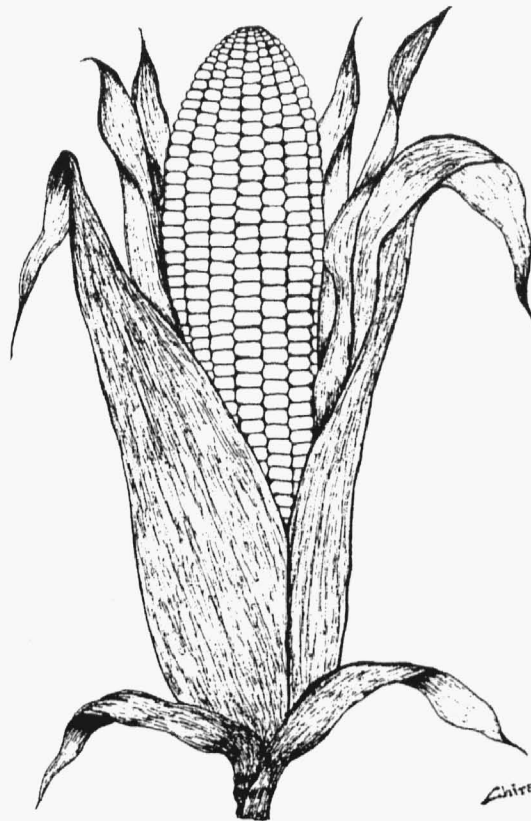


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WHITE FOOD CORN

1999 Performance Tests



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http://www.agron.missouri.edu/ars_columbia/fcpt&fd.html

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INTRODUCTION

The 1999 Late White Food Corn Performance Test (LWFCPT) included 27 white hybrids and three yellow hybrid checks submitted by 12 commercial seed producers and the University of Tennessee (Table 1). Nine white hybrids were new to the test in 1999. Two entries, including one new hybrid (Entry no. 5) and one from the University of Tennessee (Entry no. 15), were omitted from the report because of non-acknowledgment of entry submission and evidence of seed mixture, respectively. Thirteen locations were planted in the agronomic evaluation. Data were received from locations in Illinois, Kansas, Kentucky, Missouri, Tennessee, and Texas. Tests grown at Novelty and Tipton, MO, were discarded before harvest because of drought. Yield performance under three differing moisture regimes was evaluated at Lubbock, TX. First and second generation European corn borer (*Ostrinia nubilalis* Hübner) data were observed at Columbia and Novelty, MO. Corn earworm (*Helicoverpa zea* Boddie), percentage moldy grain, and ear length were obtained at Lubbock, TX. Stewart's wilt (*Erwinia stewartii* [Smith] Dye) resistance was evaluated at Urbana, IL. Grain samples were evaluated for quality by the Illinois Crop Improvement Association, Inc.

The 1999 Early White Food Corn Performance Test (EWFCPT) included 28 white hybrids and two yellow hybrid checks. Entries were submitted by 12 commercial seed producers (Table 1). Five white hybrids were new to the test in 1999. Fourteen total locations were planted in Illinois, Iowa, Ohio, Missouri, Nebraska, South Dakota, Tennessee, Texas, and Ontario, Canada. The test planted at Ogden, IA, was abandoned. Data from Knoxville, TN, and Ottawa, Ontario, Canada, were not included in the combined data analyses. Yield performance under three differing moisture regimes was evaluated at Lubbock, TX. First and second generation European corn borer data were observed at Columbia and Novelty, MO. Corn earworm percentage, moldy grain, and ear length were obtained at Lubbock, TX. Stewart's wilt resistance was evaluated at Urbana, IL. Grain samples were evaluated for quality by the Illinois Crop Improvement Association, Inc.

ENTRIES AND SEED SOURCES

Contributors of seed for the 1999 evaluations are listed in Table 1. Hybrids entered in the LWFCPT and EWFCPT are listed in Table 2 giving company-provided days relative maturity. Those entries that have an "X" as part of the hybrid name, such as Vineyard Vx4548W¹, have not been released. The last hybrids in each table are yellow kernel hybrid checks.

For averages over years, entry names have been changed to current designations, so that an experimental hybrid from an earlier year is now identified as the released hybrid. Where a previously entered hybrid was entered by a new company, updates were made to prior naming so the hybrid appears in the summaries over years (if continuously entered). Changes affecting the 1999 tests follow: Pioneer Brand 32Y52 was released from Pioneer Brand X1167BW and Pioneer Brand 32K72 was

¹ Mention of a trademark or proprietary product does not constitute a guarantee, warranty, or recommendation of the product by the U.S. Department of Agriculture or the University of Missouri and does not imply its approval to the exclusion of other products that may also be suitable.

released from Pioneer Brand X1127FW. Pioneer Brand 34P93 was listed incorrectly as Pioneer Brand 32P93 when the 1999 EWFCPT was distributed to growers; it has been listed correctly herein. Zimmerman 1780W was renamed from Wilson 1780W, Zimmerman 1790W was renamed from Wilson 1790W, Zimmerman 1851W was released from Wilson E8051, and Zimmerman N71-T7 was renamed from Novartis N71-T7 as a result of acquisitions in the industry. Vineyard V433W was released from Vx4337. The yellow hybrid checks Pioneer Brand 3245 and 3394 were contributed by Dr. C. T. Cunnyngham, Pioneer Hi-Bred International, Windfall, IN.

LOCATIONS AND AGRONOMIC PRACTICES

Table 3 lists the locations of the LWFCPT and EWFCPT from which acceptable data were returned, together with a record of the agronomic practices. Note that tests at Scandia, KS; Clay Center and Gothenburg, NE; and College Station, Lubbock, and Springlake, TX, were irrigated. Partial irrigation may have been used elsewhere. Figure 1 shows map locations where tests were planted.

DATA COLLECTED

Yield

Yields were measured on a plot basis, converted to bushels per acre (56 lb bu/a), and adjusted to 15.5% moisture. Adjustment for yield for plot stand was done when the efficiency of adjustment exceeded 104% (ratio of unadjusted to adjusted error mean squares). Adjustment was done for data from Champaign and Winchester, IL; Columbia, MO; Knoxville, TN; and College Station, TX, for the LWFCPT and from Knoxville, TN; Beresford, SD; and Ottawa and Ridgetown, Ontario, Canada, for the EWFCPT.

Stand

Stand is expressed as a percentage of the optimum plot stand or planted stand.

Root and stalk lodging

Lodging is expressed as a percentage of the total plants for each hybrid. Generally, a plant was rated as root lodged if it leaned more than 30° from vertical and as stalk lodged if it was broken at or below the ear node. Breakage above the ear was not counted.

Ear height

Ear height was measured from the soil level to the top ear leaf collar. Heights are expressed in inches.

Days to flowering

The number of days from planting to mid-tassel or mid-silk is shown. Depending on weather conditions, the total number of days from planting to physiological maturity might be taken as 1.6 to

1.8 times the number of days to flowering.

Grain moisture

Grain moisture was measured at harvest or when the grain was weighed.

Environmental yield response (b_1) and standard deviation of fit

These statistics are shown in Table 15 for the entry means combined over all locations for the 1999 LWFCPT and in Table 38 for the EWFCPT. The yield response (b_1) is expressed as bu/a/unit increase in the environmental index (I), where the index for a location is the average performance of all hybrids at the location. The deviation of fit is given in bu/a. The origin and use of these statistics are fully described later.

Moisture regime yield responses

Moisture regime yield responses were evaluated at Lubbock, TX, by using sub-surface, drip irrigation. Total growing season rainfall was 8.06". Added to that was 8.14" of irrigation water for the low moisture stress regime, 6.42" of irrigation water for the moderate moisture stress regime, and 4.27" of irrigation water for the severe moisture stress regime. The low moisture stress represented 62.5% replacement of measured evapotranspiration, the moderate moisture regime represented 55.9% replacement, and the severe moisture regime represented 47.6% replacement.

European corn borer

Leaf feeding by the first generation of the European corn borer was rated in nine classes. A score of 1 represented no feeding and 9 represented extensive damage. Plants in each plot were infested with about 160 larvae during the whorl stage of plant development. Ratings for leaf feeding were made three weeks later.

Feeding by the second generation of the European corn borer was determined by splitting stalks of five randomly infested plants per plot, counting the number of tunnels, and visually estimating the length of tunneling in inches. The minimum tunnel length associated with one hole was 1 inch. About 160 larvae were applied at flowering, and stalks were split six or more weeks later.

Corn earworm, percentage moldy grain, and ear length

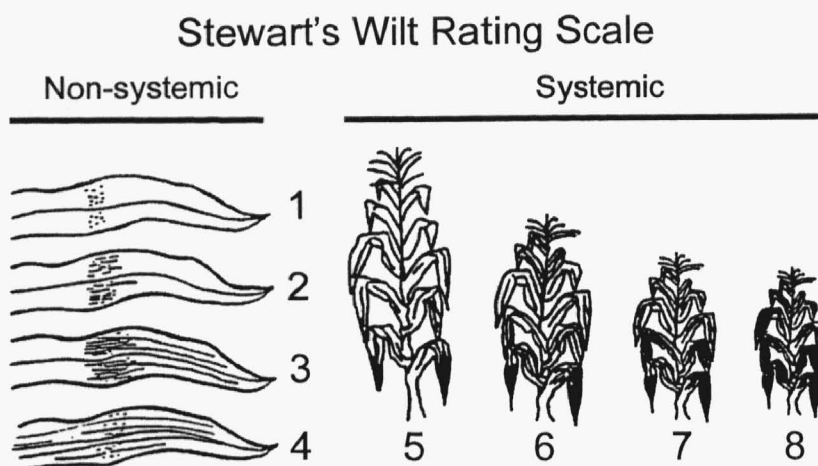
Corn earworm damage was measured on 10 infested plants as the distance from the ear tip to the last feeding spot towards the ear butt. Because the larvae must go through the silk channel, the feeding measurement starts at 0.4" beyond the tip to include that distance. Grain mold was visually estimated as the average percentage of all molded kernels for a 10-ear sample. Ear length was measured on a 10 ear sample of intact ears. Traits were measured on three replications watered by using sub-surface, drip irrigation to insure moisture stress did not occur.

Stewart's wilt

Planting for Stewart's wilt ratings was on 30APR at Urbana, IL. For these data, four replications of a randomized complete block design with 16 plants/plot were used. Entries from both the late and early tests, 50 other white food corn hybrids, and 2 sweet corn hybrid checks were included. Plants were inoculated by using the pinprick method on 1, 3, and 10JUN. Plants were rated for Stewart's wilt on 22JUN99 for the seedling blight phase and on 21JUL for the leaf blight phase. Rating was on a 1 to 9 scale where:

- 1 = No appreciable spread of symptoms from pinpricks.
- 2 = Limited water-soaking, chlorosis or necrosis within 3 cm of pinpricks.
- 3 = Limited spread from pinpricks; chlorosis or necrosis predominantly towards tips of leaves.
- 4 = Abundant spread from pinpricks; chlorosis or necrosis towards both ends of leaves.
- 5 = Minimal systemic infection; few symptomatic streaks on non-inoculated leaves.
- 6 = Moderate systemic infection; symptoms on 5 to 25% of leaf area, minimal stunting.
- 7 = Abundant systemic infection; symptoms on 25 to 50% of leaf area; distinct stunting.
- 8 = Severe systemic infection and stunting; symptoms on 50 to 90% of leaf area.
- 9 = Symptoms on 90 to 100% of leaf area; dead plants.

The rating scale is depicted in the following diagram:



Test weight

Bulk density was determined by measuring the weight of a pint of grain and converting that weight to pounds per bushel.

100-kernel weight

Weight of 100 whole, cleaned kernels was measured in grams.

Kernel size

Kernel size was determined using a helium gas pycnometer and expressed in cc.

Thins

Thins were obtained by determining the percent of a 250-kernel sample that passed through a 20/64" round-hole sieve using 30 back-and-forth cycles on a Gamet shaker.

Density

Density was determined using a helium gas pycnometer and expressed in g/cc.

Percentage horny endosperm

The percentage horny endosperm was visually estimated using a candling light. Fifteen kernels per entry per location were evaluated.

STATISTICAL ANALYSES AND INTERPRETATIONS

Data from the LWFCPT and EWFCPT were analyzed as a three-replication, randomized-complete-block-design experiment at each location. If an observation was missing in one replication, the average of those observations in the remaining replications was used to approximate the missing observation. The least significant differences at probability level 0.05 (LSD 0.05) and coefficients of variation percentages (CV%) were calculated from the location analyses of variance (AOV). Where differences among hybrids were not significant for a character, no LSD or CV% is shown. Where data were missing or observed in only one or two replications, a footnote is used to identify those situations.

The LSD 0.05 is used to compare the performance of two specific hybrids at a time. It should not be used, however, to compare all pairs of hybrids. If the mean of hybrid "X" exceeds the mean for hybrid "Y" by the LSD 0.05 or more, the difference observed is a true difference in 19 out of 20 instances when the two hybrids are grown under conditions of this test.

The CV% relates error of measurement and the mean of the observed character. Values of the CV% for root and stalk lodging are sometimes much higher than for other characters and are generally associated with nonsignificant differences among hybrids.

Agronomic data combined from 11 locations of the 1999 LWFCPT with an appropriate LSD 0.05 for each character are shown in Table 15. Table 38 gives combined results for the 1999 EWFCPT. The combined LSD 0.05 is based on the entries \times locations interaction vs. the pooled error from the combined AOV. When a character was not observed at a location, dots show in the location analysis; the combined mean and LSD 0.05 have been adjusted accordingly.

Stability analysis gives information on the responsiveness of hybrids to changes in environment and the reliability with which these responses may be predicted. Mean performance of all hybrids at a location was the measure used to rate the environment. This environmental index (I) was then used as the independent variable in a regression analysis with the individual hybrid's performance at each

location. A hybrid that is stable will have a regression coefficient (b_1) equal to 1.0, which means that an increase in the environmental index would result in an equal increase in the hybrid's yield. Regression coefficients greater than 1.0 indicate relatively better performance in good environments. Hybrids with b_1 values less than 1.0 would have a relative advantage in poor environments.

Deviation from fit reflects the accuracy with which the regression line given by b_1 represents probable performance. Low deviation indicates that a hybrid has greater predictability of performance.

Overall, a desirable hybrid would have a high mean yield, b_1 near 1.0, and low deviation from fit. If a grower knew he or she was producing on the high side of the environments sampled, then a hybrid with b_1 greater than 1.0 would be more responsive than one with $b_1 = 1.0$, and would be likely to yield more if mean yield levels were equivalent. Conversely, if a grower knew he or she was producing on the low side of the environments sampled, then a hybrid with b_1 less than 1.0 would be less influenced by environment than one with $b_1 = 1.0$, and would be likely to yield more if mean yield levels were equivalent.

NARRATIVE SUMMARY

1999 Late White Food Corn Performance Test

Yields from individual locations ranged from 94.2 bu/a at Powhattan, KS, to 176.2 bu/a at Champaign, IL. The overall average for 11 locations was 136.9 bu/a compared to 155.6 bu/a in 1998, reflecting many locations that experienced below average rainfall. Plot stands averaged 92.3% and all locations exceeded or equaled 83%. Adjustment of yield for plot stand was done when the efficiency of adjustment exceeded 104% (ratio of unadjusted to adjusted error mean squares); adjustment was done for data from Champaign and Winchester, IL; Columbia, MO; Knoxville, TN; and College Station, TX.

Root lodging was near zero (0.7% average). Stalk lodging averaged only 3.0%, and only Lexington, KY (16.0%), had more than 10%. Differences among entries were not statistically significant.

The number of days to flowering was recorded at seven locations. A 21.9-day spread was observed, ranging from 59.2 days at Columbia, MO, to 81.1 days at College Station, TX. Low grain moisture percentages can be observed where plots were harvested and dried before shelling and weighing, however, most locations were combine harvested. Details of individual location data are in Tables 4 to 14 with the combined data in Table 15. Yield data from all 11 locations are given in Table 16.

Combined yield data from 11 locations (Table 15)

Two white hybrids and one yellow check hybrid yielded significantly more than the mean for all entries (136.9 bu/a): Pioneer Brand X1138AW (159.4 bu/a), the yellow check Pioneer Brand 3245 (153.1 bu/a), and Zimmerman 1851W (150.3 bu/a). One other hybrid did not differ significantly from the top-yielding hybrid in the test: Pioneer Brand 32K72 (148.2 bu/a).

Two entries yielded significantly less than the mean of all entries: IFSI 95-1 (124.6 bu/a) and Zimmerman Z75W (123.2 bu/a). The entries \times locations interaction was significant, indicating different entry responses in different environments.

The environmental response coefficients (b_1) and standard deviations of fit are shown in the last two columns of Table 15. (A difference of ± 0.06 from 1.00 is necessary for significance. The LSD should be used when comparing coefficients of two hybrids.) Twelve white hybrids and the yellow check Pioneer Brand 3245 had b_1 s that were significantly greater than 1.00, indicating greater than average response to better environmental conditions, but poor performance in adverse environments. Six white hybrids and the yellow check hybrids B73 \times Mo17 and Pioneer Brand 3394 had environmental responses that were significantly less than 1.00.

Pioneer Brand X1138AW (159.4 bu/a, $b_1 = 1.21$ bu/a/I), the yellow check Pioneer Brand 3245 (153.1 bu/a, $b_1 = 1.15$ bu/a/I), Zimmerman 1851W (150.3 bu/a, $b_1 = 1.14$ bu/a/I), and Pioneer Brand 32K72 (148.2 bu/a, $b_1 = 1.15$ bu/a/I) had yields not differing significantly from the highest yielding entry and a b_1 that was significantly greater than 1.0. These would be good selections when a favorable environment was anticipated.

Usually, low responsiveness is associated with low mean yields. Exceptions are occasionally found that are high yielding and have a relatively low b_1 . An examples in this year's test was IFSI 97-1 (142.5 bu/a, $b_1 = 0.85$ bu/a/I). This type of response would be desirable where adverse conditions were frequently encountered.

The standard deviations of fit varied for similar environmental response coefficients. For example, Garst 8277W (136.6 bu/a, $b_1 = 1.09$ bu/a/I) and Zimmerman Z62W (133.6 bu/a, $b_1 = 1.10$ bu/a/I) had standard deviations of 9.2 and 17.5 bu/a, respectively. Garst 8277W would be expected to be a more predictable performer in response to varied environments than Zimmerman Z62W.

In choosing a hybrid, all agronomic factors must be considered in relation to the anticipated environment. Data from several locations are usually more reliable than data from a single location evaluated for two or three years.

Moisture regime yield response data (Table 17)

Responses to three moisture regimes were evaluated with three replications at Lubbock, TX. The low moisture stress regime was 62.5% replacement of measured evapotranspiration, the moderate moisture regime was 55.9% replacement, and the severe moisture regime was 47.6% replacement. Yields were quite low for that region of the High Plains, but the CV% for the low (16%) and moderate (17%) moisture stress regimes were good. Largely because of a lower mean yield, the CV% for severe moisture stress regime increased to 28%. Overall, mean yields decreased from 60.5 bu/a for the low moisture stress regime to 58.0 bu/a for the moderate moisture stress regime, and more drastically to 35.5 bu/a for the severe moisture stress regime. Nine hybrids in the moderate moisture stress evaluation had greater numeric yields than observed for the low stress evaluation, however, no difference was significant. All hybrid yields decreased substantially when comparing yields from the moderate to low moisture stress regime.

Zimmerman N71-T7 showed unusual tolerance to moisture stress and yielded significantly more than the average entry under each of the three moisture regimes. Three other hybrids yielded

significantly more than the average hybrid for the low moisture stress regime (Asgrow RX901W [87.1 bu/a], Asgrow RX921E [76.9 bu/a], and the yellow check hybrid Pioneer Brand 3394 [76.8 bu/a]), but Zimmerman N71-T7 significantly out-yielded all three of these. In the moderate and severe moisture stress evaluations, Zimmerman N71-T7 was the only hybrid to yield significantly more than the mean.

European corn borer resistance data for the 1999 LWFCPT (Table 18)

First-generation leaf-feeding ratings were obtained at Columbia and Novelty, MO. Significant differences were found among entries at both locations and for the combined data. For the combined means, Vineyard V433W was significantly better (lower rating) than the mean of all entries (2.5 rating). Ratings in the 1-to-3 range are generally considered as indicating resistance.

Significant differences among entries were not found for second-generation data for number of tunnels or tunnel length at either location or in the combined analysis for the two locations. Levels of damage for both characters were very low averaging only 1.7 inches of tunneling overall.

Corn earworm resistance and moldy grain data for the 1999 LWFCPT (Table 19)

Evaluated in Lubbock, TX, three white hybrids had significantly less corn earworm damage than the average entry: Zimmerman N71-T7, Zimmerman 1851W, and Asgrow RX921W. From 1998 information, Novartis N71-T7, which was renamed Zimmerman N71-T7 for 1999, was indicated as containing the Bt gene for resistance to lepidopteran feeding. Only the yellow check hybrid B73 × Mo17 had more corn earworm damage than the average entry.

Likely related to less corn earworm damage, Zimmerman N71-T7 had significantly less molded grain than the average entry. More moldy grain than average occurred for the yellow check hybrid Pioneer Brand 3394.

Reactions to Stewart's bacterial wilt for the 1999 LWFCPT, EWFCPT, and other white food corn hybrids (Table 20)

Stewart's wilt ratings at Urbana, IL, for the seedling wilt and leaf blight phases were highly correlated ($R = 0.95^{**}$), thus means of the two ratings were used to compare hybrids. Hybrid mean ratings ranged from 1.5 to 6.5 for all entries and from 1.5 to 3.3 for entries in the WFCPTs. Means for other white food corn hybrids that were not in the 1999 WFCPTs ranged from 1.5 to 3.6. Hybrids with ratings of 2.0 were not significantly different from the hybrid with the lowest rating of 1.5 and can be considered highly resistant. Hybrids with ratings between 2.0 and 3.0 are also considered to be resistant because these ratings indicate that the movement of *E. stewartii* was restricted to a very few inches within the plant. Ratings of 3.0 to 4.5 correspond to moderate reactions of hybrids to Stewart's wilt. Five hybrids in the WFCPTs displayed moderate reactions in this evaluation.

Kernel quality evaluation of entries in the 1999 Late White Food Corn Performance Test (Table 21)

Milling quality of entries in the 1999 LWFCPT was evaluated by the Illinois Crop Improvement Association, Inc. Target values were kernel weight of 37 g or more per 100 kernels, density equal to or exceeding 1.20 g/cc, and 90% or more horny endosperm. Significant differences among entries were found for all quality traits measured.

In 1999, the mean 100-kernel weight was 30.9 g and no entry met or exceeded the target value of 37 g/100 kernels. Low 100-kernel weights are a reflection of relatively lower yields at locations for grain sampling and a trend toward smaller, somewhat more dense kernels. All entries, except the yellow check B73 × Mo17, had kernel densities greater than or equal to 1.31 g/cc, which is very good. Meeting the 90% or more horny endosperm criterion were eight white hybrids and the yellow check Pioneer Brand 3245.

Two-, three-, four-, and five-year mean yields and agronomic performance (Tables 22 to 25)

Data were summarized for common entries in the last two, three, four, and five years of the LWFCPT. Individual year means were averaged without weighting for the varying numbers of locations over the years when they differed. For the past five years, the number of locations with acceptable data ranged from 10 for 1995 to 13 for 1996. Approximate values of 9.0 bu/a for the two-year means, 7.7 bu/a for the three-year means, 6.7 bu/a for the four-year means, and 5.9 bu/a for the five-year means could be used to compare yields of individual entries in the respective tables.

Among the hybrids included in the 1995 to 1999 tests (five-year means), the yellow check Pioneer Brand 3245 (167.1 bu/a) was significantly better yielding than any other entry. Relatively poorer performing over this period was the yellow check B73 × Mo17 (143.5 bu/a).

For the four-year means, the yellow check Pioneer Brand 3245 (168.9 bu/a) would be judged to yield significantly above the average hybrid, and it yielded significantly more than any other entry. Significantly lower yielding than the average for all entries was the yellow check B73 × Mo17 (145.4 bu/a).

1999 Early White Food Corn Performance Test

Yields in the EWFCPT ranged from 109.8 bu/a at Beresford, SD, to 199.4 bu/a at Ridgetown, ONT, with an overall average for 10 locations of 156.4 bu/a, down substantially from 174.8 bu/a in 1998. Stands averaged 85.9% overall, ranging from 87.4% at Marion, IA, to 100.6% at Beresford, SD. Adjustment of yield for plot stand was done when the efficiency of adjustment exceeded 104% (ratio of unadjusted to adjusted error mean squares); adjustment was done for data from Knoxville, TN; Beresford, SD; and Ottawa and Ridgetown, Ontario, Canada.

Root lodging averaged 3.0% for six locations reporting data and differences among entries were not significant. Stalk lodging ranged from 0.5% at Champaign, IL, to 14.5% at Gothenburg, NE, averaging only 5.5% for the seven locations with data.

Days to flowering were recorded only at Marion, IA, and Ridgetown, Ontario, with a mean of 76.0 days. Harvest grain moistures averaged 19.5%. The Gothenburg, NE, location had 14.6% moisture at harvest, while Ridgetown, ONT, had 22.8% grain moisture at harvest.

Fifteen white hybrids and the yellow checks B73 × Mo17 and Pioneer Brand 3394 were grown in both the LWFCPT and EWFCPT. Further testing may define the more suitable environments for each hybrid. There will be hybrids, however, that are intermediate to the maturity zones of the two tests and will continue to be entered in both tests.

The test was also grown at Knoxville, TN (Table 35) and Ottawa, Ontario, Canada (Table 36), but these data were not included in the combined analysis for the Corn Belt locations. Individual location data are shown in Tables 26 to 37 with the combined data in Table 38. Yield data from the 10 Corn Belt locations are given in Table 39.

Combined yield data from 10 Corn Belt locations (Table 38)

The average yield from 10 Corn Belt locations was 156.4 bu/a. Two white hybrids yielded significantly more than the average entry: Pioneer Brand X1138AW (174.7 bu/a) and Vineyard V433W (172.5 bu/a). Not differing significantly from the highest-yielding hybrid were Zimmerman 1790W (165.8 bu/a), Pioneer Brand 34P93 (165.1 bu/a), Pioneer Brand 32Y52 (164.4 bu/a), Pioneer Brand 32K72 (164.0 bu/a), Zimmerman 1851W (163.7 bu/a), Zimmerman N71-T7 (161.3 bu/a), IFSI 95-2 (161.2 bu/a), Whisnand 50AW (161.2 bu/a), and Asgrow RX776W (159.9 bu/a). Included among hybrids that yielded significantly lower than the average entry were Zimmerman Z76W (140.4 bu/a) and Garst 8527W (135.7 bu/a).

The environmental response coefficients (b_1) and standard deviations of fit for the EWFCPT are shown in the last two columns of Table 38. (A difference of ± 0.11 from 1.00 is necessary for significance. The LSD should be used when comparing coefficients of two hybrids.) Eight white hybrids had b_1 s that were significantly greater than 1.00, indicating greater than average response to better environmental conditions, but poor performance in adverse environments. Of these, Pioneer Brand 34P93 (165.1 bu/a, $b_1 = 1.18$ bu/a/I), IFSI 95-2 (161.2 bu/a, $b_1 = 1.18$ bu/a/I), and Whisnand 50AW (161.2 bu/a, $b_1 = 1.18$ bu/a/I) had mean yields not significantly different from the highest-yielding entry, and a high b_1 . These hybrids would be very responsive in good environments.

Six white hybrids and one yellow check hybrid had environmental responses that were significantly lower than 1.00. Usually, low response is associated with low mean yields. Hybrids can usually be found, however, that have high mean yield and hold up under adverse environments. In this test, Asgrow RX776W (159.9 bu/a, $b_1 = 0.76$ bu/a/I) typified that response. Response of such a hybrid would be desirable where adverse conditions were frequently encountered.

The standard deviations of fit varied for similar environmental response coefficients. For example, Pioneer Brand 32H39 (151.6 bu/a, $b_1 = 1.12$ bu/a/I) and Zimmerman 1780W (159.2 bu/a, $b_1 = 1.13$ bu/a/I) had standard deviations of 10.4 and 24.0 bu/a, respectively. Pioneer Brand 32H39 would be expected to be a more predictable performer in response to varied environments than Zimmerman 1780W.

Moisture regime yield response data (Table 40)

Responses to three moisture regimes were evaluated with three replications at Lubbock, TX. The low moisture stress regime was 62.5% replacement of measured evapotranspiration, the moderate moisture regime was 55.9% replacement, and the severe moisture regime was 47.6% replacement. Yields were quite low for that region of the High Plains, but the CV% for the low (16%) and moderate (21%) moisture stress regimes were good. Largely because of a lower mean yield, the CV% for the severe moisture stress regime increased to 28%. Overall, mean yields decreased from 64.4 bu/a for low moisture stress to 49.7 bu/a for moderate moisture stress, and more drastically to 34.5 bu/a for severe moisture stress. All hybrid yields decreased when comparing yields from low to moderate moisture stress and from moderate to severe moisture stress. Several of the decreases were significant.

As in the LWFCPT, Zimmerman N71-T7 showed unusual tolerance to moisture stress and yielded significantly more than the average entry under each of the three moisture regimes. Only the yellow check hybrid Pioneer Brand 3394 also yielded significantly more than the average hybrid under low moisture stress, but Zimmerman N71-T7 significantly out-yielded that yellow check. Under moderate and severe moisture stress, Zimmerman N71-T7 was the only hybrid to yield significantly more than the mean.

European corn borer susceptibility data for the 1999 EWFCPT (Table 41)

First-generation leaf-feeding ratings were obtained at Columbia and Novelty, MO. Significant differences were found among entries for Columbia and in the combined analysis. In the combined analysis, no entry was significantly better than the mean rating of 2.5. Only one entry was significantly worse than the average entry, DEKALB DK114W (3.3 rating), but even that would not be considered much of a problem.

Significant differences among entries were found for second-generation number of tunnels and stalk tunnel length. For tunnel numbers, Zimmerman N71-T7 (0.1) had significantly fewer tunnels than the average entry (1.4), and the yellow check B73 × Mo17 (2.9) had significantly more tunnels.

Little second-generation tunneling damage occurred since no combined tunnel length mean exceeded 2.4 inches, except for the yellow check hybrid B73 × Mo17. Again, Zimmerman N71-T7 (0.1 inches) had significantly less tunneling than the average entry (1.5 inches). From 1998 information, Novartis N71-T7, which was renamed Zimmerman N71-T7 for 1999, was indicated as containing the Bt gene for resistance to lepidopteran feeding. Three hybrids had significantly more tunneling than the mean for all entries: LG Seeds NB749W (2.4 inches), DEKALB DK665W (2.6 inches), and the yellow check hybrid B73 × Mo17 (3.1 inches).

Corn earworm resistance and moldy grain data for the 1999 LWFCPT (Table 42)

Corn earworm resistance was evaluated in Lubbock, TX. No early maturity white hybrid had significantly less corn earworm damage than the average entry. DEKALB DK665W (4.4 inches) had more corn earworm damage than the average entry (3.3 inches). Differences among entries for

percentage of moldy grain were not significant.

Reactions to Stewart's bacterial wilt for the 1999 LWFCPT, EWFCPT, and other white food corn hybrids (Table 20)

See page 12 for discussion of the Stewart's wilt reactions for the EWFCPT. All white food corn entries were evaluated in a common test and results are not separated by test maturity.

Kernel quality evaluation of entries in the 1999 Early White Food Corn Performance Test (Table 43)

Milling quality of entries in the 1999 EWFCPT was evaluated by the Illinois Crop Improvement Association, Inc. Target values were a kernel weight of 37 g or more per 100 kernels, density equal to or exceeding 1.20 g/cc, and 90% or more horny endosperm. Significant differences were found among entries for all quality traits.

No white hybrid met the 37 g/100 kernel target value in 1999. Two white hybrids were significantly better than the mean for all entries: DEKALB DK665W (35.9 g) and Zimmerman 1851W (35.0 g). Asgrow RX776W (28.0 g) had a 100-kernel weight that was significantly lower than the average hybrid.

All entries had kernel densities greater than 1.20 g/cc. Nine white hybrids had kernel densities that were significantly above that of the average hybrid (1.32 g/cc).

Four white hybrids met the 90% or more horny endosperm criterion: Pioneer Brand 34P93 (93%), Pioneer Brand X11138AW (91%), LG Seeds LG2596W (90%), and Pioneer Brand 32K72 (90%). Eleven white hybrids and the yellow check B73 × Mo17 had less than 85% horny endosperm.

Two-, three-, four-, and five-year mean yields and agronomic performance (Tables 44 to 47)

Data were summarized for the last two, three, four, and five years of the EWFCPT. Year means were averaged without weighting for the varying numbers of locations over the years. For the past five years, the number of locations with acceptable data has ranged from eight in 1995 to 12 in 1998. Although an LSD cannot be directly calculated, approximate values of 10.4 bu/a for the two-year means, 8.4 bu/a for the three-year means, 7.3 bu/a for the four-year means, and 6.4 bu/a for the five-year means can be used to compare yields of individual entries.

For the five-year means, no white hybrid or yellow hybrid check was significantly better than the mean. The yellow check hybrid Pioneer Brand 3394 (157.5 bu/a) and Zimmerman 1790W (157.4 bu/a) out-yielded Whisnand 51AW (150.4 bu/a) and the yellow check hybrid B73 × Mo17.

Results from calculating four-year means showed no hybrid was better than the mean for all hybrids. Differences among all but the lowest yielding hybrid [Garst 8527W (134.3 bu/a)] were not significant.

Table 1. Sources of commercial white endosperm food corn hybrids entered in the 1999 Late White Food Corn Performance Test and the 1999 Early White Food Corn Performance Test.

| Brand | Firm [†] | Address/telephone/FAX |
|------------------|---------------------------------|---|
| AgriGold | AgriGold Hybrids | RR#1, Box 203, St. Francisville, IL 62460 Tel. 618/943-5776 FAX 618/943-7333 |
| Asgrow | Asgrow Seed Company | 4140 114 th Street, P. O. Box 7570 Urbandale, IA 50322 Tel. 800/828-9283 FAX 515/331-7140 |
| Cargill/Vineyard | Cargill Hybrid Seeds | P. O. Box 5645, Minneapolis, MN 55440 Tel. 612/742-6725 FAX 612/742-7233 |
| DEKALB | Monsanto Global Seed Group | 3100 Sycamore Road, DeKalb, IL 60115 Tel. 800/335-2676 FAX 815/748-3927 |
| Diener | Diener Seed, Inc. | 371 North Diener Road, Reynolds, IN 47980 Tel. 800/545-8611 FAX 219/984-5364 |
| Garst | Garst Seed Company | 2369 330 th Street, P. O. Box 500, Slater, IA 50244 Tel. 515/685-5115 FAX 515/685-5080 |
| IFSI | Illinois Foundation Seeds, Inc. | P. O. Box 722, Champaign, IL 61824-0722 Tel. 217/485-6420 FAX 217/485-5223 |
| LG Seeds | LG Seeds | N. Wycles Road, P. O. Box 950, Decatur, IL 62525 Tel. 800/397-5010 FAX 217/422-2194 |
| Pioneer Brand | Pioneer Hi-Bred International | c/o Clive Holland, Product Manager, 7100 N.W. 62 nd Avenue Johnston, IA 50131-1150 Tel. 515/334-6646 FAX 515/334-6922 |
| Trisler | Trisler Seed Farms, Inc. | 3274E 800N Road, Fairmount, IL 61841 Tel. 217/288-9301 FAX 217/288-9095 |
| Whisnand | Whisnand Hybrids | 1220 East State Route 133, Arcola, IL 61910 Tel. 217/268-3714 FAX 217/268-3291 |
| Zimmerman | Wilson Genetics, L.L.C. | P. O. Box 391, Harlan, IA 51537 Tel. 712/755-3841 FAX 712/755-5261 |

[†] Mention of a trademark or proprietary product does not constitute a guarantee, warranty, or recommendation of the product by the U.S. Department of Agriculture or the University of Missouri and does not imply its approval to the exclusion of other products that may also be suitable.

Table 2. Hybrid entries and company-provided days relative maturity (DRM) for the 1999 LWFCPT and EWFCPT. New entries for 1999 are shown in italics.

| Entry no. | Entry | DRM | Entry no. | Entry | DRM |
|--|------------------------------|-----|-----------|---------------------------------|-----|
| LWFCPT | | | | | |
| 12 companies are participating and there are 8 new entries New entries for the 1999 test are shown in italics | | | | | |
| 1 | Asgrow RX901W | 120 | 16 | <i>Trisler T-4214W</i> | 111 |
| 2 | Asgrow RX921W | 120 | 17 | Vineyard V433W | 113 |
| 3 | DEKALB DK665W | 116 | 18 | <i>Vineyard Vx4548W</i> | 116 |
| 4 | <i>Diener DB 114W</i> | 114 | 19 | <i>Vineyard Vx4618W</i> | 118 |
| | | | 20 | Whisnand 50AW | 111 |
| 6 | <i>Garst 8277W</i> | 118 | 21 | Whisnand 51AW | 112 |
| 7 | IFSI 90-1 | 114 | 22 | Zimmerman 1780W | 114 |
| 8 | IFSI 95-1 | 118 | 23 | Zimmerman 1851W | 116 |
| 9 | IFSI 97-1 | 116 | 24 | Zimmerman N71-T7 | 111 |
| 10 | LG Seeds NB749W | 115 | 25 | <i>Zimmerman NX 7208</i> | 112 |
| 11 | Pioneer Brand 32H39 | 115 | 26 | Zimmerman Z62W | 111 |
| 12 | <i>Pioneer Brand 32K72</i> | 114 | 27 | Zimmerman Z75W | 111 |
| 13 | Pioneer Brand 32Y52 | 115 | 28 | Yellow check B73 × Mo17 | 115 |
| 14 | <i>Pioneer Brand X1138AW</i> | 114 | 29 | Yellow check Pioneer Brand 3245 | 115 |
| | | | 30 | Yellow check Pioneer Brand 3394 | 110 |
| EWFCPT | | | | | |
| 12 companies are participating and there are 5 new entries New entries for the 1999 test are shown in italics | | | | | |
| 1 | AgriGold A6530W | 114 | 15 | <i>Pioneer Brand X1128BW</i> | 111 |
| 2 | Asgrow RX776W | 114 | 16 | <i>Pioneer Brand X1138AW</i> | 114 |
| 3 | DEKALB DK665W | 116 | 17 | Trisler T-4211W | 111 |
| 4 | Diener DB 114W | 114 | 18 | Vineyard V433W | 113 |
| 5 | Garst 8527W | 108 | 19 | Whisnand 50AW | 111 |
| 6 | IFSI 90-1 | 114 | 20 | Whisnand 51AW | 112 |
| 7 | IFSI 95-2 | 112 | 21 | Zimmerman 1780W | 114 |
| 8 | LG Seeds LG2558W | 109 | 22 | Zimmerman 1790W | 113 |
| 9 | LG Seeds LG2596W | 112 | 23 | Zimmerman 1851W | 116 |
| 10 | LG Seeds NB749W | 115 | 24 | Zimmerman N71-T7 | 111 |
| 11 | Pioneer Brand 32H39 | 115 | 25 | <i>Zimmerman NX 7208</i> | 112 |
| 12 | Pioneer Brand 32K72 | 114 | 26 | <i>Zimmerman Z76W</i> | 111 |
| 13 | Pioneer Brand 34P93 | 111 | 27 | Yellow check B73 × Mo17 | 115 |
| 14 | <i>Pioneer Brand 32Y52</i> | 115 | 28 | Yellow check Pioneer Brand 3394 | 110 |

Table 3. Locations and agronomic conditions for yield tests.

| Location | Mean yield (bu/a) | Previous crop | Fertilizer (lb/a) | | | Date planted | Herbicide | Insecticide | Plant density (plants/a) |
|--|-------------------|---------------|-------------------|-------------------------------|------------------|--------------|------------------------------------|--------------------|--------------------------|
| | | | N | P ₂ O ₅ | K ₂ O | | | | |
| Late White Food Corn Performance Test | | | | | | | | | |
| Champaign, IL | 182.7 | Soybean | 176 | 71 | 300 | 4MAY99 | Atrazine, metolachlor | Terbufos | 28,650 |
| Winchester, IL | 142.8 | Soybean | 126 | 61 | 211 | 10MAY99 | Atrazine, metolachlor | ----- [†] | 29,430 |
| Powhattan, KS | 94.2 | Soybean | 125 | 0 | 0 | 20MAY99 | Atrazine, metolachlor | ----- | 26,000 |
| Scandia, KS [‡] | 177.8 | Soybean | 200 | 30 | 0 | 8MAY99 | Acetochlor, atrazine | ----- | 32,000 |
| Franklin, KY | 115.1 | Soybean | 200 | 137 | 72 | 20APR99 | Atrazine | Tefluthrin | 26,140 |
| Lexington, KY | 71.2 | Corn | 200 | 0 | 72 | 3MAY99 | Alachlor, atrazine | Tefluthrin | 23,870 |
| Columbia, MO | 99.7 | Soybean | 139 | 0 | 43 | 24MAY99 | Atrazine, metolachlor | Chlorpyrifos | 21,780 |
| Knoxville, TN | 132.0 | Soybean | 190 | 60 | 60 | 21APR99 | Alachlor, dicamba, simazine | Chlorpyrifos | 26,140 |
| Union City, TN | 174.9 | Corn | 260 | 85 | 140 | 19APR99 | Atrazine, metolachlor, simazine | ----- | 27,000 |
| College Station, TX [‡] | 117.7 | Corn | 173 | 7 | 7 | 26FEB99 | Atrazine, metolachlor | Tefluthrin | 30,000 |
| Lubbock, TX [‡] | ----- | Corn | 100 | 0 | 0 | 18MAY99 | Acetochlor, atrazine | ----- | 24,400 |
| Springlake, TX [‡] | 197.7 | Cotton | 257 | 35 | 70 | 20APR99 | Atrazine, metolachlor, trifluralin | Cyhalothrin | 27,000 |

Table 3. Continued.

| Location | Mean yield (bu/a) | Previous crop | Fertilizer (lb/a) | | | Date planted | Herbicide | Insecticide | Plant density (plants/a) |
|---|-------------------|---------------|-------------------|-------------------------------|------------------|--------------|---|------------------------------|--------------------------|
| | | | N | P ₂ O ₅ | K ₂ O | | | | |
| Early White Food Corn Performance Test | | | | | | | | | |
| Champaign, IL | 198.3 | Soybean | 176 | 71 | 300 | 4MAY99 | Atrazine, metolachlor | Terbufos | 28,650 |
| Galesburg, IL | 111.2 | Soybean | 201 | 61 | 300 | 20MAY99 | Acetochlor, atrazine, dicamba | ----- | 29,430 |
| Harlan, IA | 171.8 | Soybean | 160 | 0 | 0 | 19MAY99 | Acetochlor, atrazine | ----- | 28,000 |
| Marion, IA | 187.9 | Corn | 200 | 260 | 260 | 3MAY99 | Atrazine, clopyralid, nicosulfuron | Chlorpyrifos | 31,000 |
| St. Joseph, MO | 149.7 | Soybean | 160 | 119 | 75 | 11MAY99 | Atrazine | Cyfluthrin, phosphorothioate | 26,000 |
| Clay Center, NE [†] | 151.2 | Soybean | 176 | 52 | 0 | 30APR99 | Acetochlor, atrazine | Fipronil | 21,000 |
| Gothenburg, NE [†] | 124.2 | Corn | 160 | 20 | 0 | 7MAY99 | Acetochlor, atrazine | Tefluthrin | 31,600 |
| Hoytville, OH | 160.3 | Soybean | 260 | 40 | 40 | 3MAY99 | Acetochlor, atrazine, clopyralid, glyphosate | ----- | 30,000 |
| Beresford, SD | 109.8 | Soybean | 118 | 0 | 0 | 6MAY98 | Cyanazine, metolachlor | Tefluthrin | 26,720 |
| Knoxville, TN | 115.6 | Soybean | 190 | 60 | 60 | 21APR99 | Alachlor, dicamba, simazine | Chlorpyrifos | 26,140 |
| Lubbock, TX [‡] | ----- | Corn | 100 | 0 | 0 | 18MAY99 | Acetochlor, atrazine | ----- | 24,400 |
| Ottawa, Ontario | 99.6 | Corn | 140 | 35 | 75 | 10MAY99 | Atrazine, benoxacor, metolachlor | ----- | 30,610 |
| Ridgetown, Ontario | 199.4 | Soybean | 190 | 215 | 113 | 5MAY99 | Benoxacor, clopyralid, flumetsulam, metolachlor | ----- | 30,000 |

[†] Dashes indicate none used or data missing.

[‡] Irrigated location.



Fig. 1. Planted locations for the 1999 late and early white food corn performance tests.

Table 4. Yield and agronomic data from the 1999 Late White Food Corn Performance Test at Champaign, IL. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| Asgrow RX901W | 1 | 181.8 | 98.2 | 0.0 | 0.9 | 61.3 | . | 27.0 |
| Asgrow RX921W | 2 | 182.8 | 99.1 | 0.0 | 2.7 | 63.0 | . | 27.4 |
| DEKALB DK665W | 3 | 185.8 | 97.3 | 0.0 | 0.0 | 52.3 | . | 24.6 |
| <i>Diener DB 114W</i> | 4 | 179.4 | 94.6 | 0.0 | 0.0 | 56.7 | . | 24.6 |
| <i>Garst 8277W</i> | 6 | 168.3 | 93.2 | 0.5 | 0.0 | 62.7 | . | 29.0 |
| IFSI 90-1 | 7 | 203.4 | 88.7 | 0.0 | 0.5 | 59.7 | . | 26.7 |
| IFSI 95-1 | 8 | 175.1 | 99.1 | 0.9 | 1.4 | 56.7 | . | 31.8 |
| IFSI 97-1 | 9 | 166.5 | 93.7 | 1.0 | 1.9 | 62.7 | . | 25.9 |
| LG Seeds NB749W | 10 | 207.6 | 88.7 | 0.0 | 0.0 | 57.3 | . | 26.2 |
| Pioneer Brand 32H39 | 11 | 194.7 | 95.0 | 7.6 | 0.0 | 57.7 | . | 24.6 |
| <i>Pioneer Brand 32K72</i> | 12 | 197.4 | 100.0 | 0.0 | 0.5 | 58.3 | . | 21.7 |
| Pioneer Brand 32Y52 | 13 | 197.2 | 93.2 | 0.9 | 0.0 | 57.7 | . | 25.6 |
| <i>Pioneer Brand X1138AW</i> | 14 | 225.1 | 96.8 | 5.2 | 1.0 | 58.7 | . | 21.0 |
| <i>Trisler T-4214W</i> | 16 | 200.6 | 99.5 | 0.9 | 0.0 | 65.3 | . | 25.2 |
| Vineyard V433W | 17 | 183.7 | 94.6 | 2.3 | 0.5 | 59.3 | . | 24.5 |
| <i>Vineyard Vx4548W</i> | 18 | 167.9 | 93.2 | 0.0 | 0.5 | 60.0 | . | 26.9 |
| <i>Vineyard Vx4618W</i> | 19 | 174.3 | 99.1 | 0.0 | 0.9 | 55.3 | . | 27.1 |
| Whisnand 50AW | 20 | 178.9 | 92.3 | 4.0 | 0.5 | 65.3 | . | 23.3 |
| Whisnand 51AW | 21 | 203.8 | 97.3 | 0.0 | 1.9 | 66.3 | . | 24.2 |
| Zimmerman 1780W | 22 | 171.1 | 96.8 | 3.3 | 0.0 | 58.0 | . | 26.0 |
| Zimmerman 1851W | 23 | 205.9 | 95.5 | 0.0 | 0.0 | 58.7 | . | 30.2 |
| Zimmerman N71-T7 | 24 | 171.7 | 97.7 | 4.1 | 0.0 | 60.3 | . | 23.4 |
| <i>Zimmerman NX 7208</i> | 25 | 192.2 | 95.0 | 7.4 | 1.4 | 62.3 | . | 24.4 |
| Zimmerman Z62W | 26 | 171.1 | 97.7 | 0.0 | 0.0 | 65.3 | . | 26.0 |
| Zimmerman Z75W | 27 | 170.2 | 92.3 | 1.4 | 0.5 | 61.0 | . | 26.9 |
| Yellow check B73×Mo17 | 28 | 157.4 | 94.1 | 6.6 | 0.5 | 59.3 | . | 23.5 |
| Yellow check Pioneer Brand 3245 | 29 | 191.1 | 95.9 | 3.8 | 0.0 | 58.3 | . | 21.6 |
| Yellow check Pioneer Brand 3394 | 30 | 170.8 | 97.3 | 0.0 | 0.5 | 62.0 | . | 17.2 |
| Mean | | 182.7 | 95.2 | 1.7 | 0.6 | 60.2 | . | 25.4 |
| LSD 0.05 | | 28.2 | ns | ns | ns | 5.9 | | 2.2 |
| CV% | | 9.5 | | | | 6.0 | | 5.3 |

Table 5. Yield and agronomic data from the 1999 Late White Food Corn Performance Test at Winchester, IL. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| Asgrow RX901W | 1 | 122.8 | 95.6 | 1.4 | 1.8 | 43.3 | . | 23.3 |
| Asgrow RX921W | 2 | 153.5 | 91.2 | 0.0 | 2.4 | 48.7 | . | 21.1 |
| DEKALB DK665W | 3 | 126.5 | 89.0 | 0.0 | 2.5 | 42.3 | . | 20.1 |
| <i>Diener DB 114W</i> | 4 | 146.0 | 94.7 | 0.0 | 1.4 | 46.3 | . | 24.2 |
| <i>Garst 8277W</i> | 6 | 138.9 | 102.6 | 0.0 | 2.6 | 57.0 | . | 20.8 |
| IFSI 90-1 | 7 | 161.6 | 87.3 | 0.5 | 3.1 | 53.7 | . | 21.1 |
| IFSI 95-1 | 8 | 120.2 | 97.4 | 1.7 | 1.4 | 46.7 | . | 27.1 |
| IFSI 97-1 | 9 | 156.8 | 82.9 | 0.0 | 2.7 | 46.7 | . | 25.4 |
| LG Seeds NB749W | 10 | 135.1 | 91.7 | 1.1 | 2.5 | 50.3 | . | 24.2 |
| Pioneer Brand 32H39 | 11 | 129.5 | 103.5 | 6.6 | 2.1 | 52.0 | . | 19.7 |
| <i>Pioneer Brand 32K72</i> | 12 | 148.1 | 97.8 | 0.0 | 2.2 | 45.0 | . | 18.6 |
| Pioneer Brand 32Y52 | 13 | 147.9 | 80.7 | 6.3 | 3.4 | 49.0 | . | 20.7 |
| <i>Pioneer Brand X1138AW</i> | 14 | 172.3 | 99.1 | 3.9 | 3.1 | 54.7 | . | 17.5 |
| <i>Trisler T-4214W</i> | 16 | 129.6 | 100.9 | 1.3 | 3.0 | 50.7 | . | 22.4 |
| Vineyard V433W | 17 | 135.6 | 102.6 | 0.9 | 1.3 | 45.7 | . | 21.5 |
| <i>Vineyard Vx4548W</i> | 18 | 110.9 | 97.4 | 1.4 | 1.8 | 47.0 | . | 25.3 |
| <i>Vineyard Vx4618W</i> | 19 | 130.7 | 86.8 | 0.9 | 2.6 | 48.0 | . | 24.3 |
| Whisnand 50AW | 20 | 155.1 | 89.0 | 0.5 | 2.6 | 50.3 | . | 22.5 |
| Whisnand 51AW | 21 | 142.0 | 102.2 | 0.9 | 4.4 | 51.0 | . | 22.1 |
| Zimmerman 1780W | 22 | 165.9 | 82.5 | 0.6 | 2.6 | 44.0 | . | 24.3 |
| Zimmerman 1851W | 23 | 175.8 | 88.2 | 0.5 | 1.1 | 50.3 | . | 23.4 |
| Zimmerman N71-T7 | 24 | 155.8 | 93.9 | 0.9 | 1.4 | 52.3 | . | 21.0 |
| <i>Zimmerman NX 7208</i> | 25 | 138.2 | 94.3 | 2.0 | 2.9 | 48.7 | . | 21.3 |
| Zimmerman Z62W | 26 | 179.5 | 85.5 | 0.6 | 3.2 | 59.7 | . | 20.9 |
| Zimmerman Z75W | 27 | 101.4 | 84.2 | 3.7 | 3.1 | 50.3 | . | 20.8 |
| Yellow check B73 × Mo17 | 28 | 131.0 | 85.5 | 2.6 | 2.6 | 47.0 | . | 19.6 |
| Yellow check Pioneer Brand 3245 | 29 | 154.8 | 103.9 | 0.8 | 2.9 | 51.7 | . | 18.6 |
| Yellow check Pioneer Brand 3394 | 30 | 145.7 | 102.2 | 0.0 | 2.6 | 48.7 | . | 17.4 |
| Mean | | 142.8 | 92.7 | 1.5 | 2.4 | 49.0 | . | 21.9 |
| LSD 0.05 | | 25.0 | 11.3 | ns | ns | 6.8 | | 2.2 |
| CV% | | 10.7 | 7.5 | | | 8.4 | | 6.0 |

Table 6. Yield and agronomic data from the 1999 Late White Food Corn Performance Test at Powhattan, KS. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| Asgrow RX901W | 1 | 101.8 | 100.5 | 0.0 | 0.5 | . | 71.7 | 16.1 |
| Asgrow RX921W | 2 | 109.5 | 103.9 | 0.0 | 0.5 | . | 72.0 | 16.7 |
| DEKALB DK665W | 3 | 97.0 | 99.0 | 0.0 | 0.5 | . | 67.3 | 14.2 |
| <i>Diener DB 114W</i> | 4 | 106.3 | 98.5 | 0.0 | 0.0 | . | 67.3 | 14.6 |
| <i>Garst 8277W</i> | 6 | 99.6 | 102.5 | 0.0 | 1.4 | . | 69.0 | 15.7 |
| IFSI 90-1 | 7 | 86.1 | 85.3 | 0.0 | 0.5 | . | 67.3 | 15.5 |
| IFSI 95-1 | 8 | 73.8 | 95.1 | 0.0 | 0.5 | . | 72.0 | 19.5 |
| IFSI 97-1 | 9 | 105.4 | 81.9 | 0.0 | 1.8 | . | 68.0 | 18.0 |
| LG Seeds NB749W | 10 | 94.5 | 103.4 | 0.0 | 1.4 | . | 69.7 | 15.8 |
| Pioneer Brand 32H39 | 11 | 93.2 | 101.5 | 0.0 | 0.0 | . | 68.7 | 14.2 |
| <i>Pioneer Brand 32K72</i> | 12 | 105.5 | 99.0 | 0.0 | 0.5 | . | 67.0 | 13.6 |
| Pioneer Brand 32Y52 | 13 | 86.6 | 96.6 | 0.0 | 0.5 | . | 68.3 | 13.8 |
| <i>Pioneer Brand X1138AW</i> | 14 | 102.8 | 93.6 | 0.0 | 1.0 | . | 67.7 | 13.6 |
| <i>Trisler T-4214W</i> | 16 | 89.1 | 104.9 | 0.0 | 0.0 | . | 69.7 | 14.6 |
| Vineyard V433W | 17 | 121.1 | 107.4 | 0.0 | 0.4 | . | 68.0 | 15.2 |
| <i>Vineyard Vx4548W</i> | 18 | 84.9 | 97.1 | 0.0 | 0.0 | . | 70.7 | 15.5 |
| <i>Vineyard Vx4618W</i> | 19 | 102.1 | 109.3 | 0.0 | 0.4 | . | 70.7 | 15.2 |
| Whisnand 50AW | 20 | 99.6 | 97.5 | 0.0 | 0.0 | . | 67.7 | 14.2 |
| Whisnand 51AW | 21 | 88.8 | 98.5 | 0.0 | 2.0 | . | 67.7 | 14.2 |
| Zimmerman 1780W | 22 | 105.6 | 101.0 | 0.0 | 1.0 | . | 67.3 | 14.8 |
| Zimmerman 1851W | 23 | 92.3 | 86.3 | 0.0 | 0.6 | . | 71.7 | 15.7 |
| Zimmerman N71-T7 | 24 | 94.7 | 84.8 | 0.0 | 0.0 | . | 68.0 | 14.2 |
| <i>Zimmerman NX 7208</i> | 25 | 89.6 | 96.1 | 0.0 | 1.0 | . | 67.7 | 14.2 |
| Zimmerman Z62W | 26 | 68.9 | 93.1 | 0.0 | 0.0 | . | 73.3 | 13.2 |
| Zimmerman Z75W | 27 | 60.2 | 81.9 | 0.0 | 0.6 | . | 72.7 | 13.9 |
| Yellow check B73×Mo17 | 28 | 90.3 | 94.6 | 0.0 | 0.0 | . | 68.3 | 13.9 |
| Yellow check Pioneer Brand 3245 | 29 | 98.9 | 103.9 | 0.0 | 1.0 | . | 68.7 | 13.3 |
| Yellow check Pioneer Brand 3394 | 30 | 104.4 | 107.4 | 0.0 | 0.5 | . | 67.0 | 13.0 |
| Mean | | 94.2 | 96.6 | 0.0 | 0.6 | . | 69.1 | 14.9 |
| LSD 0.05 | | 18.4 | 9.5 | ns | 1.4 | | 1.7 | 0.8 |
| CV% | | 12.0 | 6.0 | | 133.7 | | 1.5 | 3.4 |

Table 7. Yield and agronomic data from the 1999 Late White Food Corn Performance Test at Scandia, KS. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| Asgrow RX901W | 1 | 183.4 | 95.9 | 0.0 | 0.9 | 43.3 | 75.0 | 14.8 |
| Asgrow RX921W | 2 | 164.1 | 96.3 | 0.0 | 1.7 | 43.7 | 75.0 | 15.3 |
| DEKALB DK665W | 3 | 166.9 | 95.1 | 0.0 | 2.6 | 40.3 | 71.0 | 14.7 |
| <i>Diener DB 114W</i> | 4 | 173.9 | 97.1 | 0.0 | 3.4 | 43.3 | 71.0 | 15.3 |
| <i>Garst 8277W</i> | 6 | 181.5 | 96.7 | 0.0 | 3.0 | 45.3 | 72.0 | 15.4 |
| IFSI 90-1 | 7 | 187.0 | 96.7 | 0.0 | 0.9 | 42.7 | 74.3 | 14.5 |
| IFSI 95-1 | 8 | 162.4 | 97.5 | 0.0 | 3.0 | 45.0 | 74.0 | 18.5 |
| IFSI 97-1 | 9 | 181.4 | 95.1 | 0.0 | 2.6 | 44.3 | 71.7 | 17.3 |
| LG Seeds NB749W | 10 | 145.5 | 94.7 | 0.0 | 2.2 | 44.7 | 75.0 | 15.2 |
| Pioneer Brand 32H39 | 11 | 206.9 | 94.7 | 0.0 | 3.4 | 43.0 | 71.0 | 14.7 |
| <i>Pioneer Brand 32K72</i> | 12 | 203.5 | 93.8 | 0.0 | 3.9 | 41.0 | 72.0 | 14.9 |
| Pioneer Brand 32Y52 | 13 | 191.7 | 94.7 | 0.0 | 3.0 | 43.3 | 73.0 | 15.6 |
| <i>Pioneer Brand X1138AW</i> | 14 | 228.0 | 94.7 | 0.0 | 0.9 | 44.7 | 72.3 | 14.4 |
| <i>Trisler T-4214W</i> | 16 | 161.5 | 95.1 | 0.0 | 1.7 | 42.0 | 73.7 | 15.0 |
| Vineyard V433W | 17 | 189.9 | 97.9 | 0.0 | 2.5 | 43.3 | 73.3 | 15.6 |
| <i>Vineyard Vx4548W</i> | 18 | 183.7 | 96.7 | 0.0 | 0.9 | 43.0 | 72.0 | 15.2 |
| <i>Vineyard Vx4618W</i> | 19 | 162.1 | 94.7 | 0.0 | 0.0 | 40.0 | 72.3 | 15.9 |
| Whisnand 50AW | 20 | 182.5 | 93.8 | 0.0 | 1.8 | 44.3 | 72.0 | 15.0 |
| Whisnand 51AW | 21 | 165.1 | 98.8 | 0.0 | 2.1 | 45.0 | 73.0 | 15.1 |
| Zimmerman 1780W | 22 | 162.8 | 96.3 | 0.0 | 5.1 | 42.0 | 71.0 | 15.6 |
| Zimmerman 1851W | 23 | 202.6 | 97.5 | 0.0 | 0.0 | 45.0 | 75.7 | 16.7 |
| Zimmerman N71-T7 | 24 | 213.8 | 94.7 | 0.0 | 0.9 | 41.7 | 72.3 | 14.9 |
| <i>Zimmerman NX 7208</i> | 25 | 171.7 | 94.2 | 0.0 | 0.9 | 44.0 | 71.7 | 14.6 |
| Zimmerman Z62W | 26 | 166.1 | 93.8 | 0.0 | 2.3 | 41.7 | 75.3 | 14.2 |
| Zimmerman Z75W | 27 | 166.7 | 93.4 | 0.0 | 1.3 | 40.7 | 72.0 | 14.9 |
| Yellow check B73×Mo17 | 28 | 183.9 | 94.2 | 0.0 | 1.7 | 42.7 | 72.3 | 15.3 |
| Yellow check Pioneer Brand 3245 | 29 | 190.6 | 93.8 | 0.0 | 2.7 | 41.0 | 73.0 | 14.4 |
| Yellow check Pioneer Brand 3394 | 30 | 172.1 | 94.7 | 0.0 | 0.4 | 43.7 | 70.0 | 13.5 |
| Mean | | 177.8 | 95.4 | 0.0 | 2.1 | 43.1 | 72.7 | 15.3 |
| LSD 0.05 | | 11.6 | ns | ns | ns | 2.4 | 0.6 | 1.0 |
| CV% | | 4.0 | | | | 3.5 | 0.5 | 3.9 |

Table 8. Yield and agronomic data from the 1999 Late White Food Corn Performance Test at Franklin, KY. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| Asgrow RX901W | 1 | 126.2 | 100.0 | . | 1.0 | . | . | 14.1 |
| Asgrow RX921W | 2 | 130.1 | 100.0 | . | 0.0 | . | . | 14.6 |
| DEKALB DK665W | 3 | 97.3 | 93.4 | . | 0.5 | . | . | 14.4 |
| <i>Diener DB 114W</i> | 4 | 129.6 | 100.0 | . | 0.5 | . | . | 12.2 |
| <i>Garst 8277W</i> | 6 | 113.6 | 99.0 | . | 1.0 | . | . | 16.4 |
| IFSI 90-1 | 7 | 100.2 | 100.0 | . | 0.5 | . | . | 11.5 |
| IFSI 95-1 | 8 | 93.8 | 100.0 | . | 0.0 | . | . | 16.4 |
| IFSI 97-1 | 9 | 114.0 | 82.8 | . | 0.0 | . | . | 17.7 |
| LG Seeds NB749W | 10 | 112.2 | 96.0 | . | 0.5 | . | . | 14.2 |
| Pioneer Brand 32H39 | 11 | 105.8 | 91.9 | . | 0.5 | . | . | 12.6 |
| <i>Pioneer Brand 32K72</i> | 12 | 117.0 | 100.0 | . | 0.0 | . | . | 12.4 |
| Pioneer Brand 32Y52 | 13 | 122.2 | 100.0 | . | 2.5 | . | . | 11.8 |
| <i>Pioneer Brand X1138AW</i> | 14 | 134.9 | 96.0 | . | 0.0 | . | . | 12.5 |
| <i>Trisler T-4214W</i> | 16 | 126.5 | 98.5 | . | 0.0 | . | . | 13.6 |
| Vineyard V433W | 17 | 117.6 | 90.9 | . | 1.0 | . | . | 13.7 |
| <i>Vineyard Vx4548W</i> | 18 | 116.3 | 100.0 | . | 0.0 | . | . | 13.6 |
| <i>Vineyard Vx4618W</i> | 19 | 92.8 | 80.8 | . | 0.0 | . | . | 15.3 |
| Whisnand 50AW | 20 | 127.1 | 93.4 | . | 1.1 | . | . | 14.7 |
| Whisnand 51AW | 21 | 122.9 | 100.0 | . | 0.5 | . | . | 13.1 |
| Zimmerman 1780W | 22 | 116.4 | 100.0 | . | 2.0 | . | . | 15.3 |
| Zimmerman 1851W | 23 | 127.7 | 100.0 | . | 1.0 | . | . | 16.1 |
| Zimmerman N71-T7 | 24 | 128.8 | 100.0 | . | 0.0 | . | . | 13.4 |
| <i>Zimmerman NX 7208</i> | 25 | 123.9 | 100.0 | . | 0.5 | . | . | 14.2 |
| Zimmerman Z62W | 26 | 95.7 | 98.0 | . | 2.1 | . | . | 11.8 |
| Zimmerman Z75W | 27 | 93.1 | 100.0 | . | 1.0 | . | . | 12.2 |
| Yellow check B73 × Mo17 | 28 | 111.1 | 98.5 | . | 0.0 | . | . | 14.1 |
| Yellow check Pioneer Brand 3245 | 29 | 138.1 | 100.0 | . | 0.0 | . | . | 13.2 |
| Yellow check Pioneer Brand 3394 | 30 | 119.8 | 100.0 | . | 1.0 | . | . | 11.0 |
| Mean | | 115.1 | 97.1 | . | 0.7 | . | . | 14.0 |
| LSD 0.05 | | 31.9 | ns | | 1.7 | | | 2.1 |
| CV% | | 17.0 | | | 154.6 | | | 9.0 |

Table 9. Yield and agronomic data from the 1999 Late White Food Corn Performance Test at Lexington, KY. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| Asgrow RX901W | 1 | 86.5 | 100.0 | 0.0 | 4.2 | 44.3 | 67.0 | 15.4 |
| Asgrow RX921W | 2 | 80.2 | 100.0 | 0.0 | 24.5 | 43.4 | 68.0 | 13.3 |
| DEKALB DK665W | 3 | 72.3 | 100.0 | 0.0 | 11.1 | 42.4 | 65.7 | 10.0 |
| <i>Diener DB 114W</i> | 4 | 75.4 | 100.0 | 0.0 | 20.4 | 43.3 | 67.0 | 14.6 |
| <i>Garst 8277W</i> | 6 | 53.1 | 100.0 | 0.0 | 0.9 | 45.4 | 69.0 | 17.6 |
| IFSI 90-1 | 7 | 67.9 | 100.0 | 0.0 | 26.9 | 48.0 | 67.0 | 12.2 |
| IFSI 95-1 | 8 | 50.3 | 100.0 | 0.0 | 6.0 | 45.5 | 68.0 | 19.0 |
| IFSI 97-1 | 9 | 85.5 | 100.0 | 0.0 | 18.5 | 45.2 | 67.0 | 19.3 |
| LG Seeds NB749W | 10 | 60.9 | 100.0 | 0.0 | 13.0 | 47.8 | 67.0 | 15.7 |
| Pioneer Brand 32H39 | 11 | 83.2 | 100.0 | 0.0 | 4.6 | 42.5 | 64.3 | 11.2 |
| <i>Pioneer Brand 32K72</i> | 12 | 78.8 | 100.0 | 0.0 | 13.4 | 43.4 | 67.0 | 11.3 |
| Pioneer Brand 32Y52 | 13 | 72.2 | 100.0 | 0.0 | 42.6 | 43.3 | 67.0 | 11.1 |
| <i>Pioneer Brand X1138AW</i> | 14 | 86.6 | 100.0 | 0.0 | 39.8 | 42.9 | 65.7 | 11.2 |
| <i>Trisler T-4214W</i> | 16 | 62.1 | 100.0 | 0.0 | 30.6 | 48.2 | 69.0 | 12.0 |
| Vineyard V433W | 17 | 74.1 | 100.0 | 0.0 | 18.1 | 43.3 | 65.7 | 16.3 |
| <i>Vineyard Vx4548W</i> | 18 | 50.3 | 100.0 | 0.0 | 4.6 | 43.3 | 67.0 | 14.5 |
| <i>Vineyard Vx4618W</i> | 19 | 70.7 | 100.0 | 0.0 | 4.2 | 39.9 | 66.3 | 15.4 |
| Whisnand 50AW | 20 | 81.2 | 100.0 | 0.0 | 23.1 | 49.3 | 67.0 | 13.3 |
| Whisnand 51AW | 21 | 68.2 | 100.0 | 0.0 | 33.3 | 47.6 | 69.0 | 11.2 |
| Zimmerman 1780W | 22 | 70.6 | 100.0 | 0.0 | 22.7 | 40.4 | 67.0 | 13.9 |
| Zimmerman 1851W | 23 | 69.6 | 100.0 | 0.0 | 6.9 | 45.8 | 68.0 | 15.8 |
| Zimmerman N71-T7 | 24 | 73.3 | 100.0 | 0.0 | 17.1 | 47.3 | 65.7 | 13.1 |
| <i>Zimmerman NX 7208</i> | 25 | 74.4 | 100.0 | 0.0 | 25.9 | 44.9 | 65.7 | 11.4 |
| Zimmerman Z62W | 26 | 60.3 | 100.0 | 0.0 | 8.8 | 41.9 | 70.0 | 11.5 |
| Zimmerman Z75W | 27 | 49.7 | 100.0 | 0.0 | 3.7 | 42.3 | 70.0 | 12.0 |
| Yellow check B73 × Mo17 | 28 | 72.3 | 100.0 | 0.0 | 19.4 | 43.7 | 67.0 | 11.5 |
| Yellow check Pioneer Brand 3245 | 29 | 81.7 | 100.0 | 0.0 | 3.7 | 36.4 | 67.0 | 12.1 |
| Yellow check Pioneer Brand 3394 | 30 | 85.6 | 100.0 | 0.0 | 6.5 | 43.3 | 67.0 | 10.2 |
| Mean | | 71.2 | 100.0 | 0.0 | 16.0 | 44.0 | 67.2 | 13.7 |
| LSD 0.05 | | 11.9 | ns | ns | 12.3 | 4.3 | 1.7 | 1.4 |
| CV% | | 10.3 | | | 47.0 | 6.0 | 1.5 | 6.4 |

Table 12. Yield and agronomic data from the 1999 Late White Food Corn Performance Test at Union City, TN. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| Asgrow RX901W | 1 | 166.1 | 95.7 | . | . | . | . | 19.4 |
| Asgrow RX921W | 2 | 159.2 | 96.3 | . | . | . | . | 19.1 |
| DEKALB DK665W | 3 | 178.8 | 104.3 | . | . | . | . | 17.2 |
| <i>Diener DB 114W</i> | 4 | 168.6 | 95.1 | . | . | . | . | 17.3 |
| <i>Garst 8277W</i> | 6 | 187.8 | 100.0 | . | . | . | . | 19.9 |
| IFSI 90-1 | 7 | 175.6 | 92.6 | . | . | . | . | 17.2 |
| IFSI 95-1 | 8 | 186.5 | 92.0 | . | . | . | . | 20.9 |
| IFSI 97-1 | 9 | 179.4 | 87.0 | . | . | . | . | 20.0 |
| LG Seeds NB749W | 10 | 164.5 | 98.1 | . | . | . | . | 18.2 |
| Pioneer Brand 32H39 | 11 | 181.4 | 98.1 | . | . | . | . | 16.2 |
| <i>Pioneer Brand 32K72</i> | 12 | 189.0 | 99.4 | . | . | . | . | 15.8 |
| Pioneer Brand 32Y52 | 13 | 181.3 | 99.4 | . | . | . | . | 15.1 |
| <i>Pioneer Brand X1138AW</i> | 14 | 201.7 | 98.1 | . | . | . | . | 16.4 |
| <i>Trisler T-4214W</i> | 16 | 172.4 | 94.4 | . | . | . | . | 15.8 |
| Vineyard V433W | 17 | 193.1 | 96.3 | . | . | . | . | 16.6 |
| <i>Vineyard Vx4548W</i> | 18 | 183.7 | 100.6 | . | . | . | . | 19.4 |
| <i>Vineyard Vx4618W</i> | 19 | 186.3 | 99.4 | . | . | . | . | 17.1 |
| Whisnand 50AW | 20 | 161.9 | 87.0 | . | . | . | . | 16.1 |
| Whisnand 51AW | 21 | 165.1 | 99.4 | . | . | . | . | 16.4 |
| Zimmerman 1780W | 22 | 162.3 | 96.3 | . | . | . | . | 19.1 |
| Zimmerman 1851W | 23 | 191.9 | 92.0 | . | . | . | . | 20.6 |
| Zimmerman N71-T7 | 24 | 179.6 | 95.7 | . | . | . | . | 16.4 |
| <i>Zimmerman NX 7208</i> | 25 | 172.6 | 103.1 | . | . | . | . | 16.2 |
| Zimmerman Z62W | 26 | 169.5 | 98.1 | . | . | . | . | 15.6 |
| Zimmerman Z75W | 27 | 168.1 | 92.0 | . | . | . | . | 15.5 |
| Yellow check B73×Mo17 | 28 | 149.4 | 90.1 | . | . | . | . | 16.5 |
| Yellow check Pioneer Brand 3245 | 29 | 214.4 | 99.4 | . | . | . | . | 16.5 |
| Yellow check Pioneer Brand 3394 | 30 | 178.2 | 93.2 | . | . | . | . | 14.8 |
| Mean | | 174.9 | 95.9 | . | . | . | . | 17.5 |
| LSD 0.05 | | 21.5 | 6.6 | | | | | 1.2 |
| CV% | | 7.5 | 4.2 | | | | | 4.0 |

Table 13. Yield and agronomic data from the 1999 Late White Food Corn Performance Test at College Station, TX. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| Asgrow RX901W | 1 | 117.6 | 76.9 | 0.0 | 1.3 | 26.0 | 80.0 | 14.5 |
| Asgrow RX921W | 2 | 132.7 | 83.8 | 0.0 | 0.5 | 27.0 | 79.7 | 14.7 |
| DEKALB DK665W | 3 | 107.9 | 84.3 | 0.0 | 0.0 | 27.0 | 80.7 | 14.5 |
| <i>Diener DB 114W</i> | 4 | 123.2 | 82.9 | 0.0 | 0.5 | 28.7 | 81.0 | 13.9 |
| <i>Garst 8277W</i> | 6 | 114.5 | 81.9 | 0.0 | 0.6 | 30.3 | 81.0 | 14.8 |
| IFSI 90-1 | 7 | 115.2 | 79.6 | 0.0 | 0.6 | 33.0 | 79.7 | 13.8 |
| IFSI 95-1 | 8 | 105.2 | 87.5 | 0.0 | 0.0 | 33.3 | 84.0 | 15.6 |
| IFSI 97-1 | 9 | 125.5 | 76.4 | 0.0 | 0.0 | 28.3 | 81.7 | 15.0 |
| LG Seeds NB749W | 10 | 108.1 | 82.4 | 0.0 | 0.6 | 26.7 | 82.3 | 13.6 |
| Pioneer Brand 32H39 | 11 | 105.1 | 92.6 | 0.0 | 1.1 | 27.7 | 81.0 | 13.6 |
| <i>Pioneer Brand 32K72</i> | 12 | 123.2 | 81.5 | 0.0 | 0.6 | 26.3 | 79.3 | 13.6 |
| Pioneer Brand 32Y52 | 13 | 109.3 | 87.0 | 0.5 | 0.0 | 27.0 | 81.0 | 14.0 |
| <i>Pioneer Brand X1138AW</i> | 14 | 141.5 | 77.8 | 0.0 | 0.5 | 28.0 | 78.3 | 13.7 |
| <i>Trisler T-4214W</i> | 16 | 115.4 | 88.0 | 0.0 | 1.1 | 35.7 | 81.0 | 13.5 |
| Vineyard V433W | 17 | 129.9 | 88.4 | 0.0 | 3.1 | 29.3 | 80.0 | 13.2 |
| <i>Vineyard Vx4548W</i> | 18 | 112.7 | 84.3 | 0.0 | 0.0 | 30.3 | 82.0 | 14.5 |
| <i>Vineyard Vx4618W</i> | 19 | 129.6 | 87.5 | 0.0 | 0.5 | 26.7 | 82.0 | 14.6 |
| Whisnand 50AW | 20 | 120.6 | 79.2 | 0.6 | 0.6 | 32.7 | 81.0 | 13.8 |
| Whisnand 51AW | 21 | 126.2 | 86.6 | 0.5 | 0.0 | 29.0 | 80.0 | 13.3 |
| Zimmerman 1780W | 22 | 111.5 | 88.0 | 0.0 | 0.0 | 27.3 | 81.0 | 14.3 |
| Zimmerman 1851W | 23 | 130.3 | 86.1 | 0.0 | 1.6 | 28.0 | 83.0 | 14.5 |
| Zimmerman N71-T7 | 24 | 112.8 | 87.0 | 0.0 | 1.2 | 31.0 | 79.7 | 12.9 |
| <i>Zimmerman NX 7208</i> | 25 | 107.0 | 76.4 | 0.0 | 0.0 | 30.7 | 80.3 | 13.9 |
| Zimmerman Z62W | 26 | 121.4 | 87.0 | 0.0 | 0.0 | 30.7 | 83.0 | 13.5 |
| Zimmerman Z75W | 27 | 119.3 | 79.6 | 0.0 | 0.6 | 30.0 | 84.0 | 12.8 |
| Yellow check B73 × Mo17 | 28 | 118.4 | 81.0 | 0.0 | 0.7 | 30.7 | 80.3 | 12.8 |
| Yellow check Pioneer Brand 3245 | 29 | 134.5 | 82.9 | 0.0 | 0.0 | 28.3 | 82.3 | 13.3 |
| Yellow check Pioneer Brand 3394 | 30 | 108.8 | 84.3 | 0.0 | 0.0 | 27.7 | 80.3 | 13.2 |
| Mean | | 117.7 | 83.5 | 0.1 | 0.5 | 29.1 | 81.1 | 13.9 |
| LSD 0.05 | | 21.7 | ns | ns | ns | ns | 1.3 | 0.8 |
| CV% | | 11.3 | | | | | 1.0 | 3.6 |

Table 14. Yield and agronomic data from the 1999 Late White Food Corn Performance Test at Springlake, TX. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|--|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| <i>Asgrow RX901W</i> | 1 | 177.9 | 73.6 | 0.0 | 1.1 | 50.0 | 79.0 | 18.6 |
| <i>Asgrow RX921W</i> | 2 | 136.4 | 56.3 | 0.0 | 0.8 | 46.7 | 78.7 | 18.7 |
| <i>DEKALB DK665W</i> | 3 | 208.1 | 87.4 | 0.0 | 1.0 | 48.7 | 78.7 | 18.8 |
| <i>Diener DB 114W</i> | 4 | 175.5 | 59.8 | 0.0 | 0.0 | 44.0 | 79.0 | 16.7 |
| <i>Garst 8277W</i> | 6 | 209.4 | 93.4 | 0.3 | 1.2 | 50.7 | 79.0 | 19.7 |
| <i>IFSI 90-1</i> | 7 | 209.8 | 85.9 | 0.3 | 4.7 | 53.0 | 79.3 | 18.3 |
| <i>IFSI 95-1</i> | 8 | 199.3 | 80.7 | 0.7 | 1.1 | 53.0 | 79.7 | 21.0 |
| <i>IFSI 97-1</i> | 9 | 197.9 | 78.7 | 0.0 | 0.0 | 53.3 | 79.0 | 19.6 |
| <i>LG Seeds NB749W</i> | 10 | 180.3 | 64.7 | 2.0 | 1.6 | 51.3 | 78.7 | 18.9 |
| <i>Pioneer Brand 32H39</i> | 11 | 207.0 | 80.7 | 3.9 | 1.1 | 48.7 | 77.7 | 16.9 |
| <i>Pioneer Brand 32K72</i> | 12 | 221.8 | 90.2 | 0.0 | 0.6 | 48.7 | 78.0 | 16.4 |
| <i>Pioneer Brand 32Y52</i> | 13 | 212.6 | 79.0 | 0.0 | 1.4 | 48.3 | 78.0 | 17.7 |
| <i>Pioneer Brand X1138AW</i> | 14 | 212.1 | 89.1 | 17.1 | 6.0 | 50.7 | 79.0 | 16.2 |
| <i>Trisler T-4214W</i> | 16 | 205.4 | 92.2 | 0.6 | 7.4 | 55.3 | 78.7 | 17.4 |
| <i>Vineyard V433W</i> | 17 | 213.3 | 88.2 | 0.6 | 2.8 | 46.0 | 79.0 | 18.6 |
| <i>Vineyard Vx4548W</i> | 18 | 220.0 | 90.2 | 0.0 | 2.6 | 48.7 | 78.7 | 14.6 |
| <i>Vineyard Vx4618W</i> | 19 | 174.6 | 79.3 | 0.0 | 1.0 | 45.0 | 79.0 | 17.7 |
| <i>Whisnand 50AW</i> | 20 | 213.1 | 92.0 | 3.8 | 1.3 | 57.7 | 79.7 | 17.8 |
| <i>Whisnand 51AW</i> | 21 | 208.4 | 88.8 | 0.6 | 6.1 | 52.3 | 78.3 | 17.2 |
| <i>Zimmerman 1780W</i> | 22 | 198.0 | 84.8 | 0.0 | 2.0 | 47.7 | 79.0 | 18.6 |
| <i>Zimmerman 1851W</i> | 23 | 205.2 | 73.6 | 0.0 | 0.4 | 50.0 | 80.3 | 19.1 |
| <i>Zimmerman N71-T7</i> | 24 | 198.3 | 80.7 | 0.0 | 2.5 | 51.7 | 78.0 | 16.2 |
| <i>Zimmerman NX 7208</i> | 25 | 186.9 | 87.4 | 0.0 | 2.6 | 50.3 | 78.3 | 11.2 |
| <i>Zimmerman Z62W</i> | 26 | 202.0 | 86.8 | 0.0 | 1.7 | 48.3 | 81.0 | 18.3 |
| <i>Zimmerman Z75W</i> | 27 | 208.6 | 82.8 | 0.0 | 1.4 | 47.0 | 81.0 | 18.6 |
| <i>Yellow check B73 × Mo17</i> | 28 | 179.9 | 71.0 | 0.8 | 1.1 | 47.7 | 78.7 | 16.1 |
| <i>Yellow check Pioneer Brand 3245</i> | 29 | 231.2 | 87.1 | 0.0 | 1.0 | 42.3 | 78.0 | 16.1 |
| <i>Yellow check Pioneer Brand 3394</i> | 30 | 198.2 | 90.2 | 0.0 | 2.6 | 47.3 | 77.0 | 15.5 |
| Mean | | 197.7 | 81.3 | 1.0 | 2.0 | 49.5 | 78.9 | 17.6 |
| LSD 0.05 | | 36.9 | 10.8 | 7.0 | 3.3 | 3.7 | 0.8 | ns |
| CV% | | 11.4 | 8.1 | 419.3 | 102.3 | 4.6 | 0.6 | |

Table 15. Combined yield and agronomic data from 11 locations of the 1999 Late White Food Corn Performance Test. New entries for 1999 are in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) | b _f (bu/a/I) | Stc dev (bu/ |
|---------------------------------|----------------------------------|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|----------------------------|--------------------|
| Asgrow RX901W | 1 | 137.4 | 93.8 | 0.4 | 2.0 | 43.7 | 72.2 | 18.4 | 0.80 | 9.0 |
| Asgrow RX921W | 2 | 136.9 | 91.4 | 0.1 | 3.8 | 42.9 | 72.3 | 18.2 | 0.58 | 16.0 |
| DEKALB DK665W | 3 | 131.3 | 93.8 | 0.1 | 2.1 | 39.7 | 70.7 | 17.1 | 1.09 | 10.0 |
| <i>Diener DB 114W</i> | 4 | 136.9 | 91.6 | 0.0 | 3.0 | 42.0 | 71.3 | 17.7 | 0.82 | 7.0 |
| <i>Garst 8277W</i> | 6 | 136.6 | 95.1 | 0.9 | 1.7 | 46.1 | 72.1 | 19.1 | 1.09 | 9.0 |
| IFSI 90-1 | 7 | 138.2 | 89.0 | 0.1 | 4.4 | 46.5 | 71.8 | 17.2 | 1.20 | 9.0 |
| IFSI 95-1 | 8 | 124.6 | 93.4 | 0.4 | 1.9 | 45.4 | 73.3 | 21.1 | 1.21 | 11.0 |
| IFSI 97-1 | 9 | 142.5 | 85.2 | 0.7 | 3.1 | 45.6 | 71.3 | 19.9 | 0.85 | 7.0 |
| LG Seeds NB749W | 10 | 130.4 | 91.1 | 0.7 | 2.5 | 44.9 | 72.5 | 18.4 | 0.98 | 14.0 |
| Pioneer Brand 32H39 | 11 | 140.5 | 94.6 | 2.4 | 1.8 | 43.2 | 70.3 | 16.6 | 1.11 | 12.0 |
| <i>Pioneer Brand 32K72</i> | 12 | 148.2 | 94.9 | 0.1 | 2.5 | 41.9 | 70.6 | 16.0 | 1.15 | 6.0 |
| Pioneer Brand 32Y52 | 13 | 141.3 | 92.2 | 1.0 | 6.1 | 43.2 | 71.5 | 16.8 | 1.15 | 5.0 |
| <i>Pioneer Brand X1138AW</i> | 14 | 159.4 | 93.4 | 3.4 | 5.8 | 44.8 | 70.3 | 15.9 | 1.21 | 11.0 |
| <i>Trisler T-4214W</i> | 16 | 136.8 | 96.2 | 0.6 | 5.0 | 47.8 | 72.7 | 17.1 | 1.04 | 11.0 |
| Vineyard V433W | 17 | 146.4 | 95.2 | 0.4 | 3.5 | 42.5 | 70.8 | 17.6 | 1.00 | 9.0 |
| <i>Vineyard Vx4548W</i> | 18 | 131.6 | 94.3 | 0.2 | 1.5 | 43.7 | 72.1 | 18.0 | 1.19 | 13.0 |
| <i>Vineyard Vx4618W</i> | 19 | 130.4 | 91.8 | 0.1 | 1.3 | 40.5 | 71.9 | 18.4 | 0.93 | 14.0 |
| Whisnand 50AW | 20 | 138.5 | 90.6 | 1.0 | 3.4 | 48.5 | 71.9 | 17.5 | 1.00 | 12.0 |
| Whisnand 51AW | 21 | 139.5 | 97.0 | 0.3 | 5.6 | 47.8 | 72.0 | 17.1 | 1.04 | 10.0 |
| Zimmerman 1780W | 22 | 137.3 | 91.6 | 0.4 | 3.9 | 41.6 | 71.2 | 18.6 | 0.86 | 11.0 |
| Zimmerman 1851W | 23 | 150.3 | 89.3 | 1.6 | 1.6 | 44.7 | 73.6 | 19.2 | 1.14 | 10.0 |
| Zimmerman N71-T7 | 24 | 143.4 | 92.2 | 0.7 | 2.4 | 45.8 | 70.8 | 17.0 | 1.04 | 13.0 |
| <i>Zimmerman NX 7208</i> | 25 | 136.1 | 94.0 | 1.2 | 4.0 | 45.9 | 70.8 | 16.5 | 0.96 | 7.0 |
| Zimmerman Z62W | 26 | 133.6 | 92.1 | 0.2 | 2.7 | 46.2 | 74.2 | 16.5 | 1.10 | 17.0 |
| Zimmerman Z75W | 27 | 123.2 | 87.6 | 0.8 | 1.3 | 43.9 | 74.0 | 16.9 | 1.16 | 14.0 |
| Yellow check B73 × Mo17 | 28 | 129.8 | 89.6 | 1.2 | 3.2 | 43.0 | 71.4 | 16.2 | 0.81 | 10.0 |
| Yellow check Pioneer Brand 3245 | 29 | 153.1 | 96.8 | 0.7 | 1.9 | 40.9 | 71.7 | 16.0 | 1.15 | 10.0 |
| Yellow check Pioneer Brand 3394 | 30 | 140.1 | 96.7 | 0.0 | 1.8 | 44.1 | 70.2 | 14.6 | 0.84 | 8.0 |
| Mean | | 136.9 | 92.3 | 0.7 | 3.0 | 44.1 | 71.8 | 17.6 | 1.00 | 11.0 |
| LSD 0.05 | | 11.8 | 4.6 | 1.6 | ns | 2.4 | 1.1 | 1.1 | 0.06 | |
| CV% | | 10.8 | 6.9 | 383.6 | | 7.5 | 1.2 | 8.2 | | |
| Location means: | | | | | | | | | | |
| | Champaign, IL | 182.7 | 95.2 | 1.7 | 0.6 | 60.2 | . | 25.4 | | |
| | Winchester, IL | 142.8 | 92.7 | 1.5 | 2.4 | 49.0 | . | 21.9 | | |
| | Powhattan, KS | 94.2 | 96.6 | 0.0 | 0.6 | . | 69.1 | 14.9 | | |
| | Scandia, KS [†] | 177.8 | 95.4 | . | 2.1 | 43.1 | 72.7 | 15.3 | | |
| | Franklin, KY | 115.1 | 97.1 | 0.0 | 0.7 | . | . | 14.0 | | |
| | Lexington, KY | 71.2 | 100.0 | 0.0 | 16.0 | 44.0 | 67.2 | 13.7 | | |
| | Columbia, MO | 99.7 | 89.9 | 2.0 | 0.2 | 42.0 | 59.2 | 22.9 | | |
| | Knoxville, TN | 132.0 | 87.6 | 0.0 | 4.9 | 36.1 | 74.3 | 16.3 | | |
| | Union City, TN | 174.9 | 95.9 | . | . | . | . | 17.5 | | |
| | College Station, TX [†] | 117.7 | 83.5 | 0.1 | 0.5 | 29.1 | 81.1 | 13.9 | | |
| | Springlake, TX [†] | 197.7 | 81.3 | 1.0 | 2.0 | 49.5 | 78.9 | 17.6 | | |

[†] Irrigated location.

Table 16. Yield data (bu/a) from 11 locations of the 1999 Late White Food Corn Performance Test. New entries for 1999 are shown in italics.

| Entry | No. | Cham- paign, IL | Win- chester, IL | Pow- hattan, KS | Scan- dia, KS † | Frank- lin, KY | Lex- ington, KY | Col- umbia, MO | Knox- ville, TN | Union City, TN | College Station, TX † | Spring- lake, TX † | Com- bined |
|---------------------------------|-----|-----------------------|------------------------|-----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------------|--------------------------|---------------|
| Asgrow RX901W | 1 | 181.8 | 122.8 | 101.8 | 183.4 | 126.2 | 86.5 | 110.8 | 136.4 | 166.1 | 117.6 | 177.9 | 137.4 |
| Asgrow RX921W | 2 | 182.8 | 153.5 | 109.5 | 164.1 | 130.1 | 80.2 | 112.4 | 144.8 | 159.2 | 132.7 | 136.4 | 136.9 |
| DEKALB DK665W | 3 | 185.8 | 126.5 | 97.0 | 166.9 | 97.3 | 72.3 | 80.7 | 123.0 | 178.8 | 107.9 | 208.1 | 131.3 |
| <i>Diener DB 114W</i> | 4 | 179.4 | 146.0 | 106.3 | 173.9 | 129.6 | 75.4 | 101.8 | 126.4 | 168.6 | 123.2 | 175.5 | 136.9 |
| <i>Garst 8277W</i> | 6 | 168.3 | 138.9 | 99.6 | 181.5 | 113.6 | 53.1 | 101.6 | 134.5 | 187.8 | 114.5 | 209.4 | 136.6 |
| IFSI 90-1 | 7 | 203.4 | 161.6 | 86.1 | 187.0 | 100.2 | 67.9 | 89.8 | 123.5 | 175.6 | 115.2 | 209.8 | 138.2 |
| IFSI 95-1 | 8 | 175.1 | 120.2 | 73.8 | 162.4 | 93.8 | 50.3 | 66.0 | 138.0 | 186.5 | 105.2 | 199.3 | 124.6 |
| IFSI 97-1 | 9 | 166.5 | 156.8 | 105.4 | 181.4 | 114.0 | 85.5 | 118.3 | 136.3 | 179.4 | 125.5 | 197.9 | 142.5 |
| LG Seeds NB749W | 10 | 207.6 | 135.1 | 94.5 | 145.5 | 112.2 | 60.9 | 89.2 | 136.0 | 164.5 | 108.1 | 180.3 | 130.4 |
| Pioneer Brand 32H39 | 11 | 194.7 | 129.5 | 93.2 | 206.9 | 105.8 | 83.2 | 105.5 | 133.4 | 181.4 | 105.1 | 207.0 | 140.5 |
| <i>Pioneer Brand 32K72</i> | 12 | 197.4 | 148.1 | 105.5 | 203.5 | 117.0 | 78.8 | 99.0 | 146.2 | 189.0 | 123.2 | 221.8 | 148.2 |
| Pioneer Brand 32Y52 | 13 | 197.2 | 147.9 | 86.6 | 191.7 | 122.2 | 72.2 | 103.9 | 129.5 | 181.3 | 109.3 | 212.6 | 141.3 |
| <i>Pioneer Brand X1138AW</i> | 14 | 225.1 | 172.3 | 102.8 | 228.0 | 134.9 | 86.6 | 102.1 | 146.3 | 201.7 | 141.5 | 212.1 | 159.4 |
| <i>Trisler T-4214W</i> | 16 | 200.6 | 129.6 | 89.1 | 161.5 | 126.5 | 62.1 | 110.3 | 131.9 | 172.4 | 115.4 | 205.4 | 136.8 |
| Vineyard V433W | 17 | 183.7 | 135.6 | 121.1 | 189.9 | 117.6 | 74.1 | 111.7 | 140.9 | 193.1 | 129.9 | 213.3 | 146.4 |
| <i>Vineyard Vx4548W</i> | 18 | 167.9 | 110.9 | 84.9 | 183.7 | 116.3 | 50.3 | 92.6 | 124.3 | 183.7 | 112.7 | 220.0 | 131.6 |
| <i>Vineyard Vx4618W</i> | 19 | 174.3 | 130.7 | 102.1 | 162.1 | 92.8 | 70.7 | 74.5 | 136.7 | 186.3 | 129.6 | 174.6 | 130.4 |
| Whisnand 50AW | 20 | 178.9 | 155.1 | 99.6 | 182.5 | 127.1 | 81.2 | 80.8 | 122.5 | 161.9 | 120.6 | 213.1 | 138.5 |
| Whisnand 51AW | 21 | 203.8 | 142.0 | 88.8 | 165.1 | 122.9 | 68.2 | 102.3 | 142.0 | 165.1 | 126.2 | 208.4 | 139.5 |
| Zimmerman 1780W | 22 | 171.1 | 165.9 | 105.6 | 162.8 | 116.4 | 70.6 | 113.9 | 132.4 | 162.3 | 111.5 | 198.0 | 137.3 |
| Zimmerman 1851W | 23 | 205.9 | 175.8 | 92.3 | 202.6 | 127.7 | 69.6 | 116.7 | 135.7 | 191.9 | 130.3 | 205.2 | 150.3 |
| Zimmerman N71-T7 | 24 | 171.7 | 155.8 | 94.7 | 213.8 | 128.8 | 73.3 | 101.4 | 147.1 | 179.6 | 112.8 | 198.3 | 143.4 |
| <i>Zimmerman NX 7208</i> | 25 | 192.2 | 138.2 | 89.6 | 171.7 | 123.9 | 74.4 | 102.2 | 138.4 | 172.6 | 107.0 | 186.9 | 136.1 |
| Zimmerman Z62W | 26 | 171.1 | 179.5 | 68.9 | 166.1 | 95.7 | 60.3 | 90.6 | 144.2 | 169.5 | 121.4 | 202.0 | 133.6 |
| Zimmerman Z75W | 27 | 170.2 | 101.4 | 60.2 | 166.7 | 93.1 | 49.7 | 93.1 | 124.6 | 168.1 | 119.3 | 208.6 | 123.2 |
| Yellow check B73 × Mo17 | 28 | 157.4 | 131.0 | 90.3 | 183.9 | 111.1 | 72.3 | 112.2 | 121.5 | 149.4 | 118.4 | 179.9 | 129.8 |
| Yellow check Pioneer Brand 3245 | 29 | 191.1 | 154.8 | 98.9 | 190.6 | 138.1 | 81.7 | 101.3 | 147.2 | 214.4 | 134.5 | 231.2 | 153.1 |
| Yellow check Pioneer Brand 3394 | 30 | 170.8 | 145.7 | 104.4 | 172.1 | 119.8 | 85.6 | 124.0 | 133.2 | 178.2 | 108.8 | 198.2 | 140.1 |

Table 16. Continued.

| Entry | No. | Cham- paign, IL | Win- chester, IL | Pow- hattan, KS | Scan- dia, KS † | Frank- lin, KY | Lex- ington, KY | Col- umbia, MO | Knox- ville, TN | Union City, TN | College Station, TX † | Spring- lake, TX † | Com- bined |
|----------|-----|-----------------------|------------------------|-----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------------|--------------------------|---------------|
| Mean | | 182.7 | 142.8 | 94.2 | 177.8 | 115.1 | 71.2 | 99.7 | 132.0 | 174.9 | 117.7 | 197.7 | 136.9 |
| LSD 0.05 | | 28.2 | 25.0 | 18.4 | 11.6 | 31.9 | 11.9 | 25.1 | 21.9 | 21.5 | 21.7 | 36.9 | 11.8 |
| CV% | | 9.5 | 10.7 | 12.0 | 4.0 | 17.0 | 10.3 | 15.4 | 10.2 | 7.5 | 11.3 | 11.4 | 10.8 |

† Irrigated location.

Table 17. Yield (bu/a) data from the 1999 Late White Food Corn Performance Test at Lubbock, TX. The low moisture stress regime was 62.5% replacement of measured evapotranspiration, the moderate moisture regime was 55.9% replacement, and the severe moisture regime was 47.6% replacement. New entries for 1999 are shown in italics.

| Entry | No. | Moisture stress level | | |
|---------------------------------|-----|-----------------------|----------|--------|
| | | Low | Moderate | Severe |
| Asgrow RX901W | 1 | 87.1 | 73.5 | 39.6 |
| Asgrow RX921W | 2 | 76.9 | 56.1 | 49.0 |
| DEKALB DK665W | 3 | 52.9 | 47.6 | 32.5 |
| <i>Diener DB 114W</i> | 4 | 62.1 | 64.1 | 40.3 |
| <i>Garst 8277W</i> | 6 | 56.4 | 60.8 | 37.6 |
| IFSI 90-1 | 7 | 56.2 | 54.7 | 28.6 |
| IFSI 95-1 | 8 | 44.0 | 53.4 | 23.3 |
| IFSI 97-1 | 9 | 45.6 | 53.4 | 33.4 |
| LG Seeds NB749W | 10 | 49.1 | 48.9 | 28.1 |
| Pioneer Brand 32H39 | 11 | 59.9 | 50.3 | 39.2 |
| <i>Pioneer Brand 32K72</i> | 12 | 64.7 | 56.9 | 39.5 |
| Pioneer Brand 32Y52 | 13 | 63.2 | 44.1 | 26.9 |
| <i>Pioneer Brand X1138AW</i> | 14 | 65.0 | 57.1 | 38.8 |
| <i>Trisler T-4214W</i> | 16 | 47.0 | 54.5 | 22.8 |
| Vineyard V433W | 17 | 54.4 | 64.2 | 36.6 |
| <i>Vineyard Vx4548W</i> | 18 | 38.9 | 54.7 | 7.6 |
| <i>Vineyard Vx4618W</i> | 19 | 66.2 | 65.3 | 39.5 |
| Whisnand 50AW | 20 | 63.8 | 62.0 | 33.6 |
| Whisnand 51AW | 21 | 53.1 | 47.6 | 31.0 |
| Zimmerman 1780W | 22 | 70.9 | 58.0 | 41.0 |
| Zimmerman 1851W | 23 | 56.2 | 63.8 | 45.5 |
| Zimmerman N71-T7 | 24 | 114.1 | 96.8 | 54.0 |
| <i>Zimmerman NX 7208</i> | 25 | 54.7 | 50.0 | 34.6 |
| Zimmerman Z62W | 26 | 55.5 | 59.7 | 38.6 |
| Zimmerman Z75W | 27 | 57.3 | 46.4 | 30.4 |
| Yellow check B73 × Mo17 | 28 | 51.3 | 60.1 | 32.4 |
| Yellow check Pioneer Brand 3245 | 29 | 58.0 | 56.5 | 43.1 |
| Yellow check Pioneer Brand 3394 | 30 | 76.8 | 67.0 | 39.8 |
| Mean | | 60.5 | 58.0 | 35.5 |
| LSD 0.05 | | 16.2 | 16.3 | 16.2 |
| CV% | | 16.4 | 17.2 | 28.0 |

Table 18. European corn borer whorl-leaf feeding and stalk tunneling data from Columbia and Novelty, MO, for the 1999 Late White Food Corn Performance Test. New entries for 1999 are shown in italics.

| Entry | No. | Columbia | | | Novelty | | | Combined | | |
|--------------------------------------|-----|----------|--------|--------|---------|--------|--------|----------|--------|--------|
| | | Leaf | No. of | Tunnel | Leaf | No. of | Tunnel | Leaf | No. of | Tunnel |
| | | (1-9) | (no) | (in) | (1-9) | (no) | (in) | (1-9) | (no) | (in) |
| Asgrow RX901W | 1 | 3.0 | 0.8 | 0.9 | 2.7 | 1.9 | 2.2 | 2.8 | 1.4 | 1.6 |
| Asgrow RX921W | 2 | 1.7 | 0.9 | 1.1 | 2.0 | 1.6 | 1.6 | 1.8 | 1.3 | 1.4 |
| DEKALB DK665W | 3 | 2.3 | 1.0 | 1.1 | 4.3 | 1.7 | 1.9 | 3.3 | 1.3 | 1.5 |
| <i>Diener DB 114W</i> | 4 | 2.0 | 1.5 | 1.5 | 3.3 | 0.7 | 0.8 | 2.7 | 1.1 | 1.2 |
| <i>Garst 8277W</i> | 6 | 2.0 | 0.9 | 1.3 | 2.7 | 2.2 | 3.3 | 2.3 | 1.5 | 2.3 |
| IFSI 90-1 | 7 | 2.3 | 1.1 | 1.3 | 2.7 | 1.4 | 1.7 | 2.5 | 1.3 | 1.5 |
| IFSI 95-1 | 8 | 3.0 | 1.3 | 1.7 | 2.7 | 1.5 | 1.9 | 2.8 | 1.4 | 1.8 |
| IFSI 97-1 | 9 | 2.7 | 0.7 | 0.7 | 2.3 | 2.3 | 2.7 | 2.5 | 1.5 | 1.7 |
| LG Seeds NB749W | 10 | 2.0 | 0.9 | 0.9 | 3.7 | 2.3 | 2.7 | 2.8 | 1.6 | 1.8 |
| Pioneer Brand 32H39 | 11 | 2.3 | 1.2 | 1.3 | 2.0 | 1.3 | 1.7 | 2.2 | 1.2 | 1.5 |
| <i>Pioneer Brand 32K72</i> | 12 | 2.3 | 1.1 | 1.3 | 3.0 | 1.6 | 1.9 | 2.7 | 1.4 | 1.6 |
| Pioneer Brand 32Y52 | 13 | 3.0 | 1.1 | 1.1 | 3.0 | 0.7 | 0.7 | 3.0 | 0.9 | 0.9 |
| <i>Pioneer Brand X1138AW</i> | 14 | 2.0 | 1.5 | 1.7 | 2.3 | 1.0 | 1.1 | 2.2 | 1.2 | 1.4 |
| <i>Trisler T-4214W</i> | 16 | 2.7 | 0.9 | 1.0 | 3.0 | 1.6 | 1.7 | 2.8 | 1.3 | 1.3 |
| Vineyard V433W | 17 | 1.3 | 1.3 | 1.3 | 2.0 | 1.7 | 1.7 | 1.7 | 1.5 | 1.5 |
| <i>Vineyard Vx4548W</i> | 18 | 2.3 | 1.6 | 1.7 | 2.7 | 3.1 | 3.5 | 2.5 | 2.4 | 2.6 |
| <i>Vineyard Vx4618W</i> | 19 | 2.7 | 1.7 | 1.7 | 3.0 | 1.7 | 2.2 | 2.8 | 1.7 | 1.9 |
| Whisnand 50AW | 20 | 2.0 | 2.2 | 2.6 | 2.3 | 2.5 | 2.5 | 2.2 | 2.3 | 2.6 |
| Whisnand 51AW | 21 | 2.3 | 1.0 | 1.1 | 3.3 | 2.8 | 3.6 | 2.8 | 1.9 | 2.4 |
| Zimmerman 1780W | 22 | 1.7 | 0.7 | 0.8 | 3.3 | 1.6 | 1.7 | 2.5 | 1.2 | 1.3 |
| Zimmerman 1851W | 23 | 2.0 | 0.7 | 0.7 | 2.0 | 1.6 | 2.1 | 2.0 | 1.2 | 1.4 |
| Zimmerman N71-T7 | 24 | 1.3 | 0.2 | 0.2 | 2.3 | 0.7 | 0.9 | 1.8 | 0.5 | 0.6 |
| <i>Zimmerman NX 7208</i> | 25 | 2.0 | 1.1 | 1.4 | 3.7 | 1.7 | 2.1 | 2.8 | 1.4 | 1.7 |
| Zimmerman Z62W | 26 | 2.7 | 1.3 | 1.3 | 2.3 | 3.3 | 4.3 | 2.5 | 2.3 | 2.8 |
| Zimmerman Z75W | 27 | 1.3 | 1.9 | 2.0 | 2.3 | 1.3 | 1.4 | 1.8 | 1.6 | 1.7 |
| Yellow check B73 × Mo17 | 28 | 2.0 | 1.7 | 2.0 | 3.0 | 3.2 | 3.5 | 2.5 | 2.5 | 2.8 |
| Yellow check Pioneer Brand 3245 | 29 | 2.7 | 1.1 | 1.3 | 3.0 | 2.0 | 2.5 | 2.8 | 1.6 | 1.9 |
| Yellow check Pioneer Brand 3394 | 30 | 2.0 | 0.5 | 0.5 | 3.0 | 1.9 | 2.5 | 2.5 | 1.2 | 1.5 |
| Susceptible check (Ki3) | | 2.0 | 1.6 | 1.7 | 4.0 | 2.0 | 2.4 | 3.0 | 1.8 | 2.1 |
| Susceptible check (Wf9 × W182E) | | 3.0 | 1.8 | 1.8 | 3.0 | 1.8 | 2.2 | 3.0 | 1.8 | 2.0 |
| Resistant check (Pioneer Brand 3184) | | 2.0 | 1.5 | 0.5 | 3.0 | 1.4 | 1.5 | 2.5 | 1.5 | 1.0 |
| Mean | | 2.3 | 1.2 | 1.3 | 2.8 | 1.8 | 2.2 | 2.5 | 1.5 | 1.7 |
| LSD 0.05 | | 1.1 | ns | ns | 1.1 | ns | ns | 0.8 | ns | ns |
| CV% | | 30.0 | | | 24.2 | | | 26.8 | | |

Table 19. Corn earworm damage, percentage molded grain, and ear length data from the 1999 Late White Food Corn Performance Test at Lubbock, TX. New entries for 1999 are shown in italics.

| Entry | No. | CEW damage (inches) | Molded grain (%) | Ear length (inches) |
|---------------------------------|-----|---------------------|------------------|---------------------|
| Asgrow RX901W | 1 | 2.4 | 4.7 | 7.2 |
| Asgrow RX921W | 2 | 2.3 | 6.0 | 7.2 |
| DEKALB DK665W | 3 | 4.0 | 10.0 | 8.1 |
| <i>Diener DB 114W</i> | 4 | 3.3 | 5.0 | 7.8 |
| <i>Garst 8277W</i> | 6 | 3.3 | 5.3 | 7.3 |
| IFSI 90-1 | 7 | 2.8 | 6.0 | 7.8 |
| IFSI 95-1 | 8 | 3.1 | 5.3 | 8.1 |
| IFSI 97-1 | 9 | 4.4 | 8.3 | 7.8 |
| LG Seeds NB749W | 10 | 3.4 | 6.7 | 7.3 |
| Pioneer Brand 32H39 | 11 | 3.3 | 7.7 | 7.1 |
| <i>Pioneer Brand 32K72</i> | 12 | 2.6 | 4.0 | 6.9 |
| Pioneer Brand 32Y52 | 13 | 2.6 | 5.0 | 7.4 |
| <i>Pioneer Brand X1138AW</i> | 14 | 3.4 | 6.0 | 8.3 |
| <i>Trisler T-4214W</i> | 16 | 3.8 | 7.0 | 8.0 |
| Vineyard V433W | 17 | 4.0 | 7.0 | 7.8 |
| <i>Vineyard Vx4548W</i> | 18 | 4.4 | 6.0 | 8.4 |
| <i>Vineyard Vx4618W</i> | 19 | 3.5 | 6.0 | 7.5 |
| Whisnand 50AW | 20 | 4.4 | 7.0 | 7.7 |
| Whisnand 51AW | 21 | 4.4 | 7.7 | 7.4 |
| Zimmerman 1780W | 22 | 4.0 | 7.7 | 7.4 |
| Zimmerman 1851W | 23 | 2.2 | 4.3 | 7.6 |
| Zimmerman N71-T7 | 24 | 1.3 | 1.7 | 7.5 |
| <i>Zimmerman NX 7208</i> | 25 | 2.7 | 6.0 | 6.9 |
| Zimmerman Z62W | 26 | 3.8 | 6.0 | 8.8 |
| Zimmerman Z75W | 27 | 4.0 | 7.7 | 8.0 |
| Yellow check B73 × Mo17 | 28 | 5.2 | 9.0 | 7.5 |
| Yellow check Pioneer Brand 3245 | 29 | 4.1 | 7.0 | 8.8 |
| Yellow check Pioneer Brand 3394 | 30 | 4.5 | 11.0 | 7.5 |
| Mean | | 3.5 | 6.4 | 7.7 |
| LSD 0.05 | | 1.2 | 3.8 | 0.6 |
| CV% | | 21.2 | 36.0 | 4.8 |

Table 20. Reactions to the seedling wilt and leaf blight phases of Stewart's bacterial wilt following inoculation at Urbana, IL, for entries in the Late and Early White Food Corn Performance Tests and for 50 other white food corn hybrids, including some from the 1998 Tests. New entries for 1999 are shown in italics.

| Entry | No. | Mean rating (1-9) | Seedling wilt [†] (1-9 rating) | Leaf blight [†] (1-9 rating) |
|--|-----|----------------------|--|--|
| Late White Food Corn Performance Test | | | | |
| Asgrow RX901W | 1 | 3.2 | 3.3 | 3.0 |
| Asgrow RX921W | 2 | . | . | . |
| DEKALB DK665W | 3 | 2.3 | 2.3 | 2.3 |
| <i>Diener DB 114W</i> | 4 | 2.1 | 2.2 | 2.0 |
| <i>Garst 8277W</i> | 6 | 2.6 | 2.8 | 2.4 |
| IFSI 90-1 | 7 | 2.0 | 2.1 | 1.8 |
| IFSI 95-1 | 8 | 1.8 | 1.8 | 1.8 |
| IFSI 97-1 | 9 | . | . | . |
| LG Seeds NB749W | 10 | 1.9 | 2.0 | 1.8 |
| Pioneer Brand 32H39 | 11 | 2.9 | 3.1 | 2.8 |
| <i>Pioneer Brand 32K72</i> | 12 | 2.8 | 2.8 | 2.8 |
| Pioneer Brand 32Y52 | 13 | 2.3 | 2.3 | 2.3 |
| <i>Pioneer Brand X1138AW</i> | 14 | 3.1 | 3.1 | 3.1 |
| <i>Trisler T-4214W</i> | 16 | 2.0 | 1.9 | 2.2 |
| Vineyard V433W | 17 | . | . | . |
| <i>Vineyard Vx4548W</i> | 18 | 2.2 | 2.1 | 2.3 |
| <i>Vineyard Vx4618W</i> | 19 | 2.2 | 2.4 | 1.9 |
| Whisnand 50AW | 20 | 1.7 | 1.6 | 1.8 |
| Whisnand 51AW | 21 | 1.7 | 1.5 | 1.9 |
| Zimmerman 1780W | 22 | . | . | . |
| Zimmerman 1815W | 23 | . | . | . |
| Zimmerman N71-T7 | 24 | . | . | . |
| <i>Zimmerman NX 7208</i> | 25 | 2.2 | 2.3 | 2.1 |
| Zimmerman Z62W | 26 | 1.5 | 1.5 | 1.6 |
| Zimmerman Z75W | 27 | 2.2 | 2.2 | 2.3 |
| Yellow check B73 × Mo17 | 28 | 2.2 | 2.0 | 2.4 |
| Yellow check Pioneer Brand 3245 | 29 | 2.8 | 2.7 | 2.9 |
| Yellow check Pioneer Brand 3394 | 30 | 2.8 | 3.1 | 2.6 |
| Mean | | 2.3 | 2.3 | 2.3 |

Table 20. Continued.

| Entry | No. | Mean rating (1-9) | Seedling wilt [†] (1-9 rating) | Leaf blight [†] (1-9 rating) |
|---|-----|-------------------------|---|---|
| Early White Food Corn Performance Test | | | | |
| AgriGold A6530W | 1 | 2.1 | 1.9 | 2.3 |
| Asgrow RX776W | 2 | 2.6 | 2.7 | 2.5 |
| DEKALB DK665W | 3 | 2.3 | 2.3 | 2.3 |
| Diener DB 114W | 4 | 2.1 | 2.2 | 2.0 |
| Garst 8527W | 5 | 2.3 | 1.9 | 2.7 |
| IFSI 90-1 | 6 | 2.0 | 2.1 | 1.8 |
| IFSI 95-2 | 7 | 2.0 | 2.2 | 1.9 |
| LG Seeds LG2558W | 8 | 3.3 | 3.2 | 3.4 |
| LG Seeds LG2596W | 9 | 3.2 | 3.3 | 3.2 |
| LG Seeds NB749W | 10 | . | . | . |
| Pioneer Brand 32H39 | 11 | 2.9 | 3.1 | 2.8 |
| Pioneer Brand 32K72 | 12 | 2.8 | 2.8 | 2.8 |
| Pioneer Brand 34P93 | 13 | 3.0 | 3.2 | 2.9 |
| <i>Pioneer Brand 32Y52</i> | 14 | 2.3 | 2.3 | 2.3 |
| <i>Pioneer Brand X1128BW</i> | 15 | 3.1 | 3.3 | 2.9 |
| <i>Pioneer Brand X1138AW</i> | 16 | 3.1 | 3.1 | 3.1 |
| Trisler T-4211W | 17 | 2.1 | 2.2 | 2.1 |
| Vineyard V433W | 18 | . | . | . |
| Whisnand 50AW | 19 | 1.7 | 1.6 | 1.8 |
| Whisnand 51AW | 20 | 1.7 | 1.5 | 1.9 |
| Zimmerman 1780W | 21 | . | . | . |
| Zimmerman 1790W | 22 | . | . | . |
| Zimmerman 1815W | 23 | . | . | . |
| Zimmerman N71-T7 | 24 | . | . | . |
| <i>Zimmerman NX 7208</i> | 25 | 2.2 | 2.3 | 2.1 |
| <i>Zimmerman Z76W</i> | 26 | 2.6 | 2.8 | 2.3 |
| Yellow check B73×Mo17 | 27 | 2.2 | 2.0 | 2.4 |
| Yellow check Pioneer Brand 3394 | 28 | 2.8 | 3.1 | 2.6 |
| Mean | | 2.5 | 2.5 | 2.5 |

Table 20. Continued.

| Entry | No. | Mean rating (1-9) | Seedling wilt [†] (1-9 rating) | Leaf blight [†] (1-9 rating) |
|--------------------------------------|-----|-------------------------|---|---|
| Other White Food Corn Hybrids | | | | |
| AgriGold A6680W | 1 | 1.7 | 1.8 | 1.7 |
| Asgrow XP7308W | 2 | 3.5 | 3.7 | 3.3 |
| Asgrow XP8118W | 3 | 2.3 | 2.4 | 2.3 |
| DEKALB DK555W | 4 | 3.3 | 3.3 | 3.4 |
| DEKALB DK631W | 5 | 3.6 | 3.8 | 3.5 |
| DEKALB DK703W | 6 | 1.6 | 1.7 | 1.5 |
| DEKALB DK739W | 7 | 3.2 | 3.3 | 3.2 |
| DEKALB DK742W | 8 | 2.1 | 2.4 | 1.8 |
| DEKALB EXP866W | 9 | 2.7 | 2.8 | 2.5 |
| DEKALB EXP868W | 10 | 2.8 | 3.0 | 2.7 |
| Garst 8419W | 11 | 1.8 | 1.8 | 1.8 |
| Garst 8490W | 12 | 1.7 | 1.3 | 2.1 |
| Garst N6278W | 13 | 2.0 | 1.9 | 2.1 |
| IFSI 98-1 | 14 | 1.6 | 1.5 | 1.7 |
| IFSI 98-2 | 15 | 2.3 | 2.2 | 2.3 |
| IFSI 98-3 | 16 | 2.6 | 2.5 | 2.8 |
| IFSI 98-4 | 17 | 2.6 | 2.7 | 2.5 |
| IFSI 98-5 | 18 | 2.2 | 2.1 | 2.3 |
| NC+ 5633W | 19 | 2.3 | 2.3 | 2.3 |
| NC+ 6989W | 20 | 2.0 | 2.0 | 2.0 |
| NC+ RE652W | 21 | 2.8 | 2.8 | 2.8 |
| Novartis N71-T7 | 22 | 2.4 | 2.4 | 2.3 |
| Pioneer Brand 3203W | 23 | 2.5 | 2.7 | 2.3 |
| Pioneer Brand 3281W | 24 | 2.8 | 3.1 | 2.5 |
| Pioneer Brand 3283W | 25 | 1.9 | 1.8 | 2.1 |
| Pioneer Brand 3287W | 26 | 3.0 | 2.8 | 3.2 |
| Pioneer Brand 32Y65 | 27 | 3.3 | 3.3 | 3.3 |
| Pioneer Brand 3392W | 28 | 2.7 | 2.8 | 2.6 |
| Pioneer Brand 3443W | 29 | 2.9 | 3.2 | 2.7 |
| Pioneer Brand 3463W | 30 | 2.9 | 3.3 | 2.6 |
| Pioneer Brand X1127DW | 31 | 2.5 | 2.6 | 2.5 |
| Pioneer Brand X1127FW | 32 | 2.8 | 3.0 | 2.7 |
| Pioneer Brand X1167BW | 33 | 2.2 | 2.3 | 2.2 |
| Pioneer Brand X1177PW | 34 | 2.0 | 2.0 | 2.1 |
| Trisler 4113W | 35 | 1.8 | 1.9 | 1.6 |
| Vineyard V413W | 36 | 2.7 | 2.8 | 2.6 |
| Vineyard V414W | 37 | 2.3 | 2.4 | 2.3 |
| Vineyard V424W | 38 | 2.1 | 1.9 | 2.3 |
| Vineyard V438W | 39 | 2.4 | 2.3 | 2.5 |
| Vineyard V448W | 40 | 2.2 | 2.1 | 2.3 |

Table 20. Continued.

| Entry | No. | Mean rating (1-9) | Seedling wilt [†] (1-9 rating) | Leaf blight [†] (1-9 rating) |
|--------------------------------------|-----|-------------------------|---|---|
| Other White Food Corn Hybrids | | | | |
| Vineyard V449W | 41 | 2.3 | 2.3 | 2.3 |
| Vineyard V453W | 42 | 2.2 | 2.3 | 2.2 |
| Vineyard Vx4337 | 43 | 2.4 | 2.3 | 2.5 |
| Vineyard Vx4517 | 44 | 2.3 | 2.4 | 2.3 |
| Vineyard Vx4596 | 45 | 1.8 | 1.8 | 1.7 |
| Wilson 1780W | 46 | 1.5 | 1.6 | 1.5 |
| Wilson 1790W | 47 | 2.2 | 2.3 | 2.1 |
| Wilson E8051 | 48 | 2.3 | 2.4 | 2.2 |
| Zimmerman Z64W | 49 | 2.6 | 2.8 | 2.5 |
| Zimmerman Z74W | 50 | 2.3 | 2.4 | 2.1 |
| Mean | | 2.4 | 2.5 | 2.4 |
| Checks: | | | | |
| Bonus (resistant) | | 3.0 | 3.1 | 2.9 |
| Jubilee (susceptible) | | 5.7 | 6.0 | 5.3 |
| Overall mean | | 2.4 | 2.5 | 2.4 |
| LSD 0.05 | | 0.50 | 0.70 | 0.51 |
| CV% | | 14.8 | 19.9 | 15.0 |

[†] Stewart's wilt rated on a scale from 1 to 9 where 1 = little or no spread of *E. stewartii* and 9 = plants dead from systemic infection.

Table 21. Combined grain quality data from the 1999 Late White Food Corn Performance Test grown at Lexington, KY; Columbia, MO; Knoxville, TN; and Springlake, TX.

| Entry | No. | Test weight (lb/bu) | 100-kernel weight (g) | Kernel size (cc) | Thins [†] (%) | Kernel density (g/cc) | Horny endosp. (%) |
|---------------------------------|-----|---------------------|-----------------------|------------------|------------------------|-----------------------|-------------------|
| Asgrow RX901W | 1 | 63.1 | 28.7 | 0.21 | 61.5 | 1.34 | 90 |
| Asgrow RX921W | 2 | 63.6 | 29.7 | 0.22 | 53.3 | 1.34 | 94 |
| DEKALB DK665W | 3 | 63.7 | 35.7 | 0.27 | 28.5 | 1.34 | 90 |
| <i>Diener DB 114W</i> | 4 | 61.2 | 27.8 | 0.21 | 38.1 | 1.32 | 85 |
| <i>Garst 8277W</i> | 6 | 64.1 | 30.5 | 0.23 | 41.5 | 1.36 | 91 |
| IFSI 90-1 | 7 | 63.4 | 31.4 | 0.23 | 36.8 | 1.35 | 89 |
| IFSI 95-1 | 8 | 64.8 | 30.4 | 0.23 | 39.4 | 1.36 | 93 |
| IFSI 97-1 | 9 | 64.2 | 30.3 | 0.22 | 49.6 | 1.35 | 88 |
| LG Seeds NB749W | 10 | 62.8 | 31.4 | 0.24 | 42.2 | 1.34 | 84 |
| Pioneer Brand 32H39 | 11 | 62.0 | 28.3 | 0.21 | 60.8 | 1.34 | 88 |
| <i>Pioneer Brand 32K72</i> | 12 | 62.5 | 31.3 | 0.24 | 50.4 | 1.34 | 91 |
| Pioneer Brand 32Y52 | 13 | 62.4 | 32.6 | 0.25 | 27.3 | 1.34 | 88 |
| <i>Pioneer Brand X1138AW</i> | 14 | 61.6 | 31.9 | 0.24 | 34.5 | 1.33 | 90 |
| <i>Trisler T-4214W</i> | 16 | 63.2 | 31.6 | 0.24 | 37.9 | 1.34 | 88 |
| Vineyard V433W | 17 | 62.0 | 30.6 | 0.24 | 74.7 | 1.31 | 88 |
| <i>Vineyard Vx4548W</i> | 18 | 62.8 | 29.7 | 0.23 | 69.7 | 1.33 | 89 |
| <i>Vineyard Vx4618W</i> | 19 | 61.6 | 31.7 | 0.24 | 40.1 | 1.31 | 86 |
| Whisnand 50AW | 20 | 62.5 | 30.7 | 0.23 | 43.7 | 1.33 | 84 |
| Whisnand 51AW | 21 | 63.3 | 31.7 | 0.24 | 38.5 | 1.34 | 85 |
| Zimmerman 1780W | 22 | 60.2 | 28.7 | 0.22 | 33.0 | 1.31 | 81 |
| Zimmerman 1851W | 23 | 61.6 | 35.5 | 0.27 | 12.6 | 1.34 | 85 |
| Zimmerman N71-T7 | 24 | 61.4 | 27.5 | 0.21 | 60.2 | 1.32 | 80 |
| <i>Zimmerman NX 7208</i> | 25 | 61.4 | 26.6 | 0.20 | 61.5 | 1.32 | 84 |
| Zimmerman Z62W | 26 | 60.3 | 29.9 | 0.23 | 28.8 | 1.33 | 88 |
| Zimmerman Z75W | 27 | 61.4 | 34.0 | 0.26 | 22.9 | 1.34 | 91 |
| Yellow check B73 × Mo17 | 28 | 59.1 | 28.1 | 0.22 | 47.0 | 1.29 | 78 |
| Yellow check Pioneer Brand 3245 | 29 | 62.9 | 34.7 | 0.26 | 28.5 | 1.35 | 91 |
| Yellow check Pioneer Brand 3394 | 30 | 61.7 | 33.1 | 0.25 | 30.8 | 1.33 | 88 |
| Mean | | 62.2 | 30.9 | 0.23 | 41.3 | 1.33 | 87 |
| LSD 0.05 | | 1.2 | 3.0 | 0.02 | 12.3 | 0.01 | 5 |
| CV% | | 1.4 | 6.8 | 6.8 | 21.2 | 0.7 | 3.7 |

[†] Percent of a 250-kernel sample passing through a 20/64" round-hole sieve.

Table 22. Yield and agronomic data from common entries in the 1998-1999 Late White Food Corn Performance Tests.

| Entry | Years (no) | Yield (bu/a) | Stand (%) | Root | Stalk | Ear | Days to | Moist. (%) |
|---------------------------------|---------------|-----------------|--------------|---------------|---------------|----------------|----------------|---------------|
| | | | | lodged (%) | lodged (%) | height (in) | flower (no) | |
| Asgrow RX901W | 2 | 144.7 | 95.2 | 0.3 | 2.3 | 44.2 | 73.6 | 19.8 |
| DEKALB DK665W | 2 | 133.9 | 95.5 | 0.7 | 2.5 | 40.3 | 72.3 | 18.4 |
| IFSI 90-1 | 2 | 144.2 | 90.9 | 0.8 | 5.0 | 46.0 | 73.2 | 18.4 |
| IFSI 95-1 | 2 | 141.7 | 93.9 | 0.5 | 2.4 | 45.7 | 74.6 | 21.8 |
| LG Seeds NB749W | 2 | 143.4 | 94.4 | 0.8 | 3.0 | 45.8 | 74.1 | 19.3 |
| Pioneer Brand 32H39 | 2 | 149.0 | 96.0 | 3.0 | 3.6 | 43.5 | 71.6 | 17.3 |
| Pioneer Brand 32Y52 | 2 | 156.2 | 93.5 | 0.6 | 5.8 | 44.8 | 72.9 | 17.4 |
| Vineyard V433W | 2 | 151.1 | 95.2 | 1.1 | 6.1 | 42.7 | 72.0 | 18.0 |
| Whisnand 50AW | 2 | 152.5 | 94.3 | 2.4 | 3.9 | 49.5 | 73.3 | 17.9 |
| Whisnand 51AW | 2 | 150.0 | 96.0 | 0.4 | 6.0 | 47.3 | 73.4 | 18.1 |
| Zimmerman 1780W | 2 | 145.9 | 93.0 | 0.4 | 4.9 | 42.0 | 72.8 | 19.4 |
| Zimmerman 1851W | 2 | 160.2 | 91.8 | 1.3 | 2.0 | 44.8 | 75.4 | 20.3 |
| Zimmerman N71-T7 | 2 | 153.4 | 94.7 | 1.7 | 3.4 | 45.4 | 72.4 | 17.5 |
| Zimmerman Z62W | 2 | 143.7 | 94.5 | 0.3 | 4.1 | 46.0 | 75.7 | 18.0 |
| Zimmerman Z75W | 2 | 134.7 | 92.3 | 0.6 | 1.6 | 45.3 | 76.0 | 18.0 |
| Yellow check B73 × Mo17 | 2 | 141.9 | 93.3 | 1.1 | 6.1 | 43.7 | 72.7 | 16.3 |
| Yellow check Pioneer Brand 3245 | 2 | 161.3 | 98.3 | 1.1 | 1.9 | 41.2 | 73.0 | 16.6 |
| Yellow check Pioneer Brand 3394 | 2 | 145.7 | 97.6 | 0.3 | 4.7 | 43.7 | 72.0 | 15.0 |
| Mean | | 147.4 | 94.5 | 0.9 | 3.8 | 44.5 | 73.4 | 18.2 |

Table 23. Yield and agronomic data from common entries in the 1997-1999 Late White Food Corn Performance Tests.

| Entry | Years (no) | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|---------------|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| DEKALB DK665W | 3 | 134.9 | 95.6 | 0.9 | 2.5 | 41.0 | 75.0 | 18.7 |
| IFSI 90-1 | 3 | 148.5 | 92.0 | 0.7 | 5.5 | 48.4 | 75.6 | 18.7 |
| IFSI 95-1 | 3 | 146.9 | 94.2 | 0.4 | 3.6 | 47.1 | 77.1 | 22.0 |
| LG Seeds NB749W | 3 | 143.2 | 94.9 | 1.0 | 3.6 | 47.3 | 76.4 | 19.7 |
| Pioneer Brand 32H39 | 3 | 155.6 | 95.7 | 2.7 | 2.9 | 44.1 | 74.3 | 17.9 |
| Whisnand 50AW | 3 | 153.3 | 94.6 | 2.4 | 3.8 | 51.5 | 75.9 | 18.2 |
| Whisnand 51AW | 3 | 150.2 | 95.9 | 0.9 | 5.5 | 49.0 | 76.0 | 18.6 |
| Zimmerman Z62W | 3 | 148.5 | 94.6 | 0.4 | 3.2 | 47.6 | 77.9 | 18.4 |
| Yellow check B73 × Mo17 | 3 | 142.8 | 94.5 | 1.5 | 6.5 | 46.0 | 75.2 | 16.9 |
| Yellow check Pioneer Brand 3245 | 3 | 164.3 | 97.7 | 1.2 | 2.9 | 42.1 | 75.8 | 17.2 |
| Yellow check Pioneer Brand 3394 | 3 | 153.1 | 97.6 | 0.3 | 3.8 | 44.7 | 74.5 | 15.5 |
| Mean | | 149.2 | 95.2 | 1.1 | 4.0 | 46.3 | 75.8 | 18.3 |

Table 24. Yield and agronomic data from common entries in the 1996-1999 Late White Food Corn Performance Tests.

| Entry | Years (no) | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|---------------|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| IFSI 90-1 | 4 | 153.6 | 93.4 | 0.6 | 6.6 | 48.8 | 75.0 | 18.9 |
| IFSI 95-1 | 4 | 150.8 | 94.6 | 0.4 | 4.8 | 46.7 | 76.3 | 22.0 |
| LG Seeds NB749W | 4 | 148.1 | 95.9 | 0.8 | 5.7 | 47.1 | 75.9 | 19.7 |
| Pioneer Brand 32H39 | 4 | 160.8 | 96.6 | 2.4 | 4.5 | 44.0 | 73.4 | 18.1 |
| Whisnand 51AW | 4 | 152.3 | 96.0 | 0.8 | 6.5 | 48.9 | 75.4 | 18.8 |
| Zimmerman Z62W | 4 | 154.2 | 95.3 | 0.3 | 4.3 | 47.3 | 77.1 | 18.5 |
| Yellow check B73 × Mo17 | 4 | 145.4 | 94.3 | 1.2 | 7.1 | 46.0 | 74.5 | 17.2 |
| Yellow check Pioneer Brand 3245 | 4 | 168.9 | 97.6 | 0.9 | 4.3 | 42.0 | 75.4 | 17.5 |
| Yellow check Pioneer Brand 3394 | 4 | 156.8 | 97.7 | 0.4 | 4.8 | 44.3 | 73.5 | 15.9 |
| Mean | | 154.5 | 95.7 | 0.9 | 5.4 | 46.1 | 75.2 | 18.5 |

Table 25. Yield and agronomic data from common entries in the 1995-1999 Late White Food Corn Performance Tests.

| Entry | Years (no) | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|---------------|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| IFSI 90-1 | 5 | 150.9 | 94.3 | 0.5 | 5.6 | 48.4 | 75.3 | 18.7 |
| IFSI 95-1 | 5 | 149.3 | 95.6 | 0.3 | 4.1 | 46.0 | 76.5 | 21.9 |
| LG Seeds NB749W | 5 | 147.3 | 96.4 | 0.7 | 4.8 | 46.7 | 76.1 | 19.6 |
| Whisnand 51AW | 5 | 149.4 | 96.6 | 0.7 | 5.6 | 47.7 | 75.6 | 18.7 |
| Zimmerman Z62W | 5 | 152.1 | 96.0 | 0.3 | 3.8 | 46.6 | 77.3 | 18.3 |
| Yellow check B73 × Mo17 | 5 | 143.5 | 94.1 | 1.2 | 5.8 | 45.6 | 74.7 | 17.0 |
| Yellow check Pioneer Brand 3245 | 5 | 167.1 | 97.6 | 0.8 | 3.7 | 41.6 | 75.8 | 17.4 |
| Yellow check Pioneer Brand 3394 | 5 | 155.2 | 97.5 | 0.4 | 4.0 | 43.6 | 73.8 | 15.9 |
| Mean | | 151.9 | 96.0 | 0.6 | 4.7 | 45.8 | 75.6 | 18.5 |

Table 26. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Champaign, IL. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| AgriGold A6530W | 1 | 164.6 | 97.3 | 3.2 | 0.0 | 66.3 | . | 20.3 |
| Asgrow RX776W | 2 | 181.1 | 96.4 | 0.0 | 0.0 | 49.7 | . | 22.4 |
| DEKALB DK665W | 3 | 194.2 | 95.9 | 1.0 | 0.5 | 63.3 | . | 22.6 |
| Diener DB 114W | 4 | 195.1 | 91.4 | 0.0 | 0.0 | 61.3 | . | 22.2 |
| Garst 8527W | 5 | 173.1 | 95.5 | 0.5 | 0.0 | 59.7 | . | 18.6 |
| <i>IFSI 90-1</i> | 6 | 203.4 | 83.3 | 1.6 | 0.5 | 67.3 | . | 23.7 |
| <i>IFSI 95-2</i> | 7 | 218.9 | 94.6 | 5.3 | 0.0 | 65.7 | . | 20.7 |
| LG Seeds LG2558W | 8 | 165.7 | 87.8 | 7.9 | 0.6 | 52.7 | . | 19.6 |
| LG Seeds LG2596W | 9 | 174.4 | 92.8 | 0.0 | 0.9 | 55.3 | . | 21.2 |
| LG Seeds NB749W | 10 | 184.0 | 86.0 | 1.5 | 1.0 | 69.3 | . | 25.6 |
| Pioneer Brand 32H39 | 11 | 193.9 | 93.7 | 1.4 | 3.2 | 61.3 | . | 23.4 |
| Pioneer Brand 32K72 | 12 | 198.9 | 93.7 | 0.0 | 0.5 | 64.3 | . | 20.2 |
| Pioneer Brand 34P93 | 13 | 223.1 | 100.0 | 0.0 | 1.8 | 59.3 | . | 18.5 |
| <i>Pioneer Brand 32Y52</i> | 14 | 234.4 | 96.4 | 3.8 | 0.5 | 61.0 | . | 22.8 |
| <i>Pioneer Brand X1128BW</i> | 15 | 206.5 | 89.2 | 0.5 | 0.5 | 56.7 | . | 16.9 |
| <i>Pioneer Brand X1138AW</i> | 16 | 231.6 | 99.1 | 3.2 | 0.0 | 67.7 | . | 19.3 |
| Trisler T-4211W | 17 | 214.3 | 91.9 | 2.0 | 0.0 | 68.3 | . | 22.1 |
| Vineyard V433W | 18 | 223.9 | 95.9 | 3.9 | 0.0 | 66.0 | . | 21.4 |
| Whisnand 50AW | 19 | 198.6 | 88.3 | 4.8 | 0.5 | 66.7 | . | 21.1 |
| Whisnand 51AW | 20 | 214.7 | 91.0 | 0.0 | 0.0 | 67.7 | . | 23.8 |
| Zimmerman 1780W | 21 | 208.3 | 95.0 | 1.4 | 0.5 | 58.0 | . | 23.5 |
| Zimmerman 1790W | 22 | 204.9 | 97.3 | 0.0 | 0.0 | 60.0 | . | 22.8 |
| Zimmerman 1851W | 23 | 205.2 | 94.1 | 0.9 | 0.0 | 64.3 | . | 27.3 |
| Zimmerman N71-T7 | 24 | 189.6 | 98.6 | 6.7 | 0.0 | 63.7 | . | 21.5 |
| <i>Zimmerman NX 7208</i> | 25 | 198.7 | 100.5 | 1.8 | 0.5 | 64.0 | . | 22.4 |
| <i>Zimmerman Z76W</i> | 26 | 182.1 | 91.9 | 0.0 | 0.6 | 64.7 | . | 20.0 |
| Yellow check B73 × Mo17 | 27 | 176.1 | 92.3 | 5.6 | 1.0 | 67.0 | . | 21.6 |
| Yellow check Pioneer Brand 3394 | 28 | 193.3 | 94.1 | 0.0 | 1.9 | 63.0 | . | 16.1 |
| Mean | | 198.3 | 93.7 | 2.0 | 0.5 | 62.7 | . | 21.5 |
| LSD 0.05 | | 28.1 | ns | ns | ns | 8.2 | | 1.7 |
| CV% | | 8.7 | | | | 8.0 | | 5.0 |

Table 27. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Galesburg, IL. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| AgriGold A6530W | 1 | 116.9 | 101.8 | 4.8 | 3.3 | 55.0 | . | 18.1 |
| Asgrow RX776W | 2 | 122.2 | 100.4 | 3.6 | 1.9 | 47.3 | . | 22.5 |
| DEKALB DK665W | 3 | 112.0 | 103.9 | 0.0 | 0.0 | 46.7 | . | 18.6 |
| Diener DB 114W | 4 | 102.9 | 100.0 | 0.0 | 1.4 | 52.7 | . | 19.3 |
| Garst 8527W | 5 | 95.5 | 95.2 | 0.0 | 5.9 | 49.0 | . | 15.4 |
| IFSI 90-1 | 6 | 108.2 | 95.2 | 3.5 | 3.9 | 58.0 | . | 18.3 |
| IFSI 95-2 | 7 | 119.6 | 91.2 | 21.0 | 1.0 | 55.3 | . | 17.7 |
| LG Seeds LG2558W | 8 | 95.2 | 96.1 | 0.0 | 8.1 | 45.3 | . | 19.6 |
| LG Seeds LG2596W | 9 | 106.9 | 96.5 | 0.0 | 1.9 | 49.3 | . | 18.3 |
| LG Seeds NB749W | 10 | 103.3 | 97.4 | 16.0 | 1.4 | 59.0 | . | 21.4 |
| Pioneer Brand 32H39 | 11 | 107.9 | 99.6 | 0.0 [†] | 0.0 | 50.7 | . | 20.4 |
| Pioneer Brand 32K72 | 12 | 122.5 | 104.8 | 0.0 | 8.4 | 52.3 | . | 20.5 |
| Pioneer Brand 34P93 | 13 | 110.9 | 104.4 | 0.0 | 8.8 | 52.3 | . | 17.3 |
| <i>Pioneer Brand 32Y52</i> | 14 | 126.7 | 106.1 | 2.5 | 3.3 | 51.7 | . | 20.1 |
| <i>Pioneer Brand X1128BW</i> | 15 | 122.1 | 104.8 | 0.0 | 13.7 | 49.0 | . | 16.3 |
| <i>Pioneer Brand X1138AW</i> | 16 | 131.3 | 96.9 | 6.3 | 6.1 | 54.0 | . | 20.1 |
| Trisler T-4211W | 17 | 116.0 | 100.9 | 0.0 | 3.1 | 58.7 | . | 16.9 |
| Vineyard V433W | 18 | 117.5 | 101.8 | 2.7 | 2.1 | 54.3 | . | 19.4 |
| Whisnand 50AW | 19 | 114.8 | 95.2 | 13.3 | 3.3 | 61.0 | . | 18.0 |
| Whisnand 51AW | 20 | 109.0 | 102.6 | 4.4 | 2.1 | 56.3 | . | 18.1 |
| Zimmerman 1780W | 21 | 110.3 | 100.9 | 0.9 | 2.7 | 49.7 | . | 20.8 |
| Zimmerman 1790W | 22 | 103.6 | 102.2 | 0.0 | 7.7 | 50.0 | . | 19.7 |
| Zimmerman 1851W | 23 | 108.0 | 95.6 | 20.1 | 0.0 | 54.3 | . | 23.9 |
| Zimmerman N71-T7 | 24 | 150.8 | 102.6 | 40.0 | 0.0 | 54.7 | . | 22.6 |
| <i>Zimmerman NX 7208</i> | 25 | 105.6 | 110.1 | 2.3 | 4.5 | 57.0 | . | 18.1 |
| <i>Zimmerman Z76W</i> | 26 | 75.8 | 94.3 | 0.0 | 1.5 | 54.0 | . | 17.2 |
| Yellow check B73 × Mo17 | 27 | 98.9 | 108.8 | 6.2 | 1.2 | 52.7 | . | 19.1 |
| Yellow check Pioneer Brand 3394 | 28 | 97.6 | 100.0 | 3.1 | 1.3 | 52.7 | . | 15.2 |
| Mean | | 111.2 | 100.3 | 5.4 | 3.5 | 53.0 | . | 19.0 |
| LSD 0.05 | | 21.2 | 8.9 | 16.5 | 6.2 | 4.1 | . | 1.6 |
| CV% | | 11.7 | 5.4 | 187.8 | 107.7 | 4.8 | . | 5.1 |

[†] Data from two replications.

Table 28. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Harlan, IA. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| AgriGold A6530W | 1 | 162.1 | 80.4 | . | . | . | . | 17.8 |
| Asgrow RX776W | 2 | 145.0 | 83.3 | . | . | . | . | 19.8 |
| DEKALB DK665W | 3 | 142.9 | 83.9 | . | . | . | . | 18.2 |
| Diener DB 114W | 4 | 156.3 | 85.7 | . | . | . | . | 21.9 |
| Garst 8527W | 5 | 148.3 | 87.5 | . | . | . | . | 15.4 |
| IFSI 90-1 | 6 | 183.3 | 90.5 | . | . | . | . | 19.4 |
| IFSI 95-2 | 7 | 174.3 | 88.1 | . | . | . | . | 18.1 |
| LG Seeds LG2558W | 8 | 142.4 | 86.3 | . | . | . | . | 18.2 |
| LG Seeds LG2596W | 9 | 149.0 | 83.9 | . | . | . | . | 17.4 |
| LG Seeds NB749W | 10 | 189.7 | 83.9 | . | . | . | . | 20.2 |
| Pioneer Brand 32H39 | 11 | 169.7 | 88.7 | . | . | . | . | 16.9 |
| Pioneer Brand 32K72 | 12 | 178.3 | 95.2 | . | . | . | . | 17.1 |
| Pioneer Brand 34P93 | 13 | 197.3 | 85.1 | . | . | . | . | 16.4 |
| <i>Pioneer Brand 32Y52</i> | 14 | 164.4 | 87.5 | . | . | . | . | 16.6 |
| <i>Pioneer Brand X1128BW</i> | 15 | 164.7 | 86.3 | . | . | . | . | 15.1 |
| <i>Pioneer Brand X1138AW</i> | 16 | 208.8 | 92.9 | . | . | . | . | 17.0 |
| Trisler T-4211W | 17 | 178.5 | 89.9 | . | . | . | . | 18.2 |
| Vineyard V433W | 18 | 209.2 | 94.0 | . | . | . | . | 20.8 |
| Whisnand 50AW | 19 | 196.5 | 91.1 | . | . | . | . | 18.3 |
| Whisnand 51AW | 20 | 183.9 | 85.7 | . | . | . | . | 19.0 |
| Zimmerman 1780W | 21 | 177.3 | 86.9 | . | . | . | . | 22.5 |
| Zimmerman 1790W | 22 | 187.3 | 91.7 | . | . | . | . | 22.4 |
| Zimmerman 1851W | 23 | 157.1 | 79.8 | . | . | . | . | 20.3 |
| Zimmerman N71-T7 | 24 | 177.6 | 81.0 | . | . | . | . | 18.4 |
| <i>Zimmerman NX 7208</i> | 25 | 185.7 | 87.5 | . | . | . | . | 18.4 |
| <i>Zimmerman Z76W</i> | 26 | 162.0 | 83.9 | . | . | . | . | 17.6 |
| Yellow check B73×Mo17 | 27 | 156.3 | 92.9 | . | . | . | . | 19.4 |
| Yellow check Pioneer Brand 3394 | 28 | 163.3 | 97.0 | . | . | . | . | 15.0 |
| Mean | | 171.8 | 87.5 | . | . | . | . | 18.4 |
| LSD 0.05 | | 26.3 | ns | | | | | 0.8 |
| CV% | | 9.4 | | | | | | 2.6 |

Table 29. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Marion, IA. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height [†] (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|------------------------------------|---------------------------|---------------|
| AgriGold A6530W | 1 | 183.9 | 88.2 | . | . | 45.0 | 74.7 | 20.7 |
| Asgrow RX776W | 2 | 199.4 | 85.5 | . | . | 35.0 | 74.7 | 25.4 |
| DEKALB DK665W | 3 | 195.0 | 87.1 | . | . | 51.0 | 74.3 | 22.5 |
| Diener DB 114W | 4 | 192.8 | 87.1 | . | . | 48.0 | 75.3 | 23.1 |
| Garst 8527W | 5 | 155.7 | 89.2 | . | . | 30.0 | 72.0 | 16.1 |
| IFSI 90-1 | 6 | 193.3 | 79.0 | . | . | 51.0 | 75.7 | 24.8 |
| IFSI 95-2 | 7 | 204.7 | 83.3 | . | . | 48.0 | 75.3 | 20.2 |
| LG Seeds LG2558W | 8 | 142.1 | 85.5 | . | . | 36.0 | 73.0 | 18.3 |
| LG Seeds LG2596W | 9 | 142.1 | 82.3 | . | . | 33.0 | 73.0 | 17.9 |
| LG Seeds NB749W | 10 | 209.0 | 91.4 | . | . | 57.0 | 76.0 | 24.2 |
| Pioneer Brand 32H39 | 11 | 189.3 | 90.3 | . | . | 42.0 | 74.0 | 21.7 |
| Pioneer Brand 32K72 | 12 | 205.4 | 90.9 | . | . | 51.0 | 75.7 | 21.3 |
| Pioneer Brand 34P93 | 13 | 184.6 | 88.2 | . | . | 36.0 | 72.0 | 19.1 |
| <i>Pioneer Brand 32Y52</i> | 14 | 205.6 | 86.6 | . | . | 51.0 | 75.7 | 21.7 |
| <i>Pioneer Brand X1128BW</i> | 15 | 191.7 | 86.0 | . | . | 42.0 | 74.0 | 19.5 |
| <i>Pioneer Brand X1138AW</i> | 16 | 197.3 | 88.7 | . | . | 51.0 | 74.7 | 18.9 |
| Trisler T-4211W | 17 | 202.9 | 90.3 | . | . | 48.0 | 75.7 | 20.3 |
| Vineyard V433W | 18 | 202.3 | 92.5 | . | . | 54.0 | 74.0 | 20.3 |
| Whisnand 50AW | 19 | 193.6 | 86.0 | . | . | 57.0 | 76.3 | 20.4 |
| Whisnand 51AW | 20 | 209.9 | 84.4 | . | . | 66.0 | 76.3 | 24.2 |
| Zimmerman 1780W | 21 | 191.8 | 86.6 | . | . | 42.0 | 75.7 | 24.6 |
| Zimmerman 1790W | 22 | 199.1 | 84.9 | . | . | 45.0 | 76.0 | 23.4 |
| Zimmerman 1851W | 23 | 198.0 | 87.6 | . | . | 37.0 | 77.3 | 27.9 |
| Zimmerman N71-T7 | 24 | 203.9 | 88.2 | . | . | 51.0 | 74.3 | 21.1 |
| <i>Zimmerman NX 7208</i> | 25 | 175.4 | 94.1 | . | . | 48.0 | 74.3 | 19.9 |
| <i>Zimmerman Z76W</i> | 26 | 148.9 | 88.2 | . | . | 51.0 | 76.3 | 20.0 |
| Yellow check B73×Mo17 | 27 | 192.7 | 86.0 | . | . | 61.0 | 74.7 | 21.7 |
| Yellow check Pioneer Brand 3394 | 28 | 149.9 | 88.7 | . | . | 54.0 | 75.7 | 15.5 |
| Mean | | 187.9 | 87.4 | . | . | 47.2 | 74.9 | 21.2 |
| LSD 0.05 | | 16.9 | 6.8 | | | | 0.9 | 1.5 |
| CV% | | 5.5 | 4.8 | | | | 0.8 | 4.3 |

[†] Data from one replication.

Table 30. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at St. Joseph, MO. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| AgriGold A6530W | 1 | 146.1 | 100.0 | 0.0 | 3.9 | . | . | 20.8 |
| Asgrow RX776W | 2 | 162.1 | 100.0 | 0.0 | 0.6 | . | . | 19.3 |
| DEKALB DK665W | 3 | 158.8 | 100.0 | 0.0 | 2.2 | . | . | 19.8 |
| Diener DB 114W | 4 | 160.8 | 100.0 | 0.0 | 2.8 | . | . | 22.1 |
| Garst 8527W | 5 | 136.4 | 100.0 | 0.0 | 4.4 | . | . | 17.7 |
| IFSI 90-1 | 6 | 160.9 | 100.0 | 0.0 | 0.0 | . | . | 23.7 |
| IFSI 95-2 | 7 | 149.5 | 100.0 | 0.0 | 5.6 | . | . | 23.7 |
| LG Seeds LG2558W | 8 | 154.8 | 100.0 | 0.0 | 0.6 | . | . | 21.8 |
| LG Seeds LG2596W | 9 | 154.8 | 100.0 | 0.0 | 1.1 | . | . | 18.6 |
| LG Seeds NB749W | 10 | 160.6 | 100.0 | 0.0 | 0.6 | . | . | 23.5 |
| Pioneer Brand 32H39 | 11 | 138.1 | 100.0 | 0.0 | 0.0 | . | . | 25.5 |
| Pioneer Brand 32K72 | 12 | 140.8 | 100.0 | 0.0 | 3.3 | . | . | 26.5 |
| Pioneer Brand 34P93 | 13 | 133.9 | 100.0 | 0.0 | 3.3 | . | . | 22.5 |
| <i>Pioneer Brand 32Y52</i> | 14 | 146.3 | 100.0 | 0.0 | 6.7 | . | . | 22.5 |
| <i>Pioneer Brand X1128BW</i> | 15 | 130.9 | 100.0 | 0.0 | 8.3 | . | . | 18.6 |
| <i>Pioneer Brand X1138AW</i> | 16 | 138.9 | 100.0 | 0.0 | 0.6 | . | . | 26.0 |
| Trisler T-4211W | 17 | 144.3 | 100.0 | 0.0 | 3.9 | . | . | 27.1 |
| Vineyard V433W | 18 | 153.9 | 100.0 | 0.0 | 3.3 | . | . | 24.5 |
| Whisnand 50AW | 19 | 146.4 | 100.0 | 0.0 | 0.6 | . | . | 24.4 |
| Whisnand 51AW | 20 | 157.5 | 100.0 | 0.0 | 2.2 | . | . | 23.7 |
| Zimmerman 1780W | 21 | 161.0 | 100.0 | 0.0 | 7.2 | . | . | 23.3 |
| Zimmerman 1790W | 22 | 159.1 | 100.0 | 0.0 | 6.1 | . | . | 21.6 |
| Zimmerman 1851W | 23 | 160.2 | 100.0 | 0.0 | 0.6 | . | . | 29.2 |
| Zimmerman N71-T7 | 24 | 141.5 | 100.0 | 0.0 | 1.1 | . | . | 24.7 |
| <i>Zimmerman NX 7208</i> | 25 | 150.6 | 100.0 | 0.0 | 5.6 | . | . | 20.5 |
| <i>Zimmerman Z76W</i> | 26 | 140.3 | 100.0 | 0.0 | 1.1 | . | . | 23.3 |
| Yellow check B73×Mo17 | 27 | 160.9 | 100.0 | 0.0 | 3.9 | . | . | 21.6 |
| Yellow check Pioneer Brand 3394 | 28 | 141.7 | 100.0 | 0.0 | 5.0 | . | . | 20.2 |
| Mean | | 149.7 | 100.0 | 0.0 | 3.0 | . | . | 22.7 |
| LSD 0.05 | | 10.4 | ns | ns | 4.9 | | | 3.8 |
| CV% | | 4.3 | | | 100.5 | | | 10.3 |

Table 31. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Clay Center, NE. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand [†] (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-------------------|---------------------------|-----------------------|------------------------|-----------------------|---------------------------|-------------------|
| AgriGold A6530W | 1 | 113.8 | . | 2.6 | . | . | . | 17.6 |
| Asgrow RX776W | 2 | 134.7 | . | 1.9 | . | . | . | 19.6 |
| DEKALB DK665W | 3 | 110.7 | . | 5.7 | . | . | . | 19.6 |
| Diener DB 114W | 4 | 182.8 | . | 36.4 | . | . | . | 18.8 |
| Garst 8527W | 5 | 128.0 | . | 1.3 | . | . | . | 17.1 |
| IFSI 90-1 | 6 | 123.7 | . | 7.3 | . | . | . | 18.7 |
| IFSI 95-2 | 7 | 151.0 | . | 3.6 | . | . | . | 17.7 |
| LG Seeds LG2558W | 8 | 184.3 | . | 14.5 | . | . | . | 19.1 |
| LG Seeds LG2596W | 9 | 139.1 | . | 0.7 | . | . | . | 18.2 |
| LG Seeds NB749W | 10 | 129.3 | . | 14.7 | . | . | . | 19.5 |
| Pioneer Brand 32H39 | 11 | 132.5 | . | 6.0 | . | . | . | 19.4 |
| Pioneer Brand 32K72 | 12 | 177.8 | . | 5.6 | . | . | . | 19.4 |
| Pioneer Brand 34P93 | 13 | 199.1 | . | 4.2 | . | . | . | 17.4 |
| <i>Pioneer Brand 32Y52</i> | 14 | 162.2 | . | 13.0 | . | . | . | 19.6 |
| <i>Pioneer Brand X1128BW</i> | 15 | 171.6 | . | 15.2 | . | . | . | 17.6 |
| <i>Pioneer Brand X1138AW</i> | 16 | 181.6 | . | 18.0 | . | . | . | 19.1 |
| Trisler T-4211W | 17 | 126.7 | . | 17.9 | . | . | . | 17.7 |
| Vineyard V433W | 18 | 183.7 | . | 10.4 | . | . | . | 19.0 |
| Whisnand 50AW | 19 | 148.8 | . | 23.5 | . | . | . | 18.3 |
| Whisnand 51AW | 20 | 143.7 | . | 2.5 | . | . | . | 19.5 |
| Zimmerman 1780W | 21 | 191.6 | . | 19.7 | . | . | . | 20.4 |
| Zimmerman 1790W | 22 | 185.3 | . | 18.0 | . | . | . | 19.7 |
| Zimmerman 1851W | 23 | 204.5 | . | 15.7 | . | . | . | 21.7 |
| Zimmerman N71-T7 | 24 | 104.5 | . | 9.8 | . | . | . | 17.8 |
| <i>Zimmerman NX 7208</i> | 25 | 136.8 | . | 9.3 | . | . | . | 18.2 |
| <i>Zimmerman Z76W</i> | 26 | 142.1 | . | 2.6 | . | . | . | 18.3 |
| Yellow check B73 × Mo17 | 27 | 147.4 | . | 17.0 | . | . | . | 19.1 |
| Yellow check Pioneer Brand 3394 | 28 | 96.5 [‡] | . | 2.7 | . | . | . | 16.8 [‡] |
| Mean | | 151.2 | . | 10.7 | . | . | . | 18.7 |
| LSD 0.05 | | 36.3 | | 13.2 | | | | 1.2 |
| CV% | | 14.7 | | 75.7 | | | | 4.0 |

[†] Variable plot sizes, no optimum stand count.

[‡] Data from one replication.

Table 32. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Gothenburg, NE. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|--------------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|-------------------|
| AgriGold A6530W | 1 | 113.0 | 97.7 | . | 22.8 | . | . | 14.1 |
| Asgrow RX776W | 2 | 147.4 [†] | 86.3 | . | 5.0 | . | . | 15.0 [†] |
| DEKALB DK665W | 3 | 135.9 | 85.0 | . | 6.2 | . | . | 14.1 |
| Diener DB 114W | 4 | 141.0 | 86.7 | . | 11.5 | . | . | 18.4 |
| Garst 8527W | 5 | 90.7 | 88.0 | . | 20.6 | . | . | 12.8 |
| IFSI 90-1 | 6 | 103.7 | 78.7 | . | 11.4 | . | . | 14.9 |
| IFSI 95-2 | 7 | 99.3 | 86.3 | . | 10.5 | . | . | 14.0 |
| LG Seeds LG2558W | 8 | 150.2 | 91.7 | . | 10.5 | . | . | 14.2 |
| LG Seeds LG2596W | 9 | 139.5 | 82.0 | . | 2.8 | . | . | 14.8 |
| LG Seeds NB749W | 10 | 131.4 | 95.0 | . | 9.1 | . | . | 15.5 |
| Pioneer Brand 32H39 | 11 | 131.1 | 96.0 | . | 2.1 | . | . | 13.8 |
| Pioneer Brand 32K72 | 12 | 141.4 | 89.0 | . | 21.3 | . | . | 14.0 |
| Pioneer Brand 34P93 | 13 | 130.8 | 91.0 | . | 13.5 | . | . | 13.2 |
| <i>Pioneer Brand 32Y52</i> | 14 | 162.5 | 91.3 | . | 9.5 | . | . | 14.5 |
| <i>Pioneer Brand X1128BW</i> | 15 | 131.2 | 94.3 | . | 17.0 | . | . | 12.2 |
| <i>Pioneer Brand X1138AW</i> | 16 | 153.3 | 98.0 | . | 6.4 | . | . | 14.2 |
| Trisler T-4211W | 17 | 115.3 | 93.7 | . | 10.7 | . | . | 14.1 |
| Vineyard V433W | 18 | 147.9 [†] | 98.0 | . | 17.8 | . | . | 15.3 [†] |
| Whisnand 50AW | 19 | 91.0 | 93.3 | . | 11.7 | . | . | 13.8 |
| Whisnand 51AW | 20 | 83.4 | 87.0 | . | 12.4 | . | . | 13.8 |
| Zimmerman 1780W | 21 | 89.9 | 88.0 | . | 38.6 | . | . | 18.3 |
| Zimmerman 1790W | 22 | 145.8 | 94.3 | . | 28.1 | . | . | 16.8 |
| Zimmerman 1851W | 23 | 148.2 | 87.7 | . | 5.9 | . | . | 16.2 |
| Zimmerman N71-T7 | 24 | 122.5 [†] | 87.3 | . | 14.4 | . | . | 14.3 [†] |
| <i>Zimmerman NX 7208</i> | 25 | 91.0 | 100.7 | . | 20.5 | . | . | 14.6 |
| <i>Zimmerman Z76W</i> | 26 | 132.9 | 90.0 | . | 10.0 | . | . | 13.4 |
| Yellow check B73×Mo17 | 27 | 98.6 | 98.3 | . | 17.2 | . | . | 15.1 |
| Yellow check Pioneer Brand 3394 | 28 | 107.3 | 90.3 | . | 37.4 | . | . | 12.3 |
| Mean | | 124.2 | 90.9 | . | 14.5 | . | . | 14.6 |
| LSD 0.05 | | 24.9 | ns | | 15.8 | | | 1.0 |
| CV% | | 12.3 | | | 66.9 | | | 4.3 |

[†] Data from two replications.

Table 33. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Hoytville, OH. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| AgriGold A6530W | 1 | 163.1 | 104.1 | . | 11.3 | . | . | 17.3 |
| Asgrow RX776W | 2 | 187.9 | 92.6 | . | 0.0 | . | . | 19.1 |
| DEKALB DK665W | 3 | 163.1 | 105.9 | . | 8.4 | . | . | 17.5 |
| Diener DB 114W | 4 | 158.1 | 102.6 | . | 14.4 | . | . | 17.9 |
| Garst 8527W | 5 | 153.9 | 100.7 | . | 5.1 | . | . | 16.5 |
| IFSI 90-1 | 6 | 166.9 | 95.2 | . | 7.7 | . | . | 17.2 |
| IFSI 95-2 | 7 | 156.7 | 97.0 | . | 19.0 | . | . | 17.3 |
| LG Seeds LG2558W | 8 | 161.9 | 100.7 | . | 4.8 | . | . | 17.0 |
| LG Seeds LG2596W | 9 | 172.9 | 97.0 | . | 12.2 | . | . | 17.7 |
| LG Seeds NB749W | 10 | 143.5 | 99.3 | . | 10.9 | . | . | 18.2 |
| Pioneer Brand 32H39 | 11 | 167.0 | 104.1 | . | 10.7 | . | . | 16.8 |
| Pioneer Brand 32K72 | 12 | 164.0 | 97.8 | . | 11.1 | . | . | 17.5 |
| Pioneer Brand 34P93 | 13 | 176.7 | 97.8 | . | 15.7 | . | . | 16.7 |
| <i>Pioneer Brand 32Y52</i> | 14 | 148.8 | 104.4 | . | 33.4 | . | . | 17.2 |
| <i>Pioneer Brand X1128BW</i> | 15 | 168.0 | 96.3 | . | 16.4 | . | . | 16.4 |
| <i>Pioneer Brand X1138AW</i> | 16 | 187.0 | 106.3 | . | 11.2 | . | . | 17.4 |
| Trisler T-4211W | 17 | 142.6 | 105.2 | . | 27.1 | . | . | 17.0 |
| Vineyard V433W | 18 | 163.2 | 98.9 | . | 8.2 | . | . | 16.6 |
| Whisnand 50AW | 19 | 167.2 | 94.1 | . | 8.6 | . | . | 17.2 |
| Whisnand 51AW | 20 | 155.8 | 87.4 | . | 18.2 | . | . | 17.3 |
| Zimmerman 1780W | 21 | 123.6 | 100.0 | . | 27.4 | . | . | 18.7 |
| Zimmerman 1790W | 22 | 154.6 | 101.9 | . | 26.9 | . | . | 17.2 |
| Zimmerman 1851W | 23 | 142.9 | 93.0 | . | 2.9 | . | . | 19.2 |
| Zimmerman N71-T7 | 24 | 178.7 | 95.2 | . | 8.9 | . | . | 17.5 |
| <i>Zimmerman NX 7208</i> | 25 | 167.5 | 104.8 | . | 7.8 | . | . | 17.4 |
| <i>Zimmerman Z76W</i> | 26 | 145.0 | 95.9 | . | 8.9 | . | . | 16.9 |
| Yellow check B73×Mo17 | 27 | 139.8 | 94.4 | . | 8.3 | . | . | 17.0 |
| Yellow check Pioneer Brand 3394 | 28 | 168.7 | 95.6 | . | 6.7 | . | . | 16.6 |
| Mean | | 160.3 | 98.9 | . | 12.6 | . | . | 17.4 |
| LSD 0.05 | | 15.2 | 8.5 | | 14.4 | | | 0.9 |
| CV% | | 5.8 | 5.3 | | 70.1 | | | 3.3 |

Table 34. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Beresford, SD. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| AgriGold A6530W | 1 | 111.5 | 97.9 | 0.0 | 2.6 | 48.9 | . | 19.4 |
| Asgrow RX776W | 2 | 120.0 | 96.7 | 0.0 | 3.3 | 32.4 | . | 18.6 |
| DEKALB DK665W | 3 | 128.1 | 100.8 | 0.0 | 1.3 | 38.9 | . | 18.7 |
| Diener DB 114W | 4 | 119.0 | 95.4 | 0.0 | 0.4 | 43.2 | . | 21.6 |
| Garst 8527W | 5 | 99.3 | 102.9 | 0.0 | 0.0 | 32.6 | . | 14.5 |
| IFSI 90-1 | 6 | 91.6 | 98.8 | 0.0 | 0.0 | 48.0 | . | 18.6 |
| IFSI 95-2 | 7 | 117.6 | 95.0 | 0.0 | 0.0 | 51.7 | . | 20.2 |
| LG Seeds LG2558W | 8 | 104.4 | 105.4 | 0.0 | 2.3 | 32.8 | . | 16.0 |
| LG Seeds LG2596W | 9 | 103.7 | 102.5 | 0.0 | 0.4 | 32.2 | . | 16.6 |
| LG Seeds NB749W | 10 | 123.2 | 98.8 | 0.0 | 0.0 | 50.3 | . | 24.1 |
| Pioneer Brand 32H39 | 11 | 85.2 | 105.0 | 0.0 | 0.8 | 42.1 | . | 15.3 |
| Pioneer Brand 32K72 | 12 | 102.7 | 102.9 | 0.0 | 0.0 | 41.0 | . | 16.0 |
| Pioneer Brand 34P93 | 13 | 97.7 | 101.7 | 0.0 | 0.4 | 36.8 | . | 17.2 |
| <i>Pioneer Brand 32Y52</i> | 14 | 89.9 | 98.8 | 0.0 | 1.0 | 43.6 | . | 15.9 |
| <i>Pioneer Brand X1128BW</i> | 15 | 92.3 | 105.4 | 0.0 | 0.4 | 39.0 | . | 13.7 |
| <i>Pioneer Brand X1138AW</i> | 16 | 112.9 | 99.6 | 0.0 | 1.3 | 42.5 | . | 16.9 |
| Trisler T-4211W | 17 | 99.9 | 99.2 | 0.0 | 2.5 | 55.6 | . | 19.2 |
| Vineyard V433W | 18 | 125.1 | 103.3 | 0.0 | 0.4 | 44.5 | . | 21.5 |
| Whisnand 50AW | 19 | 120.3 | 95.8 | 0.0 | 0.9 | 54.6 | . | 20.0 |
| Whisnand 51AW | 20 | 110.4 | 104.6 | 0.0 | 0.8 | 52.5 | . | 18.8 |
| Zimmerman 1780W | 21 | 124.1 | 91.3 | 0.0 | 0.0 | 42.3 | . | 23.8 |
| Zimmerman 1790W | 22 | 112.9 | 102.9 | 0.0 | 0.0 | 44.9 | . | 20.3 |
| Zimmerman 1851W | 23 | 105.7 | 99.6 | 0.0 | 2.5 | 45.0 | . | 21.1 |
| Zimmerman N71-T7 | 24 | 116.2 | 101.7 | 0.0 | 1.6 | 46.0 | . | 20.1 |
| <i>Zimmerman NX 7208</i> | 25 | 122.9 | 103.8 | 0.0 | 2.4 | 48.1 | . | 19.4 |
| <i>Zimmerman Z76W</i> | 26 | 95.1 | 100.8 | 0.0 | 0.4 | 43.8 | . | 17.1 |
| Yellow check B73×Mo17 | 27 | 127.2 | 100.4 | 0.0 | 0.4 | 45.8 | . | 20.9 |
| Yellow check Pioneer Brand 3394 | 28 | 115.9 | 105.4 | 0.0 | 0.0 | 38.1 | . | 20.9 |
| Mean | | 109.8 | 100.6 | 0.0 | 0.9 | 43.5 | . | 18.8 |
| LSD 0.05 | | 18.9 | ns | ns | ns | 4.2 | | 3.0 |
| CV% | | 10.6 | | | | 5.9 | | 9.7 |

Table 35. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Knoxville, TN. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| AgriGold A6530W | 1 | 114.8 | 93.3 | 0.0 | 8.4 | 37.3 | 76.0 | 15.1 |
| Asgrow RX776W | 2 | 111.1 | 92.8 | 0.0 | 6.4 | 29.3 | 72.0 | 15.0 |
| DEKALB DK665W | 3 | 98.3 | 84.4 | 0.0 | 4.0 | 29.7 | 74.3 | 15.1 |
| Diener DB 114W | 4 | 105.4 | 88.9 | 0.0 | 8.1 | 32.3 | 76.0 | 14.5 |
| Garst 8527W | 5 | 108.8 | 86.1 | 0.0 | 8.4 | 28.3 | 70.7 | 13.6 |
| IFSI 90-1 | 6 | 124.3 | 88.3 | 0.0 | 4.8 | 34.7 | 76.3 | 14.9 |
| IFSI 95-2 | 7 | 116.7 | 72.8 | 0.0 | 5.0 | 39.3 | 74.7 | 15.4 |
| LG Seeds LG2558W | 8 | 104.9 | 90.0 | 0.0 | 8.6 | 28.7 | 74.3 | 13.8 |
| LG Seeds LG2596W | 9 | 99.0 | 83.9 | 0.0 | 12.6 | 32.0 | 74.7 | 15.0 |
| LG Seeds NB749W | 10 | 118.8 | 92.8 | 0.0 | 7.1 | 36.3 | 76.7 | 15.3 |
| Pioneer Brand 32H39 | 11 | 126.5 | 97.8 | 0.0 | 7.9 | 31.7 | 73.0 | 15.1 |
| Pioneer Brand 32K72 | 12 | 132.4 | 90.0 | 0.0 | 3.0 | 31.0 | 72.0 | 14.5 |
| Pioneer Brand 34P93 | 13 | 102.8 | 91.1 | 0.0 | 5.9 | 30.3 | 72.3 | 14.0 |
| <i>Pioneer Brand 32Y52</i> | 14 | 113.1 | 88.3 | 0.0 | 9.4 | 33.7 | 74.3 | 14.7 |
| <i>Pioneer Brand X1128BW</i> | 15 | 127.8 | 81.1 | 0.0 | 2.5 | 32.3 | 71.0 | 13.9 |
| <i>Pioneer Brand X1138AW</i> | 16 | 130.0 | 72.8 | 0.0 | 10.6 | 34.3 | 72.3 | 15.1 |
| Trisler T-4211W | 17 | 132.2 | 91.7 | 0.0 | 5.3 | 35.7 | 75.7 | 15.1 |
| Vineyard V433W | 18 | 121.9 | 88.9 | 0.0 | 16.5 | 34.3 | 73.3 | 14.7 |
| Whisnand 50AW | 19 | 110.3 | 73.9 | 0.0 | 8.4 | 36.7 | 76.0 | 15.3 |
| Whisnand 51AW | 20 | 114.6 | 67.2 | 0.0 | 11.1 | 37.0 | 76.7 | 14.9 |
| Zimmerman 1780W | 21 | 124.5 | 89.4 | 0.0 | 7.9 | 33.3 | 76.0 | 15.7 |
| Zimmerman 1790W | 22 | 115.2 | 91.1 | 0.0 | 9.0 | 33.7 | 74.7 | 15.0 |
| Zimmerman 1851W | 23 | 119.1 | 80.0 | 0.0 | 2.9 | 33.0 | 76.7 | 15.5 |
| Zimmerman N71-T7 | 24 | 133.8 | 84.4 | 0.0 | 1.3 | 35.7 | 75.0 | 15.5 |
| <i>Zimmerman NX 7208</i> | 25 | 97.8 | 85.6 | 0.0 | 12.8 | 34.3 | 77.3 | 16.2 |
| <i>Zimmerman Z76W</i> | 26 | 117.0 | 80.0 | 0.0 | 11.7 | 34.7 | 75.3 | 14.3 |
| Yellow check B73 × Mo17 | 27 | 104.5 | 92.8 | 0.0 | 4.1 | 36.3 | 75.3 | 13.9 |
| Yellow check Pioneer Brand 3394 | 28 | 111.9 | 92.8 | 0.0 | 10.3 | 32.7 | 74.0 | 13.8 |
| Mean | | 115.6 | 86.2 | 0.0 | 7.6 | 33.5 | 74.5 | 14.8 |
| LSD 0.05 | | 19.5 | 15.0 | ns | 7.6 | 4.4 | 1.7 | 0.6 |
| CV% | | 10.3 | 10.6 | | 60.7 | 8.0 | 1.4 | 2.5 |

Table 36. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Ottawa, Ontario. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| AgriGold A6530W | 1 | 93.1 | 78.6 | 0.4 | 6.2 | 47.8 | . | 33.3 |
| Asgrow RX776W | 2 | 102.6 | 97.1 | 0.0 | 7.8 | 37.1 | . | 33.9 |
| DEKALB DK665W | 3 | 64.7 | 101.1 | 0.4 | 5.1 | 39.2 | . | 30.7 |
| Diener DB 114W | 4 | 104.0 | 87.3 | 0.0 | 6.2 | 39.4 | . | 33.0 |
| Garst 8527W | 5 | 109.7 | 89.9 | 1.1 | 2.3 | 34.9 | . | 28.3 |
| IFSI 90-1 | 6 | 96.5 | 97.1 | 1.2 | 3.7 | 49.0 | . | 31.9 |
| IFSI 95-2 | 7 | 110.5 | 94.6 | 1.1 | 3.4 | 55.1 | . | 32.6 |
| LG Seeds LG2558W | 8 | 105.5 | 103.3 | 2.4 | 3.1 | 34.1 | . | 29.6 |
| LG Seeds LG2596W | 9 | 104.0 | 81.9 | 0.4 | 5.8 | 33.2 | . | 33.0 |
| LG Seeds NB749W | 10 | 101.4 | 83.7 | 0.0 | 8.4 | 49.7 | . | 34.6 |
| Pioneer Brand 32H39 | 11 | 92.0 | 103.6 | 2.1 | 3.6 | 42.9 | . | 30.0 |
| Pioneer Brand 32K72 | 12 | 89.1 | 100.0 | 0.7 | 7.3 | 41.9 | . | 28.2 |
| Pioneer Brand 34P93 | 13 | 103.5 | 96.7 | 1.9 | 6.0 | 41.5 | . | 30.7 |
| <i>Pioneer Brand 32Y52</i> | 14 | 78.0 | 94.9 | 0.0 | 4.7 | 43.6 | . | 30.4 |
| <i>Pioneer Brand X1128BW</i> | 15 | 104.4 | 96.4 | 0.4 | 4.6 | 40.2 | . | 28.9 |
| <i>Pioneer Brand X1138AW</i> | 16 | 91.2 | 100.4 | 0.0 | 2.9 | 44.1 | . | 29.7 |
| Trisler T-4211W | 17 | 98.0 | 80.1 | 2.1 | 6.0 | 51.3 | . | 33.0 |
| Vineyard V433W | 18 | 110.5 | 97.8 | 0.7 | 5.9 | 42.4 | . | 33.8 |
| Whisnand 50AW | 19 | 119.9 | 96.0 | 0.4 | 5.0 | 55.4 | . | 33.2 |
| Whisnand 51AW | 20 | 93.3 | 100.4 | 0.7 | 5.4 | 50.6 | . | 32.8 |
| Zimmerman 1780W | 21 | 101.3 | 98.6 | 1.4 | 4.9 | 41.3 | . | 35.6 |
| Zimmerman 1790W | 22 | 105.0 | 96.7 | 0.4 | 3.0 | 41.1 | . | 33.1 |
| Zimmerman 1851W | 23 | 88.5 | 96.0 | 5.6 | 0.7 | 43.9 | . | 38.4 |
| Zimmerman N71-T7 | 24 | 125.4 | 92.8 | 4.3 | 0.0 | 49.0 | . | 32.6 |
| <i>Zimmerman NX 7208</i> | 25 | 110.4 | 97.8 | 0.8 | 4.5 | 52.3 | . | 33.4 |
| <i>Zimmerman Z76W</i> | 26 | 78.4 | 100.4 | 0.4 | 1.1 | 45.9 | . | 32.8 |
| Yellow check B73 × Mo17 | 27 | 107.2 | 92.8 | 1.2 | 7.5 | 45.4 | . | 31.3 |
| Yellow check Pioneer Brand 3394 | 28 | 100.1 | 96.4 | 0.4 | 4.8 | 45.9 | . | 28.1 |
| Mean | | 99.6 | 94.7 | 1.1 | 4.6 | 44.2 | . | 32.0 |
| LSD 0.05 | | 19.7 | ns | 2.6 | ns | 4.1 | | 2.9 |
| CV% | | 12.1 | | 143.5 | | 5.7 | | 5.6 |

Table 37. Yield and agronomic data from the 1999 Early White Food Corn Performance Test at Ridgertown, Ontario. New entries for 1999 are shown in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower [†] (no) | Moist. (%) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|--|---------------|
| AgriGold A6530W | 1 | 202.2 | 100.0 | 0.0 | 1.5 | 55.4 | 78.0 | 23.8 |
| Asgrow RX776W | 2 | 198.8 | 99.0 | 0.0 | 1.5 | 45.1 | 77.0 | 22.9 |
| DEKALB DK665W | 3 | 183.5 | 99.0 | 0.0 | 2.6 | 49.7 | 77.0 | 23.6 |
| Diener DB 114W | 4 | 173.4 | 98.0 | 0.0 | 6.1 | 49.4 | 78.0 | 24.0 |
| Garst 8527W | 5 | 176.3 | 99.5 | 0.0 | 4.6 | 46.0 | 73.0 | 21.5 |
| IFSI 90-1 | 6 | 223.5 | 100.0 | 0.0 | 5.6 | 56.9 | 77.0 | 22.9 |
| IFSI 95-2 | 7 | 220.0 | 99.5 | 0.0 | 2.5 | 60.3 | 78.0 | 22.1 |
| LG Seeds LG2558W | 8 | 160.5 | 98.5 | 0.0 | 3.1 | 44.9 | 77.0 | 20.9 |
| LG Seeds LG2596W | 9 | 171.7 | 100.0 | 0.0 | 3.5 | 43.6 | 77.0 | 22.7 |
| LG Seeds NB749W | 10 | 190.2 | 100.0 | 0.0 | 7.1 | 57.9 | 78.0 | 24.8 |
| Pioneer Brand 32H39 | 11 | 201.3 | 99.5 | 0.0 | 3.1 | 53.0 | 77.0 | 23.5 |
| Pioneer Brand 32K72 | 12 | 207.7 | 99.5 | 0.0 | 2.5 | 51.1 | 77.0 | 23.4 |
| Pioneer Brand 34P93 | 13 | 197.3 | 98.5 | 0.0 | 4.1 | 47.2 | 73.0 | 21.9 |
| <i>Pioneer Brand 32Y52</i> | 14 | 202.9 | 100.0 | 0.0 | 3.0 | 51.2 | 77.0 | 23.6 |
| <i>Pioneer Brand X1128BW</i> | 15 | 201.4 | 99.0 | 0.0 | 4.1 | 44.9 | 73.0 | 21.9 |
| <i>Pioneer Brand X1138AW</i> | 16 | 204.4 | 98.0 | 0.0 | 3.1 | 54.6 | 77.0 | 22.9 |
| Trisler T-4211W | 17 | 212.0 | 100.0 | 0.0 | 2.5 | 62.4 | 78.0 | 21.9 |
| Vineyard V433W | 18 | 197.9 | 99.5 | 0.0 | 4.6 | 54.5 | 78.0 | 22.7 |
| Whisnand 50AW | 19 | 234.6 | 100.0 | 0.0 | 4.0 | 62.8 | 77.0 | 21.9 |
| Whisnand 51AW | 20 | 199.2 | 99.5 | 0.0 | 7.1 | 58.5 | 78.0 | 21.9 |
| Zimmerman 1780W | 21 | 214.3 | 100.0 | 0.0 | 7.1 | 51.4 | 78.0 | 24.7 |
| Zimmerman 1790W | 22 | 205.5 | 100.0 | 0.0 | 5.6 | 53.0 | 78.0 | 23.4 |
| Zimmerman 1851W | 23 | 207.2 | 100.0 | 0.0 | 0.5 | 55.0 | 79.0 | 25.0 |
| Zimmerman N71-T7 | 24 | 227.5 | 100.0 | 0.0 | 0.5 | 59.3 | 78.0 | 23.2 |
| <i>Zimmerman NX 7208</i> | 25 | 196.5 | 98.5 | 0.0 | 4.1 | 57.2 | 77.0 | 23.3 |
| <i>Zimmerman Z76W</i> | 26 | 179.5 | 100.0 | 0.0 | 4.0 | 55.0 | 78.0 | 21.7 |
| Yellow check B73 × Mo17 | 27 | 178.0 | 99.5 | 0.0 | 7.1 | 52.0 | 77.0 | 23.0 |
| Yellow check Pioneer Brand 3394 | 28 | 216.5 | 99.5 | 0.0 | 0.5 | 52.8 | 77.0 | 20.7 |
| Mean | | 199.4 | 99.4 | 0.0 | 3.8 | 53.0 | 77.0 | 22.8 |
| LSD 0.05 | | 24.2 | ns | ns | ns | 4.9 | | 1.2 |
| CV% | | 7.4 | | | | 5.6 | | 3.3 |

[†] Data from one replication.

Table 38. Combined yield and agronomic data from 10 northern locations of the 1999 Early White Food Corn Performance Test. New entries for 1999 are in italics.

| Entry | No. | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) | b ₁ (bu/a/I) | Std. devn. (bu/a) |
|---------------------------------|-----|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|----------------------------|-------------------------|
| AgriGold A6530W | 1 | 147.7 | 86.7 | 1.8 | 6.5 | 54.1 | 76.3 | 19.0 | 0.87 | 15.5 |
| Asgrow RX776W | 2 | 159.9 | 84.0 | 0.9 | 1.7 | 41.9 | 75.8 | 20.5 | 0.76 | 17.4 |
| DEKALB DK665W | 3 | 152.4 | 86.2 | 1.1 | 3.0 | 49.9 | 75.7 | 19.5 | 0.78 | 18.5 |
| Diener DB 114W | 4 | 158.2 | 84.7 | 6.1 | 5.2 | 50.9 | 76.7 | 20.9 | 0.79 | 15.9 |
| Garst 8527W | 5 | 135.7 | 85.9 | 0.3 | 5.8 | 43.5 | 72.5 | 16.6 | 0.90 | 8.9 |
| IFSI 90-1 | 6 | 155.9 | 82.1 | 2.0 | 4.1 | 56.2 | 76.3 | 20.2 | 1.33 | 13.0 |
| IFSI 95-2 | 7 | 161.2 | 83.5 | 5.0 | 5.5 | 56.2 | 76.7 | 19.2 | 1.23 | 11.8 |
| LG Seeds LG2558W | 8 | 146.1 | 85.2 | 3.7 | 4.3 | 42.3 | 75.0 | 18.5 | 0.51 | 22.7 |
| LG Seeds LG2596W | 9 | 145.4 | 83.7 | 0.1 | 3.3 | 42.7 | 75.0 | 18.3 | 0.61 | 15.2 |
| LG Seeds NB749W | 10 | 156.4 | 85.2 | 5.4 | 4.3 | 58.7 | 77.0 | 21.7 | 0.94 | 16.6 |
| Pioneer Brand 32H39 | 11 | 151.6 | 87.7 | 1.2 | 2.8 | 49.8 | 75.5 | 19.7 | 1.12 | 10.4 |
| Pioneer Brand 32K72 | 12 | 164.0 | 87.4 | 0.9 | 6.7 | 51.9 | 76.3 | 19.6 | 1.02 | 11.8 |
| Pioneer Brand 34P93 | 13 | 165.1 | 86.7 | 0.7 | 6.8 | 46.3 | 72.5 | 18.0 | 1.15 | 20.3 |
| <i>Pioneer Brand 32Y52</i> | 14 | 164.4 | 87.1 | 3.2 | 8.2 | 51.7 | 76.3 | 19.5 | 1.10 | 20.4 |
| <i>Pioneer Brand X1128BW</i> | 15 | 158.0 | 86.1 | 2.6 | 8.6 | 46.3 | 73.5 | 16.8 | 1.06 | 13.1 |
| <i>Pioneer Brand X1138AW</i> | 16 | 174.7 | 87.9 | 4.6 | 4.1 | 54.0 | 75.8 | 19.2 | 1.05 | 16.7 |
| Trisler T-4211W | 17 | 155.2 | 87.1 | 3.3 | 7.1 | 58.6 | 76.8 | 19.5 | 1.24 | 12.5 |
| Vineyard V433W | 18 | 172.5 | 88.4 | 2.8 | 5.2 | 54.7 | 76.0 | 20.2 | 1.01 | 14.1 |
| Whisnand 50AW | 19 | 161.2 | 84.4 | 6.9 | 4.2 | 60.4 | 76.7 | 19.3 | 1.25 | 16.9 |
| Whisnand 51AW | 20 | 156.8 | 84.2 | 1.1 | 6.1 | 60.2 | 77.2 | 20.0 | 1.29 | 15.3 |
| Zimmerman 1780W | 21 | 159.2 | 84.9 | 3.7 | 11.9 | 48.7 | 76.8 | 22.0 | 1.13 | 24.0 |
| Zimmerman 1790W | 22 | 165.8 | 87.5 | 3.0 | 10.6 | 50.6 | 77.0 | 20.7 | 1.04 | 13.0 |
| Zimmerman 1851W | 23 | 163.7 | 83.7 | 6.1 | 1.8 | 51.1 | 78.2 | 23.2 | 0.99 | 21.6 |
| Zimmerman N71-T7 | 24 | 161.3 | 85.5 | 9.4 | 3.8 | 54.9 | 76.2 | 20.1 | 0.98 | 25.3 |
| <i>Zimmerman NX 7208</i> | 25 | 153.1 | 90.0 | 2.2 | 6.5 | 54.9 | 75.7 | 19.2 | 1.05 | 14.9 |
| <i>Zimmerman Z76W</i> | 26 | 140.4 | 84.5 | 0.4 | 3.8 | 53.7 | 77.2 | 18.6 | 0.92 | 14.1 |
| Yellow check B73 × Mo17 | 27 | 147.6 | 87.3 | 4.8 | 5.6 | 55.7 | 75.8 | 19.8 | 0.85 | 15.4 |
| Yellow check Pioneer Brand 3394 | 28 | 145.1 | 87.1 | 1.0 | 7.6 | 52.1 | 76.3 | 16.9 | 1.04 | 22.8 |
| Mean | | 156.4 | 85.9 | 3.0 | 5.5 | 51.9 | 76.0 | 19.5 | 1.00 | 16.4 |
| LSD 0.05 | | 15.5 | 3.3 | ns | 4.9 | 4.3 | 1.6 | 1.3 | 0.11 | |
| CV% | | 9.1 | 5.6 | | 97.9 | 5.9 | 0.5 | 6.0 | | |
| Location means: | | | | | | | | | | |
| Champaign, IL | | 198.3 | 93.7 | 2.0 | 0.5 | 62.7 | . | 21.5 | | |
| Galesburg, IL | | 111.2 | 100.3 | 5.4 | 3.5 | 53.0 | . | 19.0 | | |
| Harlan, IA | | 171.8 | 87.5 | . | . | . | . | 18.4 | | |
| Marion, IA | | 187.9 | 87.4 | . | . | 47.2 | 74.9 | 21.2 | | |
| St. Joseph, MO | | 149.7 | 100.0 | 0.0 | 3.0 | . | . | 22.7 | | |
| Clay Center, NE [†] | | 151.2 | . | 10.7 | . | . | . | 18.7 | | |
| Gothenburg, NE [†] | | 124.2 | 90.9 | . | 14.5 | . | . | 14.6 | | |
| Hoytville, OH | | 160.3 | 98.9 | . | 12.6 | . | . | 17.4 | | |
| Beresford, SD | | 109.8 | 100.6 | 0.0 | 0.9 | 43.5 | . | 18.8 | | |
| Ridgetown, ONT | | 199.4 | 99.4 | 0.0 | 3.8 | 53.0 | 77.0 | 22.8 | | |

[†] Irrigated location.

Table 39. Yield data (bu/a) from 10 locations of the 1999 Early White Food Corn Performance Test. New entries for 1999 are shown in italics.

| Entry | No. | Cham- paign, IL | Gales- burg, IL | Harlan, IA | Marion, IA | St. Joseph, MO | Clay Center, NE ¹ | Gothen- burg, NE ¹ | Hoyt- ville, OH | Beres- ford, SD | Ridge- town, ONT | Com- bined |
|---------------------------------|-----|-----------------------|-----------------------|---------------|---------------|----------------------|------------------------------------|-------------------------------------|-----------------------|-----------------------|------------------------|---------------|
| AgriGold A6530W | 1 | 164.6 | 116.9 | 162.1 | 183.9 | 146.1 | 113.8 | 113.0 | 163.1 | 111.5 | 202.2 | 147.7 |
| Asgrow RX776W | 2 | 181.1 | 122.2 | 145.0 | 199.4 | 162.1 | 134.7 | 147.4 | 187.9 | 120.0 | 198.8 | 159.9 |
| DEKALB DK665W | 3 | 194.2 | 112.0 | 142.9 | 195.0 | 158.8 | 110.7 | 135.9 | 163.1 | 128.1 | 183.5 | 152.4 |
| Diener DB 114W | 4 | 195.1 | 102.9 | 156.3 | 192.8 | 160.8 | 182.8 | 141.0 | 158.1 | 119.0 | 173.4 | 158.2 |
| Garst 8527W | 5 | 173.1 | 95.5 | 148.3 | 155.7 | 136.4 | 128.0 | 90.7 | 153.9 | 99.3 | 176.3 | 135.7 |
| IFSI 90-1 | 6 | 203.4 | 108.2 | 183.3 | 193.3 | 160.9 | 123.7 | 103.7 | 166.9 | 91.6 | 223.5 | 155.9 |
| IFSI 95-2 | 7 | 218.9 | 119.6 | 174.3 | 204.7 | 149.5 | 151.0 | 99.3 | 156.7 | 117.6 | 220.0 | 161.2 |
| LG Seeds LG2558W | 8 | 165.7 | 95.2 | 142.4 | 142.1 | 154.8 | 184.3 | 150.2 | 161.9 | 104.4 | 160.5 | 146.1 |
| LG Seeds LG2596W | 9 | 174.4 | 106.9 | 149.0 | 142.1 | 154.8 | 139.1 | 139.5 | 172.9 | 103.7 | 171.7 | 145.4 |
| LG Seeds NB749W | 10 | 184.0 | 103.3 | 189.7 | 209.0 | 160.6 | 129.3 | 131.4 | 143.5 | 123.2 | 190.2 | 156.4 |
| Pioneer Brand 32H39 | 11 | 193.9 | 107.9 | 169.7 | 189.3 | 138.1 | 132.5 | 131.1 | 167.0 | 85.2 | 201.3 | 151.6 |
| Pioneer Brand 32K72 | 12 | 198.9 | 122.5 | 178.3 | 205.4 | 140.8 | 177.8 | 141.4 | 164.0 | 102.7 | 207.7 | 164.0 |
| Pioneer Brand 34P93 | 13 | 223.1 | 110.9 | 197.3 | 184.6 | 133.9 | 199.1 | 130.8 | 176.7 | 97.7 | 197.3 | 165.1 |
| <i>Pioneer Brand 32Y52</i> | 14 | 234.4 | 126.7 | 164.4 | 205.6 | 146.3 | 162.2 | 162.5 | 148.8 | 89.9 | 202.9 | 164.4 |
| <i>Pioneer Brand X1128BW</i> | 15 | 206.5 | 122.1 | 164.7 | 191.7 | 130.9 | 171.6 | 131.2 | 168.0 | 92.3 | 201.4 | 158.0 |
| <i>Pioneer Brand X1138AW</i> | 16 | 231.6 | 131.3 | 208.8 | 197.3 | 138.9 | 181.6 | 153.3 | 187.0 | 112.9 | 204.4 | 174.7 |
| Trisler T-4211W | 17 | 214.3 | 116.0 | 178.5 | 202.9 | 144.3 | 126.7 | 115.3 | 142.6 | 99.9 | 212.0 | 155.2 |
| Vineyard V433W | 18 | 223.9 | 117.5 | 209.2 | 202.3 | 153.9 | 183.7 | 147.9 | 163.2 | 125.1 | 197.9 | 172.5 |
| Whisnand 50AW | 19 | 198.6 | 114.8 | 196.5 | 193.6 | 146.4 | 148.8 | 91.0 | 167.2 | 120.3 | 234.6 | 161.2 |
| Whisnand 51AW | 20 | 214.7 | 109.0 | 183.9 | 209.9 | 157.5 | 143.7 | 83.4 | 155.8 | 110.4 | 199.2 | 156.8 |
| Zimmerman 1780W | 21 | 208.3 | 110.3 | 177.3 | 191.8 | 161.0 | 191.6 | 89.9 | 123.6 | 124.1 | 214.3 | 159.2 |
| Zimmerman 1790W | 22 | 204.9 | 103.6 | 187.3 | 199.1 | 159.1 | 185.3 | 145.8 | 154.6 | 112.9 | 205.5 | 165.8 |
| Zimmerman 1851W | 23 | 205.2 | 108.0 | 157.1 | 198.0 | 160.2 | 204.5 | 148.2 | 142.9 | 105.7 | 207.2 | 163.7 |
| Zimmerman N71-T7 | 24 | 189.6 | 150.8 | 177.6 | 203.9 | 141.5 | 104.5 | 122.5 | 178.7 | 116.2 | 227.5 | 161.3 |
| <i>Zimmerman NX 7208</i> | 25 | 198.7 | 105.6 | 185.7 | 175.4 | 150.6 | 136.8 | 91.0 | 167.5 | 122.9 | 196.5 | 153.1 |
| <i>Zimmerman Z76W</i> | 26 | 182.1 | 75.8 | 162.0 | 148.9 | 140.3 | 142.1 | 132.9 | 145.0 | 95.1 | 179.5 | 140.4 |
| Yellow check B73 × Mo17 | 27 | 176.1 | 98.9 | 156.3 | 192.7 | 160.9 | 147.4 | 98.6 | 139.8 | 127.2 | 178.0 | 147.6 |
| Yellow check Pioneer Brand 3394 | 28 | 193.3 | 97.6 | 163.3 | 149.9 | 141.7 | 96.5 | 107.3 | 168.7 | 115.9 | 216.5 | 145.1 |

Table 39. Continued

| Entry | No. | Cham- paign, IL | Gales- burg, IL | Harlan, IA | Marion, IA | St. Joseph, MO | Clay Center, NE [†] | Gothen- burg, NE [†] | Hoyt- ville, OH | Beres- ford, SD | Ridge- town, ONT | Com- bined |
|----------|-----|-----------------------|-----------------------|---------------|---------------|----------------------|------------------------------------|-------------------------------------|-----------------------|-----------------------|------------------------|---------------|
| Mean | | 198.3 | 111.2 | 171.8 | 187.9 | 149.7 | 151.2 | 124.2 | 160.3 | 109.8 | 199.4 | 156.4 |
| LSD 0.05 | | 28.1 | 21.2 | 26.3 | 16.9 | 10.4 | 36.3 | 24.9 | 15.2 | 18.9 | 24.2 | 15.5 |
| CV% | | 8.7 | 11.7 | 9.4 | 5.5 | 4.3 | 14.7 | 12.3 | 5.8 | 10.6 | 7.4 | 9.1 |

[†] Irrigated location.

Table 40. Yield (bu/a) data from the 1999 Early White Food Corn Performance Test at Lubbock, TX. The low moisture stress regime was 62.5% replacement of measured evapotranspiration, the moderate moisture regime was 55.9% replacement, and the severe moisture regime was 47.6% replacement. New entries for 1999 are shown in italics.

| Entry | No. | Moisture stress level | | |
|---------------------------------|-----|-----------------------|----------|--------|
| | | Low | Moderate | Severe |
| AgriGold A6530W | 1 | 52.5 | 49.5 | 27.1 |
| Asgrow RX776W | 2 | 75.1 | 58.6 | 46.4 |
| DEKALB DK665W | 3 | 57.5 | 41.2 | 31.0 |
| Diener DB 114W | 4 | 62.5 | 54.9 | 28.6 |
| Garst 8527W | 5 | 56.5 | 47.2 | 37.9 |
| IFSI 90-1 | 6 | 63.6 | 50.5 | 27.1 |
| IFSI 95-2 | 7 | 63.1 | 59.8 | 33.0 |
| LG Seeds LG2558W | 8 | 52.5 | 42.5 | 32.7 |
| LG Seeds LG2596W | 9 | 71.5 | 51.7 | 34.0 |
| LG Seeds NB749W | 10 | 53.1 | 42.5 | 24.9 |
| Pioneer Brand 32H39 | 11 | 58.4 | 46.4 | 23.9 |
| Pioneer Brand 32K72 | 12 | 59.8 | 50.6 | 42.4 |
| Pioneer Brand 34P93 | 13 | 72.0 | 55.2 | 36.3 |
| <i>Pioneer Brand 32Y52</i> | 14 | 48.8 | 36.0 | 20.3 |
| <i>Pioneer Brand X1128BW</i> | 15 | 52.5 | 52.3 | 31.1 |
| <i>Pioneer Brand X1138AW</i> | 16 | 68.9 | 47.8 | 36.3 |
| Trisler T-4211W | 17 | 61.6 | 44.8 | 31.7 |
| Vineyard V433W | 18 | 77.1 | 48.8 | 44.5 |
| Whisnand 50AW | 19 | 65.4 | 46.9 | 35.4 |
| Whisnand 51AW | 20 | 52.4 | 38.0 | 32.0 |
| Zimmerman 1780W | 21 | 67.6 | 57.0 | 40.9 |
| Zimmerman 1790W | 22 | 65.9 | 56.7 | 31.4 |
| Zimmerman 1851W | 23 | 73.8 | 51.6 | 44.1 |
| Zimmerman N71-T7 | 24 | 114.5 | 78.0 | 56.2 |
| <i>Zimmerman NX 7208</i> | 25 | 51.4 | 46.2 | 28.9 |
| <i>Zimmerman Z76W</i> | 26 | 49.5 | 42.3 | 32.2 |
| Yellow check B73 × Mo17 | 27 | 64.9 | 41.1 | 27.4 |
| Yellow check Pioneer Brand 3394 | 28 | 91.4 | 52.2 | 47.7 |
| Mean | | 64.4 | 49.7 | 34.5 |
| LSD 0.05 | | 16.6 | 17.0 | 16.0 |
| CV% | | 15.8 | 20.9 | 28.3 |

Table 41. European corn borer whorl-leaf feeding and stalk tunneling data from Columbia and Novelty, MO, for the 1999 Early White Food Corn Performance Test. New entries for 1999 are shown in italics.

| Entry | No. | Columbia | | | Novelty | | | Combined | | |
|--------------------------------------|-----|--------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|--------------------|
| | | Leaf feeding (1-9) | No. of tunnels (no) | Tunnel length (in) | Leaf feeding (1-9) | No. of tunnels (no) | Tunnel length (in) | Leaf feeding (1-9) | No. of tunnels (no) | Tunnel length (in) |
| AgriGold A6530W | 1 | 2.3 | 0.7 | 0.7 | 3.7 | 2.1 | 2.3 | 3.0 | 1.4 | 1.5 |
| Asgrow RX776W | 2 | 1.7 | 1.3 | 1.5 | 2.7 | 1.1 | 1.1 | 2.2 | 1.2 | 1.3 |
| DEKALB DK665W | 3 | 2.7 | 2.3 | 2.9 | 4.0 | 2.0 | 2.2 | 3.3 | 2.2 | 2.6 |
| Diener DB 114W | 4 | 2.7 | 1.0 | 1.1 | 2.3 | 1.5 | 1.5 | 2.5 | 1.2 | 1.3 |
| Garst 8527W | 5 | 2.7 | 0.9 | 1.0 | 2.7 | 2.2 | 2.3 | 2.7 | 1.6 | 1.6 |
| IFSI 90-1 | 6 | 2.0 | 0.6 | 0.6 | 3.0 | 2.7 | 2.7 | 2.5 | 1.6 | 1.7 |
| IFSI 95-2 | 7 | 1.7 | 1.5 | 1.9 | 2.7 | 1.9 | 1.9 | 2.2 | 1.7 | 1.9 |
| LG Seeds LG2558W | 8 | 1.7 | 0.9 | 1.1 | 2.3 | 1.3 | 1.5 | 2.0 | 1.1 | 1.3 |
| LG Seeds LG2596W | 9 | 2.7 | 0.7 | 0.7 | 2.3 | 0.9 | 0.9 | 2.5 | 0.8 | 0.8 |
| LG Seeds NB749W | 10 | 2.3 | 2.9 | 3.0 | 3.7 | 1.9 | 1.9 | 3.0 | 2.4 | 2.4 |
| Pioneer Brand 32H39 | 11 | 2.0 | 0.9 | 0.9 | 2.0 | 0.9 | 0.9 | 2.0 | 0.9 | 0.9 |
| Pioneer Brand 32K72 | 12 | 1.7 | 1.1 | 1.3 | 3.3 | 1.5 | 1.6 | 2.5 | 1.3 | 1.5 |
| Pioneer Brand 34P93 | 13 | 1.7 | 1.9 | 1.9 | 2.3 | 1.4 | 1.5 | 2.0 | 1.6 | 1.7 |
| <i>Pioneer Brand 32Y52</i> | 14 | 2.3 | 1.1 | 1.1 | 2.7 | 1.7 | 1.7 | 2.5 | 1.4 | 1.4 |
| <i>Pioneer Brand X1128BW</i> | 15 | 2.3 | 0.7 | 0.7 | 2.7 | 1.4 | 1.6 | 2.5 | 1.0 | 1.1 |
| <i>Pioneer Brand X1138AW</i> | 16 | 2.0 | 0.9 | 0.9 | 2.7 | 0.9 | 0.9 | 2.3 | 0.9 | 0.9 |
| Trisler T-4211W | 17 | 2.3 | 0.7 | 0.8 | 2.7 | 2.3 | 2.3 | 2.5 | 1.5 | 1.6 |
| Vineyard V433W | 18 | 2.0 | 1.2 | 1.3 | 2.7 | 2.1 | 2.1 | 2.3 | 1.6 | 1.7 |
| Whisnand 50AW | 19 | 2.0 | 1.1 | 1.1 | 2.7 | 2.7 | 3.0 | 2.3 | 1.9 | 2.0 |
| Whisnand 51AW | 20 | 1.7 | 1.1 | 1.1 | 2.7 | 1.3 | 1.4 | 2.2 | 1.2 | 1.3 |
| Zimmerman 1780W | 21 | 2.7 | 0.8 | 0.8 | 2.0 | 1.5 | 1.6 | 2.3 | 1.1 | 1.2 |
| Zimmerman 1790W | 22 | 2.0 | 1.1 | 1.2 | 3.3 | 1.4 | 1.5 | 2.7 | 1.3 | 1.4 |
| Zimmerman 1851W | 23 | 1.7 | 0.8 | 0.8 | 3.0 | 1.7 | 2.0 | 2.3 | 1.2 | 1.4 |
| Zimmerman N71-T7 | 24 | 2.0 | 0.1 | 0.1 | 2.7 | 0.1 | 0.1 | 2.3 | 0.1 | 0.1 |
| <i>Zimmerman NX 7208</i> | 25 | 2.7 | 1.4 | 1.6 | 2.7 | 1.5 | 1.6 | 2.7 | 1.5 | 1.6 |
| <i>Zimmerman Z76W</i> | 26 | 1.7 | 1.1 | 1.2 | 2.3 | 1.2 | 1.2 | 2.0 | 1.2 | 1.2 |
| Yellow check B73 × Mo17 | 27 | 1.7 | 2.5 | 2.7 | 3.0 | 3.3 | 3.5 | 2.3 | 2.9 | 3.1 |
| Yellow check Pioneer Brand 3394 | 28 | 2.7 | 0.8 | 0.9 | 3.7 | 1.9 | 2.1 | 3.2 | 1.4 | 1.5 |
| Susceptible check (Ki3) | | 2.0 | 0.5 | 0.5 | 3.0 | 1.6 | 1.7 | 2.5 | 1.1 | 1.1 |
| Susceptible check (Wf9 × W182E) | | 3.0 | 2.2 | 2.0 | 2.0 | 2.3 | 2.3 | 2.5 | 2.2 | 2.2 |
| Resistant check (Pioneer Brand 3184) | | 2.0 | 0.5 | 2.7 | 2.0 | 0.8 | 0.8 | 2.0 | 0.7 | 1.8 |
| Mean | | 2.1 | 1.1 | 1.2 | 2.8 | 1.7 | 1.8 | 2.5 | 1.4 | 1.5 |
| LSD 0.05 | | 0.9 | 1.2 | 1.3 | ns | 1.3 | 1.4 | 0.7 | 0.9 | 0.9 |
| CV% | | 24.7 | 61.7 | 63.5 | | 47.0 | 47.4 | 25.4 | 53.1 | 54.1 |

Table 42. Corn earworm damage, percentage molded grain, and ear length data from the 1999 Early White Food Corn Performance Test at Lubbock, TX. New entries for 1999 are shown in italics.

| Entry | No. | CEW damage (inches) | Molded grain (%) | Ear length (inches) |
|---------------------------------|-----|---------------------|------------------|---------------------|
| AgriGold A6530W | 1 | 3.0 | 4.3 | 7.4 |
| Asgrow RX776W | 2 | 2.4 | 4.3 | 7.1 |
| DEKALB DK665W | 3 | 4.4 | 8.7 | 8.1 |
| Diener DB 114W | 4 | 3.3 | 4.3 | 8.0 |
| Garst 8527W | 5 | 3.4 | 6.7 | 7.0 |
| IFSI 90-1 | 6 | 3.6 | 6.0 | 7.3 |
| IFSI 95-2 | 7 | 4.1 | 5.0 | 7.3 |
| LG Seeds LG2558W | 8 | 3.7 | 6.0 | 7.9 |
| LG Seeds LG2596W | 9 | 3.2 | 5.0 | 7.1 |
| LG Seeds NB749W | 10 | 3.0 | 7.0 | 7.3 |
| Pioneer Brand 32H39 | 11 | 3.0 | 5.0 | 7.5 |
| Pioneer Brand 32K72 | 12 | 2.9 | 6.0 | 7.1 |
| Pioneer Brand 34P93 | 13 | 3.7 | 6.7 | 6.9 |
| <i>Pioneer Brand 32Y52</i> | 14 | 3.2 | 6.0 | 8.0 |
| <i>Pioneer Brand X1128BW</i> | 15 | 2.5 | 7.7 | 7.1 |
| <i>Pioneer Brand X1138AW</i> | 16 | 4.0 | 6.0 | 7.7 |
| Trisler T-4211W | 17 | 3.0 | 5.0 | 7.8 |
| Vineyard V433W | 18 | 3.8 | 5.0 | 7.5 |
| Whisnand 50AW | 19 | 3.8 | 5.0 | 7.4 |
| Whisnand 51AW | 20 | 3.7 | 5.0 | 7.6 |
| Zimmerman 1780W | 21 | 2.9 | 5.3 | 7.4 |
| Zimmerman 1790W | 22 | 4.3 | 4.7 | 7.9 |
| Zimmerman 1851W | 23 | 2.4 | 4.3 | 6.9 |
| Zimmerman N71-T7 | 24 | 2.4 | 3.0 | 7.6 |
| <i>Zimmerman NX 7208</i> | 25 | 2.6 | 5.0 | 7.3 |
| <i>Zimmerman Z76W</i> | 26 | 4.0 | 6.0 | 7.5 |
| Yellow check B73 × Mo17 | 27 | 3.8 | 6.0 | 6.8 |
| Yellow check Pioneer Brand 3394 | 28 | 3.5 | 5.3 | 7.7 |
| Mean | | 3.3 | 5.5 | 7.4 |
| LSD 0.05 | | 1.1 | ns | 0.6 |
| CV% | | 20.0 | | 4.8 |

Table 43. Combined grain quality data from the 1999 Early White Food Corn Performance Test grown at Champaign, IL; Marion, IA; Knoxville, TN; and Beresford, SD.

| Entry | No. | Test weight (lb/bu) | 100-kernel weight (g) | Kernel size (cc) | Thins [†] (%) | Kernel density (g/cc) | Horny endosp. (%) |
|---------------------------------|-----|---------------------|-----------------------|------------------|------------------------|-----------------------|-------------------|
| AgriGold A6530W | 1 | 61.6 | 28.5 | 0.22 | 36.4 | 1.32 | 84 |
| Asgrow RX776W | 2 | 62.1 | 28.0 | 0.21 | 57.6 | 1.34 | 84 |
| DEKALB DK665W | 3 | 63.5 | 35.9 | 0.27 | 18.2 | 1.34 | 88 |
| Diener DB 114W | 4 | 61.5 | 28.9 | 0.22 | 21.9 | 1.31 | 83 |
| Garst 8527W | 5 | 60.9 | 28.9 | 0.22 | 32.1 | 1.32 | 86 |
| IFSI 90-1 | 6 | 63.3 | 32.8 | 0.25 | 26.4 | 1.34 | 86 |
| IFSI 95-2 | 7 | 62.9 | 31.6 | 0.24 | 27.5 | 1.33 | 85 |
| LG Seeds LG2558W | 8 | 60.9 | 31.2 | 0.24 | 27.1 | 1.30 | 81 |
| LG Seeds LG2596W | 9 | 63.2 | 32.5 | 0.24 | 21.4 | 1.34 | 90 |
| LG Seeds NB749W | 10 | 62.3 | 33.3 | 0.25 | 26.7 | 1.32 | 81 |
| Pioneer Brand 32H39 | 11 | 62.2 | 28.6 | 0.23 | 51.3 | 1.34 | 88 |
| Pioneer Brand 32K72 | 12 | 62.5 | 31.3 | 0.24 | 42.3 | 1.34 | 90 |
| Pioneer Brand 34P93 | 13 | 62.6 | 30.4 | 0.23 | 57.5 | 1.34 | 93 |
| <i>Pioneer Brand 32Y52</i> | 14 | 62.5 | 33.2 | 0.25 | 23.2 | 1.34 | 89 |
| <i>Pioneer Brand X1128BW</i> | 15 | 60.8 | 32.2 | 0.25 | 25.7 | 1.33 | 88 |
| <i>Pioneer Brand X1138AW</i> | 16 | 62.0 | 32.2 | 0.25 | 25.0 | 1.32 | 91 |
| Trisler T-4211W | 17 | 62.5 | 29.9 | 0.23 | 35.9 | 1.32 | 83 |
| Vineyard V433W | 18 | 61.7 | 31.3 | 0.24 | 59.1 | 1.31 | 84 |
| Whisnand 50AW | 19 | 62.7 | 30.7 | 0.24 | 29.6 | 1.31 | 85 |
| Whisnand 51AW | 20 | 63.1 | 33.2 | 0.25 | 26.0 | 1.34 | 86 |
| Zimmerman 1780W | 21 | 59.9 | 28.8 | 0.22 | 21.3 | 1.30 | 80 |
| Zimmerman 1790W | 22 | 61.4 | 28.8 | 0.22 | 22.0 | 1.31 | 84 |
| Zimmerman 1851W | 23 | 61.3 | 35.0 | 0.26 | 9.5 | 1.33 | 84 |
| Zimmerman N71-T7 | 24 | 61.7 | 29.0 | 0.22 | 40.3 | 1.31 | 81 |
| <i>Zimmerman NX 7208</i> | 25 | 62.0 | 28.7 | 0.22 | 50.6 | 1.32 | 83 |
| <i>Zimmerman Z76W</i> | 26 | 61.7 | 33.2 | 0.25 | 17.7 | 1.33 | 88 |
| Yellow check B73 × Mo17 | 27 | 60.1 | 28.8 | 0.22 | 40.5 | 1.28 | 77 |
| Yellow check Pioneer Brand 3394 | 28 | 61.2 | 33.8 | 0.26 | 25.5 | 1.30 | 85 |
| Mean | | 62.0 | 31.1 | 0.24 | 32.1 | 1.32 | 85 |
| LSD 0.05 | | 1.0 | 2.8 | 0.02 | 12.4 | 0.02 | 4 |
| CV% | | 1.2 | 6.5 | 6.4 | 27.6 | 0.9 | 3.6 |

[†] Percent of a 250-kernel sample passing through a 20/64" round-hole sieve.

Table 44. Yield and agronomic data from common entries in the 1998-1999 Early White Food Corn Performance Tests.

| Entry | Years (no) | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|---------------|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| AgriGold A6530W | 2 | 165.8 | 92.5 | 6.1 | 4.4 | 52.3 | 76.3 | 20.7 |
| Asgrow RX776W | 2 | 164.5 | 90.3 | 1.8 | 2.2 | 40.3 | 76.8 | 21.7 |
| DEKALB DK665W | 2 | 157.4 | 92.3 | 3.6 | 2.4 | 49.5 | 76.5 | 21.2 |
| Diener DB 114W | 2 | 166.5 | 90.2 | 8.6 | 3.6 | 50.0 | 77.4 | 22.1 |
| Garst 8527W | 2 | 138.6 | 85.7 | 0.7 | 4.6 | 40.9 | 73.6 | 17.8 |
| IFSI 90-1 | 2 | 167.9 | 87.7 | 5.6 | 3.7 | 56.4 | 77.2 | 21.7 |
| IFSI 95-2 | 2 | 170.0 | 90.4 | 9.8 | 5.0 | 58.9 | 77.6 | 20.7 |
| LG Seeds LG2558W | 2 | 151.3 | 89.9 | 2.6 | 3.9 | 41.4 | 75.3 | 19.4 |
| LG Seeds LG2596W | 2 | 156.0 | 89.9 | 4.2 | 2.4 | 41.8 | 75.2 | 19.8 |
| LG Seeds NB749W | 2 | 167.5 | 91.0 | 8.4 | 3.5 | 57.8 | 77.7 | 22.8 |
| Pioneer Brand 32H39 | 2 | 167.3 | 92.6 | 6.2 | 2.4 | 48.9 | 76.3 | 20.9 |
| Pioneer Brand 32K72 | 2 | 184.3 | 92.6 | 4.2 | 5.0 | 49.9 | 77.2 | 20.8 |
| Pioneer Brand 34P93 | 2 | 172.4 | 93.0 | 4.5 | 5.6 | 45.4 | 74.7 | 19.0 |
| Vineyard V433W | 2 | 177.1 | 91.6 | 5.7 | 5.4 | 51.4 | 76.1 | 21.4 |
| Whisnand 50AW | 2 | 174.2 | 91.5 | 10.4 | 4.6 | 60.3 | 78.1 | 20.8 |
| Whisnand 51AW | 2 | 165.1 | 91.2 | 6.0 | 4.4 | 57.8 | 78.6 | 21.4 |
| Zimmerman 1780W | 2 | 172.0 | 91.4 | 7.8 | 6.7 | 48.2 | 77.3 | 23.3 |
| Zimmerman 1790W | 2 | 176.5 | 92.1 | 7.4 | 6.4 | 50.0 | 77.2 | 22.1 |
| Zimmerman 1851W | 2 | 178.0 | 90.0 | 9.1 | 1.4 | 50.6 | 79.1 | 24.4 |
| Zimmerman N71-T7 | 2 | 170.3 | 91.9 | 9.5 | 3.1 | 54.2 | 77.0 | 21.0 |
| Yellow check B73 × Mo17 | 2 | 166.6 | 92.4 | 8.2 | 4.1 | 53.3 | 76.5 | 20.7 |
| Yellow check Pioneer Brand 3394 | 2 | 161.7 | 92.9 | 4.2 | 5.9 | 50.7 | 76.6 | 18.2 |
| Mean | | 166.9 | 91.0 | 6.1 | 4.1 | 50.4 | 76.7 | 21.0 |

Table 45. Yield and agronomic data from common entries in the 1997-1999 Early White Food Corn Performance Tests.

| Entry | Years (no) | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|---------------|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| Asgrow RX776W | 3 | 160.9 | 92.3 | 2.3 | 3.5 | 41.0 | 79.2 | 21.9 |
| DEKALB DK665W | 3 | 146.6 | 94.0 | 3.1 | 5.5 | 48.9 | 79.0 | 21.4 |
| Diener DB 114W | 3 | 160.0 | 91.0 | 7.9 | 6.5 | 49.7 | 80.2 | 22.8 |
| Garst 8527W | 3 | 132.8 | 85.3 | 0.5 | 6.3 | 41.0 | 76.0 | 17.9 |
| IFSI 90-1 | 3 | 157.4 | 89.9 | 4.3 | 7.2 | 55.0 | 80.1 | 21.8 |
| IFSI 95-2 | 3 | 162.1 | 92.8 | 7.7 | 9.7 | 58.8 | 80.4 | 20.9 |
| LG Seeds LG2558W | 3 | 147.2 | 90.8 | 2.3 | 6.9 | 41.5 | 77.8 | 19.9 |
| LG Seeds LG2596W | 3 | 146.8 | 87.9 | 3.2 | 5.3 | 41.3 | 77.6 | 20.2 |
| LG Seeds NB749W | 3 | 159.8 | 93.7 | 7.2 | 8.9 | 56.3 | 80.8 | 23.3 |
| Pioneer Brand 32H39 | 3 | 164.7 | 94.2 | 7.2 | 4.5 | 48.6 | 78.6 | 21.4 |
| Whisnand 50AW | 3 | 162.5 | 92.8 | 9.4 | 10.0 | 59.3 | 80.7 | 21.1 |
| Whisnand 51AW | 3 | 154.4 | 92.6 | 6.3 | 9.3 | 56.2 | 80.8 | 21.8 |
| Zimmerman 1780W | 3 | 163.2 | 92.5 | 7.5 | 8.7 | 48.6 | 80.2 | 23.8 |
| Zimmerman 1790W | 3 | 163.7 | 91.9 | 6.0 | 7.9 | 49.5 | 79.7 | 22.7 |
| Yellow check B73 × Mo17 | 3 | 153.3 | 93.9 | 5.8 | 8.1 | 52.9 | 78.7 | 20.9 |
| Yellow check Pioneer Brand 3394 | 3 | 161.4 | 94.8 | 3.1 | 6.8 | 49.6 | 79.0 | 18.3 |
| Mean | | 156.1 | 91.9 | 5.2 | 7.2 | 49.9 | 79.3 | 21.3 |

Table 46. Yield and agronomic data from common entries in the 1996-1999 Early White Food Corn Performance Tests.

| Entry | Years (no) | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|------------|--------------|-----------|-----------------|------------------|-----------------|---------------------|------------|
| Garst 8527W | 4 | 134.3 | 87.8 | 0.5 | 10.6 | 40.1 | 77.3 | 18.1 |
| IFSI 90-1 | 4 | 156.4 | 90.4 | 3.6 | 12.4 | 54.0 | 81.9 | 21.7 |
| IFSI 95-2 | 4 | 160.2 | 93.6 | 6.1 | 15.2 | 57.4 | 81.8 | 20.9 |
| LG Seeds NB749W | 4 | 155.8 | 94.0 | 5.7 | 14.4 | 54.3 | 82.2 | 23.0 |
| Pioneer Brand 32H39 | 4 | 162.9 | 95.4 | 5.8 | 10.1 | 47.8 | 80.0 | 21.2 |
| Whisnand 50AW | 4 | 160.9 | 94.0 | 7.9 | 15.2 | 57.7 | 82.1 | 21.0 |
| Whisnand 51AW | 4 | 154.5 | 94.1 | 5.8 | 15.2 | 54.7 | 82.4 | 21.7 |
| Zimmerman 1780W | 4 | 161.2 | 94.5 | 5.8 | 12.9 | 47.6 | 81.9 | 24.0 |
| Zimmerman 1790W | 4 | 162.0 | 93.1 | 5.1 | 12.0 | 48.2 | 81.5 | 23.1 |
| Yellow check B73 x Mo17 | 4 | 152.2 | 94.1 | 4.9 | 13.4 | 51.4 | 80.3 | 21.0 |
| Yellow check Pioneer Brand 3394 | 4 | 159.9 | 94.9 | 2.5 | 11.8 | 47.8 | 80.5 | 18.6 |
| Mean | | 156.4 | 93.3 | 4.9 | 13.0 | 51.0 | 81.1 | 21.3 |

| DUE | RETURNED |
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BOOKS MAY BE RECALLED BEFORE THEIR DUE DATES

Table 47. Yield and agronomic data from common entries in the 1995-1999 Early White Food Corn Performance Tests.

| Entry | Years (no) | Yield (bu/a) | Stand (%) | Root lodged (%) | Stalk lodged (%) | Ear height (in) | Days to flower (no) | Moist. (%) |
|---------------------------------|---------------|-----------------|--------------|-----------------------|------------------------|-----------------------|---------------------------|---------------|
| IFSI 90-1 | 5 | 152.6 | 91.0 | 3.2 | 11.2 | 53.1 | 79.9 | 21.2 |
| IFSI 95-2 | 5 | 155.2 | 92.7 | 5.4 | 13.8 | 56.6 | 79.8 | 20.4 |
| LG Seeds NB749W | 5 | 152.8 | 94.6 | 4.8 | 12.4 | 53.2 | 80.2 | 22.6 |
| Whisnand 51AW | 5 | 150.4 | 93.8 | 4.7 | 13.2 | 53.7 | 80.3 | 21.2 |
| Zimmerman 1780W | 5 | 157.4 | 93.9 | 5.1 | 12.2 | 46.9 | 79.9 | 23.7 |
| Zimmerman 1790W | 5 | 156.3 | 93.0 | 4.4 | 10.3 | 47.4 | 79.6 | 22.7 |
| Yellow check B73 × Mo17 | 5 | 150.1 | 93.3 | 4.1 | 11.6 | 50.6 | 78.2 | 20.6 |
| Yellow check Pioneer Brand 3394 | 5 | 157.5 | 94.7 | 2.3 | 10.6 | 46.7 | 78.6 | 18.2 |
| Mean | | 154.0 | 93.4 | 4.3 | 11.9 | 51.0 | 79.6 | 21.3 |

