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# Corn Hybrid Trial Archive

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This report is available on the World-Wide-Web at http://plantsci.sdstate.edu/varietytrials/vartrial.html

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\*Roundup Ready is registered by Monsanto.

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# 2003 Precision Planted Corn Performance Trials

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This publication reports the performance of entries in the 2003 South Dakota corn hybrid performance trials for both non-Roundup-Ready and Roundup-Ready hybrids. Information includes both the most recent 2-year and 1-year grain yields in bushels per acre; and 1-year bushel weight, moisture percentages of shelled corn at harvest, acre harvest population, and stalk lodging percentages. These performance trials are conducted by the South Dakota Crop Performance Testing (CPT) program at South Dakota State University.

### **Test Trial Locations**

Trial locations, soil types, and seedbed preparation are shown in Table A; cooperators and seeding dates are shown in Table B. Seeding started May 1 and was completed May 13.

#### **Weather Conditions**

Weather data (Table C) for this year's growing season, April-September, was obtained from the 2003 USDA-South Dakota Crop-Weather reports and the South Dakota-Automatic Weather Data Network (SD-AWDN). Heat unit or growing degree-day accumulations are reported for the nearest test site, in place of temperatures. Corn hybrids typically express a certain thermal or heat unit requirement from emergence to black-layer formation (physiological maturity). The heat unit totals across test locations varied from a high of 2962 GDD at Armour to a low of 2219 GDD at Brookings. The GGD seasonal accumulations ranged from average at most locations to about 9% above average in the Huron area.

Precipitation accumulation varied greatly across test locations. Seasonal total precipitation from April 1 through the end of September was lowest at Watertown and next lowest at the NE Research Farm (South Shore). On average the seasonal precipitation accumulations were below average at Watertown (5.01 inches), Huron (1.85), and Brookings (1.35); but above average at the SE Research Farm at Centerville (4.3), Armour (3.5), and Aberdeen (1.39). At the Armour test location 8 miles south of Armour, the cooperator indicated the major rainfall events in the area occurred closer to Armour. Therefore, the rainfall levels reported at the Armour airport were higher than received at the test site south of Armour.

In summary, moisture totals and distribution in 2003 affected Armour, Yale (Huron), and South Shore (NE Research Farm) the most. At the other locations moisture was either plentiful (SE Research Farm at Centerville) or distributed in a timely pattern (Aberdeen and Brookings) that allowed hybrids to perform at higher agronomic levels than at Armour, Yale, or South Shore. The seasonal GDD totals across this region varied only slightly and were probably not a significant factor in test results this year.

The assistance of the following is appreciated: Glenda Piechowski at Brookings, Jim Smolik and Allen Heuer at the NE Research Farm, Todd Bortnem and the Brookings Agronomy Farm staff, and Bob Berg and the SE Research Farm staff; and farmer-cooperators Mark and Cletus Wiechmann (Armour), Kim Tschetter (Yale), and Allen and Inel Ryckman (Warner).

### **General Test Procedures**

Participating companies pick the test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The arbitrary relative maturity breaks between the early and late tests are as follows: 95 days for Warner and South Shore; 100 days for Yale and Brookings; 105 days for Armour; and 110 days for Beresford. A hybrid is assigned to a maturity trial based on its relative maturity rating reported by the participating seed company.

This testing program does not guarantee that all entries are placed in the proper maturity trial. In some trials, borderline entries with relative maturity ratings at or near the arbitrary break between the early and late trials may crossover at a given location. In some cases this may be indicated by exceptionally high or low grain moisture contents at harvest. A higher than average moisture content may indicate the hybrid is later in relative maturity than indicated. Likewise, a lower than average moisture may indicate the hybrid is earlier in relative maturity than indicated.

Participating seed companies for 2003 are presented in Table F. A fee was charged for all entries at each location.

#### **Experimental Procedures**

Entries were seeded in three replications with each hybrid randomly located within a replication. Plots consisted of four 30-inch rows that were 20 feet long. A Monosem precision row crop planter was used at all locations. In 2003, this precision planter was calibrated to deliver 29,260 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, the acre harvest population is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest.

Soil type, land preparation, and previous crop at each test site are outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 lb/A of 37-18-00 was applied 2 inches below and 2 inches to the side  $(2 \times 2)$  of the seed row. Force insecticide was applied down the seed tube at label rates for corn rootworm control. In addition, Pounce granular was applied at labeled rates down the whorl with a tractor mounted granular applicator just prior to canopy closure.

The experimental procedures described above apply both to the non-Roundup Ready and the Roundup Ready hybrid corn trials with one exception: Weed control in the Roundup Ready trials consisted of two post emergence applications of Roundup Ultra (32 oz/A): first, when weeds were 2-4 inches tall; and second, when weed growth was again 2-4 inches tall. In non-Roundup Ready test trials, pre-emergence herbicides consisted of Harness Extra (1.0 qt/A) at Warner and Yale, Lasso (2.5 qt/A) at South Shore, Dual at Brookings, and banded Lasso at Armour. Post emergence herbicide applications included Accent/Buctril at Brookings and Armour, and a tank mix of Steadfast (0.75 oz/A)/Callisto (3.0 oz/A) at Beresford, according to label instructions. All rates were applied according to label instructions.

#### **Measurements of Performance**

**Yield.** Yields are an average of three replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true variety differences. In 2003, the coefficient of variation (CV) for yield was within reasonable limits across all locations.

The CV value in a given test trial is a measure of experimental error associated with the test trial. Ideally, this value should not exceed 15%. In cases where the CV value exceeds 15% it is recommended that the test data be used with caution in making hybrid selection decisions. Experimental error may be the result of several factors including test methods, environmental conditions such as moisture, temperature, or soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors, all of which may or may not be controllable in a given year.

**Grain moisture content.** Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Moisture is inversely related to maturity.

Because maturity is of prime importance in South Dakota, moisture figures are of considerable importance in the evaluation of the trial entries. Hybrids that provide satisfactory yields and can be stored without additional drying are desirable. During harvest, random moisture values determined by the on-board moisture meter on the combine are checked with a Dickey-John GAC II to verify that the on-board moisture meter is within calibration limits.

**Use of tables.** Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids before there is a real yield difference. An LSD value is given at the bottom of every column where there is significant difference among the averages within a given column. If there are no real differences among the averages within a given column a "non-significant" (NS) difference designation is indicated.

The LSD values reported in this publication can be used in two ways. In this publication the LSD value is used primarily to identify the top group for current year and 2-year yields, bushel weight, grain moisture at harvest, green snap percentage, and stalk lodging below the ear percentage for each test trial.

For example, at Warner (Table 1) the highest current-year yield was 214 bu/A for Dekalb/DKC44-42. To find whether it is the only top yielding hybrid at Warner, use the LSD value of 15 bu/A at the bottom of the 2003 yield column. For hybrids to be in the top-yield group they must yield 199 bu/A (214 - 15 = 199) or higher. Technically, a yield value of 200 bu/A is in the top yield group while a value of 199 bu/A is not in the top yield group. However, all yields and LSD values are rounded to the nearest whole number. We can say 199 bu/A, because of the rounding-off, is the more appropriate minimum value for top yield hybrids at the "early" maturity test at Warner in 2003.

The minimum top-group value is indicated for the 2-year (2002-03) average unless there were no significant yield differences. Top yield hybrids for 2003 are those hybrids that are equal or higher than the minimum top-group value indicated at the bottom of the 2003 yield column. Where

#### hybrid yield differences are not significant (NS), then, by definition, all hybrids in the test are in the top-yield group for the stated 1- or 2-year period.

Likewise, the top group for other performance factors like bushel weight, grain moisture at harvest, green snap percentage, and stalk lodging below the ear percentage can be determined.

For example, at Warner the minimum bushel weight value to qualify for the top performance group is 59 lb. Bushel weights of 59 lb or higher are in the top group for bushel weight. Note that yield and bushel weight values needed to qualify for the top group are reported as a minimum topgroup value. In contrast, the grain moisture, green snap, and lodging below the ear percentage values needed to qualify for the top group are reported as a maximum top-group value. In other words, yield and bushel weight top-group values must be greater than a certain yield or bushel weight value while grain moisture, green snap, and lodging below ear percentages must be equal to or less than a certain percentage to qualify for the top group, depending on the performance factor being considered.

At Warner (Table 1, top-group values at bottom of table), current-year yield values must equal 199 bu/A or higher, bushel weight must equal 59 lb or higher, grain moisture must be 14% or lower, green snap must equal 0%, and stalk lodging below the ear must equal 8% or less to be in the top group for these performance factors. Again, as with hybrid yields, if there are no hybrid differences for a given performance factor, then, by definition, all hybrids in the test are in the top group for that performance factor for the current year.

In addition, the top-yield group LSD values can also be used to determine whether two hybrids differ in performance.

For example, in the early test at Warner, the LSD value of 15 bu/A can be used to compare the yields of any two hybrids in the early maturity trial. If hybrid A yields 210 bu/A and hybrid B yields 197 bu/A their yield difference is 13 bu/A (210 - 197 = 13). In this case the two hybrids do not differ in yield because their yield difference of 13 bu/A is less or equal to the reported LSD value of 15 bu/A. In contrast, if hybrid C yields 190 bu/A, the yield difference between hybrids A and C is 20 bu/A (210 - 190 = 20). In this case the yield difference of 20 bu/A is more than the reported LSD value of 15 bu/A, and hybrid A would have a significantly higher yield than hybrid C. Similarly, the LSD values for bushel weight, grain moisture, green snap, and stalk lodging below the ear percentages can be used to determine whether any two hybrids differ in regard to these performance factors.

### **Performance Trial Results: Conventional Hybrids**

The performance trial results for two years (2002-03) and one year (2003) are summarized below.

**Note:** Green snap percentage differences among hybrids were nonsignificant (NS) at all locations in 2003.

#### WARNER, Allen and Inel Ryckman Farm:

Early Maturity Trial (Table 1), 17 hybrid entries. Performance data of hybrids at the former Frankfort test site were carried over to this location to obtain 2-year averages. The 2-year yield average was 188 bu/A but yield differences among hybrids were not significant. The 2003 average was 200 bu/A, hybrids had to average 199 bu/A or higher to be in the top-yield group; 11 hybrids qualified for the top-yield group, and hybrids had to differ by 15 bu/A to be significantly different in yield. Bushel weight had to equal 59 lb or higher (11 hybrids), grain moisture had to equal 14% or less (12 hybrids); and stalk lodging below the ear had to equal 8% or less (14 hybrids) to be in the top group for these factors. Hybrid differences for acre harvest population were not significant. The lowest population of 26,281 plants per acre, or 90% of the seeding population, was not significantly different from the highest harvest population of 28,895 plants per acre.

Late Maturity Trial (Table 2), 14 hybrid entries. The performance data of hybrids at the former Frankfort test site were carried over to this location to obtain 2-year averages. The 2-year average was 182 bu/A but yield differences among hybrids were not significant because only one hybrid was tested for 2 years. The 2003 average was 189 bu/A, but yield differences among the 14 hybrids tested were not significant. Therefore, the lowest yield of 170 bu/A was the minimum yield value needed to qualify for the top group for yield in 2003. Bushel weight had to equal 58 lb or higher (8 hybrids), grain moisture had to equal 16% or less (6 hybrids), and stalk lodging below the ear had to equal 8% or less (13 hybrids) to be in the top group for these factors. The acre harvest population had to equal 26,521 plants per acre, or 91% of the seeding population, to be in the top group (12 hybrids) for harvest population.

#### **SOUTH SHORE, NE Research Farm:**

**Early Maturity Trial** (Table 3), 24 hybrid entries. The 2-year yield average was 117 bu/A, but yield differences among hybrids were not significant. The 2003 average was 78 bu/A, but yield differences among the 24 hybrids tested were not significant. Therefore, the lowest yield of 71 bu/A was the minimum yield value needed to qualify for the top

group for yield in 2003. Bushel weight had to equal 59 lb or higher (6 hybrids), grain moisture had to equal 15% or less (2 hybrids), and stalk lodging below the ear had to equal 12% or less (14 hybrids) to be in the top group for these factors. The acre harvest population had to equal 28,137 plants per acre, or 96% of the seeding population, to be in the top group (13 hybrids) for harvest population.

Late Maturity Trial (Table 4), 23 hybrid entries. The 2-year average was 108 bu/A but yield differences among hybrids were not significant. The 2003 average was 65 bu/A, hybrids had to average 73 bu/A or higher to be in the top-yield group, 8 hybrids qualified for the top-yield group, and hybrids had to differ by 8 bu/A to be significantly different in yield. Bushel weight had to equal 56 lb or higher (10 hybrids), grain moisture had to equal 17% or less (9 hybrids), and stalk lodging below the ear had to equal 17% or less (17 hybrids) to be in the top group for these factors. The acre harvest population had to equal 27,565 plants per acre, or 94% of the seeding population, to be in the top group (16 hybrids) for harvest population.

#### YALE, NO-TILL TRIAL, Kim Tschetter Farm:

**Early Maturity Trial** (Table 5), 23 hybrid entries. This was the first year of testing at this location; therefore, there are no 2-year averages. The 2003 average was 87 bu/A, hybrids had to average 94 bu/A or higher to be in the top-yield group, 10 hybrids qualified for the top-yield group, and hybrids had to differ by 11 bu/A to be significantly different in yield. Bushel weight had to equal 57 lb or higher (6 hybrids), grain moisture had to equal 12% or less (18 hybrids), and stalk lodging below the ear had to equal 5% or less (22 hybrids) to be in the top group for these factors. The acre harvest population had to equal 26,206 plants per acre, or 90% of the seeding population, to be in the top group (14 hybrids) for harvest population.

Late Maturity Trial (Table 6), 18 hybrid entries. This was the first year of testing at this location; therefore, there are no 2-year averages. The 2003 average was 77 bu/A, hybrids had to average 79 bu/A or higher to be in the top-yield group, 6 hybrids qualified for the top-yield group, and hybrids had to differ by 13 bu/A to be significantly different in yield. Bushel weight had to equal 58 lb or higher (7 hybrids), grain moisture had to equal 12% or less (9 hybrids), and stalk lodging below the ear had to equal 2% or less (10 hybrids) to be in the top group for these factors. Hybrid differences for acre harvest population were not significant. The lowest population of 25,410 plants per acre, or 87% of the seeding population, was not significantly different from the highest harvest population of 28,605 plants per acre.

#### **BROOKINGS, SDSU Agronomy Farm:**

**Early Maturity Trial** (Table 7), 31 hybrid entries. The 2-year average was 155 bu/A and hybrid yield differences were not significant. The 2003 average was 174 bu/A, hybrids had

to average 179 bu/A or higher to be in the top-yield group, 11 hybrids qualified for the top-yield group, and hybrids had to differ by 10 bu/A to be significantly different in yield. Bushel weight had to equal 59 lb or higher (6 hybrids), grain moisture had to equal 15% or less (26 hybrids), and stalk lodging below the ear had to equal 2% or less (31 hybrids) to be in the top group for these factors. Hybrid differences for acre harvest population were not significant. The lowest population of 26,572 plants per acre, or 91% of the seeding population, was not significantly different from the highest harvest population of 28,895 plants per acre.

Late Maturity Trial (Table 8), 33 hybrid entries. The 2-year average was 157 bu/A but hybrid yield differences were not significant. The 2003 average was 172 bu/A, hybrids had to average 175 bu/A or higher to be in the top-yield group, 15 hybrids qualified for the top-yield group, and hybrids had to differ by 15 bu/A to be significantly different in yield. Bushel weight had to equal 57 lb or higher (16 hybrids), and grain moisture had to equal 16% or less (10 hybrids) to be in the top group for these factors. Stalk lodging was nonsignificant. Hybrid differences for acre harvest population were not significant. The lowest population of 27,588 plants per acre, or 94% of the seeding population, was not significantly different from the highest harvest population of 29,040 plants per acre.

**ARMOUR, NO-TILL TRIAL, Mark and Cletus Wiechmann Farms:** Early Maturity Trial (Table 9), 16 hybrid entries. A 2-year average was not reported this year because the coefficient of variation or level of experimental error in the 2002 data was extremely high. The 2003 average was 77 bu/A, hybrids had to average 82 bu/A or higher to be in the topyield group, 5 hybrids qualified for the top-yield group, and hybrids had to differ by 10 bu/A to be significantly different in yield. Bushel weight had to equal 52 lb or higher (11 hybrids), grain moisture had to equal 12% or less (4 hybrids), and stalk lodging below the ear had to equal 7% or less (15 hybrids) to be in the top group for these factors. Hybrid differences for acre harvest population were not significant. The lowest population of 23,377 plants per acre, or 80% of the seeding population, was not significantly different from the highest harvest population of 26,862 plants per acre.

Late Maturity Trial (Table 10), 22 hybrid entries. A 2-year average was not reported this year because the coefficient of variation or level of experimental error in the 2002 data was extremely high. The 2003 average was 74 bu/A, hybrids had to average 75 bu/A or higher to be in the top-yield group, 14 hybrids qualified for the top-yield group, and hybrids had to differ by 16 bu/A to be significantly different in yield. Bushel weight had to equal 53 lb or higher (16 hybrids) and grain moisture had to equal 14% or less (19 hybrids) to be in the top group for these factors. Stalk lodging below the ear was not significant for the 22 hybrids

tested. Likewise, hybrid differences for acre harvest population were not significant. The lowest population of 21,780 plants per acre, or 74% of the seeding population, was not significantly different from the highest harvest population of 27,588 plants per acre.

#### BERESFORD, SE Research Farm:

**Early Maturity Trial** (Table 11), 42 hybrid entries. The 2-year average was 171 bu/A, but hybrid yield differences were not significant. The 2003 average was 172 bu/A, hybrids had to average 178 bu/A or higher to be in the top-yield group, 14 hybrids qualified for the top-yield group, and hybrids had to differ by 17 bu/A to be significantly different in yield. In addition, bushel weight had to equal 59 lb or higher (13 hybrids), grain moisture had to equal 14% or less (6 hybrids), and stalk lodging below the ear had to equal 2% or less (42 hybrids) to be in the top group for these factors. Hybrid differences for acre harvest population were

not significant. The lowest population of 24,248 plants per acre, or 83% of the seeding population, was not significantly different from the highest harvest population of 29,040 plants per acre.

Late Maturity Trial (Table 12), 24 hybrid entries. The 2-year average was 172 bu/A, but yield differences among the hybrids tested were not significant. The 2003 average was 165 bu/A, but again the yield differences among the hybrids tested were not significant. Bushel weight had to equal 59 lb or higher (5 hybrids), grain moisture had to equal 17% or less (10 hybrids), and stalk lodging below the ear had to equal 1% or less (24 hybrids) to be in the top group for these factors. The acre harvest population had to equal 27,729 plants per acre, or 95% of the seeding population, to be in the top group (13 hybrids) for harvest population.

### Performance Trial Results: Roundup Ready<sup>™</sup> Hybrids

**Note:** Green snap percentage differences among hybrids were nonsignificant (NS) at all locations in 2003.

#### WARNER, Allen and Inel Ryckman Farm Early Maturity Trial (Table 9), 21 hybrid entries.

Early Maturity Trial (Table 13), 28 hybrid entries. This was the first year for this test at Warner; however, the 2002 data from Frankfort was carried over to this location to obtain 2-year averages. The 2-year average was 184 bu/A, hybrids had to average 180 bu/A or higher to be in the top-yield group, 3 hybrids qualified for the top-yield group, and hybrids had to differ by 12 bu/A to be significantly different in yield. The 2003 average was 191 bu/A, hybrids had to average 191 bu/A or higher to be in the top-yield group, 18 hybrids qualified for the top-yield group, and hybrids had to differ by 14 bu/A to be significantly different in yield. Bushel weight had to equal 60 lb or higher (19 hybrids), grain moisture had to equal 14% or less (20 hybrids), and stalk lodging below the ear had to equal 6% or less (22 hybrids) to be in the top group for these factors. The acre harvest population had to equal 26,910 plants per acre, or 92% of the seeding population, to be in the top group (15 hybrids) for harvest population.

Late Maturity Trial (Table 14), 8 hybrid entries. This was the first year for this test at Warner; however, the 2002 data from Frankfort was carried over to this location in order to obtain 2-year averages. The 2-year average was 187 bu/A; but only one hybrid was tested for 2 years, hence there was no significant difference among hybrids. The 2003 average was 191 bu/A, hybrids had to average 188 bu/A or higher to be in the top-yield group, 4 hybrids qualified for the topyield group, and hybrids had to differ by 14 bu/A to be significantly different in yield. Bushel weight had to equal 60 lb or higher (one hybrid), grain moisture had to equal 16% or less (2 hybrids), and stalk lodging had to equal 4% or less (5 hybrids) to be in the top group for these factors. Hybrid differences for acre harvest population were not significant. The lowest population of 26,862 plants per acre, or 92% of the seeding population, was not significantly different from the highest harvest population of 28,895 plants per acre.

#### SOUTH SHORE, NE Research Farm:

**Early Maturity Trial** (Table 15), 30 hybrid entries. The 2-year yield average was 116 bu/A, but yield differences among hybrids were not significant. The 2003 average was 78 bu/A, hybrids had to average 77 bu/A or higher to be in the top-yield group, 20 hybrids qualified for the top-yield group, and hybrids had to differ by 11 bu/A to be significantly different in yield. Bushel weight had to equal 57 lb or higher (18 hybrids), grain moisture had to equal 16% or less (26 hybrids), and stalk lodging below the ear had to equal 9% or less (23 hybrids) to be in the top group for these factors. The acre harvest population had to equal 27,404 plants per acre, or 94% of the seeding population, to be in the top group (10 hybrids) for harvest population.

Late Maturity Trial (Table 16), 14 hybrid entries. The 2year average was 104 bu/A but yield differences among hybrids were not significant. The 2003 average was 69 bu/A, hybrids had to average 67 bu/A or higher to be in the topyield group, 10 hybrids qualified for the top-yield group, and hybrids had to differ by 10 bu/A to be significantly different in yield. Bushel weight had to equal 58 lb or higher (4 hybrids), grain moisture had to equal 18% or less (5 hybrids), and stalk lodging below the ear had to equal 6% or less (10 hybrids) to be in the top group for these factors. The acre harvest population had to equal 26,769 plants per acre, or 91% of the seeding population, to be in the top group (6 hybrids) for harvest population.

#### YALE, NO-TILL TRIAL, Kim Tschetter Farm

**Early Maturity Trial** (Table 17), 21 hybrid entries. This was the first year for this test; hence, no 2-year averages are reported. The 2003 average was 91 bu/A, hybrids had to average 98 bu/A or higher to be in the top-yield group, 9 hybrids qualified for the top-yield group, and hybrids had to differ by 8 bu/A to be significantly different in yield. Bushel weight had to equal 57 lb or higher (8 hybrids), grain moisture had to equal 11% or less (5 hybrids), and stalk lodging below the ear had to equal 2% or less (14 hybrids) to be in the top group for these factors. The acre harvest population had to equal 27,395 plants per acre, or 94% of the seeding population, to be in the top group (14 hybrids) for harvest population.

Late Maturity Trial (Table 18), 20 hybrid entries. This was the first year for this test; hence, no 2-year averages are reported. The 2003 average was 80 bu/A, hybrids had to average 90 bu/A or higher to be in the top-yield group, 2 hybrids qualified for the top-yield group, and hybrids had to differ by 10 bu/A to be significantly different in yield. Bushel weight had to equal 55 lb or higher (16 hybrids), grain moisture had to equal 12% or less (10 hybrids), and stalk lodging below the ear had to equal 2% or less (16 hybrids) to be in the top group for these factors. The acre harvest population had to equal 26,165 plants per acre, or 89% of the seeding population, to be in the top group (18 hybrids) for harvest population.

#### BROOKINGS, SDSU Agronomy Farm:

Early Maturity Trial (Table 19), 23 hybrid entries. The 2-year average was 172 bu/A, but yield differences among the hybrids tested were not significant. Therefore, all 5 hybrids tested qualified for the top-yield group because their yield differences were not significant. The 2003 average was 181 bu/A, hybrids had to average 185 bu/A or higher to be in the top-yield group, 8 hybrids qualified for the top-yield group, and hybrids had to differ by 13 bu/A to be significantly different in yield. Bushel weight had to equal 59 lb or higher (14 hybrids) and grain moisture had to equal 16% or less (22 hybrids) to be in the top group for these factors. Stalk lodging below the ear was not significant for the 23 hybrids tested. The acre harvest population had to equal 28,392 plants per acre, or 97% of the seeding population, to be in the top group (10 hybrids) for harvest population.

Late Maturity Trial (Table 20), 20 hybrid entries. The 2-year average was 163 bu/A, but yield differences among hybrids were not significant because only one hybrid was tested for 2 years. The 2003 average was 166 bu/A, hybrids had to average 168 bu/A or higher to be in the top-yield group,

7 hybrids qualified for the top-yield group, and hybrids had to differ by 15 bu/A to be significantly different in yield. Bushel weight had to equal 59 lb or higher (2 hybrids) and grain moisture had to equal 17% or less (12 hybrids) to be in the top group for these factors. Stalk lodging was nonsignificant for the 20 hybrids tested. Hybrid differences for acre harvest population were not significant. The lowest population of 25,846 plants per acre, or 88% of the seeding population, was not significantly different from the highest harvest population of 28,604 plants per acre.

#### ARMOUR, NO-TILL TRIAL, Mark and Cletus Wiechmann Farms:

**Early Maturity Trial** (Table 21), 18 hybrid entries. A 2-year average was not reported this year because the coefficient of variation or level of experimental error in the 2002 data was extremely high. The 2003 average was 92 bu/A, hybrids had to average 88 bu/A or higher to be in the top-yield group, 4 hybrids qualified for the top-yield group, and hybrids had to differ by 13 bu/A to be significantly different in yield. In addition, bushel weight had to equal 53 lb or higher (10 hybrids) and grain moisture had to equal 13% or less (10 hybrids) to be in the top group for these factors. Stalk lodging was nonsignificant for the 18 hybrids tested. Hybrid differences for acre harvest population were not significant. The lowest population of 22,506 plants per acre, or 77% of the seeding population, was not significantly different from the highest harvest population of 26,571 plants per acre.

Late Maturity Trial (Table 22), 21 hybrid entries. A 2-year average was not reported this year because the coefficient of variation or level of experimental error in the 2002 data was extremely high. The 2003 average was 144 bu/A, hybrids had to average 83 bu/A or higher to be in the top-yield group, 9 hybrids qualified for the top-yield group, and hybrids had to differ by 12 bu/A to be significantly different in yield. Bushel weight had to equal 55 lb or higher (11 hybrids) and grain moisture had to equal 14% or less (16 hybrids) to be in the top group for these factors. Stalk lodging was nonsignificant. Hybrid differences for acre harvest population were not significant. The lowest population of 23,232 plants per acre, or 79% of the seeding population, was not significantly different from the highest harvest population of 26,717 plants per acre.

#### **BBERESFORD, SE Research Farm:**

**Early Maturity Trial** (Table 23), 20 hybrid entries. The 2-year average was 162 bu/A; but yield differences among the hybrids tested were not significant. Therefore, all 6 hybrids tested qualified for the top-yield group because their yield differences were not significant. The 2003 average was 169 bu/A, hybrids had to average 164 bu/A or higher to be in the top-yield group, 15 hybrids qualified for the top-yield group, and hybrids had to differ by 26 bu/A to be significantly different in yield. Bushel weight had to equal 59 lb or higher (10 hybrids) and grain moisture had to equal 16% or less (13 hybrids) to be in the top group for these factors. Stalk lodging was nonsignificant. The acre

harvest population had to equal 27,291 plants per acre, or 93% of the seeding population, to be in the top group (17 hybrids) for harvest population.

Late Maturity Trial (Table 24), 12 hybrid entries. None of the hybrids tested this year were tested last year; hence no 2-year averages are reported. The 2003 average was 163 bu/A, hybrids had to average 161 bu/A or higher to be in the top-yield group, 6 hybrids qualified for the top-yield group, and hybrids had to differ by 18 bu/A to be

significantly different in yield. Bushel weight had to equal 58 lb or higher (10 hybrids) and grain moisture had to equal 17% or less (5 hybrids) to be in the top group for these factors. Stalk lodging was nonsignificant because there was no lodging in this test. Hybrid differences for acre harvest population were not significant. The lowest population of 25,846 plants per acre, or 88% of the seeding population, was not significantly different from the highest harvest population of 27,879 plants per acre.

#### Table A. Site Soil classification, percent slope, seedbed, and previous crop.

Site	Soil type	Seedbed, previous crop
Warner	Great Bend-Putney silt loams, 0-2% sl.	Min-till, s.wheat stubble
South Shore	Brookings sil.cl.loam, 0-3% sl.	Conventional, oat
Yale	Houdek-Prosper loams, 0-2% sl.	No-till, s.wheat stubble
Brookings	Brandt sil. cl., 0-2% sl.	Conventional, soybean
Armour	Highmore silt loam,0-2% sl.	No-till, soybean stubble
Beresford	Egan-Clarno-Trent complex, 0-2% sl.	Conventional, soybean

#### Table B. Year 2003 trial cooperators, locations, and dates seeded.

Cooperators	Location*	Seeded Date	
Allen & Inel Ryckman	Warner	May 1	
NE Research Farm	South Shore	May 8	
Kim Tschetter	Yale	May 2	
SDSU Agronomy Farm	Brookings	May 13	
Mark & Cletus Wiechmann	Armour	May 5	
SE Research Farm	Beresford	May 5	

\* Plots were all seeded at 29,260 seeds per acre.

	Variable		Data is	accumulate	ed from A	from April 1 up to the week ending:				
Station			27-Apr	1-Jun	29-Jun	27-Jul	31-Aug	28-Sep		
	Precip in.	'03	1.34	4.19	10.76	12.68	14.33	15.59		
Aberdeen		DFN*	-0.4	-0.26	3.35	2.74	1.94	1.39		
Airport	GDD's	ʻ03	89	297	730	1359	2139	2479		
		DFN	42	-21	-53	-54	-8	42		
	Precip in.	'03	1.4	5.04	6.22	7.95	9.56	11.23		
NE Res. Farm		DFN	-0.35	0.35	-2.24	-1.67	-4.78	-5.01		
(S. Shore)	GDD's	'03	149	395	775	1315	2004	2309		
		DFN	93	33	-13	-40	8	22		
	Precip in.	'03	1.35	4.21	8.39	9.4	11.17	12.77		
Huron		DFN	-0.5	-0.86	0.18	-1.3	-1.78	-1.85		
Airport	GDD's	'03	128	377	841	1548	2438	2842		
		DFN	77	43	5	34	148	228		
	Precip in.	'03	1.82	4.96	8.26	10.4	13.23	16.68		
Brookings		DFN	-0.01	-0.17	-0.94	-1.9	-2.24	-1.35		
2NE	GDD's	'03	85	259	677	1256	1968	2219		
		DFN	55	-5	-24	-22	48	42		
	Precip in.	'03	2.03	5.72	10.79	15.87	17.18	23.1		
Centerville		DFN	0.03	-0.12	0.99	2.96	0.94	4.3		
6 SE	GDD's	·03	135	379	867	1514	2339	2665		
		DFN	79	-10	-55	-70	16	11		
	Precip in.	·03	2.45	6.56	12.13	17.04	18.02	20.43		
Armour**		DFN	0.38	0.92	1.49	3.48	3.34	3.51		
Airport	GDD's	'03	147	431	926	1638	2538	2962		
		DFN	72	-6	-71	-79	-10	26		

# Table C. Nearest weather station precipitation and growing degree day (GDD) accumulations for 2003 and their departures from normal (DFN).

\* DFN - how much a variable for year 2003 is greater or less (-) than the long-term average.

\*\* Although the airport received above average rainfall the cooperator at this sight indicated rainfall levels were much lower than reported at the airport.

Source: USDA-SD-Crop-Weather report & SD Automatic Weather Data Network.

### Table D. Conventional non-Roundup Ready entries by brand/hybrid, and yield table number(s).

Brand / Hybrid	Table No.	Brand / Hybrid	Table No.
AGSOURCE SEEDS/3933BT AGSOURCE SEEDS/5983BT AGSOURCE SEEDS/6163BT AGSOURCE SEEDS/6183BT AGSOURCE SEEDS/6203BT	5 10 10 12 12	AGSOURCE SEEDS/5713BT AGSOURCE SEEDS/4123BT AGSOURCE SEEDS/4403BT AGSOURCE SEEDS/4663BT AGSOURCE SEEDS/5153BT	10,11 5,9 5 6,9 6,9
ASGROW/RX702YG	11		
CROW'S/1695 B CROW'S/1703 B CROW'S/2133 CROW'S/3520 B	1,3 1,3,5,7 6,8,9 6,8,9	CROW'S/438 B CROW'S/4911 B CROW'S/5202 B CROW'S/5366 B	10,11 10,11 12 12
DAIRYLAND/STEALTH-1497 DAIRYLAND/STEALTH-1606 DAIRYLAND/STEALTH-5104	2,4 10,11 6,8,9	DAIRYLAND/STEALTH-5194 DAIRYLAND/STEALTH-5497 DAIRYLAND/STEALTH1507BT	1,3 2,4,5 10,11
DAIRYLAND/STEALTH-5112	12		
DEKALB/DKC44-42 (YGCB) DEKALB/DKC48-84 (YGCB) DEKALB/DKC50-18 (YGCB) DEKALB/DKC52-45 (YGCB)	1,3,5,7 2,4,7 2,4,5,7,9 4,6,8,9	DEKALB/DKC53-32 (YGCB) DEKALB/DKC57-84 (YGCB) DEKALB/DKC63-79 (YGCB)	2 6,10,11 12
EPLEY/E1150BT EPLEY/E1180BT EPLEY/E1420BT EPLEY/E1442 EPLEY/E1491 EPLEY/E1493	3,7 4,7 4,8,11 6,8,11 4,8 4,6,8	EPLEY/E2410BT EPLEY/E2470 EPLEY/E2490BT EPLEY/E3630BT EPLEY/E3641	6,8,11 11 11 12 12
GARST/8331YG1 GARST/8454YG1 GARST/8545 GARST/8552YG1	12 12 11 11	GARST/8566YG1 GARST/8716 GARST/8787YG1	11 4,7 4,8
GOLD COUNTRY/100-01CL GOLD COUNTRY/1016BT GOLD COUNTRY/103-02CB	7 8 8	GOLD COUNTRY/94-01CB GOLD COUNTRY/96-04CB	1,3 2,4
HEINE/H640YGCB HEINE/H728YGCB HEINE/H745YGCB	1,3 2,5 11	HEINE/H810YGCB HEINE/H824YGCB HEINE/H827YGCB	11 12 12
HEINE/H763YGCB HEINE/H790YGCB HEINE/H792YGCB	11 11 11	HEINE/H838YGCB HEINE/H851YGCB	12 12
JACOBSEN/JS4339BT JACOBSEN/JS4440BT JACOBSEN/JS4637	8,11 11 11	JACOBSEN/JS4645BT JACOBSEN/JS4757BT	10,11 10,12
JUNG/6432BT	3	JUNG/6580BT	8

### Table D. Conventional non-Roundup Ready entry yield table index (continued).

	Table		Table
Brand / Hybrid	No.	Brand / Hybrid	No.
KALTENBERG/K4688BT	7		
KAYSTAR/KX-766	11	KAYSTAR/KX-890BT	12
KRUGER/EXP105 YGCB KRUGER/EXP112 YGCB KRUGER/EXP116 YGCB	6,8,9 11 12	KRUGER/K-9305 YGCB KRUGER/K-9306 YGCB KRUGER/K-9308 YGCB	8,9 8,9 8,10
KRUGER/EXP412 YGCB KRUGER/EXP413 YGCB KRUGER/K-9002 YGCB KRUGER/K-9002+ YGCB	10,11 10 2,7 2,4,5,7	KRUGER/K-9309 YGCB KRUGER/K-9392 YGCB KRUGER/K-9396 YGCB KRUGER/K-9403 YGCB	8,10 1,3,7 1,3,5,7 2,4,5,7,9
KRUGER/K-9111 YGCB KRUGER/K-9114+ YGCB KRUGER/K-9115 YGCB KRUGER/K-9203 YGCB	10,11 12 12 2,4,5,7	KRUGER/K-9404 YGCB KRUGER/K-9411 YGCB KRUGER/K-9415 KRUGER/K-9492 YGCB	2,4,6,8,9 10,11 12 1,3,5,7
KRUGER/K-9206 YGCB KRUGER/K-9208A KRUGER/K-9212 YGCB	8 8 12	KRUGER/K-9496 YGCB KRUGER/K-9910 YGCB	1,3,5,7 8,10
MERSCHMAN/M-20108 MERSCHMAN/M-21104	11 11	MERSCHMAN/M-9104	11
MIDWEST/G 6921 B MIDWEST/G 6963 B MIDWEST/G 7188 MIDWEST/G 7494 B	1,3 1,3,5,7 6,8,9 6,8,9	MIDWEST/G 7622 B MIDWEST/G 7716 B MIDWEST/G 8070 B MIDWEST/G 8125 B	10,11 10,11 12 12
PFISTER/1680 PFISTER/2656BT	5,7 11	PFISTER/EXP 1499BT	5,7
SABRE/3110BT SABRE/3554BT SABRE/3555CB SABRE/4280BT	3 3,7 3,7 8	SABRE/4292BT SABRE/4760 SABRE/4800BT	8 11 11
SANDS/SOI 103YGCB SANDS/SOI 9013 SANDS/SOI 9041	4,8 4,7 8	SANDS/SOI 9102 SANDS/SOI 9132 SANDS/SOI 9962	11 12 4,7
SEEDS 2000/2921BT SEEDS 2000/2953BT	3 1,3,5,7	SEEDS 2000/2991 SEEDS 2000/3122BT	4,7 2,6,8
TOP FARM/EXP 3100C TOP FARM/EXP 3101B TOP FARM/EXP 3103D TOP FARM/EXP 3196	4 8 6 7	TOP FARM/TFSX 2300 TOP FARM/TFSX 2301 TOP FARM/TFSX 2395	5 4,5 7
WENSMAN/W 4212 WENSMAN/W 4418 WENSMAN/W 4437 WENSMAN/W 5081BT WENSMAN/W 5085BT	1,3,5,7 10,11 10,11 1,3 3	WENSMAN/W 5117BT WENSMAN/W 5212BT WENSMAN/W 5314BT WENSMAN/W 5417BT WENSMAN/W 5437BT	1,3,5,7 1,3,5,7 2,4,6,8,9 6,8,10,11 11

		Yield- @15.5%	bu/a mst.	 Bu.	Grain	2003 Acre	Green	Lodged below
Brand / Hybrid	+Rel. Mat.	2-yr	2003	wt. lb	moist. pct	harvest pop.	snap pct	ear pct
			_ Enti	ries	tested t	wo years		<u> </u>
DEKALB/DKC44-42 (YGCB	94	194	214	57	14	28,314	0	0
WENSMAN/W 5212BT	95	192	203	58	14	27,443	0	4
KRUGER/K-9392 YGCB	89	191	209	59	14	27,297	0	0
SEEDS 2000/2953BT	95	190	196	57	15	27,733	0	11
GOLD COUNTRY/94-01CB	94	187	202	59	14	28,604	0	2
WENSMAN/W 4212	95	181	191	58	15	26,281	0	4
WENSMAN/W 5117BT	92	181	202	59	13	28,459	0	1
			_ Enti	ries	tested o	ne year		
CROW'S/1703 B	95		212	59	15	28,895	0	1
MIDWEST/G 6963 B	95		210	59	15	28,749	0	1
DAIRYLAND/STEALTH-5194	94		205	59	14	28,024	0	2
MIDWEST/G 6921 B	92		203	59	14	27,297	0	3
HEINE/H640YGCB	94		203	60	15	27,443	0	6
CROW'S/1695 B	92		202	58	14	27,443	0	1
KRUGER/K-9496 YGCB	94		197	57	14	28,314	0	11
KRUGER/K-9492 YGCB	92		196	60	14	27,297	0	1
KRUGER/K-9396 YGCB	92		190	60	14	28,459	0	10
WENSMAN/W 5081BT	83		179	60	13	27,878	0	1
Test average:		188	200	59	14	27,854	0	4
LSD (5%) values:		NS	15	1	1	NS		8
Top group value*- Minim	num:	181	199	59		26,281		
Maxin	num:				14			8
No. entries in top grou	.p:	7	11	11	12	17		14
Coef. of variation#:		4	5	1	5	3	•	•

# Table 1. Warner, non-Roundup Ready, early corn hybrid results, 2002-2003. Allen and Inel Ryckman farm, test relative maturity is 95-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values.
NS indicates values within a column are not significantly different.
# Measure of experimental error: values less than 15% are desired.

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						2003		
	+Rel.	Yield- @15.5%	bu/a mst.	Bu. wt.	Grain moist	Acre . harvest	Green snap	Lodged below ear
Brand / Hybrid	Mat.	2-yr	2003	dl	pct	pop.	pct	pct
			_ Enti	ries	tested t	two years		
DEKALB/DKC53-32 (YGCB	103	182	190 Enti	57 cies	18 tested d	28,169 one year	0	5
HEINE/H728YGCB	100	•	205	57	21	28,459	0	4
SEEDS 2000/3122BT	102		202	57	17	28,750	0	4
DEKALB/DKC50-18 (YGCB	100		198	60	17	28,169	0	7
DAIRYLAND/STEALTH-1497	96		195	58	14	27,733	0	4
DAIRYLAND/STEALTH-5497	97	•	193	58	14	27,007	0	7
DEKALB/DKC48-84 (YGCB	98		191	60	15	28,604	0	0
KRUGER/K-9203 YGCB	100		191	57	17	27,152	0	6
KRUGER/K-9403 YGCB	100		190	58	15	26,572	0	15
WENSMAN/W 5314BT	101	•	189	57	16	27,588	0	3
GOLD COUNTRY/96-04CB	96	•	180	58	19	24,103	0	5
KRUGER/K-9002 YGCB	100		175	59	15	28,023	0	6
KRUGER/K-9404 YGCB	101		174	60	18	26,862	0	1
KRUGER/K-9002+ YGCB	100	•	170	56	21	23,958	0	1
Test average:		182	189	58	17	27,225	0	5
LSD (5%) values:		•	NS	2	2	2,229	•	8
Top group value*- Minir	num:	•	170	58		26,521		0
Maxir	num:			0	16		•	8
No. entries in top grou Coef. of variation#:	ıp:	·	14	8 2	6 7	12	•	13

# Table 2.Warner, non-Roundup Ready, late corn hybrid results, 2002-2003. Allen and Inel Ryckman farm, test relative<br/>maturity is 96-day or more.

+ Relative maturity of hybrid as reported by seed company.

 \* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values.
 NS indicates values within a column are not significantly different.

						2003		
		Yield-	- bu/a					Lodged
		@15.5%	s mst.	Bu.	Grain	Acre	Green	below
	+Rel.	0	2002	wt.	moist	. harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	al	pct	pop.	pct	pct
			Entr	ies	tested	two years		
KRUGER/K-9392 YGCB	89	125	95	58	16	28,023	0	4
WENSMAN/W 5212BT	95	125	83	57	16	27,878	0	19
SEEDS 2000/2953BT	95	124	84	57	16	27,443	0	21
WENSMAN/W 4212	95	121	78	58	16	27,733	0	12
DEKALB/DKC44-42 (YGCB	94	120	84	55	16	28,169	0	20
WENSMAN/W 5117BT	92	119	75	59	16	28,314	0	7
GOLD COUNTRY/94-01CB	94	117	73	57	16	28,024	0	20
SABRE/3555CB	95	111	71	58	16	28,750	0	21
KRUGER/K-9396 YGCB	92	95	68	59	17	28,459	0	2
			Entr	ies	tested	one year		
JUNG/6432BT	95		87	57	17	28,314	0	21
CROW'S/1703 B	95		85	58	16	28,314	0	13
SABRE/3554BT	94		83	59	16	28,605	0	4
KRUGER/K-9496 YGCB	94		82	58	16	28,169	0	12
SEEDS 2000/2921BT	92	•	81	58	16	26,136	0	7
WENSMAN/W 5085BT	85		79	55	14	26,427	0	6
KRUGER/K-9492 YGCB	92		78	58	16	27,298	0	6
MIDWEST/G 6963 B	95		76	57	16	29,330	0	18
CROW'S/1695 B	92		75	58	16	28,750	0	8
MIDWEST/G 6921 B	92	•	75	58	16	27,443	0	9
EPLEY/E1150BT	95		74	61	17	29,621	0	5
HEINE/H640YGCB	94		73	60	17	28,459	0	3
SABRE/3110BT	91		71	60	17	26,427	0	3
WENSMAN/W 5081BT	83		71	57	15	29,040	0	15
DAIRYLAND/STEALTH-5194	94	•	71	58	16	27,153	0	14
Test average:		117	78	58	16	28,012	0	11
LSD (5%) values:		NS	NS	2	1	1,484		10
Top group value*- Minin	mum:	95	68	59		28,137		
Maxin	mum:	_		-	15		•	12
No. entries in top grou	up:	9	24	6	2	13	•	14
Coef. of variation#:		8	13	2	2	3	•	•

# Table 3. South Shore, non-Roundup Ready, early corn hybrid results, 2002-2003. NE Research Farm, test relative maturity is 95-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Entr	ries	tested t	wo years		
DAIRYLAND/STEALTH-1497	96	119	78	55	16	28,024	0	23
SANDS/SOI 9013	100	107	73	54	16	29,330	0	6
SANDS/SOI 9962	96	107	74	55	16	27,878	0	11
EPLEY/E1493	105	97	64	.58	29	27,588	0	6
			_ Entr	ries	tested o	one year		
DEKALB/DKC50-18 (YGCB	100	•	81	56	19	28,314	0	4
DEKALB/DKC52-45 (YGCB	102	•	80	56	16	29,185	0	12
DEKALB/DKC48-84 (YGCB	98	•	79	56	19	28,459	0	6
DAIRYLAND/STEALTH-5497	97	•	74	55	16	26,862	0	14
SEEDS 2000/2991	99	•	73	56	20	27,152	0	45
WENSMAN/W 5314BT	101		69	53	19	27,878	0	21
GOLD COUNTRY/96-04CB	96		69	58	17	27,007	0	3
GARST/8787YG1	102		67	58	18	28,604	0	1
KRUGER/K-9203 YGCB	100		66	54	18	28,459	0	13
SANDS/SOI 103YGCB	103	•	65	55	19	29,040	0	4
TOP FARM/TFSX 2301	100	•	64	59	17	24,974	0	3
KRUGER/K-9002+ YGCB	100		64	55	23	24,829	0	1
EPLEY/E1180BT	100		62	54	25	29,476	0	80
KRUGER/K-9403 YGCB	100		61	57	22	25,991	0	6
GARST/8716	100	•	51	52	16	27,733	0	33
TOP FARM/EXP 3100C	96		49	55	21	28,459	0	3
EPLEY/E1491	105		49	55	26	27,152	0	9
KRUGER/K-9404 YGCB	101		47	54	16	28,895	0	6
EPLEY/E1420BT	101	•	45	57	25	28,314	0	24
Test average:		108	65	56	19	27,776	0	15
LSD (5%) values:		NS	8	3	1	1,911		16
Top group value*- Minir	num:	97	73	56		27,565		
Maxir	num:				17			17
No. entries in top grou	.p:	4	8	10	9	16	•	17
Coef. of variation#:		7	7	3	4	4	•	•

# Table 4. South Shore, non-Roundup Ready, late corn hybrid results, 2002-2003. NE Research Farm, test relative maturity is 96-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2002		
		Viold	hu /a			2003		Todaod
		ALE E&	bu/a	Du	Crain	Agro	Croon	bolow
	-Del	@T0.0%	mst.	ьu.	Grain	ACLE	Green	wored
Drand / Urbrid	+Rei. Mot	2	2002	wt.	moist.	narvest	snap	ear
Brand / Hybrid	Mat.	Z-ÀT	2003	άτ	per	pop.	per	per
			_ Entr	ries	tested o	ne year		
DEKALB/DKC44-42 (YGCB	94		105	53	11	28,169	0	2
WENSMAN/W 5117BT	92		102	55	12	27,152	0	2
AGSOURCE SEEDS/3933BT	96		100	55	12	26,717	0	3
KRUGER/K-9496 YGCB	94		99	54	12	27,298	0	1
DEKALB/DKC50-18 (YGCB	100	•	99	56	12	27,298	0	0
SEEDS 2000/2953BT	95		98	54	12	25,555	0	1
KRUGER/K-9492 YGCB	92		97	56	12	27,588	0	1
CROW'S/1703 B	95		96	55	12	26,136	0	3
MTDWEST/G 6963 B	95	-	95	54	12	26,717	0	4
WENSMAN/W 5212BT	95	•	94	54	12	26,862	0	1
DATRYLAND/STRALTH-5497	97		91	55	12	25 265	0	1
WENGMAN/W 1212	95	•	89	51	12	25,209	0	1
ACCOURCE GEEDS //123RT	98	•	89	57	13	23, 410	0	20
TOD FARM/TECY 2300	100	•	8/	59	11	27,443 25 120	0	1
HEINE/H728VCCB	100	•	83	56	12	29,120	0	2
IIEINE/II/2016CD	TOO	·	00	50		20,499	0	2
AGSOURCE SEEDS/4403BT	98		83	59	13	25,991	0	1
KRUGER/K-9403 YGCB	100		79	55	12	25,555	0	5
PFISTER/1680	99		77	57	13	28,314	0	0
TOP FARM/TFSX 2301	100		74	55	12	27,007	0	0
PFISTER/EXP 1499BT	98	•	73	57	12	25,700	0	3
KRUGER/K-9396 YGCB	92		71	56	12	26,426	0	4
KRUGER/K-9002+ YGCB	100		66	57	13	24,829	0	0
KRUGER/K-9203 YGCB	100	•	63	51	11	28,604	0	4
Test average:		•	87	55	12	26,679	0	3
LSD (5%) values:			11	2	1	2,398		5
Top group value*- Minim	num:		94	57		26,206		
Maxir	num:				12			5
No. entries in top grou	.qu		10	6	18	14		22
Coef. of variation#:	_		8	2	5	5		

# Table 5.Yale, non-Roundup Ready, no-till early corn hybrid results, 2003. Kim Tschetter farm, test relative maturity<br/>is 100-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a	_	~ '		~	Lodged
	· D - 1	@15.5%	mst.	Bu.	Grain	Acre	Green	below
Drand ( Urbrid	+Rel.	2	2002	WC.	moist.	narvest	snap	ear
Brand / Hybrid	Mat.	Z-ÀT	2003	άτ	per	pop.	per	per
			_ Entr	ries t	cested o	ne year		
DEKALB/DKC52-45 (YGCB	102		92	54	11	28,169	0	0
EPLEY/E2410BT	107		89	60	13	27,588	0	3
EPLEY/E1442	104		85	57	12	28,459	0	2
DAIRYLAND/STEALTH-5104	104		85	57	12	28,605	0	2
DEKALB/DKC57-84 (YGCB	107		82	57	13	27,878	0	1
EPLEY/E1493	105		81	60	13	27,152	0	1
TOP FARM/EXP 3103D	103		78	54	11	27,298	0	4
AGSOURCE SEEDS/5153BT	105		78	57	12	26,427	0	1
MIDWEST/G 7188	102		77	54	11	27,733	0	5
KRUGER/EXP105 YGCB	103	•	76	58	13	28,459	0	3
WENSMAN/W 5417BT	107		74	59	14	25,410	0	2
CROW'S/2133	102		73	53	11	28,024	0	7
WENSMAN/W 5314BT	101		72	53	11	28,169	0	5
CROW'S/3520 B	104		71	60	13	28,314	0	0
SEEDS 2000/3122BT	102		70	53	11	27,733	0	2
AGSOURCE SEEDS/4663BT	103		67	57	13	28,604	0	4
MIDWEST/G 7494 B	103		66	59	13	28,314	0	0
KRUGER/K-9404 YGCB	101		62	58	13	27,733	0	3
Test average:			77	57	12	27,782	0	3
LSD (5%) values:			13	2	1	NS		2
Top group value*- Minim	mum:		79	58		25,410		
Maxi	mum:				12			2
No. entries in top gro	up:		6	7	9	18		10
Coef. of variation#:			6	2	2	4	•	•
SEEDS 2000/3122BT AGSOURCE SEEDS/4663BT MIDWEST/G 7494 B KRUGER/K-9404 YGCB Test average: LSD (5%) values: Top group value*- Minin Maxin No. entries in top gro Coef. of variation#:	102 103 103 101 mum: mum: up:		70 67 66 62 77 13 79 6 6	53 57 59 58 57 2 58 7 2 58 7 2	11 13 13 13 13 12 1 12 1 12 9 2	20,314 27,733 28,604 28,314 27,733 27,782 NS 25,410 18 4		2 4 0 3 2 2 2 10

# Table 6. Yale, non-Roundup Ready, no-till late corn hybrid results, 2003. Kim Tschetter farm, test relative maturity is 101-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values.
NS indicates values within a column are not significantly different.
# Measure of experimental error: values less than 15% are desired.

· · · · · · · · · · · · · · · · · · ·						2002		
			- <i>i</i>			2003		
		Yield-	bu/a					Lodged
	_	@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist	. harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Entr	ries	tested t	two years		
WENSMAN/W 5212BT	95	174	187	58	15	28,459	0	1
DEKALB/DKC44-42 (YGCB	94	174	180	57	14	28,169	0	1
SEEDS 2000/2953BT	95	168	178	57	15	27,298	0	1
WENSMAN/W 5117BT	92	166	178	59	14	28,459	0	0
SABRE/3555CB	95	160	184	58	15	28,895	0	0
SANDS/SOI 9962	96	160	177	58	15	27,298	0	0
WENSMAN/W 4212	95	158	170	57	14	27,878	0	1
PFISTER/1680	99	142	183	58	18	28,314	0	1
KRUGER/K-9002 YGCB	100	134	169	58	15	27.588	0	0
SEEDS 2000/2991	99	133	164	56	15	28 459	0	2
500072991	55	100	TOF	50	10	20,400	0	2
COLD COUNTRY/100-01CL	100	133	152	60	1.8	27 298	0	0
GOLD COONTRI/100 01CL	TOO	199	IJZ Entr	i og	or botoot	Z7,ZJO	0	0
CDOMUC/1702 D	0.5		_ EIICI	LES E7	1 E	Die year		1
CROW S/1/03 B	95	•	109	57	15	20,000	0	1 O
TOP FARM/TESX 2395	94	•	107	58	15	27,879	0	0
DEKALB/DKC50-18 (YGCB	TOO	•	187	58	15	28,895	0	0
KRUGER/K-9496 YGCB	94		185	58	15	29,330	0	1
MIDWEST/G 6963 B	95	•	183	58	15	28,604	0	1
DEKALB/DKC48-84 (YGCB	98	•	180	58	15	28,459	0	1
SABRE/3554BT	94		179	59	14	28,459	0	0
KALTENBERG/K4688BT	96		176	58	15	27,298	0	2
KRUGER/K-9392 YGCB	89		176	58	14	27,878	0	0
KRUGER/K-9492 YGCB	92		174	57	14	28,314	0	0
EPLEY/E1180BT	100		173	57	18	28,024	0	2
KRUGER/K-9396 YGCB	92		170	59	15	28.314	0	1
SANDS/SOT 9013	100	•	169	56	15	28,459	0	2
KRUCER/K-9002+ VCCB	100	•	168	57	19	27 007	0	1
TOD FARM/FYD 3196	100	•	167	59	15	27,007	0	
IOF PART/EXP 5190	95	•	TON	59	ТЭ	20,109	0	0
KRUGER/K-9403 YGCB	100		166	56	15	26,572	0	1
PFISTER/EXP 1499BT	98		165	58	15	27,588	0	1
EPLEY/E1150BT	95		164	58	15	27,878	0	1
GARST/8716	100		163	60	16	28.749	0	1
KRUGER/K-9203 YGCB	100	-	162	56	14	28.314	0	1
	TOO	•	102	50	11	20,914	0	-
Test average.		155	174	58	15	28 09/	0	1
LSD(5%) values.		NS	10	1	1	NC	0	NS
Top group walues.	m11m •	122	170	۲ ۲	Ť	26 572 267	•	C N I
iop group value^- Mini		T 2 2	т/9	27	1 🗆	20,372		2
Maxi	mum:	1 1	1 1	~	15	21	•	2
No. entries in top gro	up:	ΤŢ	ΤŢ	6	26	31	•	J⊥
Coet. of variation#:		5	4	1	3	3	•	•

# Table 7. Brookings, non-Roundup Ready, early corn hybrid results, 2002-2003. SDSU Agronomy Farm, test relative maturity is 100-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		vield-	bu/a			2005		Lodged
		@15 5%	mst	B11	Grain	Acre	Green	below
	+Rol	CT3.30	1110 C .	100.	moist	harvoet	gnan	Par
Brand / Hybrid	Mat	2-11	2003	1b	nct	non	nct	nct
Brana / nybria	Mac.	2 YI	2005	TD.	pec	pop.	pee	pec
			Ent	ries	tested	two vears		
KRUGER/K-9208A	106	172	187	55	17	28,750	0	0
EPLEY/E1493	105	166	180	57	19	28.314	0	1
WENSMAN/W 5417BT	107	164	180	55	20	28,459	0	1
KRUGER/K-9910 VGCB	108	161	170	54	21	28 169	0	1
SANDS/SOT 9041	104	157	172	59	20	27,878	0	1
SILUES, BOL SOIL	101	107	1,2	55	20	2,70,0	0	-
KRUGER/K-9306 YGCB	104	153	182	55	18	28,169	0	0
GOLD COUNTRY/1016BT	104	144	176	55	15	28,750	0	1
KRUGER/K-9309 YGCB	108	142	163	55	21	28,895	0	1
			Ent	ries	tested	one year		
DAIRYLAND/STEALTH-5104	104	•	190	57	20	28,750	0	1
GOLD COUNTRY/103-02CB	105		188	57	20	28,895	0	1
DEKALB/DKC52-45 (YGCB	102		186	57	14	28,750	0	0
TOP FARM/EXP 3101B	101		182	56	16	28,459	0	0
EPLEY/E1442	104		181	57	18	28,604	0	0
	101	•	101	0.	20	20,001	Ū.	Ũ
KRUGER/K-9206 YGCB	104		180	58	19	27,588	0	1
EPLEY/E2410BT	107		179	57	19	28,459	0	2
JACOBSEN/JS4339BT	106		179	57	18	28,024	0	1
EPLEY/E1491	105		179	57	20	29,040	0	2
SANDS/SOI 103YGCB	103		176	55	16	28,459	0	0
SEEDS 2000/3122BT	102		174	56	15	28,459	0	2
MIDWEST/G 7188	102		167	55	15	28,314	0	1
CROW'S/3520 B	104		166	56	22	28,750	0	0
MIDWEST/G 7494 B	103		166	57	21	28,169	0	0
KRUGER/K-9308 YGCB	109		166	52	20	27,733	0	1
EPLEY/E1420BT	101		166	57	16	29,040	0	2
GARST/8787YG1	102		164	58	17	28,459	0	0
KRUGER/K-9305 YGCB	105		164	56	17	27,733	0	1
CROW'S/2133	102		163	55	14	28,895	0	0
SABRE/4280BT	102		163	55	15	28,459	0	3
WENSMAN/W 5314BT	101	•	161	55	15	27,733	0	1
KRUGER/K-9404 YGCB	101	•	159	59	17	28,459	0	0
JUNG/6580BT	104	•	159	58	18	29,040	0	0
KRUGER/EXP105 YGCB	103	•	159	56	18	27,588	0	2
SABRE/4292BT	102	•	154	58	17	28,459	0	0
Test average.		157	172	56	1 Ջ	28 /15	0	1
LCD $(5\%)$ $x_2$ $y_2$		TO NG	15	20	2 10	NC	U	NC
Top group values.	m11m •	1/0	175	ム 57	4	27 500	•	CIT
TOP GLOUP VALUE" - MINI		144	TID	10	16	21,000		2
MaxII		0	1 ⊑	16		<b></b>	•	ر د د
Coof of wariation"	սբ։	ð	с т С т	οT	τU	55 7	•	23
COEL. OF VARIATION#:		ð	С	7	Ю	3	•	•

# Table 8. Brookings, non-Roundup Ready, late corn hybrid results, 2002-2003. SDSU Agronomy Farm, test relative maturity is 101-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values.
NS indicates values within a column are not significantly different.
# Measure of experimental error: values less than 15% are desired.

						2003		
	+Pol	Yield- @15.5%	bu/a mst.	Bu.	Grain	Acre	Green	Lodged below
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Entr	ries t	cested or	ne year		
DEKALB/DKC50-18 (YGCB	100		92	54	14	25,410	0	5
DEKALB/DKC52-45 (YGCB	102		92	52	13	26,281	0	3
AGSOURCE SEEDS/5153BT	105		89	54	13	25,265	0	1
KRUGER/K-9305 YGCB	105		88	54	13	24,974	0	0
KRUGER/K-9306 YGCB	104	•	87	50	13	26,862	0	0
DAIRYLAND/STEALTH-5104	104		81	52	13	25,991	0	2
MIDWEST/G 7188	102		75	50	12	25,701	0	6
KRUGER/K-9403 YGCB	100		74	50	12	23,377	0	5
CROW'S/2133	102		74	50	12	26,427	0	2
KRUGER/EXP105 YGCB	103		72	53	13	26,572	0	6
CROW'S/3520 B	104		71	54	14	24,829	0	0
MIDWEST/G 7494 B	103	•	71	54	14	25,265	0	1
AGSOURCE SEEDS/4123BT	98		70	52	13	26,281	0	7
WENSMAN/W 5314BT	101		69	49	12	24,829	0	10
AGSOURCE SEEDS/4663BT	103		66	52	13	25,410	0	5
KRUGER/K-9404 YGCB	101	-	57	52	14	26,281	0	0
Test average:		•	77	52	13	25,610	0	3
LSD (5%) values: Top group value*- Minin	m11m •	•	10	2	0	NS 23 377	•	./
Maxin	num:		02	52	12	23,577		7
No. entries in top grou	.p:		5	11	4	16		15
Coef. of variation#:		•	8	3	2	6		

# Table 9.Armour, non-Roundup Ready, no-till early corn hybrid results, 2003. Mark and Cletus Wiechmann farm,<br/>test relative maturity is 105-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	dl	pct	pop.	pct	pct
			_ Entr	ries	tested o	ne year		
DEKALB/DKC57-84 (YGCB	107		91	54	14	27,297	0	0
DAIRYLAND/STEALTH-1606	106		82	52	14	27,588	0	0
KRUGER/K-9309 YGCB	108		81	54	14	25,119	0	1
KRUGER/K-9308 YGCB	109		80	54	14	24,829	0	1
KRUGER/EXP413 YGCB	111	•	79	54	14	22,796	0	1
MIDWEST/G 7716 B	110		79	55	14	25,265	0	1
AGSOURCE SEEDS/6163BT	111		79	56	14	26,427	0	0
KRUGER/K-9111 YGCB	110		78	54	14	24,974	0	0
DAIRYLAND/STEALTH1507BT	108		78	54	14	26,717	0	2
MIDWEST/G 7622 B	108	•	78	54	14	25,120	0	0
AGSOURCE SEEDS/5713BT	108		77	54	14	25,265	0	1
AGSOURCE SEEDS/5983BT	110		77	54	15	26,136	0	1
KRUGER/K-9411 YGCB	109		75	51	13	24,248	0	3
WENSMAN/W 4437	109		75	52	14	25,845	0	0
JACOBSEN/JS4645BT	110	•	74	55	15	26,136	0	0
WENSMAN/W 4418	106	-	72	53	14	21,780	0	1
WENSMAN/W 5417BT	107		72	53	14	25,555	0	0
KRUGER/EXP412 YGCB	110		68	55	14	24,394	0	0
CROW'S/438 B	108		63	53	13	23,958	0	3
KRUGER/K-9910 YGCB	108	•	60	51	14	24,248	0	3
JACOBSEN/JS4757BT	112		58	51	15	24,103	0	1
CROW'S/4911 B	110	•	56	50	14	26,717	0	0
Test average:		•	74	53	14	25,205	0	1
LSD (5%) values:			16	3	1	NS		NS
Top group value*- Minim	um:		75	53		21,780		
Maxim	um:				14			3
No. entries in top grou	p:		14	16	19	22		22
Coef. of variation#:			13	4	3	8	•	

# Table 10. Armour, non-Roundup Ready, no-till late corn hybrid results, 2003. Mark and Cletus Wiechmann farm, test relative maturity is 106-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Enti	ries t	cested to	wo years		
WENSMAN/W 4437	109	184	188	58	16	26,136	0	0
HEINE/H745YGCB	106	183	195	61	12	27,733	0	0
DAIRYLAND/STEALTH1507BT	108	182	191	58	17	28,895	0	0
WENSMAN/W 4418	106	174	178	58	15	24,539	0	1
WENSMAN/W 5417BT	107	172	176	57	15	27,152	0	0
	100	1.00	1	F 0	1.0	00 100	0	0
MERSCHMAN/M-20108	110	169	1/1	28	10	28,169	0	0
JACOBSEN/JS4645BT	110	167	164	58	17	26,862	0	0
JACOBSEN/JS463/		167	166	58	15	27,733	0	1
SANDS/SOI 9102	110	164	175	59	16	28,459	0	1
HEINE/H790YGCB	108	163	155	58	17	28,048	0	1
EPLEY/E2470	110	160	156	58	14	27,878	0	1
			Enti	ries t	cested or	ne vear		
KRUGER/K-9111 YGCB	110		195	58	18	27.152	0	0
KRUGER/K-9411 YGCB	109		190	59	18	24,248	0	1
CROW'S/438 B	108		190	58	17	27.878	0	0
SABRE/4800BT	108	•	189	58	16	27,298	0	0
GARST/8566YG1	109		187	58	16	27 443	0	0
Shitbiy 0500101	105		107	50	τu	27,113	Ū	0
ASGROW/RX702YG	110		186	60	18	26.862	0	1
EPLEY/E2490BT	110		184	57	16	27.879	0	1
DEKALB/DKC57-84 (YGCB	107		182	60	15	28 024	0	0
GARST/8552YG1	108	·	182	56	16	27,152	0	0
MIDWEST/G 7716 B	110	···	180	58	17	28,024	0	0
WENSMAN/W 5437BT	110		177	58	16	27,152	0	1
GARST/8545	109		177	59	16	27,588	0	1
EPLEY/E1420BT	101		173	59	15	29,040	0	2
SABRE/4760	107		171	58	16	27,007	0	0
EPLEY/E2410BT	107		171	61	17	28,605	0	1
ravemad/rv - 766	110		170	50	16	07 700	0	0
	106	•	160	59	1 /	21,133 27 070	0	0
DATUTIAND/SIEADIG-1000	107	•	161	50	1 T	21,010	0	0
REINE/R/03IGCB	110/	•	164 164	20 56	⊥/ 1 ⊓	41,001 27 722	0	乙 1
KRUGER/EAPIIZ IGCB	100	•	104	20 57		41,133	0	1
HEINE/H/92YGCB	T03		エ64	57	15	21,588	U	$\perp$

# Table 11. Beresford, non-Roundup Ready, early corn hybrid results, 2002-2003. SE Research Farm, test relative maturity is 110-day or less.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			Ent	ries t	cested o	ne year		
AGSOURCE SEEDS/5713BT	108		163	59	16	26,572	0	0
MERSCHMAN/M-9104	104		162	58	14	28,895	0	1
EPLEY/E1442	104		160	58	14	28,459	0	0
JACOBSEN/JS4440BT	108		159	59	16	27,878	0	2
PFISTER/2656BT	110	•	159	58	15	26,862	0	1
MIDWEST/G 7622 B	108		159	56	16	28,017	0	0
MERSCHMAN/M-21104	104		157	59	15	26,862	0	1
JACOBSEN/JS4339BT	106		156	58	14	26,862	0	0
HEINE/H810YGCB	110		156	58	16	26,136	0	0
CROW'S/4911 B	110	•	152	58	15	28,023	0	0
KRUGER/EXP412 YGCB	110		150	59	18	25,846	0	0
Test average:		171	172	58	16	27,446	0	0
LSD (5%) values:		NS	17	2	2	NS		NS
Top group value*- Mini	mum:	160	178	59		24,248		
Maxi	mum:				14			2
No. entries in top gro	up:	11	14	13	6	42		42
Coef. of variation#:		8	6	2	9	6	•	•

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Enti	ries	tested t	wo years		
AGSOURCE SEEDS/6183BT	111	183	176	57	20	27,152	0	1
SANDS/SOI 9132	113	175	168	59	16	24,394	0	1
EPLEY/E3630BT	113	165	169	58	18	28,604	0	0
AGSOURCE SEEDS/6203BT	112	164	144	58	18	26,717	0	0
			_ Enti	ries	tested c	one year		
DEKALB/DKC63-79 (YGCB	113	•	176	60	20	28,314	0	0
JACOBSEN/JS4757BT	112		174	57	21	27,443	0	1
GARST/8454YG1	112		171	58	16	28,605	0	1
CROW'S/5366 B	114		170	58	18	27,588	0	0
KRUGER/K-9114+ YGCB	115	•	169	58	17	27,879	0	1
KRUGER/K-9212 YGCB	113		169	58	15	27,878	0	0
KRUGER/K-9115 YGCB	115		168	59	18	27,878	0	0
HEINE/H827YGCB	111		166	58	18	26,717	0	0
KRUGER/K-9415	114		165	56	17	27,588	0	0
HEINE/H851YGCB	113	•	165	58	19	27,878	0	0
MIDWEST/G 8125 B	114		164	58	20	26,862	0	0
HEINE/H838YGCB	113		163	58	14	28,169	0	0
KAYSTAR/KX-890BT	112		163	58	17	27,152	0	1
DAIRYLAND/STEALTH-5112	111		162	58	16	27,588	0	0
KRUGER/EXP116 YGCB	114	•	161	58	24	27,878	0	0
GARST/8331YG1	114		161	59	22	28,314	0	0
EPLEY/E3641	114		160	58	16	29,185	0	0
HEINE/H824YGCB	112		160	60	20	27,152	0	1
CROW'S/5202 B	113		157	57	20	28,459	0	0
MIDWEST/G 8070 B	113	•	151	58	17	28,459	0	0
Test average:		172	165	58	18	27,661	0	0
LSD (5%) values:		NS	NS	1	3	1,456		1
Top group value*- Minin	num:	164	144	59	4 5	27,729		1
Maxir	num:		~ (	_	17		•	1
No. entries in top grou	:qı	4	24	5	10	13	•	24
Coet. of variation#:		6	7	1	9	3	•	•

# Table 12. Beresford, non-Roundup Ready, late corn hybrid results, 2002-2003. SE Research Farm, test relative maturity is 111-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

### Table E. Roundup Ready™ entries by brand/hybrid, and yield table number(s).

	Table		Table
Brand / Hybrid	No.	Brand / Hybrid	No.
	17		23
AGSOURCE/JJJJIRK	21	AGSOURCE/SJZIRK	20
AGSOURCE/4306RR/BT	21	AGSOURCE/5986RR/BT	22,23
AGSOURCE/5206RR/BT	18,21	AGSOURCE/6166BTR	22,24
AGSOURCE/5216RR/BT	21	AGSOURCE/6886BTR	24
AGSOURCE/5356RR/BT	18,22	ASGROW/RX601RR/YG	21,23
AGSOURCE/5456RR/BT	18,22		
CHANNEL/6925RB	13,15,19	CHANNEL/7406R	20,21
CHANNEL/6939RB	13,15,19	CHANNEL/7624RB	22,23
CHANNEL/6999RB	16,17	CHANNEL/7806RB	22,23
CHANNEL/7091RB	16.18.20	CHANNEL/8075RB	2.4
CHANNEL/7128BB	18 20 21	CHANNEL/81278B	21
CUANNEL /712EDD	10,20,21	CITAINED/ 012/10	24
CHANNEL//ISSRB	10,20,21		
	10 15		1 4 1 0 0 1
DEKALB/DKC39-48 RRYGCB	13,15	DEKALB/DKC53-34 RRYGCB	14,18,21
DEKALB/DKC40-63 (RR)	15	DEKALB/DKC58-24 RRYGCB	18,20,22,23
DEKALB/DKC42-95 RRYGCB	13,15,19	DEKALB/DKC60-09 RRYGCB	22,23
DEKALB/DKC44-46 RRYGCB	13,15,17,19	DEKALB/DKC60-17 (RR)	23
DEKALB/DKC46-28 (RR)	16,19	DEKALB/DKC60-19 RRYGCB	22
DEKALB/DKC47-10 RRYGCB	14,17,21		
EPLEY/E1165RR	19,21	EPLEY/E14R95BT	18,20,22
EPLEY/E1445RR	18,20,21	EPLEY/E2425RR	18.20.22
FPLEV/F1/85RR	19 21		10,20,22
	19,21		
$C\lambda D C T / 9/97 V C 1 / D D$	24	CADCT / 979200	16 19
GARS1/040/IG1/RR	24	GARS1/0/02RR	10,19
GARST/05101G1/RR	20 00	GARS1788121G17RR	TO
GARST/8553RR	20,23		
	16 10 00		1.2
GOLD COUNTRY/1016RRBT	16,18,20	GOLD COUNTRY/92-01CBR	13
GOLD COUNTRY/104-01CBR	20	GOLD COUNTRY/94-01RR	15
GOLD COUNTRY/105-03R	20		
HEINE/H625RR/YGCB	13,15	HEINE/H725RR/YGCB	17
HEINE/H650RR/YGCB	13,15	HEINE/H8490RR/YGCB	23
HEINE/H722RR	17		
INTEGRA/INT 6193RRYGCB	13,15	INTEGRA/INT 6300RRYGCB	14,16,17.19
INTEGRA/INT 6208RRVCCB	22.23	INTEGRA/INT 6312RRVCCB	22.24
INTEGRA / INT 6200RD	13 15	TNTECEDA / INT 6395PP	13 15 17 10
THIRDAY AND DO DO NA	1J, 1J	THIRDIAL THI 00000K	1J, 1J, 1/, 1J
TACOBGEN/JCA61500	22 24	TACOBGEN/JCA655PBT	24
	22,24 00 00		4 <del>1</del> 00
UACOBSEN/US403/K	۲۵,۵۵	UACORSEN/US4/48KBI	

### Table E. Roundup Ready™ entries by brand/hybrid, and yield table number(s) (continued).

Brand / Hybrid	Table No.	Brand / Hybrid	Table No.
JUNG/6205RR/BT	15	JUNG/6560ARR/BT	20
JUNG/6418RR/BT	15,19	JUNG/6580RR/BT	20
KALTENBERG/K5711RR	23	KALTENBERG/K6788RR	23
KAYSTAR/KX-4000RRBT KAYSTAR/KX-4250RRBT KAYSTAR/KX-5150RR KAYSTAR/KX-6261RR KAYSTAR/KX-6500RRBT	13,15,17 13,15,17,19 13,15,17,19 21 18,20,21,23	KAYSTAR/KX-777RRBT KAYSTAR/KX-780RR KAYSTAR/KX-8551RR KAYSTAR/KX-8770RRBT	18 22,23 22,24 24
KRUGER/EXP104 RR/YGCB KRUGER/EXP9492 RR/YGRW KRUGER/K-9002 RR/YGCB KRUGER/K-9111 RR/YGCB KRUGER/K-9115 RR/YGCB KRUGER/K-9203 RR/YGCB KRUGER/K-9212 RR/YGCB KRUGER/K-9299A RR	18 13 14,16,17 22 24 14,16,17 24 16,17	KRUGER/K-9299A RR/YGCB KRUGER/K-9300 RR/YGCB KRUGER/K-9392 RR KRUGER/K-9392 RR/YGCB KRUGER/K-9404 RR/YGCB KRUGER/K-9491 RR/YGCB KRUGER/K-9496 RR	14 14,16,17 13,15 13,15 16,18 13,15 13,15
PFISTER/1553 RR-BT	19,21	PFISTER/2656 RR	23
SABRE/3554RRBT	13,15,19	SABRE/4280RRBT	20
SABRE/3555RR	13,15,19	SABRE/4320RRBT	20
SEEDS 2000/2944RRBT	13,19	SEEDS 2000/3122RRBT	18
SEEDS 2000/2953RR	13,15,19	SEEDS 2000/3171RR	22
TOP FARM/8200RY	16,19	TOP FARM/8395RR	15,17,19
TOP FARM/8391R	15	TOP FARM/EXP3103ER	18,20
TRIUMPH/1120BTRR	23	TRIUMPH/3421RR	21
TRIUMPH/2370RR	17,21	TRIUMPH/9066RR	13,17
WENSMAN/W 6089RRBT	13,15	WENSMAN/W 6212RR	13,15,17,19
WENSMAN/W 6116RR	13,15,17,19	WENSMAN/W 6315RRBT	14,16,18,20,21
WENSMAN/W 6117RRBT	13,15,17,19	WENSMAN/W 6421RR	18,20,22,23

						2003		
		Yield	– bu/a					Lodaed
		@15.5	% mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			Entr	ies	tested t	wo vears		
DEKALB/DKC44-46 RRYGCB	94	192	205	60	16	28,314	0	3
WENSMAN/W 6212RR	95	191	201	59	15	28,459	0	5
INTEGRA/INT 6193RRYGCB	93	184	200	59	14	27,152	0	3
INTEGRA/INT 6290RR	92	166	181	59	14	27,443	Õ	6
	22	100	Entr	ies	tested o	ne vear	0	0
WENSMAN/W 6117RRBT	92		201	61	14	26,862	0	6
KRUGER/K-9491 RR/YGCB	91		201	60	14	25,845	0	2
GOLD COUNTRY/92-01CBR	92		199	61	14	28,459	0	6
KRUGER/EXP9492 RR/YGRW	90		198	59	15	27,733	0	5
SABRE/3555RR	95		198	60	14	28,750	0	2
						_ ,		
DEKALB/DKC42-95 RRYGCB	92		196	60	14	28,895	0	5
CHANNEL/6939RB	93		196	60	13	26,281	0	6
SEEDS 2000/2944RRBT	94		196	60	14	24,539	0	1
SABRE/3554RRBT	94		196	61	14	27,878	0	5
KAYSTAR/KX-4250RRBT	93		195	61	14	27,879	0	5
KAYSTAR/KX-4000RRBT	91	•	195	61	14	25,265	0	5
HEINE/H625BB/VGCB	93		193	60	14	25 700	0	1
KAYSTAR/KX-5150RR	95		193	58	15	27,588	Ő	7
WENSMAN/W 6116RR	91	•	192	60	14	25 991	Ő	7
KRUGER/K-9496 RR	94	•	191	59	16	27 878	0	12
CHANNEL/6925RB	92	•	189	60	13	27,070	0	7
CIMULU OF SILD	52	·	105	00	10	27,113	Ū	1
SEEDS 2000/2953RR	95		189	59	16	27,588	0	6
KRUGER/K-9392 RR/YGCB	90		187	60	14	25,846	0	1
WENSMAN/W 6089RRBT	84		187	62	14	26,571	0	4
HEINE/H650RR/YGCB	93		185	61	14	27,298	0	8
INTEGRA/INT 6395RR	95		180	58	15	26,862	0	5
DEKALB/DKC39-48 RRYGCB	89		175	59	15	24.829	0	9
KRUGER/K-9392 RR	90		173	60	13	25.700	0	4
TRIUMPH/9066RR	90		170	60	13	23,958	0	4
Togt average.		101	101	60	1 /	26 002	0	
LCD $(5\%)$ values.		104	1/	200	1 ± ±	1 QQA	U	5
Top group walues.	- mi i m	100	101	ے د	Ť	1,200 26 010	•	J
TOP GLOUP VALUE"- MINI	11.01111 <b>:</b>	TOU	エラエ	00	1 /	∠0,91U		E
MaxII		С	10	10	14 20	1 ⊑	•	0 00
Coof of waristion#	i Yr	د ۸	10	۲٦ د	<u>۲</u>	T D	•	44
CUEL. UL VALIALIUII#:		4	4	7	Ö	C	•	•

# Table 13. Warner, Roundup Ready<sup>™</sup>, early corn hybrid results, 2002-2003. Allen and Inel Ryckman farm, test relative maturity is 95-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values.
NS indicates values within a column are not significantly different.
# Measure of experimental error: values less than 15% are desired.

		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist	. harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Ent	ries	tested	two years		
DEKALB/DKC53-34 RRYGCB	103	187	202	57	19	28,895	0	4
			_ Ent	ries	tested	one year		
DEKALB/DKC47-10 RRYGCB	97		201	61	14	28,605	0	10
KRUGER/K-9203 RR/YGCB	100		199	56	19	27,588	0	б
WENSMAN/W 6315RRBT	101		197	57	18	28,314	0	7
KRUGER/K-9002 RR/YGCB	100		187	58	21	27,298	0	1
INTEGRA/INT 6300RRYGCB	100		184	58	19	27,298	0	3
KRUGER/K-9299A RR/YGCB	100		182	58	15	28,169	0	3
KRUGER/K-9300 RR/YGCB	96	•	178	57	16	26,862	0	3
Test average:		187	191	58	17	27,878	0	5
LSD (5%) values:			14	1	2	NS		3
Top group value*- Minir	num:		188	60		26,862		
Maxir	num:				16			4
No. entries in top grou	ip:		4	1	2	8		5
Coef. of variation#:		•	4	1	б	4	•	•

#### Table 14. Warner, Roundup Ready™, late corn hybrid results, 2002-2003. Allen and Inel Ryckman farm, test relative maturity is 96-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different. # Measure of experimental error: values less than 15% are desired.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist	. harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Entr	ries	tested	two years		
INTEGRA/INT 6193RRYGCB	93	119	78	55	15	27,007	0	8
DEKALB/DKC44-46 RRYGCB	94	118	80	54	18	27,588	0	15
CHANNEL/6925RB	92	113	78	57	16	23,377	0	2
WENSMAN/W 6212RR	95	113	77	58	16	27,733	0	6
			_ Entr	ries	tested	one year		
DEKALB/DKC42-95 RRYGCB	92	•	88	56	17	29,040	0	3
WENSMAN/W 6089RRBT	84	•	86	58	15	27,152	0	6
JUNG/6418RR/BT	92	•	86	58	16	26,862	0	9
SABRE/3555RR	95		84	57	16	25,991	0	11
KRUGER/K-9491 RR/YGCB	91		84	56	15	26,717	0	2
SABRE/3554RRBT	94		84	59	16	27,443	0	7
WENSMAN/W 6117RRBT	92		82	58	16	25,120	0	9
KAYSTAR/KX-4250RRBT	93		81	58	16	28,314	0	7
GOLD COUNTRY/94-01RR	94	•	81	57	16	27,152	0	6
KRUGER/K-9392 RR/YGCB	90	•	81	57	17	24,248	0	3
WENSMAN/W 6116RR	91		80	57	16	26,717	0	2
HEINE/H625RR/YGCB	93		80	55	15	27,297	0	9
INTEGRA/INT 6395RR	95		79	57	16	27,588	0	10
SEEDS 2000/2953RR	95	•	79	57	17	26,281	0	13
KAYSTAR/KX-4000RRBT	91	•	79	54	15	27,153	0	4
CHANNEL/6939RB	93		78	56	15	25,991	0	1
KAYSTAR/KX-5150RR	95		76	56	16	27,733	0	13
KRUGER/K-9496 RR	94		76	57	16	28,459	0	8
HEINE/H650RR/YGCB	93		76	58	16	27,153	0	1
DEKALB/DKC39-48 RRYGCB	89	•	76	57	16	23,232	0	9
TOP FARM/8395RR	95		76	58	16	24,394	0	9
KRUGER/K-9392 RR	90		76	57	16	26,426	0	3
TOP FARM/8391R	91		75	56	15	26,136	0	1
DEKALB/DKC40-63 (RR)	90		70	56	15	27,733	0	9
JUNG/6205RR/BT	82	•	68	55	15	26,572	0	31
INTEGRA/INT 6290RR	92		56	52	16	28,314	0	13
Test average:		116	78	57	16	26,697	0	8
LSD (5%) values:		NS	11	_2	1	1,636	•	8
Top group value*- Minin	num:	113	77	57		27,404		
Maxin	num:		o -		16		•	9
No. entries in top grou	:qu	4	20	18	26	10	•	23
Coef. of variation#:		8	9	2	4	4	•	•

# Table 15.South Shore, Roundup Ready™, early corn hybrid results, 2000-2003. NE Research Farm,<br/>test relative maturity is 95-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist	. harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Entr	ries	tested	two years		
DEKALB/DKC46-28 (RR)	96	119	77	58	16	28,024	0	9
CHANNEL/6999RB	99	90	70	54	19	28,605	0	8
			_ Entr	ries	tested (	one year		
WENSMAN/W 6315RRBT	101		75	55	23	28,024	0	5
GARST/8812YG1/RR	97		75	56	18	26,862	0	3
GOLD COUNTRY/1016RRBT	104		74	55	23	28,024	0	б
INTEGRA/INT 6300RRYGCB	100		73	56	25	24,539	0	7
KRUGER/K-9203 RR/YGCB	100	•	70	55	22	26,717	0	9
CHANNEL/7091RB	101		70	58	23	28,604	0	2
GARST/8782RR	100		70	56	17	26,426	0	5
KRUGER/K-9299A RR	99		69	56	17	27,007	0	5
KRUGER/K-9002 RR/YGCB	100		64	59	22	26,426	0	0
TOP FARM/8200RY	100	•	61	57	18	24,684	0	3
KRUGER/K-9404 RR/YGCB	102		60	60	21	28,023	0	1
KRUGER/K-9300 RR/YGCB	96		59	54	20	27,298	0	4
Test average:		104	69	56	20	27,090	0	5
LSD (5%) values:		NS	10	2	2	1,836		6
Top group value*- Minim	num:	90	67	58		26,769		
Maxin	num:				18			6
No. entries in top grou	.qu	2	10	4	5	6		10
Coef. of variation#:		2	8	2	6	4		

# Table 16. South Shore, Roundup Ready<sup>™</sup>, late corn hybrid results, 2002-2003. NE Research Farm, test relative maturity is 96-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			Entr	ies	tested o	ne year		
DEKALB/DKC47-10 RRYGCB	97		106	58	12	28,459	0	4
KAYSTAR/KX-5150RR	95		102	56	12	27,298	0	2
DEKALB/DKC44-46 RRYGCB	94		101	54	11	28,895	0	2
KAYSTAR/KX-4000RRBT	91		100	55	11	27,443	0	3
WENSMAN/W 6116RR	91		100	57	12	27,007	0	2
AGSOURCE/3931RR	96		100	56	11	28,169	0	0
WENSMAN/W 6117RRBT	92		99	58	12	27,443	0	3
KAYSTAR/KX-4250RRBT	93		98	57	12	28,605	0	4
INTEGRA/INT 6395RR	95		98	56	12	27,007	0	2
TOP FARM/8395RR	95	•	93	56	12	26,136	0	3
WENSMAN/W 6212RR	95		90	56	12	28,024	0	3
HEINE/H725RR/YGCB	100		88	58	13	28,024	0	1
KRUGER/K-9203 RR/YGCB	100		87	55	11	27,443	0	3
INTEGRA/INT 6300RRYGCB	100		84	57	12	27,733	0	2
CHANNEL/6999RB	99	•	83	52	11	28,605	0	1
KRUGER/K-9299A RR	99		83	53	11	26,717	0	0
HEINE/H722RR	100	•	81	53	11	27,152	0	0
TRIUMPH/9066RR	90	•	81	58	12	22,651	0	2
KRUGER/K-9002 RR/YGCB	100		79	57	12	27,733	0	0
KRUGER/K-9300 RR/YGCB	96	•	75	52	11	27,733	0	2
TRIUMPH/2370RR	100		74	56	12	27,443	0	0
Test average:		•	91	56	12	27,415	0	2
LSD (5%) values:			8	1	0	1,500		2
Top group value*- Minim	ium:		98	57		27,395		
Maxim	ium:				11			2
No. entries in top grou	p:		9	8	5	14		14
Coef. of variation#:			5	1	2	3		

# Table 17. Yale, Roundup Ready<sup>™</sup>, no-till early corn hybrid results, 2002-2003. Kim Tschetter farm, test relative maturity is 100-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Entr	ies	tested o	ne year		
AGSOURCE/5356RR/BT	106		100	56	12	26,571	0	0
DEKALB/DKC53-34 RRYGCB	103		91	56	12	27,733	0	2
CHANNEL/7128RB	102		86	57	13	27,152	0	0
EPLEY/E2425RR	107		86	57	13	26,572	0	1
KRUGER/EXP104 RR/YGCB	102		85	58	13	28,314	0	2
SEEDS 2000/3122RRBT	102		85	55	11	26,572	0	3
CHANNEL/7135RB	102		84	54	11	26,717	0	3
KAYSTAR/KX-6500RRBT	104		83	57	12	27,588	0	0
TOP FARM/EXP3103ER	103		82	54	11	21,635	0	1
GOLD COUNTRY/1016RRBT	104	•	82	54	11	28,024	0	2
WENSMAN/W 6315RRBT	101		82	54	12	28,169	0	2
EPLEY/E1445RR	104		81	57	12	27,297	0	2
WENSMAN/W 6421RR	106		80	57	13	27,443	0	1
EPLEY/E14R95BT	106		77	57	13	28,459	0	0
AGSOURCE/5206RR/BT	104	•	76	57	13	27,733	0	1
AGSOURCE/5456RR/BT	107		76	55	12	28,459	0	2
DEKALB/DKC58-24 RRYGCB	108		74	57	13	26,717	0	0
CHANNEL/7091RB	101	•	71	57	13	27,733	0	0
KRUGER/K-9404 RR/YGCB	102		69	58	13	27,878	0	3
KAYSTAR/KX-777RRBT	110	•	57	57	23	25,701	0	4
Test areas			0.0	E C	10	27 122	0	1
ICD (E%) walwar		•	10	20	1	27,125	0	1
LSD (5%) VALUES:		•	10	5	Ť	2,294	•	2
TOP GLOUP VALUE"- MININ	.ulli:	•	90	00	10	20,105		2
No entries in top grou	10111. 10.		2	16	10	1 8	•	ے 16
Coef of variation#.	·Þ.	•	2. 7	т О Т О	то ТО	то ТО	•	ΤU
COCL. OI VALIACION#:		•	1	5	0	J	•	•

# Table 18. Yale, Roundup Ready™, no-till late corn hybrid results, 2002-2003. Kim Tschetter farm, test relative maturity is 101-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Entr	ries	tested t	wo years		
DEKALB/DKC44-46 RRYGCB	94	183	190	58	15	28,750	0	2
DEKALB/DKC46-28 (RR)	96	178	181	60	15	28,459	0	0
WENSMAN/W 6212RR	95	174	193	59	16	29,766	0	1
SEEDS 2000/2944RRBT	94	169	177	58	15	26,426	0	0
EPLEY/E1485RR	100	154	166	58	15	25,410	0	0
			_ Entr	ries	tested o	ne year		
TOP FARM/8395RR	95		198	58	16	28,895	0	1
SABRE/3555RR	95		192	59	16	28,459	0	2
SEEDS 2000/2953RR	95		190	59	16	28,024	0	1
INTEGRA/INT 6395RR	95		189	58	16	26,717	0	2
EPLEY/E1165RR	95	•	187	59	16	27,443	0	1
KAYSTAR/KX-5150RR	95		187	59	15	28,750	0	2
SABRE/3554RRBT	94		184	60	15	28,604	0	1
KAYSTAR/KX-4250RRBT	93	•	182	60	15	28,169	0	1
DEKALB/DKC42-95 RRYGCB	92		181	58	15	28,895	0	0
JUNG/6418RR/BT	92	•	181	61	15	26,717	0	0
WENSMAN/W 6117RRBT	92		180	60	15	27,733	0	1
WENSMAN/W 6116RR	91		179	60	15	28,024	0	0
INTEGRA/INT 6300RRYGCB	100		179	59	17	28,024	0	0
CHANNEL/6939RB	93		177	59	15	27,443	0	0
CHANNEL/6925RB	92	•	175	60	15	28,895	0	2
PFISTER/1553 RR-BT	99	·	166	57	15	28,459	0	1
GARST/8782RR	100		164	57	15	28,023	0	0
TOP FARM/8200RY	100		159	58	15	25,846	0	1
Test average:		172	181	59	15	27,910	0	1
LSD (5%) values:		NS	13	2	1	1,374		NS
Top group value*- Minim	num:	154	185	59		28,392		
Maxin	num:	_	-		16		•	2
No. entries in top grou	ıp:	5	8	14	22	10	•	23
Coet. of variation#:		4	4	2	2	3	•	•

# Table 19. Brookings, Roundup Ready<sup>™</sup>, early corn hybrid results, 2002-2003. SDSU Agronomy Farm, test relative maturity is 100-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.
						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	a Acre	Green	below
	+Rel.			wt.	moist	. harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Enti	ries	tested	two years	·	
EPLEY/E2425RR	107	163	166	58	17	27,878	0	3
			_ Enti	ries	tested	one year		
GARST/8553RR	107		183	54	21	27,588	0	0
SABRE/4280RRBT	102		177	56	16	28,169	0	0
GOLD COUNTRY/1016RRBT	104		176	58	16	28,169	0	1
CHANNEL/7135RB	102		172	57	16	28,024	0	2
WENSMAN/W 6421RR	106	•	170	56	19	27,443	0	1
JUNG/6580RR/BT	104		170	60	19	27,443	0	0
CHANNEL/7091RB	101		169	58	18	28,604	0	0
WENSMAN/W 6315RRBT	101		167	57	16	28,314	0	1
EPLEY/E1445RR	104		165	58	19	27,878	0	1
KAYSTAR/KX-6500RRBT	104	•	165	58	18	28,314	0	1
DEKALB/DKC58-24 RRYGCB	108		164	58	21	28,604	0	0
EPLEY/E14R95BT	106		163	57	20	28,024	0	3
CHANNEL/7128RB	102		162	58	17	27,007	0	0
JUNG/6560ARR/BT	101	•	160	56	15	28,459	0	0
CHANNEL/7406R	105	•	160	56	16	28,459	0	1
SABRE/4320RRBT	102		159	59	17	29,040	0	0
GOLD COUNTRY/105-03R	105		158	56	16	26,717	0	1
TOP FARM/EXP3103ER	103		155	57	15	25,846	0	1
GOLD COUNTRY/104-01CBR	103	•	155	58	17	28,169	0	1
Test average:		163	166	57	17	27,907	0	1
LSD (5%) values:			15	1	2	NS		NS
Top group value*- Minim	num:		168	59		25,846		
Maxim	num:				17	-		3
No. entries in top grou	.p:		7	2	12	20		20
Coef. of variation#:			5	2	7	4		

# Table 20. Brookings, Roundup Ready™, late corn hybrid results, 2002-2003. SDSU Agronomy Farm, test relative maturity is 101-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			Entr	ries	tested o	ne year		
DEKALB/DKC47-10 RRYGCB	97		101	55	14	26,571	0	4
EPLEY/E1165RR	95		99	53	13	25,846	0	2
DEKALB/DKC53-34 RRYGCB	103		92	52	13	25,555	0	3
EPLEY/E1445RR	104		90	55	14	25,410	0	0
WENSMAN/W 6315RRBT	101		88	51	12	25,991	0	2
TRIUMPH/3421RR	104		86	53	14	25,845	0	2
CHANNEL/7128RB	102		85	53	14	24,829	0	0
AGSOURCE/5206RR/BT	104		84	53	14	24,829	0	1
PFISTER/1553 RR-BT	99		83	49	12	25,845	0	5
ASGROW/RX601RR/YG	105		82	55	14	25,410	0	2
CHANNEL/7135RB	102		82	51	13	23,522	0	1
EPLEY/E1485RR	100		80	52	13	22,506	0	1
AGSOURCE/4306RR/BT	102		78	48	12	25,555	0	0
KAYSTAR/KX-6500RRBT	104		74	53	14	25,700	0	2
CHANNEL/7406R	105		73	50	13	24,974	0	2
KAYSTAR/KX-6261RR	102	·	70	53	14	24,249	0	1
TRIUMPH/2370RR	100		70	53	13	23,813	0	1
AGSOURCE/5216RR/BT	105	•	52	48	13	25,555	0	1
Test average:		•	82	52	13	25,111	0	2
LSD (5%) values:			13	2	1	NS	•	NS
Top group value*- Minir	num:	•	88	53		22,506		
Maxir	num:				13		•	5
No. entries in top grou	ib:	•	4	10	10	18	•	18
Coet. of variation#:		•	10	3	3	7	•	•

# Table 21. Armour, Roundup Ready™, no-till early corn hybrid results, 2003. Mark and Cletus Wiechmann farm, test relative maturity is 105-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values.
NS indicates values within a column are not significantly different.
# Measure of experimental error: values less than 15% are desired.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Entr	ies i	tested of	ne year		
AGSOURCE/5356RR/BT	106	•	95	53	13	26,136	0	0
DEKALB/DKC60-19 RRYGCB	110	•	93	54	14	25,265	0	1
EPLEY/E14R95BT	106	•	89	56	14	24,974	0	4
WENSMAN/W 6421RR	106	•	89	56	14	23,813	0	1
AGSOURCE/6166BTR	111	•	88	56	15	26,717	0	0
CHANNEL/7624RB	108		88	53	14	25,555	0	1
EPLEY/E2425RR	107		83	54	14	25,555	0	1
KRUGER/K-9111 RR/YGCB	111		83	55	14	26,281	0	0
AGSOURCE/5986RR/BT	110		83	56	16	23,232	0	0
INTEGRA/INT 6208RRYGCB	108		82	54	14	26,281	0	0
DEKALB/DKC58-24 RRYGCB	108		81	56	14	24,394	0	0
JACOBSEN/JS4615RBT	112		81	55	14	24,974	0	0
KAYSTAR/KX-8551RR	112		80	56	15	24,393	0	1
INTEGRA/INT 6312RRYGCB	112		79	56	15	24,975	0	0
KAYSTAR/KX-780RR	109	•	76	54	14	25,265	0	2
DEKALB/DKC60-09 REVGCB	110		73	54	14	25.700	0	0
AGSOURCE/5456RR/BT	107		67	52	13	24,974	0	0
JACOBSEN/JS4748RBT	112		66	57	17	24.393	0	1
JACOBSEN/JIS4637B	110	-	63	54	14	24,103	0	1
CHANNEL/7806RB	110		59	56	14	24,974	0	1
SEEDS 2000/3171RR	107		58	51	13	25,846	0	1
Test average:		•	79	55	14	25,133	0	1
LSD (5%) values:			12	2	1	NS		NS
Top group value*- Minir	num:		83	55		23,232		
Maxir	num:				14			4
No. entries in top grou	.p:		9	11	16	21		21
Coef. of variation#:			9	3	4	6		•

# Table 22. Armour, Roundup Ready™, no-till late corn hybrid results, 2003. Mark and Cletus Wiechmann farm, test relative maturity is 106-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		@15.5%	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist	. harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			Enti	ries	tested t	two years		
PFISTER/2656 RR	109	168	161	58	14	27,443	0	2
DEKALB/DKC58-24 RRYGCB	108	167	184	61	16	27,879	0	0
DEKALB/DKC60-09 RRYGCB	110	167	175	61	16	28,169	0	0
ASGROW/RX601RR/YG	105	162	171	60	15	28,750	0	1
TRIUMPH/1120BTRR	108	154	155	58	19	26,136	0	0
JACOBSEN/JS4637R	110	151	148	57	14	25,700	0	1
			_ Enti	ries	tested o	one year		
WENSMAN/W 6421RR	106		190	59	17	27,733	0	0
KAYSTAR/KX-6500RRBT	104		182	60	16	27,443	0	0
KALTENBERG/K6788RR	108		179	58	17	28,459	0	0
DEKALB/DKC60-17 (RR)	110		179	59	17	27,878	0	1
GARST/8553RR	107	•	177	57	17	28,459	0	1
INTEGRA/INT 6208RRYGCB	108		171	58	16	27,443	0	0
GARST/8510YG1/RR	110		169	58	18	29,040	0	0
AGSOURCE/5986RR/BT	110		169	59	17	27,588	0	0
KALTENBERG/K5711RR	105		168	59	15	28,024	0	1
CHANNEL/7624RB	108		167	58	16	27,443	0	0
CHANNEL/7806RB	110		164	59	15	25,845	0	1
HEINE/H8490RR/YGCB	110		164	55	16	28,024	0	0
AGSOURCE/5921RR	110		161	59	15	27,588	0	1
KAYSTAR/KX-780RR	109	•	148	57	15	27,588	0	1
Test average:		162	169	58	16	27,632	0	0
LSD (5%) values:		NS	26	2	2	1,749		NS
Top group value*- Minim	um:	151	164	59		27,291		-
Maxim	um:				16			2
No. entries in top grou	p:	6	15	10	13	17		20
Coef. of variation#:	_	8	9	2	9	4		

# Table 23. Beresford, Roundup Ready™, early corn hybrid results, 2002-2003. SE Research Farm, test relative maturity is 110-day or less.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

						2003		
		Yield-	bu/a					Lodged
		015.58	mst.	Bu.	Grain	Acre	Green	below
	+Rel.			wt.	moist.	harvest	snap	ear
Brand / Hybrid	Mat.	2-yr	2003	lb	pct	pop.	pct	pct
			_ Entr	ries t	ested o	ne year		
AGSOURCE/6166BTR	111		179	59	19	26,281	0	0
AGSOURCE/6886BTR	112		176	59	20	26,717	0	0
CHANNEL/8127RB	114		169	58	21	27,879	0	0
CHANNEL/8075RB	113		169	60	21	27,153	0	0
INTEGRA/INT 6312RRYGCB	112	•	164	57	14	25,846	0	0
KAYSTAR/KX-8770RRBT	114		162	58	20	27,588	0	0
KRUGER/K-9212 RR/YGCB	113		160	58	14	26,717	0	0
KAYSTAR/KX-8551RR	112		159	58	14	26,717	0	0
JACOBSEN/JS4615RBT	112		156	58	17	27,588	0	0
GARST/8487YG1/RR	112	•	154	58	17	27,588	0	0
KRUGER/K-9115 RR/YGCB	115		152	59	18	27,588	0	0
JACOBSEN/JS4655RBT	112	•	151	56	18	27,298	0	0
Test average:		•	163	58	18	27,080	0	0
LSD (5%) values:			18	2	3	NS	•	
Top group value*- Minin	num:		161	58		25,846	_	
Maxir	num:			4.0	17		•	•
No. entries in top grou	.qu	•	6	10	5	12	•	•
Coef. of variation#:		•	7	2	10	5	•	•

# Table 24. Beresford, Roundup Ready™, late corn hybrid results, 2002-2003. SE Research Farm, test relative maturity is 111-day or more.

+ Relative maturity of hybrid as reported by seed company.

\* Value is within one LSD value of the highest yield, bushel weight, or harvest population values; or the lowest grain moisture, green snap or lodging values. NS indicates values within a column are not significantly different.

Seed brand	Mailing address
AgSource	Agsource Seeds, 1717 E. 8 <sup>th</sup> Street, Boone, IA 50036
Asgrow	Monsanto, 3100 Sycamore Rd, Dekalb, IL 60115
Channel	Channel Bio Corp., 5932 Schumann Dr., Madison, WI 53711
Crows	Crows Hybrid Corn Co., 5932 Schumann Dr., Madison, WI 53711
Dairyland	Dairyland Seed Co., Inc., PO Box 958, West Bend, WI 53095
Dekalb	Monsanto, 3100 Sycamore Rd, Dekalb, IL 60115
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310 Shell Rock, IA 50670
Garst	Garst/AgriPro Seed Co., 1010 Christine Ave, Brookings, SD 57006
Gold Country	Gold Country Seed Inc., PO Box 604, Hutchinson, MN 55350
Heine	Heine Seed Corn, 1020 E. 320 <sup>th</sup> St., Vermillion, SD 57064
Integra Seed	Integra Seed, Ltd., PO Box 40, Bozeman, MT 59771
Jacobsen	Jacobsen Hybrid Corn Co., Inc., Box 379, Lake View, IA 51450
Jung	Jung Seed Genetics, 341 S. High St., Randolph, WI 53956
Kaltenberg	Kaltenberg Seeds, PO Box 278, Waunakee, WI 5359
Kaystar	Kaystar Seed, PO Box 947, Huron, SD 57350
Kruger	Kruger Seed Co., Hwy 20 E, Box A, Dike, IA 50624
Merschaman	Merschman Seeds, Inc. 103 Ave. D, West Point, IA 52656
Midwest	Midwest Seed Genetics, 5932 Schumann Dr., Madison, WI 53711
Pfister	Pfister Hybrid Corn Co., 187 N. Fayette St., El Paso, IL 61738
Sabre	Sabre Initiatives, LLC, 2508 Trott Ave. SW, Willmar, MN 56201
Sands	Sand Seed Service, Inc., Box 648, Marcus, IA 51035
Seeds 2000	Seeds 2000, PO Box 200, Breckenridge, MN 56520
Top Farm	Top Farm Hybrids, PO Box 850, Cokato, MN 55321
Triumph	Triumph Seed Co., Inc., PO Box 1050, Ralls, TX 79357
Wensman	Wensman Seed Co., PO Box 190, Wadena, MN 56482

## Table F. Seed companies entered in the 2003 corn hybrid trials by seed brand name.



# 2004 Precision Planted Performance Trials



This report is available on the World-Wide-Web at http://plantsci.sdstate.edu/varietytrials/vartrial.html

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50	and harvest nonulation_ central South Dakota locations	20
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TD OF	and harvest nonulation_ central South Dakota locations	2/
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	and harvest population- southern South Dakota locations	

\*Roundup Ready is registered by Monsanto.

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PDF November 2004

# 2004 Precision Planted Corn Performance Trials

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This publication reports the performance of entries in the 2004 South Dakota corn hybrid performance trials for both non-Roundup-Ready<sup>™</sup> and Roundup-Ready<sup>™</sup> hybrids. Information includes both the most recent 2-year and 1-year grain yields in bushels per acre (bu/ac); and 1-year bushel weight, moisture percentages of shelled corn at harvest, acre harvest population, and stalk lodge percentages. These performance trials are conducted by the South Dakota Crop Performance Testing (CPT) program at South Dakota State University.

## **Test Trial Locations**

Trial locations, soil types, and seedbed preparation are indicated in Table A, while cooperators and seeding dates are shown in Table B. Seeding started April 30 and was completed May 7, 2004.

## Weather Conditions

Weather data (Table C) for this year's growing season, April-September, was obtained from the 2004 USDA-South Dakota Crop-Weather reports and the South Dakota Automatic Weather Data Network (SD-AWDN).

Heat unit or growing-degree-day (GDD) accumulations are reported for the nearest test site in place of temperatures. Corn hybrids typically express a certain thermal or heat unit requirement from emergence to black-layer formation (physiological maturity). The heat unit totals across test locations varied from a high of 2,829 GDD at Armour to a low of 2,032 GDD at Brookings.

GDD seasonal accumulations were below average for all test locations in 2004. Deficits ranged from a low range of 96 to 165 units at Huron, Centerville, Armour, and Brookings to a higher range of 304 to 333 units at Watertown and Aberdeen. Generally, across all locations, cooler than normal temperatures resulted in below-normal levels of heat units during July and August. At Aberdeen and Watertown cooler than normal temperatures were evident in May and June. Precipitation accumulation varied greatly across test locations. Seasonal total precipitation from April 1 through the end of September was highest at Huron and Brookings and lowest at Aberdeen and Armour. On average the seasonal precipitation accumulations were above average at all locations. Precipitation seasonal accumulations ranged from 1.62 inches at Armour to 7.67 inches at Huron. Precipitation deficits of 0.12 to 1.0 inches were evident in April at most locations. Later in the season deficits of 0.88, 1.3, and 1.35 inches were evident at Watertown, Beresford, and Armour, respectively.

In summary, moisture deficits in July and August likely reduced yields at Armour. A more normal or above-normal moisture distribution in July and August likely resulted in higher yields at the other locations. The seasonal GDD totals across this region were below normal for 2004. At Aberdeen, Brookings, and Watertown, temperatures were cooler than normal in May and June. These cooler temperatures were often accompanied by overcast clouds and little effective sunlight. At Brookings these overcast conditions lasted nearly 3 weeks.

The assistance of the following is appreciated: Glenda Piechowski at Brookings, Jim Smolik and Allen Heuer at the NE Research Farm, Todd Bortnem and the Brookings Agronomy Farm staff, and Bob Berg and the SE Research Farm staff; and farmer-cooperators Mark and Cletus Wiechmann (Armour), Kirk Aughenbaugh (Iroquois), and Allen and Inel Ryckman (Warner).

## **General Test Procedures**

Participating companies pick the test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The arbitrary relative maturity breaks between the early and late tests are as follows: 95 days for Warner and South Shore; 100 days for Yale and Brookings; 105 days for Armour; and 110 days for Beresford. A hybrid is assigned to a maturity trial based on its relative maturity rating reported by the participating seed company. This testing program does not guarantee that all entries are placed in the proper maturity trial. In some trials, borderline entries with relative maturity ratings at or near the arbitrary break between the early and late trials may crossover at a given location. In some cases this may be indicated by exceptionally high or low grain moisture contents at harvest. A higher-than-average moisture content may indicate the hybrid is later in relative maturity than indicated. Likewise, a lower-than-average moisture may indicate the hybrid is earlier in relative maturity than indicated.

A fee was charged for all entries at each location. A list of participating seed companies for 2004 is presented in Table F.

## **Experimental Procedures**

Entries were seeded in three replications with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20 feet long. The center two rows were harvested for yield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2004, the planter was calibrated and delivered 27,878 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, the acre harvest population is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest.

Soil type, land preparation, and previous crop at each test site are outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/acre of 37-18-00 was applied 2 inches below and 2 inches to the side (2 x 2) of the seed row. Force<sup>TM</sup> insecticide was applied down the seed tube at label rates for corn rootworm control this year. In addition, Pounce<sup>TM</sup> granular was applied at labeled rates down the whorl with a tractor mounted granular applicator just prior to canopy closure.

The experimental procedures described above apply both to the non-Roundup Ready<sup>™</sup> and the Roundup Ready<sup>™</sup> hybrid corn trials with one exception: Weed control in the Roundup Ready<sup>™</sup> trials consisted of two post emergence applications of Roundup Ultra<sup>™</sup> (32 oz/acre): first, when weeds were 2-4 inches tall; and second, when weed growth was again 2-4 inches tall. In non-Roundup Ready<sup>™</sup> test trials, pre-emergence herbicides consisted of Harness Extra<sup>™</sup> (1.0 qt/ac) at Warner, South Shore, and Iroquois; Dual<sup>™</sup> at Brookings; and Balance<sup>™</sup> (3.0 oz/ac) at Armour. Post emergence herbicide applications included Accent/Buctril<sup>™</sup> at Brookings, Armour, and Warner, at labeled rates.

## Measurements of Performance

Yield. Yields are an average of three replications and are expressed as bushels per acre adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 lb.

Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true variety differences. In 2004, the coefficient of variation (CV) for yield was within reasonable limits across all locations. The CV value in a given test trial is a measure of experimental error associated with the test trial. Ideally, this value should not exceed 15%. In cases where the CV value exceeds 15% it is recommended that the test data be used with caution in making hybrid selection decisions. Experimental error may be the result of several factors, including test methods; moisture, temperature, and soil variations; agronomic factors like seeding date, reseeding; or seed quality factors; all of which may or may not be controllable in a given year.

**Grain moisture content**. Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Moisture is inversely related to maturity, and because maturity is of prime importance in South Dakota, moisture figures are of considerable importance in the evaluation of trial entries. Hybrids that provide satisfactory yields and can be stored without additional drying are desirable. During harvest, random moisture values as determined by the onboard moisture meter on the combine were checked with a Dickey-John GAC II to verify that the on-board moisture meter was within calibration limits.

**Use of tables.** Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids before there is a real yield difference. An LSD value is given at the bottom of every column where there is significant difference among the averages within a given column. If there are no real differences among the averages within a given column a "non-significant" (NS) difference designation is indicated.

The LSD values reported in this publication can be used in two ways. In this publication the LSD value is used primarily to identify the top group for current year and 2year yields, bushel weight, grain moisture at harvest, green snap percentage, and stalk lodging below the ear percentage for each test trial.

For example, at South Shore (Table 1a) the highest current year yield was 163 bu/ac for Dekalb/DKC40-05. To determine whether it is the only top yielding hybrid at South Shore, use the LSD value of 11 bu/ac indicated at the bottom of the 2004 yield column. For hybrids to be in the top yield group they must yield 152 bu/ac (163 - 11 = 152)or higher. Technically, a yield value of 153 bu/ac is in the top yield group while a value of 152 bu/ac is not in the top yield group. However, all yields and LSD values are rounded to the nearest whole number. We can say 152 bu/ac, because of the rounding-off, is the more appropriate minimum value for top yield hybrids at the "early" maturity test at South Shore in 2004. In addition, the minimum top group value is indicated for the 2-year (2003-04) average unless there were no significant yield differences. Top yield hybrids for 2004 are those hybrids that are equal or higher than the

minimim top group value indicated at the bottom of the 2004 yield column. <u>In cases where hybrid yield differences</u> are not significant (NS), then by definition all hybrids in the test are in the top-yield group for the stated 1 or 2 years.

Likewise, the top group for other performance factors like bushel weight, percent grain moisture at harvest, percent stalk lodging below the ear, and final population in plant per acre (ppa) can be determined. For example, at South Shore in 2004 (Table 1b), to qualify for the top performance group (TPG), a hybrid must have a bushel weight of 52 lb or higher and a final population of 24,249 ppa or higher. Likewise, to qualify for the top performance group a hybrid must have a grain moisture of 23% or less and a lodging value of 2% or less.

Note that yield, bushel weight, and final population (ppa) top performance group values must be greater than a certain yield, bushel weight, or final population value; while grain moisture and lodging below ear percentages must be equal to or less than a certain percentage to qualify for the TPG. Again, as with hybrid yields, if there are no hybrid differences for a given performance factor, then by definition all hybrids in the test are in the top group for that performance factor for the current year.

In addition, the top yield group LSD values can also be used to determine whether two hybrids differ in performance. For example, in the early test at South Shore (Table 1a); the LSD value of 11 bu/ac can be used to compare the yields of any two hybrids in the trial. If hybrid A yields 163 bu/ac and hybrid B yields 153 bu/ac their yield difference is 10 bu/ac (163 - 153 = 10). In this case the two hybrids do not differ in yield because their yield difference of 10 bu/ac is equal to or less than the reported LSD value of 11 bu/ac. In contrast, if hybrid C yields 151 bu/ac, the yield difference between hybrids A and C is 12 bu/ac (163 - 151 = 12). In this case the yield difference of 12 bu/ac is more than the reported LSD value of 11 bu/ac: therefore hybrid A would have a significantly higher yield than hybrid C. Similarly, the LSD values for bushel weight, grain moisture, stalk lodging below the ear, and final population (ppa) can be used to determine if any two hybrids differ in these performance factors.



# Performance Trial Results: Conventional Hybrids

## **Northern Locations**

## Early maturity corn tests:

South Shore, Tables 1a and b. The test trial yield average (Table 1a) was 148 bu/ac for year 2004 and 117 bu/ac for 2 years (2003-04). Hybrids that yielded 152 bu/ac or more in 2004 and 118 bu/ac or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 11 bu/ac in 2004 and by 10 bu/ac for 2 years to be significantly different from one another. In 2004, bushel weights averaged 51 lb, grain moisture averaged 28%, lodging averaged 1%, and the final plant population averaged 26,826 ppa (Table 1b). For a hybrid to be in the top performance group for these factors it had to equal 52 lb or higher in bushel weight, 23% or less in grain moisture, 2% or less in stalk lodging, and 24,249 ppa in final population. This final population of 24,249 ppa was the lowest population; however, the differences in final population were non-significant (NS). The minimum top performance final population of 24,249 ppa was 87% (24,249/27,878) of the population delivered at planting.

**Warner**, Tables 1a and b. The test trial yield average (Table 1a) was 224 bu/ac for year 2004 and 217 bu/ac for 2 years

(2003-04). Hybrids that yielded 227 bu/ac or more were in the top yield group for 2004. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 208 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 15 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 57 lb, grain moisture averaged 20%, lodging averaged 2%, and the final plant population averaged 27,287 ppa (Table 1b). For a hybrid to be in the top performance group for these factors it had to equal 57 lb or higher in bushel weight, 18% or less in grain moisture, 7% or less in stalk lodging, and 27,040 ppa in final population. The minimum top performance final population of 27,040 ppa was 97% (27,040/27,878) of the population delivered at planting.

## Late maturity corn tests:

**South Shore**, Tables 2a and b. The test trial yield average (Table 2a) was 130 bu/ac for year 2004 and 99 bu/ac for 2 years (2003-04). Hybrids that yielded 161 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years,

even the lowest yield of 86 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 13 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 50 lb, grain moisture averaged 34%, lodging averaged 2%, and the final plant population averaged 27,349 ppa (Table 2b). For a hybrid to be in the top performance group for these factors it had to equal 49 lb or higher in bushel weight, 28% or less in grain moisture, 3% or less in stalk lodging, and 25,991 ppa in final population. The minimum top performance final population of 25,991 ppa was 93% (25,991/27,878) of the population delivered at planting.

**Warner**, Tables 2a and b. The test trial yield average (Table 2a) was 218 bu/ac for year 2004 and 202 bu/ac for 2 years (2003-04). Hybrids that yielded 218 bu/ac or more in 2004 and 199 bu/ac or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 15 bu/ac in 2004 and by 14 bu/ac for 2 years to be significantly different from one another. In 2004, bushel weights averaged 54 lb, grain moisture averaged 23%, lodging averaged 1%, and the final plant population averaged 27,152 ppa (Table 2b). For a hybrid to be in the top performance group for these factors it had to equal 54 lb or higher in bushel weight, 22% or less in grain moisture, 3% or less in stalk lodging, and 25,555 ppa in final population. The minimum top performance final population of 25,555 ppa was 92% (25,555/27,878) of the population delivered at planting.

## **Central Locations**

## Early maturity corn tests:

**Brookings**, Tables 3a and b. The test trial yield average (Table 3a) was 191 bu/ac for year 2004 and 189 bu/ac for 2 years (2003-04). Hybrids that yielded 195 bu/ac or more in 2004 and 186 bu/ac or more for 2 years qualified for the top yield groups. Hybrids had to differ in yield by 12 bu/ac in 2004 and by 10 bu/ac for 2 years to be significantly different from one another. In 2004, bushel weights averaged 54 lb, grain moisture averaged 21%, lodging averaged 1%, and the final plant population averaged 27,072 ppa (Table 3b). For a hybrid to be in the top performance group for these factors it had to equal 54 lb or higher in bushel weight, 19% or less in grain moisture, 3% or less in stalk lodging, and 26,965 ppa in final population. The minimum top performance final population delivered at planting.

**Iroquois**, Tables 3a and b. The test trial yield average (Table 3a) was 194 bu/ac for year 2004 and 147 bu/ac for 2 years (2003-04). Hybrids that yielded 189 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 125 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 29 bu/ac in

2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 61 lb, grain moisture averaged 17%, lodging averaged 2%, and the final plant population averaged 26,959 ppa (Table 3b). For a hybrid to be in the top performance group for these factors it had to equal 61 lb or higher in bushel weight, 16% or less in grain moisture, 6% or less in stalk lodging, and 27,177 ppa in final population. The minimum top performance final population of 27,177 ppa was 97% (27,177/27,878) of the population delivered at planting.

## Late maturity corn tests:

Brookings, Tables 4a and b. The test trial yield average (Table 4a) was 187 bu/ac for year 2004 and 184 bu/ac for 2 years (2003-04). Hybrids that yielded 192 bu/ac or more in 2004 gualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 169 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 15 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 52 lb, grain moisture averaged 27%, lodging averaged 1%, and the final plant population averaged 26,739 ppa (Table 4b). For a hybrid to be in the top performance group for these factors it had to equal 53 lb or higher in bushel weight, 21% or less in grain moisture, 3% or less in stalk lodging, and 25,748 ppa in final population. The minimum top performance final population of 25,748 ppa was 92% (25,748/27,878) of the population delivered at planting.

**Iroquois**, Tables 4a and b. The test trial yield average (Table 4a) was 202 bu/ac for year 2004 and 146 bu/ac for 2 years (2003-04). Hybrids that yielded 197 bu/ac or more in 2004 and 142 bu/ac or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 36 bu/ac in 2004 and by 19 bu/ac for 2 years to be significantly different from one another. In 2004, bushel weight averaged 58 lb, grain moisture averaged 19%, lodging averaged 3%, and the final plant population averaged 26,866 ppa (Table 4b). For a hybrid to be in the top performance group for these factors it had to equal 58 lb or higher in bushel weight, 20% or less in grain moisture, 8% or less in stalk lodging, and 26,310 ppa in final population. The minimum top performance final population delivered at planting.

## **Southern Locations**

## Early maturity corn tests:

**Beresford**, Tables 5a and b. The test trial yield average (Table 5a) was 235 bu/ac for year 2004 and 210 bu/ac for 2 years (2003-04). Hybrids that yielded 244 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 205 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 15 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 60 lb, grain moisture averaged 19%, lodging averaged 1%, and the final plant population averaged 27,429 ppa (Table 5b). For a hybrid to be in the top performance group for these factors it had to equal 62 lb or higher in bushel weight, 18% or less in grain moisture, 5% or less in stalk lodging, and 27,021 ppa in final population. The minimum top performance final population of 27,021 ppa was 97% (27,021/27,878) of the population delivered at planting.

**Armour**, Tables 5a and b. The test trial yield average (Table 5a) was 124 bu/ac for year 2004 and 105 bu/ac for 2 years (2003-04). Hybrids that yielded 115 bu/ac or more in 2004 and 98 bu/ac or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 28 bu/ac in 2004 and by 18 bu/ac for 2 years to be significantly different from one another. In 2004, bushel weights averaged 58 lb, grain moisture averaged 16%, lodging averaged 2%, and the final plant population averaged 26,103 ppa (Table 5b). For a hybrid to be in the top performance group for these factors it had to equal 59 lb or higher in bushel weight, 16% or less in grain moisture, 4% or less in stalk lodging, and 26,107 ppa in final population. The minimum top performance final population of 26,107 ppa was 94% (26,107/27,878) of the population delivered at planting.

## Late maturity corn tests:

**Beresford**, Tables 6a and b. The test trial yield average (Table 6a) was 244 bu/ac for year 2004 and 213 bu/ac for 2 years (2003-04). Hybrids that yielded 247 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 208 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 14 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 58 lb, grain moisture averaged 23%, lodging averaged 2%, and the final plant population averaged 27,388 ppa (Table 6b). For a hybrid to be in the top performance group for these factors it had to equal 59 lb or higher in bushel weight, 21% or less in grain moisture, 4% or less in stalk lodging, and 25,700 ppa in final population. The minimum top performance final population of 25,700 ppa was 92% (25,700/27,878) of the population delivered at planting.

Armour, Tables 6a and b. The test trial yield average (Table 6a) was 125 bu/ac for year 2004 and 98 bu/ac for 2 years (2003-04). Hybrids that yielded 127 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 94 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 28 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 58 lb, grain moisture averaged 19%, lodging averaged 6%, and the final plant population averaged 25,356 ppa (Table 6b). For a hybrid to be in the top performance group for these factors it had to equal 58 lb or higher in bushel weight, 18% or less in grain moisture, 7% or less in stalk lodging, and 25,921 ppa in final population. The minimum top performance final population of 25,921 ppa was 93% (25,921/27,878) of the population delivered at planting.

# Performance Trial Results: Roundup Ready<sup>™</sup> Hybrids

The performance trial results for 2 years (2003-04) and 1 year (2004) are summarized below.

## **Northern Locations**

## Early maturity corn tests:

**South Shore**, Tables 7a and b. The test trial yield average (Table 7a) was 146 bu/ac for year 2004 and 114 bu/ac for 2 years (2003-04). Hybrids that yielded 147 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years,

even the lowest yield of 109 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 11 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 53 lb, grain moisture averaged 25%, lodging averaged 1%, and the final plant population averaged 27,087 ppa (Table 7b). For a hybrid to be in the top performance group for these factors it had to equal 54 lb or higher in bushel weight, 21% or less in grain moisture, 2% or less in stalk lodging, and 27,282 ppa in final population. The minimum top performance final population.

ulation of 27,282 ppa was 98% (27,282/27,878) of the population delivered at planting.

Warner, Tables 7a and b. The test trial yield average (Table 7a) was 223 bu/ac for year 2004 and 210 bu/ac for 2 years (2003-04). Hybrids that yielded 225 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 199 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 15 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 59 lb, grain moisture averaged 18%, lodging averaged 2%, and the final plant population averaged 27,177 ppa (Table 7b). For a hybrid to be in the top performance group for these factors it had to equal 59 lb or higher in bushel weight, 18% or less in grain moisture, 3% or less in stalk lodging, and 27,140 ppa in final population. The minimum top performance final population of 27,140 ppa was 97% (27,140/27,878) of the population delivered at planting.

#### Late maturity corn tests:

South Shore, Tables 8a and b. The test trial yield average (Table 8a) was 134 bu/ac for year 2004 and 104 bu/ac for 2 years (2003-04). Hybrids that yielded 144 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 102 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 11 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 49 lb, grain moisture averaged 31%, lodging averaged 1%, and the final plant population averaged 27,171 ppa (Table 8b). For a hybrid to be in the top performance group for these factors it had to equal 50 lb or higher in bushel weight, 27% or less in grain moisture, 2% or less in stalk lodging, and 26,884 ppa in final population. The minimum top performance final population of 26,884 ppa was 96% (26,884/27,878) of the population delivered at planting.

**Warner**, Tables 8a and b. The test trial yield average (Table 8a) was 207 bu/ac for year 2004 and 210 bu/ac for 2 years (2003-04). Hybrids that yielded 212 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 207 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 14 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 55 lb, grain moisture averaged 23%, lodging averaged 1%, and the final plant population averaged 27,020 ppa (Table 8b). In order for a hybrid to be in the top performance group for these factors it had to equal 56 lb or higher in bushel weight, 21% or less in grain moisture, 3% or less in stalk lodging, and 26,638

ppa in final population. The minimum top performance final population of 26,638 ppa was 96% (26,638/27,878) of the population delivered at planting.

## **Central Locations**

#### Early maturity corn tests:

**Brookings**, Tables 9a and b. The test trial yield average (Table 9a) was 205 bu/ac for year 2004 and 198 bu/ac for 2 years (2003-04). Hybrids that yielded 211 bu/ac or more in 2004 and 208 bu/ac or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 13 bu/ac in 2004 and by 3 bu/ac for 2 years to be significantly different from one another. In 2004, bushel weights averaged 56 lb, grain moisture averaged 22%, lodging averaged 1%, and the final plant population averaged 27,255 ppa (Table 9b). For a hybrid to be in the top performance group for these factors it had to equal 58 lb or higher in bushel weight, 20% or less in grain moisture, 5% or less in stalk lodging, and 27,171 ppa in final population. The minimum top performance final population of 27,171 ppa was 97% (27,171/27,878) of the population delivered at planting.

**Iroquois**, Tables 9a and b. The test trial yield average (Table 9a) was 177 bu/ac for year 2004 and 141 bu/ac for 2 years (2003-04). Hybrids that yielded 174 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 134 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 33 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 59 lb, grain moisture averaged 17%, lodging averaged 2%, and the final plant population averaged 26,999 ppa (Table 9b). For a hybrid to be in the top performance group for these factors it had to equal 59 lb or higher in bushel weight, 17% or less in grain moisture, 4% or less in stalk lodging, and 26,955 ppa in final population. The minimum top performance final population of 26,955 ppa was 97% (26,955/27,878) of the population delivered at planting.

## Late maturity corn tests:

**Brookings**, Tables 10a and b. The test trial yield average (Table 10a) was 194 bu/ac for year 2004 and 182 bu/ac for 2 years (2003-04). Hybrids that yielded 205 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 171 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 14 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 51 lb, grain moisture averaged 28%, lodging averaged 1%, and the final plant population averaged 27,349 ppa (Table 10b). For a hybrid to be in the top performance group for these factors it had to equal 52 lb or higher in bushel weight, 24% or less in grain

moisture, 3% or less in stalk lodging, and 26,949 ppa in final population. The minimum top performance final population of 26,949 ppa was 97% (26,949/27,878) of the population delivered at planting.

**Iroquois**, Tables 10a and b. The test trial yield average (Table 10a) was 190 bu/ac for year 2004 and 140 bu/ac for 2 years (2003-04). Hybrids that yielded 175 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 135 bu/ac gualified for the 2-year top yield group. Hybrids had to differ in yield by 37 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 58 lb, grain moisture averaged 18%, lodging averaged 3%, and the final plant population averaged 27,272 ppa (Table 10b). For a hybrid to be in the top performance group for these factors it had to equal 55 lb or higher in bushel weight, 22% or less in grain moisture, 5% or less in stalk lodging, and 27,314 ppa in final population. The minimum top performance final population of 27,314 ppa was 98% (27,314/27,878) of the population delivered at planting.

## **Southern Locations**

## Early maturity corn tests:

Beresford, Tables 11a and b. The test trial yield average (Table 11a) was 220 bu/ac for year 2004 and 190 bu/ac for 2 years (2003-04). Hybrids that yielded 229 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 183 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 15 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 60 lb, grain moisture averaged 19%, lodging averaged 1%, and the final plant population averaged 27,270 ppa (Table 11b). For a hybrid to be in the top performance group for these factors it had to equal 60 lb or higher in bushel weight, 18% or less in grain moisture, 3% or less in stalk lodging, and 27,266 ppa in final population. The minimum top performance final population of 27,266 ppa was 98% (27,266/27,878) of the population delivered at planting.

**Armour**, Tables 11a and b. The test trial yield average (Table 11a) was 116 bu/ac for year 2004 and 102 bu/ac for 2 years (2003-04). Hybrids that yielded 111 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even

the lowest yield of 99 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 24 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 59 lb, grain moisture averaged 16%, lodging averaged 3%, and the final plant population averaged 25,796 ppa (Table 11b). For a hybrid to be in the top performance group for these factors it had to equal 60 lb or higher in bushel weight, 16% or less in grain moisture, 7% or less in stalk lodging, and 25,672 ppa in final population. The minimum top performance final population of 25,672 ppa was 92% (25,672/27,878) of the population delivered at planting.

## Late maturity corn tests:

Beresford, Tables 12a and b. The test trial yield average (Table 12a) was 229 bu/ac for year 2004 and 200 bu/ac for 2 years (2003-04). Hybrids that yielded 227 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 192 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 19 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 57 lb, grain moisture averaged 22%, lodging averaged 1%, and the final plant population averaged 27,401 ppa (Table 12b). For a hybrid to be in the top performance group for these factors it had to equal 58 lb or higher in bushel weight, 19% or less in grain moisture, 2% or less in stalk lodging, and 26,572 ppa in final population. The minimum top performance final population of 26,572 ppa was 95% (26,572/27,878) of the population delivered at planting.

Armour, Tables 12a and b. The test trial yield average (Table 12a) was 126 bu/ac for year 2004 and 106 bu/ac for 2 years (2003-04). Hybrids that yielded 122 bu/ac or more in 2004 qualified for the top yield group. Since there were no significant differences in yield in hybrids tested for 2 years, even the lowest yield of 95 bu/ac qualified for the 2-year top yield group. Hybrids had to differ in yield by 29 bu/ac in 2004 to be significantly different from one another, while there were no significant yield differences for hybrids tested 2 years. In 2004, bushel weights averaged 59 lb, grain moisture averaged 17%, lodging averaged 2%, and the final plant population averaged 26,198 ppa (Table 12b). For a hybrid to be in the top performance group for these factors it had to equal 59 lb or higher in bushel weight, 17% or less in grain moisture, 7% or less in stalk lodging, and 26,295 ppa in final population. The minimum top performance final population of 26,295 ppa was 94% (26,295/27,878) of the population delivered at planting.

Site	Soil type	Seedbed, previous crop
	Great Bend-Putney silt loams, 0-2% sl.	Min-till, s.wheat stubble
South Shore	Brookings sil.cl.loam, 0-3% sl.	Conventional, soybeans
Iroquois	Houdek-Stickney-Dudley, 0-2% sl.	No-till, soybeans
Brookings	Brandt sil. cl., 0-2% sl.	Conventional, soybean
Armour	Highmore silt loam,0-2% sl.	No-till, soybean stubble
Beresford	Egan-Clarno-Trent complex, 0-2% sl.	Conventional, soybean

Table A. Site -Soil classification, percent slope, & previous crop.

Table B. Year 2004 trial cooperators, locations, and dates seeded.

Cooperators	Location*	Date Seeded
 Allen & Inel Ryckman	Warner	May 5
NE Research Farm	South Shore	May 6
Kirk Aughenbaugh	Iroquois	April 3
SDSU Agronomy Farm	Brookings	May 7
Mark & Cletus Wiechmann	Armour	May 3
SE Research Farm	Beresford	May 4

Otation		- 1- 1 -	Data is	s accumula	ated from A	April 1 up t	o the weel	c ending:	
Station	varia	adie	Apr. 26	May 30	June 27	Aug. 1	Aug. 29	Oct. 3	
	Precip in.	'04	0.61	4.78	9.4	12.43	13.38	16.96	
Aberdeen		DFN*	-1	0.48	2.4	2.09	1.12	2.57	
Airport	GDD's	·04	46	274	602	1276	1664	2126	
		DFN	3	-31	-160	-278	-466	-333	
	Precip in.	ʻ04	1.61	6.52	8.92	12.1	13.49	20.68	
Watertown		DFN	-0.19	1.37	0.46	0.19	-0.88	4.01	
Airport	GDD's	'04	47	257	582	1241	1640	2129	
		DFN	14	-33	-172	-295	-462	-304	
	Precip in.	'04	1.87	5.35	8.72	13.24	16.33	22.5	
Huron		DFN	0.16	0.8	0.68	2.18	3.5	7.67	
Airport	GDD's	·04	78	379	771	1519	1995	2544	
		DFN	32	59	-42	-144	-277	-96	
	Precip in.	'04	1.57	7.63	10.7	15.11	16.02	22.54	
Brookings		DFN	-0.12	2.46	1.7	2.33	0.71	4.21	
2NE	GDD's	ʻ04	39	246	585	1231	1591	2032	
		DFN	12	-7	-97	-173	-315	-165	
	Precip in.	'04	1.44	6.95	10.31	12.3	14.78	21.45	
Centerville		DFN	-0.41	1.3	0.7	0.24	-1.3	2.35	
6 SE	GDD's	'04	78	388	818	1550	2014	2557	
		DFN	27	15	-81	-176	-291	-124	
	Precip in.	'04	1.31	6.42	10.59	11.26	13.19	18.87	
Armour**		DFN	-0.18	0.97	1.51	-1.35	-1.35	1.61	
Airport	GDD's	'04	93	454	897	1707	2231	2829	
		DFN	24	34	-51	-165	-297	-143	

Table C. Nearest weather station precipitation and growing degree day (GDD) accumulations for 2004 and their departures from normal (DFN).

\* DFN - how much a variable for year 2004 is greater or less (-) than the long-term average.

\*\* Although the airport received above average rainfall the cooperator at this sight indicated rainfall levels were much lower than reported at the airport.

Source: USDA-SD-Crop-Weather report & SD Automatic Weather Data Network.

Doord / Unhord	Table	Drand ( Uybrid	Table
DI AIIU / HYDI'LU	NU.	Branu / Hybritu	NU.
ACCESS/EXP_5405YGCB	4.5	JACOBSEN / 4025	1.3
ACCESS/EXP 5503YGCB	4.5	JACOBSEN/4068CB	1.3
ACCESS/EXP 5910YGCB	5.6	JACOBSEN/4358CB	4.5
AGSOURCE SEEDS/3933	3	JACOBSEN/4637CB	6
AGSOURCE SEEDS/5153	4 5	JACOBSEN/4757CB	6
AGSOURCE SEEDS/5393	4,5		3
	-,5 5.6		4
	5,0		
	6		1
	6		1 6
	1 2		1.2
	5		1,5
	5		4,0
UNUN 3/3300 B			4,0
DATRYLAND/STEALTH-150/B	1 3,0		4,0
DAIRYLAND/STEALTH-5104	4,5		0
DAIRYLAND/STEALTH-5194	1		4,5
DAIRYLAND/STEALTH-5497	2,3	KRUGER / 5315YGCB	ь с 1 г
DAIRYLAND/STEALTH-5611	0		2,4,5
DAIRYLAND/STEALTH-5692	1		4,0
			0
DEKALB/DKC42-89 (YGPL)	1	KRUGER/5512YGCB	b
DEKALB/DKC46-25 (YGPL)	3	KRUGER/5514YGCB	6
DEKALB/DKC50-18 (YGCB)	2,3,5	KRUGER/5516YGCB	6
DEKALB/DKC52-45 (YGCB)	2,4,5	KRUGER/5594YGCB	2,3
DEKALB/DKC54-51 (YGCB)	4,5	KRUGER/5615YGCB	6
DEKALB/DKC60-14 (YGPL)	5,6	KRUGER/5717YGCB	6
DEKALB/DKC63-79 (YGCB)	6	KRUGER / 5805YGCB	2,4,5
EPLEY/E1157	3	KRUGER / 5815YGCB	6
EPLEY/E1430YGCB	4	KRUGER/8407HX	4,6
EPLEY/E1442	4	KRUGER/8413HX	6
EPLEY/E14H07	3	KRUGER / 8503HX	2,4,5
EPLEY/E2410YGCB	4,6	KRUGER/8504HX	2,4
EPLEY/E2470	4,6	KRUGER/8513HX	6
EPLEY/E2490YGCB	4,6	KRUGER/9002YGCB	2,4
EPLEY/E3220YGCB	4,6	KRUGER/9111YGCB	6
EPLEY/E37H07	6	KRUGER/9115YGCB	6
GOLD COUNTRY/103-02CB	2,4	KRUGER/9203YGRW	2,4,5
GOLD COUNTRY/110-07CB	5	KRUGER/9212YGCB	6
GOLD COUNTRY/94-01CB	1,3	KRUGER/9305	4,6
GOLD COUNTRY/99-01CB	3	KRUGER/9306YGCB	2,4,5
HEINE/H728YGCB	5	KRUGER/9392YGCB	1
HEINE/H745YGCB	5	KRUGER/9401YGCB	2,4
HEINE/H748YGCB	5	KRUGER/9404YGCB	2,4,5
HEINE/H760YGCB	5	KRUGER/9407YGCB	4,5
HEINE/H761	5	KRUGER/9496YGCB	1,3
HEINE/H793YGCB	5	MALLARD/3411CB	1
HEINE/H820YGCB	5	MALLARD/BT-2430	1
HEINE/H821YGCB	5	MALLARD/EXP 05-04	1
HEINE/H8600YGCB	6	MIDWEST/G 6963 B	1,3

Table D. 2004 corn performance trials - non-Roundup Ready entries by brand/hybrid, and yield table number(s).

	Table		Table
Brand / Hybrid	No.	Brand / Hybrid	No.
MIDWEST/G 7716 B	5	WENSMAN/W 4212	1,3
MIDWEST/G 8125 B	6	WENSMAN/W 5117BT	1.3
MYCOGEN/2E390	1	WENSMAN/W 5212BT	1.3
MYCOGEN/2E633	4	WENSMAN/W 5417BT	4.6
MYCOGEN/2G626	2.4	WENSMAN/W 5437BT	5.6
MYCOGEN/2K350	1	WENSMAN/W 6318BT	4.5
MYCOGEN/2R426	1	WENSMAN/W 7117BTRW	1.3
MYCOGEN/2R570	2.4	WENSMAN/W 7212RW	1.3
NUTECH/0313	4.5	WENSMAN/W 7315BTRW	3.5
NUTECH/1992 LL/BT	1		-,-
NUTECH/2202 HX	3.5		
NUTECH/2414 HX	6		
NUTECH/4013 YGCB	6		
NUTECH/4191 VGCR	1		
NUTECH/4202 VGCR	35		
NUTECH/4213 VGCR	6		
NUTECH / 4303 VGCB	13		
NUTECH/403 VOCR	1,5		
	4,5		
NUTECH/440/ TOOD	13		
NUTECH/4607 VCCD	1,5		
NUTECH / 4000 VCCB	7 2 3		
NUTECH/EX 205 VCCD	2,5		
NUTECH/EX 308 VCCD	5,5		
NUTECH/EX 317 VCCP	6		
NUTECH/EX 539 VGCB	6		
NUTECH/EX 607 VGCB	4 5		
NUTECH/EX 713 VCCP	+,J 6		
PEISTER/1400PT	3		
PFISTER/1680RT	3		
PEISTER/EXP 2380	4		
SANDS/SOT 103VGCB	- 2 4 5		
SANDS/SOI 107VGCB	2,7,5		
SANDS/SOI 110/100B			
SANDS/SOI 113VCCB	5		
SEEDS 2000/2023RT	1		
SEEDS 2000/2953BT	13		
TOP FARM/F3/103	4.5		
TOD FADM/E24105	4,5		
TOP FARM/E3410300	4,5		
TOD FADM/E3410/00	5,0		
TOD FADM/E34110D0B	5,0		
TOP EADM/TERY 0000	3,0 4 E		
TOD EADM/TERY 0004	4,0		
TOP FARM/IFSX 2301	ა ი		
TOP FARM/IFSX 2395	3		
TOD EADM/TERV 7400DT	4,0		
IUF FARM/IFSA /490BI	З		

Table D. 2004 corn performance trials - non-Roundup Ready entries by brand/hybrid, and yield table number(s).

		- Northern Location Averages for yield (by year)								
		South	Shore	Warı	ner					
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre					
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr					
GOLD COUNTRY/94-01CB	94	152	113	242	222					
KRUGER/9392YGCB	90	161	128	230	219					
DEKALB/DKC42-89 (YGPL)	92	157		232						
WENSMAN/W 5117BT	92	157	116	232	217					
KRUGER/9496YGCB	94	153	117	235	216					
CROW'S/1703 B	95	157	121	228	220					
MIDWEST/G 6963 B	95	153	114	233	221					
WENSMAN/W 5212BT	95	158	121	228	215					
SEEDS 2000/2953BT	95	153	118	232	214					
WENSMAN/W 4212	95	157	118	226	208					
KELTGEN/AV4880CB	95	151		230						
DEKALB/DKC40-05	90	163		217						
NUTECH/4595 YGCB	94	149		231	· ·					
WENSMAN/W 7212RW	95	156		224						
NUTECH/4393 YGCB	95	146		229	•					
MYCOGEN/2R426	95	144		232						
MALLARD/BT-2430	95	140		234						
NUTECH/1992 LL/BT	92	146		225						
JACOBSEN/4025	92	156		214						
WENSMAN/W 7117BTRW	92	147		218						
DAIRYLAND/STEALTH-5194	94	133	102	224	215					
DAIRYLAND/STEALTH-5692	93	136		222						
SEEDS 2000/2933BT	93	137		221						
MALLARD/3411CB	92	140		215						
NUTECH/4191 YGCB	90	144		210						

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Table 1a. Non-Roundup Ready early maturity corn yield resultsnorthern South locations, 2003-2004.

\* RM= relative maturity reported by seed company.

		- Northern Location Averages for yield (by year)							
		South	Shore	Warı	ner				
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre				
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr				
MALLARD/EXP 05-04	91	137		215					
KRUGER/5093YGCB	93	132		193					
JACOBSEN/4068CB	95	134							
MYCOGEN/2K350	93			227					
MYCOGEN/2E390	94	•	•	205	•				
Test avg.:	93	148	117	224	217				
High value:	95	163	128	242	222				
# Lsd (.05):		11	10	15	NS				
## TPG-value:		152	118	227	208				
@ Coef.Var.:		5	7	4	4				
No. Entries:		28	10	29	10				

Table 1a. Non-Roundup Ready early maturity corn yield resultsnorthern locations (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: South Shore- May 6 and Warner- May 5, 2004.

# Lsd= amount values in a column must differ to be significantly different.

## TPG-value= minimum value to qualify for top performance group.

@ Coef. of variation= a measure of trial experimental error, 15% or less is best.

		for	bu.v	North wt., k ear,	nern Loca kernel mo & plants						
			Sout	th Sho	ore	Warner					
		Bu.				Bu.				-	
		wt.	H20	Ldg.		wt.	H20	Ldg.			
Brand/Hybrid	RM*	Lb.	90	0/0	PPA	Lb.	°0	0/0	PPA		
KRUGER/9392YGCB	90	52	27	2	26,426	60	18	3	27,878		
MALLARD/EXP 05-04	91	52	26	0	26,572	59	19	3	24,829		
WENSMAN/W 5117BT	92	52	27	1	27,007	59	19	1	28,023		
DEKALB/DKC40-05	90	53	21	0	28,169	57	17	2	27,588		
DAIRYLAND/STEALTH-5194	94	52	26	1	25,700	59	20	1	26,717	ļ	
		l		ļļ		Į		ļļ		l	
NUTECH/1992 LL/BT	92	52	28	0	27,733	58	19	2	27,152		
NUTECH/4393 YGCB	95	52	28	0	26,281	58	21	1	28,023		
NUTECH/4191 YGCB	90	53	27	1	25,265	57	19	3	24,394		
DEKALB/DKC42-89 (YGPL)	92	53	26	1	27,297	57	19	1	28,023		
WENSMAN/W 7117BTRW	92	52	28	0	27,298	58	20	1	27,588	ļ	
MALLARD/3411CB	92	50	29	2	27 298	58	10	3	27 297	l 1	
MYCOGEN / 28426	95	50	28	1	27 007	58	21		28 169		
GOLD COUNTRY /94-01CB	94	50	20		25 845	58	20		27 878		
KRUGER / 5093YGCB	03	50	23		24 249	57	20	3	26 717		
WENSMAN /W 4212	95	51	27	0	28 169	56	19		27 588		
				Ŭ	20,100				27,000	{	
KELTGEN/AV4880CB	95	51	28	0	26,427	56	20	1	27,733		100 million (1990)
NUTECH/4595 YGCB	94	50	28	0	27,443	56	21	2	27,878		
DAIRYLAND/STEALTH-5692	93	50	30	2	27,152	56	20	6	27,733		
WENSMAN/W 5212BT	95	50	27	1	25,991	56	20	2	27,588		
SEEDS 2000/2953BT	95	51	28	1	28,024	56	20	3	27,733		
		ĺ				í	Í	í I		ĺ	
JACOBSEN/4025	92	49	27	2	25,846	57	21	7	24,829	)	
SEEDS 2000/2933BT	93	50	33	0	27,297	56	21	4	26,717		
KRUGER/9496YGCB	94	49	28	1	26,717	57	20	2	27,297		
CROW'S/1703 B	95	49	28	1	28,024	57	20	2	27,733		
WENSMAN/W 7212RW	95	50	27	0	27,733	55	20	3	27,443		

Table 1b. Non-Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- northern South Dakota locations, 2004.

\* RM= relative maturity reported by seed company.

		 for	bu.v	North vt., k ear,	nern Loca kernel mo & plants	Northern Location Averages for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)								
			Sout	th Sho	ore		١	Varner	、					
Brand/Hybrid	RM*	Bu. wt. Lb.	H20 %	Ldg. %	PPA	Bu. wt. Lb.	H20 %	Ldg. %	РРА					
MIDWEST/G 6963 B	95	49	28	0	25,265	56	20	2	27,733					
MALLARD/BT-2430	95	49	28	0	27,298	54	20	3	27,878					
JACOBSEN/4068CB	95	51	31	1	27,588	•	.	•						
MYCOGEN/2K350	93	.	.	•	-	58	19	5	27,878					
MYCOGEN/2E390	94	•	•			59	21	2	27,297					
Test avg.:		51	28	1	26,826	57	20	2	27,287					
Max-value:		53	33	2	28,169	60	21	7	28,169					
Min-value:		49	21	0	24,249	54	17	1	24,394					
# Lsd (.05):		1	2	NS	NS	2	1	NS	1,129					
## TPG-value:		52	23	2	24,249	58	18	7	27,040					
@ Coef.Var.:		2	3	165	4	2	4	91	3					
No. Entries:		28	28	28	28	29	29	29	29					

Table 1b. Non-Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- northern locations (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: South Shore- May 6 and Warner- May 5, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant. ## TPG-value= minimum or maximum value to qualify for top performance group.

@ Coef. of variation= measure of trial experimental error.

		- North fo	ern Loca <sup>.</sup> or yield	tion Ave (by yea	rages - r)	
		South	Shore	Warı	ner	
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr	
KRUGER/9306YGCB	103	161		218		
KRUGER/5594YGCB	96	145		228		
DEKALB/DKC50-18 (YGCB)	100	142	111	227	213	
DEKALB/DKC52-45 (YGCB)	102	134	107	233	.	
NUTECH/4999 YGCB	99	135	.	229		
KRUGER/9002YGCB	102	141		218	196	
KRUGER / 9401YGCB	101	129		228		
KRUGER / 8504HX	102	132		217		
KRUGER / 9404YGCB	103	125	86	207	191	
KRUGER/5805YGCB	105	115		213		
KRUGER / 8503HX	103	121		205		
KRUGER/9203YGRW	103	129		195		
KRUGER / 5405YGCB	105	115		208		
DAIRYLAND/STEALTH-5497	98			223	208	
SANDS/SOI 103YGCB	103	116	91			
MYCOGEN/2R570	104	130				
MYCOGEN/2G626	105	118				
GOLD COUNTRY/103-02CB	103	126				
Test avg.:		130	99	218	202	
High value:		161	111	233	213	
# Lsd (.05):		13	NS	15	14	
## TPG-value:		161	86	218	199	
@ Coef.Var.:		6	5	4	5	
No. Entries:		17	4	14	4	

Table 2a. Non-Roundup Ready late maturity corn yield results- northern South Dakota locations, 2003-2004.

\* RM= relative maturity reported by seed company.

Seeding dates: South Shore- May 6, and Warner- May 5, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

 ${\tt @}$  Coef. of variation= a measure of trial experimental error, 15% or less is best.

Table 2b. Non-Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- northern South Dakota locations, 2003-2004.

		f.	or bu belo	Northe u.wt. ow ear	ern Loca , kerne: r, & pla	ation L mo: ants,	n Ave istu /acre	erage: re,loo e (ppa	S dging a)
			Sout	th Sho	ore		Wa	arner	
		Bu.				Bu.			
Brand/Hybrid	RM*	wt. Lb.	H20 %	Ldg. %	PPA	wt. Lb.	H20 %	Ldg.	PPA
KRUGER / 5594YGCB	96	52	28	1	27,878	56	21	1	27,007
KRUGER/9306YGCB	103	51	29	2	27,878	55	21	3	27,733
DEKALB/DKC50-18 (YGCB)	100	50	29	1	27,733	55	22	1	27,733
KRUGER/9002YGCB	102	51	26	5	27,443	54	22	3	26,426
KRUGER/9404YGCB	103	50	32	1	28,169	54	23	1	27,588
KRUGER/9401YGCB	101	50	32	1	26,281	54	21	1	27,297
NUTECH/4999 YGCB	99	50	34	1	27,007	54	22	1	27,007
KRUGER/9203YGRW	103	51	31	1	27,007	53	22	6	27,733
DEKALB/DKC52-45 (YGCB)	102	48	30	0	27,152	55	21	1	27,297
KRUGER/5405YGCB	105	50	39	2	27,152	52	26	1	26,426
KRUGER/5805YGCB	105	50	39	4	26,862	52	26	1	25,555
KRUGER / 8504HX	102	49	31	2	28,023	53	25	1	27,588
KRUGER / 8503HX	103	50	42	4	27,733	50	27	2	27,007
DAIRYLAND/STEALTH-5497	98		.	·		54	21	0	27,733
SANDS/SOI 103YGCB	103	49	38	0	28,023		.	.	· ·
MYCOGEN/2B570	104	51	41	4	28,024				
MYCOGEN/2G626	105	50	36	6	26.571				
GOLD COUNTRY/103-02CB	103	51	37	1	25,991				
Test avg.:		50	34	2	27,349	54	23	1	27,152
Max-value:		52	42	6	28,169	56	27	6	27,733
Min-value:		49	26	0	25,991	50	21	0	25,555
# Lsd (.05):		NS	2	3	NS	2	1	3	NS
## TPG-value:		49	28	3	25,991	54	22	3	25,555
@ Coef.Var.:		2	4	99	4	2	4	112	4
No. Entries:		17	17	17	17	14	14	14	14

\* RM= relative maturity reported by seed company.

Seeding dates: South Shore- May 6, and Warner- May 5, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant.
## TPG-value= minimum or maximum value to qualify for top performance group.
@ Coef. of variation= measure of trial experimental error, 15% or less is best.

		Centi fo	ral Loca <sup>.</sup> or yield	tion Aven (by yean	rages r)		
		Brool	kings	Iroqu	Iroquois		
Brand/Hybrid	RM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr		
WENSMAN/W 5212BT	95	196	191	218	156		
DEKALB/DKC46-25 (YGPL)	96	206		206	· ·		
NUTECH/4595 YGCB	94	196		216			
CROW'S/1/03 B	95	202	196	210	153		
WENOMAN/W /315BIKW		197	•	215			
MIDWEST/G 6963 B	95	207	195	196	146		
WENSMAN/W 7212RW	95	196		207			
TOP FARM/TFSX 2395	94	199	194	198	.		
SEEDS 2000/2953BT	95	199	189	196	147		
KRUGER/9496YGCB	94	195	190	199	149		
DEKALB/DKC50-18 (YGCB)	100	199	193	191	145		
NUTECH/4999 YGCB	99	203	.	187			
EPLEY/E14H07	100	191		199	•		
NUTECH/4393 YGCB	95	190	•	197			
DAIRYLAND/STEALTH-5497	98	188		198	144		
KRUGER/5594YGCB	96	195		188			
NUTECH/2202 HX	100	187		188			
JACOBSEN/4068CB	95	175		190			
EPLEY/E1157	96	172		188			
NUTECH/4202 YGCB	100	197	.	159			
KRUGER / 5093YGCB	93	173		180			
WENSMAN/W 4212	95	194	182	160	125		
TOP FARM/TFSX 7496BT	94	167		168			
JUNG/6432YGCB	95	198	.		.		
TOP FARM/TFSX 2301	100	176	.				
JACOBSEN/4025	92	.		188			
WENSMAN/W 5117BT	92	.	.	210	156		
WENSMAN/W 7117BTRW	92	.	.	177	.		
GOLD COUNTRY/94-01CB	94	.	.	211	.		
GOLD COUNTRY/99-01CB	99	188	.	.	.		

Table 3a. Non-Roundup Ready early maturity corn yield results- central South Dakota locations, 2003-2004.

\* RM= relative maturity reported by seed company.

		Centr fo	ral Locat or yield	tion Aver (by year	rages ^)
		Brool	kings	Iroqu	uois
Description of the second	DU	Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr
PFISTER/1499BT	98	178	171	•	
PFISTER/1680BT	99	183			
AGSOURCE SEEDS/3933	96	197			•
Test avg.:		191	189	194	147
High value:		207	196	218	156
# Lsd (.05):		12	10	29	NS
## TPG-value:		195	186	189	125
@ Coef.Var.:		4	3	9	8
No. Entries:		29	9	27	9

Table 3a. Non-Roundup Ready early maturity corn yield results- central locations (continued).

 $\ast$  RM= relative maturity reported by seed company.

Seeding dates: Brookings- May 7 and Iroquois- April 7, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

@ Coef. of variation= a measure of trial experimental error, 15% or less is best.

		Central Location Averages for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)								
			Bro	pokin	gs		Ir	oquoi	6	
		Bu.				Bu.				
Brand/Hybrid	RM*	wt. Lb.	H20 %	Ldg. %	PPA	wt. Lb.	H20	Ldg.	PPA	
KRUGER/9496YGCB	94	56	20	1	27,007	61	17	1	26,717	
DEKALB/DKC46-25 (YGPL)	96	56	18	1	27,297	61	17	2	28,023	
MIDWEST/G 6963 B	95	55	21	1	27,733	62	17	0	27,443	
TOP FARM/TFSX 7496BT	94	55	20	1	27,588	61	17	1	25,410	
WENSMAN/W 5212BT	95	54	20	2	27,733	62	17	1	27,443	
KRUGER / 5093YGCB	93	56	19	1	24,103	60	   17	0	19,021	
KRUGER/5594YGCB	96	55	21	0	27,152	61	17	1	27,298	
NUTECH/4595 YGCB	94	55	20	0	28,023	61	17	0	27,588	
SEEDS 2000/2953BT	95	55	20	1	27,733	61	17	1	27,733	
WENSMAN/W 4212	95	55	20	1	27,733	60	17	0	25,991	
TOP FARM/TFSX 2395	94	55	19	1	27,588	60	   17	3	26,572	
DEKALB/DKC50-18 (YGCB)	100	55	22	1	28,169	60	18	2	27,878	
JACOBSEN/4068CB	95	54	19	3	27,443	61	16	2	27,588	
NUTECH/4393 YGCB	95	54	22	0	27,007	60	17	2	27,152	
CROW'S/1703 B	95	54	21	1	27,733	60	17	2	27,733	
WENSMAN/W 7212BW	95	53	20	3	27.588	61	   17	1	27.733	
DAIRYLAND/STEALTH-5497	98	54	20	1	26.136	60	16	2	27.152	
NUTECH/4999 YGCB	99	53	23	o	27,443	61	18	1	26.717	
WENSMAN/W 7315BTRW	100	53	22	0	27.733	61	17	1	27.878	
NUTECH/4202 YGCB	100	54	22	2	27,007	58	18	2	26,136	
   FPI FY / F1157	96	51	25	   3	26 136	50	   10	5	28 160	
	100	50	28	5	27 878	60	17	3	26 572	
	100	40	20	د ء	27 733	60	17	6	27 443	
	05	5/	20	1	25 845				21,440	
TOP FARM/TESY 2301	100	59	21	I	24 820	.	•	· ·		
	100	00	22	'	27,029		· ·		· ·	

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Table 3b. Non-Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- central South Dakota locations, 2004.

\* RM= relative maturity reported by seed company.

		Central Location Averages for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)								
			Bro	ookin	gs		Iro	oquois	6	
Brand/Hybrid	RM*	Bu. wt. Lb.	H20 %	Ldg. %	РРА	Bu. wt. Lb.	H20 %	Ldg. %	РРА	
JACOBSEN/4025	92					61	17	0	27,152	
WENSMAN/W 5117BT	92	.	.	.		63	16	5	27,878	
WENSMAN/W 7117BTRW	92	.	.	.	.	62	16	2	27,588	
GOLD COUNTRY/94-01CB	94	.	.	.		61	17	2	27,878	
GOLD COUNTRY/99-01CB	99	52	22	0	25,700	.	.		.	
PFISTER/1499BT	98	54	20	3	27,588	.		.		
PFISTER/1680BT	99	52	25	2	26,281	.	.	.		
AGSOURCE SEEDS/3933	96	55	21	1	27,152	.	.	-		
Test avg.:		54	21	1	27,072	61	17	2	26,959	
Max-value:		56	28	6	28,169	63	19	6	29,169	
Min-value:		49	18	0	24,103	58	16	0	19,021	
# Lsd (.05):		2	1	3	1,204	2	3	NS	1,992	
## TPG-value:		54	19	3	26,965	61	16	6	27,177	
@ Coef.Var.:		2	4	107	3	2	5	127	5	
No. Entries:		29	29	29	29	27	27	27	27	

Table 3b. Non-Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- central locations, 2004 (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Brookings- May 7 and Iroquois- April 7, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant. ## TPG-value= minimum or maximum value to qualify for top performance group. ### Coef. of variation= measure of trial experimental error.

		Centi fo	ral Locat or yield	tion Aven (by yean	rages r)	
		Brool	kings	Iroqu	uois	
Brand/Hybrid	RM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr	
DEKALB/DKC52-45 (YGCB)	102	207	196	229	161	
NUTECH/4403 YGCB	103	206	.	226	.	
ACCESS/EXP 5503YGCB	103	205		221	.	
KRUGER/9306YGCB	103	206	194	214	.	
DEKALB/DKC54-51 (YGCB)	104	204	•	202	.	
NUTECH/4607 YGCB	105	182		222		
KRUGER/8504HX	102	192		209	.	
KRUGER/8503HX	103	190		211	.	
KRUGER/5407YGCB	107	185		217		
KRUGER/9203YGRW	103	194		203		
NUTECH/0313	105	177		218	-	
KRUGER/8407HX	107	173		220		
GOLD COUNTRY/103-02CB	103	189	188	205	· · ·	
TOP FARM/TFSX 2300	103	183		204		
KRUGER/5405YGCB	105	183		202	•	
KRUGER/5207YGCB	110	173		213	-	
WENSMAN/W 5417BT	107	179	179	206	140	
KRUGER/9002YGCB	102	193		188	.	
KRUGER/9404YGCB	103	192	176	189	125	
KRUGER/5208YGCB	110	179		201		
KRUGER/5210YGCB	109	178		200	.	
KRUGER/5305YGCB	105	175	169	200	.	
KRUGER/9401YGCB	101	189		185	.	
KRUGER/9407YGCB	105	170		204	.	
NUTECH/EX.607 YGCB	105	182		189		
NUTECH/EX.205 YGCB	105	185		187		
WENSMAN/W 6318BT	104	197	.	174	.	
KRUGER/5805YGCB	105	187		182	.	
TOP FARM/E34105CB	105	179		186	.	

Table 4a. Non-Roundup Ready late maturity corn yield results- central South Dakota locations, 2003-2004.

\* RM= relative maturity reported by seed company.

		Centi fo	ral Loca <sup>.</sup> or yield	tion Ave (by yea	rages r)	
		Brool	kings	Iroq	uois	
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr	
KRUGER/0510	108	172		117		
DAIRYLAND/STEALTH-5104	104	193	192			
JUNG/6545YGCB	105	202				
SANDS/SOI 103YGCB	103	177	176			
SANDS/SOI 107YGCB	107	186				
			i .			1
TOP FARM/TFSX 2405	102	190	.			
TOP FARM/E34103	103	186				
ACCESS/EXP 5405YGCB	105	184				
JACOBSEN/4358CB	105	185				
EPLEY/E2470	110	182				
EPLEY/E2410YGCB	107	185	182			
EPLEY/E2490YGCB	110	190				
EPLEY/E1442	102			233	159	
EPLEY/E1430YGCB	103			199		
EPLEY/E3220YGCB	112	181				
		ĺ	ĺ			
MYCOGEN/2R570	104			223		
MYCOGEN/2G626	105			187		
MYCOGEN/2E633	107			210		
PFISTER/EXP 2380	105	189				
AGSOURCE SEEDS/5153	105	189				
AGSOURCE SEEDS/5393	105	182		•		
Test avg.:		187	184	202	146	
High value:		207	196	233	161	
# Lsd (.05):		15	NS	36	19	
## TPG-value:		192	169	197	142	
@ Coef.Var.:		5	4	11	7	
No. Entries:		46	9	36	4	

Table 4a. Non-Roundup Ready late maturity corn yield results- central locations (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Brookings- May 7 and Iroquois- April 30, 2004.

 $\ensuremath{\texttt{\#}}$  Lsd= amount values in a column must differ to be significantly different.

NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

@ Coef. of variation= a measure of trial experimental error, 15% or less is best.

Table 4b. Non-Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- central South Dakota locations, 2004.

		- bu	- Cer .wt.	ntral , kern ear, 8	Locatio nel mois & plants						
		Brookings					Ir	oquoi	S		
		Bu.				Bu.					
		wt.	H20	Ldg.		wt.	H20	Ldg.			
Brand/Hybrid	RM*	Lb.	0/0	%	PPA	Lb.	%	%	PPA		
KRUGER/9002YGCB	102	55	20	1	27,007	60	17	6	28,169		
DEKALB/DKC52-45 (YGCB)	102	55	21	0	27,588	59	17	0	27,878		
KRUGER/9203YGRW	103	54	23	2	27,152	60	17	0	26,426		
KRUGER/9404YGCB	103	55	23	0	27,733	59	17	4	27,878		
DEKALB/DKC54-51 (YGCB)	104	55	24	1	27,733	59	20	6	27,007		
KRUGER/9407YGCB	105	53	26	1	24,974	61	21	2	26,572		
GOLD COUNTRY/103-02CB	103	53	27	0	24,248	61	21	1	24,394		
NUTECH/0313	105	52	30	1	27,733	61	23	5	28,023		
KRUGER/5210YGCB	109	54	29	2	27,152	58	21	2	27,588		
NUTECH/4403 YGCB	103	54	23	2	27,443	58	17	3	27,878		
ACCESS/EXP 5503YGCB	103	52	26	0	27.588	59	19	1	28,459	_	
KRUGER / 8504HX	102	53	23	1	27,152	58	19	8	27,588		
TOP FARM/TFSX 2300	103	52	29	2	27.297	60	18	1	26,862		
KRUGER / 5305YGCB	105	52	27	1	23.813	59	18	3	25,119		the second se
KRUGER/9306YGCB	103	53	23	3	27.733	58	19	1	26,862		
									,		
TOP FARM/E34105CB	105	52	27	2	26,136	59	18	4	26,281		
KRUGER/9401YGCB	101	52	23	2	26,136	59	17	8	26,281		
KRUGER/9305	106	52	26	2	25,846	58	17	3	27,007		
KRUGER/5405YGCB	105	52	28	1	27,007	58	20	1	25,991		
KRUGER/5805YGCB	105	51	27	1	24,975	58	20	4	26,427		
KRUGER / 5208YGCB	110	51	22	 	27 143	52	20		22 042		
NUTECH/EX 607 VGCB	105	50	30	2	26 281	50	120	і Б	27 202		
WENSMAN/W 63198T	103	52	20		27 142	56	10		27 007		
KBUGER / 8503HX	104	51	29	2	26 862	50	19	- -	28 023		
KRUGER / 8407HX	107	51	31	1	24 304	57	20	0 0	20,023		
					24,094	57	20		21 , 132	]	
KRUGER/5407YGCB	107	51	30	3	27,152	57	22	8	27,733		
NUTECH/4607 YGCB	105	50	30	0	27,879	57	20	1	26,136		
KRUGER / 5207YGCB	110	49	28	2	26,571	59	20	3	27,007		
WENSMAN/W 5417BT	107	49	31	1	27,298	56	20	4	27,443		
NUTECH/EX.205 YGCB	105	50	27	3	23,087	56	19	2	26,862		

 $\star$  RM= relative maturity reported by seed company.

		Central Location Averages for bu.wt., kernel moisture, lodgingbelow ear, & plants/acre (ppa)							
		Brookings			Iroquois				
		Bu.				Bu.			
Brand/Hybrid	BM*	wt.	H20	Ldg. %	PPA	wt.	H20	Ldg.	РРА
KRUGER/0510	108	50	33	3	26,717	53	24	4	25,265
DAIRYLAND/STEALTH-5104	104	54	26	1	27,588	· ·	· ·	•	•
	105	53	20	0	27,878	•	•	•	•
SANDS/SUI 103YGCB	103	51	20		25,845	· ·	•	•	•
SANDS/SUI TU/YGCB	107	55	25	0	27,297	•	•	•	•
TOP FARM/TFSX 2405	102	52	26	6	27,443				
TOP FARM/E34103	103	52	29	2	27,152	.	.		
ACCESS/EXP 5405YGCB	105	51	26	0	26,717	.	•		
JACOBSEN/4358CB	105	53	31	1	27,733	· ·	•	•	
EPLEY/E2470	110	51	28	0	27,298	.	.	•	
EPLEY/E2410YGCB	107	51	29	1	27,588	.			
EPLEY/E2490YGCB	110	51	34	0	26,862	.			
EPLEY/E1442	102		.			60	19	0	28,314
EPLEY/E1430YGCB	103		.	.		57	23	0	25,265
EPLEY/E3220YGCB	112	53	32	2	27,588	.	.	·	•
MYCOGEN/2R570	104					59	17	6	28,024
MYCOGEN/2G626	105		•	•		58	19	1	27,588
MYCOGEN/2E633	107	.	.		.	57	20	1	27,153
PFISTER/EXP 2380	105	53	27	2	27,007	.	.		
AGSOURCE SEEDS/5153	105	51	28	3	27,298	.	.	•	•
AGSOURCE SEEDS/5393	105	52	27	1	25,119	-			
Test avg.:		52	27	1	26,739	58	19	3	26,886
Max-value:		55	34	6	27,879	61	24	8	28,459
Min-value:		49	20	0	23,087	53	17	0	22,942
# Lsd (.05):		2	1	3	2,131	3	3	NS	2,149
## TPG-value:		53	21	3	25,748	58	20	8	26,310
@ Coef.Var.:		2	3	120	5	3	9	124	5
No. Entries:		46	46	46	46	36	36	36	36

Table 4b. Non-Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- central locations, 2004 (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Brookings- May 7 and Iroquois- April 30, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant. ## TPG-value= minimum or maximum value to qualify for top performance group. @ Coef. of variation= measure of trial experimental error.

		- Southern location Averages - for yield (by year)						
		Beresford Armour						
Brand/Hybrid	RM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr			
NUTECH/EX.607 YGCB	105	252	•	121	-			
TOP FARM/TFSX 2405	102	239		135	.			
NUTECH/4403 YGCB	103	238		129				
NUTECH/2202 HX	100	241		125				
JACOBSEN/4358CB	105	243		122				
TOP FARM/E34105CB	105	227		136	-			
DEKALB/DKC54-51 (YGCB)	104	230	.	132	.			
NUTECH/0313	105	236	.	126	.			
HEINE/H728YGCB	103	236		123	.			
ACCESS/EXP 5405YGCB	105	239		109				
HEINE/H760YGCB	105	233		112	-			
NUTECH/4202 YGCB	100	228		116				
HEINE/H748YGCB	105	241	•	98	· ·			
KRUGER/5305YGCB	105	215		121	104			
NUTECH/EX.205 YGCB	105	223		108	•			
DEKALB/DKC50-18 (YGCB)	100			123	108			
DEKALB/DKC52-45 (YGCB)	102			135	113			
DEKALB/DKC60-14 (YGPL)	110	245						
DAIRYLAND/STEALTH-1507BT	108	232	212		· · ·			
DAIRYLAND/STEALTH-5104	104			131	106			
NUTECH/4407 YGCB	107	237			-			
NUTECH/EX.308 YGCB	107	232	.	.	.			
SANDS/SOI 103YGCB	103	212	.	.	.			
SANDS/SOI 107YGCB	107	227	.	.	.			
SANDS/SOI 110YGCB	110	237						
TOP FARM/TFSX 2300	103	248						
TOP FARM/E34103	103	.		115	.			
TOP FARM/E34107CB	107	214	.	.	.			
TOP FARM/E34110BCB	109	234	.	.	.			
TOP FARM/E34110DCB	110	244						
KRUGER/9306YGCB	103			120	103			
KRUGER/9404YGCB	103	.	.	113	85			
KRUGER/9203YGRW	103	.	.	131	.			
KRUGER / 8503HX	103	.	.	136	.			
KRUGER/5405YGCB	105	.	.	131	.			

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Table 5a. Non-Roundup Ready early maturity corn yield results- southern South Dakota locations, 2003-2004.

\* RM= relative maturity reported by seed company.

		- South	ern loca <sup>.</sup> or yield	tion Ave (by yea	rages - r)		
		Bere	sford	Arm	our		
Brand/Hybrid	RM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr		
KRUGER / 5805YGCB	105			102			
KRUGER/9407YGCB	105			116			
KRUGER/8407HX	107	225					
KRUGER/5407YGCB	107	240					
KRUGER/0510	108	233					
	Ì			ĺ			
KRUGER/5210YGCB	109	225					
KRUGER / 5208YGCB	110	243		.			
KRUGER/5207YGCB	110	245					
ACCESS/EXP 5910YGCB	110	213					
ACCESS/EXP 5503YGCB	103			131			
CROW'S/438 B	108	227	208				
MIDWEST/G 7716 B	110	250	215				
WENSMAN/W 5417BT	107	233	205			 	
WENSMAN/W 5437BT	110	242	210				
WENSMAN /W 7315BTBW	100		210	136			
	100		•	100			
WENSMAN /W 6318BT	104			133			
	104	225	210				
HEINE/H821VGCB	110	226	210				
HEINE/H820VGCB	100	252					
	103	234			· ·		
		204	•	· ·	•		
HEINE/HZ61	106	220					
	110	250			· ·		
	105	239	•	1/3	116		
	105	•	•	102	110		
	100		•	125	· ·		
Adsounce Seeds/5885	109	249	•	•	•		
		235	210	12/	105		
High value		250	210	14	116		
# led ( 05).		15		20	10		
$\frac{\pi}{1} = \frac{\pi}{1} = \frac{\pi}$		014	005	115			
## IFG-Value:		244	205	115	10		
No Entrice:		4	4	14   21	7		
				51	'		

Table 5a. Non-Roundup Ready early maturity corn yield results- southern locations (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Beresford- May 4 and Armour- May 3, 2004.

# Lsd= amount values in a column must differ to be significantly different.

NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

 ${\tt @}$  Coef. of variation= a measure of trial experimental error, 15% or less is best.

		Southern Location Averages for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)								
		Beresford				Armour				
		Bu. wt.	H20	Ldg.		Bu. wt.	H20	Ldg.		
Brand/Hybrid	RM*	Lb.	%	0%	PPA	Lb.	%	%	PPA	
DEKALB/DKC54-51 (YGCB)	104	62	17	5	27,733	59	15	7	27,588	
JACOBSEN/4358CB	105	60	20	1	27,733	60	17	1	26,717	
HEINE/H728YGCB	103	61	19	0	27,588	59	16	1	26,427	
NUTECH/4202 YGCB	100	62	19	1	27,588	58	15	4	27,733	
NUTECH/0313	105	61	21	3	27,878	58	16	2	26,717	
TOP FARM/E34105CB	105	61	19	0	27,297	58	16	2	23,668	
HEINE/H748YGCB	105	60	20	1	27,878	59	18	7	27,007	
ACCESS/EXP 5405YGCB	105	61	19	0	27,443	57	16	1	26,717	
NUTECH/EX.607 YGCB	105	60	19	0	28,023	58	16	3	26,136	
NUTECH/4403 YGCB	103	61	17	1	27,443	57	15	2	27,007	
KRUGER/5305YGCB	105	60	18	2	27,298	57	15	3	23,813	
TOP FARM/TFSX 2405	102	61	18	3	27,297	56	15	6	25,846	
NUTECH/EX.205 YGCB	105	59	17	1	28,169	56	15	4	26,426	
NUTECH/2202 HX	100	60	18	4	27,443	55	15	4	27,007	
HEINE/H760YGCB	105	60	21	0	27,152	54	16	5	25,265	
DEKALB/DKC50-18 (YGCB)	100					59	15	3	25 846	
DEKALB/DKC52-45 (YGCB)	102					58	15	1	26,426	
DEKALB/DKC60-14 (YGPL)	110	60	20	0	27.588				20,120	
DAIRYLAND/STEALTH-1507BT	108	59	19	1	27.443					
DAIRYLAND/STEALTH-5104	104					59	16	0	26,426	
	107	60	20	5	27 588					
NUTECH/EX.308 YGCB	107	60	20	1	28,169	•			•	
SANDS/SOI 103YGCB	103	60	17	0	27.298					
SANDS/SOI 107YGCB	107	61	19	0	27.443					
SANDS/SOI 110YGCB	110	59	21	2	25,991		.			
TOP FARM/TESX 2300	103	61	18	0	28,169					
TOP FARM/E34103	103					57	15	3	24.394	
TOP FARM/E34107CB	107	59	18	1	27,443				,	
TOP FARM/E34110BCB	109	59	20	0	27,007					
TOP FARM/E34110DCB	110	59	21	1	27,152		.	.	.	
KRUGER/9306YGCB	103	.				59	   16		26,136	
KRUGER/9404YGCB	103					60	15	3	27,152	
KRUGER/9203YGRW	103	.	.			58	15	2	25,846	
KRUGER/8503HX	103	.	.			55	15	4	25,991	
KRUGER/5405YGCB	105	.	.		•	59	17	1	25,265	

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Table 5b. Non-Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- southern South Dakota locations, 2004.
		 -	{	Southe	ern Loca	ation	n Ave	erage	S
			beld	bw ear	, kerne. r, & pla	ants,	acre/	e (pp:	a)
			Ber	resfo	rd		Ai	rmour	
		Bu.	1100	Lala		Bu.			
Brand/Hybrid	RM*	wt. Lb.	н20 %	Lag.	РРА	Lp.	H20	Lag.	РРА
KRUGER/5805YGCB	105					58	16	1	25,991
KRUGER/9407YGCB	105	•	•			60	16	1	23,087
KRUGER / 8407HX	107	60	20	2	25,265	•	•	· ·	.
KRUGER/5407YGCB	107	60	18	2	27,588	· ·	· ·	•	.
KRUGER/0510	108	60	19	1	27,443	.		.	
KRUGER/5210YGCB	109	60	20	2	27,443	.	.	.	.
KRUGER / 5208YGCB	110	61	19	2	27,878	.	.		.
KRUGER/5207YGCB	110	60	20	0	27,443	.	.	.	.
ACCESS/EXP 5910YGCB	110	62	19	2	27,733	.	.	· ·	.
ACCESS/EXP 5503YGCB	103	•	•	.	.	61	16	0	27,297
CROW'S/438 B	108	59	19	2	27,443	.			
MIDWEST/G 7716 B	110	58	22	2	27,588	.	.	.	
WENSMAN/W 5417BT	107	59	20	0	27,152	.	.	.	
WENSMAN/W 5437BT	110	59	21	0	27,007				
WENSMAN/W 7315BTRW	100	•				60	16	0	26,426
WENSMAN/W 6318BT	104					58	16	2	26.426
HEINE/H745YGCB	104	61	19	1	27.297			-	20,420
HEINE/H821YGCB	110	59	21	3	27,878				
HEINE/H820YGCB	109	59	22	2	27,588				.
HEINE/H793YGCB	107	59	19	3	27,878	.	.		
HEINE/H761	106	63	19	1	26,571	.	.		
GOLD COUNTRY/110-07CB	110	58	22	1	26,862				.
AGSOURCE SEEDS/5153	105			.	· ·	57	16	2	26,717
AGSOURCE SEEDS/5393	105			.	.	58	16	2	25,700
AGSOURCE SEEDS/5883	109	59	21	2	27,588	.	.		
Test avg.:		60	19	1	27,429	58	16	2	26,103
Max-value:	ĺ	63	22	5	28,169	61	18	7	27,733
Min-value:		58	17	0	25,265	54	15	0	23,087
# Lsd (.05):		1	1	NS NS	1,148	2	1	4	1,626
## TPG-value:		62	18	5	27,021	59	16	4	26,107
@ Coef.Var.:		1	3	148	3	2	4	92	4
No. Entries:		44	44	44	44	31	31	31	31

Table 5b. Non-Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- southern locations, 2004 (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Beresford- May 4 and Armour- May 3, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

 $\ensuremath{\texttt{@}}$  Coef. of variation= a measure of trial experimental error.

		- Southe	ern Loca <sup>.</sup> or yield	tion Ave (by yea	rages - r)
		Beres	sford	Armo	our
Brand/Hybrid	RM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr
NUTECH/EX.713 YGCB	114	253	•	143	
KRUGER/5615YGCB	116	239		155	•
JACOBSEN/4637CB	111	255	•	137	
JACOBSEN/4757CB	112	257	215	131	94
KRUGER/5512YGCB	114	245	•	139	•
KRUGER/5211YGCB	112	249		133	
KRUGER/5516YGCB	116	239		142	.
NUTECH/EX.539 YGCB	111	229	.	148	.
NUTECH/4213 YGCB	115	250		128	
KRUGER/9212YGCB	112	258	214	120	.
KRUGER / 9115YGCR	115	256	210	100	
NUTECH/EX 317 VGCB	111	230	212	140	
KBUGER / 8513HX	113	250		122	· _ ·
KRUGER / 5815YGCB	114	238		134	
KRUGER / 5514YGCB	116	235		136	
DAIRYLAND/STEALTH-5611	112	254		115	
KRUGER/5416YGCB	115	237		132	
KRUGER/5315YGCB	115	235	•	134	
KRUGER/5717YGCB	117	246		123	
KRUGER/9111YGCB	113	243		113	96
KRUGER/8413HX	113	233		117	
NUTECH/2414 HX	114	229		110	
NUTECH/4013 YGCB	112	237		100	.
DEKALB/DKC63-79 (YGCB)	113	240	208		.
DEKALB/DKC60-14 (YGPL)	110			120	
DATRYLAND/STEALTH-1507BT	108			120	00
NUTECH/4407 YGCB	107	•	•	113	33
NUTECH/EX.308 YGCB	107	•	•	117	•
SANDS/SOT 113YGCB	113	217	•		•
ASGROW/RX718YGPL	111	227		.	
TOP FARM/E34107CB	107	.		116	.
TOP FARM/E34110BCB	109			130	
TOP FARM/E34110DCB	110	.		120	.
KAYSTAR/KX-8615BT	112	247			.
KRUGER/9305	106	•	•	115	· ·

## Table 6a. Non-Roundup Ready late maturity corn yield results- southern South Dakota locations, 2003-2004.

\* RM= relative maturity reported by seed company.

		- Southe	ern Loca or yield	tion Ave (by yea	rages - r)	
		Beres	sford	Arm	our	
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr	
KRUGER/8407HX	107			109		
KRUGER/5407YGCB	107			144		
KRUGER/0510	108	.		81		
KRUGER/5210YGCB	109	.		130		
KRUGER/5208YGCB	110			107		
KRUGER/5207YGCB	110			112		
ACCESS/EXP 5910YGCB	110			132		
CROW'S/5366 B	112	252	211			
MIDWEST/G 8125 B	112	259	212			
FPI FY/F2470	110	200		108		
			•			
EPLEY/E2410YGCB	107			125		
EPLEY/E2490YGCB	110			125		
EPLEY/E3220YGCB	112			122		
EPLEY/E37H07	115			126		
WENSMAN/W 5417BT	107			131	101	
WENSMAN/W 5437BT	110			131		
HEINE/H8600YGCB	113	261				
AGSOURCE SEEDS/6183	112	261	218			
AGSOURCE SEEDS/6163	111	251	210			
AGSOURCE SEEDS/5883	109			126	•	
	109	•	•	120	•	
Test avg.:		244	213	125	98	
High value:		261	218	155	101	
# Lsd (.05):		14	NS	28	NS	
## TPG-value:	ĺ	247	208	127	94	
@ Coef.Var.:		4	6	14	13	
No. Entries:		32	7	46	4	
L						

Table 6a. Non-Roundup Ready late maturity corn yield results- southern locations, (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Beresford- May 4 and Armour- May 3, 2004.

# Lsd= amount values in a column must differ to be significantly different.

NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

 ${\tt @}$  Coef. of variation= a measure of trial experimental error, 15% or less is best.

		 f(	or bi belo	South u.wt. ow ea	ern Loca , kerne r, & pla	ation 1 mo: ants	n Ave istu /acre	erage: re,loo e (pp:	s dging a)	
			Bei	resfo	rd		Ai	rmour		
		Bu.	H20	I da		Bu.	H20	l da		
Brand/Hybrid	RM*	Lb.	%	%	PPA	Lb.	%	%	РРА	
KRUGER/5514YGCB	116	59	21	2	27,733	60	18	2	27,297	
NUTECH/EX.713 YGCB	114	59	21	1	26,862	60	20	11	25,410	
KRUGER/5512YGCB	114	58	22	3	26,717	60	20	8	25,845	
KRUGER/9111YGCB	113	59	20	3	28,169	58	18	3	25,265	
NUTECH/EX.539 YGCB	111	59	20	2	27,152	57	18	6	24,539	
JACOBSEN/4637CB	111	59	21	1	26,572	58	20	4	26,862	
KRUGER/9212YGCB	112	58	22	1	27,152	58	19	7	24,974	
KRUGER/5416YGCB	115	57	23	0	27,152	58	20	11	25,845	
NUTECH/4213 YGCB	115	58	23	1	26,862	58	22	6	25,846	
NUTECH/4013 YGCB	112	59	21	2	28,169	57	20	7	25,701	
KRUGER/5211YGCB	112	58	22	2	27,443	57	18	11	26,426	
KRUGER/5516YGCB	116	58	24	0	27,007	57	20	1	25,845	
KRUGER/8513HX	113	58	23	1	27,007	57	19	1	26,426	
DAIRYLAND/STEALTH-5611	112	59	21	3	27,733	56	17	7	26,571	
KRUGER/5615YGCB	116	57	23	4	27,733	58	21	3	24,249	
KRUGER/9115YGCB	115	57	24	1	26,572	58	19	6	26,136	
JACOBSEN/4757CB	112	57	24	2	27,443	57	21	9	25,700	
KRUGER/5315YGCB	115	57	26	5	27,588	57	22	7	27,007	
NUTECH/2414 HX	114	57	21	2	27,007	57	18	9	25,410	
KRUGER/8413HX	113	57	23	4	28,169	56	19	7	23,813	
KRUGER/5717YGCB	117	55	24	   0	27,878	57	21	4	25,555	
NUTECH/EX.317 YGCB	111	56	25	1	27,007	55	23	4	26,426	
KRUGER/5815YGCB	114	53	26	1	28,169	55	20	4	26,572	
DEKALB/DKC63-79 (YGCB)	113	59	22	1	28,169	.	.	.		
DEKALB/DKC60-14 (YGPL)	110	.	.	.	.	58	17	2	24,394	
DAIRYLAND/STEALTH-1507BT	108	.	.	.	.	57	18	8	24,829	
NUTECH/4407 YGCB	107	.	.	.	.	57	18	10	26,571	
NUTECH/EX.308 YGCB	107	.	.	.	.	59	17	5	25,991	
SANDS/SOI 113YGCB	113	60	21	1	25,700	.	.	.	.	
ASGROW/RX718YGPL	111	61	20	2	27,152	.		.	.	
TOP FARM/E34107CB	107	.	.	.		59	19	8	24,103	
TOP FARM/E34110BCB	109	.	.	.	.	59	18	3	23,958	
TOP FARM/E34110DCB	110	.	.	.	.	57	20	10	25,555	
KAYSTAR/KX-8615BT	112	57	21	7	27,298	.	.	· ·		
KRUGER/9305	106	.	.	.		59	15	2	25,265	
€	L	I			L	I	I	L	L	]

Table 6b. Non-Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- southern South Dakota locations, 2004.

		Southern Location Averages for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)										
			Bei	resfo	rd		Armour					
		Bu.				Bu.						
Brand/Hybrid	RM*	wt. Lb.	H20 %	Ldg. %	PPA	wt. Lb.	H20 %	Ldg. %	РРА			
KRUGER / 8407HX	107					58	16	8	24,684			
KRUGER/5407YGCB	107					57	18	5	26,136			
KRUGER/0510	108		.			57	21	9	24,394			
KRUGER/5210YGCB	109		.		i .	59	18	10	23,958			
KRUGER / 5208YGCB	110					58	16	3	23,813			
KRUGER/5207YGCB	110		.		.	59	18	6	26,136			
ACCESS/EXP 5910YGCB	110					59	16	3	25,845			
CROW'S/5366 B	112	57	25	2	27,007	.	.					
MIDWEST/G 8125 B	112	57	25	1	27,733	.	.					
EPLEY/E2470	110		.	•	.	58	17	8	24,684			
EPLEY/E2410YGCB	107					59	16	2	26,717			
EPLEY/E2490YGCB	110			•		57	17	6	24,684			
EPLEY/E3220YGCB	112		.			57	22	2	23,232			
EPLEY/E37H07	115		.			55	18	5	25,991			
WENSMAN/W 5417BT	107		.	•		58	19	5	23,522			
WENSMAN (W. 5437DT	110				$\mathbf{V}$	50	10	7	24 920			
	113	57			28 314	50	19		24,029			
AGSOURCE SEEDS/6183	112	57	24	4	20,014			•	•			
AGSOURCE SEEDS/6163	111	59	27	3	27 878			•	•			
AGSOURCE SEEDS/5883	109					59	20	12	23,377			
Test avo.:	L	58	23	2	27.388	58	19	6	25,356			
Max-value:		61	26	7	28,314	60	23	12	27,297			
Min-value:		53	20	0	25,700	55	15	1	23,232			
# Lsd (.05):		2	1	4	NS	2	3	6	1,376			
## TPG-value:		59	21	4	25,700	58	18	7	25,921			
@ Coef.Var.:		2	4	111	3	2	10	65	3			
# Entries:		32	32	32	32	46	46	46	46			

Table 6b. Non-Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- southern locations, 2004 (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Beresford- May 4 and Armour- May 3, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant. ## TPG-value= minimum or maximum value to qualify for top performance group. @ Coef. of variation= measure of trial experimental error.

	Table		Table
Brand / Hybrid	No.	Brand / Hybrid	No
Drand / Hybrid		Diana / nyorita	
ACCESS/EXP 2506RRYGCB	10,11,12	HEINE/H750RR/YGCB	8,10,11
ACCESS/EXP1500RR	8,9	HEINE/H793RR/YGCB	11,12
ACCESS/EXP1597RR	8,9	HEINE/H851RR/YGCB	12
AGSOURCE SEEDS/3566	7	HEINE/H8600RR/YGCB	12
AGSOURCE SEEDS/3931	8,9	INTEGRA/INT 6193RRYG	7,9
AGSOURCE SEEDS/4556	8,10,11	INTEGRA/INT 6390RRYG	9
AGSOURCE SEEDS/5286CBRR	10,11,12	INTEGRA/INT 6395RR	7,9
AGSOURCE SEEDS/5356	10,12	INTEGRA/INT 6504RRYGCB	10,11,12
AGSOURCE SEEDS/6166	12	INTEGRA/INT 6593RRYG	9
ASGROW/RX718RR/YG	11	JACOBSEN/4167RBT	8,10
CHANNEL/6925RB	7,9	JACOBSEN/4358R	10,11
CHANNEL/6939RB	7,9	JACOBSEN/4637RBT	11,12
CHANNEL/6965 R	7,9	JACOBSEN/4757RBT	12
CHANNEL/7135RB	8,10,11	JUNG/6418RR/YGCB	9
CHANNEL/7138RB	8,10,11	JUNG/6445RR	9
CHANNEL/7624RB	11,12	KALTENBERG/K4666RR	9
CHANNEL/7806RB	11,12	KALTENBERG/K5244RRBT	10,11
CHANNEL/8075RB	12	KALTENBERG/K5711RR	11
CHANNEL/8127RB	12	KALTENBERG/K5717RRBT	10,11
DAIRYLAND/STEALTH-1606	11,12	KALTENBERG/K6788RR	
DAIRYLAND/STEALTH-6497	8.9	KAYSTAR/KX-4000RRBT	7
DAIRYLAND/STEALTH-7507	11.12	KAYSTAR/KX-5150RR	7.9
DEKALB/DKC42-95RR2YGCB	7	KAYSTAR/KX-5900RR	9
DEKALB/DKC44-46RR2YGCB	7.9	KAYSTAR/KX-6650RR	11
DEKALB/DKC47-10RR2YGCB	8,9,11	KELTGEN/AV4005R2CB	7
DEKALB/DKC48-52 (RR2)	8.9.11	KELTGEN/AV4882R2	7
DEKALB/DKC50-20RR2YGCB	8,9,11	KRUGER / 1006RR	10,11,12
DEKALB/DKC52-47RR2YGCB	10	KRUGER / 1100RR	8,9
DEKALB/DKC53-34RR2YGCB	10,11	KRUGER / 1200RR	8,9
DEKALB/DKC58-80RR2YGCB	11,12	KRUGER/1202RR	8,10
DEKALB/DKC60-19RR2YGCB	11,12	KRUGER/1506RR	8,10,11
DEKALB/DKC63-81RR2YGCB	12	KRUGER / 1806RR	10,11,12
EPLEY/E1155RR	9	KRUGER/2103RR/YGCB	8,10,11
EPLEY/E1165RR	9	KRUGER/2291RR/YGCB	7
EPLEY/E1175RR	9,11	KRUGER/2391RR/YGCB	7
EPLEY/E1455RR	10,11	KRUGER/2613RR/YGCB	12
EPLEY/E1465RR	10,11	KRUGER/4193RR/YGRW	7,9
EPLEY/E1475RR	10,11	KRUGER/9115RR/YGCB	12
EPLEY/E1515RR	10,11	KRUGER/9203RR/YGCB	8,10,11
EPLEY/E2425RR	10,12	KRUGER/9208RR	10,11,12
GOLD COUNTRY/1016RRBT	8,10	KRUGER / 9208RR / YGCB	10,11,12
GOLD COUNTRY/105-03CBR	10,11	KRUGER/9212RR/YGCB	12
GOLD COUNTRY/92-01CBR	7	KRUGER/9308RR/YGCB	10,12
HEINE/H625RR/YGCB	7	KRUGER/9392RR	7.9
HEINE/H630RB	7.9	KRUGER / 9392RR / YGCB	7
HEINE/H710RR/YGCB	8.9.11	KRUGER/9412RR/YGCB	12
HEINE/H723RR/YGCB	8.9.11	KRUGER / 9496RR	7
HEINE/H728RR/YGCB	8.9.11	MALLARD/EXP 05-09	7
HEINE/H748RR	8.10.11	MALLARD/RRBT-5810	7
	-,,		

Table E. 2004 corn performance trials - Roundup Ready entries by brand/hybrid, and yield table number(s).

	Table			Table
Brand / Hybrid	No.	Brand /	Hybrid	No.
MYCOGEN/2H398	8			
/IYCOGEN/2K541	8,10			
IYCOGEN/2R416	7			
IYCOGEN/2T336	7			
YCOGEN/2T655	10			
UTECH/3005 RR/YGCB	8,9			
JTECH/3595 RR	7,9			
JTECH/5101 RR/YGCB	8,9			
TECH/5212 RR/YGCB	12			
JTECH/5592 RR/YGCB	7			
JTECH/5702 RR/YGCB	10,11			
JTECH/5808 RR/YGCB	12			
JTECH/5990 RR/YGCB	7			
ISTER/2656 RR-BT	10,11			
NDS/NGS 1030RR/YGCB	8,10,11			
NDS/NGS 1100RR	11			
EDS 2000/2944RRBT	9			
EDS 2000/2953RR	9			
EDS 2000/3122RRBT	8,10			
FARM/8301RR	9			
P FARM/8395RR	9			
P FARM/8403RR	10,11			
P FARM/9305RY	10,11			
P FARM/9391RY	9			
P FARM/E34100RR	9			
P FARM/E34102BRCB	10,11.12			
P FARM/E34102RR	10.11		_	
P FARM/E34103BRCB	10.11			
P FARM/E34110RCB	11.12			
CO SEEDS/EXPCS90RR	7.9			
CO SEEDS/EXPCS95RR	7.9			
NSMAN/W 6116RR	7.9			
NSMAN/W 6117BTRB	7.9			
NSMAN/W 6212BB	7.9			
ENSMAN/W 6274RR	8.9			
NSMAN/W 6315BTBB	10.11			
NSMAN/W 6422BTRB	10.11.12			
NSMAN/W 7111RWRR	7.9			
NSMAN/W 7309RWRP	89			
	0,0			

Table E. 2004 corn performance trials - Roundup Ready entries and table number(s) (Continued).

		- Northern Location Averages for yield (by year)											
		South	Shore	Warı	ner								
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre								
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr								
KRUGER / 9392RR / YGCB	92	154	117	240	214								
DEKALB/DKC42-95RR2YGCB	92	155	122	233	215								
WENSMAN/W 6212RR	95	150	113	237	219								
MYCOGEN/2R416	95	154		232	.								
KRUGER/9392RR	90	156	116	226	199								
KRUGER/9496RR	94	151	113	230	210								
INTEGRA/INT 6395RR	95	153	116	229	205								
NUTECH/3595 RR	94	148		231	.								
KRUGER/2291RR/YGCB	91	158		222	.								
SEEDS 2000/2944RRBT	94	150		228	212								
WECO SEEDS/EXPCS90RR	90	143		230									
SEEDS 2000/2953RR	95	150	114	223	206								
WENSMAN/W 6116RR	91	151	115	221	206								
CHANNEL/6925RB	92	146	112	226	207								
CHANNEL/6939RB	93	144	111	227	212								
KRUGER/2391RR/YGCB	92	143	114	226	213								
CHANNEL/6965 R	95	141		228									
KELTGEN/AV4005R2CB	92	143		225									
WENSMAN/W 6117BTRR	92	147	115	220	210								
DEKALB/DKC44-46RR2YGCB	94	140	110	223	214								
KELTGEN/AV4882R2	94	142		221									
MALLARD/EXP 05-09	92	142		222	.								
NUTECH/5990 RR/YGCB	92	145	.	219	.								
NUTECH/5592 RR/YGCB	93	145	.	219	.								
GOLD COUNTRY/92-01CBR	92	143	•	215	207								
WENSMAN/W 7111RWRR	90	146		210									
KRUGER/4193RR/YGRW	93	145	.	206	.								
INTEGRA/INT 6193RRYG	92	139	109	207	204								
WECO SEEDS/EXPCS95RR	95	136	.	183	.								
MALLARD/RRBT-5810	90	116		198									

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Table 7a. Roundup Ready early maturity corn yield results- northern South Dakota locations, 2003-2004.

\* RM= relative maturity reported by seed company.

		- Northe fo	ern Loca or yield	n Location Averages - yield (by year)					
		South	Shore	Warı	ner				
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre				
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr				
KAYSTAR/KX-4000RRBT	91			224	210				
KAYSTAR/KX-5150RR	95			233	213				
MYCOGEN/2T336	92			235					
HEINE/H625RR/YGCB	91			231	212				
HEINE/H630RR	95			227	-				
AGSOURCE SEEDS/3566	92	141							
Test avg.:		146	114	223	210				
High value:		158	122	240	219				
# Lsd (.05):		11	NS	15	NS				
## TPG-value:		147	109	225	199				
@ Coef.Var.:		4	5	4	4				
No. Entries:		31	14	35	19				

Table 7a. Roundup Ready early maturity corn yield results- northern locations, (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: South Shore- May 6 and Warner- May 5, 2004.

# Lsd= amount values in a column must differ to be significantly different.

NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

@ Coef. of variation= a measure of trial experimental error, 15% or less is best.

Table	7b.	Roundup	Ready	corn	early	hybrid	averages	for	bushel	weight,	kernel	moisture,	
		lodging	below	ear,	and h	arvest	populatior	n- no	orthern	locatior	ns, 2004	(continued).	

		f	or bu belo	North u.wt. ow ea	ern Loca , kerne r, & pla					
			Sout	th Sh	ore		Wa	arner		
		Bu.				Bu.				
Brand/Hybrid	RM*	wt. Lb.	H20 %	Ldg.	РРА	wt. Lb.	H20 %	Ldg.	PPA	
WENSMAN/W 6117BTRR	92	55	26	1	27,733	61	18	1	26,862	
NUTECH/5592 RR/YGCB	93	56	21	0	27,007	59	18	0	26,426	
KRUGER/9392RR	90	55	25	0	27,443	61	19	3	27,588	
WENSMAN/W 6116RR	91	55	25	1	26,862	61	18	2	27,733	
KRUGER/4193RR/YGRW	93	56	20	2	27,152	59	18	2	26,717	
KRUGER / 9392RR / YGCB	92	55	27	0	28,314	61	18	0	27,878	
WECO SEEDS/EXPCS90RR	90	55	26	1	27,152	60	18	1	27,588	
GOLD COUNTRY/92-01CBR	92	55	27	0	26,426	60	18	1	26,136	
CHANNEL/6925RB	92	54	26	0	27,152	60	19	0	27,588	
WECO SEEDS/EXPCS95RR	95	54	20	1	24,103	60	17	3	25,410	
MALLARD/EXP 05-09	92	54	26	1	27,733	59	18	0	27,733	
KELTGEN/AV4005R2CB	92	53	27	1	27,879	60	18	1	27,007	
KRUGER / 2291 RR / YGCB	91	53	22	3	26,862	60	18	1	27,443	
DEKALB/DKC42-95RR2YGCB	92	54	26	0	28,023	58	18	1	27,878	
KRUGER/2391RR/YGCB	92	54	23	2	27,007	59	18	0	28,023	
						ĺ	ĺ		Í	
WENSMAN/W 7111RWRR	90	53	22	1	27,443	59	18	2	27,588	
CHANNEL/6939RB	93	53	23	0	27,443	59	18	0	27,298	
SEEDS 2000/2944RRBT	94	52	22	2	27,152	60	18	1	27,007	
NUTECH/5990 RR/YGCB	92	52	23	2	27,443	59	18	0	27,588	
SEEDS 2000/2953RR	95	53	27	0	28,895	59	19	3	26,717	
NUTECH/3595 RR	94	52	26	0	28,169	59	18	3	27,878	
INTEGRA/INT 6193RRYG	92	53	22	1	25,701	58	17	2	25,120	
KRUGER/9496RR	94	53	26	0	28,314	58	18	3	27,733	
INTEGRA/INT 6395RR	95	53	26	0	27,588	58	19	3	27,588	
WENSMAN/W 6212RR	95	52	26	0	27,878	58	19	5	27,878	
MYCOGEN/2R416	95	52	27	0	26,426	58	18	3	27,588	
KELTGEN/AV4882R2	94	51	27	1	26,136	58	19	3	26,281	
MALLARD/RRBT-5810	90	50	26	2	25,410	59	19	2	25,700	
CHANNEL/6965 R	95	51	27	0	25,410	58	19	4	26,426	
DEKALB/DKC44-46RR2YGCB	94	49	28	1	27,298	58	19	1	27,878	

 $\ast$  RM= relative maturity reported by seed company.

			f	or bu belo	Northe u.wt. ow ear	ern L , ker r, &	oca ne: pla	atior L mo: ants,	n Ave istur /acre	erages re,loc e (ppa	3 dging a)
			South Shore Warner								
Brand/Hybrid		BM*	Bu. wt.	H20	Ldg.	PPA	4	Bu. wt.	H20	Ldg.	ΡΡΑ
									10		00 717
KAYSTAR/KX-4		91	•	•	•		•	59	18	0	20,717
MYCOGEN/2T33	6	92		•	•		•	60	18		27,588
HEINE/H625RR	/YGCB	91						58	18	1	27.733
HEINE/H630RR		95	.				•	58	19	2	27,298
AGSOURCE SEE	DS/3566	92	55	27	0	26,1	36	-	-		
	Test avg.:		53	25	1	27,0	87	59	18	2	27,177
	Max-value:		56	28	3	28,8	395	61	19	5	28,023
	Min-value:		49	20	0	24,1	03	58	17	0	25,120
	# Lsd (.05):		2	1	2	1,6	613	2	1	3	833
	## TPG-value:		54	21	2	27,2	282	59	18	3	27,140
	@ Coet.Var.:		3	3	182		4	2	3	118	2
	No. Entries:		31	31	31		31	35	35	35	35

Table 7b. Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- northern locations, 2004 (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: South Shore- May 6 and Warner- May 5, 2004.

# Lsd= amount values in a column must differ to be significantly different.

## TPG-value= minimum or maximum value to qualify for top performance group.

@ Coef. of variation= measure of trial experimental error.

		- Northe	ern Loca <sup>.</sup> or yield	tion Aven (by yean	rages - r)	
		South	Shore	Warı	ner	
		South     Shore       Bu/Acre     Bu/Acre     Bu/Acre       2004     2-Yr     20       3     155     .       7     150     .       7     149     .       3     135     102       3     135     .       3     135     .		Bu/Acre	Bu/Acre	
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr	
DEKALB/DKC48-52 (RR2)	98	155		226		
DEKALB/DKC47-10RR2YGCB	97	150		223	212	
DAIRYLAND/STEALTH-6497	97	149		214		
NUTECH/5101 RR/YGCB	100	139		213		
KRUGER/9203RR/YGCB	103	135	102	214	207	
ACCESS/EXP1597RR	97	139		211		
MYCOGEN/2K541	103	135		211		
KRUGER/2103RR/YGCB	103	133		209		
KRUGER/1200RR	100	128		205		
NUTECH/3005 RR/YGCB	100	131		198	•	
WENSMAN/W 6274RR	98	122		207		
WENSMAN/W 7309RWRR	100	127		203		
KRUGER/1100RR	100	121		196	· ·	
KRUGER/1202RR	102	120		189		
KRUGER / 1506RR	105	113		192	•	
DEKALB/DKC50-20RR2YGCB	100			218		
SANDS/NGS 1030RR/YGCB	103	132				
ACCESS/EXP1500RR	100	141				
JACOBSEN/4167RBT	101	131			<b>—</b> .	
MYCOGEN/2H398	96	•		216		
SEEDS 2000/3122RRBT	102			220		
HEINE/H750RR/YGCB	105	.	.	202	.	
HEINE/H748RR	105	.	.	190		
HEINE/H723RR/YGCB	100	.	.	211		
HEINE/H728BB/YGCB	100			185		

Table 8a. Roundup Ready late maturity corn yield results- northern South Dakota locations, 2003-2004.

 $\star$  RM= relative maturity reported by seed company.

		- Northern Location Averages for yield (by year)								
		South	ner							
Brand/Hybrid	RM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr					
HEINE/H710RR/YGCB	100			199						
GOLD COUNTRY/1016RRBT	104	139	106							
CHANNEL/7138RB	101	120								
CHANNEL/7135RB	101	136								
AGSOURCE SEEDS/3931	96	153								
AGSOURCE SEEDS/4556	101	132								
Test avg.:		134	104	207	210					
High value:		155	106	226	212					
# Lsd (.05):		11	NS	14	NS					
## TPG-value:		144	102	212	207					
@ Coef.Var.:		5	4	4	4					
No. Entries:		23	2	23	2					

## Table 8a. Roundup Ready late maturity corn yield results- northern South Dakota locations (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: South Shore- May 6 and Warner- May 5, 2004.

# Lsd= amount values in a column must differ to be significantly different.

NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

@ Coef. of variation= a measure of trial experimental error, 15% or less is best.

Table 8b. Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- northern South Dakota locations, 2004.

		Northern Location Averages for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)											
			Sout	th Sho	ore		Warner						
		Bu.				Bu.							
Brand/Hybrid	RM*	wt. Lb.	H20 %	Ldg.	PPA	wt. Lb.	H20	Ldg.	PPA				
DEKALB/DKC47-10RR2YGCB	97	52	26	1	28,169	58	20	0	27,588				
DEKALB/DKC48-52 (RR2)	98	52	25	2	27,443	57	19	3	26,862				
ACCESS/EXP1597RR	97	49	27	2	27,878	58	19	2	27,297				
WENSMAN/W 7309RWRR	100	51	33	2	27,443	55	23	0	26,281				
NUTECH/3005 RR/YGCB	100	50	30	0	26,571	57	21	1	27,443				
DAIRYLAND/STEALTH-6497	97	50	27	0	27,733	55	19	3	26,862				
KRUGER/1200RR	100	49	30	2	25,555	56	22	0	26,862				
WENSMAN/W 6274RR	98	49	30	2	25,700	55	22	5	27,588				
KRUGER/1506RR	105	50	43	5	27,443	54	28	2	27,443				
KRUGER/2103RR/YGCB	103	49	29	2	27,007	55	22	0	27,588				
NUTECH/5101 RR/YGCB	100	50	33	2	28,459	54	24	2	27,733				
KRUGER / 1100RR	100	47	32	1	25,119	56	20	0	23,668				
KRUGER/1202RR	102	49	37	1	27,007	53	26	4	27,733				
KRUGER / 9203RR / YGCB	103	48	34	0	27,152	53	24	1	27,297				
MYCOGEN/2K541	103	47	34	0	28,169	53	23	1	27,007				
DEKALB/DKC50-20BB2YGCB	100					56	21	0	27.007				
SANDS/NGS 1030RR/YGCB	103	49	34	1	26.862		l .	· .	Ľ.				
ACCESS/EXP1500RR	100	50	27	1	27,443		Ι.						
JACOBSEN/4167RBT	101	49	35	1	26,136		Ι.						
MYCOGEN/2H398	96		.			57	19	0	26,717				
SEEDS 2000/3122RRBT	102		.			54	23	1	27,152				
HEINE/H750RR/YGCB	105	.			.	52	27	1	27,152				
HEINE/H748RR	105	.	.			54	28	3	27,007				
HEINE/H723RR/YGCB	100	.	.		.	54	24	1	26,572				
HEINE/H728RR/YGCB	100	.			.	56	27	0	27,007				
1	1	1	1	1	1	1	1	1	1				

VE

 $\star$  RM= relative maturity reported by seed company.

		 f(	or bu belo	Northern Location Averages for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)										
			Sout	th Sho	ore		Wa	arner						
Brand/Hybrid	RM*	Bu. wt. Lb.	H20 %	Ldg. %	PPA	Bu. wt. Lb.	H20 %	Ldg. %	PPA					
					27 59	. 52	26	3	27,588					
CHANNEL / 7138BB	104	49 50	32	4	26.57				•					
CHANNEL/7135RB	101	49	32	1	27,73	3								
AGSOURCE SEEDS/3931	96	52	26	0	27,87	з .	.							
AGSOURCE SEEDS/4556	101	49	33	1	27,87	3.								
Test avg.:		49	31	1	27,17	1 55	23	1	27,020					
Max-value:		52	43	5	28,45	9 58	28	5	27,733					
Min-value:		47	25	0	25,11	9 52	19	0	23,668					
# Lsd (.05):		2	2	2	1,77	5 2	2	3	1,135					
## TPG-value:		50	27	2	26,884	1 56	21	3	26,638					
No. Entries:		23	23	23	2:	+ 2 3 23	23	23	23					

Table 8b. Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- northern locations, 2004 (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: South Shore- May 6 and Warner- May 5, 2004.

# Lsd= amount values in a column must differ to be significantly different.

## TPG-value= minimum or maximum value to qualify for top performance group.

@ Coef. of variation= measure of trial experimental error.

		- Centra fo	al Locat: or yield	ion Avera (by yea	ages - r)
		Brool	kings	Iroqu	uois
Brand/Hybrid	RM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr
INTEGRA/INT 6395RR	95	211	200	207	153
KRUGER/9392RR	90	217		196	
EPLEY/E1155RR	90	212		199	.
WENSMAN/W 6212RR	95	217	205	195	143
DEKALB/DKC50-20RR2YGCB	100	208		200	.
DAIRYLAND/STEALTH-6497	97	209		198	
NUTECH/3595 RR	94	213	.	192	.
ACCESS/EXP1500RR	100	221		183	.
KAYSTAR/KX-5900RR	99	204		196	.
EPLEY/E1165RR	95	211	199	189	.
DEKALB/DKC47-10RR2YGCB	97	224	.	174	140
KALTENBERG/K4666RR	96	207		184	
ACCESS/EXP1597RR	97	207	•	182	•
INTEGRA/INT 6193RRYG	92	200	•	188	
DEKALB/DKC48-52 (RR2)	98	206		180	•
NUTECH/5101 RR/YGCB	100	204		180	
KAYSTAR/KX-5150RR	95	213	200	171	137
CHANNEL/6965 R	95	211		167	
WENSMAN/W 7111RWRR	90	203		169	
WECO SEEDS/EXPCS90RR	90	214		155	.
WENSMAN/W 7309RWRR	100	189		178	
NUTECH/3005 RR/YGCB	100	193	.	172	.
TOP FARM/E34100RR	100	197	.	169	.
WENSMAN/W 6274RR	98	184	.	180	.
TOP FARM/8301RR	100	199	.	162	.
INTEGRA/INT 6593RRYG	93	207	.	153	.
KRUGER / 1200RR	100	193	.	161	.
KRUGER/4193RR/YGRW	93	181	.	169	.
EPLEY/E1175RR	100	187	.	161	.
KRUGER/1100RR	100	183	.	155	.
WECO SEEDS/EXPCS95RR	95	191		139	
DEKALB/DKC44-46RR2YGCB	94	217	204	.	.
JUNG/6418RR/YGCB	92	205	193		.
JUNG/6445RR	99	197			.
TOP FARM/8395RR	95	223	211	.	.

VE

Table 9a. Roundup Ready early maturity corn yield results- central South Dakota locations, 2003-2004.

• RM= relative maturity reported by seed company.

		- Centra fo	al Locat: or yield	ion Avera (by yea	ages - ^)
		Brool	kings	Iroqu	uois
Brand/Hybrid	RM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr
TOP FARM/9391RY	92	203			
WENSMAN/W 6116RR	91			174	137
WENSMAN/W 6117BTRR	92			168	134
SEEDS 2000/2944RRBT	94	199	188	.	
SEEDS 2000/2953RR	95	214	202	.	
HEINE/H723RR/YGCB HEINE/H728RR/YGCB HEINE/H710RR/YGCB HEINE/H630RR CHANNEL/6925RB	100 100 100 95 92	204	190	166 168 184 200	
CHANNEL/6939RB AGSOURCE SEEDS/3931	93 96	199 213	188		
Test avg.: High value: # Lsd (.05): ## TPG-value: @ Coef.Var.: No. Entries:		205 224 13 211 4 41	198 211 3 208 4 11	177 207 33 174 12 37	141 153 NS 134 10 6

Table 9a. Roundup Ready early maturity corn yield results- central locations, (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Brookings- May 7 and Iroquois- April 30, 2004.

# Lsd= amount values in a column must differ to be significantly different.

NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

@ Coef. of variation= a measure of trial experimental error, 15% or less is best.

Table 9b. Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- central South Dakota locations, 2004.

		<pre> Central Location Averages for bu.wt., kernel moisture,lodging     below ear, &amp; plants/acre (ppa)</pre>											
			Bro	ookinę	gs	Iroquois							
		Bu.				Bu.							
		wt.	H20	Ldg.		wt.	H20	Ldg.					
Brand/Hybrid	RM*	Lb.	%	%	PPA	Lb.	%	%	PPA				
KRUGER/4193RR/YGRW	93	59	20	0	25,555	61	16	3	27,733				
KRUGER/9392RR	90	58	21	1	26,717	61	16	2	26,281				
EPLEY/E1155RR	90	58	21	2	27,878	60	16	2	28,459				
WENSMAN/W 7111RWRR	90	58	21	2	27,443	60	16	4	27,443				
INTEGRA/INT 6193RRYG	92	57	19	2	27,298	61	16	1	26,717				
WECO SEEDS/EXPCS95RR	95	58	19	1	26,426	60	16	0	21,344				
WECO SEEDS/EXPCS90RR	90	58	22	1	26,862	60	16	1	27,007				
EPLEY/E1165RR	95	58	21	2	27,298	60	16	1	27,298				
INTEGRA/INT 6395RR	95	57	22	1	27,007	60	17	2	27,297				
INTEGRA/INT 6593RRYG	93	58	21	1	27,588	59	15	2	27,588				
ACCESS/EXP1597RR	97	57	23	1	27,878	60	16	2	27,007				
DEKALB/DKC47-10RR2YGCB	97	58	22	2	27,733	59	18	1	27,152				
DEKALB/DKC48-52 (RR2)	98	56	21	4	27,733	60	16	1	25,991				
WENSMAN/W 6212RR	95	57	22	3	27,007	59	16	2	27,152				
DAIRYLAND/STEALTH-6497	97	56	22	3	27,007	60	17	3	28,459				
NUTECH/3595 RR	94	57	22	2	26.862	58	16	3	27.443				
DEKALB/DKC50-20RR2YGCB	100	56	23	1	27.878	59	19	2	28.023				
TOP FARM/8301RR	100	56	22	5	26,862	58	17	2	27,297				
KALTENBERG/K4666RR	96	55	22	1	27,588	59	18	0	27,152				
ACCESS/EXP1500RR	100	56	22	1	27,297	58	18	1	26,571				
CHANNEL/6965 R	95	55	23	2	27,588	59	17	2	26,572				
NUTECH/5101 RR/YGCB	100	54	26	1	27,588	59	18	1	27,588				
KAYSTAR/KX-5150RR	95	56	22	1	27,878	57	19	1	27,298				
EPLEY/E1175RR	100	54	23	2	26,572	59	16	4	28,169				
WENSMAN/W 6274RR	98	54	25	2	26,862	59	19	0	27,153				
NUTECH/3005 RR/YGCB	100	54	24	1	26,717	59	19		26,572				
TOP FARM/E34100RR	100	55	20	2	26,571	58	17	3	25,845				
WENSMAN/W 7309RWRR	100	53	27	1	27,878	59	19	4	27,588				
KRUGER / 1200RR	100	53	23	1	27,007	57	19	4	27,007				
KAYSTAR/KX-5900RR	99	52	26	1	27,298	58	17	1	28,023				

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 $\star$  RM= relative maturity reported by seed company.

		Central Location Averages for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)										
			Bro	ookin	gs		Iroquois					
		Bu.				Bu.						
Brand/Hybrid	RM*	wτ. Lb.	H20 %	Lag. %	PPA	wτ. Lb.	H20 %	Lag.	PPA			
KRUGER / 1100RR	100	52	24	1	24,829	58	19	0	24,684			
DEKALB/DKC44-46RR2YGCB	94	56	22	1	27,878		.	.				
JUNG/6418RR/YGCB	92	58	22	0	27,298	.	.	.				
JUNG/6445RR	99	52	27	3	27,878	.	.	.		ĺ		
TOP FARM/8395RR	95	56	22	1	27,443		.	.	.			
TOP FARM/9391RY	92	59	20	0	27,733	.			.			
WENSMAN/W 6116RR	91			.		61	16	2	27,733			
WENSMAN/W 6117BTRR	92			.		62	17	0	26,862			
SEEDS 2000/2944RRBT	94	57	19	1	28,459		.	.				
SEEDS 2000/2953RR	95	56	21	0	27,733		.	.	.			
HEINE/H723RR/YGCB	100					58	20	0	25,845			
HEINE/H728RR/YGCB	100			•		60	22	1	27,443			
HEINE/H710RR/YGCB	100					55	20	1	27,733			
HEINE/H630RR	95					60	16	1	27,443			
CHANNEL/6925RB	92	59	21	0	27,443							
						Í	í I	í l		Ĺ		
CHANNEL/6939RB	93	57	20	1	27,443		) .	) .		Ì		
AGSOURCE SEEDS/3931	96	56	22	1	27,443	.	.	•	•			
Test avg.:		56	22	1	27,255	59	17	2	26,999			
Max-value:		59	27	5	28,459	62	22	4	28,459			
Min-value:		52	19	0	24,829	55	15	0	21,344			
# Lsd (.05):		1	1	NS	1,288	3	2	NS	1,504			
## TPG-value:		58	20	5	27,171	59	17	4	26,955	ĺ		
@ Coef.Var.:		2	4	115	3	3	7	139	3	1		
No. Entries:		41	41	41	41	37	37	37	37			

Table 9b. Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- central locations, 2004 (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Brookins- May 7 and Iroquois- April 30, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant. ## TPG-value= minimum or maximum value to qualify for top performance group.

@ Coef. of variation= measure of trial experimental error.

ion yield (by year)	
Brookings Iroquois	
Brand/Hybrid RM* Bu/Acre Bu/Acre Bu/Acre Bu/Acre Bu/Acre Bu/Acre	
CHANNEL/7135RB 101 208 190 209 146	
DEKALB/DKC52-47RR2YGCB 102 219 . 192 .	
SEEDS         2000/3122RRBT         102         197         .         212         148	
TOP FARM/E34102RR 102 203 . 198 .	
KRUGER/9203RR/YGCB 103 202 . 194 .	
KRUGER/2103RR/YGCB 103 202 . 194 .	
WENSMAN/W 6315BTRR  101  203  185  189  135	
GOLD COUNTRY/1016RRBT  104  195  185  193  138	
KRUGER/1506RR   105   204   .   181   .	
EPLEY/E1515RR 105 191 . 191 .	
KRUGER/9208RR/YGCB 110 189 . 191 .	
(RUGER/1006RR   106   174   .   200   .	
PLEY/E1475RR 103 183 . 190 .	
JTECH/5702 RR/YGCB 103 191 . 179 .	
RUGER/9308RR/YGCB 111 186 . 181 .	
/ENSMAN/W 6422BTRR 107 191 . 177 .	
OP FARM/9305RY 104 181 . 185 .	
PLEY/E1465RR 103 186 . 180 .	
RUGER / 1202RR 102 186 . 178 .	
UGER/9208RR 108 189 . 175 .	
PLEY/E1455RR 101 195 . 165 .	
RUGER / 1806RR   106   184   171	
KALB/DKC53-34RR2YGCB 103 188 139	
ANDS/NGS 1030RR/YGCB 103 196 .	
DP FARM/8403RR 102 186 171 .	
OP_FARM/F34102BBCB 110 198	
OP FARM/E34103BRCB 103 206	
ALTENBERG/K5717RRBT 105 194	
I TENBERG/K5244BBBT 102 207	
CCESS/EXP         2506RRYGCB         106         191         .         .         .	
ACOBSEN/4167BBT 101 212	
ACOBSEN/4358B 105 155	
PLEY/F2425BB 107 191 179	
YCOGEN/2K541 103 207	
YCOGEN/2T655 107 187	

## Table 10a. Roundup Ready late maturity corn yield results- central South Dakota locations, 2003-2004.

\* RM= relative maturity reported by seed company.

		- Central Location Averages - for yield (by year)									
		Brool	kings	Iroqu	uois						
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre						
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr						
HEINE/H750RR/YGCB	105			211							
HEINE/H748RR	105			192	.						
GOLD COUNTRY/105-03CBR	105	218			.						
PFISTER/2656 RR-BT	110	195									
CHANNEL/7138RB				186	136						
AGSOURCE SEEDS/5356	106	186			.						
AGSOURCE SEEDS/4556	101	206			.						
AGSOURCE SEEDS/5286CBRR	106	193			.						
INTEGRA/INT 6504RRYGCB	106	195									
Test avg.:		194	182	190	140						
High value:		219	190	212	148						
# Lsd (.05):		14	NS	37	NS						
## TPG-value:		205	171	175	135						
@ Coef.Var.:		4	4	12	7						
No. Entries:		37	5	29	6						

Table 10a. Roundup Ready late maturity corn yield results- central locations, (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Brookings- May 7 and Iroquois- April 30, 2004.

# Lsd= amount values in a column must differ to be significantly different.

NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

@ Coef. of variation= a measure of trial experimental error, 15% or less is best.

Table 10b. Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- central South Dakota locations, 2004.

		 f(	or bi belo	Centra u.wt. ow ea	al Loca , kerne: r, & pla						
			Bro	ookin	gs		Ir	oquoi	s		
		Bu.				Bu.					
		wt.	H20	Ldg.		wt.	H20	Ldg.			
Brand/Hybrid	RM*	Lb.	8	8	РРА	Lb.	0/0	%	РРА		
TOP FARM/E34102RR	102	53	23	1	27,588	62	17	1	26,281		
DEKALB/DKC52-47RR2YGCB	102	54	23	1	27,878	59	16	2	26,426		
EPLEY/E1475RR	103	52	25	3	26,572	62	17	1	27,298		
NUTECH/5702 RR/YGCB	103	53	27	1	27,443	60	17	2	28,169		
KRUGER/2103RR/YGCB	103	52	26	3	27,878	60	17	3	27,733		
KRUGER/9203RR/YGCB	103	51	27	0	27,443	60	17	1	28,169		
CHANNEL/7135RB	101	52	27	1	28,023	59	17	2	28,314		
KRUGER/1506RR	105	51	28	1	27,878	60	19	3	27,733		
KRUGER/9208RR/YGCB	110	52	29	1	27,588	59	19	4	27,007		
EPLEY/E1465RR	103	51	26	3	26,862	60	17	4	27,443		
	100				07 007	50			07 700		
KRUGER/9208RR	108	51	28		27,007	58		5	27,733		
WENSMAN/W 6315BTRR	101	50	27		26,281	59		4	27,588		
KRUGER/1202RR	102	50	28		27,152	59	19	3	27,733		
	104	50	30	2	27,878	59	20	3	28,023		
SEEDS 2000/3122RRB1	102	49	28	2	28,023	59		4	27,733		
	104	10	28	1	27 588	50	19	1	27 207		
	104	49 51	20	1	27,500	57	16		26 572		
	106	50	20	5	26 572	58	21		20,372		
	100	51	20	2	20,572	56	17	2	27,443		
KRUGER / 9308RR / VGCR	111	18	32	2	27,733	56	21		26 136		
		40	02	-	21,010		21		20,100	}	
WENSMAN/W 6422BTRR	107	49	31	1	27.007	55	22	2	25.555		
KRUGER / 1806RR	106	51	27	0	26,426	47	14	6	26.717		
DEKALB/DKC53-34RR2YGCB	103					59	17	1	28.023		
SANDS/NGS 1030RR/YGCB	103	51	28	1	26.717						
TOP FARM/8403RR	102	51	25	2	26,717						
,				_	,	1			ĺ		
TOP FARM/E34102BRCB	110	51	25	6	28,023	) .	) .'	) .	) .		
TOP FARM/E34103BRCB	103	50	27	0	27,878	.	.	.	.		
KALTENBERG/K5717RRBT	105	52	27	0	27,152	.	.	.	.		
KALTENBERG/K5244RRBT	102	50	27	0	27,588	.	.	.	.		
ACCESS/EXP 2506RRYGCB	106	51	30	1	27,298	.	.	.	.		
L											

 $\star$  RM= relative maturity reported by seed company.

		Central Location Averages for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)										
			Bro	pokin	gs	Iroquois						
Brand/Hybrid	RM*	Bu. wt. Lb.	H20 %	Ldg. %	РРА	Bu. wt. Lb.	H20 %	Ldg. %	РРА			
JACOBSEN/4167RBT	101					59	18	2	26,862			
JACOBSEN/4358R	105	49	35	3	25,846	.	.	.				
EPLEY/E2425RR	107	51	28	1	27,152	.	.	.				
MYCOGEN/2K541	103		.	.	.	59	17	3	27,443			
MYCOGEN/2T655	107	•	•	-		58	17	4	27,733			
HEINE/H750RR/YGCB	105					59	22	0	27,297			
HEINE/H748RR	105		.	.	.	59	19	4	28,169			
GOLD COUNTRY/105-03CBR	105	51	27	1	28,314	.	.	.				
PFISTER/2656 RR-BT	110	50	33	2	28,023	.	.	.				
CHANNEL/7138RB	101	•	•	-		59	18	1	24,394			
AGSOURCE SEEDS/5356	106	52	26	1	26,717							
AGSOURCE SEEDS/4556	101	51	27	1	28,024		.					
AGSOURCE SEEDS/5286CBRR	106	51	29	2	26,717	.	.	.	.			
INTEGRA/INT 6504RRYGCB	106	52	28	0	27,152	•						
Test avg.:		51	28	1	27,349	58	18	3	27,272			
Max-value:		54	35	6	28,314	62	22	6	28,314			
Min-value:		48	23	0	25,846	47	14	0	24,393			
# Lsd (.05):		2	1	3	1,365	7	NS NS	5	1,000			
## TPG-value:		52	24	3	26,949	55	22	5	27,314			
@ Coef.Var.:		2	3	107	3	7	8	102	2			
No. Entries:		37	37	37	37	29	29	29	29			

/E

Table 10b. Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- central locations, 2004 (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Brookins- May 7 and Iroquois- April 30, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant. ## TPG-value= minimum or maximum value to qualify for top performance group.

© Coef. of variation= measure of trial experimental error.

		- South	ern Loca <sup>.</sup> or yield	tion Ave (by yea	rages - r)	
		Bere	Beresford		our	
Brand/Hybrid	RM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr	
HEINE/H750RR/YGCB	105	238		115		
HEINE/H748RR	105	244		102		
NUTECH/5702 RR/YGCB	103	209		133	· ·	
TOP FARM/9305RY	104	228		112		
TOP FARM/E34102RR	102	206		129		
HEINE/H728RR/YGCB	100	208	.	98	.	
DEKALB/DKC53-34RR2YGCB	103	.	.	116	104	
DEKALB/DKC60-19RR2YGCB	110	242	.	.	.	
DEKALB/DKC47-10RR2YGCB	97	.	.	114	107	
DEKALB/DKC48-52 (RR2)	98			127		
DEKALB/DKC50-20RR2YGCB	100			118		
DEKALB/DKC58-80RR2YGCB	108	224				
DAIRYLAND/STEALTH-1606	107	239				
DAIRYLAND/STEALTH-7507	109	197				
SANDS/NGS 1030RR/YGCB	103	210				
SANDS/NGS 1100RR	110	213				
ASGROW/RX718RR/YG	110	224				
TOP FARM/8403RR	102	213				
TOP FARM/E34110RCB	110	205				
TOP FARM/F34102BBCB	110	216				
TOP FARM/F34103BBCB	103			127		
KAYSTAB/KX-6650BB	105			116		
KALTENBERG/K5717BBBT	105			122		
KALTENBERG/K5711RR	105	220	194			
KALTENBERG/K6788RB	109	220	180			
	100	200	109			
	100		.	105		
	102		· ·	100		
	103		.	102		
	100		· ·	100		
KRUGER/1506RR	105		•	110	•	
NNUGER / TUUOKK	100	224	· ·	· ·	· ·	
	100	010	· ·		· ·	
	106	219	· ·	· ·	· ·	
	108	228	· ·	· ·	· ·	
KRUGER/9208RR/YGCB	110	229	· ·	· ·	· ·	
ACCESS/EXP 2506RRYGCB	106	232	· ·			
JACOBSEN/4637RBT	110	233	•	· ·		
L	- <b>I</b>	L	l		L	

Table 11a. Roundup Ready early maturity corn yield results- southern South Dakota locations, 2003-2004.

 $\star$  RM= relative maturity reported by seed company.

		- Southe	ern Loca <sup>.</sup> or yield	tion Ave (by yea		
		Beres	sford	Armo	our	
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre	
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr	
JACOBSEN/4358R	105	210				
EPLEY/E1515RR	105			97		
EPLEY/E1175RR	100			100		
EPLEY/E1455RR	101			101		
EPLEY/E1465RR	103			117		
EPLEY/E1475RR	103			121	i .	
WENSMAN/W 6315BTRR	101			111	99	
WENSMAN/W 6422BTRR	107	228				
HEINE/H793RR/YGCB	108	222				
HEINE/H723RB/YGCB	100	_		123		
		-				
HEINE/H710RR/YGCB	100			129		
GOLD COUNTRY/105-03CBR	105	-		116		
PFISTER/2656 RR-BT	110	242				
CHANNEL/7138RB	101			113	- 99	
CHANNEL /7135RB	101			123	103	
CHANNEL/7624RB	108	199	183			
CHANNEL/7806RB	110	226	195			
AGSOURCE SEEDS/4556	101			119		
AGSOURCE SEEDS/5286CBRR	106	205				
INTEGRA/INT 6504RRYGCB	106	216				
LTest avg.	L	220	190	116	102	
High value:		244	195	135	107	
# lsd (.05):		15	NS	24	NS	
## TPG-value		229	183	111	90	
@ Coef. Var		4	טטי, א	13	10	
No Entries		30	4	20	5	
		02	-	29		

Table 11a. Roundup Ready early maturity corn yield results- southern locations, (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Beresford- May 4 and Armour- May 3, 2004.

# Lsd= amount values in a column must differ to be significantly different.

NS indicates differences among values in a column are non-significant.

 $\ensuremath{\#\#}$  TPG-value= minimum value to qualify for top performance group.

@ Coef. of variation= a measure of trial experimental error, 15% or less is best.

Table 11b. Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- southern South Dakota locations, 2004.

		Southern Location Averages for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)								
			Bei	resfo	rd					
		Bu. wt.	H20	Ldg.		Bu. wt.	H20	Ldg.		
Brand/Hybrid	RM*	Lb.	%	%	PPA	Lb.	%	%	PPA	
HEINE/H728RR/YGCB	100	61	20	0	27,297	62	19	2	25,991	
NUTECH/5702 RR/YGCB	103	62	17	1	28,169	60	15	2	25,846	
TOP FARM/E34102RR	102	61	18	1	27,298	60	16	0	26,862	
HEINE/H748RR	105	61	18	2	27,588	59	18	6	26,426	
HEINE/H750RR/YGCB	105	60	20	0	27,588	60	18	0	26,572	
TOP FARM/9305RY	104	60	19	1	28,169	59	16	2	25,410	
DEKALB/DKC53-34RR2YGCB	103	.				59	16	0	25,991	
DEKALB/DKC60-19RR2YGCB	110	60	21	1	26,862					
DEKALB/DKC47-10RR2YGCB	97	.	.			62	15	4	24,394	
DEKALB/DKC48-52 (RR2)	98					58	14	3	25,410	
DEKALB/DKC50-20RR2YGCB	100				_	60	15	2	27,152	
DEKALB/DKC58-80RR2YGCB	108	60	19	0	27.588	.			Í Í	
DAIRYLAND/STEALTH-1606	107	59	18	2	27.007					
DAIRYLAND/STEALTH-7507	109	58	19	1	25,991					
SANDS/NGS 1030RB/YGCB	103	60	18	0	27.007					
							í I		' í	
SANDS/NGS 1100RR	110	59	19	0	27.588	Ι.	) .'		· .)	
ASGROW/RX718RR/YG	110	62	19	3	27,297					
TOP FABM/8403BB	102	60	17	0	27.297					
TOP FABM/F34110BCB	110	60	18	0	27.297					
TOP FARM/E34102BRCB	110	60	17	0	27,733	.				
TOP FARM/F34103BBCB	103					58	15		25 555	
KAYSTAR/KX-6650BB	105		•	•	•	60	16	2	25 555	
KALTENBERG/K5717BBBT	105		•	•	•	58	15	0	25 410	
KALTENBERG/K5711BB	105	61	19	0	26.426				20,110	
KALTENBERG/K6788RR	108	59	18	1	27,588					
	100					E	16			
	102	•	•	· ·	•	00		3   6	20,002	
	103	· ·	· ·	•	· ·	28	15		23,813	
	103	· ·	· ·	•	· ·				20,/1/	
KRUGER/1006RR	105	61	21	6	27,297	) 38   .			25,120	
						(	(	( I		
KRUGER / 1806RR	106	61	18	0	26,427	· ·	•	· ·	·	
KRUGER/9208RR	108	60	18	0	27,152	· ·	•	· ·	· ·	
KRUGER/9208RR/YGCB		60	18		27,007	•	•	· ·	•	
AUGESS/EXP 2506RRYGCB	106	61	19	0	27,878	•	•	•	•	

VE

• RM= relative maturity reported by seed company.

		f	or bu belo	Southe u.wt. ow ear	ern Loca , kernei r, & pla	ation Averages l moisture,lodging ants/acre (ppa)					
			Bei	resfo	rd	Armour					
Brand/Hybrid	BM*	Bu. wt.	H20	Ldg.	ΡΡΑ	Bu. wt.	H20	Ldg.	РРА		
JACOBSEN/4637RBT	110	56	21	0	26,717	.	.		.		
JACOBSEN/4358R	105	61	20	0	27,152	.	.				
EPLEY/E1515RR	105	.	.			56	16	7	26,426		
EPLEY/E1175RR	100	.	.			59	15	1	25,700		
EPLEY/E1455RR	101	.	.	•	.	58	15	1	25,991		
EPLEY/E1465RR	103	.	.			60	15	0	24,539		
EPLEY/E1475RR	103	.	.		.	61	15	3	26,281		
WENSMAN/W 6315BTRR	101	.	.		.	58	16	6	26,426		
WENSMAN/W 6422BTRR	107	59	19	0	27,152	.	.	.	.		
HEINE/H793RR/YGCB	108	59	19	2	27,152	.	.				
HEINE/H723RR/YGCB	100					59	15	2	25,700		
HEINE/H710RR/YGCB	100			•		58	16	2	25,120		
GOLD COUNTRY/105-03CBR	105		.			60	18	6	25,120		
PFISTER/2656 RR-BT	110	57	21	3	27,588			.			
CHANNEL/7138RB	101		.	•		60	16	2	25,265		
CHANNEL/7135RB	101					58	15	5	25,991		
CHANNEL/7624RB	108	59	18	1	27,588		.	· ·			
CHANNEL/7806RB	110	58	21	0	27,007	.	.	.	.		
AGSOURCE SEEDS/4556	101			.	.	58	15	4	26,426		
AGSOURCE SEEDS/5286CBRR	106	62	19	0	27,297	.	.		.		
INTEGRA/INT 6504RRYGCB	106	61	20	0	27,443						
Test avg.:		60	19	1	27,270	59	16	3	25,796		
Max-value:		62	21	6	28,169	62	19	7	27,152		
Min-value:		56	17	0	25,991	56	14	0	23,813		
# Lsd (.05):		2	1	3	903	2	2	NS	1,480		
## TPG-value:		60	18	3	27,266	60	16	7	25,672		
@ Coef.Var.:		2	4	223	2	2	6	111	4		
No. Entries:		32	32	32	32	29	29	29	29		

Table 11b. Roundup Ready corn early hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- southern locations, 2004 (continued).

\* RM= relative maturity reported by seed company.

Seeding dates: Beresford- May 4 and Armour- May 3, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant. ## TPG-value= minimum or maximum value to qualify for top performance group. @ Coef. of variation= measure of trial experimental error.

		- South	ern Loca <sup>.</sup> or yield	tion Ave (by yea	rages - r)	
		Bere	sford	Arm	our	
Brand/Hybrid	RM*	Bu/Acre 2004	Bu/Acre 2-Yr	Bu/Acre 2004	Bu/Acre 2-Yr	
NUTECH/5212 RR/YGCB KRUGER/9412RR/YGCB KRUGER/9115RR/YGCB KRUGER/9212RR/YGCB	115 112 117 115	227 229 232 238	192	151 139 134 127		
JACOBSEN/4757RBT	112	232		124		
KRUGER/2613RR/YGCB NUTECH/5808 RR/YGCB KRUGER/9308RR/YGCB DEKALB/DKC60-19RR2YGCB DEKALB/DKC58-80RR2YGCB	113 114 111 110 108	240 199 202		94 120 114 136 134	115	
DEKALB/DKC63-81RR2YGCB DAIRYLAND/STEALTH-1606 DAIRYLAND/STEALTH-7507 TOP FARM/E34110RCB TOP FARM/E34102BRCB	113 107 109 110 110	234		146 105 115 128		
KRUGER/1006RR KRUGER/1806RR KRUGER/9208RR KRUGER/9208RR/YGCB ACCESS/EXP 2506RRYGCB	106 106 108 110 106			126 131 113 130 133		
JACOBSEN/4637RBT EPLEY/E2425RR WENSMAN/W 6422BTRR HEINE/H851RR/YGCB HEINE/H8600RR/YGCB	110 107 107 113 112	246 232	- - - - -	128 138 133	111	
HEINE/H793RR/YGCB CHANNEL/7624RB CHANNEL/7806RB CHANNEL/8127RB CHANNEL/8075RB	108 108 110 112 112	237 225	203 197	117 119 131	104 95	

Table 12a. Roundup Ready late maturity corn yield results- southern South Dakota locations, 2003-2004.

 $\star$  RM= relative maturity reported by seed company.

		- Southern Location Averages - for yield (by year)							
		Beresford Armour							
		Bu/Acre	Bu/Acre	Bu/Acre	Bu/Acre				
Brand/Hybrid	RM*	2004	2-Yr	2004	2-Yr				
AGSOURCE SEEDS/6166	111	236	208						
AGSOURCE SEEDS/5356	106			114	105				
AGSOURCE SEEDS/5286CBRR	106			117					
INTEGRA/INT 6504RRYGCB	106	•		141	•				
Test avg.:		229	200	126	106				
High value:		246	208	151	115				
# Lsd (.05):		19	NS	29	NS				
## TPG-value:		227	192	122	95				
@ Coef.Var.:		5	5	14	9				
No. Entries:		14	4	28	5				

Table 12a. Roundup Ready late maturity corn yield results- southern locations, (continued).

 $\star$  RM= relative maturity reported by seed company.

Seeding dates: Beresford- May 4 and Armour- May 3, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant.

## TPG-value= minimum value to qualify for top performance group.

@ Coef. of variation= a measure of trial experimental error, 15% or less is best.

		 f(	or b bel	South u.wt. ow ea	ern Loca , kernea r, & pla						
			Ве	resfo	rd		Ai	rmour			
		Bu.				Bu.					
		wt.	H20	Ldg.		wt.	H20	Ldg.			
Brand/Hybrid	RM*	Lb.	%	%	PPA	Lb.	°6	%	PPA		
KRUGER/9412RR/YGCB	112	60	20	7	27,152	60	17	2	25,845		
NUTECH/5808 RR/YGCB	114	58	18	1	28,169	59	16	3	25,265		
KRUGER/9308RR/YGCB	111	58	18	0	28,024	58	16	3	26,426		
KRUGER/2613RR/YGCB	113	58	24	0	27,297	58	23	3	25,846		
KRUGER/9212RR/YGCB	115	57	21	1	27,007	59	17	1	26,717		
NUTECH/5212 RR/YGCB	115	57	22	1	27,733	58	17	5	25,846		
KRUGER/9115RR/YGCB	117	56	24	0	26,572	59	19	0	25,991		
JACOBSEN/4757RBT	112	55	25	1	27,443	57	22	1	25,120		
DEKALB/DKC60-19RR2YGCB	110	.	.	.	.	54	16	2	26,281		
DEKALB/DKC58-80RR2YGCB	108	.	.	.	.	57	16	0	26,572		
DEKALB/DKC63-81RR2YGCB	113	59	22	2	27,588	.	.				
DAIRYLAND/STEALTH-1606	107			•		59	16	1	27,298		
DAIRYLAND/STEALTH-7507	109	•	1.			58	17	2	26,571		
TOP FARM/E34110RCB	110		.	.		58	16	5	23,958		
TOP FARM/E34102BRCB	110		.	· ·		60	15	3	26,426		
KRUGER/1006RR	106			<b>.</b>		60	19	7	26,136		
KRUGER / 1806RR	106	.				61	16	3	26,281	_	
KRUGER/9208RR	108	.		.	.	58	15	3	27,588		
KRUGER/9208RR/YGCB	110	.		.	.	59	16	1	26,136		
ACCESS/EXP 2506RRYGCB	106	.	.	.	.	59	17	0	26,281		
JACOBSEN/4637RBT	110		.	.		58	17	1	25,555		
EPLEY/E2425RR	107	.		.	.	59	15	2	26,717		
WENSMAN/W 6422BTRR	107	.		.	.	60	18	1	26,572		
HEINE/H851RR/YGCB	113	57	24	1	27,443	.	.	.	.		
HEINE/H8600RR/YGCB	112	57	23	1	27,007	.	.	.			

Table 12b. Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- southern South Dakota locations, 2004.

\* RM= relative maturity reported by seed company.

Table 12b. Roundup Ready corn late hybrid averages for bushel weight, kernel moisture, lodging below ear, and harvest population- southern locations, 2004 (continued).

		for bu.wt., kernel moisture,lodging below ear, & plants/acre (ppa)									
			Bei	resfo	rd		Ar	Armour			
		Bu.				Bu.					
		wt.	H20	Ldg.		wt.	H20	Ldg.			
Brand/Hybrid	RM*	Lb.	90 90	%	PPA	Lb.	°0	%	PPA		
HEINE/H793RR/YGCB	108					57	16	2	25,991		
CHANNEL/7624RB	108	.	.	.		58	16	5	25,700		
CHANNEL/7806RB	110	.	.	.		58	17	5	26,281		
CHANNEL/8127RB	112	57	24	1	27,443	.	.	.	.		
CHANNEL/8075RB	112	57	24	1	26,717	.	.	.	.		
AGSOURCE SEEDS/6166	111	57	22	1	28,024	.		] .			
AGSOURCE SEEDS/5356	106	.	.			58	15	0	26,136		
AGSOURCE SEEDS/5286CBRR	106	.	.			61	19	0	27,298		
INTEGRA/INT 6504RRYGCB	106	.	.			62	17	1	26,717		
Test avg.:		57	22	1	27,401	59	17	2	26,198		
Max-value:		60	25	7	28,169	62	23	7	27,588		
Min-value:		55	18	0	26,572	54	15	0	23,958		
# Lsd (.05):		2	1	2	NS	3	2	NS	1,293		
## TPG-value:		58	19	2	26,572	59	17	7	26,295		
@ Coef.Var.:		2	4	114	2	3	7	118	3		
No. Entries:		14	14	14	14	28	28	28	28		
					r	1					

\* RM= relative maturity reported by seed company.

Seeding dates: Beresford- May 4 and Armour- May 3, 2004.

# Lsd= amount values in a column must differ to be significantly different. NS indicates differences among values in a column are non-significant. ## TPG-value= minimum or maximum value to qualify for top performance group. @ Coef. of variation= measure of trial experimental error. Table F. Seed companies entered in the 2004 corn hybrid trials by seed brand name.

Seed brand	Mailing address
Access	Access Seed, 980 Fox Ridge Rd., Dike, IA 50624
AgSource	Agsource Seeds Inc., 1800 L Ave., Nevada, IA 50201
Asgrow	Monsanto, 3100 Sycamore Rd, Dekalb, IL 60115
Channel	Channel Bio Corp., 5932 Schumann Dr., Madison, WI 53711
Crows	Crows Hybrid Corn Co., 5932 Schumann Dr., Madison, WI 53711
Dairyland	Dairyland Seed Co., Inc., PO Box 958, West Bend, WI 53095
Dekalb	Monsanto, 3100 Sycamore Rd, Dekalb, IL 60115
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310, Shell Rock, IA 50670
Gold Country	Gold Country Seed Inc., 16506 Hwy 15 N., Hutchinson, MN 55350
Heine	Heine Seed Corn, 1020 E. 320 <sup>th</sup> St., Vermillion, SD 57064
Integra Seed	Integra Seed, Ltd., PO Box 40, Bozeman, MT 59718
Jacobsen	Jacobsen Hybrid Corn Co., Inc., 129 9 <sup>th</sup> St., Lake View, IA 51450
Jung	Jung Seed Genetics, 341 S. High St., Randolph, WI 53956
Kaltenberg	Kaltenberg Seeds, PO Box 278, Waunakee, WI 53597
Kaystar	Kaystar Seed, PO Box 947, Huron, SD 57350
Keltgen Kruger Mallard Midwest Mycogen Pfister Sands Seeds 2000 NuTech	<ul> <li>Keltgen Inc., AgVenture, 302 South Spruce St., Henry, SD 57243</li> <li>Kruger Seed Co., Hwy 20 E, Box A, Dike, IA 50624</li> <li>Mallard Seed Co. Inc., PO Box 637, Plainview, MN 55964</li> <li>Midwest Seed Genetics, 5932 Schumann Dr., Madison, WI 53711</li> <li>Mycogen Seeds, 205 Oak Ridge Rd., Brandon, SD 57005</li> <li>Pfister Hybrid Corn Co., 187 N. Fayette St., El Paso, IL 61752</li> <li>Sand Seed Service, Inc., Box 648, Marcus, IA 51035</li> <li>Seeds 2000, PO Box 200, Breckenridge, MN 56520</li> <li>Thompson Seeds/Nutech, 6131 N. Fork Rd., Ames, IA 50010</li> </ul>
Top Farm	Top Farm Hybrids, PO Box 850, Cokato, MN 55321
Weco	Wilbur-Ellis Co., PO Box 2169, Minot, ND 58702
Wensman	Wensman Seed Co., PO Box 190, Wadena, MN 56482



The crop performance trials are available at http://plantsci.sdstate.edu/varietytrials/vartrial.html

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# 2005 Precision Planted **Corn** Performance Trials

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This publication reports the performance of entries in the 2005 South Dakota corn hybrid performance trials for both non-Roundup-Ready<sup>™</sup> and Roundup-Ready<sup>™</sup> hybrids. Information includes both the most recent 2-year and 1-year grain yields in bushels per acre (bu/a); and 1-year bushel weight, grain moisture at harvest, percent stand at harvest, and stalk lodge percentages. These performance trials are conducted by the South Dakota Crop Performance Testing (CPT) program at South Dakota State University.

#### **Test Trial Locations**

Trial locations, soil types, seedbed and previous crop history, and soil fertility yield goals are indicated in Table A, while cooperators and seeding dates are shown in Table B. Seeding started May 3 and was completed May 16, 2005.

#### Weather Conditions

Weather data (Table C) for the past growing season was obtained from 2005 USDA-South Dakota Crop-Weather reports and the South Dakota-Automatic Weather Data Network (SD-AWDN).

Heat unit or growing degree-day accumulations are reported for the nearest test site in place of temperatures. Corn hybrids typically express a certain thermal or heat unit requirement from emergence to black-layer formation (physiological maturity). The heat unit totals across test locations varied from a high of 3322 GDD at Armour (nearest site to Delmont) to a low of 2604 GDD at Brookings.

Precipitation varied greatly across test locations. Seasonal total precipitation from April 3 through the end of September was highest at Brookings and Armour and lowest at Aberdeen. Seasonal precipitation accumulations were above average at all locations, except for Watertown where it was nearly normal. Accumulations by the end of July were average or above for all locations. It must be noted the cooperator at Delmont indicated they had received less rainfall than was indicated by the nearest reporting station at Armour during July and August. In summary, seasonal moisture and heat units appeared to be fairly well distributed and at average or above average for all locations, except for moisture at Delmont.

The assistance of the following is appreciated: Jim Smolik and Allen Heuer at the NE Research Farm, Todd Bortnem and the Brookings Agronomy Farm staff, and Bob Berg and the SE Research Farm staff; and farmer-cooperators Richard Luebke (Delmont), Erland Weerts (Bancroft), and Allen and Inel Ryckman (Warner).

#### **General Test Procedures**

Participating companies pick the test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The arbitrary relative maturity breaks between the early and late tests are as follows:

95 days for Warner and South Shore,100 days for Yale and Brookings,105 days for Delmont, and110 days for Beresford.

A hybrid is assigned to a maturity trial based on its relative maturity rating reported by the participating seed company. **This testing program does not guarantee that all entries are placed in the proper maturity trial.** In some trials, borderline entries with relative maturity ratings at or near the arbitrary break between the early and late trials may crossover at a given location. In some cases this may be indicated by exceptionally high or low grain moisture contents at harvest. A higher than average moisture content may indicate the hybrid is later in relative maturity than indicated. Likewise, a lower than average moisture may indicate the hybrid is earlier in relative maturity than indicated.

A fee was charged for all entries at each location. A list of participating seed companies for 2005 is presented in Table G.

#### **Experimental Procedures**

Entries were seeded in three replications with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows 20 feet long. The center two rows were harvested for yield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2005, this precision planter was calibrated to deliver 27,878 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, the percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest.

Soil type, land preparation and previous crop history, and fertility yield goal at each test site are outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 lb/a of 37-18-00 was applied 2 inches below and 2 inches to the side (2 x 2) of the seed row. Force insecticide was applied down the seed tube at label rates for corn rootworm control this year. In addition, Pounce granular was applied (except at Beresford) at label rates down the whorl with a tractor mounted granular applicator just prior to canopy closure. The weed control herbicides applied at recommended label rates are indicated in Table D for both the non-Roundup Ready<sup>™</sup> and the Roundup Ready<sup>™</sup> hybrid corn trials.

#### Measurements of Performance

**Yield.** Yields are an average of three replications and are expressed as bushels per acre (bu/a), adjusted to 15.5% moisture on a drymatter basis and a bushel weight of 56 lb.

Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true variety differences. In 2005, the coefficient of variation (CV) for yield was very good across all locations except Delmont.

The CV value in a given test trial is a measure of experimental error associated with the test trial. Ideally, this value should not exceed 15%. In cases where the CV value exceeds 15% it is recommended that the test data be used with caution in selecting hybrids. Experimental error may be the result of several factors including test methods or factors such as moisture, temperature, soil variations, or agronomic factors (like seeding date, reseeding), or seed quality factors, all of which may or may not be controllable in a given year. At Delmont, the CV values exceeded 15% and were likely the result of limited moisture during July and August at this location.

**Grain moisture content.** Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Moisture is inversely related to maturity. Because maturity is of prime importance in South Dakota, moisture figures are of considerable importance in the evaluation of the trial entries. Hybrids that provide satisfactory yields and can be stored without additional drying are desirable. During harvest, random moisture values as determined by the on-board moisture meter on the combine are checked with a Dickey-John GAC II to verify that the on-board moisture meter is within calibration limits.

Use of tables. Check for the "Least significant difference" (Lsd) value at the bottom of each column of data averages. The Lsd value indicates how much a variable such as yield must differ between two hybrids before there is a real yield difference. An Lsd value is given at the bottom of every column where there is significant difference among the averages within a given column. If there are no real differences among the averages within a given column a "non-significant" (NS) difference designation is indicated.

The Lsd values reported in this publication can be used in two ways. In this publication the Lsd value is used primarily to identify the top group for current year and 2-year yields, bushel weight, grain moisture at harvest, percent stand (percent of seeded population), and stalk lodging below the ear percentage for each test trial. For example, at Warner (Table 1a) the highest current year yield was 202 bu/a for Keltgen/AV4880CB. To determine whether it is the only top yielding hybrid at Warner, use the Lsd value of 14 bu/a indicated at the bottom of the 2005 yield column. For hybrids to be in the top yield group they must yield 188 bu/a (202 - 14 = 188) or higher. Technically, a yield value of 189 bu/a is in the top yield group while a value of 188 bu/a is not in the top yield group. However, since all yields and Lsd values are rounded to the nearest whole number, we can say 188 bu/a, because of the rounding-off, is the more appropriate minimum value for the top yield group.

Likewise, the minimum top group value is indicated for the 2year (2004-05) yield column unless there were no significant yield differences. Top yield hybrids for 2005 are those hybrids that are equal or higher than the minimim top group value indicated at the bottom of the 2005 yield column. The minimum yield value that a hybrid must attain to qualify for the top performance group for yield for 2005 or for 2004-05 is indicated and shaded at the bottom of each yield column. If hybrid yield differences are not significant (NS), then by definition all hybrids in the test are in the top yield group for the stated 1- or 2-year yield average.

The top group for other performance factors like bushel weight, percent grain moisture at harvest, percent stalk lodging below the ear, and percent stand (percent of seeded population) also can be determined. For example, at Warner in 2005 (Table 1a), to qualify for the top performance group (TPG), a hybrid must have a bushel weight of 62 lb or higher and a percent of stand value of 96% or more. Likewise, in order to qualify for the TYG, a hybrid must have a grain moisture of 16% or less and a lodging value of 1% or less.

Note that yield, bushel weight, and percent stand top group values must be greater than a certain yield, bushel weight, or percent stand value; while grain moisture and lodging below ear percentages must be equal to or less than certain a percentage to qualify for the TPG. Again, as with hybrid yields, if there are no hybrid differences for a given performance factor, then by definition all hybrids in the test are in the top group for that performance factor for the current year.

The top yield group Lsd values can also be used to determine whether two hybrids differ in performance. For example, in the early test at Warner (Table 1a); the Lsd value of 14 bu/a can be used to compare the yields of any two hybrids in the trial. If hybrid A yields 202 bu/a and hybrid B yields 188 bu/a their yield difference is 14 bu/a (202 - 188 = 14). In this case the two hybrids do not differ in yield because their yield difference of 14 bu/a is equal to or less than the reported Lsd value of 14 bu/a.

In contrast, if hybrid C yields 184 bu/a, the yield difference between hybrids A and C is 18 bu/a (202 - 184 = 18). In this case the yield difference of 18 bu/a is more than the reported Lsd value of 14 bu/a; therefore hybrid A would have a significantly higher yield than hybrid C. Similarly, the Lsd values for bushel weight, grain moisture, stalk lodging below the ear, and percent stand can be used to determine if any two hybrids differ in these performance factors.
### **PERFORMANCE TRIAL RESULTS BY LOCATIONS**

The performance trial results for 2 years (2004-05) and 1 year (2005) are summarized below.

#### **Northern Locations**

#### Warner

Early Non-Roundup Ready<sup>™</sup>, Table 1a. The test trial yield average (Table 1a) was 192 bu/a for year 2005 and 213 bu/a for 2 years (2004-05). Hybrids that yielded 188 bu/a or more in 2005 and 206 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 14 bu/a in 2005 and by 10 bu/a for 2 years to be significantly different from one another. In 2005, bushel weights averaged 61 lb, grain moisture averaged 16%, lodging averaged 0%, and the final percent stand averaged 98. For hybrids to be in the top performance group for these factors they had to equal 62 lb or more in bushel weight, 16% or less in grain moisture, 1% or less in stalk lodging, and 96% or more for percent stand.

Late Non-Roundup Ready<sup>™</sup>, Table 1b. The test trial yield average (Table 1b) was 195 bu/a for year 2005 and 210 bu/a for 2 years (2004-05). Hybrids that yielded 192 bu/a or more in 2005 qualified for the top yield group. Only one hybrid was tested for 2 years; therefore no hybrid comparisons can be made for 2 years. Hybrids had to differ in yield by 16 bu/a in 2005 to be significantly different from one another. In 2005, bushel weights averaged 59 lb, grain moisture averaged 17%, lodging averaged 0%, and the final percent stand averaged 98. For hybrids to be in the top performance group for these factors they had to equal 59 lb or more in bushel weight, 17% or less in grain moisture, 1% or less in stalk lodging, and 95% or more for percent stand.

Early Roundup Ready<sup>™</sup>, Table 1c. The test trial yield average (Table 1c) was 195 bu/a for year 2005 and 211 bu/a for 2 years (2004-05). Hybrids that yielded 193 bu/a or more in 2005 and 199 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 14 bu/a in 2005 to be significantly different from one another. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 60 lb, grain moisture averaged 16%, lodging averaged 1%, and the final percent stand averaged 96. For hybrids to be in the top performance group for these factors they had to equal 61 lb or more in bushel weight, 16% or less in grain moisture, 3% or less in stalk lodging, and 95% or more for percent stand.

Late Roundup Ready<sup>™</sup>, Table 1d. The test trial yield average (Table 1d) was 191 bu/a for year 2005 and 205 bu/a for 2 years (2004-05). Hybrids that yielded 188 bu/a or more in 2005 and 200 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 18 bu/a in 2005. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 60 lb, grain moisture averaged 18%, lodging averaged 1%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 61 lb or more in bushel weight, 18% or less in grain moisture, 2% or less in stalk lodging, and 92% or more for percent stand.

#### South Shore

Early Non-Roundup Ready<sup>™</sup>, Table 2a. The test trial yield average (Table 2a) was 159 bu/a for year 2005 and 156 bu/a for 2 years (2004-05). Hybrids that yielded 146 bu/a or more in 2005 and 145 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 20 bu/a in 2005 and by 16 bu/a for 2 years to be significantly different from one another. In 2005, bushel weights averaged 57 lb, grain moisture averaged 15%, lodging averaged 1%, and the final percent stand averaged 99. For hybrids to be in the top performance group for these factors they had to equal 56 lb or more in bushel weight, 15% or less in grain moisture, 2% or less in stalk lodging, and 97% or more for percent stand.

Late Non-Roundup Ready<sup>™</sup>, Table 2b. The test trial yield average (Table 2b) was 168 bu/a for year 2005. Hybrids that yielded 162 bu/a or more in 2005 qualified for the top yield group. Hybrids had to differ in yield by 15 bu/a in 2005 to be significantly different from one another. In 2005, bushel weights averaged 57 lb, grain moisture averaged 19%, lodging averaged 0%, and the final percent stand averaged 99. For hybrids to be in the top performance group for these factors they had to equal 57 lb or more in bushel weight, 19% or less in grain moisture, 1% or less in stalk lodging, and 97% or more for percent stand.

Early Roundup Ready<sup>™</sup>, Table 2c. The test trial yield average (Table 2c) was 178 bu/a for year 2005 and 164 bu/a for 2 years (2004-05). Hybrids that yielded 181 bu/a or more in 2005 and 160 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 13 bu/a in 2005 and 11 bu/a for 2 years to be significantly different from one another. In 2005, bushel weights averaged 58 lb, grain moisture averaged 17%, lodging averaged 0%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 58 lb or more in bushel weight, 17% or less in grain moisture, 2% or less in stalk lodging, and 97% or more for percent stand.

Late Roundup Ready<sup>™</sup>, Table 2d. The test trial yield average (Table 2d) was 172 bu/a for year 2005 and 160 bu/a for 2 years (2004-05). Hybrids that yielded 167 bu/a or more in 2005 and 156 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 19 bu/a in 2005. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 58 lb, grain moisture averaged 19%, lodging averaged 0%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 59 lb or more in bushel weight, 18% or less in grain moisture, 2% or less in stalk lodging, and 93% or more for percent stand.

#### **Central Locations**

#### Bancroft

Early Non-Roundup Ready<sup>™</sup>, Table 3a. The test trial yield average (Table 3a) was 193 bu/a for year 2005 and 198 bu/a for 2 years (2004-05). Hybrids that yielded 195 bu/a or more in 2005 and 193 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 11 bu/a in 2005 to be significantly different from one another. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 61 lb, grain moisture averaged 18%, lodging averaged 0%, and the final percent stand averaged 99. For hybrids to be in the top performance group for these factors they had to equal 59 lb or more in bushel weight, 17% or less in grain moisture, 1% or less in stalk lodging, and 98% or more for percent stand.

Late Non-Roundup Ready<sup>™</sup>, Table 3b. The test trial yield average (Table 3a) was 195 bu/a for year 2005 and 206 bu/a for 2 years (2004-05). Hybrids that yielded 186 bu/a or more in 2005 and 199 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 22 bu/a in 2005. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 58 lb, grain moisture averaged 21%, lodging averaged 0%, and the final percent stand averaged 98. For hybrids to be in the top performance group for these factors they had to equal 58 lb or more in bushel weight, 19% or less in grain moisture, 1% or less in stalk lodging, and 97% or more for percent stand.

Early Roundup Ready<sup>™</sup>, Table 3c. The test trial yield average (Table 3c) was 190 bu/a for year 2005 and 189 bu/a for 2 years (2004-05). Hybrids that yielded 199 bu/a or more in 2005 and 188 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 22 bu/a in 2005 and 23 bu/a for 2 years to be significantly different from one another. In 2005, bushel weights averaged 60 lb, grain moisture averaged 18%, lodging averaged 0%, and the final percent stand averaged 98. For hybrids to be in the top performance group for these factors they had to equal 61 lb or more in bushel weight, 17% or less in grain moisture, 1% or less in stalk lodging, and 96% or more for percent stand.

Late Roundup Ready<sup>™</sup>, Table 3d. The test trial yield average (Table 3d) was 195 bu/a for year 2005 and 198 bu/a for 2 years (2004-05). Hybrids that yielded 193 bu/a or more in 2005 or for 2 years qualified for the top yield group. Hybrids had to differ in yield by 21 bu/a in 2005 and 20 bu/a for 2 years to be significantly different from one another. In 2005, bushel weights averaged 59 lb, grain moisture averaged 22%, lodging averaged 0%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 60 lb or more in bushel weight, 21% or less in grain moisture, 1% or less in stalk lodging, and 96% or more for percent stand.

#### Brookings

**Early Non-Roundup Ready™, Table 4a.** The test trial yield average (Table 4a) was 231 bu/a for year 2005 and 211 bu/a for 2 years (2004-05). Hybrids that yielded 230 bu/a or more in 2005 and 200 bu/a or more for two years qualified for the top yield group. Hybrids had to differ in yield by 16 bu/a in 2005 to be significantly different from one another. There was no difference

between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 60 lb, grain moisture averaged 18%, lodging averaged 1%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 61 lb or more in bushel weight, 18% or less in grain moisture, 2% or less in stalk lodging, and 96% or more for percent stand.

Late Non-Roundup Ready<sup>™</sup>, Table 4b. The test trial yield average (Table 4b) was 235 bu/a for year 2005 and 213 bu/a for 2 years (2004-05). Hybrids that yielded 234 bu/a or more in 2005 and 199 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 16 bu/a in 2005. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 59 lb, grain moisture averaged 20%, lodging averaged 0%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 59 lb or more in bushel weight, 19% or less in grain moisture, 1% or less in stalk lodging, and 92% or more for percent stand.

Early Roundup Ready<sup>™</sup>, Table 4c. The test trial yield average (Table 4c) was 219 bu/a for year 2005 and 216 bu/a for 2 years (2004-05). Hybrids that yielded 230 bu/a or more in 2005 and 201 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by14 bu/a in 2005 to be significantly different from one another. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 61 lb, grain moisture averaged 17%, lodging averaged 1%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 61 lb or more in bushel weight, 16% or less in grain moisture, 2% or less in stalk lodging, and 95% or more for percent stand.

Late Roundup Ready<sup>™</sup>, Table 4d. The test trial yield average (Table 4d) was 227 bu/a for year 2005 and 212 bu/a for 2 years (2004-05). Hybrids that yielded 229 bu/a or more in 2005 and 216 bu/a for 2 years qualified for the top yield group. Hybrids had to differ in yield by 13 bu/a in 2005 and 14 bu/a for 2 years to be significantly different from one another. In 2005, bushel weights averaged 59 lbs, grain moisture averaged 20%, lodging averaged 0%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 59 lb or more in bushel weight, 18% or less in grain moisture, 1% or less in stalk lodging, and 96% or more for percent stand.

#### **Southern Locations**

#### Delmont

Note: At this location CV values were higher than at the other test locations. This indicates more experimental error was associated with these trials. During late July and August, moisture became a limiting factor, which caused more stress compared to the other test sites.

Early Non-Roundup Ready<sup>™</sup>, Table 5a. The test trial yield average (Table 5a) was 113 bu/a for year 2005 and 123 bu/a for 2 years (2004-05). Hybrids that yielded 111 bu/a or more in 2005 and 116 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 21 bu/a in 2005 and by 18 bu/a for 2 years to be significantly different from one another. In 2005, bushel weights averaged 58 lb, grain moisture averaged 15%, lodging averaged 1%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 60 lb or more in bushel weight, 14% or less in grain moisture, 3% or less in stalk lodging, and 90% or more for percent stand.

Late Non-Roundup Ready<sup>™</sup>, Table 5b. The test trial yield average (Table 5b) was 109 bu/a for year 2005 and 117 bu/a for 2 years (2004-05). Hybrids that yielded 125 bu/a or more in 2005 and 98 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 17 bu/a in 2005. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 59 lb, grain moisture averaged 15%, lodging averaged 1%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 58 lb or more in bushel weight, 14% or less in grain moisture, 3% or less in stalk lodging, and 96% or more for percent stand.

Early Roundup Ready<sup>™</sup>, Table 5c. The test trial yield average (Table 5c) was 109 bu/a for year 2005 and 115 bu/a for 2 years (2004-05). Hybrids that yielded 113 bu/a or more in 2005 and 101 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 19 bu/a in 2005 to be significantly different from one another. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 60 lb, grain moisture averaged 15%, lodging averaged 1%, and the final percent stand averaged 96. For hybrids to be in the top performance group for these factors they had to equal 60 lb or more in bushel weight, 15% or less in grain moisture, 3% or less in stalk lodging, and 96% or more for percent stand.

Late Roundup Ready<sup>™</sup>, Table 5d. The test trial yield average (Table 5d) was 97 bu/a for year 2005 and 113 bu/a for 2 years (2004-05). Hybrids that yielded 83 bu/a or more in 2005 and 97 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 28 bu/a in 2005 to be significantly different from one another. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 59 lb, grain moisture averaged 15%, lodging averaged 1%, and the final percent stand averaged 95. For hybrids to be in the top performance group for these factors they had to equal 59 lb or more in bushel weight, 15% or less in grain moisture, 3% or less in stalk lodging, and 93% or more for percent stand.

#### Beresford

**Early Non-Roundup Ready™, Table 6a.** The test trial yield average (Table 6a) was 205 bu/a for year 2005 and 223 bu/a for 2 years (2004-05). Hybrids that yielded 203 bu/a or more in 2005

and 224 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 19 bu/a in 2005 and by 12 bu/a for 2 years to be significantly different from one another. In 2005, bushel weights averaged 58 lb, grain moisture averaged 15%, lodging averaged 1%, and the final percent stand averaged 98. For hybrids to be in the top performance group for these factors they had to equal 58 lb or more in bushel weight, 16% or less in grain moisture, 2% or less in stalk lodging, and 96% or more for percent stand.

Late Non-Roundup Ready<sup>™</sup>, Table 6b. The test trial yield average (Table 6b) was 192 bu/a for year 2005 and 221 bu/a for 2 years (2004-05). Hybrids that yielded 193 bu/a or more in 2005 and 212 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 20 bu/a in 2005. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 59 lb, grain moisture averaged 16%, lodging averaged 1%, and the final percent stand averaged 98. For hybrids to be in the top performance group for these factors they had to equal 59 lb or more in bushel weight, 16% or less in grain moisture, 2% or less in stalk lodging, and 93% or more for percent stand.

Early Roundup Ready<sup>™</sup>, Table 6c. The test trial yield average (Table 6c) was 191 bu/a for year 2005 and 213 bu/a for 2 years (2004-05). Hybrids that yielded 193 bu/a or more in 2005 and 200 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 16 bu/a in 2005 to be significantly different from one another. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 59 lb, grain moisture averaged 16%, lodging averaged 1%, and the final percent stand averaged 97. For hybrids to be in the top performance group for these factors they had to equal 58 lb or more in bushel weight, 16% or less in grain moisture, 1% or less in stalk lodging, and 93% or more for percent stand.

Late Roundup Ready<sup>™</sup>, Table 6d. The test trial yield average (Table 6d) was 203 bu/a for year 2005 and 217 bu/a for 2 years (2004-05). Hybrids that yielded 216 bu/a or more in 2005 and 196 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 20 bu/a in 2005 to be significantly different from one another. There was no difference between 2-year yield averages for those hybrids tested 2 years. In 2005, bushel weights averaged 60 lb, grain moisture averaged 16%, lodging averaged 1%, and the final percent stand averaged 96. For hybrids to be in the top performance group for these factors they had to equal 60 lb or more in bushel weight, 16% or less in grain moisture, 2% or less in stalk lodging, and 93% or more for percent stand.

Table A.	Site -soi	classification.	percent slop	)e, &	previous o	crop.
			P			

Site	Soil type	Seedbed, previous crop	Fertility Yield goal
Warner	Great Bend-Putney silt loams, 0-2% sl.	Min-till, s.wheat stubble	200 bu/a
South Shore	Brookings sil.cl.loam, 0-3% sl.	Conventional, soybeans	180 bu/a
Bancroft	Houdek-Stickney-Tetonka, 0-1% sl.	No-till, soybeans	150 bu/a
Brookings	Brandt sil. cl., 0-2% sl.	Conventional, soybean	200 bu/a
Delmont	Clarno-Prosper loam, 0-2% sl.	No-till, soybean stubble	200 bu/a
Beresford	Egan-Clarno-Trent complex, 0-2% sl.	Conventional, soybean	210 bu/a

#### Table B. Year 2004 trial cooperators, locations, and dates seeded.

Cooperators	Location*	Date Seeded
Allen & Inel Ryckman	Warner	16-May
NE Research Farm	South Shore	18-May
Erland Weerts	Bancroft	5-May
SDSU Agronomy Farm	Brookings	6-May
Richard Luebke	Delmont	4-May
SE Research Farm	Beresford	3-May

\* Plots were all seeded at 27,878 seeds per acre.



Table C. Nearest weather station precipitation and growing degree day (GDD) accumulations for 2005 and their departures from normal (DFN).

Station	Variabl	e		Data is accu	mulated from	April 1 up to	o date stated	:
			Apr. 3	May 1	June 26	July 31	Aug. 28	Sept. 25
	Precip in.	'05	0.00	0.38	7.28	11.28	14.10	14.99
Aberdeen		DFN*	-0.18	-1.64	0.17	1.02	1.92	1.00
Airport	GDD's	'05	0	104	853	1677	2210	2701
		DFN	-3	41	130	159	112	287
	Precip in.	'05	0.00	1.50	9.12	10.34	13.02	16.11
Watertown		DFN	-0.18	-0.76	0.82	-1.45	1.25	-0.06
Airport	GDD's	'05	0	100	822	1660	2224	2720
		DFN	0	50	108	170	155	334
	Precip in.	'05	0.00	0.67	9.08	10.50	13.02	19.55
Huron		DFN	-0.18	-1.50	1.20	-0.48	0.25	5.13
Airport	GDD's	'05	0	138	956	1902	2555	3136
		DFN	-3	71	185	288	317	576
	Precip in.	'05	0.00	2.03	11.50	15.32	18.34	25.91
Brookings		DFN	-0.18	-0.12	2.72	2.66	3.16	8.20
2NE	GDD's	'05	0	98	819	1613	2126	2604
		DFN	0	56	174	251	249	448
	Precip in.	'05	0.00	2.73	14.45	16.60	17.85	21.11
Centerville		DFN	-0.18	0.37	5.05	3.29	1.89	2.63
6 SE Airport	GDD's	'05	0	142	988	1891	2523	3118
		DFN	-3	66	132	211	251	493
	Precip in.	'05	0.00	2.69	14.30	17.17	17.90	23.23
Armour		DFN	-0.21	0.26	5.41	4.65	3.43	6.55
Airport	GDD's	'05	2	148	987	1934	2638	3322
		DFN	-2	50	59	113	149	421

Source: USDA-SD-Crop-Weather report & SD Automatic Weather Data Network.

\* DFN - how much a variable for year 2005 is greater or less (-) than the long-term average.

#### Table D. Pre-and post-emergence herbicides used in corn performance trials for 2005.

#### All herbicide were applied at recommended label rates.

Location	Non-Round	up Ready™	Roundup Ready™		
Location	Pre-emergence	Post-emergence	Pre-emergence	Post-emergence	
Warner	Gmax + Balance Pro	Accent/Buctril	Gmax + Balance Pro	Roundup Ultra	
South Shore	Harness	None	Harness	None	
Bancroft	Surpass	Accent/Buctril	Surpass	Roundup Ultra	
Brookings	Harness	Accent/Buctril	Harness	Roundup Ultra	
Delmont	Outlook	Accent/Calisto	Outlook	Roundup Ultra	
Beresford	Dual Clarity	None	Dual Clarity	None	

		1	
Brand / Hybrid	Table No.	Brand / Hybrid	Table No.
AGVENTURE/AV4004CB	2a	KRUGER/5514YGCB	6b
AGVENTURE/AV4880CB	1a,2a	KRUGER/5517YGCB	6b
AGVENTURE/AVEXP5613CB	1b,2b	KRUGER/8414HX	6b
DAIRYLAND/STEALTH-5007	5b,6a	KRUGER/8602HX	1b,2b,3b,4b,5a
DAIRYLAND/STEALTH-5010	6b	KRUGER/8609HX	5b,6a
DAIRYLAND/STEALTH-5104	4b,5a	KRUGER/9111YGCB	5b,6b
DAIRYLAND/STEALTH-5194	1a,2a	KRUGER/9115YGCB	6b
DAIRYLAND/STEALTH-5201	3b,4b,5a	KRUGER/9212YGCB	5b,6b
DAIRYLAND/STEALTH-5204	4b,5a	KRUGER/9310YGCB	5b,6a
DAIRYLAND/STEALTH-5497	1b,3a,4a	KRUGER/9313YGCB	6b
DAIRYLAND/STEALTH-5611	6b	KRUGER/9407YGCB	3b,4b,5a,6a
DEKALB/DKC52-45 (YGCB)	5a	KRUGER/9496YGCB	1a,2a,3a,4a
DEKALB/DKC53-11 (YGCB)	5a,6a	KRUGER/9910YGCB	5b,6a
DEKALB/DKC54-51 (YGCB)	5a,6a	KRUGER/EXP0600	3a,4a
DEKALB/DKC62-31 (YGCB)	6b	KRUGER/EXP0603A	4b,5a
DEKALB/DKC64-81 (YGCB)	6b	KRUGER/EXP0603B	4b,5a
EPLEY/E1157	3a,4a	KRUGER/EXP0605A	4b,5a
EPLEY/E1214	3a,4a	KRUGER/EXP0605B	4b,5a
EPLEY/E1430YGCB	3b,4b,5a	KRUGER/EXP0608A	5b,6a
EPLEY/E1442	3b,4b,5a	KRUGER/EXP0610	5b,6a
EPLEY/E14H07HX	3a,4a,5a	KRUGER/EXP0614A	6b
EPLEY/E2490YGCB	3b,4b,5b	KRUGER/EXP0614B	6b
EPLEY/E3670YGCB	5b	KRUGER/EXP0617A	6b
GOLD COUNTRY/100-05CB	2b,3a,4a	KRUGER/EXP0692	1a,2a
GOLD COUNTRY/100-06	3a,4a	KRUGER/EXP5405YGCB	4b,5a
GOLD COUNTRY/110-07CB	5b,6a	KRUGER/EXP5510YGCB	5b,6a
GOLD COUNTRY/94-01CB	2a,3a,4a	KRUGER/EXP5602YGCB	3b,4b
GOLD COUNTRY/94-02CBLL	1a,2a	KRUGER/EXP5606YGCB	4b,5b
HEINE/H728YGCB	6a	KRUGER/EXP5608YGCB	5b,6a
HEINE/H750YGCB	6a	KRUGER/EXP5609YGCB	5b,6a
HEINE/H818YGCB	6a	KRUGER/EXP5613YGCB	6b
HEINE/H820YGCB	6a	KRUGER/EXP5692BT/LL	1,2a
HEINE/H851YGCB	6b	KRUGER/EXP8605HX	4b,5a
HEINE/H8600YGCB	6b	KRUGER/EXP8607HX	4b,5b
JUNG/6432YGCB	4a	KRUGER/EXP8614HX	6b
JUNG/6545YGCB	4b	KRUGER/EXP8616HX	6b
KAYSTAR/KX-8615B	6b	SEEDS 2000/2953BT	1a,2a,3a,4a
KRUGER/0508	5b,6a	WENSMAN/W 5117BT	1a,2a
KRUGER/5410YGCB	5b,6a	WENSMAN/W 5212BT	1a,2a,3a,4a
KRUGER/5415YGCB	6b	WENSMAN/W 5303BT	1b,2b,3a,4a,5a
KRUGER/5416YGCB	6b	WENSMAN/W 5349BT	3b,4b,5a
KRUGER/5504YGCB	1b,2b,3b,4b,5a	WENSMAN/W 5417BT	5b,6a
KRUGER/5505YGCB	1b,2b,3b,4b,5a	WENSMAN/W 5437BT	5b,6a
	•	•	•

Table E. 2005 Non-Roundup Ready™ corn hybrid entries by brand/hybrid and performance table number(s).

lable F. 2005 Roundup Ready <sup>1</sup> corn hybrid entries by brand/hybrid and performance table num	per(s).

Tubic 1. 2005 Houndup Houdy	Com nybrid charcs	by brand/nybrid and performance	
Brand / Variety	Table No.	Brand / Variety	Table No.
AGVENTURE/AV3919R2CB	2c	GOLD COUNTRY/83-01CBR	1c
AGVENTURE/AV4005R2CB	2c	GOLD COUNTRY/92-01CBR	2c
AGVENTURE/AV4882R2	2c	GOLD COUNTRY/94-01RR	3c,4c
AGVENTURE/AV4883R2RW	2c	HEINE/H625RR/YGCB	1c
AGVENTURE/AV6231R2CB	1d.3d	HEINE/H627RR/YGCB	1c.3c
AGVENTURE/EXP5612RR	1c.2c.3c	HEINE/H630RR	1c.3c
ASGROW/RX715RR2YGCB	6d	HEINE/H710RR	3c.5c
CHANNEL/4S502	1d 2d 3c 4c	HEINE/H723BB/YGCB	30.50
CHANNEL/6925BB	1c 2c	HEINE/H724BB/YGCB	30.50
CHANNEL/6965 B	10,20	HEINE/H728BB/YGCB	50,00
CHANNEL/7135BB	1d 2d 3d 4d 5c	HEINE/H746BB	3d 5c
	5d 6c		60
	10.20		3d 5c 6c
	1 1 2 2 2 4 2		50,30,00 6.5
	10,20,30,40 2d 4d 5a		00 64
	50,40,50 Ed Co		UU Ca
	50,00		10.00.00
	50,6C		
DAIRYLAND/STEALTH-6497	10,20,30,40		1c,2c,3c,4c
DAIRYLAND/STEALTH-/191			10,20,30
DEKALB/DKC40-08RR2YGCB	1c,2c	INTEGRA/INT 6506RRYG	50
DEKALB/DKC41-64RR2YGCB	1c,2c	INTEGRA/INT 6602RRYG	3c,4c
DEKALB/DKC42-95RR2YGCB	1c,2c	INTEGRA/INT 6603RRYG	3d,4d,5c
DEKALB/DKC47-10RR2YGCB	1d,2d,3c,4c	INTEGRA/INT 6609RRYG	5d,6c
DEKALB/DKC48-52 (RR2)	5c	INTEGRA/INT 6696RR	1d,3c,4c
DEKALB/DKC48-53RR2YGCB	1d,2d,3c,4c	KALTENBERG/K2717RRBT	2c
DEKALB/DKC50-20RR2YGCB	1d,2d,3c,4c,5c	KALTENBERG/K3919RRBT	2c
DEKALB/DKC52-47RR2YGCB	3d,4d,5c,6c	KALTENBERG/K4666RR	2d,4c
DEKALB/DKC55-82 (RR2)	3d,4d,5c,6c	KALTENBERG/K5244RRBT	4d
DEKALB/DKC58-80RR2YGCB	5d,6c	KALTENBERG/K5717RRBT	4d,5c,6c
DEKALB/DKC60-19RR2YGCB	6c	KALTENBERG/K6744RRBT	6c
DEKALB/DKC61-72 (RR2)	5d,6d	KAYSTAR/KX-4250RRBT	1c
DEKALB/DKC63-81RR2YGCB	6d	KAYSTAR/KX-5150RR	1c,3c
EPLEY/E1145RR	3c,4c	KAYSTAR/KX-5800RR	3c,4c
EPLEY/E1165RR	3c,4c,5c	KAYSTAR/KX-5900RR	3c,4c
EPLEY/E12R45YGCB	3d,4d,5c	KRUGER/1500RR	1d,2d,3c,4c,5c
EPLEY/E1445RR	3c,4c,5c	KRUGER/2410RR/YGCB	5d,6c
EPLEY/E1465RR	3d,4d,5c	KRUGER/2506RR/YGCB	3d,4d,5d,6c
EPLEY/E1475RR	3d,4d,5c	KRUGER/2517RR/YGCB	6d
EPLEY/E14R95YGCB	3d,4d.5d	KRUGER/2600RR/YGCB	1d.2d
EPLEY/E15R45YGCB	3d,4d.5c	KRUGER/2697RR/YGCB	1d,2d.3c.4c
EPLEY/E24R90YGCB	4d.5d	KRUGER/3503TS	1d.2d.3d.4d.5c
FPI FY/F36R65YGCB	5d	KBUGEB/4501BB/YGBW	1d.2d 3c 4c 5c
GOLD COUNTRY/1016RBBT	4d	KBUGEB/9115BB/YGCB	5d 6d
GOLD COUNTRY/103-02CBR	3d 4d 5c	KBUGEB/9203BB/VGCB	1d 2d 3d 4d 5c
GOLD COUNTRY/105-04CBR	2d 5d	KBUGEB/9212BB/VGCB	5d 6d
3312 000mmm/100 040Dm	14,54		00,00

Table F. 2005 Roundup Ready™ corn hybrid entries by brand/hybrid and performance table number(s) (continued).

Brand / Variety	Table No.	Brand / Variety	Table No.
KRUGER/9308RR/YGCB	5d,6d	NUTECH/NT-5212+RR/YGCB	6c
KRUGER/9313RR/YGCB	5d,6d	NUTECH/NT-5303 RR/YGCB	3d,4d,5c
KRUGER/9392RR/YGCB	1c,2c	NUTECH/NT-5507 RR/YGCB	5c,6c
KRUGER/9496RR	1c,2c,3c,4c	NUTECH/NT-5507+RR/YGCB	4d,5c
KRUGER/9593RR/YGCB	1c,2c	NUTECH/NT-5889 RR/YGCB	1c,2c
KRUGER/EXP1597RR	1d,2d	NUTECH/NT-7595 RR	3c,4c
KRUGER/EXP1697RR	1d,2d	NUTECH/NT-9191+RRYGPLUS	1c,2c
KRUGER/EXP2605RR/YGCB	3d,4d,5c,6c	SEEDS 2000/2944RR/BT	1c,2c
NUTECH/NT-3408 RR	4d,5c	SEEDS 2000/2953RR	1c,2c,4c
NUTECH/NT-3505 RR	3d,4d,5c,6c	SEEDS 2000/3122RR/BT	1d,3d,4d
NUTECH/NT-3505+RR	1d,2d,3d,4d	SEEDS 2000/EXP3123RR	1d,3d,4d
NUTECH/NT-3595 RR	1c,2c,3c,4c	WENSMAN/W 6117BTRR	1c,2c,3c,4c
NUTECH/NT-3696 RR	1c,2c,3c,4c	WENSMAN/W 6194BTRR	1c,2c,3c,4c
NUTECH/NT-3898 RR	1d,2d,3c,4c	WENSMAN/W 6212RR	1c,2c,3c,4c
NUTECH/NT-3999 RR	1d,2d,3c,4c	WENSMAN/W 6266BTRR	1d,2d,3c,4c
NUTECH/NT-3999+RR	1d,2d,3c,4c	WENSMAN/W 6315BTRR	1d,2d,3d,4d,5c,6c
NUTECH/NT-5005 RR/YGCB	3d,4d	WENSMAN/W 6318BTRR	3d,4d,5c,6c
NUTECH/NT-5101 RR/YGCB	1d,2d,3d,4d	WENSMAN/W 6422BTRR	5d,6c
NUTECH/NT-5191+RR/YGCB	1c,2c,3c,4c		
NUTECH/NT-5212 RR/YGCB	6c		

Table G. Seed co	ompanies entered in the 2005 corn hybrid trials by seed brand name.
Seed brand	Mailing address
Asgrow	Monsanto, 4312 Carol Ave., Courtland, IL 60112
Channel	Channel Bio Corp., PO Box 278, Madison, WI 53711
Dairyland	Dairyland Seed Co., Inc., 9728 S.Clinton Corners Rd., Clinton, WI 53525
Dekalb	Monsanto, 4312 Carol Ave., Courtland, IL 60112
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310, Shell Rock, IA 50670
Gold Country	Gold Country Seed Inc., PO Box 604, Hutchinson, MN 55350
Heine	Heine Hybrid Seed Corn, 1020 E. 320th St., Vermillion, SD 57064
Integra Seed	Integra Seed, Ltd., PO Box 40, Bozeman, MT 59718
Jung	Jung Seed Genetics, 341 S. High St., Randolph, WI 53956
Kaltenberg	Kaltenberg Seeds, PO Box 278, Waunakee, WI 53597
Kaystar	Kaystar Seed, PO Box 947, Huron, SD 57350
Agventure	Keltgen Inc. Seed, 302 South Spruce St., Henry, SD 57243
Kruger	Kruger Seed Co., 33938 160th Ave., Dike, IA 50624
Seeds 2000	Seeds 2000, PO Box 200, Breckenridge, MN 56520
NuTech	Nutech Seed, LC, 6131 N. Fork Rd., Ames, IA 50010
Wensman	Wensman Seed Co., PO Box 190, Wadena, MN 56482

Prond/Hubrid /Pu 2 year than '05	Brand		Hybrid	performa	nce variabl	e at harvest	
yields)	Rel Mat	2-year Yield bu/a	05 Yield bu/a	05 Bu. Wt. Ib	'05 Grain Mst %	'05 Lodg- ing %	'05 Pct* Stand
TWO-YEAR ENTRIES:	-						
KELTGEN/AV4880CB	95	216	202	61	16	0	99
KRUGER/9496YGCB	94	216	197	60	16	1	100
WENSMAN/W 5117BT	91	215	199	61	16	0	99
WENSMAN/W 5212BT	95	211	195	59	16	1	97
SEEDS 2000/2953BT	95	211	190	61	16	1	100
DAIRYLAND/STEALTH-5194	94	209	195	61	16	0	95
ONE-YEAR ENTRIES:	-						
GOLD COUNTRY/94-02CBLL	94		188	63	16	1	99
KRUGER/EXP0692	92		184	61	16	0	97
KRUGER/EXP5692BT/LL	92		180	63	17	0	96
Trial avg.:	94	213	192	61	16	0	98
Highest (H)-avg.:	95	216	202	63	17	1	100
Lowest (L)-avg.:	91	209	180	59	16	0	95
H-L avg. difference:	4	7	22	3	1	1	5
** Lsd (.05):		10	14	1	0	NS	4
# Min. TPG-value:		206	188	62			96
## Max. TPG-value:				_	16	1	
+ Coef. of var.:		3	4	1	1		3
No. of entries:		6	9	9	9	9	9

Table 1a. Early maturity Non-Roundup Ready™ corn hybrid test trial results. Allen & Inel Ryckman Farm, Warner, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Brond/Wichrid / Dr. 2 waar than '05	Brand		Hybrid	d performan	ce variable at	harvest	
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand
TWO-YEAR ENTRIES:							
DAIRYLAND/STEALTH-5497	97	210	197	58	16	1	100
ONE-YEAR ENTRIES:							
KRUGER/5504YGCB	104		208	60	18	0	97
KRUGER/8602HX	102		199	58	18	0	99
KRUGER/5505YGCB	105		199	59	23	0	97
WENSMAN/W 5303BT	99		194	59	18	1	95
AGVENTURE/AVEXP5613CB	96		172	61	18	0	99
Trial avg.:	101	210	195	59	18	0	98
Highest (H)-avg:	105	210	208	61	23	1	100
Lowest (L)-avg.:	96	210	172	58	16	0	95
H-L avg. difference:	9	0	36	3	7	1	5
** Lsd (.05):			16	2	1	NS	NS
# Min. TPG-value:			192	59			95
## Max. TPG-value:					17	1	
+ Coef. of var.:			5	1	4		3
No. of entries:	6	1	6	6	6	6	6

Table 1b. Late maturity Non-Roundup Ready<sup>™</sup> corn hybrid test trial results. Allen & Inel Ryckman Farm, Warner, SD, 2004-2005.

\* Seeded May 16, 2005 at 28,750 seeds per acre.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Dread (Use baid (Dr. 2) waar than (OF	Durand	Test trial variable at harvest							
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand		
TWO-YEAR ENTRIES:									
DEKALB/DKC42-95RR2YGCB	92	219	204	60	16	1	97		
WENSMAN/W 6212RR	90	219	200	59	16	1	95		
NUTECH/NT-3595 RR	95	218	205	60	16	0	96		
WENSMAN/W 6117BTRR	91	214	207	62	16	1	97		
INTEGRA/INT 6395RR	94	213	196	61	16	1	96		
SEEDS 2000/2944RRBT	94	212	195	61	16	1	96		
HEINE/H625RR/YGCB	91	212	192	60	16	1	85		
KAYSTAR/KX-5150RR	94	211	189	60	16	3	95		
CHANNEL/6965 R	95	210	192	59	16	2	95		
KRUGER/9496RR	94	210	191	59	16	3	93		
KRUGER/9392RR/YGCB	92	210	180	61	16	0	96		
HEINE/H630RR	95	209	192	59	16	1	98		
SEEDS 2000/2953RR	95	207	191	61	16	2	100		
CHANNEL/6925RB	92	207	188	61	16	0	94		
INTEGRA/INT 6193RRYG	92	199	191	61	16	3	94		
ONE-YEAR ENTRIES:									
CHANNEL/EXP X50941RB	94		205	59	16	0	97		
DAIRYLAND/STEALTH-7191	91		203	60	16	1	96		
KRUGER/9593RR/YGCB	93		201	62	16	1	98		
WENSMAN/W 6194BTRR	93		201	60	17	0	93		
HEINE/H627RR/YGCB	91		201	61	17	1	96		
NUTECH/NT-5191+RR/YGCB	91		199	61	16	1	92		
INTEGRA/INT 63F90RRYG	90		197	62	17	0	94		
DEKALB/DKC41-64RR2YGCB	91		196	61	16	0	98		
NUTECH/NT-5889 RR/YGCB	90		196	61	16	1	99		
NUTECH/NT-9191+RRYGPLUS	91		194	61	17	1	96		
KAYSTAR/KX-4250RRBT	93		194	61	16	1	94		
AGVENTURE/EXP5612RR	95		192	59	16	3	99		
NUTECH/NT-3696 RR	95		191	59	16	2	95		
DEKALB/DKC40-08RR2YGCB	90		189	61	16	1	96		
GOLD COUNTRY/83-01CBR	83		176	60	16	1	98		
Trial avg.:	92	211	195	60	16	1	96		
Highest (H)-avg.:	95	219	207	62	17	3	100		
Lowest (L)-avg.:	83	199	176	59	16	0	85		
H-L avg. difference:	12	20	31	3	2	3	15		
** Lsd (.05):		NS	14	1	0	NS	5		
# Min. TPG-value:		199	193	61			95		
## Max. TPG-value:					16	3			
+ Coef. of var.:		4	4	1	1		3		
No. of entries:	30	15	30	30	30	30	30		

Table 1c. Early maturity Roundup Ready™ corn hybrid test trial results. Allen & Inel Ryckman Farm, Warner, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Drend / United / Dr. 2 many them (05	Duou d Dol	Test trial variable at harvest							
yields)	Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand		
TWO-YEAR ENTRIES:									
DEKALB/DKC50-20RR2YGCB	100	210	202	60	17	1	100		
DEKALB/DKC47-10RR2YGCB	97	209	195	62	16	1	99		
SEEDS 2000/3122RRBT	102	206	193	58	19	0	97		
NUTECH/NT-5101 RR/YGCB	101	204	194	57	19	1	96		
KRUGER/9203RR/YGCB	103	201	188	58	19	1	96		
DAIRYLAND/STEALTH-6497	97	200	186	60	16	2	95		
ONE-YEAR ENTRIES:									
DEKALB/DKC48-53RR2YGCB	98		206	59	17	1	97		
KRUGER/3503TS	103		204	62	19	0	97		
WENSMAN/W 6266BTRR	96		200	61	17	0	97		
NUTECH/NT-3505+RR	102		199	60	22	1	98		
CHANNEL/4S502	97		197	61	17	0	99		
KRUGER/2697RR/YGCB	97		196	61	17	1	94		
WENSMAN/W 6315BTRR	101		196	58	20	0	95		
KRUGER/1500RR	100		195	60	16	1	99		
KRUGER/EXP1697RR	97		194	59	16	1	98		
KRUGER/EXP1597RR	97		192	60	16	0	99		
CHANNEL/7135RB	102		192	58	19	1	98		
NUTECH/NT-3999+RR	99		189	61	18	0	94		
NUTECH/NT-3999 RR	99		184	61	18	1	93		
CHANNEL/EXP X51001RB	100		184	61	19	0	100		
INTEGRA/INT 6696RR	97		183	61	18	5	99		
NUTECH/NT-3898 RR	98		182	59	20	2	92		
AGVENTURE/AV6231R2CB	102		180	60	16	1	96		
SEEDS 2000/EXP3123RR	102		178	58	20	1	94		
KRUGER/2600RR/YGCB	99		175	60	21	0	96		
KRUGER/4501RR/YGRW	100		169	60	18	1	97		
Trial avg.:	99	205	191	60	18	1	97		
Highest (H)-avg.:	103	210	206	62	22	5	100		
Lowest (L)-avg.:	96	200	169	57	16	0	92		
H-L avg. difference:	7	10	37	4	6	5	8		
** Lsd (.05):		NS	18	1	2	2	NS		
# Min. TPG-value:		200	188	61			92		
## Max. TPG-value:					18	2			
+ Coef. of var.:		5	6	1	5		3		
No. of entries:	26	6	26	26	26	26	26		

Table 1d. Late maturity Roundup Ready™ corn hybrid test trial results. Allen & Inel Ryckman Farm, Warner, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Drend (II. beid / Dr. 2	Durand	Hybrid performance variable at harvest							
yields)	Brand Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand		
TWO-YEAR ENTRIES:									
WENSMAN/W 5212BT	95	161	164	57	16	1	99		
SEEDS 2000/2953BT	95	159	166	56	16	1	100		
KRUGER/9496YGCB	94	159	165	56	15	2	100		
KELTGEN/AV4880CB	95	157	163	56	16	0	100		
GOLD COUNTRY/94-01CB	94	157	163	55	15	1	100		
WENSMAN/W 5117BT	91	155	152	57	14	0	99		
DAIRYLAND/STEALTH-5194	94	146	158	57	15	1	99		
ONE-YEAR ENTRIES:									
KRUGER/EXP0692	92		159	57	15	2	99		
AGVENTURE/AV4004CB	92		157	57	15	0	99		
KRUGER/EXP5692BT/LL	92		156	58	15	1	99		
GOLD COUNTRY/94-02CBLL	94		149	58	15	0	97		
Trial avg.:	93	156	159	57	15	1	99		
Highest (H)-avg.:	95	161	166	58	16	2	100		
Lowest (L)-avg.:	91	146	149	55	14	0	97		
H-L avg. difference:	4	15	17	4	2	2	3		
** Lsd (.05):		16	20	2	1	NS	NS		
# Min. TPG-value:		145	146	56			97		
## Max. TPG-value:					15	2			
+ Coef. of var.:		4	7	2	6		2		
No. of entries:	11	7	11	11	11	11	11		
* Seeded May 18, 2005 at 28,750 see	ds per acre.								

Table 2a. Early maturity Non-Roundup Ready™ corn hybrid test trial results. NE Research Farm, South Shore, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Prond/Unbrid (Dy 2 year than '05	Brand		Hybrid performance variable at harvest							
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand			
ONE-YEAR ENTRIES:										
KRUGER/5505YGCB	105		177	56	23	0	100			
GOLD COUNTRY/100-05CB	100		174	57	19	1	99			
WENSMAN/W 5303BT	99		169	57	17	0	98			
AGVENTURE/AVEXP5613CB	96		166	59	20	0	98			
KRUGER/8602HX	102		161	55	19	1	99			
KRUGER/5504YGCB	104		159	57	17	0	99			
Trial avg.:	101		168	57	19	0	99			
Highest (H)-avg.:	105		177	59	23	1	100			
Lowest (L)-avg.:	96		159	55	17	0	98			
H-L avg. difference:	9		18	5	7	1	2			
** Lsd (.05):			15	2	2	NS	3			
# Min. TPG-value:			162	57			97			
## Max. TPG-value:					19	1				
+ Coef. of var.:			5	2	6		2			
No. of entries:	6	0	6	6	6	6	6			

Table 2b. Late maturity Non-Roundup Ready™ corn hybrid test trial results. NE Research Farm, South Shore, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

	Brand	Test trial variable at harvest							
Brand/Hybrid (By 2-year then 05 yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand		
TWO-YEAR ENTRIES:									
INTEGRA/INT 6395RR	94	171	188	59	17	1	98		
KRUGER/9392RR/YGCB	92	170	186	59	17	0	97		
DEKALB/DKC42-95RR2YGCB	92	170	184	59	17	0	99		
KRUGER/9496RR	94	168	186	58	17	2	99		
SEEDS 2000/2953RR	95	168	185	57	17	1	100		
NUTECH/NT-3595 RR	95	167	186	58	19	0	94		
WENSMAN/W 6212RR	90	166	183	57	18	0	99		
WENSMAN/W 6117BTRR	91	165	183	59	16	0	100		
CHANNEL/6965 R	95	164	186	58	18	1	95		
KELTGEN/AV4005R2CB	92	163	183	58	17	0	93		
GOLD COUNTRY/92-01CBR	92	161	180	59	17	0	97		
SEEDS 2000/2944RRBT	94	160	170	59	16	1	98		
KELTGEN/AV4882R2	94	158	175	59	16	1	97		
CHANNEL/6925RB	92	157	167	59	16	0	92		
INTEGRA/INT 6193RRYG	92	150	160	57	15	2	98		
ONE-YEAR ENTRIES:									
CHANNEL/EXP X50941RB	94		194	58	17	0	100		
INTEGRA/INT 63F90RRYG	90		193	59	18	0	99		
DEKALB/DKC41-64RR2YGCB	91		186	59	16	0	98		
KRUGER/9593RR/YGCB	93		183	59	16	1	99		
NUTECH/NT-5191+RR/YGCB	91		179	59	17	0	96		
WENSMAN/W 6194BTRR	93		176	60	17	0	99		
AGVENTURE/EXP5612RR	95		174	57	16	1	100		
NUTECH/NT-5889 RR/YGCB	90		174	59	17	0	98		
NUTECH/NT-9191+RRYGPLUS	91		174	59	17	0	96		
KALTENBERG/K3919RRBT	92		174	58	17	0	97		
DEKALB/DKC40-08RR2YGCB	90		172	59	15	0	100		
AGVENTURE/AV4883R2RW	94		172	57	18	1	93		
NUTECH/NT-3696 RR	95		168	56	15	2	98		
KALTENBERG/K2717RRBT	85		168	58	16	1	98		
AGVENTURE/AV3919R2CB	90		165	58	15	1	98		
Trial avg.:	92	164	178	58	17	0	97		
Highest (H)-avg.:	95	171	194	60	19	2	100		
Lowest (L)-avg:	85	150	160	56	15	0	92		
H-L avg. difference:	10	21	34	4	4	2	8		
** Lsd (.05):		11	13	2	2	NS	3		
# Min. TPG-value:		160	181	58			97		
## Max. TPG-value:					17	2			
+ Coef. of var.:		4	5	2	6		2		
No. of entries:	30	15	30	30	30	30	30		

Table 2c. Early maturity Roundup Ready™ corn hybrid test trial results. NE Research Farm, South Shore, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Drawd / Itaka: d / Dra 2 are an than 105	Brand	Test trial variable at harvest							
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand		
TWO-YEAR ENTRIES:									
DEKALB/DKC47-10RR2YGCB	97	168	186	61	18	0	97		
DAIRYLAND/STEALTH-6497	97	162	175	58	18	1	96		
NUTECH/NT-5101 RR/YGCB	101	160	181	56	19	0	99		
KRUGER/1500RR	100	159	178	58	16	2	100		
KRUGER/9203RR/YGCB	103	156	177	56	21	0	99		
CHANNEL/7135RB	102	156	176	56	20	0	99		
ONE-YEAR ENTRIES:									
DEKALB/DKC50-20RR2YGCB	100		185	57	16	0	97		
WENSMAN/W 6266BTRR	96		183	60	18	0	100		
DEKALB/DKC48-53RR2YGCB	98		179	58	19	0	98		
KRUGER/2697RR/YGCB	97		178	59	18	0	98		
NUTECH/NT-3505+RR	102		176	57	24	1	95		
WENSMAN/W 6315BTRR	101		176	55	18	1	100		
CHANNEL/4S502	97		174	57	17	0	98		
KALTENBERG/K4666RR	96		173	57	18	1	94		
KRUGER/EXP1697RR	97		172	57	16	1	96		
NUTECH/NT-3999+RR	99		169	59	18	0	95		
KRUGER/2600RR/YGCB	99		169	58	22	0	100		
NUTECH/NT-3999 RR	99		167	58	17	0	95		
NUTECH/NT-3898 RR	98		162	56	22	0	93		
KRUGER/EXP1597RR	97		162	57	16	1	97		
KRUGER/3503TS	103		160	58	18	0	98		
CHANNEL/EXP X51001RB	100		158	58	21	1	96		
KRUGER/4501RR/YGRW	100		150	58	20	1	100		
Trial avg.:	99	160	172	58	19	0	97		
Highest (H)-avg.:	103	168	186	61	24	2	100		
Lowest (L)-avg.:	96	156	150	55	16	0	93		
H-L avg. difference:	7	12	36	5	8	2	7		
** Lsd (.05):		NS	19	2	2	NS	NS		
# Min. TPG-value:		156	167	59			93		
## Max. TPG-value:					18	2			
+ Coef. of var.:		5	7	2	6		3		
No. of entries:	23	6	23	23	23	23	23		

Table 2d. Late maturity Roundup Ready™ corn hybrid test trial results. NE Research Farm, South Shore, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Due ad // Lub aid / Du 2 was an 4b an /05	Brand	Hybrid performance variable at harvest							
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand		
TWO-YEAR ENTRIES:									
WENSMAN/W 5212BT	95	205	191	60	17	0	99		
GOLD COUNTRY/94-01CB	94	200	189	60	17	0	100		
KRUGER/9496YGCB	94	199	198	61	16	0	99		
EPLEY/E1157	95	197	206	59	19	1	99		
DAIRYLAND/STEALTH-5497	97	197	197	61	17	0	100		
EPLEY/E14H07HX	100	196	193	59	20	0	98		
SEEDS 2000/2953BT	95	193	191	60	17	0	100		
ONE-YEAR ENTRIES:									
GOLD COUNTRY/100-05CB	100		198	61	19	0	100		
GOLD COUNTRY/100-06	100		194	62	19	1	99		
EPLEY/E1214	99		191	62	19	0	99		
WENSMAN/W 5303BT	99		190	60	18	0	100		
KRUGER/EXP0600	100		179	63	18	2	100		
Trial avg.:	97	198	193	61	18	0	99		
Highest (H)-avg.:	100	205	206	63	20	2	100		
Lowest (L)-avg.:	94	193	179	59	16	0	98		
H-L avg. difference:	6	12	27	3	3	2	3		
** Lsd (.05):		NS	11	NS	1	1	NS		
# Min. TPG-value:		193	195	59			98		
## Max. TPG-value:					17	1			
+ Coef. of var.:		5	3	4	2		1		
No. of entries:	12	7	12	12	12	12	12		
* Seeded May 5, 2005 at 28,750 seed	s ner acre								

Table 3a. Early maturity Non-Roundup Ready™ corn hybrid test trial results. Erland Weerts Farm, Bancroft, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Brand/Hybrid (By 2-year then '05	Brand		Hybrid	performa	nce variabl	e at harvest	
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand
TWO-YEAR ENTRIES:							
EPLEY/E1442	102	215	197	58	21	1	94
EPLEY/E1430YGCB	103	203	207	57	24	0	97
KRUGER/9407YGCB	105	199	194	60	21	0	99
<b>ONE-YEAR ENTRIES:</b>							
DAIRYLAND/STEALTH-5201	101		208	59	19	0	100
WENSMAN/W 5349BT	101		208	60	20	0	100
KRUGER/5504YGCB	104		196	59	21	0	99
KRUGER/5505YGCB	105		194	59	24	0	96
KRUGER/8602HX	102		190	57	20	0	98
KRUGER/EXP5602YGCB	102		182	60	18	0	97
EPLEY/E2490YGCB	110		170	56	21	0	100
Trial avg.:	104	206	195	58	21	0	98
Highest (H)-avg.:	110	215	208	60	24	1	100
Lowest (L)-avg.:	101	199	170	56	18	0	94
H-L avg. difference:	9	16	38	4	5	1	6
** Lsd (.05):		NS	22	2	1	NS	3
# Min. TPG-value:		199	186	58			97
## Max. TPG-value:					19	1	
+ Coef. of var.:		10	6	2	3		2
No. of entries:	10	3	10	10	10	10	10

Table 3b. Late maturity Non-Roundup Ready™ corn hybrid test trial results. Erland Weerts Farm, Bancroft, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

 $\#\!\#\,Max.\,TPG\text{-value}\!=\!maximum\,value\,required$  for the top performance group.

Brond/Unbrid / Dr. 2. year than '05	Brand	Test trial variable at harvest						
vields)	Rel. Mat.	2-year Yield	'05 Yield	'05 Bu.	'05 Grain	05 Lodging	05 Pct.*	
		bu/a	bu/a	Wt. Ib	Moist. %	%	Stand	
TWO-YEAR ENTRIES:	•	•			•			
DEKALB/DKC50-20RR2YGCB	100	211	221	61	19	0	99	
INTEGRA/INT 6395RR	94	208	209	60	17	1	100	
WENSMAN/W 6212RR	90	196	197	60	18	2	98	
HEINE/H630RR	95	196	192	61	17	0	99	
KRUGER/1500RR	100	191	200	62	18	0	100	
NUTECH/NT-3595 RR	95	191	191	61	17	0	94	
KAYSTAR/KX-5900RR	99	191	187	58	19	0	99	
EPLEY/E1165RR	95	188	187	60	17	0	99	
INTEGRA/INT 6193RRYG	92	186	185	60	17	0	90	
DEKALB/DKC47-10RR2YGCB	97	184	195	61	17	0	100	
DAIRYLAND/STEALTH-6497	97	183	168	60	18	0	96	
KAYSTAR/KX-5150RR	94	181	192	61	17	0	99	
WENSMAN/W 6117BTRR	91	180	192	62	18	0	98	
HEINE/H723RR/YGCB	100	166	166	60	19	0	94	
ONE-YEAR ENTRIES:								
CHANNEL/4S502	97		216	63	19	0	99	
WENSMAN/W 6266BTRR	96		213	62	19	0	100	
DEKALB/DKC48-53RR2YGCB	98		202	60	19	0	99	
KAYSTAR/KX-5800RR	97		201	60	20	1	100	
KRUGER/2697RR/YGCB	97		201	61	19	0	96	
CHANNEL/EXP X51001RB	100		198	61	20	0	99	
WENSMAN/W 6194BTRR	93		197	61	19	0	95	
HEINE/H627RR/YGCB	91		196	61	17	0	100	
KRUGER/9496RR	94		194	61	18	1	99	
GOLD COUNTRY/94-01RR	94		192	61	17	0	100	
INTEGRA/INT 63F90RRYG	90		192	62	18	0	99	
INTEGRA/INT 6696RR	97		191	62	19	1	98	
INTEGRA/INT 6602RRYG	100		189	58	18	0	100	
NUTECH/NT-5191+RR/YGCB	91		188	61	17	0	95	
NUTECH/NT-3898 RR	98		188	59	20	0	95	
NUTECH/NT-7595 RR	95		186	60	18	1	98	
KRUGER/4501RR/YGRW	100		183	60	19	0	100	
HEINE/H710RR	100		180	57	21	1	99	
NUTECH/NT-3999+RR	99		178	61	20	0	96	
EPLEY/E1445RR	100		177	59	22	0	95	
AGVENTURE/EXP5612RR	95		174	59	17	0	96	

Table 3c. Early maturity Roundup Ready<sup>™</sup> corn hybrid test trial results. Erland Weerts Farm, Bancroft, SD, 2004-2005.

Table 3c. Early maturity Roundup Ready™ corn hybrid test trial results. Erland Weerts Farm, Bancroft, SD (continued).

Prond/Unbrid (Py 2 year than '05	Brond	Test trial variable at harvest							
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand		
HEINE/H724RR/YGCB	100		174	56	21	0	100		
NUTECH/NT-3696 RR	95		172	59	17	0	96		
NUTECH/NT-3999 RR	99		170	61	20	0	94		
EPLEY/E1145RR	90		158	61	16	0	95		
Trial avg.:	96	189	190	60	18	0	98		
Highest (H)-avg.:	100	211	221	63	22	2	100		
Lowest (L)-avg.:	90	166	158	56	16	0	90		
H-L avg. difference:	10	45	63	6	6	2	10		
** Lsd (.05):		23	22	2	1	1	4		
# Min. TPG-value:		188	199	61			96		
## Max. TPG-value:					17	1			
+ Coef. of var.:		11	7	2	4		2		
No. of entries:	39	14	39	39	39	39	39		

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

+ Coef.of Variation = a measure of trial experimental error, 15% or less is best.

# ARCHIVE

Prond/Unbrid (Py 2 year than '05	Brand	Test trial variable at harvest							
yields)	Rel. Mat	2-year Vield bu/a	ʻ05 Yield	'05 Bu. ₩t. Ib	'05 Grain Moist %	05 Lodging	05 Pct.* Stand		
TWO-VEAR ENTRIES:	mat	riciu bu/a	DU/a	VVI. 10	IVI0131. /0	/0	Stanu		
HEINE/H750BB/YGCB	105	213	214	58	25		98		
SEEDS 2000/3122BBBT	103	206	199	59	23	0	99		
CHANNEL /7135BB	102	200	197	57	21	1	99		
KBUGER/9203BB/VGCB	102	200	209	58	21	0	99		
	103	198	205	60	19	0	99		
WENSMAN/W 6315BTBB	102	195	200	58	21	0	96		
EPI EV/E1475BB	101	192	195	61	19	1	98		
EPLEY/E1465BB	103	174	168	61	19	1	91		
ONE-YEAR ENTRIES	100	174	100	01	10	•	51		
KBUGEB/3503TS	103	•	211	61	19	0	94		
KBUGER/EXP2605BB/YGCB	105	•	211	58	25	0	98		
NUTECH/NT-5101 BB/YGCB	100	•	209	59	20	0	95		
INTEGRA/INT 6603BBYG	103	•	200	60	25	0	98		
CHANNEL/EXP X51021BB	100		203	60	20	0	99		
NUTECH/NT-5005 BB/YGCB	102		203	59	20	0	97		
WENSMAN/W 6318BTBB	103	•	200	58	26	0	95		
NUTECH/NT-3505 BB	105	•	197	60	20	0	98		
NUTECH/NT-5303 BB/YGCB	103	•	195	59	24	0	99		
NUTECH/NT-3505+BB	102		194	61	- 22	0	96		
KBUGEB/2506BB/YGCB	106		194	60	23	0	94		
EPLEY/E12B45YGCB	102		193	58	22	0	98		
EPLEY/E15B45YGCB	103		192	60	20	0	99		
DFKALB/DKC55-82 (BB2)	105		191	59	22	1	99		
AGVENTURE/AV6231R2CB	102		185	61	19	0	100		
GOLD COUNTRY/103-02CBR	103		182	58	25	0	96		
HEINE/H746RR	104		181	57	22	0	94		
EPLEY/E14R95YGCB	106		177	59	22	0	97		
SEEDS 2000/EXP3123RR	102		157	57	21	1	93		
Trial avg.:	103	198	195	59	22	0	97		
Highest (H)-avg.:	106	213	214	61	26	1	100		
Lowest (L)-avg.:	101	174	157	57	19	0	91		
H-L avg. difference:	5	39	57	5	7	1	8		
** Lsd (.05):		20	21	1	2	NS	4		
# Min. TPG-value:		193	193	60			96		
## Max. TPG-value:					21	1			
+ Coef. of var.:		10	7	2	4		3		
No. of entries:	27	8	27	27	27	27	27		

Table 3d. Late maturity Roundup Ready™ corn hybrid test trial results. Erland Weerts Farm, Bancroft, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

	Brand	Hybrid performance variable at harvest							
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain	05 Lodging %	05 Pct.* Stand		
TWO-YEAR ENTRIES:									
SEEDS 2000/2953BT	95	218	237	60	18	0	100		
JUNG/6432YGCB	95	217	236	61	18	0	99		
KRUGER/9496YGCB	94	214	232	61	18	0	100		
EPLEY/E14H07HX	100	212	234	59	20	0	93		
WENSMAN/W 5212BT	95	212	227	61	17	0	97		
DAIRYLAND/STEALTH-5497	97	205	223	61	18	0	95		
EPLEY/E1157	95	200	228	59	18	5	96		
ONE-YEAR ENTRIES:									
GOLD COUNTRY/100-05CB	100		246	61	20	0	96		
WENSMAN/W 5303BT	99		241	61	18	1	99		
GOLD COUNTRY/94-01CB	94		240	61	18	0	98		
GOLD COUNTRY/100-06	100		221	62	18	3	95		
KRUGER/EXP0600	100		217	61	19	0	100		
EPLEY/E1214	99		215	60	18	3	96		
Trial avg.:	97	211	231	60	18	1	97		
Highest (H)-avg.:	100	218	246	62	20	5	100		
Lowest (L)-avg.:	94	200	215	59	17	0	93		
H-L avg. difference:	6	18	31	3	2	5	6		
** Lsd (.05):		NS	16	1	1	2	4		
# Min. TPG-value:		200	230	61			96		
## Max. TPG-value:					18	2			
+ Coef. of var.:		4	4	1	3		2		
No. of entries:	13	7	13	13	13	13	13		

Fable 4a. Early maturity Non-Roundup Ready™ corn hybrid test trial results. SDSU Plant Science Researc	1
Farm, Brookings, SD, 2004-2005.	

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Prond/Unitarial / Dr. 2 moor them '05	Brand		Hybrid	performa	nce variable	at harvest	
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand
TWO-YEAR ENTRIES:							
DAIRYLAND/STEALTH-5104	104	220	247	60	21	0	98
JUNG/6545YGCB	105	218	233	60	21	0	96
EPLEY/E2490YGCB	110	214	238	59	22	0	99
KRUGER/9407YGCB	105	199	228	61	21	0	98
ONE-YEAR ENTRIES:			-				
EPLEY/E1430YGCB	103		250	58	21	1	94
KRUGER/EXP5405YGCB	105		249	59	21	0	98
KRUGER/8602HX	102		241	58	20	0	98
KRUGER/EXP5606YGCB	106		241	59	22	0	98
DAIRYLAND/STEALTH-5201	101		238	60	20	1	96
KRUGER/EXP0605B	105		238	59	20	1	96
DAIRYLAND/STEALTH-5204	104		237	59	21	0	93
KRUGER/5504YGCB	104		237	60	21	0	97
KRUGER/EXP0605A	105		236	57	20	1	99
KRUGER/EXP8607HX	107		236	57	23	0	99
WENSMAN/W 5349BT	101		236	60	19	0	99
EPLEY/E1442	102		234	59	20	3	97
KRUGER/5505YGCB	105	•	227	59	21	1	98
KRUGER/EXP5602YGCB	102		227	61	19	0	99
KRUGER/EXP0603A	103		227	61	20	2	99
KRUGER/EXP0603B	103		221	58	18	1	96
KRUGER/EXP8605HX	105		215	58	21	0	92
Trial avg.:	104	213	235	59	20	0	97
Highest (H)-avg.:	110	220	250	61	23	3	99
Lowest (L)-avg.:	101	199	215	57	18	0	92
H-L avg. difference:	9	21	35	4	5	3	7
** Lsd (.05):		NS	16	2	1	1	NS
# Min. TPG-value:		199	234	59			92
## Max. TPG-value:					19	1	
+ Coef. of var.:		8	4	2	3		3
No. of entries:	21	4	21	21	21	21	21

Table 4b. Late maturity Non-Roundup Ready<sup>™</sup> corn hybrid test trial results. SDSU Plant Science Research Farm, Brookings, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Prond/Hubrid (By 2 year than '0E	Brand		Test tr	ial variabl	e at harv	est	
yields)	Rel.	2-year Yield	'05 Yield	'05 Bu.	<u> </u>	05 Lod-	05 Pct.*
	iviat.	bu/a	bu/a	Wt. Ib	Grain	ging %	Stand
TWO-YEAR ENTRIES:				•	•	•	
KRUGER/1500RR	100	227	232	61	15	5	100
DEKALB/DKC50-20RR2YGCB	100	225	242	62	17	0	98
DEKALB/DKC47-10RR2YGCB	97	221	218	63	16	1	99
WENSMAN/W 6212RR	90	219	221	61	15	1	100
SEEDS 2000/2953RR	95	217	221	61	16	3	97
KAYSTAR/KX-5900RR	99	215	225	59	19	1	96
DAIRYLAND/STEALTH-6497	97	214	219	61	15	2	97
EPLEY/E1165RR	95	213	214	60	15	1	94
NUTECH/NT-3595 RR	95	210	207	61	16	3	94
INTEGRA/INT 6395RR	94	209	207	62	15	1	98
KALTENBERG/K4666RR	96	201	195	61	16	2	93
ONE-YEAR ENTRIES:	.	.		.	.	.	
CHANNEL/4S502	97		244	61	17	1	99
WENSMAN/W 6266BTRR	96		240	63	17	0	96
INTEGRA/INT 6602RRYG	100		237	58	19	0	100
KRUGER/2697RR/YGCB	97		234	61	17	0	96
DEKALB/DKC48-53RR2YGCB	98		231	62	18	1	99
WENSMAN/W 6117BTRR	91		230	62	16	1	96
KAYSTAR/KX-5800RR	97	· ·	227	60	18	3	98
NUTECH/NT-7595 RR	95		225	60	16	1	99
NUTECH/NT-3898 RR	98		222	62	18	5	96
NUTECH/NT-3999+RR	99		220	63	18	2	95
EPLEY/E1445RR	100		220	60	19	2	95
WENSMAN/W 6194BTRR	93		219	62	17	0	96
CHANNEL/EXP X51001RB	100		219	63	19	0	99
KRUGER/9496RR	94		217	61	15	2	96
NUTECH/NT-3999 RR	99		215	62	18	1	90
KRUGER/4501RR/YGRW	100		212	62	17	1	94
GOLD COUNTRY/94-01RR	94		210	61	16	2	100
NUTECH/NT-3696 RR	95		202	60	15	1	95
INTEGRA/INT 6696RR	97		202	62	17	1	98
NUTECH/NT-5191+RR/YGCB	91		200	62	17	0	91
EPLEY/E1145RR	90		185	62	15	4	96
Trial avg.:	96	216	219	61	17	1	97
Highest (H)-avg.:	100	227	244	63	19	5	100
Lowest (L)-avg.:	90	201	185	58	15	0	90
H-L avg. difference:	10	26	59	5	4	5	10
** Lsd (.05):		NS	14	2	1	2	5
# Min. TPG-value:		201	230	61			95
## Max. TPG-value:					16	2	
+ Coef. of var.:		4	4	2	3	_	3
No of entries:	32	11	32	32	32	32	32
	52	1 11	1 32	U U L	02	02	02

Table 4c. Early maturity Roundup Ready™ corn hybrid test trial results. SDSU Plant Science Research Farm, Brookings, SD, 2004-2005.

\* Seeded May 6, 2005 at 28,750 seeds per acre.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

# Table 4d. Late maturity Roundup Ready™ corn hybrid test trial results. SDSU Plant Science Research Farm, Brookings, SD, 2004-2005.

Brand/Hybrid (By 2 year than '05	Brand			Test trial va	riable at harv	vest	
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand
TWO-YEAR ENTRIES:							
DEKALB/DKC52-47RR2YGCB	102	230	240	59	17	0	97
CHANNEL/7135RB	102	219	231	59	19	0	100
KRUGER/9203RR/YGCB	103	218	234	58	19	0	99
WENSMAN/W 6315BTRR	101	216	230	59	19	0	100
SEEDS 2000/3122RRBT	102	215	232	58	19	0	98
KALTENBERG/K5244RRBT	102	214	220	59	20	0	92
GOLD COUNTRY/1016RRBT	104	213	231	59	18	1	97
KALTENBERG/K5717RRBT	105	203	212	57	21	0	98
EPLEY/E1475RR	103	198	213	60	17	1	99
EPLEY/E1465RR	103	192	199	59	18	1	93
ONE-YEAR ENTRIES:							
DEKALB/DKC55-82 (RR2)	105		242	61	20	0	96
INTEGRA/INT 6603RRYG	103		240	60	21	0	99
GOLD COUNTRY/105-04CBR	106		239	60	21	0	96
NUTECH/NT-5005 RR/YGCB	105		237	59	21	0	98
NUTECH/NT-3505 RR	105		234	61	21	1	97
KRUGER/EXP2605RR/YGCB	105		234	59	20	0	96
EPLEY/E14R95YGCB	106		234	59	21	1	97
EPLEY/E24R90YGCB	110		232	59	21	0	100
NUTECH/NT-5101 RR/YGCB	101	· ·	231	58	19	0	100
NUTECH/NT-5507+RR/YGCB	105		229	57	21	0	100
KRUGER/3503TS	103		226	60	18	0	93
EPLEY/E12R45YGCB	102	. /	226	58	19	0	93
GOLD COUNTRY/103-02CBR	103		226	61	22	0	97
NUTECH/NT-3505+RR	102		225	61	20	0	99
NUTECH/NT-5303 RR/YGCB	103		225	60	23	0	98
NUTECH/NT-3408 RR	105		225	59	21	1	92
WENSMAN/W 6318BTRR	103		225	59	21	0	95
KRUGER/2506RR/YGCB	106		222	60	21	0	95
CHANNEL/EXP X51021RB	102		219	59	20	0	100
EPLEY/E15R45YGCB	103		212	60	19	1	99
SEEDS 2000/EXP3123RR	102	•	209	58	19	0	97
Trial avg.:	104	212	227	59	20	0	97
Highest (H)-avg.:	110	230	242	61	23	1	100
Lowest (L)-avg.:	101	192	199	57	17	0	92
H-L avg. difference:	9	38	43	5	6	1	8
** Lsd (.05):		14	13	2	1	1	4
# Min. TPG-value:		216	229	59			96
## Max. TPG-value:					18	1	
+ Coef. of var.:		3	3	2	4		2
No. of entries:	31	10	31	31	31	31	31

\* Seeded May 6, 2005 at 28,750 seeds per acre.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Brand (Usebrid (By 2 years than 'OF	Brand		Hybrid p	erformance	e variabl	e at harvest	
yields)	Rel.	2-year Yield	'05 Yield	'05 Bu.	<b>'05</b>	05 Lodging	05 Pct.*
-	Mat.	bu/a	bu/a	Wt. Ib	Grain	%	Stand
TWO-YEAR ENTRIES:	•		•	•			•
DEKALB/DKC52-45 (YGCB)	102	134	132	57	15	1	94
DEKALB/DKC54-51 (YGCB)	104	128	124	59	15	3	98
DAIRYLAND/STEALTH-5104	104	120	110	59	15	0	99
KRUGER/9407YGCB	105	109	101	59	15	5	99
ONE-YEAR ENTRIES:			•				•
EPLEY/E14H07HX	100		130	57	15	0	96
DEKALB/DKC53-11 (YGCB)	103		126	62	15	7	99
EPLEY/E1442	102		124	59	15	0	95
KRUGER/EXP0605B	105		121	59	16	1	99
KRUGER/EXP0605A	105		118	56	14	0	98
WENSMAN/W 5303BT	99		117	57	14	1	99
DAIRYLAND/STEALTH-5201	101		116	60	15	1	95
EPLEY/E1430YGCB	103		114	59	15	0	99
WENSMAN/W 5349BT	101		114	61	15	1	98
KRUGER/EXP0603B	103		113	57	15	1	96
KRUGER/EXP5405YGCB	105		109	58	15	1	98
KRUGER/5505YGCB	105		104	58	15	1	98
DAIRYLAND/STEALTH-5204	104		103	59	15	0	97
KRUGER/8602HX	102		101	57	15	0	99
KRUGER/EXP0603A	103		100	58	15	3	96
KRUGER/5504YGCB	104		97	59	15	0	99
KRUGER/EXP8605HX	105		96	57	15	0	90
Trial avg.:	103	123	113	58	15	1	97
Highest (H)-avg.:	105	134	132	62	16	7	99
Lowest (L)-avg.:	99	109	96	56	14	0	90
H-L avg. difference:	6	25	36	6	2	7	9
** Lsd (.05):		18	21	2	0	3	NS
# Min. TPG-value:		116	111	60			90
## Max. TPG-value:					14	3	
+ Coef. of var.:		15	12	2	2		3
No. of entries:	21	4	21	21	21	21	21

# Table 5a. Early maturity Non-Roundup Ready<sup>™</sup> corn hybrid test trial results. Richard Luebke Farm, Delmont, SD, 2004-2005.

\* Seeded May 4, 2005 at 28,750 seeds per acre.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Drand/Ultrhaid (Dr. 2 trans than (05	Brand		Hybrid pe	erformance	e variable at	harvest	
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand
TWO-YEAR ENTRIES:							
WENSMAN/W 5437BT	110	137	142	59	15	1	95
WENSMAN/W 5417BT	107	122	113	59	15	1	91
EPLEY/E2490YGCB	110	116	108	58	15	1	100
KRUGER/9212YGCB	112	113	106	59	15	1	98
KRUGER/9111YGCB	111	98	84	58	15	1	100
ONE-YEAR ENTRIES:							
KRUGER/EXP0608A	108		128	60	15	0	99
GOLD COUNTRY/110-07CB	110		124	59	15	0	94
KRUGER/9310YGCB	110		122	59	15	1	100
KRUGER/0508	108		117	60	15	1	100
KRUGER/5410YGCB	110		117	60	15	0	99
KRUGER/9910YGCB	108		116	57	14	3	99
KRUGER/8609HX	109		114	56	14	2	91
DAIRYLAND/STEALTH-5007	107		109	56	14	3	96
KRUGER/EXP5606YGCB	106		108	58	15	2	99
KRUGER/EXP8607HX	107		99	58	15	1	98
KRUGER/EXP5608YGCB	108		99	61	16	3	100
KRUGER/EXP0610	110		98	60	15	1	97
EPLEY/E3670YGCB	116	·	97	59	15	1	95
KRUGER/EXP5609YGCB	109		96	56	15	1	99
KRUGER/EXP5510YGCB	110		91	59	15	1	94
Trial avg.:	109	117	109	59	15	1	97
Highest (H)-avg.:	116	137	142	61	16	3	100
Lowest (L)-avg.:	106	98	84	56	14	0	91
H-L avg. difference:	10	39	58	5	2	3	9
** Lsd (.05):		NS	17	3	0	NS	4
# Min. TPG-value:		98	125	58			96
## Max. TPG-value:					14	3	
+ Coef. of var.:		15	10	3	2		3
No. of entries:	20	5	20	20	20	20	20

Table 5b. Late maturity Non-Roundup Ready™ corn hybrid test trial results. Richard Luebke Farm, Delmont, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

#### Table 5c. Early maturity Roundup Ready™ corn hybrid test trial results. Richard Luebke Farm, Delmont, SD, 2004-2005.

	Brand			Test trial var	able at harves	st	
Brand/Hybrid (By 2-year then '05 yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand
TWO-YEAR ENTRIES:							
DEKALB/DKC48-52 (RR2)	98	123	119	59	14	1	95
DEKALB/DKC50-20RR2YGCB	100	122	126	59	15	1	98
EPLEY/E1475RR	103	120	119	61	15	0	96
CHANNEL/7135RB	102	118	113	59	14	1	98
EPLEY/E1465RR	103	117	118	61	15	2	91
KALTENBERG/K5717RRBT	105	117	113	59	15	1	95
WENSMAN/W 6315BTRR	101	115	120	58	14	1	99
KRUGER/9203RR/YGCB	103	114	126	57	14	1	96
HEINE/H723RR/YGCB	100	111	99	59	15	0	95
HEINE/H750RR/YGCB	105	109	103	60	15	0	100
HEINE/H728RR/YGCB	100	101	104	61	16	0	97
ONE-YEAR ENTRIES:							
KRUGER/3503TS	103		132	62	15	0	98
DEKALB/DKC52-47RR2YGCB	102		130	59	15	0	99
NUTECH/NT-5507+RR/YGCB	105		119	59	15	0	99
KRUGER/1500RR	100		119	60	15	3	96
EPLEY/E1165RR	95		119	59	15	0	95
HEINE/H724RR/YGCB	100		118	59	15	2	100
NUTECH/NT-5507 RR/YGCB	105		116	59	16	0	98
EPLEY/E15R45YGCB	103		115	62	15	1	94
EPLEY/E12R45YGCB	102		113	58	14	0	97
KRUGER/4501RR/YGRW	100		111	62	15	1	94
KRUGER/EXP2605RR/YGCB	105		111	60	15	1	95
CHANNEL/EXP X51021RB	102		109	59	15	0	95
NUTECH/NT-3505 RR	105		104	61	16	2	97
WENSMAN/W 6318BTRR	103		104	59	15	1	96
HEINE/H746RR	104		104	60	15	1	90
HEINE/H710RR	100		103	60	15	0	99
DEKALB/DKC55-82 (RR2)	105		102	60	15	0	99
NUTECH/NT-3408 RR	105		94	60	15	0	95
INTEGRA/INT 6603RRYG	103		93	60	15	0	100
INTEGRA/INT 6506RRYG	105		88	61	16	0	94
NUTECH/NT-5303 RR/YGCB	103		87	62	17	0	95
GOLD COUNTRY/103-02CBR	103		85	61	16	1	94
EPLEY/E1445RR	100		74	60	16	1	96
Trial avg.:	102	115	109	60	15	1	96
Highest (H)-avg.:	105	123	132	62	17	3	100
Lowest (L)-avg.:	95	101	74	57	14	0	90
H-L avg. difference:	10	22	58	5	3	3	10
** Lsd (.05):		NS	19	2	1	NS	4
# Min. TPG-value:		101	113	60			96
## Max. TPG-value:					15	3	
+ Coef. of var.:		12	11	2	3		3
No. of entries:	34	11	34	34	34	34	34

\* Seeded May 4, 2005 at 28,750 seeds per acre.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

10  Me  Ju,  Late maturity multium meaus   for a multium multium lest that results, memory a multium, permutit, sp, 2007-200	Table	5d. Late	e maturity	/ Roundup	Readv	™ corn hvt	orid te	st trial r	esults.	Richard	Luebke	Farm.	Delmont.	SD,	2004-200
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Prond/Unbrid (Py 2 year than '05	Brand			Test trial vari	able at harvest		
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	ʻ05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand
TWO-YEAR ENTRIES:							
DEKALB/DKC58-80RR2YGCB	108	119	104	57	14	1	92
WENSMAN/W 6422BTRR	107	119	104	58	15	0	94
DAIRYLAND/STEALTH-1606	107	119	91	58	15	1	98
KRUGER/9115RR/YGCB	115	113	93	61	15	1	93
KRUGER/9308RR/YGCB	111	109	103	56	14	3	95
KRUGER/9212RR/YGCB	112	97	66	59	15	0	95
ONE-YEAR ENTRIES:			•			•	
DEKALB/DKC61-72 (RR2)	111		111	60	15	3	92
EPLEY/E14R95YGCB	106		109	59	15	1	88
KRUGER/9313RR/YGCB	113		106	57	15	2	95
KRUGER/2410RR/YGCB	110		104	60	15	1	96
GOLD COUNTRY/105-04CBR	106		103	60	15	1	99
EPLEY/E24R90YGCB	110		102	58	15	1	100
CHANNEL/7R432	110	•	101	61	15	1	94
INTEGRA/INT 6609RRYG	108		101	59	15	2	99
KRUGER/2506RR/YGCB	106	•	94	61	15	0	96
CHANNEL/EXP X51101RB	110		91	59	15	0	100
EPLEY/E36R65YGCB	115	•	62	57	17	1	93
Trial avg.:	110	113	97	59	15	1	95
Highest (H)-avg.:	115	119	111	61	17	3	100
Lowest (L)-avg.:	106	97	62	56	14	0	88
H-L avg. difference:	9	22	49	5	3	3	12
** Lsd (.05):		NS	28	2	1	NS	7
# Min. TPG-value:		97	83	59			93
## Max. TPG-value:					15	3	
+ Coef. of var.:		19	17	2	4		4
No. of entries:	17	6	17	17	17	17	17

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Drand/lladaid (Dr. 2) are an theory (05	Duand		Hybrid	d performanc	e variable at	harvest	
yields)	Brand Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand
TWO-YEAR ENTRIES:							
GOLD COUNTRY/110-07CB	110	236	213	57	16	1	93
HEINE/H820YGCB	109	228	205	58	16	1	98
WENSMAN/W 5437BT	110	224	205	56	15	0	93
HEINE/H728YGCB	103	220	204	58	15	0	99
WENSMAN/W 5417BT	107	215	197	58	15	0	98
DEKALB/DKC54-51 (YGCB)	104	213	196	59	15	3	97
ONE-YEAR ENTRIES:				•			
HEINE/H818YGCB	109		222	59	15	1	94
KRUGER/EXP0608A	108		220	59	16	1	99
KRUGER/EXP0610	110		215	58	15	5	100
DEKALB/DKC53-11 (YGCB)	103		214	59	16	1	99
KRUGER/9310YGCB	110		209	57	15	1	97
KRUGER/9910YGCB	108		205	57	15	0	100
KRUGER/8609HX	109		202	58	16	0	97
KRUGER/EXP5609YGCB	109		202	59	16	1	98
KRUGER/EXP5608YGCB	108		201	59	16	1	99
DAIRYLAND/STEALTH-5007	107		200	56	15	1	100
KRUGER/9407YGCB	105		200	60	15	2	99
KRUGER/5410YGCB	110	-	200	59	15	0	98
HEINE/H750YGCB	105		200	58	15	1	99
KRUGER/EXP5510YGCB	110		197	58	16	1	100
KRUGER/0508	108		193	58	15	0	99
Trial avg.:	108	223	205	58	15	1	98
Highest (H)-avg.:	110	236	222	60	16	5	100
Lowest (L)-avg.:	103	213	193	56	15	0	93
H-L avg. difference:	7	23	29	4	1	5	7
** Lsd (.05):		12	19	2	NS	2	4
# Min. TPG-value:		224	203	58			96
## Max. TPG-value:					16	2	
+ Coef. of var.:		5	6	2	2		2
No. of entries:	21	6	21	21	21	21	21

Table 6a. Early maturity Non-Roundup Ready<sup>™</sup> corn hybrid test trial results. SE Research Farm, Beresford, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Brand/Unbrid /Br 2 waar than 'OF	Brand		Hybrid	performa	nce variable	at harvest	
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand
TWO-YEAR ENTRIES:							
HEINE/H8600YGCB	112	230	198	60	16	2	99
KRUGER/9115YGCB	115	228	201	60	16	0	100
KRUGER/9111YGCB	111	222	200	57	15	0	99
KAYSTAR/KX-8615BT	112	222	196	58	16	1	98
DAIRYLAND/STEALTH-5611	112	219	183	59	15	1	96
KRUGER/9212YGCB	112	219	181	58	15	0	98
KRUGER/5416YGCB	115	216	195	59	16	1	97
KRUGER/5514YGCB	114	212	189	58	16	1	98
ONE-YEAR ENTRIES:							
KRUGER/EXP8616HX	116		213	59	17	0	97
DEKALB/DKC62-31 (YGCB)	112		207	60	18	0	99
KRUGER/EXP0614B	114		201	60	17	0	97
DEKALB/DKC64-81 (YGCB)	114		195	59	16	2	97
KRUGER/EXP5613YGCB	113		194	58	17	0	100
DAIRYLAND/STEALTH-5010	112		192	61	16	0	100
KRUGER/9313YGCB	113		191	58	15	1	100
KRUGER/8414HX	114		191	59	16	0	98
KRUGER/EXP8614HX	114		191	59	17	0	95
HEINE/H851YGCB	112		188	59	16	0	98
KRUGER/EXP0614A	114		186	59	16	0	100
KRUGER/EXP0617A	116		186	60	16	1	93
KRUGER/5517YGCB	116		179	57	17	6	98
KRUGER/5415YGCB	114		161	58	17	2	93
Frial avg.:	114	221	192	59	16	1	98
Highest (H)-avg.:	116	230	213	61	18	6	100
Lowest (L)-avg.:	111	212	161	57	15	0	93
H-L avg. difference:	5	18	52	4	2	6	7
** Lsd (.05):		NS	20	2	1	2	NS
# Min. TPG-value:		212	193	59			93
## Max. TPG-value:					16	2	
+ Coef. of var.:		5	6	2	4		3
No. of entries:	22	8	22	22	22	22	22

Table 6b. Late maturity Non-Roundup Ready™ corn hybrid test trial results. SE Research Farm, Beresford, SD, 2004-2005.

 $^{\ast}$  Seeded May 3, 2005 at 28,750 seeds per acre.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Brain of Strike         Rel. Mat.         2-year Yield bu/a         '05 Yield bu/a         '05 Grain Moist         05 Lodging %         05 Pct* Stand           TWO-YEAR ENTRIES:         .	Brand/Hybrid (By 2-year than '05	Brand		Tes	t trial vari	able at harv	vest	
Imat         Yield bu/a         bu/a         Wt. b         Moist. %         %         Stand           TWO-YEAR ENTRIES:         .	yields)	Rel.	2-year	'05 Yield	'05 Bu.	'05 Grain	05 Lodging	05 Pct.*
TWO-YEAR ENTRIES:         .	• •	Mat.	Yield bu/a	bu/a	Wt. Ib	Moist. %	%	Stand
DEKALB/DKC60-19RR2YGCB         110         223         203         60         16         0         94           HEINE/H750RR/YGCB         105         218         198         59         16         1         99           DAIRYLAND/STEALTH-1606         107         216         192         58         15         1         99           WENSMAN/W 6422BTRR         107         210         193         59         16         0         96           DEKALB/DKC58-80RR2YGCB         100         200         191         60         17         1         94           ONE-YEAR ENTRIES:         . <td>TWO-YEAR ENTRIES:</td> <td></td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td>	TWO-YEAR ENTRIES:		•	•	•	•	•	•
HEINE/H750RR/Y6CB         105         218         198         59         16         1         99           DAIRYLAND/STEALTH-1606         107         216         192         58         15         1         99           DAIRYLAND/STEALTH-1606         107         210         193         59         16         0         96           DEKALB/DKC58-80RR2YGCB         100         200         191         60         17         1         94           ONE-YEAR ENTRIES:         .	DEKALB/DKC60-19RR2YGCB	110	223	203	60	16	0	94
DAIRYLAND/STEALTH-1606         107         216         192         58         15         1         99           WENSMAN/W 6422BTRR         107         210         193         59         16         0         96           DEKALB/DKC58-80RR2YGCB         108         208         191         58         15         0         96           HEINE/H728RR/YGCB         100         200         191         60         17         1         94           OME-YEAR ENTRIES:         .	HEINE/H750RR/YGCB	105	218	198	59	16	1	99
WENSMAN/W 6422BTRR         107         210         193         59         16         0         96           DEKALB/DKC58-80RR2YGCB         108         208         191         58         15         0         96           HEINE/H728RRYGCB         100         200         191         60         17         1         94           ONE-YEAR ENTRIES:         .	DAIRYLAND/STEALTH-1606	107	216	192	58	15	1	99
DEKALB/DKC58-80RR2YGCB         108         208         191         58         15         0         96           HEINE/H728RR/YGCB         100         200         191         60         17         1         94           ONE-YEAR ENTRIES:         .	WENSMAN/W 6422BTRR	107	210	193	59	16	0	96
HEINE/H728RR/YGCB         100         200         191         60         17         1         94           ONE-YEAR ENTRIES:         .	DEKALB/DKC58-80RR2YGCB	108	208	191	58	15	0	96
ONE-YEAR ENTRIES:         .	HEINE/H728RR/YGCB	100	200	191	60	17	1	94
DEKALB/DKC52-47RR2YGCB         102         .         209         58         15         1         97           NUTECH/NT-5507 RR/YGCB         105         .         203         59         16         0         99           HEINE/H748RR/YGCB         105         .         198         60         15         0         98           DEKALB/DKC55-82 (RR2)         105         .         196         60         16         0         99           NUTECH/NT-3505 RR         105         .         194         60         16         0         99           INTEGRA/INT 6609RRYG         108         .         193         59         15         3         96           KRUGER/2410RR/YGCB         110         .         191         58         15         1         93           KRUGER/2506RR/YGCB         106         .         190         60         16         0         100           KALTENBERG/K5717RRBT         105         .         189         58         15         0         96           CHANNEL/FR432         110         .         188         59         15         2         98           CHANNEL/FR432         110         .	ONE-YEAR ENTRIES:							
NUTECH/NT-5507 RR/YGCB         105         .         203         59         16         0         99           HEINE/H748RR/YGCB         105         .         198         60         15         0         98           DEKALB/DKC55-82 (RR2)         105         .         196         60         16         0         95           NUTECH/NT-3505 RR         105         .         194         60         16         0         99           INTEGRA/INT 6609RRYG         108         .         193         59         15         3         96           KRUGER/2410R/YGCB         110         .         192         60         16         0         98           WENSMAN/W 6315BTRR         101         .         191         58         15         1         93           KRUGER/2506RR/YGCB         106         .         190         60         16         0         100           KALTENBERG/K5717RRBT         105         .         189         58         15         0         96           CHANNEL/ZY X51101RB         110         .         188         59         15         0         94           KRUGER/EXP2605RR/YGCB         105         . </td <td>DEKALB/DKC52-47RR2YGCB</td> <td>102</td> <td></td> <td>209</td> <td>58</td> <td>15</td> <td>1</td> <td>97</td>	DEKALB/DKC52-47RR2YGCB	102		209	58	15	1	97
HEINE/H748RR/YGCB       105       .       198       60       15       0       98         DEKALB/DKC55-82 (RR2)       105       .       196       60       16       0       95         NUTECH/NT-3505 RR       105       .       194       60       16       0       99         INTEGRA/INT 6609RRYG       108       .       193       59       15       3       96         KRUGER/2410RR/YGCB       110       .       192       60       16       0       98         WENSMAN/W 6315BTRR       101       .       191       58       15       1       93         KRUGER/2506RR/YGCB       106       .       190       60       16       0       100         KALTENBERG/K5717RRBT       105       .       189       58       15       0       96         CHANNEL/ZXP X51101RB       110       .       188       59       15       2       98         CHANNEL/R432       108       .       187       58       15       0       94         KRUGER/K6744RRBT       108       .       187       59       16       1       97         NUTECH/NT-5212 RR/YGCB       100	NUTECH/NT-5507 RR/YGCB	105		203	59	16	0	99
DEKALB/DKC55-82 (RR2)         105         .         196         60         16         0         95           NUTECH/NT-3505 RR         105         .         194         60         16         0         99           INTEGRA/INT 6609RYG         108         .         193         59         15         3         96           KRUGER/2410RR/YGCB         110         .         192         60         16         0         98           WENSMAN/W 6315BTRR         101         .         191         58         15         1         93           KRUGER/2506RR/YGCB         106         .         190         60         16         0         100           KALTENBERG/K5717RRBT         105         .         189         58         15         0         96           CHANNEL/ZXP X51101RB         110         .         188         59         15         2         98           CHANNEL/TR432         110         .         188         59         15         0         94           KRUGER/EXP2605RR/YGCB         105         .         187         59         16         1         97           NUTECH/NT-5212 RR/YGCB         100         .	HEINE/H748RR/YGCB	105		198	60	15	0	98
NUTECH/NT-3505 RR         105         .         194         60         16         0         99           INTEGRA/INT 6609RRYG         108         .         193         59         15         3         96           KRUGER/2410RR/YGCB         110         .         192         60         16         0         98           WENSMAN/W 6315BTRR         101         .         191         58         15         1         93           KRUGER/2506RR/YGCB         106         .         190         60         16         0         100           KALTENBERG/K5717RRBT         105         .         189         58         15         0         96           CHANNEL/EXP X51101RB         110         .         188         59         15         2         98           CHANNEL/TR432         110         .         188         60         16         0         97           KALTENBERG/K6744RBT         108         .         187         58         15         0         96           WENSMAN/W 6318BTR         103         .         182         59         15         1         96           VUTECH/NT-5212+RR/YGCB         100         .	DEKALB/DKC55-82 (RR2)	105		196	60	16	0	95
INTEGRA/INT 6609RRYG         108         .         193         59         15         3         96           KRUGER/2410RR/YGCB         110         .         192         60         16         0         98           WENSMAN/W 6315BTRR         101         .         191         58         15         1         93           KRUGER/2506RR/YGCB         106         .         190         60         16         0         100           KALTENBERG/K5717RRBT         105         .         189         58         15         0         96           CHANNEL/EXP X51101RB         110         .         188         59         15         2         98           CHANNEL/7R432         110         .         188         60         16         0         97           KALTENBERG/K6744RRBT         108         .         187         58         15         0         94           KRUGER/EXP2605RR/YGCB         105         .         187         59         16         1         97           NUTECH/NT-5212 RR/YGCB         100         .         182         59         15         1         96           Trial avg.:         109         .	NUTECH/NT-3505 RR	105		194	60	16	0	99
KRUGER/2410RR/YGCB       110       .       192       60       16       0       98         WENSMAN/W 6315BTRR       101       .       191       58       15       1       93         KRUGER/2506RR/YGCB       106       .       190       60       16       0       100         KALTENBERG/K5717RRBT       105       .       189       58       15       0       96         CHANNEL/EXP X51101RB       110       .       188       59       15       2       98         CHANNEL/TR432       110       .       188       60       16       0       97         KALTENBERG/K6744RRBT       108       .       187       58       15       0       94         KRUGER/EXP2605RR/YGCB       105       .       187       59       16       1       97         NUTECH/NT-5212 RR/YGCB       100       .       182       59       15       1       96         Trial avg.:       106       213       191       59       16       1       97         Lowest (L)-avg.:       100       200       159       58       15       0       93         Lowest (L)-avg.:       10	INTEGRA/INT 6609RRYG	108		193	59	15	3	96
WENSMAN/W 6315BTRR       101       .       191       58       15       1       93         KRUGER/2506RR/YGCB       106       .       190       60       16       0       100         KALTENBERG/K5717RRBT       105       .       189       58       15       0       96         CHANNEL/EXP X51101RB       110       .       188       59       15       2       98         CHANNEL/TR432       110       .       188       60       16       0       97         KALTENBERG/K6744RRBT       108       .       187       58       15       0       94         KALTENBERG/K6744RRBT       108       .       187       59       16       1       97         KALTENBERG/KS74GCB       105       .       187       59       16       1       97         NUTECH/NT-5212 RR/YGCB       110       .       182       59       15       1       96         VUTECH/NT-5212+RR/YGCB       109       .       176       58       15       1       96         NUTECH/NT-5212+RR/YGCB       100       .       159       58       15       1       96         Lowest (L)-avg.: <t< td=""><td>KRUGER/2410RR/YGCB</td><td>110</td><td></td><td>192</td><td>60</td><td>16</td><td>0</td><td>98</td></t<>	KRUGER/2410RR/YGCB	110		192	60	16	0	98
KRUGER/2506RR/YGCB       106       .       190       60       16       0       100         KALTENBERG/K5717RRBT       105       .       189       58       15       0       96         CHANNEL/EXP X51101RB       110       .       188       59       15       2       98         CHANNEL/FA432       110       .       188       60       16       0       97         KALTENBERG/K6744RRBT       108       .       187       58       15       0       94         KALTENBERG/K6744RRBT       108       .       187       59       16       1       97         KALTENBERG/K6744RRBT       108       .       187       59       16       1       97         NUTECH/NT-5212 RR/YGCB       105       .       182       59       15       1       96         WENSMAN/W 6318BTR       103       .       182       59       15       1       96         NUTECH/NT-5212 RR/YGCB       109       .       176       58       15       1       96         NUTECH/NT-5212+RR/YGCB       100       .       159       58       15       1       96         Lowest (L)-avg.:       <	WENSMAN/W 6315BTRR	101		191	58	15	1	93
KALTENBERG/K5717RRBT       105       .       189       58       15       0       96         CHANNEL/EXP X51101RB       110       .       188       59       15       2       98         CHANNEL/7R432       110       .       188       60       16       0       97         KALTENBERG/K6744RRBT       108       .       187       58       15       0       94         KALTENBERG/K6744RRBT       108       .       187       58       15       0       94         KRUGER/EXP2605RR/YGCB       105       .       187       59       16       1       97         NUTECH/NT-5212 RR/YGCB       110       .       182       59       15       0       96         WENSMAN/W 6318BTRR       103       .       182       59       15       1       96         NUTECH/NT-5212+RR/YGCB       100       .       176       58       15       1       96         NUTECH/NT-5212+RR/YGCB       100       .       159       58       15       1       96         VIECH/NT-5212+RR/YGCB       100       .       159       58       15       0       93         Lowest (L)-avg.:	KRUGER/2506RR/YGCB	106		190	60	16	0	100
CHANNEL/EXP X51101RB       110       .       188       59       15       2       98         CHANNEL/7R432       110       .       188       60       16       0       97         KALTENBERG/K6744RRBT       108       .       187       58       15       0       94         KRUGER/EXP2605RR/YGCB       105       .       187       59       16       1       97         NUTECH/NT-5212 RR/YGCB       110       .       182       59       15       0       96         WENSMAN/W 6318BTRR       103       .       182       59       15       1       95         HEINE/H820RR/YGCB       109       .       176       58       15       1       96         NUTECH/NT-5212+RR/YGCB       110       .       159       58       15       1       96         NUTECH/NT-5212+RR/YGCB       100       .       159       58       15       1       96         VUTECH/NT-5212+RR/YGCB       100       .       159       58       15       1       96         VUTECH/NT-sque:       100       200       159       58       15       0       93         Highest (H)-avg.:       <	KALTENBERG/K5717RRBT	105		189	58	15	0	96
CHANNEL/7R432       110       .       188       60       16       0       97         KALTENBERG/K6744RRBT       108       .       187       58       15       0       94         KRUGER/EXP2605RR/YGCB       105       .       187       59       16       1       97         NUTECH/NT-5212 RR/YGCB       105       .       182       59       15       0       96         WENSMAN/W 6318BTRR       103       .       182       59       15       1       95         HEINE/H820RR/YGCB       109       .       176       58       15       1       96         NUTECH/NT-5212+RR/YGCB       110       .       159       58       15       1       96         NUTECH/NT-5212+RR/YGCB       110       .       159       58       15       1       96         NUTECH/NT-5212+RR/YGCB       110       .       159       58       15       1       96         NUTECH/NT-5212+RR/YGCB       100       203       209       60       17       3       100         Lowest (L)-avg.:       100       200       159       58       15       0       93         H-L avg. difference: <td>CHANNEL/EXP X51101RB</td> <td>110</td> <td></td> <td>188</td> <td>59</td> <td>15</td> <td>2</td> <td>98</td>	CHANNEL/EXP X51101RB	110		188	59	15	2	98
KALTENBERG/K6744RRBT       108       .       187       58       15       0       94         KRUGER/EXP2605RR/YGCB       105       .       187       59       16       1       97         NUTECH/NT-5212 RR/YGCB       110       .       182       59       15       0       96         WENSMAN/W 6318BTRR       103       .       182       59       15       1       95         HEINE/H820RR/YGCB       109       .       176       58       15       1       96         NUTECH/NT-5212+RR/YGCB       110       .       159       58       15       1       97         Highest (H)-avg.:       100       200       159       58       15       0       93         Lowest (L)-avg.:       100       23       50       3       2       3       7         ** Lsd (.05):       <	CHANNEL/7R432	110	· ·	188	60	16	0	97
KRUGER/EXP2605RR/YGCB       105       .       187       59       16       1       97         NUTECH/NT-5212 RR/YGCB       110       .       182       59       15       0       96         WENSMAN/W 6318BTRR       103       .       182       59       15       1       95         HEINE/H820RR/YGCB       109       .       176       58       15       1       96         NUTECH/NT-5212+RR/YGCB       109       .       159       58       15       1       96         NUTECH/NT-5212+RR/YGCB       110       .       159       58       15       1       96         Trial avg.:       106       213       191       59       16       1       97         Highest (H)-avg.:       110       223       209       60       17       3       100         Lowest (L)-avg.:       100       200       159       58       15       0       93         H-L avg. difference:       10       23       50       3       2       3       7         ** Lsd (.05):       Min. TPG-value:       200       193       58       93       93	KALTENBERG/K6744RRBT	108		187	58	15	0	94
NUTECH/NT-5212 RR/YGCB         110         .         182         59         15         0         96           WENSMAN/W 6318BTRR         103         .         182         59         15         1         95           HEINE/H820RR/YGCB         109         .         176         58         15         1         96           NUTECH/NT-5212+RR/YGCB         109         .         176         58         15         1         96           NUTECH/NT-5212+RR/YGCB         100         .         159         58         15         1         96           NUTECH/NT-5212+RR/YGCB         100         .         159         58         15         1         96           NUTECH/NT-5212+RR/YGCB         100         .         159         58         15         1         96           NUTECH/NT-5212+RR/YGCB         100         223         209         60         17         3         100           Lowest (L)-avg.:         100         200         159         58         15         0         93           H-L avg. difference:         10         23         50         3         2         3         7           ** Lsd (.05):         X <td< td=""><td>KRUGER/EXP2605RR/YGCB</td><td>105</td><td></td><td>187</td><td>59</td><td>16</td><td>1</td><td>97</td></td<>	KRUGER/EXP2605RR/YGCB	105		187	59	16	1	97
WENSMAN/W 6318BTRR         103         .         182         59         15         1         95           HEINE/H820RR/YGCB         109         .         176         58         15         1         96           NUTECH/NT-5212+RR/YGCB         110         .         159         58         15         1         96           Trial avg.:         106         213         191         59         16         1         97           Highest (H)-avg.:         110         223         209         60         17         3         100           Lowest (L)-avg.:         100         200         159         58         15         0         93           H-L avg. difference:         10         23         50         3         2         3         7           ** Lsd (.05):         NS         16         2         1         1         NS         93           # Min. TPG-value:         200         193         58         58         93         93	NUTECH/NT-5212 RR/YGCB	110		182	59	15	0	96
HEINE/H820RR/YGCB       109       .       176       58       15       1       96         NUTECH/NT-5212+RR/YGCB       110       .       159       58       15       1       96         Trial avg.:       106       213       191       59       16       1       97         Highest (H)-avg.:       110       223       209       60       17       3       100         Lowest (L)-avg.:       100       200       159       58       15       0       93         H-L avg. difference:       10       23       50       3       2       3       7         ** Lsd (.05):       NS       16       2       1       1       NS         # Min. TPG-value:       200       193       58       58       93	WENSMAN/W 6318BTRR	103		182	59	15	1	95
NUTECH/NT-5212+RR/YGCB         110         .         159         58         15         1         96           Trial avg.:         106         213         191         59         16         1         97           Highest (H)-avg.:         110         223         209         60         17         3         100           Lowest (L)-avg.:         100         200         159         58         15         0         93           H-L avg. difference:         10         23         50         3         2         3         7           ** Lsd (.05):         NS         16         2         1         1         NS           # Min. TPG-value:         200         193         58         93	HEINE/H820RR/YGCB	109		176	58	15	1	96
Trial avg.:       106       213       191       59       16       1       97         Highest (H)-avg.:       110       223       209       60       17       3       100         Lowest (L)-avg.:       100       200       159       58       15       0       93         H-L avg. difference:       10       23       50       3       2       3       7         ** Lsd (.05):       NS       16       2       1       1       NS         # Min. TPG-value:       200       193       58       93	NUTECH/NT-5212+RR/YGCB	110		159	58	15	1	96
Highest (H)-avg.:       110       223       209       60       17       3       100         Lowest (L)-avg.:       100       200       159       58       15       0       93         H-L avg. difference:       10       23       50       3       2       3       7         ** Lsd (.05):       NS       16       2       1       1       NS         # Min. TPG-value:       200       193       58       58       93	Trial avg.:	106	213	191	59	16	1	97
Lowest (L)-avg.:       100       200       159       58       15       0       93         H-L avg. difference:       10       23       50       3       2       3       7         ** Lsd (.05):       NS       16       2       1       1       NS         # Min. TPG-value:       200       193       58       93	Highest (H)-avg.:	110	223	209	60	17	3	100
H-L avg. difference:       10       23       50       3       2       3       7         *** Lsd (.05):       NS       16       2       1       1       NS         # Min. TPG-value:       200       193       58       93	Lowest (L)-avg.:	100	200	159	58	15	0	93
** Lsd (.05): # Min. TPG-value: 200 193 58 93	H-L avg. difference:	10	23	50	3	2	3	7
# Min. TPG-value: 200 193 58 93	** Lsd (.05):		NS	16	2	1	1	NS
	# Min. TPG-value:		200	193	58			93
## Max. TPG-value: 16 1	## Max. TPG-value:					16	1	
+ Coef. of var.: 4 5 2 3 3	+ Coef. of var.:		4	5	2	3		3
No. of entries: 24 6 24 24 24 24 24 24	No. of entries:	24	6	24	24	24	24	24

Table 6c. Early maturity Roundup Ready™ corn hybrid test trial results. SE Research Farm, Beresford, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

Brand/Hybrid (By 2-year then '05	Brand	Test trial variable at harvest					
yields)	Rel. Mat.	2-year Yield bu/a	'05 Yield bu/a	'05 Bu. Wt. Ib	'05 Grain Moist. %	05 Lodging %	05 Pct.* Stand
TWO-YEAR ENTRIES:							
DEKALB/DKC63-81RR2YGCB	113	231	227	61	18	0	98
HEINE/H851RR/YGCB	113	230	215	60	17	0	98
KRUGER/9115RR/YGCB	115	222	211	60	16	0	96
HEINE/H8600RR/YGCB	112	212	193	59	16	1	93
KRUGER/9212RR/YGCB	112	210	181	59	15	1	97
KRUGER/9308RR/YGCB	111	196	191	59	15	0	99
ONE-YEAR ENTRIES:				•			
ASGROW/RX715RR2YGCB	111		236	61	19	1	93
DEKALB/DKC61-72 (RR2)	111		216	60	15	0	97
KRUGER/2517RR/YGCB	116		183	60	17	2	95
KRUGER/9313RR/YGCB	113		172	59	16	0	94
Trial avg.:	113	217	203	60	16	1	96
Highest (H)-avg.:	116	231	236	61	19	2	99
Lowest (L)-avg.:	111	196	172	59	15	0	93
H-L avg. difference:	5	35	64	2	4	2	6
** Lsd (.05):		NS	20	1	1	NS	NS
# Min. TPG-value:		196	216	60			93
## Max. TPG-value:					16	2	
+ Coef. of var.:		6	6	1	4		2
No. of entries:	10	6	10	10	10	10	10

Table 6d. Late maturity Roundup Ready™ corn hybrid test trial results. SE Research Farm, Beresford, SD, 2004-2005.

\*\* Lsd= the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value= minimum value required for the top performance group.

## Max. TPG-value= maximum value required for the top performance group.

# ARCHIVE



The crop performance trials are available at http://plantsci.sdstate.edu/varietytrials/vartrial.html

## **Tables, 2006 Corn Performance Trials**

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## 2006 Precision Planted **Corn** Performance Trials

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Performance of entries in the 2006 South Dakota corn hybrid performance trials for both non-Roundup-Ready and Roundup-Ready<sup>™</sup> hybrids is reported. Information includes both the most recent 2-year and 1-year grain yields in bushels per acre and 1-year bushel weight, grain moisture at harvest, percent stand at harvest, and stalk lodge percentages. These performance trials are conducted by the South Dakota Crop Performance Testing (CPT) program at South Dakota State University.

#### Test Trial Locations

Trial locations, soil types, seedbed and previous crop history, soil fertility yield goals, and seeding dates are in Table A.

The participation and efforts of our cooperators—Allen and Inel Ryckman at Warner, James Smolik and Al Heuer at South Shore (Northeast Research Farm), Erland Weerts at Bancroft, Todd Bortnem at Brookings (SDSU Plant Science Research Farm), Curtis Sybesma at Geddes, and Robert Berg and staff at Beresford (Southeast Experiment Station)—are gratefully acknowledged.

#### Weather Conditions

Weather data (Table B) for the growing season were obtained from the South Dakota Office of Climate and Weather.

Average daily temperatures across test locations were average to above average from April to September. In both July and August, daily averages varied greatly across locations. In July the daily average temperature ranged from 3.3°F above normal at South Shore and Centerville to 6.6°F above normal at Huron. Likewise, in August, daily average temperature varied from nearly normal (0.4°F) at Brookings to a high °F 13.0°F above normal at Huron.

Heat unit totals across test locations varied from a high of 3,030 GDD at Centerville to a low of 2,557 GDD at Brookings. In August and September, the GDD accumulations at all sites were about 9 to 10% higher than average.

Precipitation varied greatly across test locations. Monthly precipitation from April through September was below average in at least one month at all locations. Monthly averages were particularly low for Aberdeen and South Shore. Both locations were 2 to 3 inches below average in precipitation in June and July with little rainfall in August. The Geddes area (Platte) received above normal precipitation in May and June, but was 2.7 inches below normal for July and near normal for August. Other locations were somewhat below average in precipitation in June and/or July but received higher than normal rainfall in August (Iroquois and Brookings) or likely had adequate levels of subsoil moisture to sustain growth during limited rainfall (Centerville).

In summary, seasonal moisture, average daily temperatures, and heat units varied across test locations. In many cases July and August temperatures were above normal, resulting in GDD seasonal accumulations that were about 9 to 10% above average. All sites experienced below average rainfall during at least one month; the lack of rainfall at Aberdeen and South Shore was more severe than at the other locations.

#### **General Test Procedures**

Participating companies pick the test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The arbitrary relative maturity breaks between the early and late tests are as follows: 95 days for Warner and South Shore; 100 days for Yale and Brookings; 105 days for Geddes; and 110 days for Beresford. A hybrid is assigned to a maturity trial based on its relative maturity rating reported by the participating seed company.

This testing program does not guarantee that all entries are placed in the proper maturity trial. In some trials, borderline entries with relative maturity ratings at or near the arbitrary break between the early and late trials may crossover at a given location. In some cases this may be indicated by exceptionally high or low grain moisture contents at harvest. A higher than average moisture content may indicate the hybrid is later in relative maturity than indicated. Likewise, a lower than average moisture content may indicate the hybrid is earlier in relative maturity than indicated.

A fee was charged for all entries at each location. A list of participating seed companies for 2006 is presented in Table E.

#### **Experimental Procedures**

Entries were seeded in three replications with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20 feet long. The center two rows were harvested for yield.

A Monosem precision row crop planter was used for seeding plots at all locations. In 2006, this precision planter was calibrated and delivered 27,878 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest.

Soil type, land preparation and previous crop history, and fertility yield goal at each test site is outlined in Table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 lb/ a of 37-18-00 was applied 2 inches below and 2 inches to the side  $(2 \ge 2)$  of the seed row. Force insecticide was applied in-furrow at label rates for corn rootworm control this year. The weed control herbicides applied at recommended label rates are indicated in Table A for both the non-Roundup Ready<sup>TM</sup> and the Roundup Ready<sup>TM</sup> hybrid corn trials.

#### Measurements of Performance

Yields are obtained from the South Dakota Crop Performance Testing Program (CPT). Current-year yields are included for each entry tested at a given location. In addition, 2-year averages are included where hybrids have been tested for 2 years. Yields, test averages, and least significant difference (Lsd) values are printed at the bottom of each yield column for each location and are rounded off to the nearest bushel.

Use Lsd values to identify the best-yielding hybrids. The Lsd value indicated at the bottom of each yield column is used to calculate the minimum top yield value. For example, if the highest yield within a column is 130 bu and the Lsd value for that yield column is 15 bu, then the minimum top yield value equals 115 bu (130-15 = 115). Within a yield column, hybrids with yields equal to or higher than this minimum top-yield value are the best yielding hybrids.

Entries in all tables are sorted from highest to lowest values according to the variable(s) listed in the Brand/Hybrid column of each performance table. Note: Entries tested for 2 years may also have a top yield group value in the 2006 yield column.

**Yield.** Yields are an average of three replications, and are expressed as bushels per acre (bu/a), adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 lb. Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand.

Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2006, the coefficient of variation (CV) values (a measure of experimental error) for yield was quite variable across the state. At Warner, South Shore, and Geddes the CV values was quite high in both the Non-Roundup Ready<sup>™</sup> and Roundup Ready<sup>™</sup> test trials. At these locations, the yield CV values varied from a low of 22% at Geddes to a high of 76% at Warner.

The CV value in a given test trial is a measure of experimental error associated with the test trial. Ideally, this value should not exceed 20%. In cases where the CV value exceeds 20% it is recommended that the test data be used with caution in making hybrid selection decisions. In 2006, the exceptionally high CV values at Warner, South Shore, and Geddes indicate there is way too much error associated with the test trial to make any determination of which hybrids should be in the top performance group for yield. In addition, it is impossible to determine if any two hybrids that are relatively close in yield are actually similar or different in yield potential. Experimental error may be the result of several factors including test methods; factors such as moisture, temperature, soil variations; or agronomic factors like seeding date, reseeding, or seed quality factors. All may or may not be controllable in a given year.

Clearly, this year, seasonal moisture distribution and/or subsoil moisture conditions along with elevated high temperatures were the two factors that affected the yielding potential of corn hybrids under test.

The sites with high levels of experimental error (Warner, South Shore, and Geddes) had many plots that showed a lack of pollination and/or ear development. In many plots, a lack of pollination resulted in no ear at all. In a few cases, an ear started to develop but quit, and only a "nubbin" was formed.

Within a hybrid entry, not all plots showed a lack of pollination. For a few hybrids, all plots appeared normal. For other hybrids, one or more plots showed a lack of pollination. Within the performance tables for Warner, South Shore, and Geddes; hybrids with high averages pollinated normally, while plots with the lower yield averages experienced moderate to severe problems with pollination and/or ear development. As indicated in Table B, these sites were exposed to above normal temperatures in July. Air temperatures of 95°F or higher can have a profound and negative effect on corn pollination.

All test locations likely were exposed to some degree of moisture stress this year (see Weather conditions). In most cases where high CV values were evident, it is difficult to say how high temperatures and a lack of moisture may have affected pollination and/or ear development. It is important to note that even though high temperatures and moisture stress can work together to affect pollination, high temperatures alone, without the influence of moisture stress, can severely affect pollination and reduce yields.

**Grain moisture content.** Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Moisture is inversely related to maturity.

Because maturity is of prime importance in South Dakota, moisture figures are of considerable importance in the evaluation of the trial entries. Hybrids that provide satisfactory yields and can be stored without additional drying are desirable.

During harvest, random moisture values as determined by the on-board moisture meter on the combine were checked with a Dickey-John GAC II to verify that the on-board moisture meter is within calibration limits.

**Use of tables.** Check for the "Least significant difference" (Lsd) value at the bottom of each column of data averages. The Lsd value indicates how much a variable such as yield must differ between two hybrids before there is a real yield difference. An Lsd value is given at the bottom of every column where there is significant difference among the averages within a given column. If there are no real differences among the averages within a given column a "non-significant" (NS) difference designation is indicated.

The Lsd values reported in this publication can be used in two ways. In this publication the Lsd value is used primarily to identify the top performance group (TPG) for current year and 2-year yields, bushel weight, grain moisture at harvest, and stalk lodging below the ear percentage for each test trial.

To determine which hybrids are in the TPG for yield, use the Lsd value indicated at the bottom of each yield column in any

yield table. For example, say the column Lsd value equals 15 (bu/ a) and the highest yield for that column equals 155 bu/a. Subtract the column Lsd value from the highest yield (155 - 15 = 140) to obtain the minimum value for the TPG for yield or 140 bu/a. Technically, a yield value of 141 bu/a should be included in the TPG while a value of 140 bu/a should not. However, because all yields and Lsd values are rounded to the nearest whole number, we can say 140 bu/a, because of the rounding-off, is the more appropriate minimum value for the TPG for yield. These minimum TPG values for yield are indicated at the bottom of each yield column unless too much experimental error (high CV values) is associated with the test.

Top yield hybrids are those hybrids that are equal or higher than the minimum TPG value (shaded) reported at the bottom of each yield column. If hybrid yield differences are not significant (NS) and the CV values are 20% or less, then, by definition, all hybrids in the test are in the top-yield group. In contrast, if the column CV value is greater than 20%, then no minimum TPG value is indicated because there is too much experimental error associated with the test to make a valid determination of the TPG for yield.

Likewise, the TPG for other performance factors like bushel weight, percent grain moisture at harvest, percent stalk lodging below the ear, and percent stand (percent of seeded population) can be determined.

For example, at any location and test trial, in order to qualify for the TPG, a hybrid must have a bushel weight value and a percent of stand value that is equal to or greater than the minimum reported TPG value for that bushel weight or percent of stand. Likewise, to qualify for the TYG a hybrid must have a grain moisture value and a lodging value that is equal to or less than the maximum reported TPG value for that grain moisture or lodging percentage.

Note that yield, bushel weight, and percent stand TPG values must be greater than a certain yield, bushel weight, or percent stand value; while grain moisture and lodging below ear percentages must be equal to or less than a certain percentage to qualify for the TPG. Again, as with hybrid yields, if there are no hybrid differences for a performance factor, then, by definition, all hybrids in the test are in the TPG for that performance factor.

In addition, the Lsd values for the TPG can be used to determine if two hybrids differ in performance. For example, if a test trial Lsd value equals 16 bu/a and hybrid A yields 132 bu/a while hybrid B yields 118 bu/a, then their yield difference is 14 bu/a (132 - 118 = 14). In this case the two hybrids do not differ in yield because their yield difference of 14 bu/ac is equal to or less than the reported Lsd value of 16 bu/a. In contrast, if hybrid C yields 114 bu/a, the yield difference between hybrids A and C is 18 bu/a (132 - 114 = 18). In this case the yield difference of 18 bu/a is higher than the reported Lsd value of 16 bu/a; therefore, hybrid A would have a significantly higher yield than hybrid C.

Similarly, the Lsd values for bushel weight, grain moisture, stalk lodging below the ear, and percent stand can be used to determine if any two hybrids differ in these performance factors. For example, if a test trial grain moisture Lsd value equals 2%, and hybrid A measures 18% and hybrid B measures 16%, their yield difference is 2% (18 - 16 = 2). In this case the two hybrids do not differ in grain moisture because their moisture difference of 2% is equal to or less than the reported Lsd value of 2%. In contrast, if hybrid C measures 15%, the grain moisture difference between hybrids A and C is 3% (18 - 15 = 3). In this case the grain difference of 3% is more than the reported Lsd value of 2%; therefore, hybrid A is significantly higher in grain moisture than hybrid C.

#### **PERFORMANCE TRIAL RESULTS BY LOCATIONS**

The performance trial results for 2 years (2005–06) and one year (2006) are summarized below:

#### **Northern Locations**

Note: At both of these northern locations the CV values for yield were higher than 20%; this means we believe the experimental error at both Warner and South Shore are too high to be considered as valid or acceptable for South Dakota conditions.

The high levels of experimental error at these two locations are thought to be the result of uneven seasonal moisture distribution and/or high temperatures during pollination (see discussion in Weather conditions).

#### Warner

Early, Non-Roundup Ready<sup>™</sup>, Table 1a. he test trial yield average was 44 bu/a in 2006 and 121 bu/a for 2 years. Hybrids that yielded 108 bu/a over 2 years qualified for the top yield group. Hybrid differences had to exceed 26 bu/a to significantly differ from one another over the 2-year period. The high level of experimental error (CV =44%) prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences among entries in 2006.

In 2006, bushel weights averaged 59 lb, grain moisture averaged 17%, lodging averaged nearly 0%, and the final percent stand averaged 99%. For a hybrid to be in the top performance group for these factors it had to equal 57 lb or more in bushel weight, 17% or less in grain moisture, 2% or less in stalk lodging, and 98% or more for percent stand.

Late, Non-Roundup Ready<sup>™</sup>, Table 1b. The test trial yield average was 56 bu/a in 2006 and 129 bu/a for 2 years. There was no significant difference in yield average among entries tested for 2 years, so all three entries qualified for the top yield group. The high level of experimental error (CV =30%) prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences among the entries tested in 2006.

In 2006, bushel weights averaged 56 lb, grain moisture averaged 21%, lodging averaged 1%, and the final percent stand averaged 99%. For a hybrid to be in the top performance group for these factors it had to equal 57 lb or more in bushel weight, 18% or less in grain moisture, 2% or less in stalk lodging, and 99% or more for percent stand.

**Early, Roundup Ready™, Table 1c.** The test trial yield average was 71 bu/a in 2006 and 134 bu/a for 2 years. In both 2006 and for the 2-year period there were high levels of experimental error. CV values of 76 and 29%, respectively, prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences.

In 2006, bushel weights averaged 58 lb, grain moisture averaged 16%, lodging averaged 1%, and the final percent stand averaged 99%. For a hybrid to be in the top performance group for these factors it had to equal 58 lb or more in bushel weight, 16% or less in grain moisture, 3% or less in stalk lodging, and 98% or more for percent stand.

Late, Roundup Ready<sup>™</sup>, Table 1d. The test trial yield average was 48 bu/a in 2006 and 122 bu/a for 2 years. There was no significant difference in yield average among the hybrids tested for 2 years, so all nine entries qualified for the top yield group. The high level of experimental error (CV =35%) prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences among the entries tested in 2006.

In 2006, bushel weights averaged 57 lb, grain moisture averaged 18%, lodging averaged 1%, and the final percent stand averaged 100%. For a hybrid to be in the top performance group for these factors it had to equal 57 lb or more in bushel weight, 17% or less in grain moisture, 3% or less in stalk lodging, and 98% or more for percent stand.

#### South Shore

Early, Non-Roundup Ready<sup>™</sup>, Table 2a. The test trial yield average was 54 bu/a in 2006 and 114 bu/a for 2 years. There was no significant difference in yield average among the entries tested for 2 years so six entries qualified for the top yield group. The high level of experimental error (CV =45%) prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences among the entries tested in 2006.

In 2006, bushel weights averaged 57 lb, grain moisture averaged 17%, lodging averaged 1%, and the final percent stand averaged 100%. For a hybrid to be in the top performance group for these factors it had to equal 57 lb or more in bushel weight, 18% or less in grain moisture, 2% or less in stalk lodging, and 98% or more for percent stand.

Late, Non-Roundup Ready<sup>™</sup>, Table 2b. The test trial yield average was 40 bu/a in year 2006 and 86 bu/a for 2 years. There was no significant difference in yield average among the hybrids tested for 2 years so both entries qualified for the top yield group. The high level of experimental error (CV =58%) prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences between the entries tested in 2006.

In 2006, bushel weights averaged 55 lb, grain moisture averaged 20%, lodging averaged 0%, and the final percent stand averaged 99%. For a hybrid to be in the top performance group for these factors it had to equal 56 lb or more in bushel weight, 18% or less in grain moisture, 2% or less in stalk lodging, and 98% or more for percent stand.

**Early, Roundup Ready**<sup>TM</sup>, **Table 2c.** The test trial yield average was 70 bu/a in 2006 and 129 bu/a for 2 years. There was no significant difference in yield average among the hybrids tested for 2 years so all 14 entries qualified for the top yield group. The high level of experimental error (CV =30%) prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences among the entries tested in 2006.

In 2006, bushel weights averaged 56 lb, grain moisture averaged 17%, lodging averaged 1%, and the final percent stand averaged 98%. For a hybrid to be in the top performance group for these factors it had to equal 57 lb or more in bushel weight, 16% or less in grain moisture, 2% or less in stalk lodging, and 98% or more for percent stand.

Late, Roundup Ready<sup>™</sup>, Table 2d. The test trial yield aver-

age was 77 bu/a in 2006 and 127 bu/a for 2 years. There was no significant difference in yield average among the hybrids tested for 2 years so all eight entries qualified for the top yield group. The high level of experimental error (CV = 39%) prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences among the entries tested in 2006.

In 2006, bushel weights averaged 55 lb, grain moisture averaged 19%, lodging averaged 1%, and the final percent stand averaged 99%. For a hybrid to be in the top performance group for these factors it had to equal 57 lb or more in bushel weight, 17% or less in grain moisture, 3% or less in stalk lodging, and 95% or more for percent stand.

#### **Central Locations** Bancroft

Early, Non-Roundup Ready<sup>™</sup>, Table 3a. The test trial yield average was 144 bu/a in 2006 and 168 bu/a for 2 years. Hybrids that yielded 136 bu/a or more in 2006 and 165 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 24 bu/a in 2006 to be significantly different from one another. There were no difference in yield averages among the six hybrids tested 2 years.

In 2006, bushel weights averaged 59 lb, grain moisture averaged 18%, lodging averaged 2%, and the final percent stand averaged 98%. For a hybrid to be in the top performance group for these factors it had to equal 59 lb or more in bushel weight, 17% or less in grain moisture, 4% or less in stalk lodging, and 95% or more for percent stand.

Late, Non-Roundup Ready<sup>™</sup>, Table 3b. The test trial yield average was 139 bu/a in 2006 and 173 bu/a for 2 years. Hybrids that yielded 136 bu/a or more in 2006 and 166 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 25 bu/a in 2006 to be significantly different from one another. There were no difference in yield averages among the five hybrids tested 2 years.

In 2006, bushel weights averaged 57 lb, grain moisture averaged 22%, lodging averaged 8%, and the final percent stand averaged 98%. For a hybrid to be in the top performance group for these factors it had to equal 57 lb or more in bushel weight, 21% or less in grain moisture, 16% or less in stalk lodging, and 94% or more for percent stand.

**Early, Roundup Ready™, Table 3c.** The test trial yield average was 154 bu/a in 2006 and 176 bu/a for 2 years. Hybrids that yield-ed 146 bu/a or more in 2006 and 184 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 26 bu/a in 2006 to be significantly different from one another.

In 2006, bushel weights averaged 58 lb, grain moisture averaged 17%, lodging averaged 1%, and the final percent stand averaged 97%. For a hybrid to be in the top performance group for these factors it had to equal 58 lb or more in bushel weight, 16% or less in grain moisture, 3% or less in stalk lodging, and 96% or more for percent stand.

Late, Roundup Ready<sup>™</sup>, Table 3d. The test trial yield average was 156 bu/a in 2006 and 182 bu/a for 2 years. Hybrids that yielded 156 bu/a or more in 2006 and 175 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 19 bu/a in 2006 to be significantly different from one another. There was no difference in yield averages among the ten hybrids tested 2 years.

In 2006, bushel weights averaged 57 lb, grain moisture averaged 20%, lodging averaged 2%, and the final percent stand averaged 97%. In order for a hybrid to be in the top performance group for these factors it had to equal 59 lb or more in bushel weight, 19% or less in grain moisture, 4% or less in stalk lodging, and 96% or more for percent stand.

#### Brookings

Early, Non-Roundup Ready<sup>™</sup>, Table 4a. The test trial yield average was 168 bu/a in 2006 and 204 bu/a for 2 years. Hybrids that yielded 163 bu/a or more in 2006 and 199 bu/a or more for 2 years \qualified for the top yield group. Hybrids had to differ in yield by 24 bu/a in 2006 to be significantly different from one another. There was no difference in yield averages among the five hybrids tested 2 years.

In 2006, bushel weights averaged 55 lb, grain moisture averaged 19%, lodging averaged 1%, and the final percent stand averaged 100%. For a hybrid to be in the top performance group for these factors it had to equal 55 lb or more in bushel weight, 19% or less in grain moisture, 2% or less in stalk lodging, and 100% or more for percent stand.

Late, Non-Roundup Ready<sup>™</sup>, Table 4b. The test trial yield average was 177 bu/a in 2006 and 207 bu/a for 2 years. Hybrids that yielded 177 bu/a or more in 2006 and 194 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 29 bu/a in 2006 and 31 bu/a for the 2-year period to be significantly different from one another.

In 2006, bushel weights averaged 55 lb, grain moisture averaged 22%, lodging averaged 1%, and the final percent stand averaged 98%. For a hybrid to be in the top performance group for these factors it had to equal 55 lb or more in bushel weight, 21% or less in grain moisture, 3% or less in stalk lodging, and 96% or more for percent stand.

**Early, Roundup Ready™, Table 4c.** The test trial yield average was 162 bu/a in 2006 and 194 bu/a for 2 years. Hybrids that yielded 164 bu/a or more in 2006 and 190 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 20 bu/a in 2006 and 17 bu/a for the 2-year period to be significantly different from one another.

In 2006, bushel weights averaged 55 lb, grain moisture averaged 18%, lodging averaged 1%, and the final percent stand averaged 98%. In order for a hybrid to be in the top performance group for these factors it had to equal 56 lb or more in bushel weight, 17% or less in grain moisture, 2% or less in stalk lodging, and 96% or more for percent stand.

Late, Roundup Ready<sup>™</sup>, Table 4d. The test trial yield average was 189 bu/a in 2006 and 214 bu/a for 2 years. Hybrids that yielded 198 bu/a or more in 2006 and 208 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 16 bu/a in 2006 to be significantly different from one another. There was no difference in yield averages among the 11 hybrids tested 2 years.

In 2006, bushel weights averaged 55 lb, grain moisture averaged 20%, lodging averaged nearly 0%, and the final percent stand averaged 97%. For a hybrid to be in the top performance group for these factors it had to equal 56 lb or more in bushel weight, 17% or less in grain moisture, 1% or less in stalk lodging, and 96% or more for percent stand.

#### **Southern Locations** Geddes

Note: At this southern location, the CV values for yield were higher than 20%; this means we believe the experimental error associated with the trials at Geddes are too high to be considered valid or acceptable for hybrid selection decisions. The high levels of experimental error are thought to be the result of the uneven seasonal moisture distribution and/or high temperatures at this location, especially during pollination (see discussion in Weather conditions).

Early, Non-Roundup Ready<sup>™</sup>, Table 5a. The test trial yield average was 60 bu/a in 2006 and 85 bu/a for 2 years. In both 2006 and for the 2-year period there were high levels of experimental error, CV values of 48 and 24%, respectively, that prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences.

In 2006, bushel weights averaged 56 lb, grain moisture averaged 21%, lodging averaged 2%, and the final percent stand averaged 97%. For a hybrid to be in the top performance group for these factors it had to equal 56 lb or more in bushel weight, 19% or less in grain moisture, 4% or less in stalk lodging, and 92% or more for percent stand.

Late, Non-Roundup Ready<sup>™</sup>, Table 5b. The test trial yield average was 94 bu/a in both 2006 and for 2 years. In both 2006 and for the 2-year period there were high levels of experimental error, CV values of 33 and 27%, respectively, that prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences.

In 2006, bushel weights averaged 55 lb, grain moisture averaged 22%, lodging averaged 1%, and the final percent stand averaged 96%. For a hybrid to be in the top performance group for these factors it had to equal 53 lb or more in bushel weight, 21% or less in grain moisture, 3% or less in stalk lodging, and 92% or more for percent stand.

**Early Roundup Ready**<sup>TM</sup>, **Table 5c.** The test trial yield average was 97 bu/a in 2006 and 103 bu/a for 2 years. Hybrids that yielded 102 bu/a for 2 years qualified for the top yield group. Hybrid differences had to exceed 23 bu/a to be significantly different from one another over the 2-year period. In 2006 the high level of experimental error (CV = 22%) prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences.

In 2006, bushel weights averaged 56 lb, grain moisture averaged 21%, lodging averaged nearly 1%, and the final percent stand averaged 96%. For a hybrid to be in the top performance group for these factors it had to equal 58 lb or more in bushel weight, 17% or less in grain moisture, 3% or less in stalk lodging, and 93% or more for percent stand.

Late Roundup Ready<sup>™</sup>, Table 5d. The test trial yield average was 86 bu/a in 2006 and 91 bu/a for 2 years. Hybrid yield averages were not significantly different among the four entries tested for 2 years, therefore all four of the hybrids tested were in the top yield group. In 2006 the high level of experimental error (CV =23%) prevented the valid determination of the top performance group for yield and the determination of hybrid yield differences between the entries.

In 2006, bushel weights averaged 53 lb, grain moisture averaged 23%, lodging averaged 2%, and the final percent stand

averaged 97%. In order for a hybrid to be in the top performance group for these factors it had to equal 54 lb or more in bushel weight, 20% or less in grain moisture, 4% or less in stalk lodging, and 93% or more for percent stand.

#### Beresford

**Early, Non-Roundup Ready™, Table 6a.** The test trial yield average was 159 bu/a in 2006 and 184 bu/a for 2 years. Hybrids that yielded 167 bu/a or more in 2006 and 166 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 23 bu/a in 2006 to be significantly different from one another. There was no difference in yield averages among the five hybrids tested 2 years.

In 2006, bushel weights averaged 60 lb, grain moisture averaged 17%, lodging averaged 11%, and the final percent stand averaged 98%. For a hybrid to be in the top performance group for these factors it had to equal 60 lb or more in bushel weight, 16% or less in grain moisture, 12% or less in stalk lodging, and 97% or more for percent stand.

Late, Non-Roundup Ready<sup>™</sup>, Table 6b. The test trial yield average was 188 bu/a in 2006 and 192 bu/a for 2 years. Hybrids that yielded 184 bu/a or more in 2006 and 174 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 26 bu/a in 2006 to be significantly different from one another. There was no difference in yield averages among the ten hybrids tested 2 years.

In 2006, bushel weights averaged 59 lb, grain moisture averaged 19%, lodging averaged 18%, and the final percent stand averaged 96%. For a hybrid to be in the top performance group for these factors it had to equal 58 lb or more in bushel weight, 17% or less in grain moisture, 17% or less in stalk lodging, and 96% or more for percent stand.

**Early, Roundup Ready™, Table 6c.** The test trial yield average was 171 bu/a in 2006 and 181 bu/a for 2 years. Hybrids that yielded 170 bu/a or more in 2006 and 172 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 33 bu/a in 2006 to be significantly different from one another. There was no difference in yield averages among the nine hybrids tested 2 years.

In 2006, bushel weights averaged 60 lb, grain moisture averaged 17%, lodging averaged 15%, and the final percent stand averaged 97%. For a hybrid to be in the top performance group for these factors it had to equal 61 lb or more in bushel weight, 16% or less in grain moisture, 19% or less in stalk lodging, and 91% or more for percent stand.

Late, Roundup Ready<sup>™</sup>, Table 6d. The test trial yield average was 188 bu/a in 2006 and 195 bu/a for 2 years. Hybrids that yielded 192 bu/a or more in 2006 and 179 bu/a or more for 2 years qualified for the top yield group. Hybrids had to differ in yield by 21 bu/a in 2006 to be significantly different from one another. There was no difference in yield average among the five hybrids tested 2 years.

In 2006, bushel weights averaged 60 lb, grain moisture averaged 19%, lodging averaged 9%, and the final percent stand averaged 96%. For a hybrid to be in the top performance group for these factors it had to equal 60 lb or more in bushel weight, 17% or less in grain moisture, 8% or less in stalk lodging, and 93% or more for percent stand.

#### Table A. Description of trial locations- soil type, tillage methods, previous crop, herbicides and insecticides used, and seeding dates.

	Soils & Management				Herb	icides	Force	Force Fertility		
Location (County)	Туре	Tillage Method	Previous crop	Roundup Pre	Applied at Ready™ Post	Non- Roundup Ready		In furrow at label rate	Yield Goal bu/a	Date seeded
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	Mid. till	S. Wheat	Harness Xtra	None	Harness Xtra 1.8 qt	None	Yes	200	May 3
South Shore (Codington)	Kransburg silty clay loam, 3-6% slope	Conven- tional	S. Wheat	Harness	Roundup once	Harness	Single light cult.	Yes	180	May 23
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	No-till	Soybean	Fall Dual	Roundup once	Fall Dual	Accent/ Buctril	Yes	150	May 12
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conven- tional	Soybean	Dual-	Roundup once	Dual-	Accent/ Buctril	Yes	200	May 19
Geddess (Chas. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	S. Wheat	None	Roundup once	None	Steadfast Atrazine	Yes	200	May 16
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conven- tional	Soybean	Dual- Python	Roundup once	Dual- Python	None	Yes	210	May 8
Note: All plots were seeded at 27,878 seeds per acre.										

Table B. Nearest weather station precipitation, temperature average, and growing degree day accumulation for each growing season month for 2006 and their departures from normal (DFN). Source: South Dakota Office of Climate and Weather.

Station	Variable		Precipitat	Precipitation and temperature monthly averages, GDD's f		rom April 1		
Station	Variable	:	April 30	May 31	June 30	July 31	Aug 31	Sept 30
	Precip.	<b>'</b> 06	2.41	2.16	3.21	0.71	2.47	2.67
	(inches)	DFN*	0.58	-0.53	-2.8	-2.21	0.07	0.86
Aberdeen	Avg. Temp.	'06	51	58	69	77	72	57
Airport	(F.°)	DFN	5.6	0.1	2.2	4.8	1.5	-2.8
, in port	Accum. GDD's	'06	207	512	1,059	1,760	2,405	2,666
		DFN	95	129	173	209	219	161
	Precip.	'06	2.53	1.99	0.95	0.83	1.93	5.66
	(inches)	DFN	0.53	-0.73	-2.88	-0.244	0.53	3.77
South	Avg. Temp.	'06	48	56	66	73	69	58
Shore (NE Farm)	(F.°)	DFN	5.0	0.2	1.3	3.3	1.2	-0.1
	Accum. GDD's	'06	160	460	934	1,595	2,200	2,580
		DFN	81	95	+00         934         1,595           95         109         134           ).98         1.3         0.6           1.89         -2.06         2.53           59         70         80           0.8         2.1         6.6           544         1 137         1 893	134	181	247
	Precip.	<b>'</b> 06	1.73	0.98	1.3	0.6	5.68	4.61
	(inches)	DFN	0.51	-1.89	-2.06	2.53	3.6	2.59
lroquois**/	Avg. Temp.	'06	53	59	70	80	74	58
Huron#, ##	(F.°)	DFN	6.9	0.8	2.1	6.6	13.0	10.1
	Accum. GDD's	'06	214	544	1,137	1,893	2,588	2,861
		DFN	89	142	197	255	269	204
	Precip.	'06	2.65	2.02	2.35	0.23	5.65	4.09
	(inches)	DFN	0.62	-0.93	-1.88	-2.88	2.71	1.61
Brookings	Avg. Temp.	'06	49	58	67	74	69	55
ZNE (SDSILEarm)	(F.°)	DFN	4.8	1.3	0.9	3.3	0.4	-4.1
(3030 1 ann)	Accum. GDD's	'06	166	500	1,016	1,709	2,307	2,557
		DFN	-26	107	137	188	207	118
	Precip.	<b>'</b> 06	3.44	1.51	3.72	0.39	3.23	7.81
	(inches)	DFN	0.97	-2.14	-0.23	-2.96	0.4	5.55
Centerville	Avg. Temp.	'06	53	61	70	77	72	58
(Expt. Stn.)	(F.°)	DFN	5.8	0.5	0.6	3.3	9.7	8.3
	Accum. GDD's	'06	230	656	1,265	2,025	2,701	3,030
		DFN	88	166	184	197	198	122
	Precip.	'06	3.62	0.89	2.36	0.47	2.35	NA
	(inches)	DFN	1.01	2.91	1.05	-2.69	0.12	-
Platte**/	Avg. Temp.	'06	52	60	70	79	73	58
Academy# Mitchell##	(F.°)	DFN	6.5	2.4	2.6	5.5	1.6	-3.7
ΙνπισΠσΠππ	Accum. GDD's	'06	235	600	1,226	1,998	2,705	2,988
		DFN	114	178	228	278	292	206

\* DFN - how much a variable for year 2006 is greater or less (-) than the long-term average.

\*\* Precipitation data. # Avg. Temp. data. ## GDD data.

Table C. 2006 Non-Roundup Ready™ corn hybrid entries by brand/hybrid and performance table
number.

	Brand / Hybrid	Table No.	Brand / Hybrid	Table No.
	AGVENTURE/ AV4880CB	1a	KRUGER/ 8609HX	5b, 6a
	AGVENTURE/ AV5544CB	2b, 3a	KRUGER/ 8616HX	6b
	AGVENTURE/ AVEXP5544CB	1b	KRUGER/ 9111YGCB	5b, 6b
	DAIRYLAND/ STEALTH-1806	6a	KRUGER/ 9115YGCB	6b
	DAIRYLAND/ STEALTH-5007	5b	KRUGER/ 9212YGCB	6b
	DAIRYLAND/ STEALTH-5194	1a, 2a	KRUGER/ 9310YG+	5b, 6a
	DAIRYLAND/ STEALTH-5201	3b, 4b, 5a	KRUGER/ 9313YGCB	6b
	DAIRYLAND/ STEALTH-5204	3b, 4b, 5a	KRUGER/ 9496YGCB	1a, 2a, 3a, 4a
	DAIRYLAND/ STEALTH-5497	1b, 3a	KRUGER/ EXP0191	1a, 2a
	DEKALB/ DKC52-45 (YGCB)	5a	KRUGER/ EXP0192	1a, 2a
	DEKALB/ DKC55-12 (YGCB)	5a, 6a	KRUGER/ EXP0309	6a
	DEKALB/ DKC62-31 (YGCB)	6b	KRUGER/ EXP0404	3b, 4b, 5a
	EPLEY/ E1157	3a, 5a	KRUGER/ EXP0408	5b
	EPLEY/ E1231	3a, 4a, 5a	KRUGER/ EXP0599	1b, 2b, 3a, 4a
	EPLEY/ E1407HXLL	3a, 4a, 5a	KRUGER/ EXP0605B	3b, 4b, 5a
	EPLEY/ E1430YGCB	3b, 4b, 5a	KRUGER/ EXP0610	5b, 6a
	EPLEY/ E2407HXLL	3b, 4b, 5b	KRUGER/ EXP0692	1a, 2a
	EPLEY/ E2492YGPL	4b, 5b	KRUGER/ EXP5310YGCB	5b, 6a
	FARM ADVANTAGE/ 1065	5a, 6a	KRUGER/ EXP5494BTLL	1a, 2a
	FARM ADVANTAGE/ 5406	5b, 6a	KRUGER/ EXP5497YGCB	1b, 2b, 3a, 4a
	FARM ADVANTAGE/ 9699L	3a, 4a	KRUGER/ EXP5498YGCB	1b, 2b, 3a, 4a
	GOLD COUNTRY/ 94-01CB	1a, 2a, 4a	KRUGER/ EXP5593BTLL	1a, 2a
	GOLD COUNTRY/ 95-03CB	1a, 2a, 4a	KRUGER/ EXP5596BTLL	1a, 2a
	HEINE/ H818YGCB	6a	KRUGER/ EXP5597BTLL	1b, 2b, 3a, 4a
	HEINE/ H820YGCB	6a	KRUGER/ EXP5693YGCB	1a, 2a
_	HEINE/ H822	6b	KRUGER/ EXP8204HX	3b, 4b, 5a
	HEINE/ H824YGCB	6a	KRUGER/ EXP8502HX	1b, 2b, 4b, 5a
	HEINE/ H851YGCB	6b	KRUGER/ EXP8508HX	6a
	HEINE/ H856YGCB	6b	KRUGER/ EXP8601HX	1b, 2b, 4b, 5a
	KALTENBERG/ K4688BT	2b, 4a	KRUGER/ EXP8605HX	3b, 4b, 5a
	KRUGER/ 0409	5b, 6a	MYCOGEN/ 2C727	6b
	KRUGER/ 0508	5b, 6a	MYCOGEN/ 2G677	6a
	KRUGER/ 0603	1b, 2b, 3b, 4b, 5a	MYCOGEN/ 2K717	6b
	KRUGER/ 0612	6b	MYCOGEN/ 2R570	6a
	KRUGER/ 5109YGCB	5b, 6a	MYCOGEN/ 2T780	6b
	KRUGER/ 5416YGCB	6b	RENK/ RK488YGCB	2b, 3a, 4a
	KRUGER/ 5504YGCB	1b, 2b, 3b, 4b, 5a	RENK/ RK575YGPL	2b, 3a, 4a
	KRUGER/ 5505YGCB	3b, 4b, 5a	RENK/ RK789YGPL	6b
	KRUGER/ 5509YGCB	5b, 6a	RENK/ RK888YGCB	6b
	KRUGER/ 5517YGCB	6b	SEEDS 2000/ 2953BT	1a, 2a, 3a, 4a
	KRUGER/ 7613YG+	6b	WENSMAN/ W 5212BT	1a, 2a. 3a. 4a
	KRUGER/ 8414HX	6b	WENSMAN/ W4190	1a. 2a
		1h 2h 2h 4h Eo		, _u

Tuble B. 2000 Houndap Houdy			
Brand / Hybrid	Table No.	Brand / Hybrid	Table No.
AGVENTURE/ AV4006YPRR	1c, 2c	HEINE/ H725/RRYGCB	5c
AGVENTURE/ AV4883R2RW	2c	HEINE/ H749RR/YGCB	5c,6c
AGVENTURE/ AV5016R2CB	1c, 2c	HEINE/ H750RR/YGCB	5c,6c
ASGROW/ RX674RR2	6c	HEINE/ H766RRYGPL	6c
ASGROW/ RX715RR2YGCB	6d	HEINE/ H785RR	5d, 6c
CROWS/ 1699T	1c, 2c	HEINE/ H796RR	5d, 6c
CROWS/ 1705S	1d, 2d	HEINE/ H818RR	5d, 6c
CROWS/ 2121S	4d, 5c	HEINE/ H851RR/YGCB	5d, 6d
CROWS/ 4843X	5d, 6c	HEINE/ H851RRYGPL	6d
CROWS/ 4940T	6d	INTEGRA/ INT 6395RRYG	1c, 2c, 3c
CROWS/ 4982X	6d	INTEGRA/ INT 63F90RRYG	1c. 2c. 3c
CROWS/ 4S502	1d. 2d. 3c. 4c	INTEGRA/ INT 6506RRYG	4d, 5c
DAIRYLAND/ STEALTH-1606	5d 6c	INTEGRA/ INT 6602BBYG	1d 2d 3c 4c 5c
DAIRYLAND/ STEALTH-4006	6c	INTEGRA/ INT 6603BBYG	3d 4d 5c
DAIRVIAND/ STEALTH-6497	24	INTEGRA/ INT 6609BBVG	5d 6c
DAIRYLAND/ STEALTH-7191	10	INTEGRA/ INT 6698BBVG	2d 3c 4c
	1d 2d 3c 4c	INTEGRA/ INT 6710RRVG	20, 00, το βο
	1d 2d		1d 3c 4c
	10, 20		10, 30, 40
	10,20		20
	10,20		
			40
DEKALB/ DKC40-22RR21GPL	20,4C		40, 50, 60
			6C
DEKALB/ DKC48-53KR2YGCB	1d, 2d, 3c, 4c, 5c	KRUGER/ TI95RR	10, 20, 30, 40
DEKALB/ DKC50-20RR2YGCB	1d, 2d, 3c, 4c, 5c	KRUGER/ 1500RR	1d, 2d, 3c, 4c, 5c
DEKALB/ DKC50-48RR2YGCB	1d, 3c, 4c, 5c	KRUGER/ 158/RR	1c, 2c
DEKALB/ DKC51-39RR2YGPL	5c	KRUGER/ 1603RR	1d, 2d, 3d, 4d, 5c
DEKALB/ DKC52-47RR2YGCB	3d, 4d, 5c, 6c	KRUGER/ 1606RR	3d, 4d, 5d, 6c
DEKALB/ DKC52-63RR2YGCB	3d, 4d, 5c	KRUGER/ 2288RR/YGCB	1c, 2c
DEKALB/ DKC58-19 (RR2)	5d, 6c	KRUGER/ 2499RR/YGCB	1d, 2d, 3c, 4c
DEKALB/ DKC60-19RR2YGCB	6c	KRUGER/ 2506RR/YGCB	3d, 4d, 5d, 6c
DEKALB/ DKC61-22 (RR2)	6d	KRUGER/ 2509RR/YGCB	5d, 6c
DEKALB/ DKC61-72 (RR2)	5d, 6d	KRUGER/ 2517RR/YGCB	6d
EPLEY/ E1165RR	2c, 3c, 4c	KRUGER/ 2613RR/YGCB	5d, 6d
EPLEY/ E1185RR	2d, 3c, 4c	KRUGER/ 2697RR/YGCB	1d, 2d, 3c, 4c
EPLEY/ E1195RR	2d, 3c, 4c	KRUGER/ 6503TS	1d, 2d, 3d, 4d, 5c
EPLEY/ E12R24YGPL	2d, 3c, 4c	KRUGER/ 6603TS	1d, 2d, 3d, 4d, 5c
EPLEY/ E12R45YGCB	2d, 3d, 4d	KRUGER/ 6607TS	6c
EPLEY/ E1445RR	2d, 3d, 4d	KRUGER/ 9115TS	5d, 6d
EPLEY/ E2435RRRW	3d, 4d	KRUGER/ 9203RR/YGCB	1d, 2d, 3d, 4d, 5c
FARM ADVANTAGE/ 6504	4d, 5c, 6c	KRUGER/ 9212TS	5d, 6d
FONTANELLE/ 5K106	4c, 5c	KRUGER/ 9310TS	5d, 6c
FONTANELLE/ 5K824	4d, 5c	KRUGER/ 9313RR/YGCB	5d, 6d
FONTANELLE/ 7K733	5d, 6d	KRUGER/ 9392RR/YGCB	1c, 2c
FONTANELLE/ 8K389	6d	KRUGER/ 9392TS	1c, 2c
GOLD COUNTRY/ 100-05CBRC	3c, 4c	KRUGER/ 9407TS	6c
GOLD COUNTRY/ 102-04CBR	3d, 4d, 5c	KRUGER/ 9496RR	1c, 2c, 3c, 4c
GOLD COUNTRY/ 105-04CBR	4d, 5d	KRUGER/ 9593RR/YGCB	1c, 2c
GOLD COUNTRY/ 106-02CBR	4d, 5d, 6c	KRUGER/ EXP1190RR	1c. 2c
GOLD COUNTRY/ 92-01CBRCR	1c, 2c	KRUGER/ EXP1292RR	1c, 2c
GOLD COUNTRY/ 93-04CBR	10.20	KBUGER/ EXP1503BB	1d. 2d. 3d. 4d
GOLD COUNTRY/ 98-10CBR	1d. 2d. 3c. 4c	KRUGER/ EXP1700RR	1d, 2d, 3c, 4c
HEINE/ 729BR/VGCR	Γα, 2α, σσ, το Γο	KRUGER/ EXP2105RR/VGCR	3d 4d 5c
HEINE/ H721BB/YGCB	50	KBUGER/ EXP2301RB/VGCB	1d 2d 2d 4d
	50 60	KRUGER/ EXP2/1/RR/VGCR	5d 6d
	50,00		Ju, 00

Table D. 2006 Roundup Ready™ corn hybrid entries by brand/hybrid and performance table numb	er
(continued).	

Brand / Hybrid	Table No.	Brand / Hybrid	Table No.
KRUGER/ EXP2511RR/YGCB	5d, 6d	SEEDS 2000/ 3122RR/BT	1d, 3d
KRUGER/ EXP2688RR/YGCB	1c, 2c	SEEDS 2000/ EXP3101RR	1d, 2d, 4d
KRUGER/ EXP6611TS	6d	WENSMAN/ W 6117BTRR	1c, 2c
KRUGER/ EXP6612TS	6d	WENSMAN/ W 6194BTRR	1c, 2c, 3c, 4c
LEGEND/ LR9391RRYG+	2c	WENSMAN/ W 6212RR	1c, 2c, 3c, 4c
LEGEND/ LR9396RRCR	2d	WENSMAN/ W 6266BTRR	1d, 2d, 3c, 4c, 5c
LEGEND/ LR9501RRYG+	4d, 5c	WENSMAN/W 6287RR	1d, 2d, 3c, 4c
LEGEND/ LR9510RR	6c	WENSMAN/ W 6307RR	1d, 2d, 3c, 4c, 5c
LEGEND/ LR9594RB	2c	WENSMAN/ W 6315BTRR	3d, 4d, 5c, 6c
LEGEND/ LR9693RRYG+	4c	WENSMAN/ W 6318BTRR	3d, 4d, 5c, 6c
LEGEND/ LR9699RRYG+	4c, 5c	WENSMAN/ W 6374BTRR	3d, 4d, 5c, 6c
LEGEND/ LR9708RRYG+	6c	WENSMAN/ W 6422BTRR	6c
MIDWEST/ 4S502	1d. 2d. 3c. 4c	WENSMAN/W 7118BTRWRB	1c. 2c
MIDWEST/ 69402T	1c. 2c	WENSMAN/W 7269BTRWRB	1d. 2d. 3c. 4c. 5c
MIDWEST/ 69642S	1d, 2d	WENSMAN/W 7316BTRWRB	3d, 4d, 5c, 6c
MIDWEST/ 70503S	4d, 5c	WENSMAN/W 7423BTRWRR	5d, 6c
MIDWEST/ 77124X	5d, 6c	WENSMAN/ W7439BTRWRR	5d, 6c
MIDWEST/ 77323T	6d	WILBUR ELLIS/ HB9421B	10.20
MIDWEST/ 78133X	6d	WILBUR FLUS/ HB9451B	16.26.36.46
NUTECH/ 3301 BB	1d. 2d. 3c. 4c	WILBUR FLLIS/ HB9482BB	1d, 2d, 3c, 4c
NUTECH/ 3307 BB	3d 4d	WILBUR FLUS/ HB9531BB	3d 4d 5c 6c
NUTECH/ 3595 BB	1r	WII BUB FLUS/ HB9601BB	5d 6c
NUTECH/ 3995 BB	1c 2c		50,00
NUITECH/ 5005 BB/VGCB	3d 4d		
NUTECH/ 5006A BB/VGCB	3d 4d 5c 6c		
NUTECH/ 5101 BB/YGCB	1d 2d 3d 4d 5c		
NUTECH/ 5210 BB/VGCB	5d 6c		
NUTECH/ 5507 BB/YGCB	3d 4d 5c 6c		
NUTECH/ 5596 BB/VGCB			
NUTECH/ 5696 BB/YGCB	1d 2d		
NUTECH/ 7099 BB/YGBW	1d 2d 3c		
NUTECH/ 7110 BB/YGBW	5d 6c		
	5d, 6c		
	1d 2d 3c 4c		
NUTECH/ 9003 BB/YGPI	3d 4d		
NUTECH/ 9006 BR/VGPI	3d 4d 5c 6c		
NUTECH/ 9013 BR/VGCB	6c		
NUTECH/ 9101 BR/YGPI	1d 2d 3c 4c 5c		
NUTECH/ 9197 BB/YGPI	1c 2c		
NUTECH/ 9410 BR/YGPI	5d 6c		
NUTECH/ 9507 BB/YGPI	3d 4d 5c 6c		
NUTECH/ 9903 BR/YGPI	3d 4d 5c		
NUTECH/ 9908 RR/VGPI	5d 6c		
ΡΔΝΝΔΒ/ 5C-760RRCRW/±	2d Ar		
PANNAR/ 5E-850RRRT	2d, <del>1</del> 0 2d 4c		
	2d, 40		
	20, 40 3d 4d		
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3EED9 2000/ 2993KK	IC, 2C, 4C		

Drond /Urbrid	Brand		Hybrid performance variable at harvest						
(By 2-year then '06 yields)	Rel Mot	2-year	'06 Yield	'06 Bu.Wt.	'06 Grain	'06 Lodg-	'06 Pct*		
	พลเ	Yield bu/a	bu/a	lb	Mist %	ing %	Stand		
TWO-YEAR ENTRIES:									
AGVENTURE/ AV4880CB	95	134	66	60	17	0	100		
DAIRYLAND/ STEALTH-5194	94	130	66	58	18	1	99		
KRUGER/ 9496YGCB	95	125	53	59	17	0	100		
SEEDS 2000/ 2953BT	95	121	52	60	18	2	100		
WENSMAN/ W 5212BT	95	118	42	58	15	0	100		
KRUGER/ EXP0692	92	99	15		17	0	99		
ONE-YEAR ENTRIES:									
KRUGER/ EXP5593BTLL	93		64	60	17	1	100		
WENSMAN/ W4190	90		57	59	15	0	98		
KRUGER/ EXP5693YGCB	93		50	59	16	2	100		
GOLD COUNTRY/ 94-01CB	94		49	57	16	0	99		
KRUGER/ EXP0191	91		45	58	18	0	100		
KRUGER/ EXP5494BTLL	94		37	57	15	1	98		
KRUGER/ EXP0192	92	•	31	59	16	0	100		
GOLD COUNTRY/ 95-03CB	95		20		18	0	98		
KRUGER/ EXP5596BTLL	95	•	14		18	0	99		
Trial avg.:	94	121	44	59	17	0	99		
Highest (H)-avg.:	95	134	66	60	18	2	100		
Lowest (L)-avg.:	90	99	14	57	15	0	98		
H-L avg. difference:	5	35	52	3	3	2	3		
** Lsd (.05):		26	++	NS	2	NS	NS		
# Min. TPG-value:		108	-	57	-	-	98		
## Max. TPG-value:		-	-	-	17	2	-		
+ Coef. of var.:		15	44+++	2	8	233	1		
No. of entries:	15	6	15	12	15	15	15		

Table 1a. Early maturity Non-Roundup Ready™ corn hybrid test trial results, Allen & Inel Ryckn	an Farm,
Warner, SD, 2005–2006.	

\* Seeded May 3, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

Prond/Unbrid	Brand	Hybrid performance variable at harvest							
(By 2-year then '06 yields)	Rel.	2-year	'06 Yield	'06 Bu.Wt.	'06 Grain	'06 Lodg-	'06 Pct.*		
	Mat.	Yield bu/a	bu/a	lb	Moist. %	ing %	Stand		
TWO-YEAR ENTRIES:									
DAIRYLAND/ STEALTH-5497	98	137	77	57	16	0	99		
KRUGER/ 5504YGCB	103	126	44	55	22	0	100		
KRUGER/ 8602HX	102	124	50	56	21	1	99		
ONE-YEAR ENTRIES:									
KRUGER/ EXP5597BTLL	97	•	82	58	19	0	100		
AGVENTURE/ AVEXP5544CB	98	•	77	58	20	1	99		
KRUGER/ EXP5497YGCB	97		73	56	18	2	100		
KRUGER/ EXP8502HX	102		59	57	22	3	99		
KRUGER/ EXP0599	99		49	57	20	0	99		
KRUGER/ EXP5498YGCB	98		44	57	23	0	100		
KRUGER/ EXP8601HX	101		36	54	25	0	99		
KRUGER/ 0603	103		31	53	25	0	100		
Trial avg.:	100	129	56	56	21	1	99		
Highest (H)-avg:	103	137	82	58	25	3	100		
Lowest (L)-avg.:	97	124	31	53	16	0	99		
H-L avg. difference:	6	13	51	5	9	3	2		
** Lsd (.05):		NS	++	1	2	2	NS		
# Min. TPG-value:		124	-	57	-	-	99		
## Max. TPG-value:		-	-		18	2	-		
+ Coef. of var.:		14	30+++	1	5	248	1		
No. of entries:	11	3	11	11	11	11	11		

Table 1b. Late maturity Non-Roundup Ready<sup>™</sup> corn hybrid test trial results, Allen and Inel Ryckman Farm, Warner, SD, 2005–2006.

\* Seeded May 3, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

Drend (II) shall	Brand	Test trial variable at harvest							
Brand/Hybrid (By 2 year than '06 yields)	Rel.	2-year	'06 Yield	'06 Bu.Wt.	'06 Grain	'06 Lodg-	'06 Pct.*		
(By 2-year their to yields)	Mat.	Yield bu/a	bu/a	lb	Moist. %	ing %	Stand		
TWO-YEAR ENTRIES:									
WENSMAN/W 6212RR	95	169	137	58	15	1	100		
DEKALB/DKC42-95RR2YGCB	92	156	108	54	16	0	98		
WENSMAN/W 6194BTRR	95	150	98	59	16	1	99		
SEEDS 2000/2944RR/BT	94	148	100	59	15	0	99		
KRUGER/9593RR/YGCB	93	144	88	60	15	0	100		
SEEDS 2000/2953RR	95	143	94	59	15	0	98		
KRUGER/9392RR/YGCB	92	142	105	59	16	0	99		
WENSMAN/W 6117BTRR	92	133	59	60	15	0	100		
NUTECH/NT-3595 RR	94	132	60	57	15	1	100		
INTEGRA/INT 6395RR	94	126	57	57	18	0	99		
DAIRYLAND/STEALTH-7191	91	125	48	59	15	0	100		
INTEGRA/INT 63F90RRYG	91	106	16		17	0	100		
DEKALB/DKC41-64RR2YGCB	91	105	14		19	0	100		
KRUGER/9496RR	95	100	10		15	1	100		
ONE-YEAR ENTRIES:									
WILBUR ELLIS/ HB9421R	92		137	59	15	0	99		
NUTECH/ 9197 RR/YGPL	95		115	60	15	2	99		
GOLD COUNTRY/ 93-04CBR	93		102	57	16	0	100		
KRUGER/ EXP1190RR	90		91	59	14	2	99		
GOLD COUNTRY/ 92-01CBRC	92		86	57	17	0	100		
NUTECH/ 5596 RR/YGCB	95		83	55	21	1	99		
CROWS/ 1699T	94		82	57	16	0	100		
DEKALB/ DKC44-92 (RR2)	94		81	57	16	0	100		
NUTECH/ 3995 RR	94		79	59	16	0	99		
KRUGER/ 9392TS	92		78	58	16	0	100		
WENSMAN/W 7118BTRWRR	92		72	58	16	Ó	98		
AGVENTURE/ AV4006YPRR	92		63	58	16	1	100		
AGVENTURE/ AV5016R2CB	94		60	58	16	Ó	99		
MIDWEST/ 69402T	94		60	57	17	Ō	100		
KRUGER/ 1587RR	87		52	60	16	1	99		
WILBUR ELLIS/ HB9451R	95		51	58	16	2	100		
KRUGER/ EXP1292RR	92		51	56	14	8	100		
KRUGER/ 1195RR	95		51	58	15	1	100		
KRUGER/ 2288RR/YGCB	88		31	58	15	8	99		
KRUGER/ EXP2688RR/YGCB	88		8		15	0	100		
Trial avg.:	93	134	71	58	16	1	99		
Highest (H)-avg.:	95	169	137	60	21	8	100		
Lowest (L)-avg.:	87	100	8	54	14	0	98		
H-L avg. difference:	8	69	129	6	6	8	3		
** Lsd (.05):	-	++	++	2	2	3	NS		
# Min. TPG-value:		-	-	58	-	-	98		
## Max. TPG-value:		-	-	-	16	3	-		
+ Coef. of var.:		29+++	76+++	3	7	220	1		
No. of entries:	34	14	34	30	34	34	34		

Table 1c. Early maturity Roundup Ready™ corn hybrid test trial results, Allen & Inel Ryckman Farm, Warner, SD, 2005–2006.

\* Seeded May 3, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

+++ The high level of experimental error in this test indicates caution should be exercised when using the results of this

test to determine the top performance group for yield or for determining if two hybrids differ in yield.

Brond /Ushrid	Brand		T	est trial varia	ble at harve	st	
Brallu/Hybriu (By 2 year than '06 yields)	Rel.	2-year	'06 Yield	'06 Bu.Wt.	'06 Grain	'06 Lodg-	'06 Pct.*
(By 2-year their to yields)	Mat.	Yield bu/a	bu/a	lb	Moist. %	ing %	Stand
TWO-YEAR ENTRIES:							
KRUGER/2697RR/YGCB	97	135	73	58	16	1	100
WENSMAN/W 6266BTRR	97	127	54	59	16	4	100
DEKALB/DKC50-20RR2YGCB	100	125	47	56	20	4	100
DEKALB/DKC47-10RR2YGCB	97	124	53	59	16	1	100
NUTECH/NT-5101 RR/YGCB	101	123	52	55	21	0	99
KRUGER/6503TS	103	123	42	59	21	3	99
DEKALB/DKC48-53RR2YGCB	98	120	35	56	19	1	100
SEEDS 2000/3122RR/BT	102	115	37	54	23	0	100
KRUGER/ 1500RR	100	119	43	58	15	2	100
KRUGER/9203RR/YGCB	103	106	25	55	21	0	99
ONE-YEAR ENTRIES:							
WENSMAN/ W 6307RR	100		82	58	17	0	100
MIDWEST/ 69642S	96		77	58	16	0	100
KRUGER/ 2499RR/YGCB	99		74	59	15	0	100
DAIRYLAND/ STEALTH-7196	96		71	58	16	0	99
KRUGER/ EXP1700RR	100		71	58	18	0	99
CROWS/ 1705S	96		69	58	16	1	100
NUTECH/ 7099 RR/YGRW	98		62	59	17	0	100
KRUGER/ EXP1503RR	103		60	57	18	0	100
MIDWEST/ 4S502	97		60	59	15	2	97
NUTECH/ 3301 RR	100		57	55	18	0	99
WENSMAN/W 6287RR	98		57	58	16	2	100
SEEDS 2000/ EXP3101BB	101		57	59	18	_0	100
GOLD COUNTRY/ 98-10CBR	98		55	59	16	1	99
NUTECH/9101 BB/YGPI	100		54	55	20	0	100
NUTECH/ 5696 BB/YGCB	96		51	56	16	1	100
CBOWS/ 4S502	97		49	57	15	, 0	100
KBUGER/ 1603BB	103	·	39	53	24	5	100
DAIRYLAND/ STEALTH-7201	100	·	35	57	19	2	100
NUTECH/ 9002 BB/YGPI	100		35	59	21	0	100
KBUGER/ 6603TS	103	•	34	54	24	1	100
DEKALB/ DKC50-48BB2YGCB	100	•	28	0.	19	2	100
INTEGRA/ INT 6602BBYG	100		28	55	19	0	100
INTEGRA/ INT 6799RBYG	99	•	20	55	19	1	100
WILBUR FLUS/ HB9482BB	98	•	16	00	21	0	100
KBUGER/ EXP2301BB/YGCB	103	•	10	•	27	0	98
WENSMAN/W/7269BTBWBB	97	·	9	•	18	0 0	100
Trial avg :	99	. 122	48	57	18	1	100
Highest (H)-avg :	103	125	82	59	24	5	100
lowest (I)-avg.	96	105	9	53	15	0	97
H-l ava difference:	7	29	73	6	9 IJ	5	37
**   cd ( 05).	,	NS	, j 1	2	2	2	2
# Min_TPG_value:		106	τ <del>†</del>	57	2	5	2 02
# Way TPC_value		100	-	31	- 17	2	30
$\pi\pi$ ivial. IF U-value.		10	25,	- 2	0	ى 10/	- 1
+ COUL OI Val	26	10	ວບ+++ ວຣ	2	0	134	26
NO. OF EITHES:	30	10	- 30	JZ	30	30	- 30

### Table 1d. Late maturity Roundup Ready™ corn hybrid test trial results, Allen & Inel Ryckman Farm Warner, SD, 2005–2006.

\* Seeded May 13, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

Drond /Unbrid	Brand	Hybrid performance variable at harvest							
(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'O6 Lodg- ing %	'06 Pct.* Stand		
TWO-YEAR ENTRIES:									
WENSMAN/ W 5212BT	95	119	75	57	16	0	99		
DAIRYLAND/ STEALTH-5194	94	118	77	57	17	1	100		
GOLD COUNTRY/ 94-01CB	94	115	67	56	18	2	100		
KRUGER/ 9496YGCB	95	113	61	57	16	1	99		
KRUGER/ EXP0692	92	109	60	59	15	1	99		
SEEDS 2000/ 2953BT	95	108	51	56	18	0	98		
ONE-YEAR ENTRIES:									
KRUGER/ EXP5593BTLL	93		72	58	16	0	100		
WENSMAN/ W4190	90		71	56	14	1	100		
KRUGER/ EXP5693YGCB	93		55	56	16	1	99		
KRUGER/ EXP5494BTLL	94		45	55	17	1	100		
KRUGER/ EXP0191	91		39	57	19	1	100		
KRUGER/ EXP5596BTLL	95		34	58	18	0	100		
KRUGER/ EXP0192	92		29	53	17	0	100		
GOLD COUNTRY/ 95-03CB	95		21		17	1	100		
Trial avg.:	93	114	54	57	17	1	100		
Highest (H)-avg.:	95	119	77	59	19	2	100		
Lowest (L)-avg.:	90	108	21	53	14	0	98		
H-L avg. difference:	5	11	56	6	4	2	2		
** Lsd (.05):		NS	++	2	-	-	NS		
# Min. TPG-value:		108	-	57	-	-	98		
## Max. TPG-value:		-	-	-	18	2			
+ Coef. of var.:		18	45+++	2	9	171	1		
No. of entries:	14	6	14	13	14	14	14		

### Table 2a. Early maturity Non-Roundup Ready™ corn hybrid test trial results, Northeast Research Farm, South Shore, SD, 2005–2006.

\* Seeded May 5, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

Prond/Hybrid	Brand	Hybrid performance variable at harvest							
(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand		
TWO-YEAR ENTRIES:									
KRUGER/ 5504YGCB	103	86	13		18	0	100		
KRUGER/ 8602HX	102	86	10		18	1	98		
<b>ONE-YEAR ENTRIES:</b>									
RENK/ RK488YGCB	97		97	57	17	0	100		
RENK/ RK575YGPL	97		82	54	16	0	100		
KRUGER/ EXP5597BTLL	97		70	58	19	1	100		
KRUGER/ EXP5497YGCB	97		63	54	17	0	100		
KALTENBERG/ K4688BT	96		50	57	17	3	99		
KRUGER/ 0603	103		29	54	22	0	99		
KRUGER/ EXP8601HX	101		26	54	24	0	100		
AGVENTURE/ AV5544CB	98		25	55	22	1	96		
KRUGER/ EXP5498YGCB	98		23	51	26	0	99		
KRUGER/ EXP0599	99		16		19	0	100		
KRUGER/ EXP8502HX	102	•	10	57	20	0	99		
Trial avg.:	99	86	40	55	20	0	99		
Highest (H)-avg.:	103	86	97	58	26	3	100		
Lowest (L)-avg.:	96	86	10	51	16	0	96		
H-L avg. difference:	7	0	87	7	10	3	4		
** Lsd (.05):		NS	++	3	2	2	2		
# Min. TPG-value:		86	-	56	-	-	98		
## Max. TPG-value:		-	-	-	18	2	-		
+ Coef. of var.:		10	58+++	3	6	240	1		
No. of entries:	13	2	13	10	13	13	13		

### Table 2b. Late maturity Non-Roundup Ready™ corn hybrid test trial results, Northeast Research Farm, South Shore, SD, 2005–2006.

\* Seeded May 5, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

Brond/Hybrid	Brand		T	est trial varia	ble at harve	st	
Branu/Hybriu (By 2-year then '06 yields)	Rel.	2-year	'06 Yield	'06 Bu.Wt.	'06 Grain	'06 Lodg-	'06 Pct.*
(By 2-year their of yreids)	Mat.	Yield bu/a	bu/a	lb	Moist. %	ing %	Stand
TWO-YEAR ENTRIES:							
INTEGRA/INT 63F90RRYG	91	139	85	58	17	0	98
DEKALB/DKC42-95RR2YGCB	92	138	91	56	17	0	98
WENSMAN/W 6194BTRR	95	134	92	57	16	0	100
KRUGER/9496RR	95	133	80	56	15	0	100
KRUGER/9593RR/YGCB	93	132	81	60	15	0	100
WENSMAN/W 6117BTRR	92	131	79	57	17	0	99
SEEDS 2000/2953RR	95	131	76	57	17	0	98
INTEGRA/INT 6395RR	94	131	74	55	18	2	99
SEEDS 2000/2944RR/BT	94	126	81	58	16	0	96
KRUGER/9392RR/YGCB	92	126	66	57	17	0	100
KALTENBERG/K3919RRBT	92	124	74	57	18	0	100
DEKALB/DKC41-64RR2YGCB	91	124	62	53	23	3	99
WENSMAN/W 6212RR	95	123	64	55	16	0	96
AGVENTURE/AV4883R2RW	94	108	44	56	18	1	96
ONE-YEAR ENTRIES:	•						
CROWS/ 1699T	94		95	55	17	0	98
WENSMAN/ W 7118BTRW/RR	92		88	57	16	0	99
	92		84	58	16	0	100
GOLD COUNTRY/ 92-01CBBC	92	•	83	58	18	Ő	97
NUTECH/ 9197 BB/VGPI	95	•	82	58	18	ů n	99
KBLIGER/ 9392TS	92	•	82	56	17	1	98
MIDWEST/ 69/02T	9/	•	82	50	19	1	99
KRUGER/ 1105RR	95		78	56	17	0	100
	01		70	55	10	2	100
	02		74	55	10	2	00
	02		74	57	20	1	33
	05	•	74	55	20		
	95		73	50	21	0	97
	94	·	71	50	14	0	97
	90		09	57	14	0	100
	94	•	08	50	18	1	100
	94	•	67	50	17		97
	94	•	62	50	17	0	99
	95		60	55	17	1	98
WILBUR ELLIS/ HB9451R	95		53	56	18	1	95
	8/		52	59	14	0	99
KALIENBERG/ K2405RRB1	81	•	44	57	14	0	98
KRUGER/ EXP1292KK	92	•	30	52	10	0	100
KRUGER/ EXP2688RR/YGCB	88	•	31	55	18	1	100
KRUGER/ 2288RR/YGCB	88		28	55	20	0	98
Trial avg.:	92	129	70	56	17	1	98
Highest (H)-avg.:	95	139	95	60	23	6	100
Lowest (L)-avg:	81	108	28	52	14	0	95
H-L avg. difference:	14	31	67	7	9	6	5
** Lsd (.05):		NS	++	3	2	2	NS
# Min. TPG-value:		108	-	57	-	-	98
## Max. TPG-value:		-	-	-	16	2	-
+ Coef. of var.:		13	30+++	3	8	209	2
No. of entries:	38	14	38	38	38	38	38

### Table 2c. Early maturity Roundup Ready<sup>™</sup> corn hybrid test trial results, Northeast Research Farm, South Shore, SD, 2005–2006.

\* Seeded May 5, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

	Brand Test trial variable at harvest						
Brand/Hybrid (By 2-year then '06 yields)	Rel.	2-year	'06 Yield	'06 Bu.Wt.	'06 Grain	'06 Lodg-	'06 Pct.*
	Mat.	Yield bu/a	bu/a	lb	Moist. %	ing %	Stand
TWO-YEAR ENTRIES:							
KRUGER/2697RR/YGCB	97	142	105	55	17	1	99
DEKALB/DKC50-20RR2YGCB	100	141	98	56	18	0	100
WENSMAN/W 6266BTRR	97	137	91	57	17	0	100
DEKALB/DKC48-53RR2YGCB	98	130	81	53	17	2	98
KRUGER/ 1500RR	100	130	81	56	16	1	99
NUTECH/NT-5101 RR/YGCB	101	123	65	51	23	2	100
DAIRYLAND/STEALTH-6497	97	121	67	56	14	2	100
KRUGER/6503TS	103	111	62	55	21	0	100
KRUGER/9203RR/YGCB	103	109	41	50	24	0	99
ONE-YEAR ENTRIES:							
MIDWEST/ 69642S	96		108	56	16	0	98
DAIRYLAND/ STEALTH-7196	96		106	56	16	2	97
DEKALB/ DKC46-22RR2YGPL	96		101	59	16	0	97
WENSMAN/ W 6307RR	100		101	55	19	2	99
WENSMAN/ W 7269BTRWRR	97		101	54	16	0	99
SEEDS 2000/ EXP3101RR	101		100	57	17	0	96
CROWS/ 1705S	96		97	56	18	1	98
KRUGER/ EXP1700RR	100		96	56	16	1	99
KRUGER/ EXP1503RR	103	· ·	95	53	20	1	97
NUTECH/ 5696 RR/YGCB	96		94	55	15	1	99
MIDWEST/ 4S502	97		92	58	17	0	99
PANNAR/ 5C-760RRCRW+	97		89	54	16	0	97
NUTECH/ 7099 RR/YGRW	98		88	58	18	0	95
CROWS/ 4S502	97		88	57	16	0	100
KRUGER/ 2499RR/YGCB	99	· ·	87	57	17	0	98
EPLEY/ E1185RR	97		86	55	15	2	98
WENSMAN/ W 6287RR	98		84	56	17	1	99
INTEGRA/ INT 6698RRYG	97		84	55	16	2	98
KRUGER/ 1500RR	100		81	56	16	1	99
EPLEY/ E1195RR	98		79	58	17	0	99
LEGEND/ LR9396RRCR	96		78	56	16	3	100
WILBUR ELLIS/ HB9482RB	98		76	53	17	0	99
GOLD COUNTRY/ 98-10CBR	98		73	56	18	0	97
EPLEY/ E12R24YGPL	100		69	53	22	0	100
DAIRYLAND/ STEALTH-7201	100		66	55	22	0	99
NUTECH/ 9002 RR/YGPL	100		62	54	25	1	99
RENK/ RK488RRYGPL	97		61	58	18	1	99
NUTECH/ 3301 RR	100		60	50	22	0	97
INTEGRA/ INT 6602RRYG	100		59	52	22	0	99
NUTECH/ 9101 RR/YGPL	100		58	53	23	1	99

# Table 2d. Late maturity Roundup Ready™ corn hybrid test trial results, Northeast Research Farm, South Shore, SD, 2005–2006.

Proved/Uniterial	Brand	Test trial variable at harvest							
Brand/Hybrid (By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand		
EPLEY/ E12R45YGCB	102		58	50	24	0	98		
PANNAR/ 5E-900RRBT	97		56	51	25	0	99		
KRUGER/ 1603RR	103		54	56	20	0	99		
KRUGER/ EXP2301RR/YGCB	103		48	50	27	1	100		
KRUGER/ 6603TS	103		39	50	26	1	100		
PANNAR/ 5E-850RRBT	96		34	54	25	1	99		
EPLEY/ E1445RR	104		29	55	22	0	100		
Trial avg.:	99	127	77	55	19	1	99		
Highest (H)-avg.:	104	142	108	59	27	3	100		
Lowest (L)-avg.:	96	109	29	50	14	0	95		
H-L avg. difference:	8	33	79	9	12	3	5		
** Lsd (.05):		NS	++	2	3	NS	NS		
# Min. TPG-value:		109	-	57	-	-	95		
## Max. TPG-value:		-	-	-	17	3	-		
+ Coef. of var.:		18	39+++	2	9	201	2		
No. of entries:	45	9	45	45	45	45	45		

### Table 2d. Late maturity Roundup Ready™ corn hybrid test trial results, Northeast Research Farm, South Shore, SD, 2005–2006 (continued).

\* Seeded May 5, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

Prond/Hubrid	Brand	Hybrid performance variable at harvest							
Branu/Hybrid (By 2-year then '05 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	'06 Bu.Wt. Ib	'05 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand		
TWO-YEAR ENTRIES:									
DAIRYLAND/ STEALTH-5497	98	172	148	59	16	2	98		
KRUGER/ 9496YGCB	95	172	147	59	16	3	97		
SEEDS 2000/ 2953BT	95	168	145	59	16	0	100		
WENSMAN/ W 5212BT	95	167	143	59	16	1	97		
EPLEY/ E1407HXLL	100	166	139	58	21	5	97		
EPLEY/ E1157	96	165	124	58	20	6	95		
<b>ONE-YEAR ENTRIES:</b>									
AGVENTURE/ AV5544CB	98		160	61	18	4	96		
FARM ADVANTAGE/ 9699L	99		159	59	20	2	100		
KRUGER/ EXP5597BTLL	97		153	58	16	1	99		
RENK/ RK575YGPL	97		147	57	16	0	100		
KRUGER/ EXP5498YGCB	98		145	60	20	0	98		
RENK/ RK488YGCB	97		143	59	16	3	100		
EPLEY/ E1231	100		143	59	19	5	99		
KRUGER/ EXP5497YGCB	97		136	58	16	0	99		
KRUGER/ EXP0599	99		130	58	20	3	98		
Trial avg.:	97	168	144	59	18	2	98		
Highest (H)-avg.:	100	172	160	61	21	6	100		
Lowest (L)-avg.:	95	165	124	57	16	0	95		
H-L avg. difference:	5	7	36	4	5	6	5		
** Lsd (.05):		NS	24	2	1	4	NS		
# Min. TPG-value:		165	136	59	-	-	95		
## Max. TPG-value:		-	-	-	17	4	-		
+ Coef. of var.:		6	10	2	4	105	3		
No. of entries:	15	6	15	15	15	15	15		

### Table 3a. Early maturity Non-Roundup Ready™ corn hybrid test trial results, Erland Weerts Farm, Bancroft, SD, 2005–2006.

\* Seeded May 12, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

Drond /Uniberid	Brand	Hybrid performance variable at harvest							
(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand		
TWO-YEAR ENTRIES:									
EPLEY/ E1430YGCB	103	182	157	57	25	12	96		
KRUGER/ 5505YGCB	105	177	160	59	22	3	100		
DAIRYLAND/ STEALTH-5201	101	171	135	59	19	4	99		
KRUGER/ 5504YGCB	103	167	138	57	20	16	100		
KRUGER/ 8602HX	102	166	142	57	21	5	98		
ONE-YEAR ENTRIES:									
KRUGER/ 0603	103		161	56	24	14	99		
KRUGER/ EXP8204HX	105		151	57	22	6	94		
KRUGER/ EXP0605B	105		143	56	22	9	99		
DAIRYLAND/ STEALTH-5204	104		141	57	20	10	99		
KRUGER/ EXP0404	104		133	57	19	3	97		
KRUGER/ EXP8605HX	105		128	56	24	5	99		
EPLEY/ E2407HXLL	108		78	51	27	7	97		
Trial avg.:	104	173	139	57	22	8	98		
Highest (H)-avg.:	108	182	161	59	27	16	100		
Lowest (L)-avg.:	101	166	78	51	19	3	94		
H-L avg. difference:	7	16	83	8	7	13	6		
** Lsd (.05):		NS	25	2	2	NS	2		
# Min. TPG-value:		166	136	57	-	-	NS		
## Max. TPG-value:		-	-	-	21	16	-		
+ Coef. of var.:		8	11	2	4	84	2		
No. of entries:	12	5	12	12	12	12	12		

Table 3b. Late maturity Non-Roundup Ready<sup>™</sup> corn hybrid test trial results, Erland Weerts Farm, Bancroft, SD, 2005–2006.

\* Seeded May 12, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

Dramumyonic (b) 2-year then 06 yields)         Rel. Mat.         2-year Vield bu/a         106 Bu.Wt. bu/a         106 Bu.Vt. Moist %         106 deg.         106 deg.         107         00 By 3           TWO-YEAR ENTRIES: DEKALB/DKCS0-20RRYGCB         100         195         169         59         16         3         99           WENSMAN/WC S206 TRR         94         183         158         59         17         2         99           WENSMAN/WC S206 TRR         94         183         158         59         16         0         100           DEKALB/DKC48-S3RR2YGCB         98         173         154         58         16         1         99           WENSMAN/WC S12RR         90         173         154         59         16         1         98           KRUGER/9496RR         94         165         137         58         16         1         99           PIELY(E1165RR         95         160         134         58         16         3         100           ONE-EAR ENTRIES: WENSMAN/W 630/RR         100         .         171         57         17         2         98           DEKALB/DKC50-48RR2YGCB         99         .         167         59 <td< th=""><th>Due and Allach with</th><th>Brand</th><th></th><th>T</th><th>est trial varia</th><th>ble at harve</th><th>st</th><th></th></td<>	Due and Allach with	Brand		T	est trial varia	ble at harve	st	
IP / Pier luin of yield bu/a         Mat.         Yield bu/a         bu/a         Ib         Moist. %         ing %         Stand           I'MO-YEAR ENTRIES:         100         195         169         59         16         3         99           WEINSMANW 5266 TIR         96         189         164         60         17         0         98           WEINSMANW 5266 TIR         96         189         164         59         16         0         0         99           WEINSMANW 51948 TIR         93         181         164         58         16         1         96           RUGER 2000R         90         173         154         59         16         1         00           DEKALB/DKC48-53R2/GCB         90         163         142         58         16         1         99           INTEGRA/INT 6300RR         100         172         145         59         16         1         100           VENSMAN/W 522RR         90         164         140         57         18         1         99           INTEGRA/INT 6602RYG         100         172         57         17         2         98           VELAUS MASONA         95	Brand/Hybrid (By 2 year than '06 yielda)	Rel.	2-year	'06 Yield	'06 Bu.Wt.	'06 Grain	'06 Lodg-	'06 Pct.*
TWO-YEAR ENTRIES:         -	(By 2-year their to yields)	Mat.	Yield bu/a	bu/a	lb	Moist. %	ing %	Stand
DEKALB/DKC50-20RR/YGCB         100         195         169         59         16         3         99           WENSMAM/W 62B6BTRR         94         183         158         59         17         2         99           WENSMAM/W 62B6BTRR         93         181         164         58         16         1         96           KRUGER/287RYCCB         97         178         155         59         16         1         97           DEKALB/DKC4-53RRYGCB         98         178         154         59         16         1         98           KRUGER/948RR         90         169         142         58         16         1         99           INTEGA/INT 6602RNYG         90         169         142         58         16         1         99           INTEGRA/INT 6602RNYG         100         1.64         140         57         18         1         91           PILEV/E1168R         95         160         1.71         57         17         2         96           DEKALB/DKC6.948R2/YGCB         100         .         171         60         16         2         97           INTEGRA/INT 6693RNYGCB         99         .<	TWO-YEAR ENTRIES:							
WEINMAIN/W 626BTRR         96         189         164         60         17         0         98           INTEGRA/INT 639SRR         94         183         158         59         17         2         99           WENSMAN/W 6194BTRR         93         181         164         58         16         1         96           KRUGER/2697RR/GCB         97         178         155         59         16         1         97           INTEGRA/INT 63790RRYG         90         172         145         59         16         1         98           KRUGER/48648-53RR2YGCB         90         169         142         58         16         1         99           INTEGRA/INT 6622RRYG         100         172         145         59         16         1         99           INTEGRA/INT 6622RRYG         100         16         134         58         16         3         100           VENSMAN/W 62047RR         100         .         171         57         20         2         95           RUGER/ 2671700R         100         .         171         57         17         2         98           VENSMAN/W 62048RRYCB         97 <td< td=""><td>DEKALB/DKC50-20RR2YGCB</td><td>100</td><td>195</td><td>169</td><td>59</td><td>16</td><td>3</td><td>99</td></td<>	DEKALB/DKC50-20RR2YGCB	100	195	169	59	16	3	99
INTEGRA/INT 6395RR         94         183         158         59         17         2         99           WENSMAN/W 6394BTRR         33         181         164         58         16         1         96           KRUGER/2697R/YGCB         97         178         154         58         16         1         97           INTEGRA/INT 6390RRYG         90         173         154         59         16         1         98           KRUGER/3930RR         94         165         137         58         16         1         99           INTEGRA/INT 6302RRYG         100         164         140         57         18         1         91           IPLEV/E1165R         95         160         134         58         16         2         97           ORE-YEAR ENTRIES:	WENSMAN/W 6266BTRR	96	189	164	60	17	0	98
WEINMAIN/W 6194BTRR         93         181         164         58         16         1         96           KRUBER/269/RR/VGCB         97         178         155         59         16         0         100           DEKALB/DKC48-53R2/GCB         98         173         154         59         16         1         97           INTEGRA/INT 65790RYG         90         173         154         59         16         1         100           WENSMAN/W 6212RR         90         163         142         58         16         1         98           KRUGER/ISORR         94         165         137         58         16         1         99           INTEGRA/INT 6602/RYG         100         164         140         57         18         1         91           ONE-YEAR ENTRIS:	INTEGRA/INT 6395RR	94	183	158	59	17	2	99
KRUGER/2697RR/GCB         97         178         155         59         16         0         100           DEKALB/DKC48-53RR2YGCB         98         178         154         58         16         1         97           INTEGRA/INT 63P90RPYG         90         173         154         59         16         1         98           KRUGER/1500RR         100         172         145         59         16         1         98           KRUGER/9496RR         94         165         137         58         16         1         99           INTEGRA/INT 602RNG         100         164         140         57         18         1         91           EPLEYE/16168R         95         160         134         58         16         2         92           VENSMAN/W 6307R         100         .         171         60         16         2         97           CROWS/45802         97         .         167         59         17         0         97           MIDWEST/45802         97         .         167         58         16         3         96           EPLEY/E10724YGPL         100         .         167	WENSMAN/W 6194BTRR	93	181	164	58	16	1	96
DEKALB/DKC44-53R2YECB         98         178         154         58         16         1         97           INTEGRA/INT 63790RYG         90         173         154         59         16         1         100           WENSMAN/W 6212RR         90         169         142         58         16         1         99           INTEGRA/INT 602RRYG         100         164         140         57         18         1         91           EPLEY/E1165RR         95         160         134         58         16         3         100           ONE-YEAR ENTRIES:	KRUGER/2697RR/YGCB	97	178	155	59	16	0	100
INTEGRA/INT 63F90RYG         90         173         154         59         16         1         98           KRUGER/ 1500R         100         172         145         59         16         1         100           WENSMAN/W 6212RR         90         169         142         58         16         1         98           INTEGRA/INT 6028RYG         100         164         140         57         18         1         91           EPLEY[1155R         95         160         134         58         16         3         100           ONE-YEAR ENTRIES:	DEKALB/DKC48-53RR2YGCB	98	178	154	58	16	1	97
KRUGER/ 1500RR         100         172         145         59         16         1         100           WENSMAN/W 6212RR         90         169         142         58         16         1         99           INTEGRA/INT 6602RNG         100         164         140         57         18         1         91           CRUCEN/9496RR         95         160         134         58         16         3         100           ONE-YEAR ENTRIES	INTEGRA/INT 63F90RRYG	90	173	154	59	16	1	98
WENSMAN/W 6212RR         90         169         142         58         16         1         98           KRUGER/9496R         94         165         137         58         16         1         99           INTEGRA/INT 6602RPYG         100         164         140         57         18         1         91           EPLEY/E116SRR         95         160         134         58         16         3         100           ON-YEAR ENTRIES:	KRUGER/ 1500RR	100	172	145	59	16	1	100
KRUGER/9496RR         94         165         137         58         16         1         99           INTEGRA/INT 6602RYG         100         164         140         57         18         1         91           EPLEYE/EIDSRR         95         160         134         58         16         3         100           ONE-YEAR ENTRIES:              95         160         134         58         16         3         100           DEKALE JOKCS0-48RR2YGCB         100         .         171         60         16         2         95           KRUGER/ ZAP1700RR         100         .         171         60         16         2         97           CROWS/ 45502         97         .         167         59         17         0         97           INTEGRA/ INT 6989RRYG         97         .         167         58         16         3         96           EPLEY/E12R24YGPL         100         .         165         58         17         2         100           NUTECH/7399 RR/GRW         98         .         163         59         16         0         96	WENSMAN/W 6212RR	90	169	142	58	16	1	98
INTEGRA/INT 6602RRYG         100         164         140         57         18         1         91           EPLEY(E1165RR         95         160         134         58         16         3         100           ONE-YEAR ENTRIES:	KRUGER/9496RR	94	165	137	58	16	1	99
EPLEY/E1165RR         95         160         134         58         16         3         100           ONE-YEAR ENTRIES:         VENSMAN/V 6307RR         100         .         172         57         17         2         98           DEKALB/ DKC50-488R2YGCB         100         .         171         57         20         2         95           CROWS/AS502         97         .         170         59         16         0         97           CROWS/AS502         97         .         168         59         17         1         97           KRUGER/ 249SRR/GCB         99         .         167         58         16         3         96           PLEY 12824YGPL         100         .         165         58         17         2         100           NUTECH/ 598 RRYGCB         95         .         163         59         16         0         96           GOLD COUNTRY 98-10CBR         98         .         163         59         16         0         96           INTEGRA/ INT 6799RYG         97         .         163         59         16         0         96           INTECH/ 3030 RR         97         . </td <td>INTEGRA/INT 6602RRYG</td> <td>100</td> <td>164</td> <td>140</td> <td>57</td> <td>18</td> <td>1</td> <td>91</td>	INTEGRA/INT 6602RRYG	100	164	140	57	18	1	91
ONE-YEAR ENTRIES:         Indiana         Indiana <thindiana< th="">         Indiana         <thindiana< th=""></thindiana<></thindiana<>	EPLEY/E1165RR	95	160	134	58	16	3	100
WENSMAN/ W 6307RR         100         .         172         57         17         2         98           DEKALB/ DKC50-48RR2YGCB         100         .         171         57         20         2         95           KRUGER/ EXP170RR         100         .         171         60         16         2         97           CROWS/ 4S502         97         .         170         59         16         0         97           MIDWEST/ 4S502         97         .         167         59         17         0         97           INTEGRA/INT 6698RNYG         97         .         167         58         16         3         96           PLEY/ E12R24/GPL         100         .         165         58         17         2         100           NUTECH/ 7099 RRYGRW         98         .         164         59         16         2         100           NUTECH/ 596 RR/YGCB         95         .         163         59         16         0         96           GOLD COUNTRY 98-10CBR         95         .         163         59         16         0         99           NUTECH/ 330 I R         97         .         147	ONE-YEAR ENTRIES:							
DEKALB/ DKC50-48RR2YGCB         100         .         171         57         20         2         95           KRUGER/ EXP1700RR         100         .         171         60         16         2         97           CROWS/ 45502         97         .         168         59         17         1         97           KRUGER/ 2499RR/GCB         99         .         167         59         17         0         97           INTEGRA/ INT 6698RPG         97         .         166         58         17         2         100           PLEY, EIZZAYGPL         100         .         165         58         17         2         100           NUTECH/ 7099 R/YGRW         98         .         164         60         17         0         99           KRUGER/ 1195RR         95         .         163         59         16         0         96           INTEGRA/ INT 6799RRYG         99         .         163         57         16         0         96           NUTECH/ 3301 RR         100         .         158         56         17         1         91           PLYEY E1185R         97         .         147	WENSMAN/ W 6307RR	100		172	57	17	2	98
KRUGER/ EXP1700RR         100         .         171         60         16         2         97           CROWS/ 45502         97         .         170         59         16         0         97           MIDWEST/ 45502         97         .         168         59         17         1         97           NTEGRA/ INT 6698RRYG         97         .         167         58         16         3         96           EPLEY/ E12R24YGPL         100         .         165         58         17         2         100           NUTECH/ 599 RR/YGRW         98         .         164         59         16         2         100           NUTECH/ 599 RR/YGCB         95         .         163         59         16         0         96           GOLD COUNTRY 98.10CBR         98         .         163         59         16         0         99           NUTECH/ 301 RR         100         .         158         56         17         1         90           DAIRYLAND/ STEALTH-7196         96         .         156         58         16         1         91           EPLEY E1185R         97         .         147	DEKALB/ DKC50-48RR2YGCB	100		171	57	20	2	95
CROWS/4S502         97         .         170         59         16         0         97           MIDWEST/4S502         97         .         168         59         17         1         97           KRUGER/2499R/YGCB         99         .         167         59         17         0         97           INTEGRA/INT 6639RRYG         97         .         167         58         16         3         96           EPLEY/ E12R24YGPL         100         .         165         58         17         2         100           NUTECH/ 7099 RR/YGCB         95         .         164         60         17         0         99           KRUGER/ 195RR         95         .         163         59         16         0         96           GOLD COUNTRY/ 98-10CBR         98         .         163         57         16         0         99           NUTECH/ 301 RR         1000         .         158         56         17         1         90           DAIRYLAND/ STEALTH-7196         96         .         156         58         16         1         91           EPLEY/ E118SR         97         .         147 <t< td=""><td>KRUGER/ EXP1700RR</td><td>100</td><td></td><td>171</td><td>60</td><td>16</td><td>2</td><td>97</td></t<>	KRUGER/ EXP1700RR	100		171	60	16	2	97
MIDWEST/45502         97         .         168         59         17         1         97           KRUGER/2499RR/VGCB         99         .         167         59         17         0         97           INTEGRA/INT 6698RRYG         97         .         167         58         16         3         96           EPLEY. E12R24YGPL         100         .         165         58         17         2         100           NUTECH/7099 RR/YGRW         98         .         164         60         17         0         99           KRUGER/1195RR         95         .         163         59         16         0         96           GOLD COUNTRY/98-10CBR         98         .         163         57         16         0         96           INTEGRA/INT 6799RRYG         99         .         163         57         16         0         96           NUTECH/3301 RR         100         .         158         56         17         1         90           DAIRYLAND/ STEALTH-7196         96         .         156         58         16         1         91           WENSMAN/W 7269BTRWRR         97         .         147 </td <td>CROWS/ 4S502</td> <td>97</td> <td></td> <td>170</td> <td>59</td> <td>16</td> <td>0</td> <td>97</td>	CROWS/ 4S502	97		170	59	16	0	97
KRUGER/2499R/YGCB         99         .         167         59         17         0         97           INTEGRA/ INT 6698RRYG         97         .         167         58         16         3         96           EPLEY/ E12R24YGPL         100         .         165         58         17         2         100           NUTECH/7099 RRYGRW         98         .         164         59         16         2         100           NUTECH/7099 RRYGRW         98         .         163         59         16         0         96           GOLD COUNTRY/98-10CBR         98         .         163         59         16         0         96           INTEGRA/INT 6799RRYG         99         .         163         57         16         0         96           NUTECH/3301 RR         100         .         158         56         17         1         90           DAIRYLAND/ STEALTH-7196         96         .         156         58         16         1         91           EPLEY/ E1385R         97         .         147         58         16         1         99           WENSMAN/W 0289TRR         97         .         141	MIDWEST/ 4S502	97		168	59	17	1	97
INTEGRA/ INT 6698RRYG         97         .         167         58         16         3         96           EPLEY/ E12R24YGPL         100         .         165         58         17         2         100           NUTECH/ 7099 RR/YGRW         98         .         164         60         17         0         99           KRUGER/ 195RR         95         .         163         59         16         2         100           NUTECH/ 559 GR/YGCB         95         .         163         59         16         0         96           GOLD COUNTRY/ 98-10CBR         98         .         163         57         16         0         99           NUTECH/ 3030 1R         100         .         158         56         17         1         90           DAIRYLAND/ STEALTH-7196         96         .         156         58         16         1         91           EPLEY/ E1185RR         97         .         147         58         15         3         96           WENSMAN/ W 7269BTRWRR         97         .         147         58         16         1         98           WILBUR ELLIS / HB9451R         95         .	KRUGER/ 2499RR/YGCB	99		167	59	17	0	97
EPLEY/         EPLEY/<	INTEGRA/ INT 6698RRYG	97		167	58	16	3	96
NUTECH/ 7099 RR/YGRW         98         .         164         60         17         0         99           KRUGER/ 1195RR         95         .         164         59         16         2         100           NUTECH/ 5596 RR/YGCB         95         .         163         59         16         0         96           GOLD COUNTRY/ 98-10CBR         98         .         163         57         16         0         96           INTEGRA/ INT 6799RYG         99         .         163         57         16         0         99           NUTECH/ 3301 RR         100         .         158         56         17         1         90           DAIRYLAND/ STEALTH-7196         96         .         156         58         16         1         91           EPLEV/ E1185R         97         .         147         58         15         3         96           WENSMAN/W 7269BTRWRR         97         .         147         58         16         1         98           WILBUR ELLIS/ HB9451R         95         .         142         58         17         5         95           RENK/ RK488RRYGPL         97         . <td< td=""><td>EPLEY/ E12R24YGPL</td><td>100</td><td></td><td>165</td><td>58</td><td>17</td><td>2</td><td>100</td></td<>	EPLEY/ E12R24YGPL	100		165	58	17	2	100
KRUGER/1195RR         95         .         164         59         16         2         100           NUTECH/5596 RR/YGCB         95         .         163         59         16         0         96           GOLD COUNTRY/98-10CBR         98         .         163         59         16         0         96           INTEGRA/INT 6799RRYG         99         .         163         57         16         0         99           NUTECH/3301 RR         100         .         158         56         17         1         90           DAIRYLAND/STEALTH-7196         96         .         156         58         16         1         91           EPLEY/E1185R         97         .         147         58         15         3         96           WENSMAN/W 7269BTRWRR         97         .         147         58         16         1         98           WILBUR ELLIS/HB451R         95         .         142         58         17         2         99           NUTECH/9101 RR/YGPL         97         .         141         59         17         2         99           WILBUR ELLIS/ HB482RB         98         .         133<	NUTECH/ 7099 RR/YGRW	98		164	60	17	0	99
NUTECH/5596RR/YGCB95.1635916096GOLD COUNTRY/98-10CBR98.1635916096INTEGRA/INT 6799RRYG99.1635716099NUTECH/3301 RR100.1585617190DAIRYLAND/STEALTH-719696.1565816191PLEY/E1185RR97.1475815396WENSMAN/W 7269BTRWRR97.1475816199WENSMAN/W 6287RR98.1465916198WILBUR ELLIS/HB9451R95.1425817595RENK/ RK488RRYGPL97.1415917299NUTECH/9101 RR/YGPL100.1395718099WILBUR ELLIS/ HB9452RB98.1245917698GOLD COUNTRY/100-05CBR100.1335919199NUTECH/902 RR/YGPL100.1295920298EPLEY/E1195RR98.1245615090Highest (H)-avg.:10019517260206100Lowest (L)-avg.:901601245615090H-1 avg.:10354845610** L	KRUGER/ 1195RR	95		164	59	16	2	100
GOLD COUNTRY/ 98-10CBR         98         163         59         16         0         96           INTEGRA/ INT 6799RRYG         99         163         57         16         0         99           NUTECH/ 3301 RR         100         158         56         17         1         90           DAIRYLAND/ STEALTH-7196         96         156         58         16         1         91           EPLEY/ E1185RR         97         147         58         15         3         96           WENSMAN/ W 7269BTRWRR         97         147         58         16         1         99           WENSMAN/ W 6287RR         98         1446         59         16         1         98           WILBUR ELLIS/ HB9451R         95         142         58         17         5         95           RENK/ RK488RRYGPL         97         141         59         17         2         99           NUTECH/ 9101 RR/YGPL         100         133         59         19         1         94           GOLD COUNTRY/ 100-05CBR         100         129         59         20         2         98           EPLEY/ E1195RR         98         124         59 <td>NUTECH/ 5596 RR/YGCB</td> <td>95</td> <td></td> <td>163</td> <td>59</td> <td>16</td> <td>0</td> <td>96</td>	NUTECH/ 5596 RR/YGCB	95		163	59	16	0	96
INTEGRA/ INT 6799RRYG         99         .         163         57         16         0         99           NUTECH/ 3301 RR         100         .         158         56         17         1         90           DAIRYLAND/ STEALTH-7196         96         .         156         58         16         1         91           EPLEY/ E1185RR         97         .         147         58         15         3         96           WENSMAN/ W 7269BTRWRR         97         .         147         58         16         1         99           WENSMAN/ W 6287R         98         .         146         59         16         1         98           WILBUR ELLIS/ HB9451R         95         .         142         58         17         5         95           RENK/ RK488RRYGPL         97         .         141         59         17         2         99           NUTECH/ 9101 RR/YGPL         100         .         133         57         18         0         99           WILBUR ELLIS/ HB9482RB         98         .         133         59         19         1         99           NUTECH/ 9101 RR/YGPL         100         .	GOLD COUNTRY/ 98-10CBR	98		163	59	16	Ō	96
NUTECH/ 3301 RR         100         .         158         56         17         1         90           DAIRYLAND/ STEALTH-7196         96         .         156         58         16         1         91           EPLEY/ E1185RR         97         .         147         58         15         3         96           WENSMAN/ W 7269BTRWRR         97         .         147         58         16         1         99           WENSMAN/ W 6287RR         98         .         146         59         16         1         98           WILBUR ELLIS/ HB9451R         95         .         142         58         17         5         95           RENK/ RK488RRYGPL         97         .         141         59         17         2         99           NUTECH/ 9101 RR/YGPL         100         .         139         57         18         0         99           WILBUR ELLIS/ HB9482RB         98         .         134         57         16         1         94           GOLD COUNTRY/ 100-05CBR         100         .         129         59         20         2         98           EPLEY/ E1195RR         97         176	INTEGRA/ INT 6799RRYG	99		163	57	16	0	99
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	NUTECH/ 3301 RR	100		158	56	17	1	90
EPLEY/ E1185RR         97         .         147         58         15         3         96           WENSMAN/W 7269BTRWRR         97         .         147         58         16         1         99           WENSMAN/W 7269BTRWRR         97         .         147         58         16         1         99           WENSMAN/W 6287RR         98         .         146         59         16         1         98           WILBUR ELLIS/ HB9451R         95         .         142         58         17         5         95           RENK/ RK488RRYGPL         97         .         141         59         17         2         99           NUTECH/ 9101 RR/YGPL         100         .         139         57         18         0         99           WILBUR ELLIS/ HB9482RB         98         .         133         59         19         1         94           GOLD COUNTRY/ 100-05CBR         100         .         129         59         20         2         98           EPLEY/ E1195RR         98         .         124         59         17         6         98           Trial avg.:         97         176         154<	DAIRYLAND/ STEALTH-7196	96		156	58	16	1	91
WENSMAN/W 7269BTRWRR         97         147         58         16         1         99           WENSMAN/W 6287RR         98         146         59         16         1         98           WILBUR ELLIS/ HB9451R         95         142         58         17         5         95           RENK/ RK488RRYGPL         97         141         59         17         2         99           NUTECH/ 9101 RR/YGPL         100         139         57         18         0         99           WILBUR ELLIS/ HB9482RB         98         134         57         16         1         94           GOLD COUNTRY/ 100-05CBR         100         133         59         19         1         99           NUTECH/ 9002 RR/YGPL         100         129         59         20         2         98           EPLEY/ E1195RR         98         124         59         17         6         98           Trial avg.:         97         176         154         58         17         1         97           Highest (H)-avg.:         100         195         172         60         20         6         100           Lowest (L)-avg.:         90	EPLEY/ E1185RR	97		147	58	15	3	96
WENSMAN/ W 6287RR         98         146         59         16         1         98           WILBUR ELLIS/ HB9451R         95         142         58         17         5         95           RENK/ RK488RRYGPL         97         141         59         17         2         99           NUTECH/ 9101 RR/YGPL         100         139         57         18         0         99           WILBUR ELLIS/ HB9482RB         98         134         57         16         1         94           GOLD COUNTRY/ 100-05CBR         100         133         59         19         1         99           NUTECH/ 9002 RR/YGPL         100         129         59         20         2         98           EPLEY/ E1195RR         98         124         59         17         6         98           Trial avg.:         97         176         154         58         17         1         97           Highest (H)-avg.:         100         195         172         60         20         6         100           Lowest (L)-avg.:         90         160         124         56         15         0         90           H-L avg. difference:	WENSMAN/W 7269BTRWRR	97		147	58	16	1	99
WILBUR ELLIS/ HB9451R         95         .         142         58         17         5         95           RENK/ RK488RRYGPL         97         .         141         59         17         2         99           NUTECH/ 9101 RR/YGPL         100         .         139         57         18         0         99           WILBUR ELLIS/ HB9482RB         98         .         134         57         16         1         94           GOLD COUNTRY/ 100-05CBR         100         .         133         59         19         1         99           NUTECH/ 9002 RR/YGPL         100         .         129         59         20         2         98           EPLEY/ E1195RR         98         .         124         59         17         6         98           Trial avg.:         97         176         154         58         17         1         97           Highest (H)-avg.:         100         195         172         60         20         6         100           Lowest (L)-avg.:         90         160         124         56         15         0         90           H-L avg. difference:         10         35	WENSMAN/ W 6287RR	98		146	59	16	1	98
RENK/ RK488RRYGPL97.1415917299NUTECH/ 9101 RR/YGPL100.1395718099WILBUR ELLIS/ HB9482RB98.1345716194GOLD COUNTRY/ 100-05CBR100.1335919199NUTECH/ 9002 RR/YGPL100.1295920298EPLEY/ E1195RR98.1245917698Trial avg.:971761545817197Highest (H)-avg.:10019517260206100Lowest (L)-avg.:901601245615090H-L avg. difference:10354845610** Lsd (.05):111262134# Min. TPG-value:96## Max. TPG-value:163-+ Coef. of var.:810241423No. of entries:37123737373737	WILBUR ELLIS/ HB9451R	95		142	58	17	5	95
NUTECH/ 9101 RR/YGPL         100         .         139         57         18         0         99           WILBUR ELLIS/ HB9482RB         98         .         134         57         16         1         94           GOLD COUNTRY/ 100-05CBR         100         .         133         59         19         1         99           NUTECH/ 9002 RR/YGPL         100         .         129         59         20         2         98           EPLEY/ E1195RR         98         .         124         59         17         6         98           Trial avg.:         97         176         154         58         17         1         97           Highest (H)-avg.:         100         195         172         60         20         6         100           Lowest (L)-avg.:         90         160         124         56         15         0         90           H-L avg. difference:         10         35         48         4         5         6         10           ** Lsd (.05):         11         26         2         1         3         4           # Min. TPG-value:         -         -         -         -	RENK/ RK488RRYGPL	97		141	59	17	2	99
WILBUR ELLIS/ HB9482RB         98         .         134         57         16         1         94           GOLD COUNTRY/ 100-05CBR         100         .         133         59         19         1         99           NUTECH/ 9002 RR/YGPL         100         .         129         59         20         2         98           EPLEY/ E1195RR         98         .         124         59         17         6         98           Trial avg.:         97         176         154         58         17         1         97           Highest (H)-avg.:         100         195         172         60         20         6         100           Lowest (L)-avg.:         90         160         124         56         15         0         90           H-L avg. difference:         10         35         48         4         5         6         10           ** Lsd (.05):         111         26         2         1         3         4           # Min. TPG-value:         184         146         58         -         -         96           ## Max. TPG-value:         -         -         -         16         3	NUTECH/ 9101 RR/YGPL	100		139	57	18	0	99
GOLD COUNTRY/ 100-05CBR         100         .         133         59         19         1         99           NUTECH/ 9002 RR/YGPL         100         .         129         59         20         2         98           EPLEY/ E1195RR         98         .         124         59         17         6         98           Trial avg.:         97         176         154         58         17         1         97           Highest (H)-avg.:         100         195         172         60         20         6         100           Lowest (L)-avg.:         90         160         124         56         15         0         90           H-L avg. difference:         10         35         48         4         5         6         10           ** Lsd (.05):         11         26         2         1         3         4           # Min. TPG-value:         184         146         58         -         -         96           ## Max. TPG-value:         -         -         -         166         3         -           + Coef. of var.:         8         10         2         4         142         3	WILBUR ELLIS/ HB9482RB	98		134	57	16	1	94
NUTECH/ 9002 RR/YGPL         100         .         129         59         20         2         98           EPLEY/ E1195RR         98         .         124         59         17         6         98           Trial avg.:         97         176         154         58         17         1         97           Highest (H)-avg.:         100         195         172         60         20         6         100           Lowest (L)-avg.:         90         160         124         56         15         0         90           H-L avg. difference:         10         35         48         4         5         6         10           ** Lsd (.05):         11         26         2         1         3         4           # Min. TPG-value:         184         146         58         -         -         96           ## Max. TPG-value:         -         -         -         -         166         3         -           + Coef. of var.:         8         10         2         4         142         3           No. of entries:         37         12         37         37         37         37         37	GOLD COUNTRY/ 100-05CBR	100		133	59	19	1	99
EPLEY/ E1195RR         98         .         124         59         17         6         98           Trial avg.:         97         176         154         58         17         1         97           Highest (H)-avg.:         100         195         172         60         20         6         100           Lowest (L)-avg.:         90         160         124         56         15         0         90           H-L avg. difference:         10         35         48         4         5         6         10           ** Lsd (.05):         11         26         2         1         3         4           # Min. TPG-value:         184         146         58         -         -         96           ## Max. TPG-value:         -         -         -         166         3         -           + Coef. of var.:         8         10         2         4         142         3           No. of entries:         37         12         37         37         37         37         37	NUTECH/ 9002 RR/YGPL	100		129	59	20	2	98
Trial avg.:         97         176         154         58         17         1         97           Highest (H)-avg.:         100         195         172         60         20         6         100           Lowest (L)-avg.:         90         160         124         56         15         0         90           H-L avg. difference:         10         35         48         4         5         6         10           ** Lsd (.05):         11         26         2         1         3         4           # Min. TPG-value:         184         146         58         -         -         96           ## Max. TPG-value:         -         -         -         16         3         -           + Coef. of var.:         8         10         2         4         142         3           No. of entries:         37         12         37         37         37         37         37	EPLEY/ E1195RR	98		124	59	17	6	98
Highest (H)-avg.:       100       195       172       60       20       6       100         Lowest (L)-avg.:       90       160       124       56       15       0       90         H-L avg. difference:       10       35       48       4       5       6       10         ** Lsd (.05):       11       26       2       1       3       4         # Min. TPG-value:       184       146       58       -       -       96         ## Max. TPG-value:       -       -       -       16       3       -         + Coef. of var.:       8       10       2       4       142       3         No. of entries:       37       12       37       37       37       37       37	Trial avg.:	97	176	154	58	17	1	97
Lowest (L)-avg.:         90         160         124         56         15         0         90           H-L avg. difference:         10         35         48         4         5         6         10           ** Lsd (.05):         11         26         2         1         3         4           # Min. TPG-value:         184         146         58         -         -         96           ## Max. TPG-value:         -         -         -         16         3         -           + Coef. of var.:         8         10         2         4         142         3           No. of entries:         37         12         37         37         37         37	Highest (H)-avg.:	100	195	172	60	20	6	100
H-L avg. difference:       10       35       48       4       5       6       10         ** Lsd (.05):       11       26       2       1       3       4         # Min. TPG-value:       184       146       58       -       -       96         ## Max. TPG-value:       -       -       -       16       3       -         + Coef. of var.:       8       10       2       4       142       3         No. of entries:       37       12       37       37       37       37	Lowest (L)-avg.:	90	160	124	56	15	0	90
** Lsd (.05):       11       26       2       1       3       4         # Min. TPG-value:       184       146       58       -       -       96         ## Max. TPG-value:       -       -       -       16       3       -         + Coef. of var.:       8       10       2       4       142       3         No. of entries:       37       12       37       37       37       37       37	H-L avg. difference:	10	35	48	4	5	6	10
# Min. TPG-value:       184       146       58       -       -       96         ## Max. TPG-value:       -       -       -       16       3       -         + Coef. of var.:       8       10       2       4       142       3         No. of entries:       37       12       37       37       37       37       37	** Lsd (.05):	-	11	26	2	1	3	4
## Max. TPG-value:     -     -     -     16     3     -       + Coef. of var.:     8     10     2     4     142     3       No. of entries:     37     12     37     37     37     37     37	# Min. TPG-value:		184	146	58	-	-	96
+ Coef. of var.: 8 10 2 4 142 3 No. of entries: 37 12 37 37 37 37 37 37	## Max. TPG-value:		-	-	-	16	3	-
No. of entries: 37 12 37 37 37 37 37	+ Coef. of var.:		8	10	2	4	142	3
	No. of entries:	37	12	37	37	37	37	37

### Table 3c. Early maturity Roundup Ready™ corn hybrid test trial results, Erland Weerts Farm, Bancroft, SD, 2005–2006.

\* Seeded May 12, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

Prond/Hybrid	Brand		T	est trial varia	ble at harve	st	
(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand
TWO-YEAR ENTRIES:							
NUTECH/NT-5005 RR/YGCB	105	186	169	56	22	2	99
KRUGER/9203RR/YGCB	103	186	162	57	17	0	98
WENSMAN/W 6318BTRR	103	185	171	56	22	0	92
WENSMAN/W 6315BTRR	101	185	169	57	17	1	97
DEKALB/DKC52-47RR2YGCB	102	184	164	58	17	1	96
KRUGER/ 2506RR/YGCB	106	182	170	56	23	14	100
SEEDS 2000/3122RR/BT	102	181	163	56	18	4	96
KRUGER/6503TS	103	181	151	59	18	1	98
NUTECH/NT-5101 RR/YGCB	101	180	150	57	17	1	98
EPLEY/E12R45YGCB	102	177	161	57	18	3	97
INTEGRA/INT 6603RRYG	103	175	141	59	17	0	97
ONE-YEAR ENTRIES:							
DEKALB/ DKC52-63RR2YGCB	102		175	57	18	0	95
NUTECH/ 5006A RR/YGCB	105		170	57	23	10	100
NUTECH/ 9003 RR/YGPL	102		167	59	19	0	99
KRUGER/ 1606RR	106		167	55	21	3	97
KRUGER/ 6603TS	103		164	56	22	0	100
KRUGER/ EXP1503RR	103		162	56	17	1	87
NUTECH/ 5507 RR/YGCB	105		161	54	24	0	95
NUTECH/ 3307 RR	106		161	58	19	8	100
PANNAR/ 7A-560RRBT	104		160	55	21	0	100
WENSMAN/ W 7316BTRWRR	101		160	58	17	0	99
KRUGER/ 1603RR	103		156	57	22	3	99
WILBUR ELLIS/ HB9531RB	103		155	59	18	1	100
PANNAR/ 6C-330RRCRW+	102		155	60	17	1	97
NUTECH/ 9507 RR/YGPL	105		153	55	23	1	100
RENK/ RK772RRYGPL	103		153	58	17	0	99
NUTECH/ 9006 RR/YGPL	105		151	57	22	5	99
KRUGER/ EXP2301RR/YGCB	103		151	58	20	1	98
WENSMAN/ W 6374BTRR	105		151	57	18	3	93
KRUGER/ EXP2105RR/YGCB	105		150	54	22	6	94
GOLD COUNTRY/ 102-04CBR	102		150	58	21	0	95
RENK/ RK632RRYGPL	102		147	60	18	0	98
EPLEY/ E2435RRRW	108		144	57	18	1	97
PANNAR/ 8A-180RRBT	107		131	51	28	11	95
NUTECH/ 9903 RR/YGPL	103		130	58	21	5	92
EPLEY/ E1445RR	104		128	57	23	4	99
Trial avg.:	104	182	156	57	20	2	97
Highest (H)-avg.:	108	186	175	60	28	14	100
Lowest (L)-avg.:	101	175	128	51	17	0	87
H-L avg. difference:	7	11	47	8	11	14	13
** Lsd (.05):		NS	19	1	2	4	4
# Min. TPG-value:		175	156	59	-	-	96
## Max. TPG-value:		-	-	-	19	4	-
+ Coef. of var.:		7	8	1	5	111	3
No. of entries:	36	11	36	36	36	36	36

### Table 3d. Late maturity Roundup Ready<sup>™</sup> corn hybrid test trial results, Erland Weerts Farm, Bancroft, SD, 2005–2006.

\* Seeded May 12, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

Drond /Urbrid	Brand	Hybrid performance variable at harvest							
(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand		
TWO-YEAR ENTRIES:									
GOLD COUNTRY/ 94-01CB	94	212	184	56	17	1	100		
KRUGER/ 9496YGCB	95	205	177	56	17	0	100		
SEEDS 2000/ 2953BT	95	205	172	56	18	1	100		
EPLEY/ E1407HXLL	100	201	168	53	23	0	100		
WENSMAN/ W 5212BT	95	199	172	55	18	1	100		
<b>ONE-YEAR ENTRIES:</b>									
RENK/ RK488YGCB	97		187	57	17	0	100		
KRUGER/ EXP5597BTLL	97		182	56	19	1	100		
FARM ADVANTAGE/ 9699L	99		179	56	22	1	100		
KALTENBERG/ K4688BT	96		174	56	18	0	100		
RENK/ RK575YGPL	97		163	54	18	1	100		
GOLD COUNTRY/ 95-03CB	95		161	56	21	1	100		
KRUGER/ EXP5498YGCB	98		160	55	23	0	100		
EPLEY/ E1231	100		158	57	19	1	100		
KRUGER/ EXP0599	99		143	55	21	1	100		
KRUGER/ EXP5497YGCB	97		141	52	21	0	100		
Trial avg.:	97	204	168	55	19	1	100		
Highest (H)-avg.:	100	212	187	57	23	1	100		
Lowest (L)-avg.:	94	199	141	52	17	0	100		
H-L avg. difference:	6	13	46	4	7	1	1		
** Lsd (.05):		NS	24	2	2	NS	NS		
# Min. TPG-value:		199	163	55	- \	-	100		
## Max. TPG-value:		-	-		19	2	-		
+ Coef. of var.:		4	9	2	5	193	0		
No. of entries:	15	5	15	15	15	15	15		

### Table 4a. Early maturity Non-Roundup Ready™ corn hybrid test trial results, SDSU Plant Science Research Farm, Brookings, SD, 2005–2006.

\* Seeded May 19, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

Drond /Urbrid	Brand	Hybrid performance variable at harvest							
Brand/nybrid (By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand		
TWO-YEAR ENTRIES:									
EPLEY/ E1430YGCB	103	225	200	57	23	1	99		
KRUGER/ 5505YGCB	105	216	206	57	22	0	100		
KRUGER/ 8602HX	102	214	187	55	21	2	100		
DAIRYLAND/ STEALTH-5201	101	211	185	56	20	2	100		
KRUGER/ 5504YGCB	103	210	183	55	23	0	99		
DAIRYLAND/ STEALTH-5204	104	209	182	53	23	0	97		
KRUGER/ 0603	103	199	170	55	23	3	100		
KRUGER/ EXP0605B	105	190	142	54	24	2	97		
KRUGER/ EXP8605HX	105	188	162	56	24	0	90		
ONE-YEAR ENTRIES:									
KRUGER/ EXP8204HX	105		185	56	23	0	94		
KRUGER/ EXP8502HX	102		184	55	19	2	100		
KRUGER/ EXP8601HX	101		181	56	21	0	100		
EPLEY/ E2492YGPL	110		179	55	22	0	100		
KRUGER/ EXP0404	104		164	55	22	1	100		
EPLEY/ E2407HXLL	108	· ·	148	52	26	0	99		
Trial avg.:	104	207	177	55	22	1	98		
Highest (H)-avg.:	110	225	206	57	26	3	100		
Lowest (L)-avg.:	101	188	142	52	19	0	90		
H-L avg. difference:	9	37	64	6	7	3	10		
** Lsd (.05):		31	29	2	2	NS	4		
# Min. TPG-value:		194	177	55	-	-	96		
## Max. TPG-value:		-	-	-	21	3	-		
+ Coef. of var.:		7	10	2	5	196	2		
No. of entries:	15	9	15	15	15	15	15		

### Table 4b. Late maturity Non-Roundup Ready<sup>™</sup> corn hybrid test trial results, SDSU Plant Science Research Farm, Brookings, SD, 2005–2006.

\* Seeded May 19, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

Brand/HybridRel. (By 2-year then '06 yields)Rel. Mat.2-year Yield bu/a'06 Yield bu/a'06 Bu.Wt. Ib'06 Grain Moist. %'06 Lodg- ing %'06 Pc StanTWO-YEAR ENTRIES: KRUGER/2697RR/YGCB9720718056160100DEKALB/DKC50-20RR2YGCB10020717255200100	<b>ct.*</b> <b>nd</b> 0 0 0 3
Wat.         Yield bu/a         bu/a         Ib         Moist. %         ing %         Star           TWO-YEAR ENTRIES:	nd 0 0 0 3 3
TWO-YEAR ENTRIES:         7         207         180         56         16         0         100           DEKALB/DKC50-20RR2YGCB         100         207         172         55         20         0         100	0 0 0 3 3
KRUGER/2697RR/YGCB         97         207         180         56         16         0         100           DEKALB/DKC50-20RR2YGCB         100         207         172         55         20         0         100	0 0 0 3 3
DEKALB/DKC50-20RR2YGCB   100   207   172   55   20   0   100	0 0 3 3
	0 6 8
WENSMAN/W 6266BTRR 96 203 165 57 18 0 100	6 8
INTEGRA/INT 6602RRYG 100 202 166 54 19 1 96	3
WENSMAN/W 6194BTRR 93 198 177 56 16 0 98	•
DEKALB/DKC48-53RR2YGCB 98 191 151 54 19 0 97	7
KRUGER/1500RR 100 190 148 54 17 1 100	0
WENSMAN/W 6212RR 90 187 154 55 15 2 100	0
SEEDS 2000/2953RR 95 185 149 56 16 1 90	)
EPLEY/E1165RR 95 182 149 55 16 2 100	0
KRUGER/9496RR 94 182 148 56 15 3 99	9
ONE-YEAR ENTRIES:	
EPLEY/ E12R24YGPL 100 . 184 56 18 0 99	9
INTEGRA/ INT 6799RRYG 99 . 184 55 18 0 99	9
WILBUR ELLIS/ HB9451R 95 . 183 55 15 2 100	0
DEKALB/ DKC46-22RR2YGPL 96 . 180 58 16 1 98	3
DAIRYLAND/ STEALTH-7196 96 . 179 58 16 0 93	3
RENK/ RK488RRYGPL 97 . 178 55 17 0 96	3
CROWS/ 4S502 97 . 177 58 18 0 99	9
NUTECH/ 3301 RR 100 . 176 54 18 1 96	3
DEKALB/ DKC50-48RR2YGCB 100 . 171 54 24 0 99	9
MIDWEST/4S502 97 . 171 58 18 0 98	3
NUTECH/ 9101 RR/YGPL 100 . 167 55 19 1 99	9
LEGEND/ LR9693RRYG+ 96 . 167 56 18 0 99	9
FONTANELLE/ 5K106 100 . 167 57 19 1 100	0
KRUGER/ 2499RR/YGCB 99 165 57 18 0 98	3
WILBUR ELLIS/ HB9482RB 98 . 162 53 17 1 90	)
LEGEND/LR9699RRYG+ 99 . 162 57 20 1 99	9
GOLD COUNTRY/ 100-05CBR 100 . 162 58 20 0 100	0
INTEGRA/ INT 6698RRYG 97 . 161 53 16 0 99	9
WENSMAN/W 6307RR 100 . 158 54 20 1 99	9
WENSMAN/W 7269BTRWRR 97 . 158 55 18 1 100	0
PANNAR/ 5C-760RRCRW+ 97 . 156 55 17 0 92	2
KRUGER/ EXP1700RR 100 . 154 55 19 1 100	0
GOLD COUNTRY/ 98-10CBR 98 153 55 19 0 92	2
NUTECH/ 9002 RR/YGPL 100 . 151 55 22 0 100	0
PANNAR/ 5E-900RRBT 97 . 151 52 22 1 98	3
KRUGER/ 1195RR 95 . 151 55 17 1 99	9
WENSMAN/W 6287RR 98 . 150 54 19 1 100	0
NUTECH/ 5596 RR/YGCB 95 . 147 54 22 0 97	7
PANNAR/ 5E-850RRBT 96 . 136 53 23 0 100	0
EPLEY/ E1195RR 98 . 134 57 17 2 93	3
EPLEY/ E1185RR 97 . 130 52 15 0 98	3
Trial avg.: 97 194 162 55 18 1 98	3
Highest (H)-avg.: 100 207 184 58 24 3 100	0
Lowest (L)-avg.: 90 182 130 52 15 0 90	)
H-L avg. difference: 10 25 54 6 9 3 10	)
** Lsd (.05): 17 20 2 2 2 4	
# Min. TPG-value: 190 164 56 - 96	6
## Max. TPG-value:	-
+ Coef. of var.: 5 8 2 6 180 3	
No. of entries: 42 11 42 42 42 42 42 42	2

Table 4c. Early maturity Roundup Ready™ corn hybrid test trial results, SDSU Plant Science Research Farm, Brookings, SD, 2005-2006.

\* Seeded May 19, 2006 at 28,750 seeds per acre.
\*\* Lsd = the amount values in a column must differ to be significantly different. If Lsd = NS then differences among values in a column are non-significant (NS).
# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.
 + Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

Table 4d. Late maturity Roundup Read	y™ corn hybrid test trial results	, SDSU Plant Science Research Farm,
Brookings, SD, 2005–2006.		

Dimmerian         Description         Description <thdescription< th=""> <thdescription< th="">         &lt;</thdescription<></thdescription<>	Brand Brand Test trial variable at harvest						st	
TWO-FAR ENTRIES:         Image: Probability of the image: Probab	(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand
DEKALB/DKCS2-47R2YGCB         102         222         203         55         16         0         98           KRUGER/3203RAYGCB         103         220         206         54         18         1         99           INTEGRA/INF GOSBRYG         103         220         200         57         18         0         89           WENSMANW 6318BTRR         103         214         203         55         21         0         93           NUTECH/INT-5005 RAYGCB         105         214         190         55         22         0         98           WENSMANW 6318BTRR         103         211         196         57         17         0         99           NUTECH/INT-500 RAYGCB         101         210         190         54         18         0         98           KRUGER/S03TS         103         211         196         57         17         0         99           EPLEY/E12R4SYGCB         101         210         190         54         18         0         98           EVEXER ENTRIES:           21         55         17         0         98           ONE-YEAR ENTRIES:          201	TWO-YEAR ENTRIES:							
KRUGER/9203R/YGCB         103         220         206         54         18         1         99           INTEGRA/INT 6603RRYG         103         220         200         57         18         0         100           GOLD COUNTRY/105-04CBR         106         218         197         54         222         0         89           WENSMAN/W G31BTRR         103         214         203         55         21         0         98           WENSMAN/W G31BTRR         101         213         196         54         19         0         96           KNUGER/SOSTS         103         211         190         54         18         0         99           NUTECH/NT-5101 RR/YGCB         101         210         190         54         18         0         98           ONE-VEAR ENTRIES:         102         209         198         54         18         0         98           ONE-VEAR ENTRIES:         102         201         171         55         17         0         98           GOLD COUNTRY/ 106-02CBR         105         207         52         12         0         99           VENSMAV         V72-05RAYGCB         105	DEKALB/DKC52-47RR2YGCB	102	222	203	55	16	0	98
INTEGRA/INT 6603RRYG         103         220         200         57         18         0         100           GOLD COUNTRY/105-04CBR         106         218         197         54         22         0         89           WENSMA/W 6318BTR         103         214         203         55         22         0         98           WENSMA/W 6318BTR         101         213         196         54         19         0         96           KRUGER/6503TS         103         211         196         57         17         0         99           NUTECH/NT-5101 RRYGCB         101         209         198         54         18         0         99           FPLEYF12R45YGCB         102         208         191         53         19         0         96           KRUGER/2506R/YGCB         106         201         173         53         22         0         98           ONE-YEAR ENTRIES:           214         56         22         1         98           OK-YEAR ENTRIES:           201         55         17         0         98           OLEALD/DSOGA RR/YGCB         105         207	KRUGER/9203RR/YGCB	103	220	206	54	18	1	99
GOLD COUNTRY/105-04CBR         106         218         197         54         22         0         89           WENSMANW 631BBTR         103         214         203         55         21         0         93           NUTECH/NT-500S RR/YGCB         105         214         190         55         22         0         98           WENSMANW 631BBTR         101         213         196         57         177         0         99           NUTECH/NT-5101 RR/YGCB         101         210         190         54         18         0         98           KALTENBERG/K5244RBT         102         209         198         54         18         0         98           CHLYE12RASYCEB         102         208         191         53         19         0         66           KRUGER/SCB         105         .         214         56         22         1         88           DEKALB/DK52-63RR2YGCB         102         .         211         55         17         0         98           OLD COUNTRY/106-02CBR         105         .         207         52         22         0         96           NUTECH/S006A RR/YGCB         105	INTEGRA/INT 6603RRYG	103	220	200	57	18	0	100
WENSMAN/W 6318BTRR         103         214         203         55         21         0         93           NUTECH/NT-5005 RR/VGCB         105         214         190         55         22         0         98           WENSMAN/W 6315BTRR         101         213         196         54         19         0         96           KRUGER/6S07S         103         211         196         54         18         0         99           PLEV/FE12MSCB         101         210         190         54         18         0         99           EPL/FE12MSCB         106         201         179         53         22         0         98           ONE-FEAR ENTHES:         -         -         -         -         -         -         -         96           CKALS / DKCS2-638R2YGCB         105         .         211         55         17         0         98         90         90         97         -         98         60LD COUNTRY/ 106-02CBR         106         .         201         55         18         0         97         -         199         55         18         0         97         -         166         191         97	GOLD COUNTRY/105-04CBR	106	218	197	54	22	0	89
NUTECH/NT-5005 RR/YGCB         105         214         190         55         22         0         98           KRUGER/6503TS         103         211         196         57         17         0         99           KRUGER/6503TS         103         211         196         57         17         0         99           KALTENBERG/K5244RBT         102         209         198         54         18         0         96           KRUGER/2506R/YGCB         102         208         191         53         19         0         96           NUTECH/V17-I21A4SYGCB         102         208         191         53         19         0         96           NUTECH/2506R/YGCB         106         201         179         53         22         0         98           ONE-YEAR ENTRIES         NUTECH/9006A RR/YGCB         105         214         56         22         1         98           GOLD COUNTRY/ 106-02CBR         102         203         56         19         0         98           GOLD COUNTRY/ 106-02CBR         101         199         55         18         0         97           LEGEND/ LR9501RRYG+         101         194	WENSMAN/W 6318BTRR	103	214	203	55	21	0	93
WENSMAN/W 6315BTRR         101         213         196         54         19         0         96           KRUGER/6503TS         103         211         196         57         177         0         99           NUTECH/NT-5101 RR/YGCB         101         210         190         54         18         0         99           EPLEY/E12R4SYGCB         102         208         191         53         19         0         96           KRUGER/S2506RR/YGCB         106         201         179         53         22         0         98           ONE-YEAR ENTRIES:              96         84         98         98           KRUGER/S05R/RYGCB         105         .         214         56         22         1         98           DEKALE/DKC52-63RR2YGCB         102         .         201         55         19         0         98           WENSMAN/W 7316BTRWAR         101         .         199         55         18         0         97           LEGEND/ LR9501RRYG+         101         .         194         55         20         0         99           VENSMAN/W 7316BTRWAR	NUTECH/NT-5005 RR/YGCB	105	214	190	55	22	0	98
KRUGER/6503TS         103         211         196         57         17         0         99           NUTECH/NT-5101 RR/YGCB         101         210         190         54         18         0         98           KALTENBERG/K5244RBT         102         209         198         54         18         0         99           CHUCH21A4SYGCB         102         208         191         53         19         0         96           KRUGER/2506RR/YGCB         106         201         179         53         22         0         98           DNE-VEAR ENTRIES:              99         98         56         19         0         98         57         18         0         99         99         99         99         99         99         99         90         99         99         99         99         90         99         99         90         90         90         90         99         99         99         99         99         99         99         99         99         99         99         99         99         99         90         90         90         90 <td< td=""><td>WENSMAN/W 6315BTRR</td><td>101</td><td>213</td><td>196</td><td>54</td><td>19</td><td>0</td><td>96</td></td<>	WENSMAN/W 6315BTRR	101	213	196	54	19	0	96
NUTECH/NT-5101 RR/YGCB         101         210         190         54         18         0         98           KALTENBERG/K5244RBT         102         209         198         54         18         0         99           EPLEY/E12R45YGCB         102         208         191         53         19         0         96           KRUGER/Z050RR/YGCB         106         201         179         53         22         0         98           ONE-YEAR ENTRIES:              98          98           ONE-YEAR ENTRIES:              98          98           ONE-YEAR ENTRIES:            214         56         22         1         98           DEKALB/ DKC3-SARRYGCB         105         .         201         55         19         0         98           GOLD COUNTRY/ 106-02CBR         106         .         201         55         18         0         97           LEGEN 2000/ EXP3101RR         101         .         194         55         17         0         99           PANNAR/ 6C-330RRCW+	KRUGER/6503TS	103	211	196	57	17	0	99
KALTENBERG/K5244RRBT         102         209         198         54         18         0         99           EPLEY/E12R45YGCB         102         208         191         53         22         0         98           ONE-YEAR ENTRIES:	NUTECH/NT-5101 RR/YGCB	101	210	190	54	18	0	98
EPLEY/E12R45YGCB         102         208         191         53         19         0         96           KRUGER/2506RR/YGCB         106         201         179         53         22         0         98           ONE-VEAR ENTRIES:	KALTENBERG/K5244RRBT	102	209	198	54	18	0	99
KRUGER/ 2506RR/YGCB         106         201         179         53         22         0         98           ONE-YEAR ENTRIES:         . <td>EPLEY/E12R45YGCB</td> <td>102</td> <td>208</td> <td>191</td> <td>53</td> <td>19</td> <td>0</td> <td>96</td>	EPLEY/E12R45YGCB	102	208	191	53	19	0	96
ONE-YEAR ENTRIES:         Image: Constraint of the system of the sys	KRUGER/ 2506RR/YGCB	106	201	179	53	22	0	98
NUTECH/ 5006A RR/YGCB         105         .         214         56         22         1         98           DEKALB/ DKC52-63RR2YGCB         102         .         211         55         17         0         98           KRUGER/ EXP2105RR/YGCB         105         .         207         52         22         0         96           NUTECH/ 9003 RR/YGPL         102         .         203         56         19         0         98           GOLD COUNTRY/ 106-02CBR         106         .         201         55         17         0         99           WENSMAN/W 7316BTRWRR         101         .         199         55         17         0         99           SEEDS 2000/ EXP3101RR         101         .         194         55         20         0         99           PANNAR/ 6C-330RCRW+         102         .         193         56         18         0         94           CROWS/ 2121S         101         .         194         55         17         0         98           FONTANELLE/ 5K824         101         .         191         55         18         0         100           NUTECH/ 5907 RR/YGCB         105	ONE-YEAR ENTRIES:							
DEKALB/ DKC52-63RR2YGCB         102         .         211         55         177         0         98           KRUGER/ EXP2105RR/YGCB         105         .         207         52         22         0         96           NUTECH/ 9003 RR/YGPL         102         .         203         56         19         0         98           GOLD COUNTRY, 106-02CBR         106         .         201         55         19         0         99           WENSMAN/ W 7316BTRWRR         101         .         199         55         18         0         97           LEGEDX LR9501RRYG+         101         .         194         55         17         0         99           SEEDS 2000/ EXP3101RR         101         .         194         55         18         0         94           CROWS/ 2121S         101         .         193         57         21         0         92           KRUGER/ EXP1503RR         103         .         191         55         18         0         100           NUTECH/ 5507 RR/YGCB         105         .         191         55         18         0         100           NUTECH/ 5507 RR/YGCB         105	NUTECH/ 5006A RR/YGCB	105		214	56	22	1	98
KRUGER/ EXP2105RR/YGCB         105          207         52         22         0         96           NUTECH/ 9003 RR/YGPL         102          203         56         19         0         98           GOLD COUNTRY/ 106-02CBR         106          201         55         19         0         99           WENSMAN/ W 731BBTRWRR         101          199         55         18         0         97           LEGEND/ LR9501RRYG+         101          194         57         17         0         99           SEEDS 2000/ EXP3101RR         101          194         57         17         1         97           INTEGRA/ INT 6506RRYG         105          194         55         10         0         94           CROWS/ 2121S         101          193         57         21         0         92           KRUGER/ EXP1503RR         103          191         55         17         0         98           FONTANELLE/ 5K824         101          191         55         18         0         100           NUTECH/ 3903 RR/YGPL         103	DEKALB/ DKC52-63RR2YGCB	102		211	55	17	0	98
NUTECH/ 9003 RR/YGPL         102         .         203         56         19         0         98           GOLD COUNTRY/ 106-02CBR         106         .         201         55         19         0         99           WENSMAN/W 7316BTRWRR         101         .         199         55         18         0         97           LEGEND/ LR9501RRYG+         101         .         194         57         17         0         99           SEEDS 2000/ EXP3101RR         101         .         194         55         20         0         99           PANNAR/ 6C-308RCRW4         102         .         193         56         18         0         94           CROWS/ 2121S         101         .         193         57         21         0         92           KALTENBERG/ K5685RRBT         105         .         191         55         17         0         98           FONTANELLE/ 5K824         101         .         191         55         18         0         100           NUTECH/ 5903 RR/YGPL         103         .         190         56         17         0         98           RENK/ RK772RRYGPL         103         . <td>KRUGER/ EXP2105RR/YGCB</td> <td>105</td> <td></td> <td>207</td> <td>52</td> <td>22</td> <td>0</td> <td>96</td>	KRUGER/ EXP2105RR/YGCB	105		207	52	22	0	96
GOLD COUNTRY/ 106-02CBR         106         .         201         55         19         0         99           WENSMAN/W 7316BTRWRR         101         .         199         55         18         0         97           LEGEND/ LR9501RRYG+         101         .         196         55         17         0         99           SEEDS 2000/ EXP3101RR         101         .         194         57         17         1         97           INTEGRA/ INT 6506RRYG         105         .         194         55         20         0         99           PANNAR/ 6C .330RRCRW+         102         .         193         56         18         0         94           CROWS/ 2121S         101         .         193         55         17         0         92           KALTENBERG/ K5685RRBT         105         .         191         55         17         0         92           KRUGER/ EXP1503RR         103         .         191         55         17         0         98           RENK/ K772RRYGCB         103         .         190         55         21         0         95           NUTECH/ 9903 RR/YGPL         103         . </td <td>NUTECH/ 9003 RR/YGPL</td> <td>102</td> <td></td> <td>203</td> <td>56</td> <td>19</td> <td>0</td> <td>98</td>	NUTECH/ 9003 RR/YGPL	102		203	56	19	0	98
WENSMAN/ W 7316BTRWRR         101         199         55         18         0         97           LEGEND/ LR9501RRYG+         101         196         55         17         0         99           SEEDS 2000/ EXP3101RR         101         194         57         17         1         97           INTEGRA/ INT 6506RRYG         105         194         55         20         0         99           PANNAR/ 6C-330RRCRW+         102         193         56         18         0         94           CROWS/ 2121S         101         193         57         21         0         99           KALTENBERG/ K5685RRBT         105         191         56         21         0         92           KRUGER/ EXP1503RR         103         191         55         17         0         98           FONTANELLE/ 5K824         101         191         55         18         0         100           NUTECH/ 5507 RR/YGPL         103         190         56         17         0         97           NUTECH/ 3307 RR         106         187         56         20         4         98           WILBUR ELLIS/ HB9531RB         103         187 <t< td=""><td>GOLD COUNTRY/ 106-02CBR</td><td>106</td><td></td><td>201</td><td>55</td><td>19</td><td>0</td><td>99</td></t<>	GOLD COUNTRY/ 106-02CBR	106		201	55	19	0	99
LEGEND/ LR9501RRYG+         101         196         55         17         0         99           SEEDS 2000/ EXP3101RR         101         194         57         17         1         97           INTEGRA/ INT 6506RRYG         105         194         55         20         0         99           PANNAR/ 6C-330RRCW+         102         193         56         18         0         94           CROWS/ 2121S         101         193         57         21         0         99           KALTENBERG/ K5685RBT         105         191         56         21         0         92           KRUGER/ EXP1503RR         103         191         55         17         0         98           FONTANELLE/ 5K824         101         191         55         18         0         100           NUTECH/ 507 RR/YGCB         103         190         56         17         0         98           RENK/ RK722RRYGPL         103         189         56         21         0         95           NUTECH/ 9303 RR/YGPL         103         187         57         19         0         98           NUTECH/ 9507 RR/YGPL         105         186         52	WENSMAN/ W 7316BTRWRR	101		199	55	18	0	97
SEEDS 2000/ EXP3101RR         101         .         194         57         17         1         97           INTEGRA/ INT 6506RRYG         105         .         194         55         20         0         99           PANNAR/ 6C-330RRCRW+         102         .         193         56         18         0         94           CROWS/ 2121S         101         .         193         57         21         0         99           KALTENBERG/ K5685RRBT         105         .         191         56         21         0         92           KRUGER/ EXP1503RR         103         .         191         55         17         0         98           FONTANELLE/ 5K824         101         .         191         55         18         0         100           NUTECH/ 5507 RR/YGCB         103         .         190         56         17         0         97           NUTECH/ 903 RR/YGPL         103         .         187         56         20         4         98           WILBUR ELLIS/ HB9531RB         103         .         187         57         19         0         98           NUTECH/ 9507 RR/YGPL         105         . </td <td>LEGEND/ LR9501RRYG+</td> <td>101</td> <td></td> <td>196</td> <td>55</td> <td>17</td> <td>0</td> <td>99</td>	LEGEND/ LR9501RRYG+	101		196	55	17	0	99
INTEGRA/ INT 6506RRYG         105         .         194         55         20         0         99           PANNAR/ 6C-330RRCRW+         102         .         193         56         18         0         94           CROWS/ 2121S         101         .         193         57         21         0         99           KALTENBERG/ K5685RRBT         105         .         191         56         21         0         92           KRUGER/ EXP1503RR         103         .         191         55         17         0         98           FONTANELLE/ 5K824         101         .         191         55         18         0         100           NUTECH/ 5507 RR/YGCB         103         .         190         56         17         0         98           RENK/ RK772RRYGPL         103         .         190         56         20         4         98           WILEUR ELLIS/ H89531RB         103         .         187         56         20         4         98           WILBUR ELLIS/ H89531RB         103         .         187         57         19         0         98           RENK/ RK632RRYGPL         105         .	SEEDS 2000/ EXP3101RR	101		194	57	17	1	97
PANNAR/ 6C-330RRCRW+         102         .         193         56         18         0         94           CROWS/ 2121S         101         .         193         57         21         0         99           KALTENBERG/ K5685RRBT         105         .         191         56         21         0         92           KRUGER/ EXP1503RR         103         .         191         55         17         0         98           FONTANELLE/ 5K824         101         .         191         55         18         0         100           NUTECH/ 5507 RR/YGCB         105         .         190         56         17         0         98           RENK/ RK772RRYGPL         103         .         190         56         17         0         97           NUTECH/ 9903 RR/YGPL         103         .         189         56         21         0         95           NUTECH/ 9003 RR/YGPL         103         .         187         56         20         4         98           WILBUR ELLIS/ H89531RB         103         .         187         57         19         0         96           RENK/ RK632RRYGPL         105         .	INTEGRA/ INT 6506RRYG	105		194	55	20	0	99
CROWS/2121S         101         193         57         21         0         99           KALTENBERG/K5685RBT         105         .         191         56         21         0         92           KRUGER/EXP1503RR         103         .         191         55         17         0         98           FONTANELLE/5K824         101         .         191         55         18         0         100           NUTECH/5507 RR/YGCB         105         .         190         55         21         0         98           RENK/ RK772RRYGPL         103         .         190         56         17         0         97           NUTECH/9903 RR/YGPL         103         .         190         56         21         0         95           NUTECH/903 RR/YGPL         103         .         187         56         20         4         98           WILBUR ELLIS/ HB9531RB         103         .         187         57         19         0         98           NUTECH/9507 RR/YGPL         105         .         186         52         21         0         96           RENK/ RK632RRYGPL         105         .         186 <td< td=""><td>PANNAR/ 6C-330RRCRW+</td><td>102</td><td></td><td>193</td><td>56</td><td>18</td><td>0</td><td>94</td></td<>	PANNAR/ 6C-330RRCRW+	102		193	56	18	0	94
KALTENBERG/ K5685RBT       105       .       191       56       21       0       92         KRUGER/ EXP1503RR       103       .       191       55       17       0       98         FONTANELLE/ 5K824       101       .       191       55       18       0       100         NUTECH/ 5507 RR/YGCB       105       .       190       55       21       0       98         RENK/ RK772RRYGPL       103       .       190       56       17       0       97         NUTECH/ 9903 RR/YGPL       103       .       190       56       21       0       95         NUTECH/ 9903 RR/YGPL       103       .       189       56       21       0       95         NUTECH/ 9903 RR/YGPL       103       .       187       56       20       4       98         WILBUR ELLIS/ HB9531RB       103       .       187       57       19       0       98         NUTECH/ 9507 RR/YGPL       105       .       186       55       22       0       99         FARM ADVANTAGE/ 6504       104       .       186       52       21       0       96         RENK/ RK632RRYGPL       <	CROWS/ 2121S	101		193	57	21	0	99
KRUGER/ EXP1503RR103.1915517098FONTANELLE/ 5K824101.19155180100NUTECH/ 5507 RR/YGCB105.1905521098RENK/ RK772RRYGPL103.1905617097NUTECH/ 9903 RR/YGPL103.1895621095NUTECH/ 3307 RR106.1875620498WILBUR ELLIS/ HB9531RB103.1875719098NUTECH/ 9507 RR/YGPL105.1865522099FARM ADVANTAGE/ 6504104.1865221096RENK/ RK632RRYGPL102.1835717087WENSMAN/ W 6374BTRR105.1815520097KRUGER/ 1606RR1061805419099KRUGER/ FEXP2301RR/YGCB103.17752250100KRUGER/ 1603RR103.1775520199MIDWEST/ 70503S101.1775821198	KALTENBERG/ K5685RRBT	105		191	56	21	0	92
FONTANELLE/ 5K824101.19155180100NUTECH/ 5507 RR/YGCB105.1905521098RENK/ RK772RRYGPL103.1905617097NUTECH/ 9903 RR/YGPL103.1895621095NUTECH/ 3307 RR106.1875620498WILBUR ELLIS/ HB9531RB103.1875719098NUTECH/ 9507 RR/YGPL105.1865522099FARM ADVANTAGE/ 6504104.1865221096RENK/ RK632RRYGPL102.1835717087WENSMAN/ W 6374BTRR105.1815520097KRUGER/ 1606RR106.1805419099PANNAR/ 7A-560RRBT104.17752250100KRUGER/ 1603RR103.1775520199MIDWEST/ 70503S101.1775821198	KRUGER/ EXP1503RR	103		191	55	17	0	98
NUTECH/ 5507 RR/YGCB         105         190         55         21         0         98           RENK/ RK772RRYGPL         103         .         190         56         17         0         97           NUTECH/ 9903 RR/YGPL         103         .         189         56         21         0         95           NUTECH/ 3307 RR         106         .         187         56         20         4         98           WILBUR ELLIS/ HB9531RB         103         .         187         57         19         0         98           NUTECH/ 9507 RR/YGPL         105         .         186         55         22         0         99           FARM ADVANTAGE/ 6504         104         .         186         52         21         0         96           RENK/ RK632RRYGPL         102         .         183         57         17         0         87           VENSMAN/W 6374BTRR         105         .         181         55         20         0         97           KRUGER/ 1606RR         106         .         180         54         19         0         99           PANNAR/ 7A-560RBT         104         .         177	FONTANELLE/ 5K824	101		191	55	18	0	100
RENK/ RK772RRYGPL         103         .         190         56         17         0         97           NUTECH/ 9903 RR/YGPL         103         .         189         56         21         0         95           NUTECH/ 3307 RR         106         .         187         56         20         4         98           WILBUR ELLIS/ HB9531RB         103         .         187         57         19         0         98           NUTECH/ 9507 RR/YGPL         105         .         186         55         22         0         99           FARM ADVANTAGE/ 6504         104         .         186         52         21         0         96           RENK/ RK632RRYGPL         102         .         183         57         17         0         87           WENSMAN/ W 6374BTRR         105         .         181         55         20         0         97           KRUGER/ 1606RR         106         .         180         54         19         0         99           PANNAR/ 7A-560RBT         103         .         177         52         25         0         100           KRUGER/ 1603RR         103         . <td< td=""><td>NUTECH/ 5507 RR/YGCB</td><td>105</td><td></td><td>190</td><td>55</td><td>21</td><td>0</td><td>98</td></td<>	NUTECH/ 5507 RR/YGCB	105		190	55	21	0	98
NUTECH/ 9903 RR/YGPL103.1895621095NUTECH/ 3307 RR106.1875620498WILBUR ELLIS/ HB9531RB103.1875719098NUTECH/ 9507 RR/YGPL105.1865522099FARM ADVANTAGE/ 6504104.1865221096RENK/ RK632RRYGPL102.1835717087WENSMAN/ W 6374BTRR105.1815520097KRUGER/ 1606RR106.1805419099KRUGER/ EXP2301RR/YGCB103.17752250100KRUGER/ 1603RR103.1775520199MIDWEST/ 70503S101.1775821198	RENK/ RK772RRYGPL	103		190	56	17	0	97
NUTECH/ 3307 RR         106         .         187         56         20         4         98           WILBUR ELLIS/ HB9531RB         103         .         187         57         19         0         98           NUTECH/ 9507 RR/YGPL         105         .         186         55         22         0         99           FARM ADVANTAGE/ 6504         104         .         186         52         21         0         96           RENK/ RK632RRYGPL         102         .         183         57         17         0         87           WENSMAN/ W 6374BTRR         105         .         181         55         20         0         97           KRUGER/ 1606RR         106         .         180         54         19         0         99           KRUGER/ FXP2301RR/YGCB         103         .         177         56         19         0         99           PANNAR/ 7A-560RBT         104         .         177         55         20         100         100           KRUGER/ 1603RR         103         .         177         55         20         1         99           MIDWEST/ 70503S         101         .         <	NUTECH/ 9903 RR/YGPL	103		189	56	21	0	95
WILBUR ELLIS/ HB9531RB         103         .         187         57         19         0         98           NUTECH/ 9507 RR/YGPL         105         .         186         55         22         0         99           FARM ADVANTAGE/ 6504         104         .         186         52         21         0         96           RENK/ RK632RRYGPL         102         .         183         57         17         0         87           WENSMAN/ W 6374BTRR         105         .         181         55         20         0         97           KRUGER/ 1606RR         106         .         180         54         19         0         99           KRUGER/ EXP2301RR/YGCB         103         .         177         56         19         0         99           PANNAR/ 7A-560RRBT         104         .         177         55         20         100         100           KRUGER/ 1603RR         103         .         177         55         20         1         99           MIDWEST/ 70503S         101         .         177         58         21         1         98	NUTECH/ 3307 RR	106		187	56	20	4	98
NUTECH/9507 RR/YGPL         105         .         186         55         22         0         99           FARM ADVANTAGE/ 6504         104         .         186         52         21         0         96           RENK/ RK632RRYGPL         102         .         183         57         17         0         87           WENSMAN/ W 6374BTRR         105         .         181         55         20         0         97           KRUGER/ 1606RR         106         .         180         54         19         0         99           KRUGER/ EXP2301RR/YGCB         103         .         177         56         19         0         99           PANNAR/ 7A-560RRBT         104         .         177         55         20         100         100           KRUGER/ 1603RR         103         .         177         55         20         10         100           KRUGER/ 1603RR         103         .         177         55         20         1         99           MIDWEST/ 70503S         101         .         177         58         21         1         98	WILBUR ELLIS/ HB9531RB	103		187	57	19	0	98
FARM ADVANTAGE/ 6504         104         .         186         52         21         0         96           RENK/ RK632RRYGPL         102         .         183         57         17         0         87           WENSMAN/ W 6374BTRR         105         .         181         55         20         0         97           KRUGER/ 1606RR         106         .         180         54         19         0         99           KRUGER/ EXP2301RR/YGCB         103         .         177         56         19         0         99           PANNAR/ 7A-560RRBT         104         .         177         52         25         0         100           KRUGER/ 1603RR         103         .         177         55         20         1         99           MIDWEST/ 70503S         101         .         177         58         21         1         98	NUTECH/ 9507 RR/YGPL	105		186	55	22	0	99
RENK/ RK632RRYGPL       102       .       183       57       17       0       87         WENSMAN/ W 6374BTRR       102       .       183       57       17       0       87         WENSMAN/ W 6374BTRR       105       .       181       55       20       0       97         KRUGER/ 1606RR       106       .       180       54       19       0       99         KRUGER/ EXP2301RR/YGCB       103       .       179       56       19       0       99         PANNAR/ 7A-560RRBT       104       .       177       52       25       0       100         KRUGER/ 1603RR       103       .       177       55       20       1       99         MIDWEST/ 70503S       101       .       177       58       21       1       98	FARM ADVANTAGE/ 6504	104		186	52	21	0	96
WENSMAN/ W 6374BTRR         105         .         181         55         20         0         97           KRUGER/ 1606RR         106         .         180         54         19         0         99           KRUGER/ 1606RR         106         .         180         54         19         0         99           KRUGER/ EXP2301RR/YGCB         103         .         179         56         19         0         99           PANNAR/ 7A-560RRBT         104         .         177         52         25         0         100           KRUGER/ 1603RR         103         .         177         55         20         1         99           MIDWEST/ 70503S         101         .         177         58         21         1         98	RENK/ RK632RRYGPL	102		183	57	17	0	87
KRUGER/ 1606RR       106       107       107       107       107       107       107       107       107       107       108       107       109       107       109       107       109       107       109       107       109       107       109       107       109       100	WENSMAN/W 6374BTRR	105		181	55	20	0	97
KRUGER/ EXP2301RR/YGCB     103     .     179     56     19     0     99       PANNAR/ 7A-560RBT     104     .     177     52     25     0     100       KRUGER/ 1603RR     103     .     177     55     20     1     99       MIDWEST/ 70503S     101     .     177     58     21     1     98	KRUGER/ 1606RR	106		180	54	19	0	99
PANNAR/ 7A-560RRBT         104         .         177         52         25         0         100           KRUGER/ 1603RR         103         .         177         55         20         1         99           MIDWEST/ 70503S         101         .         177         58         21         1         98	KRUGER/ EXP2301RR/YGCB	103		179	56	19	0	99
KRUGER/ 1603RR         103         .         177         55         20         1         99           MIDWEST/ 70503S         101         .         177         58         21         1         98	PANNAR/ 7A-560RRBT	104		177	52	25	0	100
MIDWEST/ 70503S 101 . 177 58 21 1 98	KRUGER/ 1603BB	103	·	177	55	20	1	99
	MIDWEST/ 70503S	101	·	177	58	21	1	98
EPLEY/ E1445RR 104 . 177 56 20 2 99	EPLEY/ E1445RR	104		177	56	20	2	99

Prond/Ushrid	Brand	Test trial variable at harvest						
Brand/Hybrid (By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand	
GOLD COUNTRY/ 102-04CBR	102		176	57	20	0	98	
KRUGER/ 6603TS	103		175	55	20	2	98	
NUTECH/ 9006 RR/YGPL	105		172	56	21	0	98	
EPLEY/ E2435RRRW	108		170	54	17	0	89	
PANNAR/ 8A-180RRBT	107		147	51	24	1	98	
Trial avg.:	103	214	189	55	20	0	97	
Highest (H)-avg.:	108	222	214	58	25	4	100	
Lowest (L)-avg.:	101	208	147	51	16	0	87	
H-L avg. difference:	7	21	67	7	8	4	13	
** Lsd (.05):		NS	16	2	1	1	4	
# Min. TPG-value:		208	198	56	-	-	96	
## Max. TPG-value:		-	-	-	17	1	-	
+ Coef. of var.:		4	5	2	4	342	3	
No. of entries:	46	12	46	46	46	46	46	

### Table 4d. Late maturity Roundup Ready™ corn hybrid test trial results, SDSU Plant Science Research Farm, Brookings, SD, 2005–2006 (continued).

\* Seeded May 19, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

Prond (Ushrid	Brand	Hybrid performance variable at harvest						
(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand	
TWO-YEAR ENTRIES:								
EPLEY/ E1407HXLL	100	112	95	57	21	0	96	
DAIRYLAND/ STEALTH-5201	101	105	95	57	20	3	100	
DEKALB/ DKC52-45 (YGCB)	102	100	68	57	18	1	99	
KRUGER/ 8602HX	102	89	77	57	21	3	98	
KRUGER/ 0603	103	88	76	52	25	3	97	
KRUGER/ 5505YGCB	105	85	66	56	24	0	96	
KRUGER/ EXP0605B	105	85	48	58	21	1	97	
KRUGER/ 5504YGCB	103	74	51	54	22	1	99	
EPLEY/ E1430YGCB	103	69	25	54	25	0	98	
DAIRYLAND/ STEALTH-5204	104	63	22	54	24	1	98	
KRUGER/ EXP8605HX	105	61	27	52	25	0	92	
ONE-YEAR ENTRIES:								
FARM ADVANTAGE/ 1065	105		91	55	18	2	96	
EPLEY/ E1157	96	-	70	57	20	3	93	
KRUGER/ EXP8204HX	105		66	54	22	0	96	
KRUGER/ EXP8601HX	101		61	56	23	1	100	
EPLEY/ E1231	100	-	58	57	20	1	97	
KRUGER/ EXP0404	104		56	58	19	2	99	
DEKALB/ DKC55-12 (YGCB)	105		52	57	17	5	99	
KRUGER/ EXP8502HX	102		45	55	22	3	99	
Trial avg.:	103	85	60	56	21	2	97	
Highest (H)-avg.:	105	112	95	58	25	5	100	
Lowest (L)-avg.:	96	61	22	52	17	0	92	
H-L avg. difference:	9	51	73	6	8	5	8	
** Lsd (.05):		++	++	2	2	4	NS	
# Min. TPG-value:		-	-	56	-	-	92	
## Max. TPG-value:		-	-	-	19	4	-	
+ Coef. of var.:		24+++	48+++	3	6	167	3	
No. of entries:	19	11	19	19	19	19	19	

### Table 5a. Early maturity Non-Roundup Ready™ corn hybrid test trial results, Curtis Sybesma Farm Geddes, SD, 2005–2006.

\* Seeded May 16, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

Prond/Ushrid	Brand		Hybrid	performance	variable at	harvest	
(By 2-year then '06 yields)	Rel. Mat	2-year Viold hu/o	'06 Yield	'06 Bu.Wt.	'06 Grain	'06 Lodg-	'06 Pct.*
	iviat.	fielu bu/a	DU/a	IU	IVIUISI. 70	iiiy 70	Stallu
VPUCED/EVDOGIO	110	102	107	54	<b>1</b> 2	Б	90
	100	00	00	57	10	0	
	109	99	00	57	19	0	90 02
	107	97	00 70	50	20	2 1	92
	109	90 72	79	55	24	ן ז	90
	111	13	03	50	20	Ζ	30
	100		10/	55	12	n	00
	109	•	104	55	20	2	99
	108	•	124	54	20		90
	100	•	117	53	25	5	9/
	100	•	104	55	21	0	95
	100	•	102	54	23	0	95
EPLEY/ E240/HXLL	108	•	93	53	25	U	94
	109	•	89	53	23	U	96
EPLEY/ E2492YGPL	110	•	/6	56	20	U	9/
KRUGER/ 5509YGCB	107		61	56	24	2	95
Irial avg.:	109	94	94	55	22	1	96
Highest (H)-avg.:	111	102	134	57	25	5	99
Lowest (L)-avg.:	106	73	61	53	19	0	92
H-L avg. difference:	5	29	73	4	6	5	7
** Lsd (.05):		++	++	NS	2	3	NS
# Min. TPG-value:		-	-	53	-	-	92
## Max. TPG-value:		-	-	-	21	3	2
+ Coef. of var.:		27+++	33+++	3	6	116	3
No. of entries:	14	5	14	14	14	14	14

Table 5b. Late maturity Non-Roundup Ready™ corn hybrid test trial results, Curtis Sybesma Farm, Geddes, SD, 2005–2006.

\* Seeded May 16, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

# Table 5c. Early maturity Roundup Ready™ corn hybrid test trial results, Curtis Sybesma Farm, Geddes, SD, 2005–2006.

Prond /Wyhrid	Brand	Brand Test trial variable at harvest					
(By 2-year then '06 yields)	Rel.	2-year	'06 Yield	'06 Bu.Wt.	'06 Grain	'06 Lodg-	'06 Pct.*
	Mat.	Yield bu/a	bu/a	lb	Moist. %	ing %	Stand
TWO-YEAR ENTRIES:							
DEKALB/DKC52-47RR2YGCB	102	125	120	58	16	2	97
DEKALB/DKC50-20RR2YGCB	100	115	105	57	18	2	97
KRUGER/6503TS	103	114	96	59	19	3	96
HEINE/H724RR/YGCB	100	110	101	54	22	0	97
KRUGER/ 1500RR	100	110	102	58	16	2	94
WENSMAN/W 6315BTRR	101	110	100	54	21	0	99
KRUGER/9203RR/YGCB	103	108	90	51	23	0	97
INTEGRA/INT 6603RRYG	103	95	98	59	20	0	94
NUTECH/NT-5507 RR/YGCB	105	93	70	50	27	0	98
HEINE/H750RR/YGCB	105	90	77	52	24	1	96
WENSMAN/W 6318BTRR	103	88	73	52	24	0	94
INTEGRA/INT 6506RRYG	105	80	73	52	24	0	97
ONE-YEAR ENTRIES:							
DEKALB/ DKC50-48RR2YGCB	100	•	124	57	20	1	95
WENSMAN/ W 6307RR	100		124	58	18	3	100
KRUGER/ EXP2105RR/YGCB	105		120	54	19	1	95
NUTECH/ 5101 RR/YGCB	101		115	54	22	0	99
FARM ADVANTAGE/ 6504	104		114	55	20	1	98
WILBUR ELLIS/ HB9531RB	103		113	59	21	0	97
HEINE/ H749RR/YGCB	104		113	54	19	2	96
FONTANELLE/ 5K824	101		112	55	20	0	93
HEINE/ H721RR/YGCB	101		110	58	19	1	94
DEKALB/ DKC51-39RR2YGPL	101		106	58	18	1	98
HEINE/ 729RR/YGCB	102		106	61	15	3	95
INTEGRA/ INT 6602RRYG	100		106	57	19	0	93
WENSMAN/ W 7316BTRWRR	101		105	55	19	1	98
DEKALB/ DKC52-63RR2YGCB	102		104	56	20	6	95
NUTECH/ 9101 RR/YGPL	100		102	54	20	1	96
FONTANELLE/ 5K106	100		102	59	20	2	97
DEKALB/ DKC48-53RR2YGCB	98		101	54	19	2	97
LEGEND/ LR9501RRYG+	101		101	55	19	1	97
LEGEND/ LR9699RRYG+	99		101	59	20	1	96
KRUGER/ 1603RR	103		100	54	24	2	99
KALTENBERG/ K5685RRBT	105		95	56	22	2	98
KRUGER/ 6603TS	103		95	54	24	0	98
GOLD COUNTRY/ 102-04CBR	102		93	58	22	1	93
WENSMAN/ W 6374BTRR	105		92	55	18	3	96

Prond/Ushrid	Brand	Test trial variable at harvest						
Brand/Hybrid (By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand	
HEINE/ H725/RRYGCB	102		92	57	23	1	96	
WENSMAN/ W 7269BTRWRR	97		91	54	18	1	96	
MIDWEST/ 70503S	101		88	56	23	0	94	
NUTECH/ 5006A RR/YGCB	105		86	55	22	1	98	
NUTECH/ 9507 RR/YGPL	105		85	51	26	0	97	
WENSMAN/ W 6266BTRR	97		81	57	19	5	95	
CROWS/ 2121S	101		75	57	22	0	98	
NUTECH/ 9006 RR/YGPL	105		69	54	24	0	94	
NUTECH/ 9903 RR/YGPL	103		56	56	20	6	95	
Trial avg.:	102	103	97	56	21	1	96	
Highest (H)-avg.:	105	125	124	61	27	6	100	
Lowest (L)-avg.:	97	80	56	50	15	0	93	
H-L avg. difference:	8	45	68	10	12	6	7	
** Lsd (.05):		23	++	3	2	3	NS	
# Min. TPG-value:		102	-	58	-	-	93	
## Max. TPG-value:		-	-	-	17	3	-	
+ Coef. of var.:		19	22+++	3	7	154	4	
No. of entries:	45	12	45	45	45	45	45	

### Table 5c. Early maturity Roundup Ready™ corn hybrid test trial results, Curtis Sybesma Farm, Geddes, SD, 2005–2006 (continued).

\* Seeded May 16, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

+ Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

++ Lsd value is not reported because Coef. of Variation value exceeds 20%.

Prond/Unbrid	Brand		Test trial variable at harvest					
(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand	
TWO-YEAR ENTRIES:								
DEKALB/DKC61-72 (RR2)	111	109	107	51	26	1	99	
KRUGER/9313RR/YGCB	113	89	72	50	25	1	100	
DAIRYLAND/STEALTH-1606	107	86	80	52	20	0	93	
GOLD COUNTRY/105-04CBR	106	86	68	52	24	0	98	
KRUGER/ 2506RR/YGCB	106	86	77	52	25	1	99	
ONE-YEAR ENTRIES:								
NUTECH/ 5210 RR/YGCB	110		125	53	21	7	99	
KRUGER/ EXP2511RR/YGCB	111		120	55	23	3	95	
WENSMAN/ W7439BTRWRR	110		112	56	23	1	95	
KRUGER/ EXP2414RR/YGCB	114		110	54	25	7	95	
HEINE/ H796RR	108		109	55	23	6	99	
NUTECH/ 7808 RR/YGRW	108		108	54	19	2	95	
CROWS/ 4843X	110		104	55	25	6	99	
GOLD COUNTRY/ 106-02CBR	106		103	55	20	6	96	
KRUGER/ 2613RR/YGCB	113		94	54	21	0	95	
KRUGER/ 9310TS	110		94	55	21	0	95	
FONTANELLE/ 7K733	111		94	53	25	1	96	
DEKALB/ DKC58-19 (RR2)	108		93	53	22	3	99	
KRUGER/ 9212TS	112	•	91	53	23	3	97	
KRUGER/ 1606RR	106		90	51	25	0	97	
NUTECH/ 9410 RR/YGPL	110		87	52	25	4	96	
HEINE/ H785RR	107		85	53	24	2	99	
WENSMAN/ W 7423BTRWRR	107		83	52	23	0	96	
INTEGRA/ INT 6609RRYG	106		81	55	20	0	98	
MIDWEST/ 77124X	110		77	54	25	3	100	
NUTECH/ 9908 RR/YGPL	108		75	55	23	1	94	
NUTECH/ 7110 RR/YGRW	110		70	50	26	0	97	
HEINE/ H851RR/YGCB	112		60	50	27	0	100	
HEINE/ H818RR	109		60	54	24	2	95	
KRUGER/ 9115TS	115		53	52	25	2	100	
KRUGER/ 2509RR/YGCB	107		44	53	21	0	99	
WILBUR ELLIS/ HB9601RB	110		37	51	24	3	100	
Trial avg.:	109	91	86	53	23	2	97	
Highest (H)-avg.:	115	109	125	56	27	7	100	
Lowest (L)-avg.:	106	86	37	50	19	0	93	
H-L avg. difference:	9	23	88	6	7	7	7	
** Lsd (.05):		NS	++	2	1	4	NS	
# Min. TPG-value:		86	-	54	-	-	93	
## Max. TPG-value:		-	-	-	20	4	-	
+ Coef. of var.:		17	23+++	2	4	129	3	
No. of entries:	31	5	31	31	31	31	31	

### Table 5d. Late maturity Roundup Ready™ corn hybrid test trial results, Curtis Sybesma Farm, Geddes, SD, 2005–2006.

\* Seeded May 16, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

Prond/Unbrid	Brand		Hybrid performance variable at harvest						
(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand		
TWO-YEAR ENTRIES:									
HEINE/ H818YGCB	109	206	190	59	17	30	99		
KRUGER/ EXP0610	110	185	155	61	16	14	98		
KRUGER/ 0508	109	183	172	60	15	3	98		
HEINE/ H820YGCB	109	179	154	61	18	20	97		
KRUGER/ 8609HX	109	166	129	60	16	7	100		
ONE-YEAR ENTRIES:									
KRUGER/ EXP8508HX	108		171	60	17	1	98		
KRUGER/ EXP5310YGCB	110		168	59	18	12	97		
MYCOGEN/ 2G677	109		168	58	18	1	96		
MYCOGEN/ 2R570	104		166	59	16	9	100		
KRUGER/ EXP0309	109		165	58	15	2	98		
DEKALB/ DKC55-12 (YGCB)	105		164	59	15	11	98		
HEINE/ H824YGCB	110		164	60	19	2	94		
KRUGER/ 0409	109		163	59	16	3	99		
KRUGER/ 5109YGCB	109		162	60	18	17	100		
KRUGER/ 9310YG+	110		159	61	16	2	100		
DAIRYLAND/ STEALTH-1806	106	•	155	60	16	2	96		
FARM ADVANTAGE/ 5406	106	•	143	61	16	18	100		
KRUGER/ 5509YGCB	107	•	139	62	17	55	99		
FARM ADVANTAGE/ 1065	105		136	59	15	5	96		
Trial avg.:	108	184	159	60	17	11	98		
Highest (H)-avg.:	110	206	190	62	19	55	100		
Lowest (L)-avg.:	104	166	129	58	15	1	94		
H-L avg. difference:	6	40	61	4	4	55	6		
** Lsd (.05):		NS	23	2	1	12	3		
# Min. TPG-value:		166	167	60	-	-	97		
## Max. TPG-value:		-	-	-	16	12	-		
+ Coef. of var.:		6	9	2	3	62	2		
No. of entries:	19	5	19	19	19	19	19		

### Table 6a. Early maturity Non-Roundup Ready™ corn hybrid test trial results, Southeast Experiment Station, Beresford, SD, 2005–2006.

\* Seeded May 8, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

	Brand	Hybrid performance variable at harvest						
(By 2-year then '05 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand	
TWO-YEAR ENTRIES:								
KRUGER/ 8616HX	116	203	194	59	20	34	99	
KRUGER/ 8414HX	114	199	207	58	20	76	100	
KRUGER/ 9115YGCB	115	197	194	60	20	2	97	
DEKALB/ DKC62-31 (YGCB)	112	197	187	60	20	1	98	
KRUGER/ 5416YGCB	115	196	197	60	20	9	97	
KRUGER/ 9111YGCB	111	195	190	60	16	2	97	
KRUGER/ 9313YGCB	113	193	195	59	19	11	98	
KRUGER/ 9212YGCB	112	185	189	59	18	17	95	
HEINE/ H851YGCB	112	182	177	60	20	4	97	
KRUGER/ 5517YGCB	116	174	170	58	22	40	98	
ONE-YEAR ENTRIES:								
MYCOGEN/ 2C727	112		210	59	19	24	96	
HEINE/ H822	111		193	60	17	9	88	
RENK/ RK888YGCB	112	•	191	59	19	1	93	
KRUGER/ 7613YG+	113	•	188	60	16	20	96	
KRUGER/ 0612	112		187	61	17	15	95	
RENK/ RK789YGPL	111		185	61	16	5	97	
MYCOGEN/ 2T780	114		180	59	20	56	96	
MYCOGEN/ 2K717	113		174	59	19	9	94	
HEINE/ H856YGCB	113		173	59	20	10	96	
Trial avg.:	113	192	188	59	19	18	96	
Highest (H)-avg.:	116	203	210	61	22	76	100	
Lowest (L)-avg.:	111	174	170	58	16	1	88	
H-L avg. difference:	5	29	40	3	6	75	12	
** Lsd (.05):		NS	26	NS	1	17	4	
# Min. TPG-value:		174	184	58	-	-	96	
## Max. TPG-value:		-	-	-	17	17	-	
+ Coef. of var.:		8	8	2	5	58	3	
No. of entries:	19	10	19	19	19	19	19	

### Table 6b. Late maturity Non-Roundup Ready™ corn hybrid test trial results, Southeast Experiment Station, Beresford, SD, 2005–2006.

\* Seeded May 8, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.
## Table 6c. Early maturity Roundup Ready™ corn hybrid test trial results, Southeast Experiment Station, Beresford, SD, 2005–2006.

Prond/Unbrid	Brand	Brand Test trial variable at harvest					
(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand
TWO-YEAR ENTRIES:							
DEKALB/DKC52-47RR2YGCB	102	198	188	58	15	1	98
WENSMAN/W 6318BTRR	103	189	196	60	17	1	99
NUTECH/NT-5507 RR/YGCB	105	188	172	59	16	17	97
DEKALB/DKC60-19RR2YGCB	110	187	170	60	18	8	98
DAIRYLAND/STEALTH-1606	107	182	172	59	16	12	98
HEINE/H750RR/YGCB	105	182	166	60	17	3	99
KALTENBERG/K6744RRBT	108	173	160	58	15	7	97
WENSMAN/W 6422BTRR	107	173	152	61	18	7	98
WENSMAN/W 6315BTRR	101	172	153	58	15	1	95
KRUGER/ 2506RR/YGCB	106	171	152	60	19	5	98
ONE-YEAR ENTRIES:							
WENSMAN/ W7439BTRWRR	110		203	59	17	1	95
KRUGER/ 6607TS	107		193	59	15	1	96
CROWS/ 4843X	110		191	60	18	6	91
HEINE/ H785RR	107		191	61	17	10	98
NUTECH/ 5210 RR/YGCB	110		190	59	17	2	95
MIDWEST/ 77124X	110		187	59	18	5	95
NUTECH/ 9410 RR/YGPL	110		185	61	19	30	99
HEINE/ H818RR	109		184	60	17	31	99
FARM ADVANTAGE/ 6504	104		183	61	16	5	99
KRUGER/ 1606RR	106		181	58	16	6	98
LEGEND/ LR9708RRYG+	108		180	61	16	58	95
WENSMAN/ W 7316BTRWRR	101		180	59	15	5	98
NUTECH/ 7808 RR/YGRW	108		179	60	16	8	97
KALTENBERG/ K5685RRBT	105		179	62	16	0	96
HEINE/ H766RRYGPL	106		178	60	16	45	97
NUTECH/ 9006 RR/YGPL	105		176	60	16	52	97
NUTECH/ 7110 RR/YGRW	110		176	59	18	36	97
INTEGRA/ INT 6710RRYG	110		175	59	17	40	96
KRUGER/ 9310TS	110		173	60	17	2	97
DEKALB/ DKC58-19 (RR2)	108		172	61	16	14	99
GOLD COUNTRY/ 106-02CBR	106		172	60	16	1	99
WENSMAN/ W 7423BTRWRR	107		171	60	16	2	95
NUTECH/ 5006A RR/YGCB	105		168	60	16	55	98
NUTECH/ 9908 RR/YGPL	108		168	60	16	3	96
DAIRYLAND/ STEALTH-4006	106		167	58	16	5	99
NUTECH/ 9507 RR/YGPL	105		167	59	16	1	99
ASGROW/ RX674RR2	109		165	59	17	10	98
INTEGRA/ INT 6609RRYG	106		165	61	16	44	98
NUTECH/ 9013 RR/YGCB	110		163	63	18	14	98
WILBUR ELLIS/ HB9601RB	110		162	60	18	29	99

Drond/Unbrid	Brand	Test trial variable at harvest							
Brand/Hybrid (By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand		
KRUGER/ 9407TS	107		161	61	16	2	94		
HEINE/ H796RR	108		161	61	17	10	98		
HEINE/ H724RR/YGCB	102		159	59	15	3	98		
WILBUR ELLIS/ HB9531RB	103		157	62	16	4	97		
WENSMAN/ W 6374BTRR	105		156	59	15	2	97		
HEINE/ H749RR/YGCB	104		147	60	16	29	98		
KRUGER/ 2509RR/YGCB	107		140	61	16	68	97		
LEGEND/ LR9510RR	110		128	59	19	28	98		
Trial avg.:	107	181	171	60	17	15	97		
Highest (H)-avg.:	110	198	203	63	19	68	99		
Lowest (L)-avg.:	101	172	128	58	15	0	91		
H-L avg. difference:	9	26	75	5	5	68	8		
** Lsd (.05):		NS	33	2	1	19	NS		
# Min. TPG-value:		172	170	61	-	-	91		
## Max. TPG-value:		-	-	-	16	19	-		
+ Coef. of var.:		7	12	2	3	79	3		
No. of entries:	48	10	48	48	48	48	48		

#### Table 6c. Early maturity Roundup Ready™ corn hybrid test trial results, Southeast Experiment Station, Beresford, SD, 2005-2006 (continued).

\* Seeded May 8, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group. + Coef. of Variation = a measure of trial experimental error, 20% or less is best for yield.

Brond/Hybrid	Brand	Test trial variable at harvest							
(By 2-year then '06 yields)	Rel. Mat.	2-year Yield bu/a	'06 Yield bu/a	ʻ06 Bu.Wt. Ib	'06 Grain Moist. %	'06 Lodg- ing %	'06 Pct.* Stand		
TWO-YEAR ENTRIES:									
ASGROW/RX715RR2YGCB	111	211	186	60	20	1	94		
HEINE/H851RR/YGCB	113	203	192	58	21	11	98		
DEKALB/DKC61-72 (RR2)	111	199	182	59	18	3	96		
KRUGER/9313RR/YGCB	113	184	195	59	19	4	99		
KRUGER/2517RR/YGCB	116	179	176	59	22	34	98		
ONE-YEAR ENTRIES:									
MIDWEST/ 77323T	111		213	60	20	9	99		
FONTANELLE/ 7K733	111		203	60	19	15	97		
KRUGER/ 9212TS	112		200	60	18	11	98		
KRUGER/ EXP6611TS	111		199	61	18	36	99		
RENK/ RK870RRYGPL	112		195	60	18	13	99		
CROWS/ 4982X	112		193	61	19	1	95		
CROWS/ 4940T	111		190	60	19	7	98		
HEINE/ H851RRYGPL	112		190	60	21	2	93		
KRUGER/ EXP2511RR/YGCB	111		189	60	18	1	94		
MIDWEST/ 78133X	112		188	61	19	2	97		
KRUGER/ EXP6612TS	112		185	61	18	2	94		
FONTANELLE/ 8K389	112		183	59	18	18	93		
KRUGER/ 9115TS	115		179	60	21	4	98		
DEKALB/ DKC61-22 (RR2)	111		174	60	20	4	98		
KRUGER/ EXP2414RR/YGCB	114	-	172	60	19	5	98		
KRUGER/ 2613RR/YGCB	113		155	59	16	4	93		
Trial avg.:	112	195	188	60	19	9	96		
Highest (H)-avg.:	116	211	213	61	22	36	99		
Lowest (L)-avg.:	111	179	155	58	16	1	93		
H-L avg. difference:	5	32	58	3	6	35	6		
** Lsd (.05):		NS	21	1	1	8	NS		
# Min. TPG-value:		179	192	60	-	-	93		
## Max. TPG-value:		-	-	-	17	8	-		
+ Coef. of var.:		5	7	1	3	56	3		
No. of entries:	21	5	21	21	21	21	21		

Table 6d. Late maturity Roundup Ready™ corn hybrid test trial results, Southeast Experiment Station, Beresford, SD, 2005–2006.

\* Seeded May 8, 2006 at 28,750 seeds per acre.

\*\* Lsd = the amount values in a column must differ to be significantly different.

If Lsd = NS then differences among values in a column are non-significant (NS).

# Min. TPG-value = minimum value required for the top performance group.

## Max. TPG-value = maximum value required for the top performance group.

Seed brand	Mailing address
AgVenture	Keltgen Inc. Seed, 44449 U.S. Hwy 212, Watertown, SD 57201
AgVenture	Scherr's Seed LLC, 13464 335 Ave., Roscoe, SD 57471
Asgrow	Monsanto, 102 W Carol Ave., Cortland, IL 60112
Crows	Crows Hybrid Corn Co., PO Box 157, Kentland, IN 47951
Dairyland	Dairyland Seed, PO Box 958, West Bend, WI 53095
Dekalb	Monsanto, 102 W Carol Ave., Cortland, IL 60112
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310, Shell Rock, IA 50670
Farm Advantage	Farm Advantage, 1275 Hwy 19, Belmond, IA 50421
Fontanelle	Fontanelle Hybrids, 10981 9th St., Fontanelle, NE 68044
Gold Country	Gold Country Seed Inc., PO Box 604, Hutchinson, MN 55350
Heine	Heine Hybrid Seed Corn, 1020 E. 320th St., Vermillion, SD 57064
Integra Seed	Integra Seed, Ltd., PO Box 40, Bozeman, MT 59718
Kaltenberg	Kaltenberg Seeds, 5506 State Road 19, Box 278, Waunakee, WI 53597
Kruger	Kruger Seed Co., Box A, Dike, IA 50624
Legend	Legend Seeds, 605 E 21 St., Sioux Falls, SD 57105
Midwest	Midwest Seed Genetics, PO Box 518, Carroll, IA 51401
Mycogen	Mycogen Seeds, 25931 486th Ave., Valley Springs, SD 57065
NuTech	Nutech Seed, LC, 6131 N. Fork Rd., Ames, IA 50010
Pannar	Pannar Seed Inc., 40329 US Hwy 14 E, Huron, SD 57350
Renk	Renk Seed Co., 6809 Wilburn Rd., Sun Prairie, WI 53590
Seeds 2000	Seeds 2000, PO Box 200, Breckenridge, MN 56520
Wensman	Wensman Seed Co., PO Box 190, Wadena, MN 56482
Wilbur Ellis (WECO)	Wilbur Ellis Seed, 3320 Pine Ave, Brookings, SD 57006

#### Table E. Mailing addresses for seed entries in the 2006 corn hybrid trials by seed brand name.

## **CONTROL BANK** 2007 Precision Planted Performance Trials



SDSU

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### Tables, 2007 Corn Performance Trials

А	Description of 2007 corn hybrid trial locations- soil type, tillage type, prior crop, herbicide and insecticides used, and seeding date
В	Monthly nearest weather station totals for precipitation and growing degree days (GDD); and average temperatures;
	and their departments for normal (DFN) for the 2007 growing season
С	2007 Non-Roundup Ready™ corn hybrid entries by brand/hybrid and performance table number.)
D	2007 Roundup Ready™ corn hybrid entries by brand/hybrid and performance table number
E	Mailing addresses for seed entries in the 2007 corn hybrid trials by seed brand name
1a	Early maturity Non-Roundup Ready™ corn hybrid test trial results, Allen & Inel Ryckman Farm, Warner, SD, 2007
1b	Late maturity Non-Roundup Ready™ corn hybrid test trial results, Allen and Inel Ryckman Farm, Warner, SD, 2007
1c	Early maturity Roundup Ready™ corn hybrid test trial results, Allen & Inel Ryckman Farm, Warner, SD, 2007
1d	Late maturity Roundup Ready™ corn hybrid test trial results, Allen & Inel Ryckman Farm Warner, SD, 2007
2a	Early maturity Non-Roundup Ready™ corn hybrid test trial results, Northeast Research Farm, South Shore, SD, 2007
2b	Late maturity Non-Roundup Ready™ corn hybrid test trial results, Northeast Research Farm, South Shore, SD, 2007
2c	Early maturity Roundup Ready™ corn hybrid test trial results, Northeast Research Farm, South Shore, SD, 2007
2d	Late maturity Roundup Ready™ corn hybrid test trial results, Northeast Research Farm, South Shore, SD, 2007
3a	Early maturity Non-Roundup Ready™ corn hybrid test trial results, Erland Weerts Farm, Bancroft, SD, 2006–2007
3b	Late maturity Non-Roundup Ready™ corn hybrid test trial results, Erland Weerts Farm, Bancroft, SD, 2006–2007
3c	Early maturity Roundup Ready™ corn hybrid test trial results, Erland Weerts Farm, Bancroft, SD, 2006–2007
3d	Late maturity Roundup Ready™ corn hybrid test trial results, Erland Weerts Farm, Bancroft, SD, 2006–2007
4a	Early maturity Non-Roundup Ready™ corn hybrid test trial results, SDSU Plant Science Research Farm, Brookings, SD, 2006–2007
4b	Late maturity Non-Roundup Ready™ corn hybrid test trial results, SDSU Plant Science Research Farm, Brookings, SD, 2006–2007
4c	Early maturity Roundup Ready™ corn hybrid test trial results, SDSU Plant Science Research Farm, Brookings, SD, 2006–2007
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5a	Early maturity Non-Roundup Ready™ corn hybrid test trial results, Curtis Sybesma Farm Geddes, SD, 2007
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6a	Early maturity Non-Roundup Ready™ corn hybrid test trial results, Southeast Experiment Station, Beresford, SD, 2006–2007
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6c	Early maturity Roundup Ready™ corn hybrid test trial results, Southeast Experiment Station, Beresford, SD, 2006–2007
6d	Late maturity Roundup Ready™ corn hybrid test trial results, Southeast Experiment Station, Beresford, SD, 2006–2007

#### C253—Precision Planted Corn 2007 Crop Performance Results is available electronically on the internet

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## 2007 Precision Planted **Corn** Performance Trials

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This publication reports the performance of entries in the 2007 South Dakota corn hybrid performance trials for both non-Roundup-Ready<sup>™</sup> and Roundup-Ready<sup>™</sup> hybrids. Information includes the most recent two-year and one-year grain yield averages, in bushels per acre, and one-year averages for bushel weight, grain moisture at harvest, percent stand at harvest, and stalk lodging percentages. These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Corn performance trial tables are listed on the inside front cover. Environmental data is listed in tables A and B, indices of brand/hybrid entries to performance table number are listed in tables C and D, and mailing addresses for seed companies are listed in table E.

#### **Test Trial Locations**

Trial locations, soil types, seedbed, previous crop history, soil fertility yield goals, and seeding dates are indicated in Table A. The participation and efforts of our cooperators Allen and Inel Ryckman at Warner, Al Heuer at South Shore (Northeast Research Farm), Erland Weerts at Bancroft, Douglas Doyle at Brookings (SDSU Plant Science Research Farm), Curtis Sybesma at Geddes, and Robert Berg and staff at Beresford (Southeast Experiment Station) are gratefully acknowledged.

#### Weather Conditions

Weather data (Table B) was obtained through the efforts of D. Todey and C. Shukla, South Dakota Office of Climate and Weather, and they are gratefully acknowledged. Average daily temperatures were 1 to 4°F below average across test locations in April; however, by May all locations were 2 to 4°F above average in temperature. Thereafter, temperatures ranged from about 0 o 2°F above average from June through August and from average to about 4°F above average in September. Heat unit totals varied across locations, ranging from a high of 3,168 GDD at the Beresford research farm to a low of 2,493 GDD at the South Shore research farm. Heat unit accumulations were below average only at Aberdeen (-55), South Shore research farm (-40), De Smet (-18), and Brookings (-16) in August; otherwise, they were average to above average across locations. The total GDD accumulations though September were about 10% above average across all locations.

Precipitation varied across test locations. On average, seasonal

moisture varied from a deficit of -2.91" at the Beresford research farm to a high of 7.77" above normal in the Aberdeen area. All locations experienced moisture deficits during the growing season. Moisture in April or May or both apparently was able to compensate for moisture deficits at some locations later in the season. In July, Brookings and the Beresford research farm received little or no rainfall.

#### General Test Procedures

Seed companies pick the test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Warner and South Shore, 100 days for Yale and Brookings, 105 days for Geddes, and 110 days for Beresford. Hybrids are assigned to trials based on their relative maturity ratings, which are reported by the participating seed company. This testing program does not guarantee that all entries are placed in the proper maturity trial. In some trials, borderline entries with relative maturity ratings at or near the arbitrary break between the early and late trials may cross over at a given location. In some cases, this may be indicated by exceptionally high or low grain moisture contents at harvest. A higher than average moisture content may indicate the hybrid is later in relative maturity than indicated. Likewise, a lower than average moisture may indicate the hybrid is earlier in relative maturity than indicated. A fee was charged for all entries at each location. A list of participating seed companies for 2007 is presented in Table E.

#### **Experimental Procedures**

Entries were seeded in three replications, with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20-feet long. The center two rows were harvested for yield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2007, the precision planter was calibrated to deliver 28,750 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation and previous crop history, and fertility yield goal at each test site are outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/ acre of 37-18-00 was applied 2" below and 2" to the side (2X2) of the seed row. Force insecticide in-furrow at label rates for corn rootworm control this year. The weed control herbicides applied at recommended label rates are indicated in table A for both the non-Roundup Ready<sup>™</sup> and the Roundup Ready<sup>™</sup> hybrid corn trials.

#### Measurements of Performance

Yields are obtained from the South Dakota Crop Performance Testing Program. Current-year and two-year yield averages are included where hybrids have been tested in 2007 and for the past two years. In 2007, two-year yield means were not calculated at Warner, South Shore, and Geddes. The yield data for 2006 at these locations was not used in the calculation of 2007 yields averages because the 2006 data contained high levels of experimental error. The high levels of experimental error in the 2006 data resulted when temperatures in the high 90s and above resulted in very poor or no pollination, which severely reduced yield. Therefore, the performance data at Warner, South Shore, and Geddes only includes data for 2007.

Yield: Yield values are an average of three replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2007, the coefficient of variation (CV) values (a measure of experimental error) for yield was relatively low over the six test locations. The highest CV value (13%) was obtained in the early non-Roundup Ready trial at Geddes, while the remaining test trial CV values were generally in the 5 to 10% range. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, and soil variations, or agronomic factors such as seeding date, reseeding, or seed quality factors-all of which may or may not be controllable in a given year. Clearly, in 2007, seasonal moisture distribution and/or subsoil moisture conditions, along with elevated high temperatures, were the factors that affected the yielding potential of the corn hybrids tested. All test locations likely were exposed to some degree of moisture stress; however, Beresford was particularly dry in July (Table B).

**Grain moisture content:** Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Moisture is generally inversely related to maturity and is important in the evaluation of hybrids. Hybrids that provide satisfactory yields and can be stored without additional drying are desirable. During harvest, moisture values were determined by the combine moisture meter, which, in turn, was periodically checked with a Dickey-John GAC II to verify it was within limits.

Use of tables: Check for the least significant difference (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids before there is a significant yield difference. LSD values are given at the bottom of every column where there is significant difference among the averages within the column. If differences among the averages within a column are not significant, then the LSD value is reported as non-significant (NS).

The LSD values reported in this publication can be used in several ways. Here, the LSD value is used primarily to identify

not only the top performance group (TPG) for current-year and two-year yields, but also bushel weight, grain moisture at harvest, and lodging (below the ear) percentage for each test trial. In order to determine which hybrids are in the TPG for yield, use the LSD value indicated at the bottom of each yield column in any yield table. For example, let's say the column LSD value equals 15 (bu/a) and the highest yield for that column equals 155 bu/a. Subtract the column LSD value from the highest yield (155 - 15 =140) to obtain the minimum value for the TPG for yield-or 140 bu/a. Technically, a yield value of 141 bu/a should be included in the TPG, while a value of 140 bu/a should not. However, because all yields and LSD values are rounded to the nearest whole number, we can say 140 bu/a, because of rounding, is the more appropriate minimum value for the TPG for yield. These minimum TPG values for yield are indicated at the bottom of each yield column, unless too much experimental error (high CV values) is associated with the test. Top yield hybrids are those hybrids that are equal to or higher than the minimum TPG value reported at the bottom of each yield column (2007 or two-year yield averages). If hybrid yield differences are not significant (NS) and the CV values are 20% or less, then, by definition, all hybrids in the test are in the top-yield group. In contrast, if the column CV value is greater than 20%, then no minimum TPG value is indicated because there is too much experimental error associated with the test to make a valid determination of the TPG for yield. When comparing yield means, compare current-year averages with other current-year averages and compare two-year yield averages with other two-year averages. Do not compare current-year averages with two-year averages when comparing hybrids. When evaluating current-year averages, do not forget to note that entries tested for two years may also have a yield value that qualifies for the TPG in the 2007 yield column.

The LSD values for the TPG can also be used to determine if two hybrids differ in performance. For example, if a test trial LSD value equals 16 bu/a, and if hybrid A yields 132 bu/a while hybrid B yields 118 bu/a, then their yield difference is 14 bu/a (132 - 118 = 14). In this case, the two hybrids do not differ in yield because their yield difference of 14 bu/ac is equal to or less than the reported LSD value of 16 bu/a. In contrast, if hybrid C yields 114 bu/a, then the yield difference between hybrids A and C is 18 bu/a (132 - 114 = 18). In this case, the yield difference of 18 bu/a is higher than the reported LSD value of 16 bu/a; therefore, hybrid A would have a significantly higher yield than hybrid C. Similarly, the LSD values for bushel weight, grain moisture, stalk lodging below the ear, and percent stand can be used to determine if any two hybrids differ in these performance factors. For example, if a test trial grain moisture LSD value equals 2%, and if hybrid A measures 18% and hybrid B measures 16, then their yield difference is 2% (18 - 16 = 2). In this case, the two hybrids do not differ in grain moisture because their moisture difference of 2% is equal to or less than the reported LSD value of 2%. In contrast, if hybrid C measures 15%, the grain moisture difference between hybrids A and C is 5% (18 - 15 = 3). In this case, the grain difference of 3% is more than the reported LSD value 2%; therefore, hybrid A is significantly higher in grain moisture than hybrid C.

The TPG for other performance factors like bushel weight, percent grain moisture at harvest, percent lodging (below the ear), and percent stand (percent of seeded population) can also be determined. In order to qualify for the TPG group, a hybrid must have a bushel weight and a percent of stand value that is equal to or greater than the minimum reported TPG value for bushel weight or percent of stand. Likewise, in order to qualify for the TPG, a hybrid must have grain moisture and lodging values that are equal to or less than the maximum reported TPG value for grain moisture or lodging percentage. Note that yield, bushel weight, and percent stand TPG values are greater than a minimum yield, minimum bushel weight, or minimum percent stand value. In contrast, grain moisture and lodging percentage values are equal to or less than a maximum grain moisture or lodging percentage to qualify for the TPG. Again, as with hybrid yields, if there are no hybrid differences for a performance factor, then, by definition, all hybrids in the test are in the TPG for that performance factor.

### **PERFORMANCE TRIAL RESULTS BY LOCATIONS**

The performance trial results for one year (2007) and for two years (2006-07) follow:

#### **Northern Locations**

**Note:** In 2007, two-year yield means were not calculated at Warner and South Shore. The yield data for 2006 at these locations was not used in the calculation of 2007 yields means because the 2006 data contained high levels of experimental error. The high levels of experimental error in the 2006 data resulted when temperatures in the high 90s and above resulted in very poor or no pollination, which severely reduced yields. Thus, the performance data at Warner and South Shore only includes 2007 data.

#### Warner

Early maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 1a: The test trial yield average was 174 bu/a in 2007. Yield differences among hybrids were non-significant in 2007. Therefore, all entries tested were in the TPG for yield, even the lowest yield value of 166 bu/a. In 2007, bushel weights averaged 56 lbs, grain moisture averaged 17%, lodging averaged 1%, and percent stand averaged 99%. In order for hybrids to be in the TPG for all performance factors, they had to average 166 bu/a or more in yield, 56 lbs or more in bushel weight, 17% or less in grain moisture, 2% or less in lodging, and 97% or more for percent stand.

Late maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 1b: The test trial yield average was 180 bu/a in 2007. Yield differences among hybrids were non-significant in 2007. Therefore, all entries tested were in the TPG for yield, even the lowest yield value of 169 bu/a. In 2007, bushel weights averaged 54 lbs, grain moisture averaged 24%, lodging averaged slightly more than 0%, and percent stand averaged 99%. In order for hybrids to be in the TPG for all performance factors, they had to average 169 bu/a or more in yield, 54 lbs or more in bushel weight, 21% or less in grain moisture, 1% or less in lodging, and 98% or more for percent stand.

**Early maturity trial – Roundup Ready™, Tables 1c:** The test trial yield average was 187 bu/a in 2007. Hybrids that yielded 189 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 12 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 17%, lodging averaged 1%, and percent stand averaged 97%. In order for hybrids to be in the TPG for all performance factors, they had to average 189 bu/a or more in yield, 57 lbs or more in bushel weight, 16% or less in grain moisture, 2% or less in lodg-

ing, and 96% or more for percent stand.

Late maturity trial – Roundup Ready<sup>™</sup>, Tables 1d: The test trial yield average was 181 bu/a in 2007. Hybrids that yielded 180 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 14 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 19%, lodging averaged slightly more than 0%, and percent stand averaged 98%. In order for hybrids to be in the TPG for all performance factors, they had to average 180 bu/a or more in yield, 58 lbs or more in bushel weight, 18% or less in grain moisture, 2% or less in lodging, and 97% or more for percent stand.

#### South Shore

Early maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 2a: The test trial yield average was 177 bu/a in 2007. Hybrids that yielded 178 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 12 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 55 lbs, grain moisture averaged 19%, lodging averaged 1%, and percent stand averaged 98%. In order for hybrids to be in the TPG for all performance factors, they had to average 178 bu/a or more in yield, 55 lbs or more in bushel weight, 18% or less in grain moisture, 2% or less in lodging, and 98% or more for percent stand.

Late maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 2b: The test trial yield average was 174 bu/a in 2007. Hybrids that yielded 168 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 16 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 53 lbs, grain moisture averaged 26%, lodging averaged slightly more than 0%, and percent stand averaged 100%. In order for hybrids to be in the TPG for all performance factors, they had to average 168 bu/a or more in yield, 52 lbs or more in bushel weight, 25% or less in grain moisture, 1% or less in lodging, and 99% or more for percent stand.

Early maturity trial – Roundup Ready<sup>™</sup>, Tables 2c: The test trial yield average was 179 bu/a in 2007. Hybrids that yielded 182 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 12 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 55 lbs, grain moisture averaged 20%, lodging averaged 1%, and percent stand averaged 99%. In order for hybrids to be in the TPG for all performance factors, they had to average 182 bu/a or more in yield, 57 lbs or more in bushel weight, 18% or less in grain moisture, 3% or less in lodging, and 97% or more for percent stand. Late maturity trial – Roundup Ready<sup>™</sup>, Tables 2d: The test trial yield average was 177 bu/a in 2007. Hybrids that yielded 172 bu/a or more qualified for the TPG for yield. Hybrids had to differ in yield by 20 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 54 lbs, grain moisture averaged 22%, lodging averaged 1%, and percent stand averaged 98%. In order for hybrids to be in the TPG for all performance factors, they had to average 172 bu/a or more in yield, 56 lbs or more in bushel weight, 20% or less in grain moisture, 2% or less in lodging, and 96% or more for percent stand.

#### **Central Locations** Bancroft

Early maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 3a: The test trial yield averages were 191 bu/a in 2007 and 167 bu/a for two years. Hybrids that yielded 186 bu/a or more in 2007 qualified for the TPG for yield. There were no differences in yield average among the three hybrids tested two years, so all three qualified for the TPG. Hybrids had to differ in yield by 18 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 58 lbs, grain moisture averaged 19%, lodging averaged slightly more than 0%, and percent stand averaged 97%. In order for hybrids to be in the TPG for all performance factors, they had to average 186 bu/a for 2007 and 159 bu/a or more in yield for two years, 58 lbs or more in bushel weight, 17% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

Late maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 3b: The test trial yield averages were 190 bu/a in 2007 and 170 bu/a for two years. Yield differences among hybrids were non-significant in 2007 and for the two-year period. Therefore, all entries were in the TPG for yield, even though the lowest yield value was 179 bu/a in 2007 and 166 bu/a for two years. In 2007, bushel weights averaged 56 lbs, grain moisture averaged 22%, lodging averaged slightly more than 0%, and the final percent stand averaged 98%. In order for hybrids to be in the top performance group for these factors, they had to average 179 bu/a or more for 2007 and 166 bu/a or more for two years, 56 lbs or more in bushel weight, 21% or less in grain moisture, 1% or less in stalk lodging, and 96% or more for percent stand.

Early maturity trial – Roundup Ready<sup>™</sup>, Tables 3c: The test trial yield averages were 190 bu/a in 2007 and 172 bu/a for two years. Hybrids that yielded 193 bu/a or more in 2007 and 173 bu/a or more for two years qualified for the TPG for yield. Hybrids had to differ in yield by 19 bu/a in 2007 and 17 bu/a for two years to be significantly different. In 2007, bushel weights averaged 58 lbs, grain moisture averaged 19%, lodging averaged 1% and the final percent stand averaged 97%. In order for hybrids to be in the TPG for these factors, they had to average 193 bu/a or more for 2007 and 173 bu/a or more for two years, 58 lbs or more in bushel weight, 18% or less in grain moisture, 1% or less in lodging, and 95% or more for percent stand.

Late maturity trial – Roundup Ready<sup>™</sup>, Tables 3d: The test trial yield averages were 193 bu/a in 2007 and 176 bu/a for two years. Hybrids that yielded 192 bu/a or more in 2007 and 168 bu/a or more for two years qualified for the TPG for yield. Hybrids had to differ in yield by 18 bu/a in 2007 and 19 bu/a for two years to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 21%, lodging averaged slightly more than 0%, and the final percent stand averaged 96%. In order for hybrids to be in the TPG for these factors, they had to average 192 bu/a or more for 2007 and 168 bu/a or more for two years, 57 lbs or more in bushel weight, 20% or less in grain moisture, 1% or less in lodging, and 92% or more for percent stand.

#### Brookings

Early maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 4a: The test trial yield averages were 151 bu/a in 2007 and 166 bu/a for two years. Yield differences among hybrids were non-significant in 2007 and for the two-year period. Therefore, all entries were in the TPG for yield, even though the lowest yield value was 151 bu/a in 2007 and 166 bu/a for two years. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 19%, lodging averaged slightly more than 0%, and the final percent stand averaged 97%. In order for hybrids to be in the TPG for these factors, they had to average 151 bu/a or more for 2007 and 166 bu/a or more for two years, 58 lbs or more in bushel weight, 17% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

Late maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 4b: The test trial yield averages were 192 bu/a in 2007 and 187 bu/a for two years. Hybrids that yielded 204 bu/a or more in 2007 qualified for the TPG for yield. There were no differences in yield average among the four hybrids tested two years, so all four qualified for the TPG. Hybrids had to differ in yield by 16 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 56 lbs, grain moisture averaged 20%, lodging averaged slightly more than 0%, and percent stand averaged 98%. In order for hybrids to be in the TPG for all performance factors, they had to average 204 bu/a for 2007 and 165 bu/a or more in yield for two years, 58 lbs or more in bushel weight, 19% or less in grain moisture, 2% or less in lodging, and 96% or more for percent stand.

Early maturity trial – Roundup Ready<sup>™</sup>, Tables 4c: The test trial yield averages were 186 bu/a in 2007 and 175 bu/a for two years. Hybrids that yielded 188 bu/a or more in 2007 and 170 bu/a or more for two years qualified for the TPG for yield. Hybrids had to differ in yield by 20 bu/a in 2007 and 21 bu/a for two years to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 17%, lodging averaged slightly more than 0%, and the final percent stand averaged 98%. In order for hybrids to be in the TPG for these factors, they had to average 188 bu/a or more for 2007 and 170 bu/a or more for two years, 59 lbs or more in bushel weight, 16% or less in grain moisture, 1% or less in lodging, and 97% or more for percent stand.

Late maturity trial – Roundup Ready<sup>™</sup>, Tables 4d: The test trial yield averages were 199 bu/a in 2007 and 198 bu/a for two years. Hybrids that yielded 204 bu/a or more in 2007 and 185 bu/a or more for two years qualified for the TPG for yield. Hybrids had to differ in yield by 16 bu/a in 2007 and 31 bu/a for two years to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 20%, lodging averaged slightly more than 0%, and percent stand averaged 97%. In order for hybrids to be in the TPG for these factors, they had to average 204 bu/a or more for 2007 and 185 bu/a or more for two years, 58 lbs or more in bushel weight, 18% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

#### **Southern Locations**

**Note:** In 2007, two-year yield means were not calculated at Geddes. The yield data for 2006 at this location was not used

in the calculation of 2007 yields means because the 2006 data contained high levels of experimental error. The high levels of experimental error in the 2006 data resulted when temperatures in the high 90s and above resulted in very poor or no pollination, which severely reduced yields. Therefore, the performance data at Geddes only includes data for this year.

#### Geddes

Early maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 5a: The test trial yield average was 163 bu/a in 2007. Yield differences among hybrids were non-significant in 2007. Therefore, all entries tested were in the TPG for yield, even the lowest yield value of 155 bu/a. In 2007, bushel weights averaged 59 lbs, grain moisture averaged 17%, lodging averaged slightly more than 0%, and percent stand averaged 97%. In order for hybrids to be in the TPG for all performance factors, they had to average 155 bu/a or more in yield, 60 lbs or more in bushel weight, 17% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

Late maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 5b: The test trial yield average was 166 bu/a in 2007. Yield differences among hybrids were non-significant in 2007. Therefore, all entries tested were in the TPG for yield, even the lowest yield value of 160 bu/a. In 2007, bushel weights averaged 59 lbs, grain moisture averaged 19%, lodging averaged slightly more than 0%, and percent stand averaged 96%. In order for hybrids to be in the TPG for all performance factors, they had to average 160 bu/a or more in yield, 59 lbs or more in bushel weight, 20% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

**Early maturity trial – Roundup Ready™, Tables 5c:** The test trial yield average was 177 bu/a in 2007. Hybrids that yielded 183 bu/a or more in 2007 qualified for the TPG for yield. Hybrids had to differ in yield by 19 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 60 lbs, grain moisture averaged 15%, lodging averaged slightly more than 0%, and percent stand averaged 92%. In order for hybrids to be in the TPG for these factors, they had to average 183 bu/a or more in yield for 2007, 60 lbs or more in bushel weight, 15% or less in grain moisture, 2% or less in lodging, and 94% or more for percent stand.

Late maturity trial – Roundup Ready<sup>™</sup>, Tables 5d: The test trial yield average was 191 bu/a in 2007. Hybrids that yielded 198 bu/a or more in 2007 qualified for the TPG for yield. Hybrids had to differ in yield by 18 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 58 lbs, grain moisture averaged 19%, lodging averaged 1%, and percent stand averaged 90%. In order for hybrids to be in the TPG for these factors, they had to average 198 bu/a or more in yield for 2007, 58 lbs or more in bushel weight, 18% or less in grain moisture, 2% or less in lodging, and 91% or more for percent stand.

#### Beresford

Early maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 6a: The test trial yield averages were 192 bu/a in 2007 and 189 bu/a for two years. Hybrids that yielded 195 bu/a or more in 2007 qualified for the TPG for yield. There were no differences in yield average between the two hybrids tested two years, so both qualified for the TPG. Hybrids had to differ in yield by 17 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 17%, lodging averaged 0%, and percent stand averaged 97%. In order for hybrids to be in the TPG for all performance factors, they had to average 195 bu/a for 2007 and 178 bu/a or more in yield for two years, 58 lbs or more in bushel weight, 15% or less in grain moisture, 0% in lodging, and 97% or more for percent stand.

Late maturity trial – Non-Roundup Ready<sup>™</sup>, Tables 6b: The test trial yield averages were 190 bu/a in both 2007 and for two years. Yield differences among hybrids were non-significant in 2007 and for the two-year period. Therefore, all entries were in the TPG for yield, even though the lowest yield value was 173 bu/a in 2007 and 174 bu/a for two years. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 19%, lodging averaged 0%, and percent stand averaged 97%. In order for hybrids to be in the top performance group for these factors, they had to average 173 bu/a or more for 2007 and 174 bu/a or more for two years, 58 lbs or more in bushel weight, 18% or less in grain moisture, 1% or less in stalk lodging, and 95% or more for percent stand.

**Early maturity trial – Roundup Ready™, Tables 6c:** The test trial yield averages were 183 bu/a in 2007 and 182 bu/a for two years. Hybrids that yielded 182 bu/a or more in 2007 qualified for the TPG for yield. There were no differences in yield average between the three hybrids tested two years, so all three qualified for the TPG. Hybrids had to differ in yield by 24 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 57 lbs, grain moisture averaged 17%, lodging averaged slightly more than 0%, and percent stand averaged 96%. In order for hybrids to be in the TPG for all performance factors, they had to average 182 bu/a for 2007 and 170 bu/a or more in yield for two years, 57 lbs or more in bushel weight, 15% or less in grain moisture, 1% or less in lodging, and 96% or more for percent stand.

Late maturity trial – Roundup Ready<sup>™</sup>, Tables 6d: The test trial yield average was 189 bu/a in 2007. Hybrids that yielded 195 bu/a or more in 2007 qualified for the TPG for yield. Hybrids had to differ in yield by 24 bu/a in 2007 to be significantly different. In 2007, bushel weights averaged 59 lbs, grain moisture averaged 19%, lodging averaged 0%, and percent stand averaged 97%. In order for hybrids to be in the TPG for these factors, they had to average 195 bu/a or more in yield for 2007, 59 lbs or more in bushel weight, 18% or less in grain moisture, 0% or less in lodging, and 96% or more for percent stand.

	Soils & Management			Herbi	cides - App	rates	Fertility			
Location (County)	Tune	Tillage Prior		Roundup Ready		Non- Roundup Ready		Yield Goal	Date Seeded	
(oounty)	туре	Туре	crop	Pre	Post	Pre	Post	bu/a	Jecucu	
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	Conven- tional	Spring Wheat	Harness Xtra	Roundup once	Harness Xtra	Accent/ Buctril	200	May 18	
South Shore (Codington)	Kransburg silty clay loam, 3-6% slope	Conven- tional	Oat	Dual II Magnum	Roundup once	Dual II Magnum	Accent/ Buctril	180	May 14	
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	Conven- tional	Soybean	Balance Pro	Roundup once	Balance Pro	Accent/ Buctril	180	May 19	
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conven- tional	Soybean	Dual II Magnum	Roundup once	Dual II Magnum	Accent/ Buctril	200	May 10	
Geddess (Chas. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	Winter Wheat	None	Roundup once	None	Stead- fast/ Callisto/ Atrazine	200	May 15	
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conven- tional	Soybean	None	Roundup once	None	Prowl/ Clarity	210	May 2	

Table A. Description of 2007 corn hybrid trial locations- soil type, tillage type, prior crop, herbicides and insecticides used, and seeding dates

All plots were seeded at 27,878 seeds per acre. Force insecticide was applied in-furrow at label rate at seeding



Station	on Variable Monthly data b					beginning April 1 and ending September 30					
(Test site)	Vallable	April	May	June	July	Aug	Sept	Totals			
	Precip inches	'07 DFN*	3.42 1.83	12.23 9.54	2.43 -1.06	0.79 -2.13	2.20 -0.22	1.61 -0.19	22.68 7.77		
Aberdeen Airport	Avg.Temp°F	'07 DFN	41 -4.1	60 2.5	69 2.1	74 1.6	68 -2.1	60 0.5			
(Warner)	Accum. GDD's	'07 DFN	152 41	404 88	583 85	727 36	589 -55	434 72	2,889 267		
	Precip inches	'07 DFN	4.23 2.20	3.70 0.87	2.08 -1.57	0.85 -2.79	0.51 -2.72	4.14 2.08	15.51 -1.93		
South Shore Shore (NE Farm)	Avg.Temp°F	'07 DFN	40 -3.4	58 2.6	66 1.2	71 0.7	68 0.2	61 3.0			
	Accum. GDD's	'07 DFN	124 51	325 49	507 68	640 12	518 -40	379 72	2,493 212		
	Precip inches	'07 DFN	3.42 1.21	4.25 1.17	2.27 -1.65	1.05 -2.50	4.27 1.41	2.16 -0.20	17.42 -0.56		
DeSmet/ (Bancroft)	Avg.Temp°F	'07 DFN	44 -1.8	62 4.0	69 1.6	74 2.2	70 -0.1	62 2.0			
	Accum. GDD's	'07 DFN	162 61	390 90	570 51	733 48	601 -18	420 78	2,876 310		
	Precip inches	'07 DFN	3.62 1.59	1.86 -1.09	2.99 -1.24	0.14 -2.97	6.45 3.51	1.00 -1.28	16.06 -0.39		
Brookings 2NF	Avg.Temp°F	'07 DFN	41 -3.3	61 4.0	68 2.1	72 0.8	68 -0.2	61 1.6			
	Accum. GDD's	'07 DFN	146 61	385 91	544 61	653 14	561 -16	409 79	2,698 290		
	Precip inches	'07 DFN	3.04 0.57	3.49 -0.16	2.16 -1.79	0.00 -3.35	4.95 2.12	1.96 -0.30	15.60 -2.91		
Centerville "(SE Farm," Beresford)	Avg.Temp°F	'07 DFN	46 -1.6	64 4.5	70 0.5	75 1.6	73 0.8	64 1.4			
	Accum. GDD's	'07 DFN	187 51	457 449	606 25	750 14	706 38	462 69	3,168 646		
	Precip inches	'07 DFN	1.76 -0.85	5.68 1.88	6.24 2.83	1.47 -1.69	4.78 2.31	1.51 -0.88	21.44 3.60		
Platte**/ Academy*** (Geddes)	Avg.Temp°F	'07 DFN	44 -1.3	62 4.2	69 1.5	76 2.3	72 0.7	65 3.5			
(Geddes)	Accum. GDD's	'07 DFN	159 41	406 101	566 44	727 9	660 -1	465 72	2,983 266		

Table B.Monthly nearest weather station totals for precipitation and growing degree days (GDD); and<br/>average temperatures; and their departures from normal (DFN) for the 2007 growing season<br/>Source: South Dakota Office of Climate and Weather. 2007. D. Todey and C. Shukla.

\* DFN - how much a variable for the current year is greater or less (-) than the long-term average

\*\* Precipitation data

\*\*\* Temperature and GDD accumulation data

Table C. 2007 Non-Roundup Ready corn hybrid entries by brand/hybrid and performance table number(s)

Brand / Hybrid	Table No.	Brand / Hybrid	Table No.
AGVENTURE/ EX268275CBLL	1a	KRUGER/ 5504YGCB	3b, 4b, 5a
EPLEY/ E1231	3a, 4a, 5a	KRUGER/ 8112HX	6b
EPLEY/ E12L50YGCB	3a, 4a, 5a	KRUGER/ 8308HX	5b, 6a
EPLEY/ E1430YGCB	3b, 4b, 5a	KRUGER/ 8310HX	5b
EPLEY/ E1522YGPL	3b, 4b, 5a	KRUGER/ 8502HX	1b, 2b, 3b, 4b, 5a
EPLEY/ E2207HXLL	3b, 4b, 5a	KRUGER/ 8602HX	1b, 2b, 3b, 4b, 5a
EPLEY/ E2474	4b, 5b	KRUGER/ 8616HX	6b
FARM ADVANTAGE/ 86X06	5b, 6a	KRUGER/ 9414HXT	6b
FARM ADVANTAGE/ 87X00	3b, 4b	KRUGER/ EXP8199HX	1b, 2b
FARM ADVANTAGE/ 9690L	1a, 2a	KRUGER/ EXP9010HXT	5b, 6a
FARM ADVANTAGE/ 9699L	1b, 2b, 3a, 4a	KRUGER/ EXP9106HXT	3b, 4b, 5a, 6a
GOLD COUNTRY/ 95-03CB	1a, 2a, 3a, 4a	KRUGER/ EXP9502HXT	1b, 2b, 3b, 4b, 5a
HEINE/ H734	6a	KRUGER/ EXP9504HXT	3b, 4b, 5a
HEINE/ H818	6a	MYCOGEN/ 2C597	6a
HEINE/ H818YGCB	6a	MYCOGEN/ 2C727	6b
HEINE/ H819	6a	MYCOGEN/ 2D675	6a
HOEGEMEYER/ 9326HX	6a	MYCOGEN/ 2K718	6b
HOEGEMEYER/ HB+651	6a	MYCOGEN/ 2R572	6a
KING SEED/ X7871CBLL	1a	MYCOGEN/ 2T787	6b
KING SEED/ X7901	1a	RENK/ RK442LLYGCB	1a, 2a
KRUGER/ 0401	1b, 2b, 3b, 4b, 5a	RENK/ RK852LLYGCB	5b, 6a
KRUGER/ 5006YGCB	3b, 4b, 5b	RENK/ RK884YGCB	5b, 6b
KRUGER/ 5013YGCB	6b	SEEDS 2000/ 2953BT	1a, 2a, 3a, 4a
KRUGER/ 5111	5b, 6b	WENSMAN/ 5343BT	3b, 4b, 5a, 6a
KRUGER/ 5114YGCB	6b	WENSMAN/ W4141	1a, 2a
KRUGER/ 5210YGCB	5b, 6a	WENSMAN/ W5105BT	1a, 2a
AR			

Table D. 2007 R	oundup Ready corn hybrid entrie	es by brand/hybrid and pe	rformance table numbers (s)	

Brand / Hybrid	Table No.	Brand / Hybrid	Table No.
AGSOURCE/ 3A-090RR	1c	DEKALB/ DKC58-16(VT3)	5d, 6c
AGSOURCE/ 3A-093RR	1c	DEKALB/ DKC61-69(VT3)	5d, 6d
AGSOURCE/ 3A-391RR	1c	DEKALB/ DKC62-33RR2YGCB	6d
AGSOURCE/ 3C-007RR/YGCB	3d, 4d, 5d, 6c	DEKALB/ DKC63-42(VT3)	6d
AGSOURCE/ 3C-009RR/YGCB	5d	DEKALB/ RX715VT3	6d
AGSOURCE/ 3C-101RR/YGCB	5c	EPLEY/ E1165RR	3c, 4c, 5c
AGSOURCE/ 3C-310RR/YGCB	5d, 6c	EPLEY/ E1195RR	3c, 4c, 5c
AGSOURCE/ 3C-504ARRYGCB	2d, 3c, 4c, 6c	EPLEY/ E1205RR	3c, 4c, 5c
AGSOURCE/ 3C-504RR/YGCB	5c	EPLEY/ E1225RR	3c, 4c, 5c
AGSOURCE/ 3C-799RR/YGCB	2d, 3c, 4c	EPLEY/ E12234YGPL	3d, 4d, 5c
AGSOURCE/ 3P-191RR/YGPL	2c	EPLEY/ E1525RR	3d, 4d, 5c
AGSOURCE/ 3P-300RR/YGPL	1d	EPLEY/ E16R12YGPL	3d, 4d, 5c
AGSOURCE/ 3P-302ARRYGPL	3d, 4d, 5c	EPLEY/ E24R32YGPL	4d, 5d, 6c
AGSOURCE/ 3P-902RR/YGPL	2d, 3c, 4c, 5c	EPLEY/ E25R52YGPL	4d, 5d, 6c
AGSOURCE/ 3P-910RR/YGPL	5d	EPLEY/ E3245RR	5d, 6d
AGSOURCE/ 3T-006A VT3	3d	FARM/ ADVANTAGE 6504	6c
AGSOURCE/ 3T-096 VT3	1c, 2c	FARM/ ADVANTAGE 9503GL	5c
AGSOURCE/ 3T-099 VT3	1d, 2d, 3c, 4c	FIELDERS/ CHOICE E640HX	5c
AGSOURCE/ 3T-799 VT3	1d, 2d, 3c, 4c	FIELDERS/ CHOICE NG6402	1c, 2c
AGSOURCE/ 3T-808 VT3	4d, 5d, 6c	FIELDERS/ CHOICE NG6490	1d, 2d, 3c, 4c
AGSOURCE/ 3T-995 VT3	1c, 2c	FIELDERS/ CHOICE NG6510	1d, 2d, 3c, 4c
AGSOURCE/ 5H-008 RR/HX	3d, 4d, 6c	FIELDERS/ CHOICE NG6580	3d, 4d, 5c
AGSOURCE/ 5H-403 RR/HX	4d, 5c	FIELDERS/ CHOICE NG6686	5d, 6c
AGVENTURE/ AV4006YPRR	1c	FIELDERS/ CHOICE NG6721	5d, 6c
AGVENTURE/ AV4883YPRR	1c, 2c, 4c	FIELDERS/ CHOICE NG6745	6c
AGVENTURE/ AV5016R2CB	1c	FIELDERS/ CHOICE NG6780	5d, 6d
AGVENTURE/ AV5480R2CB	2d, 4c	FIELDERS/ CHOICE NG6785	6d
AGVENTURE/ AV5480V3R	1d	FONTANELLE/ 2R144	1c, 2c
AGVENTURE/ AV6323R2CB	4d	FONTANELLE/ 4N627	1d, 2d
CROWS/ 2121S	2d, 4d	FONTANELLE/ 5N503	1d, 2d, 5c
CROWS/ 3846T CROWS/ 4846T CROWS/ 48502 DAIRYLAND/ STEALTH-7196 DAIRYLAND/ STEALTH-7204	6c 6c 2d, 4c 1d, 2d, 3c 3d, 4d, 5c	FONTANELLE/ 6T226 FONTANELLE/ 7K456 FONTANELLE/ 7N866 FONTANELLE/ 7T683 FOUR/ STAR 6880VT3	5d, 6c 5d, 6c 5d, 6c 5d, 6c 5d, 6c 6d
DAIRYLAND/ STEALTH-9194	1c, 2c	FOUR/ STAR EX9744RRBT	6c
DAIRYLAND/ STEALTH-9196	1d, 2d	FOUR/ STAR EX9762RRYGPL	6c
DAIRYLAND/ STEALTH-9201	1d, 2d, 3d, 4d	GCS/ 100-07CBR	2d, 3c, 4c
DAIRYLAND/ STEALTH-9497	1d, 2d, 3c	GCS/ 102-04CBR	2d, 3d, 4d
DAIRYLAND/ STEALTH-9799	1d, 2d, 3c	GCS/ 107-01CBRCRW	5d, 6c
DEKALB/ DKC42-95RR2YGCB	1c, 2c	GCS/ 89-02R	1c, 2c
DEKALB/ DKC43-31RR2YGCB	1c, 2c, 3c, 4c	GCS/ 98-10VT3	1d, 2d, 3c, 4c
DEKALB/ DKC46-22RR2YGPL	2d, 4c	GCS/ 99-02CBR	2d, 3c, 4c
DEKALB/ DKC46-60(VT3)	1d, 2d, 3c, 4c, 5c	HEINE/ H645RRYGPL	5c
DEKALB/ DKC49-35(RR2)	1d, 2d, 3c, 4c, 5c	HEINE/ H711RRYGPL	5c, 6c
DEKALB/ DKC50-20RR2YGCB	3c, 4c	HEINE/ H713RRYGPL	5c
DEKALB/ DKC50-48RR2YGCB	3c, 4c, 5c, 6c	HEINE/ H726RR	5c, 6c
DEKALB/ DKC51-39RR2YGPL	1d, 2d, 3d, 4d, 5c	HEINE/ H727RRYGPL	5c, 6c
DEKALB/ DKC52-63RR2YGCB	1d, 2d, 3d, 4d, 5c, 6c	HEINE/ H751RRYG	5c, 6c
DEKALB/ DKC53-18(RR2)	3d, 4d, 5c, 6c	HEINE/ H764RRYGPL	5c, 6c
DEKALB/ DKC57-47(RR2)	5d, 6c	HEINE/ H792RR	5c

Table D. 2007 Roundup Ready corn hybrid entries by brand/hybrid and performance table numbers (s)	
(continued)	

Brand / Hybrid		Table No.	Brand / Hybrid	Table No.
	HEINE/ H798RRYG	6c	NUTECH/ 3P-302 RR/YGPL	2d, 3d, 4d, 6c
	HEINE/ H818RRYG	6c	NUTECH/ 3P-494 RR/YGPL	1c, 2c
	HOEGEMEYER/ 4373	6c	NUTECH/ 3P-612 RR/YGPL	6d
	HOEGEMEYER/ EXP 3005	4c	NUTECH/ 3P-703 RR/YGPL	3d, 4d, 5c
	HOEGEMEYER/ EXP 708	6c	NUTECH/ 3P-905 RR/YGPL	3d
	KALTENBERG/ K4012RRBT KALTENBERG/ K4263RRPLUS KALTENBERG/ K4663RRPLUS KALTENBERG/ K5243RRPLUS KALTENBERG/ K5683RRPLUS	2c, 4c 4c 2d 5c 5c	NUTECH/ 3T-006 VT3 NUTECH/ 3T-098 VT3 NUTECH/ 3T-098A VT3 NUTECH/ 3T-393 VT3 NUTECH/ 3T-595 VT3	4d, 5c 1d, 2d 1c, 2c 1c, 2c 1c, 2c 1c, 2c
	KALTENBERG/ K5685RRBT	6c	NUTECH/ 3T-808A VT3	3d, 6c
	KALTENBERG/ K6235RRBT	6c	NUTECH/ 3W-099 RR/YGRW	1d, 2d, 3c, 4c
	KRUGER/ 1008RR	5d, 6c	NUTECH/ 5H-312 RR/HX	5d, 6d
	KRUGER/ 1490RR	1c, 2c	NUTECH/ 5X-402 RR/HXT	4d, 5c
	KRUGER/ 1500RR	1d, 2d, 3c, 4c	PANNAR/ 4D-255VT3	1c, 2c
	KRUGER/ 1606RR	3d, 4d, 5d	PANNAR/ 4E-705VT3	1c, 2c
	KRUGER/ 2090RR/YGCB	1c, 2c	PANNAR/ 5A-125RR2	1c, 2c
	KRUGER/ 2094RR/YGCB	1c, 2c	PANNAR/ 5A-155VT3	1c, 2c
	KRUGER/ 2097RR/YGCB	3c, 4c	PANNAR/ 5D-303RR/YG+	1d, 2d, 3c, 4c
	KRUGER/ 2114RR/YGCB	6d	PANNAR/ 5E-900RR/YG+	1d, 2d, 3c, 4c, 5c
	KRUGER/ 2298RR/YGCB	1d, 2d, 3c, 4c	PANNAR/ 6C-260RR/BT	2d, 3d, 4d, 5c
	KRUGER/ 6006VT3	3d, 4d, 5d	PANNAR/ 6D-409RR2	3d, 4d, 5c
	KRUGER/ 6007VT3	5d, 6c	PANNAR/ 7B880RR/YG+	5d
	KRUGER/ 6011TS	6d	PANNAR/ 8A-410RR/BT	5d, 6c
	KRUGER/ 6015VT3	6d	RENK/ 7-692-LLYGCB	5d, 6c
	KRUGER/ 6111VT3	5d, 6d	RENK/ RK488RRYGPL	1d, 2d, 3c, 4c
	KRUGER/ 6208VT3	5d, 6c	RENK/ RK570VT3	1c, 2c, 3c, 4c
	KRUGER/ 6210TS	5d, 6c	RENK/ RK618VT3	1d, 2d, 3c, 4c
	KRUGER/ 6314TS	6d	RENK/ RK670VT3	3d, 4d, 5c
	KRUGER/ 6401TS	1d, 2d, 3d, 4d, 5c	RENK/ RK888RRYGPL	5d, 6d
	KRUGER/ 6412VT3	6d	SEEDS/ 2000 2953RRYGPL	1c, 2c
	KRUGER/ 6499VT3	1d, 2d, 3c, 4c	SEEDS/ 2000 3122RR/BT	1d, 2d, 3d, 4d
	KRUGER/ 6503TS	3d, 4d, 5c	SEEDS/ 2000 9501VT3	2c
	KRUGER/ 6603TS	3d, 4d, 5c	SEEDS/ 2000 9501VT3	4c
	KRUGER/ 6697TS	1d, 2d, 3c, 4c	SEEDS/ 2000 EXP9901VT3	1d, 2d, 4c
	KRUGER/ 9392TS	1c, 2c	SEEDS/ 2000 EXP9902VT3	1d, 3c
	KRUGER/ 9496TS	1c, 2c	WENSMAN/ W6117BTRR	1c, 2c
	NUTECH/ 3A-113 RR	6d	WENSMAN/ W6194BTRR	1c, 2c, 3c, 4c
	NUTECH/ 3A-113A RR	5d, 6d	WENSMAN/ W6266BTRR	1d, 2d, 3c, 4c, 5c
	NUTECH/ 3C-303A RR/YGCB	3d, 4d, 5c	WENSMAN/ W6271RR	1d, 2d, 3c, 4c, 5c
	NUTECH/ 3C-312 RR/YGCB	6c	WENSMAN/ W6307RR	1d, 2d, 3c, 4c, 5c
	NUTECH/ 3C-409 RR/YGCB	5d, 6c	WENSMAN/ W6374BTRR	3d, 4d, 5c, 6c
	NUTECH/ 3C-712 RR/YGCB	5d, 6d	WENSMAN/ W6431RR	3d, 4d, 5d, 6c
	NUTECH/ 3C-907 RR/YGCB	3d, 4d	WENSMAN/ W7118VT3	1c, 2c
	NUTECH/ 3C-908 RR/YGCB	5d, 6c	WENSMAN/ W7195VT3	1c, 2c, 3c, 4c
	NUTECH/ 3P-098 RR/YGPL NUTECH/ 3P-098A RR/YGPL NUTECH/ 3P-196 RR/YGPL NUTECH/ 3P-300 RR/YGPL NUTECH/ 3P-300A RR/YGPL	1d, 2d, 3c, 4c 1c, 2c, 3c, 4c 1d 2d, 3c, 4c, 5c 1d	WENSMAN/ W7267VT3 WENSMAN/ W7289VT3 WENSMAN/ W7309VT3 WENSMAN/ W7375BTRWRR	1d, 2d, 3c, 4c, 5c 1d, 2d, 3c, 4c, 5c 1d, 2d, 3d, 4d, 5c, 6c 3d, 4d, 5c, 6c

 Table 1a. Early maturity Non-Roundup Ready corn hybrid test trial results - Allen & Inel Ryckman Farm.

 Warner, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination which reduced grain yield.

Drond /Unbrid	Brand	Hybrid performance variable at harvest							
(By '07 yield)	Rel Mat	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Mst %	<b>'07 Lodging</b> %	'07 Pct* Stand		
WENSMAN/ W5105BT	91		185	56	17	0	100		
AGVENTURE/ EX268275CBLL	87		179	56	16	1	97		
RENK/ RK442LLYGCB	95		177	54	17	1	96		
FARM ADVANTAGE/ 9690L	90		175	56	17	0	100		
WENSMAN/ W4141	93		174	58	17	1	100		
GOLD COUNTRY/ 95-03CB	95		172	57	19	0	100		
KING SEED/ X7901	90		171	53	17	3	99		
KING SEED/ X7871CBLL	87		170	56	18	2	95		
SEEDS 2000/ 2953BT	95		166	55	19	1	93		
Trial avg.:	91		174	56	17	1	98		
Highest (H)-avg.:	95		185	58	19	3	100		
Lowest (L)-avg.:	87		166	53	16	0	93		
H-L avg. difference:	8		19	4	2	3	7		
** Lsd (.05):			NS	2	1	2	3		
# Min. TPG-value:			166	56	-	-	97		
## Max. TPG-value:			-	-	17	2	-		
+ Coef. of var.:			7	2	3	100	2		
No. of entries:	9	0	9	9	9	9	9		

\* Seeded May 18, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

 Table 1b. Late maturity Non-Roundup Ready corn hybrid test trial results - Allen & Inel Ryckman Farm, Warner, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination which reduced grain yield.

Drond/Usehrid	Brand	Hybrid performance variable at harvest							
(By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
KRUGER/ EXP9502HXT	102		188	52	32	0	99		
KRUGER/ 8602HX	102		182	53	25	1	98		
KRUGER/ EXP8502HX	102		181	53	24	0	99		
FARM ADVANTAGE/ 9699L	99		180	54	24	1	100		
KRUGER/ EXP8199HX	99		177	54	20	0	100		
KRUGER/ 0401	101		169	56	21	1	100		
Trial avg.:	101		180	54	24	>0	99		
Highest (H)-avg:	102		188	56	32	1	100		
Lowest (L)-avg.:	99		169	52	20	0	98		
H-L avg. difference:	3		19	4	12	1	2		
** Lsd (.05):			NS	2	1	NS	NS		
# Min. TPG-value:			169	54	-	-	98		
## Max. TPG-value:			-	-	21	1	-		
+ Coef. of var.:			6	2	3	177	2		
No. of entries:	6	0	6	6	6	6	6		

\* Seeded May 18, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

 Table 1c. Early maturity Roundup Ready corn hybrid test trial results- Allen & Inel Ryckman Farm, Warner, SD, 2007

 Note:
 Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination that reduced grain yield.

Due und (Ibab ui d	Brand	Test trial variable at harvest							
(By '07 yield)	Rel.	2-year	'07 Yield	ʻ07 Bu.Wt.	'07 Grain	<b>'07 Lodging</b>	'07 Pct.*		
	Mat.	Yield bu/a	bu/a	Ib	Moist. %	%	Stand		
NUTECH/ 3T-098A VT3	95	•	201	59	19	0	97		
KRUGER/ 2094RR/YGCB	94		198	56	18	1	97		
KRUGER/ 9496TS	93		197	57	19	1	100		
WENSMAN/ W6194BTRR	95		197	58	20	2	96		
WENSMAN/ W7195VT3	95		197	57	19	0	97		
NUTECH/ 3P-098A RR/YGPL	95		196	58	19	0	99		
DEKALB/ DKC42-95RR2YGCB	92		195	56	17	0	100		
AGSOURCE/ 3T-995 VT3	95		195	57	20	1	95		
PANNAR/ 5A-155VT3	95		194	55	18	1	100		
AGVENTURE/ AV5016R2CB	95		193	56	17	0	95		
WENSMAN/ W7118VT3 AGVENTURE/ AV4006YPRR NUTECH/ 3T-393 VT3 PANNAR/ 4E-705VT3 NUTECH/ 3P-494 RR/YGPL	92 91 93 94 94		193 192 192 192 192 191	56 58 56 56 54	17 17 17 17 17	3 1 0 1	96 98 99 99 99 97		
NUTECH/ 3T-595 VT3	95	•	191	57	18	0	99		
DAIRYLAND/ STEALTH-9194	94		190	57	17	1	100		
DEKALB/ DKC43-31RR2YGCB	93		189	57	16	0	99		
PANNAR/ 5A-125RR2	95		189	56	17	2	100		
PANNAR/ 4D-255VT3	93		188	55	17	1	96		
AGSOURCE/ 3T-096 VT3	95		188	57	20	0	97		
AGVENTURE/ AV4883YPRR	95		187	57	19	0	99		
WENSMAN/ W6117BTRR	92		186	56	17	1	99		
FIELDERS/ CHOICE NG6402	92		185	55	15	2	93		
RENK/ RK570VT3	95		185	56	18	0	100		
SEEDS/ 2000 2953RRYGPL KRUGER/ 9392TS KRUGER/ 2090RR/YGCB FONTANELLE/ 2R144 KRUGER/ 1490RR	95 92 90 92 90		184 183 181 180 177	57 57 58 59 59	19 17 17 16 16	0 0 1 1	94 100 95 100 97		
AGSOURCE/ 3A-093RR AGSOURCE/ 3A-090RR GCS/ 89-02R AGSOURCE/ 3A-391RR	93 90 89 91		173 172 162 159	57 58 59 56	16 15 16 17	1 4 1 1	96 95 91 92		
Trial avg.: Highest (H)-avg.: Lowest (L)-avg.: H-L avg. difference: ** Lsd (.05): # Min. TPG-value: ## Max. TPG-value: + Coef. of var.: No. of entries:	93 95 89 6		187 201 159 42 12 189 - 4 34	57 59 54 5 2 57 - 2 34	17 20 15 6 1 - 16 4 34	1 4 0 4 2 - 2 174 34	97 100 91 9 4 96 - 3 34		

\* Seeded May 18, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

 Table 1d.
 Late maturity Roundup Ready corn hybrid test trial results- Allen & Inel Ryckman Farm, Warner, SD, 2007

 Note:
 Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination that reduced grain yield.

Prond/Ushrid	Brand	Test trial variable at harvest						
(By '07 yield)	Rel. Mat	2-year	'07 Yield	'07 Bu.Wt.	'07 Grain	'07 Lodging	'07 Pct.*	
	100	Yield bu/a	bu/a	lb F0	Moist. %	%	Stand	
FIELDERS/ CHOICE NG6510	98	•	194 194	58 58	20 17	0	99 100	
DEKALB/ DKC51-39RR2YGPL	101		193	58	18	1	99	
WENSMAN/ W6271RR WENSMAN/ W7267VT3	97 97		190 189	56 58	17 17	1	99 100	
DAIRYI AND/ STEALTH-9201	101		188	57	17	0	98	
NUTECH/ 3T-098 VT3	98		188	58	19	Ő	98	
KRUGER/ 6499VT3	99 100		188	57	17	1	97 100	
WENSMAN/ W0307111 WENSMAN/ W7289VT3	99		186	57	20	0	97	
SEEDS/ 2000 3122RR/BT	102		186	56	20	3	100	
DEKALB/ DKC46-60(VT3)	96		185	56 60	17	0	100	
WENSMAN/ W7309VT3	101	•	185	57	19	1	99	
SEEDS/ 2000 EXP9901VT3	99		185	59	19	0	99	
PANNAR/ 5D-303RR/YG+	98		184	59	18	0	100	
AGSOURCE/ 3T-099 VT3	99	•	184	50	19	0	100	
FONTANELLE/ 4N627	98		183	57	20	1	98	
AGSUURCE/ 31-799 V13	99	•	183	56	20	0	98	
PANNAR/ 5E-900RR/YG+ GCS/ 98-10VT3	99 98		182	56 	20	0	99	
DEKALB/ DKC49-35(RR2)	99	·	180	56	16	1 I	97	
DAIRYLAND/ STEALTH-7196	96 99		180 180	58 57	20 19	0	97 100	
DAIRYLAND/ STEALTH-9196	96		179	57	20	0	99	
AGVENTURE/ AV5480V3R	98		178	57	18	Ő	99	
DAIRYLAND/ STEALTH-9497	98 98		178	57	18		100	
KRUGER/ 2298RR/YGCB	98		178	59	18	0	99	
FONTANELLE/ 5N503	101		178	57	17	0	99	
SEEDS/ 2000 EXP9902VT3	99 97		177	56 56	19	1	95 07	
NUTECH/ 3P-300A RR/YGPL	99	•	175	56	19	1	97 94	
RENK/ RK488RRYGPL	97		173	57	18	0	98	
RENK/ RK618VT3	100		173	59	18	1	98	
AGSOURCE/ 3P-300RR/YGPL NUTECH/ 3W-099 RR/YGRW	99	•	169	56 60	19 19	0	97 99	
NUTECH/ 3P-196 RR/YGPL	96		167	58	17	2	92	
FIELDERS/ CHOICE NG6490	97		167	57	19	0	92	
KRUGER/ 1500RR	100		165	56	18	2	94	
Irial avg.: Highest (H)-avg	99 102	•	181 194	57 60	19 21	>0 3	98 100	
Lowest (L)-avg.:	96		165	56	16	0	92	
H-L avg. difference:	6		29 14	4	5	3	8 2	
# Min. TPG-value:			180	58	-	-	97	
## Max. TPG-value:			-	-	18	2	-	
+ Coer. of var.: No. of entries:	41	0	5 41	2 41	о 41	232 41	2 41	

\* Seeded May 18, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

## Table 2a. Early maturity Non-Roundup Ready corn hybrid test trial results - Northeast Research Farm, South Shore, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination which reduced grain yield.

Brond (Usebrid	Brand	Hybrid performance variable at harvest						
(By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand	
WENSMAN/ W5105BT	91		190	56	18	0	100	
RENK/ RK442LLYGCB	95		186	54	19	1	100	
SEEDS 2000/ 2953BT	95		175	56	20	0	95	
GOLD COUNTRY/ 95-03CB	95		171	56	21	0	99	
WENSMAN/ W4141	93		169	56	18	2	96	
FARM ADVANTAGE/ 9690L	90		168	55	16	1	100	
Trial avg.:	93		177	55	19	1	98	
Highest (H)-avg.:	95		190	56	21	2	100	
Lowest (L)-avg.:	90		168	54	16	0	95	
H-L avg. difference:	5		22	3	5	2	5	
** Lsd (.05):			12	1	2	NS	3	
# Min. TPG-value:			178	55	-	-	97	
## Max. TPG-value:			-	-	18	2	-	
+ Coef. of var.:			4	1	5	151	1	
No. of entries:	6	0	6	6	6	6	6	

\* Seeded May 14, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

## Table 2b. Late maturity Non-Roundup Ready corn hybrid test trial results - Northeast Research Farm, South Shore, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the
result of high temperatures that caused very poor or no pollination which reduced grain yield.

Drond/Unbrid	Brand	Hybrid performance variable at harvest								
(By '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	'07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand			
KRUGER/ 0401	101		184	53	25	0	100			
FARM ADVANTAGE/ 9699L	99		181	54	23	0	100			
KRUGER/ EXP8199HX	99		179	54	22	1	100			
KRUGER/ EXP8502HX	102		174	52	25	1	99			
KRUGER/ 8602HX	102		167	50	26	0	99			
KRUGER/ EXP9502HXT	102		161	51	33	1	100			
Trial avg.:	101		174	53	26	>0	100			
Highest (H)-avg.:	102		184	54	33	1	100			
Lowest (L)-avg.:	99		161	50	22	0	99			
H-L avg. difference:	3		23	4	10	1	2			
** Lsd (.05):			16	2	1	NS	NS			
# Min. TPG-value:			168	52	-	-	99			
## Max. TPG-value:			-	-	25	1	-			
+ Coef. of var.:			5	2	2	245	1			
No. of entries:	6	0	6	6	6	6	6			

\* Seeded May 14, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

 Table 2c. Early maturity Roundup Ready corn hybrid test trial results- Northeast Research Farm, South Shore, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination that reduced grain yield.

Drond (Ushrid	Brand	Test trial variable at harvest							
(By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
NUTECH/ 3P-098A RR/YGPL KRUGER/ 9496TS NUTECH/ 3P-494 RR/YGPL PANNAR/ 5A-155VT3 AGSOURCE/ 3T-096 VT3	95 93 94 95 95		194 194 193 189 189	56 55 53 53 53 56	23 22 18 21 23	1 1 4 3	99 100 100 100 100		
WENSMAN/ W7118VT3 NUTECH/ 3T-595 VT3 NUTECH/ 3T-393 VT3 KRUGER/ 2090RR/YGCB KRUGER/ 2094RR/YGCB	92 95 93 90 94		187 186 184 183 183	54 56 56 56 55	21 20 21 19 21	1 1 0 1 3	100 98 100 100 100		
SEEDS/ 2000 9501VT3 AGSOURCE/ 3P-191RR/YGPL NUTECH/ 3T-098A VT3 PANNAR/ 4E-705VT3 WENSMAN/ W7195VT3	96 91 95 94 95		182 182 181 181 181	54 55 57 53 55	20 21 21 22 21	1 1 0 0	100 97 100 100 100		
DEKALB/ DKC43-31RR2YGCB AGVENTURE/ AV4883YPRR DAIRYLAND/ STEALTH-9194 SEEDS/ 2000 2953RRYGPL KRUGER/ 9392TS	93 95 94 95 92		180 180 179 179 176	54 56 55 56 55	21 22 20 22 20	0 1 1 1	99 95 99 96 100		
FONTANELLE/ 2R144 WENSMAN/ W6117BTRR WENSMAN/ W6194BTRR AGSOURCE/ 3T-995 VT3 DEKALB/ DKC42-95RR2YGCB	92 92 95 95 92		176 176 173 173 173 171	58 56 58 55 56	18 19 21 21 19	0 1 2 2 1	100 100 100 99 100		
KRUGER/ 1490RR RENK/ RK570VT3 KALTENBERG/ K4012RRBT PANNAR/ 4D-255VT3 FIELDERS/ CHOICE NG6402	90 95 94 93 92		171 170 168 167 163	58 54 54 55 54	18 21 22 20 17	2 0 2 4 3	99 96 100 100 99		
GCS/ 89-02R PANNAR/ 5A-125RR2	89 95		163 159	56 55	20 18	2 2	93 100		
Trial avg.: Highest (H)-avg.: Lowest (L)-avg: H-L avg. difference: ** Lsd (.05): # Min. TPG-value: ## Max. TPG-value: + Coef. of var.:	93 96 89 7		179 194 159 35 12 182 - 4	55 58 53 5 1 57 - 2	20 23 17 6 1 - 18 4	1 4 0 4 3 - 3 122	99 100 93 7 3 97 - 2		
No. of entries:	32	0	32	32	32	32	32		

\* Seeded May 14, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

Table 2d. Late maturity Roundup Ready corn hybrid test trial results- Northeast Research Farm, South Shore, SD,2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as as the result of high temperatures that caused very poor or no pollination that reduced grain yield.

Prond/Hybrid	Brand	Test trial variable at harvest							
(By '07 yield)	Rel.	2-year Yield	'07 Yield	ʻ07 Bu.Wt.	'07 Grain	<b>'07 Lodging</b>	'07 Pct.*		
	Mat.	bu/a	bu/a	Ib	Moist. %	%	Stand		
NUTECH/ 3P-302 RR/YGPL	102		192	54	25	1	100		
RENK/ RK488RRYGPL	97		192	54	22	1	98		
KRUGER/ 6401TS	101		192	55	25	1	97		
WENSMAN/ W7289VT3	99		191	55	23	2	100		
AGSOURCE/ 3C-799RR/YGCB	100		191	52	24	1	100		
FONTANELLE/ 5N503	101		190	53	22	0	100		
WENSMAN/ W6271RR	97		190	54	20	3	98		
DEKALB/ DKC46-22RR2YGPL	96		188	56	20	0	100		
FIELDERS/ CHOICE NG6490	97		187	55	20	1	97		
GOLD COUNTRY/ 98-10CBR	98		185	54	21	0	99		
DEKALB/ DKC46-60(VT3) KRUGER/ 6697TS CROWS/ 2121S WENSMAN/ W7309VT3 NUTECH/ 3T-098 VT3	96 97 101 101 98		184 184 184 184 183	54 55 56 53 55	21 21 24 23 22	0 1 1 2 0	99 97 92 100 99		
FIELDERS/ CHOICE NG6510	98		182	54	20	1	99		
DAIRYLAND/ STEALTH-9196	96		181	56	20	0	96		
DAIRYLAND/ STEALTH-9497	98		181	54	22	2	100		
DAIRYLAND/ STEALTH-9201	101		181	55	23	1	95		
NUTECH/ 3P-098 RR/YGPL	98		181	55	20	1	100		
WENSMAN/ W6266BTRR	97		181	54	23	1	94		
AGSOURCE/ 3P-902RR/YGPL	100		180	56	20	0	100		
DEKALB/ DKC51-39RR2YGPL	101		179	53	23	1	100		
KALTENBERG/ K4663RRPLUS	96		179	54	22	1	99		
AGSOURCE/ 3C-504ARRYGCB	100		179	53	25	5	100		
NUTECH/ 3W-099 RR/YGRW	99		177	57	21	2	98		
GCS/ 100-07CBR	100		177	56	22	0	100		
DEKALB/ DKC52-63RR2YGCB	102		176	55	22	1	97		
DAIRYLAND/ STEALTH-9799	99		176	54	20	0	100		
WENSMAN/ W7267VT3	97		176	55	22	1	100		
DAIRYLAND/ STEALTH-7196 GCS/ 99-02CBR CROWS/ 4S502 AGSOURCE/ 3T-799 VT3 RENK/ RK618VT3	96 99 97 99 100		175 175 174 174 173	55 53 56 53 53 55	22 22 22 23 22	1 0 2 1 1	98 100 98 99 100		
KRUGER/ 6499VT3	99		172	55	21	1	99		
PANNAR/ 5E-900RR/YG+	99		171	54	21	2	99		
GCS/ 102-04CBR	102		171	55	24	0	97		
NUTECH/ 3P-300 RR/YGPL	99		170	54	24	1	96		
SEEDS/ 2000 EXP9901VT3	99		170	55	22	0	99		

Table 2d. Late maturity Roundup Ready corn hybrid test trial results- Northeast Research Farm, South Shore, SD,2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as as the result of high temperatures that caused very poor or no pollination that reduced grain yield (continued)

Brond/Unhrid	Brand	Test trial variable at harvest								
(By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand			
AGSOURCE/ 3T-099 VT3	99		168	55	21	1	98			
PANNAR/ 5D-303RR/YG+	98		165	56	22	0	100			
KRUGER/ 2298RR/YGCB	98		159	55	21	0	100			
PANNAR/ 6C-260RR/BT	102		157	51	24	3	99			
SEEDS/ 2000 3122RR/BT	102		157	52	20	2	100			
DEKALB/ DKC49-35(RR2)	99		154	54	18	1	95			
Trial avg.:	99		177	54	22	1	98			
Highest (H)-avg.:	102		192	57	25	5	100			
Lowest (L)-avg.:	96		154	51	18	0	92			
H-L avg. difference:	6		38	6	7	5	8			
** Lsd (.05):			20	1	2	2	4			
# Min. TPG-value:			172	56	-	-	96			
## Max. TPG-value:			-	-	20	2	-			
+ Coef. of var.:			7	1	6	150	2			
No. of entries:	50	0	50	50	50	50	50			

\* Seeded May 14, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

Table 3a.	Early maturity Non-Roundup Ready corn hybrid test trial results - Erland Weerts Farm,
	Bancroft, SD, 2006-2007

Drond/United	Brand	Hybrid performance variable at harvest							
(By 2-year then '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	′07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
TWO-YEAR ENTRIES:									
FARM ADVANTAGE/ 9699L	99	182	204	58	20	0	99		
SEEDS 2000/ 2953BT	95	161	178	57	16	1	92		
EPLEY/ E1231	100	159	175	58	20	1	98		
ONE-YEAR ENTRIES:									
GOLD COUNTRY/ 95-03CB	95		203	60	17	0	99		
EPLEY/ E12L50YGCB	100		193	57	20	0	98		
Trial avg.:	98	167	191	58	19	>0	97		
Highest (H)-avg.:	100	182	204	60	20	1	99		
Lowest (L)-avg.:	95	159	175	57	16	0	92		
H-L avg. difference:	5	23	29	3	4	1	7		
** Lsd (.05):		NS	18	1	1	NS	3		
# Min. TPG-value:		159	186	58	-	-	96		
## Max. TPG-value:		-	-	-	17	1	-		
+ Coef. of var.:		4	5	1	3	295	2		
No. of entries:	5	3	5	5	5	5	5		

\* Seeded May 19, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group



Drond/Unbrid	Brand	Hybrid performance variable at harvest							
Brand/Hybrid (By 2-year then '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
TWO-YEAR ENTRIES:									
EPLEY/ E1430YGCB	103	173	189	55	24	0	97		
KRUGER/ 8602HX	102	172	202	56	22	0	99		
KRUGER/ 5504YGCB	102	166	193	56	20	0	100		
<b>ONE-YEAR ENTRIES:</b>									
KRUGER/ 5006YGCB	106		204	57	22	0	100		
KRUGER/ EXP9502HXT	102		199	53	28	0	100		
FARM ADVANTAGE/ 87X00	103		198	55	21	0	97		
KRUGER/ EXP9106HXT	105		188	57	20	0	99		
KRUGER/ 0401	101		186	57	22	0	100		
KRUGER/ EXP9504HXT	102		183	57	21	0	99		
EPLEY/ E1522YGPL	105		183	57	23	0	98		
WENSMAN/ 5343BT	105		181	54	22	0	93		
KRUGER/ 8502HX	102		180	56	20	1	98		
EPLEY/ E2207HXLL	105		179	54	23	1	95		
Trial avg.:	103	170	190	56	22	>0	98		
Highest (H)-avg.:	106	173	204	57	28	1	100		
Lowest (L)-avg.:	101	166	179	53	20	0	93		
H-L avg. difference:	5	7	25	4	8	1	7		
** Lsd (.05):		NS	NS	1	1	NS	4		
# Min. TPG-value:		166	179	56	-	-	96		
## Max. TPG-value:		-	-	-	21	1	-		
+ Coef. of var.:		9	6	1	4	451	2		
No. of entries:	13	3	13	13	13	13	13		

#### Table 3b. Late maturity Non-Roundup Ready corn hybrid test trial results - Erland Weerts Farm, Bancroft, SD, 2006-2007

\* Seeded May 19, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

Table 3c. Early maturity Roundup Ready corn hybrid test trial results- Erland Weerts Farm, Bancroft, SD,
2006-2007

Drond /Wishrid	Brand		Те	st trial varia	ble at harves	st	
(By 2-year then '07 yields)	Rel.	2-year Yield	'07 Yield	ʻ07 Bu.Wt.	'07 Grain	<b>'07 Lodging</b>	'07 Pct.*
	Mat.	bu/a	bu/a	Ib	Moist. %	%	Stand
TWO-YEAR ENTRIES: WENSMAN/ W6307RR DEKALB/ DKC50-48RR2YGCB WENSMAN/ W6266BTRR DEKALB/ DKC50-20RR2YGCB DAIRYLAND/ STEALTH-7196	100 100 97 100 96	190 187 182 179 177	208 202 199 189 198	56 58 57 58	21 22 20 20 19	0 0 0 0 0	100 96 98 98 94
WENSMAN/ W6194BTRR	95	176	188	59	19	0	95
GOLD COUNTRY/ 98-10CBR	98	175	187	58	19	0	97
EPLEY/ E1165RR	95	163	192	56	17	1	98
RENK/ RK488RRYGPL	97	162	183	57	18	0	96
KRUGER/ 1500RR	100	162	179	58	19	0	91
EPLEY/ E1195RR	98	141	158	59	18	0	100
ONE-YEAR ENTRIES:		-					
DAIRYLAND/ STEALTH-9799	99	-	212	58	19	0	98
NUTECH/ 3P-098 RR/YGPL	98	-	210	59	18	0	98
KRUGER/ 6697TS	97	-	208	57	19	0	97
KRUGER/ 6499VT3	99	-	207	59	18	0	97
WENSMAN/ W7267VT3	97		207	59	18	0	100
DAIRYLAND/ STEALTH-9497	98		204	58	19	1	98
SEEDS/ 2000 EXP9902VT3	99		203	58	19	0	98
RENK/ RK618VT3	100		201	60	19	1	100
AGSOURCE/ 3T-799 VT3	99		201	57	19	0	96
WENSMAN/ W6271RR DEKALB/ DKC43-31RR2YGCB DEKALB/ DKC46-60(VT3) KRUGER/ 2097RR/YGCB WENSMAN/ W7195VT3	97 93 96 97 95		199 198 198 198 198 196	56 57 58 57 57 58	19 17 19 18 18	0 0 0 0 0	94 97 99 96 95
GCS/ 99-02CBR FIELDERS/ CHOICE NG6510 AGSOURCE/ 3P-902RR/YGPL AGSOURCE/ 3C-799RR/YGCB FIELDERS/ CHOICE NG6490	99 98 100 100 97		194 193 193 193 193 190	58 57 59 57 58	19 20 18 19 18	0 0 0 0	98 97 99 99 99 92
EPLEY/ E1225RR	98		190	57	19	1	95
AGSOURCE/ 3C-504ARRYGCB	100		186	56	24	0	99
PANNAR/ 5E-900RR/YG+	99		185	57	22	1	100
NUTECH/ 3P-098A RR/YGPL	95		183	57	19	0	92
DEKALB/ DKC49-35(RR2)	99		182	57	18	1	97
PANNAR/ 5D-303RR/YG+	98		181	59	20	0	99

Table 3c.	Early maturity Roundup Ready corn hybrid test trial results- Erland Weerts Farm, Bancroft,	SD,
2006-2007	(continued)	

Drond/Unhvid	Brand	Test trial variable at harvest							
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
KRUGER/ 2298RR/YGCB	98		175	58	20	0	98		
AGSOURCE/ 3T-099 VT3	99		172	58	21	0	100		
EPLEY/ E1205RR	95		167	56	19	0	97		
GCS/ 100-07CBR	100		167	58	21	0	96		
NUTECH/ 3W-099 RR/YGRW	99		164	59	19	0	96		
Trial avg.:	98	172	190	58	19	>0	97		
Highest (H)-avg.:	100	190	212	60	24	1	100		
Lowest (L)-avg.:	93	141	158	56	16	0	91		
H-L avg. difference:	7	49	54	4	8	1	9		
** Lsd (.05):		17	19	2	2	NS	5		
# Min. TPG-value:		173	193	58	-	-	95		
## Max. TPG-value:		-	-	-	18	1	-		
+ Coef. of var.:		9	6	2	5	434	3		
No. of entries:	44	11	44	44	44	44	44		

\* Seeded May 19, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

+ Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

# ARCHIVE

Table 3d. Late maturity Roundup	Ready co	rn hybrid test t	rial results-	Erland Weerts	s Farm, Bancr	oft, SD, 2006-2	2007
Descer d'Alechard d	Brand			Test trial varial	ble at harvest		
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	ʻ07 Lodging %	'07 Pct.* Stand
TWO-YEAR ENTRIES: DEKALB/ DKC52-63RR2YGCB NUTECH/ 5005 RR/YGCB WENSMAN/ W6374BTRR KRUGER/ 6603TS NUTECH/ 9003 RR/YGPL	102 104 104 103 102	186 179 177 177 177	197 188 202 189 187	57 58 57 57 57	20 23 22 23 23 22	1 0 0 0 0	92 94 96 94 96
SEEDS/ 2000 3122RR/BT GOLD COUNTRY/ 102-04CBR KRUGER/ 6503TS <b>ONE-YEAR ENTRIES:</b> KRUGER/ 6006VT3 NUTECH/ 3T-808A VT3 EPLEY/ E16R12YGPL AGSOURCE/ 3T-006A VT3 AGSOURCE/ 3C-007RR/YGCB	102 102 103 106 108 103 106 107	173 170 165	184 191 179 210 209 206 206 206 206	55 58 59 57 57 57 56 57	20 21 18 24 25 20 23 25	0 0 0 0 0 0 0 1	96 95 95 99 99 99 96 97 99
WENSMAN/ W7309VT3 AGSOURCE/ 5H-008 RR/HX DEKALB/ DKC51-39RR2YGPL DEKALB/ DKC53-18(RR2) KRUGER/ 1606RR	101 108 101 103 106		204 203 202 201 201	58 55 58 58 54	19 24 19 18 24	0 0 1 0 0	100 94 98 98 97
PANNAR/ 6D-409RR2 NUTECH/ 3C-303A RR/YGCB PANNAR/ 6C-260RR/BT RENK/ RK670VT3 WENSMAN/ W7375BTRWRR	103 103 102 103 104		199 198 195 193 192	57 57 54 57 57 57	19 22 23 18 21	0 1 0 0 1	99 98 95 92 99
WENSMAN/ W6431RR EPLEY/ E1525RR KRUGER/ 6401TS AGSOURCE/ 3P-302ARRYGPL DAIRYLAND/ STEALTH-7204	107 104 101 102 104		192 189 188 185 181	55 56 58 58 58 58	24 21 21 22 21	0 0 0 1 0	96 96 97 98 98
NUTECH/ 3C-907 RR/YGCB EPLEY/ E12R34YGPL DAIRYLAND/ STEALTH-9201 NUTECH/ 3P-703 RR/YGPL	107 101 101 103	•	181 180 176 176	56 58 58 58	23 18 19 20	0 0 0 0	97 93 95 96
Trial avg.: Highest (H)-avg.: Lowest (L)-avg.: H-L avg. difference: ** Lsd (.05): # Min. TPG-value: ## Max. TPG-value: + Coef. of var.: No. of entries:	104 108 101 7 32	176 186 165 21 19 168 - 7 8	193 210 176 34 18 192 - 6 32	57 59 54 5 2 57 - 2 32	21 25 18 6 2 - 20 5 32	>0 1 0 1 NS - 1 397 32	96 100 92 8 NS 92 - 3 32

\* Seeded May 19, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

 $\#\!\#\,Max.\,TPG\text{-value}\!=\!maximum\,value\,required$  for the top performance group

Table 4a.	Early maturity Non-Roundup Ready corn hybrid test trial results - SDSU Plant Science Research
	Farm, Brookings, SD, 2006-2007

Brand Hybrid performance variable at harvest							
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand
TWO-YEAR ENTRIES:							
FARM ADVANTAGE/ 9699L	99	175	171	56	20	0	98
GOLD COUNTRY/ 95-03CB	95	169	178	59	19	0	98
EPLEY/ E1231	100	166	173	57	19	1	100
SEEDS 2000/ 2953BT	95	166	159	57	16	1	92
ONE-YEAR ENTRIES:							
EPLEY/ E12L50YGCB	100		151	56	21	0	98
Trial avg.:	98	169	166	57	19	>0	97
Highest (H)-avg.:	100	175	178	59	21	1	100
Lowest (L)-avg.:	95	166	151	56	16	0	92
H-L avg. difference:	5	9	27	3	5	1	8
** Lsd (.05):		NS	NS	1	1	NS	4
# Min. TPG-value:		166	151	58	-	-	96
## Max. TPG-value:		-	-	-	17	1	-
+ Coef. of var.:		6	8	1	2	295	2
No. of entries:	5	4	5	5	5	5	5

\* Seeded May 10, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group



Duend (llubrid	Brand	Hybrid performance variable at harvest							
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
TWO-YEAR ENTRIES:									
KRUGER/ EXP8502HX	102	197	210	56	19	0	97		
EPLEY/ E1430YGCB	103	196	192	56	23	0	100		
KRUGER/ 8602HX	102	189	191	56	19	1	98		
KRUGER/ 5504YGCB	102	165	146	57	22	2	96		
<b>ONE-YEAR ENTRIES:</b>									
KRUGER/ EXP9502HXT	102		220	56	25	0	100		
EPLEY/ E2207HXLL	105		214	55	23	1	99		
FARM ADVANTAGE/ 87X00	103		202	56	19	0	94		
WENSMAN/ 5343BT	105		195	55	19	1	93		
KRUGER/ 5006YGCB	106		193	57	22	0	99		
KRUGER/ EXP9106HXT	105		190	58	19	0	99		
EPLEY/ E2474	109		190	56	19	1	99		
KRUGER/ 0401	101		185	58	19	0	100		
KRUGER/ EXP9504HXT	102		185	57	18	0	98		
EPLEY/ E1522YGPL	105		177	59	19	0	96		
Trial avg.:	104	187	192	56	20	>0	98		
Highest (H)-avg.:	109	197	220	59	25	2	100		
Lowest (L)-avg.:	101	165	146	55	18	0	93		
H-L avg. difference:	8	32	74	4	7	2	7		
** Lsd (.05):		NS	16	1	1	NS	4		
# Min. TPG-value:		165	204	58	-	-	96		
## Max. TPG-value:		-			19	2			
+ Coef. of var.:		7	5	1	3	306	2		
No. of entries:	14	4	14	14	14	14	14		

 Table 4b. Late maturity Non-Roundup Ready corn hybrid test trial results - SDSU Plant Science Research, Farm, Brookings, SD, 2006-2007

\* Seeded May 10, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

 Table 4c. Early maturity Roundup Ready corn hybrid test trial results- SDSU Plant Science Farm, Brookings, SD., 2006-2007

Prond/Unbrid	Brand	Test trial variable at harvest							
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
TWO-YEAR ENTRIES: RENK/ RK488RRYGPL DEKALB/ DKC50-48RR2YGCB WENSMAN/ W6194BTRR DEKALB/ DKC46-22RR2YGPL DEKALB/ DKC50-20RR2YGCB	97 100 95 96 100	191 189 184 183 180	204 208 192 186 188	59 57 58 59 57	16 21 17 16 17	0 1 0 0	98 100 99 100 98		
CROWS/ 4S502 GOLD COUNTRY/ 98-10CBR WENSMAN/ W6307RR WENSMAN/ W6266BTRR KRUGER/ 1500RR	97 98 100 97 100	180 177 176 168 161	182 201 195 172 175	59 58 56 58 58	18 17 19 18 17	0 0 0 1	99 98 100 97 98		
EPLEY/ E1165RR EPLEY/ E1195RR <b>ONE-YEAR ENTRIES:</b> KRUGER/ 6697TS KRUGER/ 2097RR/YGCB AGSOURCE/ 3T-799 VT3 WENSMAN/ W7289VT3 HOEGEMEYER/ 3113 BTRR	95 98 97 97 99 99 99 99	161 144	172 154 203 200 199 198 197	56 59 56 55 56 58 59	16 19 15 17 17 18 16	1 0 0 0 0 0 0 0	100 96 99 99 97 97 97 100		
RENK/ RK618VT3 DEKALB/ DKC43-31RR2YGCB DEKALB/ DKC46-60(VT3) FIELDERS/ CHOICE NG6490 WENSMAN/ W7267VT3	100 93 96 97 97		196 195 195 195 195 195	59 57 57 57 57	18 15 18 17 17	0 0 0 0	100 99 98 98 100		
WENSMAN/ W6271RR AGSOURCE/ 3C-799RR/YGCB WENSMAN/ W7195VT3 NUTECH/ 3P-300 RR/YGPL FIELDERS/ CHOICE NG6510	97 100 95 99 98		192 192 191 190 190	57 57 57 56 58	16 18 16 20 17	0 0 0 1 0	93 98 95 95 100		
GCS/ 99-02CBR EPLEY/ E1225RR PANNAR/ 5D-303RR/YG+ NUTECH/ 3P-098A RR/YGPL AGSOURCE/ 3T-099 VT3	99 98 98 95 99		190 189 188 187 186	58 57 59 57 59	17 18 18 17 19	0 1 1 0 0	100 97 99 94 100		
AGSOURCE/ 3P-902RR/YGPL SEEDS/ 2000 9501VT3 PANNAR/ 5E-900RR/YG+ SEEDS/ 2000 EXP9901VT3 KALTENBERG/ K4012RRBT	100 96 99 99 99 94	• • •	186 185 184 183 182	60 55 57 59 54	18 14 19 19 15	0 0 1 0	99 96 100 99 96		
KRUGER/ 6499VT3 EPLEY/ E1205RR NUTECH/ 3P-098 RR/YGPL RENK/ RK570VT3 GCS/ 100-07CBR	99 95 98 95 100		181 181 178 178 178	58 57 56 54 59	17 17 17 15 19	0 0 0 0	98 98 97 95 98		

 Table 4c. Early maturity Roundup Ready corn hybrid test trial results- SDSU Plant Science Farm, Brookings, SD., 2006-2007 (continued)

Drond/Webrid	Brand	Test trial variable at harvest							
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
KALTENBERG/ K4263RRPLUS	99		173	59	18	0	97		
KRUGER/ 2298RR/YGCB	98		169	58	18	0	97		
AGSOURCE/ 3C-504ARRYGCB	100		169	56	22	0	99		
AGVENTURE/ AV5480R2CB	98		168	59	18	0	96		
Trial avg.:	98	175	186	57	17	>0	98		
Highest (H)-avg.:	100	191	208	60	22	1	100		
Lowest (L)-avg.:	93	144	154	54	14	0	93		
H-L avg. difference:	7	47	54	6	8	1	7		
** Lsd (.05):		21	20	1	2	NS	3		
# Min. TPG-value:		170	188	59	-	-	97		
## Max. TPG-value:		-	-	-	16	1	-		
+ Coef. of var.:		7	7	1	7	469	2		
No. of entries:	49	12	49	49	49	49	49		

\* Seeded May 10, 2007 at 28,750 seeds per acre

\*\* Lsd= the amount values in a column must differ to be significantly different

If Lsd = NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

+ Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

## ARCHIVE

Brand/Hybrid	Brand	Test trial variable at harvest							
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
TWO-YEAR ENTRIES: DEKALB/ DKC52-63RR2YGCB NUTECH/ 5006A RR/YGCB NUTECH/ 9003 RR/YGPL WENSMAN/ W6374BTRR KRUGER/ 6503TS	102 105 102 104 103	216 216 202 198 196	220 217 201 215 196	56 57 57 56 58	18 22 21 20 18	1 1 0 0 1	95 98 98 99 99		
KRUGER/ 6603TS CROWS/ 2121S GOLD COUNTRY/ 102-04CBR <b>ONE-YEAR ENTRIES:</b> NUTECH/ 3C-907 RR/YGCB	103 101 102 107	193 184 182	212 175 187 212	56 58 58 56	23 20 19 19	0 1 0 0	97 91 97 99		
KRUGER/ 6006VT3 AGSOURCE/ 3C-007RR/YGCB AGSOURCE/ 3P-302ARRYGPL AGSOURCE/ 5H-008 RR/HX	106 107 102 108		210 210 209 209	57 56 58 56	23 23 20 22	1 0 0 0	98 98 98 96		
KRUGER/ 1606RR WENSMAN/ W6431RR WENSMAN/ W7375BTRWRR AGVENTURE/ AV6323R2CB NUTECH/ 3C-303A RR/YGCB	106 107 104 102 103		208 208 205 204 204	54 55 57 58 56	22 22 19 17 20	3 1 0 1 0	96 93 100 97 99		
SEEDS/ 2000 3122RR/BT DEKALB/ DKC51-39RR2YGPL DEKALB/ DKC53-18(RR2) EPLEY/ E16R12YGPL AGSOURCE/ 3T-808 VT3	102 101 103 103 108		204 203 203 203 203	55 58 58 56 55	20 17 18 19 25	0 0 1 0 1	100 98 98 99 91		
WENSMAN/ W7309VT3 AGSOURCE/ 5H-403 RR/HX EPLEY/ E24R32YGPL EPLEY/ E12R34YGPL EPLEY/ E25R52YGPL	101 103 108 101 110		202 200 198 197 196	58 56 57 58 57	21 21 18 18 21	0 1 0 0	99 98 98 99 99		
DAIRYLAND/ STEALTH-9201 RENK/ RK670VT3 NUTECH/ 5X-402 RR/HXT EPLEY/ E1525RR PANNAR/ 6D-409RR2	101 103 102 104 103		195 195 193 193 192	59 56 57 56 54	17 19 21 20 18	0 1 0 1 0	98 93 94 97 92		
PANNAR/ 6C-260RR/BT KRUGER/ 6401TS NUTECH/ 3P-703 RR/YGPL DAIRYLAND/ STEALTH-7204	102 101 103 104		189 186 185 136	54 59 58 57	21 20 21 22	0 0 0 0	95 99 96 95		
Trial avg.: Highest (H)-avg.: Lowest (L)-avg.: H-L avg. difference: ** Lsd (.05): # Min. TPG-value: ## Max. TPG-value:	104 110 101 9	198 216 182 34 31 185 -	199 220 136 84 16 204 -	57 59 54 5 1 58	20 25 17 8 1 - 18	>0 3 0 1 - 1	97 100 91 9 4 96 -		
+ coer. of var.: No. of entries:	37	4 8	37	37	37	37	37		

#### Table 4d. Late maturity Roundup Ready corn hybrid test trial results- SDSU Plant Science Research Farm, Brookings, SD., 2006-2007

\* Seeded May 10, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

 Table 5a. Early maturity Non-Roundup Ready corn hybrid test trial results - Curtis Sybesma Farm, Geddes, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination which reduced grain yield.

Brand/Hybrid (By '07 yield)	Brand Rel. Mat.	Hybrid performance variable at harvest					
		2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand
KRUGER/ EXP9502HXT	102		174	58	21	0	100
KRUGER/ 5504YGCB	102		172	59	15	0	99
EPLEY/ E12L50YGCB	100		172	60	16	0	92
KRUGER/ EXP9504HXT	102		171	60	16	0	98
EPLEY/ E1430YGCB	103		170	57	19	0	99
KRUGER/ EXP9106HXT	105		167	61	16	1	97
WENSMAN/ 5343BT	105		158	57	16	0	93
KRUGER/ 8602HX	102		157	59	16	1	100
EPLEY/ E1231	100		157	60	15	0	96
EPLEY/ E2207HXLL	105		156	59	17	0	95
KRUGER/ EXP8502HX	102		155	59	17	0	99
KRUGER/ 0401	101		155	61	17	0	96
EPLEY/ E1522YGPL	105		155	62	16	0	96
Trial avg.:	103		163	59	17	>0	97
Highest (H)-avg.:	105		174	62	21	1	100
Lowest (L)-avg.:	100		155	57	15	0	92
H-L avg. difference:	5		19	5	6	1	8
** Lsd (.05):			NS	2	2	NS	4
# Min. TPG-value:			155	60	-	-	96
## Max. TPG-value:			-		17	1	-
+ Coef. of var.:			13	2	6	451	3
No. of entries:	13	0	13	13	13	13	13

\* Seeded May 15, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group
Table 5b. Late maturity Non-Roundup Ready corn hybrid test trial results - Curtis Sybesma Farm, Geddes, SD, 2007

Note: Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination which reduced grain yield.

Drond /Urbrid	Brand		Hybrid	performance	variable at h	narvest	
(By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand
KRUGER/ 5111	111		176	60	19	0	96
RENK/ RK852LLYGCB	110		172	57	19	0	94
KRUGER/ 8310HX	110		172	58	17	1	99
FARM ADVANTAGE/ 86X06	106		168	58	20	0	95
KRUGER/ 5006YGCB	106		168	61	18	0	98
RENK/ RK884YGCB	112		161	57	22	0	95
KRUGER/ 8308HX	108		161	59	20	0	93
KRUGER/ 5210YGCB	110		161	60	20	0	97
KRUGER/ EXP9010HXT	110		160	59	20	0	100
EPLEY/ E2474	109		160	59	17	1	97
Trial avg.:	109		166	59	19	>0	96
Highest (H)-avg.:	112		176	61	22	1	100
Lowest (L)-avg.:	106		160	57	17	0	93
H-L avg. difference:	6		16	4	6	1	6
** Lsd (.05):			NS	2	3	NS	4
# Min. TPG-value:			160	59	-	-	96
## Max. TPG-value:			-	-	20	1	-
+ Coef. of var.:			10	2	8	398	2
No. of entries:	10	0	10	10	10	10	10

\* Seeded May 15, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

 Table 5c.
 Early maturity Roundup Ready corn hybrid test trial results- Curtis Sybesma Farm, Geddes, SD, 2007

 Note:
 Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination that reduced grain yield.

	Brand			Test trial var	iable at harve	est	
(By '07 yield)	Rel.	2-year Yield	'07 Yield	'07 Bu.Wt.	'07 Grain	'07 Lodging	'07 Pct.*
	iviat.	bu/a	bu/a	lb	Moist. %	%	Stand
HEINE/ H751RRYG	105		202	58	18	1	91
WENSMAN/ W6271RR	97		200	60	14	0	93
DEKALB/ DKC50-48RR2YGCB	100		196	59	15	1	95
WENSMAN/ W7267VT3	97		194	60	15	0	96
DEKALB/ DKC51-39RR2YGPL	101	•	193	61	15	0	94
PANNAR/ 6D-409RR2	103		193	59	15	1	93
DAIRYLAND/ STEALTH-7204	104		192	60	15	0	98
NUTECH/ 5006A RR/YGCB	105		192	60	17	2	97
	103		189	59	15	1	96
NUTECH/ 5X-402 KK/HXT	102	· ·	188	01	17	0	94
WENSMAN/ W6374BTRR	104		188	60	14	1	95
HEINE/ H711RRYGPL	100		188	59	15	0	90
NUTECH/ 3C-303A RR/YGCB	103		18/	61	15	0	90
	103		100	59 61	15 16		93
	104	•	100	01	10	U	93
EPLEY/ E1225RR	98		185	60 50	15	1	93
	102		104	59	15	0	88
	104	•	104	59	10	0	93
KRUGER/ 6603TS	103		183	61	13	0	97
	101		100	62		-0	100
	101		101	0Z 61	10	0	100
EONTANELLE/ 5052Ammon E	102		179	59	15	0	97
WENSMAN/ W7289VT3	99		179	61	15	0	94
RENK/ RK670VT3	103		178	59	15	0	88
WENSMAN/ W6307RR	100		177	59	14	1	90
DEKALB/ DKC46-60(VT3)	96		176	59	14	0	93
FARM/ ADVANTAGE 9503GL	103		176	60	17	0	87
KRUGER/ 6503TS	103		176	61	15	0	95
EPLEY/ E1165RR	95		175	59	14	0	95
PANNAR/ 5E-900RR/YG+	99		174	59	16	0	92
HEINE/ H764RRYGPL	105		174	60	16	0	93
KALTENBERG/ K5243RRPLUS	102		173	59	16	0	93
KRUGER/ 64011S	101		172	62	16	0	91
HEINE/ H645KKYGPL	98		1/2	61	15		96
EPLEY/ E12R34YGPL	101		171	61	15	0	94
AGSUURCE/ 3C-504RR/YGCB	104		171	61	18	2	90
	102	•	168	59	14		84
EFLET/ ET2UONN W/ENISMAN/ W/7375RTRW/RR	95 104	•	100	59 61	14 17	0 0	90 Q1
	104		100		17	0	07
	00		100	58 59	15	1	9/
HEINE/ H727RRYGPI	99 103	·	162	50	14	0	09 91
AGSOURCE/ 5H-403 BR/HX	103	·	160	61	16	0	92
HEINE/ H713RRYGPL	102		159	61	14	0	91

#### Table 5c. Early maturity Roundup Ready corn hybrid test trial results- Geddes, SD (continued)

	Brand	Test trial variable at harvest							
(By '07 yield)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
NUTECH/ 3P-703 RR/YGPL	103		158	61	15	0	92		
NUTECH/ 3P-300 RR/YGPL	99		152	58	15	1	86		
EPLEY/ E1195RR	98		152	60	16	0	92		
WENSMAN/ W6266BTRR	97		152	60	15	0	87		
KALTENBERG/ K5683RRPLUS	105		151	61	16	1	89		
AGSOURCE/ 3P-902RR/YGPL	100		151	62	15	0	87		
Trial avg.:	101		177	60	15	>0	92		
Highest (H)-avg.:	105		202	62	18	2	100		
Lowest (L)-avg.:	95		151	58	14	0	84		
H-L avg. difference:	10		51	4	4	2	16		
** Lsd (.05):			19	2	1	NS	6		
# Min. TPG-value:			183	60	-	-	94		
## Max. TPG-value:			-	-	15	2	-		
+ Coef. of var.:			7	2	5	306	4		
No. of entries:	51	0	51	51	51	51	51		

\* Seeded May 15, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

+ Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

## ARCHIVE

 Table 5d.
 Late maturity Roundup Ready corn hybrid test trial results- Curtis Sybesma Farm, Geddes, SD, 2007

 Note:
 Data for 2006 was excluded due to the high level of experimental error in these plots as the result of high temperatures that caused very poor or no pollination that reduced grain yield.

Duo u d (lash ui d	Brand		•	Test trial vari	able at harv	est	
(By '07 yield)	Rel.	2-year Yield	'07 Yield	'07 Bu.Wt.	'07 Grain	'07 Lodging	'07 Pct.*
		bu/a	bu/a	lb	Moist. %	%	Stand
DEKALB/ DKC58-16(VT3)	108		216	58	18	0	95
KRUGER/ 6208VT3	108		216	58	20	1	95
FONTANELLE/ 7N866	108		215	58	18	0	86
KRUGER/ 6007V13	107	•	213	58	18	0	93
NUTECH/ 3C-712 KK/YGCB	112		200	59	23	U	93
AGSOURCE/ 3C-007RR/YGCB	107		199	59	20	0	93
DEKALB/ DKC61-69(VT3)	111		198	58	19	1	84
FIELDERS/ CHOICE NG6686	107		198	60	18	0	88
	107		198	58	1/	1	88
FUNTAINELLE/ /1083	108	· ·	197	59	19	1	91
FIELDERS/ CHOICE NG6721	110		196	57	19	0	90
WENSMAN/ W6431RR	107		196	57	17	1	86
PANNAR/ 8A-410RR/BT	110		193	58	18	1	89
KRUGER/ 1606RR	106	•	193	57	16	0	87
NUTECH/ 5H-312 RK/HX	112		192	5/	17	1	97
KRUGER/ 6006VT3	106		192	59	18	0	90
KRUGER/ 6111VT3	111		192	58	20	2	92
AGSOURCE/ 3T-808 VT3	108		192	60	19	0	85
NUTECH/ 5210 RR/YGCB	110		191	59	18	1	96
FUNTANELLE/ 61226	106		191	60	17	0	90
NUTECH/ 3A-113A RR	112	·	189	59	21	1	88
KRUGER/ 1008RR	107	•	186	58	18	0	91
DEKALB/ DKC57-47(RR2)	107	•	184	59	17	3	87
FIELDERS/ CHUICE NG6/80	111	•	184	60	20	1	8/
AUSUURCE/ 3C-310RR/ FUCD	110		104	30	10	2	00
RENK/ RK888RRYGPL	112		182	57	20	1	93
AGSOURCE/ 3C-009RR/YGCB	109		182	58	18	1	87
EPLEY/ E24R32YGPL	108	•	181	59	18	0	93
	109		1/9	59	20	0	91
FUNTAINELLE/ /K436	110	· ·	1/9	60	19	Z	89
KRUGER/ 6210TS	110		178	60	21	4	90
AGSOURCE/ 3P-910RR/YGPL	111		178	58	22	1	86
PANNAR/ /B880RR/YG+	106	•	1/5	59	1/	1	85
	112		171	58	19	0	90
EPLEY/ E25R52YGPL	110		1/1	59	10	Z	85
Trial avg.:	109		191	58	19	1	90
Highest (H)-avg.:	112	· ·	216	60	23	4	97
Lowest (L)-avg.:	106	· ·		5/	16	U	84
H-L avg. difference:	6		45 10	່ ວັ າ	2	4	13
# Min_TPG_value			10	۲ ۶۵	2	2	0 Q1
# Will. IF G-Value. ## May TPG-value			- 130		18	2	-
+ Coef of var.			6	2	6	180	4
No. of entries:	35	0	35	35	35	35	35

\* Seeded May 15, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

	Brand	nd Hybrid performance variable at harvest						
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	ʻ07 Lodging %	'07 Pct.* Stand	
TWO-YEAR ENTRIES:								
HEINE/ H818YGCB	108	200	209	55	18	0	99	
MYCOGEN/ 2R572	104	178	191	56	15	0	96	
<b>ONE-YEAR ENTRIES:</b>								
HOEGEMEYER/ HB+651	109		212	57	18	0	100	
HEINE/ H818	105		208	56	18	0	96	
HEINE/ H819	108		198	55	17	0	100	
KRUGER/ 5210YGCB	110		196	57	19	0	99	
MYCOGEN/ 2D675	109		196	56	19	0	100	
KRUGER/ 8308HX	108		194	58	18	0	95	
HOEGEMEYER/ 9326HX	107		191	58	17	0	98	
KRUGER/ EXP9106HXT	105		190	57	14	0	97	
KRUGER/ EXP9010HXT	110		190	59	17	0	98	
HEINE/ H734	103		189	58	15	0	94	
MYCOGEN/ 2C597	107		188	55	16	0	99	
RENK/ RK852LLYGCB	110		180	55	16	0	91	
WENSMAN/ 5343BT	105		179	56	14	0	96	
FARM ADVANTAGE/ 86X06	106		160	56	16	0	91	
Trial avg.:	107	189	192	57	17	0	97	
Highest (H)-avg.:	110	200	212	59	19	0	100	
Lowest (L)-avg.:	103	178	160	55	14	0	91	
H-L avg. difference:	7	22	52	3	_5	0	9	
** Lsd (.05):		NS	17	1	1	NS	3	
# Min. TPG-value:		178	195	58	-	-	97	
## Max. TPG-value:		-		-	15	0	-	
+ Coef. of var.:		2	5	2	4	0	2	
No. of entries:	16	2	16	16	16	16	16	

Table 6a. Early maturity Non-Roundup Ready corn hybrid test trial results - Southeast Experin	ient Station,
Beresford, SD, 2006-2007	

\* Seeded May 2, 2007 at 28,750 seeds per acre \*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

Table 6b.	Late maturity Non-Roundup Ready corn hybrid test trial results - Southeast Experiment Station,
	Beresford, SD, 2006-2007

Drond /Underid	Brand		Hybrid <sub>I</sub>	performance	variable at h	arvest	
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand
TWO-YEAR ENTRIES:							
KRUGER/ 8616HX	115	199	204	56	21	0	99
MYCOGEN/ 2C727	112	199	188	58	19	0	100
MYCOGEN/ 2T787	114	186	193	55	20	0	95
MYCOGEN/ 2K718	111	174	173	58	18	1	100
ONE-YEAR ENTRIES:							
KRUGER/ 5013YGCB	113		194	58	18	0	97
KRUGER/ 5114YGCB	114		194	59	19	1	96
KRUGER/ 9414HXT	114		192	57	20	0	99
KRUGER/ 5111	111		191	59	19	0	99
KRUGER/ 8112HX	112		191	57	17	0	95
RENK/ RK884YGCB	112		178	55	21	0	95
Trial avg.:	113	190	190	57	19	0	97
Highest (H)-avg.:	115	199	204	59	21	1	100
Lowest (L)-avg.:	111	174	173	55	17	0	95
H-L avg. difference:	4	25	31	4	4	1	5
** Lsd (.05):		NS	NS	1	1	NS	NS
# Min. TPG-value:		174	173	58	-	-	95
## Max. TPG-value:		-	-	-	18	1	-
+ Coef. of var.:		8	7	1	3	398	3
No. of entries:	10	4	10	10	10	10	10

\* Seeded May 2, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

	Brand	Test trial variable at harvest							
Brand/Hybrid (By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
TWO-YEAR ENTRIES: NUTECH/ 5210 RR/YGCB FARM/ ADVANTAGE 6504 WENSMAN/ W6374BTRR ONE-YEAR ENTRIES: FIELDERS/ CHOICE NG6686 FONTANELLE/ 7K456 NUTECH/ 3T-808A VT3 DEKALB/ DKC52-63RR2YGCB KBUGER/ 6208/T3	110 104 104 107 110 108 102 108	190 187 170	190 191 185 206 201 200 198 198	58 56 57 58 57 58 55 55	19 15 14 18 18 18 18 14 16	0 0 0 0 0 0 0 0	96 100 100 97 100 99 92 100		
DEKALB/ DKC58-16(VT3) KRUGER/ 1008RR FONTANELLE/ 7T683 AGSOURCE/ 3C-007RR/YGCB DEKALB/ DKC53-18(RR2)	108 107 108 107 107 103		196 196 196 195 194	57 57 57 58 57 57	17 17 18 17 14	0 0 1 0 3	99 100 98 100 97		
KRUGER/ 6007VT3 CROWS/ 4846T FOUR/ STAR EX9744RRBT WENSMAN/ W6431RR FONTANELLE/ 7N866	107 110 108 107 108		194 193 192 192 191	57 57 58 55 58	16 19 18 15 16	0 0 0 0 0	98 98 96 95 98		
AGSOURCE/ 5H-008 RR/HX CROWS/ 3846T HEINE/ H818RRYG FONTANELLE/ 6T226 HOEGEMEYER/ 5142 RRBT	108 105 108 106 110		191 190 189 187 186	58 59 56 59 59 57	18 17 19 19 19	0 0 0 0	96 94 96 99 99		
AGSOURCE/ 3T-808 VT3 AGSOURCE/ 3C-310RR/YGCB PANNAR/ 8A-410RR/BT HEINE/ H711RRYGPL DEKALB/ DKC50-48RR2YGCB	108 110 110 100 100		186 186 184 184 183	58 57 55 54 56	19 19 17 14 14	0 0 0 0	93 97 95 97 97		
FIELDERS/ CHOICE NG6745 GCS/ 107-01CBRCRW HEINE/ H764RRYGPL FIELDERS/ CHOICE NG6721 EPLEY/ E25R52YGPL	110 107 105 110 110		182 182 181 180 180	57 57 57 56 58	19 16 16 16 16	0 0 0 0 0	99 94 94 96 96		
AGSOURCE/ 3C-504ARRYGCB KALTENBERG/ K5685RRBT KRUGER/ 6210TS HEINE/ H727RRYGPL WENSMAN/ W7309VT3	100 105 110 103 101		180 178 178 178 178 175	59 58 57 56 57	16 15 18 14 15	0 0 1 0 0	97 95 99 91 99		
EPLEY/ E24R32YGPL HEINE/ H798RRYG WENSMAN/ W7375BTRWRR NUTECH/ 3P-302 RR/YGPL NUTECH/ 3C-409 RR/YGCB	108 108 104 102 109		174 174 173 172 167	57 56 58 58 59	15 17 14 16 19	0 0 0 0 0	99 91 100 96 91		

#### Table 6c. Early maturity Roundup Ready corn hybrid test trial results- Southeast Experiment Station, Beresford, SD., 2006-2007

Table 6c.	Early maturity Roundup Ready corn hybrid test trial results- Southeast Experiment Station,
	Beresford, SD., 2006-2007 (continued)

Drond/Unbrid	Brand	Test trial variable at harvest							
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
HOEGEMEYER/ 4373	105		164	56	16	0	94		
FOUR/ STAR EX9762RRYGPL	110		158	57	19	0	94		
DEKALB/ DKC57-47(RR2)	107		154	58	16	0	96		
HEINE/ H792RR	108		150	58	15	0	93		
Trial avg.:	107	182	183	57	17	>0	96		
Highest (H)-avg.:	110	190	206	59	19	3	100		
Lowest (L)-avg.:	100	170	150	53	14	0	91		
H-L avg. difference:	10	20	56	6	5	3	9		
** Lsd (.05):		NS	24	2	1	1	4		
# Min. TPG-value:		170	182	57	-	-	96		
## Max. TPG-value:		-	-	-	15	1	-		
+ Coef. of var.:		9	8	2	4	593	3		
No. of entries:	50	3	50	50	50	50	50		

\* Seeded May 2, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

+ Coef.of Variation = a measure of trial experimental error, 20% or less is best for yield

## ARCHIVE

Duend/United	Brand	Test trial variable at harvest							
(By 2-year then '07 yields)	Rel. Mat.	2-year Yield bu/a	'07 Yield bu/a	ʻ07 Bu.Wt. Ib	'07 Grain Moist. %	<b>'07 Lodging</b> %	'07 Pct.* Stand		
DEKALB/ DKC61-69(VT3)	111		219	58	17	0	100		
DEKALB/ RX715VT3	112		217	59	19	0	99		
DEKALB/ DKC63-42(VT3)	113		203	58	19	0	100		
KRUGER/ 6111VT3	111		200	60	19	0	99		
EPLEY/ E3245RR	112		196	57	18	0	96		
KRUGER/ 2114RR/YGCB	114		195	60	20	0	95		
KRUGER/ 6314TS	114		194	59	21	0	95		
NUTECH/ 3A-113 RR	113		193	61	19	0	98		
FIELDERS/ CHOICE NG6780	111		193	59	20	0	93		
KRUGER/ 6011TS	111		191	59	18	0	98		
NUTECH/ 3P-612 RR/YGPL	112		186	59	19	0	98		
DEKALB/ DKC62-33RR2YGCB	112		183	60	19	0	92		
FIELDERS/ CHOICE NG6785	112		181	60	18	0	99		
RENK/ RK888RRYGPL	112		181	58	19	0	95		
NUTECH/ 5H-312 RR/HX	112		179	59	18	0	97		
NUTECH/ 3A-113A RR	112		177	61	20	0	94		
KRUGER/ 6412VT3	112		177	60	21	0	100		
KRUGER/ 6015VT3	115		175	60	20	0	96		
NUTECH/ 3C-712 RR/YGCB	112		174	59	18	0	96		
FOUR/ STAR 6880VT3	112		164	59	20	0	95		
Trial avg.:	112		189	59	19	0	97		
Highest (H)-avg.:	115		219	61	21	0	100		
Lowest (L)-avg.:	111		164	57	17	0	92		
H-L avg. difference:	4		55	4	4	0	8		
** Lsd (.05):			24	2	1	NS	4		
# Min. TPG-value:			195	59	-	-	96		
## Max. IPG-value:			-	-	18	U	-		
+ Coef. of var.:	20	0	8	2	5	U 20	2		
NO. OT ENTRIES:	20	U U	20	20	20	20	20		

 

 Table 6d. Late maturity Roundup Ready corn hybrid test trial results- Southeast Experiment Station, Beresford, SD., 2007. Note: All late maturity entries were new for 2007

\* Seeded May 2, 2007 at 28,750 seeds per acre

\*\* LSD (0.5)- the amount values in a column must differ to be significantly different

If LSD= NS then differences among values in a column are non-significant (NS)

# Min. TPG-value= minimum value required for the top performance group

## Max. TPG-value= maximum value required for the top performance group

Table E. Mailing addresses for seed entries in the 2007 corn hybrid trials by seed brand name

Seed brand	Seed company mailing address
AgSource	AgSource Seeds Inc., 1800 L Ave., Nevada, IA 50201
AgVenture	Keltgen Inc. AgVenture, 44449 U.S. Hwy 212, Watertown, SD 57201
AgVenture	Scherr's Seed LLC, 13464 335 Ave., Roscoe, SD 57471
Crows	Crows Hybrid Corn Co., PO Box 157, Kentland, IN 47951
Dairyland	Dairyland Seed, PO Box 958, West Bend, WI 53095
Dekalb	Monsanto, 102 W Carol Ave., Cortland, IL 60112
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310, Shell Rock, IA 50670
Farm Advantage	Farm Advantage, 1275 Hwy 69, Belmond, IA 50421
Fielder's Choice	Grow Direct, 306 N. Main Street, Monticello, IN 47960
Fontanelle	Fontanelle Hybrids, 919 West 23 <sup>th</sup> Street, Freemont, NE 68025
Four Star	Four Star Seed Co., 2929-33th Street, Logan, IA 51546
Gold Country	Gold Country Seed Inc., PO Box 604, Hutchinson, MN 55350
Heine	Heine Hybrid Seed Corn, 1020 E. 320th St., Vermillion, SD 57069
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031
Kaltenberg	Kaltenberg Seeds, 5506 State Road 19, Box 278, Waunakee, WI 53597
King	Kings Seed Inc., PO Box 939, Huron, SD 57350
Kruger	Kruger Seed Co., Box A, Dike, IA 50624
Mycogen	Mycogen Seeds, 25931 486 <sup>th</sup> Ave., Valley Springs, SD 57068
NuTech	Nutech Seed, LLC, 40321 130th Ave., Leland, IA 50453
Pannar	Pannar Seed Inc., 40329 US Hwy 14 East, Huron, SD 57350
Renk	Renk Seed Co., 6809 Wilburn Rd., Sun Prairie, WI 53590
Seeds 2000	Seeds 2000, PO Box 200, Breckenridge, MN 56520
	Wensman Seed Co. PO Box 190 Wadena MN 56482

C 253 Revised Annually





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The crop performance trials are available at http://plantsci.sdstate.edu/varietytrials/vartrial.html

### **Tables, 2008 Corn Performance Trials**

Α	Description of 2008 corn hybrid trial locations- soil type, tillage type, prior crop, herbicide and insecticides used, and seeding date
В	Nearest weather station precipitation and growing degree day (GDD) accumulation and average daily temperatures for each growing season month in 2008 and their departures from average (DFA)
С	2008 Glyphosate-resistant corn hybrid entries by brand/hybrid, seed product traites, and index to performance table no. (s)
D	Explanation of performance table footnotes
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1b	Warner late maturity Roundup Ready™ corn hybrid test results, 2007-08, Allen & Inel Ryckman Farm
2a	South Shore early maturity Roundup Ready™ corn hybrid test results, 2007-08, Northeast Reseach Farm
2b	South Shore late maturity Roundup Ready™ corn hybrid test results, 2007-08, Northeast Reseach Farm
3a	Bancroft early maturity glyphosate-resistant corn hybrid test results, 2007-08, Erland Weerts Farm
3b	Bancroft late maturity glyphosate-resistant corn hybrid test results, 2007-08, Erland Weerts Farm
4a	Brookings early maturity glyphosate-resistant corn hybrid test results, 2007-08, Plant Science Farm
4b	Brookings late maturity glyphosate-resistant corn hybrid test results, 2007-08, Plant Science Farm
5a	Geddes early maturity glyphosate-resistant corn hybrid test results, 2007-08, Curt Sybesma Farm
5b	Geddes late maturity glyphosate-resistant corn hybrid test results, 2007-08, Curt Sybesma Farm
6a	Beresford early maturity glyphosate-resistant corn hybrid test results, 2007-08, Southeast Experiment Station
6b	Beresford late maturity glyphosate-resistant corn hybrid test results, 2007-08, Southeast Experiment Station
6c	Beresford non-glyphosate-resistant corn hybrid combined early and late maturity test results, 2007-08, Southeast Experiment Station

#### C253—Precision Planted Corn 2008 Crop Performance Results is available electronically on the internet http://agbiopubs.sdstate.edu/articles/C253–08.pdf



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## 2008 Precision Planted **Corn** Performance Trials

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This publication reports the results of the 2008 South Dakota corn hybrid performance trials for both glyphosate-resistant hybrids and non-glyphosate-resistant hybrids. Information includes both the most recent two-year and one-year grain yields in bushels per acre; and one-year bushel weight, grain moisture at harvest, lodging percentage, and final stand percentages. These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Corn performance trial tables are listed on the inside front cover. Environmental data is listed in tables A and B, indices of brand/ hybrid entries to performance table number are listed in table C, table D has the footnote legend, and mailing addresses for seed companies are listed in table E.

#### **Test Trial Locations**

Trial locations, soil types, seedbed and previous crop history, soil fertility yield goals, and seeding dates are indicated in table B. The participation and efforts of our cooperators – Allen and Inel Ryckman at Warner, Al Heuer at South Shore (Northeast Research Farm), Erland Weerts at Bancroft, Douglas Doyle at Brookings (SDSU Plant Science Research Farm), Curtis Sybesma at Geddes, and Robert Berg and staff at Beresford (Southeast Experiment Station) – are gratefully acknowledged.

#### Weather Conditions

Weather data (table B) obtained through the efforts of D. Todey and C. Shukla, South Dakota Office of Climate and Weather, are gratefully acknowledged. Precipitation varied across test locations, and all locations experienced some moisture deficits during the growing season. Monthly precipitation totals were below average at Aberdeen for April, May, June, and August; at South Shore for April and August; at Huron for April, July, and September; at Brookings for April, May, July, August, and September; at Centerville for April, July, and August; and at Mitchell for July, August, and September. On average, seasonal moisture varied from 4.81" below average at Brookings to 2.22" above average at Aberdeen.

Average daily temperatures across locations by month were 2 to 5°F below average in April, 3 to 9°F below average in May, and

average to 3°F below average in June. Thereafter, temperatures tended to be average for the remainder of the growing season.

Heat unit or growing-degree day (GDD) monthly totals were below average at Aberdeen, Huron, and Brookings for May and June; and at South Shore, Centerville, and Mitchell for April, May, and June. Heat unit growing season totals were below average at South Shore (-135) and Mitchell (-90); slightly below average at Brookings (-34) and Centerville (-44); average at Aberdeen (-2); and slightly above average at Huron (40). Heat unit totals varied across locations from a high of 3,004 GDD at Mitchell to a low of 2,164 GDD at South Shore.

#### **General Test Procedures**

Seed companies pick the test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Warner and South Shore; 100 days for Yale and Brookings; 105 days for Geddes; and 110 days for Beresford. Hybrids are assigned to trials based on the relative maturity rating reported by the participating seed company. This testing program does not guarantee that all entries are placed in the proper maturity trial. In some trials, borderline entries with relative maturity ratings at or near the arbitrary break between the early and late trials may crossover at a given location. In some cases this may be indicated by exceptionally high or low grain moisture contents at harvest. A higher than average moisture content may indicate the hybrid is later in relative maturity than indicated. Likewise, a lower than average moisture may indicate the hybrid is earlier in relative maturity than indicated. A fee was charged for all entries at each location. A list of participating seed companies for 2008 is presented in Table E.

#### **Experimental Procedures**

Entries were seeded in three replications, with each hybrid randomly located within each trial. Plots consisted of four 30inch rows that were 20 feet long, with the center two rows harvested for yield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2008, the precision planter was calibrated to deliver 28,750 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation and previous crop history, and fertility yield goal at each test site is outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/ acre of 37-18-00 was applied 2" below and 2" to the side (2 x 2) of the seed row. Force insecticide in-furrow at label rates for corn rootworm control this year. The weed control herbicides applied at recommended label rates are indicated in table A for both the glyphosate-resistant and the non-glyphosate-resistant hybrid corn trials.

#### **Measurements of Performance**

Yields are obtained from the South Dakota Crop Performance Testing Program. Current-year and 2-year yield averages are included where hybrids have been tested in 2008 and for the past two years.

Yield. Yield values are an average of three replications, and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2008, the coefficient of variation (CV) values (a measure of experimental error) for yield was relatively low, ranging from 5 to 9% over the six test locations. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors - all of which may or may not be controllable in a given year. Clearly, this year, seasonal moisture distribution and/or subsoil moisture conditions, along with elevated high temperatures, were the two factors that affected the yielding potential of the corn hybrids tested. All test locations likely were exposed to some degree of moisture stress; however, Beresford was particularly dry in July (table B).

**Grain moisture content**. Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Moisture is generally inversely related to maturity and is important in the evaluation of hybrids. Hybrids that provide satisfactory yields and can be stored without additional drying are desirable. During harvest, moisture values were determined by the combine moisture meter, which in turn was periodically checked with a Dickey-John GAC II to verify it was within limits.

Use of tables. Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids before there is a significant yield difference. LSD values are given at the bottom of every column where there is significant difference among the averages within the column. If differences among the averages within a column are not significant, the LSD value is reported as "non-significant" (NS).

The LSD values reported in this publication can be used in two ways. In this publication the LSD value is used primarily to identify the top performance group (TPG) for two-year yields, for current-year yields, for bushel weight, for grain moisture at harvest, for lodging (below the ear) percentage, and for final stand percentage for each test trial. In order to determine which hybrids are in the TPG for yield, use the LSD value indicated at the bottom of each yield column in any yield table. For example, let's say the column LSD value equals 15 (bu/a) and the highest yield for that column equals 155 bu/a. If you subtract the column LSD value from the highest yield, you obtain an intermediate value of 140 bu/a (155 - 15 = 140). The minimum top yield value has to be greater than this intermediate value of 140 bu., and since the yield values are rounded to the nearest bushel, it must be at least 141 bu. Thus, varieties with an average of 141 bu. or higher are included in the top-yield group.

These minimum TPG values for yield are indicated at the bottom of each yield column, unless too much experimental error (high CV values) is associated with the test. Top yield hybrids are those hybrids that are equal or higher than the minimum TPG value reported at the bottom of each yield column (2008 or 2-yr yield averages). If hybrid yield differences are not significant (NS) and the CV values are 15% or less, then, by definition, all hybrids in the test are in the top-yield group. In contrast, if the column CV value is greater than 15%, then no minimum TPG value is indicated because there is too much experimental error associated with the test to make a valid determination of the TPG for yield. When comparing yield means, compare current year averages with other current year averages and compare 2-yr yield averages with other 2-yr averages. Do not compare current year averages with 2-yr averages when comparing hybrids. When evaluating current year averages, do not forget to note that entries tested for two years may also have a yield value that qualifies for the TPG in the 2008 yield column.

The TPG for other performance factors - such as bushel weight, percent grain moisture at harvest, percent lodging (below the ear), and percent stand (percent of seeded population) – can also be determined. In order to qualify for the TPG group, a hybrid must have a bushel weight and a final stand percentage value that is equal to or greater than the minimum reported TPG value for bushel weight or final stand percentage. Likewise, in order to qualify for the TYG a hybrid must have grain moisture, lodging percentages, or lodging score values that are equal to or less than the maximum reported TPG value for grain moisture, lodging percentage, or lodging score. Note that yield, bushel weight, and percent stand TPG values are greater than a certain yield, bushel weight, or final stand value; or they are minimum values. In contrast, grain moisture, lodging percentage, or lodging score values are equal to or less than a certain value to qualify for the TPG; or they are maximum values. Again, as with hybrid yields, if there are no hybrid differences for a performance factor, then, by definition, all hybrids in the test are in the TPG for that performance factor.

The LSD values for the TPG can also be used to determine if two hybrids differ in performance. For example, if a test trial LSD value equals 16 bu/a, and hybrid A yields 132 bu/a while hybrid B yields 118 bu/a, then their yield difference is 14 bu/a (132-118 =14). In this case, the two hybrids do not differ in yield because their yield difference of 14 bu/ac is equal to or less than the reported LSD value of 16 bu/a. In contrast, if hybrid C yields 114 bu/a, the yield difference between hybrids A and C is 18 bu/a (132-114=18). In this case, the yield difference of 18 bu/a is higher than the reported LSD value of 16 bu/a; therefore, hybrid A would have a significantly higher yield than hybrid C. Similarly, the LSD values for bushel weight, grain moisture, stalk lodging below the ear, and percent stand can be used to determine if any two hybrids differ in these performance factors. For example, if a test trial grain moisture LSD value equals 2%, and hybrid a measures 18% and hybrid B measures 16, their grain moisture difference is 2% (18-16=2). In this case, the two hybrids do not differ in grain moisture because their moisture difference of 2% is equal to or less than the reported LSD value of 2%. In contrast, if hybrid C measures 15%, the grain moisture difference between hybrids A and C is 5% (18-15=3). In this case, the grain moisture difference of 3% is more than the reported LSD value 2%; therefore, hybrid A is significantly higher in grain moisture than hybrid C.

### PERFORMANCE TRIAL RESULTS BY LOCATIONS

The performance trial results for one year (2008) and for two years (2007-08) follow:

#### Northern Locations

Note: The test trial at South Shore was exposed to extremely high winds on July 31, 2008. Consequently, the hybrid lodging response to the high winds were quite variable. At South Shore, the hybrid response to lodging was reported as a lodging score as opposed to a lodging percentage. The lodging score better described the hybrid response to the high winds because many of the entries were lodged over; whereas few entries exhibited any lodging below the ear as indicated in a lodging percentage rating.

#### Warner:

Early – Glyphosate-resistant trial, Table 1a. The test trial yield averages were 186 bu/a for both the 2008 and two-year periods. Hybrids that yielded 186 bu/a or more for two years and 191 bu/a or more for 2008 qualified for the TPG for yield. Hybrids had to differ in yield by 13 bu/a for two years and 17 bu/a in 2008 to be significantly different. In 2008, bushel weights averaged 55 lbs, grain moisture averaged 21%, lodging percentage averaged 6%, and final stand percentage averaged 95%. In order for hybrids to be in the TPG for these factors, they had to average 56 lbs. or more in bushel weight, 17% or less in grain moisture, 7% or less in lodging percentage, and 96% or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 1b. The test trial yield averages were 187 bu/a for two-years and 192 bu/a for 2008. Hybrids that yielded 182 bu/a or more for two years and 200 bu/a or more for 2008 qualified for the TPG for yield. Hybrids had to differ in yield by 16 bu/a for two years and 19 bu/a in 2008 to be significantly different. In 2008, bushel weights averaged 54 lbs, grain moisture averaged 23%, lodging percentage averaged 5%, and final stand percentage averaged 94%. In order for hybrids to be in the TPG for these factors, they had to average 55 lbs. or more in bushel weight, 21% or less in grain moisture, 7% or less in lodging percentage, and 94% or more for final stand percentage.

#### South Shore:

Early - Glyphosate-resistant trial, Table 2a. The test trial

yield averages were **170** bu/a for two-years and **161** bu/a for 2008. The yield differences among those hybrids tested for two years were nonsignificant (NS). Hybrids that yielded **172** bu/a or more for 2008 qualified for the TPG for yield. Hybrids had to differ in yield by **21** bu/a in 2008 to be significantly different. In 2008, bushel weights averaged **54** lbs, grain moisture averaged **22%**, lodging score averaged **3**, and final stand percentage averaged **96%.** In order for hybrids to be in the TPG for these factors, they had to average **55** lbs. or more in bushel weight, **18%** or less in grain moisture, **and 1** in lodging score. The differences among hybrids in final stand percentage were nonsignificant (NS).

Late – Glyphosate-resistant trial, Table 2b. The test trial yield averages were 172 bu/a for two-years and 166 bu/a for 2008. Hybrids that yielded 163 bu/a or more for two years and 176 bu/a or more for 2008 qualified for the TPG for yield. Hybrids had to differ in yield by 25 bu/a for two years and 16 bu/a in 2008 to be significantly different. In 2008, bushel weights averaged 52 lbs, grain moisture averaged 24%, lodging score averaged 3, and final stand percentage averaged 94%. In order for hybrids to be in the TPG for these factors, they had to average 53 lbs. or more in bushel weight, 23% or less in grain moisture, and 1 in lodging score. The differences among hybrids in final stand percentage were nonsignificant (NS).

#### Central Locations Bancroft:

**Early – Glyphosate-resistant trial, Table 3a.** The test trial yield averages were **193** bu/a in 2008 and **196** bu/a for two years. Hybrids that yielded **196** bu/a or more in 2008 qualified for the TPG for yield. There were no differences in yield average among the hybrids tested two years, so all qualified for the TPG. Hybrids had to differ in yield by **19** bu/a in 2008 to be significantly different. In 2008, bushel weights averaged **55** lbs, grain moisture averaged **19%**, lodging averaged **5%**, and percent stand averaged **97%**. In order for hybrids to be in the TPG for these factors, they had to average **56** lbs. or more in bushel weight, **18%** or less in grain moisture, **6%** or less in lodging percentage, and **96%** or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 3b. The test trial yield averages were 192 bu/a in 2008 and 193 bu/a for two years. Hybrids that yielded 195 bu/a or more in 2008 qualified for the TPG for yield. Yield differences among hybrids were non-signif-

icant for the two-year period. In 2008, bushel weights averaged 55 lbs, grain moisture averaged 21%, lodging percentage averaged 5%, and the final stand percentage averaged 97%. In order for hybrids to be in the TPG for these factors, they had to average 56 lbs. or more in bushel weight, 19% or less in grain moisture, 7% or less in lodging percentage, and 96% or more for final stand percentage.

#### **Brookings**:

**Early – Glyphosate-resistant trial, Table 4a.** The test trial yield averages were **185** bu/a for two years and **172** bu/a for 2008. Hybrids that yielded **176** bu/a or more for two years and **183** bu/a or more for 2008 qualified for the TPG for yield. Hybrids had to differ in yield by **16** bu/a for two years and **14** bu/a in 2008 to be significantly different. In 2008, bushel weights averaged **56** lbs, grain moisture averaged **17%**, lodging percentage averaged **5%**, and final stand percentage averaged **97%**. In order for hybrids to be in the TPG for these factors, they had to average **58** lbs. or more in bushel weight, **16%** or less in grain moisture, **6%** or less in lodging percentage, and **96%** or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 4b. The test trial yield averages were 184 bu/a for two years and 171 bu/a for in 2008. There were no differences in yield average among the hybrids tested two years, so all hybrids tested qualified for the TPG. Hybrids that yielded 174 bu/a or more in 2008 qualified for the TPG for yield. Hybrids had to differ in yield by 15 bu/a in 2008 to be significantly different. In 2008, bushel weights averaged 56 lbs, grain moisture averaged 19%, lodging averaged slightly more than 8%, and percent stand averaged 96%. In order for hybrids to be in the TPG for all performance factors they had to average 58 lbs. or more in bushel weight, 17% or less in grain moisture, 7% or less in lodging percentage, and 96% or more for final stand percentage.

#### Southern Locations Geddes:

**Early – Glyphosate-resistant trial, Table 5a.** The test trial yield average was **176** bu/a for two years and **183** bu/a in 2008. The average yield differences among the hybrids tested two years were non-significant (NS), so all the hybrids tested qualified for the TPG. Hybrids that yielded **185** bu/a or more for 2008 qualified for the TPG for yield. In 2008, bushel weights averaged **59** lbs, grain moisture averaged **18%**, lodging percentage averaged **5%**, and percent stand averaged **91%**. In order for hybrids to be in the TPG for these factors, they had to average **60** lbs. or more in bushel weight, **16%** or less in grain moisture, **7%** or less in lodging, and **91%** or more for percent stand.

Late – Glyphosate-resistant trial, Table 5b. The test trial yield average was 198 bu/a for two years and 190 bu/a for 2008.

Yield differences among hybrids tested for two years were nonsignificant (NS); thus, all entries tested two years were in the TPG for yield. In 2008, bushel weights averaged **57** lbs, grain moisture averaged **21**%, lodging percentage averaged **8**%, and percent stand averaged **92**%. In order for hybrids to be in the TPG for these factors, they had to average **60** lbs. or more in bushel weight, **19**% or less in grain moisture, **9**% or less in lodging, and **92**% or more for percent stand.

#### **Beresford**:

Early – Glyphosate-resistant trial, Table 6a. The test trial yield averages were 190 bu/a for two years and 196 bu/a in 2008. There were no differences in yield average among the hybrids tested two years, so all hybrids tested qualified for the TPG. Hybrids that yielded 210 bu/a or more in 2008 qualified for the TPG for yield. Hybrids had to differ in yield by 24 bu/a in 2008 to be significantly different. In 2008, bushel weights averaged 55 lbs, grain moisture averaged 21%, lodging percentage averaged 6%, and final stand percentage averaged 83%. In order for hybrids to be in the TPG for these factors, they had to average 57 lbs. or more in bushel weight, 19% or less in grain moisture, 9% or less in lodging percentage, and 83% or more for final stand percentage.

Late – Glyphosate-resistant, Table 6b. The test trial yield averages were 199 bu/a for both two years and for 2008. There were no differences in yield average among the hybrids tested two years, so all hybrids tested qualified for the TPG. Hybrids that yielded 192 bu/a or more in 2008 qualified for the TPG for yield. Hybrids had to differ in yield by 26 bu/a in 2008 to be significantly different. In 2008, bushel weights averaged 54 lbs, grain moisture averaged 23%, lodging percentage averaged 7%, and final stand percentage averaged 95%. In order for hybrids to be in the TPG for these factors, they had to average 55 lbs. or more in bushel weight, 20% or less in grain moisture, and 8% or less in lodging percentage. The differences among hybrids in final stand percentage were nonsignificant (NS).

Early & Late – Non-glyphosate-resistant trial, Table 6c. The combined early and late maturity test trial yield averages were 195 bu/a two years and 181 bu/a for 2008. There were no differences in yield average among the hybrids tested two years, so all hybrids tested qualified for the TPG. Hybrids that yielded 183 bu/a or more in 2008 qualified for the TPG for yield. Hybrids had to differ in yield by 22 bu/a in 2008 to be significantly different. In 2008, bushel weights averaged 56 lbs, grain moisture averaged 18%, lodging percentage averaged 7%, and final stand percentage averaged 98%. In order for hybrids to be in the TPG for these factors, they had to average 58 lbs. or more in bushel weight, 17% or less in grain moisture, and 97% or higher in final stand percentage were nonsignificant (NS).

Table A. Description of 2008 corn hybrid trial locations- soil type, tillage type, prior crop, herbicides and insecticides used, and seeding dates.

	Soils & Management			Herbicides - Applied at label rates					
Location (County)	Туре	Tillage	Prior crop	Glyphosate Resistant		Non-Glyphosate Resistant		Fertility Yield Goal	Date Seeded
		туре		Pre	Post	Pre	Post	bu/u	
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	Conven- tional	Spring Wheat	Harness Xtra	Roundup once	-	-	200	May 13
South Shore (Codington)	Kranzburg silty clay loam, 3-6% slope	Conven- tional	Oat	Dual II Magnum	Roundup once	-	-	180	May 14
Bancroft (Kingsbury)	Houdek-Stickney-Teton- ka loam, 0-3% slope	Conven- tional	Soybean	Fall Dual	Roundup once	-	-	180	May 21
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conven- tional	Soybean	-	Roundup twice	-	-	200	May 7
Geddess (Chas. Mix)	Highmore-Walke silt Ioam, 0-2% slope	No-till	Winter Wheat	-	Roundup once	-	-	200	May 16
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conven- tional	Soybean	1.5 pt Dual	-	1.5 pt Dual	-	210	May 19

All plots were seeded at 27,878 seeds per acre. Force insecticide was applied in-furrow at label rate at seeding.

Table B. Nearest weather station precipitation and growing degree day (GDD) accumulation and average daily temperatures for each growing season month in 2008 and their departures from average (DFA). Source: South Dakota Office of Climate and Weather.

Station (Test site)	Verichle		Monthly data - April 1 to September 30					
Station (Test site)	variable	April	May	June	July	Aug	Sept	Totai
	Precip inches '08 1971-2000 avg.	0.86 1.83	2.19 2.69	3.21 3.49	6.26 2.92	1.24 2.42	3.62 1.81	17.38 15.16
	DFA*	-0.97	-0.50	-0.28	3.34	-1.18	1.81	2.22
Aberdeen Airport	Avg.Temp°F '08 1971-2000 avg.	43 45	49 58	65 67	73 72	71 71	62 60	
(vvaller)	DFA	-2	-9	-2	1	0	2	
	Accum GDD's '08 1971-2000 avg.	115 111	282 316	467 498	694 691	640 644	409 349	2,607 2,609
	DFA	4	-34	-31	3	-4	60	-2
	Precip inches '08 1971-2000 avg.	0.57 1.96	2.67 2.61	4.48 4.01	4.04 2.91	1.74 2.85	2.25 2.03	15.75 16.37
	DFA	-1.39	0.06	0.47	1.13	-1.11	0.22	-0.62
South Shore	Avg.Temp°F '08 1971-2000 avg.	39 43	53 56	62 65	70 70	68 68	59 58	
	DFA	-4	-3	-3	0	0	1	
	Accum GDD's '08 1971-2000 avg.	75 73	226 276	365 457	594 628	569 558	335 307	2,164 2,299
	DFA	2	-50	-92	-34	11	28	-135
	Precip inches '08 1971-2000 avg.	0.19 2.29	4.33 3.00	4.51 3.28	2.47 2.86	2.79 2.07	1.48 1.80	15.77 15.30
Huron	DFA	-2.10	1.33	1.23	-0.39	0.72	-0.32	0.47
	Avg.Temp°F '08 1971-2000 avg.	41 46	50 58	66 68	74 73	73 72	62 61	
(Danciolit)	DFA	-5	-8	-2	1	1	1	
	Accum GDD's '08 1971-2000 avg.	135 124	281 318	493 536	726 719	704 665	459 395	2,798 2,757
	DFA	11	-37	-43	7	39	64	41

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Brookings	Precip inches 1971-2000 avg.	'08	0.84 2.03	2.76 2.95	5.60 4.23	1.60 3.11	0.67 2.94	1.46 2.48	12.93 17.74
	DFA		-1.19	-0.19	1.37	-1.51	-2.27	-1.02	-4.81
	Avg.Temp°F 1971-2000 avg.	'08	41 44	48 57	64 66	71 71	69 69	62 59	
(Agronomy Farm)	DFA		-3	-9	-2	0	0	3	
	Accum GDD's 1971-2000 avg.	'08	82 85	229 296	439 479	649 640	587 585	410 345	2,396 2,430
	DFA		-3	-67	-40	9	2	65	-34
	Precip inches 1971-2000 avg.	'08	1.84 2.47	5.76 3.65	4.68 3.95	2.63 3.35	1.70 2.83	2.40 2.26	19.01 18.51
	DFA		-0.63	2.11	0.73	-0.72	-1.13	0.14	0.50
Centerville, 6 SE	Avg.Temp°F 1971-2000 avg.	'08	44 47	57 60	69 69	75 74	71 72	62 62	
	DFA		-3	-3	0	1	-1	0	
	Accum GDD's 1971-2000 avg.	'08	121 136	304 338	568 581	743 736	639 668	437 393	2,812 2,852
	DFA		-15	-34	-13	7	-29	44	-40
	Precip inches 1971-2000 avg.	'08	3.31 2.71	5.9 3.33	4.9 3.52	2.46 2.64	0.76 2.32	1.07 2.27	18.40 16.79
	DFA		0.60	2.57	1.38	-0.18	-1.56	-1.20	1.61
Mitchell (Geddes)	Avg.Temp°F '08 1971-2000 avg.		44 47	51 59	68 69	76 74	73 72	66 62	
	DFA		-3	-8	-1	2	1	4	
	Accum GDD's '08 1971-2000 avg.		134 164	302 360	553 596	765 761	714 720	482 439	2,950 3,040
	DFA		-30	-58	-43	4	-6	43	-90

Table B. Nearest weather station precipitation and growing degree	day (GDD) accumulation and average daily temperatures for each
growing season month in 2008 and their departures from average. (c	continued)

\* DFA - departure from normal, difference current year is greater or less (-) than the long-term average.

	Brand/Hybrid	Seed Biotech Traits *	Table No. (s)
	AGSOURCE/ 3A-095 RR AGSOURCE/ 3C-007RR/YGCB AGSOURCE/ 3C-104RR/YGCB AGSOURCE/ 3C-505RR/YGCB AGSOURCE/ 3P-400RR/YGPL	Gly Cb,Gly Cb,Gly Cb, Gly Cb,Crw,Gly	1a, 2a 3b, 4b, 5a 5a 3b, 4b, 5a 1b, 2b
	AGSOURCE/ 3T-006A VT3 AGSOURCE/ 3T-096 VT3 AGSOURCE/ 3T-110 VT3 AGSOURCE/ 3T-302 VT3 AGSOURCE/ 3T-303 VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	3b 1a, 2a 6a 3a 4b
	AGSOURCE/ 3T-303A VT3 AGSOURCE/ 3T-310 VT3 AGSOURCE/ 3T-311 VT3 AGSOURCE/ 3T-393 VT3 AGSOURCE/ 3T-399 VT3	WBcw,Cb,Bcw,Faw,MCrw,NCrw,WCrw,Glu,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	3b, 4b, 5a 5b, 6a 6a 1a, 2a 1b, 2b
	AGSOURCE/ 3T-409 VT3 AGSOURCE/ 3T-495 VT3 AGSOURCE/ 3T-603 VT3 AGSOURCE/ 3T-710 VT3 AGSOURCE/ 3T-799 VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,MCrw,NCrw,WCrw,Glu,Gly Cb,Crw,Gly Cb,Crw,Gly	5b, 6a 1a, 2a 3b, 4b, 5a 5b, 6a 1b, 2b, 3a, 4a
	AGSOURCE/ 3T-908 VT3 AGSOURCE/ 3T-995 VT3 AGSOURCE/ 5H-597 RR/HX AGSOURCE/ 5H-599 RR/HX AGSOURCE/ 5N-898GTCBLLRW	Cb,Crw,Gly Cb,Crw,Gly WBcw,Cb,Bcw,Faw,Glu,Gly WBcw,Cb,Bcw,Faw,Glu,Gly Cb,MCrw,NCrw,WCrw,Glu,Gly	5b 1a, 2a 1a, 2a, 3a, 4a 4a 1b, 2b, 3a, 4a
	AGSOURCE/ 5X-201+HXT/RR DAIRYLAND/ STEALTH-6208 DAIRYLAND/ STEALTH-7891 DAIRYLAND/ STEALTH-9003 DAIRYLAND/ STEALTH-9005	WBcw,Cb,Bcw,Faw,MCrw,NCrw,WCrw,Glu,Gly Gly Cb,Gly,Glu Cb,Crw,Gly Cb,Crw,Gly	1b, 2b, 3a, 4a 5b, 6a 2a 4b 5a
F	DAIRYLAND/ STEALTH-9006 DAIRYLAND/ STEALTH-9196 DAIRYLAND/ STEALTH-9110 DAIRYLAND/ STEALTH-9417 DAIRYLAND/ STEALTH-9594	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Gly	6a 1b, 2b 6a 2b 1a, 2a
	DAIRYLAND/ STEALTH-9799 DAIRYLAND/ STEALTH-9902 DEKALB/ DKC42-91(VT3) DEKALB/ DKC43-27(VT3) DEKALB/ DKC46-60(VT3)	Cb,Crw,Gly Cb,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1b, 3a, 4a 1b, 3b, 4b 1a, 2a 1a, 2a, 3a, 4a, 5a 1b, 2b, 3a, 4a
	DEKALB/ DKC48-37(VT3) DEKALB/ DKC50-44(VT3) DEKALB/ DKC52-59(VT3) DEKALB/ DKC53-17(VT3) DEKALB/ DKC53-41(VT3)	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1b, 2b 1b, 2b 1b, 2b, 3b, 4b, 5a, 6a 3b, 4b, 5a, 6a 1b, 2b, 3b, 4b, 5a, 6a
	DEKALB/ DKC55-24(VT3) DEKALB/ DKC58-16(VT3) DEKALB/ DKC61-69(VT3) DEKALB/ DKC63-42(VT3) EPLEY/ E1165RR	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Gly	3b, 4b, 5a, 6a 5b, 6a 5b, 6b 6b 3a, 4a, 5a
	EPLEY/ E1225RR EPLEY/ E1254 VT3 EPLEY/ E1265RR EPLEY/ E1475RR EPLEY/ E1525RR	Gly Gly Gly Gly Gly	3a, 4a, 5a 3a, 5a 3a, 4a, 5a 3b, 4b, 5a 5a, 3b, 4b
	FARM ADVANTAGE/ 6894 FARM ADVANTAGE/ 87A10GL FARM ADVANTAGE/ 87A99GL FARM ADVANTAGE/ 9803GL FARM ADVANTAGE/ 9890GL	Gly Cb,Crw,Glu,Gly Cb,MCrw,NCrw,WCrw,Glu,Gly Cb,Gly,Glu Cb,Gly,Glu	1a, 2a 5b, 6a 1b, 2b, 3a, 4a 3b, 4b, 5a, 6a 1a, 2a
	* The key to biotech traits is listed	l at the end of this table.	

 Table C. 2008 Glyphosate-resistant corn hybrid entries by brand/hybrid, seed product traits, and index to performance table no. (s).

Brand/Hybrid	Seed Biotech Traits *	Table No. (s)
FIELDERS CHOICE/ NG6510	Cb,Crw,Gly	1b
FIELDERS CHOICE/ NG6520	Cb,Crw,Gly	2b, 3a, 4a
FIELDERS CHOICE/ NG6583	Cb,Crw,Gly	2b, 4b
FIELDERS CHOICE/ NG6686	Cb,Crw,Gly	5b, 6a
FONTANELLE/ 5T128	Cb,Crw,Gly	5a
FONTANELLE/ 5T750	Cb,Crw,Gly	5a
FONTANELLE/ 6T226	Cb,Crw,Gly	5a, 6a
FONTANELLE/ 7N771	Cb, Gly	6a
FONTANELLE/ 7T231	Cb,Crw,Gly	6a
FOUR STAR/ 6844VT3	Cb,Crw,Gly	6a
FOUR STAR/ 6861VT3	Cb,Crw,Gly	6a
FOUR STAR/ 6862VT3	Cb,Crw,Gly	6a
FOUR STAR/ 6863VT3	Cb,Crw,Gly	6a
FOUR STAR/ 8843HXTRRLL	Cb,Bcw,WBcw,Faw,NCrw,WCrw,Gly,Glu	6a
FOUR STAR/ 9956VT3	"Cb,Crw,Gly"	6a
G2 GENET./ 3A-513 RR	Cb,Gly	6b
G2 GENET./ 5H-004 RR/HX	WBcw,Cb,Bcw,Faw,Gly,Glu	3b
G2 GENET./ 5H-298 RR/HX	WBcw,Cb,Bcw,Faw,Gly,Glu	1b, 2b, 3a, 4a
G2 GENET./ 5H-501 RR/HX	WBcw,Cb,Bcw,Faw,Gly,Glu	2b, 3a, 4a
G2 GENET./ 5H-506 RR/HX	WBcw,Cb,Bcw,Faw,Gly,Glu	3b, 4b, 5a, 6a
G2 GENET./ 5H-506A RR/HX	WBcw,Cb,Bcw,Faw,Gly,Glu	3b, 4b, 5a, 6a
G2 GENET./ 5H-508 RR/HX	WBcw,Cb,Bcw,Faw,Gly,Glu	3b, 4b, 5b, 6a
G2 GENET./ 5H-702 RR/HX	WBcw,Cb,Bcw,Faw,Gly,Glu	1b, 2b
G2 GENET./ 5H-906 RR/HX	WBcw,Cb,Bcw,Faw,Gly,Glu	3b, 4b, 5a, 6a
G2 GENET./ 5H-911 RR/HX	WBcw,Cb,Bcw,Faw,Gly,Glu	6a
GCS/ 100-07VT3 GCS/ 102-04VT3 GCS/ 102-04VT3 GCS/ 102-04VT3 GCS/ 107-01CBRCRW GCS/ 92-03VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	3a, 4a 3b, 4b 6a 6a 1a, 2a
GCS/ 94-04VT3	Cb,Crw,Gly	1a, 2a, 3a, 4a
GCS/ 96-08VT3	Cb,Crw,Gly	1a, 2a, 3a, 4a
GCS/ 98-10VT3	Cb,Crw,Gly	1b, 2b, 3a, 4a
HEINE/ H633RR	Gly	5a
HEINE/ H711RR	Gly	5a
HEINE/ H724VT3 HEINE/ H742RRCRW HEINE/ H747RRYGCB HEINE/ H815VT3 HEINE/ H816VT3	Cb,Crw,Gly Crw,Gly Cb, Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	5a 5a, 6a 6a 5b, 6a 5b, 6a
HEINE/ H817VT3	Cb,Crw,Gly	5b, 6a
HEINE/ H835VT3	Cb,Crw,Gly	6a
HOEGEMEYER/ 3113VTRR	Cb,Crw,Gly	4a
HOEGEMEYER/ 5353VTRR	Cb,Crw,Gly	6a
HOEGEMEYER/ 8192HXRR	WBcw,Cb,Bcw,Faw,Gly,Glu	4b, 5a
HOEGEMEYER/ EXP 800	Gly	5a
KALTENBERG/ 4486RRLLBTHX	WBcw,Cb,Bcw,Faw,Gly,Glu	4a
KALTENBERG/ 5232RRLLBTHX	WBcw,Cb,Bcw,Faw,Gly,Glu	5a
KALTENBERG/ 6355RRLLBTHX	WBcw,Cb,Bcw,Faw,Gly,Glu	6a
KALTENBERG/ K3843RRPLUS	Cb,MCrw,NCrw,WCrw,Glu,Gly	2a
KALTENBERG/ K4263VT3	Cb,MCrw,NCrw,WCrw,Glu,Gly	2b, 4a
KALTENBERG/ K4433VT3	Cb,Crw,Gly	4a
KALTENBERG/ K5163VT3	Cb,Crw,Gly	5a
KALTENBERG/ K6663VT3	Cb,MCrw,NCrw,WCrw,Glu,Gly	6a
KRUGER/ 1295RR	Gly	1a, 2a
KRUGER/ 1490RR	Gly	1a, 2a
KRUGER/ 2090RR/YGCB	Cb,Gly	1a, 2a
KRUGER/ 2115RR/YGCB	Cb,Gly	6b
KRUGER/ 2808RR/YGCB	Cb,Bcw,WBcw,Faw,NCrw,WCrw,Gly,Glu	6b
KRUGER/ 3300RR/HX	WBcw,Cb,Bcw,Faw,Gly,Glu	3a, 4a

 Table C. 2008 Glyphosate-resistant corn hybrid entries by brand/hybrid, seed product traits, and index to performance table no.(s) (Continued).

Brand/Hybrid	Seed Biotech Traits *	Table No. (s)
KRUGER/ 6006VT3 KRUGER/ 6007TS KRUGER/ 6011TS KRUGER/ 6015VT3 KRUGER/ 6093VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	3b, 4b, 5b 3b, 4b, 5b, 6a 6b 6b 1a, 2a
KRUGER/ 6094VT3 KRUGER/ 6097VT3 KRUGER/ 6102VT3 KRUGER/ 6111TS KRUGER/ 6114VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1a, 2a 1b, 2b, 3a, 4a 1b, 2b, 3b, 4b, 5a 5b, 6a 6b
KRUGER/ 6208VT3 KRUGER/ 6210TS KRUGER/ 6212TS KRUGER/ 6213VT3 KRUGER/ 6298VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	5b, 6a 5b, 6a 6b 6b 1b, 2b, 3a, 4a
KRUGER/ 6400TS KRUGER/ 6401VT3 KRUGER/ 6411VT3 KRUGER/ 6499VT3 KRUGER/ 6503TS	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Bcw,WBcw,Faw,NCrw,WCrw,Gly,Glu	1b, 2b 1b, 2b, 3b, 4b, 5a 6b 1b, 2b, 3a, 4a 4b, 5a
KRUGER/ 6606VT3 KRUGER/ 6697VT3 KRUGER/ 9414RR/HXT NC+/ 1557 VT3 NC+/ 1775 VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Bcw,WBcw,Faw,NCrw,WCrw,Gly,Glu Cb,Crw,Gly Cb,Crw,Gly	3b, 4b, 5b 1b, 2b, 3a, 4a 6b 3a, 4a 3a, 4a, 5a
NC+/ 1887 VT3 NC+/ 1981 R NC+/ 2174 VT3 NC+/ 3613 VT3 NC+/ 4022 VT3	Cb,Crw,Gly Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	3a 3a, 4a, 5a 4b 5a, 6a 5b, 6a
NC+/ 4252 VT3 NC+/ 4582 VT3 NC+/ 5403 VT3 NUTECH/ 3C-006 RR/YGCB NUTECH/ 3C-104 RR/YGCB	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Gly Cb,Gly Cb,Gly	5b, 6a 6a 6b 4b 5a
NUTECH/ 3C-300 RR/YGCB NUTECH/ 3C-408 RR/YGCB NUTECH/ 3C-907 RR/YGCB NUTECH/ 3P-098 RR/YGPL NUTECH/ 3P-098A RR/YGPL	Cb,Gly Cb,Gly Cb,Gly Cb,Crw,Gly Cb,Crw,Gly	1b, 2b 3b, 4b, 5b, 6a 4b 3a 1a, 2a
NUTECH/ 3P-302 RR/YGPL NUTECH/ 3P-494+ RR/YGPL NUTECH/ 3P-708 RR/YGPL NUTECH/ 3T-012 VT3 NUTECH/ 3T-096A VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	2b 1a, 2a 3b, 5b, 6a 6b 1a, 2a, 4a
NUTECH/ 3T-098 VT3 NUTECH/ 3T-098A VT3 NUTECH/ 3T-101+ VT3 NUTECH/ 3T-109 VT3 NUTECH/ 3T-213 VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1b, 2b, 3a, 4a 1a, 2a 1b, 2b 5b, 6a 6b
NUTECH/ 3T-500 VT3 NUTECH/ 3T-500A VT3 NUTECH/ 3T-595 VT3 NUTECH/ 3T-808 VT3 NUTECH/ 3T-808A VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1b, 2b 3b 1a, 2a 3b, 4b, 5b 6a
NUTECH/ 3T-809 VT3 NUTECH/ 3T-912 VT3 NUTECH/ 3W-403 RR/YGRW NUTECH/ 5H-512 RR/HXT	Cb,Crw,Gly Cb,Crw,Gly Crw,Gly Crw,Gly WBcw,Cb,Bcw,Faw,MCrw,NCrw,WCrw,Glu,Gly	5b, 6a 6b 3b, 4b, 5a 6b

 Table C. 2008 Glyphosate-resistant corn hybrid entries by brand/hybrid, seed product traits, and index to performance table no.(s) (Continued).

Table C. 2008 Glyphosate-resistant corn hybrid entries by brand/hybrid, seed product
traits, and index to performance table no.(s) (Continued).

Brand/Hybrid	Seed Biotech Traits *	Table No. (s)
PIONEER/ 35F40	WBcw,Cb,Bcw,Faw,Glu,Gly	3b, 4b, 5a, 6a
PIONEER/ 36V53	WBcw,Cb,Bcw,Faw,Glu,Gly	1b, 3b, 4b, 5a, 6a
PIONEER/ 38H08	WBcw,Cb,Bcw,Faw,Glu,Gly	1a, 2a
REA/ 4T105	Cb,Crw,Gly	2a
REA/ 4T417	Cb,Crw,Gly	1a, 2a
REA/ 4T722 REA/ 5T128 RENK/ RK488RRYGPL RENK/ RK570VT3 RENK/ RK575VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1a 1b, 2b 1b, 2b 1b, 2b 1b, 2b, 3a, 4a
RENK/ RK670VT3	Cb,Crw,Gly	3b, 4b
RENK/ RK698RRYGRW	Crw,Gly	5b, 6a
RENK/ RK760RRYGCB	Cb,Gly	4b, 5b
RENK/ RK770VT3	Cb,Crw,Gly	5b, 6a
RENK/ RK822VT3	Cb,Crw,Gly	5b, 6a
SEEDS 2000/ 3122RR/BT	Cb,Gly	3b, 4b
SEEDS 2000/ 9501VT3	Cb,Crw,Gly	1a, 2a
SEEDS 2000/ 9901VT3	Cb,Crw,Gly	1b, 2b, 3a, 4a
WENSMAN/ W7107VT3	Cb,Crw,Gly	1a, 2a
WENSMAN/ W7143VT3	Cb,Crw,Gly	1a, 2a
WENSMAN/ W7267VT3 WENSMAN/ W7273VT3 WENSMAN/ W7289VT3 WENSMAN/ W7309VT3 WENSMAN/ W7360BTRWRR	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1b, 2b, 3a, 4a 1b, 2b, 3a, 4a 3a, 4a 3b, 4b 3b, 4b, 5a
WENSMAN/ W7433VT3	Cb,Crw,Gly	5a
WENSMAN/ W7455VT3	Cb,Crw,Gly	5b, 6a
WENSMAN/ W7469VT3	Cb,Crw,Gly	5b, 6a
WENSMAN/ W7562VT3	Cb,Crw,Gly	6b

\* Key to biotech traits that impart resistance, tolerance, or protection:

Insect traits - Black cutworm (Bcw), Corn borer (Cb), corn rootworm (Crw), Mexican Corn rootworm (MCrw), Northern Corn rootworm (NCrw), Western Corn rootworm (WCrw), Fall Armyworm (Faw), and Western Bean cutworm (WBcw)

Herbicide traits - Glyphosate tolerance (Gly), Glufosinate tolerance (Glu).

NOTE: Biotech traits were obtained by referencing the product registrant trade name and seed characteristics as listed in the Know Before You Grow section at the National Corn Growers Website (http://www. ncga.com/) with the hybrid information supplied by each seed company. Since these biotech seed products change over time, growers are encouraged to verify the biotech traits of any hybrid (s) of interest with the respective seed dealer.

Table D.	Explanation	of perf	ormance ta	blei	footnotes.
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No.	Explanation of footnotes
[1]	Entries are listed by Brand/Variety- Entries are sorted by 2-yr then by 2008 yield average.
[2]	Brand Relative Maturity (Rel. Mat.)- the relative maturity rating as reported by the seed company.
[3]	Lodging Percentage– percentage of stalks broken below the ear at harvest.
[4]	Final Stand Percentage – the number of standing stalks at harvest as a percentage of the seeded population.
[5]	Least Significant Difference (LSD 0.05) – the difference two values within a column must equal or exceed to be significantly different (0.05 level of probability). If their difference Is less than the LSD value the difference is nonsignificant (NS).
[6]	Min. TPG-avg.— the minimum column value for yield, bushel weight, and final stand percentage that a hybrid must equal or exceed to be in the TPG.
[7]	Max. TPG-avg.— the maximum column value for grain moisture at harvest, lodging percentage, or lodging score that a hybrid must equal or be less than to be in the TPG.
[8]	Coefficient of variation (C.V.) - the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% are less common while values of 6-15% are more common. If values exceed 15%; the trial contained too much experimental error to be valid; so data for that trial was not reported.

	Del	Yield A	verages	Other 2008 Averages				
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
NUTECH/ 3T-098A VT3 + Cruiser 250	95	198	195	54	24	0	98	
NUTECH/ 3P-098A RR/YGPL + Cruiser 250	95	196	197	55	24	1	98	
AGSOURCE/ 3T-995 VT3 + Poncho 250	95	192	189	55	23	9	92	
NUTECH/ 3P-494+ RR/YGPL + Cruiser 250	94	191	191	55	22	3	96	
NUTECH/ 3T-595 VT3 + Cruiser 250	95	185	180	55	21	5	98	
AGSOURCE/ 3T-096 VT3 + Cruiser 250 KRUGER/ 2090RR/YGCB + Cruiser 250 KRUGER/ 1490RR + Cruiser 250 GCS/ 96-08VT3 + Poncho 250 REA/ 4T417 + Poncho 250	95 90 90 95 92	183 179 165	177 176 153 207 203	55 57 58 53 56	24 17 19 23 23	4 20 5 5 4	81 98 98 99 99 98	
AGSOURCE/ 5H-597 RR/HX + Poncho 250	95		202	53	27	1	94	
REA/ 4T722 + Poncho 250	95		199	55	23	1	99	
GCS/ 94-04VT3 + Poncho 250	94		195	57	23	5	96	
KRUGER/ 6094VT3 + Cruiser 250	94		194	57	21	4	95	
PIONEER/ 38H08 + Poncho 1250	92		193	53	16	10	95	
KRUGER/ 1295RR + Cruiser 250	95		192	56	20	5	100	
DEKALB/ DKC43-27(VT3) + Poncho 250	93		191	56	19	0	97	
SEEDS 2000/ 9501VT3 + Poncho 250	95		189	55	20	2	100	
WENSMAN/ W7143VT3 + Poncho 250	93		187	58	20	4	92	
AGSOURCE/ 3A-095 RR + Poncho 250	95		185	56	21	3	86	
GCS/ 92-03VT3 + Poncho 250	92		184	55	22	1	100	
DAIRYLAND/ STEALTH-9594 + Poncho 250	94		182	56	19	12	91	
NUTECH/ 3T-096A VT3 + Cruiser 250	95		181	56	24	2	84	
WENSMAN/ W7107VT3 + Poncho 250	90		181	56	21	7	89	
AGSOURCE/ 3T-393 VT3 + Cruiser 250	93		180	55	21	3	97	
KRUGER/ 6093VT3 + Cruiser 250	93	· · · /	179	55	24	3	96	
AGSOURCE/ 3T-495 VT3 + Poncho 250	95		175	53	16	12	96	
DEKALB/ DKC42-91(VT3) + Poncho 250	92		174	56	19	17	97	
FARM ADVANTAGE/ 9890GL + Cruiser 250	90		172	55	16	24	92	
FARM ADVANTAGE/ 6894 + Cruiser 250	94		169	55	23	20	89	
Trial avg.: High avg.: Low avg.: [5] LSD(.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	94 95 90 30	186 198 165 13 186 5	186 207 153 17 191 6 30	55 58 53 2 57 2 30	21 27 16 2	6 24 0 7 7 69 30	95 100 81 5 96 3 30	

#### Table 1a. Warner early maturity Roundup Ready corn hybrid test results, 2007-08, Allen & Inel Ryckman Farm, Seeded May 13, 2008 at 28,750 seeds per acre.

		Yield A	verages	Other 2008 Averages				
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
SEEDS 2000/ 9901VT3 + Poncho 250 KRUGER/ 6499VT3 + Cruiser 250 DEKALB/ DKC46-60(VT3) + Poncho 250 NUTECH/ 3T-098 VT3 + Cruiser 250 WENSMAN/ W7267VT3 + Poncho 250	99 99 96 98 97	197 194 192 192 191	210 200 199 196 192	55 54 54 54 54	23 24 22 24 22 24 22	2 1 1 3	99 95 93 86 95	
FIELDERS CHOICE/ NG6510 + Poncho 250 DAIRYLAND/ STEALTH-9196 + Poncho 250 AGSOURCE/ 3T-799 VT3 + Cruiser 250 DAIRYLAND/ STEALTH-9799 + Poncho 250 GCS/ 98-10VT3 + Poncho 250	98 96 99 99 98	187 186 185 184 178	180 193 187 189 175	54 55 52 54 53	25 23 25 22 22 22	4 5 2 2 3	86 88 94 99 97	
RENK/ RK488RRYGPL + Poncho 250 PIONEER/ 36V53 + Poncho 1250 KRUGER/ 6401VT3 + Cruiser 250 DEKALB/ DKC50-44(VT3) + Poncho 250 DEKALB/ DKC52-59(VT3) + Poncho 250	96 102 101 100 102	176	179 218 217 207 205	55 51 53 54 53	22 25 26 25 26	7 1 4 6 3	95 98 97 93 92	
KRUGER/ 6102VT3 + Cruiser 250 KRUGER/ 6097VT3 + Cruiser 250 AGSOURCE/ 3P-400RR/YGPL + Cruiser 250 G2 GENET./ 5H-298 RR/HX + Poncho 250 WENSMAN/ W7273VT3 + Poncho 250	102 97 100 98 98	• • • •	205 202 201 200 199	56 52 53 53 54	23 23 26 23 22	3 4 1 0 4	99 95 95 97 96	
AGSOURCE/ 3T-399 VT3 + Poncho 250 AGSOURCE/ 5N-898GTCBLLRW + Poncho 250 RENK/ RK570VT3 + Poncho 250 DEKALB/ DKC53-41(VT3) + Poncho 250 KRUGER/ 6298VT3 + Cruiser 250	99 98 96 103 98		198 197 196 193 191	54 53 53 54 54	24 24 22 23 21	22 4 0 17 4	99 98 92 94 97	
AGSOURCE/ 5X-201+HXT/RR + Poncho 250 REA/ 5T128 + Poncho 250 NUTECH/ 3C-300 RR/YGCB + Poncho 250 NUTECH/ 5H-599 RR/HX + Poncho 250 NUTECH/ 3T-500 VT3 + Poncho 250	100 100 100 99 100		189 188 186 185 185	51 53 54 51 54	27 25 22 25 23	1 2 11 1 7	94 98 92 91 98	
G2 GENET./ 5H-702 RR/HX + Poncho 250 FARM ADVANTAGE/ 87A99GL + Cruiser 250 DEKALB/ DKC48-37(VT3) + Poncho 250 RENK/ RK575VT3 + Poncho 250 KRUGER/ 6697VT3 + Cruiser 250	100 99 98 97 96		185 184 182 181 178	53 53 55 53 55	24 24 22 23 21	12 7 6 3 5	88 94 94 91 91	
KRUGER/ 6400TS + Cruiser 250 DAIRYLAND/ STEALTH-9902 + Poncho 250 NUTECH/ 3T-101+ VT3 + Poncho 250	100 102 100	• • •	178 177 169	55 54 52	20 23 26	19 8 5	95 90 82	
Trial avg.: High avg.: Low avg.: [5] LSD(.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.:	99 103 96	187 197 176 16 182 5	192 218 169 19 200 6	54 56 51 2 55 2	23 27 20 2 21 5	5 22 0 7 7 83	94 99 82 6 94 4	
No. entries:	38	11	38	38	38	38	38	

#### Table 1b. Warner late maturity Roundup Ready corn hybrid test results, 2007-08, Allen & Inel Ryckman Farm. Seeded May 13, 2008 at 28,750 seeds per acre.

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2008 yield average. Note that additional table footnotes are explained in table D.

Table 2a. South Shore early maturity I	oundup Ready corn hybrid test results, 2007-08, Northeast Research Farm.
Seeded May 14, 2008 at 28,750 seeds	er acre.

	Dol Mot	Yield A	verages	Other 2008 Averages			
Brand/Hybrid + Seed Treatment [1]	[2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Score [*]	Final Stand Pctg [4]
AGSOURCE/ 3T-995 VT3 + Poncho 250 NUTECH/ 3T-595 VT3 + Cruiser 250 AGSOURCE/ 3T-096 VT3 + Cruiser 250 KRUGER/ 2090RR/YGCB + Cruiser 250	95 95 95 90	182 181 180 176	191 176 171 168	53 54 55 55	23 22 24 20	3 3 3 3	97 96 95 95
SEEDS 2000/ 9501VT3 + Poncho 250 NUTECH/ 3P-098A RR/YGPL + Cruiser 250 KRUGER/ 1490RR + Cruiser 250 NUTECH/ 3T-098A VT3 + Cruiser 250	95 95 90 95	167 166 165 164	152 139 159 147	54 54 56 54	20 22 20 22	1 1 3 1	98 97 97 98
NUTECH/ 3P-494+ RR/YGPL + Cruiser 250 DEKALB/ DKC43-27(VT3) + Poncho 250 FARM ADVANTAGE/ 6894 + Cruiser 250 DEKALB/ DKC42-91(VT3) + Poncho 250	94 93 94 92	153	113 192 177 175	52 55 54 56	24 21 23 21	2 3 2 3	100 97 96 95
GCS/ 94-04VT3 + Poncho 250 PIONEER/ 38H08 + Poncho 1250 GCS/ 92-03VT3 + Poncho 250 AGSOURCE/ 5H-597 RR/HX + Poncho 250	94 92 92 95		173 172 172 172	54 53 55 51	24 22 24 27	4 3 3 3	95 97 96 95
WENSMAN/ W7107VT3 + Poncho 250 KRUGER/ 6093VT3 + Cruiser 250 KRUGER/ 1295RR + Cruiser 250 DAIRYLAND/ STEALTH-7891 + Poncho 250	90 93 95 91		171 169 169 168	56 53 52 55	19 24 22 18	3 3 4 3	96 96 96 97
REA/ 4T417 + Poncho 250 WENSMAN/ W7143VT3 + Poncho 250 KRUGER/ 6094VT3 + Cruiser 250 FARM ADVANTAGE/ 9890GL + Cruiser 250	92 93 94 90		168 167 166 164	54 56 55 54	24 22 24 18	3 3 3 4	98 98 97 96
NUTECH/ 3T-096A VT3 + Cruiser 250 AGSOURCE/ 3A-095 RR + Poncho 250 REA/ 4T105 + Poncho 250 KALTENBERG/ K3843RRPLUS + Poncho 250	95 95 95 95		162 150 148 144	53 55 53 51	24 22 21 23	3 2 1 3	94 99 96 95
AGSOURCE/ 3T-495 VT3 + Poncho 250 AGSOURCE/ 3T-393 VT3 + Cruiser 250 DAIRYLAND/ STEALTH-9594 + Poncho 250 GCS/ 96-08VT3 + Poncho 250	95 93 94 95		144 142 139 135	52 54 54 54	19 21 16 19	4 2 3 1	91 96 96 99
Trial avg.: High avg.: Low avg.: [5] LSD(.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	93 95 90 32	170 182 153 NS 153 8 9	161 192 113 21 172 8 32	54 56 51 2 55 2 32	22 27 16 3 18 6 32	3 4 1 1 23 32	96 100 91 NS 91 2 32

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2008 yield average. Note that additional table footnotes are explained in table D.
 [\*] Lodging scores: 0= all plants erect, 3= 50% of plants lodged at 45°-angle, 5= all plants flat. This trial was exposed to extremely high winds on July 31, 2008. To facilitate the collection of lodging data following these high winds lodging was accessed as a lodging score as opposed to a lodging percentage that was collected at other test trials.

	Dol Mot	Yield A	verages	Other 2008 Averages			
Brand/Hybrid + Seed Treatment [1]	[2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Score [*]	Final Stand Pctg [4]
DEKALB/ DKC46-60(VT3) + Poncho 250 RENK/ RK488RRYGPL + Poncho 250 DAIRYLAND/ STEALTH-9497 + Poncho 250 NUTECH/ 3P-302 RR/YGPL + Cruiser 250 SEEDS 2000/ 9901VT3 + Poncho 250	96 96 97 100 99	187 185 182 179 174	191 178 184 166 179	52 54 52 51 51	23 21 22 27 25	3 3 3 4 4	97 97 96 98 98
GCS/ 98-10VT3 + Poncho 250 AGSOURCE/ 3T-799 VT3 + Cruiser 250 NUTECH/ 3T-098 VT3 + Cruiser 250 DAIRYLAND/ STEALTH-9196 + Poncho 250 WENSMAN/ W7267VT3 + Poncho 250	98 99 98 96 97	171 167 166 165 163	157 161 150 150 150	54 52 53 54 53	23 24 24 21 23	1 1 1 1	97 96 97 97 96
KRUGER/ 6499VT3 + Cruiser 250 KRUGER/ 6102VT3 + Cruiser 250 DEKALB/ DKC48-37(VT3) + Poncho 250 KRUGER/ 6298VT3 + Cruiser 250 WENSMAN/ W7273VT3 + Poncho 250	99 102 98 98 98	157	143 188 184 184 183	54 53 54 54 52	21 24 23 23 23 23	1 3 3 3 3	97 97 97 98 97
G2 GENET./ 5H-702 RR/HX + Poncho 250 DEKALB/ DKC50-44(VT3) + Poncho 250 AGSOURCE/ 5N-898GTCBLLRW + Poncho 250 FARM ADVANTAGE/ 87A99GL + Cruiser 250 DEKALB/ DKC53-41(VT3) + Poncho 250	100 100 98 99 103		181 179 177 175 174	53 52 52 52 52 51	24 25 26 26 26	3 4 2 3 4	97 97 98 97 98
AGSOURCE/ 3T-399 VT3 + Poncho 250 AGSOURCE/ 3P-400RR/YGPL + Cruiser 250 NUTECH/ 3C-300 RR/YGCB + Poncho 250 NUTECH/ 3T-500 VT3 + Poncho 250 RENK/ RK575VT3 + Poncho 250	99 100 100 100 97		173 173 172 171 171	55 53 51 53 53 52	24 24 25 25 21	3 3 2 2	96 98 96 97 97
KALTENBERG/ K4263VT3 + Poncho 250 KRUGER/ 6400TS + Cruiser 250 KRUGER/ 6401VT3 + Cruiser 250 FIELDERS CHOICE/ NG6583 + Poncho 250 G2 GENET./ 5H-298 RR/HX + Poncho 250	98 100 101 102 98		171 169 167 166 163	53 52 50 52 52 52	23 25 27 27 23	3 4 4 3	95 97 94 93 96
NUTECH/ 3T-101+ VT3 + Poncho 250 G2 GENET./ 5H-501 RR/HX + Poncho 250 KRUGER/ 6697VT3 + Cruiser 250 DEKALB/ DKC52-59(VT3) + Poncho 250 KRUGER/ 6097VT3 + Cruiser 250	100 100 96 102 97		157 156 154 150 148	52 51 52 51 51 51	25 26 22 23 22	2 4 1 2 2	99 95 98 100 97
AGSOURCE/ 5X-201+HXT/RR + Poncho 250 FIELDERS CHOICE/ NG6520 + Poncho 250 RENK/ RK570VT3 + Poncho 250 REA/ 5T128 + Poncho 250	100 98 96 100		147 140 138 137	52 52 52 52 52	26 22 22 24	3 2 2 1	98 98 98 97
Trial avg.: High avg.: Low avg.: [5] LSD(.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	99 103 96 39	172 187 157 25 163 5 11	166 191 137 16 176 6 39	52 55 50 3 53 3 39	24 27 21 3 23 5 39	3 4 1 1 25 39	97 100 93 NS 93 2 39

#### Table 2b. South Shore late maturity Roundup Ready corn hybrid test results, 2007-08, Northeast Research Farm. Seeded May 14, 2008 at 28,750 seeds per acre.

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2008 yield average. Note that additional table footnotes are explained in table D.
 [\*] Lodging scores: 0= all plants erect, 3= 50% of plants lodged at 45°-angle, 5= all plants flat. This trial was exposed to extremely high winds on July 31, 2008. To facilitate the collection of lodging data following these high winds lodging was accessed as a lodging score as opposed to a lodging percentage that was collected at other test trials.

	Del	Yield Averages		Other 2008 Averages			
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
DAIRYLAND/ STEALTH-9799 + Poncho 250	99	212	212	55	18	5	95
WENSMAN/ W7267VT3 + Poncho 250	97	205	204	55	18	8	100
NUTECH/ 3P-098 RR/YGPL + Cruiser 250	98	203	197	55	17	3	95
KRUGER/ 6499VT3 + Cruiser 250	99	200	193	55	17	6	98
DEKALB/ DKC46-60(VT3) + Poncho 250	96	198	198	57	18	4	96
AGSOURCE/ 3T-799 VT3 + Cruiser 250	99	195	190	55	19	4	97
WENSMAN/ W7289VT3 + Poncho 250	99	194	210	57	19	8	100
GCS/ 100-07VT3 + Poncho 250	100	190	214	56	18	3	100
GCS/ 98-10VT3 + Poncho 250	98	189	192	54	19	3	96
EPLEY/ E1165RR + Not reported	95	188	183	55	17	4	99
EPLEY/ E1225RR + Not reported	98	184	179	55	19	2	93
NC+/ 1557 VT3 + Cruiser 250	95		205	57	19	2	97
NC+/ 1775 VT3 + Cruiser 250	97	• • •	205	55	18	2	95
G2 GENET./ 5H-501 RR/HX + Poncho 250	100		202	55	20	4	94
FIELDERS CHOICE/ NG6520 + Poncho 250	98		200	54	18	17	99
NC+/ 1981 R + Cruiser 250	99		200	53	19	7	100
GCS/ 96-08VT3 + Poncho 250	95	• • •	200	53	17	8	98
DEKALB/ DKC48-37(VT3) + Poncho 250	98		197	56	19	3	96
KRUGER/ 6097VT3 + Cruiser 250	97		197	53	18	10	100
DEKALB/ DKC43-27(VT3) + Poncho 250	93		196	56	17	1	99
KRUGER/ 3300RR/HX + Cruiser 250	100	• • •	196	53	21	2	96
WENSMAN/ W7273VT3 + Poncho 250	98		196	54	18	9	98
G2 GENET./ 5H-298 RR/HX + Poncho 250	98		194	56	19	1	99
NC+/ 1887 VT3 + Cruiser 250	98		194	54	18	4	98
KRUGER/ 6298VT3 + Cruiser 250	98		192	56	18	2	99
NUTECH/ 3C-300 RR/YGCB + Poncho 250	100		191	55	18	4	96
DEKALB/ DKC50-44(VT3) + Poncho 250	100		190	55	19	13	97
NUTECH/ 3T-500 VT3 + Poncho 250	100		190	56	20	5	95
EPLEY/ E1265RR + Not reported	100	· · · ·	190	54	18	4	99
SEEDS 2000/ 9901VT3 + Poncho 250	99		190	56	19	8	97
AGSOURCE/ 5X-201+HXT/RR + Poncho 250	100		190	53	22	3	94
NUTECH/ 3T-098 VT3 + Cruiser 250	98		189	54	17	5	92
EPLEY/ E1254 VT3 + Not reported G2 GENET./ 5H-702 RR/HX + Poncho 250 GCS/ 94-04VT3 + Poncho 250 RENK/ RK575VT3 + Poncho 250	95 100 94 97		189 188 188 188 187	56 56 56 54	20 21 18 18	7 7 9 12	95 96 100 99
KRUGER/ 6400TS + Cruiser 250 AGSOURCE/ 3T-302 VT3 + Cruiser 250 AGSOURCE/ 5H-597 RR/HX + Poncho 250 NUTECH/ 3P-302 RR/YGPL + Cruiser 250	100 100 95 100		186 186 185 184	56 55 52 56	19 21 23 21	6 2 2 2	96 93 94 97
FARM ADVANTAGE/ 87A99GL + Cruiser 250 KRUGER/ 6697VT3 + Cruiser 250 AGSOURCE/ 5N-898GTCBLLRW + Poncho 250	99 96 98		183 182 173	54 55 55	19 18 18	4 11 4	96 96 98
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No entries:	98 100 93 43	196 212 184 NS 184 6 11	193 214 173 19 196 6 43	55 57 52 2 56 2 43	19 23 17 2 18 5 43	5 17 1 6 6 65 43	97 100 92 5 96 3 43

#### Table 3a. Bancroft early maturity glyphosate-resistant corn hybrid test results, 2007-08, Erland Weerts Farm. Seeded May 21, 2008 at 28,750 seeds per acre.

	Dal	Yield Averages		Other 2008 Averages				
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
AGSOURCE/ 3C-007RR/YGCB + Cruiser 250 KRUGER/ 6006VT3 + Cruiser 250 WENSMAN/ W7309VT3 + Poncho 250 AGSOURCE/ 3T-006A VT3 + Cruiser 250 EPLEY/ E1525RR + Not reported	105 106 101 106 105	205 198 194 189 186	204 187 185 172 182	54 55 56 54 55	25 23 20 22 22 22	3 4 5 6 2	94 97 96 89 96	
SEEDS 2000/ 3122RR/BT + Poncho 250 GCS/ 102-04VT3 + Poncho 250 KRUGER/ 6007TS + Cruiser 250 KRUGER/ 6401VT3 + Cruiser 250 PIONEER/ 36V53 + Poncho 1250	102 102 107 101 102	185	186 212 210 208 207	56 55 55 56 55	19 21 23 21 20	11 2 3 4 3	99 98 100 100 99	
DEKALB/ DKC52-59(VT3) + Poncho 250 G2 GENET./ 5H-508 RR/HX + Poncho 250 DEKALB/ DKC53-41(VT3) + Poncho 250 G2 GENET./ 5H-506A RR/HX + Poncho 250 DAIRYLAND/ STEALTH-9902 + Poncho 250	102 108 103 105 102		205 203 202 201 200	53 56 55 56 56	19 23 19 23 19	7 0 4 2 5	98 92 99 99 99	
DEKALB/ DKC53-17(VT3) + Poncho 250 WENSMAN/ W7360BTRWRR + Poncho 250 NUTECH/ 3W-403 RR/YGRW + Poncho 250 DEKALB/ DKC55-24(VT3) + Poncho 250 PIONEER/ 35F40 + Poncho 1250	103 103 103 105 105		199 199 198 195 195	57 56 54 55 57	20 21 19 20 22	1 3 3 12 2	96 96 94 95 100	
G2 GENET./ 5H-506 RR/HX + Poncho 250 AGSOURCE/ 3C-505RR/YGCB + Poncho 250 NUTECH/ 3C-408 RR/YGCB + Poncho 250 G2 GENET./ 5H-906 RR/HX + Poncho 250 KRUGER/ 6606VT3 + Cruiser 250	105 105 108 105 106	•	195 194 193 192 192	54 56 55 57 55	23 22 24 23 22	0 3 9 4 6	98 100 95 93 99	
AGSOURCE/ 3T-603 VT3 + Poncho 250 NUTECH/ 3T-500A VT3 + Poncho 250 EPLEY/ E1475RR + Not reported NUTECH/ 3P-708 RR/YGPL + Poncho 250 RENK/ RK670VT3 + Poncho 250	104 101 104 108 102		188 187 187 185 185	56 56 54 53 54	18 20 18 25 19	2 5 3 4 6	94 96 93 100 96	
KRUGER/ 6102VT3 + Cruiser 250 AGSOURCE/ 3T-303A VT3 + Poncho 250 FARM ADVANTAGE/ 9803GL + Cruiser 250 G2 GENET./ 5H-004 RR/HX + Poncho 250 NUTECH/ 3T-808 VT3 + Cruiser 250	102 104 103 104 108		185 185 178 175 159	56 53 53 56 55	19 22 21 21 21 24	6 1 1 5 25	100 92 99 95 100	
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	104 108 101 35	193 205 185 NS 185 5 6	192 212 159 18 195 6 35	55 57 53 2 56 2 35	21 25 18 2 19 3 35	5 25 0 7 7 88 35	97 100 89 5 96 3 35	

#### Table 3b. Bancroft late maturity glyphosate-resistant corn hybrid test results, 2007-08, Erland Weerts Farm. Seeded May 21, 2008 at 28,750 seeds per acre.

#### Table 4a. Brookings early maturity glyphosate-resistant corn hybrid test results, 2007-08, Plant Science Farm. Seeded May 7, 2008 at 28,750 seeds per acre.

	Pol Mot	Yield Averages		Other 2008 Averages				
Brand/Hybrid + Seed Treatment [1]	[2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
WENSMAN/ W7289VT3 + Poncho 250 HOEGEMEYER/ 3113VTRR + Poncho 250 GCS/ 98-10VT3 + Poncho 250 AGSOURCE/ 3T-799 VT3 + Cruiser 250 WENSMAN/ W7267VT3 + Poncho 250	99 95 98 99 97	191 190 190 189 188	183 182 179 178 181	57 57 56 55 55	19 17 16 20 16	8 4 2 2 4	100 96 96 99 99 97	
EPLEY/ E1225RR + Not reported	98	186	183	56	19	10	98	
DEKALB/ DKC46-60(VT3) + Poncho 250	96	185	175	57	16	2	99	
KRUGER/ 6499VT3 + Cruiser 250	99	182	183	55	16	1	100	
GCS/ 100-07VT3 + Poncho 250	100	181	184	59	17	4	98	
SEEDS 2000/ 9901VT3 + Poncho 250	99	179	175	58	17	6	97	
EPLEY/ E1165RR + Not reported G2 GENET./ 5H-298 RR/HX + Poncho 250 AGSOURCE/ 5X-201+HXT/RR + Poncho 250 DAIRYLAND/ STEALTH-9799 + Poncho 250 EPLEY/ E1265RR + Not reported	95 98 100 99 100	175	177 196 188 185 185	55 55 55 56 56	16 17 19 17 18	5 1 9 3 5	99 100 97 95 95	
G2 GENET./ 5H-501 RR/HX + Poncho 250	100	• • • •	184	56	20	1	93	
NUTECH/ 3P-302 RR/YGPL + Cruiser 250	100		179	57	22	7	96	
DEKALB/ DKC43-27(VT3) + Poncho 250	93		177	56	15	1	96	
WENSMAN/ W7273VT3 + Poncho 250	98		177	54	16	5	99	
G2 GENET./ 5H-702 RR/HX + Poncho 250	100		176	56	19	13	94	
GCS/ 96-08VT3 + Poncho 250	95		176	55	15	4	100	
DEKALB/ DKC50-44(VT3) + Poncho 250	100		175	56	19	1	94	
FIELDERS CHOICE/ NG6520 + Poncho 250	98		175	54	15	8	98	
NUTECH/ 3C-300 RR/YGCB + Poncho 250	100		174	55	18	6	95	
FARM ADVANTAGE/ 87A99GL + Cruiser 250	99		174	56	16	4	95	
NC+/ 1775 VT3 + Cruiser 250	97		173	56	16	4	99	
NC+/ 1557 VT3 + Cruiser 250	95		172	58	16	3	98	
NUTECH/ 3T-096A VT3 + Cruiser 250	95		171	58	18	3	85	
RENK/ RK575VT3 + Poncho 250	97		171	55	16	0	95	
NC+/ 1981 R + Cruiser 250	99		171	55	17	4	99	
KRUGER/ 6298VT3 + Cruiser 250	98		169	58	17	3	99	
KRUGER/ 6097VT3 + Cruiser 250	97		168	54	16	11	100	
DEKALB/ DKC48-37(VT3) + Poncho 250	98		167	57	16	2	99	
GCS/ 94-04VT3 + Poncho 250	94		165	57	16	9	98	
AGSOURCE/ 5N-898GTCBLLRW + Poncho 250	98		165	56	16	3	95	
NUTECH/ 3T-098 VT3 + Cruiser 250	98		164	56	16	2	91	
KALTENBERG/ K4433VT3 + Poncho 250	100		163	55	17	2	97	
KALTENBERG/ 4486RRLLBTHX + Poncho 250	100		163	56	18	11	94	
NUTECH/ 3T-500 VT3 + Poncho 250	100		160	57	16	2	97	
KRUGER/ 6400TS + Cruiser 250	100		159	58	16	8	100	
KALTENBERG/ K4263VT3 + Poncho 250	98		156	58	16	10	93	
KRUGER/ 6697VT3 + Cruiser 250	96		155	56	15	4	99	
AGSOURCE/ 5H-599 RR/HX + Poncho 250	99		153	54	17	2	99	
KRUGER/ 3300RR/HX + Cruiser 250	100		147	56	18	13	95	
AGSOURCE/ 5H-597 RR/HX + Poncho 250	95		146	56	18	18	99	
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	98 100 93 2 45	185 191 175 16 176 6 11	172 196 146 14 183 5 45	56 59 54 2 58 2 45	17 22 15 2 16 6 45	5 18 0 6 74 45	97 100 85 4 96 2 45	

		Yield Av	verages	Other 2008 Averages				
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
AGSOURCE/ 3C-007RR/YGCB + Cruiser 250 NUTECH/ 3C-907 RR/YGCB + Poncho 250 SEEDS 2000/ 3122RR/BT + Poncho 250 WENSMAN/ W7309VT3 + Poncho 250 KRUGER/ 6503TS + Cruiser 250	105 107 102 101 105	194 192 188 183 181	179 171 172 165 166	57 55 55 57 57	23 22 18 17 18	11 5 5 10 7	94 95 96 100 98	
NUTECH/ 3C-006 RR/YGCB + Cruiser 250 KRUGER/ 6006VT3 + Cruiser 250 EPLEY/ E1525RR + Not reported G2 GENET./ 5H-506A RR/HX + Poncho 250 G2 GENET./ 5H-506 RR/HX + Poncho 250	105 106 105 105 105	180 179 174	144 147 155 193 193	54 56 57 56 57	17 16 18 22 21	14 11 8 7 6	86 99 98 96 98	
GCS/ 102-04VT3 + Poncho 250 PIONEER/ 36V53 + Poncho 1250 PIONEER/ 35F40 + Poncho 1250 G2 GENET./ 5H-906 RR/HX + Poncho 250 KRUGER/ 6401VT3 + Cruiser 250	102 102 105 105 101		190 189 188 185 184	58 55 57 59 56	19 20 22 22 19	7 3 11 4 6	99 97 99 94 99	
NUTECH/ 3W-403 RR/YGRW + Poncho 250 DEKALB/ DKC52-59(VT3) + Poncho 250 WENSMAN/ W7360BTRWRR + Poncho 250 DAIRYLAND/ STEALTH-9003 + Poncho 250 RENK/ RK670VT3 + Poncho 250	103 102 103 103 102		182 180 180 179 179	56 56 57 55 55	19 16 20 18 17	5 2 9 4 3	89 99 95 94 100	
KRUGER/ 6007TS + Cruiser 250 DEKALB/ DKC53-41(VT3) + Poncho 250 NC+/ 2174 VT3 + Cruiser 250 FIELDERS CHOICE/ NG6583 + Poncho 250 FARM ADVANTAGE/ 9803GL + Cruiser 250	107 103 101 102 103	• • •	177 176 176 175 172	55 56 58 57 55	20 17 20 20 18	9 9 12 8 3	97 97 96 84 95	
KRUGER/ 6606VT3 + Cruiser 250 AGSOURCE/ 3C-505RR/YGCB + Poncho 250 DEKALB/ DKC53-17(VT3) + Poncho 250 KRUGER/ 6102VT3 + Cruiser 250 DEKALB/ DKC55-24(VT3) + Poncho 250	106 105 103 102 105		172 171 170 169 168	57 58 57 57 56	18 20 16 16 17	98394	100 97 100 97 93	
RENK/ RK760RRYGCB + Poncho 250 EPLEY/ E1475RR + Not reported NUTECH/ 3C-408 RR/YGCB + Poncho 250 HOEGEMEYER/ 8192HXRR + Poncho 250 G2 GENET./ 5H-508 RR/HX + Poncho 250	106 104 108 101 108		168 168 164 164 162	58 54 56 58 57	20 16 22 20 23	8 2 11 22 6	99 98 96 93 91	
DAIRYLAND/ STEALTH-9902 + Poncho 250 AGSOURCE/ 3T-603 VT3 + Poncho 250 AGSOURCE/ 3T-303 VT3 + Cruiser 250 NUTECH/ 3T-808 VT3 + Cruiser 250 AGSOURCE/ 3T-303A VT3 + Poncho 250	102 104 103 108 104		158 157 156 153 153	56 55 56 55 55	17 15 18 21 18	7 4 20 28 10	95 100 99 100 97	
Trial avg.: High avg.: Low avg. [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var:: No. optrics:	104 108 101	184 194 174 NS 174 5	171 193 144 15 179 5 40	56 59 54 2 58 2 40	19 23 15 3 17 6 40	8 28 7 7 53 40	96 100 84 5 96 3	

#### Table 4b. Brookings late maturity glyphosate-resistant corn hybrid test results, 2007-08, Plant Science Farm. Seeded May 7, 2008 at 28,750 seeds per acre.

Table 5a. Geddes early maturity glyphosate-resistant corn hybrid test results, 2007-08, Curtis Sybesma Far	m.
Seeded May 16, 2008 at 28,750 seeds per acre.	

	Pol	Yield Averages		Other 2008 Averages				
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
EPLEY/ E1525RR + Not reported	105	181	177	59	18	8	96	
KRUGER/ 6503TS + Cruiser 250	105	175	174	60	17	6	83	
EPLEY/ E1225RR + Not reported	98	174	162	59	18	10	85	
EPLEY/ E1165RR + Not reported	95	172	170	57	16	4	92	
DEKALB/ DKC50-44(VT3) + Poncho 250	100		200	59	18	6	94	
DEKALB/ DKC52-59(VT3) + Poncho 250	102		197	57	18	1	99	
PIONEER/ 36V53 + Poncho 1250	102		196	57	18	2	94	
G2 GENET./ 5H-506 RR/HX + Poncho 250	105		196	59	20	3	89	
WENSMAN/ W7433VT3 + Poncho 250	105		196	57	20	4	91	
DEKALB/ DKC55-24(VT3) + Poncho 250	105		194	59	17	13	95	
HOEGEMEYER/ EXP 800 + Poncho 250	105	•	194	60	21	6	91	
G2 GENET./ 5H-506A RR/HX + Poncho 250	105		193	58	20	2	94	
NUTECH/ 3C-104 RR/YGCB + Poncho 250	104		192	57	20	4	97	
DEKALB/ DKC53-41(VT3) + Poncho 250	103		191	59	16	18	92	
NC+/ 3613 VT3 + Cruiser 250	105		191	60	19	19	98	
KRUGER/ 6401VT3 + Cruiser 250 FONTANELLE/ 5T128 + Poncho 250 NC+/ 1981 R + Cruiser 250 AGSOURCE/ 3T-303A VT3 + Poncho 250 AGSOURCE/ 3C-104RR/YGCB + Poncho 250	101 100 99 104 104		190 190 190 190 189	58 60 59 58 57	19 17 17 18 19	7 0 3 3 12	96 95 95 92 91	
KALTENBERG/ K5163VT3 + Poncho 250	103	•	188	59	17	4	93	
AGSOURCE/ 3C-007RR/YGCB + Cruiser 250	105		188	58	22	0	88	
DAIRYLAND/ STEALTH-9005 + Poncho 250	105		187	59	17	3	96	
DEKALB/ DKC53-17(VT3) + Poncho 250	103		186	61	18	1	96	
NC+/ 1775 VT3 + Cruiser 250	97		186	60	17	2	86	
WENSMAN/ W7360BTRWRR + Poncho 250	103		186	60	19	4	90	
FONTANELLE/ 6T226 + Poncho 250	104		185	60	19	5	85	
NUTECH/ 3T-500 VT3 + Poncho 250	100		184	59	18	1	91	
G2 GENET/ 5H-906 RR/HX + Poncho 250	105		184	60	21	4	91	
EPLEY/ E1265RR + Not reported	100		184	59	17	4	93	
AGSOURCE/ 3C-505RR/YGCB + Poncho 250	105		184	59	20	2	89	
PIONEER/ 35F40 + Poncho 1250	105		183	60	19	9	92	
NUTECH/ 3C-300 RR/YGCB + Poncho 250	100		183	60	17	6	93	
DEKALB/ DKC48-37(VT3) + Poncho 250	98		182	60	17	3	91	
FARM ADVANTAGE/ 9803GL + Cruiser 250	103		182	58	18	2	86	
KRUGER/ 6102VT3 + Cruiser 250	102		182	58	17	3	96	
NUTECH/ 3W-403 RR/YGRW + Poncho 250	103		180	59	17	4	87	
KALTENBERG/ 5232RRLLBTHX + Poncho 250	103		180	59	19	3	87	
NUTECH/ 3P-302 RR/YGPL + Cruiser 250	100		179	59	20	6	92	
KRUGER/ 6400TS + Cruiser 250	100		179	60	16	3	91	
HEINE/ H742RRCRW + Poncho 250	105		179	59	18	2	89	
G2 GENET./ 5H-702 RR/HX + Poncho 250	100		177	59	19	8	92	
AGSOURCE/ 3T-603 VT3 + Poncho 250	104		177	59	17	3	87	
EPLEY/ E1254 VT3 + Not reported	95		174	59	18	8	94	
HEINE/ H711RR + Poncho 250	100		173	58	17	5	93	
EPLEY/ E1475RR + Not reported	104	•	171	57	16	2	92	
HEINE/ H633RR + Poncho 250	97		171	59	18	6	90	
FONTANELLE/ 5T750 + Poncho 250	100		170	60	17	3	80	
DEKALB/ DKC43-27(VT3) + Poncho 250	93		169	58	16	0	87	
HEINE/ H724VT3 + Poncho 250	102		164	58	18	6	89	
H0EGEMEYER/ 8192HXRR + Poncho 250	101		151	58	20	4	67	
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.:	102 105 93	176 181 172 NS 172 7	183 200 151 16 185 5	59 61 57 2 60 2	18 22 16 1	5 19 0 7 7 92	91 99 67 9 91 6	
NO. ENLITES:	51	4	51	51	51	<b>U</b>	1 31	

	Del Met	Yield Averages		Other 2008 Averages			
Brand/Hybrid + Seed Treatment [1]	[2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
DEKALB/ DKC58-16(VT3) + Poncho 250 KRUGER/ 6208VT3 + Cruiser 250 DEKALB/ DKC61-69(VT3) + Poncho 250 FIELDERS CHOICE/ NG6686 + Poncho 250	108 108 111 107	208 208 199 194	201 200 200 190	57 57 56 59	20 22 22 19	8 1 3 18	95 95 92 91
KRUGER/ 6006VT3 + Cruiser 250 KRUGER/ 6210TS + Cruiser 250 KRUGER/ 6606VT3 + Cruiser 250 KRUGER/ 6007TS + Cruiser 250	106 110 106 107	193 188	194 199 210 206	60 58 58 57	18 23 20 20	15 7 3 2	97 93 94 100
NC+/ 4252 VT3 + Cruiser 250 NC+/ 4022 VT3 + Cruiser 250 WENSMAN/ W7455VT3 + Poncho 250 RENK/ RK760RRYGCB + Poncho 250	107 109 107 106	•	205 203 201 196	57 59 55 60	23 20 22 20	4 7 2 8	95 95 86 97
WENSMAN/ W7469VT3 + Poncho 250 NUTECH/ 3T-809 VT3 + Poncho 250 G2 GENET./ 5H-508 RR/HX + Poncho 250 AGSOURCE/ 3T-710 VT3 + Poncho 250	109 109 108 110		196 192 192 192	55 56 60 57	21 19 21 20	9 17 1 8	95 90 86 92
RENK/ RK822VT3 + Poncho 250 NUTECH/ 3C-408 RR/YGCB + Poncho 250 AGSOURCE/ 3T-409 VT3 + Cruiser 250 RENK/ RK770VT3 + Poncho 250	110 108 109 107		191 188 186 184	60 59 58 57	21 21 20 20	6 2 3 1	97 86 88 86
HEINE/ H817VT3 + Poncho 250 HEINE/ H815VT3 + Poncho 250 RENK/ RK698RRYGRW + Poncho 250 AGSOURCE/ 3T-908 VT3 + Poncho 250	109 109 107 108	•	184 184 183 183	56 58 58 57	23 21 18 21	10 1 2 1	89 89 86 86
DAIRYLAND/ STEALTH-6208 + Poncho 250 NUTECH/ 3T-109 VT3 + Poncho 250 NUTECH/ 3P-708 RR/YGPL + Poncho 250 AGSOURCE/ 3T-310 VT3 + Cruiser 250	108 109 108 110		182 182 180 179	57 56 58 57	19 22 21 21	15 15 3 18	94 93 93 94
FARM ADVANTAGE/ 87A10GL + Cruiser 250 KRUGER/ 6111TS + Cruiser 250 NUTECH/ 3T-808 VT3 + Cruiser 250 HEINE/ H816VT3 + Poncho 250	110 110 108 109		177 177 171 170	54 57 58 58	21 22 21 19	7 10 16 31	84 82 95 97
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	108 111 106 32	198 208 188 NS 188 6 6	190 210 170 15 196 5 32	57 60 54 1 60 1 32	21 23 18 2 19 5 32	8 31 10 9 78 32	92 100 82 7 92 5 32

#### Table 5b. Geddes late maturity glyphosate-resistant corn hybrid test results, 2007-08, Curtis Sybesma Farm. Seeded May 16, 2008 at 28,750 seeds per acre.

Table 6a. Beresford early maturity gly	phosate-resistant corn hybrid test results,	2007-08, Southeast Experiment Station.
Seeded May 19, 2008 at 28,750 seeds	per acre.	

	Del Mat	Yield Averages		Other 2008 Averages			
Brand/Hybrid + Seed Treatment [1]	[2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
DEKALB/ DKC58-16(VT3) + Poncho 250	108	197	199	55	20	3	82
FIELDERS CHOICE/ NG6686 + Poncho 250	107	197	188	56	22	5	76
KRUGER/ 6208VT3 + Cruiser 250	108	196	195	54	22	10	85
KRUGER/ 6210TS + Cruiser 250	110	194	210	54	24	1	78
NUTECH/ 3T-808A VT3 + Cruiser 250	108	191	183	55	20	21	78
FONTANELLE/ 6T226 + Poncho 250 GCS/ 107-01CBRCRW + Poncho 250 NC+/ 4582 VT3 + Cruiser 250 FONTANELLE/ 7T231 + Poncho 250 WENSMAN/ W7455VT3 + Poncho 250	104 107 110 110 107	180 175	174 169 233 226 221	57 54 53 53 55	22 19 25 22 21	4 2 8 12 1	71 64 86 96 90
KALTENBERG/ K6663VT3 + Poncho 250	110		218	55	23	3	81
HOEGEMEYER/ 5353VTRR + Poncho 250	109		218	55	22	7	86
NC+/ 4252 VT3 + Cruiser 250	107		217	55	22	3	83
KRUGER/ 6111TS + Cruiser 250	110		215	54	24	17	87
AGSOURCE/ 3T-710 VT3 + Poncho 250	110		212	56	24	2	93
FOUR STAR/ 6844VT3 + Cruiser 250 G2 GENET./ 5H-506A RR/HX + Poncho 250 WENSMAN/ W7469VT3 + Poncho 250 DEKALB/ DKC52-59(VT3) + Poncho 250 AGSOURCE/ 3T-311 VT3 + Poncho 250	108 105 109 102 110	•	211 209 209 208 208	55 56 53 56 54	24 20 23 16 24	531 35	82 86 78 87 84
FOUR STAR/ 6863VT3 + Cruiser 250	110		205	55	21	15	92
NUTECH/ 3P-708 RR/YGPL + Poncho 250	108		205	55	22	3	89
HEINE/ H817VT3 + Poncho 250	109		205	55	22	7	80
DAIRYLAND/ STEALTH-9006 + Poncho 250	106		204	56	19	9	94
KALTENBERG/ 6355RRLLBTHX + Poncho 250	109		203	55	22	2	91
KRUGER/ 6007TS + Cruiser 250 FOUR STAR/ 8843HXTRRLL + Cruiser 250 DAIRYLAND/ STEALTH-9410 + Poncho 250 G2 GENET./ 5H-506 RR/HX + Poncho 250 FOUR STAR/ 6861VT3 + Cruiser 250	107 108 110 105 110	· · · · ·	203 201 201 201 201 200	54 57 55 55 54	19 21 23 23 21	2 2 1 2 4	89 89 82 70 83
FARM ADVANTAGE/ 87A10GL + Cruiser 250	110		200	54	22	8	83
FONTANELLE/ 7N771 + Poncho 250	110		200	56	23	4	94
DAIRYLAND/ STEALTH-6208 + Poncho 250	108		199	55	19	15	89
RENK/ RK822VT3 + Poncho 250	110		199	58	21	3	88
HEINE/ H835VT3 + Poncho 250	110		199	55	22	9	89
PIONEER/ 35F40 + Poncho 1250	105	•	198	57	21	5	85
AGSOURCE/ 3T-409 VT3 + Cruiser 250	109		198	56	23	2	83
NUTECH/ 3T-809 VT3 + Poncho 250	109		197	53	21	13	86
G2 GENET./ 5H-508 RR/HX + Poncho 250	108		197	59	22	2	84
DEKALB/ DKC53-41(VT3) + Poncho 250	103		196	56	16	5	89
NC+/ 4022 VT3 + Cruiser 250	109	• • • •	195	55	22	7	85
HEINE/ H815VT3 + Poncho 250	109		195	56	23	3	83
FOUR STAR/ 6862VT3 + Cruiser 250	108		191	54	21	6	91
NUTECH/ 3T-109 VT3 + Poncho 250	109		191	55	20	5	79
HEINE/ H816VT3 + Poncho 250	109		190	56	19	26	93
GCS/ 102-04VT3 + Poncho 250	102		190	57	19	2	75
DEKALB/ DKC55-24(VT3) + Poncho 250	105		189	57	18	10	81
FARM ADVANTAGE/ 9803GL + Cruiser 250	103		189	55	16	3	90
PIONEER/ 36V53 + Poncho 1250	102		187	56	18	0	69
RENK/ RK698RRYGRW + Poncho 250	107		187	56	18	1	72

Table 6a. Beresford early maturity glyphosate-resistant corn hybrid test results (continued).								
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	Yield Averages		Other 2008 Averages				
		2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
AGSOURCE/ 3T-110 VT3 + Poncho 250 RENK/ RK770VT3 + Poncho 250 NUTECH/ 3C-408 RR/YGCB + Poncho 250 DEKALB/ DKC53-17(VT3) + Poncho 250 NC+/ 3613 VT3 + Cruiser 250	110 107 108 103 105	• • •	187 186 181 180 176	54 55 56 57 57	21 23 22 19 21	25 2 4 4 5	86 72 69 75 73	
G2 GENET./ 5H-906 RR/HX + Poncho 250 FOUR STAR/ 9956VT3 + Cruiser 250 G2 GENET./ 5H-911 RR/HX + Poncho 250 HEINE/ H747RRYGCB + Poncho 250 HEINE/ H742RRCRW + Poncho 250 AGSOURCE/ 3T-310 VT3 + Cruiser 250	105 109 110 104 105 110		175 173 173 172 169 164	58 56 57 56 56 55	21 23 21 17 18 20	2 3 10 2 0 12	79 70 85 67 67 89	
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	108 110 102 61	190 197 175 NS 175 8 7	196 233 164 24 210 7 61	55 59 53 3 57 2 61	21 25 16 4 19 8 61	6 26 9 9 98 61	83 96 64 14 83 10 61	

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2008 yield average. Note that additional table footnotes are explained in table D.

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		Yield Averages		Other 2008 Averages			
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
DEKALB/ DKC61-69(VT3) + Poncho 250 DEKALB/ DKC63-42(VT3) + Poncho 250 KRUGER/ 6015VT3 + Cruiser 250 KRUGER/ 6111TS + Cruiser 250 KRUGER/ 6114VT3 + Cruiser 250 KRUGER/ 6411VT3 + Cruiser 250	111 113 115 110 114 111	217 202 192 185	214 202 209 178 217 215	54 54 54 55 55 53	22 24 24 19 24 22	8 10 6 2 7 8	94 94 95 98 99 98
NUTECH/ 3T-912 VT3 + Poncho 250 KRUGER/ 2115RR/YGCB + Cruiser 250 KRUGER/ 6213VT3 + Cruiser 250 KRUGER/ 9414RR/HXT + Cruiser 250 WENSMAN/ W7562VT3 + Poncho 250 KRUGER/ 2208RR/YGCB + Cruiser 250	112 115 113 114 111 111		213 212 208 208 208 208 202	55 55 52 55 52 52 55	23 24 25 23 23 20	3 4 8 5 6 7	93 97 95 99 95 98
G2 GENET./ 3A-513 RR + Poncho 250 NUTECH/ 3T-012 VT3 + Poncho 250 NC+/ 5403 VT3 + Cruiser 250 KRUGER/ 6212TS + Cruiser 250 NUTECH/ 3T-213 VT3 + Cruiser 250 NUTECH/ 5H-512 RR/HXT + Poncho 250	113 112 113 112 113 113 112		201 198 189 179 170 152	55 54 56 54 54 54 52	20 24 23 24 21 22	8 5 5 8 25	92 95 94 91 95 94
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	113 115 110 18	199 217 185 NS 185 9 4	199 217 152 26 192 8 18	54 56 52 2 55 2 18	23 25 19 2 20 5 18	7 25 2 7 8 58 18	95 99 91 NS 91 4 18

 Table 6b. Beresford late maturity glyphosate-resistant corn hybrid test results, 2007-08, Southeast Experiment

 Station. Seeded May 19, 2008 at 28,750 seeds per acre.

Table 6c. Beresford non-glyphosate-resistant corn hybrid combined early and late maturity test, 2007-08. Southeast Experiment Station, seeded May 19, 2008 at 28,750 seeds per acre.

	Dol Mot	Yield Averages		Other 2008 Averages			
Brand/Hybrid + Seed Treatment [1]	кет. Мат. [2]	2-Yr bu/a	2008 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
HOEGEMEYER/ HBT651 + Poncho 250 HEINE/ H818YGCB + Poncho 250 KRUGER/ 8616HX + Poncho 250 KRUGER/ 8112HX + Poncho 250	109 109 110 110	197 192	183 174 204 189	56 56 55 56	17 16 23 20	7 7 6 6	97 99 100 100
HEINE/ H758YGCB + Poncho 250 RENK/ RK692CBLLRW + Poncho 250 KRUGER/ 8414HX + Poncho 250 KRUGER/ 8106HX + Poncho 250	106 105 114 106		185 179 169 164	56 58 56 56	20 15 18 16	7 8 7 7	92 95 100 100
Trial avg.: High avg.: Low avg.: [5] LSD(.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	109 114 105 8	195 197 192 NS 192 7 2	181 204 164 22 183 7 8	56 58 55 1 58 1 8	18 23 15 3 17 8 8	7 8 6 NS 8 32 8	98 100 92 4 97 2 8

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2008 yield average.

Note that additional table footnotes are explained in table D.

 Table E. Mailing addresses for seed entries in the 2008 corn hybrid trials by seed brand name.

Seed brand	Seed company mailing address
AgSource	AgSource Seeds Inc., 1800 L Ave., Nevada, IA 50201
Dairyland	Dairyland Seed, PO Box 958, West Bend, WI 53095
Dekalb	Monsanto, 102 W. Carol Ave., Cortland, IL 60112
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310, Shell Rock, IA 50670
Farm Advantage	Farm Advantage, 1275 Hwy 69, Belmond, IA 50421
Fielder's Choice	Grow Direct, 306 N. Main Street, Monticello, IN 47960
Fontanelle	Fontanelle Hybrids, 919 West 23rd Street, Freemont, NE 68025
Four Star	Four Star Seed Co., 2929-335th Street, Logan, IA 51546
Gold Country	Gold Country Seed Inc., PO Box 604, Hutchinson, MN 55350
G-2 Genetics	G-2 Genetics, 415 S. Duff Avenue, Suite C, Ames, IA 50010
Heine	Heine Hybrid Seed Corn, 1020 E. 320th St., Vermillion, SD 57069
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031
Kaltenberg	Kaltenberg Seeds, 5506 State Road 19, Box 278, Waunakee, WI 53597
Kruger	Kruger Seed Co., Box A, Dike, IA 50624
NC+	719 E. 15th Avenue, Mitchell, SD 57301
NuTech	Nutech Seed, LLC, 415 S. Duff Avenue, Suite C, Ames, IA 50010
Pioneer	Pioneer Hi-Bred International, 151 Saint Andrews Court, Mankato, MN 6001
Rea	Rea Hybrids, 919 W. 23rd Street, Freemont, NE 68025
Renk	Renk Seed Co., 6809 Wilburn Rd., Sun Prairie, WI 53590
Seeds 2000	Seeds 2000, PO Box 200, Breckenridge, MN 56520
Wensman	Wensman Seed Co., 67784 330th Street, Watkins, MN 55389
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The crop performance trials are available at http://plantsci.sdstate.edu/varietytrials/vartrial.html

## **Tables, 2009 Corn Performance Trials**

Α	Description of 2009 corn hybrid trial locations- soil type, tillage type, prior crop, herbicide and insecticides used, and seeding date
В	Nearest weather station precipitation and growing degree day (GDD) accumulation and average daily temperatures for each growing season month in 2009 and their departures from average (DFA)
С	2009 Glyphosate-resistant corn hybrid entries by brand/hybrid, seed product traites, and index to performance table no. (s)
D	Explanation of performance table footnotes
E	Mailing addresses for seed entries in the 2009 corn hybrid trials by seed brand name
1a	Warner early maturity Roundup Ready™ corn hybrid test results, 2008-09, Allen & Inel Ryckman Farm
1b	Warner late maturity Roundup Ready™ corn hybrid test results, 2008-09, Allen & Inel Ryckman Farm
2a	South Shore early maturity Roundup Ready™ corn hybrid test results, 2008-09, Northeast Reseach Farm
2b	South Shore late maturity Roundup Ready™ corn hybrid test results, 2008-09, Northeast Reseach Farm
3a	Bancroft early maturity glyphosate-resistant corn hybrid test results, 2008-09, Erland Weerts Farm
3b	Bancroft late maturity glyphosate-resistant corn hybrid test results, 2008-09, Erland Weerts Farm
4a	Brookings early maturity glyphosate-resistant corn hybrid test results, 2008-09, Plant Science Farm
4b	Brookings late maturity glyphosate-resistant corn hybrid test results, 2008-09, Plant Science Farm
5a	Geddes early maturity glyphosate-resistant corn hybrid test results, 2008-09, Curt Sybesma Farm
5b	Geddes late maturity glyphosate-resistant corn hybrid test results, 2008-09, Curt Sybesma Farm
6a	Beresford early maturity glyphosate-resistant corn hybrid test results, 2008-09, Southeast Experiment Station
6b	Beresford late maturity glyphosate-resistant corn hybrid test results, 2008-09, Southeast Experiment Station

#### C253—Precision Planted Corn 2009 Crop Performance Results is available electronically on the internet http://agbiopubs.sdstate.edu/articles/C253–09.pdf



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## 2009 Precision Planted **Corn** Performance Trials

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This publication reports the results of the 2009 South Dakota corn hybrid performance trials for glyphosate-resistant hybrids. Information includes both the most recent 2-year and 1-year grain yields in bushels per acre and 1-year bushel weight, grain moisture at harvest, lodging percentage, and final stand percentages. These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Corn performance trial tables are listed on the inside front cover. Environmental data is listed in tables A and B, indices of brand/hybrid entries to performance table number are listed in table C, table D has the footnote legend, and mailing addresses for seed companies are listed in table E.

#### **Test Trial Locations**

Trial locations, soil types, seedbed and previous crop history, soil fertility yield goals, and seeding dates are indicated in table A. The participation and efforts of our cooperators — Allen and Inel Ryckman at Warner, Al Heuer at South Shore (Northeast Research Farm), E. Weerts Farm Inc. at Bancroft, Douglas Doyle at Brookings (SDSU Plant Science Research Farm), Curtis Sybesma at Geddes, and Robert Berg and staff at Beresford (Southeast Experiment Station) — are gratefully acknowledged.

#### Seasonal Temperatures and Precipitation

Seasonal rainfall and its distribution and average temperatures at weather reporting stations nearest each test trial are reported in table B for the period April 1 to October 31. Seasonal precipitation sums were above average at Aberdeen (3.15"), South Shore (2.95", and Huron (2.25"); near average at Centerville (0.65"); and below average at Brookings (-1.38") and White Lake (-1.37"). The greatest moisture deficits tended to occur at most locations in April and May. In some areas of the state, such early season moisture deficits may have resulted in the delayed emergence of some crops seeded at their normal seeding dates.

Seasonal average temperatures from April to October were at or near normal at Brookings and Centerville. Seasonal temperatures were below average at Aberdeen (-2.37°F), South Shore (-3.07°F), Huron (-2.00°F) and White Lake (-3.13°F). The monthly departures from average temperatures in June, July, and August varied from near normal at Brookings and Centerville to nearly 7°F below average at South Shore and White Lake in July. Seasonal sums of accumulated growing degree days (GDDs) varied from a low of 2,010 at South Shore to a high of 2,630 at Centerville for the April–October period. The seasonal accumulated GDDs departures from average were below average for all locations and varied from a low of -279 at Huron to a high of -588 GDDs at White Lake. If only the May to September period is considered, then the seasonal GDDs departure from average would be -224 at Aberdeen, -291 at South Shore, -162 at Huron, -171 at Brookings, -306 at Centerville, and -415 at White Lake. If one calculates the average loss in GDDs per day from May to September, the average losses were -1.5 at Aberdeen, -1.9 at South Shore, -1.1 at Huron and Brookings, -2.0 at Centerville, and -2.7 at White Lake.

In summary, the growing season precipitation sums for corn varied from -1.3" below to over 3" above normal across the 6 locations tested, with the greatest precipitation generally occurring in October. In addition, the greatest monthly departures from average temperature occurred in June, July, August, and October. Generally, the GDD loss per day during the growing season was low at Huron and Brookings; slightly higher at Aberdeen, South Shore, and Centerville; and the highest at White Lake.

#### **General Test Procedures**

Seed companies pick the test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Warner and South Shore, 100 days for Bancroft and Brookings, 105 days for Geddes, and 110 days for Beresford. Hybrids are assigned to trials based on the relative maturity rating reported by the participating seed company. This testing program does not guarantee that all entries are placed in the proper maturity trial. In some trials, borderline entries with relative maturity ratings at or near the arbitrary break between the early and late trials may crossover at a given location. In some cases this may be indicated by exceptionally high or low grain moisture contents at harvest. A higher than average moisture content may indicate the hybrid is later in relative maturity than indicated. Likewise, a lower than average moisture content may indicate the hybrid is earlier in relative maturity than indicated. A fee was charged for all entries at each location. A list of participating seed companies for 2009 is presented in table E.

#### **Experimental Procedures**

Entries were seeded in 3 replications, with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20 feet long, with the center two rows harvested for yield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2009, the precision planter was calibrated to deliver 28,750 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation, previous crop history, and fertility yield goal at each test site is outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/acre of 37-18-00 was applied 2" below and 2" to the side  $(2 \times 2)$  of the seed row. The weed control herbicides applied at recommended label rates are indicated in table A.

#### **Measurements of Performance**

Yields are obtained from the South Dakota Crop Performance Testing Program. Current-year and 2-year yield averages are included where hybrids have been tested in 2009 and for the past 2 years.

Yield. Yield values are an average of 3 replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2009, the coefficient of variation (CV) values (a measure of experimental error) for yield was relatively low, ranging from 3 to 8% over the 6 test locations. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, or soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors - all of which may or may not be controllable in a given year. This year, good seasonal moisture distribution and cooler than normal mid-summer temperatures were the 2 factors that were instrumental in producing good yields but very low bushel weights and high kernel moisture levels at harvest.

**Grain moisture content**. Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Moisture is generally inversely related to maturity and is important in the evaluation of hybrids. Hybrids that provide satisfactory yields and can be stored without additional drying are desirable. During harvest, moisture values were determined by the combine moisture meter, which in turn was periodically checked with a Dickey-John GAC-2100 to verify it was within limits. In 2009, grain moisture values were higher than normal as the result of lower than normal heat unit accumulation (below average temperatures) that slowed the progress of the crop during grain filling that in turn contributed to both high kernel moisture and low bushel weight values.

**Use of tables.** Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between 2 hybrids before there is a significant yield difference. LSD values are given at the bottom of every column where there

is significant difference among the averages within the column. If differences among the averages within a column are not significant, the LSD value is reported as "non-significant" (NS).

The LSD values reported in this publication can be used in two ways. In this publication the LSD value is used primarily to identify the top performance group (TPG) for 2-year yields, for current-year yields, for bushel weight, for grain moisture at harvest, for lodging (below the ear) percentage, and for final stand percentage for each test trial. In order to determine which hybrids are in the TPG for yield, use the LSD value indicated at the bottom of each yield column in any yield table. For example, let's say the column LSD value equals 15 (bu/a) and the highest yield for that column equals 155 bu/a. If you subtract the column LSD value from the highest yield, you obtain an intermediate value of 140 bu/a (155 - 15 = 140). The minimum top yield value has to be greater than this intermediate value of 140 bu., and since the yield values are rounded to the nearest bushel, it must be at least 141 bu. Thus, varieties with an average of 141 bu. or higher are included in the top-yield group.

These minimum TPG values for yield are indicated at the bottom of each yield column, unless too much experimental error (high CV values) is associated with the test. Top yield hybrids are those hybrids that are equal or higher than the minimum TPG value reported at the bottom of each yield column (2-yr or 2009 yield averages). If hybrid yield differences are not significant (NS) and the CV values are 15% or less, then, by definition, all hybrids in the test are in the top-yield group. In contrast, if the column CV value is greater than 15%, then no minimum TPG value is indicated because there was too much experimental error associated with the test to make a valid determination of the TPG for yield. When comparing yield means, compare current-year averages with other current-year averages and compare 2-yr yield averages with other 2-yr averages. When evaluating 2-yr averages, do not forget to note how the entries tested for 2 years performed in 2009. Entries tested for 2 years may also have a yield value that qualifies for the TPG in the 2009 yield column.

The TPG for other performance factors — such as bushel weight, percent grain moisture at harvest, percent lodging (below the ear), and percent stand (percent of seeded population) — can also be determined. In order to qualify for the TPG group, a hybrid must have a bushel weight and a final stand percentage value that is equal to or greater than the minimum reported TPG value for bushel weight or final stand percentage. Likewise, in order to qualify for the TYG, a hybrid must have grain moisture and lodging percentage values that are equal to or less than the maximum reported TPG value for grain moisture or lodging percentage. Note that yield, bushel weight, and percent stand TPG values are greater than a certain yield, bushel weight, or final stand value, or they are minimum values. In contrast, grain moisture and lodging percentages are equal to or less than a certain value to qualify for the TPG, or they are maximum values. Again, as with hybrid yields, if there are no hybrid differences for a performance factor, then, by definition, all hybrids in the test are in the TPG for that performance factor.

The LSD values for the TPG can also be used to determine if two hybrids differ in performance. For example, if a test trial LSD value equals 16 bu/a, and hybrid A yields 132 bu/a while hybrid B yields 118 bu/a, then their yield difference is 14 bu/a (132-118 =14). In this case, the two hybrids do not differ in yield because their yield difference of 14 bu/ac is equal to or less than the reported LSD value of 16 bu/a. In contrast, if hybrid C yields 114 bu/a, the yield difference between hybrids A and C is 18 bu/a (132-114=18). In this case, the yield difference of 18 bu/a is higher than the reported LSD value of 16 bu/a; therefore, hybrid A would have a significantly higher yield than hybrid C. Similarly, the LSD values for bushel weight, grain moisture, stalk lodging below the ear, and percent stand can be used to determine if any two hybrids differ in these performance factors. For example, if a test trial grain moisture LSD value equals 2% and hybrid a measures

18% and hybrid B measures 16, their grain moisture difference is 2% (18-16=2). In this case, the two hybrids do not differ in grain moisture because their moisture difference of 2% is equal to or less than the reported LSD value of 2%. In contrast, if hybrid C measures 15%, the grain moisture difference between hybrids A and C is 3% (18-15=3). In this case, the grain moisture difference of 3% is more than the reported LSD value 2%; therefore, hybrid A is significantly higher in grain moisture than hybrid C.

The performance trial results for one year (2009) and for two years (2008-09) follow:

### **PERFORMANCE TRIAL RESULTS BY LOCATIONS**

#### Northern Locations

A brief discussion of the corn performance trial results at the various test trial locations for the past 2 years (2008-2009) and for the most recent year (2009) follow. In addition, note that all yield averages are reported as harvest yield adjusted to 15.5% grain moisture and a 56 pound bushel weight. Generally, Warner, Geddes, and Beresford exhibited the best yield and bushel weight averages, along with grain moisture levels of 17 to 27%. At South Shore, Bancroft, and Brookings the yield averages were surprisingly good, but the bushel weight averages were very low and varied from 47 to 50 pounds with high grain-moisture levels of 20 to 31%. At all locations, the coefficient of variation (a measure of experimental error) for yield was very low and only varied from 3 to 6% for 2009. The cooler than average temperatures this past summer had a significant influence that resulted in high yields but lower than average bushel weights and higher than average moisture levels at harvest at most locations.

#### Warner:

**Early – Glyphosate-resistant trial, Table 1a.** The test trial yield averages were **210** bu/a for 2 years and 230 bu/a for 2009. Hybrids that yielded **206** bu/a or more for 2 years and 234 bu/a or more for 2009 qualified for the TPG for yield. Hybrids had to differ in yield by **13** bu/a in 2009 to be significantly different, while the yield differences for 2 years were not significant (NS). Because there were no differences in yield average among the hybrids test-ed 2 years, all entries tested qualified for the TPG. In 2009, bushel weights averaged **52** lbs, grain moisture averaged **21%**, lodging percentage averaged **zero percent**, and final stand percentage averaged **94%**. In order for hybrids to be in the TPG for these factors, the hybrid had to average **53** lbs. or more in bushel weight, **19%** or less in grain moisture, **1%** or less in lodging percentage, and **94%** or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 1b. The test trial yield averages were 220 bu/a for 2 years and 231 bu/a for 2009. Hybrids that yielded 210 bu/a or more for 2 years qualified for the TPG for yield. Because there were no differences in yield average among the hybrids tested two years, all entries tested qualified for the TPG. Hybrids had to differ in yield by 12 bu/a in 2009 to be significantly different. In 2009, bushel weights averaged 52 lbs, grain moisture averaged 23%, lodging percentage averaged zero percent, and final stand percentage averaged 94%. In order for hybrids to be in the TPG for these factors, the hybrid had to aver-

age **53** lbs. or more in bushel weight, **19%** or less in grain moisture, **1%** or less in lodging percentage, and **95%** or more for final stand percentage.

#### **South Shore:**

**Early – Glyphosate-resistant trial, Table 2a.** The test trial yield averages were **187** bu/a for 2 years and **200** bu/a for 2009. The yield differences among those hybrids tested for 2 years were not significant (NS). Hybrids that yielded **205** bu/a or more for 2009 qualified for the TPG for yield. Hybrids had to differ in yield by **11** bu/a in 2009 to be significantly different. In 2009, bushel weights averaged **50** lbs, grain moisture averaged **20%**, lodging averaged **zero percent**, and final stand percentage averaged **96%**. In order for hybrids to be in the TPG for these factors, the hybrid had to average **52** lbs. or more in bushel weight, **18%** or less in grain moisture, **1%** or less in lodging, and **95%** or more in final stand percentage.

Late – Glyphosate-resistant trial, Table 2b. The test trial yield averages were 185 bu/a for 2 years and 192 bu/a for 2009. Hybrids that yielded 171 bu/a or more for 2 years and 204 bu/a or more for 2009 qualified for the TPG for yield. Hybrids had to differ in yield by 28 bu/a for two years and 13 bu/a in 2009 to be significantly different. In 2009, bushel weights averaged 47 lbs, grain moisture averaged 26%, lodging averaged zero percent, and final stand percentage averaged 93%. In order for hybrids to be in the TPG for these factors, the hybrid had to average 49 lbs. or more in bushel weight, 22% or less in grain moisture, and 1% or less in lodging, and 93% or higher in final stand percentage.

#### Central Locations Bancroft:

Early – Glyphosate-resistant trial, Table 3a. The test trial yield averages were 189 bu/a for 2 years and 179 bu/a in 2009. Hybrids that yielded 179 bu/a or more for 2 years and 183 bu/a in 2009 qualified for the TPG for yield. Hybrids had to differ in yield by 20 bu/a for 2 years and 18 bu/a in 2009 to be significantly different. In 2009, bushel weights averaged 49 lbs, grain moisture averaged 24%, lodging averaged zero percent, and percent stand averaged 90%. In order for hybrids to be in the TPG for these factors, the hybrid had to average 51 lbs. or more in bushel weight, 20% or less in grain moisture, 2% or less in lodging percentage, and 91% or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 3b. The test trial

yield averages were **181** bu/a for 2 years and **161** bu/a in 2009. Hybrids that yielded **168** bu/a or more in 2009 qualified for the TPG for yield. Yield differences among hybrids were not significant for the 2-year period. In 2009, bushel weights averaged **48** lbs, grain moisture averaged **31%**, lodging percentage averaged **1%**, and the final stand percentage averaged **89%**. In order for hybrids to be in the TPG for these factors, the hybrid had to average **47** lbs. or more in bushel weight, **26%** or less in grain moisture, **4%** or less in lodging percentage, and **90%** or more for final stand percentage.

#### **Brookings:**

Early – Glyphosate-resistant trial, Table 4a. The test trial yield averages were 197 bu/a for 2 years and 219 bu/a for 2009. Hybrids that yielded 234 bu/a or more for 2009 qualified for the TPG for yield, while the yield differences for 2 years were not significant (NS). Hybrids had to differ in yield by 11 bu/a in 2009 to be significantly different. In 2009, bushel weights averaged 50 lbs, grain moisture averaged 23%, lodging percentage averaged zero percent, and final stand percentage averaged 93%. In order for hybrids to be in the TPG for these factors, the hybrid had to average 51 lbs. or more in bushel weight, 22% or less in grain moisture, 2% or less in lodging percentage, and 94% or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 4b. The test trial yield averages were 201 bu/a for 2 years and 223 bu/a for in 2009. There were no differences in yield average among the hybrids tested 2 years, so all hybrids tested qualified for the TPG. Hybrids that yielded 231 bu/a or more in 2009 qualified for the TPG for yield. Hybrids had to differ in yield by 12 bu/a in 2009 to be significantly different. In 2009, bushel weights averaged 48 lbs, grain moisture averaged 27%, lodging averaged slightly more than zero percent, and percent stand averaged 93%. In order for hybrids to be in the TPG for all performance factors, the hybrid had to average 51 lbs. or more in bushel weight, 24% or less in grain moisture, 2% or less in lodging percentage, and 95% or more for final stand percentage.

#### Southern Locations Geddes:

**Early – Glyphosate-resistant trial, Table 5a.** The test trial yield average was **211** bu/a for 2 years and **229** bu/a in 2009. The average yield differences among the hybrids tested 2 years were non-significant (NS), so all the hybrids tested qualified for the TPG. Hybrids that yielded **228** bu/a or more for 2009 qualified for

the TPG for yield. In 2009, bushel weights averaged **54** lbs, grain moisture averaged **17%**, lodging percentage averaged **zero percent**, and percent final stand averaged **93%**. In order for hybrids to be in the TPG for these factors, the hybrid had to average **55** lbs. or more in bushel weight, **16%** or less in grain moisture, **2%** or less in lodging, and **93%** or more for final stand.

Late – Glyphosate-resistant trial, Table 5b. The test trial yield average was 208 bu/a for 2 years and 216 bu/a for 2009. Yield differences among hybrids tested for 2 years were non-significant (NS); thus, all entries tested two years were in the TPG for yield. Hybrids that yielded 216 bu/a or more for 2009 qualified for the TPG for yield. Hybrids had to differ in yield by 18 bu/a in 2009 to be significantly different. In 2009, bushel weights averaged 52 lbs, grain moisture averaged 20%, lodging percentage averaged zero percent, and percent final stand averaged 91%. In order for hybrids to be in the TPG for these factors, the hybrid had to average 53 lbs. or more in bushel weight, 18% or less in grain moisture, 2% or less in lodging, and 95% or more for final stand.

#### **Beresford**:

Early – Glyphosate-resistant trial, Table 6a. The test trial yield averages were 225 bu/a for 2 years and 236 bu/a in 2009. There were no differences in yield average among the hybrids tested 2 years, so all hybrids tested qualified for the TPG. Hybrids that yielded 239 bu/a or more in 2009 qualified for the TPG for yield. Hybrids had to differ in yield by 14 bu/a in 2009 to be significantly different. In 2009, bushel weights averaged 52 lbs, grain moisture averaged 24%, lodging percentage averaged 1%, and final stand percentage averaged 93%. In order for hybrids to be in the TPG for these factors, the hybrid had to average 53 lbs. or more in bushel weight, 19% or less in grain moisture, 2% or less in lodging percentage, and 93% or more for final stand percentage.

Late – Glyphosate-resistant, Table 6b. The test trial yield averages were 225 bu/a for 2 years and 232 bu/a in 2009. There were no differences in yield average among the hybrids tested 2 years, so all hybrids tested qualified for the TPG. Hybrids that yielded 235 bu/a or more in 2009 qualified for the TPG for yield. Hybrids had to differ in yield by 14 bu/a in 2009 to be significantly different. In 2009, bushel weights averaged 52 lbs, grain moisture averaged 27%, lodging percentage averaged 1%, and final stand percentage averaged 93%. In order for hybrids to be in the TPG for these factors, the hybrid had to average 53 lbs. or more in bushel weight, 25% or less in grain moisture, and 3% or less in lodging percentage.

Location (County)	Soil Type	Tillage Method	age Prior At label rates		Fertility Yield Goal	Date Seeded	
		Methou	Crop	Pre	Post	bu/a	Jeeueu
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	Conventional	Spring Wheat	Harness Xtra	Roundup once	200	May 7
South Shore (Codington)	Kranzburg silty clay loam, 3-6% slope	Conventional	Spring Wheat	Dual II Magnum	Roundup once	180	May 7
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	Conventional	Soybean	Fall Dual	Roundup once	180	May 18
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conventional	Soybean	Dual II Magnum	Roundup twice	200	May 6
Geddess (Chas. Mix)	Highmore-Walke silt Ioam, 0-2% slope	No-till	Winter Wheat	-	Roundup twice	200	May 14
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conventional	Soybean	-	Roundup once	210	May 11

 
 Table A. Description of 2009 corn hybrid trial locations- soil type, tillage method, prior crop, herbicides used, and seeding dates.

Plots were seeded at 28,750 seeds per acre.

Table B. Nearest weather station precipitation accumulation and average daily tempeatures for each growing season
month in 2009 and departures from average (DFA), SD Office of Climate and Weather.

Station (Test site)	Variable		Monthly data - April 1 to October 31						Sum or	
Station (Test site)			April	May	June	July	Aug	Sept	Oct	Average
	Precip inches 1971-2000 avg.	<b>'</b> 09	1.90 1.83	0.47 2.69	3.87 3.49	2.46 2.92	2.83 2.42	4.41 1.81	4.00 1.63	19.94 16.79
		DFA*	0.07	-2.22	0.38	-0.46	0.41	2.60	2.37	3.15
Aberdeen Airport (Warner)	Avg.Temp°F 1971-2000 avg.	<b>'</b> 09	43.0 45.4	56.4 57.9	64.0 66.8	68.0 72.2	66.5 70.5	63.5 59.8	41.4 46.8	57.54 59.91
		DFA	-2.4	-1.5	-2.8	-4.2	-4.0	3.7	-5.4	-2.37
	Accum. GDDs 1971-2000 avg.	<b>'</b> 09	108 111	309 316	450 498	549 691	535 644	431 349	40 143	2422 2752
		DFA*	-3	-7	-48	-142	-109	82	-103	-330
	Precip inches 1971-2000 avg.	<b>'</b> 09	1.09 1.96	1.73 2.61	2.70 4.01	3.97 2.91	3.60 2.85	1.62 2.03	6.53 1.92	21.24 18.29
		DFA	-0.87	-0.88	-1.31	1.06	0.75	-0.41	4.61	2.95
South Shore	Avg.Temp°F 1971-2000 avg.	<b>'</b> 09	40.7 43.2	54.3 56.0	61.9 65.3	64.0 70.4	63.9 67.8	61.1 57.8	38.1 45.0	54.86 57.93
Northeast Research Farm		DFA	-2.5	-1.7	-3.4	-6.4	-3.9	3.3	-6.9	-3.07
	Accum. GDDs 1971-2000 avg.	<b>'</b> 09	89 73	250 278	391 456	439 631	449 558	377 306	15 107	2010 2409
		DFA*	16	-28	-65	-192	-109	71	-92	-399
	Precip inches 1971-2000 avg.	<b>'</b> 09	1.68 2.29	2.08 3.00	4.45 3.28	2.95 2.86	1.57 2.07	2.54 1.80	3.87 1.59	19.14 16.89
		DFA	-0.61	-0.92	1.17	0.09	-0.50	0.74	2.28	2.25
Huron (Bancroft)	Avg.Temp°F 1971-2000 avg.	'09	44.5 46.1	58.5 58.2	65.0 67.9	69.0 73.4	68.5 71.5	64.5 61.0	42.0 47.9	58.86 60.86
		DFA	-1.6	0.3	-2.9	-4.4	-3.0	3.5	-5.9	-2.00
	Accum. GDDs 1971-2000 avg.	<b>'</b> 09	122 124	344 318	478 536	580 719	587 665	465 378	54 169	2630 2909
		DFA*	-2	26	-58	-139	-78	87	-115	-279

	Precip inches 1971-2000 avg.	'09	0.86 2.03	2.23 2.95	3.32 4.23	3.78 3.11	1.37 2.94	1.25 2.48	5.33 1.78	18.14 19.52
		DFA	-1.17	-0.72	-0.91	0.67	-1.57	-1.23	3.55	-1.38
Brookings	Avg.Temp°F 1971-2000 avg.	'09	44.4 44.2	56.9 56.7	66.2 66.1	70.7 70.7	68.5 68.6	58.9 59.1	46.0 46.3	58.80 58.81
(SDSU Plant Science Farm)		DFA	0.2	0.2	0.1	0.0	-0.1	-0.2	-0.3	-0.01
	Accum. GDDs 1971-2000 avg.	'09	100 85	299 293	429 483	496 640	504 577	394 330	23 138	2245 2546
		DFA*	15	6	-54	-144	-73	64	-115	-301
	Precip inches 1971-2000 avg.	'09	1.60 2.47	0.94 3.65	4.64 3.95	4.82 3.35	2.08 2.83	2.16 2.26	4.72 1.80	20.96 20.31
0		DFA	-0.87	-2.71	0.69	1.47	-0.75	-0.10	2.92	0.65
(Beresford)	Avg.Temp°F 1971-2000 avg.	'09	47.4 47.2	59.7 59.5	69.5 69.4	73.7 73.7	71.4 71.5	62.6 62.3	49.4 49.7	61.96 61.90
Southeast Experiment		DFA	0.2	0.2	0.1	0.0	-0.1	0.3	-0.3	0.06
	Accum. GDDs 1971-2000 avg.	'09	136 135	354 338	504 582	561 733	564 666	424 396	52 194	2595 3044
		DFA*	1	16	-78	-172	-102	28	-142	-449
	Precip inches 1971-2000 avg.	'09	0.96 2.49	1.18 3.6	3.11 3.19	3.4 2.88	2.63 2.21	1.72 2.09	3.68 1.59	16.68 18.05
		DFA	-1.53	-2.42	-0.08	0.52	0.42	-0.37	2.09	-1.37
White Lake (Geddes)	Avg.Temp°F 1971-2000 avg.	<b>'</b> 09	43.7 47.9	58.0 59.7	65.1 69.0	68.0 74.5	67.5 72.7	62.7 62.8	49.5 49.8	59.21 62.34
		DFA	-4.2	-1.7	-3.9	-6.5	-5.2	-0.1	-0.3	-3.13
	Accum. GDDs 1971-2000 avg.	'09	125 148	340 342	457 567	570 740	552 696	426 415	40 190	2510 3098
		DFA*	-23	-2	-110	-170	-144	11	-150	-588

\* DFA - departure from normal, difference current year is greater or less (-) than the long-term average.

## Table C. 2009 Glyphosate-resistant corn hybrid entries by brand/hybrid, seed product traits, and index to performance table no.(s).

Brand/Hybrid	Seed Biotech Traits	Table No.(s)
AGSOURCE/ 3P-494+RR/YGPL AGSOURCE/ 3T-096 VT3 AGSOURCE/ 3T-294 VT3 AGSOURCE/ 3T-302 VT3 AGSOURCE/ 3T-603B VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1a, 2a 1a, 2a, 3a 1a, 2a 1b, 2b, 5a 3b, 4b, 5a
AGSOURCE/ 3T-712 VT3 AGSOURCE/ 3T-799 VT3 AGSOURCE/ 3T-904 VT3 AGSOURCE/ 3T-995 VT3 AGSOURCE/ 5B-198 GTCBLL	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Glu,Gly	6b 1b, 2b, 3a, 4a 3b, 4b, 5a 1a, 2a, 3a 1b, 2b, 3a, 4a
AGSOURCE/ 5X-100A RR/HXT AGSOURCE/ 5X-805 RR/HXT DAIRYLAND/ ST-6992 DAIRYLAND/ ST-7790 DAIRYLAND/ ST-9003	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly Gly Crw*,Glu Cb,Crw,Gly	1b, 2b 3b, 4b, 5a 2a 2a 4b
DAIRYLAND/ ST-9006 DAIRYLAND/ ST-9395 DAIRYLAND/ ST-95000 DAIRYLAND/ ST-9594 DAIRYLAND/ ST-95970	Cb,Crw,Gly Cb,Crw,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly Cb,Crw,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	6a 1a, 2a 1b, 4a 1a, 2a 1b, 2b, 4a
DAIRYLAND/ ST-97030 DAIRYLAND/ ST-9789 DAIRYLAND/ ST-9799 DAIRYLAND/ ST-9810 DAIRYLAND/ ST92060	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	4b 2a 1b 6a 6a

Brand/Hybrid	Seed Riotech Traits	Table No (s)
DEKALB/ DKC40-20(VT3) DEKALB/ DKC42-72(VT3) DEKALB/ DKC43-27(VT3) DEKALB/ DKC46-60(VT3) DEKALB/ DKC48-37(VT3)	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1a, 2a 1a, 2a 1a, 2a, 3a, 4a, 5a 1b, 2b, 3a, 4a 2b, 3a
DEKALB/ DKC50-35(VT3)	Cb,Crw,Gly	3a, 5a
DEKALB/ DKC50-44(VT3)	Cb,Crw,Gly	1b, 2b, 4a, 5a
DEKALB/ DKC50-66(VT3)	Cb,Crw,Gly	1b, 2b, 3a, 4a, 5a
DEKALB/ DKC51-13(VT3)	Cb,Crw,Gly	1b, 2b, 3b, 4b, 5a
DEKALB/ DKC52-59(VT3)	Cb,Crw,Gly	1b, 3b, 4b, 5a, 6a
DEKALB/ DKC53-76(VT3)	Cb,Crw,Gly	3b, 4b, 5a, 6a
DEKALB/ DKC55-07(VT3)	Cb,Crw,Gly	3b, 5a, 6a
DEKALB/ DKC57-50(VT3)	Cb,Crw,Gly	6a
DEKALB/ DKC58-16(VT3)	Cb,Crw,Gly	5b
DEKALB/ DKC59-64(VT3)	Cb,Crw,Gly	5b, 6a
DEKALB/ DKC61-69(VT3)	Cb,Crw,Gly	5b, 6b
DEKALB/ DKC62-54(VT3)	Cb,Crw,Gly	6b
EPLEY/ E1115GT	WBcw,Cb,Bcw,Faw,Glu,Gly	2a, 3a, 4a
EPLEY/ E1184VT3	Cb,Crw,Gly	2b, 3a, 4a
EPLEY/ EXP1307HXLLRR	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	2b, 3a, 4a
OUR/ STAR 6844VT3	Cb,Crw,Gly	6a
OUR/ STAR EXP6066VT3	Cb,Crw,Gly	6a
OUR/ STAR EXP9056VT3	Cb,Crw,Gly	6a
OUR/ STAR EXP9072VT3	Cb,Crw,Gly	6a
62/ GEN. 3P-595 RR/YGPL	Cb,Crw,Gly	1a, 2a
62/ GEN. 5H-005 RR/HX	WBcw,Cb,Bcw,Faw,Glu,Gly	3b, 4b, 5a
62/ GEN. 5H-007 RR/HX	WBcw,Cb,Bcw,Faw,Glu,Gly	3b, 4b, 5b, 6a
62/ GEN. 5H-199 RR/HX	WBcw,Cb,Bcw,Faw,Glu,Gly	1b, 2b
62/ GEN. 5H-210 RR/HX	WBcw,Cb,Bcw,Faw,Glu,Gly	5b, 6a
62/ GEN. 5H-214 RR/HX	WBcw,Cb,Bcw,Faw,Glu,Gly	6b
62/ GEN. 5H-501 RR/HX 62/ GEN. 5H-506 RR/HX 62/ GEN. 5H-506A RR/HX 62/ GEN. 5H-501A RR/HX 62/ GEN. 5H-511A RR/HX 62/ GEN. 5H-511A RR/HX	WBcw,Cb,Bcw,Faw,Glu,Gly WBcw,Cb,Bcw,Faw,Glu,Gly WBcw,Cb,Bcw,Faw,Glu,Gly WBcw,Cb,Bcw,Faw,Glu,Gly WBcw,Cb,Bcw,Faw,Glu,Gly	1b, 2b, 3a, 4a, 5a 3b, 4b, 5a 3b, 4b, 5a 5b, 6a 5b, 6b
52/ GEN. 5H-797 RR/HX	WBcw,Cb,Bcw,Faw,Glu,Gly	1b, 2b, 3a
52/ GEN. 5H-905 RR/HX	WBcw,Cb,Bcw,Faw,Glu,Gly	3b, 4b, 5a
52/ GEN. 5H-999 RR/HX	WBcw,Cb,Bcw,Faw,Glu,Gly	1b, 2b, 3a, 4a
52/ GEN. 5X-199RR/HXT	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	1b, 2b, 3a, 4a
52/ GEN. 5X-210 RR/HXT	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	5b, 6a
62/ GEN. 5X-398 RR/HXT 62/ GEN. 5X-513 RR/HXT 62/ GEN. 5X-594 RR/HXT 62/ GEN. 5X-707 RR/HXT 62/ GEN. 5X-701 RR/HXT 62/ GEN. 5X-711 RR/HXT	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	1a, 2a, 3a, 4a 6b 1a, 2a 3b, 4b 6a
62/ GEN. 5X-711A RR/HXT	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	6b
62/ GEN. 5X-802 RR/HXT	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	1b, 2b, 3a, 4a, 5a
62/ GEN. 5X-911 RR/HXT	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	5b, 6a
62/ GEN. 5X-911A RR/HXT	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	6b
HEINE/ 727VT3	Cb,Crw,Gly	4b
IEINE/ 742VT3	Cb,Crw,Gly	4b
IEINE/ 744RRYGCB	Cb,Gly	4b
IEINE/ 745VT3	Cb,Crw,Gly	4b
IEINE/ 753VT3	Cb,Crw,Gly	4b
IOEGEMEYER/ 3113	Cb,Crw,Gly	3a, 4a
IOEGEMEYER/ 7421	Cb,Glu,Gly	5a
IOEGEMEYER/ 7445	Cb,Crw,Gly	5a
IOEGEMEYER/ HPT 6962	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	4a
IOEGEMEYER/ HPT 7757	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	5a, 6a
IOEGEMEYER/ HPTEXP6589	WBcw,Cb,Bcw,Faw,Glu,Gly	3a
HOEGEMEYER/ HPTEXP7041	WBcw,Cb,Bcw,Faw,Glu,Gly	3a
HOEGEMEYER/ HPTEXP7408	WBcw,Cb,Bcw,Faw,Glu,Gly	5a
(ALTENBERG/ 5355LLGTBT11	Cb,Glu,Gly	5a
(ALTENBERG/ 5588LLRRHXT	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	5a
(ALTENBERG/ K4053VT3	Cb,Crw,Gly	4a

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Table C. 2009 Glyphosate-resistant corn hybrid entry index to performance table no. (s). (Continued)					
Brand/Hybrid	Seed Biotech Traits	Table No.(s)			
KALTENBERG/ K4149LLGT3 KALTENBERG/ K4521LLRRHXT KALTENBERG/ K5163VT3 KALTENBERG/ K5332GT KALTENBERG/ K6645LLGT3	Cb,Crw,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly Cb,Crw,Gly Gly Cb,Crw*,Glu,Gly	4a 4a 5a 5a 6a			
KALTENBERG/ K6663VT3 KRUGER/ 6006VT3 KRUGER/ 6010VT3 KRUGER/ 6013VT3 KRUGER/ 6093VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	6a 3b, 4b, 5b 5b, 6a 6b 1a, 2a			
KRUGER/ 6097VT3 KRUGER/ 6102VT3 KRUGER/ 6116VT3 KRUGER/ 6200VT3 KRUGER/ 6205VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1b, 2b, 3a, 4a 1b, 2b, 3b, 4b, 5a 6b 1b, 2b 3b, 4b, 5a			
KRUGER/ 6208VT3 KRUGER/ 6213VT3 KRUGER/ 6214VT3 KRUGER/ 6295VT3 KRUGER/ 6298VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	5b, 6a 6b 6b 1a, 2a 1b, 2b, 3a, 4a			
KRUGER/ 6401VT3 KRUGER/ 6408VT3 KRUGER/ 6410VT3 KRUGER/ 6411VT3 KRUGER/ 6412VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1b, 2b, 3b, 4b, 5a 5b, 6a 5b, 6a 6b 6b			
KRUGER/ 6490VT3 KRUGER/ 6499VT3 KRUGER/ 6606VT3 NC+/ 1775VT3 NC+/ 1982VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1a, 2a 1b, 2b, 3a, 4a 3b, 4b, 5b 3a, 4a, 5a 3a, 4a, 5a			
NC+/ 208-72VT3 NC+/ 210-57VT3 NC+/ 4517VT3 NC+/ 4582VT3 NUTECH/ 3T-098 VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	5b, 6a 5b, 6a 6b 5b, 6a 1b, 2b, 3a, 4a			
NUTECH/ 3T-106 VT3 NUTECH/ 3T-110 VT3 NUTECH/ 3T-295 VT3 NUTECH/ 3T-300 VT3 NUTECH/ 3T-308 VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	3b, 4b, 5a, 6a 5b, 6a 1a, 2a 1b, 2b, 3a, 4a 3b, 4b, 5b, 6a			
NUTECH/ 3T-313 VT3 NUTECH/ 3T-401 VT3 NUTECH/ 3T-408 VT3 NUTECH/ 3T-409 VT3 NUTECH/ 3T-413 VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	6b 1b, 2b, 3a, 4a, 5a 3b, 4b, 5b, 6a 5b 6b			
NUTECH/ 3T-493 VT3 NUTECH/ 3T-512 VT3 NUTECH/ 3T-512A VT3 NUTECH/ 3T-600 VT3 NUTECH/ 3T-601 VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1a, 2a 5b, 6a 6b 1b, 2b, 3a, 4a 1b, 2b, 3a, 4a			
NUTECH/ 3T-603 VT3 NUTECH/ 3T-612 VT3 NUTECH/ 3T-706 VT3 NUTECH/ 3T-713 VT3 NUTECH/ 3T-801 VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1b, 2b, 3b, 4b, 5a 6b 3b, 4b, 5a 6b 1b, 2b, 3a, 4a, 5a			
NUTECH/ 3T-894 VT3 NUTECH/ 5B-804 GT/CB/LL NUTECH/ 5N-909 GTCBLLRW PIONEER/ 33Z74 PIONEER/ 35F44	Cb,Crw,Gly Cb,Glu,Gly Cb,Crw*,Glu,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	1a, 2a 3b, 4b, 5a 5b, 6a 6b 3b, 4b, 5a, 6a			
PIONEER/ 36V53 PIONEER/ 37K11 PIONEER/ 37N68 PIONEER/ 38H08 PIONEER/ 38P43	WBcw,Cb,Bcw,Faw,Glu,Gly WBcw,Cb,Bcw,Faw,Glu,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly WBcw,Cb,Bcw,Faw,Glu,Gly WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	3b, 4b, 5a 1b, 3a 1b, 4b 1a, 2a 2a			

Table C. 2009 Glyphosate-resistant corn hyb	rid entry index to performance tal	ole no. (s). (Continued)
Brand/Hybrid	Seed Biotech Traits [1]	Table No.(s)
PROSEED/ 794	Cb,Glu,Gly	1a, 2a
PROSEED/ 8100	Gly	4a
PROSEED/ 8101VT3	Cb,Crw,Gly	5a, 6a
PROSEED/ 8104	Cb,Glu,Gly	6a
PROSEED/ 894	Cb,Crw,Gly	1a, 2a
PROSEED/ 896 PROSEED/ 897 PROSEED/ 9102 PROSEED/ 9105 RENK/ EXP7-816VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1b, 2b 1b, 2b, 3a, 4a 5a, 6a 5a, 6a 6b
RENK/ EXP8-809VT3	Cb,Crw,Gly	6b
RENK/ RK670VT3	Cb,Crw,Gly	3b, 4b, 5a, 6a
RENK/ RK698VT3	Cb,Crw,Gly	3b, 4b, 5a, 6a
RENK/ RK711RRHXTRA	WBcw,Cb,Bcw,Faw,Crw*,Glu,Gly	5b, 6a
RENK/ RK744VT3	Cb,Crw,Gly	5b, 6a
RENK/ RK760VT3	Cb,Crw,Gly	4b, 5b, 6a
RENK/ RK822VT3	Cb,Crw,Gly	5b, 6a
SEEDS/ 2000 9501VT3	Cb,Crw,Gly	1a, 2a
SEEDS/ 2000 9502VT3	Cb,Crw,Gly	1a, 2a
SEEDS/ 2000 9901VT3	Cb,Crw,Gly	1b, 2b, 3a, 4a
WENSMAN/ W 7195VT3 WENSMAN/ W 7267VT3 WENSMAN/ W 7270VT3 WENSMAN/ W 7273VT3 WENSMAN/ W 7289VT3	Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly Cb,Crw,Gly	1a, 2a 4a 1b, 2b, 3a, 4a 1b, 2b 3a
WENSMAN/ W 7360VT3	Cb,Crw,Gly	3b, 4b, 5a
WENSMAN/ W 7433VT3	Cb,Crw,Gly	5a
WENSMAN/ W 7455VT3	Cb,Crw,Gly	3b, 4b, 5b, 6a
WENSMAN/ W 7469VT3	Cb,Crw,Gly	5b, 6a
WENSMAN/ W 8180	Cb,Crw,Gly	1a, 2a

[1] Crw\* includes Western, Northern, and Mexican Corn rootworm.

Insect traits - Black cutworm (Bcw), Corn borer (Cb), corn rootworm (Crw), Mexican Corn rootworm (MCrw), Northern Corn rootworm (NCrw), Western Corn rootworm (WCrw), Fall Armyworm (Faw), and Western Bean cutworm (WBcw)

Herbicide traits - Glyphosate tolerance (Gly), Glufosinate tolerance (Glu).

NOTE: Biotech traits were obtained by referencing the product registrant trade name and seed characteristics as listed in the Know Before You Grow section at the National Corn Growers Website (http://www.ncga.com/) with the hybrid information supplied by each seed company. Since these biotech seed products change over time, growers are encouraged to verify the biotech traits of any hybrid (s) of interest with the respective seed dealer.

Table D. Explanation of performance tabl
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No.	Explanation of footnotes
[1]	Entries are listed by brand/variety – entries are sorted by 2-yr then by 2009 yield average.
[2]	Brand Relative Maturity (Rel. Mat.) – the relative maturity rating as reported by the seed company.
[3]	Lodging Percentage – percentage of stalks broken below the ear at harvest.
[4]	Final Stand Percentage – the number of standing stalks at harvest as a percentage of the seeded population.
[5]	Least Significant Difference (LSD 0.05) – the difference any two values within a column must equal or exceed to be significantly different (0.05 level of probability). If the difference is less than the LSD value, the difference is nonsignificant (NS).
[6]	Min. TPG-avg. – the minimum column value for yield, bushel weight, and final stand percentage that a hybrid must equal or exceed to be in the TPG.
[7]	Max. TPG-avg. – the maximum column value for grain moisture at harvest, lodging percentage, or lodging score that a hybrid must equal or be less than to be in the TPG.
[8]	Coefficient of variation (C.V.) – the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% are less common, while values of 6-15% are more common. If a value exceeds 15%, the trial contained too much experimental error to be valid, so results for that trial are not reported.

Seed Brand	Seed Company Mailing Address
AgSource	AgSource Seeds Inc., 1800 L Ave., Nevada, IA 50201
Dairyland	Dairyland Seed, PO Box 958, West Bend, WI 53095
Dekalb	Monsanto, 102 W. Carol Ave., Cortland, IL 60112
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310, Shell Rock, IA 50670
Four Star	Four Star Seed Co., 2929-335th Street, Logan, IA 51546
G-2 Genetics	G-2 Genetics, 415 S. Duff Avenue, Suite C, Ames, IA 50010
Heine	Heine Hybrid Seed Corn, 1020 E. 320th St., Vermillion, SD 57069
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031
Kaltenberg	Kaltenberg Seeds, 5506 State Road 19, Box 278, Waunakee, WI 53597
Kruger	Kruger Seed Co., Box A, Dike, IA 50624
NC+	NC+, 525 South 211th Street, Elkhorn, NE 68022
NuTech	Nutech Seed, LLC, 415 S. Duff Avenue, Suite C, Ames, IA 50010
Pioneer	Pioneer Hi-Bred International, 151 Saint Andrews Court, Mankato, MN 56001
Proseed	Proseed, 701 E. Brewster St., Harvey, ND 58341
Renk	Renk Seed Co., 6809 Wilburn Rd., Sun Prairie, WI 53590
Seeds 2000	Seeds 2000, PO Box 200, Breckenridge, MN 56520
Wensman	Wensman Seed Co., 67784 330th Street, Watkins, MN 55389

Table E. Mailing addresses for seed entries in the 2009 corn hybrid trials by seed brand name

## ARCHIVE

		Yield A	verages		Other 200	9 Averages	
Brand/Hybrid & Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2009 bu/a	Bu. Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
SEEDS/ 2000 9501VT3 + Poncho 1250 DAIRYLAND/ ST-9594 + Poncho 250 PIONEER/ 38H08 + Poncho 250 AGSOURCE/ 3T-995 VT3 + Cruiser 250 KRUGER/ 6093VT3 + Cruiser 250	95 94 92 95 93	217 214 209 207 206	<b>245</b> <b>246</b> 225 225 233	52 <b>54</b> 50 52 <b>53</b>	<b>19</b> <b>19</b> 17 21 21	0 0 0 0	98 97 95 98 99
DEKALB/ DKC43-27(VT3) + Poncho 250 PROSEED/ 794 + Poncho 250 DAIRYLAND/ ST-9395 + Poncho 250 NUTECH/ 3T-295 VT3 + Poncho 250 AGSOURCE/ 3P-494+RR/YGPL + Cruiser 250	93 94 95 95 94	<b>206</b>	220 247 245 244 242	<b>54</b> 52 52 <b>54</b> 52	20 22 20 23 20	1 0 0 0 0	93 95 97 96 99
PROSEED/ 894 + Poncho 250 KRUGER/ 6295VT3 + Cruiser 250 DEKALB/ DKC42-72(VT3) + Poncho 250 WENSMAN/ W 7195VT3 + Poncho 250 SEEDS/ 2000 9502VT3 + Poncho 1250	94 95 92 95 95	•	<b>240</b> <b>236</b> 232 232 232	51 <b>53</b> <b>54</b> 52 <b>53</b>	20 21 <b>19</b> 22 21	0 0 0 0	95 95 97 97 89
G2/ GEN. 5X-398 RR/HXT + Cruiser 250 NUTECH/ 3T-493 VT3 + Poncho 250 DEKALB/ DKC40-20(VT3) + Poncho 250 WENSMAN/ W 8180 + Poncho 250 G2/ GEN. 5X-594 RR/HXT + Cruiser 250	95 93 90 95 94		230 229 226 226 225	51 50 <b>53</b> 49	24 21 20 23 21	0 1 0 0 0	93 86 <b>95</b> <b>96</b> 92
NUTECH/ 3T-894 VT3 + Poncho 250 AGSOURCE/ 3T-096 VT3 + Cruiser 250 G2/ GEN. 3P-595 RR/YGPL + Cruiser 250 KRUGER/ 6490VT3 + Cruiser 250 AGSOURCE/ 3T-294 VT3 + Poncho 250	94 95 95 90 94		224 215 212 208 208	54 54 52 54 54	20 22 22 <b>18</b> 21	0 1 0 0	95 97 83 95 88
Trial avg.: High avg.: Low avg.: [5] LSD(.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	94 95 90 25	210 217 206 NS 206 4 6	230 247 208 13 234 3 25	52 54 49 1 53 2 25	21 24 17 2 19 6 25	0 1 0 NS 1 372 25	94 99 83 5 94 3 25

Table 1a. Warner early maturity Roundup Ready corn hybrid test results, 2008-09, Allen & Inel Ryckman Farm. Seeded May 7, 2009 at 28,750 seeds per acre.

·		Yield A	verages	Other 2009 Averages				
Brand/Hybrid & Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2009 bu/a	Bu. Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
KRUGER/ 6401VT3 + Cruiser 250 DEKALB/ DKC52-59(VT3) + Poncho 250 SEEDS/ 2000 9901VT3 + Poncho 250 KRUGER/ 6499VT3 + Cruiser 250 DEKALB/ DKC50-44(VT3) + Poncho 250	101 102 99 99 100	230 223 223 222 222 222	242 241 236 243 237	<b>53</b> 50 <b>53</b> 51 <b>54</b>	24 23 23 24 23	0 0 0 0	<b>95</b> 95 95 97 93	
NUTECH/ 3T-098 VT3 + Cruiser 250 WENSMAN/ W 7273VT3 + Poncho 250 G2/ GEN. 5H-797 RR/HX + Cruiser 250 KRUGER/ 6097VT3 + Cruiser 250 KRUGER/ 6102VT3 + Cruiser 250	98 98 96 97 102	221 221 221 220 219	<b>247</b> <b>243</b> <b>241</b> <b>237</b> 234	51 52 51 50 <b>53</b>	23 23 21 23 22	0 0 1 0	<b>95</b> <b>95</b> <b>97</b> 94 93	
KRUGER/ 6298VT3 + Cruiser 250 DEKALB/ DKC46-60(VT3) + Poncho 250 DAIRYLAND/ ST-9799 + Poncho 250 G2/ GEN. 5H-199 RR/HX + Cruiser 250 NUTECH/ 3T-601 VT3 + Poncho 250	98 96 99 99 100	213 213 210	236 227 231 243 240	<b>53</b> <b>53</b> 50 51 <b>53</b>	20 20 24 21 23	0 0 0 0 0	<b>99</b> <b>95</b> 94 93 <b>96</b>	
G2/ GEN. 5H-501 RR/HX + Cruiser 250 G2/ GEN. 5X-199RR/HXT + Cruiser 250 WENSMAN/ W 7270VT3 + Poncho 250 DEKALB/ DKC50-66(VT3) + Poncho 250 NUTECH/ 3T-801 VT3 + Poncho 250	100 99 97 100 100		<b>240</b> <b>235</b> <b>235</b> 234 234	52 52 <b>53</b> 53 50	23 23 20 20 24	0 1 0 1 0	<b>95</b> 97 94 96 90	
G2/ GEN. 5H-999 RR/HX + Cruiser 250 PIONEER/ 37K11 + Poncho 250 NUTECH/ 3T-401 VT3 + Cruiser 250 NUTECH/ 3T-300 VT3 + Cruiser 250 KRUGER/ 6200VT3 + Cruiser 250	99 99 100 100 100		234 233 233 231 231	<b>54</b> 49 52 52 52	22 22 24 24 <b>18</b>	0 0 0 0	92 95 96 95 95	
PROSEED/ 897 + Poncho 250 NUTECH/ 3T-600 VT3 + Poncho 250 G2/ GEN. 5X-802 RR/HXT + Cruiser 250 AGSOURCE/ 5B-198 GTCBLL + Poncho 250 PROSEED/ 896 + Poncho 250	97 100 100 100 96		229 229 228 225 222	<b>54</b> 52 51 52 <b>53</b>	21 24 24 24 23	0 1 0 0 0	92 89 <b>98</b> 83 90	
PIONEER/ 37N68 + Poncho 250 AGSOURCE/ 3T-799 VT3 + Cruiser 250 AGSOURCE/ 3T-302 VT3 + Cruiser 250 DAIRYLAND/ ST-95970 + Cruiser 250 NUTECH/ 3T-603 VT3 + Cruiser 250	101 99 102 97 103		222 219 219 218 218 218	51 50 51 50 51	24 24 25 24 24 24	1 0 0 0	93 88 90 91 92	

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#### Table 1b. Warner late maturity Roundup Ready corn hybrid test results, 2008-09, Allen & Inel Ryckman Farm. Seeded May 7, 2009 at 28,750 seeds per acre.

No. entries: [1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2009 yield average. \* Values in **bold type** within a column are included in the top-performance group.

Trial avg.:

High avg.:

Low avg.:

[5] LSD(.05): [6] Min.TPG value: [7] Max.TPG value:

[8] Coef. of var.:

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Note that additional table footnotes are explained in table D.

AGSOURCE/ 5X-100A RR/HXT + Poncho 250

DEKALB/ DKC51-13(VT3) + Poncho 250

DAIRYLAND/ ST-9500Q + Cruiser 250

		Yield Av	verages	Other 2009 Averages				
Brand/Hybrid & Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2009 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
DEKALB/ DKC43-27(VT3) + Poncho 250 AGSOURCE/ 3T-995 VT3 + Cruiser 250 KRUGER/ 6093VT3 + Cruiser 250 PIONEER/ 38H08 + Poncho 250 SEEDS/ 2000 9501VT3 + Poncho 1250	93 95 93 92 95	202 199 185 184 178	<b>212</b> <b>206</b> 201 195 204	<b>52</b> 49 50 47 48	20 20 22 <b>18</b> 19	0 0 0 0	95 96 98 94 99	
DAIRYLAND/ ST-9594 + Poncho 250 DAIRYLAND/ ST-6992 + Poncho 250 KRUGER/ 6295VT3 + Cruiser 250 DEKALB/ DKC42-72(VT3) + Poncho 250 DAIRYLAND/ ST-9395 + Poncho 250	94 92 95 92 95	176	213 216 215 212 212	51 51 49 51 49	<b>16</b> 20 19 20 19	0 1 0 0	95 95 99 96 95	
DAIRYLAND/ ST-9789 + Poncho 250 NUTECH/ 3T-493 VT3 + Poncho 250 NUTECH/ 3T-295 VT3 + Poncho 250 AGSOURCE/ 3T-294 VT3 + Poncho 250 WENSMAN/ W 8180 + Poncho 250	89 93 95 94 95	• • • •	210 207 207 207 207 206	51 49 50 51 51	<b>18</b> <b>17</b> 23 19 22	1 0 0 0	<b>99</b> 92 94 93 94	
PROSEED/ 894 + Poncho 250 NUTECH/ 3T-894 VT3 + Poncho 250 DEKALB/ DKC40-20(VT3) + Poncho 250 KRUGER/ 6490VT3 + Cruiser 250 SEEDS/ 2000 9502VT3 + Poncho 1250	94 94 90 90 95		<b>205</b> <b>205</b> 204 203 203	49 49 51 <b>53</b> 50	21 20 21 19 20	1 0 0 0 0	<b>95</b> 96 94 <b>99</b> 93	
DAIRYLAND/ ST-7790 + Cruiser 250 WENSMAN/ W 7195VT3 + Poncho 250 AGSOURCE/ 3P-494+RR/YGPL + Cruiser 250 AGSOURCE/ 3T-096 VT3 + Cruiser 250 G2/ GEN. 3P-595 RR/YGPL + Cruiser 250	90 95 94 95 95		202 198 193 191 189	51 49 49 50 49	21 23 22 23 23 23	0 0 0 0	93 <b>95</b> 97 92 <b>99</b>	
PROSEED/ 794 + Poncho 250 G2/ GEN. 5X-594 RR/HXT + Cruiser 250 G2/ GEN. 5X-398 RR/HXT + Cruiser 250 PIONEER/ 38P43 + Poncho 250 EPLEY/ E1115GT + Not reported	94 94 95 95 93		187 182 173 171 159	47 45 47 51 50	20 21 24 22 22	0 0 0 0 0	99 95 95 95 95 95	
Trial avg.: High avg.: Low avg.: [5] LSD(.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	94 95 89 30	187 202 176 NS 176 6 6	200 216 159 11 205 3 30	50 53 45 1 52 2 30	20 24 16 2 18 5 30	0 1 NS 1 557 30	96 99 92 4 95 3 30	

#### Table 2a. South Shore early maturity Roundup Ready corn hybrid test results, 2008-09, Northeast Research Farm. Seeded May 7, 2009 at 28,750 seeds per acre.

		Yield A	verages		Other 200	9 Averages	
Brand/Hybrid & Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2009 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
KRUGER/ 6102VT3 + Cruiser 250 DEKALB/ DKC48-37(VT3) + Poncho 250 DEKALB/ DKC46-60(VT3) + Poncho 250 DEKALB/ DKC50-44(VT3) + Poncho 250 KRUGER/ 6298VT3 + Cruiser 250 SEEDS/ 2000 9901VT3 + Poncho 250	102 98 96 100 98 99	199 196 196 194 190 187	<b>209</b> <b>209</b> 200 <b>208</b> 197 195	48 <b>50</b> 48 47 48 <b>49</b>	25 <b>20</b> <b>21</b> 25 24 24 24	0 0 1 0	<b>93</b> <b>93</b> <b>97</b> 92 <b>96</b> 92
KRUGER/ 6097VT3 + Cruiser 250 WENSMAN/ W 7273VT3 + Poncho 250 KRUGER/ 6401VT3 + Cruiser 250 G2/ GEN. 5H-797 RR/HX + Cruiser 250 NUTECH/ 3T-098 VT3 + Cruiser 250 KRUGER/ 6499VT3 + Cruiser 250	97 98 101 96 98 99	<b>182</b> 1 <b>82</b> 1 <b>81</b> 1 <b>79</b> 169 164	<b>215</b> 181 195 196 188 188	46 47 <b>50</b> 45 46 47	27 31 27 24 29 29	0 0 0 0 0	97 94 96 94 96 95
G2/ GEN. 5H-999 RR/HX + Cruiser 250 DEKALB/ DKC50-66(VT3) + Poncho 250 KRUGER/ 6200VT3 + Cruiser 250 EPLEY/ E1184VT3 + Cruiser 250 G2/ GEN. 5H-501 RR/HX + Cruiser 250 G2/ GEN. 5X-199RR/HXT + Cruiser 250	99 100 100 96 100 99		<b>217</b> <b>214</b> <b>213</b> <b>208</b> 203 199	48 <b>49</b> 48 47 47	23 22 21 21 24 25	1 0 0 0 0 0	<b>94</b> <b>94</b> <b>94</b> <b>94</b> 92 91
PROSEED/ 896 + Poncho 250 NUTECH/ 3T-601 VT3 + Poncho 250 PROSEED/ 897 + Poncho 250 G2/ GEN. 5H-199 RR/HX + Cruiser 250 WENSMAN/ W 7270VT3 + Poncho 250 NUTECH/ 3T-401 VT3 + Cruiser 250	96 100 97 99 97 100		198 198 197 197 196 193	<b>49</b> 48 47 47 47 46	25 24 26 23 25 29	0 0 1 0 0	91 96 91 90 <b>95</b> <b>93</b>
DAIRYLAND/ ST-95970 + Cruiser 250 DEKALB/ DKC51-13(VT3) + Poncho 250 NUTECH/ 3T-300 VT3 + Cruiser 250 AGSOURCE/ 5B-198 GTCBLL + Poncho 250 G2/ GEN. 5X-802 RR/HXT + Cruiser 250 NUTECH/ 3T-600 VT3 + Poncho 250	97 101 100 100 100 100		192 189 184 182 180 179	<b>49</b> 47 46 47 46 47	24 26 31 29 26 25	0 0 0 0 0	92 94 94 84 97 87
AGSOURCE/ 3T-799 VT3 + Cruiser 250 NUTECH/ 3T-603 VT3 + Cruiser 250 AGSOURCE/ 5X-100A RR/HXT + Poncho 250 AGSOURCE/ 3T-302 VT3 + Cruiser 250 EPLEY/ EXP1307HXLLRR + Cruiser 250 NUTECH/ 3T-801 VT3 + Poncho 250	99 103 100 102 100 100		173 168 165 165 162 154	48 48 48 48 46 45	29 25 31 35 30 34	0 0 0 0 0	88 87 <b>94</b> 95 91 91
Trial avg.: High avg.: Low avg.: [5] LSD(.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	99 103 96 36	185 199 164 28 171 5 12	192 217 154 13 204 4 36	47 50 45 1 49 2 36	26 35 20 2 2 5 36	0 1 0 NS 1 420 36	93 97 92 4 93 3 36

#### Table 2b. South Shore late maturity Roundup Ready corn hybrid test results, 2008-09, Northeast Research Farm. Seeded May 7, 2009 at 28,750 seeds per acre.

	Del	Yield A	verages		Other 2009 Averages		
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2009 bu/a	Bu. Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
DEKALB/ DKC46-60(VT3) + Poncho 250 DEKALB/ DKC48-37(VT3) + Poncho 250 DEKALB/ DKC43-27(VT3) + Poncho 250 WENSMAN/ W 7289VT3 + Poncho 250 NC+/ 1982VT3 + Cruiser 250	96 98 93 99 99	199 196 195 195 193	<b>200</b> <b>196</b> <b>194</b> 179 <b>186</b>	<b>51</b> <b>52</b> <b>51</b> 48 47	21 <b>20</b> 21 24 25	1 0 0 0	94 93 89 91 94
KRUGER/ 6298VT3 + Cruiser 250 G2/ GEN. 5H-797 RR/HX + Cruiser 250 NC+/ 1775VT3 + Cruiser 250 NUTECH/ 3T-098 VT3 + Cruiser 250 KRUGER/ 6097VT3 + Cruiser 250	98 96 97 98 97	189 189 189 186 186	<b>186</b> <b>184</b> 174 <b>183</b> 175	49 48 49 49 47	23 23 25 26 25	0 0 1 0 0	92 87 89 92 92
KRUGER/ 6499VT3 + Cruiser 250 SEEDS/ 2000 9901VT3 + Poncho 250 EPLEY/ E1184VT3 + Cruiser 250 G2/ GEN. 5X-199RR/HXT + Cruiser 250 H0EGEMEYER/ 3113 + Poncho 250	99 99 96 99 95	<b>180</b> 175	168 160 <b>201</b> 193 193	48 49 48 47 51	27 24 <b>18</b> 24 21	1 1 0 0	<b>95</b> 82 <b>92</b> 90 <b>92</b>
AGSOURCE/ 3T-995 VT3 + Cruiser 250 HOEGEMEYER/ HPTEXP6589 + Cruiser 250 PROSEED/ 897 + Poncho 250 WENSMAN/ W 7270VT3 + Poncho 250 DEKALB/ DKC50-66(VT3) + Poncho 250	95 95 97 97 100		192 191 190 190 187	48 47 50 48 49	21 23 22 24 22	0 0 0 1	90 94 92 94 95
DEKALB/ DKC50-35(VT3) + Poncho 250 PIONEER/ 37K11 + Poncho 250 AGSOURCE/ 3T-799 VT3 + Cruiser 250 NUTECH/ 3T-300 VT3 + Cruiser 250 G2/ GEN. 5H-501 RR/HX + Cruiser 250	100 99 99 100 100		182 182 180 177 177	49 47 48 48 49	26 22 27 27 26	0 0 1 0	92 91 95 93 88
G2/ GEN. 5H-999 RR/HX + Cruiser 250 G2/ GEN. 5X-398 RR/HXT + Cruiser 250 NUTECH/ 3T-401 VT3 + Cruiser 250 EPLEY/ E1115GT + Not reported AGSOURCE/ 3T-096 VT3 + Cruiser 250	99 95 100 93 95		175 174 173 171 171	50 47 50 <b>51</b> 50	24 26 26 23 24	0 0 0 1 2	87 94 91 88 92
KRUGER/ 6200VT3 + Cruiser 250 NUTECH/ 3T-801 VT3 + Poncho 250 EPLEY/ EXP1307HXLLRR + Cruiser 250 HOEGEMEYER/ HPTEXP7041 + Cruiser 250 NUTECH/ 3T-600 VT3 + Poncho 250	100 100 100 100 100		170 169 168 165 164	50 48 47 48 48 48	21 32 28 26 24	0 0 0 0	89 <b>93</b> <b>94</b> <b>94</b> 78
AGSOURCE/ 5B-198 GTCBLL + Poncho 250 G2/ GEN. 5X-802 RR/HXT + Cruiser 250 NUTECH/ 3T-601 VT3 + Poncho 250	100 100 100		161 153 151	48 47 48	28 25 25	0 0 0	75 <b>94</b> 77
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	98 100 93 38	189 199 175 20 179 5 12	179 201 151 18 183 6 38	49 52 47 1 51 2 38	24 32 18 2 20 5 38	0 2 NS 2 310 38	90 95 75 4 91 3 38

#### Table 3a. Bancroft early maturity glyphosate-resistant corn hybrid test results, 2009-09, E. Weerts Farm Inc. Seeded May 21, 2009 at 28,750 seeds per acre.

	Del	Yield Av	erages	Other 2009 Averages				
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2009 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
WENSMAN/ W 7360VT3 + Poncho 250 DEKALB/ DKC52-59(VT3) + Poncho 250 PIONEER/ 36V53 + Poncho 250 KRUGER/ 6102VT3 + Cruiser 250 KRUGER/ 6401VT3 + Cruiser 250	103 102 102 102 102 101	193 190 190 187 186	<b>187</b> <b>175</b> <b>174</b> <b>189</b> 165	48 49 48 47 50	27 <b>25</b> <b>26</b> <b>24</b> 29	1 1 0 0	88 93 90 90 88	
KRUGER/ 6606VT3 + Cruiser 250 G2/ GEN. 5H-506A RR/HX + Cruiser 250 KRUGER/ 6006VT3 + Cruiser 250 G2/ GEN. 5H-506 RR/HX + Cruiser 250 RENK/ RK670VT3 + Poncho 250	106 105 106 105 103	176 175 174 169 168	161 149 162 143 151	48 48 50 48 48	32 35 29 34 31	1 0 1 0 4	91 90 91 85 91	
NUTECH/ 5B-804 GT/CB/LL + Cruiser 250 RENK/ RK698VT3 + Poncho 250 DEKALB/ DKC51-13(VT3) + Poncho 250 DEKALB/ DKC53-76(VT3) + Poncho 250 KRUGER/ 6205VT3 + Cruiser 250	104 105 101 103 105	- - - - -	177 173 169 169 168	<b>48</b> <b>50</b> <b>50</b> <b>48</b> 46	28 27 <b>26</b> 31 33	0 1 1 1 2	<b>93</b> 87 89 89 <b>94</b>	
AGSOURCE/ 3T-904 VT3 + Poncho 250 NUTECH/ 3T-706 VT3 + Poncho 250 PIONEER/ 35F44 + Poncho 250 NUTECH/ 3T-106 VT3 + Poncho 250 NUTECH/ 3T-408 VT3 + Cruiser 250	104 105 105 105 108		165 164 163 163 162	48 49 49 48 48	27 32 30 35 29	3 0 0 0 1	84 90 92 88 95	
AGSOURCE/ 3T-603B VT3 + Cruiser 250 DEKALB/ DKC55-07(VT3) + Poncho 250 G2/ GEN. 5H-905 RR/HX + Cruiser 250 NUTECH/ 3T-308 VT3 + Poncho 250 WENSMAN/ W 7455VT3 + Poncho 250	103 105 105 108 107		162 161 161 156 151	<b>48</b> <b>48</b> <b>47</b> <b>50</b> 45	27 29 32 31 36	2 0 0 0	94 79 91 89 90	
G2/ GEN. 5H-007 RR/HX + Cruiser 250 G2/ GEN. 5X-707 RR/HXT + Cruiser 250 NUTECH/ 3T-603 VT3 + Cruiser 250 AGSOURCE/ 5X-805 RR/HXT + Poncho 250 G2/ GEN. 5H-005 RR/HX + Cruiser 250	107 107 103 105 105		148 148 135 134 132	47 50 47 47 44	33 37 28 37 34	1 0 1 2 1	83 81 80 88 <b>91</b>	
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	105 108 101 30	181 193 168 NS 168 6 10	161 189 132 21 168 8 30	48 50 44 3 47 3 30	31 37 24 2 26 5 30	1 4 0 NS 4 225 30	89 95 79 5 90 3 30	

#### Table 3b. Bancroft late maturity glyphosate-resistant corn hybrid test results, 2008-09, E. Weerts Farm Inc. Seeded May 21, 2009 at 28,750 seeds per acre.

Table 4a.	Brookings early maturity g	Jlyphosate-resistant corn	hybrid test results,	2008-09, Plant	Science Farm.
Seeded N	lay 7, 2009 at 28,750 seeds	per acre.			

		Yield A	verages		Other 200	09 Averages	
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2009 bu/a	Bu. Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
H0EGEMEYER/ 3113 + Poncho 250 WENSMAN/ W 7267VT3 + Poncho 250 KRUGER/ 6298VT3 + Cruiser 250 DEKALB/ DKC46-60(VT3) + Poncho 250 DEKALB/ DKC50-44(VT3) + Poncho 250	95 97 98 96 100	202 202 201 197 197	223 222 233 219 219	<b>52</b> 48 <b>51</b> 50 <b>52</b>	23 24 23 <b>22</b> 23	0 0 0 0	91 92 97 96 95
SEEDS/ 2000 9901VT3 + Poncho 250 KRUGER/ 6499VT3 + Cruiser 250 KRUGER/ 6097VT3 + Cruiser 250 NC+/ 1775VT3 + Cruiser 250 DEKALB/ DKC43-27(VT3) + Poncho 250	99 99 97 97 93	197 197 196 195 195	219 211 224 216 213	<b>52</b> 50 49 49 50	<b>21</b> 24 <b>20</b> 24 <b>20</b>	0 0 2 1 1	91 97 97 96 94
NC+/ 1982VT3 + Cruiser 250 NUTECH/ 3T-098 VT3 + Cruiser 250 G2/ GEN. 5H-501 RR/HX + Cruiser 250 NUTECH/ 3T-401 VT3 + Cruiser 250 KRUGER/ 6200VT3 + Cruiser 250	99 98 100 100 100	193 191	217 218 <b>245</b> <b>243</b> <b>240</b>	47 49 49 <b>52</b> 52	24 23 24 24 <b>21</b>	1 0 0 0 0	96 97 95 94 95
DEKALB/ DKC50-66(VT3) + Poncho 250 G2/ GEN. 5X-199RR/HXT + Cruiser 250 NUTECH/ 3T-601 VT3 + Poncho 250 WENSMAN/ W 7270VT3 + Poncho 250 DAIRYLAND/ ST-9597Q + Cruiser 250	100 99 100 97 97		<b>238</b> <b>237</b> 233 226 225	<b>53</b> 50 50 <b>52</b> <b>51</b>	<b>21</b> 24 23 23 23	0 0 0 0	98 94 95 96 91
G2/ GEN. 5H-999 RR/HX + Cruiser 250 AGSOURCE/ 5B-198 GTCBLL + Poncho 250 DAIRYLAND/ ST-95000 + Cruiser 250 PROSEED/ 897 + Poncho 250 KALTENBERG/ K4053VT3 + Poncho 250	99 100 99 97 97		223 223 221 220 215	50 49 50 <b>52</b> <b>51</b>	23 25 25 24 24	0 0 0 1	<b>94</b> 87 91 <b>98</b> 92
EPLEY/ E1184VT3 + Cruiser 250 EPLEY/ EXP1307HXLLRR + Cruiser 250 NUTECH/ 3T-600 VT3 + Poncho 250 KALTENBERG/ K4149LLGT3 + Cruiser 250 EPLEY/ E1115GT + Not reported	96 100 100 98 93		214 212 211 211 211 210	<b>51</b> 49 49 50 49	<b>20</b> 25 24 26 <b>21</b>	0 1 0 0	90 <b>95</b> 89 92 <b>95</b>
NUTECH/ 3T-300 VT3 + Cruiser 250 HOEGEMEYER/ HPT 6962 + Cruiser 250 G2/ GEN. 5X-802 RR/HXT + Cruiser 250 AGSOURCE/ 3T-799 VT3 + Cruiser 250 KALTENBERG/ K4521LLRRHXT + Poncho 250	100 100 100 99 100		209 209 206 205 203	49 49 48 48 50	24 <b>22</b> 25 24 25	0 1 0 3	92 85 <b>98</b> 92 84
NUTECH/ 3T-801 VT3 + Poncho 250 G2/ GEN. 5X-398 RR/HXT + Cruiser 250 PROSEED/ 8100 + Poncho 250	100 95 100	•	201 200 189	46 50 49	28 <b>21</b> <b>22</b>	0 1 1	90 <b>95</b> 80
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	98 100 93 38	197 202 191 NS 191 4 12	219 245 189 11 234 3 38	50 53 46 2 51 2 38	23 28 20 2 22 4 38	0 3 0 2 2 307 38	93 98 80 4 94 2 38

		Yield Av	verages		Other 20	;	
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2009 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
DEKALB/ DKC52-59(VT3) + Poncho 250 KRUGER/ 6401VT3 + Cruiser 250 PIONEER/ 36V53 + Poncho 250 WENSMAN/ W 7360VT3 + Poncho 250 RENK/ RK670VT3 + Poncho 250	102 101 102 103 103	211 209 207 206 203	<b>241</b> <b>235</b> 225 <b>233</b> 228	49 <b>51</b> 50 48 44	<b>23</b> <b>23</b> <b>24</b> 27 28	0 0 0 0	94 <b>95</b> 96 94 <b>96</b>
G2/ GEN. 5H-506 RR/HX + Cruiser 250 KRUGER/ 6102VT3 + Cruiser 250 G2/ GEN. 5H-506A RR/HX + Cruiser 250 KRUGER/ 6606VT3 + Cruiser 250 DAIRYLAND/ ST-9003 + Poncho 250	105 102 105 106 103	203 200 200 197 194	212 230 208 221 209	46 <b>53</b> 48 49 47	30 <b>24</b> 30 27 30	0 0 0 1	90 <b>96</b> 88 92 92
KRUGER/ 6006VT3 + Cruiser 250 HEINE/ 744RRYGCB + Poncho 250 HEINE/ 742VT3 + Poncho 250 RENK/ RK698VT3 + Poncho 250 NUTECH/ 3T-706 VT3 + Poncho 250	106 104 104 105 105	<b>183</b>	220 243 241 240 238	46 50 <b>52</b> <b>51</b> 47	29 <b>23</b> <b>24</b> 25 28	0 0 0 0	<b>96</b> <b>96</b> 92 <b>97</b> 93
NUTECH/ 5B-804 GT/CB/LL + Cruiser 250 DEKALB/ DKC53-76(VT3) + Poncho 250 G2/ GEN. 5H-905 RR/HX + Cruiser 250 KRUGER/ 6205VT3 + Cruiser 250 AGSOURCE/ 3T-904 VT3 + Poncho 250	104 103 105 105 104	• • • •	<b>234</b> <b>232</b> 230 230 230	48 49 47 48 47	<b>23</b> 28 29 29 <b>2</b> 9 <b>2</b> 4	0 1 0 0	94 94 92 <b>95</b> 89
PIONEER/ 35F44 + Poncho 250 WENSMAN/ W 7455VT3 + Poncho 250 NUTECH/ 3T-408 VT3 + Cruiser 250 HEINE/ 745VT3 + Poncho 250 HEINE/ 727VT3 + Poncho 250	105 107 108 104 102		228 228 227 227 225	50 46 48 <b>51</b> 49	26 31 27 <b>22</b> 27	0 0 0 0	<b>95</b> <b>96</b> <b>95</b> 94 94
DEKALB/ DKC51-13(VT3) + Poncho 250 G2/ GEN. 5X-707 RR/HXT + Cruiser 250 DAIRYLAND/ ST-9703Q + Cruiser 250 NUTECH/ 3T-106 VT3 + Poncho 250 RENK/ RK760VT3 + Poncho 250	101 107 103 105 106		223 220 219 219 219 219	47 46 49 47 48	25 34 26 29 28	0 0 0 0	<b>96</b> 93 93 94 87
PIONEER/ 37N68 + Poncho 250 HEINE/ 753VT3 + Poncho 250 NUTECH/ 3T-603 VT3 + Cruiser 250 NUTECH/ 3T-308 VT3 + Poncho 250 AGSOURCE/ 3T-603B VT3 + Cruiser 250	101 104 103 108 103		217 213 210 210 210 210	49 49 49 48 48	25 28 <b>24</b> 29 <b>24</b>	0 0 0 2	<b>96</b> 92 94 91 <b>99</b>
AGSOURCE/ 5X-805 RR/HXT + Poncho 250 G2/ GEN. 5H-007 RR/HX + Cruiser 250 G2/ GEN. 5H-005 RR/HX + Cruiser 250	105 107 105	•	207 201 175	47 45 45	29 27 36	1 0 1	94 79 88
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No entries:	104 108 101	201 211 183 NS 183 4 11	223 243 175 12 231 4 38	48 53 44 2 51 2 38	27 36 22 2 4 38	0 2 0 NS 2 417 38	93 99 79 4 95 2 38

#### Table 4b. Brookings late maturity glyphosate-resistant corn hybrid test results, 2008-09, Plant Science Farm. Seeded 7 May 2009 at 28,750 seeds per acre.

#### Table 5a. Geddes early maturity glyphosate-resistant corn hybrid test results, 2008-09, Curtis Sybesma Farm. Seeded May 14, 2009 at 28,750 seeds per acre.

		Yield Averages		Other 2009 Averages			
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2009 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
PIONEER/ 36V53 + Poncho 250 WENSMAN/ W 7433VT3 + Poncho 250 DEKALB/ DKC52-59(VT3) + Poncho 250 KRUGER/ 6401VT3 + Cruiser 250 WENSMAN/ W 7360VT3 + Poncho 250	102 105 102 101 103	221 219 219 216 215	247 242 241 243 243	<b>55</b> 56 54 56 56	15 17 16 16 16	0 1 0 1 0	96 94 96 95 96
NC+/ 1982VT3 + Cruiser 250 KRUGER/ 6102VT3 + Cruiser 250 G2/ GEN. 5H-506A RR/HX + Cruiser 250 G2/ GEN. 5H-506 RR/HX + Cruiser 250 DEKALB/ DKC50-44(VT3) + Poncho 250	99 102 105 105 100	213 211 211 211 211 210	<b>235</b> <b>240</b> <b>230</b> 226 221	54 <b>56</b> 52 52 53	<b>15</b> 17 18 21 <b>16</b>	1 0 1 1 0	<b>93</b> <b>94</b> <b>93</b> 89 91
NC+/ 1775VT3 + Cruiser 250 KALTENBERG/ K5163VT3 + Poncho 250 HOEGEMEYER/ HPT 7757 + Cruiser 250 DEKALB/ DKC43-27(VT3) + Poncho 250 NUTECH/ 3T-401 VT3 + Cruiser 250	97 103 105 93 100	208 200 200 199	230 212 205 230 <b>247</b>	54 51 54 <b>56</b> 55	<b>16</b> 18 19 <b>16</b> <b>16</b>	0 0 1 0 1	<b>93</b> <b>95</b> 90 92 <b>97</b>
G2/ GEN. 5H-905 RR/HX + Cruiser 250 H0EGEMEYER/ 7421 + Cruiser 250 DEKALB/ DKC50-35(VT3) + Poncho 250 G2/ GEN. 5H-501 RR/HX + Cruiser 250 DEKALB/ DKC50-66(VT3) + Poncho 250	105 104 100 100 100		246 243 242 242 242 240	52 55 55 55 55 57	15 18 16 16 15	0 0 0 0	<b>94</b> 92 <b>97</b> 91 <b>93</b>
PROSEED/ 9102 + Poncho 250 KRUGER/ 6205VT3 + Cruiser 250 RENK/ RK670VT3 + Poncho 250 DEKALB/ DKC51-13(VT3) + Poncho 250 NUTECH/ 3T-706 VT3 + Poncho 250	102 105 103 101 105		239 236 235 234 233	<b>55</b> 52 52 <b>56</b> 54	17 <b>15</b> 17 <b>16</b> 17	1 0 0 1 1	95 95 96 93 92
NUTECH/ 5B-804 GT/CB/LL + Cruiser 250 HOEGEMEYER/ 7445 + Poncho 250 KRUGER/ 6200VT3 + Cruiser 250 KALTENBERG/ K5332GT + Poncho 250 KALTENBERG/ 5355LLGTBT11 + Poncho 250	104 103 100 104 104		232 232 231 230 230	<b>55</b> 54 <b>55</b> 56 52	17 18 <b>15</b> 16 16	0 0 0 0	<b>94</b> <b>94</b> 89 90 <b>96</b>
AGSOURCE/ 3T-904 VT3 + Poncho 250 NUTECH/ 3T-106 VT3 + Poncho 250 G2/ GEN. 5H-005 RR/HX + Cruiser 250 AGSOURCE/ 3T-603B VT3 + Cruiser 250 NUTECH/ 3T-801 VT3 + Poncho 250	104 105 105 103 100		<b>229</b> 226 226 226 225	51 52 51 53 52	<b>15</b> <b>16</b> 19 17 <b>16</b>	1 1 0 1 0	91 <b>94</b> 91 <b>96</b> 89
RENK/ RK698VT3 + Poncho 250 NUTECH/ 3T-603 VT3 + Cruiser 250 PROSEED/ 8101VT3 + Poncho 250 G2/ GEN. 5X-802 RR/HXT + Cruiser 250 PROSEED/ 9105 + Poncho 250	105 103 101 100 105	• • • •	224 223 221 221 220	<b>55</b> 54 53 51 53	17 <b>15</b> 17 17 <b>16</b>	0 1 0 0	87 90 <b>94</b> 92 90
PIONEER/ 35F44 + Poncho 250 DEKALB/ DKC53-76(VT3) + Poncho 250 DEKALB/ DKC55-07(VT3) + Poncho 250 AGSOURCE/ 3T-302 VT3 + Cruiser 250	105 103 105 102	•	219 217 215 212	54 <b>55</b> 55 54	<b>16</b> 17 19 <b>15</b>	0 2 0 1	<b>94</b> 91 90 91
HOEGEMEYER/ HPTEXP7408 + Cruiser 250 KALTENBERG/ 5588LLRRHXT + Poncho 250 AGSOURCE/ 5X-805 RR/HXT + Poncho 250	104 105 105	• •	211 205 195	51 50 51	18 17 19	0 0 1	90 <b>93</b> 92
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	103 105 93 47	211 221 199 NS 199 4 14	229 247 195 19 228 5 47	54 57 50 2 55 2 47	17 21 15 1 16 5 47	0 2 0 NS 2 276 47	93 97 87 4 93 3 47

	D.I.	Yield Averages Other 2009 Av					Averages		
Brand/Hybrid + Seed Treatment [1]	Kei. Mat. [2]	2-Yr bu/a	2009 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]		
DEKALB/ DKC58-16(VT3) + Poncho 250 KRUGER/ 6606VT3 + Cruiser 250 KRUGER/ 6006VT3 + Cruiser 250 WENSMAN/ W 7455VT3 + Poncho 250 WENSMAN/ W 7469VT3 + Poncho 250	108 106 106 107 109	214 214 210 210 207	226 218 226 220 217	52 <b>54</b> <b>55</b> 50 49	20 <b>18</b> 20 20 20	0 1 0 0 0	92 91 92 89 93		
DEKALB/ DKC61-69(VT3) + Poncho 250 KRUGER/ 6208VT3 + Cruiser 250 RENK/ RK822VT3 + Poncho 250 KRUGER/ 6410VT3 + Cruiser 250 G2/ GEN. 5H-210 RR/HX + Cruiser 250	111 108 110 110 110	207 204 200	214 209 209 <b>234</b> <b>231</b>	50 <b>54</b> 51 51 51	21 22 21 20 <b>18</b>	0 0 0 1 2	88 94 <b>97</b> 91 <b>95</b>		
KRUGER/ 6010VT3 + Cruiser 250 NC+/ 208-72VT3 + Cruiser 250 G2/ GEN. 5H-511 RR/HX + Cruiser 250 NUTECH/ 3T-408 VT3 + Cruiser 250 RENK/ RK744VT3 + Poncho 250	110 108 110 108 107		231 225 224 222 222 222	50 52 <b>54</b> 53 <b>54</b>	21 19 19 20 <b>17</b>	1 0 0 0	91 93 87 <b>99</b> 86		
G2/ GEN. 5H-511A RR/HX + Cruiser 250 G2/ GEN. 5H-007 RR/HX + Cruiser 250 NC+/ 4582VT3 + Cruiser 250 NC+/ 210-57VT3 + Cruiser 250 NUTECH/ 3T-308 VT3 + Poncho 250	111 107 110 110 108		222 219 218 218 218 217	<b>54</b> 52 52 52 <b>52</b> <b>54</b>	21 <b>17</b> 20 21 20	2 1 0 1 1	89 87 <b>95</b> 91 91		
RENK/ RK711RRHXTRA + Poncho 250 RENK/ RK760VT3 + Poncho 250 G2/ GEN. 5X-911 RR/HXT + Cruiser 250 NUTECH/ 5N-909 GTCBLLRW + Cruiser 250 G2/ GEN. 5X-210 RR/HXT + Cruiser 250	107 106 110 109 110		<b>217</b> <b>216</b> <b>216</b> 211 211	52 <b>53</b> <b>54</b> 50 51	<b>16</b> 19 19 19 20	0 1 0 1 0	94 88 94 89 93		
DEKALB/ DKC59-64(VT3) + Poncho 250 KRUGER/ 6408VT3 + Cruiser 250 NUTECH/ 3T-409 VT3 + Cruiser 250 NUTECH/ 3T-512 VT3 + Poncho 250 NUTECH/ 3T-110 VT3 + Cruiser 250	109 108 109 110 110		208 205 204 193 185	49 <b>53</b> 52 52 48	23 19 22 25 24	1 0 0 0 1	92 82 89 93 92		
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	109 111 106 30	208 214 200 NS 200 6 8	216 234 185 18 216 5 30	52 55 48 2 53 2 30	20 25 16 2	0 2 0 NS 2 237 30	91 99 82 4 95 3 30		

 

 Table 5b. Geddes late maturity glyphosate-resistant corn hybrid test results, 2008-09, Curtis Sybesma Farm.

 Seeded May 14, 2009 at 28,750 seeds per acre.

	Del	Yield A	verages		Other 20	)09 Average	s
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2009 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
NC+/ 4582VT3 + Cruiser 250 KALTENBERG/ K6663VT3 + Poncho 250 WENSMAN/ W 7455VT3 + Poncho 250 DAIRYLAND/ ST-9006 + Poncho 250 WENSMAN/ W 7469VT3 + Poncho 250	110 110 107 106 109	239 233 231 227 222	<b>245</b> <b>247</b> <b>240</b> <b>250</b> 235	<b>53</b> 51 51 <b>54</b> 49	27 25 26 23 26	1 0 4 0 0	98 93 92 96 94
FOUR/ STAR 6844VT3 + Cruiser 250 DEKALB/ DKC52-59(VT3) + Poncho 250 KRUGER/ 6208VT3 + Cruiser 250 RENK/ RK822VT3 + Poncho 250 DEKALB/ DKC57-50(VT3) + Poncho 250	108 102 108 110 107	221 220 217 214	231 232 <b>240</b> 228 <b>253</b>	50 <b>53</b> 51 52 50	24 <b>18</b> 25 25 24	4 1 3 1 0	85 96 94 97 96
KRUGER/ 6408VT3 + Cruiser 250 NC+/ 210-57VT3 + Cruiser 250 G2/ GEN. 5H-511 RR/HX + Cruiser 250 KRUGER/ 6410VT3 + Cruiser 250 DEKALB/ DKC59-64(VT3) + Poncho 250	108 110 110 110 109	•••••	252 249 248 248 248 247	<b>54</b> 51 <b>53</b> 52	24 25 25 25 26	0 0 0 1	91 <b>96</b> <b>94</b> 92 <b>96</b>
RENK/ RK744VT3 + Poncho 250 KRUGER/ 6010VT3 + Cruiser 250 DAIRYLAND/ ST-9810 + Poncho 250 FOUR/ STAR EXP9072VT3 + Cruiser 250 NUTECH/ 3T-308 VT3 + Poncho 250	107 110 110 110 108	• • • •	247 246 245 244 243	51 49 <b>53</b> 51 52	23 26 25 26 24	0 1 0 0	92 92 <b>93</b> <b>93</b> <b>94</b>
KALTENBERG/ K6645LLGT3 + Poncho 250 NUTECH/ 3T-408 VT3 + Cruiser 250 RENK/ RK711RRHXTRA + Poncho 250 RENK/ RK698VT3 + Poncho 250 NC+/ 208-72VT3 + Cruiser 250	110 108 107 105 108		<b>243</b> 242 241 239 238	50 <b>53</b> 51 <b>54</b> 51	24 25 24 21 24	1 0 0 0	90 <b>97</b> <b>93</b> 88 91
DEKALB/ DKC53-76(VT3) + Poncho 250 NUTECH/ 5N-909 GTCBLLRW + Cruiser 250 NUTECH/ 3T-512 VT3 + Poncho 250 G2/ GEN. 5H-210 RR/HX + Cruiser 250 PROSEED/ 9105 + Poncho 250	103 109 110 110 105		237 237 236 236 235	<b>54</b> 51 52 52 <b>53</b>	22 24 26 24 <b>19</b>	0 1 0 0	94 92 93 96 88
NUTECH/ 3T-106 VT3 + Poncho 250 NUTECH/ 3T-110 VT3 + Cruiser 250 PROSEED/ 9102 + Poncho 250 PIONEER/ 35F44 + Poncho 250 G2/ GEN. 5X-711 RR/HXT + Cruiser 250	105 110 102 105 110	•	234 234 233 233 233	51 50 52 <b>53</b> <b>54</b>	23 27 21 21 25	0 1 2 0 0	93 92 95 95 93
DAIRYLAND/ ST9206Q + Cruiser 250 G2/ GEN. 5X-210 RR/HXT + Cruiser 250 FOUR/ STAR EXP6066VT3 + Cruiser 250 DEKALB/ DKC55-07(VT3) + Poncho 250 G2/ GEN. 5H-007 RR/HX + Cruiser 250	106 110 110 105 107	•••••	232 230 229 227 226	51 50 50 <b>55</b> 50	24 26 29 24 23	0 0 1 0	<b>97</b> 92 90 <b>93</b> 87
G2/ GEN. 5X-911 RR/HXT + Cruiser 250 RENK/ RK670VT3 + Poncho 250 RENK/ RK760VT3 + Poncho 250 HOEGEMEYER/ HPT 7757 + Cruiser 250	110 103 106 105		226 225 225 220	52 52 52 54	24 21 23 24	0 1 1 0	87 <b>96</b> <b>93</b> 92
PROSEED/ 8101VT3 + Poncho 250 PROSEED/ 8104 + Poncho 250 FOUR/ STAR EXP9056VT3 + Poncho 250	101 104 108		218 218 217	53 54 54	20 21 26	2 1 1	<b>93</b> 78 <b>93</b>
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	107 110 101 47	225 239 214 NS 214 5 9	236 253 217 14 239 4 47	52 55 49 2 53 3 47	24 29 18 1 19 4 47	1 4 0 2 2 284 47	93 98 78 5 93 3 47

#### Table 6a. Beresford early maturity glyphosate-resistant corn hybrid test results, 2008-09, Southeast Experiment Station. Seeded May 19, 2009 at 28,750 seeds per acre.

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2009 yield average. \* Values in **bold type** within a column are included in the top-performance group. Note that additional table footnotes are explained in table D.

Table 6b. Beresford late maturity glyphosate	e-resistant corn hybrid test results, 2008-09, Southeast Experiment Sta-
tion. Seeded May 19, 2009 at 28,750 seeds pe	r acre.

		Yield Av					
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2009 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
KRUGER/ 6411VT3 + Cruiser 250 KRUGER/ 6213VT3 + Cruiser 250 DEKALB/ DKC61-69(VT3) + Poncho 250 DEKALB/ DKC62-54(VT3) + Poncho 250 NUTECH/ 3T-413 VT3 + Cruiser 250	111 113 111 112 113	229 225 223	243 243 231 249 246	51 52 51 <b>53</b> 52	<b>24</b> 27 26 <b>25</b> 28	0 2 0 1 0	91 93 95 95 95 95
G2/ GEN. 5H-511A RR/HX + Cruiser 250 KRUGER/ 6214VT3 + Cruiser 250 NC+/ 4517VT3 + Cruiser 250 AGSOURCE/ 3T-712 VT3 + Poncho 250 KRUGER/ 6116VT3 + Cruiser 250	111 114 113 112 116	•	242 240 240 237 236	<b>53</b> 51 52 <b>53</b> 52	<b>25</b> 27 26 29 28	0 1 1 0 1	92 92 94 96 93
G2/ GEN. 5X-911A RR/HXT + Cruiser 250 NUTECH/ 3T-713 VT3 + Poncho 250 NUTECH/ 3T-313 VT3 + Cruiser 250 KRUGER/ 6013VT3 + Cruiser 250 G2/ GEN. 5X-711A RR/HXT + Cruiser 250	111 113 113 113 113 112	•	<b>235</b> 234 233 233 232	<b>53</b> 50 <b>54</b> 51 <b>53</b>	<b>24</b> 29 26 29 <b>25</b>	0 1 0 3 0	92 93 91 94 95
NUTECH/ 3T-612 VT3 + Poncho 250 KRUGER/ 6412VT3 + Cruiser 250 NUTECH/ 3T-512A VT3 + Poncho 250 RENK/ EXP8-809VT3 + Poncho 250 G2/ GEN. 5H-314 RR/HX + Cruiser 250	112 112 111 111 111 114		230 228 226 226 226 224	<b>55</b> 52 52 52 52 52	28 27 28 28 28 28	0 0 0 1 0	90 95 95 93 92
G2/ GEN. 5X-513 RR/HXT + Cruiser 250 RENK/ EXP7-816VT3 + Poncho 250 PIONEER/ 33Z74 + Poncho 250	114 112 113		220 212 199	51 <b>53</b> 51	28 <b>25</b> 27	1 1 1	94 93 91
Trial avg.: High avg.: Low avg.: [5] LSD(0.05): [6] Min.TPG value: [7] Max.TPG value: [8] Coef. of var.: No. entries:	112 116 111 23	225 229 223 NS 223 5 3	232 249 199 14 235 4 23	52 55 50 2 53 2 23	27 29 24 1 25 3 23	1 3 0 NS 3 213 23	93 96 90 NS 90 3 23

C 253 Revised Annually



## 2010 Precision Planted Performance Trials





South Dakota State University • Cooperative Extension Service • U.S. Department of Agriculture

## **Tables, 2010 Corn Performance Trials**

Α	Description of 2010 corn hybrid trial locations- soil type, tillage type, prior crop, herbicide and insecticides used, and seeding date
В	Nearest weather station precipitation and growing degree day (GDD) accumulation and average daily temperatures for each growing season month in 2010 and their departures from average (DFA)
С	2010 Glyphosate-resistant corn hybrid entries by brand/hybrid, seed product traites, and index to performance table no. (s)
D	Explanation of performance table footnotes
E	Mailing addresses for seed entries in the 2010 corn hybrid trials by seed brand name
1a	Warner early maturity Roundup Ready™ corn hybrid test results, 2009-10, Allen & Inel Ryckman Farm
1b	Warner late maturity Roundup Ready™ corn hybrid test results, 2009-10, Allen & Inel Ryckman Farm
2a	South Shore early maturity Roundup Ready™ corn hybrid test results, 2009-10, Northeast Reseach Farm
2b	South Shore late maturity Roundup Ready™ corn hybrid test results, 2009-10, Northeast Reseach Farm
3a	Bancroft early maturity glyphosate-resistant corn hybrid test results, 2009-10, Erland Weerts Farm, Inc
3b	Bancroft late maturity glyphosate-resistant corn hybrid test results, 2009-10, Erland Weerts Farm, Inc
4a	Brookings early maturity glyphosate-resistant corn hybrid test results, 2009-10, Plant Science Farm
4b	Brookings late maturity glyphosate-resistant corn hybrid test results, 2009-10, Plant Science Farm
5a	Geddes early maturity glyphosate-resistant corn hybrid test results, 2009-10, Curt Sybesma Farm
5b	Geddes late maturity glyphosate-resistant corn hybrid test results, 2009-10, Curt Sybesma Farm
6a	Beresford early maturity glyphosate-resistant corn hybrid test results, 2009-10, Southeast Experiment Station
6b	Beresford late maturity glyphosate-resistant corn hybrid test results, 2009-10, Southeast Experiment Station

#### C253—Precision Planted Corn 2010 Crop Performance Results is available electronically on the internet

http://www.sdstate.edu/ps/extension/crop-mgmt/variety-trials-results.cfm



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## 2010 Precision Planted **Corn** Performance Trials

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This publication reports the results of the 2010 South Dakota corn hybrid performance trials for glyphosate-resistant hybrids. Information includes both the most recent two-year and one-year grain yields in bushels per acre and one-year bushel weight in pounds, along with grain moisture at harvest, lodging, and final stand in percentages. These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Corn performance trial tables are listed on the inside front cover. Environmental data is listed in tables A and B, indices of brand/hybrid entries to performance table number are listed in table C, table D has the performance table footnote legends, and mailing addresses for seed companies are listed in table E.

#### **Test Trial Locations**

Trial locations, soil types, seedbed and previous crop history, soil fertility yield goals, and seeding dates are indicated in table B. The participation and efforts of our cooperators—Allen and Inel Ryckman at Warner, Al Heuer at South Shore (Northeast Research Farm), E. Weerts Farms Inc. at Bancroft, Douglas Doyle at Brookings (SDSU Plant Science Research Farm), Curtis Sybesma at Geddes, and Robert Berg and staff at Beresford (Southeast Experiment Station)—are gratefully acknowledged.

#### Weather Conditions

The efforts of Dennis Todey and his staff at the South Dakota Office of Climate and Weather at South Dakota State University are gratefully acknowledged in obtaining the weather data reported in table B. Seasonal rainfall and its distribution and average temperatures at weather reporting stations nearest each test trial are reported for the period April 1 to October 31. Seasonal precipitation totals were 5" above average at Aberdeen (22.37"), 6" above average at White Lake (24.12"), 8" above average at Beresford (28.49"), 9" above average at Huron (25.98"), and 10" above average at Brookings (29.72"). Seasonal precipitation totals were 4" below average at South Shore (13.99"). The moisture distribution across locations was fairly uniform at Huron, Brookings, Beresford, and White Lake. Two locations encountered moisture deficits. Aberdeen only received 1" of moisture at the airport during August, while 10 miles south at the test trial site there was no moisture. This lack of rainfall likely reduced the potential yield

at the Warner trial. At Northeast Research Farm at South Shore, the early season moisture in April was well above average and was near average through July. Thereafter, there was little if any rainfall through harvest. Again, this lack of moisture may have reduced the potential yield at the Northeast Research Farm. The test trials at Bancroft (Huron airport station) were likely affected by the rainfall totals in June and July that were 4" above average. The above average rainfall along with water ponding in the field at Bancroft likely was a major cause in the higher coefficient of variation of 10% or higher amount of experimental error associated with the trial. The coefficient of variation was well within acceptable limits; this means the test trial was valid. The lower coefficient of variation at the other locations only means there was less experimental error associated with the other trial locations, compared to Bancroft.

The average daily temperatures for April were well above average for Huron, Brookings, Beresford, and White Lake, while Aberdeen was 1 degree above average and South Shore was 1 degree below average. May through July temperatures were near average across all locations. However, August temperatures were 3 to 5 degrees higher than average at Aberdeen, South Shore, Bancroft, and Brookings, while other locations were near average.

The accumulation of growing degree days (GDDs) in April and May started out average to slightly below average at Aberdeen, South Shore, and Huron, and well above average at Brookings, Centerville, and White Lake. Thereafter, the GDDs accumulations tended to be average to higher than average (June through August). Again, in September, the GDDs accumulations were below average at all locations, while in October the GDDs accumulations were slightly below average at some locations and above average at other locations. Aberdeen and White were the only locations with below average total season GDDs accumulations, while at the other locations the GDDs accumulations were nearly 100 to 300 GDDs above their average seasonal totals.

#### **General Test Procedures**

Seed companies pick the test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Warner and South Shore, 100 days for Yale and Brookings, 105 days for Geddes, and 110 days for Beresford. Hybrids are assigned to trials based on the relative maturity rating reported by the participating seed company; therefore, we cannot always guarantee entries are placed in the proper maturity trial. In some trials, borderline entries with relative maturity ratings at or near the arbitrary break between the early and late trials may crossover at a given location. In some cases, this may be indicated by exceptionally high or low grain moisture contents at harvest. A higherthan-average moisture content may indicate the hybrid is later in relative maturity than indicated. Likewise, a lower-than-average moisture may indicate the hybrid is earlier in relative maturity than indicated. A fee was charged for all entries at each location. A list of participating seed companies for 2010 is presented in table E.

#### **Experimental Procedures**

Entries were seeded in three replications, with each hybrid randomly located within each trial. Plots consisted of four 30inch rows that were 20-feet long, with the center two rows harvested for yield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2010, the precision planter was calibrated to deliver 28,750 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation and previous crop history, and fertility yield goal at each test site is outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/ acre of 37-18-00 was applied 2" below and 2" to the side (2 x 2) of the seed row. Force insecticide in-furrow at label rates for corn rootworm control this year. The weed control herbicides applied at recommended label rates are indicated in table A.

#### **Measurements of Performance**

Yields are obtained from the South Dakota Crop Performance Testing Program. Two-year and current yield averages are included where hybrids have been tested for the most recent two-year period.

Yield. Yield values are an average of three replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2010, the coefficient of variation (CV) values (a measure of experimental error) for yield was relatively low, ranging from 5 to 9% over the six test locations. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors-all of which may or may not be controllable in a given year. Clearly, this year, seasonal moisture distribution and/or subsoil moisture conditions, along with above-average temperatures, combined to produce excellent yields at most locations, along with some very good bushel weight values.

**Grain moisture content**. Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Moisture is generally inversely related to maturity and is important in the evaluation of hybrids. Hybrids that provide satisfactory yields and

can be stored without additional drying are desirable. During harvest, moisture values were determined by the combine moisture meter, which in turn was periodically checked with a Dickey-John GAC II to verify it was within limits.

Use of tables. Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids before there is a significant yield difference. LSD values are given at the bottom of every column where there is significant difference among the averages within the column. If differences among the averages within a column are not significant, the LSD value is reported as "non-significant" (NS).

The LSD values reported in this publication can be used in two ways. In this publication, the LSD value is used primarily to identify the top performance group (TPG) for two-year yields, for current-year yields, for bushel weight, for grain moisture at harvest, for lodging (below the ear) percentage, and for final stand percentage for each test trial. In order to determine which hybrids are in the TPG for yield, use the LSD value indicated at the bottom of each yield column in any yield table. For example, let's say the column LSD value equals 15 (bu/a) and the highest yield for that column equals 155 bu/a. If you subtract the column LSD value from the highest yield, you obtain an intermediate value of 140 bu/a (155 - 15 = 140). In this case, the minimum top yield value is generally 141 bu., or one bushel greater than the intermediate value of 140 bu. However, we can say the 140 bu. value also qualifies for the top performance group for yield because the yield values are rounded to the nearest bushel per acre. Thus, varieties with an average of 140 bu. or higher are also included in the top yield group to compensate for rounding-off the yield averages to the nearest bushel.

These minimum TPG values for yield are indicated at the bottom of each yield column, unless too much experimental error (high CV values) is associated with the test. Top yield hybrids are those hybrids that are equal or higher than the minimum TPG value reported at the bottom of each yield column (2010 or 2-yr yield averages). If hybrid yield differences are not significant (NS) and the CV values are 15% or less, then, by definition, all hybrids in the test are in the top yield group. In contrast, if the column CV value is greater than 15%, then no minimum TPG value is indicated because there is too much experimental error associated with the test to make a valid determination of the TPG for yield. When comparing yield means, compare current year averages with other current year averages and compare two-year yield averages with other two-year averages. Do not compare current year averages with two-year averages when comparing hybrids. When evaluating current year averages, remember that entries tested for two years may also have a yield value that qualifies for the TPG in the 2010 yield column.

The TPG for other performance factors—such as bushel weight, percent grain moisture at harvest, percent lodging (below the ear), and percent stand (percent of seeded population)—can also be determined. In order to qualify for the TPG group, a hybrid must have a bushel weight and a final stand percentage value that is equal to or greater than the minimum reported TPG value for bushel weight or final stand percentage. Likewise, in order to qualify for the TYG, a hybrid must have grain moisture, lodging percentages, or lodging score values that are equal to or less than the maximum reported TPG value for grain moisture and lodging percentage. Note that yield, bushel weight, and percent stand TPG values are greater than a certain yield, bushel weight, or final stand value; or they are minimum values. In contrast, grain moisture and lodging percentage values are equal to or less than a certain value to qualify for the TPG; or they are maximum values. Again, as with hybrid yields, if there are no differences for a performance factor, then, by definition, all hybrids in the test are in the TPG for that performance factor.

The LSD values for the TPG can also be used to determine if two hybrids differ in performance. For example, if a test trial LSD value equals 16 bu/a, and hybrid A yields 132 bu/a while hybrid B yields 118 bu/a, then their yield difference is 14 bu/a (132-118 =14). In this case, the two hybrids do not differ in yield because their yield difference of 14 bu/ac is equal to or less than the reported LSD value of 16 bu/a. In contrast, if hybrid C yields

than the reported LSD value of 16 bu/a; therefore, hybrid A would have a significantly higher yield than hybrid C. Similarly, the LSD values for bushel weight, grain moisture, stalk lodging below the ear, and percent stand can be used to determine if any two hybrids differ in these performance factors. For example, if a trial grain moisture LSD value equals 2%, and hybrid A measures 18% and hybrid B measures 16, their grain moisture difference is 2% (18-16=2). In this case, the two hybrids do not differ in grain moisture because their moisture difference of 2% is equal to or less than the trial LSD value of 2%. In contrast, if hybrid C measures 15%, the grain-moisture difference between hybrids A and C is 5% (18-15=3). In this case, the grain-moisture difference of 3% is more than the reported LSD value 2%; therefore, hybrid A is significantly higher in grain moisture than hybrid C.

114 bu/a, the yield difference between hybrids A and C is 18 bu/a

(132-114=18). In this case, the yield difference of 18 is higher

#### **PERFORMANCE TRIAL RESULTS BY LOCATIONS**

The performance trial results for one year (2010) and for two years (2009–10) follow:

#### Northern Locations

Note: The top performance group (TPG) for the performance factors yield (bu/a), bushel weight in (lbs.), harvest grain moisture (%), lodging below the ear (%), and final stage (%) are indicated in each performance table by the presence of shaded data values. Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values there are in each row the better the hybrid did as a top-performing hybrid for a given test trial.

#### Warner:

Early – Glyphosate-resistant trial, Table 1a. The test-trial yield averages were 214 bu/a for two years and 196 bu/a in 2010. Hybrids that yielded 208 bu/a or more for two years and 199 bu/a or more for 2010 qualified for the top-performance-group (TPG) for yield. Hybrids had to differ in yield by 20 bu/a for two years and 19 bu/a in 2010 to be significantly different. In 2010, bushel weights averaged 56 lbs, grain moisture averaged 17%, lodging percentage averaged zero, and final stand percentage averaged 93%. In order for a hybrid to be in the TPG for these factors, it had to average 58 lbs. or more in bushel weight, 16% or less in grain moisture, 1% or less in lodging percentage, and 95% or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 1b. The test-trial yield averages were 224 bu/a for two years and 209 bu/a in 2010. Hybrids that yielded 210 bu/a or more for two years and 211 bu/a or more for 2010 qualified for the TPG for yield. Hybrids had to differ in yield by 20 bu/a in 2010 to be significantly different. There was no significant difference in yield among the hybrids tested for the two years. In 2010, bushel weights averaged 58 lbs, grain moisture averaged 19%, lodging percentage averaged 1%, and final stand percentage averaged 90%. In order for a hybrid to be in the TPG for these factors, it had to average 59 lbs. or more in bushel weight, 18% or less in grain moisture, 5% or less in lodging percentage, and 96% or more for final stand percentage.

#### South Shore:

**Early – Glyphosate-resistant trial, Table 2a.** The test-trial yield averages were **203** bu/a for two years and **198** bu/a in 2010. The yield differences among those hybrids tested for two years were nonsignificant (NS). Hybrids that yielded **196** bu/a or more for 2010 qualified for the TPG for yield. Hybrids had to differ in yield by **17** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged **56** lbs, grain moisture averaged **16%**, lodging averaged **1%**, and final stand percentage averaged **92%**. In order for hybrids to be in the TPG for these factors, they had to average **57** lbs. or more in bushel weight, **15%** or less in grain moisture, **2%** in lodging percentage, and **95%** or higher in final stand percentage.

Late – Glyphosate-resistant trial, Table 2b. The test-trial yield averages were 210 bu/a for two years and 214 bu/a in 2010. The yield differences among those hybrids tested for two years were nonsignificant (NS). Hybrids that yielded 222 bu/a or more for 2010 qualified for the TPG for yield. Hybrids had to differ in yield by 17 bu/a in 2010 to be significantly different. In 2010, bushel weights averaged 59 lbs, grain moisture averaged 19%, lodging averaged 1%, and final stand percentage averaged 91%. In order for hybrids to be in the TPG for these factors, they had to average 59 lbs. or more in bushel weight, 18% or less in grain moisture, and 3% or more in lodging percentage, and 95% or more in final stand percentage.

#### Central Locations Bancroft:

**Early – Glyphosate-resistant trial, Table 3a.** The test-trial yield averages were **169** bu/a for two years and **152** bu/a in 2010. Hybrids that yielded **143** bu/a or more in 2010 qualified for the TPG for yield. There were no differences in yield average among the hybrids tested two years, so all qualified for the TPG. Hybrids had to differ in yield by **26** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged **56** lbs., grain moisture averaged **17%**, lodging averaged **3%**, and final stand percentage averaged **93%**. In order for hybrids to be in the TPG for these factors, they had to average **57** lbs. or more in bushel weight, **17%** or

less in grain moisture, **4%** or less in lodging percentage, and **94%** or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 3b. The test-trial yield averages were 165 bu/a for two years and 161 bu/a in 2010. Yield differences among hybrids were non-significant for the two-year period. Hybrids that yielded 148 bu/a or more in 2010 qualified for the TPG for yield. In 2010, bushel weights averaged 54 lbs, grain moisture averaged 21%, lodging percentage averaged 1%, and the final stand percentage averaged 95%. In order for hybrids to be in the TPG for these factors, they had to average 54 lbs. or more in bushel weight, 20% or less in grain moisture, 4% or less in lodging percentage, and 93% or more for final stand percentage.

#### **Brookings**:

**Early – Glyphosate-resistant trial, Table 4a.** The test-trial yield averages were **226** bu/a for two years and **228** bu/a in 2010. Hybrids that yielded **230** bu/a or more for two years and **242** bu/a or more for 2010 qualified for the TPG for yield. Hybrids had to differ in yield by **20** bu/a for two years and **14** bu/a in 2010 to be significantly different. In 2010, bushel weights averaged **57** lbs, grain moisture averaged **15%**, lodging percentage averaged **1%**, and final stand percentage averaged **93%**. In order for hybrids to be in the TPG for these factors, they had to average **59** lbs. or more in bushel weight, **13%** or less in grain moisture, **2%** or less in lodging percentage, and **94%** or more for final stand percentage.

Late – Glyphosate-resistant trial, Table 4b. The test-trial yield averages were 231 bu/a for two years and 235 bu/a in 2010. Hybrids that yielded 230 bu/a or more for two years and 247 bu/a or more in 2010 qualified for the TPG for yield. Hybrids had to differ in yield by 15 bu/a for two years and 12 bu/a in 2010 to be significantly different. In 2010, bushel weights averaged 57 lbs, grain moisture averaged 18%, lodging averaged slightly more than 1%, and percent stand averaged 90%. In order for hybrids to be in the TPG for all performance factors, they had to average 58 lbs. or more in bushel weight, 17% or less in grain moisture, 1% or less in lodging percentage, and 86% or more for final stand percentage.

#### Southern Locations Geddes:

**Early – Glyphosate-resistant trial, Table 5a.** The test-trial yield average was **236** bu/a for two years and **223** bu/a in 2010. The average yield differences among the hybrids tested two years

were non-significant (NS), so all the hybrids tested qualified for the TPG. Hybrids that yielded **226** bu/a or more in 2010 qualified for the TPG for yield. In 2010, bushel weights averaged **58** lbs, grain moisture averaged **16%**, lodging percentage averaged **2%**, and percent stand averaged **95%**. In order for hybrids to be in the TPG for these factors, they had to average **60** lbs. or more in bushel weight, **16%** or less in grain moisture, **6%** or less in lodging, and **94%** or more for percent stand.

Late – Glyphosate-resistant trial, Table 5b. The test trial yield average was 224 bu/a for two years and 228 bu/a in 2010. Yield differences among hybrids tested for two years were non-significant (NS); thus, all entries tested two years were in the TPG for yield. Hybrids that yielded 221 bu/a or more in 2010 qualified for the TPG for yield. In 2010, bushel weights averaged 57 lbs, grain moisture averaged 18%, lodging percentage averaged 4%, and percent stand averaged 94%. In order for hybrids to be in the TPG for these factors, they had to average 59 lbs. or more in bushel weight, 18% or less in grain moisture, 4% or less in lodging, and 94% or more for final stand percentage.

#### **Beresford**:

Early – Glyphosate-resistant trial, Table 6a. The test-trial yield averages were 234 bu/a for two years and 230 bu/a in 2010. There were no differences in yield average among the hybrids tested two years, so all hybrids tested qualified for the TPG. Hybrids that yielded 236 bu/a or more in 2010 qualified for the TPG for yield. Hybrids had to differ in yield by 15 bu/a in 2010 to be significantly different. In 2010, bushel weights averaged 58 lbs, grain moisture averaged 17%, lodging percentage averaged zero percent, and final stand percentage averaged 98%. In order for hybrids to be in the TPG for these factors, they had to average 60 lbs. or more in bushel weight, 15% or less in grain moisture, 2% or less in lodging percentage, and 97% or more for final stand percentage.

Late – Glyphosate-resistant, Table 6b. The test trial yield averages were 233 bu/a for two years and 224 bu/a in 2010. There were no differences in yield average among the hybrids tested two years, so all hybrids tested qualified for the TPG. Hybrids that yielded 224 bu/a or more in 2010 qualified for the TPG for yield. Hybrids had to differ in yield by 20 bu/a in 2010 to be significantly different. In 2010, bushel weights averaged 57 lbs. grain moisture averaged 21%, lodging percentage averaged 2%, and final stand percentage averaged 96%. In order for hybrids to be in the TPG for these factors, they had to average 59 lbs. or more in bushel weight, 19% or less in grain moisture, 3% or less in lodging percentage, and 95% or more in final stand percentage.

Location (County)	Soil Type	Tillage Method	Prior crop	Herb Applied ra	icides d at label ites	Fertility Yield Goal	Date Seeded	
			_	Pre	Post	Du/a		
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	Conventional	Spring Wheat	Harness Xtra	Roundup once	200	May 4	
South Shore (Codington)	Kranzburg silty clay loam, 3-6% slope	Conventional	Spring Wheat	Dual II Magnum	Roundup once	180	May 5	
Bancroft (Kingsbury)	Houdek-Stickney-Tetonka loam, 0-3% slope	Conventional	Soybean	Fall Dual	Roundup once	180	May 19	
Brookings (Brookings)	Barnes clay loam, 0-2% slope	Conventional	Soybean	Dual II Magnum	Roundup twice	200	April 28	
Geddess (Chas. Mix)	Highmore-Walke silt loam, 0-2% slope	No-till	Winter Wheat	-	Roundup twice	200	May 18	
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conventional	Soybean	-	Roundup once	210	May 3	

 Table A. Description of 2010 corn hybrid trial locations- soil type, tillage method, prior crop, herbicides used, and seeding dates.

Plots were seeded at 28,750 seeds per acre.

 Table B. Nearest weather station monthly rainfall and growing degree day totals and average daily temperatures and their departures from average during the 2010 growing season. South Dakota Office of Climate and Weather, South Dakota State University, Brookings, SD.

Station (Test site)	Verieble		Monthly data - April 1 to October 31							Sum or
Station (Test site)	variable		April	May	June	July	Aug	Sept	Oct	Average
	Rain totals - inch 1971-2000 avg.	'10	3.15 1.83	4.46 2.69	5.40 3.49	3.24 2.92	1.01 2.42	4.08 1.81	1.03 1.63	22.37 16.79
		DFA*	1.32	1.77	1.91	0.32	-1.41	2.27	-0.60	5.58
Aberdeen Airport (Werper)	Temp.Avg°F 1971-2000 avg.	'10	51.0 45.4	56.2 57.9	67.2 66.8	72.6 72.2	73.4 70.5	57.9 59.8	49.3 46.7	61.09 59.90
(vvariier)		DFA	5.6	-1.7	0.4	0.4	2.9	-1.9	2.6	1.19
	GDDs Totals 1971-2000 avg.	'10	85 111	265 316	525 498	708 691	734 644	245 349	106 143	2,668 2,752
		DFA*	-26	-51	27	17	90	-104	-37	-84
South Shore Northeast Research	Rain totals - inch 1971-2000 avg.	'10	0.94 1.96	2.76 2.61	6.53 4.01	3.51 2.91	0.25 2.85	0.00 2.03	0.00 1.92	13.99 18.29
		DFA	-1.02	0.15	2.52	0.60	-2.60	-2.03	-1.92	-4.30
	Temp.Avg⁰wF 1971-2000 avg.	'10	51.1 43.2	56.4 56.0	65.9 65.3	71.7 70.4	72.5 67.8	57.2 57.8	50.1 45.0	60.70 57.93
		DFA	7.9	0.4	0.6	1.3	4.7	-0.6	5.1	2.77
, unit	GDDs Totals 1971-2000 avg.	'10	83 73	272 278	478 456	673 631	697 558	221 306	115 107	2,539 2,409
		DFA*	10	-6	22	42	139	-85	8	130
	Rain totals - inch 1971-2000 avg.	'10	2.40 2.29	3.67 3.00	7.52 3.28	6.43 2.86	1.60 2.07	3.50 1.80	0.86 1.59	25.98 16.89
		DFA	0.11	0.67	4.24	3.57	-0.47	1.70	-0.73	9.09
Huron (Bancroft)	Temp.Avg°F 1971-2000 avg.	'10	52.6 46.1	57.3 58.2	68.4 67.9	74.6 73.4	75.4 71.5	60.2 61.0	51.6 47.9	62.87 60.86
		DFA	6.5	-0.9	0.5	1.2	3.9	-0.8	3.7	2.01
	GDDs Totals 1971-2000 avg.	'10	124 124	286 318	560 536	770 719	798 665	318 378	141 169	2,997 2,909
		DFA*	0	-32	24	51	133	-60	-28	88

	Rain totals - inch 1971-2000 avg.	'10	1.24 2.03	2.22 2.95	7.95 4.23	5.29 3.11	4.75 2.94	7.39 2.48	0.88 1.78	29.72 19.52
Brookings		DFA	-0.79	-0.73	3.72	2.18	1.81	4.91	-0.90	10.20
SDSU	Temp.Avg°F 1971-2000 avg.	'10	51.5 44.2	56.7 56.7	66.4 66.1	72.1 70.7	72.7 68.6	57.9 59.1	49.1 46.3	60.91 58.81
Farm		DFA	7.3	0.0	0.3	1.4	4.1	-1.2	2.8	2.10
	GDDs Totals 1971-2000 avg.	'10	203 85	303 293	487 483	668 640	700 577	288 330	189 138	2,838 2,546
		DFA*	118	10	4	28	123	-42	51	292
	Rain totals - inch 1971-2000 avg.	'10	1.91 2.47	2.19 3.65	6.69 3.95	6.99 3.35	3.47 2.83	6.03 2.26	1.21 1.80	28.49 20.31
0		DFA	-0.56	-1.46	2.74	3.64	0.64	3.77	-0.59	8.18
Centerville, 6 SE (Beresford) Southeast	Temp.Avg°F 1971-2000 avg.	'10	53.4 47.2	58.8 59.5	69.8 69.4	74.1 73.7	73.9 71.5	60.6 62.3	51.2 49.7	63.11 61.90
Experiment		DFA	6.2	-0.7	0.4	0.4	2.4	-1.7	1.5	1.21
Station	GDDs Totals 1971-2000 avg.	'10	257 135	355 338	561 582	720 733	733 666	384 396	250 194	3,260 3,044
		DFA*	122	17	-21	-13	67	-12	56	216
	Rain totals - inch 1971-2000 avg.	'10	2.86 2.49	2.93 3.6	6.45 3.19	6.4 2.88	2.35 2.21	2.48 2.09	0.65 1.59	24.12 18.05
14/1 12		DFA	0.37	-0.67	3.26	3.52	0.14	0.39	-0.94	6.07
White Lake (Geddes)	Temp.Avg°F 1971-2000 avg.	'10	51.3 47.9	56.8 59.7	68.5 69.0	74.3 74.5	74.0 72.7	58.8 62.8	50.7 49.8	62.06 62.34
		DFA	3.4	-2.9	-0.5	-0.2	1.3	-4.0	0.9	-0.29
	GDDs Totals 1971-2000 avg.	'10	204 148	305 342	552 567	707 740	698 696	272 415	243 190	2,981 3,098
		DFA*	56	-37	-15	-33	2	-143	53	-117
* DFA - departure from normal, difference current year is greater or less (-) than the long-term average.										

	Brand/Hybrid	Brand/Hybrid Seed Biotech Traits [1]				
	AGSOURCE/ 3A-889 RR AGSOURCE/ 3P-494+RR/YGPL AGSOURCE/ 3T-294 VT3 AGSOURCE/ 3T-297 VT3 AGSOURCE/ 3T-914 VT3	Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly	1a, 2a 1a, 2a 1a, 2a 1b, 2b 6b			
	AGSOURCE/ 5N-593GTCBLLRW AGSOURCE/ 5N-813GTCBLLRW AGSOURCE/ 5N695AGTCBLLRW AGSOURCE/ 5X-500A RR/HXT AGSOURCE/ 5X-598A RR/HXT	CB,CRw*,Glu,Gly CB,CRw*,Glu,Gly CB,CRw*,Glu,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly	1a, 2a 6b 3a 2b, 3b 2b, 3a			
	CHANNEL/ 189-59VT3 CHANNEL/ 190-21VT3P CHANNEL/ 193-46VT3 CHANNEL/ 196-06VT3 CHANNEL/ 199-55VT3	CB,CRw,Gly ECB,SWCB,SCB,CEw,FAw,CRw*,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly	1a, 2a 1a, 2a 1a, 2a 1b, 2b, 3a, 4a 3a, 4a, 5a			
	CHANNEL/ 201-16VT3 DAIRYLAND/ ST-6310 DAIRYLAND/ ST-92080 DAIRYLAND/ ST-9395 DAIRYLAND/ ST-95000	CB,CRw,Gly Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly CB,CRw,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly	5a, 6a 6a 6a 1a, 2a 1b, 4a			
	DAIRYLAND/ ST-9594 DAIRYLAND/ ST-95970 DAIRYLAND/ ST-97030 DAIRYLAND/ ST-9789 DAIRYLAND/ ST-9992	CB,CRw,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly CB,CRw,Gly CB,CRw,Gly	1a, 2a 1b, 4a 4b 1a, 2a 1a, 2a			
	DAIRYLAND/ ST92060 DEKALB/ DKC42-72(VT3) DEKALB/ DKC43-27(VT3) DEKALB/ DKC45-52(GENVT3P) DEKALB/ DKC48-37(VT3)	WBCw,CB,BCw,FAw,CRw*,Glu,Gly CB,CRw,Gly CB,CRw,Gly ECB,SWCB,SCB,CEw,FAw,CRw*,Gly CB,CRw,Gly	6a 1a, 2a, 3a, 4a 1a, 2a, 3a, 4a 1a, 2a, 3a, 4a, 5a 1b, 2b, 3a, 4a, 5a			
	DEKALB/ DKC50-35(VT3) DEKALB/ DKC50-66(VT3) DEKALB/ DKC51-86(GENVT3P) DEKALB/ DKC52-59(VT3) DEKALB/ DKC58-83(GENVT3P)	CB,CRw,Gly CB,CRw,Gly ECB,SWCB,SCB,CEw,FAw,CRw*,Gly CB,CRw,Gly ECB,SWCB,SCB,CEw,FAw,CRw*,Gly	1b, 2b, 3a, 4a, 6a 1b, 2b, 3a, 4a, 5a, 6a 2b, 6a 1b, 2b, 5a, 6a 5b, 6a			
	DEKALB/ DKC59-35(VT3) DEKALB/ DKC59-88(VT3) DEKALB/ DKC61-69(VT3) DEKALB/ DKC62-54(VT3) DEKALB/ DKC63-84(VT3)	CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly	5b, 6a 5b, 6a 5b, 6b 6b 6b			
	EPLEY/ E1125GT EPLEY/ E1275RR EPLEY/ E1315RR EPLEY/ E1418GT3000 EPLEY/ E1479HXTLLRR	Gly Gly Gly CB,CRw*,Glu,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly	1b, 2b 1b, 2b, 4a 3a, 4a, 5a 3b, 4b, 5a 3b, 4b, 5a, 6a			
	EPLEY/ E1535GT EPLEY/ E2404VT3PRO G2 GEN./ 5H-007 RR/HX G2 GEN./ 5H-105 RR/HX G2 GEN./ 5H-210 RR/HX	Gly ECB,SWCB,SCB,CEw,FAw,CRw*,Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly	3b, 4b, 5a, 6a 6a 4b 3b, 4b, 5a 5b, 6a			
	G2 GEN./ 5H-404 RR/HX G2 GEN./ 5H-501 RR/HX G2 GEN./ 5H-501A RR/HX G2 GEN./ 5H-502 RR/HX G2 GEN./ 5H-502A RR/HX	WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly	3b, 4b 1b, 4a, 5a 3b 2b, 3a, 4a, 5a 3b			
	G2 GEN./ 5H-509 RR/HX G2 GEN./ 5H-511 RR/HX G2 GEN./ 5H-511A RR/HX G2 GEN./ 5H-513 RR/HX G2 GEN./ 5H-597 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly	5b, 6a 5b, 6a 6b 6b 1b			

 Table C. Glyphosate-resistant 2010 corn hybrid entries by brand/hybrid, seed product traits, and index to performance table no.(s).

	Brand/Hybrid	Brand/Hybrid Seed Biotech Traits [1]				
	G2 GEN./ 5H-597A RR/HX G2 GEN./ 5H-696 RR/HX G2 GEN./ 5H-700 RR/HX G2 GEN./ 5H-797 RR/HX G2 GEN./ 5H-812 RR/HX	WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly	1a, 2a 1a, 2a 3a, 4a 1b, 2b 6b			
	G2 GEN./ 5H-891 RR/HX G2 GEN./ 5H-905 RR/HX G2 GEN./ 5H-992 RR/HX G2 GEN./ 5H-999 RR/HX G2 GEN./ 5X-007 RR/HXT	WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly	1a, 2a 4b, 5a 1a, 2a 2b 4b, 5a			
	G2 GEN./ 5X-411 RR/HXT G2 GEN./ 5X-411A RR/HXT G2 GEN./ 5X-411B RR/HXT G2 GEN./ 5X-500 RR/HXT G2 GEN./ 5X-512 RR/HXT	WBCw,CB,BCw,FAw,CRw*,Glu,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly	5b, 6a 5b, 6a 6b 1b, 2b, 3a, 4a 6b			
	G2 GEN./ 5X-598 RR/HXT G2 GEN./ 5X-895 RR/HXT HEINE/ 723VT3 HEINE/ 742VT3 HEINE/ 744RRYGCB	WBCw,CB,BCw,FAw,CRw*,Glu,Gly Gly CB,CRw,Gly CB,CRw,Gly	1b, 2b, 3a, 4a 1a, 2a 4b 4b 4b			
	HEINE/ 745VT3 HEINE/ 810VT3 PRO HOEGEMEYER/ EX6200GTCBLL HOEGEMEYER/ EX68383000GT HOEGEMEYER/ EXP6456HXRR	CB,CRw,Gly ECB,SWCB,SCB,CEw,FAw,CRw*,Gly CB,Glu,Gly CB,CRw*,Glu,Gly WBCw,CB,BCw,FAw,Glu, Gly	4b 6a 4a 4a 4a			
	HOEGEMEYER/ EXP7998HXRR HOEGEMEYER/ HPT6589HXRR HOEGEMEYER/ HPT7584HXTRR HOEGEMEYER/ HPT7757HXTRR HOEGEMEYER/ HPT8041HXRR	WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,Glu, Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly WBCw,CB,BCw,FAw,CRw*,Glu,Gly WBCw,CB,BCw,FAw,Glu, Gly	6a 4a 6a 6a 6a			
	MASTERS CHOICE/ MCT-480 MASTERS CHOICE/ MCT-493 MASTERS CHOICE/ MCT-527 NUTECH/ 3A-109 GT NUTECH/ 3A-406 GT	Gly CB,CRw*,Glu,Gly CB,CRw*,Glu,Gly Gly Gly	1a 1a 5a 6a 5b			
	NUTECH/ 3A-710 GT NUTECH/ 3A-804 GT NUTECH/ 3C-889 RR/YGCB NUTECH/ 3C-889A RR/YGCB NUTECH/ 3P-494+ RR/YGPL	Gly Gly CRw*,Gly CRw*,Gly CB,CRw*,Gly	5b, 6a 4b 1a, 2a 1a 1a, 2a			
	NUTECH/ 3T-098 VT3 NUTECH/ 3T-300 VT3 NUTECH/ 3T-393 VT3 NUTECH/ 3T-401 VT3 NUTECH/ 3T-401A VT3	CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly	1b, 2b, 3a, 4a 1b, 4a 1a, 2a 1b, 2b, 3a, 4a, 5a 3b, 4b			
	NUTECH/ 3T-413 VT3 NUTECH/ 3T-415 VT3 NUTECH/ 3T-603A VT3 NUTECH/ 3T-713 VT3 NUTECH/ 3T-810 VT3	CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly	6b 6b 5a 5b, 6b 5b, 6a			
	NUTECH/ 5B-290 GT/CB/LL NUTECH/ 5B-612 GT/CB/LL NUTECH/ 5H-700A RR/HX NUTECH/ 5N-001 GTCBLLRW NUTECH/ 5N-102 GTCBLLRW	CB,Glu,Gly CB,Glu,Gly WBCw,CB,BCw,FAw,Glu, Gly CB,CRw*,Glu,Gly CB,CRw*,Glu,Gly	2a 5b, 6b 2b 3a 1b, 2b, 3a, 4a, 5a			
	NUTECH/ 5N-102AGTCBLLRW NUTECH/ 5N-197 GTCBLLRW NUTECH/ 5N-197AGTCBLLRW NUTECH/ 5N-215 GTCBLLRW NUTECH/ 5N-695 GTCBLLRW	CB,CRw*,Glu,Gly CB,CRw*,Glu,Gly CB,CRw*,Glu,Gly CB,CRw*,Glu,Gly CB,CRw*,Glu,Gly CB,CRw*,Glu,Gly	3b, 4b 1b, 2b, 3a, 4a 1a, 2a 6b 1a, 2a			

 Table C. Glyphosate-resistant 2010 corn hybrid entries by brand/hybrid, seed product traits, and index to performance table no.(s) (continued).
Table C. Glyphosate-resistant 2010 corn hybrid entries by brand/hybrid, seed product traits, and index to performance table no.(s) (continued).

Brand/Hybrid	Seed Biotech Traits [1]	Table No.(s)
NUTECH/ 5N-803 GTCBLLRW	CB,CRw*,Glu,Gly	3b, 4b, 5a
NUTECH/ 5N-804 GTCBLLRW	CB,CRw*,Glu,Gly	3b, 4b, 5a
PIONEER/ PIONEER BR.33P83	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	6b
PIONEER/ PIONEER BR.36V53	WBCw,CB,BCw,FAw,Glu, Gly	1b, 3b, 4b, 5a, 6a
PIONEER/ PIONEER BR.37K11	WBCw,CB,BCw,FAw,Glu, Gly	5a
PIONEER/ PIONEER BR.38H08	WBCw,CB,BCw,FAw,Glu, Gly	1a, 2a
PIONEER/ PIONEER BR.P0461HR	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	5a
PIONEER/ PIONEER BR.P0461XR	WBCw,CB,BCw,FAw,CRw*,Glu,Gly	3b, 4b, 6a
PIONEER/ PIONEER BR.P8917XR	Gly	2a
PIONEER/ PIONEER BR.P9176XR	Gly	2a
PIONEER/ PIONEER BR.P9494XR	Gly	1a, 3a, 4a
SEEDS 2000/ 3172RR	CRw*,Gly	5b
SEEDS 2000/ 9501VT3	CB,CRw,Gly	1a, 2a
SEEDS 2000/ 9502VT3	CB,CRw,Gly	1a, 2a
SEEDS 2000/ 9701SS	ECB,SWCB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly	1b, 2b, 3a, 4a
SEEDS 2000/ 9901VT3 SEEDS 2000/ EXP 9602G3 SEEDS 2000/ EXP X104G3 SEEDS 2000/ EXP X299V WENSMAN/ W 7230VT3	CB,CRw,Gly CB,CRw*,Glu,Gly CB,CRw*,Glu,Gly CB,CRw,Gly CB,CRw,Gly CB,CRw,Gly	1b, 2b, 3a, 4a 1b, 2b, 3a, 4a 3b, 4b, 5a 1b, 2b, 3a, 4a 3a, 4a
WENSMAN/ W 7267VT3	CB,CRw,Gly	3a, 4a
WENSMAN/ W 7270VT3PR0	ECB,SWCB,SCB,CEw,FAw,CRw*,Gly	3a, 4a
WENSMAN/ W 7273VT3	CB,CRw,Gly	3a, 4a
WENSMAN/ W 7289VT3	CB,CRw,Gly	3a, 4a, 5a
WENSMAN/ W 7433VT3	CB,CRw,Gly	3b, 4b, 5a, 6a
WENSMAN/ W 7455VT3	CB,CRw,Gly	3b, 4b, 5b, 6a
WENSMAN/ W 7473VT3	CB,CRw,Gly	5b, 6a
WENSMAN/ W 7562VT3	CB,CRw,Gly	5b, 6b
WENSMAN/ W 8180STX	ECB,SWCB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly	3a, 4a
WENSMAN/ W 8364STX	ECB,SWCB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly	3b, 4b, 5a, 6a

[1] Insect traits - Black Cutworm (BCw), Western Bean Cutworm (WBCw), Corn Borer (CB), Eastern Corn Borer (ECB), Southwestern Corn Borer (SWCB), Sugarcane Borer (SCB), Corn Rootworm (CRw), CRw\*(includes Mexican, Northern, and Western Corn Rootworm, Fall Armyworn (FAw), and Corn Earworm CEw.

Herbicide traits - Glyphosate tolerance (Gly) and Glufosinate tolerance (Glu).

**NOTE:** Biotech traits were obtained by referencing the product registrant trade name and seed characteristics as listed in the Know Before You Grow section at the National Corn Growers Website (http://www.ncga.com/) with the hybrid information supplied by each seed company. Biotech seed products change over time, therefore, growers are strongly encouraged to verify all biotech traits of interest with the respective seed dealer.

Table D. Explanation of performance table footnotes.

No.	Explanation of footnotes
[1]	Entries are listed by Brand/Variety– Entries are sorted by 2-yr then by 2009 yield average.
[2]	Brand Relative Maturity (Rel. Mat.)— the relative maturity rating as reported by the seed company.
[3]	Lodging Percentage– percentage of stalks broken below the ear at harvest.
[4]	Final Stand Percentage – the number of standing stalks at harvest as a percentage of the seeded population.
[5]	Least Significant Difference (LSD 0.05) – the difference any two values within a column must be equal to or exceed for the values to be significantly different (0.05 level of probability). If the difference is less than the LSD values the difference between them are nonsignificant (NS).
[6]	Min. TPG-avg.– the minimum column value for yield, bushel weight, and final stand percentage that a hybrid must equal or exceed to be in the TPG.
[7]	Max. TPG-avg.— the maximum column value for grain moisture at harvest, lodging percentage, or lodging score that a hybrid must equal or be less than to be in the TPG.
[8]	Coefficient of variation (C.V.)– the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% are less common while values of 6-15% are more common. If a value exceeds 15%; the trial contained too much experimental error to be valid, so the results are not reported.

 Table E. Mailing addresses for seed entries in the 2010 corn hybrid trials by seed brand name.

Seed brand	Seed company mailing address
AgSource	AgSource Seeds Inc., 415 S. Duff Avenue, Suite C, Ames, IA 50010
Dairyland	Dairyland Seed, PO Box 958, West Bend, WI 53095
Dekalb	Monsanto, 102 W. Carol Ave., Cortland, IL 60112
Masters Choice	3010 St. Rt. 146 E, Anna, IL 62906
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310, Shell Rock, IA 50670
G-2 Genetics	G-2 Genetics, 415 S. Duff Avenue, Suite C, Ames, IA 50010
Heine	Heine Hybrid Seed Corn, 1020 E. 320th St., Vermillion, SD 57069
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031
Channel	Channelbio Corp., Box 277, Laurel, NE 68745
NuTech	Nutech Seed, LLC, 415 S. Duff Avenue, Suite C, Ames, IA 50010
	· · · · · · · · · · · · · · · · · · ·
Pioneer	Pioneer Hi-Bred International, 151 Saint Andrews Court, Mankato, MN 5600
Seeds 2000	Seeds 2000, 115 N 3rd St., Breckenridge, MN 56520
Wensman	Wensman Seed Co., PO Box 190, 63585 HWY 10, Wadena, MN 56482

	Pol Mot	Yield Av	erages*	Other 2010 Averages*				
Brand/Hybrid + Seed Treatment [1]	[2]	2-Yr bu/a	2010 bu/a	Bu.Wt. Ib	Grain Mois- ture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
AGSOURCE/ 3P-494+RR/YGPL + Cruiser 250	94	228	215	56	16	0	100	
DAIRYLAND/ ST-9594 + Cruiser Extreme 250	94	222	197	59	16	0	95	
DAIRYLAND/ ST-9395 + Cruiser Extreme 250	95	221	197	56	16	1	91	
SEEDS 2000/ 9501VT3 + Poncho 250	95	221	197	56	16	1	94	
PIONEER/ PIONEER BR.38H08 + Poncho 1250	92	215	205	55	16	0	95	
DEKALB/ DKC42-72(VT3) + Poncho 250	92	211	189	56	16	0	98	
SEEDS 2000/ 9502VT3 + Poncho 250	95	209	187	56	17	1	91	
DEKALB/ DKC43-27(VT3) + Poncho 250	93	199	179	57	16	0	89	
AGSOURCE/ 3T-294 VT3 + Poncho 250	94	198	188	57	17	0	96	
MASTERS CHOICE/ MCT-493 + Poncho 250	93		218	58	17	0	100	
G2 GEN./ 5H-597A RR/HX + Cruiser 250	95		214	57	18	1	93	
DEKALB/ DKC45-52(GENVT3P) + Acceleron	95		213	57	16	0	98	
G2 GEN./ 5H-696 RR/HX + Cruiser 250	95		213	55	21	0	96	
CHANNEL/ 190-21VT3P + Acceleron	90		205	57	15	1	99	
NUTECH/ 3P-494+ RR/YGPL +	94		200	56	16	0	100	
DAIRYLAND/ ST-9992 + Cruiser Extreme 250	92		199	56	16	0	94	
NUTECH/ 3C-889A RR/YGCB + Poncho 250	89		199	56	16	0	89	
NUTECH/ 5N-197AGTCBLLRW + Poncho 250	95		198	55	20	0	86	
AGSOURCE/ 5N-593GTCBLLRW + Poncho 250	93	·	197	56	17	0	96	
PIONEER/ PIONEER BR.P9494XR + Poncho 1250	94		196	54	17	0	97	
DAIRYLAND/ ST-9789 + Cruiser Extreme 250	89		196	58	16	0	97	
G2 GEN./ 5X-895 RR/HXT + Cruiser 250	95		196	53	20	0	85	
NUTECH/ 5N-695 GTCBLLRW + Cruiser 250	95		194	56	19	0	89	
CHANNEL/ 193-46VT3 + Acceleron	93		194	58	16	0	97	
CHANNEL/ 189-59VT3 + Acceleron	89		193	56	16	0	95	
MASTERS CHOICE/ MCT-480 + Poncho 250	90		191	57	17	2	99	
NUTECH/ 3C-889 RR/YGCB + Poncho 250	89		190	57	17	0	93	
AGSOURCE/ 3A-889 RR + Poncho 250	89		190	57	16	0	95	
G2 GEN./ 5H-891 RR/HX + Cruiser 250	91		188	57	15	0	96	
G2 GEN./ 5H-992 RR/HX + Cruiser 250	92		174	54	16	0	61	
NUTECH/ 3T-393 VT3 + Cruiser 250	93		173	56	17	0	72	
Trial avg.:	93	214	196	56	17	0	93	
High avg.:	95	228	218	59	21	2	103	
Low avg.:	89	198	173	53	15	0	61	
[5] LSD(.05):		20	19	1	1	1	6	
[6] Min.TPG value:		208	199	58			95	
[7] Max.TPG value:					16	1		
[8] Coef. of var.:		4	6	1	5	320	4	
No. entries:	31	9	31	31	31	31	31	

#### Table 1a. Warner early maturity Roundup Ready corn hybrid test results, 2009-10, Allen & Inel Ryckman Farm. Seeded May 4, 2010 at 28,750 seeds per acre.

 Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
 \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better. Note that additional table footnotes are explained in table D.

		Yield Av	erages*	Other 2010 Averages*				
Brand/Hybrid + Seed Treatment [1]	Kel. Mat. [2]	2-Yr bu/a	2010 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
DEKALB/ DKC52-59(VT3) + Poncho 250	102	236	231	56	20	0	100	
NUTECH/ 3T-401 VT3 + Cruiser 250	100	230	227	59	20	0	97	
DEKALB/ DKC50-66(VT3) + Poncho 250	100	230	226	58	16	0	100	
NUTECH/ 3T-098 VT3 + Cruiser 250	98	230	214	59	18	1	90	
G2 GEN./ 5H-501 RR/HX + Cruiser 250	100	227	214	57	21	0	91	
G2 GEN./ 5H-797 RR/HX + Cruiser 250	97	227	213	57	18	0	93	
NUTECH/ 3T-300 VT3 + Cruiser 250	100	226	222	56	20	1	82	
SEEDS 2000/ 9901VT3 + Poncho 250	99	216	195	59	19	0	81	
DAIRYLAND/ ST-9500Q + Cruiser Extreme 250	100	210	212	57	22	0	95	
DAIRYLAND/ ST-9597Q + Cruiser Extreme 250	97	210	201	58	18	1	100	
CHANNEL/ 196-06VT3 + Acceleron	96		226	58	18	0	95	
SEEDS 2000/ EXP 9602G3 + Cruiser 250	96		222	57	18	0	93	
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100		221	57	19	1	96	
G2 GEN./ 5H-597 RR/HX + Cruiser 250	97		221	59	18	1	100	
SEEDS 2000/ 9701SS + Acceleron	97		219	56	17	3	93	
DEKALB/ DKC50-35(VT3) + Poncho 250	100		214	58	19	0	98	
PIONEER/ PIONEER BR.36V53 + Poncho 1250	102	•	214	57	19	0	90	
NUTECH/ 5N-197 GTCBLLRW + Poncho 250	97		210	58	18	0	86	
EPLEY/ E1125GT + Maxim XL,Lorsban Dynasty	98		208	57	19	5	99	
DEKALB/ DKC48-37(VT3) + Poncho 250	98		203	60	17	0	93	
G2 GEN./ 5X-500 RR/HXT + Cruiser 250	100		196	58	18	1	83	
EPLEY/ E1275RR + Maxim XL,Lorsban Dynasty	97		196	59	17	1	91	
G2 GEN./ 5X-598 RR/HXT + Cruiser 250	98		195	57	19	1	86	
AGSOURCE/ 3T-297 VT3 + Poncho 250	97		159	58	17	0	67	
SEEDS 2000/ EXP X299V + Poncho 250	99		155	59	19	0	64	
Trial avg.:	99	224	209	58	19	1	90	
High avg.:	102	236	231	60	22	5	100	
Low avg.:	96	210	155	56	16	0	64	
[5] LSD(.05):		NS**	20	1	2	NS	4	
[6] Min.TPG value:		210	211	59			96	
[7] Max.TPG value:					18	5		
[8] Coef. of var.:		5	6	1	6	275	3	
No. entries:	25	10	25	25	25	25	25	

#### Table 1b. Warner late maturity Roundup Ready corn hybrid test results, 2009-10, Allen & Inel Ryckman Farm. Seeded May 4, 2010 at 28,750 seeds per acre.

 [1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
 \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better. \*\* Indicates differences between values within a column are non-significant (NS). Note that additional table footnotes are explained in table D.

	Dol Mot	Yield Averages*		Other 2010 Averages*				
Brand/Hybrid + Seed Treatment [1]	[2]	2-Yr bu/a	2010 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
DAIRYLAND/ ST-9594 + Cruiser Extreme 250	94	213	212	59	17	0	98	
DAIRYLAND/ ST-9789 + Cruiser Extreme 250	89	209	208	58	17	0	97	
AGSOURCE/ 3T-294 VT3 + Poncho 250	94	207	207	58	17	0	100	
DAIRYLAND/ ST-9395 + Cruiser Extreme 250	95	206	200	57	17	1	85	
DEKALB/ DKC42-72(VT3) + Poncho 250	92	206	199	57	17	0	91	
DEKALB/ DKC43-27(VT3) + Poncho 250	93	204	196	57	16	1	91	
SEEDS 2000/ 9502VT3 + Poncho 250	95	199	195	57	18	0	87	
SEEDS 2000/ 9501VT3 + Poncho 250	95	197	190	56	15	1	100	
PIONEER/ PIONEER BR.38H08 + Poncho 1250	92	196	196	55	15	1	90	
AGSOURCE/ 3P-494+RR/YGPL + Cruiser 250	94	195	197	55	15	1	94	
CHANNEL/ 190-21VT3P + Acceleron	90		213	59	16	0	99	
DAIRYLAND/ ST-9992 + Cruiser Extreme 250	92		212	56	17	1	99	
NUTECH/ 3P-494+ RR/YGPL +	94		211	55	16	2	95	
NUTECH/ 5B-290 GT/CB/LL + Poncho 250	90		211	56	15	1	99	
DEKALB/ DKC45-52(GENVT3P) + Acceleron	95		210	57	17	0	100	
G2 GEN./ 5H-696 RR/HX + Cruiser 250	95		205	57	18	0	96	
AGSOURCE/ 5N-593GTCBLLRW + Poncho 250	93		203	56	15	0	98	
G2 GEN./ 5H-597A RR/HX + Cruiser 250	95		202	57	18	0	92	
CHANNEL/ 189-59VT3 + Acceleron	89		202	57	16	0	94	
NUTECH/ 3C-889 RR/YGCB + Poncho 250	89		199	57	16	0	97	
G2 GEN./ 5H-891 RR/HX + Cruiser 250	91		198	56	14	0	94	
AGSOURCE/ 3A-889 RR + Poncho 250	89		198	56	15	0	94	
PIONEER/ PIONEER BR.P9176XR + Poncho 1250	91		197	58	16	1	97	
CHANNEL/ 193-46VT3 + Acceleron	93		195	57	16	1	95	
NUTECH/ 5N-695 GTCBLLRW + Cruiser 250	95		189	55	16	7	86	
NUTECH/ 5N-197AGTCBLLRW + Poncho 250	95		184	56	16	5	89	
PIONEER/ PIONEER BR.P8917XR + Poncho 1250	89		178	58	16	1	89	
NUTECH/ 3T-393 VT3 + Cruiser 250	93		178	55	17	0	80	
G2 GEN./ 5H-992 RR/HX + Cruiser 250	92		178	54	16	0	64	
G2 GEN./ 5X-895 RR/HXT + Cruiser 250	95		176	54	17	0	77	
Trial avg.:	93	203	198	56	16	1	92	
High avg.:	95	213	213	59	18	7	100	
Low avg.:	89	195	176	54	14	0	64	
[5] LSD(.05):		NS**	17	2	1	2	5	
[6] Min.TPG value:		195	196	57			95	
[7] Max.TPG value:					15	2		
[8] Coef. of var.:		4	5	2	6	145	4	
No. entries:	30	10	30	30	30	30	30	

#### Table 2a. South Shore early maturity Roundup Ready corn hybrid test results, 2009-10, Northeast Research Farm. Seeded May 5, 2010 at 28,750 seeds per acre.

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
 \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
 \*\* Indicates differences between values within a column are non-significant (NS).
 Note that additional table footnotes are explained in table D.

	Rel.	Yield Av	erages*	Other 2010 Averages*				
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2010 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
G2 GEN./ 5H-999 RR/HX + Cruiser 250	99	220	224	59	19	1	96	
DEKALB/ DKC50-66(VT3) + Poncho 250	100	218	222	60	17	0	99	
NUTECH/ 3T-401 VT3 + Cruiser 250	100	214	235	58	22	0	100	
NUTECH/ 3T-098 VT3 + Cruiser 250	98	208	228	59	20	0	94	
DEKALB/ DKC48-37(VT3) + Poncho 250	98	208	207	60	17	0	91	
G2 GEN./ 5H-797 RR/HX + Cruiser 250	97	204	212	59	18	0	92	
SEEDS 2000/ 9901VT3 + Poncho 250	99	201	207	59	20	0	83	
DEKALB/ DKC50-35(VT3) + Poncho 250	100		239	59	21	0	98	
DEKALB/ DKC51-86(GENVT3P) + Acceleron	101		238	59	20	0	100	
DEKALB/ DKC52-59(VT3) + Poncho 250	102		228	59	20	0	92	
G2 GEN./ 5H-502 RR/HX + Cruiser 250	100		226	58	22	1	91	
SEEDS 2000/ EXP 9602G3 + Cruiser 250	96		226	57	17	0	97	
CHANNEL/ 196-06VT3 + Acceleron	96		224	59	19	1	98	
NUTECH/ 5H-700A RR/HX + Cruiser 250	100		219	58	21	0	88	
NUTECH/ 5N-197 GTCBLLRW + Poncho 250	97		217	58	21	3	89	
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100		212	56	21	1	92	
EPLEY/ E1275RR + Maxim XL,Lorsban Dynasty	97		212	59	17	2	97	
SEEDS 2000/ 9701SS + Acceleron	97		207	59	17	3	92	
EPLEY/ E1125GT + Maxim XL,Lorsban Dynasty	98	·	206	57	19	9	91	
AGSOURCE/ 3T-297 VT3 + Poncho 250	97		202	59	19	0	80	
G2 GEN./ 5X-500 RR/HXT + Cruiser 250	100		201	59	19	0	87	
AGSOURCE/ 5X-598A RR/HXT + Cruiser 250	98		199	57	19	1	84	
G2 GEN./ 5X-598 RR/HXT + Cruiser 250	98		196	57	19	0	80	
AGSOURCE/ 5X-500A RR/HXT + Cruiser 250	101		196	58	19	0	90	
SEEDS 2000/ EXP X299V + Poncho 250	99		178	59	20	0	66	
Trial avg.:	99	210	214	59	19	1	91	
High avg.:	102	220	239	60	22	9	100	
Low avg.:	96	201	178	56	17	0	66	
[5] LSD(.05):		NS**	17	1	1	3	5	
[6] Min.TPG value:		201	222	59			95	
[7] Max.TPG value:					18	3		
[8] Coef. of var.:		5	5	1	4	248	4	
No. entries:	25	7	25	25	25	25	25	

#### Table 2b. South Shore late maturity Roundup Ready corn hybrid test results, 2009-10, Northeast Research Farm. Seeded May 5, 2010 at 28,750 seeds per acre.

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average. \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better. \*\* Indicates differences between values within a column are non-significant (NS).

Table 3a. Bancroft early maturity glyphosate-resistant corn hybrid test results, 2009-10, E. Weerts Farms	Inc. Seeded
May 19, 2010 at 28,750 seeds per acre.	

	Dol Mot	Yield Averages*		Other 2010 Averages*				
Brand/Hybrid + Seed Treatment [1]	[2]	2-Yr bu/a	2010 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
DEKALB/ DKC48-37(VT3) + Poncho 250	98	177	159	56	16	2	90	
DEKALB/ DKC50-66(VT3) + Poncho 250	100	176	165	56	17	1	99	
WENSMAN/ W 7270VT3PR0 + Acceleron	97	175	160	57	16	1	98	
NUTECH/ 3T-098 VT3 + Cruiser 250	98	173	163	54	17	4	94	
NUTECH/ 3T-401 VT3 + Cruiser 250	100	171	169	57	19	2	100	
DEKALB/ DKC43-27(VT3) + Poncho 250	93	170	146	57	16	0	91	
DEKALB/ DKC50-35(VT3) + Poncho 250	100	167	152	56	17	0	90	
WENSMAN/ W 7289VT3 + Poncho 250	99	166	153	57	18	3	96	
SEEDS 2000/ 9901VT3 + Poncho 250	99	156	152	58	20	0	88	
EPLEY/ E1315RR + Maxim XL,Lorsban Dynasty	100	156	144	55	18	7	94	
WENSMAN/ W 7267VT3 + Poncho 250	97		168	54	17	7	95	
CHANNEL/ 199-55VT3 + Acceleron	99		165	55	16	3	96	
G2 GEN./ 5H-502 RR/HX + Cruiser 250	100		160	56	19	1	97	
SEEDS 2000/ EXP 9602G3 + Cruiser 250	96		158	54	15	0	95	
CHANNEL/ 196-06VT3 + Acceleron	96		156	55	16	4	94	
SEEDS 2000/ 9701SS + Acceleron	97		155	55	19	1	99	
PIONEER/ PIONEER BR.P9494XR + Poncho 1250	94		153	53	16	2	94	
G2 GEN./ 5H-700 RR/HX + Cruiser 250	100	•	153	57	18	3	93	
NUTECH/ 5N-001 GTCBLLRW + Cruiser 250	100	<b>-</b> .	152	53	17	2	95	
DEKALB/ DKC42-72(VT3) + Poncho 250	92		150	56	16	0	92	
WENSMAN/ W 7273VT3 + Poncho 250	98	<b></b> .	150	55	18	9	92	
NUTECH/ 5N-197 GTCBLLRW + Poncho 250	97	•	149	55	19	1	90	
WENSMAN/ W 8180STX + Acceleron	95		147	56	17	7	99	
DEKALB/ DKC45-52(GENVT3P) + Acceleron	95		146	56	16	3	100	
G2 GEN./ 5X-500 RR/HXT + Cruiser 250	100		146	55	18	2	94	
WENSMAN/ W 7230VT3 + Poncho 250	96		145	57	16	9	96	
AGSOURCE/ 5X-598A RR/HXT + Cruiser 250	98		144	56	18	0	87	
SEEDS 2000/ EXP X299V + Poncho 250	99		141	57	17	5	96	
G2 GEN./ 5X-598 RR/HXT + Cruiser 250	98		140	55	19	0	81	
AGSOURCE/ 5N695AGTCBLLRW + Cruiser 250	95		136	56	17	5	82	
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100		127	56	18	4	87	
Trial avg.:	98	169	152	56	17	3	93	
High avg.:	100	177	169	58	20	9	100	
Low avg.:	92	156	127	53	15	0	81	
[5] LSD(0.05):		NS**	26	1	2	4	6	
[6] Min.TPG value:		156	143	57			94	
[7] Max.TPG value:					17	4		
[8] Coef. of var.:		9	10	2	6	91	4	
No. entries:	31	10	31	31	31	31	31	

 [1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
 \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better. \*\* Indicates differences between values within a column are non-significant (NS). Note that additional table footnotes are explained in table D.

		Yield Av	verages*	Other 2010 Averages*				
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2010 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
PIONEER/ PIONEER BR.36V53 + Poncho 1250	102	173	172	54	20	1	98	
WENSMAN/ W 7455VT3 + Poncho 250	107	158	164	51	24	2	96	
NUTECH/ 5N-804 GTCBLLRW + Cruiser 250	104		175	53	22	0	97	
G2 GEN./ 5H-404 RR/HX + Cruiser 250	104		173	55	21	0	91	
G2 GEN./ 5H-502A RR/HX + Cruiser 250	102		172	56	20	1	98	
EPLEY/ E1535GT + Maxim XL,Lorsban Dynasty	104		171	54	20	1	96	
SEEDS 2000/ EXP X104G3 + Cruiser 250	104		170	53	22	0	93	
EPLEY/ E1418GT3000 + Cruiser Extreme 250	104		164	52	24	0	98	
WENSMAN/ W 7433VT3 + Poncho 250	105		164	54	22	4	96	
EPLEY/ E1479HXTLLRR + Cruiser Extreme 250	104		162	53	23	3	96	
AGSOURCE/ 5X-500A RR/HXT + Cruiser 250	101		161	56	18	1	93	
NUTECH/ 5N-803 GTCBLLRW + Cruiser 250	103		155	52	21	2	91	
G2 GEN./ 5H-501A RR/HX + Cruiser 250	101		155	55	20	2	98	
G2 GEN./ 5H-105 RR/HX + Cruiser 250	105		155	55	21	2	94	
NUTECH/ 3T-401A VT3 + Cruiser 250	101		152	56	20	4	94	
NUTECH/ 5N-102AGTCBLLRW + Cruiser 250	102		152	55	19	1	92	
PIONEER/ PIONEER BR.P0461XR + Poncho 1250	104	•	151	54	22	0	93	
WENSMAN/ W 8364STX + Acceleron	103		141	55	21	4	97	
Trial avg.:	103	165	161	54	21	1	95	
High avg.:	107	173	175	56	24	4	98	
Low avg.:	101	158	141	51	18	0	91	
[5] LSD(0.05):		NS**	27	2	2	NS	5	
[6] Min.TPG value:		158	148	54			93	
[7] Max.TPG value:					20	4		
[8] Coef. of var.:		4	10	2	5	150	3	
No. entries:	18	2	18	18	18	18	18	

#### Table 3b. Bancroft late maturity glyphosate-resistant corn hybrid test results, 2009-10, E. Weerts Farms Inc. Seeded May 19, 2010 at 28,750 seeds per acre.

 Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
 \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the \*\* Indicates differences between values within a column are non-significant (NS). Note that additional table footnotes are explained in table D.

#### Table 4a. Brookings early maturity glyphosate-resistant corn hybrid test results, 2009-10, Plant Science Farm. Seeded April 28, 2010 at 28,750 seeds per acre.

		Yield Averages*		Other 2010 Averages*				
Brand/Hybrid + Seed Treatment [1]	Mat.	2-Yr	2010	Bu.Wt.	Grain Moisture	Lodging Pctg	Final Stand	
	[2]	bu/a	bu/a	lb	Pctg	[3]	Pctg [4]	
NUTECH/ 3T-401 VT3 + Cruiser 250	100	250	256	58	17	1	99	
DEKALB/ DKC50-66(VT3) + Poncho 250	100	239	242	60	15	1	97	
G2 GEN./ 5H-501 RR/HX + Cruiser 250	100	239	233	58	16	1	89	
WENSMAN/ W 7267VT3 + Poncho 250	97	229	236	58	16	0	95	
DAIRYLAND/ ST-9597Q + Cruiser Extreme 250	97	226	228	57	16	2	99	
DAIRYLAND/ ST-9500Q + Cruiser Extreme 250	100	224	226	57	18	2	93	
WENSMAN/ W 7270VT3PR0 + Acceleron	97	223	219	57	14	1	96	
NUTECH/ 3T-300 VT3 + Cruiser 250	100	222	234	58	16	1	91	
EPLEY/ E1315RR + Maxim XL,Lorsban Dynasty	100	222	231	56	17	6	97	
NUTECH/ 3T-098 VT3 + Cruiser 250	98	222	226	57	16	0	95	
SEEDS 2000/ 9901VT3 + Poncho 250	99	220	221	59	16	0	90	
DEKALB/ DKC43-27(VT3) + Poncho 250	93	203	193	58	13	1	87	
WENSMAN/ W 7273VT3 + Poncho 250	98		256	57	16	0	97	
CHANNEL/ 199-55VT3 + Acceleron	99		256	56	16	0	99	
DEKALB/ DKC50-35(VT3) + Poncho 250	100		246	57	16	0	98	
G2 GEN./ 5H-502 RR/HX + Cruiser 250	100		246	58	17	1	92	
HOEGEMEYER/ EX6200GTCBLL + Poncho or Cruiser 250	92		243	56	14	2	93	
G2 GEN./ 5H-700 RR/HX + Cruiser 250	100		242	58	17	0	98	
DEKALB/ DKC45-52(GENVT3P) + Acceleron	95		237	58	15	0	99	
NUTECH/ 5N-197 GTCBLLRW + Poncho 250	97		236	58	16	4	92	
SEEDS 2000/ EXP 9602G3 + Cruiser 250	96	· •	234	56	15	1	98	
CHANNEL/ 196-06VT3 + Acceleron	96		234	57	16	0	93	
HOEGEMEYER/ EX68383000GT + Poncho or Cruiser 250	97		233	57	16	0	85	
WENSMAN/ W 7289VT3 + Poncho 250	99		232	58	16	0	94	
SEEDS 2000/ 9701SS + Acceleron	97		227	54	12	2	97	
HOEGEMEYER/ HPT6589HXRR + Poncho or Cruiser 250	96		226	57	14	0	95	
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100		224	56	16	2	93	
WENSMAN/ W 8180STX + Acceleron	95		224	57	16	0	95	
SEEDS 2000/ EXP X299V + Poncho 250	99		223	59	16	1	88	
DEKALB/ DKC42-72(VT3) + Poncho 250	92		220	57	14	0	93	
G2 GEN./ 5X-500 RR/HXT + Cruiser 250	100		220	57	15	0	94	
PIONEER/ PIONEER BR.P9494XR + Poncho 1250	94		219	55	13	0	92	
EPLEY/ E1275RR + Maxim XL,Lorsban Dynasty	97		211	58	14	7	96	
WENSMAN/ W 7230VT3 + Poncho 250	96		210	56	15	2	95	
DEKALB/ DKC48-37(VT3) + Poncho 250	98		208	59	15	0	89	
HOEGEMEYER/ EXP6456HXRR + Poncho or Cruiser 250	94		207	56	12	5	82	
G2 GEN / 5X-598 RR/HXT + Cruiser 250	98		183	56	15	0	79	
Trial avo.:	97	226	228	57	15	1	93	
High avg.:	100	250	256	60	18	7	99 70	
Low avg.: [5] LSD(0.05):	92	203	183	54 1	12	U 2	79 5	
[6] Min.TPG value:		230	242	59			94	
[/] Max.1PG value: [8] Coef. of var.:		3	4	i	13	131	3	
No. entries:	37	12	37	37	37	37	37	

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
 \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better. Note that additional table footnotes are explained in table D.

<u> </u>	Rel.	Yield Av	verages*	Other 2010 Averages*				
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2010 bu/a	Bu.Wt. Ib	Grain Mois- ture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
HEINE/ 744RRYGCB + Poncho 250	104	245	247	58	18	0	91	
HEINE/ 745VT3 + Poncho 250	104	243	259	58	20	0	96	
G2 GEN./ 5H-905 RR/HX + Cruiser 250	105	241	253	56	17	1	91	
HEINE/ 742VT3 + Poncho 250	102	235	228	59	17	0	84	
PIONEER/ PIONEER BR.36V53 + Poncho 1250	102	230	234	57	17	1	94	
DAIRYLAND/ ST-9703Q + Cruiser Extreme 250	103	221	222	56	19	0	85	
G2 GEN./ 5H-007 RR/HX + Cruiser 250	105	218	235	56	19	0	89	
WENSMAN/ W 7455VT3 + Poncho 250	107	212	197	56	19	1	75	
EPLEY/ E1418GT3000 + Cruiser Extreme 250	104		259	55	18	1	95	
NUTECH/ 5N-803 GTCBLLRW + Cruiser 250	103		246	56	16	2	95	
HEINE/ 723VT3 + Poncho 250	102		245	55	19	0	93	
NUTECH/ 5N-804 GTCBLLRW + Cruiser 250	104		241	57	17	0	93	
WENSMAN/ W 7433VT3 + Poncho 250	105		241	56	19	0	91	
EPLEY/ E1479HXTLLRR + Cruiser Extreme 250	104		240	56	22	0	95	
WENSMAN/ W 8364STX + Acceleron	103		240	57	18	1	96	
NUTECH/ 3T-401A VT3 + Cruiser 250	101		238	57	17	2	94	
G2 GEN./ 5H-105 RR/HX + Cruiser 250	105		233	57	19	0	74	
PIONEER/ PIONEER BR.P0461XR + Poncho 1250	104		231	57	17	0	89	
NUTECH/ 5N-102AGTCBLLRW + Cruiser 250	102		231	57	17	0	87	
NUTECH/ 3A-804 GT + Cruiser 250	104		230	56	17	2	92	
SEEDS 2000/ EXP X104G3 + Cruiser 250	104		228	57	17	1	90	
G2 GEN./ 5X-007 RR/HXT + Cruiser 250	105		221	58	19	0	89	
EPLEY/ E1535GT + Maxim XL,Lorsban Dynasty	104		221	58	16	2	94	
G2 GEN./ 5H-404 RR/HX + Cruiser 250	104		218	57	17	0	81	
Trial avg.:	104	231	235	57	18	1	90	
High avg.:	107	245	259	59	22	2	96	
Low avg.:	101	212	197	55	16	0	74	
[5] LSD(0.05):		15	12	1	1	1	10	
[6] Min.TPG value:		230	247	58			86	
[7] Max.TPG value:					17	1		
[8] Coef. of var.:		4	3	1	3	177	7	
No. entries:	24	8	24	24	24	24	24	

#### Table 4b. Brookings late maturity glyphosate-resistant corn hybrid test results, 2009-10, Plant Science Farm. Seeded April 28, 2009 at 28,750 seeds per acre.

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average. \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.

Brand/Hybrid + Seed Treatment [1]	Rel.	Yield Av	erages*	Other 2010 Averages*			
	Mat. [2]	2-Yr bu/a	2010 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
G2 GEN./ 5H-905 RR/HX + Cruiser 250	105	242	238	57	17	0	99
DEKALB/ DKC52-59(VT3) + Poncho 250	102	239	236	58	16	4	97
NUTECH/ 3T-401 VT3 + Cruiser 250	100	237	228	59	17	2	96
PIONEER/ PIONEER BR.36V53 + Poncho 1250	102	235	223	57	16	0	99
WENSMAN/ W 7433VT3 + Poncho 250	105	234	227	58	16	1	95
DEKALB/ DKC50-66(VT3) + Poncho 250	100	231	222	59	15	2	96
G2 GEN./ 5H-501 RR/HX + Cruiser 250	100	231	220	59	16	3	95
CHANNEL/ 199-55VT3 + Acceleron	99		237	57	15	3	98
CHANNEL/ 201-16VT3 + Acceleron	101		235	60	16	3	94
PIONEER/ PIONEER BR.P0461HR + Poncho 1250	104		234	57	17	2	98
NUTECH/ 5N-803 GTCBLLRW + Cruiser 250	103		234	58	17	3	94
EPLEY/ E1418GT3000 + Cruiser Extreme 250	104		231	57	18	2	94
NUTECH/ 3T-603A VT3 + Cruiser 250	103		229	60	17	3	94
EPLEY/ E1479HXTLLRR + Cruiser Extreme 250	104		226	58	18	4	97
PIONEER/ PIONEER BR.37K11 + Poncho 1250	99		224	58	15	3	99
G2 GEN./ 5H-502 RR/HX + Cruiser 250	100		223	59	17	2	85
SEEDS 2000/ EXP X104G3 + Cruiser 250	104		223	59	16	3	89
WENSMAN/ W 8364STX + Acceleron	103		221	58	17	3	94
MASTERS CHOICE/ MCT-527 + Poncho 250	105	· ·	220	58	17	3	96
EPLEY/ E1535GT + Maxim XL,Lorsban Dynasty	104		220	58	17	1	94

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# Table 5a. Geddes early maturity glyphosate-resistant corn hybrid test results, 2009-10, Curtis Sybesma Farm. Seeded May 18, 2010 at 28,750 seeds per acre.

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.

[8] Coef. of var.:

No. entries:

Trial avg.:

High avg.:

Low avg.:

[5] LSD(0.05):

[6] Min.TPG value:

[7] Max.TPG value:

\* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.

\*\* Indicates differences between values within a column are non-significant (NS).

Note that additional table footnotes are explained in table D.

NUTECH/ 5N-804 GTCBLLRW + Cruiser 250

DEKALB/ DKC45-52(GENVT3P) + Acceleron

NUTECH/ 5N-102 GTCBLLRW + Cruiser 250

EPLEY/ E1315RR + Maxim XL,Lorsban Dynasty

G2 GEN./ 5H-105 RR/HX + Cruiser 250

WENSMAN/ W 7289VT3 + Poncho 250

G2 GEN./ 5X-007 RR/HXT + Cruiser 250

DEKALB/ DKC48-37(VT3) + Poncho 250

	Rel.	Yield Averages*		Other 2010 Averages*				
Brand/Hybrid + Seed Treatment [1]		2-Yr bu/a	2010 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
G2 GEN./ 5H-210 RR/HX + Cruiser 250	110	235	238	58	16	4	89	
G2 GEN./ 5H-511 RR/HX + Cruiser 250	110	230	235	59	18	6	95	
DEKALB/ DKC61-69(VT3) + Poncho 250	111	223	233	58	19	2	95	
WENSMAN/ W 7455VT3 + Poncho 250	107	210	200	57	17	4	95	
WENSMAN/ W 7562VT3 + Poncho 250	111		243	56	18	3	98	
WENSMAN/ W 7473VT3 + Poncho 250	109		243	56	20	3	97	
DEKALB/ DKC59-35(VT3) + Poncho 250	109		240	59	19	1	96	
NUTECH/ 5B-612 GT/CB/LL + Poncho 250	112		239	54	18	4	93	
DEKALB/ DKC58-83(GENVT3P) + Acceleron	108		237	60	16	3	95	
NUTECH/ 3T-810 VT3 + Poncho 250	110		232	56	19	5	88	
SEEDS 2000/ 3172RR + Poncho 250	107		231	56	16	7	99	
NUTECH/ 3A-406 GT + Cruiser 250	106		229	56	16	0	96	
G2 GEN./ 5X-411A RR/HXT + Cruiser 250	110		228	58	21	2	90	
NUTECH/ 3T-713 VT3 + Poncho 250	113		224	57	21	5	94	
G2 GEN./ 5X-411 RR/HXT + Cruiser 250	110		223	59	20	5	92	
G2 GEN./ 5H-509 RR/HX + Cruiser 250	109		217	59	18	1	95	
NUTECH/ 3A-710 GT + Poncho 250	110		211	57	17	7	98	
DEKALB/ DKC59-88(VT3) + Poncho 250	109		201	58	19	0	90	
Trial avg.:	110	224	228	57	18	4	94	
High avg.:	113	235	243	60	21	7	99	
Low avg.:	106	210	200	54	16	0	88	
[5] LSD(0.05):		NS**	22	1	2	4	5	
[6] Min.TPG value:		210	221	59			94	
[7] Max.TPG value:					18	4		
[8] Coef. of var.:		5	6	1	8	63	3	
No. entries:	18	4	18	18	18	18	18	

#### Table 5b. Geddes late maturity glyphosate-resistant corn hybrid test results, 2009-10, Curtis Sybesma Farm. Seeded May 18, 2010 at 28,750 seeds per acre.

 [1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
 \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better. \*\*\* Indicates differences between values within a column are non-significant (NS).

		Yield Averages*		Other 2010 Averages*			
Brand/Hybrid + Seed Treatment [1]	Mat.	2-Yr	2010	Bu.Wt.	Grain Moisture	Lodging	Final Stand
	[2]	bu/a	bu/a	lb	Pctg	Pctg [3]	Pctg [4]
G2 GEN./ 5H-210 RR/HX + Cruiser 250	110	242	248	58	20	1	98
WENSMAN/ W 7455VT3 + Poncho 250	107	240	239	59	17	1	96
G2 GEN./ 5H-511 RR/HX + Cruiser 250	110	239	230	57	20	0	96
DAIRYLAND/ ST9206Q + Cruiser Extreme 250	106	235	238	57	18	0	99
DEKALB/ DKC52-59(VT3) + Poncho 250	102	228	224	58	14	0	100
HOEGEMEYER/ HPT7757HXTRR + Poncho or Cruiser 250	106	220	219	61	18	0	100
WENSMAN/ W 7473VT3 + Poncho 250	109		251	56	18	0	98
NUTECH/ 3A-710 GT + Poncho 250	110		250	59	18	1	100
HEINE/ 810VT3 PRO + Acceleron	109		249	58	19	0	100
NUTECH/ 3A-109 GT + Poncho 250	109		248	57	17	1	99
DEKALB/ DKC59-35(VT3) + Poncho 250	109		245	57	19	1	100
G2 GEN./ 5H-509 RR/HX + Cruiser 250	109		243	58	18	0	100
DAIRYLAND/ ST-9208Q + Cruiser Extreme 250	108		241	58	18	1	100
HOEGEMEYER/ HPT8041HXRR + Poncho or Cruiser 250	109		241	60	20	0	98
HOEGEMEYER/ HPT7584HXTRR + Poncho or Cruiser 250	105		235	57	17	0	100
EPLEY/ E1479HXTLLRR + Cruiser Extreme 250	104		233	58	18	0	99
DEKALB/ DKC58-83(GENVT3P) + Acceleron	108		232	60	17	0	100
PIONEER/ PIONEER BR.P0461XR + Poncho 1250	104		231	58	16	0	100
G2 GEN./ 5X-411 RR/HXT + Cruiser 250	110		231	58	20	0	92
DEKALB/ DKC59-88(VT3) + Poncho 250	109		230	59	19	1	99
PIONEER/ PIONEER BR.36V53 + Poncho 1250	102		227	59	15	0	99
HOEGEMEYER/ EXP7998HXRR + Poncho or Cruiser 250	109		226	58	18	0	98
WENSMAN/ W 7433VT3 + Poncho 250	105		226	59	15	3	100
DAIRYLAND/ ST-6310 + Cruiser Extreme 250	110		225	59	17	0	99
NUTECH/ 3T-810 VT3 + Poncho 250	110		224	54	22	0	89
G2 GEN./ 5X-411A RR/HXT + Cruiser 250	110		224	58	20	0	98
EPLEY/ E1535GT + Maxim XL,Lorsban Dynasty	104		223	58	15	1	98
WENSMAN/ W 8364STX + Acceleron	103		219	59	16	0	98
DEKALB/ DKC51-86(GENVT3P) + Acceleron	101		214	58	14	2	100
DEKALB/ DKC50-35(VT3) + Poncho 250	100		212	60	14	1	100
EPLEY/ E2404VT3PR0 + Cruiser Extreme 250	107		210	58	16	0	88
DEKALB/ DKC50-66(VT3) + Poncho 250	100		203	59	14	1	100
CHANNEL/ 201-16VT3 + Acceleron	101		197	59	14	1	99
Trial avg.:	107	234	230	58	17	0	98
High avg.:	110	242	251	61	22	3	100
Low avg.:	100	220	197	54	14	0	88
[5] LSD(0.05):		NS**	15	1	1	2	3
[6] Min.TPG value:		220	236	60			97
[7] Max.TPG value:					15	2	
[8] Coef. of var.:		3	4	1	4	226	2
No. entries:	33	6	33	33	33	33	33

#### Table 6a. Beresford early maturity glyphosate-resistant corn hybrid test results, 2009-10, Southeast Experiment Station. Seeded May 3, 2010 at 28,750 seeds per acre.

 Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
 \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better. \*\*\* Indicates differences between values within a column are non-significant (NS).

Brand/Hybrid + Seed Treatment [1]		Rel.	Yield Averages*		Other 2010 Averages*				
		Mat. [2]	2-Yr bu/a	2010 bu/a	Bu.Wt. Ib	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	
NUTECH/ 3T-413 VT3 + Crui	ser 250	113	237	228	57	23	1	94	
DEKALB/ DKC61-69(VT3) +	Poncho 250	111	234	237	58	18	0	95	
NUTECH/ 3T-713 VT3 + Pon	cho 250	113	234	234	57	21	0	98	
G2 GEN./ 5H-511A RR/HX +	Cruiser 250	111	234	226	58	20	1	96	
DEKALB/ DKC62-54(VT3) +	Poncho 250	112	226	203	59	18	1	96	
DEKALB/ DKC63-84(VT3) +	Poncho 250	113		244	56	20	0	100	
NUTECH/ 3T-415 VT3 + Pon	cho 250	115		241	57	22	0	99	
WENSMAN/ W 7562VT3 + I	Poncho 250	111		241	57	19	1	100	
PIONEER/ PIONEER BR.33P83 + Poncho 1250		111		239	59	19	1	99	
G2 GEN./ 5H-513 RR/HX + Cruiser 250		113		231	57	23	1	98	
G2 GEN./ 5H-812 RR/HX + Cruiser 250		112		228	60	22	1	99	
NUTECH/ 5B-612 GT/CB/LL + Poncho 250		112		224	53	20	5	98	
NUTECH/ 5N-215 GTCBLLR	W + Poncho 250	115		224	57	23	1	98	
G2 GEN./ 5X-411B RR/HXT -	+ Cruiser 250	111		215	60	20	1	92	
G2 GEN./ 5X-512 RR/HXT +	Cruiser 250	112		214	56	23	0	87	
AGSOURCE/ 3T-914 VT3 + P	oncho 250	114		193	54	24	17	98	
AGSOURCE/ 5N-813GTCBL	LRW + Poncho 250	113		181	55	22	4	93	
	Trial avg.:	112	233	224	57	21	2	96	
	High avg.:	115	237	244	60	24	17	100	
	Low avg.:	111	226	181	53	18	0	87	
	[5] LSD(0.05):		NS**	20	1	1	3	5	
	[6] Min.TPG value:		226	224	59	· · ·		95	
	[7] Max.TPG value:					19	3		
	[8] Coef. of var.:		3	5	1	3	88	3	
	No. entries:	17	5	17	17	17	17	17	

#### Table 6b. Beresford late maturity glyphosate-resistant corn hybrid test results, 2009-10, Southeast Experiment Station. Seeded May 3, 2010 at 28,750 seeds per acre.

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2010 yield average.
 \* Shaded values within a column are included in the top-performance group - look for hybrids with one or more shaded values; the more the better.
 \*\* Indicates differences between values within a column are non-significant (NS).



# 2011 annual report

#### **NOVEMBER 2011**

#### SDSU EXTENSION

# Corn production is greatly affected by hybrid selection.

This publication reports the agronomic performance of entries in the 2011 South Dakota performance trials for glyphosate-resistant field corn hybrids.

# Major factors in hybrid selection include:

- Yield
- Maturity
- Lodging resistance
- Seed traits

# Glyphosate-Resistant Corn Hybrid Performance Trials – 2011 Results

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Tables containing corn hybrid performance information are reported to participating seed companies and to the general public.

Tables by location and maturity trial include:

Warner	Table 1a, Early trial and Table 1b, Late trial
South Shore	Table 2a, Early trial and Table 2b, Late trial
Bancroft	Table 3a, Early trial and Table 3b, Late trial
Brookings	Table 4a, Early trial and Table 4b, Late trial
Geddes	Table 5a, Early trial and Table 5b, Late trial
Beresford	Table 6a, Early trial and Table 6b, Late trial

These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Environmental data is listed in tables A and B, indices of brand/hybrid entries to performance table number are listed in table C, performance table reference legends are listed in Table D, and mailing addresses for seed companies are listed in table E.

#### **Test Trial Locations**

Trial locations, soil types, seedbed and previous crop history, soil fertility yield goals, and seeding dates are indicated in table B. The participation and efforts of our cooperators—Allen and Inel Ryckman at Warner, Al Heuer at South Shore (Northeast Research Farm), Weerts Farms Inc. at Bancroft, Douglas Doyle at Brookings (Volga Research Farm), Curtis Sybesma at Geddes, and Robert Berg and staff at Beresford (Southeast Experiment Station) are gratefully acknowledged.

#### Weather Conditions

The efforts of Dennis Todev and his staff at the South Dakota Office of Climate and Weather at South Dakota State University are gratefully acknowledged in obtaining the weather data reported in table B. Seasonal rainfall and its distribution at weather reporting stations nearest each test trial are reported for the period April 1 to September 30. Seasonal precipitation totals were about 2.5 " above average at Aberdeen (Wagner), 1.5" above average at the Northeast Research Farm (South Shore), 1" below average at Huron Airport (Bancroft), near average at Brookings (Volga Research Farm) and White Lake (Geddes), and 1.5" below average at the Southeast Research Station (Beresford or Centerville). Generally, across all the test trial locations, precipitation was generally highest in June and July and tended to be lower in August and September.

The accumulation of growing degree days (GDDs) in April through June were generally below average for all locations. In July, the GDDs were near or above average across all locations; and in August the GDDs accumulation across locations varied from about 129 to 179 GDDs below average. The seasonal GDDs accumulations were below average at all locations including Aberdeen (-791), Northeast Research Farm (-1057), Huron ((-786), Brookings (-807), White Lake (-1059), and the Southeast Research Station (-841 GDDs). The coefficients of variation for yield were 8% or less across locations and well within acceptable limits; this means the test trials for vield were valid. Although the rainfall distribution and heat unit distribution did vary significantly this year compared to the average; the variability did not have a significant effect on the ability of the test trials to identify corn hybrid differences.

#### **General Test Procedures**

Seed companies pick the test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Warner and South Shore, 100 days for Yale and Brookings, 105 days for Geddes, and 110 days for Beresford. Hybrids are assigned to trials based on the relative maturity rating reported by the participating seed company; therefore, we cannot always guarantee entries are placed in the proper maturity trial. In some trials, borderline

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entries with relative maturity ratings at or near the arbitrary break between the early and late trials may crossover at a given location. In some cases, this may be indicated by exceptionally high or low grain moisture contents at harvest. A higherthan-average moisture content may indicate the hybrid is later in relative maturity than indicated. Likewise, a lower-than-average moisture may indicate the hybrid is earlier in relative maturity than indicated. A fee was charged for all entries at each location. A list of participating seed companies for current year is presented in table E.

#### **Experimental Procedures**

Entries were seeded in three replications, with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20-feet long, with the center two rows harvested for vield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2011, the precision planter was calibrated to deliver 29,621 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation and previous crop history, and fertility yield goal at each test site is outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/acre of 37-18-00 was applied 2" below and 2" to

the side (2 x 2) of the seed row. The weed control herbicides applied at recommended label rates are indicated in table A.

# Measurements of Performance

Yields are obtained from the South Dakota Crop Performance Testing Program. Two-year and current yield averages are included where hybrids have been tested for the most recent twoyear period.

Yield. Yield values are an average of three replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Hybrids of equal potential may yield differently because of variations in slope, soil fertility, and stand. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2011, the coefficient of variation (CV) values (a measure of experimental error) for yield was relatively low, ranging from 5 to 9% over the six test locations. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors—all of which may or may not be controllable in a given year. Clearly, this year, seasonal moisture distribution and/or subsoil moisture conditions, along with above-average temperatures, combined to produce excellent yields at most locations, along

with some very good bushel weight values.

#### Grain moisture content.

Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Moisture is generally inversely related to maturity and is important in the evaluation of hybrids. Hybrids that provide satisfactory yields and can be stored without additional drying are desirable. During harvest, moisture values were determined by the combine moisture meter, which in turn was periodically checked with a Dickey-John GAC II to verify it was within limits.

Use of tables. Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as vield must differ between two hybrids before there is a significant yield difference. LSD values are given at the bottom of every column where there is significant difference among the averages within the column. If differences among the averages within a column are not significant, the LSD value is reported as "non-significant" (NS).

The LSD values reported in this publication can be used in two ways. In this publication, the LSD value is used primarily to identify the top performance group (TPG) for two-year yields, for current-year yields, for bushel weight, for grain moisture at harvest, for lodging (below the ear) percentage, and for final

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stand percentage for each test trial. In order to determine which hybrids are in the TPG for yield, use the LSD value indicated at the bottom of each yield column in any yield table. For example, let's say the column LSD value equals 15 (bu/a) and the highest yield for that column equals 155 bu/a. If you subtract the column LSD value from the highest yield, you obtain an intermediate value of 140 bu/a (155 - 15 = 140). In this case, the minimum top yield value is generally 141 bu., or one bushel greater than the intermediate value of 140 bu. However, we can say the 140 bu. value also gualifies for the top performance group for yield because the yield values are rounded to the nearest bushel per acre. Thus, varieties with an average of 140 bu. or higher are also included in the top yield group to compensate for rounding-off the yield averages to the nearest bushel.

These minimum TPG values for yield are indicated at the bottom of each yield column, unless too much experimental error (high CV values) is associated with the test. Top yield hybrids are those hybrids that are equal or higher than the minimum TPG value reported at the bottom of each yield column (2011 or 2-yr yield averages). If hybrid yield differences are not significant (NS) and the CV values are 15% or less, then, by definition, all hybrids in the test are in the top yield group. In contrast, if the column CV value is greater than 15%, then no minimum TPG value is indicated because there is too much experimental error

associated with the test to make a valid determination of the TPG for yield. When comparing yield means, compare current year averages with other current year averages and compare two-year yield averages with other twoyear averages. Do not compare current year averages with twoyear averages when comparing hybrids. When evaluating current year averages, remember that entries tested for two years may also have a yield value that qualifies for the TPG in the 2011 yield column.

The TPG for other performance factors—such as bushel weight, percent grain moisture at harvest, percent lodging (below the ear), and percent stand (percent of seeded population)—can also be determined. In order to qualify for the TPG group, a hybrid must have a bushel weight and a final stand percentage value that is equal to or greater than the minimum reported TPG value for bushel weight or final stand percentage. Likewise, in order to qualify for the TYG, a hybrid must have grain moisture, lodging percentages, or lodging score values that are equal to or less than the maximum reported TPG value for grain moisture and lodging percentage. Note that yield, bushel weight, and percent stand TPG values are greater than a certain yield, bushel weight, or final stand value; or they are minimum values. In contrast, grain moisture and lodging percentage values are equal to or less than a certain value to qualify for the TPG; or they are maximum values. Again, as with hybrid

yields, if there are no differences for a performance factor, then, by definition, all hybrids in the test are in the TPG for that performance factor.

The LSD values for the TPG can also be used to determine if two hybrids differ in performance. For example, if a test trial LSD value equals 16 bu/a, and hybrid A yields 132 bu/a while hybrid B yields 118 bu/a, then their yield difference is 14 bu/a (132-118 =14). In this case, the two hybrids do not differ in yield because their yield difference of 14 bu/ ac is equal to or less than the reported LSD value of 16 bu/a. In contrast, if hybrid C yields 114 bu/a, the yield difference between hybrids A and C is 18 bu/a (132-114=18). In this case, the yield difference of 18 is higher than the reported LSD value of 16 bu/a; therefore, hybrid A would have a significantly higher yield than hybrid C. Similarly, the LSD values for bushel weight, grain moisture, stalk lodging below the ear, and percent stand can be used to determine if any two hybrids differ in these performance factors. For example, if a trial grain moisture LSD value equals 2%; and hybrid A measures 18% and hybrid B measures 16, their grain moisture difference is 2% (18-16=2). In this case, the two hybrids do not differ in grain moisture because their moisture difference of 2% is equal to or less than the trial LSD value of 2%. In contrast, if hybrid C measures 15%, the grainmoisture difference between hybrids A and C is 5% (18-15=3). In this case, the grain-moisture difference of 3% is more than the

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reported LSD value 2%; therefore, hybrid A is significantly higher in grain moisture than hybrid C.

#### Performance Trial Results By Locations

The performance trial results for one year (2011) and for two years (2011–11) follow:

#### **Northern Location**

Note: The top performance group (TPG) for the performance factors yield (bu/a), bushel weight in (lbs.), harvest grain moisture (%), lodging below the ear (%), final stand (%), and ear drop (%) at Geddes are indicated in the performance tables by the shaded data values. Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values there are in each row the better the hybrid did as a topperforming hybrid for a given test trial.

#### Warner

Early – Glyphosate-resistant trial, Table 1a. The test-trial yield averages were 203 bu/a for two years and 207 bu/a in 2011. Hybrids that yielded 187 bu/a or more for two years and 218 bu/a or more for 2011 gualified for the top-performance-group (TPG) for yield. There was no significant difference in yield average among the hybrids tested for the two year period. Hybrids had to differ in yield average by 16 bu/a in 2011 to be significantly different. In 2011, bushel weights averaged 59 lbs., grain moisture averaged 15%, lodging percentage averaged

3%, and final stand percentage averaged 96%. In order for a hybrid to be in the TPG for these factors, it had to average 59 lbs. or more in bushel weight, 15% or less in grain moisture, 3% or less in lodging percentage, and 96% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 16 bu/a or more for yield in 2011, 1 lb. or more in bushel weight, 1% or more in grain moisture, 4% or more in lodging percentage and 5% or more in the final stand percentage.

Late – Glyphosate-resistant trial, Table 1b. The test-trial yield averages were 215 bu/a for two years and 213 bu/a in 2011. Hybrids with yield averages of 214 bu/a or more for two years and 223 bu/a or more for 2011 qualified for the TPG. Hybrids had to differ in yield average by 14 bu/a in for two years and 13 bu/a in 2011 to be significantly different. In 2011, bushel weights averaged 58 lbs., grain moisture averaged 16%, lodging percentage averaged 2%, and final stand percentage averaged 93%. In order for a hybrid to be in the TPG for these factors, it had to average 59 lbs. or more in bushel weight, 15% or less in grain moisture, 3% or less in lodging percentage, and 94% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 14 bula or more for two years, 13 bu/a or more for yield in 2011, 1 lb. or more in bushel weight, 1% or more in grain

moisture, 3% or more in lodging percentage and 5% or more in the final stand percentage.

#### South Shore

**Early – Glyphosate-resistant** trial, Table 2a. The test-trial yield averages were 179 bu/a for two years and 155 bu/a in 2011. The yield average differences among the hybrids tested for two years were nonsignificant (NS). Hybrids with yield averages of 158 bu/a or more for 2011 qualified for the TPG. In 2011, bushel weights averaged 54 lbs., grain moisture averaged 17%, lodging averaged zero, and final stand percentage averaged 96%. In order for hybrids to be in the TPG for these factors, they had to average 56 lbs. or more in bushel weight, 14% or less in grain moisture, zero in lodging percentage, and 95% or higher in final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 15 bu/a or more for yield in 2011, 1 lb. or more in bushel weight, 1% or more in grain moisture, 1% or more in lodging percentage and 4% or more in the final stand percentage.

Late – Glyphosate-resistant trial, Table 2b. The test-trial yield averages were 187 bu/a for two years and 151 bu/a in 2011. The yield average differences among the hybrids tested for two years were nonsignificant (NS). Hybrids with yield averages of 158 bu/a or more for 2011 qualified for the TPG. In 2011, bushel weights

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averaged 52 lbs., grain moisture averaged 20%, lodging averaged zero, and final stand percentage averaged 95%. In order for hybrids to be in the TPG for these factors, they had to average 55 lbs. or more in bushel weight, 16% or less in grain moisture, and 1% or more in lodging percentage, and 95% or more in final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 11 bu/a or more for yield in 2011, 1 lb. or more in bushel weight, 1% or more in grain moisture, 1% or more in lodging percentage and 5% or more in the final stand percentage.

# Central Locations Bancroft

Early – Glyphosate-resistant trial, Table 3a. The test-trial

yield averages were 183 bu/a for two years and 211 bu/a in 2011. Hybrids with yield averages of 177 bu/a or more for two years and 225 bu/a or more in 2011 qualified for the TPG. In 2011, bushel weights averaged 57 lbs., grain moisture averaged 19%, lodging averaged 1%, and final stand percentage averaged 99%. In order for hybrids to be in the TPG for these factors, they had to average 58 lbs. or more in bushel weight, 17% or less in grain moisture, 3% or less in lodging percentage, and 95% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 14 bula or more for two years, 15 bu/a or more for yield in 2011, 1 lb. or more in bushel weight, 1%

or more in grain moisture, zero in lodging percentage and zero in the final stand percentage.

#### Late – Glyphosate-resistant

trial, Table 3b. The test-trial yield averages were 182 bu/a for two years and 208 bu/a in 2011. Hybrids that yielded 178 bu/a or more for two years and 213 bu/a or more in 2011 gualified for the TPG. In 2011, bushel weights averaged 55 lbs., grain moisture averaged 24%, lodging percentage averaged 1%, and the final stand percentage averaged 98%. In order for hybrids to be in the TPG for these factors, they had to average 56 lbs. or more in bushel weight, 23% or less in grain moisture, 2% or less in lodging percentage, and 97% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 15 bula or more for two years, 14 bu/a or more for 2011, 1 lb. or more in bushel weight, 2% or more in grain moisture, zero in lodging percentage and 4% or more in the final stand percentage.

#### **Brookings**

**Early – Glyphosate-resistant trial, Table 4a.** The test-trial yield averages were 219 bu/a for two years and 206 bu/a in 2011. Hybrids with yield averages of 205 bu/a or more for two years and 208 bu/a or more for 2011 qualified for the TPG. There were no differences in yield average among the hybrids tested two years, so all qualified for the TPG. In 2011, bushel weights averaged 56 lbs., grain moisture averaged 15%, lodging percentage averaged 1%, and final stand percentage averaged 96%. In order for hybrids to be in the TPG for these factors, they had to average 57 lbs. or more in bushel weight, 15% or less in grain moisture, 2% or less in lodging percentage, and 96% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 14 bu/a or more for yield in 2011, 1 lb. or more in bushel weight, 1% or more in grain moisture, 2% or more in lodging percentage and 4% or more in the final stand percentage.

Late – Glyphosate-resistant trial, Table 4b. The test-trial yield averages were 226 bu/a for two years and 208 bu/a in 2011. There were no differences in yield average among the hybrids tested two years, so all qualified for the TPG. Hybrids that yielded 213 bu/a or more in 2011 gualified for the TPG. In 2011, bushel weights averaged 55 lbs., grain moisture averaged 16%, lodging averaged zero, and percent final stand averaged 96%. In order for hybrids to be in the TPG for these factors, they had to average 57 lbs. or more in bushel weight, 15% or less in grain moisture, 1% or less in lodging percentage, and 96% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 13 bu/a or more for yield in 2011, 1 lb. or more in bushel weight, 1% or more in grain moisture, 1% or more in lodging percentage and

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4% or more in the final stand percentage.

# Southern Locations **Geddes**

**Note:** The amount of ear drop at this location was significant in both trials. Hence, the ear drop percentage Is reported in tables 5a and 5b. Ear dropped occurred in some hybrids more so than in others. The trial and hybrid yield averages for both the two year period and for 2011 were affected by the ear drop at this location.

Early – Glyphosate-resistant trial, Table 5a. The test-trial yield average was 176 bu/a for two years and 125 bu/a in 2011. The average yield differences among the hybrids tested two years were non-significant (NS), so all the hybrids tested qualified for the TPG. Hybrids with yield averages of 141 bu/a or more in 2011 gualified for the TPG. In 2011, bushel weights averaged 56 lbs., grain moisture averaged 14%, lodging percentage averaged 2%, percent final stand averaged 92%, and ear drop averaged 4%. In order for hybrids to be in the TPG for these factors, they had to average 57 lbs. or more in bushel weight, 13% or less in grain moisture, 3% or less in lodging, 93% or more for percent final stand, and 4% or less for ear drop percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 17 bu/a or more for yield in 2011, 2 lb. or more in bushel weight, 1% or more in grain moisture, 3% in lodging percentage, 6% or more in the final stand percentage,

and 4% or more in ear drop percentage.

Late – Glyphosate-resistant trial, Table 5b. The test trial yield average was 183 bu/a for two years and 131 bu/a in 2011. Yield differences among hybrids tested for two years were nonsignificant (NS); thus, all entries tested two years were in the TPG. Hybrids with yield averages of 137 bu/a or more in 2011 gualified for the TPG. In 2011, bushel weights averaged 56 lbs., grain moisture averaged 15%, lodging percentage averaged zero, percent stand averaged 92%, and ear drop percentage averaged 3%. In order for hybrids to be in the TPG for these factors, they had to average 57 lbs. or more in bushel weight, 13% or less in grain moisture, 2% or less in lodging, 92% or more for final stand percentage, and 3% or less for ear drop percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 14 bu/a or more for vield in 2011, 1 lb. or more in bushel weight, 1% or more in grain moisture, zero in lodging percentage, 5% or more in the final stand percentage, and 3% or more in ear drop percentage.

#### **Beresford**

**Early – Glyphosate-resistant trial, Table 6a.** The test-trial yield averages were 215 bu/a for two years and 193 bu/a in 2011. Hybrids with yield average of 219 bu/a for two years and 203 bu/a or more in 2011 qualified for the TPG. In 2011, bushel weights averaged 58 lbs., grain moisture averaged 17%, lodging percentage averaged zero percent, and final stand percentage averaged 92%. In order for hybrids to be in the TPG for these factors, they had to average 59 lbs. or more in bushel weight, 14% or less in grain moisture, 2% or less in lodging percentage, and 94% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 8 bu/a or more for two years and 16 bu/a or more for 2011, 1 lb. or more in bushel weight, 1% or more in grain moisture, zero in lodging percentage, 6% or more in the final stand percentage.

#### Late - Glyphosate-resistant,

Table 6b. The test trial yield averages were 217 bu/a for two years and 199 bu/a in 2011. There was no difference in yield average among the hybrids tested two years because there was only one hybrid tested. Hybrids with yield averages of 196 bu/a or more in 2011 qualified for the TPG. In 2011, bushel weights averaged 57 lbs. grain moisture averaged 20%, lodging percentage averaged zero, and final stand percentage averaged 91%. In order for hybrids to be in the TPG for these factors, they had to average 59 lbs. or more in bushel weight, 20% or less in grain moisture, 1% or less in lodging percentage, and 87% or more in final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 18 bu/a or more for yield in 2011, 1 lb. or more in bushel weight, 1% or more in grain moisture, zero in lodging percentage, and zero in final stand percentage.

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Table A. Description of 2011 corn hybrid trial locations- soil type, tillage method, prior crop, herbicides used, and seeding dates.

Location	Soil Type	Tillage Mothed Prior cror		Herbicides label	Applied at rates	Fertility Yield Goal	Date
(County)		Method			Post	bu/a	Seeded
Warner (Brown)	Harmony-Aberdeen silty clay loam, 0-2% slope	Conventional	Soybean	Harness Xtra	Roundup once	200	May 5
South Shore (Codington)	Kranzburg silty clay Ioam, 3-6% slope	Conventional	Spring Wheat	Dual II Magnum	Roundup once	180	May 16
Bancroft (Kingsbury)	Houdek-Stickney- Tetonka loam, 0-3% slope	Conventional	Soybean	Fall Dual	Roundup once	180	May 24
Brookings (Volga)	Barnes clay loam, 0-2% slope	Conventional	Soybean	Dual II Magnum	Roundup once	200	May 15
Geddess (Chas. Mix)	Highmore-Walke silt Ioam, 0-2% slope	No-till	Winter Wheat	-	Roundup twice	200	May 17
Beresford (Clay)	Egan-Clarno-Trent silty clay loam, 0-2% slope	Conventional	Soybean	-	Roundup twice	210	May 17
Plots were se	eded at 29,621 seeds pe	er acre.					

Table B. Nearest weather station monthly rainfall and growing degree day totals and their departures from average during the 2011 growing season. Data is courtesy of the South Dakota Office of Climate and Weather, South Dakota State University, Brookings, SD.

Station	tion Monthly data - April 1 to October 31							<b>0</b>
(Test site)	Vallable	April	May	June	July	Aug	Sept	Sum
	Rain totals – inch '11 30 year avg.	2.98 1.85	2.93 3.11	4.69 3.70	6.63 3.02	0.87 2.43	0.64 2.19	18.74 16.30
Abardoon	DFA*	1.13	-0.18	0.99	3.61	-1.56	-1.55	2.44
Aberdeen	GDDs Totals '11 30 year avg.	86 278	265 480	498 678	786 751	641 770	376 486	2,652 3,443
	DFA*	-192	-215	-180	35	-129	-110	-791
	Rain totals – inch '11 30 year avg.	1.38 2.18	4.72 2.74	3.28 3.77	8.13 3.34	1.20 2.93	0.58 2.78	19.29 17.74
Northeast	DFA	-0.80	1.98	-0.49	4.79	-1.73	-2.20	1.55
Research Farm	GDDs Totals'11 30 year avg.	65 270	217 466	426 669	717 723	554 733	310 485	2,289 3,346
	DFA*	-205	-249	-243	-6	-179	-175	-1,057
	Rain totals – inch '11 30 year avg.	2.59 2.31	3.34 3.11	3.95 3.93	3.49 2.92	2.35 2.43	0.45 2.46	16.17 17.16
Huron	DFA	0.28	0.23	0.02	0.57	-0.08	-2.01	-0.99
(Bancroft)	GDDs Totals '11 30 year avg.	98 304	300 473	524 686	842 801	670 794	383 545	2,817 3,603
	DFA*	-206	-173	-162	41	-124	-162	-786
	Rain totals - inch '11 30 year avg.	2.64 2.13	6.18 2.97	3.98 4.30	4.88 3.25	1.52 3.07	0.14 3.19	19.34 18.91
Brookings	DFA	0.51	3.21	-0.32	1.63	-1.55	-3.05	0.43
Farm)	GDDs Totals'11 30 year avg.	62 238	257 445	457 643	772 745	586 740	347 477	2,481 3,288
	DFA*	-176	-188	-186	27	-154	-130	-807
	Rain totals – inch '11 30 year avg.	2.74 2.72	4.12 3.54	6.61 3.64	1.63 2.63	2.35 2.53	0.35 2.23	17.80 17.29
White Lake	DFA	0.02	0.58	2.97	-1.00	-0.18	-1.88	0.51
(Geddes)	GDDs Totals'11 30 year avg.	97 314	254 517	478 712	784 800	652 796	383 568	2,648 3,707
	DFA*	-217	-263	-234	-16	-144	-185	-1,059
	Rain totals – inch '11 30 year avg.	3.52 2.73	5.16 3.64	4.38 4.36	1.06 3.28	3.43 2.95	0.74 2.93	18.29 19.89
Centerville,	DFA	0.79	1.52	0.02	-2.22	0.48	-2.19	-1.60
Station	GDDs Totals'11 30 year avg.	98 286	312 532	532 722	830 780	668 770	368 559	2,808 3,649
	DFA*	-188	-220	-190	50	-102	-191	-841
* DFA - depar	* DFA - departure from average, difference current year is greater or less (-) than the 30 year average.							

Table C. 2011 Glyphosate-resistan	nt corn hybrid entries by brand/hybrid, seed product traits, and inde	x to performance table no.(s).
Brand/Hybrid	Seed Biotech Traits [1]	Table No.(s)
CHANNEL/ 190-95VT3P	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	1a, 2a
CHANNEL/ 196-06VT3P	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	1b, 2b, 3a, 4a
CHANNEL/ 197-32VT3P	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	1a, 2a
CHANNEL/ 197-67VT3P	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	1b, 2b, 3a, 4a
CHANNEL/ 199-55VT3	ECB,SWCB,SB,SCB,CRw*,Gly	3a, 4a, 5a
CHANNEL/ 200-91VT3P	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	3b, 4b, 5a
CHANNEL/ 201-16VT3	ECB,SWCB,SB,SCB,CRw*,Gly	3b, 4b, 5a
CHANNEL/ 203-43VT3P	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	3b, 4b
CHANNEL/ 209-85VT3P	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	5b, 6a
CHANNEL/ 210-61VT3	ECB,SWCB,SB,SCB,CRw*,Gly	5b, 6a
CHANNEL/ 211-99VT3P	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	5b, 6b
DAIRYLAND/ ST-6310	Gly	6a
DAIRYLAND/ ST-6494	Not reported	1a, 2a
DAIRYLAND/ ST-7291SSX	Not reported	2a
DAIRYLAND/ ST-9210SSX	ECB,SWCB,SB,SCB,CEw,Faw,Gly	6a
DAIRYLAND/ ST-9303SSX	ECB,SWCB,SB,SCB,CEw,Faw,Gly	4b
DAIRYLAND/ ST-9395SSX	ECB,SWCB,SB,SCB,CEw,Faw,Gly	1a, 2a
DAIRYLAND/ ST-9399	CB,CRw*,Glu,Gly	1b, 4a
DAIRYLAND/ ST-9500SSX	ECB,SWCB,SB,SCB,CEw,Faw,Gly	1b, 4b
DAIRYLAND/ ST-9501SSX	ECB,SWCB,SB,SCB,CEw,Faw,Gly	1b, 4b
DAIRYLAND/ ST-9992	ECB,SWCB,SB,SCB,CRw*,Gly	2a
DEKALB/ DKC42-72	ECB,SWCB,SB,SCB,CRw*,Gly	1a, 2a, 3a, 4a
DEKALB/ DKC43-27	ECB,SWCB,SB,SCB,CRw*,Gly	1a, 2a, 3a, 4a
DEKALB/ DKC45-51	ECB,SWCB,SB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly,Glu	1a, 2a, 3a, 4a
DEKALB/ DKC48-12	ECB,SWCB,SB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly,Glu	1b, 2b, 3a, 4a, 5a
DEKALB/ DKC48-37	ECB,SWCB,SB,SCB,CRw*,Gly	2b, 3a
DEKALB/ DKC49-94	ECB,SWCB,SB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly,Glu	1b, 2b, 3a, 4a, 5a
DEKALB/ DKC50-66	ECB,SWCB,SB,SCB,CRw*,Gly	1b, 2b, 3a, 4a, 5a
DEKALB/ DKC52-59	ECB,SWCB,SB,SCB,CRw*,Gly	1b, 2b, 5a, 6a
DEKALB/ DKC53-78	ECB,SWCB,SB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly,Glu	6a
DEKALB/ DKC55-09	ECB,SWCB,SB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly,Glu	5a, 6a
DEKALB/ DKC59-35	ECB,SWCB,SB,SCB,CRw*,Gly	5b, 6a
DEKALB/ DKC62-97	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	5b, 6b
DEKALB/ DKC63-84	ECB,SWCB,SB,SCB,CRw*,Gly	5b, 6b
EPLEY/ E1275RR	Gly	1b, 2b, 3a, 4a
EPLEY/ E1315RR	Gly	1b, 2b, 3a, 4a
EPLEY/ E1418GT3000	CB,CRw*,Glu,Gly	1b, 2b, 3b, 4b, 5a
EPLEY/ E1479HXTLLRR	WBCw,CB,BCw,FAw,CRw**,Glu,Gly	3b, 4b, 5a
EPLEY/ E1602SS	ECB,SWCB,SB,SCB,CEw,FAw,CRw*,WBCw,BCw,Gly,Glu	3b, 4b, 5b
G2 GEN./ 5H-013	WBCw,CB,BCw,FAw,Glu, Gly	5b, 6b
G2 GEN./ 5H-0701	WBCw,CB,BCw,FAw,Glu, Gly	3b, 4b, 5b, 6a
G2 GEN./ 5H-210	WBCw,CB,BCw,FAw,Glu, Gly	5b, 6a
G2 GEN./ 5H-492	WBCw,CB,BCw,FAw,Glu, Gly	1a, 2a
G2 GEN./ 5H-501	WBCw,CB,BCw,FAw,Glu, Gly	1b, 2b, 3a, 4a
G2 GEN./ 5H-511	WBCw,CB,BCw,FAw,Glu, Gly	5b, 6a
G2 GEN./ 5H-700	WBCw,CB,BCw,FAw,Glu, Gly	1b, 2b, 3a, 4a
G2 GEN./ 5H-712	WBCw,CB,BCw,FAw,Glu, Gly	5b, 6b
G2 GEN./ 5H-905	WBCw,CB,BCw,FAw,Glu, Gly	3b, 4b, 5a, 6a
G2 GEN./ 5X-500	WBCW,CB,BCW,FAW,CRW**,Glu,Gly	1b, 2b, 3a, 4a
G2 GEN./ 5X-795	WBCW,CB,BCW,FAW,CRW**,Glu,Gly	1a, 2a, 3a, 4a

Table C. 2011 Glyphosate-resistant co	rn hybrid entries by brand/hybrid and index to performance table no	.(s (Continued).
Brand/Hybrid	Seed Biotech Traits [1]	Table No.(s)
G2 GEN./ 5X-903	WBCw,CB,BCw,FAw,CRw**,Glu,Gly	3b, 4b, 5a, 6a
HEINE/ 635VT3	ECB,SWCB,SB,SCB,CRw*,Gly	4a
HEINE/ 637VT3	ECB,SWCB,SB,SCB,CRw*,Gly	4a
HEINE/ 705VT3 PRO	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	4a
HEINE/ 731VT3	Not reported	4b, 5a
HEINE/ 735VT3 PRO	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	4b, 5a
HEINE/ 741GT3000	CB,CRw*,Glu,Gly	4b, 5a
HEINE/ 744RRYGCB	ECB,SWCB,SCB,Gly	4b, 5a
HEINE/ 745VT3 PRO	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	4b, 5a
HEINE/ 810VT3 PRO	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	6a
HOEGEMEYER/ HPT 6200 GTCBLL	ECB,SWCB,SB,SCB,CRw*,Glu,Gly	4a
HOEGEMEYER/ HPT 6572 3000GT	CB,CRw*,Glu,Gly	4a
HOEGEMEYER/ HPT 6838 3000GT	CB,CRw*,Glu,Gly	4a
HOEGEMEYER/ HPT 7041 HXLLRR	WBCw,CB,BCw,FAw,Glu	3a, 4a
HOEGEMEYER/ HPT 7278 HXLLRR	WBCw,CB,BCw,FAw,Glu	3b, 5a
HOEGEMEYER/ HPT 7584 HXTLLRR	CRw*,Glu	6a
HOEGEMEYER/ HPT 7998 HXLLRR	WBCw, CB, BCw, FAw, Glu	6a
HOEGEMEYER/ HPT EXP 7726	CB,CRw*,Glu,Gly	5b
INTEGRA/ 043093RR2	Not reported	1a
INTEGRA/ 142095 VT3PRO	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,GIy	1a, 2a
INTEGRA/ 915102VT3	ECB,SWCB,SB,SCB,CRw*,Gly	3b
INTEGRA/ 921095GT3000	ECB, SWCB, SB, SCB, FAw, BAw, WBCw, BCw, DCw, CRW**, GI	2a
INTEGRA/ 921100GT3000		3a
INTEGRA/ 9422VT3	ECB,SWCB,SB,SCB,CRw*,Gly	1a
INTEGRA/ 9460SS	Not reported	2b
LEGEND/ LR9098GENSS	Not reported	3a
LEGEND/ LR9197GENSS	Not reported	За
LEGEND/ LR9800VT3	Not reported	3a
LEGEND/ LR9904VT3	Not reported	3b
LEGEND/ LR9993VT3	Not reported	3a
LEGEND/ LR99983000GT	Not reported	За
MASTERS CHOICE/ MCT-4561	Gly	1 b
MASTERS CHOICE/ MCT-493	CB,CRw*,Glu,Gly	1a
MASTERS CHOICE/ MCT-5324	ECB, SWCB, SB, SCB, FAw, BAw, WBCw, BCw, DCw, CRW**, GI	5a
NUTECH/ 5B-1003	ECB,SWCB,SB,SCB,CRw*,Glu,Gly	5b, 6a
NUTECH/ 5N-001	CB,CRw*,Glu,Gly	1b, 2b, 3a, 4a, 5a, 6a
NUTECH/ 5N-102	CB,CRw*,Glu,Gly	1b, 2b, 3a, 4a, 5a, 6a
NUTECH/ 5N-186	CB,CRw*,Glu,Gly	1a, 2a
NUTECH/ 5N-197	ECB, SWCB, SB, SCB, FAw, BAw, WBCw, BCw, DCw, CRW**, GI	1b, 2b, 3a, 4a
NUTECH/ 5N-290	CB,CRw*,Glu,Gly	1a, 2a
NUTECH/ 5N-803	CB,CRw*,Glu,Gly	3b, 4b, 5a, 6a
NUTECH/ 5N-9001	CB,CRw*,Glu,Gly	1a, 2a
NUTECH/ 5V-705	ECB, SWCB, SB, SCB, FAw, BAw, WBCw, BCw, DCw, CRW**, GI	3b, 4b, 5a, 6a
PETERSON FARMS/ 48Q95	CB,CRw*,Glu,Gly	1a, 2a
PETERSON FARMS/ 76R92	ECB,SWCB,SB,SCB,CEw,Faw,Gly	1a, 2a
PETERSON FARMS/ 98L90	ECB,SWCB,SB,SCB,CRw*,Glu,Gly	1a, 2a
PIONEER/ PIONEER BR. 34F07	WBCw,CB,BCw,FAw,Glu, Gly	6a
PIONEER/ PIONEER BR. 36V53	WBCw,CB,BCw,FAw,Glu, Gly	1b, 3b, 4b, 5a
PIONEER/ PIONEER BR. 38H08	WBCw,CB,BCw,FAw,Glu, Gly	1a, 2a
PIONEER/ PIONEER BR. P0115XR	WBCw,CB,BCw,FAw,CRw**,Glu,Glv	1b. 3b. 4b

Table C. 2011 Glyphosate-resistant corn hy	brid entries by brand/hybrid and index to performance tabl	e no.(s) (Continued).
Brand/Hybrid	Seed Biotech Traits [1]	Table No.(s)
PIONEER/ PIONEER BR. P0448XR	WBCw,CB,BCw,FAw,CRw**,Glu,Gly	3b, 4b, 5a
PIONEER/ PIONEER BR. P0533XR	WBCw,CB,BCw,FAw,CRw**,Glu,Gly	3b, 4b, 5a, 6a
PIONEER/ PIONEER BR. P8917XR	WBCw,CB,BCw,FAw,CRw**,Glu,Gly	1a, 2a
PIONEER/ PIONEER BR. P9630XR	WBCw,CB,BCw,FAw,CRw**,Glu,Gly	1b, 2b
PIONEER/ PIONEER BR. P9807HR	WBCw,CB,BCw,FAw,Glu, Gly	1b, 2b, 3a, 4a
PIONEER/ PIONEER BR. P9910XR	WBCw,CB,BCw,FAw,CRw**,Glu,Gly	1b, 3a, 4a
PIONEER/ PIONEER BR. P9917XR	WBCw,CB,BCw,FAw,CRw**,Glu,Gly	1b, 3a, 4a
RENK/ 5K565GTCBLLRW	Not reported	1b, 2b, 3a, 4a
RENK/ RK530VT3P	CRw*,Gly	1a, 2a
RENK/ RK580VT3	CRw*,Gly	1b, 2b, 3a, 4a
RENK/ RK585VT3P	CRw*,Gly	1a, 2a
RENK/ RK698VT3	CB,CRw*,Glu,Gly	3b, 4b
RENK/ RK741VT3P	ECB, SWCB, SB, SCB, CEw, Faw, CRw*, Gly	3b
RENK/ RK744VT3P	ECB,SWCB,SB,SCB,CRw*,Gly	4b, 6a
RENK/ RK818VT3P	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	6a
RENK/ RK858VT3P	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	6b
RENK/ RK880SSTX	ECB, SWCB, SB, SCB, CEw, FAw, CRw*, WBCw, BCw, Gly, Glu	6b
SEEDS 2000/ 2903GTCBLL	ECB,SWCB,SB,SCB,CRw*,Glu,Gly	1a, 2a
SEEDS 2000/ 2982GT	Gly	1b, 2b, 3a, 4a
SEEDS 2000/ 3141GT	Gly	3b, 4b
SEEDS 2000/ 9202 VT2P	ECB,SWCB,SB,SCB,CEw,Faw,Gly	1a, 2a
SEEDS 2000/ 9602G3	CB,CRw*,Glu,Gly	1b, 2b, 3a, 4a
SEEDS 2000/ EXP X302	CB,CRw*,Glu,Gly	1b, 2b, 3b, 4b
SEEDS 2000/ EXP X398	CB,CRw*,Glu,Gly	1b, 2b, 3a, 4a
SEEDS 2000/ EXP X495	Gly	1a, 2a
SEEDS 2000/ EXP X695	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	1a, 2a
WENSMAN/W 6443RR	Not reported	5b, 6a
WENSMAN/ W 7107VT3	ECB,SWCB,SB,SCB,CRw*,GIy	1a, 2a
WENSMAN/W 7140VT3PRO	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	1a, 2a
WENSMAN/W 7143VT3	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	1a, 2a
WENSMAN/ W 7268VT3	ECB,SWCB,SB,SCB,CRw*,GIy	1b, 2b
WENSMAN/W 7270VT3PRO	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	1b, 2b
WENSMAN/W 7273VT3	ECB,SWCB,SB,SCB,CRw*,Gly	1b, 2b, 3a, 4a
WENSMAN/ W 7290VT3PRO	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	3a, 4a
WENSMAN/ W 7320VT3PRO	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	3b, 4b, 5a, 6a
WENSMAN/ W 7360VT3	ECB,SWCB,SB,SCB,CRw*,GIy	3b, 4b, 5a, 6a
WENSMAN/ W 7392GT3	CB,CRw*,Glu,Gly	3b, 4b, 5a, 6a
WENSMAN/ W 7473VT3	ECB,SWCB,SB,SCB,CRw*,GIy	5b, 6a
WENSMAN/ W 7566VT3PRO	ECB,SWCB,SB,SCB,CEw,Faw,CRw*,Gly	5b, 6b
WENSMAN/ W 8120VT2PRO	ECB, SWCB, SB, SCB, CEw, Faw, Gly	1a, 2a

[1] Insect traits - Black Cutworm (BCw), Western Bean Cutworm (WBCw), Corn Borer (CB), Eastern Corn Borer (ECB), Southwestern Corn Borer (SWCB), Sugarcane Borer (SCB), Corn Rootworm (CRw), CRw\*(includes Mexican, Northern, and Western Corn Rootworm, Fall Armyworm (FAw), and Corn Earworm (CEw). Herbicide traits - Glyphosate (Gly) and Glufosinate tolerance (Glu).

Note: Biotech traits were obtained by referencing the product registrant trade name and seed characteristics as listed in the Know Before You Grow section at the National Corn Growers Website (http://www.ncga.com/) with the hybrid information suppled by each seed company. Because biotech products continually change, growers are strongly encouraged to verify all biotech traits of interest with the respective seed dealer.

Table D.	Explanation of performance table references.
No.	Explanation of references
[1]	Entries are listed by Brand/Variety- Entries are sorted by 2-yr then by 2009 yield average.
[2]	Brand Relative Maturity (Rel. Mat.)- the relative maturity rating as reported by the seed company.
[3]	Lodging Percentage- stalks broken below the ear as a percentage of the final stand. Ear Drop Percentage- ears dropped as a percentage of the final stand.
[4]	Final Stand Percentage – the number of standing stalks at harvest as a percentage of the seeded population.
[5]	Least Significant Difference (LSD 0.05) - the difference any two values within a column must be equal to or exceed for the values to be significantly different (0.05 level of probability). If the difference is less than the LSD values the difference between them are nonsignificant (NS).
[6]	Min. TPG-avg the minimum column value for yield, bushel weight, and final stand percentage that a hybrid must equal or exceed to be in the TPG.
[7]	Max. TPG-avg the maximum column value for grain moisture at harvest, lodging percentage, or lodging score that a hybrid must equal or be less than to be in the TPG.
[8]	Coefficient of variation (C.V.)- the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% are less common ; while values of 6-15% are more common. If a value exceeds 15%; the trial had too much error to be valid, so the results are not reported.

ΛΙ					
Table E. Mailing addresses for seed entries in the 2011 corn hybrid trials and listed by seed brand name					
Seed brand	Seed company mailing address				
Channel	Channelbio Corp., Box 277, Laurel, NE 68745				
Dairyland	610 Lauren Lane, Forsyth, IL 62535				
Dekalb	46040 SD Hwy 44, Chancellor, SD 57016				
Epley Bros.	Epley Bros. Hybrids Inc., PO Box 310, Shell Rock, IA 50670				
G-2 Genetics	G-2 Genetics, 415 S. Duff Avenue, Suite 2, Ames, IA 50010				
Heine	Heine Hybrids, 1020 E. 320th St., Vermillion, SD 57069				
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031				
Integra	PO Box 40, Bozeman, MT 59771				
Legend Seed	116 W. 10th Ave., Webster, SD 57274				
Masters Choice	3010 St. Rt. 146 E, Anna, IL 62906				
NuTech	Nutech Seed, LLC, 415 S. Duff Avenue, Suite 2, Ames, IA 50010				
Petersen Farms	3104 164th Ave. SE, Harwood, ND 58042				
Pioneer	Pioneer Hi-Bred International, 151 Saint Andrews Court-Suite 910, Mankato, MN 5601				
Renk	6809 Wilburn Road, Sun Prairie, WI 53590				
Seeds 2000	Seeds 2000, 115 N 3rd St., Breckenridge, MN 56520				
Wensman	Wensman Seed Co., PO Box 190, Wadena, MN 56482				

Table 1a. Warner early maturity Roundup Ready corn hybrid test results, 2010-11, Allen & Inel Ryckman Farm. Seeded May 5, 2011 at 29,621 seeds per acre.

	Del	Yield Averages *#					
Brand/Hybrid + Seed Treatment [1]	Mat.	2-Yr	2011	Bu. Wt.	Grain	Lodaina	Final
	[2]	bu/a	bu/a	lb.	Moisture	Pctg [3]	Stand Pote [4]
MASTERS/ CHOICE MCT-493 + Poncho 250	93	225	233	59	16	5	96
PIONEER/ PIONEER BR 38H08 + Cruiser Extreme	92	204	204	57	15	15	95
DEKALR/DKC42 72(VT2) + Papeha Vativa 500	02	204	204	50	15	2	01
DEKALD/ DKC42-72(VT3) + Poncho Votivo 500	92	107	214	53	16	2	05
DEKALB/ DKC43-27(V13) + Poncho Votivo 500	93	197	210	59	10	0	95
DAIRYLAND/ SI-9395SSX + Cruiser Extreme 250	95	187	1/8	58	14	0	94
	95		223	50	15	17	00
	90		228	58	15	17	98
NUTECH/ 5N-9001 + Cruiser 250	90		223	59	17	4	95
SEEDS/ 2000 EXP X495 + Acceleron	95		221	58	16	0	97
PETERSON/ FARMS 98L90 + Poncho 250	90		220	58	15	17	97
NUTECH/ 5N-186 + Cruiser 250	86		218	58	15	4	97
CHANNEL/ 197-32VT3P + Poncho Votivo 500	92		216	60	15	2	96
PETERSON/ FARMS 48Q95 + Poncho 250	95		214	59	16	1	96
WENSMAN/W 7140VT3PRO + Acceleron	93		209	60	15	1	96
DAIRYLAND/ ST-6494 + Cruiser Extreme 250	94		207	59	14	1	97
SEEDS/ 2000 EXP X695 + Acceleron	95		207	59	16	0	98
PETERSON/ FARMS 76R92 + Acceleron	92		206	59	14	0	97
CHANNEL/ 190-95VT3P + Poncho Votivo 500	90		204	58	14	0	96
SEEDS/ 2000 9202 VT2P + Acceleron	92		203	59	14	0	94
INTEGRA/ 142095 VT3PRO + Poncho 250	95		203	59	16	0	98
DEKALB/ DKC45-51 + Poncho Votivo 500	95		201	59	16	1	97
WENSMAN/W 8120VT2PRO + Acceleron	92		201	59	14	0	97
G2/ GEN. 5H-492 + Cruiser 250	92		200	58	16	1	93
INTEGRA/ 9422VT3 + Poncho 250	92		200	60	15	3	100
RENK/ RK530VT3P + Acceleron	94		199	59	15	0	96
G2/ GEN. 5X-795 + Cruiser 250	95		199	58	15	1	95
WENSMAN/ W 7107VT3 + Acceleron	90		199	61	15	0	98
NUTECH/ 5N-290 + Cruiser 250	90		198	58	14	6	96
PIONEER/ PIONEER BR. P8917XR + Cruiser Extreme	89		196	59	15	2	90
INTEGRA/ 043093RR2 + Poncho 250	93		185	58	14	1	99
WENSMAN/W 7143VT3 + Acceleron	93		179	60	16	1	98
Trial avg.:	92	203	207	59	15	3	96
High avg.:	95	225	233	61	17	17	100
Low avg.:	86	187	178	57	14	0	90
[5] LSD(.05):		NS**	16	1	1	4	5
[6] Min.TPG value:		187	218	60			95
[/] Max.FG value:		5	۲		15	4	· ·
No. entries:	31	5	31	31	31	31	31

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.

 $\ast$  Shaded values within a column are included in the top-performance group.

 $^{\ast\ast}$  Indicates differences between values within a column are non-significant (NS).

# Adjusted to 13% moisture basis.

Table 1b. Warner late maturity Roundup Ready corn hybrid test results, 2010-11, Allen & Inel Ryckman Farm. Seeded May 5, 2011 at 29,621 seeds per acre.

		Yield Averages *#			Other 2011 Averages *					
Brand/Hybrid + Seed Treatment [1]	Rel. Mat [2]	2-YR	2011	Bu.	Grain	Lodging	Final			
	wat. [2]	bu/a	bu/a	VVt.	Peta	Pctg [3]	Stand Pctg [4]			
CHANNEL/ 196-06VT3P + Poncho Votivo 500	96	227	229	59	16	0	94			
DEKALB/DKC50-66(VT3) + Poncho Votivo 500	100	224	223	59	15	0	94			
DEKALB/ DKC52-59(VT3) + Poncho Votivo 500	102	221	212	59	16	2	8.9			
PIONEER/ PIONEER BR 36V53 + Cruiser Extreme	102	220	225	57	16	0	99			
NUTECH/ 5N-102 GTCBLL BW + Cruiser 250	100	220	220	58	15	6	97			
SEEDS/ 2000 9602G3 + Cruiser 250	96	217	211	58	15	1	96			
G2/ GEN. 5H-501 + Cruiser 250	100	209	204	58	16	0	95			
G2/ GEN. 5X-500 + Cruiser 250	97	198	199	59	16	1	98			
EPLEY/ E1275RR + Not reported	97	196	196	59	15	1	95			
PIONEER/ P9807HR + Cruiser Extreme	98		235	57	16	7	98			
NUTECH/ 5N-001 + Cruiser 250	100		231	56	16	1	96			
EPLEY/ E1418GT3000 + Cruiser 250	104		231	58	18	3	84			
SEEDS/ 2000 EXP X302 + Cruiser 250	102		230	57	17	2	92			
EPLEY/ E1315RR + Not reported	100		228	58	16	2	97			
RENK/ 5K565GTCBLLRW + Cruiser Extreme	99		227	59	15	3	84			
DAIRYLAND/ ST-9399 + Cruiser Extreme 250	99		226	59	16	3	89			
RENK/ RK580VT3 + Not reported	98		222	60	16	1	96			
DAIRYLAND/ ST-9500SSX + Cruiser Extreme 250	101		221	58	18	0	97			
G2/ GEN. 5H-700 + Cruiser 250	100		220	59	16	0	95			
SEEDS/ 2000 EXP X398 + Cruiser 250	98		220	58	16	1	97			
PIONEER/ P9917XR + Cruiser Extreme	99		216	60	17	4	94			
DEKALB/ DKC49-94 + Poncho Votivo 500	99	· .	214	59	15	0	95			
WENSMAN/W 7270VT3PRO + Acceleron	97		212	59	15	0	90			
DEKALB/ DKC48-12 + Poncho Votivo 500	98		210	57	15	0	94			
WENSMAN/W 7273VT3 + Acceleron	98		207	58	15	2	95			
PIONEER/ P9630XR + Cruiser Extreme	96		205	59	16	1	96			
PIONEER/ P0115XR + Cruiser Extreme	101		204	59	16	0	88			
WENSMAN/W 7268VT3 + Acceleron	96		202	59	16	0	97			
DAIRYLAND/ ST-9501SSX + Cruiser Extreme 250	101		201	57	16	1	85			
NUTECH/ 5N-197 + Cruiser 250	97		201	60	16	10	87			
MASTERS/ CHOICE MCT-4561 + Poncho 250	96		196	58	15	0	89			
PIONEER/ P9910XR + Cruiser Extreme	99		176	56	15	0	96			
SEEDS/ 2000 2982GT + Cruiser 250	98		174	60	15	6	91			
Trial avg.:	99	215	213	58	16	2	93			
High avg.:	104	227	235	60	18	10	99			
	96	196	174	56	15	0	84			
[5] LSD(.05): [6] Min TPG value:		214	223	59	< 1	ى ئ	94			
[7] Max.TPG value:					15	3				
[8] Coef. of var.:		4	4	1	3	104	3			
No. entries:	33	9	33	33	33	33	33			

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.

 $\ensuremath{^*}$  Shaded values within a column are included in the top-performance group.

# Adjusted to 13% moisture basis.

Table 2a. South Shore early maturity Roundup Ready corn hybrid test results, 2010-11, Northeast Research Farm. Seeded May 16, 2011 at 29,621 seeds per acre.

	<b>.</b>	Yield Averages *#		Other 2011 Averages *					
	Kel.	0. ) (	0.044	Bu.	Grain	Lodging	Final		
Brand/Hybrid + Seed Treatment [1]	Mat.	2-Yr	2011	Wt.	Moisture	Pctg	Stand		
	[2]	bu/a	bu/a	lb.	Pctg	[3]	Pctg [4]		
DAIRYLAND/ ST-9992 + Cruiser Extreme 250	92	191	170	56	16	0	96		
PIONEER/ 38H08 + Cruiser Extreme	92	184	172	54	17	0	99		
DEKALB/ DKC42-72 + Poncho Votivo 500	92	183	167	53	15	0	99		
DAIRYLAND/ ST-9395SSX + Cruiser Extreme 250	95	177	153	52	15	0	95		
DEKALB/ DKC43-27 + Poncho Votivo 500	93	172	148	55	17	0	97		
PIONEER/ P8917XR + Cruiser Extreme	89	165	153	56	16	0	98		
PETERSON/ FARMS 76R92 + Acceleron	92		169	55	16	0	98		
CHANNEL/ 197-32VT3P + Poncho Votivo 500	92		168	55	18	0	97		
SEEDS/ 2000 9202 VT2P + Acceleron	92		165	55	17	0	99		
RENK/ RK585VT3P + Acceleron	95		163	54	19	0	95		
G2/ GEN. 5H-492 + Cruiser 250	92		162	55	17	0	97		
G2/ GEN. 5X-795 + Cruiser 250	95		159	54	20	0	96		
NUTECH/ 5N-186 + Cruiser 250	86		157	54	15	0	98		
CHANNEL/ 190-95VT3P + Poncho Votivo 500	90		157	55	15	0	91		
DAIRYLAND/ ST-6494 + Cruiser Extreme 250	94		156	54	15	0	95		
PETERSON/ FARMS 98L90 + Poncho 250	90		155	51	15	0	96		
INTEGRA/ 142095 VT3PRO + Poncho 250	95		155	56	19	0	93		
SEEDS/ 2000 EXP X495 + Acceleron	95		154	54	19	0	98		
SEEDS/ 2000 2903GTCBLL + Cruiser 250	90		153	50	15	0	96		
WENSMAN/ W 7143VT3 + Acceleron	93		152	54	18	0	99		
NUTECH/ 5N-290 + Cruiser 250	90	· .	151	53	13	1	99		
SEEDS/ 2000 EXP X695 + Acceleron	95		151	54	18	0	93		
DAIRYLAND/ ST-7291SSX + Cruiser Extreme 250	91		150	53	15	0	95		
WENSMAN/W 7107VT3 + Acceleron	90		150	56	17	0	97		
WENSMAN/W 8120VT2PRO + Acceleron	92		150	55	17	0	90		
NUTECH/ 5N-9001 + Cruiser 250	90		149	53	17	0	93		
RENK/ RK530VT3P + Acceleron	94		147	55	19	0	94		
PETERSON/ FARMS 48Q95 + Poncho 250	95		144	51	16	0	95		
WENSMAN/W 7140VT3PRO + Acceleron	93		142	56	18	0	97		
INTEGRA/ 921095GT3000 + Poncho 250	95		141	52	16	0	94		
DEKALB/ DKC45-51 + Poncho Votivo 500	95		138	53	22	0	94		
Trial avg.:	92	179	155	54	17	0	96		
High avg.:	95	191	172	56	22	1	99		
LOW aVg.:	86	165 NIS**	138	50	13		90		
[6] LSD(.05). [6] Min.TPG value:		165	158	56			95		
[7] Max.TPG value:					14	0			
[8] Coef. of var.:		6	6	1	5	344	3		
No. entries:	31	6	31	31	31	31	31		

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.

\* Shaded values within a column are included in the top-performance group.

# Adjusted to 13% moisture basis.

 $^{\ast\ast}$  Indicates differences between values within a column are non-significant (NS).



Table 2b. South Shore late maturity Roundup Ready corn hybrid test results, 2010-11, Northeast Research Farm. Seeded May 16, 2011 at 29,621 seeds per acre.

		Yield Ave	erages*#				
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2011 bu/a	Bu. Wt. Ib.	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
CHANNEL/ 196-06VT3P + Poncho Votivo 500	96	194	164	54	20	0	96
DEKALB/ DKC52-59 + Poncho Votivo 500	102	194	159	52	18	0	89
DEKALB/ DKC50-66 + Poncho Votivo 500	100	190	157	53	18	0	90
SEEDS/ 2000 9602G3 + Cruiser 250	96	190	155	53	15	0	96
EPLEY/ E1275RR + Not reported	97	189	166	56	17	0	96
DEKALB/ DKC48-37 + Poncho Votivo 500	98	184	162	54	16	0	91
G2/ GEN. 5X-500 + Cruiser 250	97	177	153	54	22	0	95
NUTECH/ 5N-102 + Cruiser 250	100	176	141	52	20	0	92
WENSMAN/W 7268VT3 + Acceleron	96		168	56	19	0	94
CHANNEL/ 197-67VT3P + Poncho Votivo 500	97		167	54	20	0	96
PIONEER/ P9807HR + Cruiser Extreme	98		161	51	23	0	96
G2/ GEN. 5H-501 + Cruiser 250	100		160	53	23	0	93
DEKALB/ DKC48-12 + Poncho Votivo 500	98		158	53	16	0	95
G2/ GEN. 5H-700 + Cruiser 250	100		158	52	24	0	99
RENK/ RK580VT3 + Not reported	98		157	51	19	0	98
INTEGRA/ 9460SS + Poncho 250	98		157	54	19	0	94
WENSMAN/W 7270VT3PRO + Acceleron	97	•	153	53	17	0	97
PIONEER/ P9630XR + Cruiser Extreme	96		151	53	20	0	97
NUTECH/ 5N-197 + Cruiser 250	97	· .	148	52	18	0	91
SEEDS/ 2000 EXP X398 + Cruiser 250	98		145	53	20	2	92
EPLEY/ E1315RR + Not reported	100		140	50	22	0	90
SEEDS/ 2000 2982GT + Cruiser 250	98		140	52	19	0	95
WENSMAN/W 7273VT3 + Acceleron	98		139	50	19	0	92
DEKALB/ DKC49-94 + Poncho Votivo 500	99		137	50	18	0	99
RENK/ 5K565GTCBLLRW + Cruiser Extreme	99		137	52	20	0	99
EPLEY/ E1418GT3000 + Cruiser 250	104		134	47	25	0	94
NUTECH/ 5N-001 + Cruiser 250	100		129	49	20	0	92
SEEDS/ 2000 EXP X302 + Cruiser 250	102		129	48	21	0	100
Trial avg.:	99	187	151	52	20	0	95
High avg.:	104	194	168	56	25	2	100
	96	176	129	47	15	0	89
[6] LSD(.05). [6] Min.TPG value:		176	158	55		I	95
[7] Max.TPG value:					16	1	
[8] Coef. of var.:	20	4	4	2	4	287	3
No. entries:	20	8	28	28	28	28	28

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.

st Shaded values within a column are included in the top-performance group.

# Adjusted to 13% moisture basis.

 $^{\ast\ast}$  Indicates differences between values within a column are non-significant (NS).

le 3a. Bancroft early maturity Roundup Ready corn hybrid test results, 2010-11, Weerts Farms Inc. Seeded May 24, 2011 at 29,621									
		Yield Av	erages *#	Other 2011 Averages *					
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2011 bu/a	Bu. Wt. Ib.	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]		
G2/ GEN. 5H-700 + Cruiser 250	100	190	227	58	19	0	98		
CHANNEL/ 196-06VT3P + Poncho Votivo 500	96	190	225	57	18	0	99		
DEKALB/ DKC48-37(VT3) + Poncho Votivo 500	98	189	220	58	19	0	100		
DEKALB/ DKC50-66(VT3) + Poncho Votivo 500	100	189	214	57	18	0	100		
CHANNEL/ 199-55VT3 + Poncho Votivo 500	99	188	210	55	20	0	100		
NUTECH/ 5N-001 GTCBLLRW + Cruiser 250	100	186	220	56	19	0	99		
DEKALB/ DKC42-72(VT3) + Poncho Votivo 500	92	185	221	56	16	0	100		
SEEDS/ 2000 9602G3 + Cruiser 250	96	185	211	56	17	2	98		
G2/ GEN. 5X-500 + Cruiser 250	97	183	219	56	19	0	98		
WENSMAN/W 7273VT3 + Acceleron	98	183	215	57	18	0	99		
DEKALB/ DKC43-27(VT3) + Poncho Votivo 500	93	180	214	58	17	0	100		
EPLEY/ E1315RR + Not reported	100	173	202	56	20	1	97		
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100	160	192	55	21	3	98		
HOEGEMEYER/ 7041 HXLLRR + Poncho 1250 + Votivo	100		239	56	20	0	100		
WENSMAN/W 7290VT3PRO + Acceleron	99		236	58	19	0	99		
CHANNEL/ 197-67VT3P + Poncho Votivo 500	97		227	58	19	0	100		
PIONEER/ P9917XR + Cruiser Extreme	99		222	58	19	0	98		
LEGEND/ LR99983000GT + Not reported	98		221	57	17	3	100		
G2/ GEN. 5X-795 + Cruiser 250	95		219	57	18	0	100		
PIONEER/ P9807HR + Cruiser Extreme	98		218	54	20	1	98		
DEKALB/ DKC45-51 + Poncho Votivo 500	95		215	58	20	0	100		
INTEGRA/ 921100GT3000 + Poncho 250	100		209	56	19	1	98		
DEKALB/ DKC49-94 + Poncho Votivo 500	99		208	58	17	0	98		
NUTECH/ 5N-197 + Cruiser 250	97	· ·	207	57	20	0	98		
G2/ GEN. 5H-501 + Cruiser 250	100		207	57	21	1	100		
EPLEY/ E1275RR + Not reported	97		207	58	17	0	100		
DEKALB/ DKC48-12 + Poncho Votivo 500	98		205	58	17	0	98		
LEGEND/ LR9800VT3 + Not reported	100		203	57	18	0	100		
SEEDS/ 2000 EXP X398 + Cruiser 250	98		203	56	20	2	95		
RENK/ RK580VT3 + Not reported	98		202	57	18	0	100		
RENK/ 5K565GTCBLLRW + Cruiser Extreme	99		200	56	20	0	98		
LEGEND/ LR9993VT3 + Not reported	93		199	59	16	1	98		
PIONEER/ P9910XR + Cruiser Extreme	99		198	56	18	0	100		
SEEDS/ 2000 2982GT + Cruiser 250	98		198	57	19	2	98		
LEGEND/ LR9197GENSS + Not reported	97		195	57	17	0	100		
LEGEND/ LR9098GENSS + Not reported	98		183	57	22	0	99		
Trial avg.:	98	183	211	57	19	1	99		
High avg.:	100	190	239	59	22	3	100		
Low avg.:	92	160	183	54	16	0	95		
[5] LSD(.05):		14	15	1	1	NS**	NS		
[6] Min.TPG value:		177	225	58			95		
[7] Max.TPG value:					17	3			
[8] Coef. of var.:		7	4	1	4	217	2		
No. entries:	36	13	36	36	36	36	36		

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.

\* Shaded values within a column are included in the top-performance group. \*\* Indicates differences between values within a column are non-significant (NS).

# Adjusted to 13% moisture.

Table 3b. Bancroft late maturity Roundup Ready corn hybrid test results, 2010-11, Weerts Farms Inc. Seeded May 24, 2011 at 29,621 seeds per acre.

		Yield Av	erages *#	Other 2011 Averages *					
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2011 bu/a	Bu. Wt. Ib.	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]		
PIONEER/ PIONEER BR.36V53 + Cruiser Extreme	102	192	213	56	23	0	100		
EPLEY/ E1418GT3000 + Cruiser 250	104	187	210	53	25	0	99		
EPLEY/ E1479HXTLLRR + Cruiser 250	104	177	193	54	24	2	100		
NUTECH/ 5N-803 GTCBLLRW + Cruiser 250	103	173	191	53	24	1	100		
PIONEER/ P0533XR + Cruiser Extreme	105		226	55	25	1	100		
WENSMAN/ W 7320VT3PRO + Acceleron	101		223	57	23	0	100		
RENK/ RK741VT3P + Acceleron	108		219	54	25	0	99		
CHANNEL/ 203-43VT3P + Poncho Votivo 500	103		218	56	22	0	99		
CHANNEL/ 201-16VT3 + Poncho Votivo 500	101		216	57	23	0	99		
PIONEER/ P0448XR + Cruiser Extreme	104		215	57	25	1	97		
NUTECH/ 5V-705 + Cruiser 250	105		215	58	22	0	100		
G2/ GEN. 5H-905 + Cruiser 250	105		215	54	24	0	98		
EPLEY/ E1602SS + Acceleron	106		214	53	27	0	99		
SEEDS/ 2000 EXP X302 + Cruiser 250	102		213	55	23	0	100		
RENK/ RK698VT3 + Acceleron	102		209	55	23	1	100		
LEGEND/ LR9904VT3 + Not reported	104		208	57	22	0	98		
SEEDS/ 2000 3141GT + Cruiser 250	104		208	54	24	1	100		
CHANNEL/ 200-91VT3P + Poncho Votivo 500	102	· ·	208	56	22	2	99		
G2/ GEN. 5X-903 + Cruiser 250	103		203	54	22	0	100		
HOEGEMEYER/ 7278 HXLLRR + Poncho 1250 + Votivo	102		202	57	23	0	93		
WENSMAN/W 7360VT3 + Acceleron	103		197	56	23	0	99		
WENSMAN/ W 7392GT3 + Acceleron	104		197	55	25	0	96		
PIONEER/ P0115XR + Cruiser Extreme	101		195	56	21	0	94		
G2/ GEN. 5H-0701 + Cruiser 250	107		195	56	24	1	100		
INTEGRA/ 915102VT3 + Poncho 250	102		192	54	25	2	99		
Trial avg.:	103	182	208	55	24	1	98		
High avg.:	108	192	226	58	27	2	100		
Low avg.:	101	173	191	53	21	0	93		
[5] LSD(.05): [6] Min.TPG value		178	213	56	∠ 	112	97		
[7] Max.TPG value:					23	2			
[8] Coef. of var.:		6	4	1	5	221	2		
No. entries:	25	4	25	25	25	25	25		

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.

\* Shaded values within a column are included in the top-performance group.

# Adjusted to 13% moisture basis.

\*\* Indicates differences between values within a column are non-significant (NS).

Table 4a. Brookings early maturity Roundup Ready corn hybrid test results, 2010-11, Volga Research Farm. Seeded May 15, 2011 at 29,621 seeds per acre.

		Yield Averages *#		Other 2011 Averages *					
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2011 bu/a	Bu. Wt. Ib.	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]		
HOEGEMEYER/ 6200 GTCBLL + Cruiser 250	92	232	221	56	15	14	97		
CHANNEL/ 199-55VT3 + Poncho Votivo 500	99	229	203	54	15	0	96		
HOEGEMEYER/ 6838 3000GT + Cruiser 250	97	226	219	56	15	6	100		
SEEDS/ 2000 9602G3 + Cruiser 250	96	226	218	56	15	0	100		
CHANNEL/ 196-06VT3P + Poncho Votivo 500	96	225	215	56	16	0	99		
WENSMAN/W 7273VT3 + Acceleron	98	225	193	56	16	0	92		
DEKALB/ DKC50-66 + Poncho Votivo 500	100	224	208	55	15	1	93		
G2/ GEN. 5H-700 + Cruiser 250	100	222	201	56	17	0	84		
NUTECH/ 5N-102 + Cruiser 250	100	221	217	57	16	2	99		
DEKALB/ DKC42-72 + Poncho Votivo 500	92	219	217	55	14	0	99		
G2/ GEN. 5H-501 + Cruiser 250	100	214	196	56	16	1	91		
G2/ GEN. 5X-500 + Cruiser 250	97	212	203	57	17	1	94		
EPLEY/ E1275RR + Not reported	97	206	202	58	15	0	97		
EPLEY/ E1315RR + Not reported	100	206	182	54	16	0	96		
DEKALB/ DKC43-27 + Poncho Votivo 500	93	205	217	57	15	0	97		
SEEDS/ 2000 EXP X398 + Cruiser 250	98		218	56	16	0	99		
PIONEER/ P9917XR + Cruiser Extreme	99		216	57	16	0	96		
HEINE/ 637VT3 + Acceleron	98		216	56	15	0	100		
NUTECH/ 5N-001 + Cruiser 250	100		215	52	16	0	95		
HOEGEMEYER/ 7041 HXLLRR + Poncho 1250 + Votivo	100		215	55	16	0	95		
DAIRYLAND/ ST-9399 + Cruiser Extreme 250	99		213	56	16	4	98		
PIONEER/ P9807HR + Cruiser Extreme	98		211	56	16	1	97		
HOEGEMEYER/ 6572 3000GT + Cruiser 250	95		211	56	15	2	98		
WENSMAN/W 7290VT3PRO + Acceleron	99		211	57	15	0	96		
CHANNEL/ 197-67VT3P + Poncho Votivo 500	97		208	56	16	0	92		
RENK/ 5K565GTCBLLRW + Cruiser Extreme	99		207	56	16	8	98		
DEKALB/ DKC48-12 + Poncho Votivo 500	98		206	56	14	0	94		
HEINE/ 705VT3 PRO + Acceleron	100		202	54	14	0	99		
DEKALB/ DKC45-51 + Poncho Votivo 500	95		201	57	14	0	100		
G2/ GEN. 5X-795 + Cruiser 250	95		200	56	15	0	97		
RENK/ RK580VT3 + Not reported	98		199	57	16	1	98		
HEINE/ 635VT3 + Acceleron	98		197	55	15	1	95		
NUTECH/ 5N-197 + Cruiser 250	97		194	57	14	0	97		
DEKALB/ DKC49-94 + Poncho Votivo 500	99		192	57	15	0	94		
PIONEER/ P9910XR + Cruiser Extreme	99		189	54	15	0	95		
SEEDS/ 2000 2982GT + Cruiser 250	98		172	57	15	0	96		
Trial avg.:	98	219	206	56	15	1	96		
High avg.:	100	232	221	58	17	14	100		
	92	205 NC**	172	52	14	0	84		
[5] LSD(.05): [6] Min TPG value:		205	208	57	< 1		4 96		
[7] Max.TPG value:					15	2			
[8] Coef. of var.:		4	4	1	4	94	3		
No. entries:	36	15	36	36	36	36	36		

Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.
 \* Shaded values within a column are included in the top-performance group.

# Adjusted to 13% moisture basis. \*\* Indicates differences between values within a column are non-significant (NS).

Table 4b. Brookings late maturity Roundup Ready corn hybrid test results, 2010-11, Volga Research Farm. Seeded May 15, 2011 at 29,621 seeds per acre.

		Yield Ave	erages *#				
Brand/Hybrid + Seed Treatment [1]	Ref. Mat. [2]	2-Yr bu/a	2011 bu/a	Bu. Wt. Ib.	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
EPLEY/ E1418GT3000 + Cruiser 250	104	237	215	54	16	2	93
G2/ GEN. 5H-905 + Cruiser 250	105	230	207	54	15	0	96
HEINE/ 745VT3 PRO + Acceleron	105	228	198	55	14	0	93
PIONEER/ 36V53 + Cruiser Extreme	102	224	213	55	16	0	95
HEINE/ 744RRYGCB + Acceleron	104	224	201	56	16	0	85
NUTECH/ 5N-803 + Cruiser 250	103	223	200	55	16	0	92
EPLEY/ E1479HXTLLRR + Cruiser 250	104	219	197	54	18	1	99
PIONEER/ P0533XR + Cruiser Extreme	105		226	56	19	0	99
SEEDS/ 2000 EXP X302 + Cruiser 250	102		223	54	16	1	100
CHANNEL/ 201-16VT3 + Poncho Votivo 500	101		220	57	15	0	95
HEINE/ 741GT3000 + Cruiser 250	104		219	54	16	1	98
DAIRYLAND/ ST-9500SSX + Cruiser Extreme 250	101		217	57	16	0	95
NUTECH/ 5V-705 + Cruiser 250	105		217	57	16	0	96
WENSMAN/ W 7360VT3 + Acceleron	103		217	57	16	0	97
RENK/ RK698VT3 + Acceleron	102		216	57	16	0	96
WENSMAN/ W 7392GT3 + Acceleron	104		213	55	16	1	92
HEINE/ 735VT3 PRO + Acceleron	103		211	55	15	0	97
CHANNEL/ 203-43VT3P + Poncho Votivo 500	103		211	56	15	0	97
G2/ GEN. 5X-903 + Cruiser 250	103	7 .	210	55	15	0	96
RENK/ RK744VT3P + Acceleron	107		207	55	15	0	99
WENSMAN/ W 7320VT3PRO + Acceleron	101		206	57	16	0	96
PIONEER/ P0115XR + Cruiser Extreme	101		205	58	15	0	99
PIONEER/ P0448XR + Cruiser Extreme	104		204	58	17	0	100
DAIRYLAND/ ST-9303SSX + Cruiser Extreme 250	103		204	54	14	0	98
HEINE/ 731VT3 + Not reported	104		204	53	14	0	94
SEEDS/ 2000 3141GT + Cruiser 250	104		203	56	16	1	96
DAIRYLAND/ ST-9501SSX + Cruiser Extreme 250	101		202	55	15	0	95
G2/ GEN. 5H-0701 + Cruiser 250	107		201	56	16	0	97
EPLEY/ E1602SS + Acceleron	106		200	53	20	0	95
CHANNEL/ 200-91VT3P + Poncho Votivo 500	102		179	55	16	0	95
Trial avg.:	103	226	208	55	16	0	96
High avg.:	107	237	226	58	20	2	100
Low avg.:	101	219	179	53	14	0	85
[5] LSD(.05):		NS**	13	1	<1	1	4
[6] Min.TPG value:		219	213	57			96
[/] Max.IPG value:		л	л	. 1	15	2/2	
No. entries:	30	7	30	30	30	30	30

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.\* Shaded values within a column are included in the top-performance group.

# Adjusted to 13% moisture basis.

\*\* Indicates differences between values within a column are non-significant (NS).



Table 5a. Geddes early maturity Roundup Ready corn hybrid test results, 2010-11, Curtis Sybesma Farm. Seeded May 16, 2011 at 29,621 seeds per acre.

		Yield Averages *#		Other 2011 Averages *						
Brand/Hybrid + Seed Treatment [1]	Mat. [2]	2-Yr bu/a	2011 bu/a	Bu. Wt. Ib.	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	Ear Drop Pctg [3]		
CHANNEL/ 199-55VT3 + Poncho Votivo 500	99	194	152	57	13	0	91	0		
DEKALB/ DKC52-59(VT3) + Poncho Votivo 500	102	189	142	55	13	2	90	0		
G2/ GEN. 5H-905 + Cruiser 250	105	189	139	56	13	2	94	5		
PIONEER/ PIONEER BR.36V53 + Cruiser Extreme	102	182	141	57	13	1	96	0		
EPLEY/ E1418GT3000 + Cruiser 250	104	182	133	54	13	3	88	2		
DEKALB/ DKC50-66(VT3) + Poncho Votivo 500	100	178	135	55	13	0	94	0		
EPLEY/ E1479HXTLLRR + Cruiser 250	104	167	108	57	16	5	98	0		
NUTECH/ 5N-102 GTCBLLRW + Cruiser 250	100	162	116	56	13	7	92	0		
CHANNEL/ 201-16VT3 + Poncho Votivo 500	101	160	84	57	14	10	95	0		
NUTECH/ 5N-803 GTCBLLRW + Cruiser 250	103	155	75	57	13	4	94	0		
WENSMAN/W 7320VT3PRO + Acceleron	101		158	57	14	1	95	0		
PIONEER/ P0533XR + Cruiser Extreme	105		157	57	15	5	99	0		
NUTECH/ 5N-001 + Cruiser 250	100		148	54	13	3	91	0		
DEKALB/ DKC48-12 + Poncho Votivo 500	98		145	56	13	0	97	1		
DEKALB/ DKC49-94 + Poncho Votivo 500	99		144	57	13	0	89	0		
WENSMAN/ W 7360VT3 + Acceleron	103		134	58	14	2	93	4		
DEKALB/ DKC55-09 + Poncho Votivo 500	105		132	59	15	2	95	3		
NUTECH/ 5V-705 + Cruiser 250	105		132	56	14	0	91	1		
HOEGEMEYER/ 7278 HXLLRR+ Poncho 1250+ Votivo	102		127	59	14	0	91	1		
HEINE/ 735VT3 PRO + Acceleron	103		127	56	13	0	92	1		
PIONEER/ P0448XR + Cruiser Extreme	104		124	57	14	0	91	0		
HEINE/ 731VT3 + Not reported	104		123	56	13	0	97	1		
HEINE/ 741GT3000 + Cruiser 250	104		120	54	13	5	97	4		
CHANNEL/ 200-91VT3P + Poncho Votivo 500	102		119	58	14	0	72	0		
HEINE/ 745VT3 PRO + Acceleron	105		115	56	13	2	88	9		
WENSMAN/W 7392GT3 + Acceleron	104		114	57	14	0	90	11		
HEINE/ 744RRYGCB + Acceleron	104		101	56	15	0	90	11		
G2/ GEN. 5X-903 + Cruiser 250	103		97	57	13	1	92	12		
MASTERS/ CHOICE MCT-5324 + Poncho 250	103		93	57	13	0	93	5		
Trial avg.:	103	176	125	56	14	2	92	4		
High avg.:	105	194	158	59	16	10	99	12		
Low avg.:	98	155	75	54	13	0	72	0		
[5] LSD(.05):		NS**	17	2	<1	3	6	4		
נסן win.iPG value: [7] May TPG value:		100	141	5/	13	. 3	33	Д		
[8] Coef. of var.:		5	8	2	3	95	4	81		
No. entries:	29	10	29	29	29	29	29	20		

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.

\* Shaded values within a column are included in the top-performance group.

# Adjusted to 13% moisture basis. \*\* Indicates differences between values within a column are non-significant (NS).
# Grow | 2011 annual report

Table 5b. Geddes late maturity Roundup Ready corn hybrid test results, 2010-11, Curtis Sybesma Farm. Seeded May 16, 2011 at 29,621 seeds per acre.

		Yield Ave	erages *#	Other 2011 Averages *					
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2011 bu/a	Bu. Wt. Ib.	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]	Ear Drop Pctg [3]	
G2/ GEN. 5H-210 + Cruiser 250	110	194	150	57	16	0	87	0	
WENSMAN/W 7473VT3 + Acceleron	109	182	121	54	12	0	86	0	
DEKALB/ DKC59-35(VT3) + Poncho Votivo 500	109	180	120	57	15	0	92	0	
G2/ GEN. 5H-511 + Cruiser 250	110	175	114	58	16	0	83	0	
CHANNEL/ 209-85VT3P + Poncho Votivo 500	109		148	56	16	2	95	0	
DEKALB/ DKC62-97 + Poncho Votivo 500	112		147	57	16	0	97	0	
HOEGEMEYER/ EXP 7726 + Activa	107		147	57	15	0	89	3	
CHANNEL/ 210-61VT3 + Poncho Votivo 500	110		145	56	18	1	95	0	
CHANNEL/ 211-99VT3P + Poncho Votivo 500	111		140	58	16	0	94	0	
G2/ GEN. 5H-0701 + Cruiser 250	107		139	57	14	0	93	3	
EPLEY/ E1602SS + Acceleron	106	•	138	58	15	1	88	0	
NUTECH/ 5B-1003 + Cruiser 250	110		137	54	15	0	96	0	
WENSMAN/W 7566VT3PRO + Acceleron	111		128	54	14	0	95	5	
DEKALB/ DKC63-84 + Poncho Votivo 500	113		122	57	14	1	95	4	
G2/ GEN. 5H-013 + Cruiser 250	113		110	58	15	1	93	5	
G2/ GEN. 5H-712 + Cruiser 250	112		108	57	17	0	91	6	
WENSMAN/W 6443RR + Acceleron	106		107	58	14	2	91	8	
Trial avg.:	110	183	131	56	15	0	92	3	
High avg.:	113	194	150	58	18	2	97	8	
Low avg.:	106	175	107	54	12	0	83	0	
[5] LSD(.05):		NS**	14	1	1	NS	5	3	
[6] Min.TPG value:		175	137	57			92		
[/] Max.IPG value:					13	2		3	
[8] Coet. of var.:	17	5	17		4	182	3	/4	
No. entries:		4	1/		17		17	١Z	

[1] Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.

\* Shaded values within a column are included in the top-performance group.

# Adjusted to 13% moisture basis.

\*\* Indicates differences between values within a column are non-significant (NS).

Note that additional table references are explained in table D.

# Grow | 2011 annual report

Table 6a. Beresford early maturity Roundup Ready corn hybrid test results, 2010-11, Southeast Experiment Station. Seeded May 16, 2011 at 29,621 seeds per acre.

		Yield Av	erages *#		*		
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2011 bu/a	Bu. Wt. Ib.	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]
G2/ GEN. 5H-210 + Cruiser 250	110	226	204	58	19	2	91
HEINE/ 810VT3 PRO + Acceleron	109	226	203	59	18	1	95
WENSMAN/W 7473VT3 + Acceleron	109	224	196	55	18	0	91
DEKALB/ DKC59-35(VT3) + Poncho Votivo 500	109	222	199	60	19	0	90
HOEGEMEYER/ HPT7584HXTRR+Poncho 1250+Votivo	105	218	200	57	16	0	96
G2/ GEN. 5H-511 + Cruiser 250	110	208	185	60	19	2	85
HOEGEMEYER/ EXP7998HXRR+Poncho 1250+Votivo	109	205	184	58	17	1	87
DAIRYLAND/ ST-6310 + Cruiser Extreme 250	110	204	182	59	16	0	97
DEKALB/ DKC52-59(VT3) + Poncho Votivo 500	102	202	180	58	14	0	89
PIONEER/ 34F07 + Cruiser Extreme	110		219	59	18	0	91
NUTECH/ 5B-1003 + Cruiser 250	110		211	56	18	1	98
NUTECH/ 5N-803 + Cruiser 250	103		203	58	16	0	92
DAIRYLAND/ ST-9210SSX + Cruiser Extreme 250	110		201	57	20	1	91
CHANNEL/ 210-61VT3 + Poncho Votivo 500	110		200	57	20	0	95
CHANNEL/ 209-85VT3P + Poncho Votivo 500	109	_ ·	199	58	17	0	98
PIONEER/ P0533XR + Cruiser Extreme	105		198	60	17	0	95
G2/ GEN. 5H-0701 + Cruiser 250	107		198	58	16	0	90
RENK/ RK818VT3P + Acceleron	109	•	196	58	18	0	90
WENSMAN/W 6443RR + Acceleron	106		195	60	16	2	91
NUTECH/ 5N-102 + Cruiser 250	100		194	57	14	1	99
DEKALB/ DKC53-78 + Poncho Votivo 500	103		189	58	15	0	96
WENSMAN/W 7320VT3PRO + Acceleron	101		188	59	15	0	83
G2/ GEN. 5H-905 + Cruiser 250	105		186	58	16	0	94
NUTECH/ 5N-001 + Cruiser 250	100		185	55	13	0	74
WENSMAN/W 7360VT3 + Acceleron	103		185	59	17	0	93
WENSMAN/W 7392GT3 + Acceleron	104		184	58	16	0	91
DEKALB/ DKC55-09 + Poncho Votivo 500	105		183	59	16	0	94
G2/ GEN. 5X-903 + Cruiser 250	103		180	57	16	1	92
NUTECH/ 5V-705 + Cruiser 250	105		178	56	15	0	96
RENK/ RK744VT3P + Acceleron	107		177	58	16	0	89
Trial avg.:	106	215	193	58	17	0	92
High avg.:	110	226	219	60	20	2	99
Low avg.:	100	202	177	55	13	0	74
[5] LSD(.05):		8	16	1	1	NS**	6
[6] MIN. PG Value:		219	203	29	14	· 2	94
[8] Coef. of var.:		5	5	2	5	205	4
No. entries:	30	9	30	30	30	30	30

 $\ensuremath{\left[1\right]}$  Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2011 yield average.

 $^{*}$  Shaded values within a column are included in the top-performance group.

# Adjusted to 13% moisture basis.

\*\* Indicates differences between values within a column are non-significant (NS).

Note that additional table references are explained in table D.

Table 6b. Beresford late maturity Roundup Ready corn hybrid test results, 2010-11, Southeast Experiment Station. Seeded May 16, 2011 at 29,621 seeds per acre.

		Yield Av	verages *#	Other 2011 Averages *						
Brand/Hybrid + Seed Treatment [1]	Rel. Mat. [2]	2-Yr bu/a	2011 bu/a	Bu. Wt. Ib.	Grain Moisture Pctg	Lodging Pctg [3]	Final Stand Pctg [4]			
DEKALB/ DKC63-84(VT3) + Poncho Votivo 500	113	217	191	57	21	0	87			
DEKALB/ DKC62-97 + Poncho Votivo 500	112		213	56	21	0	91			
CHANNEL/ 211-99VT3P + Poncho Votivo 500	111		213	58	19	1	91			
G2/ GEN. 5H-013 + Cruiser 250	113		212	60	22	1	95			
RENK/ RK858VT3P + Acceleron	112		209	57	19	0	95			
WENSMAN/W 7566VT3PRO + Acceleron	111		201	54	20	0	90			
RENK/ RK880SSTX + Acceleron	112		181	57	20	0	91			
G2/ GEN. 5H-712 + Cruiser 250	112		169	57	21	1	87			
Trial avg.:	112	217	199	57	20	0	91			
High avg.:	113	217	213	60	22	1	95			
Low avg.:	111	217	169	54	19	0	87			
[5] LSD(.05):			18	< 1	1	NS**	NS			
[6] Min.TPG value:			196	59			87			
[7] Max.TPG value:					20	1				
[8] Coef. of var.:			5	1	4	199	7			
No. entries:	8	1	8	8	8	8	8			
[1] Entries are listed by Brand/Hybrid and sorted by 2	-yr then by 2	011 yield av	erage.							
* Shaded values within a column are included in the	op-performat	nce group.								
# Adjusted to 13% moisture basis.										
** Indicates differences between values within a colu	imn are non-:	significant (	NS).							
Note that additional table references are explained in	table D.									



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# 2012 annual report

#### OCTOBER 2012

# Corn production is greatly affected by hybrid selection.

This publication reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant field corn hybrids.

# Major factors in hybrid selection include:

- Yield
- Maturity
- Lodging resistance
- Seed traits

#### SDSU EXTENSION

# Corn Hybrid Performance Trials Results - Bath

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These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Corn test trial information is listed in table A, performance table footnote references including technology traits and seed treatments are listed in Table B. Mailing addresses for seed company entrants that participated in the 2012 test trials are listed in table C.

#### **General Test Procedures**

Seed companies pick one or more of the six test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Bath and South Shore, 100 days for Bancroft and Volga, 105 days for Geddes, and 110 days for Beresford. Hybrids are assigned to trials based on the relative maturity rating reported by the participating seed company. In 2012, results from only five of the test locations are reported. Information from Beresford is not reported because the severe drought at that location prevented the collection of valid data.

Table A. General test information for 2012							
Location:	Glyphosate resistant corn results, Bath, SD						
Cooperator:	Gordon and Roger Locken Farms - Bath						
Soil Type:	Great Bend silt Ioam, 0–2% slope						
Tillage:	No-till						
Fertility-Yield Goal:	200 bushel						
Previous Crop:	Soybeans						
Row Space:	30 inches						
Seeding Population:	30,000/acre						
Weed Control:	Pre: Harness Xtra, Post: 1 quart Roundup						
Insect Control:	None						
Disease Control:	None						
Date Seeded:	May 1, 2012						

# **Experimental Procedures**

Entries were seeded in three replications, with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20-feet long, with the center two rows harvested for vield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2012, the precision planter was calibrated to deliver 29,621 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation and previous crop history, pest control, and fertility yield goal at each test site is outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/acre of 37-18-00 was applied 2" below and 2" to the side  $(2 \times 2)$  of the seed row.

#### **Measures of Performance**

Yields are obtained from the South Dakota Crop Performance

Testing Program. Two-year and current yield averages are included where hybrids have been tested for the most recent two-year period.

Yield. Yield values are an average of three replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2012, the coefficient of variation (CV) values (a measure of experimental error) for yield was quite variable, ranging from a low of 4% in both trials at Bath to a high of 12% and 15% for the early and late trials, respectively, at Geddes. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors—all of which may or may not be controllable in a given year. Clearly, this year, drought

and variable seasonal moisture distribution and/or subsoil moisture conditions, along with above-average temperatures, combined to produce highly variable yields across our South Dakota corn growing regions. The top yield averages occurred at Bath and Bancroft, whereas, the plot grain yields were so low at Beresford the harvest equipment could not determine valid harvest yields.

#### Grain moisture content.

Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Hybrids that are above average in yield and can be stored without additional drying are desirable. At harvest, moisture values were determined by the combine moisture meter, which in turn was periodically verified with a Dickey-John GAC II meter.

Use of tables. Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids

before there is a significant yield difference. LSD values are given at the bottom of every column where there is significant difference among the averages within the column. If differences among the averages within a column are not significant, the LSD value is reported as "nonsignificant" (NS). The top performance group (TPG) for the performance factors yield (bu/a), bushel weight in (lbs.), harvest grain moisture (%), lodging below the ear (%), and final stand (%) are indicated in the performance tables by the shaded data values. Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values in each row, the better the hybrid did as a topperforming hybrid for a given test trial.

## Performance Trial Results

**Note:** Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values there are in each row the better the hybrid did as a top-performing hybrid for a given test trial.

Table B. E	xplanation of performance table references.
No.	Explanation of references
[1]	Entries are listed by Brand/Variety- Entries are sorted by 2-yr then by 2012 yield average.
[2]	Technology traits: Agr. = Agrisure; SmartStax or GenSSX= DowAgrosciences (DAS) or Monsanto Genuity (Gen), respectively; HX1, HXX = Herculex by DAS & Pioneer Hi-Bred, Opt. = Optimum AcreMax1 or Optimum AcreMaxXtra by Pioneer Hi-Bred, YG = Monsanto YieldGard.
[3]	Seed treatments: P/V500 = Poncho/Votivo 500, P/V1250 = Poncho/Votivo1250; CM250 = Cruiser Maxx250, CM1250 = Cruiser Max1250; MHL = Maxim XL, MQ = Maxim Quattro; PPST250 = Pioneer Premium Seed Treatment.
[4]	Brand Relative Maturity (Rel. Mat.)- the relative maturity rating reported by the test trial entrant.
[5]	Lodging Percentage- stalks broken below the ear as a percentage of the final stand; look for low values.
[6]	Final Stand Percentage - the number of standing stalks at harvest as a percentage of the seeding population.
[7]	Least Significant Difference (LSD 0.05) - the difference any two values within a column must be equal to or exceed for the values to be significantly different (0.05 level of probability). If the difference is less than the LSD value the difference between them is nonsignificant (NS).
[8]	Min. TPG-avg the minimum column value for yield, bushel weight, and final stand percentage that a hybrid must equal or exceed to be in the top performance group (TPG).
[9]	Max. TPG-avg the maximum column value for grain moisture at harvest, lodging percentage, or lodging score that a hybrid must equal or be less than to be in the TPG.
[10]	Coefficient of variation (C.V.)- the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% are less common ; while values of 6-15% are more common. If a value exceeds 15%; the trial had too much error to be valid, so the results are not reported.

Table 1. Bath early maturity Roundup Ready corn hybrid test results, 2011-12, Gordon and Roger Locken Farm.								
		Yield Averages *,# Other 2012 Averages					s##	
Brand/Hybrid [1] + Tech. Trait [2] + Seed Trt. [3]	Rel. Mat. [4]	2-Yr bu/a	2012 bu/a	Bu. Wt. Ib	Grain Moisture %	Ldg. % [5]	Final Stand % [6]	
SEEDS/ 2000 2903GTCBLL + AgrGT/CB/LL + Acceleron	90	223	218	56	15	1	87	
RENK/ RK585VT3P + GenVT3P + Acceleron	95	222	215	58	14	0	94	
SEEDS 2000/ 9504VT3P + GenVT3P + Acceleron	95	217	212	59	14	1	89	
MASTERS/ CHOICE MCT-493 + Agr3000GT + CM250+MXL	93	212	192	57	13	1	80	
G2/ GEN. 5X-795 + HXXRR2 + MQ	95	207	215	58	13	0	91	
SEEDS 2000/ 9202 VT2P + OptAMX + MQ	92	207	210	57	13	0	89	
WENSMAN/W 7140VT3PRO + GenVT3P + Acceleron	93	207	206	60	14	1	93	
SEEDS 2000 /9503 VT2P + GenVT2P + Acceleron	95	206	204	60	15	1	88	
NUTECH/ 5N-9001 + LL + CM250	90	206	188	58	13	0	80	
PETERSON/ FARMS 76R92 + GenVT2P + Acceleron	92	204	202	58	13	0	89	
WENSMAN/W 8120VT2RIB + GenVT2P + Acceleron	92	203	206	57	13	0	86	
RENK/ RK530VT3P + GenVT3P + Acceleron	94	202	204	60	13	0	90	
PIONEER/ 38H08 + HX1RR2 + PPST250	92	201	199	57	12	2	89	
CHANNEL/ 192-09VT3P + GenVT3P + P/V500	92		220	58	13	0	92	
RENK/ RK492VT3P + GenVT3P + Acceleron	93		215	60	13	0	91	
PETERSON FARMS/ PFS76Z95 + GenVT2P + Acceleron	95		213	59	16	1	90	
RENK/ RK568VT3P + GenVT3P + Acceleron	95		212	59	15	0	93	
G2 GEN./ 5X-193 + HXXRR2 + P/V1250	93		211	58	13	1	88	
DEKALB/ DKC43-48 + GenVT3P + P/V500	93		210	58	13	1	94	
EPLEY/ E9505RR + RR2 + MQ	95		209	60	14	0	89	
PROSEED/ 1292VT2P + LL + Acceleron	92		205	58	13	0	89	
DEKALB/ DKC43-10 + GenVT2P + P/V500	93		204	58	13	0	87	
WENSMAN/W 8184VT3PRO + GenVT3P + Acceleron	95		201	58	15	2	88	
RENK/ RK434VT3P + GenVT3P + Acceleron	92		200	59	13	0	85	
PROSEED/ 1295SS + LL + Acceleron	95		197	60	13	0	93	
G2 GEN./ 5X-9402 + HXXRR2 + P/V1250	94		197	59	13	0	83	
PROSEED/ D99031116 + LL + CM250+MQ	90		194	58	14	0	75	
PETERSON FARMS/ PFS75T93 + GenVT2P + Acceleron	93		194	60	13	1	88	
PIONEER/ P8906HR + HX1RR2 + PPST250	89		194	59	13	1	92	
Trial avg.:	93	209	205	58	14	1	88	
High avg.:	95	223	220	60	16	2	94	
Low avg.:	89	201	188	56	12	0	75	
[7] LSD(.05):		NS**	14	1	1	1	5	
[8] Min.TPG value:		201	206	59			89	
[9] Max.TPG value:					13	1		
[10] Coef. of var.:		4	4	1	4	187	3	
No. entries:	29	13	29	29	29	29	29	

NOTE: Table references [1-10] are explained in table B.

\* Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2012 yield average.

# Adjusted to 15.5% moisture.

 $^{\ast\ast}$  NS indicates differences between column values are nonsignificant.

Table 2. Bath late maturity Roundup Ready corn hybrid test results, 2011-12, Gordon and Roger Locken Farm.								
		Yield Ave	erages *,#	0	ther 2012 A	verages	\$##	
Brand/Hybrid [1] + Tech, Trait [2] + Seed Trt. [3]	Kel. Mat.	2-Vr	2012	Bu	Grain	Ldg.	Final	
	[4]	bu/a	bu/a	Wt. Ib	Moisture	%	Stand	
					%	[3]	% [6]	
NUTECH/ 5N-001 + Agr3000GT + MQ	100	224	217	56	16	0	81	
PIONEER/ 36V53 + HX1RR2 + PPST250	102	222	219	56	15	0	91	
DEKALB/ DKC50-66 + YGVTRWRR2 + P/V500	100	221	219	58	13	0	91	
DAIRYLAND/ ST-9399 + Agr3000GT + CM250	99	221	216	57	15	0	89	
CHANNEL/ 196-06VT3P + GenVT3P + P/V500	96	221	212	59	15	0	89	
SEEDS 2000/ 9902 VTP3111 + Agr311 + Acceleron	98	213	206	57	14	1	93	
DEKALB/ DKC48-12 + GenSSX + P/V500	98	208	206	57	13	0	82	
WENSMAN/W 7268VT3 + YGVTRWRR2 + Acceleron	96	205	208	57	16	0	92	
RENK/ RK580VT3 + GenSSX + Acceleron	98	203	184	58	15	0	78	
PIONEER/ P0193HR + HX1RR2 + PPST250	101		228	54	16	2	89	
PIONEER/ P0062XR + HXXRR2 + PPST250	100		227	54	15	8	96	
G2 GEN./ 5X-0004 + HXXRR2 + P/V1250	100		225	54	15	1	90	
DEKALB/ DKC49-30 + GenVT3P + P/V500	99		222	59	14	0	95	
PIONEER/ P9834HR + HX1RR2 + PPST250	98		220	55	14	0	81	
G2 GEN./ 5Z-198 + OptAMX + P/V1250	98		220	55	12	0	86	
DAIRYLAND/ DS9501SSX + DAS Smart Stax + Activa Compl.	101		219	56	13	0	92	
WENSMAN/W 7290VT3PRO + GenVT3P + Acceleron	99		218	58	14	0	96	
WENSMAN/W 9288VT3PRO + GenVT3P + Acceleron	98		218	58	15	0	91	
SEEDS 2000/ 3011 G3 + Agr3000GT + Acceleron	101		218	55	15	0	81	
PIONEER/ P9917AM1 + OptAM1 + PPST250	99		214	58	14	0	88	
WENSMAN/W 7320VT3PRO + GenVT3P + Acceleron	101		208	58	15	1	90	
G2 GEN./ 5X-895 + HXXRR2 + MQ	97		207	57	13	0	88	
NUTECH/ 5N-0103 + Agr3000GT + CM250	101		205	56	15	0	87	
G2 GEN./ 5H-502 + HX1RR2 + MQ	102		204	56	16	0	79	
PIONEER/ P9675AMX + OptAMX + PPST250	96		203	58	13	0	85	
RENK/ RK578VT3P + GenVT3P + Acceleron	96		195	58	13	0	89	
DEKALB/ DKC46-20 + GenVT3P + P/V500	96		194	60	15	0	87	
DAIRYLAND/ DS9303SSX + DAS Smart Stax + Activa Compl.	103		194	55	15	1	88	
RENK/ RK576VT3P + GenVT3P + Acceleron	97		191	58	13	0	89	
NUTECH/ 5B-798 + AgrGT/CB/LL + CM250	98		181	58	16	1	78	
DAIRYLAND/ DS9402SSX + DAS Smart Stax + Activa Compl.	102		172	54	14	1	82	
Trial avg.:	99	215	209	57	14	1	88	
High avg.:	103	224	228	60	16	8	96	
Low avg.:	96	203	172	54	12	0	78	
[5] LSD(.05):		NS**	12	2	1	1	6	
[6] Min.TPG value:		203	216	58			90	
[7] Max.TPG value:					13	1		
[8] Coef. of var.:		3	4	2	5	143	4	
No. entries:	31	9	31	31	31	31	31	

NOTE: Table references [1-10] are explained in table B.

\* Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2012 yield average.

# Adjusted to 15.5% moisture.

\*\* NS indicates differences between column values are nonsignificant.

#### Early maturity trial, Table 1.

The test-trial yield averages were 209 bu/a for two years and 205 bu/a in 2012. Hybrids that yielded 201 bu/a or more for two years and **206 bu/a** or more for 2012 gualified for the top-performancegroup (TPG) for yield. There was no significant difference in yield average among the hybrids tested for the two year period. Hybrids had to differ in yield average by 14 bu/a in 2012 to be significantly different. In 2012, bushel weights averaged 58 lbs., grain moisture averaged 14%, lodging percentage averaged 1%, and final stand percentage averaged 88%. In order for a hybrid to be in the TPG for these factors, it had to average 59 lbs. or more in bushel weight, 13% or less in grain moisture, 1% or less in lodging

percentage, and **89%** or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal **14 bu/a** or more for yield in 2012, **1 lb.** or more in bushel weight, **1%** or less in grain moisture, **1%** or less in lodging percentage and **5%** or more in the final stand percentage.

#### Late maturity trial, Table 2.

The test-trial yield averages were 215 bu/a for two years and 209 bu/a in 2012. Hybrids with yield averages of 203 bu/a or more for two years and 216 bu/a or more for 2012 qualified for the TPG. There was no significant difference in yield average among the hybrids tested for the two year period. Hybrids had to differ

# Grow | 2012 annual report - Bath

in yield average by 12 bu/a in 2012 to be significantly different. In 2012, bushel weights averaged 57 lbs., grain moisture averaged 14%, lodging percentage averaged 1%, and final stand percentage averaged 88%. In order for a hybrid to be in the TPG for these factors, it had to average 58 lbs. or more in bushel weight, 13% or less in grain moisture, 1% or less in lodging percentage, and 90% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 12 bu/a or more for yield in 2012, 2 Ib. or more in bushel weight, 1% or more in grain moisture, 1% or more in lodging percentage and 6% or more in the final stand percentage.

Table C.Mailing	addresses for seed entries in the 2012 corn hybrid trials and listed by seed brand name
Seed brand	Seed company mailing address
Channel	Channelbio Corp., Box 277, Laurel, NE 68745
Dairyland	PO Box 958, West Bend, WI 53095
Dekalb	46040 SD Hwy 44, Chancellor, SD 57015
Epley Bros.	Epley Bros. Hybrids Inc., 22494 Yale Ave., Shell Rock, IA 50670
G-2 Genetics	G-2 Genetics, 2321 North Loop Drive, Suite 230, Ames, IA 50010
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031
Masters Choice	3010 St. Rt. 146 E, Anna, IL 62906
NuTech	Nutech Seed, LLC, 2321 North Loop Drive, Suite 230, Ames, IA 50010
Petersen Farms	3104 164th Ave. SE, Harwood, ND 58042
Pioneer	Pioneer Hi-Bred International, 151 Saint Andrews Court-Suite 910, Mankato, MN 56001
ProSeed	705 E. Brewster, Harvey, ND 58341
Renk	6809 Wilburn Road, Sun Prairie, WI 53590
Seeds 2000	Seeds 2000, 115 N 3rd St., Breckenridge, MN 56520
Wensman	Wensman Seed Co., PO Box 190, Wadena, MN 56482



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# 2012 annual report

## OCTOBER 2012

# Corn production is greatly affected by hybrid selection.

This publication reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant field corn hybrids.

# Major factors in hybrid selection include:

- Yield
- Maturity
- Lodging resistance
- Seed traits

#### SDSU EXTENSION

# Corn Hybrid Performance Trials Results - Volga

Robert G. HallSDSU Extension AgronomistKevin K. KirbyAgricultural Research ManagerShawn HawksAgricultural Research Manager



These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Corn test trial information is listed in table A, performance table footnote references including technology traits and seed treatments are listed in Table B. Mailing addresses for seed company entrants that participated in the 2012 test trials are listed in table C.

#### **General Test Procedures**

Seed companies pick one or more of the six test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Bath and South Shore, 100 days for Bancroft and Volga, 105 days for Geddes, and 110 days for Beresford. Hybrids are assigned to trials based on the relative maturity rating reported by the participating seed company. In 2012, results from only five of the test locations are reported. Information from Beresford is not reported because the severe drought at that location prevented the collection of valid data.

Table A. General test information for 2012.							
LOCATION:	Glyphosate resistant corn trial results, Volga, SD.						
COOPERATOR:	SDSU Plant Science Research Farm - Volga, Doug Doyle and staff.						
SOIL TYPE:	Brandt silty clay loam, 0-2% slope						
TILLAGE:	Conventional						
FERTILITY-YIELD GOAL:	200 bushel						
PREVIOUS CROP:	Spring wheat (stubble)						
ROW SPACE:	30 inches						
SEEDING POPULATION:	30,000/acre						
WEED CONTROL:	Pre: 1qt Dual 2, Post: 1 quart Roundup						
INSECT CONTROL:	None						
DISEASE CONTROL:	None						
DATE SEEDED:	April 30, 2012						

# **Experimental Procedures**

Entries were seeded in three replications, with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20-feet long, with the center two rows harvested for vield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2012, the precision planter was calibrated to deliver 29,621 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation and previous crop history, pest control, and fertility yield goal at each test site is outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/acre of 37-18-00 was applied 2" below and 2" to the side  $(2 \times 2)$  of the seed row.

#### **Measures of Performance**

Yields are obtained from the South Dakota Crop Performance

Testing Program. Two-year and current yield averages are included where hybrids have been tested for the most recent two-year period.

Yield. Yield values are an average of three replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2012, the coefficient of variation (CV) values (a measure of experimental error) for yield was quite variable, ranging from a low of 4% in both trials at Bath to a high of 12% and 15% for the early and late trials, respectively, at Geddes. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors—all of which may or may not be controllable in a given year. Clearly, this year, drought

and variable seasonal moisture distribution and/or subsoil moisture conditions, along with above-average temperatures, combined to produce highly variable yields across our South Dakota corn growing regions. The top yield averages occurred at Bath and Bancroft, whereas, the plot grain yields were so low at Beresford the harvest equipment could not determine valid harvest yields.

#### Grain moisture content.

Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Hybrids that are above average in yield and can be stored without additional drying are desirable. At harvest, moisture values were determined by the combine moisture meter, which in turn was periodically verified with a Dickey-John GAC II meter.

Use of tables. Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids

# Grow | 2012 annual report - Volga

before there is a significant yield difference. LSD values are given at the bottom of every column where there is significant difference among the averages within the column. If differences among the averages within a column are not significant, the LSD value is reported as "nonsignificant" (NS). The top performance group (TPG) for the performance factors yield (bu/a), bushel weight in (lbs.), harvest grain moisture (%), lodging below the ear (%), and final stand (%) are indicated in the performance tables by the shaded data values. Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values in each row, the better the hybrid did as a topperforming hybrid for a given test trial.

# Performance Trial Results

**Note:** Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values there are in each row the better the hybrid did as a top-performing hybrid for a given test trial.

Table B.	Explanation of performance table references.
No.	Explanation of references
[1]	Entries are listed by Brand/Variety- Entries are sorted by 2-yr then by 2012 yield average.
[2]	Technology traits: Agr. = Agrisure; SmartStax or GenSSX= DowAgrosciences (DAS) or Monsanto Genuity (Gen), respectively; HX1, HXX = Herculex by DAS & Pioneer Hi-Bred, Opt. = Optimum AcreMax1 or Optimum AcreMaxXtra by Pioneer Hi-Bred, YG = Monsanto YieldGard.
[3]	Seed treatments: P/V500 = Poncho/Votivo 500, P/V1250 = Poncho/Votivo1250; CM250 = Cruiser Maxx250, CM1250 = Cruiser Max1250; MHL = Maxim XL, MQ = Maxim Quattro; PPST250 = Pioneer Premium Seed Treatment.
[4]	Brand Relative Maturity (Rel. Mat.)- the relative maturity rating reported by the test trial entrant.
[5]	Lodging Percentage- stalks broken below the ear as a percentage of the final stand; look for low values.
[6]	Final Stand Percentage - the number of standing stalks at harvest as a percentage of the seeding population.
[7]	Least Significant Difference (LSD 0.05) - the difference any two values within a column must be equal to or exceed for the values to be significantly different (0.05 level of probability). If the difference is less than the LSD value the difference between them is nonsignificant (NS).
[8]	Min. TPG-avg the minimum column value for yield, bushel weight, and final stand percentage that a hybrid must equal or exceed to be in the top performance group (TPG).
[9]	Max. TPG-avg the maximum column value for grain moisture at harvest, lodging percentage, or lodging score that a hybrid must equal or be less than to be in the TPG.
[10]	Coefficient of variation (C.V.)- the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% are less common ; while values of 6-15% are more common. If a value exceeds 15%; the trial had too much error to be valid, so the results are not reported.

# Grow | 2012 annual report - Volga

Table 1. Volga early maturity Roundup Ready corn hybrid test results, 2011-12, Plant Science Research Farm								
	Del	Yield Ave	erages *,#		Other 2012 Av	verages##	ŧ	
Brand/Hybrid [1] + Tech. Trait [2] + Seed Trt. [3]	Mat.	2-Yr	2012	Bu.	Grain	Lda. %	Final	
	[4]	bu/a	bu/a	Wt. Ib	Moisture %	[5]	Stand % [6]	
HOEGEMEYER/ HPT 7042 + OptAMX + CM250	100	186	157	58	13	0	83	
DEKALB/ DKC50-66 + YGVTRWRR2 + P/V500	100	185	162	58	12	0	96	
CHANNEL/ 197-67VT3P + GenVT3P + P/V500	97	184	161	60	14	2	91	
WENSMAN/W 7290VT3PRO + GenVT3P + Acceleron	99	182	154	58	14	3	92	
HOEGEMEYER/ 6838 3000GT + Agr3000GT + CM250	98	182	145	58	12	6	92	
HOEGEMEYER/ 6200 GTCBLL + AgrGT/CB/LL + CM250	92	181	141	58	13	0	76	
NUTECH/ 5N-001 + Agr3000GT + MQ	100	176	138	57	13	2	82	
SEEDS 2000/ 9902 VP3111 + GenVT2P + Acceleron	98	175	132	58	12	14	88	
DEKALB/ DKC48-12 + GenSSX + P/V500	98	169	132	57	13	0	97	
RENK/ RK585VT3P + GenVT3P + Acceleron	95		162	59	12	0	95	
PIONEER/ P9834HR + HX1RR2 + PPST250	98		160	57	14	0	89	
G2 GEN./ 5X-0004 + HXXRR2 + P/V1250	100		159	55	12	0	84	
PIONEER/ P0062XR + HXXRR2 + PPST250	100		151	57	13	1	84	
DEKALB/ DKC46-20 + GenVT3P + P/V500	96		150	59	15	0	97	
DEKALB/ DKC49-30 + GenVT3P + P/V500	99		150	59	13	0	98	
G2 GEN./ 5Z-198 + OptAMX + P/V1250	98		144	57	12	0	80	
DEKALB/ DKC43-48 + GenVT3P + P/V500	93		141	58	13	0	95	
WENSMAN/W 7268VT3 + YGVTRWRR2 + Acceleron	96		141	58	12	5	94	
EPLEY/ E9505RR + RR2 + MQ	95		138	59	12	2	93	
RENK/ RK576VT3P + GenVT3P + Acceleron	97		137	58	11	0	93	
MASTERS CHOICE/ MCT-4563 + Agr3000GT + CM250+MXL	96		134	58	12	1	51	
CHANNEL/ 196-76VT3P + GenVT3P + P/V500	96		134	60	14	0	92	
PIONEER/ P9917AM1 + OptAM1 + PPST250	99		130	59	14	1	88	
DEKALB/ DKC43-10 + GenVT2P + P/V500	93		127	58	12	0	90	
WENSMAN/W 9288VT3PRO + GenVT3P + Acceleron	98		124	60	14	0	92	
RENK/ RK578VT3P + GenVT3P + Acceleron	96		123	58	13	0	89	
Trial avg.:	97	180	143	58	13	1	88	
High avg.:	100	186	162	60	15	14	98	
Low avg.:	92	169	123	55	11	0	51	
[7] LSD(.05):		NS**	21	1	2	2	6	
[8] Min.TPG value:		169	141	59			92	
[9] Max.TPG value:					12	2		
[10] Coef. of var.:		5	9	1	11	98	4	
No. entries:	26	9	26	26	26	26	26	

NOTE: Table references [1-10] are explained in table B.

\* Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2012 yield average.

# Adjusted to 15.5% moisture.

\*\* NS indicates differences between column values are nonsignificant.

# Grow | 2012 annual report - Volga

Table 2. Volga late maturity Roundup Ready corn hybrid test results, 2011-12, Plant Science Research Farm.								
Yield Averages *,# Other 2012 Avera						Averages	##	
Brand/Hybrid [1] + Tech. Trait [2] + Seed Trt. [3]	Mat. [4]	2-Yr bu/a	2012 bu/a	Bu. Wt. Ib	Grain Moisture %	Ldg. % [5]	Final Stand % [6]	
PIONEER/ 36V53 + HX1RR2 + PPST250	102	188	163	57	12	0	91	
PIONEER/ P0533AM1 + OptAM1 + PPST250	105	187	147	58	13	0	81	
EPLEY/ E1418GT3000 + Agr3000GT + CM250	104	178	142	58	15	1	86	
G2 GEN./ 5X-903 + HXXRR2 + MQ	103	177	144	58	15	0	84	
WENSMAN/ W 7320VT3PRO + GenVT3P + Acceleron	101	175	144	59	14	0	91	
CHANNEL/ 203-43VT3P + GenVT3P + P/V500	103	172	132	58	16	0	92	
DAIRYLAND/ DS9303SSX + DAS Smart Stax + Activa Compl.	103	171	137	58	13	0	89	
G2 GEN./ 5H-806 + HX1RR2 + MQ	107	164	126	58	15	5	91	
DEKALB/ DKC52-61 + GenVT2P + P/V500	102		161	58	12	0	94	
PIONEER/ P0193HR + HX1RR2 + PPST250	101		154	56	12	0	84	
NUTECH/ 5B-604 + AgrGT/CB/LL + MQ	104		152	56	12	0	86	
NUTECH/ 5N-0103 + Agr3000GT + CM250	101		149	57	12	1	87	
RENK/ RK635VT3P + GenVT3P + Acceleron	102		149	57	13	0	91	
DEKALB/ DKC52-04 + GenVT3P + P/V500	102		148	58	14	0	83	
PIONEER/ P0876HR + HX1RR2 + PPST250	108		148	59	16	1	87	
NUTECH/ 5N-907 + Agr3000GT + CM250	110		148	56	13	1	86	
G2 GEN./ 5Z-802 + OptAMX + P/V1250	102		147	57	14	0	76	
G2 GEN./ 5H-0504 + HX1RR2 + P/V1250	105		147	57	14	0	89	
DAIRYLAND/ DS9501SSX + DAS Smart Stax + Activa Compl.	101		146	58	12	0	92	
WENSMAN/ W 9325VT3PRO + GenVT3P + Acceleron	102		146	60	13	1	87	
DAIRYLAND/ DS6903 + RR2 + CM250	103		145	60	15	5	86	
SEEDS 2000/ 3011 G3 + Agr3000GT + Acceleron	101		143	56	13	1	85	
DAIRYLAND/ DS6604 + RR2 + CM250	104		141	58	12	1	86	
G2 GEN./ 5H-202 + HX1RR2 + P/V1250	102		138	58	15	12	95	
WENSMAN/W 7330VT3 + GenVT3P + Acceleron	103		136	60	14	0	88	
CHANNEL/ 202-25VT3P + GenVT3P + P/V500	102		135	60	12	0	90	
G2 GEN./ 5H-502 + HX1RR2 + MQ	102		130	58	15	0	76	
RENK/ RK708SSTX + GenSSX + Acceleron	105		128	59	15	1	89	
DAIRYLAND/ DS9402SSX + Smart Stax + Activa Compl.	102		123	59	13	0	76	
Trial avg.:	103	177	143	58	14	1	87	
High avg.:	110	188	163	60	16	12	95	
Low avg.:	101	164	123	56	12	0	76	
[7] LSD(.05):		17	21	1	2	4	5	
[8] Min.TPG value:		171	142	59			90	
[9] Max.TPG value:					14	4		
[10] Coef. of var.:		5	9	1	9	187	3	
No. entries:	29	8	29	29	29	29	29	

NOTE: Table references [1-10] are explained in table B.

\* Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2012 yield average.

# Adjusted to 15.5% moisture.

\*\* NS indicates differences between column values are nonsignificant.

#### Early maturity trial, Table 1.

The test-trial yield averages were 180 bu/a for two years and 143 bu/a in 2012. Hybrids with yield averages of 169 bu/a or more for two years and 141 bu/a or more for 2012 gualified for the TPG. There were no differences in yield average among the hybrids tested two years, so all qualified for the TPG. In 2012, bushel weights averaged 58 lbs., grain moisture averaged 13%, lodging percentage averaged 1%, and final stand percentage averaged 88%. In order for hybrids to be in the TPG for these factors, they had to average 59 lbs. or more in bushel weight, 12% or less in grain moisture, 2% or less in lodging

percentage, and 92% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 21 bu/a or more for yield in 2012, 1 lb. or more in bushel weight, 2% or less in grain moisture, 2% or less in lodging percentage and 6% or more in the final stand percentage.

Late maturity trial, Table 2. The test-trial yield averages were 177 bu/a for two years and 143 bu/a in 2012. Hybrids that yielded 171 bu/a or more for two years and 142 bu/a in 2012 qualified for the TPG. In 2012, bushel weights averaged 58 lbs., grain moisture

# Grow | 2012 annual report - Volga

averaged 14%, lodging averaged 1%, and percent final stand averaged 87%. In order for hybrids to be in the TPG for these factors, they had to average 59 lbs. or more in bushel weight, 14% or less in grain moisture, 4% or less in lodging percentage, and 90% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal **17 bu/a** or more for two years and 21 bu/a or more for yield in 2012; and **1 lb.** or more in bushel weight, 2% or less in grain moisture, 4% or less in lodging percentage and 5% or more in the final stand percentage in 2012.

Table C.Mailing addresses for seed entries in the 2012 corn hybrid trials and listed by seed brand name					
Seed brand	Seed company mailing address				
Channel	Channelbio Corp., Box 277, Laurel, NE 68745				
Dairyland	PO Box 958, West Bend, WI 53095				
Dekalb	46040 SD Hwy 44, Chancellor, SD 57015				
Epley Bros.	Epley Bros. Hybrids Inc., 22494 Yale Ave., Shell Rock, IA 50670				
G-2 Genetics	G-2 Genetics, 2321 North Loop Drive, Suite 230, Ames, IA 50010				
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031				
Masters Choice	3010 St. Rt. 146 E, Anna, IL 62906				
NuTech	Nutech Seed, LLC, 2321 North Loop Drive, Suite 230, Ames, IA 50010				
Petersen Farms	3104 164th Ave. SE, Harwood, ND 58042				
Pioneer	Pioneer Hi-Bred International, 151 Saint Andrews Court-Suite 910, Mankato, MN 56001				
ProSeed	705 E. Brewster, Harvey, ND 58341				
Renk	6809 Wilburn Road, Sun Prairie, WI 53590				
Seeds 2000	Seeds 2000, 115 N 3rd St., Breckenridge, MN 56520				
Wensman	Vensman Wensman Seed Co., PO Box 190, Wadena, MN 56482				



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# 2012 annual report

## OCTOBER 2012

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# Major factors in hybrid selection include:

- Yield
- Maturity
- Lodging resistance
- Seed traits

#### SDSU EXTENSION

# Corn Hybrid Performance Trials Results - South Shore

Robert G. HallSDSU Extension AgronomistKevin K. KirbyAgricultural Research ManagerShawn HawksAgricultural Research Manager



These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Corn test trial information is listed in table A, performance table footnote references including technology traits and seed treatments are listed in Table B. Mailing addresses for seed company entrants that participated in the 2012 test trials are listed in table C.

#### **General Test Procedures**

Seed companies pick one or more of the six test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Bath and South Shore, 100 days for Bancroft and Volga, 105 days for Geddes, and 110 days for Beresford. Hybrids are assigned to trials based on the relative maturity rating reported by the participating seed company. In 2012, results from only five of the test locations are reported. Information from Beresford is not reported because the severe drought at that location prevented the collection of valid data.

Table A. General test information for 2012.					
Location:	Glyphosate resistant corn trial results, South Shore, SD				
Cooperator:	Northeast Research Farm - South Shore, Al Heuer and staff				
Soil Type:	Kransburg silty clay loam, 0-6% slope				
Tillage:	Conventional				
Fertility-Yield Goal:	200 bushel				
Previous Crop:	Spring wheat (stubble)				
Row Space:	30 inches				
Seeding Population:	30,000/acre				
Weed Control:	Pre: 1quart Dual 2, Post: 1 quart Roundup				
Insect Control:	None				
Disease Control:	None				
Date Seeded:	May 2, 2012				

# **Experimental Procedures**

Entries were seeded in three replications, with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20-feet long, with the center two rows harvested for vield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2012, the precision planter was calibrated to deliver 29,621 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation and previous crop history, pest control, and fertility yield goal at each test site is outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/acre of 37-18-00 was applied 2" below and 2" to the side  $(2 \times 2)$  of the seed row.

#### **Measures of Performance**

Yields are obtained from the South Dakota Crop Performance

Testing Program. Two-year and current yield averages are included where hybrids have been tested for the most recent two-year period.

Yield. Yield values are an average of three replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2012, the coefficient of variation (CV) values (a measure of experimental error) for yield was quite variable, ranging from a low of 4% in both trials at Bath to a high of 12% and 15% for the early and late trials, respectively, at Geddes. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors—all of which may or may not be controllable in a given year. Clearly, this year, drought

and variable seasonal moisture distribution and/or subsoil moisture conditions, along with above-average temperatures, combined to produce highly variable yields across our South Dakota corn growing regions. The top yield averages occurred at Bath and Bancroft, whereas, the plot grain yields were so low at Beresford the harvest equipment could not determine valid harvest yields.

#### Grain moisture content.

Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Hybrids that are above average in yield and can be stored without additional drying are desirable. At harvest, moisture values were determined by the combine moisture meter, which in turn was periodically verified with a Dickey-John GAC II meter.

Use of tables. Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids

before there is a significant yield difference. LSD values are given at the bottom of every column where there is significant difference among the averages within the column. If differences among the averages within a column are not significant, the LSD value is reported as "nonsignificant" (NS). The top performance group (TPG) for the performance factors yield (bu/a), bushel weight in (lbs.), harvest grain moisture (%), lodging below the ear (%), and final stand (%) are indicated in the performance tables by the shaded data values. Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values in each row, the better the hybrid did as a topperforming hybrid for a given test trial.

## Performance Trial Results

**Note:** Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values there are in each row the better the hybrid did as a top-performing hybrid for a given test trial.

Table E	3. Explanation of performance table references.
No.	Explanation of references
[1]	Entries are listed by Brand/Variety- Entries are sorted by 2-yr then by 2012 yield average.
[2]	Technology traits: Agr. = Agrisure; SmartStax or GenSSX= DowAgrosciences (DAS) or Monsanto Genuity (Gen), respectively; HX1, HXX = Herculex by DAS & Pioneer Hi-Bred, Opt. = Optimum AcreMax1 or Optimum AcreMaxXtra by Pioneer Hi-Bred, YG = Monsanto YieldGard.
[3]	Seed treatments: P/V500 = Poncho/Votivo 500, P/V1250 = Poncho/Votivo1250; CM250 = Cruiser Maxx250, CM1250 = Cruiser Max1250; MHL = Maxim XL, MQ = Maxim Quattro; PPST250 = Pioneer Premium Seed Treatment.
[4]	Brand Relative Maturity (Rel. Mat.)- the relative maturity rating reported by the test trial entrant.
[5]	Lodging Percentage- stalks broken below the ear as a percentage of the final stand; look for low values.
[6]	Final Stand Percentage - the number of standing stalks at harvest as a percentage of the seeding population.
[7]	Least Significant Difference (LSD 0.05) – the difference any two values within a column must be equal to or exceed for the values to be significantly different (0.05 level of probability). If the difference is less than the LSD value the difference between them is nonsignificant (NS).
[8]	Min. TPG-avg the minimum column value for yield, bushel weight, and final stand percentage that a hybrid must equal or exceed to be in the top performance group (TPG).
[9]	Max. TPG-avg the maximum column value for grain moisture at harvest, lodging percentage, or lodging score that a hybrid must equal or be less than to be in the TPG.
[10]	Coefficient of variation (C.V.)- the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% are less common ; while values of 6-15% are more common. If a value exceeds 15%; the trial had too much error to be valid, so the results are not reported.

Table 1. South Shore early maturity Roundup Ready corn hybrid test results, 2011-12, Northeast Research Farm.							
Yield Averages *,# Other 2012 Av				erages#	#		
Brand/Hybrid [1] + Tech, Trait [2] + Seed Trt, [3]	Mat.	2-Yr	2012	Bu Wt	Grain	Ldg.	Final
	[4]	bu/a	bu/a	lb	Moisture	%	Stand
		4.05	477	5.7	%	[5]	% [6]
SEEDS 2000/ 2903 GICBLL + AgrGI/CB/LL + Acceleron	90	105	1//	57			81
SEEDS 2000/ 9504 VI3P + GenVI3P + Acceleron	95	165	1/5	58	11	0	89
PETERSON FARMS/ PFS/6R92 + GenVI2P + Acceleron	92	164	160	57	11	0	90
RENK/ RK585VI3P + GenVI3P + Acceleron	95	159	156	57	11	0	93
DAIRYLAND/ DS9992 + YGVIRWRR2 + CM250	92	159	148	58	11	0	84
SEEDS 2000/ 9202 VT2P + OptAMX + MQ	92	157	148	56	11	1	89
PIONEER/ 38H08 + HX1RR2 + PPST250	92	155	138	56	11	0	85
G2 GEN./ 5X-795 + HXXRR2 + MQ	95	154	149	56	11	0	87
WENSMAN/W 7140VT3PRO + GenVT3P + Acceleron	93	152	161	60	11	0	91
SEEDS 2000/ 9503 VT2P + GenVT2P + Acceleron	95	147	144	58	11	0	89
NUTECH/ 5B-9102 + LL + CM250	90	145	141	55	10	1	85
RENK/ RK568VT3P + GenVT3P + Acceleron	95		173	59	12	1	92
DEKALB/DKC43-10 + GenVT2P + P/V500	93		165	56	11	0	92
G2 GEN./ 5X-9402 + HXXRR2 + P/V1250	94		161	57	11	0	90
EPLEY/ E9505RR + RR2 + MQ	95		156	59	12	0	93
PROSEED/ 1295SS + LL + Acceleron	95		153	58	12	0	80
RENK/ RK434VT3P + GenVT3P + Acceleron	92		152	57	11	0	80
G2 GEN./ 5X-193 + HXXRR2 + P/V1250		· ·	151	56	11	1	93
RENK/ RK492VT3P + GenVT3P + Acceleron			150	56	11	2	85
CHANNEL/ 192-09VT3P + GenVT3P + P/V500	92		150	56	11	0	94
PETERSON FARMS/ PFS76Z95 + GenVT2P + Acceleron	95		149	58	11	0	83
DAIRYLAND/ DS9487SSX + DAS Smart Stax + Activa Compl.	87		146	55	11	0	82
DEKALB/ DKC43-48 + GenVT3P + P/V500	93		140	57	11	3	91
DAIRYLAND/ DS9291SSX + DAS Smart Stax + CM250	91		139	57	11	0	82
PETERSON FARMS/ PFS75T93 + GenVT2P + Acceleron	93		135	59	12	0	76
PIONEER/ P8906HR + HX1RR2 + PPST250	89		135	58	11	0	87
PROSEED/ D99031116 + LL + CM250+MQ	90		132	58	11	0	72
PROSEED/ 1292VT2P + LL + Acceleron	92		129	57	11	0	85
Trial avg.:	93	157	150	57	11	0	86
High avg.:	95	165	177	60	12	3	94
Low avg.:		145	129	55	10	0	72
[7] LSD(.05):		NS**	28	1	1	1	5
[8] Min.TPG value:		145	149	59			89
[9] Max.TPG value:					11	1	
[10] Coef. of var.:		8	11	1	4	248	4
No. entries:	28	11	28	28	28	28	28
			20	20			

NOTE: Table references [1-10] are explained in table B.

 $^{*}$  Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2012 yield average.

# Adjusted to 15.5% moisture.

\*\* NS indicates differences between column values are nonsignificant.

Table 2. South Shore late maturity Roundup Ready corn hybrid test results, 2011-12, Northeast Research Farm.							
Yield Averages *,# Other 2012 Average					Average	s##	
Brand/Hybrid [1] + Tech. Trait [2] + Seed Trt. [3]	Ref. Mat. [4]	2-Yr bu/a	2012 bu/a	Bu. Wt. Ib	Grain Moisture %	Ldg. % [5]	Final Stand % [6]
CHANNEL/ 196-06VT3P + GenVT3P + P/V500	96	164	164	57	11	0	89
DEKALB/ DKC48-12 + GenSSX + P/V500	98	163	168	55	11	0	87
WENSMAN/W 7268VT3 + YGVTRWRR2 + Acceleron	96	161	153	56	11	0	90
DEKALB/ DKC50-66 + YGVTRWRR2 + P/V500	100	149	141	57	11	0	93
RENK/ RK580SSTX + GenSSX + Acceleron	98	147	136	58	12	0	73
SEEDS 2000/ 9902 VP3111 + GenVT2P + Acceleron	98	140	136	56	12	3	74
NUTECH/ 5N-001 + Agr3000GT + MQ	100	134	138	53	11	0	72
WENSMAN/W 9288VT3PRO + GenVT3P + Acceleron	98		158	57	12	0	86
WENSMAN/W 7290VT3PRO + GenVT3P + Acceleron	99		156	57	12	1	93
PIONEER/ P9834HR + HX1RR2 + PPST250	98		155	55	12	0	83
G2 GEN./ 5X-0004 + HXXRR2 + P/V1250	100		155	55	13	0	86
PIONEER/ P9675AMX + OptAMX + PPST250	96		154	57	12	1	80
DEKALB/ DKC49-30 + GenVT3P + P/V500	99		153	58	12	0	87
G2 GEN./ 5H-502 + HX1RR2 + MQ	102		152	57	12	1	76
PIONEER/ P0062XR + HXXRR2 + PPST250	100		151	56	12	1	83
PIONEER/ P9917AM1 + OptAM1 + PPST250	99		150	58	12	0	85
WENSMAN/W 7320VT3PRO + GenVT3P + Acceleron	101		147	58	12	0	82
DAIRYLAND/ DS9501SSX + DAS Smart Stax + Activa Compl.			145	57	11	0	89
NUTECH/ 5N-0103 + Agr3000GT + CM250			143	54	12	1	78
RENK/ RK578VT3P + GenVT3P + Acceleron	96		139	57	12	0	85
SEEDS 2000/ 3011 G3 + Agr3000GT + Acceleron	101		137	54	11	0	79
DEKALB/DKC46-20 + GenVT3P + P/V500	96		135	58	12	0	92
G2 GEN./ 5X-895 + HXXRR2 + MQ	97		133	57	11	0	80
RENK/ RK576VT3P + GenVT3P + Acceleron	97		126	57	11	2	90
G2 GEN./ 5Z-198 + OptAMX + P/V1250	98		123	54	11	0	80
NUTECH/ 5B-798 + AgrGT/CB/LL + CM250	98		118	58	13	0	77
Trial avg.:	99	151	145	56	12	0	83
High avg.:	102	164	168	58	13	3	93
Low avg.:	96	134	118	53	11	0	72
[7] LSD(.05):		22	22	1	1	1	4
[8] Min.TPG value:		142	146	57			89
[9] Max.TPG value:					12	1	
[10] Coef. of var.:		8	9	1	5	200	3
No. entries:	26	7	26	26	26	26	26
NOTE: Table references [1-10] are explained in table B.							

\* Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2012 yield average.

# Adjusted to 15.5% moisture.

\*\* NS indicates differences between column values are nonsignificant.

#### Early maturity trial, Table 1.

The test-trial yield averages were 157 bu/a for two years and 150 bu/a in 2012. The yield average differences among the hybrids tested for two years were nonsignificant (NS). Hybrids with yield averages of 149 bu/a or more for 2012 qualified for the TPG. In 2012, bushel weights averaged 57 lbs., grain moisture averaged 11%, lodging averaged zero, and final stand percentage averaged 86%. In order for hybrids to be in the TPG for these factors, they had to average 59 **Ibs.** or more in bushel weight, 11% or less in grain moisture, 1% in lodging percentage, and 89% or higher in final stand percentage.

In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal **28 bu/a** or more for yield in 2012, **1 lb.** or more in bushel weight, **1%** or less in grain moisture, **1%** or less in lodging percentage and **5%** or more in the final stand percentage.

#### Late maturity trial, Table 2.

The test-trial yield averages were 151 bu/a for two years and 145 bu/a in 2012. Hybrids with yield averages of 142 bu/a or more for two years and 146 bu/a for 2012 qualified for the TPG. In 2012, bushel weights averaged 56 lbs., grain moisture averaged 12%, lodging averaged zero, and final stand percentage averaged 83%. In order for hybrids to be in the TPG for these factors, they had to average 57 lbs. or more in bushel weight, 12% or less in grain moisture, and 1% or more in lodging percentage, and 89% or more in final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 22 bu/a or more for both two years and for the 2012 yield average; and 1 lb. or more in bushel weight, 1% or less in grain moisture, 1% or less in lodging percentage and 4% or more in the final stand percentage in 2012.

Table C.Mailing	addresses for seed entries in the 2012 corn hybrid trials and listed by seed brand name			
Seed brand	Seed company mailing address			
Channel	Channelbio Corp., Box 277, Laurel, NE 68745			
Dairyland	PO Box 958, West Bend, WI 53095			
Dekalb	46040 SD Hwy 44, Chancellor, SD 57015			
Epley Bros.	Epley Bros. Hybrids Inc., 22494 Yale Ave., Shell Rock, IA 50670			
G-2 Genetics	G-2 Genetics, 2321 North Loop Drive, Suite 230, Ames, IA 50010			
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031			
Masters Choice	3010 St. Rt. 146 E, Anna, IL 62906			
NuTech	Nutech Seed, LLC, 2321 North Loop Drive, Suite 230, Ames, IA 50010			
Petersen Farms	3104 164th Ave. SE, Harwood, ND 58042			
Pioneer	Pioneer Hi-Bred International, 151 Saint Andrews Court-Suite 910, Mankato, MN 56001			
ProSeed	Seed 705 E. Brewster, Harvey, ND 58341			
Renk	6809 Wilburn Road, Sun Prairie, WI 53590			
Seeds 2000	ds 2000 Seeds 2000, 115 N 3rd St., Breckenridge, MN 56520			
Wensman	Wensman Seed Co., PO Box 190, Wadena, MN 56482			



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# 2012 annual report

## OCTOBER 2012

# Corn production is greatly affected by hybrid selection.

This publication reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant field corn hybrids.

# Major factors in hybrid selection include:

- Yield
- Maturity
- Lodging resistance
- Seed traits

# SDSU EXTENSION

# Corn Hybrid Performance Trials Results - Geddes

Robert G. Hall | SDSU Extension Agronomist Kevin K. Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager



These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Corn test trial information is listed in table A, performance table footnote references including technology traits and seed treatments are listed in Table B. Mailing addresses for seed company entrants that participated in the 2012 test trials are listed in table C.

#### **General Test Procedures**

Seed companies pick one or more of the six test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Bath and South Shore, 100 days for Bancroft and Volga, 105 days for Geddes, and 110 days for Beresford. Hybrids are assigned to trials based on the relative maturity rating reported by the participating seed company. In 2012, results from only five of the test locations are reported. Information from Beresford is not reported because the severe drought at that location prevented the collection of valid data.

Table A. General test trial information for 2012.					
Location:	Glyphosate resistant corn trial results, Geddes, SD				
Cooperator:	Curtis Sybesma Farm - Geddes				
Soil Type:	Highmore-Walke silt Ioam, 0–2% slope				
Tillage:	No-till				
Fertility-Yield Goal:	200 bushel				
Previous Crop:	Winter Wheat stubble (No Till)				
Row Space:	30 inches				
Seeding Population:	30,000/acre				
Weed Control:	Pre: Harness Xtra, Post: 22 ounces Power Max				
Insect Control:	None				
Disease Control:	None				
Date Seeded:	May 8, 2012				

# **Experimental Procedures**

Entries were seeded in three replications, with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20-feet long, with the center two rows harvested for vield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2012, the precision planter was calibrated to deliver 29,621 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation and previous crop history, pest control, and fertility yield goal at each test site is outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/acre of 37-18-00 was applied 2" below and 2" to the side  $(2 \times 2)$  of the seed row.

#### **Measures of Performance**

Yields are obtained from the South Dakota Crop Performance

Testing Program. Two-year and current yield averages are included where hybrids have been tested for the most recent two-year period.

Yield. Yield values are an average of three replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2012, the coefficient of variation (CV) values (a measure of experimental error) for yield was quite variable, ranging from a low of 4% in both trials at Bath to a high of 12% and 15% for the early and late trials, respectively, at Geddes. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors—all of which may or may not be controllable in a given year. Clearly, this year, drought

and variable seasonal moisture distribution and/or subsoil moisture conditions, along with above-average temperatures, combined to produce highly variable yields across our South Dakota corn growing regions. The top yield averages occurred at Bath and Bancroft, whereas, the plot grain yields were so low at Beresford the harvest equipment could not determine valid harvest yields.

#### Grain moisture content.

Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Hybrids that are above average in yield and can be stored without additional drying are desirable. At harvest, moisture values were determined by the combine moisture meter, which in turn was periodically verified with a Dickey-John GAC II meter.

Use of tables. Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids

# **Grow** | **2012** annual report - Geddes

before there is a significant yield difference. LSD values are given at the bottom of every column where there is significant difference among the averages within the column. If differences among the averages within a column are not significant, the LSD value is reported as "nonsignificant" (NS). The top performance group (TPG) for the performance factors yield (bu/a), bushel weight in (lbs.), harvest grain moisture (%), lodging below the ear (%), and final stand (%) are indicated in the performance tables by the shaded data values. Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values in each row, the better the hybrid did as a topperforming hybrid for a given test trial.

## Performance Trial Results

**Note:** Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values there are in each row the better the hybrid did as a top-performing hybrid for a given test trial.

Table E	3. Explanation of performance table references.
No.	Explanation of references
[1]	Entries are listed by Brand/Variety- Entries are sorted by 2-yr then by 2012 yield average.
[2]	Technology traits: Agr. = Agrisure; SmartStax or GenSSX= DowAgrosciences (DAS) or Monsanto Genuity (Gen), respectively; HX1, HXX = Herculex by DAS & Pioneer Hi-Bred, Opt. = Optimum AcreMax1 or Optimum AcreMaxXtra by Pioneer Hi-Bred, YG = Monsanto YieldGard.
[3]	Seed treatments: P/V500 = Poncho/Votivo 500, P/V1250 = Poncho/Votivo1250; CM250 = Cruiser Maxx250, CM1250 = Cruiser Max1250; MHL = Maxim XL, MQ = Maxim Quattro; PPST250 = Pioneer Premium Seed Treatment.
[4]	Brand Relative Maturity (Rel. Mat.)- the relative maturity rating reported by the test trial entrant.
[5]	Lodging Percentage- stalks broken below the ear as a percentage of the final stand; look for low values.
[6]	Final Stand Percentage - the number of standing stalks at harvest as a percentage of the seeding population.
[7]	Least Significant Difference (LSD 0.05) - the difference any two values within a column must be equal to or exceed for the values to be significantly different (0.05 level of probability). If the difference is less than the LSD value the difference between them is nonsignificant (NS).
[8]	Min. TPG-avg the minimum column value for yield, bushel weight, and final stand percentage that a hybrid must equal or exceed to be in the top performance group (TPG).
[9]	Max. TPG-avg the maximum column value for grain moisture at harvest, lodging percentage, or lodging score that a hybrid must equal or be less than to be in the TPG.
[10]	Coefficient of variation (C.V.)- the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% are less common ; while values of 6-15% are more common. If a value exceeds 15%; the trial had too much error to be valid, so the results are not reported.

# Grow | 2012 annual report - Geddes

Table 1. Geddes early maturity Roundup Ready corn hybrid test results, 2011-12, Curtis Sybesma Farm.							
	Del	Yield Ave	erages *,#	Other 2012 Averages##			
Brand/Hybrid [1] + Tech. Trait [2] + Seed Trt. [3]	Mat. [4]	2-Yr bu/a	2012 bu/a	Bu. Wt. Ib	Grain Moisture %	Ldg. % [5]	Final Stand % [6]
PIONEER/ P0533XR + OptAM1 + PPST250	105	145	132	59	17	0	92
DEKALB/ DKC48-12 + GenSSX + P/V500	98	129	114	59	12	0	92
WENSMAN/W 7320VT3PRO + GenVT3P + Acceleron	101	118	79	60	16	1	87
EPLEY/ E1418GT3000 + Agr3000GT + CM250	104	115	97	58	15	2	88
PIONEER/ 36V53 + HX1RR2 + PPST250	102	111	81	56	15	0	88
G2/ GEN. 5X-903 + HXXRR2 + MQ	103	93	89	55	17	1	88
DEKALB/DKC52-61 + GenVT2P + P/V500	102		119	59	13	0	88
G2 GEN./ 5H-0504 + HX1RR2 + P/V1250	105		115	58	13	0	89
PIONEER/ P0193HR + HX1RR2 + PPST250	101		108	57	15	0	93
CHANNEL/ 203-43VT3P + GenVT3P + P/V500	103		105	60	15	1	89
HOEGEMEYER/ HPT 7042 + OptAMX + CM250	100		103	58	14	0	86
CHANNEL/ 202-25VT3P + GenVT3P + P/V500			102	60	14	0	85
WENSMAN/W 7330VT3 + GenVT3P + Acceleron			101	57	12	0	90
HOEGEMEYER/ HPT 7584 + HXT/LL/RR + CM250			97	55	17	0	89
WENSMAN/W 9288VT3PRO + GenVT3P + Acceleron	98		93	60	13	0	90
RENK/ RK708SSTX + GenSSX + Acceleron	105		92	58	18	1	89
WENSMAN/W 9325VT3PRO + GenVT3P + Acceleron	102		89	60	15	0	86
DEKALB/ DKC52-04 + GenVT3P + P/V500	102		87	60	16	0	87
CHANNEL/ 204-06VT3P + GenVT3P + P/V500	104		81	58	18	0	93
DEKALB/ DKC49-30 + GenVT3P + P/V500	99		80	58	11	0	88
Trial avg.:	102	119	98	58	15	0	89
High avg.:	105	145	132	60	18	2	93
Low avg.:	98	93	79	55	11	0	85
[7] LSD(.05):		NS**	26	2	2	NS	NS
[8] Min.TPG value:		93	106	58			85
[9] Max.TPG value:					13	2	
[10] Coef. of var.:		11	15	2	8	215	3
No. entries:	20	6	20	20	20	20	20
NOTE: Table references [1-10] are explained in table B.							

\* Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2012 yield average

# Adjusted to 15.5% moisture.

\*\* NS indicates differences between column values are nonsignificant.

# Grow | 2012 annual report - Geddes

Table 2. Geddes late maturity Roundup Ready corn hybrid test results, 2011-12, Curtis Sybesma Farm.							
	Pol	Yield Ave	erages *,#	(	Other 2012 /	Averages	\$##
Brand/Hybrid [1] + Tech. Trait [2] + Seed Trt. [3]	Mat. [4]	2-Yr bu/a	2012 bu/a	Bu. Wt. Ib	Grain Moisture %	Ldg. % [5]	Final Stand % [6]
CHANNEL/209-85VT3P + GenVT3P + P/V500	109	133	118	55	19	2	95
DEKALB/ DKC62-97 + GenVT3P + P/V500		130	113	58	17	0	89
CHANNEL/ 211-99VT3P + GenVT3P + P/V500	111	126	113	57	15	1	92
NUTECH/ 5B-410 + AgrGT/CB/LL + MQ	110	125	113	56	19	0	92
G2/ GEN. 5H-0701 + HX1RR2 + MQ	107	124	109	57	15	0	93
WENSMAN/W 7473VT3 + YGVTRWRR2 + Acceleron	109	111	101	55	13	0	90
HOEGEMEYER/ HPTEXP7644 + HX1RR2 + CM250	106		141	58	15	0	91
PIONEER/ P0876HR + HX1RR2 + PPST250	108		136	61	16	0	93
PIONEER/ P1151HR + HX1RR2 + PPST250	111		132	59	16	0	90
WENSMAN/W 7459VT3PRO + GenVT3P + Acceleron	107		131	58	12	0	89
RENK/ RK741SSTX + GenSSX + Acceleron	108		124	59	16	0	90
CHANNEL/ 208-48VT3P + GenVT3P + P/V500	108		123	59	16	0	93
DEKALB/ DKC57-76 + GenVT3P + P/V500	107		118	59	18	0	82
HOEGEMEYER/ HPTEXP7715 + Opt AM + CM250			117	58	18	0	90
G2 GEN./ 5Z-407 + OptAMX + P/V1250			116	60	13	0	95
G2 GEN./ 5H-1005 + HX1RR2 + P/V1250			115	57	17	2	87
RENK/ RK795VT3P + GenVT3P + Acceleron			113	58	17	0	88
NUTECH/ 5N-907 + Agr3000GT + CM250			110	56	15	0	84
G2 GEN./ 5Z-008 + OptAMX + P/V1250	108		108	58	15	0	85
EPLEY/ E1804VT3PRO + GenVT3P + CM250	108		108	58	16	0	89
HOEGEMEYER/ HPTEXP7876 + Opt AM + CM250	108		106	59	15	1	90
DEKALB/ DKC61-17 + GenVT3P + P/V500	111		104	57	16	0	82
RENK/ RK752SSTX + GenSSX + Acceleron	106		91	58	16	2	92
NUTECH/ 5N-910 + Agr3000GT + MQ	110		90	56	17	0	93
G2 GEN./ 5Z-1205 + LL + P/V1250	112		88	57	20	1	89
Trial avg.:	109	125	114	58	16	0	90
High avg.:	112	133	141	61	20	2	95
Low avg.:	106	111	88	55	12	0	82
[7] LSD(.05):		9	23	1	3	NS**	5
[8] Min.TPG value:		124	118	60			90
[9] Max.TPG value:					15	2	
[10] Coef. of var.:		7	12	1	11	231	4
No. entries:	25	6	25	25	25	25	25
NOTE: Table references [1-10] are explained in table B							

NOTE: Table references [1-10] are explained in table B.

\* Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2012 yield average.

# Adjusted to 15.5% moisture.

 $\ast\ast$  NS indicates differences between column values are nonsignificant.

**Note:** The coefficients of variation (CVs) at the bottom of the yield columns (Tables 1 and 2) were 12 and 15%, respectively, for the early and late maturity trials. The high CV of 15% still enabled the statistical program to determine variety differences for those hybrids tested this year.

#### Early maturity trial, Table 1.

The test-trial yield average was 119 bu/a for two years and 98 bu/a in 2012. The average yield differences among the hybrids tested two years were nonsignificant (NS), so all the hybrids tested qualified for the TPG. Hybrids with yield averages of 106 bu/a or more in 2012 qualified for the TPG. In 2012, bushel weights averaged 58 lbs., grain moisture averaged 15%, lodging percentage averaged nearly zero, and percent final stand averaged 89%. In order for hybrids to be in

the TPG for these factors, they had to average 58 lbs. or more in bushel weight, 13% or less in grain moisture, 2% or less in lodging, and 85% or more for percent final stand. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 26 bu/a or more for yield in 2012, 2 lb. or more in bushel weight, and 2% or less in grain moisture. There were no differences among the hybrids tested in 2012 for lodging percentage or final stand percentage.

#### Late maturity trial, Table 2.

The test trial yield average was 125 bu/a for two years and 114 bu/a in 2012. Hybrids with yield averages of 124 bu/a or more for two years and 118 bu/a in 2012 qualified for the TPG. In 2012, bushel weights averaged 58 lbs., grain moisture averaged 16%,

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lodging percentage averaged nearly zero, and percent stand averaged 90%. In order for hybrids to be in the TPG for these factors, they had to average 60 lbs. or more in bushel weight, 15% or less in grain moisture, 2% or less in lodging, and 90% or more for final stand percentage. There were no differences in lodging percentage averages among the hybrids tested in 2012. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 9 bu/a or more for yield for two years and 23 bu/a for yield in 2012; 1 lb. or more in bushel weight, 3% or less in grain moisture, and 5% or more in the final stand percentage. There were no differences among the hybrids tested in 2012 for lodging percentage.

Table C.Mailing addresses for seed entries in the 2012 corn hybrid trials and listed by seed brand name				
Seed brand	Seed company mailing address			
Channel	Channelbio Corp., Box 277, Laurel, NE 68745			
Dairyland	PO Box 958, West Bend, WI 53095			
Dekalb	46040 SD Hwy 44, Chancellor, SD 57015			
Epley Bros.	Epley Bros. Hybrids Inc., 22494 Yale Ave., Shell Rock, IA 50670			
G-2 Genetics	G-2 Genetics, 2321 North Loop Drive, Suite 230, Ames, IA 50010			
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031			
Masters Choice	3010 St. Rt. 146 E, Anna, IL 62906			
NuTech	Nutech Seed, LLC, 2321 North Loop Drive, Suite 230, Ames, IA 50010			
Petersen Farms	3104 164th Ave. SE, Harwood, ND 58042			
Pioneer	Pioneer Hi-Bred International, 151 Saint Andrews Court-Suite 910, Mankato, MN 56001			
ProSeed	705 E. Brewster, Harvey, ND 58341			
Renk	6809 Wilburn Road, Sun Prairie, WI 53590			
Seeds 2000	Seeds 2000, 115 N 3rd St., Breckenridge, MN 56520			
Wensman	Wensman Seed Co., PO Box 190, Wadena, MN 56482			



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# 2012 annual report

#### OCTOBER 2012

# Corn production is greatly affected by hybrid selection.

This publication reports the agronomic performance of entries in the 2012 South Dakota performance trials for glyphosate-resistant field corn hybrids.

# Major factors in hybrid selection include:

- Yield
- Maturity
- Lodging resistance
- Seed traits

#### SDSU EXTENSION

# Corn Hybrid Performance Trials Results - Bancroft

Robert G. HallSDSU Extension AgronomistKevin K. KirbyAgricultural Research ManagerShawn HawksAgricultural Research Manager



These performance trials are conducted by the South Dakota Crop Performance Testing program at South Dakota State University. Corn test trial information is listed in table A, performance table footnote references including technology traits and seed treatments are listed in Table B. Mailing addresses for seed company entrants that participated in the 2012 test trials are listed in table C.

#### **General Test Procedures**

Seed companies pick one or more of the six test locations where their entries are tested. Entries are placed into "early" or "late" maturity trials. The relative maturity breaks between the early and late tests are 95 days for Bath and South Shore, 100 days for Bancroft and Volga, 105 days for Geddes, and 110 days for Beresford. Hybrids are assigned to trials based on the relative maturity rating reported by the participating seed company. In 2012, results from only five of the test locations are reported. Information from Beresford is not reported because the severe drought at that location prevented the collection of valid data.

Table A. General test information for 2012.					
LOCATION:	Glyphosate resistant corn trial results, Bancroft, SD				
COOPERATOR:	Weerts Farm Inc Bancroft				
SOIL TYPE:	Houdek-Stickney-Tetonka loam, 0–3% slope				
TILLAGE:	No-till				
FERTILITY-YIELD GOAL:	200 bushel				
PREVIOUS CROP:	Soybeans				
ROW SPACE:	30 inches				
SEEDING POPULATION:	30,000/acre				
WEED CONTROL:	Pre: 1 ounce Sharpen with burn down, Post: 1 quart Roundup.				
INSECT CONTROL:	None				
DISEASE CONTROL:	None				
DATE SEEDED:	May 3, 2012				

# **Experimental Procedures**

Entries were seeded in three replications, with each hybrid randomly located within each trial. Plots consisted of four 30-inch rows that were 20-feet long, with the center two rows harvested for yield. A Monosem precision row crop planter was used for seeding plots at all locations. In 2012, the precision planter was calibrated to deliver 29,621 seeds per acre, regardless of seed quality and germination percentage. No seeding rate adjustment was made for low germination. Therefore, percent stand is an indication of initial seed quality and the ability of the seed to cope with the production environment from seeding to harvest. Soil type, land preparation and previous crop history, pest control, and fertility yield goal at each test site is outlined in table A. Seedbed preparation was good at all locations. A starter fertilizer of 100 pounds/acre of 37-18-00 was applied 2" below and 2" to the side  $(2 \times 2)$  of the seed row.

## **Measures of Performance**

Yields are obtained from the South Dakota Crop Performance Testing Program. Two-year and current yield averages are included where hybrids have been tested for the most recent two-year period.

Yield. Yield values are an average of three replications and are expressed as bushels per acre, adjusted to 15.5% moisture on a dry-matter basis and a bushel weight of 56 pounds. Statistical tests were conducted to determine whether differences obtained were caused by variations in environment or were true hybrid differences. In 2012, the coefficient of variation (CV) values (a measure of experimental error) for yield was guite variable, ranging from a low of 4% in both trials at Bath to a high of 12% and 15% for the early and late trials, respectively, at Geddes. Experimental error may be the result of several factors, including test methods, or factors such as moisture, temperature, soil variations, or agronomic factors like seeding date, reseeding, or seed quality factors—all of which may or may not be controllable in a given year. Clearly, this year, drought and variable seasonal moisture distribution and/or subsoil

moisture conditions, along with above-average temperatures, combined to produce highly variable yields across our South Dakota corn growing regions. The top yield averages occurred at Bath and Bancroft, whereas, the plot grain yields were so low at Beresford the harvest equipment could not determine valid harvest yields.

Grain moisture content. Moisture content is expressed as the percentage of moisture in the shelled corn at harvest. Hybrids that are above average in yield and can be stored without additional drying are desirable. At harvest, moisture values were determined by the combine moisture meter, which in turn was periodically verified with a Dickey-John GAC II meter.

Use of tables. Check for the "least significant difference" (LSD) value at the bottom of each column of data averages. The LSD value indicates how much a variable such as yield must differ between two hybrids before there is a significant yield difference. LSD values are given at the bottom of every column where there is significant

difference among the averages within the column. If differences among the averages within a column are not significant, the LSD value is reported as "nonsignificant" (NS). The top performance group (TPG) for the performance factors yield (bu/a), bushel weight in (lbs.), harvest grain moisture (%), lodging below the ear (%), and final stand (%) are indicated in the performance tables by the shaded data values. Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values in each row, the better the hybrid did as a topperforming hybrid for a given test trial.

# Performance Trial Results

**Note:** Evaluate the performance of each hybrid (row) by moving across the table and observing if any of the reported performance values are shaded. The more shaded performance values there are in each row the better the hybrid did as a top-performing hybrid for a given test trial.

Table B	. Explanation of performance table references.
No.	Explanation of references
[1]	Entries are listed by Brand/Variety- Entries are sorted by 2-yr then by 2012 yield average.
[2]	Technology traits: Agr. = Agrisure; SmartStax or GenSSX= DowAgrosciences (DAS) or Monsanto Genuity (Gen), respectively; HX1, HXX = Herculex by DAS & Pioneer Hi-Bred, Opt. = Optimum AcreMax1 or Optimum AcreMaxXtra by Pioneer Hi-Bred, YG = Monsanto YieldGard.
[3]	Seed treatments: P/V500 = Poncho/Votivo 500, P/V1250 = Poncho/Votivo1250; CM250 = Cruiser Maxx250, CM1250 = Cruiser Max1250; MHL = Maxim XL, MQ = Maxim Quattro; PPST250 = Pioneer Premium Seed Treatment.
[4]	Brand Relative Maturity (Rel. Mat.)- the relative maturity rating reported by the test trial entrant.
[5]	Lodging Percentage- stalks broken below the ear as a percentage of the final stand; look for low values.
[6]	Final Stand Percentage - the number of standing stalks at harvest as a percentage of the seeding population.
[7]	Least Significant Difference (LSD 0.05) – the difference any two values within a column must be equal to or exceed for the values to be significantly different (0.05 level of probability). If the difference is less than the LSD value the difference between them is nonsignificant (NS).
[8]	Min. TPG-avg the minimum column value for yield, bushel weight, and final stand percentage that a hybrid must equal or exceed to be in the top performance group (TPG).
[9]	Max. TPG-avg the maximum column value for grain moisture at harvest, lodging percentage, or lodging score that a hybrid must equal or be less than to be in the TPG.
[10]	Coefficient of variation (C.V.)- the percent of experimental error associated with a test trial. Ideally, the CV value for yield is less than 15%. Values less than 5% are less common ; while values of 6-15% are more common. If a value exceeds 15%; the trial had too much error to be valid, so the results are not reported.

Table 1. Bancroft early maturity Roundup Ready corn hybrid test results, 2011-12, Weerts Farms Inc.							
	Del	Yield Ave	erages *,#	Other 2012 Averages##			##
Brand/Hybrid [1] + Tech. Trait [2] + Seed Trt. [3]	Mat. [4]	2-Yr bu/a	2012 bu/a	Bu. Wt. Ib	Grain Moisture %	Ldg. % [5]	Final Stand % [6]
WENSMAN/W 7290VT3PRO + GenVT3P + Acceleron	99	216	196	60	12	0	94
CHANNEL/ 197-67VT3P + GenVT3P + P/V500	97	208	189	60	13	0	91
NUTECH/ 5N-001 + Agr3000GT + MQ	100	206	191	57	11	0	84
DEKALB/ DKC48-12 + GenSSX + P/V500	98	200	196	58	12	0	95
DEKALB/ DKC50-66 + YGVTRWRR2 + P/V500	100	200	186	59	11	0	95
SEEDS 2000/ 9902 VP3111 + Agr311 + Acceleron	98	176	150	58	11	0	91
PIONEER/ P0062XR + HXXRR2 + PPST250	100		208	58	11	0	95
G2 GEN./ 5X-0004 + HXXRR2 + P/V1250	100		206	57	13	0	89
PIONEER/ P9917AM1 + OptAM1 + PPST250	99		205	60	12	0	93
WENSMAN/W 9288VT3PRO + GenVT3P + Acceleron	98		204	59	12	0	93
RENK/ RK585VT3P + GenVT3P + Acceleron	95		201	60	11	0	96
G2 GEN./ 5Z-198 + OptAMX + P/V1250	98		197	57	11	0	87
DEKALB/ DKC43-10 + GenVT2P + P/V500	93		193	59	11	0	93
DEKALB/ DKC49-30 + GenVT3P + P/V500	99		193	60	12	0	96
CHANNEL/ 196-76VT3P + GenVT3P + P/V500	96		192	60	12	0	95
DEKALB/ DKC46-20 + GenVT3P + P/V500	96		191	61	12	0	96
WENSMAN/W 7268VT3 + YGVTRWRR2 + Acceleron	96		191	59	12	0	96
EPLEY/ E9505RR + RR2 + MQ	95		189	62	12	1	94
PIONEER/ P9834HR + HX1RR2 + PPST250	98		185	57	12	0	94
DEKALB/ DKC43-48 + GenVT3P + P/V500	93		180	59	11	0	97
RENK/ RK576VT3P + GenVT3P + Acceleron	97	·	171	58	11	0	97
RENK/ RK578VT3P + GenVT3P + Acceleron	96		164	60	13	0	89
Trial avg.:	97	201	190	59	12	0	93
High avg.:	100	216	208	62	13	1	97
Low avg.:	93	176	150	57	11	0	84
[7] LSD(.05):		NS**	21	1	1	NS	4
[8] Min.TPG value:		176	187	61			93
[9] Max.TPG value:					12	1	
[10] Coef. of var.:		6	7	1	5	378	3
No. entries:	22	6	22	22	22	22	22

NOTE: Table references [1-10] are explained in table B.

 $^{\ast}$  Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2012 yield average.

# Adjusted to 15.5% moisture.

\*\* NS indicates differences between column values are nonsignificant.

Table 2. Bancroft late maturity Roundup Ready corn hybrid test results, 2011-12, Weerts Farms Inc.							
	Yield Averages *,#			Other 2012 Averages##			
Brand/Hybrid [1] + Tech. Trait [2] + Seed Trt. [3]	Mat. [4]	2-Yr bu/a	2012 bu/a	Bu. Wt. Ib	Grain Moisture %	Ldg. % [5]	Final Stand % [6]
PIONEER/ P0533XR + OptAM1 + PPST250	105	215	205	60	12	0	91
WENSMAN/W 7320VT3PRO + GenVT3P + Acceleron	101	208	193	61	14	0	93
PIONEER/ 36V53 + HX1RR2 + PPST250	102	207	201	59	12	0	90
G2/ GEN. 5X-903 + HXXRR2 + MQ	103	182	161	58	13	0	86
EPLEY/ E1418GT3000 + Agr3000GT + CM250	104	182	154	58	14	0	93
G2/ GEN. 5H-0701 + HX1RR2 + MQ	107	174	154	60	13	0	96
NUTECH/ 5B-604 + AgrGT/CB/LL + MQ	104		214	57	12	0	95
PIONEER/ P0193HR + HX1RR2 + PPST250	101		211	58	12	0	92
DEKALB/ DKC52-61 + GenVT2P + P/V500	102		207	58	13	0	92
G2 GEN./ 5H-0504 + HX1RR2 + P/V1250	105		200	58	14	0	92
PIONEER/ P0876HR + HX1RR2 + PPST250	108		197	60	16	0	91
RENK/ RK635VT3P + GenVT3P + Acceleron	102		195	60	12	0	93
NUTECH/ 5N-907 + Agr3000GT + CM250	110		193	57	12	0	90
WENSMAN/W 9325VT3PRO + GenVT3P + Acceleron	102		193	60	13	0	93
NUTECH/ 5N-0103 + Agr3000GT + CM250	101		190	58	11	0	92
G2 GEN./ 5H-502 + HX1RR2 + MQ	102		189	59	13	0	87
DEKALB/ DKC52-04 + GenVT3P + P/V500	102		185	58	15	1	88
G2 GEN./ 5Z-802 + OptAMX + P/V1250	102		185	58	12	0	85
SEEDS 2000/ 3011 G3 + Agr3000GT + Acceleron	101		183	56	11	0	89
G2 GEN./ 5H-202 + HX1RR2 + P/V1250	102		181	62	12	0	94
RENK/ RK708SSTX + GenSSX + Acceleron	105		178	59	13	0	93
WENSMAN/ W 7330VT3 + GenVT3P + Acceleron	103		171	59	12	0	91
TriaLavg.:	103	195	188	59	13	0	91
High avg.:	110	215	214	62	16	1	96
Low avg.:	101	174	154	56	11	0	85
[7] LSD(.05):		29	21	1	1	NS**	4
[8] Min.TPG value:		186	193	61			92
[9] Max.TPG value:					12	1	
[10] Coef. of var.:		5	7	1	5	396	3
No. entries:	22	6	22	22	22	22	22

NOTE: Table references [1-10] are explained in table B.

\* Entries are listed by Brand/Hybrid and sorted by 2-yr then by 2012 yield average

# Adjusted to 15.5% moisture.

\*\* NS indicates differences between column values are nonsignificant.

#### Early maturity trial, Table 1.

The test-trial yield averages were 201 bu/a for two years and 190 bu/a in 2012. Hybrids with yield averages of 176 bu/a or more for two years and 187 bu/a or more in 2012 qualified for the TPG. The yield average differences among the hybrids tested for two years were nonsignificant (NS). In 2012, bushel weights averaged 59 lbs., grain moisture averaged 12%, lodging averaged zero, and final stand percentage averaged 93%. In order for hybrids to be in the TPG for these factors, they had to average 61 lbs. or more in bushel weight, **12%** or less in grain moisture, 1% or less in lodging percentage, and 93% or

more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal **21 bu/a** or more for yield in 2012, **1 lb.** or more in bushel weight, **1%** or less in grain moisture, **1%** or less in lodging percentage and **4%** or more in the final stand percentage.

Late maturity trial, Table 2. The test-trial yield averages were 195 bu/a for two years and 188 bu/a in 2012. Hybrids that yielded 186 bu/a or more for two years and 193 bu/a or more in 2012 qualified for the TPG. In 2012, bushel weights averaged 59 lbs., grain moisture averaged 13%, lodging percentage averaged nearly zero, and the final stand percentage averaged 91%. In order for hybrids to be in the TPG for these factors, they had to average 61 lbs. or more in bushel weight, 12% or less in grain moisture, 1% or less in lodging percentage, and 92% or more for final stand percentage. In order for a hybrid variable to differ from one hybrid compared to another, their difference had to equal 29 bu/a or more for two years, 21 bu/a or more for 2012, 1 lb. or more in bushel weight, 1% or less in grain moisture, less than 1% in lodging percentage and 4% or more in the final stand percentage.

Table C.Mailing a	addresses for seed entries in the 2012 corn hybrid trials and listed by seed brand name							
Seed brand	Seed company mailing address							
Channel	Channelbio Corp., Box 277, Laurel, NE 68745							
Dairyland PO Box 958, West Bend, WI 53095								
Dekalb	calb 46040 SD Hwy 44, Chancellor, SD 57015							
Epley Bros.	Epley Bros. Hybrids Inc., 22494 Yale Ave., Shell Rock, IA 50670							
G-2 Genetics	G-2 Genetics, 2321 North Loop Drive, Suite 230, Ames, IA 50010							
Hoegemeyer	Hoegemeyer Hybrids, 1755 Hoegemeyer Road, Hooper, NE 68031							
Masters Choice	3010 St. Rt. 146 E, Anna, IL 62906							
NuTech	Nutech Seed, LLC, 2321 North Loop Drive, Suite 230, Ames, IA 50010							
Petersen Farms	3104 164th Ave. SE, Harwood, ND 58042							
Pioneer	Pioneer Hi-Bred International, 151 Saint Andrews Court-Suite 910, Mankato, MN 56001							
ProSeed	705 E. Brewster, Harvey, ND 58341							
Renk	6809 Wilburn Road, Sun Prairie, WI 53590							
Seeds 2000	Seeds 2000, 115 N 3rd St., Breckenridge, MN 56520							
Wensman	Wensman Seed Co., PO Box 190, Wadena, MN 56482							



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# 2013 South Dakota Corn Hybrid Trial Results – Bancroft

Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 2.5 miles north of Bancroft (57071) in Kingsbury County (GPS: UTM 14N, 595960 m East 4930132 m North) Cooperator: Weerts Farm Inc. Soil Type: Houdek-Stickney-Tetonka Ioam, 0-2% slope, non-irrigated Fertility-Yield Goal: 200 bu/ac Previous Crop: Soybean Tillage: No-till Row Spacing: 30 inches Seeding Rate: 29,620/acre Weed Management: Halex GT on June 30 Date seeded/harvested: June 3/Nov. 4

# ARCHIVE



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# 2013 Corn Hybrid Trial Results – Bancroft

Table 1. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Early Season Trial (100 day or less) at Bancroft (9 Brands, 31 hybrids).									
Hy	brid Information			Measurements					
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)		
Pioneer	P9917AMX	99	178.4	21.0	56.0	0.4	28.7		
Wensman	W 9288STXRIB	98	172.3	22.9	52.4	1.6	26.7		
Pioneer	P0062AMX	100	170.5	20.1	53.7	5.7	28.6		
Channel	195-58STX	95	166.7	18.7	54.4	0.0	27.6		
Channel	197-68STX	97	166.0	21.9	55.0	3.9	27.9		
Wensman	W 7290VT3PRIB	99	165.7	20.5	55.4	2.8	27.9		
NuTech/G2 Genetics	5Z-200	100	164.2	20.7	54.4	4.2	28.4		
Proseed	PX99A GT3000	99	163.0	22.6	52.1	3.9	25.0		
Renk	RK585VT3P	95	162.6	18.4	54.4	1.2	28.5		
Epley	E9505RR	95	161.9	19.1	57.9	0.4	27.7		
DEKALB	DKC43-48RIB	93	161.8	17.7	54.6	2.0	27.8		
Renk	RK596SSTX	98	160.9	20.6	54.8	0.4	27.1		
	СНЕСК	99	160.7	20.8	56.1	0.0	27.9		
Pioneer	P9526AMX	95	160.7	20.3	56.2	1.2	27.8		
Channel	196-77STX	96	159.8	19.1	56.1	1.2	28.1		
Nuseed	9504 VT3P	95	159.6	20.2	54.4	0.4	28.1		
Channel	197-33STX	97	159.4	21.8	55.6	0.4	28.2		
Renk	RK598SSTX	100	159.0	21.6	55.5	0.8	27.8		
Wensman	W 70975VT3PRO	97	156.5	20.8	56.0	1.2	27.8		
Nuseed	9503 VT2P	95	156.1	20.0	55.1	0.8	27.0		
Wensman	W 80978VT3PRO	97	155.9	18.7	53.7	0.4	27.6		
Channel	192-09VT3P	92	155.6	17.6	54.1	2.7	28.3		
Proseed	PX97 SSR	97	155.2	19.4	54.1	0.8	28.6		
DEKALB	DKC43-10RIB	93	154.2	17.7	54.7	5.2	27.3		
DEKALB	DKC46-20RIB	96	153.2	19.5	55.5	0.0	28.6		
DEKALB	DKC49-29RIB	99	151.8	20.8	55.0	1.2	28.0		
DEKALB	DKC48-12RIB	98	148.7	20.4	54.1	1.2	27.8		
Proseed	PX96 SSSG	96	148.2	19.9	56.0	0.0	27.7		
NuTech/G2 Genetics	5H-399	99	144.7	21.1	52.4	3.6	27.1		
Renk	RK581SSTX	100	143.8	22.4	53.8	0.8	27.3		
Wensman	W 90967STX	96	139.9	19.7	55.8	0.8	26.8		
	Tria	al Average	158.6	20.2	54.8	1.6	27.7		
	LS	SD (0.05)†	18.9	1.9	1.3	2.1	1.2		
		C.V.‡	8.5	6.8	1.7	-	3.1		

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
\*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

# 2013 Corn Hybrid Trial Results - Bancroft

Table 2. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Late Season Trial (101 day or more) at Bancroft (7 Brands, 22 hybrids).								
Hyt	orid Information		Measurements					
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (Ibs/bu)	Lodging* %	Final Stand (plants/A x 1000)	
NuTech/G2 Genetics	5H-905	105	175.8	22.4	51.7	0.8	28.3	
Pioneer	P0876YHR	108	174.7	25.1	53.9	5.9	28.0	
Epley	E1438VIP	104	174.5	23.9	51.7	3.9	28.4	
NuTech/G2 Genetics	5H-502	102	171.5	21.1	54.1	1.3	25.8	
Pioneer	P0297XR	102	170.4	22.4	54.2	2.7	28.0	
NuTech/G2 Genetics	5H-903	103	169.2	24.0	51.5	1.2	28.1	
NuTech/G2 Genetics	5H-805	105	167.6	21.7	52.6	1.2	27.6	
DEKALB	DKC52-04RIB	102	166.8	20.3	53.5	2.0	27.3	
	CHECK	99	166.8	21.1	55.9	1.1	28.9	
NuTech/G2 Genetics	5H-806	106	166.5	23.1	53.0	1.7	25.6	
Pioneer	P0533AM1	105	166.2	23.1	54.6	0.0	29.0	
DEKALB	DKC53-56RIB	103	166.1	23.2	52.2	1.2	27.6	
Wensman	W 9325STXRIB	102	164.8	21.2	53.4	2.3	27.8	
NuTech/G2 Genetics	5H-202	102	164.5	21.2	55.6	6.1	27.2	
NuTech/G2 Genetics	3D-802	102	161.0	23.1	51.2	0.4	27.2	
Wensman	W 7320VT3PRIB	101	159.6	22.3	54.7	0.9	25.2	
Pioneer	P0193AM	101	158.5	20.5	52.9	0.0	27.0	
Renk	RK699SSTX	105	157.3	24.9	53.1	1.0	23.6	
Renk	RK666SSTX	102	154.4	22.4	51.3	0.4	27.2	
Renk	RK633SSTX	101	153.2	20.6	53.0	2.4	27.3	
Wensman	W 91011STX	101	149.6	22.4	52.6	1.3	26.7	
Proseed	PX101R VT3P	101	146.6	21.2	52.9	0.4	27.8	
	163.9	22.3	53.2	1.7	27.2			
	14.6	1.7	1.2	2.4	1.6			
	6.3	5.4	1.6	-	4.2			

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
\*Lodging percentage – stalks broken below the ear as a percentage of the final stand.


Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 1.5 miles south of Volga (57071) in Brookings County (GPS: UTM 14N, 665388 m East 4907169 m North) Cooperator: SDSU Volga Research Farm – Doug Doyle and staff Soil Type: Brandt silty clay loam, 0-2% slope, non-irrigated Fertility-Yield Goal: 200 bu/ac Previous Crop: Spring wheat Tillage: Conventional Row Spacing: 30 inches Seeding Rate: 29,620/acre Weed Management: Dual II – Pre, Glyphosate – Post Date seeded/harvested: May 16/Nov. 2

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# 2013 Corn Hybrid Trial Results – Volga

Table 1. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Early Season Trial (100 day or less) at Volga (11 Brands, 31 hybrids).									
Hyt	orid Information				Measuremer	nts			
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)		
Channel	197-68STX	97	247.9	21.0	55.9	0.8	27.9		
Wensman	W 80978VT3PRO	97	246.4	19.5	55.2	0.0	28.5		
Renk	RK596SSTX	98	244.1	20.3	57.5	0.0	27.4		
Channel	197-33STX	97	241.2	19.8	57.1	0.0	28.0		
Hoegemeyer	HPT 7042 AMX-R	100	240.5	20.0	57.0	0.0	28.2		
Wensman	W 70975VT3PRO	97	239.2	19.4	57.5	0.0	28.0		
Wensman	W 7290VT3PRIB	99	239.2	20.5	57.6	0.0	27.6		
Pioneer	P9917AMX	99	237.4	20.0	58.0	0.0	26.6		
Masters Choice	MCT 4881	98	233.6	19.5	56.8	3.2	27.6		
Hoegemeyer	6200 GT/CB/LL	91	232.9	18.0	55.2	2.5	26.0		
DEKALB	DKC48-12RIB	98	232.5	17.7	56.6	0.0	28.5		
-	СНЕСК	99	231.5	19.5	57.8	1.6	27.7		
DEKALB	DKC43-48RIB	93	230.0	18.2	57.6	1.2	28.1		
Epley	E9505RR	95	229.6	18.2	58.0	0.0	27.0		
Nuseed	9503 VT2P	95	227.6	19.1	57.8	5.2	27.1		
Nuseed	9504 VT3P	95	226.7	18.5	57.4	0.0	27.8		
NuTech/G2 Genetics	G2 GEN. 5Z-200	100	223.2	18.6	56.3	1.6	27.6		
Wensman	W 9288STXRIB	98	222.2	19.1	56.6	0.4	27.3		
DEKALB	DKC46-20RIB	96	220.1	17.6	57.7	0.4	27.9		
Proseed	PX96 SSSG	96	220.0	18.6	58.1	3.1	25.7		
Pioneer	P0062AMX	100	219.4	17.5	55.2	3.1	28.0		
Renk	RK581SSTX	100	218.4	21.7	56.1	0.0	26.8		
DEKALB	DKC49-29RIB	99	218.4	19.2	56.9	0.8	27.0		
Renk	RK598SSTX	100	217.3	20.7	57.5	0.4	27.7		
Pioneer	P9526AMX	95	216.8	19.3	57.9	0.8	27.0		
Proseed	PX99A GT3000	99	216.6	18.3	55.3	0.4	27.8		
Proseed	PX97 SSR	97	215.6	19.2	56.3	0.0	28.4		
Wensman	W 90967STX	96	215.3	18.5	57.8	0.0	26.2		
Hoegemeyer	EXP 1221 HX/LL/RR	99	215.0	18.8	55.0	0.8	26.2		
DEKALB	DKC43-10RIB	93	214.0	16.7	55.2	0.0	27.4		
NuTech/G2 Genetics	5H-399	99	212.3	17.9	54.3	0.0	27.3		
	Tria	al Average	227.3	19.1	56.7	0.8	27.4		
	19.1	1.5	1.1	2.2	0.9				
		C.V.‡	6.0	5.6	1.4	-	2.4		

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
 \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

# 2013 Corn Hybrid Trial Results – Volga

able 2. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Late Season Trial (101 day or more) at Volga (10 Brands, 32 hybrids).								
Hyt	orid Information				Measuremer	nts		
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (Ibs/bu)	Lodging* %	Final Stand (plants/A x 1000)	
NuTech/G2 Genetics	5H-903	103	246.2	22.2	55.0	0.0	28.1	
Wensman	W 91011STX	101	244.4	21.6	56.6	0.0	26.4	
Channel	202-64STX	102	241.8	22.5	56.5	0.0	28.1	
NuTech/G2 Genetics	3D-802	102	240.6	22.7	55.4	0.0	26.5	
Masters Choice	5273000G	105	239.4	23.6	55.4	2.0	27.7	
Renk	RK633SSTX	101	238.4	21.9	55.4	0.0	27.4	
Renk	RK666SSTX	102	237.2	23.3	54.5	0.0	27.6	
Wensman	W 7330VT3PRIB	104	236.4	24.2	52.9	0.0	26.7	
DEKALB	DKC53-56RIB	103	235.8	22.6	56.1	0.0	28.1	
Pioneer	P0297XR	102	235.4	23.1	56.0	0.8	27.2	
Dairyland Seeds	DS-9809RA	109	235.0	24.9	54.5	0.4	28.1	
Pioneer	P0193AM	101	232.4	19.9	54.1	0.0	25.4	
Dairyland Seeds	DS-9501SSX	101	231.9	20.9	56.2	0.0	27.1	
Masters Choice	MCT 5373	103	230.0	23.2	55.4	0.4	26.9	
Wensman	W 7320VT3PRIB	101	229.5	23.3	57.2	0.0	24.6	
DEKALB	DKC52-04RIB	102	229.4	21.2	56.6	0.0	27.6	
	СНЕСК	99	228.4	21.8	57.4	0.0	27.2	
Wensman	W 9325STXRIB	102	228.2	20.7	54.8	0.9	25.8	
Pioneer	P0533AM1	105	227.0	22.8	56.8	0.0	27.1	
Renk	RK699SSTX	105	226.2	24.1	55.5	0.5	24.2	
NuTech/G2 Genetics	5H-805	105	225.1	21.2	55.1	0.0	25.6	
NuTech/G2 Genetics	5H-502	102	223.2	22.4	55.9	0.5	24.7	
Channel	203-44STX	103	221.1	22.1	55.5	0.0	27.1	
Masters Choice	MCT535GT	107	219.7	25.9	52.8	3.8	25.7	
NuTech/G2 Genetics	5H-905	105	218.6	19.7	54.2	0.8	27.1	
Channel	201-39STX	101	217.9	21.0	55.8	0.4	26.7	
NuTech/G2 Genetics	5H-806	106	216.9	23.5	54.2	0.0	25.0	
Masters Choice	MCT 5663	106	215.1	22.4	53.9	0.8	27.2	
Dairyland Seeds	DS-9604SSX	104	212.5	22.5	55.6	0.4	27.8	
Proseed	PX101R VT3P	101	210.3	20.9	54.6	0.4	26.6	
NuTech/G2 Genetics	5H-202	102	206.1	20.7	58.5	4.2	26.2	
Epley	E1438VIP	104	203.6	20.7	53.9	0.8	27.1	
	Tria	al Average	227.6	22.3	55.4	0.5	26.7	
	LS	SD (0.05)†	20.8	1.3	1.5	1.6	1.1	
		C.V.‡	6.5	4.3	1.9	-	3.0	
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† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
\*Lodging percentage – stalks broken below the ear as a percentage of the final stand.



Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 4 miles south of Bath (57427) in Brown County (GPS: UTM 14N, 552563 m East 5028350 m North) Cooperator: Gordon and Roger Locken Farms Soil Type: Great Bend silt loam, 0-2% slope, non-irrigated Fertility-Yield Goal: 200 bu/ac Soil Test: 4.5% OM, 5.3 pH, 24 ppm P (Olsen), 497 ppm K Previous Crop: Soybean Tillage: No-till Row Spacing: 30 inches Seeding Rate: 29,620/acre Weed Management: Glyphosate & Sharpen – Pre, Glyphosate – Post Date seeded/harvested: May 9/Nov. 5

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Table 1a. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Early Season Trial (95 day or less) at Bath (16 Brands, 43 hybrids).									
Hyl	brid Information				Measuremen	nts			
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (Ibs/bu)	Lodging* %	Final Stand (plants/A x 1000)		
Nuseed	9001 VP3220	90	233.0	18.5	54.5	0.4	25.6		
Channel	192-09VT3P	92	231.4	18.2	56.9	0.0	28.4		
	СНЕСК	99	230.2	20.9	57.4	0.0	28.3		
Wensman	W 8184VT2RIB	95	228.9	19.6	57.4	0.0	28.0		
Rea	3A929-RIB	92	228.3	18.6	58.2	0.0	27.6		
Wensman	W 80952VT2RIB	95	227.8	18.2	56.3	0.4	28.6		
Peterson Farms	PFS76S92	92	226.5	18.1	56.4	0.0	28.2		
Wensman	W 90935VT3PRO	93	225.6	17.8	57.7	0.4	28.3		
Renk	RK522SSTX	94	224.3	18.0	57.2	1.9	28.4		
Federal Hybrids	4440 VT3P	94	223.2	18.4	57.0	0.0	27.9		
Federal Hybrids	4640 VT3P	95	222.4	18.5	57.7	0.0	28.0		
Latham	LH 4455 VT3PRO	94	221.2	19.2	58.0	0.0	27.7		
Nuseed	9503 VT2P	95	221.2	18.8	57.3	0.0	27.6		
Latham	LH 4242 VT3PRO	92	221.1	18.6	57.5	0.0	28.2		
Wensman	W 7110VT3PRIB	90	221.0	17.8	56.8	0.0	28.0		
Rea	4A950-RIB	95	220.1	18.7	58.7	0.8	29.0		
Latham	LH 4568 VT3PRO	95	219.6	18.9	57.7	0.8	28.4		
Rea	4B941-RIB	94	218.4	17.6	57.8	0.0	28.6		
Renk	RK568VT3P	95	218.4	19.5	57.5	0.0	27.1		
Channel	195-58STX	95	218.3	18.1	56.5	0.0	26.4		
Pioneer	P9305YHR	93	217.7	18.3	57.1	0.4	28.4		
DEKALB	DKC43-48RIB	93	217.6	17.6	57.0	0.0	28.4		
Dairyland	DS-9791RA	91	217.3	18.1	56.9	0.4	28.2		
Renk	RK557SSTX	95	217.0	19.9	56.8	0.0	27.3		
Masters Choice	MCT 4564	92	217.0	20.2	53.0	0.4	27.8		
Epley	E9505RR	95	214.6	18.4	59.5	0.4	27.4		
Federal Hybrids	4520 VT3P	95	213.6	18.7	59.7	0.0	27.9		
NuTech/G2 Genetics	5X-894	94	213.0	18.0	56.7	0.4	28.2		
Latham	LH 4098 VT3PRO	90	212.4	18.0	57.5	0.0	27.2		
Nuseed	9504 VT3P	95	212.0	17.8	57.0	0.4	28.5		
DEKALB	DKC43-10RIB	93	211.8	17.6	56.1	0.0	27.4		
Proseed	1295 SS	95	211.8	19.7	57.5	0.0	25.6		
Pioneer	P9526AMX	95	211.7	18.7	58.1	0.8	28.1		
Rea	4B285-RIB	93	211.6	17.5	55.5	0.0	28.6		
Channel	191-87STX	91	209.0	17.5	57.6	0.4	27.0		
	Tria	al Average	216.6	18.4	57.1	0.3	27.6		
	LS	SD (0.05)†	14.6	1.2	1.3	NS	1.1		
		C.V.‡	4.8	4.6	1.6	-	2.7		

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence. No significant (NS) difference between hybrids.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
 \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

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Table 1b. Churchesets registent earn bubrid performance regults (average of 4 replications ported by yield) Early											
Season Trial (95	Season Trial (95 day or less) at Bath (16 Brands, 43 hybrids).										
•	Hybrid Information				Measuremer	nts					
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)				
Channel	189-03VT2P	89	208.9	16.1	57.4	0.8	27.3				
NuTech	EXP 5N-9404	94	208.4	20.3	55.6	0.4	23.7				
Federal Hybrids	4240 VT3P	92	207.9	18.1	56.6	0.8	28.7				
Rea	3A921-RIB	92	203.2	17.7	57.8	0.0	27.7				
Rea	3A901-RIB	90	203.1	17.5	56.1	0.0	25.8				
Renk	RK585VT3P	95	202.7	17.7	56.4	0.8	27.7				
Nuseed	9202 VT2P	92	201.7	17.0	55.6	0.0	27.3				
Renk	RK492SSTX	92	190.3	19.1	57.3	0.5	22.8				
	Tri	al Average	216.6	18.4	57.1	0.3	27.6				
	L	SD (0.05)†	14.6	1.2	1.3	NS	1.1				
		C.V.‡	4.8	4.6	1.6	-	2.7				

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence. No significant (NS) difference between hybrids.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
 \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

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Table 2a. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Late Season Trial (96 day or more) at Bath (12 Brands, 42 hybrids).									
Hyl	orid Information				Measuremen	nts			
			Yield	Grain			Final Stand		
Brand	Hybrid	Relative Maturity	Bu/A (15.5%)	Moisture %	l est Wt. (lbs/bu)	Lodging*	(plants/A x 1000)		
NuTech/G2 Genetics	5H-399	99	227.3	20.4	53.2	0.4	27.2		
Pioneer	P0193AM	101	226.0	20.8	53.1	1.6	27.2		
Wensman	W 7290VT3PRIB	99	225.1	19.2	56.6	0.0	28.6		
Wensman	W 9288STXRIB	98	224.4	21.1	54.6	0.0	27.1		
Pioneer	P9917AMX	99	223.7	20.2	56.9	0.0	27.6		
	CHECK	99	223.5	19.8	56.9	0.8	28.1		
DEKALB	DKC48-12RIB	98	223.1	17.8	55.3	0.4	27.7		
NuTech/G2 Genetics	3F-198	98	222.5	18.2	52.8	0.4	26.9		
Dekalb	DKC46-20RIB	96	221.4	18.4	58.1	1.5	27.6		
Dekalb	DKC52-04RIB	102	221.3	20.5	56.1	1.2	26.9		
Rea	5A992-RIB	99	220.8	20.8	54.5	0.0	27.3		
Nutech	5N-498	98	219.2	20.5	54.7	0.0	25.9		
Pioneer	P0297XR	102	219.1	22.0	55.1	2.4	27.0		
Peterson Farms	PFS55S96	96	218.8	19.2	57.1	0.0	27.4		
NuTech/G2 Genetics	5Z-200	100	218.5	18.8	54.7	0.4	27.7		
Latham	LH 5185 VT2PRO	101	218.1	20.7	55.2	2.1	25.8		
Latham	LH 4974 3000GT-A	99	217.8	21.0	52.8	0.0	28.3		
Dairyland	DS-9501SSX	101	217.4	19.6	54.4	0.0	27.1		
DEKALB	DKC49-29RIB	99	217.2	19.4	56.0	0.4	28.1		
Pioneer	P0062AMX	100	216.6	19.5	54.9	1.2	27.4		
Proseed	PX97 SSR	97	215.8	18.1	55.7	0.0	27.3		
Dairyland	DS-9898RA	98	215.8	23.6	53.2	0.0	27.9		
Proseed	PX96 SSSG	96	215.7	18.3	57.0	0.8	27.1		
Proseed	PX99A GT3000	99	214.5	20.4	53.0	0.0	25.8		
Rea	4A971-RIB	97	214.1	18.3	56.5	0.0	26.8		
Rea	5A508-RIB	99	213.4	20.4	56.9	0.4	27.0		
Peterson Farms	PFS88A97	97	213.4	19.8	54.3	0.4	27.1		
Latham	LH 5088 SS	100	211.9	20.8	55.5	0.0	26.1		
Latham	LH 4645 VT2PRO	96	211.8	18.1	54.8	0.4	28.1		
NuTech/G2 Genetics	5X-698	98	211.3	19.5	55.4	0.0	24.6		
Renk	RK581SSTX	100	211.1	21.5	55.5	0.0	28.3		
Wensman	W 90967STX	96	204.1	18.3	56.5	0.4	27.3		
NuTech/G2 Genetics	EXP 5Z-9605	96	204.0	19.0	55.0	0.4	27.4		
Masters Choice	MCT 4954	99	203.6	21.3	55.4	1.3	25.0		
Proseed	PX101R VT3P	101	200.3	19.9	54.4	0.4	26.1		
	Tria	al Average	213.9	19.8	55.3	0.5	27.0		
	LS	SD (0.05)†	14.1	1.3	1.0	NS	1.0		
		C.V.‡	4.7	4.5	1.3	-	2.6		

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence. No significant (NS) difference between hybrids.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
 \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

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Table 2b. Glyphos Season Trial (96)	Table 2b. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Late Season Trial (96 day or more) at Bath (12 Brands, 42 hybrids).										
	Hybrid Information	, i			Measuremer	nts					
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)				
Dairyland	DS-9796	96	200.2	19.7	55.3	0.0	28.2				
Rea	4A654-RIB	96	199.5	19.0	54.9	0.4	26.6				
Rea	5A980-RIB	98	199.3	18.0	57.6	0.4	27.1				
Renk	RK598SSTX	100	196.7	19.9	56.8	0.0	25.8				
Latham	LH 4679 SS	96	192.5	20.0	54.1	0.4	26.4				
Latham	LH 4926 VT3PRO	99	184.1	21.4	54.4	0.5	23.0				
Trial Average		al Average	213.9	19.8	55.3	0.5	27.0				
	LSD (0.05)†			1.3	1.0	NS	1.0				
		C.V.‡	4.7	4.5	1.3	-	2.6				

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence. No significant (NS) difference between hybrids.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
 \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

# KCHIVF



### 2013 South Dakota Corn Hybrid Trial Results – South Shore

Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 8.5 miles west of South Shore (57263) in Codington County (GPS: UTM 14N, 649641 m East 4996544 m North) Cooperator: SDSU Northeast Research Farm – Allen Heuer Soil Type: Kranzburg-Brookings silty clay loam, 0-2% slope, non-irrigated Fertility-Yield Goal: 200 bu/ac (180 lbs N/ac, 110 lbs P<sub>2</sub>0<sub>5</sub>/ac, and 60 lbs K<sub>2</sub>0/ac) Soil Test: 24 ppm P & 142 ppm K Previous Crop: Soybean Tillage: Conventional till Row Spacing: 30 inches Seeding Rate: 29,620/acre Weed Management: Dual II – Pre, Glyphosate – Post Date seeded/harvested: May 13/Nov. 6

# ARCHIVE



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# 2013 Corn Hybrid Trial Results - South Shore

Table 1a. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Early Season Trial (95 day or less) at South Shore (15 Brands, 40 hybrids).									
Hyl	prid Information	, <del></del>			Measuremer	nts			
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging*	Final Stand (plants/A x 1000)		
	CHECK	99	185.0	18.4	56.8	0.4	27.1		
Rea	3A901-RIB	90	182.3	15.0	54.9	0.0	27.9		
NuTech/G2 Genetics	5X-894	94	182.2	16.3	55.7	0.0	27.6		
Channel	191-87STX	91	179.7	15.8	56.8	2.5	26.9		
Federal Hybrids	4520 VT3P	95	177.8	16.5	57.8	0.0	28.1		
Peterson Farms	PFS76S92	92	177.7	18.1	55.3	0.0	28.6		
Channel	195-58STX	95	177.7	15.0	54.0	0.0	28.4		
Epley	E9505RR	95	174.4	16.9	57.6	0.4	27.6		
Federal Hybrids	4240 VT3P	92	171.9	17.4	56.2	0.0	28.7		
Latham	LH 4098 VT3PRO	90	168.2	14.7	54.9	0.4	28.5		
Wensman	W 90935VT3PRO	93	168.0	14.0	55.1	0.0	28.1		
Wensman	W 7140VT3PRIB	93	167.1	17.3	57.3	0.4	26.2		
Renk	RK585VT3P	95	166.7	15.7	55.0	0.0	27.8		
Proseed	1295 SS	95	165.6	18.9	55.4	0.0	25.3		
Rea	4B285-RIB	93	164.1	14.6	53.9	0.8	28.0		
Pioneer	P9526AMX	95	163.1	16.1	56.9	5.4	28.3		
Channel	189-03VT2P	89	162.9	14.7	56.6	0.8	26.9		
DEKALB	DKC43-48RIB	93	162.3	15.9	55.3	0.0	28.6		
Federal Hybrids	4640 VT3P	95	162.2	15.7	55.2	0.8	27.8		
Nuseed	9202 VT2P	92	161.6	14.3	53.8	1.3	25.9		
Nuseed	9504 VT3P	95	161.6	15.8	55.2	0.8	28.3		
Latham	LH 4568 VT3PRO	95	161.2	15.9	54.2	0.0	28.4		
Nuseed	9001 VP3220	90	160.7	14.1	52.6	0.8	28.3		
Channel	192-09VT3P	92	159.7	15.8	54.5	0.0	28.0		
Rea	4B941-RIB	94	159.0	17.2	56.1	0.0	28.0		
Latham	LH 4455 VT3PRO	94	158.6	17.6	56.3	2.0	26.9		
Renk	RK522SSTX	94	155.9	16.3	55.2	0.4	27.8		
Latham	LH 4242 VT3PRO	92	154.1	17.2	55.6	0.0	28.4		
Nuseed	9503 VT2P	95	151.0	16.4	55.9	0.0	27.9		
DEKALB	DKC43-10RIB	93	150.8	16.0	54.9	0.4	27.1		
Dairyland	DS-9791RA	91	150.5	16.7	55.9	0.4	28.7		
Renk	RK568VT3P	95	150.0	17.3	56.2	0.4	27.4		
Rea	3A921-RIB	92	149.8	16.5	55.7	0.0	28.1		
Rea	3A929-RIB	92	148.9	16.9	55.9	0.0	28.4		
Federal Hybrids	4440 VT3P	94	148.8	16.9	55.9	0.4	28.4		
	Tria	al Average	161.6	16.2	55.5	0.5	27.5		
	LS	SD (0.05)†	14.6	1.1	0.9	1.7	1.2		
		C.V.‡	6.4	4.7	1.2	-	3.0		

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence. No significant (NS) difference between hybrids.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
 \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

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# 2013 Corn Hybrid Trial Results - South Shore

Table 1b. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Early Season Trial (95 day or less) at South Shore (15 Brands, 40 hybrids).										
ŀ	Hybrid Information				Measuremer	its				
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)			
Renk	RK557SSTX	95	148.8	17.4	54.0	0.0	27.6			
Renk	RK492SSTX	92	145.9	16.7	56.7	0.0	21.3			
Rea	4A950-RIB	95	144.9	15.1	55.6	0.0	27.8			
NuTech	EXP 5N-9404	94	143.9	17.7	55.1	1.0	23.8			
Pioneer	P9305YHR	93	140.3	15.6	53.9	2.3	28.3			
	Tria	al Average	161.6	16.2	55.5	0.5	27.5			
LSD (0.05)† 14.6 1.1 0.9 1.7 1.2							1.2			
		C.V.‡	6.4	4.7	1.2	-	3.0			

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence. No significant (NS) difference between hybrids.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable. \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

# KCHIVE

# 2013 Corn Hybrid Trial Results - South Shore

Table 2a. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Late Season Trial (96 day or more) at South Shore (12 Brands, 42 hybrids).									
Hyt	orid Information	uo, 12 11961			Measuremer	nts			
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging*	Final Stand (plants/A x 1000)		
Channel	197-33STX	97	194.4	20.0	56.9	1.6	27.8		
Pioneer	P9917AMX	99	193.5	19.1	58.4	0.4	28.1		
NuTech/G2 Genetics	5X-698	98	191.1	19.6	58.6	1.8	24.1		
	СНЕСК	99	190.0	19.3	56.8	0.4	27.8		
DEKALB	DKC48-12RIB	98	188.5	17.9	55.5	0.0	28.1		
Channel	197-68STX	97	187.3	18.8	55.1	0.8	28.4		
Latham	LH 5185 VT2PRO	101	185.2	19.9	56.7	2.1	26.4		
Rea	4A654-RIB	96	183.6	17.7	57.1	0.0	28.2		
NuTech/G2 Genetics	3F-198	98	181.9	16.1	53.6	0.0	26.0		
Rea	5A508-RIB	99	181.5	19.3	56.3	0.0	27.9		
Proseed	PX101R VT3P	101	180.6	20.7	55.0	0.4	27.9		
DEKALB	DKC52-04RIB	102	180.6	19.3	56.4	0.8	27.2		
Peterson Farms	PFS55S96	96	180.6	18.3	58.2	0.4	27.2		
DEKALB	DKC49-29RIB	99	180.3	19.6	56.1	0.0	27.4		
Rea	5A992-RIB	99	179.6	17.8	54.4	0.0	27.9		
Wensman	W 90967STX	96	178.9	17.5	56.7	0.8	27.3		
Latham	LH 5088 SS	100	178.6	22.4	55.4	0.4	27.9		
Latham	LH 4645 VT2PRO	96	178.0	17.2	54.1	0.4	27.2		
Channel	196-77STX	96	177.5	18.6	57.8	0.0	28.3		
Pioneer	P0062AMX	100	177.3	17.6	54.2	1.6	28.2		
Wensman	W 9288STXRIB	98	176.7	19.6	56.2	0.8	27.1		
DEKALB	DKC46-20RIB	96	174.8	17.9	57.4	0.0	28.6		
Wensman	W 70975VT3PRO	97	174.1	18.4	57.3	0.4	28.0		
NuTech/G2 Genetics	EXP 5Z-9605	96	172.5	17.0	56.0	0.0	26.8		
Latham	LH 4974 3000GT-A	99	170.5	18.5	53.9	1.3	24.9		
Dairyland	DS-9501SSX	101	169.1	19.5	56.1	1.6	28.5		
Latham	LH 4926 VT3PRO	99	168.3	21.9	55.5	0.0	23.2		
Peterson Farms	PFS88A97	97	167.0	18.1	54.8	0.0	26.9		
Proseed	PX97 SSR	97	166.2	18.4	56.4	0.0	27.8		
Renk	RK596SSTX	98	166.1	18.3	56.6	0.9	25.8		
Proseed	PX99A GT3000	99	165.0	18.5	53.6	2.6	24.2		
NuTech	5N-498	98	164.0	18.8	54.4	1.2	27.2		
Rea	5A980-RIB	98	164.0	17.4	58.5	0.4	27.4		
Dairyland	DS-9796	96	163.0	17.9	57.0	0.4	28.1		
Latham	LH 4679 SS	96	162.3	18.6	54.8	0.0	27.4		
	Tria	al Average	174.2	18.7	55.9	0.6	27.2		
	LS	SD (0.05)†	14.3	1.3	1.4	NS	1.0		
		C.V.‡	5.9	4.9	1.8	-	2.6		

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence. No significant (NS) difference between hybrids.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
 \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

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# 2013 Corn Hybrid Trial Results – South Shore

Table 2b. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Late Season         Trial (96 day or more) at South Shore (12 Brands, 42 hybrids).											
Hy	brid Information				Measuremer	nts					
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)				
NuTech/G2 Genetics	5Z-200	100	162.1	17.8	52.6	2.7	28.4				
Renk	RK581SSTX	100	162.0	22.0	56.2	0.0	27.3				
Proseed	PX96 SSSG	96	161.6	15.9	57.0	0.0	27.3				
NuTech/G2 Genetics	5H-399	99	161.1	18.1	53.8	1.2	27.3				
Dairyland	DS-9898RA	98	161.1	21.4	54.7	0.0	28.6				
Rea	4A971-RIB	97	159.2	17.5	55.3	0.4	26.2				
Renk	RK598SSTX	100	158.3	18.3	57.0	0.0	27.3				
	Tri	al Average	174.2	18.7	55.9	0.6	27.2				
	L	SD (0.05)†	14.3	1.3	1.4	NS	1.0				
		C.V.‡	5.9	4.9	1.8	-	2.6				

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence. No significant (NS) difference between hybrids.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

\*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

# ARCHIVE



Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 6 miles west & 3 miles south of Beresford (57004) in Clay County (GPS: UTM 14N, 670979 m East 4768145 m North) Cooperator: SDSU Southeast Research Center – Peter Sexton and staff Soil Type: Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated Fertility-Yield Goal: 200 bu/ac Fertilizer program: 62 lbs N/ac & 84 lbs P<sub>2</sub>0<sub>5</sub>/ac – Preplant; 30-10-10 (N-P<sub>2</sub>0<sub>5</sub>-K<sub>2</sub>0 lbs/ac) – Starter; 42 lbs N/ac – Sidedress Previous Crop: Soybean Tillage: No-till Row Spacing: 30 inches Seeding Rate: 29,620/acre Weed Management: Dual and Glyphosate – Pre, Callisto and Atrazine – Post Date seeded/harvested: May 14/Nov. 8



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# 2013 Corn Hybrid Trial Results - Beresford

Table 1a. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Early Season Trial (110 day or less) at Beresford (10 Brands, 36 hybrids).									
Hyt	orid Information	, <b>,</b>	-7-		Measuremen	its			
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)		
Hoegemeyer	HPT 7876 AM	108	233.6	18.7	61.7	4.2	28.5		
NuTech	5B-410	110	232.6	19.0	58.9	0.4	27.8		
Dairyland	DS-9610	110	231.5	19.0	59.3	3.9	27.9		
Channel	209-53STX	109	227.9	20.2	60.1	1.6	28.1		
Pioneer	P0533AM1	105	227.9	17.9	61.7	0.4	28.9		
NuTech/G2 Genetics	5Z-109	109	225.6	19.8	61.2	8.9	28.0		
Hoegemeyer	HPT 8066 AM	110	225.3	18.8	61.4	13.2	28.0		
NuTech/G2 Genetics	5F-008	108	225.0	18.4	61.4	2.4	28.1		
Wensman	W 7330VT3PRIB	104	224.7	17.0	58.1	0.4	27.4		
	СНЕСК	99	223.8	16.9	61.2	0.4	29.0		
NuTech/G2 Genetics	5Z-709	109	223.4	18.6	60.2	16.8	28.0		
Pioneer	P0193AM	101	222.9	16.6	59.3	0.0	27.1		
Hoegemeyer	HPT 7644 HX/LL/RR	106	222.5	17.8	60.9	3.4	28.4		
NuTech/G2 Genetics	5H-707	107	221.2	18.0	60.7	3.9	27.6		
Pioneer	P0636HR	106	220.2	17.7	60.8	1.6	28.0		
DEKALB	DKC52-04RIB	102	220.0	17.1	59.6	0.8	28.7		
NuTech/G2 Genetics	5H-905	105	219.4	16.6	59.3	1.5	28.2		
NuTech/G2 Genetics	5H-610	110	218.2	18.5	60.9	3.3	27.1		
Renk	RK797SSTX	109	217.6	17.8	60.8	0.8	27.8		
Renk	RK776VT3P	107	217.5	18.7	61.2	6.2	26.8		
NuTech/G2 Genetics	5H-805	105	217.3	17.5	60.5	0.0	28.2		
Wensman	W 7473VT3PRIB	109	217.1	18.6	57.2	0.4	27.3		
NuTech/G2 Genetics	5H-806	106	216.8	17.8	61.2	2.1	26.5		
Pioneer	P0297XR	102	215.9	17.3	60.9	1.5	28.0		
Wensman	W 7459VT3PRIB	107	214.3	17.9	59.3	0.4	27.7		
Renk	RK791SSTX	108	214.2	17.2	59.8	8.2	28.0		
DEKALB	DKC57-75RIB	107	211.9	17.7	59.7	1.9	27.3		
Channel	208-49STX	108	210.5	18.8	60.5	0.8	28.4		
Pioneer	P0876YHR	108	210.1	20.1	62.8	4.3	27.9		
NuTech/G2 Genetics	5F-811	110	209.0	19.8	61.2	6.7	27.7		
	Tria	al Average	217.3	18.1	60.3	3.7	27.8		
	13.0	0.8	1.2	3.7	1.0				
		C.V.‡	4.3	3.2	1.4	-	2.6		

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
\*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

# 2013 Corn Hybrid Trial Results - Beresford

Table 1b. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Early Season Trial (110 day or less) at Beresford (10 Brands, 36 hybrids)										
Season mar(110	Hybrid Information			15).	Measuremer	nts				
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)			
Wensman	W 9325STXRIB	102	207.7	16.7	60.0	0.0	27.7			
Channel	206-78STX	106	205.2	17.7	61.0	3.3	26.9			
DEKALB	DKC53-56RIB	103	200.5	17.0	60.5	0.0	27.7			
Dairyland	DS-9809RA	109	199.9	18.4	58.6	5.3	28.5			
Epley	E1804VT3PRO	108	195.8	19.3	59.7	21.9	27.9			
Wensman	W 91011STX	101	194.2	16.5	60.0	0.4	26.0			
	Tria	al Average	217.3	18.1	60.3	3.7	27.8			
	L	SD (0.05)†	13.0	0.8	1.2	3.7	1.0			
		C.V.‡	4.3	3.2	1.4	-	2.6			

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable. \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

# **KCHIVE**

# 2013 Corn Hybrid Trial Results - Beresford

Table 2. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Late Season Trial (111 day or more) at Beresford (5 Brands, 8 hybrids).									
Hyl	brid Information		Measurements						
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)		
DEKALB	DKC62-97RIB	112	225.2	19.2	59.5	1.7	25.4		
NuTech/G2 Genetics	5Z-612	112	216.8	20.0	59.9	18.2	28.2		
	СНЕСК	99	216.6	16.9	60.5	1.1	28.5		
DEKALB	DKC63-33RIB	113	211.1	18.2	60.8	0.4	27.3		
Channel	211-24STX	111	210.6	18.4	59.4	3.9	28.1		
Wensman	W 7566VT3PRIB	111	209.1	18.7	56.5	3.6	27.6		
Pioneer	P1151AM	111	204.8	18.4	60.8	5.1	27.7		
DEKALB	DKC61-16RIB	111	203.7	18.0	60.3	3.1	27.6		
	٦	rial Average	212.2	18.5	59.7	4.6	27.5		
		LSD (0.05)†	13.3	0.7	0.9	3.8	1.1		
		C.V.‡	4.2	2.6	1.0	-	2.6		

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable. \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

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### 2013 South Dakota Corn Hybrid Trial Results – Geddes

#### Nathan Mueller | SDSU Extension Agronomist Kevin Kirby | Ag Research Manager/Specialist Shawn Hawks | Ag Research Manager/Specialist

Location: 1.5 miles west & 0.5 miles north of Geddes (57342) in Charles Mix County (GPS: UTM 14N, 527310 m East 4790375 m North) Cooperator: Curtis Sybesma Farm Soil Type: Highmore-Eakin silt loam, 0-2% slope, non-irrigated Fertility-Yield Goal: 180 bu/ac, included starter fertilizer of 30-10-10 (N-P<sub>2</sub>0<sub>5</sub>-K<sub>2</sub>0 lbs/ac) Previous Crop: Soybean Tillage: No-till Row Spacing: 30 inches Seeding Rate: 25,300/acre Weed Management: Harness Extra – Pre, Glyphosate – Post Date seeded/harvested: May 14/Nov. 8

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# 2013 Corn Hybrid Trial Results – Geddes

Table 1. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Early Season Trial (105 day or less) at Geddes (6 Brands, 16 hybrids).									
Hyl	brid Information	e nybridoj.	Measurements						
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)		
Epley	E1438VIP	104	232.0	17.3	58.9	0.9	24.7		
Channel	202-64STX	102	227.9	16.7	60.3	0.0	24.5		
Pioneer	P0533AM1	105	226.8	17.2	60.3	0.0	24.2		
DEKALB	DKC52-04RIB	102	226.7	16.9	60.9	0.5	24.6		
Pioneer	P0193AM	101	225.0	15.8	58.2	0.0	23.8		
NuTech/G2 Genetics	5H-905	105	224.7	15.7	59.4	0.0	24.9		
DEKALB	DKC53-56RIB	103	222.1	16.6	60.3	0.0	24.1		
Channel	203-44STX	103	219.7	17.0	59.8	0.0	24.7		
Wensman	W 9325STXRIB	102	219.4	15.6	60.5	1.3	24.0		
Wensman	W 91011STX	101	216.6	15.5	60.8	0.0	23.8		
DEKALB	DKC48-12RIB	98	215.8	14.5	58.3	0.0	25.2		
Pioneer	P0297XR	102	215.6	16.4	60.3	0.0	25.3		
NuTech/G2 Genetics	5H-805	105	213.0	16.3	60.3	0.0	24.5		
DEKALB	DKC49-29RIB	99	211.8	16.5	60.1	0.5	24.2		
	СНЕСК	99	204.9	16.7	61.2	0.5	24.9		
Channel	201-39STX	101	202.7	15.6	59.0	0.5	24.0		
	Tr	ial Average	219.0	16.3	59.9	0.3	24.5		
	L	SD (0.05)†	14.6	0.9	1.0	NS	NS		
		C.V.‡	4.7	4.0	1.2	-	3.1		

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
 \*Lodging percentage – stalks broken below the ear as a percentage of the final stand.

# 2013 Corn Hybrid Trial Results - Geddes

Table 2. Glyphosate-resistant corn hybrid performance results (average of 4 replications sorted by yield) – Late Season Trial (106 day or more) at Geddes (8 Brands, 25 hybrids).							
Hyt	orid Information	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Measuremer	nts	
Brand	Hybrid	Relative Maturity	Yield Bu/A (15.5%)	Grain Moisture %	Test Wt. (lbs/bu)	Lodging* %	Final Stand (plants/A x 1000)
Dairyland	DS-9610	110	240.0	19.9	57.8	1.7	25.3
NuTech/G2 Genetics	5Z-709	109	236.8	19.8	59.1	1.3	24.5
NuTech/G2 Genetics	5F-811	110	227.4	20.7	61.1	0.0	24.5
NuTech/G2 Genetics	5Z-109	109	224.1	20.5	60.3	2.7	24.3
NuTech/G2 Genetics	5H-610	110	224.0	20.5	59.5	9.0	24.3
Pioneer	P0876YHR	108	222.6	20.4	60.8	1.8	24.8
Channel	211-24STX	111	222.2	20.2	58.9	4.3	23.3
Renk	RK776VT3P	107	221.8	19.2	60.8	2.2	24.3
Pioneer	P0636HR	106	220.0	17.8	59.8	0.9	24.8
Renk	RK791SSTX	108	219.9	19.0	59.4	1.4	24.0
NuTech	5B-410	110	218.5	19.6	58.2	4.6	23.8
NuTech/G2 Genetics	5H-707	107	217.3	19.1	58.8	1.9	23.6
Dairyland	DS-9809RA	109	217.2	18.6	57.9	0.9	24.9
Wensman	W 7459VT3PRIB	107	217.0	20.0	57.6	0.5	22.9
NuTech/G2 Genetics	5Z-612	112	216.5	19.5	60.3	1.4	23.1
Pioneer	P1151AM	111	216.0	21.2	59.3	3.6	24.7
Wensman	W 7473VT3PRIB	109	214.9	18.2	55.2	0.5	23.1
NuTech/G2 Genetics	5F-008	108	214.0	20.3	60.6	1.3	24.8
Epley	E1804VT3PRO	108	209.4	19.5	59.7	3.9	24.4
NuTech/G2 Genetics	5H-806	106	207.9	18.2	59.7	0.5	23.1
Channel	209-53STX	109	205.6	20.5	59.3	5.8	21.3
Channel	208-49STX	108	203.8	18.9	60.5	2.6	25.0
	СНЕСК	99	202.4	17.3	59.8	0.5	24.0
Renk	RK797SSTX	109	201.8	17.9	59.9	0.0	23.7
Channel	206-78STX	106	199.8	18.0	60.1	1.0	23.0
	Tria	al Average	216.8	19.4	59.4	2.2	24.0
	LS	SD (0.05)†	16.5	1.8	1.2	4.1	1.2
		C.V.‡	5.4	6.7	1.4	-	3.4

† Yield, moisture, test weight, lodging, and plant population value required (≥LSD) to determine if hybrids are different from each other with confidence.

C.V. is a measure of variability or experimental error, 15% or less is acceptable.
\*Lodging percentage – stalks broken below the ear as a percentage of the final stand.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	b miles west and 3 miles south of Beresford (57432) in Clay county, SD							
	(GPS: N 43°02.774' W 096°54.079')							
Cooperator:	SDSU Southeast Research Farm - Peter Sexton, manager							
Soil Type:	Egan-Clarno-Trent silty clay loam, 0-2% slope, non-irrigated							
Fertilizer:	120-0-80 preplant; 30-10-10 starter; 60-0-0 sidedress							
Yield Goal:	200 bu/acre							
Previous crop:	Soybeans							
Tillage:	Conventional							
Row spacing:	30 inches							
Seeding Rate:	31,400/acre							
Herbicide:	Pre: Glyphosate, Dual, Metribuzin, Sharpen							
	Post: Atrazine, Callisto							
Date seeded:	5/16/2014							
Date harvested:	10/26/2014							
Fertilizer: Yield Goal: Previous crop: Tillage: Row spacing: Seeding Rate: Herbicide: Date seeded: Date harvested:	120-0-80 preplant; 30-10-10 starter; 60-0-0 sidedress 200 bu/acre Soybeans Conventional 30 inches 31,400/acre Pre: Glyphosate, Dual, Metribuzin, Sharpen Post: Atrazine, Callisto 5/16/2014 10/26/2014							



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (110day maturity or less) at Beresford, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	5F-709	109	237.9	19.3	58.1	0.0	28600
Nutech/G2 Genetics	5H-905	105	235.7	17.4	59.2	0.0	29000
Nutech/G2 Genetics	5F-805	105	233.7	18.0	59.9	0.0	28600
Channel	209-53STXRIB	109	232.5	19.7	59.3	0.0	28500
Renk	RK776SSTX	107	232.2	19.2	59.8	0.0	27100
Nutech/G2 Genetics	EXP 5Z-0906	109	231.2	18.0	60.1	0.0	28300
Renk	RK752SSTX	105	230.7	18.8	59.3	0.0	28900
Wensman	W 91073STXRIB	107	230.4	19.4	58.5	0.0	28700
REA Hybrids	6A071-RIB	107	229.5	19.1	58.0	0.4	28700
Titan Pro	2M04-2P	105	229.4	18.5	59.2	0.0	28700
Hoegemeyer	HPT 8066 AM	110	229.3	18.8	57.8	0.4	27300
Great Lakes Hybrids	5918STXRIB	109	228.6	18.4	57.9	0.0	28500
Dairyland Seed	DS-6805	105	228.6	18.5	57.5	0.0	29200
Hoegemeyer	HPT 7876AM	108	228.4	19.0	60.9	0.4	29200
Renk	RK712SSTX	106	228.0	18.5	59.4	0.0	29000
Renk	RK834SSTX	110	227.4	22.3	56.7	0.0	28300
Great Lakes Hybrids	6068STXRIB	110	226.9	19.3	58.6	0.0	27800
Wensman	W 91095STX	109	226.5	19.8	60.1	0.4	28300
Great Lakes Hybrids	5755STXRIB	107	226.4	18.9	58.2	0.0	28400
Titan Pro	2M07-SS	107	225.1	19.2	59.5	0.8	28600
Pioneer	P0533AM1	105	225.0	19.7	60.0	0.0	28900
Channel	209-46STXRIB	109	224.2	19.0	59.0	0.0	29300
Nutech/G2 Genetics	5D-109	109	223.7	20.6	60.0	0.0	27700
Legend Seeds	LR 9405 GENSSRIB	105	222.2	18.4	59.0	0.4	28900
Dairyland Seed	DS-9305	105	221.6	18.6	58.1	0.4	29500
Nutech/G2 Genetics	5F-008	108	221.1	18.7	60.7	0.0	27700
Nutech/G2 Genetics	5H-806	106	219.8	18.0	59.7	0.0	26700
Pioneer	P0636AM	106	219.4	18.0	58.9	0.0	28500
Wensman	W 7330VT3PRIB	103	219.0	16.8	56.4	0.0	28400
Legend Seeds	LR DG9502 VT2PRIB	102	216.4	16.0	58.6	0.4	27900
	Tria	Average	220.2	18.5	58.9	0.1	28100
	L	SD (0.05)†	12.1	0.6	1.0	0.5	1100
C.V.‡			3.9	2.4	1.2	-	2.7

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

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Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial(110 day maturity or less) at Beresford, SD.

Va	riety Information		Agronomic Performance					
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	<b>Final Stand</b>	
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)	
Hoegemeyer	HPT 7644 HX/LL/RR	106	216.1	18.2	59.0	0.0	29000	
Wensman	W 91051STX	105	215.1	18.2	61.0	0.0	29000	
Dairyland Seed	DS-6905	105	215.1	19.4	57.8	0.0	28300	
Check	СНЕСК	99	214.9	16.7	60.4	0.0	29300	
Renk	RK699SSTX	105	214.9	18.2	59.6	0.0	27300	
Titan Pro	TP 39-05 SS	102	214.7	18.5	59.4	0.4	29100	
Wensman	W 7473VT3PRIB	109	214.0	17.6	55.5	0.0	25300	
Nutech/G2 Genetics	5V-0705	107	213.4	20.3	56.9	0.0	27600	
Pioneer	P0876AM	108	213.0	19.3	61.0	0.0	28900	
Hoegemeyer	HPT 7541 HX/LL/RR	105	212.5	17.8	59.9	0.0	27700	
Masters Choice	MCT 527 VIPTERA 3111	105	211.5	16.2	57.7	0.4	26400	
Channel	205-19STXRIB	95	210.4	17.1	58.8	0.0	27400	
Masters Choice	MCT 5663	106	209.4	17.7	57.9	0.0	26900	
Legend Seeds	LR 9410 GENSSRIB	110	208.8	18.5	58.9	0.0	28400	
Wensman	W 9325STXRIB	102	208.7	17.1	59.3	0.0	27300	
Nutech/G2 Genetics	5Z-707	107	203.9	17.9	58.0	0.4	25400	
Masters Choice	MCT 5375	103	203.3	18.1	59.6	0.0	26600	
Dairyland Seed	DS-9307SSX	107	203.3	17.9	59.1	0.4	28000	
Legend Seeds	47J104-3122	104	201.2	18.6	59.7	0.0	26500	
Channel	206-55STXRIB	106	196.2	17.9	58.3	0.0	26700	
	Tria	al Average	220.2	18.5	58.9	0.1	28100	
	L	SD (0.05)†	12.1	0.6	1.0	0.5	1100	
		C.V.‡	3.9	2.4	1.2	-	2.7	

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late **Season Trial (111 day maturity or more)** at Beresford, SD.

Variety Information			Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Pioneer	P1197AM	111	233.4	18.5	59.5	0.0	28400	
Titan Pro	TP 39-11 SS	111	224.0	22.2	57.6	0.4	26100	
Nutech/G2 Genetics	5F-811	111	222.4	20.7	60.3	0.0	25800	
REA Hybrids	7A111-RIB	111	221.7	18.2	60.1	0.0	27300	
Nutech/G2 Genetics	5Z-111	111	221.6	19.0	59.0	0.0	28400	
Channel	211-24STXRIB	111	220.4	18.5	59.7	0.4	28600	
Renk	RK860VT3P	111	219.5	19.1	60.4	0.0	26500	
Pioneer	P1498AM	114	219.3	20.7	59.9	0.0	28200	
Pioneer	P1151AM	111	218.2	20.4	60.1	0.0	27200	
REA Hybrids	7A112-RIB	111	218.0	21.2	57.5	0.0	27300	
Check	СНЕСК	99	210.6	16.7	60.6	0.0	28400	
Wensman	W 7566VT3PRIB	111	209.6	18.9	56.3	0.4	25200	
Channel	211-35STXRIB	111	208.6	19.8	59.8	0.0	26100	
Channel	213-28STXRIB	113	198.1	20.8	58.3	0.0	19700	
Trial Average		217.5	19.6	59.2	0.1	26700		
LSD (0.05)†			12.7	0.8	0.9	0.5	1600	
		C.V.‡	4.1	2.8	1.1	-	4.2	

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	3 miles south and 1 mile east of Bath (57427) in Brown county, SD
Coorderater	(GFS. N 45 25.107 VV 090 10.400)
Cooperator:	Gordon and Roger Locken Farms
Soil Type:	Great Bend silt loam, 0-2% slope, non-irrigated
Fertilizer:	Variable-applied preplant; 30-10-10 starter
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: none
	Post: Harness & Glyphosate (early post), Glyphosate
Date seeded:	5/20/2014
Date harvested:	10/28/2014



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (95 day maturity or less)** at Bath, SD.

Variety	Agronomic Performance						
, 		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Peterson Farms Seed	81W95	95	211.2	16.8	56.1	0.4	28900
Check	СНЕСК	99	209.2	17.3	57.5	0.0	29600
REA Hybrids	4V953-RIB	95	202.8	15.4	56.7	0.8	28900
Great Lakes Hybrids	4548STXRIB	95	202.7	16.9	58.2	0.7	29100
Federal Hybrids	4240 VT2P RIB	92	202.3	17.3	57.0	0.0	30100
Peterson Farms Seed	76S92	92	200.5	17.1	55.9	0.7	29700
Nuseed	9304 VT2P	93	199.8	17.4	57.1	1.1	29300
Pioneer	P9538AMXT	95	199.1	16.7	56.9	0.0	25600
Wensman	W 90941STX	94	198.0	16.2	55.5	1.5	29100
Peterson Farms Seed	73D91	91	197.9	16.0	57.3	0.0	27800
Federal Hybrids	4550 SSTAX	95	197.6	15.8	55.5	0.0	29700
Pioneer	P9526AMX	95	197.3	16.9	57.2	0.8	28700
REA Hybrids	3B922-RIB	92	195.7	16.0	56.9	0.0	28600
Wensman	W 80952VT2RIB	95	194.5	16.4	55.4	1.1	29400
Channel	195-58STXRIB	95	194.3	16.0	55.5	0.0	28400
Peterson Farms Seed	75T93	93	193.8	17.0	57.9	2.2	29100
Great Lakes Hybrids	4250STXRIB	92	193.5	16.6	54.5	0.4	28400
Nuseed	9001 VP3220	90	193.2	16.3	53.6	0.4	27700
REA Hybrids	4B285-RIB	93	192.7	15.5	56.0	0.4	29400
Renk	RK522SSTX	94	191.9	16.8	57.2	0.8	26800
Nutech/G2 Genetics	5V-195	95	190.6	17.3	54.5	0.0	28900
Federal Hybrids	4520 VT3P RIB	95	190.3	16.7	58.2	0.0	29900
REA Hybrids	3A929-RIB	92	189.9	16.6	56.5	0.7	29200
Nuseed	9504 VT3P RIB	95	189.6	16.9	57.6	0.0	26500
Dairyland Seed	DS-9093	93	188.3	19.2	55.7	0.0	29000
Channel	190-13VT2PRIB	90	188.1	14.9	57.7	0.0	27800
Wensman	W 90935STXRIB	93	188.1	16.8	58.4	0.0	28700
Dairyland Seed	DS-9791RA	91	187.5	17.2	55.9	0.0	29100
Nutech/G2 Genetics	5X-894	94	187.2	16.3	56.9	0.4	27600
Nuseed	9202 VT2P RIB	92	187.0	16.0	57.2	0.0	28200
	Tria	al Average	193.1	16.7	56.7	0.5	28400
	L	SD (0.05)†	9.9	0.5	1.1	1.2	1100
C.V.‡			3.7	2.6	1.4	-	2.8

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season	
Trial (95 day maturity or less) at Bath, SD.	

Variet	y Information		Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand		
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)		
Channel	191-87STXRIB	91	186.2	16.4	57.8	0.0	27200		
Nuseed	9505 VT2P RIB	95	185.2	16.7	58.9	0.4	26800		
Renk	RK568VT3P	95	185.0	16.6	57.9	0.0	28600		
Renk	RK557SSTX	95	182.1	16.9	55.4	0.0	27600		
Proseed	1295 SS	95	181.7	18.4	57.6	0.4	26700		
Wensman	W 90910STXRIB	91	177.9	17.8	57.7	3.0	25600		
Trial Average LSD (0.05)†		193.1	16.7	56.7	0.5	28400			
		9.9	0.5	1.1	1.2	1100			
		C.V.‡	3.7	2.6	1.4	-	2.8		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.





Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (96 day maturity or more) at Bath, SD.

· ·							
Variet		Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Wensman	W 90979STX	97	209.7	17.1	56.3	1.2	28400
Pioneer	P9917AMX	99	207.4	17.5	57.7	0.0	29200
Check	СНЕСК	99	206.4	17.3	58.0	0.0	29200
Nutech/G2 Genetics	5F-198	98	205.8	14.4	54.0	0.0	29000
Pioneer	P0297AMX	102	204.8	19.5	54.2	0.4	28400
Channel	197-68STXRIB	97	204.0	17.2	56.0	0.4	29000
Pioneer	P9703AMX	97	203.6	17.4	54.6	1.6	27900
Federal Hybrids	4640 VT3P RIB	96	203.2	17.3	57.1	0.4	29000
Nutech/G2 Genetics	5F-399	99	201.8	16.6	54.2	0.0	28100
Federal Hybrids	5245 VT2P RIB	102	199.8	20.5	53.4	0.8	28300
Nutech/G2 Genetics	5Y-196	96	197.8	14.7	54.5	0.0	27700
REA Hybrids	4A972-RIB	97	197.7	16.2	55.6	0.0	27200
Proseed	1399A GT3000	99	197.6	18.2	54.5	1.6	27300
REA Hybrids	4A974-RIB	97	197.3	17.2	56.1	0.0	29100
Great Lakes Hybrids	5015STXRIB	100	197.2	17.1	55.9	0.0	28900
Peterson Farms Seed	55\$96	96	197.1	17.0	56.6	0.4	28000
Wensman	W 70975VT3PRIB	97	196.5	16.8	56.8	1.1	29200
Nuseed	3014 VT2P	101	196.5	17.5	56.0	0.0	28000
REA Hybrids	5A992-RIB	99	195.2	17.1	53.7	0.4	28700
Proseed	13101 SS RIB	101	195.1	17.9	54.4	0.0	27900
Pioneer	P0193AM	101	195.0	17.6	53.4	0.0	27600
Federal Hybrids	5240 SSTAX RIB	102	194.7	18.4	54.1	0.0	27000
Wensman	W 9288STXRIB	98	194.3	18.0	54.6	0.4	28100
Great Lakes Hybrids	4879STXRIB	98	194.1	17.7	54.9	0.0	25400
Nutech/G2 Genetics	5F-200	100	192.9	18.0	56.2	0.0	27900
Renk	RK596SSTX	98	191.6	17.3	55.9	1.6	28200
Nuseed	9904 VT2P	99	190.7	17.4	53.9	1.6	28100
Proseed	1396 VT3P RIB	96	190.5	16.7	56.6	0.0	27800
Nutech/G2 Genetics	5X-698	98	189.5	16.8	55.6	0.4	28600
Peterson Farms Seed	88A97	97	186.9	17.1	55.1	0.0	29100
	Tria	al Average	195.3	17.4	55.3	0.5	28100
	Ľ	SD (0.05)†	11.3	0.5	1.0	1.3	1200
	4.1	2.2	1.3	-	3		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

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 Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season

 Trial (96 day maturity or more) at Bath, SD.

Variety	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Dairyland Seed	DS-9900SSX	100	186.6	18.5	50.7	6.2	27900
REA Hybrids	4A654-RIB	96	186.5	17.6	55.5	0.0	28300
Wensman	W 90967STXRIB	96	186.4	17.4	56.2	0.0	27300
Dairyland Seed	DS-9796	96	185.9	17.0	56.6	0.4	27100
Peterson Farms Seed	84Y01	101	185.3	18.2	54.8	0.0	28000
Proseed	PX 96 SS RIB	97	184.3	17.0	56.2	1.2	27100
REA Hybrids	5A993-RIB	99	176.3	17.7	57.0	0.4	28100
	Tria	al Average	195.3	17.4	55.3	0.5	28100
LSD (0.05)†		11.3	0.5	1.0	1.3	1200	
		C.V.‡	4.1	2.2	1.3	-	3

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	1.5 miles south of Volga (57101) in Brookings County, SD								
	(GPS: N 44°17.926' W 096°55.268')								
Cooperator:	SDSU Volga Research Farm - Jack Ingemansen, manager								
Soil Type:	Brandt silty clay loam, 0-2% slope								
Fertilizer:	180-40-40 preplant; 30-10-10 starter								
Yield Goal:	200 bu/ac								
Previous crop:	Spring wheat								
Tillage:	Conventional								
Row spacing:	30 inches								
Seeding Rate:	31,400/acre								
Herbicide:	Pre: Surpass								
	Post: None								
Date seeded:	5/17/2014								
Date harvested:	10/31/2014								



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (100 day maturity or less)** at Volga, SD.

Varie	ety Information			Agron	omic Perforr	mance	
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Channel	197-68STXRIB	97	241.1	18.1	56.5	0.0	29400
Wensman	W 90979STX	97	238.4	17.3	58.0	0.0	29400
REA Hybrids	5A992-RIB	99	235.3	16.8	56.2	0.4	29400
Federal Hybrids	5050 SSTAX	100	232.4	16.5	57.6	0.0	29700
Wensman	W 9288STXRIB	98	230.4	18.0	57.2	0.4	29000
Peterson Farms Seed	81W95	95	230.2	16.8	56.5	0.0	29200
Pioneer	P9917AMX	99	228.9	17.7	57.4	0.7	29500
Federal Hybrids	4550 SSTAX	95	228.8	16.4	56.1	0.0	29300
Hoegemeyer	HPT 6621 YXR	96	228.2	15.8	56.2	1.9	29100
Check	СНЕСК	99	227.5	18.4	57.6	0.0	28100
Wensman	W 90941STX	94	227.5	15.9	58.9	1.1	29900
Golden Harvest	G99Z33-3011A	99	227.4	18.2	55.4	0.0	28000
Hoegemeyer	HPT 6799 HXT/LL/RR	97	227.0	17.8	57.4	2.6	29500
Renk	RK605SSTX	100	226.8	16.8	57.8	0.0	29300
Great Lakes Hybrids	5015STXRIB	100	226.7	17.5	57.6	0.4	29800
Nutech/G2 Genetics	5F-399	99	226.3	16.8	55.7	0.0	28700
Nutech/G2 Genetics	5F-200	100	225.2	17.7	57.6	0.8	29000
Nuseed	9904 VT2P	99	224.4	16.5	56.8	0.4	28900
Proseed	1396 VT3P RIB	96	224.3	16.8	57.1	0.7	30100
Golden Harvest	G98Y58-3000GT	98	224.2	17.6	54.5	0.7	28700
Federal Hybrids	4840 SSTAX RIB	98	223.9	16.8	59.4	1.1	29500
Wensman	W 70975VT3PRIB	97	222.6	16.6	57.7	0.0	29700
Masters Choice	MCT 4884	98	222.5	19.2	57.0	1.9	28600
Great Lakes Hybrids	4879STXRIB	98	221.4	17.9	56.3	0.0	27400
Channel	200-48STXRIB	100	220.4	18.1	57.8	0.0	28300
Proseed	1399A GT3000	99	219.2	18.6	57.0	0.8	28000
Wensman	W 7290VT3PRIB	99	219.0	17.0	59.7	0.4	29000
Pioneer	P9703AMX	97	218.8	18.3	57.7	0.0	29300
Peterson Farms Seed	73D91	91	218.5	15.4	56.0	0.4	29100
Peterson Farms Seed	76S92	92	218.4	17.3	58.5	0.4	29500
	Tria	Average	220.6	17.3	57.1	0.5	28900
	L	SD (0.05)†	11.0	0.6	1.2	1.5	1200
C.V.‡			3.6	2.3	1.6	-	3.0

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season
Trial (100 day maturity or less) at Volga, SD.

Variety Information			Agronomic Performance					
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)	
Proseed	PX 96 SS RIB	96	217.1	17.6	58.3	1.5	28500	
Renk	RK596SSTX	98	217.1	17.4	56.8	0.0	28300	
Peterson Farms Seed	55S96	96	216.2	17.5	58.3	0.4	27900	
REA Hybrids	4A972-RIB	97	216.1	16.5	56.1	0.0	29400	
Nuseed	9504 VT3P RIB	95	215.1	17.5	58.4	0.0	27100	
Peterson Farms Seed	75T93	93	215.0	16.7	57.5	0.0	29100	
Titan Pro	TP 39-98 SS	98	214.1	17.2	56.7	0.4	29000	
Federal Hybrids	4240 VT3P	92	214.0	17.0	59.0	0.0	29000	
REA Hybrids	4A974-RIB	97	213.6	18.2	58.3	0.4	29100	
Nuseed	9505 VT2P	95	213.4	16.9	57.6	0.0	28100	
Wensman	W 90967STXRIB	96	213.1	17.4	57.0	0.4	28700	
Pioneer	P9526AMX	95	213.0	17.5	57.8	0.0	28500	
Dairyland Seed	DS-9900SSX	100	212.5	17.9	53.3	2.7	28400	
REA Hybrids	5A993-RIB	99	212.1	18.0	57.4	0.4	29000	
Nutech/G2 Genetics	5X-698	98	211.0	16.4	57.4	1.8	30200	
Dairyland Seed	DS-9796	96	209.1	16.9	56.2	2.2	29500	
Dairyland Seed	DS-9093	93	203.8	18.4	55.5	0.0	28900	
Peterson Farms Seed	88A97	97	202.5	16.6	55.2	0.0	28500	
Renk	RK581SSTX	100	197.5	18.9	57.4	0.4	27200	
Trial Average			220.6	17.3	57.1	0.5	28900	
LSD (0.05)†			11.0	0.6	1.2	1.5	1200	
C.V.‡			3.6	2.3	1.6	-	3.0	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day maturity or more) at Volga, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
REA Hybrids	6A032-RIB	103	240.6	18.1	56.0	0.0	29400
REA Hybrids	5A029-RIB	102	238.2	17.8	55.8	0.0	28600
Federal Hybrids	5140 SSTAX RIB	101	236.5	17.8	56.2	0.0	29000
Great Lakes Hybrids	5283STXRIB	102	235.6	18.6	55.1	0.0	28000
Nuseed	3014 VT2P	101	232.7	17.7	56.9	0.8	29000
Pioneer	P0193AM	101	229.4	17.1	55.4	0.4	28400
Proseed	13101 SS	101	227.2	17.4	56.7	0.0	28700
Hoegemeyer	HPT 7278 HXT/LL/RR	102	226.8	17.2	58.3	1.1	28900
Wensman	W 91011STXRIB	101	226.5	18.1	57.5	0.0	28400
Check	СНЕСК	99	226.4	18.1	57.6	1.2	28300
Pioneer	P0533AM1	105	225.7	20.9	56.9	0.0	29100
Titan Pro	TP 39-02 SS	102	225.7	18.4	54.9	0.0	29200
Channel	201-39STXRIB	101	225.3	18.1	55.7	0.0	29400
Federal Hybrids	5240 SSTAX RIB	102	225.0	18.8	56.0	0.8	28700
Wensman	W 9325STXRIB	102	224.9	18.0	56.8	0.0	26700
Masters Choice	MCT 5375	103	224.5	19.2	57.5	0.0	28100
Nutech/G2 Genetics	EXP 5Z-0106	101	224.4	17.7	56.0	0.0	26800
Golden Harvest	G02W74-3000GT	102	223.8	18.4	56.0	0.0	28900
Nutech/G2 Genetics	5H-806	106	223.5	18.5	57.1	0.0	27400
Renk	RK666SSTX	102	223.1	18.7	55.5	0.4	28600
Nutech/G2 Genetics	5Z-002	102	220.8	18.2	57.2	5.9	27800
Titan Pro	2M04-2P	104	220.3	20.4	53.8	0.4	28300
Channel	203-88STXRIB	103	219.3	16.8	55.3	0.4	27400
Titan Pro	TP 31-01 3011A	101	219.1	17.3	58.4	0.0	29100
Masters Choice	MCT 5663	106	216.9	17.9	56.3	0.0	28300
Nutech/G2 Genetics	5H-905	105	215.3	18.5	54.4	0.0	29300
Golden Harvest	G01P52-3011A	101	215.3	17.5	57.9	0.0	28200
Channel	202-64STXRIB	102	215.2	17.8	57.0	0.0	29500
Pioneer	P0297AMX	102	215.2	19.7	55.1	0.0	28700
Nutech/G2 Genetics	5H-502	102	214.8	17.6	57.6	0.7	28100
	Tria	al Average	221.0	18.1	56.2	0.6	28300
	L	SD (0.05)†	10.2	0.6	1.0	1.1	1300
	1.4	2.2	1.3	-	3.2		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season Trial (101 day maturity or more) at Volga, SD.

<u>, , ,</u>	, 0,						
Var	Agronomic Performance						
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	<b>Final Stand</b>
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Titan Pro	TP 39-05 SS	105	213.3	19.1	56.0	0.8	28200
Titan Pro	TP 35-01 2P	101	210.5	16.7	56.3	0.0	28300
Hoegemeyer	HPT 7103 HXT/LL/RR	101	208.4	17.0	53.2	0.0	28500
Peterson Farms Seed	84Y01	101	208.1	18.6	56.1	0.0	28200
Great Lakes Hybrids	5428STXRIB	104	207.3	18.5	56.5	0.0	28000
Masters Choice	MCT 527 Viptera 3111	105	206.5	17.1	54.0	9.9	25500
Nutech/G2 Genetics	5F-805	105	203.4	18.5	55.2	0.0	26600
Hoegemeyer	EXP 7166 YHR	102	198.4	17.4	57.1	0.0	26800
	Tria	al Average	221.0	18.1	56.2	0.6	28300
	L	SD (0.05)†	10.2	0.6	1.0	1.1	1300
		C.V.‡	1.4	2.2	1.3	-	3.2

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	2 miles east and 3/4 mile north of Geddes (57432) in Charles Mix County, SD (GPS: N 43°15 007' W 008°30 808')
Cooperator:	Curtis Sybesma
Soil Type:	Highmore-Eakin silt loam, 0-2% slope
Fertilizer:	Variable-applied preplant; 30-10-10 starter
Yield Goal:	170 bu/acre
Previous crop:	Winter Wheat
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	27,000/acre
Herbicide:	Pre: Harness, Glyphosate, 2,4-D
	Post: Glyphosate
Date seeded:	5/15/2014
Date harvested:	11/4/2014



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Table 1. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (105 day maturity or less) at Geddes, SD.

Varie	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Nuseed	3051 GT	105	173.1	16.0	59.9	1.5	22000
Channel	202-64STXRIB	102	173.0	16.4	60.7	0.4	24100
Hoegemeyer	HPT 7541 HX/LL/RR	105	171.3	17.9	59.4	0.5	21900
Wensman	W 7330VT3PRIB	103	170.0	16.1	58.3	1.1	20500
Pioneer	P0193AM	101	169.6	17.1	56.9	0.5	22000
Wensman	W 91011STXRIB	101	169.5	15.7	60.5	0.5	23500
Dairyland Seed	DS-6805	105	169.4	16.7	58.6	1.3	24200
Nutech/G2 Genetics	5H-905	105	168.6	16.9	56.8	0.5	23500
Pioneer	P0533AM1	105	168.0	19.4	60.7	0.4	24100
Channel	205-19STXRIB	105	167.1	16.6	59.1	1.0	20800
Channel	203-88STXRIB	103	166.7	16.5	58.6	0.5	21700
Wensman	W 91051STX	105	165.9	18.7	60.9	1.5	22000
Titan Pro	2M04-2P	104	165.9	20.7	58.5	0.9	24100
Pioneer	P0297AMX	102	165.4	18.4	58.0	0.4	24300
REA Hybrids	6A032-RIB	103	164.7	16.8	61.1	0.0	23000
Hoegemeyer	HPT 7278 HX/LL/RR	102	164.2	16.8	60.5	0.0	22300
Dairyland Seed	DS-6905	105	164.1	19.3	58.6	0.5	22200
Check	СНЕСК	99	164.0	16.4	59.7	1.0	22300
Renk	RK699SSTX	105	163.0	19.1	61.1	0.9	23300
Renk	RK752SSTX	105	162.9	17.7	61.0	0.0	23100
Channel	200-48STXRIB	100	162.3	16.5	59.6	0.5	22300
Federal Hybrids	5240 SSTAX RIB	101	161.4	16.4	60.4	2.4	22100
Nutech/G2 Genetics	5F-805	105	161.1	17.1	60.2	0.0	21800
Federal Hybrids	5050 SSTAX	100	160.8	15.8	60.8	0.5	21700
Federal Hybrids	5140 SSTAX RIB	101	159.1	15.6	60.3	0.9	24700
Titan Pro	TP 39-05 SS	105	159.0	18.9	60.9	0.9	24500
Hoegemeyer	EXP 7166 YHR	102	155.6	16.0	59.8	0.5	22000
Nuseed	3012 GTA	101	153.5	15.4	61.0	1.4	23500
Nuseed	3014 VT2P	101	151.9	15.7	60.5	0.5	23700
Wensman	W 9325STXRIB	102	151.6	16.8	60.5	0.5	20600
Channel	201-39STXRIB	101	148.8	15.4	59.2	0.0	23000
Dairyland Seed	DS-9305	105	148.5	19.0	59.5	1.8	24100
	Tria	al Average	163.1	17.1	59.7	0.7	22800
LSD (0.05)†			11.5	0.9	0.9	1.9	1200
	5.0	3.6	1.1	-	3.8		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

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### 2014 South Dakota Corn Hybrid Trial Results - Geddes

Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (106 day maturity or more) at Geddes, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	5Z-111	111	183.3	19.6	59.5	1.0	22000
Pioneer	P0636AM	106	180.4	18.1	59.3	0.0	22000
Wensman	W 91095STX	109	178.7	18.7	62.4	0.0	22500
Hoegemeyer	HPT 7876	108	178.3	18.2	60.8	0.9	23300
Channel	209-53STXRIB	109	177.6	21.4	59.2	0.5	23000
REA Hybrids	6A071-RIB	107	177.1	19.4	60.3	0.5	23400
Pioneer	P0876AM	108	176.5	19.2	62.5	0.0	21600
Hoegemeyer	HPT 7644 HX/LL/RR	106	175.2	18.2	60.2	0.0	21100
Nutech/G2 Genetics	EXP 5Z-0906	109	174.2	19.1	60.8	1.0	21600
Nutech/G2 Genetics	5V-0705	107	173.3	19.8	59.7	0.5	22500
Nutech/G2 Genetics	5F-709	109	172.3	20.3	58.1	1.0	21800
REA Hybrids	7A112-RIB	112	170.0	21.5	60.1	0.5	22700
Renk	RK834SSTX	110	169.7	23.0	56.4	2.4	22500
Nutech/G2 Genetics	5F-008	108	169.6	18.5	60.0	0.5	21200
Hoegemeyer	HPT 8066 AM	110	169.2	21.1	58.1	2.0	21600
Nutech/G2 Genetics	5Z-707	107	168.5	17.6	59.1	0.0	19300
Nutech/G2 Genetics	5D-109	109	166.1	19.7	61.4	1.1	20100
Pioneer	P1151AM	111	165.2	21.3	59.9	2.5	22500
Renk	RK860VT3P	111	165.2	20.4	60.6	1.5	21900
Great Lakes Hybrids	5755STXRIB	107	164.4	18.3	59.4	0.5	21700
Great Lakes Hybrids	6068STXRIB	110	164.1	18.2	62.0	0.0	22300
Wensman	W 91073STXRIB	107	161.9	19.0	59.4	0.0	21900
Channel	206-55STXRIB	106	161.8	17.7	60.9	2.9	19100
Check	СНЕСК	99	161.5	16.3	61.0	0.5	22300
Channel	209-46STXRIB	109	161.4	18.6	61.1	3.2	23800
Nutech/G2 Genetics	5H-806	106	160.0	18.0	60.3	0.6	21100
Renk	RK776SSTX	107	159.9	19.1	60.2	0.9	22700
Titan Pro	TP 39-11 SS	111	159.0	23.1	55.3	1.4	22700
REA Hybrids	7A111-RIB	111	157.9	18.3	61.2	1.4	22900
Dairyland Seed	DS-9307SSX	107	154.0	17.7	61.6	1.9	22800
	Tria	al Average	166.3	19.3	60.1	0.9	21900
	13.5	1.0	1.0	2.4	1500		
	5.8	3.9	1.1	-	4.8		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



### 2014 South Dakota Corn Hybrid Trial Results - Geddes

Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season Trial (106 day maturity or more) at Geddes, SD.

Variety Information			Agronomic Performance							
Brand	Hybrid	Maturity Rating	Yield Bu/A (15.5%)	Moisture %	Test Wt. (lbs/bu)	Lodging*	Final Stand (plants/A)			
Titan Pro	2M07-SS	107	152.0	18.3	61.7	0.0	22500			
Great Lakes Hybrids	5918STXRIB	109	151.6	19.5	60.7	0.5	20600			
Renk	RK712SSTX	106	150.5	19.3	61.4	1.0	21700			
Nutech/G2 Genetics	5F-811	111	147.4	22.1	59.0	0.0	19900			
Trial Average		166.3	19.3	60.1	0.9	21900				
		LSD (0.05)†	13.5	1.0	1.0	2.4	1500			
		C.V.‡	5.8	3.9	1.1	-	4.8			

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.





#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	8.5 miles west of South Shore (57263) in Codington County, SD
	(GPS: N 45°06.368' W 097°06.120')
Cooperator:	SDSU Northeast Research Farm - Allen Heuer, manager
Soil Type:	Kranzburg-Brookings silty clay loams, 0-2% slope
Fertilizer:	150-100-50 preplant incorporated; 30-10-10 starter
Yield Goal:	200 bu/acre
Previous crop:	Spring Wheat
Tillage:	Conventional
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: Dual II
	Post: Glyphosate
Date seeded:	5/19/2014
Date harvested:	10/30/2014



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (95 day maturity or less)** at South Shore, SD.

Varie	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Titan Pro	2M91-2P	91	234.6	16.9	56.7	0.0	29500
Nuseed	9001 VP3220	90	233.7	17.0	55.6	0.4	29700
REA Hybrids	4V953-RIB	95	232.1	17.3	55.8	0.0	29900
Titan Pro	2M95-2P	95	229.3	18.8	56.9	0.0	29800
Peterson Farms Seed	81W95	95	229.0	18.2	54.7	0.0	28500
Federal Hybrids	4240 VT2P RIB	92	227.5	18.6	56.6	0.0	30100
Great Lakes Hybrids	4548STXRIB	95	226.7	18.0	55.2	0.0	29700
Wensman	W 90935STXRIB	93	226.6	18.1	56.9	0.4	27600
REA Hybrids	3A929-RIB	92	226.3	18.5	55.0	0.0	29700
Wensman	W 90941STX	94	226.2	16.7	55.7	0.0	28400
Golden Harvest	G92T43-3111	92	225.0	16.3	54.0	0.7	28900
Nuseed	9202 VT2P	92	224.7	16.9	55.4	0.4	28100
Peterson Farms Seed	73D91	91	224.5	17.0	56.3	0.0	28400
Nuseed	9304 VT2P	93	223.7	18.9	56.5	0.0	28900
Masters Choice	MCT 4054	90	223.5	16.2	53.3	2.0	28000
Check	СНЕСК	99	223.5	19.4	56.0	0.0	29400
Nutech	5V-195	95	223.2	18.0	53.7	0.4	29700
Nuseed	9505 VT2P RIB	95	222.5	18.5	56.3	0.0	29200
Peterson Farms Seed	76S92	92	222.2	18.6	56.9	0.4	29400
Peterson Farms Seed	75T93	93	221.4	18.7	57.1	0.4	29100
Federal Hybrids	4550 SSTAX	95	220.4	17.8	55.1	0.0	29100
REA Hybrids	3B922-RIB	92	220.2	17.7	56.4	0.0	29300
Pioneer	P9526AMX	95	220.2	18.9	56.8	0.0	29100
Renk	RK522SSTX	94	219.6	18.3	54.0	0.0	28400
Channel	190-13VT2PRIB	90	219.6	17.7	55.4	0.0	28700
REA Hybrids	4B285-RIB	93	219.6	17.3	55.5	0.8	28900
Golden Harvest	G93H90-3000GT	93	219.2	17.1	54.0	0.8	27700
Federal Hybrids	4520 VT3P RIB	95	218.9	17.9	55.6	0.4	29600
Renk	RK568VT3P	95	218.8	18.8	57.0	1.1	29200
Nuseed	9504 VT3P RIB	95	217.5	19.1	55.5	0.0	25900
Trial Average			220.2	18.1	55.5	0.3	28700
	L	SD (0.05)†	9.4	0.6	0.8	1.2	1300
	3.0	2.4	1.1	-	3.3		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



 Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season

 Trial (95 day maturity or less) at South Shore, SD.

Variet	Agronomic Performance						
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Channel	195-58STXRIB	95	216.8	18.3	56.7	0.0	28100
Channel	191-87STXRIB	91	216.8	18.3	56.6	0.0	28600
Wensman	W 7140VT3PRIB	93	216.2	18.8	57.3	0.4	27800
Masters Choice	MCT 4211	92	214.8	17.7	55.4	1.5	28200
Dairyland Seed	DS-9791RA	91	214.2	18.7	54.4	0.0	29000
Pioneer	P9538AMXT	95	213.2	19.1	54.8	0.0	27200
Proseed	1295 SS	95	210.6	20.6	56.4	0.4	27200
Masters Choice	MCT 4564	95	209.9	17.6	53.8	1.2	28700
Dairyland Seed	DS-9093	93	207.1	21.4	52.4	0.0	29100
Dairyland Seed	DS-9487RA	87	204.8	17.1	54.8	0.0	28400
Renk	RK557SSTX	95	203.0	18.9	53.9	0.0	27800
Nutech/G2 Genetics	5X-894	94	200.1	17.3	56.1	1.2	27900
	Trial Average		220.2	18.1	55.5	0.3	28700
	LSD (0.05)†		9.4	0.6	0.8	1.2	1300
		C.V.‡	3.0	2.4	1.1	-	3.3

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (96 day maturity or more) at South Shore, SD.

Vari	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Channel	197-68STXRIB	97	232.9	19.0	54.4	0.0	28900
Federal Hybrids	4640 VT3P RIB	96	226.7	18.7	57.3	0.0	28200
Pioneer	P0297AMX	102	226.2	23.0	53.3	0.0	29500
Proseed	1399A GT3000	99	224.2	21.3	52.8	0.0	26800
Nuseed	3014 VT2P	101	223.6	19.2	53.6	0.0	29400
Wensman	70975VT3PRIB	97	223.5	18.2	56.1	0.0	29000
Pioneer	P9917AMX	99	223.3	19.8	55.7	0.0	29300
Wensman	90979STX	97	222.1	18.1	53.6	0.0	27900
REA Hybrids	5A992-RIB	99	221.9	19.2	52.4	0.0	28900
Check	СНЕСК	99	221.5	19.7	56.0	0.0	29300
Wensman	9288STXRIB	98	221.5	19.5	52.3	0.0	29100
Golden Harvest	G99Z33-3011A	99	221.3	21.0	52.1	0.0	25900
Pioneer	P9703AMX	97	221.2	19.6	53.8	0.0	28100
Nutech/G2 Genetics	5F-200	100	220.4	18.5	56.1	0.8	27900
Masters Choice	MCT 4884	98	220.2	20.9	55.0	0.4	28400
Wensman	90967STXRIB	96	219.9	19.0	55.3	0.0	29000
REA Hybrids	4A974-RIB	97	217.7	19.3	54.7	0.0	28000
Renk	RK596SSTX	98	217.5	19.3	54.1	0.0	27900
REA Hybrids	4A972-RIB	97	216.8	18.3	53.9	0.0	28500
Great Lakes Hybrids	4879STXRIB	98	216.7	19.4	52.9	0.0	27000
Nutech/G2 Genetics	5F-198	98	216.4	17.7	51.9	0.0	27900
Proseed	13101 SS	101	216.2	19.3	54.7	0.0	28700
Nuseed	9904 VT2P	99	216.1	18.4	53.0	0.0	28100
Peterson Farms Seed	55\$96	96	214.8	18.7	56.2	0.0	26900
Great Lakes Hybrids	5015STXRIB	100	213.6	18.4	54.4	0.0	28300
Nutech/G2 Genetics	5F-399	99	213.3	19.0	52.1	0.0	27800
REA Hybrids	5A993-RIB	99	213.2	19.7	55.1	0.0	28400
Nutech/G2 Genetics	5Y-196	96	212.2	17.0	53.1	0.0	27200
Dairyland Seed	DS-9900SSX	100	211.9	22.6	49.5	0.0	26700
Proseed	1396 VT3P RIB	96	211.6	18.3	55.2	0.0	29000
	Tria	al Average	216.9	19.3	53.9	0.1	28000
	L	SD (0.05)†	10.3	0.9	1.2	0.4	1100
	3.4	3.4	1.5	-	2.8		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season Trial (96 day maturity or more) at South Shore, SD.

Vari	Agronomic Performance						
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	<b>Final Stand</b>
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Pioneer	P0193AM	101	210.8	21.8	50.5	0.0	26000
Peterson Farms Seed	88A97	97	209.5	19.7	53.2	0.0	28000
REA Hybrids	4A654-RIB	96	209.5	17.5	54.6	0.4	28900
Nutech/G2 Genetics	5X-698	98	208.6	18.0	54.5	0.0	27800
Golden Harvest	G96A69-3111	97	207.7	18.4	53.8	0.5	25000
Proseed	PX 96 SS RIB	97	207.6	19.8	53.4	0.0	28700
Dairyland Seed	DS-9796	96	205.8	18.3	54.8	0.4	27700
Titan Pro	TP 39-98 SS	98	203.8	19.4	53.8	0.0	26000
	Tri	al Average	216.9	19.3	53.9	0.1	28000
	I	SD (0.05)†	10.3	0.9	1.2	0.4	1100
		C.V.‡	3.4	3.4	1.5	-	2.8

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	4 miles north and 1/2 mile west of Bancroft (57353) in Kingsbury County
	(GPS: N 44°31.091′ W 097°45.244)
Cooperator:	Weerts Farm, Inc.
Soil Type:	Houdek-Stickney loam, 0-2% slope, non-irrigated
Fertilizer:	170-40-0 preplant; 30-10-10 starter
Yield Goal:	170 bu/ac
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: Dual (fall-applied)
	Post: Halex GT, Status
Date seeded:	5/15/2014
Date harvested:	11/3/2014



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Tria**l **(100 day maturity or less)** at Bancroft, SD.

Vario	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	5F-399	99	214.4	14.4	56.2	0.4	28100
Channel	197-68STXRIB	97	209.4	15.5	58.5	0.4	29600
Pioneer	P9917AMX	99	207.3	15.6	59.3	0.0	29600
Great Lakes Hybrids	4879STXRIB	98	206.4	15.4	57.9	0.0	26700
Check	СНЕСК	99	205.1	15.4	59.5	0.0	28500
Proseed	1399 AGT3000	99	205.0	16.4	57.3	2.0	27700
Wensman	W 90979STX	97	203.4	15.7	58.9	0.0	28200
Peterson Farms Seed	81W95	95	202.1	14.1	57.7	0.0	28600
Pioneer	P9526AMX	95	202.1	14.9	59.2	3.3	28600
Wensman	W 70975VT3PRIB	97	202.1	14.5	59.8	0.4	28600
Wensman	W 9288STXRIB	98	201.0	15.4	56.1	0.4	28300
Nuseed	9505 VT2P	95	200.8	14.7	59.8	1.5	27900
Wensman	W 7290VT3PRIB	99	199.7	14.4	59.7	0.0	27400
Channel	200-48STXRIB	100	198.6	15.7	57.9	0.8	27600
Federal Hybrids	5050 SSTAX	100	198.6	14.6	59.0	0.4	28700
Federal Hybrids	4540 VT3P RIB	95	198.3	15.6	57.7	0.0	29000
REA Hybrids	5A993-RIB	99	198.2	16.2	59.3	1.2	28000
Federal Hybrids	4640 VT3P RIB	96	198.1	15.4	59.9	0.4	28100
Legend Seeds	LR 9599 GENSSRIB	99	196.9	15.1	58.5	0.0	28400
Legend Seeds	LR 9391 GENSSRIB	91	196.8	14.0	58.7	0.4	29300
Pioneer	P9703AMX	97	196.2	16.3	58.3	1.2	28100
REA Hybrids	4A974-RIB	97	195.7	15.9	58.2	0.0	27100
Channel	195-58STXRIB	95	194.5	13.6	56.6	0.4	27300
Nutech/G2 Genetics	5F-200	100	193.1	15.8	58.3	2.0	26500
REA Hybrids	5A992-RIB	99	193.0	14.7	57.0	0.4	28400
REA Hybrids	4A972-RIB	97	192.5	14.1	57.9	0.0	28600
Wensman	W 90941STX	94	192.4	13.7	57.9	0.0	26800
Renk	RK596SSTX	98	192.3	14.3	57.8	0.4	27800
Renk	RK605SSTX	100	192.0	14.8	58.5	0.4	28300
Legend Seeds	LR 9394 GENSSRIB	91	191.5	16.5	59.3	0.7	28900
	Trial Average			15.0	58.2	0.7	28000
	L	SD (0.05)†	12.2	0.7	1.0	1.5	1400
	4.5	3.5	1.2	-	3.5		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



 Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season

 Trial (100 day maturity or less) at Bancroft, SD.

Variety Information			Agronomic Performance					
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)	
Proseed	PX 96 SS RIB	96	191.2	14.8	57.7	0.0	28500	
Nuseed	9904 VT2P	99	190.8	15.0	57.3	1.5	28500	
Peterson Farms Seed	55S96	96	190.6	14.5	59.8	0.4	26500	
Wensman	W 90967STXRIB	96	190.1	15.1	58.6	0.0	27800	
Proseed	1396 VT3P RIB	96	188.5	14.6	58.9	0.0	28600	
Dairyland Seed	DS-9900SSX	100	188.0	13.7	53.6	6.0	27200	
Nutech/G2 Genetics	5X-698	98	187.5	14.6	58.3	1.5	29700	
Nuseed	9504 VT3P RIB	95	187.1	15.5	59.3	1.3	24100	
Legend Seeds	LR 9496 GENSSRIB	96	184.4	14.2	58.8	0.8	28500	
Renk	RK581SSTX	100	183.7	16.3	57.1	0.8	25800	
Dairyland Seed	DS-9796	96	182.7	15.8	58.5	0.8	28400	
Titan Pro	TP 39-98 SS	98	180.3	14.1	57.6	0.4	26500	
Peterson Farms Seed	88A97	97	175.9	14.2	56.9	0.0	24300	
Trial Average			195.3	15.0	58.2	0.7	28000	
LSD (0.05)†			12.2	0.7	1.0	1.5	1400	
		C.V.‡	4.5	3.5	1.2	-	3.5	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day
maturity or more) at Bancroft, SD.

Vari	ety Information		Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Check	СНЕСК	99	209.3	14.4	58.7	0.4	28700
Pioneer	P0533AM1	105	208.3	17.3	59.0	0.4	28200
Pioneer	P0297AMX	102	204.6	16.8	57.7	1.9	28200
Nutech/G2 Genetics	5H-502	102	199.8	14.9	58.3	0.0	27100
REA Hybrids	5A029-RIB	102	197.8	15.3	57.2	0.0	29000
Titan Pro	TP 39-05 SS	105	197.2	17.2	57.0	5.7	28300
Nutech/G2 Genetics	5H-905	105	197.1	16.0	57.0	0.8	26600
Great Lakes Hybrids	5283STXRIB	102	195.7	16.5	57.1	0.4	27300
Titan Pro	TP 35-01 2P	101	195.1	15.5	56.9	0.8	27100
Pioneer	P0193AM	101	195.0	14.5	56.5	0.8	26200
Proseed	13101 SS	101	194.7	15.5	57.6	0.4	27900
Titan Pro	2M04-2P	104	194.1	17.3	56.2	2.4	28000
Wensman	W 91011STXRIB	101	193.6	16.0	57.6	0.8	27800
Nutech/G2 Genetics	EXP 5Z-0106	101	192.7	14.8	56.3	0.4	26500
Titan Pro	TP 39-02 SS	102	191.7	15.5	56.4	0.8	27300
REA Hybrids	5A022-RIB	102	190.7	14.7	57.2	1.6	27300
Nutech/G2 Genetics	5H-806	106	190.7	16.6	57.9	1.4	24600
Titan Pro	TP31-01 3011A	101	190.3	16.6	57.8	0.8	28500
Nuseed	3014 VT2P	101	190.1	15.5	56.3	1.2	27200
Nutech/G2 Genetics	5F-805	105	189.8	16.7	57.6	0.4	26900
REA Hybrids	6A032-RIB	103	188.0	16.3	56.7	0.8	27100
Channel	202-64STXRIB	102	187.3	16.1	57.5	0.8	27100
Wensman	W 9325STXRIB	102	185.5	16.3	57.0	0.4	24500
Great Lakes Hybrids	5428STXRIB	104	185.5	15.5	57.9	0.4	26800
Channel	201-39STXRIB	101	185.4	15.1	56.7	0.0	28000
Federal Hybrids	5240 SSTAX RIB	102	184.5	16.0	57.2	0.4	27300
Renk	RK666SSTX	102	184.2	15.6	56.7	0.0	25800
Peterson Farms Seed	84Y01	101	180.3	15.5	56.9	0.0	25800
Nutech/G2 Genetics	5Z-002	102	176.5	16.5	57.5	17.7	26400
	Tria	al Average	192.6	15.8	57.3	1.4	27200
	L	SD (0.05)†	13.5	0.7	0.9	2.2	1600
		C.V.‡	5.0	3.1	1.1	-	4.1

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	2.5 miles north of Bancroft (57353) in Kingsbury County
	(GPS: 44.519032, -97.753749)
Cooperator:	Weerts Farm, Inc.
Soil Type:	Houdek-Stickney-Tetonka loam, 0-2% slope
Fertilizer:	140-0-0 preplant; 30-10-10 starter
Yield Goal:	170 bu/ac
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: Harness (acetochlor)
	Post: Roundup PowerMax (glyphosate) + TripleFlex (acetochlor + flumetsulam +
	clopyralid) + Status (dicamba + diflufenzopyr)
Date seeded:	5/5/2015
Date harvested:	10/22/2015



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (100 day maturity or less) at Bancroft, SD.

Varie	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Peterson Farms Seed	PFS55S96	96	177.9	15.6	58.7	0.4	28000
Wensman	W70975VT3PRIB	97	177.3	15.1	58.6	0.0	29200
Nutech/G2 Genetics	5F-198	98	177.1	15.2	55.4	0.0	28300
Pioneer	P9929AM	99	176.8	16.1	58.3	0.4	28500
Nutech/G2 Genetics	5F-196	96	175.4	15.8	56.5	0.4	26100
Federal Hybrids	4440 VT3P	94	175.1	15.2	58.4	0.0	29000
Thunder Seed	4695 RR	95	174.1	15.9	58.6	0.0	29000
Wensman	W81007STX	100	174.0	19.1	59.7	0.0	29300
Channel	197-50STXRIB	97	173.9	16.9	56.8	0.0	25600
Check	Check	99	172.8	16.1	59.0	0.8	28000
Proseed	1399A GT3000	99	172.3	15.4	57.0	2.7	24000
Rea Hybrids	4A972-RIB	97	171.5	15.7	58.4	0.0	29500
Federal Hybrids	4540 VT3P	95	171.4	16.7	58.3	0.4	28300
Federal Hybrids	4640 VT3P	96	171.2	15.7	58.9	0.0	29200
Nuseed	9504 VT3P RIB	95	171.1	15.9	58.9	0.0	31000
Federal Hybrids	4240 VT2P	92	170.6	15.0	58.5	0.0	29400
Proseed	1495SS	95	170.6	16.7	58.3	0.4	28900
Dairyland Seed	DS-9198	98	169.5	16.2	55.9	0.0	29100
Great Lakes Hybrids	4879STXRIB	98	169.2	17.7	57.6	0.0	28600
Federal Hybrids	4160 VT2P	91	168.9	14.5	56.9	0.4	28500
Rea Hybrids	4A962-RIB	96	168.7	16.4	59.3	0.0	28500
Nuseed	9904 VT2P RIB	99	168.7	17.1	58.6	0.0	27700
Rea Hybrids	5A981-RIB	98	168.2	16.0	58.9	0.0	29700
Wensman	W9288STXRIB	98	167.9	16.7	56.3	0.4	28400
Thunder Seed	7396 VT2PRIB	96	167.3	14.8	58.5	0.0	29000
Rea Hybrids	5A992-RIB	99	167.0	17.7	57.8	0.0	29900
Legend Seeds	LR 9397 VT3PRIB	97	167.0	16.1	58.5	0.0	30200
Channel	200-48STXRIB	100	166.7	18.3	56.8	0.0	28400
Wensman	W90962STX	96	166.6	14.0	57.2	0.0	29400
Federal Hybrids	4250 VT2P	92	166.4	13.9	57.8	0.0	28600
	Tria	al Average	165.4	16.4	57.9	0.4	28500
	L	SD (0.05)†	15.0	1.3	1.1	1.5	1000
		C.V.‡	6.5	5.8	1.3	-	2.5

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - **Early Season Trial** (100 day maturity or less) at Bancroft, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	5F-200	100	166.2	19.2	57.8	4.7	28100
Dairyland Seed	DS-9599	99	164.5	16.1	56.2	2.3	28300
Thunder Seed	101-95 GENSSRIB	95	164.5	17.4	57.2	0.4	29000
Wensman	W90979STXRIB	97	163.2	15.9	59.0	1.5	29100
Renk Seed	RK596SSTX	98	162.2	15.6	56.9	0.0	26900
Thunder Seed	101-97 GENSSRIB	97	161.6	15.0	57.4	0.4	29300
Federal Hybrids	5050 VT2P	100	160.8	16.9	57.7	0.4	28400
Rea Hybrids	5A993-RIB	99	160.3	17.3	59.8	0.8	29000
Thunder Seed	6600 VT2PRIB	100	159.8	19.5	57.5	0.0	27400
Wensman	W90994STX	99	159.7	16.1	57.0	0.0	27700
Proseed	1496 SS	96	159.1	15.8	57.7	0.0	27400
Great Lakes Hybrids	4548STXRIB	95	158.0	15.9	60.1	1.5	28400
Rea Hybrids	5A000-RIB	100	153.7	18.1	56.8	0.0	30100
Legend Seeds	LR 9497 GENSSRIB	97	153.6	16.5	58.8	0.0	28700
Renk Seed	RK612SSTX	100	151.8	15.5	56.9	0.0	29300
Great Lakes Hybrids	5015STXRIB	100	150.4	19.2	57.9	0.0	28500
Channel	197-68STXRIB	98	150.1	16.6	58.3	0.8	28100
Peterson Farms Seed	PFS81W95	95	148.1	14.5	56.9	0.0	29000
Legend Seeds	LR 9600 GENSSRIB	100	147.6	16.9	56.8	1.1	28900
Trial Average			165.4	16.4	57.9	0.4	28500
	L	SD (0.05)†	15.0	1.3	1.1	1.5	1000
	6.5	5.8	1.3	-	2.5		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day	/
maturity or more) at Bancroft, SD.	

Vari	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	5F-701	101	183.5	17.1	58.4	0.3	28600
Pioneer	P0339AM	103	182.9	19.2	58.0	0.8	28500
Dairyland Seed	DS-9701	101	181.5	15.1	56.5	0.0	28100
Federal Hybrids	5250 SSTAX	102	174.0	17.8	57.9	0.0	27800
Wensman	W9325STXRIB	102	173.4	15.3	57.4	0.0	28000
Check	Check	99	172.7	16.0	58.6	0.3	28400
Pioneer	P0589AM	105	171.8	20.0	57.7	0.0	28100
Proseed	13101 SS	101	171.5	17.0	57.5	0.5	28200
Federal Hybrids	5245 VT2P	102	171.3	19.6	56.0	0.0	27100
Legend Seeds	LR 94A01 GTA	101	169.4	15.1	57.1	0.8	28000
Great Lakes Hybrids	5283STXRIB	102	169.2	18.1	56.9	0.3	27300
Rea Hybrids	5A022-RIB	102	168.0	17.2	56.8	0.0	27100
Rea Hybrids	5A029-RIB	102	167.9	15.7	57.2	0.0	28300
Rea Hybrids	6A032-RIB	103	167.7	18.7	58.4	1.0	28100
Titan Pro	TP 39-02 SS	102	166.0	16.6	56.8	0.0	26000
Dairyland Seed	DS-9905	105	166.0	21.7	54.0	1.5	27600
Federal Hybrids	5140 VT2P	101	164.8	15.6	58.5	0.0	29000
Titan Pro	TP 39-05 SS	105	164.6	22.0	56.7	0.3	27700
Channel	202-52STXRIB	102	164.5	17.0	56.2	0.3	28500
Dairyland Seed	DS-9203	103	164.4	19.7	57.0	0.3	29300
Channel	202-64STXRIB	102	162.6	18.5	58.2	0.0	28200
Wensman	W91011STXRIB	101	162.0	17.2	58.6	0.5	27900
Dairyland Seed	DS-9805	103	160.4	20.0	55.3	0.8	28600
Great Lakes Hybrids	5688STXRIB	106	160.1	19.7	57.8	1.3	26800
Titan Pro	2M04-2P	104	158.4	19.4	56.5	0.0	27900
Titan Pro	TP 58-01 2P	101	158.0	16.9	57.2	0.3	28300
Renk	RK699SSTX	105	157.6	21.1	56.8	0.0	19300
Legend Seeds	LR 9405 GENSSRIB	105	157.3	21.1	56.5	0.0	27400
Great Lakes Hybrids	5470STXRIB	104	156.5	18.1	59.6	0.0	28600
Renk	RK666SSTX	102	151.9	17.2	55.7	0.0	27100
Legend Seeds	LR 9401 GENSSRIB	101	148.4	15.9	56.5	0.1	26700
Titan Pro	TP 31-01 3011A	101	147.1	17.4	57.8	1.8	27200
	Tria	al Average	165.6	18.0	57.2	0.3	27600
	L	SD (0.05)†	15.1	1.6	1.0	1.0	1100
		C.V.‡	6.5	6.2	1.3	-	2.9

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	4 1/2 miles south and 1 mile east of Bath (57427) in Brown County, SD
	(GPS: 45.393016, -98.305427)
Cooperator:	Gordon and Roger Locken Farms
Soil Type:	Great Bend silt loam, 0-2% slope, non-irrigated
Fertilizer:	Variable-applied preplant; 30-10-10 starter
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: none
	Post: Harness & Glyphosate (early post), Glyphosate
Date seeded:	5/21/2015
Date harvested:	10/26/2014



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (95 day maturity or less)** at Bath, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Check	Check	99	235.5	18.7	58.9	0.4	29700
Rea Hybrids	3A922-RIB	92	229.5	16.8	59.6	0.0	29500
Renk Seed	RK568VT3P	95	225.8	17.7	57.6	0.0	29200
Channel	195-58STXRIB	95	225.6	17.6	58.1	0.4	29500
Thunder Seed	4695 RR	95	224.7	17.5	59.2	0.4	28400
Federal Hybrids	4558 SSTAX	95	224.5	17.5	57.9	0.0	29500
Nuseed	9504 VT3P RIB	95	223.6	17.5	58.5	0.0	29700
Dairyland Seed	DS-9791RA	91	223.1	17.3	57.2	0.0	29000
Nuseed	9001 VP3220 EZR	90	221.5	17.3	56.6	1.1	28900
Peterson Farms Seed	PFS 76S92	92	221.5	16.7	58.9	0.0	29300
Rea Hybrids	4B953-RIB	95	220.5	16.7	59.1	0.0	29300
Proseed	1392 VT2P	92	220.5	16.6	58.4	0.8	29200
Federal Hybrids	4160 VT2P	91	220.4	16.0	58.2	0.0	28600
Federal Hybrids	4450 SSTAX	94	219.1	17.9	58.7	0.0	28900
Thunder Seed	7993 VT2PRIB	93	219.1	16.8	58.1	0.0	29100
Federal Hybrids	4240 VT2P	92	218.8	16.6	57.2	0.4	29200
Wensman	W8184VT2RIB	95	218.6	17.8	59.0	0.0	28900
Federal Hybrids	4440 VT3P	94	218.4	17.5	58.2	0.0	29000
Peterson Farms Seed	PFS 81W95	95	218.0	16.8	57.6	0.0	29200
Wensman	W80928VT2PRO	92	217.3	16.1	58.6	0.0	29800
Nuseed	9304 SS RIB	93	217.0	17.2	58.7	0.0	29100
Legend Seeds	LR 9694 GENSSRIB	94	216.2	16.9	57.4	0.0	29300
Proseed	1495SS	95	215.7	17.6	58.2	0.0	28700
Wensman	W80931VT2RIB	93	214.8	16.0	58.2	0.0	29400
Renk Seed	RK544SSTX	95	214.8	17.6	58.9	0.4	29400
Legend Seeds	LR 9391 GENSSRIB	91	213.3	16.4	58.0	0.0	29200
Dairyland Seed	DS-9593	93	212.1	16.2	55.5	0.0	25200
Peterson Farms Seed	PFS 75T93	93	210.9	16.5	58.5	0.4	29600
Rea Hybrids	4A942-RIB	94	210.9	16.8	58.4	0.0	29400
Channel	194-14STXRIB	94	210.6	17.2	57.0	0.0	27400
	Tria	Average	213.9	16.9	58.1	0.2	28500
	L	SD (0.05)†	12.5	0.6	1.0	0.9	1200
		C.V.‡	4.2	2.4	1.2	-	3.0

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

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 Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial

 (95 day maturity or less) at Bath, SD.

Varie	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Thunder Seed	101-95 GENSSRIB	95	209.6	18.3	57.7	0.0	29300
Federal Hybrids	4540 VT3P	95	208.7	17.8	57.6	0.7	28500
Nutech/G2 Genetics	5D-091	91	208.4	15.7	57.5	0.4	29500
Channel	190-13VT2PRIB	90	207.6	15.8	58.7	0.0	28000
Wensman	W80952VT2RIB	95	207.2	17.1	57.1	0.4	29100
Nutech/G2 Genetics	5X-894	94	206.9	17.1	58.9	0.0	27100
Thunder Seed	4389 RR	89	206.6	15.6	59.1	0.7	30300
Renk Seed	RK522SSTX	94	204.7	17.9	57.4	0.0	26000
Thunder Seed	4391 VT2	90	204.6	16.1	58.7	0.8	27100
Nutech/G2 Genetics	5Z-488	88	204.4	15.5	56.7	1.9	24000
Federal Hybrids	4550 SSTAX	95	203.9	18.0	57.4	0.0	26400
Legend Seeds	LR 9688 VT2PRIB	88	202.1	15.3	58.2	0.0	28500
Federal Hybrids	4250 VT2P	92	201.8	15.8	57.8	0.0	28400
Nuseed	9202 VT2P RIB	92	201.3	15.7	58.0	0.0	29100
Legend Seeds	LR 9587 VT2PRIB	87	200.6	15.8	58.1	0.0	26200
Legend Seeds	40J592 VT2PRIB	92	197.3	16.2	58.3	0.0	27600
Legend Seeds	LR 9394 GENSSRIB	94	196.6	18.5	59.0	1.4	23400
Trial Average			213.9	16.9	58.1	0.2	28500
LSD (0.05)†			12.5	0.6	1.0	0.9	1200
		4.2	2.4	1.2	-	3.0	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (96 day maturity or more) at Bath, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Pioneer	P9929AM	99	231.8	18.1	58.1	0.4	29400
Pioneer	P0339AM	103	231.1	20.0	57.3	0.0	28500
Check	Check	99	229.2	18.7	58.7	0.4	29000
Dairyland Seed	DS-9701	101	227.8	19.6	56.8	0.8	27000
Rea Hybrids	5A992-RIB	99	223.0	18.1	57.5	0.0	29200
Nutech/G2 Genetics	5F-196	96	222.5	17.7	57.1	1.5	28700
Dairyland Seed	DS-9599	99	222.0	19.1	55.9	0.0	29800
Dairyland Seed	DS-9198	98	221.9	17.3	55.7	0.0	29300
Federal Hybrids	5250 SSTAX	102	220.5	19.4	57.6	0.0	29700
Channel	197-68STXRIB	98	219.6	18.8	58.7	0.0	29200
Nutech/G2 Genetics	5F-198	98	217.0	17.0	56.3	0.0	28300
Federal Hybrids	4640 VT3P	96	215.9	17.6	60.2	0.0	30100
Federal Hybrids	4760 SSTAX	97	215.3	17.4	56.4	0.7	29200
Wensman	W8294VT2RIB	99	211.8	18.7	59.1	0.8	28000
Peterson Farms Seed	PFS 55S96	96	210.8	17.7	59.5	0.0	27200
Proseed	13101 SS	101	210.4	18.8	56.5	0.0	28200
Wensman	W90962STX	96	210.2	16.6	57.5	0.0	28900
Federal Hybrids	5050 SSTAX	100	209.3	18.5	57.3	0.4	29100
Rea Hybrids	4A962-RIB	96	208.2	18.5	57.5	0.0	29100
Channel	197-50STXRIB	97	208.2	19.2	56.7	0.0	27000
Pioneer	P9703AM	97	206.6	16.1	58.3	0.7	27800
Renk Seed	RK596SSTX	98	206.5	17.8	58.0	0.0	27100
Wensman	W9288STXRIB	98	206.4	18.7	58.0	0.0	28200
Thunder Seed	6600 VT2PRIB	100	205.2	19.3	57.8	0.0	26400
Proseed	1399A GT3000	99	205.1	18.8	56.0	0.0	25800
Thunder Seed	7603 GENSSRIB	103	204.9	19.2	57.9	0.0	26100
Nutech/G2 Genetics	5F-200	100	204.4	18.7	56.7	1.1	29000
Thunder Seed	101-97 GENSSRIB	97	202.4	17.5	58.5	0.0	29000
Wensman	W90979STXRIB	97	202.1	17.7	58.4	0.0	28900
Thunder Seed	7396 VT2PRIB	96	201.3	17.5	58.9	0.0	28900
	Tria	al Average	206.2	17.7	56.0	0.2	27600
	L	SD (0.05)†	13.1	0.8	1.4	0.9	1000
		C.V.‡	4.5	3.0	1.8	-	2.6

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

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Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season	
Trial (96 day maturity or more) at Bath, SD.	

	, ,						
Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Rea Hybrids	4A972-RIB	97	200.8	16.8	59.1	0.0	29300
Federal Hybrids	5140 SSTAX	101	200.2	19.1	57.0	0.0	28700
Proseed	1496 SS	96	195.8	18.0	57.8	1.2	27800
Trial Average		206.2	17.7	56.0	0.2	27600	
LSD (0.05)†		13.1	0.8	1.4	0.9	1000	
C.V.‡			4.5	3.0	1.8	-	2.6

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

# ARCHIVE



# 2015 South Dakota Corn Hybrid Trial Results Beresford

#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	6 miles west and 3 miles south of Beresford (57432) in Clay county, SD (GPS: N 43°02.783' W 096°54.125')
Cooperator:	SDSU Southeast Research Farm - Peter Sexton, manager
Soil Type:	Egan-Clarno-Trent silty complex, 0-2% slope, non-irrigated
Fertilizer:	132-78-90 preplant; 30-10-10 starter
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	Conventional
Row spacing:	30 inches
Seeding Rate:	31,400/acre
	Pre: Roundup (glyphosate) +Dual (metolachlor) +Metribuzin (metribuzin) +
Herbicide:	Sharpen (saflufenacil)
	Post: Atrazine (atrazine) + Callisto (mesotrione)
Date seeded:	5/12/2015
Date harvested:	10/29/2015





## 2015 South Dakota Corn Hybrid Trial Results Beresford

Table 1. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (107 day maturity or less) at Beresford, SD.

Varie	Agronomic Performance						
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	5Z-906	106	254.8	17.2	61.8	2.7	28000
Channel	207-27STXRIB	107	254.2	17.1	60.2	0.7	29800
Rea Hybrids	6A071-RIB	107	245.0	15.8	61.0	1.5	29200
Great Lakes Hybrids	5688STXRIB	106	244.7	16.7	60.9	3.8	29200
Great Lakes Hybrids	5755STXRIB	107	244.6	16.7	61.4	0.0	29000
Titan Pro	TP 56-06 3110	106	244.0	17.2	61.0	3.0	29100
Pioneer	P0589AM	105	242.2	15.5	60.7	0.4	29200
Renk Seed	RK712SSTX	106	242.0	16.0	61.9	2.7	28200
Nutech/G2 Genetics	5Z-504	104	239.9	16.0	61.4	5.2	27100
Renk Seed	RK776SSTX	107	239.6	17.8	62.0	2.3	28200
Pioneer	P0760AMXT	107	238.0	16.6	62.8	1.2	28200
Titan Pro	TP 39-05 SS	105	235.9	15.8	61.4	2.7	27800
Wensman	W91073STXRIB	107	232.6	16.7	60.8	2.4	27200
Nutech/G2 Genetics	5X-905	105	232.1	15.7	60.0	1.5	29300
Rea Hybrids	6A032-RIB	103	231.5	16.0	61.0	4.0	27700
Channel	205-19STXRIB	105	228.3	15.2	59.9	4.4	27400
Wensman	W9325STXRIB	102	226.5	14.8	60.6	1.5	29500
Rea Hybrids	6A050-RIB	105	225.9	15.7	60.7	0.4	27800
Wensman	W91051STXRIB	105	225.9	16.3	62.6	0.4	28400
Masters Choice	MCT 5661	103	225.0	16.2	59.1	2.1	25600
Masters Choice	MCT 527GT	105	224.8	15.9	60.2	5.9	27700
Check	Check	99	224.6	15.2	61.8	3.8	29000
Rea Hybrids	6A062-RIB	106	223.2	15.7	59.7	6.1	28500
Channel	206-55STXRIB	106	221.9	15.5	61.2	2.0	27400
Thunder Seed	4600 RR	100	219.8	14.6	59.9	7.2	28900
Masters Choice	MCT 5371	103	219.6	15.7	59.1	2.1	26500
Great Lakes Hybrids	5283STXRIB	102	218.3	15.5	61.4	0.8	26900
Nutech/G2 Genetics	5X-806	106	217.4	16.0	61.0	0.0	28900
Great Lakes Hybrids	5470STXRIB	104	215.4	15.9	61.9	2.0	27200
Thunder Seed	6600 VT2RIB	100	212.4	14.4	59.8	0.0	25900
Thunder Seed	7603 GENSSRIB	103	207.6	15.0	60.3	0.4	26700
	Tria	al Average	230.6	15.9	60.9	2.4	28100
	L	SD (0.05)†	13.2	0.5	1.0	2.4	1000
	C.V.‡				1.2	-	2.7

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



## 2015 South Dakota Corn Hybrid Trial Results Beresford

 Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (108 day

 maturity or more) at Beresford, SD.

Variet	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Rea Hybrids	7B090-RIB	109	257.6	17.3	61.5	3.0	29000
Nutech/G2 Genetics	5F-709	109	254.2	17.6	61.4	1.1	29600
Wensman	W91112STX	111	245.8	16.5	60.9	2.4	27900
Nutech/G2 Genetics	5F-510	110	245.5	18.3	62.0	1.5	28400
Pioneer	P1197AM	111	244.5	18.5	59.4	0.4	26600
Wensman	W91095STXRIB	109	244.4	16.5	62.5	1.2	28000
Titan Pro	TP 55-11 2P	111	242.2	18.5	60.3	0.4	28300
Channel	209-46STXRIB	109	239.6	17.0	61.4	0.0	28200
Nutech/G2 Genetics	5Z-308	108	239.3	17.3	67.3	0.8	27900
Channel	209-53STXRIB	109	237.6	18.0	61.2	1.9	28600
Channel	211-35STXRIB	111	237.1	19.1	63.1	1.2	27300
Great Lakes Hybrids	6399STXRIB	113	237.0	18.5	63.0	3.1	28400
Renk Seed	RK871VT2P	111	234.3	18.9	61.3	3.6	27000
Renk Seed	RK791SSTX	108	230.7	16.4	62.5	0.4	27200
Rea Hybrids	7A111-RIB	111	229.9	16.6	61.6	5.8	28100
Great Lakes Hybrids	6185STXRIB	111	228.7	17.3	61.7	2.0	27800
Great Lakes Hybrids	6068STXRIB	110	226.8	17.1	60.7	2.7	28100
Channel	213-28STXRIB	113	226.5	18.3	60.7	1.6	26700
Check	Check	99	223.4	15.3	61.3	3.4	29300
Great Lakes Hybrids	6462STXRIB	114	216.3	20.1	62.1	0.8	26500
Titan Pro	TP 59-08 SS	108	214.3	17.6	60.1	2.9	26600
Rea Hybrids	7A082-RIB	108	212.6	17.7	61.3	1.3	24300
	Tria	al Average	234.9	17.6	61.7	1.9	27700
	L	SD (0.05)†	12.7	0.5	3.4	2.6	1100
		C.V.‡	3.8	2.2	3.9	-	2.8

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



# 2015 South Dakota Corn Hybrid Trial Results Geddes

#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

2 miles east and 3/4 mile north of Geddes (57432) in Charles Mix County, SD
(GPS: N 43°16.958' W 098°39.895')
Curtis Sybesma
Highmore silt loam, 0-2% slope
Variable-applied preplant; 30-10-10 starter
170 bu/acre
Soybeans
No-till
30 inches
27,000/acre
Pre: Harness (acetochlor) + Roundup (glyphosate) + 2,4-D
Post: Roundup (glyphosate)
5/12/2015
10/29/2015



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# 2015 South Dakota Corn Hybrid Trial Results Geddes

Table 1. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (107 day maturity or less) at Geddes, SD.

	· ·						
Vari	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Pioneer	P0589AM	105	221.2	16.1	60.7	0.4	26600
Nutech/G2 Genetics	5X-905	105	218.5	16.4	60.1	0.4	26900
Pioneer	P9929AM	99	217.1	13.6	59.2	0.4	26600
Wensman	W9325STXRIB	102	216.3	14.1	61.4	0.0	26100
Pioneer	P0339AM	103	216.0	15.6	60.7	0.8	25800
Channel	206-55STXRIB	106	215.5	15.8	60.2	1.3	25800
Channel	205-19STXRIB	105	215.1	14.5	59.6	0.0	26500
Great Lakes Hybrids	5283STXRIB	102	211.8	14.1	60.3	0.0	25500
Rea Hybrids	5A000-RIB	100	211.6	13.2	59.8	0.4	26800
Rea Hybrids	6A071-RIB	107	211.6	15.9	60.1	1.7	25700
Titan Pro	TP 56-06 3110	106	211.3	17.0	59.1	2.1	26200
Rea Hybrids	6A062-RIB	103	211.2	16.2	59.5	1.2	27000
Check	Check	99	209.6	15.1	60.6	0.8	26600
Rea Hybrids	6A050-RIB	105	208.4	15.7	60.8	0.0	26100
Great Lakes Hybrids	5755STXRIB	107	208.3	16.1	60.3	2.1	25300
Channel	207-27STXRIB	107	206.7	16.2	59.9	1.2	26700
Wensman	W91073STXRIB	107	205.9	16.4	60.3	3.2	24100
Channel	203-88STXRIB	103	205.7	14.3	58.7	0.9	23000
Great Lakes Hybrids	5688STXRIB	106	205.0	16.9	60.7	6.3	26000
Rea Hybrids	5A022-RIB	102	204.7	14.0	58.4	0.0	24700
Renk Seed	RK776SSTX	107	203.7	17.2	61.2	1.3	25800
Thunder Seed	7603 GENSSRIB	103	203.6	13.6	59.7	0.0	24700
Wensman	W91051STXRIB	105	202.8	16.4	61.6	1.2	26100
Channel	202-52STXRIB	102	202.7	13.9	61.6	0.4	25900
Channel	202-64STXRIB	102	201.0	14.9	61.1	1.9	23000
Rea Hybrids	6A032-RIB	103	199.0	16.5	61.3	2.3	23500
Renk Seed	RK712SSTX	106	198.7	16.4	60.9	6.8	24100
Great Lakes Hybrids	5470STXRIB	104	198.4	16.1	61.3	0.0	25500
Thunder Seed	6600 VT2PRIB	100	195.3	13.5	60.3	0.5	24500
Titan Pro	TP 39-05 SS	105	187.7	16.9	60.5	8.3	23500
	Ti	rial Average	200.7	14.9	58.4	1.5	24700
		LSD (0.05)†	13.8	1.0	0.9	2.4	900
		C.V.‡	4.9	4.6	1.1	-	2.7

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



# 2015 South Dakota Corn Hybrid Trial Results Geddes

Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (108 day maturity or more) at Geddes, SD.

Variety Information			Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Channel	209-53STXRIB	109	232.6	19.8	60.6	1.2	26800	
Rea Hybrids	7B090-RIB	109	227.3	19.2	60.2	3.4	26500	
Renk Seed	RK871VT2P	111	227.1	20.1	59.4	0.4	25700	
Titan Pro	TP 55-11 2P	111	223.3	20.0	59.0	0.0	26100	
Channel	209-46STXRIB	109	220.1	18.3	60.5	2.5	26400	
Rea Hybrids	7A111-RIB	111	219.3	16.9	58.9	3.3	26200	
Great Lakes Hybrids	5944STX	109	219.1	17.0	59.5	3.1	25000	
Nutech/G2 Genetcs	5F-709	109	217.8	18.3	60.5	2.0	26900	
Great Lakes Hybrids	6185STXRIB	111	217.5	17.2	60.3	0.8	26200	
Great Lakes Hybrids	5918STXRIB	109	217.4	18.7	60.3	3.3	25900	
Wensman	W91112STX	111	216.2	17.4	59.8	1.9	23600	
Renk Seed	RK791SSTX	108	215.9	16.7	61.2	0.9	24600	
Titan Pro	TP 59-08 SS	108	214.4	17.4	60.9	6.1	25400	
Check	Check	99	212.0	15.9	61.2	1.7	26600	
Wensman	W91095STXRIB	109	211.4	16.8	61.0	1.3	25900	
Great Lakes Hybrids	6068STXRIB	110	208.7	18.2	60.2	3.3	26600	
Rea Hybrids	7A082-RIB	108	189.8	18.9	59.3	9.6	20700	
	Tria	al Average	217.0	18.0	60.2	2.6	25600	
	L	SD (0.05)†	12.1	1.0	0.7	4.0	1300	
		C.V.‡	3.9	3.8	0.8	-	3.6	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	7 miles south and 2 miles east of Miller (57362) in Hand county, SD (GPS: 44.413385, -98.940216)
Cooperator:	Paul Fulton
Soil Type:	Houdek-Prosper loams, 0-2% slopes
Fertilizer:	140-40-30 preplant, 30-10-10 starter
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	27,000/acre
Herbicide:	Pre: Harness (acetochlor) + LV6 (2,4-D)
	Post: Roundup WeatherMax (glyphosate) + Status (diflufenzopyr + dicamba)
Date seeded:	5/13/2015
Date harvested:	11/2/2015



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (100 day maturity or less)** at Miller, SD.

	·							
Varie	Agronomic Performance							
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)	
Federal Hybrids	5050 VT2P	100	222.2	16.1	58.5	1.3	25200	
Check	Check	99	220.7	17.0	58.6	0.0	26200	
Nuseed	9904 VT2P RIB	99	219.0	16.3	59.2	0.0	24000	
Rea Hybrids	5A992-RIB	99	218.3	16.3	57.7	0.0	26500	
Rea Hybrids	5A000-RIB	100	217.5	15.8	57.7	0.0	26700	
Rea Hybrids	4A972-RIB	97	216.9	15.0	59.0	0.0	27000	
Federal Hybrids	4540 VT3P	95	216.9	15.8	59.5	0.0	24900	
Federal Hybrids	4640 VT3P	96	215.8	15.6	60.1	0.0	26400	
Federal Hybrids	4240 VT2P	92	215.6	15.1	59.9	0.0	26700	
Wensman	W81007STX	100	215.5	18.3	59.4	0.4	25900	
Nutech/G2 Genetics	5F-198	98	215.4	14.0	55.4	0.4	24100	
Nuseed	9504 VT3P RIB	95	214.5	15.7	59.2	0.4	26500	
Wensman	W80978VT2RIB	97	214.5	15.4	58.2	0.0	26100	
Federal Hybrids	4250 VT2P	92	211.4	14.4	59.0	0.4	27100	
Renk Seed	RK596SSTX	98	211.3	15.4	57.8	0.0	24300	
Rea Hybrids	5A993-RIB	99	211.0	17.2	61.1	0.0	27200	
Channel	200-48STXRIB	100	210.6	16.5	58.6	0.0	24000	
Wensman	W90962STX	96	210.2	15.1	58.3	0.0	25900	
Nutech/G2 Genetics	5F-200	100	209.5	16.6	58.3	0.0	25400	
Wensman	W90979STXRIB	97	209.0	15.2	58.8	0.0	25400	
Federal Hybrids	4440 VT3P	94	208.4	15.7	58.9	0.0	25800	
Thunder Seed	6600 VT2PRIB	100	208.3	16.8	58.9	0.0	24100	
Nuseed	9202 VT2P RIB	92	208.1	13.9	57.9	0.0	25900	
Channel	197-50STXRIB	97	207.6	16.6	58.4	0.0	23000	
Channel	197-68STXRIB	98	207.5	16.7	58.6	0.0	25200	
Nutech/G2 Genetics	5F-196	96	207.2	15.4	56.7	0.0	23200	
Pioneer	P9703AM	97	206.8	14.4	56.9	0.4	25300	
Pioneer	P9284AM	92	206.3	15.5	60.0	0.0	25600	
Renk Seed	RK612SSTX	100	206.0	16.3	59.1	0.0	26600	
Thunder Seed	101-95 GENSSRIB	95	205.7	16.1	58.7	0.0	25600	
	Tria	al Average	205.4	15.8	57.9	0.1	24700	
	L	SD (0.05)†	11.7	2.0	4.2	0.7	1000	
<b>C.V.‡</b> 4.1 9.0 5.1 - 2								

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

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Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial (100 day maturity or less) at Miller, SD.

Variety Information			Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Thunder Seed	4695 RR	95	205.0	16.0	58.8	0.0	25300	
Wensman	W8294VT2RIB	99	204.9	16.5	58.4	0.5	23500	
Rea Hybrids	5A981-RIB	98	204.3	17.3	58.9	0.0	24500	
Thunder Seed	101-97 GENSSRIB	97	203.9	15.7	59.3	0.8	27300	
Wensman	W90994STX	99	203.2	16.5	57.8	0.5	24000	
Federal Hybrids	4160 VT2P	91	199.7	14.6	58.0	0.0	24900	
Thunder Seed	7396 VT2PRIB	103	199.4	15.4	58.5	0.0	25300	
Rea Hybrids	4A962-RIB	96	192.9	16.2	59.4	0.0	24600	
Trial Average		205.4	15.8	57.9	0.1	24700		
LSD (0.05)†		11.7	2.0	4.2	0.7	1000		
		C.V.‡	4.1	9.0	5.1	-	2.8	

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day maturity or more) at Miller, SD.

Variety	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Pioneer	P0339AM	103	241.4	17.7	58.7	0.8	25500
Wensman	W81041VT2RIB	104	237.0	19.2	60.5	0.0	25400
Dairyland Seed	DS-9701	101	225.2	17.8	58.2	0.0	24400
Dairyland Seed	DS-9905	105	222.9	20.4	57.0	1.3	24500
Federal Hybrids	5140 VT2P	101	221.3	16.3	58.9	1.3	26700
Titan Pro	TP 39-05 SS	105	221.0	20.0	58.9	0.9	24800
Wensman	W91011STXRIB	101	219.9	16.3	59.2	0.0	24800
Wensman	W81028VT2RIB	102	218.9	17.0	60.0	0.8	26100
Titan Pro	2M04-2P	104	217.3	18.7	58.6	0.4	24200
Check	Check	99	217.3	17.3	58.9	0.0	24000
Rea Hybrids	5A029-RIB	102	216.9	17.3	58.8	0.0	25500
Federal Hybrids	5250 SSTAX	102	216.4	17.3	59.4	0.4	25200
Channel	202-64STXRIB	102	214.8	17.7	60.6	0.9	24200
Nutech/G2 Genetics	5F-701	101	213.7	16.5	59.3	0.0	24600
Dairyland Seed	DS-9203	103	212.2	18.9	57.5	0.0	26400
Titan Pro	TP 58-01 2P	101	211.4	16.3	59.9	0.0	23500
Channel	202-52STXRIB	102	210.0	16.8	59.0	0.0	26600
Rea Hybrids	5A022-RIB	102	208.9	17.6	58.0	2.0	22400
Federal Hybrids	5245 VT2P	102	207.4	19.9	57.9	0.0	23400
Titan Pro	TP 31-01 3011A	101	205.4	17.3	59.4	0.4	26000
Rea Hybrids	6A032-RIB	103	205.4	18.8	59.2	0.9	24200
Dairyland Seed	DS-9805	103	204.7	20.0	57.1	0.8	25000
Titan Pro	TP 39-02 SS	102	201.6	18.6	57.5	1.0	19300
Renk Seed	RK666SSTX	102	201.3	17.4	57.6	0.5	24400
Renk Seed	RK699SSTX	105	163.6	20.8	58.3	3.5	16600
	Tria	al Average	213.4	18.1	58.7	0.6	24300
	L	SD (0.05)†	14.3	0.9	0.9	1.7	1200
	4.7	3.6	1.1	-	3.4		

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

<sup>+</sup> Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	5.5 miles west of South Shore (57263) in Codington County, SD						
Cooperator:	JPS: N 45°06.418 W 097°06.121°) DSU Northoast Posoarch Farm Allon Houar managor						
Soil Type:	Kranzburg-Brookings silty clay loams 0-2% slope						
Fertilizer:	150-100-50 preplant incorporated: 30-10-10 starter						
Yield Goal:	200 bu/acre						
Previous crop:	Spring Wheat						
Tillage:	Conventional						
Row spacing:	30 inches						
Seeding Rate:	31,400/acre						
Herbicide:	Pre: Dual II (metolachlor)						
	Post: Roundup Ultra (glyphosate)						
Date seeded:	5/8/2014						
Date harvested:	10/30/2015						



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (95 day maturity or less)** at South Shore, SD.

Varie		Agron	omic Perfori	mance			
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Titan Pro	2M95-2P	95	220.7	18.4	60.2	1.1	28300
Thunder Seed	7993 VT2PRIB	93	219.6	17.4	58.9	0.0	29800
Federal Hybrids	4550 SSTAX	95	218.4	17.5	60.1	0.0	28600
Channel	195-58STXRIB	95	217.8	17.8	60.1	0.0	28500
Check	Check	99	217.7	18.0	59.7	0.4	28900
Nuseed	9504 VT3P RIB	95	217.6	17.7	60.5	0.4	30400
Renk Seed	RK544SSTX	95	216.9	17.7	59.9	0.0	28200
Proseed	1495SS	95	214.1	18.4	59.0	0.0	29000
Rea Hybrids	3A922-RIB	92	213.2	16.9	60.6	0.0	29500
Federal Hybrids	4450 SSTAX	94	212.7	17.8	59.8	0.4	28100
Titan Pro	2M91-2P	91	211.3	16.6	60.0	0.7	29800
Federal Hybrids	4440 VT3P	94	210.5	17.1	59.7	0.4	28500
Thunder Seed	4695 RR	95	209.2	18.1	60.1	0.4	27600
Wensman	W90941STXRIB	94	208.3	16.6	59.6	1.2	27900
Federal Hybrids	4558 SSTAX	95	208.2	17.1	59.3	0.4	28600
Peterson Farms Seed	PFS 81W95	95	207.3	17.1	58.1	0.0	26700
Peterson Farms Seed	PFS 76S92	92	206.9	17.4	60.2	0.0	27900
Rea Hybrids	4B953-RIB	95	206.2	16.9	59.3	0.0	29200
Thunder Seed	101-95 GENSSRIB	95	204.4	18.7	59.3	0.0	27900
Nuseed	9304 SS RIB	93	204.3	17.4	60.2	0.4	29000
Proseed	1392 VT2P	92	204.0	16.9	59.2	0.4	29900
Federal Hybrids	4160 VT2P	91	203.9	16.6	59.1	0.0	28400
Nuseed	9202 VT2P RIB	92	203.5	15.9	59.5	0.0	26800
Federal Hybrids	4240 VT2P	92	202.5	17.9	60.4	0.0	26800
Federal Hybrids	4250 VT2P	92	201.6	16.0	59.4	1.2	27900
Federal Hybrids	4540 VT3P	95	201.2	17.6	60.0	0.8	28200
Nuseed	9001 VP3220 EZR	90	201.1	17.2	57.2	2.0	26700
Peterson Farms Seed	PFS 75T93	93	200.4	16.9	59.8	2.3	27900
Renk Seed	RK568VT3P	95	199.0	18.0	60.1	0.5	22900
Dairyland Seed	DS-9791RA	91	198.8	16.5	58.5	0.8	28200
	Tria	al Average	202.5	17.4	59.5	0.6	26900
	Ľ	SD (0.05)†	8.7	0.7	1.0	1.5	900
	3.2	3.0	1.2	-	2.4		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial (95 day maturity or less) at South Shore, SD.

Variety Information		Agronomic Performance					
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Channel	190-13VT2PRIB	90	198.7	16.0	58.4	0.0	26900
Legend Seeds	40J595 RR	95	198.5	17.4	61.2	0.0	27300
Wensman	W90935STXRIB	93	198.1	17.6	60.1	1.2	26500
Thunder Seed	4389 RR	89	197.4	15.7	60.4	3.4	28700
Titan Pro	TP-58-95 SS	95	197.1	18.8	59.0	0.5	23600
Legend Seeds	LR 9391 GEN SSRIB	91	196.9	16.7	59.3	0.0	28400
Channel	194-14STXRIB	94	196.3	17.2	58.0	1.3	25300
Rea Hybrids	3A929-RIB	92	192.9	17.9	59.7	0.0	22700
Rea Hybrids	4A930-RIB	93	192.4	18.0	59.0	0.0	24000
Renk Seed	RK522SSTX	94	191.7	17.6	59.0	0.5	23300
Wensman	W7110VT3PRIB	90	190.1	16.4	59.9	1.3	24800
Dairyland Seed	DS-9593	93	180.8	18.0	56.1	2.9	18400
Thunder Seed	4391 VT2	90	175.0	16.8	59.7	1.4	24000
	Tria	l Average	202.5	17.4	59.5	0.6	26900
	L	SD (0.05)†	8.7	0.7	1.0	1.5	900
		c.v.‡	3.2	3.0	1.2	-	2.4

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (96 day maturity or more) at South Shore, SD.

	,							
Variety Information			Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Rea Hybrids	5A992-RIB	99	230.5	17.9	59.1	0.0	29100	
Dairyland Seed	DS-9599	99	230.4	20.1	57.2	0.0	27600	
Pioneer	P9929AM	99	223.8	18.1	58.3	0.8	28200	
Federal Hybrids	5050 VT2P	100	217.4	18.3	59.2	0.4	29800	
Federal Hybrids	4640 VT3P	96	216.4	18.6	60.7	0.0	29000	
Federal Hybrids	5140 VT2P	101	214.9	18.6	59.2	2.3	29100	
Check	Check	99	214.9	18.4	60.7	0.4	27600	
Wensman	W9288STXRIB	98	212.8	19.7	58.0	0.4	27600	
Wensman	W90962STX	96	212.1	17.0	58.4	0.4	28900	
Rea Hybrids	4A962-RIB	96	211.2	18.1	60.0	0.8	27900	
Channel	197-68STXRIB	98	211.0	19.3	60.3	0.0	26900	
Thunder Seed	7396 VT2PRIB	96	210.1	18.3	59.9	0.0	29500	
Renk Seed	RK596SSTX	98	209.5	18.7	58.9	0.0	25500	
Legend Seeds	LR 9397 VT3PRIB	97	208.4	18.2	59.8	1.1	29400	
Wensman	W70975VT3PRIB	97	207.8	18.0	60.8	0.4	25600	
Rea Hybrids	5A993-RIB	99	205.9	19.1	60.9	0.4	29800	
Wensman	W90994STX	99	205.9	19.1	58.5	1.4	24000	
Rea Hybrids	4A972-RIB	97	204.7	16.9	59.7	0.0	28300	
Legend Seeds	LR 9600 GENSSRIB	100	204.5	19.5	58.9	0.0	27300	
Dairyland Seed	DS-9198	98	204.4	17.9	56.7	0.4	26000	
Wensman	W90979STXRIB	97	204.4	18.4	60.3	0.0	26800	
Proseed	13101 SS	101	201.3	19.0	60.3	0.8	26600	
Thunder Seed	101-97 GENSSRIB	97	200.9	18.1	59.6	0.0	28500	
Legend Seeds	LR 9497 GENSSRIB	97	200.8	18.6	59.0	0.0	27400	
Thunder Seed	7603 GENSSRIB	103	200.1	19.0	59.7	1.3	25600	
Peterson Farms Seed	PFS 55S96	96	199.5	18.0	60.5	0.0	24700	
Dairyland Seed	DS-9701	101	199.5	20.3	58.8	0.5	23400	
Proseed	1399A GT3000	99	199.1	20.7	56.2	1.7	18700	
Thunder Seed	6600 VT2PRIB	100	198.3	19.3	59.7	0.5	23400	
Channel	197-50STXRIB	97	197.5	19.9	58.4	0.5	22900	
	201.2	18.1	57.6	0.5	26000			
	10.1	1.0	1.0	1.5	1000			
	3.6	3.8	1.3	-	2.8			

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season Trial (96 day maturity or more) at South Shore, SD.

Variety Information			Agronomic Performance				
Brand	Hybrid	Maturity Rating	Yield Bu/A (15.5%)	Moisture %	Test Wt. (lbs/bu)	Lodging*	Final Stand (plants/A)
Proseed	1496 SS	96	194.1	19.1	60.5	0.0	27400
Federal Hybrids	4760 SSTAX	97	193.6	18.1	59.2	0.9	25200
Pioneer	P9703AM	97	192.4	16.5	58.9	3.3	26900
		Trial Average	201.2	18.1	57.6	0.5	26000
		LSD (0.05)†	10.1	1.0	1.0	1.5	1000
		C.V.‡	3.6	3.8	1.3	-	2.8

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

# ARCHIVE



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	1.5 miles south of Volga (57101) in Brookings County, SD				
	(GPS: N 44°17.926' W 096°55.562')				
Cooperator:	SDSU Volga Research Farm - Jack Ingemansen, manager				
Soil Type:	Brandt silty clay loam, 0-2% slope				
Fertilizer:	180-40-40 preplant				
Yield Goal:	200 bu/ac				
Previous crop:	Spring wheat				
Tillage:	Conventional				
Row spacing:	30 inches				
Seeding Rate:	31,400/acre				
Herbicide:	Pre: Staunch (acetochlor)				
	Post: Roundup Power Max (glyphosate)				
Date seeded:	4/27/2015				
Date harvested:	10/21/2015				



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (100 day maturity or less) at Volga, SD.

Varie	Variety Information				Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand		
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)		
Wensman	W81007STX	100	263.4	20.1	60.1	0.8	29100		
Renk Seed	RK612SSTX	100	253.6	18.9	57.9	2.9	29800		
Great Lakes Hybrids	4879STXRIB	98	252.7	17.4	59.9	0.4	29500		
Nutech/G2 Genetics	5F-200	100	251.8	19.6	58.4	1.6	28400		
Masters Choice	MCT 4881	98	246.4	17.1	59.4	4.5	28900		
Rea Hybrids	5A992-RIB	99	243.8	16.7	58.2	0.0	29300		
Wensman	W9288STXRIB	98	241.0	17.1	59.2	0.0	28200		
Nutech/G2 Genetics	5F-198	98	240.5	15.8	56.7	0.4	27800		
Dairyland Seed	DS-9599	99	240.4	17.2	58.7	1.9	27700		
Great Lakes Hybrids	5015STXRIB	100	240.1	18.1	59.0	2.7	28400		
Rea Hybrids	5A993-RIB	99	240.1	19.0	62.0	0.0	29100		
Renk Seed	RK596SSTX	98	239.6	16.9	59.7	0.4	28500		
Federal Hybrids	4440 VT3P	94	239.5	16.6	60.1	0.0	29000		
Proseed	1399A GT3000	99	239.4	16.7	58.3	3.3	26900		
Thunder Seed	6600 VT2PRIB	100	238.3	18.5	59.1	0.0	27300		
Federal Hybrids	5050 SSTAX	100	237.5	16.9	59.2	0.8	29100		
Check	СНЕСК	99	237.5	18.1	59.6	0.4	28300		
Thunder Seed	101-97 GENSSRIB	97	237.1	16.9	60.2	0.0	29700		
Wensman	W90994STX	99	236.6	17.9	58.6	0.0	27100		
Wensman	W90979STXRIB	97	236.3	15.8	58.8	0.4	28900		
Legend Seeds	LR 9600 GENSSRIB	100	236.3	18.6	58.4	0.0	27600		
Channel	197-68STXRIB	98	236.2	18.6	58.7	0.0	26100		
Pioneer	P9929AM	99	235.2	17.4	59.1	0.8	28900		
Dairyland Seed	DS-9198	98	235.1	15.9	57.8	0.0	29200		
Wensman	W70975VT3PRIB	97	234.4	15.7	60.1	0.0	28500		
Peterson Farms Seed	PFS 55S96	96	233.6	16.2	59.5	0.0	29100		
Federal Hybrids	4450 SSTAX	94	233.4	16.4	59.7	1.2	28500		
Nuseed	9904 VT2P RIB	99	232.9	16.1	58.9	0.0	26700		
Federal Hybrids	4558 SSTAX	95	232.6	15.5	58.6	0.0	29700		
Federal Hybrids	4540 VT3P	95	232.2	16.6	59.6	0.0	29200		
	Tria	al Average	230.0	16.7	58.0	0.6	27500		
	LSD (0.05)†			1.1	0.9	1.6	1400		
	C.V.‡				1.2	-	3.5		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial (100 day maturity or less) at Volga, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Great Lakes Hybrids	4548STXRIB	95	232.1	16.1	60.3	0.0	28200
Legend Seeds	LR 9397 VT3PRIB	97	231.0	16.0	59.2	0.0	29300
Channel	200-48STXRIB	100	230.8	19.5	58.5	0.8	25500
Federal Hybrids	4760 SSTAX	97	230.7	16.3	58.4	0.8	27000
Rea Hybrids	4A962-RIB	96	230.3	17.2	59.5	0.0	27400
Legend Seeds	40J595 RR	95	229.9	16.1	61.6	1.6	27300
Rea Hybrids	5A981-RIB	98	229.8	18.0	59.6	0.0	27100
Wensman	W90941STXRIB	94	229.8	14.2	58.6	1.2	28600
Proseed	1495SS	95	229.7	16.0	59.8	3.5	28000
Channel	197-50STXRIB	97	228.8	19.2	58.2	0.0	24500
Rea Hybrids	4A972-RIB	97	228.4	15.6	59.1	0.8	28400
Legend Seeds	LR 9497 GENSSRIB	97	228.2	18.4	58.9	0.0	27400
Thunder Seed	101-95 GENSSRIB	95	227.8	18.2	58.7	0.0	27000
Thunder Seed	7396 VT2PRIB	96	227.6	16.0	58.7	0.0	28500
Wensman	W90962STX	96	225.4	14.9	58.0	0.0	28700
Federal Hybrids	4640 VT3P	96	223.7	15.4	61.3	0.0	28600
Thunder Seed	4695 RR	95	222.7	16.8	60.0	0.8	27400
Nutech/G2 Genetics	5F-196	96	222.2	15.9	57.4	0.4	23600
Federal Hybrids	4550 SSTAX	95	219.5	16.1	57.2	0.0	27800
Peterson Farms Seed	PFS 81W95	95	218.1	14.7	58.4	0.0	27400
Proseed	1496 SS	96	217.2	18.4	58.1	0.0	27100
	Tria	l Average	230.0	16.7	58.0	0.6	27500
LSD (0.05)†			11.9	1.1	0.9	1.6	1400
		C.V.‡	3.7	4.9	1.2	-	3.5

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day maturity or more) at Volga. SD.

Vari	iety Information		Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Great Lakes Hybrids	5688STXRIB	106	255.0	23.2	59.0	0.0	27800
Dairyland Seed	DS-9203	103	253.2	21.2	58.6	0.0	29500
Pioneer	P0339AM	103	252.1	18.4	58.3	0.8	28400
Rea Hybrids	5A029-RIB	102	251.6	17.1	59.1	0.0	29300
Wensman	W9325STXRIB	102	249.7	17.7	59.1	0.4	28200
Wensman	W91011STXRIB	101	246.5	17.3	58.2	0.0	27100
Federal Hybrids	5250 SSTAX	102	246.4	17.1	60.6	0.0	29000
Masters Choice	MCT 5371	103	245.0	18.0	59.2	0.4	26500
Dairyland Seed	DS-9905	105	244.7	22.0	57.2	1.9	29200
Rea Hybrids	6A032-RIB	103	243.9	20.0	60.2	0.0	26000
Pioneer	P0589AM	105	243.8	20.8	57.9	0.0	29000
Dairyland Seed	DS-9701	101	243.5	17.9	58.8	0.0	27300
Dairyland Seed	DS-9805	103	243.1	22.5	56.9	0.0	28500
Great Lakes Hybrids	5283STXRIB	102	242.8	18.0	58.6	0.4	28300
Titan Pro	2M04-2P	104	242.7	19.8	59.7	0.4	27700
Channel	202-52STXRIB	102	242.2	17.3	58.3	0.0	29200
Federal Hybrids	5140 SSTAX	101	240.9	17.8	59.4	0.7	28300
Titan Pro	TP 39-05 SS	105	240.1	22.4	60.1	0.0	26700
Channel	202-64STXRIB	102	238.0	19.0	60.7	0.0	27000
Renk Seed	RK666SSTX	102	236.3	17.3	57.1	0.0	27400
Titan Pro	TP 39-02 SS	102	235.7	18.2	59.0	0.8	25900
Channel	203-88STXRIB	103	234.8	20.0	57.2	0.4	27400
Great Lakes Hybrids	5470STXRIB	104	234.5	20.2	59.3	0.0	28700
Check	СНЕСК	99	234.2	17.5	59.9	0.4	28300
Nutech/G2 Genetics	5F-701	101	232.5	18.3	59.7	0.0	27400
Legend Seeds	LR 9405 GENSSRIB	105	232.4	21.6	59.7	0.0	27200
Titan Pro	TP 31-01 3011A	101	232.1	18.5	60.0	1.3	27100
Legend Seeds	LR 94A01 GTA	101	231.4	17.2	59.5	0.0	28300
Titan Pro	TP 58-01 2P	101	229.5	17.0	59.0	0.0	27100
Renk Seed	RK699SSTX	105	223.3	22.2	58.1	0.5	23000
Proseed	13101 SS	101	211.6	17.3	58.7	0.0	26200
	Tria	al Average	239.8	19.1	58.9	0.3	27700
LSD (0.05)†			11.4	1.0	1.2	1.2	1100
	3.4	3.7	1.5	-	2.9		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	4 miles north and 1/2 mile west of Bancroft (57353) in Kingsbury County
	(GPS: 44.543921, -97.767418)
Cooperator:	Weerts Farm, Inc.
Soil Type:	Houdek-Stickney loam, 0-2% slope, non-irrigated
Fertilizer:	135-75-0-10S-2Z preplant; 30-10-10 starter
Yield Goal:	170 bu/ac
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: 1.5 pt Harness (acetochlor), fall applied
	Post: 1 qt Roundup PowerMax (glyphosate) + 1 qt TripleFlex (acetochlor +
	flumetsulam + clopyralid) + 30 oz Status (dicamba + diflufenzopyr)
Date seeded:	5/16/2016
Date harvested:	11/7/2016



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (100 day maturity or less) at Bancroft, SD.

Varie	ety Information	1	Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
NuTech/G2 Genetics	5F-196	96	232.8	15.4	58.9	0.0	28300
NuTech/G2 Genetics	5F-198	98	231.2	14.8	56.4	0.0	27100
Federal Hybrids	4640 VT2P RIB	96	229.4	15.8	61.6	0.4	28200
Heine Seeds	723VT2PRORIB	100	227.2	16.0	60.6	0.0	29200
Proseed	1399A 3000GT	99	223.3	16.0	58.7	0.0	27900
Thunder Seed	EXP 7899 SS	99	222.6	15.6	59.3	0.0	27600
Dairyland Seed	DS-9599	99	221.6	15.8	58.7	0.0	28600
Wensman	W81007VT2RIB	100	221.3	16.5	61.4	0.0	27300
Channel	197-50STXRIB	97	221.2	15.1	59.2	0.0	27900
Thunder Seed	4695 RR	95	220.3	15.2	60.5	0.0	27900
Renk	RK596SSTX	98	220.0	15.0	59.3	0.0	24800
Federal Hybrids	4560 VT2P RIB	95	219.9	15.2	61.5	0.0	28000
Federal Hybrids	4470 VT2P	94	219.6	14.9	60.2	0.0	27800
Peterson Farms Seed	72D00	100	219.5	15.5	59.8	0.0	27400
Wensman	W8184VT2RIB	95	218.9	15.3	60.9	0.0	29000
Titan Pro	TP 54-98 2P	98	218.3	15.6	60.2	0.0	28500
Proseed	PX 598	98	217.7	15.2	60.1	0.0	29000
Federal Hybrids	5060 VT2P	100	217.6	15.6	60.9	0.0	28200
Thunder Seed	EXP 6791 VT2P	91	217.6	14.9	61.9	0.0	27800
Proseed	PX 695	95	217.5	15.5	61.4	0.4	29000
Federal Hybrids	4540 VT3P RIB	95	217.1	15.3	60.1	0.0	27800
Wensman	W80993VT2PRO	99	215.2	15.9	61.7	0.0	29000
Heine Seeds	639STXRIB	99	213.8	15.2	60.5	0.0	28300
Federal Hybrids	4240 VT2P RIB	92	213.5	14.9	60.8	0.0	27600
Titan Pro	TP 65-00 2P	100	213.3	15.6	60.1	0.0	27700
Federal Hybrids	3970 VT2P	89	213.2	14.3	60.7	0.0	28700
Renk	RK595SSTX	99	213.2	14.9	60.7	0.0	29100
Heine Seeds	712VT2PRORIB	100	213.0	15.5	61.0	0.0	27600
Peterson Farms Seed	77P94	94	212.5	15.1	59.3	0.0	26900
Federal Hybrids	4520 VT2P RIB	95	212.0	15.8	61.7	0.0	27800
	Tria	al Average	212.8	15.2	60.2	0.2	27800
	L	SD (0.05)†	15.0	0.6	1.0	0.3	1100
		C.V.‡	5.1	2.8	1.1	_	2.9

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - **Early Season Tria** (100 day maturity or less) at Bancroft, SD.

Variet	Agronomic Performance						
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Wensman	W90994STXRIB	99	211.3	15.0	60.3	0.0	28300
Wensman	W80972VT2PRO	97	209.5	15.2	59.6	0.4	28000
Wensman	W90962STXRIB	96	209.5	14.6	61.0	0.0	29200
Wensman	W90979STXRIB	97	209.3	15.1	60.1	0.0	29100
Peterson Farms Seed	55\$96	96	208.9	15.3	60.4	0.0	25300
Thunder Seed	7396 VT2P	96	207.9	14.5	60.7	0.0	28300
Federal Hybrids	4760 VT2P RIB	97	207.3	14.9	59.5	0.0	27900
Federal Hybrids	4558 SSTAX RIB	95	206.0	14.7	60.1	0.0	27100
Check	Check	99	206.0	15.0	60.7	0.0	26100
Thunder Seed	101-95 SS	95	205.3	14.9	59.4	0.0	28000
Channel	197-68STXRIB	97	204.8	15.3	60.6	0.0	28000
Federal Hybrids	4160VT2P RIB	91	203.4	14.4	59.7	0.4	28400
Federal Hybrids	4440 VT2P RIB	94	202.8	15.0	60.5	0.0	27900
Dairyland Seed	DS-9198RA	98	202.1	13.9	59.3	0.0	27200
Renk	RK612SSTX	100	201.7	14.7	58.9	0.0	27700
NuTech/G2 Genetics	5N-800	100	201.6	15.8	60.8	0.0	25900
Peterson Farms Seed	81W95	95	201.4	14.8	59.0	0.0	27400
Federal Hybrids	4870 SSTAX	98	198.7	15.4	60.6	0.0	26400
Proseed	1496 SS	96	197.1	15.0	59.0	0.0	27000
Thunder Seed	6600 VT2P	100	196.8	15.8	61.5	0.0	25400
Federal Hybrids	4060 VT2P RIB	90	184.6	14.1	59.7	0.0	28300
	Tria	al Average	212.8	15.2	60.2	0.2	27800
	LSD (0.05)†			0.6	1.0	0.3	1100
		C.V.‡	5.1	2.8	1.1	-	2.9

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day maturity or more) at Bancroft, SD.

) (	A succession Deutermannen						
vari	ety information		Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
NuTech/G2 Genetics	5F-701	101	222.3	16.1	61.3	0.0	27600
NuTech/G2 Genetics	5Z-503	103	220.2	15.7	60.1	0.0	27800
NuTech/G2 Genetics	5Z-601	101	219.9	15.6	60.2	0.0	27600
NuTech/G2 Genetics	5F-504	104	219.8	16.6	59.8	0.0	27000
Dairyland Seed	DS-9403	103	219.4	16.6	57.0	0.0	28300
Federal Hybrids	5370 SSTAX	103	216.8	16.0	60.9	0.0	28500
Federal Hybrids	5260 DGVT2P RIB	102	215.2	15.0	61.4	0.0	27100
Thunder Seed	EXP 7805 SS	105	213.3	16.2	60.6	0.0	28700
Federal Hybrids	5550 SSTAX RIB	105	212.6	16.3	59.1	0.0	27900
Dairyland Seed	DS-9204	104	212.2	17.2	58.0	0.0	28100
Titan Pro	TP 67-02 SS	102	209.9	15.1	60.3	0.0	27300
Titan Pro	TP 58-01 2P	101	206.3	15.6	61.4	0.0	27600
Wensman	W9325STXRIB	102	206.3	15.4	58.9	0.0	27400
Federal Hybrids	5250 SSTAX RIB	102	205.6	15.8	60.8	0.0	27300
Federal Hybrids	5140 VT2P RIB	101	205.4	15.7	58.7	0.0	27900
Channel	201-37VT2PRIB	101	204.7	15.2	58.7	0.0	27900
Channel	205-19STXRIB	105	204.0	15.5	57.4	0.0	24900
Thunder Seed	EXP 6803 VT2P	103	203.8	17.7	59.8	0.0	24800
Dairyland Seed	DS-9701RA	101	203.7	15.5	57.9	0.0	26400
Channel	203-01STXRIB	103	202.5	15.2	56.8	0.0	26200
Check	Check	99	199.4	14.8	59.3	0.0	25800
Channel	206-30STXRIB	106	199.0	17.9	59.9	0.0	28200
Thunder Seed	7603 SS	103	198.0	15.9	59.0	0.0	27700
Dairyland Seed	DS-9802	102	196.8	15.8	57.9	0.0	27900
Dairyland Seed	DS-9106	106	195.0	17.1	59.7	0.0	26500
Titan Pro	TP 31-01 3011A	101	193.9	15.8	60.4	4.7	27700
Channel	202-52STXRIB	102	193.5	15.8	58.0	0.0	25900
NuTech/G2 Genetics	5H-502	102	185.0	16.0	59.4	0.0	22800
Federal Hybrids	5440 SSTAX RIB	104	182.3	15.2	58.0	0.0	27600
	Trial Average			15.9	59.4	0.2	27100
	12.3	0.5	0.8	0.3	1000		
	4.2	2.1	1.0	-	2.6		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	5 miles south and 2.5 miles east of Bath (57427) in Brown County, SD						
0	(GPS. 45.380740, -98.284948)						
Cooperator:	Gordon and Roger Locken Farms						
Soil Type:	Great Bend-Beotia silt loams, 0-2% slopes, non-irrigated						
Fertilizer:	180-96-0-11S preplant; 30-10-10 starter						
Yield Goal:	200 bu/acre						
Previous crop:	Soybeans						
Tillage:	No-till						
Row spacing:	30 inches						
Seeding Rate:	31,400/acre						
Herbicide:	Pre: none						
	Post: 1 qt Powermax (glyphosate)						
Date seeded:	5/4/2016						
Date harvested:	11/4/2016						



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (95 day maturity or less)** at Bath, SD.

Variet	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Wensman	W8184VT2RIB	95	250.7	16.0	60.8	0.0	29100
Channel	195-18VT2PRIB	95	249.6	17.4	62.9	0.0	29800
Heine Seeds	615VT2PRO	95	249.6	16.2	59.9	0.0	29400
Dairyland Seed	DS-7294	94	246.7	16.5	61.2	0.4	29100
Proseed	PX 695	95	245.2	16.5	60.8	0.0	29000
Federal Hybrids	4560 SSTAX RIB	95	245.2	16.4	59.0	0.0	29300
Federal Hybrids	4470 VT2P	94	243.6	16.0	60.3	0.0	28000
Peterson Farms Seed	77P94	94	243.4	15.8	59.8	0.0	27300
Heine Seeds	627VT3PRORIB	95	241.4	16.3	61.5	0.4	28400
Federal Hybrids	4160 VT2P RIB	91	240.7	15.3	59.9	0.0	29100
Thunder Seed	EXP 6791 VT2P	91	239.6	15.3	60.2	0.0	28400
Federal Hybrids	4558 SSTAX RIB	95	237.7	15.4	59.4	0.0	28400
Federal Hybrids	4540 VT3P RIB	95	237.6	16.7	60.5	0.0	28000
Wensman	W80928VT2RIB	92	237.5	15.3	61.0	0.3	29900
Peterson Farms Seed	72A91	91	237.5	15.4	60.8	0.0	29000
Federal Hybrids	3970 VT2P	89	237.5	15.2	60.9	0.0	29300
Thunder Seed	7993 VT2P	93	237.3	15.8	60.2	0.0	28900
Check	Check	99	237.3	15.6	59.1	0.0	28000
Thunder Seed	4695 RR	95	237.2	16.1	60.0	0.4	29400
Wensman	W80952VT2RIB	95	237.1	16.4	58.9	1.1	29100
NuTech/G2 Genetics	5F-894	94	236.5	15.8	58.7	0.0	28600
Renk	RK568VT3P	95	233.1	16.7	61.0	0.0	27100
Wensman	W80931VT2RIB	93	232.2	15.4	59.8	0.0	28700
Peterson Farms Seed	81W95	95	231.8	15.6	59.3	0.0	27700
NuTech/G2 Genetics	5F-091	91	231.1	15.6	60.8	0.0	27700
Federal Hybrids	4520 VT3P RIB	95	230.3	17.1	60.8	0.8	28400
Peterson Farms Seed	76S92	92	229.9	15.7	59.1	0.0	29100
Federal Hybrids	4440 VT3P RIB	94	229.9	16.1	60.7	0.0	27300
Federal Hybrids	4060 VT2P RIB	90	228.1	15.3	59.8	0.4	28600
Federal Hybrids	4240 VT2P RIB	92	228.0	15.8	60.9	0.4	28900
	Tria	al Average	235.4	16.0	60.2	0.2	28300
	L	SD (0.05)†	13.3	0.5	0.9	0.7	1300
		C.V.‡	4.0	2.1	1.1	-	3.3

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial (95 day maturity or less) at Bath, SD.

Vai	riety Information		Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Renk	RK566SSTX	94	224.5	16.0	59.4	0.0	25400	
Thunder Seed	101-95 SS	95	223.3	16.6	60.9	0.0	27400	
Stine	R9209-32	94	220.0	15.5	60.6	0.0	26200	
Stine	9314-20	94	217.6	17.1	58.5	0.4	28400	
Renk	RK522SSTX	94	210.0	15.7	60.2	0.9	25000	
Trial Average		235.4	16.0	60.2	0.2	28300		
LSD (0.05)†		13.3	0.5	0.9	0.7	1300		
		C.V.‡	4.0	2.1	1.1	-	3.3	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.





Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (96 day maturity or more) at Bath, SD.

Variet	Variety Information				Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand			
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)			
Heine Seeds	639STXRIB	99	257.2	16.7	58.2	1.2	29100			
NuTech/G2 Genetics	5F-196	96	256.2	16.5	58.4	0.8	28500			
NuTech/G2 Genetics	5Z-601	101	255.8	18.0	59.0	0.4	28600			
Federal Hybrids	5370 SSTAX	103	254.9	19.0	59.7	3.8	28700			
Renk	RK608DGVT2P	100	254.6	16.9	58.0	0.4	28500			
Thunder Seed	EXP 7899 SS	99	251.7	16.5	58.6	0.0	28200			
Proseed	1399A 3000 GT	99	250.3	17.4	58.6	0.4	29000			
Proseed	PX 598	98	249.3	16.7	58.7	0.4	29300			
NuTech/G2 Genetics	5F-701	101	248.3	18.1	59.7	0.0	29100			
Federal Hybrids	4760 SSTAX RIB	97	246.2	16.9	58.2	1.1	28500			
Thunder Seed	7603 SS	103	245.5	17.7	59.5	1.2	28300			
Renk	RK595SSTX	99	244.3	16.5	59.5	0.0	28500			
Wensman	W80993VT2PRO	99	243.9	17.4	60.6	0.7	29200			
Federal Hybrids	5440 SSTAX RIB	104	243.4	19.8	56.5	0.4	27800			
Thunder Seed	7396 VT2P	96	242.4	16.1	59.1	1.1	28300			
Wensman	W80972VT2PRO	97	241.6	16.1	58.9	0.0	29100			
NuTech/G2 Genetics	5F-198	98	241.4	15.8	56.0	0.4	27700			
Federal Hybrids	5250 SSTAX RIB	102	240.5	18.0	60.0	0.8	28600			
Check	Check	99	239.4	15.9	58.2	0.4	28500			
Federal Hybrids	5550 SSTAX RIB	105	237.9	18.9	58.1	3.7	27100			
Federal Hybrids	5060 SSTAX RIB	100	237.2	17.4	59.5	0.0	26800			
Stine	R9428-32	100	236.7	18.0	59.1	0.4	28300			
Wensman	W90962STXRIB	96	236.5	15.4	58.5	1.1	29000			
Federal Hybrids	5260 DGVT2P RIB	102	236.1	17.0	61.5	1.5	28600			
Channel	197-50STXRIB	97	235.5	16.7	59.4	0.7	28700			
Dairyland Seed	DS-9599	99	235.3	18.0	57.6	0.0	28300			
Channel	197-68STXRIB	97	234.8	17.0	58.4	0.0	26700			
Peterson Farms Seed	55\$96	96	234.1	16.5	59.4	0.0	27700			
Wensman	W8294VT2RIB	99	233.0	17.6	59.6	0.8	26800			
Dairyland Seed	DS-9198RA	98	232.2	15.8	57.2	0.8	28600			
	Tria	al Average	238.3	17.1	58.8	0.8	28200			
	L	SD (0.05)†	14.1	0.7	1.1	1.6	1200			
	C.V.+				1.4	-	3.1			

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



 Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season

 Trial (96 day maturity or more) at Bath, SD.

Variety	Information		Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Federal Hybrids	5140 SSTAX RIB	101	230.6	18.1	59.5	1.2	28500	
Renk	RK612SSTX	100	229.6	16.5	58.5	1.6	27300	
Federal Hybrids	4870 SSTAX	98	225.5	16.8	61.0	0.0	27200	
Dairyland Seed	DS-9701RA	101	224.3	17.6	57.0	4.6	28600	
Thunder Seed	6600 VT2P	100	223.9	17.2	59.4	0.4	25800	
Renk	RK596SSTX	98	223.6	17.1	59.3	1.2	27400	
Proseed	1496 SS	96	204.2	17.1	58.2	0.0	26600	
Federal Hybrids	4640 VT3P RIB	96	198.9	15.7	59.5	0.0	28700	
Trial Average		238.3	17.1	58.8	0.8	28200		
LSD (0.05)†			14.1	0.7	1.1	1.6	1200	
		C.V.‡	4.2	2.8	1.4	-	3.1	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



#### 2016 South Dakota Corn Hybrid Trial Results Beresford

#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	6 miles west and 3 miles south of Beresford (57432) in Clay county, SD (GPS: N 43°02.783' W 096°54.125')
Cooperator:	SDSU Southeast Research Farm - Peter Sexton, manager
Soil Type:	Egan-Clarno-Trent silty complex, 0-2% slope, non-irrigated
Fertilizer:	130-0-0 preplant; 30-10-10 starter
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	Conventional
Row spacing:	30 inches
Seeding Rate:	31,400/acre
	Pre: 32 oz Roundup (glyphosate) + 1.33 pt Dual (metolachlor) + 4 oz Metribuzin
Herbicide:	(metribuzin) + 1 oz Sharpen (saflufenacil)
	Post: none
Date seeded:	5/6/2016
Date harvested:	10/26/2016





#### 2016 South Dakota Corn Hybrid Trial Results Beresford

Table 1. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (107 day maturity or less) at Beresford, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Channel	207-27STXRIB	107	234.7	17.4	59.5	0.0	28900.0
Nutech/G2 Genetics	5F-504	104	233.9	16.9	61.1	0.7	28600.0
Nutech/G2 Genetics	5F-906	106	230.7	17.6	60.2	0.0	26300.0
Renk	RK776SSTX	107	229.6	17.7	60.0	0.7	28000.0
Heine	790VT2PRORIB	107	228.1	17.2	59.2	0.7	27600.0
Hoegemeyer	HPT7606AM	106	226.6	17.0	60.6	0.0	26300.0
Great Lakes Hybrids	5470STXRIB	104	224.9	15.8	58.9	0.4	28600.0
Nutech/G2 Genetics	5H-806	106	224.7	17.0	60.3	0.0	27600.0
Hoegemeyer	HPT7557AM	105	224.5	17.2	59.8	0.0	26300.0
Nutech/G2 Genetics	5H-905	105	224.5	15.7	56.6	0.3	26300.0
Titan Pro	TP 56-06 3110	106	224.3	16.4	58.1	0.0	28200.0
Heine	775STXRIB	107	223.8	16.2	59.7	0.0	28200.0
Wensman	W91051STXRIB	105	223.0	16.6	59.2	0.0	26700.0
Great Lakes Hybrids	5755STXRIB	107	222.4	16.4	60.5	1.1	28000.0
Dyna-Gro Seed	D44VC36RIB	104	222.1	17.4	59.6	0.0	27500.0
Great Lakes Hybrids	5029VT2RIB	100	220.5	15.9	58.5	0.3	28600.0
Heine	791VT2PRORIB	107	219.7	17.9	59.0	1.4	27900.0
Thunder Seed	EXP 6803 VT2P	103	219.5	17.7	59.2	0.0	26300.0
Heine	744VT3PRORIB	104	213.5	16.3	59.1	0.3	25500.0
Hoegemeyer	HPT7644AM	106	211.7	16.6	59.6	0.0	26600.0
Heine	755VT2PRO	105	210.8	16.3	58.6	1.1	26700.0
Wensman	W9325STXRIB	102	209.4	15.9	58.7	0.3	27800.0
Masters Choice	MCT 5663	106	209.2	17.5	57.1	0.8	24300.0
Thunder Seed	EXP 7805 SS	105	208.9	15.9	58.9	0.0	27900.0
Wensman	W91073STXRIB	107	207.3	17.2	57.9	0.0	22700.0
Great Lakes Hybrids	4548STXRIB	95	203.9	15.2	60.5	0.0	27600.0
Thunder Seed	7603 SS	103	203.7	15.3	58.4	0.3	28100.0
Masters Choice	MCT 5371	103	201.3	16.1	58.2	0.4	24000.0
Check	Check	99	198.5	15.1	56.4	0.0	25800.0
Masters Choice	MCT 5454	104	198.2	16.3	59.1	1.9	26700.0
Great Lakes Hybrids	4879STXRIB	98	196.2	15.4	58.0	0.0	27600.0
Great Lakes Hybrids	5283STXRIB	102	196.0	15.9	58.0	0.0	27400.0
Stine	9538-20	104	188.3	17.4	60.0	0.8	23000.0
Stine	9529E-20	105	184.9	18.7	60.1	0.0	23100.0
	Tria	al Average	213.2	16.6	59.2	0.4	26800.0
	L	SD (0.05)†	16.2	0.7	1.1	1.1	1100.0
		C.V.‡	5.4	2.7	1.3	-	2.9

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### 2016 South Dakota Corn Hybrid Trial Results Beresford

Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (108 day maturity or more) at Beresford, SD.

Variet	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	5F-308	108	240.8	19.8	59.9	0.0	27000
Hoegemeyer	HPT8066AM	110	236.5	19.3	60.0	0.0	28000
Channel	209-53STXRIB	109	230.3	20.2	59.7	0.4	28200
Heine Seeds	834DGVT2PRO	112	229.9	19.9	59.1	0.0	27200
Dyna-Gro Seed	D52SS91RIB	112	227.7	22.0	59.1	0.4	26800
Nutech/G2 Genetics	5F-510	110	226.7	19.9	60.4	0.0	27200
Renk	RK877DGVT2P	111	225.8	21.7	58.9	0.0	24800
Great Lakes Hybrids	6185STXRIB	111	224.5	18.7	59.1	0.0	26900
Titan Pro	TP 66-10 2P	110	223.9	19.3	58.7	0.0	24700
Renk	RK871VT2P	111	223.7	21.2	59.0	0.0	23800
Nutech/G2 Genetics	5F-709	109	222.3	19.9	58.3	0.4	25300
Titan Pro	TP 59-08 SS	108	222.2	17.9	59.7	0.0	25600
Great Lakes Hybrids	6462STXRIB	114	218.0	21.7	60.3	0.4	26600
Renk	RK810SSTX	110	217.3	19.5	58.9	0.4	28400
Channel	209-44VT2PRIB	109	216.5	19.4	58.4	0.4	25200
Great Lakes Hybrids	5824STXRIB	108	215.1	18.5	61.2	0.4	25900
Dyna-Gro Seed	D49VC39RIB	109	215.1	19.4	59.8	0.0	25000
Titan Pro	TP 55-11 2P	111	212.9	20.2	58.9	0.0	25000
Wensman	W91095STXRIB	109	203.5	18.5	60.5	0.0	27000
Channel	211-35STXRIB	111	202.6	21.8	59.9	0.4	26600
Renk	RK792SSTX	108	198.7	18.0	59.2	0.0	25200
Great Lakes Hybrids	5944STXRIB	109	193.9	19.3	58.2	0.0	21500
Check	Check	99	189.9	15.4	58.6	0.0	25800
Wensman	W91112STXRIB	111	189.8	19.3	59.6	0.0	21500
	Tria	al Average	215.1	19.3	59.3	0.1	25900
	L	SD (0.05)†	14.6	0.8	0.8	0.6	919
		C.V.‡	4.8	2.9	1.0	-	2.5

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### 2016 South Dakota Corn Hybrid Trial Results Geddes

#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	2 miles North of Geddes (57432) in Charles Mix County, SD (GPS: N 43°16.958' W 098°39.895')
Cooperator:	Curtis Sybesma
Soil Type:	Highmore silt loam, 0-2% slope
Fertilizer:	120-46-0-32S-2Z preplant; 30-10-10 starter
Yield Goal:	170 bu/acre
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	27,000/acre
Herbicide:	Pre: 1.5 qt Harness Xtra (acetochlor) + 1 qt RT3 (glyphosate) + 12 oz Strut (dicamba)
	Post: none
Date seeded:	5/6/2016
Date harvested:	10/26/2016



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#### 2016 South Dakota Corn Hybrid Trial Results Geddes

Table 1. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (107 day maturity or less) at Geddes, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Heine Seeds	791VT2PRORIB	107	180.2	16.4	59.1	0.0	25300
Hoegemeyer	HPT7644AM	106	176.2	15.7	59.8	0.0	26000
Heine Seeds	790VT2PRORIB	107	176.1	16.2	59.8	0.0	25900
Nutech/G2 Genetics	5H-905	105	173.0	14.5	57.4	0.0	24800
Nutech/G2 Genetics	5F-504	104	172.6	16.5	59.7	1.6	26200
Heine Seeds	755VT2PRO	105	166.9	16.1	58.2	0.0	26400
Channel	207-27STXRIB	107	164.9	15.9	59.2	0.0	27000
Heine Seeds	775STXRIB	107	164.8	17.5	59.0	0.0	25800
Renk	RK776SSTX	107	162.8	17.1	60.1	0.0	25800
Wensman	W91073STXRIB	107	161.1	15.9	58.7	0.0	24700
Dyna-Gro Seed	D44VC36RIB	104	160.0	16.7	60.8	0.0	26800
Great Lakes Hybrids	5755STXRIB	107	159.5	16.2	58.5	0.0	25900
Heine Seeds	744VT3PRORIB	104	159.4	15.2	59.0	0.0	26000
Hoegemeyer	HPT7166AM	101	157.2	14.6	59.0	0.0	25400
Great Lakes Hybrids	5283STXRIB	102	157.0	15.4	60.3	0.0	26100
Great Lakes Hybrids	4879STXRIB	98	155.7	15.3	59.4	0.0	25900
Nutech/G2 Genetics	5F-906	106	153.1	16.2	59.8	0.0	25600
Great Lakes Hybrids	5470STXRIB	104	152.7	15.5	59.3	0.0	26200
Thunder Seed	EXP 6803 VT2P	103	151.1	16.8	60.7	0.0	25900
Wensman	W9325STXRIB	102	150.4	15.5	60.5	0.0	26000
Thunder Seed	7603 SS	103	146.6	15.0	59.1	0.0	26400
Check	Check	99	145.8	14.4	58.0	0.0	25200
Wensman	W91051STXRIB	105	145.0	15.2	59.8	0.0	26200
Titan Pro	TP 56-06 3110	106	144.9	15.8	56.5	0.9	24800
Thunder Seed	EXP 7805 SS	105	141.7	15.0	61.1	0.0	26200
Great Lakes Hybrids	5029VT2RIB	100	139.4	15.9	60.1	0.0	26100
Great Lakes Hybrids	4548STXRIB	95	139.2	14.1	58.5	0.4	26500
Federal Hybrids	5550 SSTAX RIB	105	127.7	15.2	61.0	0.0	26400
	Tri	al Average	156.4	15.6	59.3	0.0	25900
	L	SD (0.05)†	18.7	0.8	1.0	0.0	886
		C.V.‡	8.6	3.5	1.2	-	2.4

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### 2016 South Dakota Corn Hybrid Trial Results Geddes

Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (108 day maturity or more) at Geddes, SD.

Variety Information				Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Hoegemeyer	HPT8255AM	112	185.6	16.6	57.9	0.4	25300	
Hoegemeyer	HPT8066AM	110	185.2	15.8	58.3	0.0	26400	
Renk	RK871VT2P	111	183.1	17.2	58.7	0.5	24000	
Great Lakes Hybrids	6462STXRIB	114	179.0	19.8	59.0	0.4	26000	
Dyna-Gro Seed	D49VC39RIB	109	177.8	15.7	58.9	0.0	24900	
Renk	RK877DGVT2P	111	176.2	18.2	57.4	0.4	24600	
Dyna-Gro Seed	D52SS91RIB	112	173.8	20.3	58.6	0.4	25900	
Heine Seeds	834DGVT2PRO	112	173.5	17.4	58.0	0.0	25300	
Channel	209-53STXRIB	109	172.5	18.4	59.5	0.0	26100	
Channel	209-44VT2PRIB	109	170.9	18.0	56.8	0.9	24800	
Channel	211-35STXRIB	111	168.6	18.1	59.9	0.0	24300	
Titan Pro	TP 66-10 2P	110	167.5	15.9	58.2	0.4	25600	
Great Lakes Hybrids	6185STXRIB	111	166.8	17.1	58.7	0.4	26600	
Titan Pro	TP 55-11 2P	111	166.0	17.4	58.9	0.0	25500	
Great Lakes Hybrids	5824STXRIB	108	157.2	16.4	60.0	0.0	26400	
Renk	RK810SSTX	110	153.2	18.4	58.2	0.4	26100	
Great Lakes Hybrids	5944STXRIB	109	152.2	16.4	57.2	0.0	22100	
Wensman	W91095STXRIB	109	151.1	15.8	61.6	0.0	25600	
Check	Check	99	150.9	13.7	58.2	0.0	25800	
Wensman	W91112STXRIB	111	146.8	16.7	59.2	0.0	23200	
Renk	RK792SSTX	108	146.5	15.3	59.9	0.4	24300	
Titan Pro	TP 59-08 SS	108	142.8	15.1	59.2	0.4	25900	
	Tria	al Average	164.2	16.7	58.6	0.2	25300	
	L	SD (0.05)†	14.9	0.9	1.0	0.9	896	
		C.V.‡	6.6	3.7	1.2	-	2.5	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	2 3/4 miles south and 2 miles east of Wessington (57381) in Beadle county, SD (GPS: 44 346708 -98 659005)
Cooperator:	Paul Fulton
Soil Type:	Houdek-Prosper loams, 0-2% slopes
Fertilizer:	134-52-18-12S-5Z preplant, 30-10-10 starter, 28-0-0 preemerge
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	27,000/acre
Herbicide:	Pre: 32 oz Harness (acetochlor) + 32 oz RT3 (glyphosate) +12 oz LV6 (2,4-D)
	Post: 44 oz Roundup WeatherMax (glyphosate)
Date seeded:	5/11/2016
Date harvested:	10/27/2016



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (100 day maturity or less)** at Miller, SD.

<u> </u>							
Varie	Agronomic Performance						
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Hoegemeyer	HPT 7088 AM	100	220.9	18.4	59.7	0.0	25200
Hoegemeyer	HPT 6620 AM	96	212.6	18.0	59.5	0.4	24400
Federal Hybrids	5060 VT2P	100	212.1	17.5	62.2	0.0	26800
Hoegemeyer	HPT 7061 AM	100	209.0	18.2	58.0	1.4	23200
Wensman	W8294VT2RIB	99	207.9	16.9	61.4	0.5	24600
Thunder Seed	4695 RR	95	207.5	16.9	59.8	0.0	24900
Titan Pro	TP 54-98 2P	98	205.9	18.5	59.1	1.3	24900
Nutech/G2 Genetics	5F-198	98	205.7	17.5	56.7	0.0	22800
Wensman	W81007VT2RIB	100	205.1	19.6	59.7	1.4	23500
Renk	RK608DGVT2P	100	204.7	18.4	59.7	0.0	23500
Nutech/G2 Genetics	5F-196	96	204.2	18.3	57.6	1.3	24300
Heine Seeds	639STXRIB	99	203.9	17.1	58.5	0.8	25500
Federal Hybrids	4560 VT2P RIB	95	203.6	16.4	60.4	0.0	24800
Heine Seeds	712VT2PRORIB	100	202.9	17.7	60.8	0.0	25600
Titan Pro	TP 65-00 2P	100	202.7	17.4	60.5	0.0	24600
Thunder Seed	EXP 7899 SS	99	202.7	17.5	59.7	0.0	24700
Federal Hybrids	3970 VT2P	89	201.8	15.7	60.2	0.0	23800
Federal Hybrids	4470 VT2P	94	200.8	16.6	58.4	0.0	23600
Federal Hybrids	4640 VT2P RIB	96	199.3	17.8	60.8	0.0	24000
Peterson Farms Seed	55\$96	96	198.3	16.9	61.0	0.0	24000
Federal Hybrids	4760 VT 2P RIB	97	197.3	17.5	60.2	0.5	24800
Wensman	W90994STXRIB	99	196.8	16.9	59.1	0.8	26000
Channel	197-68STXRIB	97	195.4	16.9	60.0	0.5	23800
Renk	RK612SSTX	100	194.7	16.6	59.8	0.0	25700
Channel	197-50STXRIB	97	194.7	17.1	59.5	0.0	24500
Thunder Seed	7396 VT2P	96	193.7	16.8	60.1	0.0	24200
Wensman	W80993VT2PRO	99	193.6	19.1	60.8	0.0	25500
Peterson Farms Seed	77P94	94	193.0	16.5	59.9	0.0	23700
Federal Hybrids	4520 VT2P RIB	95	192.2	17.4	62.0	0.5	24400
Federal Hybrids	4160 VT2P RIB	91	192.0	16.0	60.3	0.0	25900
	Tria	al Average	195.9	17.1	60.0	0.3	24400
	L	SD (0.05)†	13.8	0.8	1.0	1.2	2300
		C.V.‡	5.1	3.3	1.2	-	6.6

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



 Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial

 (100 day maturity or less) at Miller, SD.

Variet	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Wensman	W80972VT2PRO	97	191.7	17.4	60.0	0.0	24300
Heine Seeds	723VT2PRORIB	100	191.5	17.2	60.1	0.4	24400
Federal Hybrids	4558 SSTAX RIB	95	190.6	16.3	59.3	0.0	25200
Thunder Seed	7993 VT2P	93	189.8	16.3	60.0	0.0	26000
Thunder Seed	EXP 6791 VT2P	91	189.0	16.0	60.6	0.0	23500
Nutech/G2 Genetics	5N-800	100	188.9	17.7	61.3	0.0	23700
Thunder Seed	6600 VT2P	100	188.2	17.6	60.7	0.0	23600
Renk	RK595SSTX	99	187.6	16.7	61.3	0.4	25200
Thunder Seed	101-95 SS	95	187.3	16.9	60.3	0.4	24800
Federal Hybrids	4540 VT3P RIB	95	187.0	17.5	60.7	0.5	24300
Renk	RK596SSTX	98	186.0	17.3	59.3	1.0	23000
Federal Hybrids	4870 SSTAX	98	185.2	16.9	60.7	0.0	24700
Federal Hybrids	4240 VT2P RIB	92	184.5	16.1	60.5	0.0	23100
Wensman	W90962STXRIB	96	184.3	15.9	60.0	0.4	24700
Check	Check	99	180.5	16.6	59.4	0.0	23500
Peterson Farms Seed	81W95	95	179.8	16.3	59.2	1.1	22700
Federal Hybrids	4440 VT2P RIB	94	179.4	16.5	60.5	0.4	23700
Federal Hybrids	4060 VT2P RIB	90	176.8	16.5	60.2	0.0	25400
Trial Average			195.9	17.1	60.0	0.3	24400
LSD (0.05)†			13.8	0.8	1.0	1.2	2300
		C.V.‡	5.1	3.3	1.2	-	6.6

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day maturity or more) at Miller, SD.

Variety	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	5Z-503	103	215.7	18.1	58.0	0.5	24800
Nutech/G2 Genetics	5Z-601	101	215.4	17.8	59.5	0.5	24500
Thunder Seed	EXP 7805 SS	105	214.4	19.4	60.6	2.5	25300
Nutech/G2 Genetics	5F-504	104	206.4	19.5	58.5	0.5	24200
Dairyland Seed	DS-9204	104	204.9	20.1	57.1	0.0	25500
Federal Hybrids	5370 SSTAX	103	204.6	18.8	61.3	0.9	25600
Federal Hybrids	5260 DGVT2P RIE	102	203.2	18.0	59.7	0.8	24100
Wensman	W81041VT2RIB	104	202.2	20.4	59.7	2.2	24700
Federal Hybrids	5140 VT2P RIB	101	201.9	18.0	59.0	0.4	25700
Dairyland Seed	DS-9403	103	201.7	19.5	57.2	0.0	25400
Dairyland Seed	DS-9701RA	101	201.2	18.0	58.2	1.3	24200
Wensman	W81028VT2RIB	102	201.1	18.7	58.5	0.4	24500
Federal Hybrids	5550 SSTAX RIB	105	201.0	18.9	58.4	0.8	25000
Hoegemeyer	HPT 7166 AM	101	200.7	18.8	60.4	4.6	23600
Wensman	W91011STXRIB	101	200.4	16.9	59.7	0.0	25500
Channel	203-01STXRIB	103	199.6	18.5	57.5	0.4	24500
Federal Hybrids	5440 SSTAX RIB	103	198.8	20.2	58.5	0.5	22200
Titan Pro	TP 67-02 SS	102	197.4	17.9	60.3	0.5	24200
Thunder Seed	7603 SS	103	196.4	17.6	59.2	0.0	25000
Channel	205-19STXRIB	105	196.3	19.5	57.9	1.9	23500
Renk	RK675DGVT2P	103	194.6	18.8	58.5	0.9	25500
Dairyland Seed	DS-9802	102	194.6	18.3	57.9	0.0	24500
Nutech/G2 Genetics	5F-701	101	194.2	18.8	60.4	0.6	22700
Titan Pro	TP 58-01 2P	101	193.2	17.2	59.7	0.0	23800
Channel	206-30STXRIB	106	192.3	19.3	60.1	0.9	23500
Channel	202-52STXRIB	102	190.9	17.9	58.3	0.5	24100
Titan Pro	TP 31-01 3011A	101	190.1	18.4	60.1	5.1	25300
Dairyland Seed	DS-9106	106	189.6	19.4	58.5	1.5	22800
Renk	RK680SSTX	103	188.6	17.4	59.3	0.9	24200
Check	Check	99	183.5	15.9	59.1	0.5	23800
Channel	201-37VT2PRIB	101	180.4	17.5	58.8	0.4	23200
Nutech/G2 Genetics	5H-502	102	179.1	18.5	59.5	1.9	19600
Federal Hybrids	5250 SSTAX RIB	102	178.9	19.9	58.2	7.2	24300
Thunder Seed	EXP 6803 VT2P	103	157.7	21.2	58.1	7.2	23200
	Tria	l Average	196.0	18.5	59.0	1.3	24200
	LS	SD (0.05)†	13.4	1.0	0.9	2.0	2300
	4.9	4.1	1.1	-	6.7		

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.

‡ C.V. is a measure of variability or experimental error, 15% or less is acceptable.

Page 4



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	8.5 miles west of South Shore (57263) in Codington County, SD
	(GPS: 45.106941, -97.098865)
Cooperator:	SDSU Northeast Research Farm - Allen Heuer, manager
Soil Type:	Kranzburg-Brookings silty clay loams, 0-2% slope
Fertilizer:	150-100-25 preplant incorporated; 30-10-10 starter
Yield Goal:	200 bu/acre
Previous crop:	Spring Wheat
Tillage:	Conventional
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: 1 qt Dual II (metolachlor)
	Post: 1 qt Roundup PowerMax (glyphosate)
Date seeded:	5/3/2016
Date harvested:	11/1/2016



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (95 day maturity or less)** at South Shore, SD.

Variety Information				Agron	omic Perfori	mance	
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Thunder Seed	101-95 SS	95	193.4	19.7	58.5	0.0	26500
Federal Hybrids	4560 SSTAX RIB	95	191.7	18.8	59.8	0.0	28300
Renk	RK566SSTX	94	188.0	19.2	60.6	0.0	27400
Federal Hybrids	4470 VT2P	94	185.7	19.5	59.2	0.0	28200
Thunder Seed	4695 RR	95	185.6	20.3	60.0	0.8	28200
Titan Pro	TP 58-95 SS	95	184.9	19.2	60.2	0.4	28100
Channel	195-18VT2PRIB	95	181.5	21.6	60.0	0.4	28900
Thunder Seed	EXP 6791 VT2P	91	181.5	19.1	58.9	0.0	28400
Federal Hybrids	4558 SSTAX RIB	95	181.2	19.4	59.1	0.0	29000
Check	Check	99	180.7	20.2	58.2	0.0	27800
Wensman	W90941STXRIB	94	180.5	18.8	58.0	0.4	28300
Wensman	W8184VT2RIB	95	179.5	20.5	58.5	0.0	28400
Renk	RK568VT3P	95	178.9	20.6	59.4	0.4	26000
Peterson Farms Seed	76S92	92	178.4	19.4	59.7	0.0	27200
Heine Seeds	615VT2PRO	95	178.2	19.9	58.7	0.0	28500
Federal Hybrids	4540 VT3P RIB	95	175.6	19.2	58.7	0.0	28200
NuTech/G2 Genetics	5F-894	94	175.4	18.5	56.8	0.3	29800
Heine Seeds	627VT3PRORIB	95	175.3	20.3	59.7	0.4	25900
Federal Hybrids	4440 VT3P RIB	94	174.9	20.1	59.9	0.0	27000
Thunder Seed	7993 VT2P	93	174.3	19.3	60.3	0.4	28300
Federal Hybrids	4160 VT2P RIB	91	172.2	19.1	59.4	0.0	28700
Renk	RK522SSTX	94	172.1	19.7	57.4	0.0	26400
Federal Hybrids	4520 VT3P RIB	95	171.6	20.9	60.9	0.4	26800
Peterson Farms Seed	72A91	91	171.5	19.4	59.1	0.0	28700
Stine	R9209-32	94	171.2	19.1	61.3	0.4	26600
Federal Hybrids	4240 VT2P RIB	92	168.0	19.2	59.2	0.0	26500
Federal Hybrids	3970 VT2P	89	167.5	17.3	59.7	0.0	28700
Masters Choice	MCT 4572	95	165.3	19.8	60.0	0.0	26800
Titan Pro	TP 65-90 2P	90	164.1	17.2	60.2	0.0	27700
Stine	9314-20	94	163.0	20.2	57.8	1.2	28000
	Tria	al Average	172.5	19.5	59.3	0.2	27700
	Ľ	SD (0.05)†	14.0	0.7	0.8	0.8	1100
		C.V.‡	5.8	2.5	1.0	-	2.8

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial (95 day maturity or less) at South Shore, SD.

Varie	Variety Information			Agronomic Performance					
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand		
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)		
Dairyland Seed	DS-7294	94	159.2	19.9	59.4	0.0	28500		
Federal Hybrids	4060 VT2P RIB	90	151.0	18.8	59.1	0.0	27200		
NuTech/G2 Genetics	5F-091	91	150.1	18.9	58.3	0.5	24100		
Proseed	PX 695	95	148.2	19.6	60.2	0.0	28100		
Masters Choice	MCT 3891	88	145.5	18.4	60.9	0.4	26900		
Titan Pro	TP 61-94 3110A	101	144.7	19.8	59.7	0.4	29500		
	Tria	al Average	172.5	19.5	59.3	0.2	27700		
	L	SD (0.05)†	14.0	0.7	0.8	0.8	1100		
		C.V.‡	5.8	2.5	1.0	-	2.8		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.





Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (96 day maturity or more) at South Shore, SD.

Vari	ety Information		Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
NuTech/G2 Genetics	5Z-601	101	208.3	21.1	57.6	0.8	29100
Channel	197-50STXRIB	97	195.2	20.6	58.6	0.0	28700
Dairyland Seed	DS-9701RA	101	193.0	22.2	58.3	0.4	27900
Thunder Seed	EXP 7899 SS	99	190.2	20.6	57.4	0.4	27900
Wensman	W9288STXRIB	98	189.7	19.0	57.8	0.0	29100
Channel	197-68STXRIB	97	188.0	20.9	59.7	0.0	26100
Federal Hybrids	5250 SSTAX RIB	102	187.7	22.4	59.1	0.0	26700
Thunder Seed	7603 SS	103	186.8	21.3	59.5	0.0	27700
Proseed	1496 SS	96	185.4	19.5	59.0	0.4	24500
Federal Hybrids	5060 SSTAX RIB	100	184.8	20.0	59.5	0.0	27300
Federal Hybrids	5370 SSTAX	103	184.2	23.0	59.2	0.0	28500
Renk	RK608DGVT2P	100	184.1	20.4	58.3	0.9	26000
Wensman	W90979STXRIB	97	183.7	20.6	59.8	0.4	27700
Check	Check	99	183.4	20.1	58.0	0.4	26500
Heine Seeds	639STXRIB	99	183.3	21.7	59.1	0.0	28400
Renk	RK595SSTX	99	183.0	20.2	60.5	0.0	29200
Dairyland Seed	DS-9198RA	98	182.4	20.6	58.0	0.0	27400
Federal Hybrids	5140 SSTAX RIB	101	182.4	20.8	58.9	0.0	27400
Federal Hybrids	4640 VT3P RIB	96	182.0	20.4	59.0	0.0	28600
NuTech/G2 Genetics	5F-701	101	181.1	20.4	58.3	1.2	27000
Federal Hybrids	5260 DGVT2P RIB	102	180.4	21.2	60.1	0.8	28400
Federal Hybrids	5440 SSTAX RIB	104	178.8	24.1	55.7	0.8	26900
Wensman	W90962STXRIB	96	177.8	20.1	57.5	0.0	28300
Wensman	W80972VT2PRO	97	177.0	22.8	57.8	0.0	29000
Dairyland Seed	DS-9599	99	176.6	23.0	55.8	0.0	26100
Peterson Farms Seed	55\$96	96	176.4	20.7	59.0	0.4	28200
Wensman	W90994STXRIB	99	176.0	21.1	56.5	0.0	28300
Proseed	PX 598	98	175.8	22.3	57.6	0.0	28200
Renk	RK596SSTX	98	174.1	21.7	59.3	0.0	24900
Federal Hybrids	5550 SSTAX RIB	105	173.9	23.1	56.4	0.0	26900
	Tria	al Average	179.1	21.0	58.3	0.2	27400
	L	SD (0.05)†	11.4	0.7	1.0	0.9	1000
		C.V.‡	4.6	2.4	1.2	-	2.7

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season Trial(96 day maturity or more) at South Shore, SD.

Vari	Agronomic Performance						
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	<b>Final Stand</b>
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Proseed	1399A 3000GT	99	173.4	22.6	56.5	0.0	25900
NuTech/G2 Genetics	5F-198	98	173.1	19.9	55.5	0.0	25800
Thunder Seed	6600 VT2P	100	171.9	19.3	60.3	0.0	25900
Wensman	W80993VT2PRO	99	170.7	19.5	58.3	0.0	28500
Federal Hybrids	4760 SSTAX RIB	97	170.5	20.9	58.5	0.7	29100
NuTech/G2 Genetics	5F-196	96	170.3	19.7	57.1	0.0	26100
Federal Hybrids	4870 SSTAX	98	170.1	19.9	60.0	0.0	25200
Thunder Seed	7396 VT2P	96	169.7	20.1	59.6	0.0	28900
Masters Choice	MCT 4632	96	166.3	22.4	59.0	0.0	26200
Renk	RK612SSTX	100	166.1	20.2	57.3	0.0	26700
Masters Choice	MCT 5371	103	158.8	22.8	57.1	0.0	28200
Masters Choice	MCT 4884	98	158.1	20.9	58.7	0.0	26000
		Trial Average	179.1	21.0	58.3	0.2	27400
		LSD (0.05)†	11.4	0.7	1.0	0.9	1000
		C.V.‡	4.6	2.4	1.2	-	2.7

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Crop Performance Testing Director Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	1.5 miles south of Volga (57101) in Brookings County, SD
	(GPS: 44.302528, -96.919038)
Cooperator:	SDSU Volga Research Farm - Jack Ingemansen, manager
Soil Type:	Brandt silty clay loam, 0-2% slope
Fertilizer:	180-40-40-8S preplant, 30-10-10 starter
Yield Goal:	200 bu/ac
Previous crop:	Soybeans
Tillage:	Conventional
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: 1.8 pt Staunch (acetochlor)
	Post: 32 oz Roundup Power Max (glyphosate)
Date seeded:	4/26/2016
Date harvested:	10/31/2016



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (100 day maturity or less)** at Volga, SD.

Varie	ety Information			Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Hoegemeyer	HPT 7089 AMXT	100	292.8	18.1	61.0	0.0	29500	
Federal Hybrids	4760 SSTAX RIB	97	276.2	17.2	58.7	0.0	29200	
Titan Pro	TP 54-98 2P	98	274.5	17.7	58.3	0.0	29000	
Heine Seeds	723VT2PRORIB	100	274.5	17.4	60.6	0.0	29700	
Titan Pro	TP 65-00 2P	100	273.5	17.1	59.3	0.0	28200	
Proseed	PX 598	98	272.8	16.9	58.3	0.0	29300	
Wensman	W81007VT2RIB	100	271.3	19.1	58.1	0.0	27900	
Peterson Farms Seed	72D00	100	270.5	17.1	57.7	0.0	29100	
Channel	197-50STXRIB	97	268.4	17.0	58.7	0.0	29100	
Wensman	W8184VT2RIB	95	267.5	16.9	59.2	0.0	29500	
Peterson Farms Seed	77P94	94	267.3	16.4	58.3	0.0	28700	
Heine Seeds	639STXRIB	99	265.1	17.8	58.2	0.4	28400	
Wensman	W90979STXRIB	97	264.7	18.2	59.2	0.0	28300	
Federal Hybrids	4540 VT3P RIB	95	264.1	17.4	59.1	0.0	29100	
Wensman	W9288STXRIB	98	263.4	17.5	59.4	0.0	29000	
Wensman	W90994STXRIB	99	263.2	17.4	59.2	0.0	29500	
Nutech/G2 Genetics	5F-196	96	262.9	17.4	57.5	0.0	28100	
Heine Seeds	712VT2PRORIB	100	262.3	17.1	60.7	0.0	29800	
Stine	R9428-32	100	262.0	17.5	59.5	0.0	28200	
Proseed	PX 695	95	261.6	17.5	59.0	0.0	28500	
Federal Hybrids	4560 SSTAX RIB	95	261.2	17.5	59.5	0.0	29100	
Thunder Seed	EXP 7899 SS	99	260.1	17.4	58.3	0.0	28300	
Thunder Seed	4695 RR	95	258.9	16.7	59.0	0.0	28700	
Proseed	1399A 3000GT	99	258.2	17.5	58.1	0.4	28400	
Hoegemeyer	HPT 7062 AMXT	100	257.0	18.3	59.7	0.0	27900	
Hoegemeyer	HPT 6621 AMX	96	255.8	16.8	59.4	0.4	27400	
Channel	197-68STXRIB	97	255.6	17.0	59.8	0.0	28900	
Nutech/G2 Genetics	5N-800	100	254.9	18.1	59.9	0.0	27700	
Dairyland Seed	DS-9599	99	254.8	18.3	58.1	0.0	26500	
Wensman	W90962STXRIB	96	253.2	16.3	57.8	0.0	29000	
	Tria	al Average	257.3	17.3	59.0	0.1	28100	
	Ľ	SD (0.05)†	13.7	0.6	1.0	0.3	1362	
		C.V.‡	3.8	2.7	1.2	-	3.5	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial (100 day maturity or less) at Volga, SD.

Variet	y Information		Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Federal Hybrids	4558 SSTAX RIB	95	252.6	16.5	58.3	0.0	28200
Thunder Seed	7396 VT2P	96	252.2	16.8	59.1	0.8	28700
Federal Hybrids	4520 VT3P RIB	95	251.8	18.0	60.1	0.4	29100
Federal Hybrids	4870 SSTAX	98	251.8	17.3	61.5	0.0	28000
Peterson Farms Seed	86598	98	250.5	17.1	61.0	0.0	28100
Peterson Farms Seed	81W95	95	250.0	16.1	58.4	0.0	27600
Proseed	1496 SS	96	249.6	17.8	58.5	0.0	25500
Thunder Seed	101-95 SS	95	249.6	18.2	59.6	0.0	28200
Federal Hybrids	4640 VT3P RIB	96	249.1	16.3	58.0	0.0	29400
Federal Hybrids	4440 VT3P RIB	94	243.4	17.1	59.9	0.0	25800
Nutech/G2 Genetics	5F-198	98	242.9	16.6	56.9	0.0	25600
Dairyland Seed	DS-9198RA	98	242.5	17.1	57.5	0.0	28000
Thunder Seed	6600 VT2P	100	240.1	17.1	60.2	0.0	28000
Federal Hybrids	5060 SSTAX RIB	100	238.1	17.5	58.9	0.0	25200
Check	Check	99	238.1	16.5	57.4	0.0	29000
Stine	R9209-32	94	237.1	16.7	60.5	0.0	27800
Stine	9314-20	94	236.6	17.3	57.2	0.0	23200
Peterson Farms Seed	55S96	96	226.1	17.0	60.3	0.0	24600
	Tria	al Average	257.3	17.3	59.0	0.1	28100
	L	SD (0.05)†	13.7	0.6	1.0	0.3	1362
		C.V.‡	3.8	2.7	1.2	-	3.5

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day maturity or more) at Volga, SD.

Vari	ety Information		Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Thunder Seed	EXP 7805 SS	105	298.5	20.5	60.1	0.4	28500
Renk	RK717SSTX	105	297.8	20.6	59.8	0.4	29300
Federal Hybrids	5370 SSTAX	103	297.6	20.8	59.8	0.0	29000
Nutech/G2 Genetics	5Z-601	101	290.7	18.6	59.5	0.4	29700
Nutech/G2 Genetics	5F-504	104	284.2	19.9	59.3	0.0	27000
Nutech/G2 Genetics	5Z-503	103	283.3	19.0	60.2	0.4	28900
Dairyland Seed	DS-9403	103	279.5	19.4	56.5	0.4	28700
Hoegemeyer	HPT 7166 AM	101	278.2	18.8	60.3	0.0	28400
Nutech/G2 Genetics	5F-701	101	276.7	18.6	60.6	0.0	27300
Titan Pro	TP31-01 3011A	101	276.6	18.8	60.2	0.0	29700
Federal Hybrids	5550 SSTAX RIB	105	276.2	21.1	58.7	0.8	27100
Dairyland Seed	DS-9204	104	274.5	20.1	57.8	4.6	28700
Wensman	W9325STXRIB	102	269.7	19.0	58.4	0.4	28700
Dairyland Seed	DS-9802	102	268.5	18.5	57.9	0.4	28500
Thunder Seed	7603 SS	103	267.6	18.2	59.1	0.0	29100
Channel	205-19STXRIB	105	266.9	19.7	58.9	0.0	25800
Thunder Seed	EXP 6803 VT2P	103	265.6	19.8	59.0	0.0	26600
Peterson Farms Seed	81W01	101	264.0	18.3	59.4	0.0	28500
Wensman	W91011STXRIB	101	263.8	18.6	59.4	0.0	28200
Titan Pro	TP 67-02 SS	102	263.0	18.8	60.1	0.0	27400
Channel	203-01STXRIB	103	259.5	21.4	57.7	0.4	28900
Channel	202-52STXRIB	102	259.1	18.2	59.2	0.0	28100
Titan Pro	TP 58-01 2P	101	257.2	18.0	60.8	0.4	28700
Channel	206-30STXRIB	106	256.9	20.0	60.6	0.0	27100
Renk	RK680SSTX	103	255.1	18.3	59.2	0.0	27600
Federal Hybrids	5440 SSTAX RIB	103	254.7	19.7	58.9	0.0	26700
Federal Hybrids	5140 SSTAX RIB	101	252.9	18.8	58.7	0.0	27700
Dairyland Seed	DS-9701RA	101	250.5	18.9	57.9	0.0	24600
Dairyland Seed	DS-9106	106	250.1	19.8	58.2	0.4	26400
Nutech/G2 Genetics	5H-502	102	237.1	18.7	59.2	0.0	23300
Channel	201-37VT2PRIB	101	234.9	18.0	58.0	0.0	26200
Wensman	W91018STX	101	233.8	18.6	59.0	0.0	24600
Check	Check	99	231.6	17.2	58.5	0.0	28000
	Tria	al Average	265.7	19.1	59.1	0.3	27700
	L	SD (0.05)†	13.5	0.5	0.9	0.9	1300
		C.V.‡	3.6	2.0	1.0	-	3.3

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	7 miles south and 2 miles east of Miller (57362) in Hand county, SD (GPS: 44.413376, -98.945645)
Cooperator:	Paul Fulton
Soil Type:	Houdek-Dudley complex, 0-2% slopes
Fertilizer:	114-52-18-12S-5Z preplant, 30-10-10 starter, 10 gal 28-0-0 preemerge
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	28,750/acre
	Pre: 32 oz Harness Xtra (acetochlor) + 32 oz RT3 (glyphosate) +
Herbicide:	12 oz LV6 (2,4-D), (appllied with 10 gal 28% UAN)
	Post: 32 oz Roundup WeatherMax (glyphosate) +
	2.5 oz Status (dicamba + diflufenzopyr) + 4 oz Crosshair (drift agent)
Date seeded:	5/8/2017
Date harvested:	11/1/2017





Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (100 day maturity or less) at Miller, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	<b>Final Stand</b>
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Federal Hybrids	4770 VT2P RIB	97	166.6	16.4	58.3	0.0	27100
Hoegemeyer Hybrids	HPT 7088 AM	100	165.3	17.4	57.2	0.0	26200
Wensman	W80972VT2RIB	97	154.4	15.6	58.3	0.4	27200
Wensman	W80993VT2RIB	99	153.0	15.6	59.4	0.8	27100
Federal Hybrids	4880 VT2P RIB	98	151.1	16.6	57.8	0.4	26000
Federal Hybrids	4560 SSTAX RIB	95	150.9	15.5	57.2	0.0	27200
Check	CHECK	97	150.8	16.2	56.2	0.4	26900
Federal Hybrids	4680 VT2P	96	150.5	15.9	57.7	0.8	26200
Hoegemeyer Hybrids	HPT 6813 AM	98	149.8	16.4	54.8	0.0	23800
Wensman	W81007VT2RIB	100	148.8	16.1	56.8	1.3	24400
Proseed	1399 3000GT	99	147.8	16.8	54.4	0.9	23300
Thunder Seed	6794 VT2P	94	147.6	15.2	57.4	0.4	26800
Wensman	W8294VT2RIB	99	147.4	15.9	57.5	0.4	26200
Federal Hybrids	4560 VT2P RIB	95	147.0	15.9	57.7	0.0	25900
Peterson Farms Seed	78B98	98	146.6	16.3	57.4	0.0	27800
Wensman	W80965VT2RIB	96	145.9	13.7	57.5	0.0	27900
NuTech/G2 Genetics	5FN-7099	99	144.3	16.7	56.8	0.0	25500
Federal Hybrids	4470 VT2P RIB	94	144.1	15.0	58.2	0.5	25000
Channel	197-50STXRIB	97	144.0	16.3	56.4	0.0	26900
Peterson Farms Seed	75S96	96	143.5	15.2	58.8	0.0	27100
Channel	195-18VT2PRIB	95	140.9	15.4	60.2	0.0	27000
Channel	193-53STXRIB	93	140.1	16.4	57.4	0.0	26800
Renk	RK608DGVT2P	100	140.0	16.2	57.1	0.0	27000
NuTech/G2 Genetics	5FN-5096	96	139.7	15.9	58.6	0.0	23400
Proseed	PX694 VT2P	94	138.9	16.3	57.5	0.4	25500
Federal Hybrids	4180 VT2P	91	138.4	14.5	57.4	0.0	27300
Federal Hybrids	4185 VT2P RIB	91	138.2	14.4	59.3	0.8	26600
Federal Hybrids	5060 SSTAX RIB	100	138.2	17.2	57.1	0.0	26400
Hoegemeyer Hybrids	HPT 6620 AM	96	137.2	13.9	56.1	0.0	26200
Heine Seeds	732DGVT2PRORIB	100	136.6	16.1	57.1	0.0	24900
	Tria	l Average	140.0	15.6	57.2	0.3	26000
	L	SD (0.05)†	14.4	1.3	1.1	1.1	1200
		C.V.‡	7.4	5.8	1.4	-	3.4

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial (100 day maturity or less) at Miller, SD.

Variety	y Information		Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Federal Hybrids	4880 SSTAX RIB	98	136.3	17.6	57.8	0.0	24800	
Thunder Seed	7993 VT2P	93	136.3	14.5	57.6	0.4	26100	
Proseed	1395 VT2P	95	136.1	16.0	58.1	1.4	23400	
NuTech/G2 Genetics	5F-196	96	136.0	14.9	55.6	0.4	27400	
Proseed	1591 VT2P	91	135.8	13.4	57.4	0.0	27900	
Thunder Seed	4600 RR	100	135.4	17.2	55.4	0.4	26500	
NuTech/G2 Genetics	5F-198	98	134.5	13.0	54.1	0.9	24200	
Hoegemeyer Hybrids	HPT 6695 AM	96	134.2	16.1	58.2	0.0	22700	
Federal Hybrids	4558 SSTAX RIB	95	133.7	15.6	56.2	0.0	27100	
Federal Hybrids	4160 VT2P RIB	91	133.6	13.4	57.7	1.6	26900	
Rob-See-Co	RC4915-3120	99	133.5	15.2	53.8	0.0	23600	
Federal Hybrids	4760 VT2P RIB	97	132.8	15.8	57.0	0.0	26000	
Thunder Seed	4695 RR	95	131.8	14.1	58.2	0.4	26500	
Rob-See-Co	IC4521-3110	95	131.6	15.9	57.9	0.0	23700	
Renk	RK595SSTX	99	129.9	15.9	57.7	0.4	25900	
Federal Hybrids	4580 VT2P RIB	95	129.1	14.7	57.4	0.0	27800	
Federal Hybrids	4760 SSTAX RIB	97	127.0	15.2	55.9	0.0	25900	
Thunder Seed	6798 VT2P	98	126.2	15.9	57.4	0.0	25700	
Rob-See-Co	RC4343-3110A	93	124.6	14.6	56.7	0.0	24900	
Peterson Farms Seed	72D00	100	124.3	16.4	57.7	0.0	24900	
Thunder Seed	7793 SS	93	123.9	15.0	57.7	0.8	26600	
Thunder Seed	7396 VT2P	96	118.6	14.1	56.6	0.8	25600	
	Tria	l Average	140.0	15.6	57.2	0.3	26000	
	LS	SD (0.05)†	14.4	1.3	1.1	1.1	1200	
		C.V.‡	7.4	5.8	1.4	-	3.4	

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day maturity or more) at Miller, SD.

Variety	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	X5LN-0308	103	163.1	17.3	59.1	0.5	21100
Renk	RK642SSTX	103	162.0	17.5	57.2	0.9	25200
Hoegemeyer Hybrids	HPT 7166 AM	101	159.8	16.3	60.0	0.8	26100
Dairyland Seed	DS-9701RA	101	159.6	18.4	56.7	1.4	24800
Nutech/G2 Genetics	5F-504	104	158.5	17.9	57.0	0.4	26700
Nutech/G2 Genetics	5F-601	101	158.0	17.0	57.9	0.0	26800
Hoegemeyer Hybrids	HPT 7557 AM	105	156.4	18.5	57.2	0.0	26800
Heine Seeds	7410STX	104	155.5	16.1	57.2	0.4	24700
Renk	RK680SSTX	103	153.1	17.2	56.7	0.0	24100
Thunder Seed	7603 SS	103	152.8	16.3	57.8	0.8	26600
Nutech/G2 Genetics	5F-701	101	151.4	16.6	59.5	0.0	23500
Wensman	W81028VT2RIB	102	149.3	18.2	57.5	0.0	26200
Check	CHECK	97	149.1	15.7	57.2	0.8	26700
Heine Seeds	740VT2PRO	102	148.7	19.2	56.2	0.0	24100
Dairyland Seed	DS-9804SSX	104	<b>148.4</b>	22.7	53.2	0.5	23400
Channel	201-05VT2PRIB	101	148.3	18.0	58.2	0.4	25600
Heine Seeds	752VT2PRO	105	146.7	20.7	57.1	0.4	26200
Channel	201-28VT2PRIB	101	146.1	16.1	58.3	0.0	26700
Heine Seeds	739VT2PRO	102	145.8	18.3	56.1	0.0	25500
Hoegemeyer Hybrids	HPT 7333 AMXT	103	144.4	17.2	59.0	0.0	21000
Wensman	W81041VT2RIB	104	142.4	18.5	59.2	0.0	26600
Federal Hybrids	5180 SSTAX RIB	101	140.7	16.0	58.0	0.0	25300
Peterson Farms Seed	81W01	101	140.4	16.6	57.0	0.0	24600
Wensman	W91018STXRIB	101	139.6	15.5	57.6	0.0	26600
Rob-See-Co	RC5112-3122A	101	139.4	20.2	55.8	0.0	25500
Nutech/G2 Genetics	X5FN-0306	103	136.7	16.2	56.7	0.4	27100
Renk	RK675DGVT2P	103	136.3	16.0	57.1	0.0	23300
Heine Seeds	754STXRIB	105	133.1	17.8	57.8	0.0	25900
Rob-See-Co	IC5203-3120	102	128.5	17.8	59.0	0.0	25000
Dairyland Seed	DS-9802RA	102	125.7	21.6	56.1	0.0	26900
Rob-See-Co	IC5296-3120	102	122.0	19.3	53.4	1.3	25300
	Tria	l Average	146.5	17.8	57.3	0.3	25300
	LS	SD (0.05)†	14.8	1.3	2.0	1.3	1300
		C.V.‡	7.2	5.3	2.4	-	3.7

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



# 2017 South Dakota Corn Hybrid Trial Results - Beresford

#### Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	6 miles west and 3 miles south of Beresford (57432) in Clay county, SD (GPS: 43.053103, -96.889990)
Cooperator:	SDSU Southeast Research Farm - Peter Sexton, manager
Soil Type:	Egan-Trent silty clay loams, 0-2% slope, non-irrigated
Fertilizer:	144-0-0-20S preplant; 30-10-10 starter
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	31,400/acre
	Pre: 32 oz Roundup (glyphosate) + 1.33 pt Dual (metolachlor) + 4 oz Sencor
Herbicide:	(metribuzin) + 4 gal UAN
	Post: 12 oz Atrazine + 3 oz Callisto (mesotrione) + 1% V/V + UAN 2.5% V/V
Date seeded:	5/16/2017
Date harvested:	11/3/2017

Soil conditions: This location was very wet during and shortly after planting. Please pay special attention to the harvest population when evaluating hybrid performance.




Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (107 day maturity or less) at Beresford, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Channel	207-27STXRIB	107	226.2	20.7	59.8	0.4	27600
Nutech/G2 Genetics	5F-504	104	223.3	18.3	60.1	10.1	28200
Heine Seeds	823VT2PRO	107	216.9	22.7	53.0	2.3	28200
Dyna-Gro	D39DC43	99	215.0	16.3	58.8	2.4	28000
Great Lakes Hybrids	5556VT2RIB	105	212.2	17.4	59.0	1.2	26900
Check	CHECK	97	210.9	16.2	59.9	3.5	28200
Great Lakes Hybrids	5470STXRIB	104	209.3	17.4	59.9	5.4	28200
Wensman	W81041VT2RIB	104	209.3	17.3	60.8	3.6	26800
Dyna-Gro	D44VC36VT2P	104	208.6	17.1	59.3	2.1	26600
Wensman	W81069VT2RIB	106	206.5	17.9	60.1	1.3	25900
Heine Seeds	754STXRIB	105	204.9	16.8	60.3	3.6	27100
Thunder Seed	4695 RR	95	204.7	14.9	59.7	6.0	27000
Nutech/G2 Genetics	5D-906	106	204.6	19.3	60.1	3.2	23800
Channel	203-01STXRIB	103	204.1	16.9	57.9	0.4	26700
Channel	204-74VT2PRIB	104	203.5	17.1	59.1	3.1	24600
Masters Choice	MCT5661	106	203.3	18.7	57.7	1.8	28600
Nutech/G2 Genetics	5VN-4707	107	203.1	17.8	57.9	0.4	26700
Thunder Seed	4600 RR	100	203.0	16.5	60.0	9.4	25000
Titan Pro	TP 77-06 SS	106	202.2	18.0	58.3	1.0	22500
Renk	RK717SSTX	105	202.0	16.7	61.0	0.4	26800
Great Lakes Hybrids	5283STXRIB	102	201.0	17.5	59.0	0.0	27000
Wensman	W81058VT2RIB	105	200.6	17.9	61.7	3.4	25200
Hoegemeyer	7557 AM	105	199.2	17.5	60.3	5.8	26400
Heine Seeds	790VT2PRORIB	107	199.2	18.1	59.4	0.8	28200
Channel	205-19STXRIB	105	196.7	17.4	58.4	0.4	24900
Great Lakes Hybrids	5755STXRIB	107	196.3	19.0	57.8	0.5	23600
Thunder Seed	6794 VT2P	94	195.6	14.6	58.7	6.8	26800
Hoegemeyer	7088 AM	100	194.9	17.0	59.9	3.4	25500
Thunder Seed	7396 VT2P	96	193.2	13.2	58.5	6.8	27300
Hoegemeyer	7224 AM	102	192.0	17.5	60.6	1.9	29000
	Tria	l Average	197.9	17.3	59.4	2.4	25700
	21.0	0.9	1.0	3.7	1600		
	7.6	3.5	1.2	-	4.4		

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early SeasonTrial (107 day maturity or less) at Beresford, SD.

Varie	ty Information		Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Dairyland Seed	DS-6106	106	191.9	17.7	60.7	0.4	26500
Great Lakes Hybrids	5626VT2PRO	106	191.8	18.2	62.0	1.4	23100
Miller Hybrids	RX215VT2P	107	189.0	19.3	58.2	1.5	21700
Thunder Seed	6798 VT2P	98	186.8	15.0	59.9	0.7	28100
Thunder Seed	7993 VT2P	93	186.0	14.5	59.9	1.2	26500
Heine Seeds	821VT2PRORIB	107	185.6	20.5	58.4	3.5	22900
Wensman	W91025STXRIB	102	184.5	14.9	60.8	1.8	24500
Thunder Seed	7793 SS	93	183.8	15.0	59.6	0.4	24200
Renk	RK776SSTX	107	182.3	20.6	59.2	0.0	22100
Nutech/G2 Genetics	X5FN-0306	103	180.7	17.2	60.9	0.8	27600
Thunder Seed	7603 SS	103	180.4	16.3	60.0	0.8	25400
Nutech/G2 Genetics	X5FN-0308	103	177.8	17.3	60.7	1.0	22100
Hoegemeyer	7333 AMXT	103	176.7	16.9	59.0	0.0	20300
Masters Choice	MCT5371	103	175.6	16.9	60.4	0.5	18800
Dairyland Seed	DS-9804SSX	104	168.9	17.8	59.0	1.4	23200
	Tria	al Average	197.9	17.3	59.4	2.4	25700
	L	SD (0.05)†	21.0	0.9	1.0	3.7	1600
		C.V.‡	7.6	3.5	1.2	-	4.4

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (108 day maturity or more) at Beresford, SD.

Variety	Agronomic Performance						
Variet	y miormation	Maturity	Yield Bu/A	, igi on i	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Hoegemeyer	8066 AM	110	211.3	20.2	58.6	5.6	25500
Nutech/G2 Genetics	5F-510	110	210.5	20.0	61.2	0.9	24900
Renk	RK871VT2P	111	208.0	21.3	57.1	1.1	28400
Miller Hybrids	RX13-11VT2P	113	200.2	19.7	59.8	1.9	24100
Titan Pro	TP 71-12 SS	112	200.2	22.3	57.4	0.4	27400
Great Lakes Hybrids	5910VT2PRO	109	199.4	20.1	57.7	1.0	21500
Channel	208-23STXRIB	108	199.4	20.9	58.9	0.0	25200
Channel	210-26STXRIB	110	197.6	22.1	56.7	0.0	26400
Miller Hybrids	M66-23G	110	197.3	21.3	54.7	0.0	18300
Check	CHECK	97	197.3	16.6	60.0	1.3	25700
Great Lakes Hybrids	6224STX	112	196.4	22.6	57.0	1.8	24800
Hoegemeyer	7946 AM	109	195.7	19.5	59.1	1.8	23600
Heine	852VT2PRORIB	112	192.2	24.8	58.0	1.0	25700
Wensman	W91095STXRIB	109	190.0	19.6	59.9	1.1	19800
Channel	213-19STXRIB	113	188.6	21.5	59.8	0.0	26100
Nutech/G2 Genetics	5F-308	108	186.8	20.0	59.8	0.5	22300
Titan Pro	TP 66-10 SS	110	186.1	21.5	57.6	0.5	20700
Great Lakes Hybrids	6462STXRIB	114	184.0	24.1	57.5	0.0	23200
Dairyland Seed	DS-9508RA	108	183.1	20.2	54.4	0.4	27900
Channel	209-53STXRIB	109	182.4	21.2	56.7	0.0	27300
Heine	837DGVT2PRO	111	182.1	21.7	58.0	3.5	28400
Nutech/G2 Genetics	5F-709	109	181.3	21.0	58.1	3.0	20800
Great Lakes Hybrids	6401STXRIB	114	176.1	22.6	58.2	0.0	26100
Renk	RK810SSTX	110	174.5	22.8	56.1	0.4	24100
Heine	863STX	112	174.0	24.4	57.3	0.0	26500
Channel	209-15VT2P	109	173.4	20.0	57.5	0.0	19700
Heine	856STXRIB	112	172.9	22.2	59.2	2.0	26900
Great Lakes Hybrids	6369VT2RIB	113	172.0	22.4	57.3	1.4	24000
Miller Hybrids	RX436VT2P	110	164.9	22.7	56.3	1.1	18900
Great Lakes Hybrids	5935STX	109	164.3	21.0	57.6	2.6	20300
Dyna-Gro	D50VC30VT2P	110	160.8	19.2	58.1	0.8	26000
Titan Pro	TP 59-08 SS	108	152.1	19.5	59.4	0.0	23100
Renk	RK792SSTX	108	145.6	19.1	59.0	0.0	24300
Renk	RK815SSTX	111	139.8	21.4	56.6	1.4	24200
	Tria	l Average	183.8	21.0	58.0	1.1	24200
	L	SD (0.05)†	24.2	1.0	1.1	2.5	1800
C.V.‡			9.4	3.6	1.3	-	5.7

\* Lodging percentage - stalks broken below the ear as a percentage of the final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	4.55 miles south and 1 mile east of Bath (57427) in Brown County, SD (GPS: 45.393017, -98.306879)
Cooperator:	Gordon and Roger Locken Farms
Soil Type:	Great Bend-Beotia silt loams, 0-2% slopes, non-irrigated
Fertilizer:	186-124-0-25S preplant; 30-10-10 starter
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: none
	Post: 1 qt Powermax (glyphosate)
Date seeded:	5/10/2017
Date harvested:	11/2/2017



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (95 day maturity or less)** at Bath, SD.

Variet	Variety Information				Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand			
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)			
Heine Seeds	6200VT2PRO	95	249.1	17.4	59.1	3.4	28500			
Check	СНЕСК	97	244.6	18.2	57.3	3.2	27300			
Federal Hybrids	4580 VT2P RIB	95	242.4	17.3	58.8	6.7	27700			
Thunder Seed	6794 VT2P	94	242.1	17.1	59.1	5.4	28100			
Federal Hybrids	4560 VT2P RIB	95	240.7	17.0	59.4	2.3	28100			
Heine Seeds	632VT2PRORIB	95	239.5	17.3	58.1	6.8	27700			
Dahlman Seed	R47-24VT2PRIB	94	239.4	17.1	58.3	6.7	27900			
Miller Hybrids	RX94-25VT2P	94	238.0	16.7	58.3	2.7	27900			
Renk	RK566SSTX	94	235.3	17.2	57.2	3.5	28000			
Heine Seeds	615VT2PRO	95	235.2	17.3	58.2	2.0	28200			
Peterson Farms Seed	77P94	94	235.0	17.0	58.5	3.5	28000			
Renk	RK522SSTX	94	234.7	16.6	57.5	0.4	27200			
Dahlman Seed	R48-28VT2PRIB	95	234.1	17.3	58.9	1.9	28400			
Federal Hybrids	4470 VT2P RIB	94	232.5	17.0	57.7	3.1	27800			
Miller Hybrids	RX91-03SS	91	232.4	16.6	58.2	1.5	28600			
Federal Hybrids	4180 VT2P	91	231.9	16.4	59.2	8.2	29100			
Proseed	1591 VT2P	91	231.4	16.2	59.4	4.8	27600			
Thunder Seed	4695 RR	95	231.1	17.2	58.6	2.7	28300			
Federal Hybrids	4560 SSTAX RIB	95	230.5	17.2	57.6	1.1	28700			
Renk	RK433RR	92	230.4	16.9	58.5	4.7	28300			
Channel	193-53STXRIB	93	230.1	16.7	56.8	0.8	28300			
Proseed	PX694 VT2P	94	229.1	16.8	58.8	1.2	27900			
Wensman	W8184VT2RIB	95	227.7	17.6	55.4	0.8	28200			
Wensman	W80931VT2RIB	93	227.6	16.0	58.2	6.5	28600			
Nutech/G2 Genetics	5G-293	93	227.0	17.5	58.4	3.8	26000			
Wensman	W80928VT2RIB	92	227.0	16.4	57.9	1.9	28400			
Heine Seeds	627VT3PRORIB	95	226.9	17.2	58.6	1.2	26400			
Thunder Seed	7993 VT2P	93	226.9	17.1	57.9	0.8	27600			
Dahlman Seed	R46-27VT2PRIB	92	226.3	16.8	58.4	2.3	28500			
Dairyland Seed	DS-7294	94	225.8	17.2	57.2	15.9	27400			
	Tri	al Average	227.4	16.9	58.2	4.4	27500			
	I	LSD (0.05)†	12.0	0.6	1.0	3.2	1000			
		C.V.‡	3.8	3.6	1.2	_	2.6			

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - **Early Season Tria**l **(95 day maturity or less)** at Bath, SD.

Variety Information			Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Peterson Farms Seed	76S92	92	225.5	17.0	57.9	1.6	28000	
Wensman	W80947VT2RIB	94	225.1	16.7	59.7	4.9	27000	
Wensman	W80945-3110A	94	225.0	17.7	58.3	16.2	26900	
Thunder Seed	4791 RR	91	224.3	16.3	58.1	3.7	26700	
Channel	195-18VT2PRIB	95	224.0	17.8	60.4	4.2	28400	
Federal Hybrids	4185 VT2P RIB	91	222.7	16.5	58.8	7.9	29000	
Dairyland Seed	DS-6091	91	221.9	16.6	60.2	10.6	27700	
Wensman	W80943VT2RIB	94	221.7	16.1	56.9	1.5	28400	
Peterson Farms Seed	72A91	91	220.7	16.3	59.3	3.6	27100	
Thunder Seed	6791 VT2P	91	220.0	16.0	56.8	4.5	26800	
Federal Hybrids	4558 SSTAX RIB	95	219.9	17.2	56.6	3.7	26400	
Rob-See-Co	IC4453-3110	94	219.9	16.9	58.0	10.9	26900	
Rob-See-Co	RC4343-3110A	93	219.8	17.1	57.7	10.2	23500	
Peterson Farms Seed	81W95	95	219.7	16.9	58.3	0.4	27800	
Renk	RK568VT3P	95	217.9	18.4	57.4	4.4	24700	
Rob-See-Co	IC4016-3010	90	217.8	16.7	57.7	8.1	25800	
Rob-See-Co	IC4521-3110	95	217.8	17.3	56.8	3.3	26200	
Thunder Seed	7793 SS	93	217.6	16.7	59.3	3.5	28100	
Proseed	1395 VT2P	95	217.0	18.5	59.8	0.4	25900	
Federal Hybrids	4160 VT2P RIB	91	211.8	15.9	58.4	2.4	27400	
Dairyland Seed	DS-9090SSX	90	211.8	16.9	57.4	0.4	27100	
Thunder Seed	4795 DP VT2P	95	196.9	15.1	57.6	11.4	26500	
	Tri	al Average	227.4	16.9	58.2	4.4	27500	
LSD (0.05)†			12.0	0.6	1.0	3.2	1000	
		C.V.‡	3.8	3.6	1.2	-	2.6	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (96 day maturity or more) at Bath, SD.

Variet	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Heine Seeds	739VT2PRO	102	247.1	20.2	56.5	0.0	27100
Channel	201-28VT2PRIB	101	244.1	18.1	56.0	0.4	26900
Check	СНЕСК	97	242.5	18.5	56.9	1.1	27900
Nutech/G2 Genetics	5F-196	96	241.2	17.0	56.3	7.0	28100
Channel	197-50STXRIB	97	240.3	18.7	55.2	5.8	28100
Hoegemeyer	6620 AM	96	236.3	16.8	56.3	8.5	27100
Channel	201-05VT2PRIB	101	236.0	19.3	56.0	16.6	27400
Heine Seeds	712STXRIB	100	235.6	18.9	56.4	4.4	27300
Miller Hybrids	EX98G	98	234.4	18.1	57.5	0.4	27300
Thunder Seed	4600 RR	100	233.9	18.3	56.6	5.2	26800
Wensman	W80993VT2RIB	99	233.8	17.7	57.9	11.6	28100
Wensman	W80972VT2RIB	97	233.7	17.0	57.2	0.4	26700
Federal Hybrids	4770 VT2P RIB	97	232.9	18.0	57.6	0.8	26600
Renk	RK608DGVT2P	100	231.9	18.5	56.9	0.4	25600
Hoegemeyer	6813 AM	98	230.8	19.1	52.6	19.2	23800
Federal Hybrids	4680 VT2P	96	230.7	17.4	57.5	3.4	25800
Federal Hybrids	4880 VT2P RIB	98	230.1	17.9	58.7	1.7	25200
Hoegemeyer	7166 AM	101	229.5	18.2	57.6	6.1	26900
Dahlman Seed	R48-21VT2PRIB	96	228.9	17.3	58.4	0.4	25900
Proseed	1399 3000GT	99	228.1	19.2	56.5	1.7	25500
Thunder Seed	6798 VT2P	98	227.9	17.3	56.8	5.5	27700
Miller Hybrids	RX0961G	96	227.6	17.4	58.4	2.4	27100
Hoegemeyer	6695 AM	96	227.2	18.0	58.5	2.8	27200
Renk	RK595SSTX	99	226.8	17.9	57.1	5.3	26800
Hoegemeyer	7088 AM	100	226.5	18.5	56.7	14.5	27000
Miller Hybrids	RX96-53SS	96	225.1	17.7	58.2	1.5	28000
Federal Hybrids	5060 SSTAX RIB	100	225.0	19.4	55.3	1.6	26600
Nutech/G2 Genetics	5F-601	101	224.7	18.7	56.7	17.2	27200
Nutech/G2 Genetics	5FN-5096	96	224.6	17.5	57.0	7.8	24900
Nutech/G2 Genetics	5F-701	101	223.9	18.6	58.4	6.9	25300
	Tri	ial Average	228.8	18.2	56.5	7.0	26800
	I	LSD (0.05)†	12.1	0.8	1.2	3.3	1000
	3.8	3.3	1.5	-	2.7		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season Trial (96 day maturity or more) at Bath, SD.

Variety	Information		Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Thunder Seed	7396 VT2P	96	223.9	17.2	56.6	2.8	27600	
Rob-See-Co	RC4915-3120	99	223.7	19.8	50.9	4.7	25700	
Hoegemeyer	6075 AMX	100	222.9	16.2	56.5	24.8	27700	
Federal Hybrids	5180 SSTAX RIB	101	222.6	18.1	57.0	1.9	28300	
Renk	RK675DGVT2P	103	222.5	18.1	55.6	5.0	26200	
Thunder Seed	7603 SS	103	222.2	19.9	54.4	4.3	27600	
Nutech/G2 Genetics	5FN-7099	99	220.4	19.0	53.0	18.3	23700	
Federal Hybrids	4880 SSTAX RIB	98	219.8	19.1	56.6	9.4	26500	
Federal Hybrids	4760 VT2P RIB	97	219.5	17.1	55.6	6.3	28000	
Heine Seeds	639STXRIB	99	218.7	17.5	56.3	2.4	26900	
Peterson Farms Seed	75S96	96	218.7	17.7	57.4	1.9	28500	
Rob-See-Co	IC4688-3120	96	218.1	18.2	57.4	48.6	27300	
Federal Hybrids	4760 SSTAX RIB	97	214.5	17.7	54.9	10.9	27000	
	Tria	I Average	228.8	18.2	56.5	7.0	26800	
LSD (0.05)†			12.1	0.8	1.2	3.3	1000	
		C.V.‡	3.8	3.3	1.5	-	2.7	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	2.5 miles north of Bancroft (57353) in Kingsbury County (GPS: N 44°31.091' W 097°45.244)
Cooperator:	Weerts Farm, Inc.
Soil Type:	Houdek-Stickney-Tetonka loam, 0-2% slope, non-irrigated
Fertilizer:	140-80-0-10S preplant; 30-10-10 starter
Yield Goal:	200 bu/ac
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: 1.5 pt Harness (acetochlor), applied with fertilizer
	Post: 1 qt Roundup PowerMax (glyphosate) + 1.75 pt TripleFlex (acetochlor +
	flumetsulam + clopyralid) + 3 oz Status (dicamba + diflufenzopyr)
Date seeded:	5/4/2017
Date harvested:	11/9/2017



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Trial (100 day maturity or less)** at Bancroft, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Hoegemeyer	HPT 6620 AM	96	240.7	16.9	59.0	0.0	27700
Nutech/G2 Genetics	5F-196	96	239.1	16.4	58.4	0.0	27900
Heine Seeds	6250VT2PRO	96	232.6	17.4	58.6	0.0	28300
Peterson Farms Seed	72D00	100	232.1	17.0	60.0	0.0	27000
Federal Hybrids	4880 VT2P RIB	98	230.5	16.6	59.5	0.4	28100
Wensman	W80993VT2RIB	99	230.3	17.3	58.9	0.0	28500
Check	CHECK	97	230.0	16.9	59.2	0.0	29500
Nutech/G2 Genetics	5F-198	98	227.9	16.1	57.0	0.9	26100
Renk	RK608DGVT2P	100	227.4	17.2	58.3	0.0	26100
Wensman	W81007VT2RIB	100	226.2	17.5	60.1	0.4	27000
Federal Hybrids	4760 VT2P RIB	97	226.1	16.7	59.2	0.0	29100
Peterson Farms Seed	78B98	98	226.1	17.1	60.0	0.0	28500
Federal Hybrids	4680 VT2P	96	226.1	16.3	60.7	0.0	28600
Rob-See-Co	IC4688-3120	96	225.9	17.1	59.6	2.7	28300
Heine Seeds	632VT2PRORIB	95	225.0	16.5	58.9	0.4	28500
Hoegemeyer	HPT 7088 AM	100	224.7	17.3	59.5	0.8	28000
Dairyland Seed	DS-9599	99	224.5	17.5	58.9	3.8	28500
Wensman	W80972VT2RIB	97	224.5	16.3	59.4	0.4	29200
Channel	197-50STXRIB	97	223.6	17.1	58.4	0.0	28500
Thunder Seed	4695 RR	95	223.3	16.5	60.3	0.0	28500
Nutech/G2 Genetics	5FN-7099	99	223.0	17.1	57.5	0.4	24900
Heine Seeds	637STX	99	222.8	16.3	59.1	0.0	28400
Wensman	W8184VT2RIB	95	222.7	16.9	60.0	0.0	28100
Heine Seeds	712STXRIB	100	221.8	17.9	59.2	0.4	28100
Federal Hybrids	4185 VT2P RIB	91	221.1	16.2	60.3	0.0	28300
Federal Hybrids	5060 SSTAX RIB	100	220.5	17.7	59.3	0.4	27000
Rob-See-Co	RC4915-3120	99	220.5	15.9	55.6	0.0	27700
Federal Hybrids	4470 VT2P RIB	94	220.3	16.9	59.8	0.8	27000
Thunder Seed	6794 VT2P	94	220.2	16.7	59.7	2.3	28600
Federal Hybrids	4770 VT2P RIB	97	219.7	16.6	59.4	0.0	28400
Trial Average			219.5	16.8	59.4	0.4	27800
LSD (0.05)†			15.4	0.6	1.0	1.2	1000
	5.0	3.0	1.2	-	2.6		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial (100 day maturity or less) at Bancroft, SD.

Variet	ty Information		Agronomic Performance					
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)	
Federal Hybrids	4880 SSTAX RIB	98	218.1	17.0	59.7	0.4	26600	
Federal Hybrids	4580 VT2P RIB	95	217.0	16.2	61.3	0.0	29100	
Nutech/G2 Genetics	5FN-5096	96	215.5	17.1	59.7	0.0	27100	
Channel	195-18VT2PRIB	95	215.3	17.2	61.3	2.4	27400	
Thunder Seed	6798 VT2P	98	214.7	16.4	59.7	0.0	26400	
Federal Hybrids	4160 VT2P RIB	91	214.4	15.6	59.8	0.0	29200	
Rob-See-Co	IC4521-3110	95	213.7	16.7	60.5	0.0	27100	
Hoegemeyer	HPT 6813 AM	98	213.5	17.0	57.7	0.4	25700	
Federal Hybrids	4560 VT2P RIB	95	213.4	16.8	61.0	0.4	27400	
Federal Hybrids	4760 SSTAX RIB	96	210.6	16.8	59.2	0.0	27000	
Thunder Seed	4600 RR	100	210.1	17.1	59.5	0.0	27100	
Thunder Seed	7793 SS	93	209.9	16.4	59.4	1.2	27700	
Renk	RK595SSTX	99	209.2	16.4	60.6	0.0	28200	
Federal Hybrids	4180 VT2P	91	207.4	16.4	60.4	1.2	28100	
Thunder Seed	7396 VT2P	96	206.8	15.8	58.7	0.0	28300	
Federal Hybrids	4558 SSTAX RIB	95	206.6	16.3	59.1	0.0	27800	
Heine Seeds	732DGVT2PRORIB	100	204.4	17.1	59.4	0.8	27000	
Thunder Seed	7993 VT2P	93	204.1	16.1	59.8	0.0	28400	
Heine Seeds	723VT2PRORIB	100	203.9	17.3	60.0	0.0	28400	
Federal Hybrids	4560 SSTAX RIB	95	203.1	16.5	59.8	0.0	27300	
Wensman	W90979STXRIB	97	196.6	16.8	59.7	0.0	26800	
	Tria	al Average	219.5	16.8	59.4	0.4	27800	
LSD (0.05)†			15.4	0.6	1.0	1.2	1000	
		C.V.‡	5.0	3.0	1.2	-	2.6	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day maturity or more) at Bancroft, SD.

Varie	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Heine Seeds	740VT2PRO	102	261.0	17.4	59.8	0.4	28000
Nutech/G2 Genetics	X5FN-0306	103	246.1	17.7	60.1	2.3	28200
Heine Seeds	739VT2PRO	102	240.6	18.0	59.0	0.8	26600
Channel	201-28VT2PRIB	101	238.7	16.8	58.7	0.0	27600
Heine Seeds	752VT2PRO	105	238.4	18.1	59.3	0.4	27900
Dairyland Seed	DS-9804SSX	104	236.8	18.3	56.9	0.4	26800
Channel	204-74VT2PRIB	104	234.5	17.9	58.2	0.8	25700
Thunder Seed	7603 SS	103	234.5	17.4	58.9	0.0	28500
Nutech/G2 Genetics	5F-601	101	233.7	17.4	58.8	0.8	28400
Rob-See-Co	IC5296-3120	102	233.3	16.8	58.0	2.3	28100
Heine Seeds	754STXRIB	105	233.3	17.5	59.8	0.4	28400
Nutech/G2 Genetics	5F-504	104	232.9	18.3	57.1	5.0	28200
Wensman	W9325STXRIB	102	230.6	18.0	59.7	0.8	25800
Channel	201-05VT2PRIB	101	230.5	17.2	58.2	1.6	27300
Rob-See-Co	RC5112-3122A	101	230.0	18.4	58.2	0.0	28100
Channel	205-19STXRIB	105	230.0	17.7	56.4	0.8	26500
Check	СНЕСК	97	229.8	16.8	59.3	0.4	28600
Nutech/G2 Genetics	5F-701	101	227.9	17.1	60.3	0.0	25400
Dairyland Seed	DS-9802RA	102	226.4	18.2	58.3	2.1	26600
Heine Seeds	7410STX	104	226.2	17.1	56.9	1.3	24900
Renk	RK642SSTX	103	224.8	17.6	59.0	0.8	27700
Channel	203-01STXRIB	103	224.5	17.7	58.0	0.0	27600
Renk	RK680SSTX	103	221.6	17.3	58.9	0.4	27800
Wensman	W91018STXRIB	101	220.2	16.6	56.4	0.8	26800
Federal Hybrids	5180 SSTAX RIB	101	218.2	16.7	59.2	0.8	27700
Hoegemeyer	7166 AM	101	217.5	17.3	59.8	0.0	27000
Wensman	W91025STXRIB	102	217.2	16.6	59.9	2.8	27600
Nutech/G2 Genetics	X5LN-0308	103	215.4	17.2	59.9	0.5	24000
Renk	RK675DGVT2P	103	205.1	17.2	57.7	3.8	25800
Rob-See-Co	IC5203-3120	102	204.9	18.4	58.6	1.6	27600
Peterson Farms Seed	81W01	101	203.2	16.6	58.5	0.4	24300
Trial Average			228.0	17.5	58.6	1.0	27070
	15.1	0.6	0.9	1.7	1084		
		4.7	2.3	1.2	-	2.8	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	8.5 miles west of South Shore (57263) in Codington County, SD (GPS: 45.106810, -97.100162)
Cooperator:	SDSU Northeast Research Farm - Allen Heuer, manager
Soil Type:	Kranzburg-Brookings silty clay loams, 0-2% slope
Fertilizer:	150-0-50-25S preplant incorporated; 30-10-10 starter
Yield Goal:	200 bu/acre
Previous crop:	Soybeans
Tillage:	Conventional
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: 1 qt Dual II (metolachlor)
	Post: 1 qt Roundup PowerMax (glyphosate)
Date seeded:	5/3/2017
Date harvested:	11/13/2017





Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - **Early Season Tria**l **(95 day maturity or less)** at South Shore, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Thunder Seed	6794 VT2P	94	255.5	20.2	56.8	0.0	28600
Federal Hybrids	4185 VT2P RIB	91	251.8	20.3	58.7	0.0	28100
Federal Hybrids	4580 VT2P RIB	95	251.7	21.0	57.9	0.0	28100
Federal Hybrids	4560 SSTAX RIB	95	251.5	18.9	58.2	0.0	28300
Check	CHECK	97	249.8	21.1	56.5	3.4	28600
Renk	RK433RR	92	248.9	19.4	57.5	0.0	28500
Proseed	PX694 VT2P	94	248.4	20.4	57.3	0.0	29300
Proseed	1591 VT2P	91	246.7	19.8	56.9	0.7	29500
Renk	RK566SSTX	94	246.3	19.1	57.9	0.0	28100
Peterson Farms Seed	77P94	94	245.9	20.6	56.0	0.0	27700
Thunder Seed	4695 RR	95	245.3	21.1	57.2	0.0	28900
Peterson Farms Seed	72A91	91	245.3	20.1	57.5	0.4	28400
Federal Hybrids	4160 VT2P RIB	91	243.6	19.5	57.6	0.8	28600
Federal Hybrids	4470 VT2P RIB	94	241.8	20.7	55.7	0.4	27900
Titan Pro	TP 58-95 SS	95	241.3	19.0	58.6	0.0	28600
Wensman	W80931VT2RIB	93	239.1	17.9	57.6	1.9	29300
Federal Hybrids	4180 VT2P	91	238.8	18.5	57.8	0.0	28100
Channel	193-53STXRIB	93	238.5	19.2	55.7	0.0	28600
Federal Hybrids	4560 VT2P RIB	95	237.8	19.5	58.3	0.0	28000
Dairyland Seed	DS-9090SSX	90	235.1	18.8	56.3	0.0	28700
Thunder Seed	4791 RR	91	234.6	19.5	57.5	0.0	28000
Dairyland Seed	DS-6091	91	234.3	19.6	58.5	3.9	27700
Renk	RK522SSTX	94	233.5	20.4	55.4	0.0	28000
Dairyland Seed	DS-7294	94	233.1	19.3	58.3	0.0	27100
Thunder Seed	7793 SS	93	232.5	19.1	59.4	0.0	28300
Peterson Farms Seed	81W95	95	231.9	20.4	57.0	0.0	28400
Peterson Farms Seed	76S92	92	231.2	19.5	58.2	0.0	28100
Federal Hybrids	4558 SSTAX RIB	95	229.0	20.9	56.5	0.0	27600
Thunder Seed	7993 VT2P	93	228.9	19.9	58.1	0.0	28300
Rob-See-Co	IC4521-3110	95	228.8	19.4	57.6	0.0	27400
	Tria	l Average	235.4	19.9	57.4	0.5	27800
	L	SD (0.05)†	11.1	0.8	1.0	1.0	1100
		C.V.‡	3.4	3.0	1.2	-	2.9

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial (95 day maturity or less) at South Shore, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Thunder Seed	6791 VT2P	91	228.2	19.8	58.4	0.4	26600
Nutech/G2 Genetics	5G-293	93	227.2	18.8	58.1	0.4	27300
Wensman	W80947VT2RIB	94	226.9	20.8	57.1	0.0	28400
Titan Pro	TP 73-91 2P	91	226.6	20.5	57.2	0.0	27000
Channel	195-18VT2PRIB	95	226.4	22.6	57.8	0.4	28200
Rob-See-Co	IC4016-3010	90	225.4	18.0	57.8	0.4	25700
Masters Choice	SP1927	95	225.3	21.7	55.9	3.8	25900
Rob-See-Co	IC4453-3110	94	221.4	18.9	58.5	0.8	25600
Proseed	1395 VT2P	95	221.2	21.5	56.8	0.4	26500
Rob-See-Co	RC4343-3110A	93	218.9	19.1	58.0	0.5	24000
Thunder Seed	4795 DP VT2P	95	218.0	18.0	55.7	0.8	28200
Renk	RK568VT3P	95	200.6	21.6	56.5	0.0	23200
	Tria	l Average	235.4	19.9	57.4	0.5	27800
	L	SD (0.05)†	11.1	0.8	1.0	1.0	1100
		C.V.‡	3.4	3.0	1.2	-	2.9

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (96 day maturity or more) at South Shore, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Channel	201-28VT2PRIB	101	265.3	22.3	55.8	0.4	26800
Channel	197-50STXRIB	97	265.2	21.3	55.5	0.4	29100
Wensman	W80965VT2RIB	96	262.5	20.6	57.1	0.4	28900
Channel	201-05VT2PRIB	101	258.1	22.7	54.7	0.4	25900
Wensman	W90994STXRIB	99	256.9	21.2	55.8	0.4	28900
Wensman	W9288STXRIB	98	255.3	22.3	55.7	1.5	28500
Dairyland Seed	DS-9701RA	101	254.8	23.6	53.6	0.8	28100
Nutech/G2 Genetics	5F-196	96	254.8	21.0	54.4	0.0	27100
Rob-See-Co	IC4772-3111	97	254.7	19.7	57.0	0.0	29400
Hoegemeyer	HPT 6620 AM	96	253.8	20.3	54.6	1.6	27700
Check	CHECK	97	253.2	21.0	56.8	2.2	29200
Titan Pro	TP 65-00 2P	100	252.7	23.2	56.1	0.0	27100
Peterson Farms Seed	75S96	96	252.3	20.8	57.7	0.0	29600
Federal Hybrids	4880 VT2P RIB	98	252.2	20.9	56.0	0.0	26800
Thunder Seed	4600 RR	100	252.1	21.9	56.2	1.1	28600
Thunder Seed	7603 SS	103	252.1	20.5	57.5	1.5	28400
Thunder Seed	6798 VT2P	98	251.4	20.1	56.1	0.4	28900
Federal Hybrids	4760 VT2P RIB	97	250.7	19.4	57.5	0.0	28200
Renk	RK595SSTX	99	249.9	19.1	57.4	0.0	29200
Federal Hybrids	5180 SSTAX RIB	101	249.8	22.1	56.7	0.0	27300
Federal Hybrids	4680 VT2P	96	249.2	21.0	56.1	0.0	28600
Thunder Seed	7396 VT2P	96	248.6	18.7	56.0	0.0	28700
Renk	RK608DGVT2P	100	248.6	23.0	54.1	0.0	27800
Hoegemeyer	HPT 7166 AM	101	248.1	22.2	58.0	1.2	27400
Wensman	W80993VT2RIB	99	247.9	23.9	54.7	0.4	27900
Federal Hybrids	4770 VT2P RIB	97	247.8	22.8	55.4	0.0	28400
Federal Hybrids	4760 SSTAX RIB	97	246.7	20.1	54.8	0.8	28000
Wensman	W80972VT2RIB	97	244.8	21.6	53.8	0.4	28600
Nutech/G2 Genetics	5F-701	101	244.1	22.0	56.7	0.0	27100
Peterson Farms Seed	78B98	98	242.5	21.7	55.9	0.8	27600
	Tria	l Average	245.9	21.5	55.5	0.7	27600
	L	SD (0.05)†	12.4	1.0	1.0	1.2	1000
		3.6	3.2	1.3	-	2.6	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season Trial (96 day maturity or more) at South Shore, SD.

Vari	Agronomic Performance						
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	<b>Final Stand</b>
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	5F-601	101	241.5	22.7	54.8	3.2	26900
Federal Hybrids	5060 SSTAX RIB	100	240.3	22.6	56.8	0.8	27700
Rob-See-Co	RC4915-3120	99	239.5	22.7	50.1	0.4	26700
Proseed	1399 3000GT	99	239.4	22.3	54.7	0.0	25000
Wensman	W90979STXRIB	97	236.5	19.6	56.0	0.0	25900
Hoegemeyer	HPT 6695 AM	96	235.5	21.2	55.3	0.0	25500
Dairyland Seed	DS-9802RA	102	233.6	23.2	52.8	0.0	26700
Hoegemeyer	HPT 7088 AM	100	233.4	21.7	56.3	0.8	27700
Federal Hybrids	4880 SSTAX RIB	98	233.3	21.4	55.5	0.0	25200
Nutech/G2 Genetics	5FN-7099	99	229.6	23.4	52.9	0.4	26600
Hoegemeyer	HPT 6075 AMX	100	226.8	17.9	55.7	0.4	28200
Hoegemeyer	HPT 6813 AM	98	224.5	23.0	52.3	2.8	26900
Renk	RK675DGVT2P	103	219.6	22.6	55.3	2.1	26100
Nutech/G2 Genetics	5FN-5096	96	219.5	22.9	55.4	3.4	26000
	Tria	al Average	245.9	21.5	55.5	0.7	27600
	L	SD (0.05)†	12.4	1.0	1.0	1.2	1000
		C.V.‡	3.6	3.2	1.3	-	2.6

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	2 miles East and 1 mile North of Geddes (57432) in Charles Mix County, SD (GPS: 43.271195, -98.645333)
Cooperator:	Curtis Sybesma
Soil Type:	Eakin-Ethan complex, 2-6% slopes
Fertilizer:	120-46-0-32S-2Z preplant; 30-10-10 starter
Yield Goal:	170 bu/acre
Previous crop:	Soybeans
Tillage:	No-till
Row spacing:	30 inches
Seeding Rate:	28,750/acre
Herbicide:	Pre: 1.5 qt Harness Xtra (acetochlor) + 33 oz Powermax (glyphosate) + 1 pt
	Banvel (dicamba)
	Post: 33 oz Powermax (glyphosate)
Date seeded:	5/11/2017
Date harvested:	11/10/2017





Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (107 day maturity or less) at Geddes, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Miller Hybrids	M06-94BRGV	106	228.1	17.3	59.0	1.2	27200
Nutech/G2 Genetics	5VN-4707	107	224.3	17.2	59.6	0.0	27200
Channel	207-27STXRIB	107	220.8	17.7	60.0	0.0	27000
Nutech/G2 Genetics	5F-504	104	219.5	17.1	60.2	3.3	26500
Hoegemeyer	HPT 7166 AM	101	219.1	16.3	62.1	0.4	27300
Hoegemeyer	HPT 7557 AM	105	217.1	17.0	60.9	0.4	27700
Nutech/G2 Genetics	5D-906	106	213.1	16.7	61.3	0.4	25200
Dyna-Gro	D44VC36VT2P	104	211.0	16.3	60.2	1.2	27000
Channel	204-74VT2PRIB	104	208.3	16.8	61.6	0.0	26400
Great Lakes Hybrids	5470STXRIB	104	204.6	15.8	59.6	1.2	27400
Wensman	W81041VT2RIB	104	203.1	17.0	60.8	0.4	27700
Nutech/G2 Genetics	5H-905	105	201.2	16.3	59.1	0.8	26200
Thunder Seed	4695 RR	95	200.9	14.0	60.6	2.0	27600
Thunder Seed	6798 VT2P	98	200.7	13.9	60.1	0.8	27800
Renk	RK776SSTX	107	199.9	17.4	61.0	0.0	27100
Miller Hybrids	M01-41BRGA	101	199.2	16.5	61.6	0.0	27900
Hoegemeyer	HPT 7333 AMXT	103	199.1	15.8	59.4	0.0	23200
Hoegemeyer	HPT 7088 AM	100	197.4	16.2	60.8	0.8	26500
Channel	203-01STXRIB	103	196.8	15.6	59.0	0.0	26400
Great Lakes Hybrids	5283STXRIB	102	196.5	15.7	60.8	0.4	26600
Channel	205-19STXRIB	105	196.3	15.7	59.8	0.0	27100
Dyna-Gro	D39DC43	99	195.4	15.8	60.2	1.2	27400
Heine Seeds	790VT2PRORIB	107	195.1	17.1	59.5	0.4	26500
Great Lakes Hybrids	5755STXRIB	107	194.8	17.0	58.9	0.9	25900
Nutech/G2 Genetics	X5FN-0306	103	193.0	16.8	61.1	1.2	27000
Thunder Seed	7603 SS	103	192.3	14.9	59.9	1.6	27000
Thunder Seed	6794 VT2P	94	192.1	14.5	60.7	1.7	26000
Wensman	W81007VT2RIB	100	190.3	15.3	59.8	1.2	26900
Great Lakes Hybrids	5556VT2RIB	105	189.1	16.2	59.3	0.0	26900
Wensman	W81069VT2RIB	106	188.6	16.8	61.6	0.0	26600
	Tria	al Average	194.0	16.1	60.4	0.9	26700
	L	SD (0.05)†	12.5	0.8	1.0	1.7	1000
		5.6	3.4	1.2	-	2.7	

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Early Season Trial (107 day maturity or less) at Geddes, SD.

Varie	ety Information		Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Nutech/G2 Genetics	X5LN-0308	103	187.8	15.9	60.2	0.0	23100
Thunder Seed	4600 RR	100	187.6	15.6	60.9	3.4	25600
Heine Seeds	823VT2PRO	107	185.5	19.0	57.9	0.8	26200
Check	CHECK	97	177.0	15.4	61.4	0.4	27400
Heine Seeds	821VT2PRORIB	107	176.3	18.0	59.9	5.0	26400
Great Lakes Hybrids	5626VT2PRO	106	173.2	17.1	62.7	0.0	25900
Thunder Seed	7993 VT2P	93	172.3	14.6	61.8	0.8	26900
Thunder Seed	7793 SS	93	167.9	14.1	61.0	2.1	25800
Thunder Seed	7396 VT2P	96	167.2	13.3	58.9	1.9	27600
Renk	RK717SSTX	105	163.5	16.5	61.7	0.4	26800
Heine Seeds	754STXRIB	105	156.2	16.5	61.0	0.0	27800
Wensman	W81028VT2RIB	102	155.7	16.3	60.5	2.0	27100
		Trial Average	194.0	16.1	60.4	0.9	26700
		LSD (0.05)†	12.5	0.8	1.0	1.7	1000
		C.V.‡	5.6	3.4	1.2	-	2.7

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (108 day maturity or more) at Geddes, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Great Lakes Hybrids	6462STXRIB	114	217.1	20.1	61.2	0.0	25500
Nutech/G2 Genetics	5F-709	109	214.6	17.7	59.7	0.9	25800
Great Lakes Hybrids	6369VT2RIB	113	213.9	19.2	58.9	0.4	26500
Hoegemeyer	HPT 8066 AM	110	211.3	19.0	58.8	0.9	24700
Miller Hybrids	M08-06BGV	108	208.1	17.5	58.0	1.2	26500
Wensman	W91095STXRIB	109	208.0	17.1	60.2	0.9	25600
Channel	213-19STXRIB	113	204.5	18.7	60.3	0.4	25900
Heine Seeds	852VT2PRORIB	112	204.0	22.2	58.0	0.4	24800
Nutech/G2 Genetics	5F-308	108	203.6	17.6	60.3	0.4	26700
Hoegemeyer	HPT 7946 AM	109	202.1	17.9	60.3	0.4	25900
Renk	RK871VT2P	111	197.8	19.2	58.1	0.4	25400
Channel	209-15VT2P	109	197.1	17.4	59.1	0.9	24400
Channel	210-26STXRIB	110	196.1	18.7	58.9	0.0	25800
Channel	208-23STXRIB	108	194.4	18.6	57.8	0.0	25900
Channel	209-53STXRIB	109	194.4	19.4	57.5	0.4	26200
Heine Seeds	837DGVT2PRO	111	194.0	20.1	58.7	0.8	26800
Great Lakes Hybrids	5910VT2PRO	109	191.6	17.7	60.8	0.8	26400
Great Lakes Hybrids	6224STX	112	188.6	19.7	60.1	0.0	22300
Renk	RK810SSTX	110	187.5	20.7	57.6	0.0	22800
Heine Seeds	863STX	112	186.5	22.1	60.5	0.0	25700
Heine Seeds	856STXRIB	112	185.9	19.4	57.9	0.4	25600
Miller Hybrids	RX436VT2P	110	184.7	19.4	59.2	0.4	27400
Check	CHECK	97	180.2	15.2	60.1	0.8	26000
Renk	RK815SSTX	111	175.6	18.2	58.2	1.3	24600
Miller Hybrids	RX13-11VT2P	113	175.0	18.0	58.9	0.0	24500
Renk	RK792SSTX	108	169.7	16.4	60.8	0.0	24400
Great Lakes Hybrids	6401STXRIB	114	168.5	20.5	59.0	0.4	26400
Great Lakes Hybrids	5935STX	109	164.0	17.9	59.4	0.9	23800
Dyna-Gro	D50VC30VT2P	110	159.1	17.4	60.0	0.0	26100
	Tria	l Average	191.6	18.6	59.3	0.5	25500
	L	SD (0.05)†	15.8	1.9	1.0	1.5	1000
	5.9	7.4	1.2	-	2.7		

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Yield or moisture value required (>LSD) to determine if varieties are significantly different from one another.



#### Jonathan Kleinjan | SDSU Extension Crop Production Associate Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Location:	1.5 miles south of Volga (57101) in Brookings County, SD
	(GPS: 44.298767, -96.922201)
Cooperator:	SDSU Volga Research Farm - Jack Ingemansen, manager
Soil Type:	Brandt silty clay loam, 0-2% slope
Fertilizer:	179-40-40-7S preplant, 30-10-10 starter
Yield Goal:	200 bu/ac
Previous crop:	Soybeans
Tillage:	Conventional
Row spacing:	30 inches
Seeding Rate:	31,400/acre
Herbicide:	Pre: 1.8 pt Staunch (acetochlor)
	Post: 32 oz Roundup Power Max (glyphosate)
Date seeded:	5/5/2017
Date harvested:	11/11/2017
Row spacing: Seeding Rate: Herbicide: Date seeded: Date harvested:	30 inches 31,400/acre Pre: 1.8 pt Staunch (acetochlor) Post: 32 oz Roundup Power Max (glyphosate) 5/5/2017 11/11/2017



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Table 1a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Early Season Trial (100 day maturity or less) at Volga, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Heine Seeds	6250VT2PRO	96	278.1	17.4	59.1	0.0	28400
Hoegemeyer	HPT 7088 AM	100	274.4	17.0	58.7	0.0	27900
Federal Hybrids	4880 VT2P RIB	98	274.3	16.5	59.1	0.0	28100
Renk	RK608DGVT2P	100	273.7	17.1	59.1	0.0	27400
Thunder Seed	6798 VT2P	98	272.0	16.3	59.5	0.0	28600
Federal Hybrids	4580 VT2P RIB	95	270.3	16.8	60.5	0.0	28600
Titan Pro	TP 65-00 2P	100	269.8	17.2	59.4	0.0	27900
Hoegemeyer	HPT 6813 AM	98	268.7	16.7	56.8	0.0	25400
Federal Hybrids	4760 VT2P RIB	97	267.7	15.9	58.3	0.0	29200
Federal Hybrids	4880 SSTAX RIB	98	266.3	17.1	60.0	0.0	26400
Federal Hybrids	5060 SSTAX RIB	100	265.1	16.6	58.6	0.4	28200
Wensman	W8184VT2RIB	95	265.0	16.8	61.5	0.0	29200
Channel	197-50STXRIB	97	264.9	16.8	58.6	0.8	28900
Thunder Seed	4695 RR	95	264.6	16.6	59.0	0.0	28900
Heine Seeds	637STX	99	264.6	16.2	60.0	0.4	29000
Heine Seeds	712STXRIB	100	263.3	16.6	59.4	0.0	29300
Check	СНЕСК	97	263.3	16.6	59.6	0.0	28400
Wensman	W80993VT2RIB	99	263.2	17.0	59.9	0.0	27800
Peterson Farms Seed	78B98	98	262.9	16.6	60.0	0.0	28900
Miller Hybrids	EX98G	98	261.9	16.8	59.7	0.0	28500
Wensman	W81007VT2RIB	100	261.1	17.4	58.3	0.0	27700
Wensman	W80972VT2RIB	97	261.0	16.6	60.1	0.0	29600
Titan Pro	TP 71-98 2P	98	260.6	16.7	59.7	0.4	28000
Peterson Farms Seed	72D00	100	260.3	17.3	57.1	0.0	27700
Channel	195-18VT2PRIB	95	257.8	17.5	62.2	0.0	28300
Miller Hybrids	RX0961G	96	256.8	16.4	60.1	0.0	28200
Renk	RK595SSTX	99	256.6	15.9	59.2	0.0	28700
Nutech/G2 Genetics	5F-196	96	256.5	16.4	56.9	0.0	29100
Federal Hybrids	4680 VT2P	96	256.3	16.6	58.7	0.0	28200
Heine Seeds	632VT2PRORIB	100	255.7	15.9	59.4	0.0	29300
	Tria	al Average	255.9	16.5	59.0	0.1	28100
	Ľ	SD (0.05)†	13.9	0.5	0.9	0.7	1100
		C.V.‡	3.9	2.0	1.1	-	2.8

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 1b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - **Early Season Tria** (100 day maturity or less) at Volga, SD.

Variety Information			Agronomic Performance				
		Maturity	Yield Bu/A	Moisture	Test Wt.	Lodging*	Final Stand
Brand	Hybrid	Rating	(15.5%)	%	(lbs/bu)	%	(plants/A)
Masters Choice	SP2038	93	254.3	16.2	57.9	0.0	29000
Federal Hybrids	4770 VT2P RIB	97	254.0	16.6	58.8	0.0	28700
Nutech/G2 Genetics	5FN-7099	99	252.3	16.5	56.0	0.0	24100
Federal Hybrids	4760 SSTAX RIB	97	251.6	15.6	57.0	0.4	28900
Heine Seeds	723VT2PRORIB	100	248.0	16.5	59.1	0.0	28500
Federal Hybrids	4558 SSTAX RIB	95	247.1	16.2	58.2	0.0	28300
Hoegemeyer	HPT 6695 AM	96	247.1	16.2	59.8	0.0	26700
Thunder Seed	7993 VT2P	93	246.6	16.5	61.0	0.0	29200
Federal Hybrids	4560 SSTAX RIB	95	245.9	16.1	59.4	0.0	28300
Rob-See-Co	IC4772-3111	97	245.2	15.1	58.7	0.7	29200
Thunder Seed	6794 VT2P	94	244.5	16.1	58.3	0.0	28100
Thunder Seed	4600 RR	100	243.7	16.6	58.5	1.9	28900
Federal Hybrids	4560 VT2P RIB	95	242.6	16.3	60.2	0.0	27900
Rob-See-Co	RC4915-3120	99	242.3	15.0	56.4	0.0	25500
Miller Hybrids	RX94-25VT2P	94	241.6	16.2	59.0	0.0	28300
Thunder Seed	7396 VT2P	96	239.3	15.4	58.3	0.4	28200
Wensman	W90979STXRIB	97	239.1	15.7	58.2	0.4	27400
Hoegemeyer	HPT 6620 AM	96	238.1	16.4	57.0	0.4	28100
Nutech/G2 Genetics	5FN-5096	96	234.3	16.4	59.5	0.0	25400
Rob-See-Co	IC4521-3110	95	225.3	16.6	59.8	0.0	26400
Thunder Seed	7793 SS	94	224.5	16.3	58.7	0.0	27700
	Tria	al Average	255.9	16.5	59.0	0.1	28100
	L	SD (0.05)†	13.9	0.5	0.9	0.7	1100
		C.V.‡	3.9	2.0	1.1	-	2.8

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2a. Glyphosate-resistant corn hybrid variety performance results (average of 4 replications) - Late Season Trial (101 day maturity or more) at Volga, SD.

Variety Information			Agronomic Performance					
		Maturity	Yield Bu/A		Test Wt.	Lodging*	Final Stand	
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)	
Titan Pro	TP 53-03 2P	103	286.5	17.6	59.9	0.0	28400	
Channel	201-05VT2PRIB	101	278.6	17.9	57.8	0.0	27300	
Channel	205-19STXRIB	105	274.7	17.4	58.1	0.0	27900	
Dairyland Seed	DS-9804SSX	104	274.7	19.7	57.9	0.0	28000	
Channel	203-01STXRIB	103	274.5	17.0	57.5	0.0	27700	
Channel	201-28VT2PRIB	101	272.7	16.2	58.9	0.0	28200	
Heine Seeds	739VT2PRO	102	271.9	19.0	59.0	0.0	29000	
Hoegemeyer	HPT 7224 AM	102	269.4	17.0	58.5	0.4	28400	
Heine Seeds	752VT2PRO	105	269.3	18.3	57.8	0.0	27700	
Channel	204-74VT2PRIB	104	267.6	18.1	59.4	0.8	27000	
Heine Seeds	740VT2PRO	102	267.2	17.8	58.2	0.4	28100	
Wensman	W91025STXRIB	102	264.3	16.6	60.0	0.4	27100	
Check	CHECK	97	260.8	16.6	59.6	0.0	28600	
Nutech/G2 Genetics	X5FN-0306	103	260.1	17.8	59.1	0.0	28500	
Heine Seeds	754STXRIB	105	259.7	17.5	60.2	0.4	28900	
Renk	RK642SSTX	103	259.4	17.8	60.0	0.0	27300	
Nutech/G2 Genetics	5F-601	101	257.5	17.6	57.7	0.0	27000	
Nutech/G2 Genetics	X5LN-0308	103	256.6	17.0	59.0	0.0	23500	
Titan Pro	TP61-013122A	101	256.4	18.2	60.5	0.0	28000	
Wensman	W91018STXRIB	101	253.8	17.0	59.3	0.4	27200	
Titan Pro	TP 75-01 SS	101	251.3	16.7	59.2	0.0	28200	
Masters Choice	SP2272	102	251.1	17.6	59.8	0.0	28100	
Thunder Seed	7603 SS	103	250.7	17.2	58.9	0.0	28400	
Rob-See-Co	IC5203-3120	102	250.6	19.1	60.7	0.0	28500	
Rob-See-Co	RC5112-3122A	101	250.0	19.0	59.9	1.1	27900	
Federal Hybrids	5180 SSTAX RIB	101	249.8	17.5	60.1	0.0	29000	
Wensman	W91051STXRIB	105	249.7	19.9	60.2	0.4	26800	
Heine Seeds	7410STX	104	248.8	16.6	57.8	0.0	27300	
Renk	RK680SSTX	103	248.1	17.6	58.6	0.0	27700	
Miller Hybrids	M01-41BRGA	101	247.8	18.1	59.3	0.4	28200	
Trial Average			255.9	17.7	58.9	0.1	27400	
	14.6	0.8	1.1	0.8	1100			
	4.1	3.2	1.3	-	2.9			

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

<sup>+</sup> Value required (≥LSD) to determine if varieties are significantly different from one another.



Table 2b. Glyphosate-resistant corn hybrid variety performance results, continued (average of 4 replications) - Late Season Trial (101 day maturity or more) at Volga, SD.

Varie	Agronomic Performance						
		Maturity	Yield Bu/A		Test Wt.	Lodging*	<b>Final Stand</b>
Brand	Hybrid	Rating	(15.5%)	Moisture %	(lbs/bu)	%	(plants/A)
Peterson Farms Seed	81W01	101	245.5	17.2	57.0	0.0	24300
Dairyland Seed	DS-9802RA	102	243.7	18.2	56.4	0.0	28400
Nutech/G2 Genetics	5F-701	101	239.5	17.0	58.6	0.0	25500
Rob-See-Co	RC53713000GT	103	237.4	18.2	59.9	0.4	28400
Renk	RK675DGVT2P	103	236.8	17.3	58.5	0.0	25400
Wensman	W9325STXRIB	102	232.5	18.9	58.5	0.0	25600
Miller Hybrids	RX02-46VT2P	102	227.2	17.2	56.3	0.0	25500
Hoegemeyer	HPT 7333 AMXT	103	226.6	17.2	59.0	0.0	22900
	Tr	ial Average	255.9	17.7	58.9	0.1	27400
		LSD (0.05)†	14.6	0.8	1.1	0.8	1100
		C.V.‡	4.1	3.2	1.3	-	2.9

\* Lodging percentage - stalks broken below the ear as a percentage of final stand.

+ Value required (≥LSD) to determine if varieties are significantly different from one another.