# Report of the
# INTER-REGIONAL MAIZE INBRED EVALUATION

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# COOPERATING INSTITUTIONS
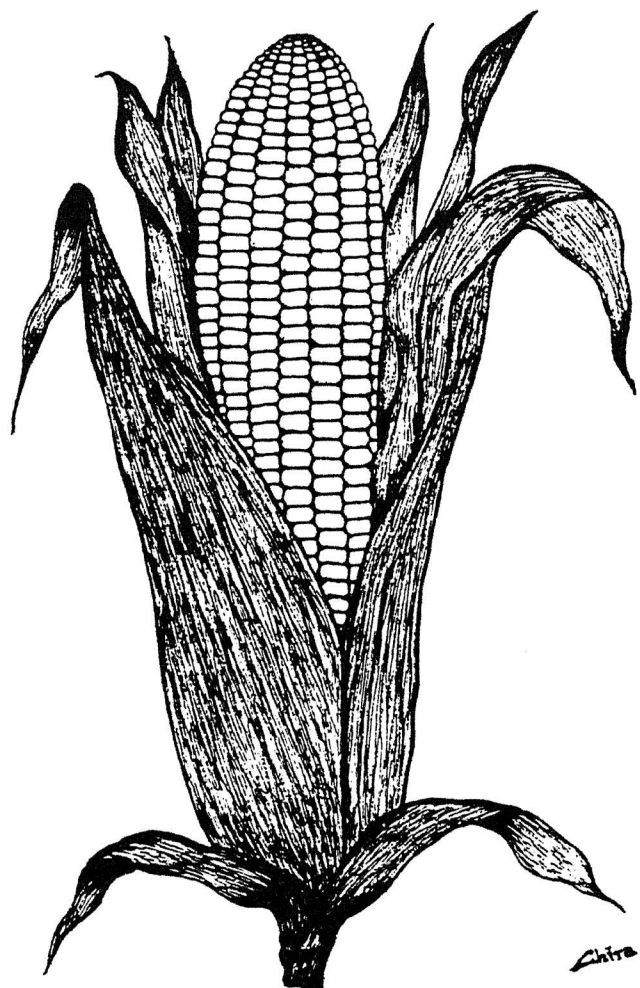
United States Department of Agriculture, Agricultural Research Service

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                                        Iowa
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  Michigan
  Minnesota
  Missouri
  Nebraska
  North Dakota
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## FORWARD

The North Central Corn Breeding Committee truly exemplifies the sharing of research efforts between the public and private industries. Today's farmers are searching for a means of survival, i.e., more efficient crop production, improved maize crop productivity, and better marketability of the final product. Improved standability, more rapid drydown, and insect and disease resistance helps the farmer solve some of his problems. This committee cooperates with maize scientists of other regions, the Agricultural Research Service, USDA, and private industry. The input of scientists of other disciplines is a very important adjunct.

I wholeheartedly endorse this regional publication, Report of the Inter-regional Maize Inbred Evaluation. The Inbred Line Evaluation Committee is to be commended for their effort and results as outlined in this manuscript.

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Administrative Advisor, NCR-2
University of Nebraska Agricultural Research Division

## INTRODUCTION

The Inter-regional Maize Inbred Evaluation (IRMIE) was sponsored by the North Central Corn Breeding Research Committee (NCR-2), Northeastern Corn Improvement Conference (NEC-29), and Southern Corn Improvement Conference (SCIC). The evaluation compares agronomic performance and disease and insect responses of important public maize inbred lines in five AES maturity groups: 100-300, 400-600, 700-800, 900-1000, and 1100-1200.

The evaluation was initially planned for 1981, but poor seed production conditions in 1980 contributed to a limited number of entries in some of the maturity groupings. Seed distributed in January 1981 was heldover following a postponement decision at the 1981 NCR-2 meeting. Additional entries were received and distributed for growing in 1982.

Table I lists the entries in the five maturity groups with the check entries marked with an asterisk. Table II summarizes the tables for each maturity grouping. For each maturity grouping, the agronomic data are presented first, then the data for disease susceptibility, followed by insect susceptibility data, and lastly data on trifluralin tolerance. To locate specific information, find the maturity group of the inbred in question and then locate the appropriate table number in Table II for the desired character. Cooperators contributing to a given maturity evaluation are listed at the beginning of each maturity group's data. A brief description of the data collected and statistical analysis follows on page 6.

Submitted by the inter-regional committee on inbred line evaluation.

L. F. Bauman, NCR-2
C. E. Manchester, NEC-29
W. A. Russell, NCR-2
G. E. Scott, SCIC
L. L. Darrah, NCR-2, Chairman

Table I.  Inbreds and maturity groups in the inter-regional maize evaluation.

| Number | 100-300 | 400-600 | 700-800 | 900-1000 | 1100-1200 |
|--------|---------|---------|---------|----------|-----------|
| 1  | CM105 * | A619 *     | B73 *   | CI66 *    | SC76 *   |
| 2  | CO109 * | A632 *     | Mo17 *  | FR802W *  | SC213 *  |
| 3  | A661    | B85        | N28Ht * | FR805W *  | T232 *   |
| 4  | A665    | A634       | B68     | Ga209     | GT112RF  |
| 5  | A666    | A635       | B75     | Mo17      | NC246    |
| 6  | A671    | A659       | B76     | T145      | NC248    |
| 7  | ND100   | A670       | B77     | T147      | SC12     |
| 8  | ND240   | Mo42       | B79     | T151      | SC43     |
| 9  | ND241   | AY499      | B84     | T153      | SC55     |
| 10 | ND245   | NY562      | Mo14W   | T155      | Mp496    |
| 11 | ND246   | NY378      | Mo20W   | T159      | Tx601    |
| 12 | ND300   | NY821LERF  | Mo40    | T250      |          |
| 13 | ND301   | NYD410     | Mo42    | T254      |          |
| 14 | ND376   | NYRW3      | N132    | T256      |          |
| 15 | ND408   | NYRW20     | N139    | T258      |          |
| 16 | ND474   | NYRW23     | N152    | Ar258     |          |
| 17 | Pa326   | Pa405      | Oh509A  | Ar262     |          |
| 18 | Pa329   | FR19       | Oh514   | Ar266     |          |
| 19 | Pa373   | CH9        | Pa91    | Tx29A     |          |
| 20 | Pa374   | CH581-13   | Pa762   | Tx61M     |          |
| 21 | CK52    | CH586-12   | Pa871   | Tx403     |          |
| 22 | CK64    | CH591-36   | Pa872   | Tx5855    |          |
| 23 | CK69    | CH592-46   | FR16    | Tx6252    |          |
| 24 | CK75    | CH593-9    | FR20    |           |          |
| 25 | CG11    | CH606-11   | FR21    |           |          |
| 26 | CG12    | CH663-8    | H60     |           |          |
| 27 | CG13    | B87        | H84     |           |          |
| 28 | CG14    | Ms71       | H93     |           |          |
| 29 | CG15    | Ms75       | H98     |           |          |
| 30 | CG16    | Ms76       | H100    |           |          |
| 31 | CG17    | Ms200      | H102    |           |          |
| 32 | CG18    | H95        | H103    |           |          |
| 33 | CL1     | H99        |         |           |          |
| 34 | Ms72    | W64A *     |         |           |          |
| 35 | Ms74    | W548       |         |           |          |
| 36 | W117Ht * | W552C     |         |           |          |
| 37 |         | W562       |         |           |          |
| 38 |         | W570       |         |           |          |
| 39 |         | CH753-4    |         |           |          |
| 40 |         | CH671-28   |         |           |          |

Table II.  Data table numbers by maturity group and character.

| Character | Maturity group | | | | |
|---|---|---|---|---|---|
| | 100-300 | 400-600 | 700-800 | 900-1000 | 1100-1200 |
| **Agronomic characters:** | | | | | |
| Yield | 1 | 24 | 47 | 70 | 90 |
| Stand | 2 | 25 | 48 | 71 | 91 |
| Root lodging | 3 | 26 | 49 | 72 | 92 |
| Stalk lodging | 4 | 27 | 50 | 73 | 93 |
| Usable ears | 5 | 28 | 51 | 74 | 94 |
| Plant height | 6 | 29 | 52 | 75 | 95 |
| Ear height | 7 | 30 | 53 | 76 | 96 |
| Moisture | 8 | 31 | 54 | 77 | 97 |
| Days-to-tassel | 9 | 32 | 55 | 78 | 98 |
| Days-to-silk | 10 | 33 | 56 | 79 | 99 |
| Ear row number | 11 | 34 | 57 | 80 | 100 |
| Ear length | 12 | 35 | 58 | 81 | 101 |
| Ear diameter | 13 | 36 | 59 | 82 | 102 |
| 300-kernel weight | 14 | 37 | 60 | 83 | 103 |
| Stalk crushing strength | 15 | 38 | 61 | 84 | 104 |
| **Disease reactions:** | | | | | |
| Bacterial wilts | 16 | 39 | 62 | 85 | 105 |
| Ear rots | 17 | 40 | 63 | -- | --- |
| Fungal leaf diseases and rust | 18 | 41 | 64 | 86 | 106 |
| Smuts | 19 | 42 | 65 | 87 | 107 |
| Stalk rots | 20 | 43 | 66 | -- | --- |
| Viruses | 21 | 44 | 67 | 88 | 108 |
| Insect reactions | 22 | 45 | 68 | 89 | 109 |
| Trifluralin tolerance | 23 | 46 | 69 | -- | --- |

# DATA COLLECTED

## Agronomic Characters

### Yield
Twenty competitive plants per plot were harvested and dried to a uniform moisture. Plot weights were adjusted to 15.5 percent moisture and converted to quintals per hectare (q/ha).

### Stand
The number of counted plants per plot was expressed as a percent of the number that represented 100 percent stand.

### Root lodging
Plants that lean more than 30 degrees from vertical were counted and expressed as a percent of the counted stand.

### Stalk lodging
Plants that were broken over or off at or below the ear bearing node were counted and expressed as a percent of the counted stand.

### Usable ears
The number of usable ears was expressed as a percent of the 20 plants harvested for yield.

### Plant height
Heights of 10 random competitive plants per plot were measured in centimeters from the ground to the top leaf collar and the mean calculated.

### Ear height
Heights of 10 random competitive plants per plot were measured in centimeters from the ground to the top ear node and the mean calculated.

### Moisture
Grain weights at harvest and after drying were used to determine grain moisture at harvest. However, at some locations it is possible that grain moistures reported were obtained using a moisture meter either at harvest or after drying.

### Days-to-tassel
The number of days from planting to 50 percent anthesis was reported.

### Days-to-silk
The number of days from planting to 50 percent silk emergence was reported.

### Ear row number
The number of kernel rows on 10 random top ears were counted and the mean calculated.

### Ear length
The lengths of 10 random top ears were measured in centimeters and the mean calculated.

Ear diameter
The diameters of 10 random top ears were measured in centimeters and the mean calculated.

300-kernel weight
After shelling, 300 random kernels were counted and weighed in grams.

Stalk crushing strength
Stalk sections from 10 competitive plants were obtained and crushed vertically using an automated hydraulic press.  The mean force required to crush the sections is expressed in load-kilograms.


Disease Reactions


Various rating scales were used for evaluating disease and insect reactions. In these, a rating of 0 or 1 represented a resistant plant and 5 or 9 represented susceptibility.

Bacterial wilts
Stewart's wilt (Erwinia stewartii) was rated on a 1 to 5 scale.

Goss' wilt (Corynebacterium nebraskense) was rated on a 1 to 9 scale.

Ear rots
Fusarium ear rot (Fusarium moniliforme) was rated on a 1 to 9 scale.

Gibberella ear rot (Gibberella zeae) was rated on a 0 to 5 scale.

Fungal leaf diseases
Eyespot (Kabatiella zeae) was rated on a 1 to 5 scale.

Northern leaf spot (Helminthosporium carbonum) was rated on a 1 to 5 scale.

Southern leaf blight (H. maydis) was rated on a 1 to 5 scale.  The percent leaf area affected was estimated for two dates.

Northern leaf blight (H. turcicum) was rated on 1 to 5 and 0 to 5 scales at different locations.  The percent of leaf area affected was estimated for race 1 and race 2 for a single date.

Southern leaf rust (Puccinia polysora) was rated on a 0 to 9 scale.

Smuts
Common smut (Ustilago maydis)  was reported as percent infected plants.

Head smut (Sphacelotheca reiliana) was reported as percent infected plants.

Stalk rots
Anthracnose stalk rot (Colletotrichum graminicola) was rated on a 1 to 5 scale.  In addition, the number of internodes infected and the number of internodes with greater than 50 percent infection were reported.

Diplodia stalk rot (<u>Diplodia</u> <u>maydis</u>) was rated on a 1 to 5 scale.

Stalk rot <u>per</u> <u>se</u> was reported as percent infected plants.

<u>Viruses</u>
Maize chlorotic dwarf virus (MCDV) was reported as percent infected plants.

Maize dwarf mosiac virus (MDMV) was reported as percent infected plants. In addition, a rating scale of 1 to 5 was used a some locations.

Corn lethal necrosis (CLN) was rated on a 1 to 9 scale.

Virus severity was rated on a 1 to 5 scale.


## Insect Reactions


First and second generation European corn borer (ECB, <u>Ostrinia</u> <u>nubilalis</u>) damage was rated on a 1 to 9 scale.

Corn ear worm (CEW, <u>Heliothis</u> <u>zeae</u>) damage was determined by measuring the depth of penetration into the ear in centimeters.

Fall armyworm (FAW, <u>Spodoptera</u> <u>frugiperda</u>) damage was rated on a scale of 0 to 9.

Southwestern corn borer (SWCB, <u>Diatraea</u> <u>grandiosella</u>) damage was rated on a scale of 1 to 9.


## Trifluralin Tolerance


Trifluralin tolerance was rated on an open-ended index where 0 was the lowest rating and high values represent greater tolerance.


## STATISTICAL ANALYSES


Three replications of a randomized complete block design were grown, although some locations, for some variables, used one or two replications. Four rep-lications were used for fall armyworm evaluation. Where the number of repli-cations differed from three, a footnote indicates what was used.

Many plots were missing because of poor stands. No missing-plot calculation or averaging of the remaining replications was done. Where plots were missing, that is indicated by a footnote. Occasionally, an entry was missing in all replications and that is indicated by a "." in the body of the table.

Analyses were completed using the General Linear Models procedure of the Statistical Analysis System (SAS Institute, Inc., P. O. Box 10066, Raleigh, NC 27605). That procedure correctly calculates means and sums of squares for

unbalanced data. The least significant difference at P=0.05 (LSD 0.05) and coefficient of variation percentage (CV%) were calculated in the usual manner for each character at each location. Analysis of the combined data assumed that environments were random effects and the LSD 0.05 and CV% were calculated using the genotype-by-environment mean square.

Inbred lines which had very low stands were not discarded because the information that was obtained may be useful. Certainly, in such cases, yield, lodging, usable ears, and the ear characteristic data are to be viewed with much caution. It was also assumed, unless otherwise noted, that cooperators followed the distributed protocol for obtaining data as described in the **DATA COLLECTED** section.

## COOPERATORS CONTRIBUTING TO THE 100-300 MATURITY EVALUATION:
(In order of character presentation in the tables)

| Cooperator | Site code | Organization and location | Characters |
|---|---|---|---|
| Rossman | MI | Michigan State Univ., East Lansing | Agronomic |
| Geadelmann | MN | Univ. of Minnesota, St. Paul | Agronomic |
| Darrah | MO | USDA/Univ. of Missouri, Columbia | Agronomic |
| Cross | ND | North Dakota State Univ., Fargo | Agronomic |
| Kannenberg | CANGUE | Univ. of Guelph, Guelph, Ontario | Agronomic |
| Hamilton | CANBDN | Agric. Canada, Brandon, Manitoba | Agronomic |
| Hudon | CANSTJ | Agric. Canada, St-Jean-sur-Richelieu, Quebec | Agronomic |
| Politowski | MO | Pfizer Genetics, St. Louis | Stewart's wilt |
| Trainor | IL | Northrup, King & Co., St. Joseph | Stewart's wilt |
| Turner | NE | Funk Seeds International, Clearwater | Goss' wilt |
| Trainor | MN | Northrup, King & Co., Eden Prarie | Fusarium ear rot |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | Gibberella ear rot Eyespot |
| Hudon | CANSTJ | Agric. Canada, St-Jean-sur-Richelieu, Quebec | Eyespot |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | North. leaf spot |
| White | IL | Univ. of Illinios, Urbana | South. leaf blight North. leaf blight |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | North. leaf blight |
| Hudon | CANSTJ | Agric. Canada, St-Jean-sur-Richelieu, Quebec | Common smut |
| Bockholt and Frederiksen | TX | Texas A&M Univ., Halfway | Head smut |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | Anthracnose stalk rot |
| Trainor | WI | Northrup, King & Co., Glen Haven | Anthracnose stalk rot |
| White | IL | Univ. of Illinois | Anthracnose stalk rot Diplodia stalk rot |
| Hudon | CANSTJ | Agric. Canada, St-Jean-sur-Richelieu, Quebec | Stalk rot |
| Findley and Louie | OH | USDA/OARDC, Wooster | MCDV MDMV Virus rating |
| Turner | KS | Funk Seeds International, Norton | CLN |
| Guthrie | IA | USDA | European corn borer |
| Penner, Roggenbuck, and Rossman | MI | Michigan State Univ., East Lansing | Trifluralin tolerance |

Table 1. Yield (q/ha) evaluation of the 100-300 maturity inbred
         lines.

| Entry | No. | MI | MN | ND | CANGUE | CANBDN | CANSTJ | Mean |
|-------|-----|------|------|------|--------|--------|--------|------|
| CM105 * | 1 | 21.8 | 41.2 | 6.6 | 15.0 | 6.0 | 31.7 | 20.4 |
| CO109 * | 2 | 18.1 | 46.6 | 20.4 | 9.0 | 9.4 | 18.0 | 20.3 |
| A661 | 3 | 33.1 | 47.7 | 16.0 | 13.5 | 16.9 | 28.8 | 26.0 |
| A665 | 4 | 32.8 | 42.7 | 12.8 | 6.4 | 3.2 | 17.4 | 19.2 |
| A666 | 5 | 38.7 | 58.8 | 21.6 | 24.1 | 10.2 | 28.9+ | 30.5 |
| A671 | 6 | 29.7 | 44.2 | 14.1 | 9.1 | 0.2 | 21.7 | 19.9 |
| ND100 | 7 | 25.9 | 34.8 | 10.9 | 15.0 | 12.3 | 13.4 | 18.7 |
| ND240 | 8 | 24.0 | 39.2 | 20.5 | 12.4 | 4.9 | 8.3+ | 18.8 |
| ND241 | 9 | 18.7 | 31.5 | 19.4 | 6.8 | 8.4 | 16.8 | 16.9 |
| ND245 | 10 | 21.7 | 32.8 | 11.5 | 10.1 | 9.4 | 24.4 | 18.3 |
| ND246 | 11 | 23.9 | 36.8 | 14.3 | 11.8 | 11.7 | 26.3 | 20.8 |
| ND300 | 12 | 25.3 | 42.8 | 14.8 | 7.9 | 3.5 | 10.5+ | 17.9 |
| ND301 | 13 | 36.0 | 46.4 | 16.4 | 13.7 | 10.5 | 25.3 | 24.7 |
| ND376 | 14 | 28.0 | 35.0 | 10.7 | 6.4 | 0.8+ | 13.3 | 16.6 |
| ND408 | 15 | 23.2 | 28.1 | 19.7 | 5.0 | 2.6 | 8.4 | 14.5 |
| ND474 | 16 | 22.3 | 40.0 | 23.8 | 5.2++ | 3.0 | 15.8 | 20.0 |
| Pa326 | 17 | 33.0 | 42.2 | 14.6 | 19.9+ | 10.5 | 27.5 | 24.9 |
| Pa329 | 18 | 41.8 | 50.8 | 18.6 | 11.3 | 1.0+ | 7.7+ | 24.1 |
| Pa373 | 19 | 25.3 | . | . | . | . | . | 25.3 |
| Pa374 | 20 | 41.9 | . | . | . | 3.3++ | . | 32.3 |
| CK52 | 21 | 18.9 | 33.7 | 19.4 | 12.9 | 16.9 | 29.3 | 21.8 |
| CK64 | 22 | 10.6 | 29.3 | 17.5 | 13.8 | 12.1 | 17.7 | 16.8 |
| CK69 | 23 | 23.2 | 39.5 | 19.4 | 21.4 | 9.5 | 18.9 | 22.0 |
| CK75 | 24 | 5.9 | 17.3 | 8.7 | 6.1 | 10.9 | 9.9 | 9.8 |
| CG11 | 25 | 28.5 | 31.8 | 15.6 | 19.1 | 14.4 | 26.6 | 22.7 |
| CG12 | 26 | 26.0 | 38.6 | 17.3 | 12.7 | 13.9 | 17.8 | 21.1 |
| CG13 | 27 | 19.2 | 39.1 | 15.2 | 13.6 | 4.8 | 17.5 | 18.2 |
| CG14 | 28 | 21.3 | 31.5 | 20.5 | 15.3 | 18.4 | 28.6 | 22.6 |
| CG15 | 29 | 27.1 | 26.0 | 15.4 | 10.3 | 7.9 | 24.9 | 18.6 |
| CG16 | 30 | 40.2 | 49.1 | 16.5 | 23.0 | 11.7 | 23.7 | 27.4 |
| CG17 | 31 | 38.7 | 40.9 | 14.9 | 22.0 | 12.0 | 35.7 | 27.4 |
| CG18 | 32 | 37.1 | 39.4 | 20.5 | 17.6 | 11.4 | 29.2 | 25.8 |
| CL1 | 33 | 13.5 | 27.7 | 15.0 | 9.9 | 12.0 | 16.5 | 15.8 |
| Ms72 | 34 | 33.9 | 41.8 | 11.4 | 6.2 | 0.1++ | 8.0+ | 19.7 |
| Ms74 | 35 | 23.4 | 35.9 | 19.6 | 16.2 | 14.0 | 24.9 | 22.3 |
| W117H† * | 36 | 23.9 | 51.4 | 13.3 | 6.7 | 11.3 | 16.2 | 20.5 |
| Mean | | 26.6 | 38.7 | 16.1 | 12.7 | 9.3 | 20.7 | 20.8 |
| LSD 0.05 | | 2.0 | 6.1 | 4.7 | 4.6 | 4.9 | 10.2 | 6.4 |
| CV% | | 4.5 | 9.6 | 18.0 | 22.4 | 32.1 | 30.1 | 47.3 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

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Table 2. Stand (percent) evaluation of the 100-300 maturity inbred lines.

| Entry | No. | MN | ND | CANGUE | CANBDN | CANSTJ | Mean |
|-------|-----|------|------|--------|--------|--------|------|
| CM105 * | 1 | 88.9 | 81.1 | 97.2 | 65.6 | 80.0 | 82.6 |
| C0109 * | 2 | 68.5 | 81.1 | 90.3 | 62.2 | 74.4 | 75.3 |
| A661 | 3 | 88.9 | 87.8 | 100.0 | 75.6 | 90.0 | 88.4 |
| A665 | 4 | 85.2 | 84.4 | 86.1 | 68.9 | 65.6 | 78.0 |
| A666 | 5 | 81.5 | 83.3 | 100.0 | 52.2 | 62.2 | 75.9 |
| A671 | 6 | 88.9 | 77.8 | 98.6 | 53.3 | 80.0 | 79.7 |
| ND100 | 7 | 96.3 | 85.6 | 100.0 | 70.0 | 67.8 | 83.9 |
| ND240 | 8 | 94.4 | 82.2 | 98.6 | 40.0 | 62.2 | 75.5 |
| ND241 | 9 | 85.2 | 86.7 | 100.0 | 70.0 | 68.9 | 82.1 |
| ND245 | 10 | 85.2 | 80.0 | 100.0 | 55.6 | 74.4 | 79.0 |
| ND246 | 11 | 98.1 | 87.8 | 95.8 | 76.7 | 74.4 | 86.6 |
| ND300 | 12 | 70.4 | 66.7 | 70.8 | 53.3 | 45.6 | 61.4 |
| ND301 | 13 | 92.6 | 87.8 | 93.1 | 64.4 | 86.7 | 84.9 |
| ND376 | 14 | 75.9 | 67.8 | 59.7 | 51.7+ | 52.2 | 62.2 |
| ND408 | 15 | 87.0 | 83.3 | 97.2 | 58.9 | 77.8 | 80.9 |
| ND474 | 16 | 38.9 | 58.9 | 27.8 | 12.2 | 55.6 | 38.7 |
| Pa326 | 17 | 61.1 | 75.6 | 100.0 | 63.3 | 76.7 | 75.3 |
| Pa329 | 18 | 29.6 | 55.6 | 77.8 | 15.0+ | 16.7+ | 42.5 |
| Pa373 | 19 | . | . | 15.3 | . | . | 15.3 |
| Pa374 | 20 | . | . | 15.3 | 20.0++ | . | 16.5 |
| CK52 | 21 | 83.3 | 85.6 | 100.0 | 66.7 | 80.0 | 83.1 |
| CK64 | 22 | 74.1 | 77.8 | 90.3 | 60.0 | 70.0 | 74.4 |
| CK69 | 23 | 94.4 | 75.6 | 100.0 | 56.7 | 54.4 | 76.2 |
| CK75 | 24 | 94.4 | 85.6 | 100.0 | 78.9 | 88.9 | 89.6 |
| CG11 | 25 | 90.7 | 87.8 | 98.6 | 75.6 | 80.0 | 86.5 |
| CG12 | 26 | 96.3 | 90.0 | 100.0 | 56.7 | 58.9 | 80.4 |
| CG13 | 27 | 94.4 | 84.4 | 100.0 | 31.1 | 88.9 | 79.8 |
| CG14 | 28 | 94.4 | 87.8 | 100.0 | 76.7 | 94.4 | 90.7 |
| CG15 | 29 | 87.0 | 83.3 | 97.2 | 54.4 | 68.9 | 78.2 |
| CG16 | 30 | 83.3 | 54.4 | 98.6 | 53.3 | 83.3 | 74.6 |
| CG17 | 31 | 88.9 | 85.6 | 98.6 | 55.6 | 82.2 | 82.2 |
| CG18 | 32 | 88.9 | 82.2 | 100.0 | 61.1 | 67.8 | 80.0 |
| CL1 | 33 | 74.1 | 88.9 | 101.4 | 41.1 | 61.1 | 73.3 |
| Ms72 | 34 | 79.6 | 80.0 | 100.0 | 26.7++ | 55.6 | 74.8 |
| Ms74 | 35 | 83.3 | 86.7 | 93.1 | 56.7 | 70.0 | 77.9 |
| W117H† * | 36 | 68.5 | 81.1 | 98.6 | 65.6 | 74.4 | 77.6 |
| Mean | | 82.1 | 80.3 | 88.9 | 57.3 | 70.8 | 76.2 |
| LSD 0.05 | | 21.0 | 15.2 | 15.6 | 17.8 | 26.4 | 11.6 |
| CV% | | 15.7 | 11.6 | 10.7 | 19.0 | 22.9 | 21.3 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

Table 3. Root lodging (percent) evaluation of the 100-300 maturity
inbred lines.

| Entry | No. | MN | ND | CANBDN | CANSTJ | Mean |
|-------|-----|------|------|--------|--------|------|
| CM105  * | 1 | 0.0 | 0.0 | 0.0 | 34.8 | 8.7 |
| CO109  * | 2 | 56.8 | 0.0 | 1.8 | 71.8 | 32.6 |
| A661 | 3 | 31.0 | 0.0 | 0.0 | 95.1 | 31.5 |
| A665 | 4 | 2.4 | 0.0 | 0.0 | 62.3 | 16.2 |
| A666 | 5 | 0.0 | 0.0 | 0.0 | 58.5 | 14.6 |
| A671 | 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ND100 | 7 | 0.0 | 1.3 | 0.0 | 12.0 | 3.3 |
| ND240 | 8 | 1.0 | 0.0 | 0.0 | 19.9 | 5.2 |
| ND241 | 9 | 3.5 | 0.0 | 0.0 | 68.6 | 18.0 |
| ND245 | 10 | 2.4 | 4.3 | 0.0 | 3.1 | 2.5 |
| ND246 | 11 | 1.9 | 2.4 | 0.0 | 18.8 | 5.8 |
| ND300 | 12 | 52.5 | 6.5 | 0.0 | 55.8 | 28.7 |
| ND301 | 13 | 0.9 | 0.0 | 1.7 | 30.6 | 8.3 |
| ND376 | 14 | 19.0 | 0.0 | 0.0+ | 47.7 | 18.2 |
| ND408 | 15 | 0.0 | 1.2 | 0.0 | 78.5 | 19.9 |
| ND474 | 16 | 38.9 | 0.0 | 0.0 | 47.8 | 21.7 |
| Pa326 | 17 | 0.0 | 0.0 | 0.0 | 7.7 | 1.9 |
| Pa329 | 18 | 0.0 | 0.0 | 0.0+ | 12.5+ | 2.5 |
| Pa373 | 19 | . | . | . | . | . |
| Pa374 | 20 | . | . | 0.0++ | . | 0.0 |
| CK52 | 21 | 1.0 | 3.8 | 0.0 | 95.1 | 25.0 |
| CK64 | 22 | 0.0 | 0.0 | 0.0 | 17.4 | 4.3 |
| CK69 | 23 | 0.0 | 0.0 | 0.0 | 4.8 | 1.2 |
| CK75 | 24 | 0.0 | 0.0 | 0.0 | 1.4 | 0.3 |
| CG11 | 25 | 0.0 | 0.0 | 0.0 | 19.0 | 4.8 |
| CG12 | 26 | 0.0 | 0.0 | 0.0 | 41.1 | 10.3 |
| CG13 | 27 | 22.1 | 0.0 | 0.0 | 61.6 | 20.9 |
| CG14 | 28 | 2.9 | 7.2 | 2.8 | 30.7 | 10.9 |
| CG15 | 29 | 4.6 | 0.0 | 2.2 | 50.0 | 14.2 |
| CG16 | 30 | 48.9 | 20.6 | 15.7 | 80.7 | 41.5 |
| CG17 | 31 | 54.8 | 4.9 | 11.7 | 82.9 | 38.6 |
| CG18 | 32 | 0.0 | 0.0 | 0.0 | 20.6 | 5.2 |
| CL1 | 33 | 0.0 | 0.0 | 0.0 | 30.1 | 7.5 |
| Ms72 | 34 | 0.0 | 0.0 | 0.0++ | 98.3 | 29.5 |
| Ms74 | 35 | 33.7 | 0.0 | 0.0 | 68.5 | 25.5 |
| W117H† * | 36 | 0.0 | 0.0 | 1.6 | 37.7 | 9.8 |
| Mean | | 11.1 | 1.5 | 1.1 | 43.4 | 14.3 |
| LSD 0.05 | | 12.9 | 8.5 | NS | 28.1 | 21.7 |
| CV% | | 70.9 | 340.0 | | 39.6 | 188.7 |

*  Check entry.
+  Data missing from one replication.
++ Data missing from two replications.

Table 4. Stalk lodging (percent) evaluation of the 100-300 maturity inbred lines.

| Entry | No. | MN | ND | CANGUE | CANBDN | Mean |
|---|---|---|---|---|---|---|
| CM105 * | 1 | 6.1 | 0.0 | 17.1 | 0.0 | 5.8 |
| CO109 * | 2 | 23.4 | 1.3 | 29.6 | 0.0 | 13.6 |
| A661 | 3 | 13.9 | 10.5 | 58.3 | 10.7 | 23.4 |
| A665 | 4 | 1.0 | 0.0 | 17.2 | 0.0 | 4.6 |
| A666 | 5 | 1.4 | 1.2 | 11.1 | 5.1 | 4.7 |
| A671 | 6 | 2.1 | 0.0 | 6.9 | 0.0 | 2.3 |
| ND100 | 7 | 1.0 | 2.7 | 44.4 | 0.0 | 12.0 |
| ND240 | 8 | 36.0 | 13.9 | 54.3 | 5.1 | 27.3 |
| ND241 | 9 | 34.6 | 2.6 | 45.8 | 0.0 | 20.8 |
| ND245 | 10 | 0.9 | 0.0 | 25.0 | 0.0 | 6.5 |
| ND246 | 11 | 3.9 | 0.0 | 44.9 | 0.0 | 12.2 |
| ND300 | 12 | 33.4 | 26.0 | 103.4 | 0.0 | 40.7 |
| ND301 | 13 | 5.1 | 1.2 | 10.4 | 0.0 | 4.2 |
| ND376 | 14 | 1.4 | 0.0 | 99.7 | 0.0+ | 27.6 |
| ND408 | 15 | 10.9 | 0.0 | 15.5 | 0.0 | 6.6 |
| ND474 | 16 | 24.1 | 3.8 | 95.0+ | 0.0 | 24.9 |
| Pa326 | 17 | 1.1 | 3.3 | 30.6 | 1.4 | 9.1 |
| Pa329 | 18 | 0.0 | 0.0 | 18.8 | 0.0+ | 5.1 |
| Pa373 | 19 | . | . | 0.0++ | . | 0.0 |
| Pa374 | 20 | . | . | 0.0++ | 0.0++ | 0.0 |
| CK52 | 21 | 66.4 | 20.7 | 83.3 | 0.0 | 42.6 |
| CK64 | 22 | 27.8 | 36.2 | 64.0 | 0.0 | 32.0 |
| CK69 | 23 | 51.5 | 2.9 | 54.7 | 0.0 | 27.3 |
| CK75 | 24 | 15.7 | 7.0 | 70.8 | 3.8 | 24.3 |
| CG11 | 25 | 0.0 | 0.0 | 18.4 | 0.0 | 4.6 |
| CG12 | 26 | 1.9 | 0.0 | 27.8 | 0.0 | 7.4 |
| CG13 | 27 | 1.9 | 0.0 | 34.7 | 0.0 | 9.2 |
| CG14 | 28 | 51.9 | 6.1 | 55.6 | 20.3 | 33.5 |
| CG15 | 29 | 14.5 | 2.7 | 36.4 | 0.0 | 13.4 |
| CG16 | 30 | 11.9 | 1.6 | 35.3 | 10.4 | 14.8 |
| CG17 | 31 | 25.9 | 44.6 | 39.6 | 0.0 | 27.5 |
| CG18 | 32 | 29.9 | 21.6 | 23.6 | 0.0 | 18.8 |
| CL1 | 33 | 8.2 | 4.9 | 78.1 | 7.7 | 24.7 |
| Ms72 | 34 | 0.0 | 2.8 | 11.1 | 0.0++ | 4.2 |
| Ms74 | 35 | 10.0 | 11.1 | 71.5 | 5.9 | 24.6 |
| W117H+ * | 36 | 0.0 | 0.0 | 18.2 | 0.0 | 4.6 |
| Mean | | 15.2 | 6.7 | 41.3 | 2.1 | 16.5 |
| LSD 0.05 | | 13.0 | 18.1 | 40.8 | 8.6 | 20.1 |
| CV% | | 52.5 | 164.6 | 60.4 | 246.0 | 152.3 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

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Table 5.  Usable ears (per 100 plants) evaluation of the 100-300
          maturity inbred lines.

| Entry | No. | ND | CANBDN | CANSTJ | Mean |
|-------|-----|------|--------|--------|-------|
| CM105 * | 1 | 98.3 | 61.7 | 101.7 | 87.2 |
| CO109 * | 2 | 105.0 | 68.3 | 83.3 | 85.6 |
| A661 | 3 | 100.0 | 110.0 | 95.0 | 101.7 |
| A665 | 4 | 96.7 | 76.7 | 60.0 | 77.8 |
| A666 | 5 | 100.0 | 81.7 | 101.7 | 94.4 |
| A671 | 6 | 101.7 | 28.3 | 110.0 | 80.0 |
| ND100 | 7 | 96.7 | 103.3 | 73.3 | 91.1 |
| ND240 | 8 | 110.0 | 63.3 | 60.0 | 77.8 |
| ND241 | 9 | 116.7 | 100.0 | 98.3 | 105.0 |
| ND245 | 10 | 96.7 | 80.0 | 93.3 | 90.0 |
| ND246 | 11 | 101.7 | 111.7 | 85.0 | 99.4 |
| ND300 | 12 | 88.3 | 46.7 | 50.0 | 61.7 |
| ND301 | 13 | 101.7 | 85.0 | 96.7 | 94.4 |
| ND376 | 14 | 81.7 | 20.0+ | 60.0 | 58.1 |
| ND408 | 15 | 138.3 | 56.7 | 45.0 | 80.0 |
| ND474 | 16 | 101.7 | 18.3 | 63.3 | 61.1 |
| Pa326 | 17 | 85.0 | 86.7 | 83.3 | 85.0 |
| Pa329 | 18 | 83.3 | 22.5+ | 25.0+ | 49.3 |
| Pa373 | 19 | . | . | . | . |
| Pa374 | 20 | . | 25.0++ | . | 25.0 |
| CK52 | 21 | 108.3 | 103.3 | 101.7 | 104.4 |
| CK64 | 22 | 90.0 | 78.3 | 86.7 | 85.0 |
| CK69 | 23 | 105.0 | 81.7 | 75.0 | 87.2 |
| CK75 | 24 | 118.3 | 105.0 | 35.0 | 86.1 |
| CG11 | 25 | 101.7 | 101.7 | 98.3 | 100.6 |
| CG12 | 26 | 101.7 | 86.7 | 70.0 | 86.1 |
| CG13 | 27 | 100.0 | 40.0 | 91.7 | 77.2 |
| CG14 | 28 | 106.7 | 120.0 | 101.7 | 109.4 |
| CG15 | 29 | 103.3 | 78.3 | 88.3 | 90.0 |
| CG16 | 30 | 85.0 | 68.3 | 85.0 | 79.4 |
| CG17 | 31 | 78.3 | 86.7 | 95.0 | 86.7 |
| CG18 | 32 | 91.7 | 85.0 | 86.7 | 87.8 |
| CL1 | 33 | 98.3 | 70.0 | 81.7 | 83.3 |
| Ms72 | 34 | 86.7 | 10.0++ | 46.7 | 58.6 |
| Ms74 | 35 | 103.3 | 86.7 | 103.3 | 97.8 |
| W117H+ * | 36 | 90.0 | 85.0 | 71.7 | 82.2 |
| Mean | | 99.2 | 75.6 | 80.0 | 85.0 |
| LSD 0.05 | | 18.5 | 25.2 | 31.1 | 30.1 |
| CV% | | 11.5 | 20.4 | 23.8 | 37.6 |

*  Check entry.
+  Data missing from one replication.
++ Data missing from two replications.

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Table 6. Plant height (cm) evaluation of the 100-300 maturity inbred
lines.

| Entry | No. | MI | MN | MO | ND | CANGUE | CANSTJ | Mean |
|---|---|---|---|---|---|---|---|---|
| CM105 * | 1 | 128.3 | 142.7 | 136.7 | 128.7 | 112.3 | 164.7 | 135.6 |
| C0109 * | 2 | 121.3 | 131.7 | 131.7 | 128.7 | 117.3 | 147.0 | 129.6 |
| A661 | 3 | 141.7 | 146.0 | 118.3 | 132.3 | 128.3 | 155.3 | 137.0 |
| A665 | 4 | 133.3 | 132.7 | 138.3 | 117.7 | 105.3 | 162.3 | 131.6 |
| A666 | 5 | 128.3 | 133.3 | 131.7 | 134.0 | 119.0 | 146.0 | 132.1 |
| A671 | 6 | 133.3 | 135.7 | 131.7 | 121.0 | 117.7 | 148.3 | 131.3 |
| ND100 | 7 | 113.3 | 114.0 | 123.3 | 111.7 | 113.7 | 136.3 | 118.7 |
| ND240 | 8 | 98.3 | 109.7 | 103.3 | 113.3 | 89.7 | 120.7 | 105.8 |
| ND241 | 9 | 113.3 | 131.7 | 125.0 | 126.3 | 90.3 | 141.0 | 121.3 |
| ND245 | 10 | 116.7 | 125.7 | 121.7 | 128.7 | 108.3 | 135.7 | 122.8 |
| ND246 | 11 | 116.7 | 126.0 | 116.7 | 115.0 | 113.7 | 137.3 | 120.9 |
| ND300 | 12 | 141.7 | 149.0 | 138.3 | 142.3 | 121.3 | 153.3 | 141.0 |
| ND301 | 13 | 128.3 | 134.7 | 118.3 | 118.7 | 117.7 | 144.3 | 127.0 |
| ND376 | 14 | 130.0 | 133.3 | 133.3 | 144.7 | 116.7 | 155.7 | 135.6 |
| ND408 | 15 | 131.7 | 118.7 | 121.7 | 146.3 | 88.0 | 154.7 | 126.8 |
| ND474 | 16 | 113.3 | 117.7 | 116.7 | 134.7 | 84.0+ | 142.7 | 120.2 |
| Pa326 | 17 | 121.7 | 117.7 | 125.0 | 121.3 | 117.3 | 163.0 | 127.7 |
| Pa329 | 18 | 111.7 | 121.0 | 113.3 | 135.3 | 108.0 | 141.5+ | 120.6 |
| Pa373 | 19 | 130.0 | . | . | . | . | . | 130.0 |
| Pa374 | 20 | 116.7 | . | 136.7 | . | . | . | 126.7 |
| CK52 | 21 | 101.7 | 113.7 | 91.7 | 111.7 | 94.0 | 139.7 | 108.7 |
| CK64 | 22 | 110.0 | 106.0 | 103.3 | 117.7 | 117.0 | 128.7 | 113.8 |
| CK69 | 23 | 115.0 | 123.7 | 125.0+ | 123.0 | 104.3 | 155.7 | 124.4 |
| CK75 | 24 | 106.7 | 117.3 | 100.0 | 120.0 | 98.3 | 142.7 | 114.2 |
| CG11 | 25 | 96.7 | 109.0 | 83.3 | 103.0 | 98.7 | 126.3 | 102.8 |
| CG12 | 26 | 115.0 | 118.0 | 105.0 | 117.3 | 104.0 | 139.3 | 116.4 |
| CG13 | 27 | 93.3 | 104.7 | 95.0 | 97.7 | 93.7 | 113.3 | 99.6 |
| CG14 | 28 | 123.3 | 114.3 | 115.0 | 126.3 | 108.7 | 147.3 | 122.5 |
| CG15 | 29 | 125.0 | 112.0 | 121.7 | 117.0 | 101.3 | 139.7 | 119.4 |
| CG16 | 30 | 145.0 | 151.3 | 136.7 | 149.0 | 131.3 | 152.3 | 144.3 |
| CG17 | 31 | 150.0 | 138.7 | 118.3 | 131.0 | 115.3 | 153.7 | 134.5 |
| CG18 | 32 | 115.0 | 120.7 | 118.3 | 131.3 | 111.3 | 136.0 | 122.1 |
| CL1 | 33 | 90.0 | 94.3 | 103.3 | 101.0 | 87.0 | 102.7 | 96.4 |
| Ms72 | 34 | 158.3 | 147.7 | 163.3 | 148.0 | 133.3 | 170.3 | 153.5 |
| Ms74 | 35 | 118.3 | 122.7 | 115.0 | 124.7 | 102.3 | 134.3 | 119.6 |
| W117H† * | 36 | 95.0 | 117.7 | 121.7 | 116.7 | 106.3 | 130.7 | 114.7 |
| Mean | | 120.2 | 124.5 | 119.9 | 124.6 | 108.3 | 143.0 | 123.4 |
| LSD 0.05 | | 12.8 | 7.0 | 13.0 | 13.9 | 21.2 | 9.4 | 8.8 |
| CV% | | 6.5 | 3.4 | 6.6 | 6.8 | 12.0 | 4.0 | 11.0 |

* Check entry.
+ Data missing from one replication.

Table 7. Ear height (cm) evaluation of the 100-300 maturity inbred lines.

| Entry | No. | MI | MN | MO | ND | CANGUE | CANSTJ | Mean |
|-------|-----|------|------|-------|------|--------|--------|------|
| CM105 * | 1 | 50.0 | 55.7 | 45.0 | 55.0 | 35.7 | 63.0 | 50.7 |
| CO109 * | 2 | 49.0 | 49.0 | 41.7 | 49.3 | 28.3 | 40.7 | 43.0 |
| A661 | 3 | 63.3 | 65.7 | 46.7 | 56.7 | 41.8 | 54.0 | 54.7 |
| A665 | 4 | 68.3 | 58.7 | 53.3 | 61.0 | 43.8 | 54.0 | 56.5 |
| A666 | 5 | 55.0 | 49.3 | 43.3 | 51.0 | 43.1 | 41.7 | 47.2 |
| A671 | 6 | 50.0 | 54.7 | 45.0 | 58.7 | 39.1 | 42.7 | 48.4 |
| ND100 | 7 | 50.0 | 50.3 | 43.3 | 52.3 | 38.1 | 44.7 | 46.5 |
| ND240 | 8 | 41.7 | 41.3 | 35.0 | 50.0 | 21.1 | 31.7 | 36.8 |
| ND241 | 9 | 45.0 | 59.0 | 45.0 | 58.7 | 28.0 | 44.7 | 46.7 |
| ND245 | 10 | 55.0 | 50.3 | 41.7 | 56.7 | 27.0 | 40.0 | 45.1 |
| ND246 | 11 | 50.0 | 52.3 | 40.0 | 60.0 | 27.2 | 43.0 | 45.4 |
| ND300 | 12 | 63.3 | 79.3 | 58.3 | 87.0 | 51.1 | 52.0 | 65.2 |
| ND301 | 13 | 56.7 | 53.3 | 45.0 | 47.3 | 30.2 | 41.0 | 45.6 |
| ND376 | 14 | 70.0 | 65.3 | 55.0 | 80.7 | 37.0 | 55.0 | 60.5 |
| ND408 | 15 | 65.0 | 53.7 | 51.7 | 88.3 | 35.6 | 59.3 | 58.9 |
| ND474 | 16 | 48.3 | 47.7 | 31.7 | 68.0 | 18.8+ | 35.3 | 43.0 |
| Pa326 | 17 | 45.0 | 38.0 | 38.3 | 45.7 | 37.8 | 40.7 | 40.9 |
| Pa329 | 18 | 50.0 | 51.0 | 45.0 | 69.3 | 27.9 | 41.5+ | 47.8 |
| Pa373 | 19 | 66.7 | . | . | . | . | . | 66.7 |
| Pa374 | 20 | 56.7 | . | 30.0 | . | . | . | 43.3 |
| CK52 | 21 | 40.0 | 37.0 | 28.3 | 39.0 | 16.0 | 41.7 | 33.7 |
| CK64 | 22 | 36.7 | 26.7 | 21.7 | 45.0 | 23.3 | 23.7 | 29.5 |
| CK69 | 23 | 48.3 | 57.3 | 37.5+ | 50.7 | 32.1 | 45.0 | 45.6 |
| CK75 | 24 | 38.3 | 41.7 | 25.0 | 48.0 | 26.0 | 34.0 | 35.5 |
| CG11 | 25 | 35.0 | 31.3 | 23.3 | 37.3 | 25.6 | 27.0 | 29.9 |
| CG12 | 26 | 50.0 | 39.7 | 30.0 | 43.3 | 26.1 | 34.0 | 37.2 |
| CG13 | 27 | 41.7 | 36.7 | 33.3 | 46.7 | 26.4 | 24.0 | 34.8 |
| CG14 | 28 | 45.0 | 33.3 | 35.0 | 45.0 | 27.2 | 38.7 | 37.4 |
| CG15 | 29 | 56.7 | 39.0 | 41.7 | 49.0 | 23.2 | 40.3 | 41.6 |
| CG16 | 30 | 64.7 | 64.7 | 50.0 | 68.7 | 48.4 | 47.3 | 57.3 |
| CG17 | 31 | 71.7 | 63.7 | 43.3 | 71.3 | 33.4 | 49.3 | 55.4 |
| CG18 | 32 | 50.0 | 53.3 | 43.3 | 65.3 | 37.0 | 44.7 | 48.9 |
| CL1 | 33 | 36.7 | 26.3 | 26.7 | 33.0 | 16.2 | 23.0 | 27.0 |
| Ms72 | 34 | 71.7 | 69.0 | 68.3 | 78.0 | 53.0 | 49.0 | 64.8 |
| Ms74 | 35 | 50.0 | 47.7 | 41.7 | 51.0 | 22.3 | 39.0 | 41.9 |
| W117H+ * | 36 | 38.3 | 48.3 | 41.7 | 58.0 | 43.5 | 52.3 | 47.0 |
| Mean | | 52.0 | 49.7 | 40.8 | 56.6 | 32.2 | 42.3 | 45.7 |
| LSD 0.05 | | 8.2 | 5.5 | 11.2 | 12.1 | 15.4 | 12.5 | 6.6 |
| CV% | | 9.6 | 6.8 | 16.9 | 13.1 | 29.2 | 18.1 | 22.0 |

* Check entry.
+ Data missing from one replication.

Table 8.  Moisture (percent) evaluation of the 100-300 maturity inbred
          lines.

| Entry | No. | MI | MN | ND | CANGUE | CANBDN | CANSTJ | Mean |
|-------|-----|----|----|----|--------|--------|--------|------|
| CM105 * | 1 | 33.1 | 23.6 | 46.2 | 37.7 | 62.0 | 39.7 | 40.4 |
| CO109 * | 2 | 30.5 | 17.6 | 30.6 | 33.5 | 43.6 | 54.0 | 35.0 |
| A661 | 3 | 34.4 | 23.1 | 39.0 | 43.5 | 60.1 | 45.7 | 41.0 |
| A665 | 4 | 36.2 | 23.0 | 46.2 | 48.9 | 73.5 | 38.7 | 44.4 |
| A666 | 5 | 27.1 | 24.5 | 30.5 | 37.4 | 57.2 | 40.3 | 36.2 |
| A671 | 6 | 37.6 | 30.6 | 52.8 | 60.6 | 81.3 | 51.5+ | 52.4 |
| ND100 | 7 | 26.0 | 25.3 | 40.8 | 38.8 | 45.4 | 49.3 | 37.6 |
| ND240 | 8 | 25.5 | 21.8 | 36.7 | 33.0 | 68.2 | 19.0++ | 35.9 |
| ND241 | 9 | 18.8 | 19.1 | 33.3 | 36.9 | 51.4 | 39.5+ | 32.8 |
| ND245 | 10 | 19.1 | 15.4 | 22.0 | 23.6 | 37.5 | 38.7 | 26.0 |
| ND246 | 11 | 19.5 | 15.0 | 21.9 | 19.5 | 38.2 | 38.3 | 25.4 |
| ND300 | 12 | 30.3 | 26.1 | 40.1 | 37.9 | 66.1 | 48.5+ | 41.1 |
| ND301 | 13 | 31.4 | 23.7 | 35.0 | 32.8 | 54.6 | 40.7 | 36.4 |
| ND376 | 14 | 40.0 | 27.1 | 48.4 | 41.7 | 70.9+ | 58.0+ | 45.6 |
| ND408 | 15 | 33.3 | 24.2 | 40.8 | 41.7 | 64.6 | 55.5+ | 42.7 |
| ND474 | 16 | 24.6 | 20.3 | 35.8 | 50.7++ | 52.8 | 41.5+ | 35.6 |
| Pa326 | 17 | 20.5 | 21.0 | 39.5 | 26.9+ | 58.5 | 41.0 | 35.0 |
| Pa329 | 18 | 39.2 | 32.1 | 53.9 | 51.9 | 75.0+ | 53.0++ | 48.9 |
| Pa373 | 19 | 38.2 | . | . | . | . | . | 38.2 |
| Pa374 | 20 | 34.2 | . | . | . | 66.7++ | . | 42.3 |
| CK52 | 21 | 18.1 | 18.9 | 23.2 | 29.0 | 39.4 | 37.5+ | 27.1 |
| CK64 | 22 | 18.6 | 16.0 | 16.0 | 19.9 | 18.2 | 20.0++ | 17.9 |
| CK69 | 23 | 28.6 | 20.2 | 35.3 | 29.7 | 58.0 | 44.5+ | 35.6 |
| CK75 | 24 | 40.9 | 20.7 | 35.6 | 35.9 | 55.0 | 54.0+ | 39.6 |
| CG11 | 25 | 18.5 | 18.7 | 19.0 | 24.5 | 33.5 | 37.5+ | 24.6 |
| CG12 | 26 | 18.9 | 18.0 | 21.6 | 30.0 | 38.2 | 45.0++ | 26.6 |
| CG13 | 27 | 29.9 | 23.9 | 37.8 | 36.0 | 60.3 | 43.0++ | 37.9 |
| CG14 | 28 | 30.2 | 18.3 | 34.6 | 31.5 | 52.2 | 41.7 | 34.7 |
| CG15 | 29 | 27.7 | 17.2 | 27.2 | 29.7 | 42.9 | 46.0 | 31.8 |
| CG16 | 30 | 31.9 | 23.3 | 38.5 | 35.3 | 54.3 | 37.0+ | 36.7 |
| CG17 | 31 | 22.2 | 20.2 | 29.0 | 30.0 | 54.3 | 43.3 | 33.2 |
| CG18 | 32 | 19.8 | 20.3 | 23.8 | 26.5 | 49.1 | 44.0+ | 29.8 |
| CL1 | 33 | 18.5 | 16.5 | 21.9 | 29.5 | 27.0 | 35.0 | 24.7 |
| Ms72 | 34 | 36.1 | 29.9 | 49.9 | 59.2 | 73.6++ | 58.0++ | 46.9 |
| Ms74 | 35 | 27.8 | 19.1 | 27.3 | 27.5 | 40.8 | 42.7 | 30.8 |
| W117H† * | 36 | 28.0 | 25.5 | 44.2 | 46.0 | 49.6 | 54.0 | 41.2 |
| Mean |  | 28.2 | 21.9 | 34.7 | 35.6 | 52.5 | 43.6 | 35.6 |
| LSD 0.05 |  | 1.5 | 1.5 | 7.5 | 7.7 | 8.6 | NS | 6.2 |
| CV% |  | 3.2 | 4.2 | 13.2 | 13.2 | 10.0 |  | 26.8 |

*   Check entry.
+   Data missing from one replication.
++  Data missing from two replications.

Table 9. Days-to-tassel evaluation of the 100-300 maturity inbred lines.

| Entry | No. | MN | MO | ND | CANGUE | CANSTJ# | Mean |
|-------|-----|------|------|------|--------|---------|------|
| CM105 * | 1 | 76.0 | 75.0 | 72.0 | 92.0 | 59.7 | 74.9 |
| CO109 * | 2 | 77.3 | 73.7 | 70.7 | 99.0 | 67.0+ | 78.3 |
| A661 | 3 | 77.7 | 70.3 | 70.0 | 90.7 | 60.7 | 73.9 |
| A665 | 4 | 81.3 | 72.3 | 79.0 | 101.7 | 68.0++ | 82.4 |
| A666 | 5 | 74.3 | 71.7 | 70.3 | 90.7 | 60.7 | 73.5 |
| A671 | 6 | 83.0 | 74.7 | 79.0 | 93.0 | 68.7 | 79.7 |
| ND100 | 7 | 74.3 | 70.0 | 68.3 | 89.0 | 64.7 | 73.3 |
| ND240 | 8 | 71.0 | 69.0 | 69.3 | 83.3 | 57.0 | 69.9 |
| ND241 | 9 | 75.3 | 73.7 | 70.7 | 86.7 | 60.0 | 73.3 |
| ND245 | 10 | 69.3 | 68.7 | 66.7 | 83.7 | 53.7 | 68.4 |
| ND246 | 11 | 71.0 | 69.0 | 67.0 | 83.7 | 55.3 | 69.2 |
| ND300 | 12 | 78.0 | 74.3 | 75.7 | 94.7 | 68.0+ | 78.9 |
| ND301 | 13 | 74.7 | 70.7 | 70.7 | 84.7 | 58.3 | 71.8 |
| ND376 | 14 | 78.7 | 75.0 | 76.7 | 93.7 | 67.3 | 78.3 |
| ND408 | 15 | 79.3 | 74.3 | 75.7 | 98.3 | 69.7 | 79.5 |
| ND474 | 16 | 74.3 | 71.7 | 71.3 | . | 56.3 | 68.4 |
| Pa326 | 17 | 76.3 | 73.0 | 73.7 | 88.0 | 61.3 | 74.5 |
| Pa329 | 18 | 76.3 | 73.0 | 76.3 | 91.7 | 60.5+ | 76.6 |
| Pa373 | 19 | . | . | . | . | . | . |
| Pa374 | 20 | . | 71.0 | . | . | . | 71.0 |
| CK52 | 21 | 66.0 | 66.7 | 62.7 | 80.3 | 50.7 | 65.3 |
| CK64 | 22 | 67.0 | 69.7 | 56.3 | 82.0 | 49.7 | 64.9 |
| CK69 | 23 | 74.3 | 72.0 | 69.0 | 86.0 | 59.3 | 72.1 |
| CK75 | 24 | 70.3 | 67.0 | 65.0 | 82.3 | 54.7 | 67.9 |
| CG11 | 25 | 67.0 | 66.0 | 55.3 | 85.7 | 50.7 | 64.9 |
| CG12 | 26 | 67.0 | 66.3 | 55.7 | 86.0 | 52.0 | 65.4 |
| CG13 | 27 | 72.3 | 69.7 | 68.7 | 88.7 | 56.3 | 71.1 |
| CG14 | 28 | 69.0 | 68.3 | 66.3 | 87.3 | 54.7 | 69.1 |
| CG15 | 29 | 74.3 | 70.3 | 67.3 | 87.3 | 56.0 | 71.1 |
| CG16 | 30 | 74.7 | 71.7 | 71.0 | 91.7 | 61.3 | 74.1 |
| CG17 | 31 | 75.3 | 73.0 | 73.0 | 92.3 | 60.0 | 74.7 |
| CG18 | 32 | 76.0 | 71.7 | 70.7 | 93.7 | 59.7 | 74.3 |
| CL1 | 33 | 69.0 | 69.3 | 67.0 | 85.3 | 54.3 | 69.0 |
| Ms72 | 34 | 81.7 | 76.3 | 79.7 | 95.0 | 68.3 | 80.2 |
| Ms74 | 35 | 73.3 | 71.3 | 69.7 | 83.0 | 57.0 | 70.9 |
| W117Ht * | 36 | 75.0 | 72.3 | 73.3 | 92.3 | 62.0 | 75.0 |
| Mean | | 74.1 | 71.2 | 69.8 | 89.2 | 59.2 | 72.7 |
| LSD 0.05 | | 2.1 | 3.0 | 2.2 | 8.2 | 4.9 | 2.9 |
| CV% | | 1.7 | 2.6 | 1.9 | 5.6 | 5.1 | 5.6 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.
# No date of planting given, data are days from 1JUN.

Table 10.  Days-to-silk evaluation of the 100-300 maturity inbred
lines.

| Entry | No. | MI | MN | ND | CANGUE | CANBDN | CANSTJ# | Mean |
|-------|-----|------|------|------|--------|----------|---------|------|
| CM105 * | 1 | 77.7 | 77.7 | 75.0 | 94.3 | 98.0 | 63.3 | 81.0 |
| CO109 * | 2 | 80.3 | 76.7 | 74.3 | 100.7 | 101.0 | 69.0+ | 84.5 |
| A661 | 3 | 78.3 | 79.0 | 72.0 | 93.7 | 95.7 | 65.7 | 80.7 |
| A665 | 4 | 82.7 | 82.3 | 80.7 | 103.3 | 100.0+ | 69.0++ | 87.7 |
| A666 | 5 | 75.0 | 74.3 | 72.3 | 92.3 | 94.3 | 62.3 | 78.4 |
| A671 | 6 | 81.7 | 83.7 | 81.7 | 98.3 | 103.0++ | 69.0 | 86.3 |
| ND100 | 7 | 72.3 | 75.3 | 72.0 | 91.0 | 97.0 | 66.3 | 79.0 |
| ND240 | 8 | 73.3 | 74.3 | 71.3 | 85.7 | 99.0 | 64.3 | 78.0 |
| ND241 | 9 | 75.0 | 76.7 | 75.0 | 87.0 | 95.3 | 65.3 | 79.1 |
| ND245 | 10 | 71.0 | 72.0 | 71.3 | 87.3 | 94.3 | 58.3 | 75.7 |
| ND246 | 11 | 69.0 | 74.0 | 71.3 | 85.7 | 95.7 | 60.3 | 76.0 |
| ND300 | 12 | 77.0 | 79.0 | 77.0 | 96.3 | 103.0 | 68.0+ | 85.3 |
| ND301 | 13 | 75.0 | 76.3 | 75.3 | 89.7 | 97.0 | 65.0 | 79.7 |
| ND376 | 14 | 79.7 | 80.0 | 77.3 | 94.0 | 96.5+ | 67.0 | 83.5 |
| ND408 | 15 | 79.7 | 81.7 | 78.7 | 103.0 | 103.0 | . | 89.2 |
| ND474 | 16 | 72.3 | 73.0 | 70.0 | . | 99.0 | 62.3 | 75.3 |
| Pa326 | 17 | 73.0 | 75.7 | 75.3 | 88.0 | 93.3 | 65.7 | 78.5 |
| Pa329 | 18 | 75.3 | 77.0 | 76.0 | 92.7 | 100.0+ | 65.0+ | 80.8 |
| Pa373 | 19 | 82.0 | . | . | . | . | . | 82.0 |
| Pa374 | 20 | 76.0 | . | . | . | 103.0++ | . | 82.8 |
| CK52 | 21 | 71.0 | 68.0 | 69.0 | 84.0 | 95.7 | 55.0 | 73.8 |
| CK64 | 22 | 70.0 | 67.3 | 64.7 | 80.7 | 87.3 | 54.3 | 70.7 |
| CK69 | 23 | 71.3 | 74.3 | 70.7 | 87.3 | 95.7 | 64.3 | 77.3 |
| CK75 | 24 | 70.0 | 71.3 | 66.3 | 84.3 | 98.0 | 59.3 | 74.9 |
| CG11 | 25 | 67.3 | 67.3 | 62.3 | 85.7 | 89.7 | 51.7 | 70.7 |
| CG12 | 26 | 67.3 | 68.3 | 62.7 | 87.7 | 93.3 | 54.7 | 72.3 |
| CG13 | 27 | 69.7 | 73.7 | 71.0 | 93.3 | 100.3 | 63.0 | 78.5 |
| CG14 | 28 | 71.0 | 70.3 | 69.3 | 89.7 | 89.7 | 61.0 | 75.2 |
| CG15 | 29 | 70.7 | 75.0 | 69.3 | 88.7 | 97.0 | 58.7 | 76.6 |
| CG16 | 30 | 70.7 | 74.3 | 72.0 | 91.7 | 94.3 | 64.7 | 77.9 |
| CG17 | 31 | 72.0 | 77.7 | 76.3 | 93.0 | 99.0 | 63.5 | 81.2 |
| CG18 | 32 | 72.0 | 76.3 | 72.7 | 94.3 | 93.0 | 63.7 | 78.7 |
| CL1 | 33 | 67.7 | 69.3 | 68.3 | 85.7 | 94.3 | 56.3 | 73.6 |
| Ms72 | 34 | 80.3 | 83.0 | 81.7 | 96.0 | . | 69.0 | 84.0 |
| Ms74 | 35 | 75.0 | 73.7 | 71.3 | 84.3 | 97.0 | 60.0 | 76.9 |
| W117H† * | 36 | 74.0 | 75.7 | 78.0 | 97.0 | 101.0 | 68.3 | 82.3 |
| Mean | | 74.1 | 75.1 | 72.7 | 91.1 | 96.5 | 62.1 | 78.7 |
| LSD 0.05 | | 1.5 | 2.3 | 1.7 | 8.6 | 3.6 | 4.0 | 2.5 |
| CV% | | 1.2 | 1.9 | 1.4 | 5.8 | 2.3 | 4.0 | 4.8 |

*   Check entry.
+   Data missing from one replication.
++  Data missing from two replications.
#   No date of planting given, data are days from 1JUN.

Table 11. Ear row number evaluation of the 100-300 maturity inbred lines.

| Entry | No. | ND | CANBDN | CANSTJ | Mean |
|-------|-----|------|--------|---------|------|
| CM105 * | 1 | 12.9 | 14.2 | 14.0 | 13.7 |
| C0109 * | 2 | 14.6 | 14.6 | 14.0 | 14.4 |
| A661 | 3 | 16.6 | 17.0 | 16.0 | 16.5 |
| A665 | 4 | 14.0 | 14.6 | 14.0 | 14.2 |
| A666 | 5 | 14.3 | 13.5 | 13.3 | 13.7 |
| A671 | 6 | 14.3 | 13.4 | 15.3 | 14.3 |
| ND100 | 7 | 13.5 | 13.9 | 12.7 | 13.4 |
| ND240 | 8 | 18.7 | 16.4 | 16.0 | 17.0 |
| ND241 | 9 | 17.6 | 15.4 | 16.0 | 16.3 |
| ND245 | 10 | 12.0 | 11.3 | 12.7 | 12.0 |
| ND246 | 11 | 11.5 | 12.5 | 12.0 | 12.0 |
| ND300 | 12 | 13.9 | 14.6 | 13.3 | 13.9 |
| ND301 | 13 | 14.9 | 15.6 | 14.0 | 14.8 |
| ND376 | 14 | 16.0 | 14.5+ | 14.0 | 14.9 |
| ND408 | 15 | 17.7 | 17.8 | 16.0 | 17.2 |
| ND474 | 16 | 15.3 | 14.7 | 14.0 | 14.7 |
| Pa326 | 17 | 13.4 | 12.9 | 12.7 | 13.0 |
| Pa329 | 18 | 15.8 | 14.5+ | 16.0++ | 15.4 |
| Pa373 | 19 | . | . | . | . |
| Pa374 | 20 | . | 13.2++ | . | 13.2 |
| CK52 | 21 | 13.3 | 12.4 | 12.0 | 12.6 |
| CK64 | 22 | 12.6 | 13.3 | 12.0 | 12.6 |
| CK69 | 23 | 13.1 | 12.7 | 12.7 | 12.8 |
| CK75 | 24 | 12.4 | 12.8 | 10.0 | 11.7 |
| CG11 | 25 | 13.5 | 13.7 | 14.0 | 13.7 |
| CG12 | 26 | 14.5 | 14.0 | 13.3 | 13.9 |
| CG13 | 27 | 16.9 | 16.9 | 15.3 | 16.4 |
| CG14 | 28 | 14.3 | 14.1 | 14.0 | 14.1 |
| CG15 | 29 | 13.1 | 12.3 | 12.7 | 12.7 |
| CG16 | 30 | 15.3 | 15.3 | 14.0 | 14.9 |
| CG17 | 31 | 15.5 | 16.1 | 18.0 | 16.6 |
| CG18 | 32 | 14.8 | 15.5 | 15.3 | 15.2 |
| CL1 | 33 | 17.1 | 17.2 | 14.0 | 16.1 |
| Ms72 | 34 | 12.8 | 12.0++ | 12.0+ | 12.4 |
| Ms74 | 35 | 15.4 | 14.3 | 14.0 | 14.6 |
| W117H† * | 36 | 14.0 | 13.7 | 13.3 | 13.7 |
| Mean | | 14.6 | 14.4 | 13.9 | 14.3 |
| LSD 0.05 | | 1.0 | 1.1 | 1.4 | 1.2 |
| CV% | | 3.7 | 4.6 | 6.3 | 8.9 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

Table 12. Ear length (cm) evaluation of the 100-300 maturity inbred lines.

| Entry | No. | ND | CANBDN | CANSTJ | Mean |
|---|---|---|---|---|---|
| CM105 * | 1 | 12.7 | 13.2 | 16.3 | 14.1 |
| CO109 * | 2 | 13.0 | 12.1 | 11.7 | 12.3 |
| A661 | 3 | 11.6 | 11.1 | 13.0 | 11.9 |
| A665 | 4 | 14.0 | 13.8 | 16.3 | 14.7 |
| A666 | 5 | 14.1 | 11.7 | 13.3 | 13.0 |
| A671 | 6 | 12.9 | 9.7 | 13.3 | 12.0 |
| ND100 | 7 | 11.8 | 11.9 | 12.7 | 12.1 |
| ND240 | 8 | 11.5 | 9.2 | 11.7 | 10.8 |
| ND241 | 9 | 11.0 | 10.7 | 11.7 | 11.1 |
| ND245 | 10 | 13.2 | 14.7 | 15.0 | 14.3 |
| ND246 | 11 | 13.8 | 14.0 | 14.7 | 14.2 |
| ND300 | 12 | 14.6 | 14.6 | 13.7 | 14.3 |
| ND301 | 13 | 13.4 | 13.2 | 13.7 | 13.4 |
| ND376 | 14 | 11.1 | 10.9+ | 12.3 | 11.5 |
| ND408 | 15 | 11.2 | 10.7 | 11.3 | 11.1 |
| ND474 | 16 | 13.2 | 12.5 | 11.7 | 12.5 |
| Pa326 | 17 | 15.1 | 14.8 | 15.3 | 15.1 |
| Pa329 | 18 | 12.2 | 10.6+ | 13.0++ | 11.8 |
| Pa373 | 19 | . | . | 13.0++ | 13.0 |
| Pa374 | 20 | . | 12.9++ | . | 12.9 |
| CK52 | 21 | 15.3 | 15.9 | 16.3 | 15.8 |
| CK64 | 22 | 14.1 | 12.7 | 14.3 | 13.7 |
| CK69 | 23 | 11.7 | 11.5 | 12.7 | 11.9 |
| CK75 | 24 | 11.6 | 10.8 | 9.0 | 10.5 |
| CG11 | 25 | 11.7 | 11.3 | 12.7 | 11.9 |
| CG12 | 26 | 11.6 | 12.1 | 12.7 | 12.1 |
| CG13 | 27 | 9.3 | 8.9 | 11.0 | 9.7 |
| CG14 | 28 | 13.1 | 12.1 | 14.3 | 13.2 |
| CG15 | 29 | 14.4 | 13.6 | 15.7 | 14.5 |
| CG16 | 30 | 9.9 | 10.0 | 9.3 | 9.8 |
| CG17 | 31 | 11.4 | 12.2 | 14.3 | 12.6 |
| CG18 | 32 | 12.7 | 11.8 | 13.7 | 12.7 |
| CL1 | 33 | 11.5 | 11.1 | 10.7 | 11.1 |
| Ms72 | 34 | 11.4 | 12.5++ | 12.5+ | 11.9 |
| Ms74 | 35 | 13.4 | 13.5 | 12.3 | 13.1 |
| W117H+ * | 36 | 12.2 | 11.9 | 12.7 | 12.2 |
| Mean | | 12.5 | 12.1 | 13.1 | 12.6 |
| LSD 0.05 | | 1.2 | 1.0 | 2.1 | 1.3 |
| CV% | | 5.8 | 5.2 | 9.7 | 11.4 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

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Table 13. Ear diameter (cm) evaluation of the 100-300 maturity inbred lines.

| Entry | No. | ND | CANBDN | CANSTJ | Mean |
|-------|-----|-----|--------|--------|------|
| CM105 * | 1 | 3.5 | 3.6 | 3.7 | 3.6 |
| CO109 * | 2 | 3.9 | 3.6 | 3.5 | 3.7 |
| A661 | 3 | 3.8 | 3.7 | 3.6 | 3.7 |
| A665 | 4 | 3.6 | 3.2 | 3.6 | 3.5 |
| A666 | 5 | 3.8 | 3.5 | 3.6 | 3.6 |
| A671 | 6 | 3.9 | 2.9 | 3.4 | 3.4 |
| ND100 | 7 | 3.4 | 3.3 | 3.3 | 3.3 |
| ND240 | 8 | 4.1 | 3.5 | 3.3 | 3.7 |
| ND241 | 9 | 3.8 | 3.3 | 3.3 | 3.5 |
| ND245 | 10 | 2.9 | 2.9 | 3.0 | 2.9 |
| ND246 | 11 | 2.9 | 2.9 | 3.0 | 2.9 |
| ND300 | 12 | 3.3 | 3.0 | 2.9 | 3.1 |
| ND301 | 13 | 3.6 | 3.6 | 3.5 | 3.6 |
| ND376 | 14 | 3.8 | 3.3+ | 3.4 | 3.5 |
| ND408 | 15 | 3.8 | 3.4 | 3.4 | 3.5 |
| ND474 | 16 | 4.1 | 3.8 | 3.6 | 3.8 |
| Pa326 | 17 | 3.6 | 3.5 | 3.3 | 3.5 |
| Pa329 | 18 | 4.1 | 3.2+ | 3.9++ | 3.8 |
| Pa373 | 19 | . | . | 3.6++ | 3.6 |
| Pa374 | 20 | . | 3.4++ | . | 3.4 |
| CK52 | 21 | 3.4 | 3.0 | 3.2 | 3.2 |
| CK64 | 22 | 3.5 | 3.3 | 3.2 | 3.3 |
| CK69 | 23 | 3.8 | 3.3 | 3.4 | 3.5 |
| CK75 | 24 | 3.4 | 3.6 | 3.1 | 3.3 |
| CG11 | 25 | 3.3 | 3.2 | 3.6 | 3.4 |
| CG12 | 26 | 3.5 | 3.3 | 3.4 | 3.4 |
| CG13 | 27 | 4.0 | 3.7 | 3.5 | 3.8 |
| CG14 | 28 | 3.9 | 3.7 | 3.6 | 3.7 |
| CG15 | 29 | 3.4 | 3.5 | 3.5 | 3.5 |
| CG16 | 30 | 4.1 | 3.7 | 3.8 | 3.9 |
| CG17 | 31 | 3.7 | 3.4 | 3.2 | 3.5 |
| CG18 | 32 | 3.6 | 3.5 | 3.7 | 3.6 |
| CL1 | 33 | 3.9 | 3.9 | 3.6 | 3.8 |
| Ms72 | 34 | 3.4 | 3.0++ | 3.2+ | 3.3 |
| Ms74 | 35 | 3.6 | 3.6 | 3.5 | 3.6 |
| W117Ht * | 36 | 3.5 | 3.3 | 3.2 | 3.3 |
| Mean | | 3.6 | 3.4 | 3.4 | 3.5 |
| LSD 0.05 | | 0.2 | 0.2 | 0.3 | 0.3 |
| CV% | | 3.1 | 3.1 | 5.3 | 8.2 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

Table 14. Three-hundred kernel weight (g) evaluation of the 100-300 maturity inbred lines.

| Entry | No. | ND | CANBDN | CANSTJ | Mean |
|---|---|---|---|---|---|
| CM105 * | 1 | 49.0 | 34.0 | 54.1 | 45.7 |
| CO109 * | 2 | 56.7 | 35.7 | 46.9 | 46.4 |
| A661 | 3 | 45.5 | 30.0 | 49.2 | 41.5 |
| A665 | 4 | 44.6 | 27.0 | 54.5 | 42.0 |
| A666 | 5 | 47.0 | 33.7 | 60.0+ | 45.2 |
| A671 | 6 | 44.0 | 15.3 | 45.1 | 34.8 |
| ND100 | 7 | 49.4 | 33.7 | 50.2 | 44.4 |
| ND240 | 8 | 51.8 | 31.7 | 38.4 | 40.6 |
| ND241 | 9 | 48.4 | 26.0 | 31.8+ | 35.8 |
| ND245 | 10 | 43.1 | 29.3 | 47.1 | 39.8 |
| ND246 | 11 | 43.6 | 29.0 | 48.3 | 40.3 |
| ND300 | 12 | 49.5 | 27.3 | 41.8 | 39.5 |
| ND301 | 13 | 47.0 | 32.0 | 53.0 | 44.0 |
| ND376 | 14 | 63.9 | 30.5+ | 61.4 | 54.6 |
| ND408 | 15 | 35.1 | 26.7 | 39.3 | 33.7 |
| ND474 | 16 | 63.2 | 33.7 | 48.1 | 48.3 |
| Pa326 | 17 | 50.2 | 31.0 | 50.3 | 43.8 |
| Pa329 | 18 | 46.1 | 30.0+ | 52.6+ | 43.4 |
| Pa373 | 19 | . | . | . | . |
| Pa374 | 20 | . | 31.0++ | . | 31.0 |
| CK52 | 21 | 60.3 | 38.0 | 56.2 | 51.5 |
| CK64 | 22 | 39.6 | 30.3 | 38.7 | 36.2 |
| CK69 | 23 | 52.3 | 24.3 | 50.7 | 42.5 |
| CK75 | 24 | 54.3 | 43.0 | 72.7+ | 54.6 |
| CG11 | 25 | 62.5 | 44.7 | 66.1 | 57.8 |
| CG12 | 26 | 63.4 | 41.7 | 59.4 | 54.8 |
| CG13 | 27 | 55.5 | 31.7 | 42.8 | 43.3 |
| CG14 | 28 | 51.5 | 35.3 | 60.7 | 49.2 |
| CG15 | 29 | 45.4 | 33.0 | 57.9 | 45.4 |
| CG16 | 30 | 55.4 | 33.3 | 56.0 | 48.2 |
| CG17 | 31 | 39.2 | 27.7 | 43.6 | 36.8 |
| CG18 | 32 | 40.3 | 24.3 | 46.9 | 37.2 |
| CL1 | 33 | 50.8 | 33.3 | 64.6 | 49.6 |
| Ms72 | 34 | 46.2 | 11.0++ | 50.1+ | 41.7 |
| Ms74 | 35 | 45.9 | 32.7 | 49.4 | 42.6 |
| W117H† * | 36 | 58.5 | 31.7 | 53.9 | 48.0 |
| Mean | | 50.0 | 31.4 | 51.1 | 44.2 |
| LSD 0.05 | | 7.6 | 4.4 | 6.8 | 8.1 |
| CV% | | 9.3 | 8.6 | 8.2 | 19.5 |

*  Check entry.
+  Data missing from one replication.
++ Data missing from two replications.

Table 15.  Stalk crushing strength (load-kg) evaluation of the 100-300
           maturity inbred lines.

| Entry | No. | MO |
|---|---|---|
| CM105  * | 1 | 210.6 |
| CO109  * | 2 | 196.6 |
| A661 | 3 | 289.1 |
| A665 | 4 | 294.8 |
| A666 | 5 | 190.5 |
| A671 | 6 | 251.0 |
| ND100 | 7 | 214.7 |
| ND240 | 8 | 207.4 |
| ND241 | 9 | 231.6 |
| ND245 | 10 | 332.6 |
| ND246 | 11 | 220.0 |
| ND300 | 12 | 174.6+ |
| ND301 | 13 | 128.5 |
| ND376 | 14 | 303.9 |
| ND408 | 15 | 178.4 |
| ND474 | 16 | 218.2 |
| Pa326 | 17 | 361.5 |
| Pa329 | 18 | 224.5+ |
| Pa373 | 19 | . |
| Pa374 | 20 | 192.8++ |
| CK52 | 21 | 134.4 |
| CK64 | 22 | 184.5 |
| CK69 | 23 | 120.7 |
| CK75 | 24 | 81.6 |
| CG11 | 25 | 161.8 |
| CG12 | 26 | 210.2 |
| CG13 | 27 | 178.4 |
| CG14 | 28 | 169.3 |
| CG15 | 29 | 198.1 |
| CG16 | 30 | 204.1 |
| CG17 | 31 | 165.0 |
| CG18 | 32 | 299.4 |
| CL1 | 33 | 138.3 |
| Ms72 | 34 | 420.9 |
| Ms74 | 35 | 256.3+ |
| W117Ht  * | 36 | 280.5 |
| Mean | | 218.3 |
| LSD 0.05 | | 95.5 |
| CV% | | 26.8 |

*   Check entry.
+   Data missing from one replication.
++ Data missing from two replications.

Table 16. Bacterial wilt susceptibility evaluation of the 100-300 maturity inbred lines.

| Entry | No. | Stewart's wilt | | | Goss' wilt |
|-------|-----|------|------|------|------|
| | | MO | IL | Mean | NE |
| | | (1-5) | (1-5) | (1-5) | (1-9) |
| CM105 * | 1 | 3.0+ | 2.7 | 2.8 | 5.7 |
| CO109 * | 2 | 2.5+ | 2.0 | 2.2 | 3.0 |
| A661 | 3 | 3.3 | 2.0 | 2.7 | 1.7 |
| A665 | 4 | 3.0++ | 2.0 | 2.3 | 2.3 |
| A666 | 5 | . | 2.3 | 2.3 | 3.3 |
| A671 | 6 | 3.7 | 1.0 | 2.3 | 3.3 |
| ND100 | 7 | 3.0 | 1.0 | 2.0 | 2.3 |
| ND240 | 8 | 3.0+ | 2.0 | 2.4 | 1.3 |
| ND241 | 9 | 2.0+ | 1.7 | 1.8 | 2.7 |
| ND245 | 10 | . | 2.0 | 2.0 | 1.0 |
| ND246 | 11 | 3.0++ | 2.3 | 2.5 | 3.3 |
| ND300 | 12 | . | 2.0 | 2.0 | 2.0 |
| ND301 | 13 | 3.7 | 2.0 | 2.8 | 4.3 |
| ND376 | 14 | 2.0++ | 1.7 | 1.8 | 2.0 |
| ND408 | 15 | 4.0++ | 1.3 | 2.0 | 4.5+ |
| ND474 | 16 | . | 1.0 | 1.0 | 3.0 |
| Pa326 | 17 | 2.3 | 2.0 | 2.2 | 2.7 |
| Pa329 | 18 | . | . | . | 2.7 |
| Pa373 | 19 | . | . | . | 3.0 |
| Pa374 | 20 | . | . | . | 3.3 |
| CK52 | 21 | 4.0+ | 2.7 | 3.0 | 2.7 |
| CK64 | 22 | . | 2.0 | 2.0 | 2.7 |
| CK69 | 23 | 4.0++ | 1.7 | 2.3 | 1.0 |
| CK75 | 24 | . | 2.3 | 2.3 | 2.3 |
| CG11 | 25 | 4.0 | 2.3 | 3.2 | 3.0 |
| CG12 | 26 | 4.0 | 2.7 | 3.3 | 2.7 |
| CG13 | 27 | . | 1.7 | 1.7 | 2.3 |
| CG14 | 28 | 4.0++ | 2.7 | 3.0 | 1.3 |
| CG15 | 29 | 2.5+ | 2.0 | 2.2 | 2.0 |
| CG16 | 30 | 3.0++ | 1.7 | 2.0 | 2.5+ |
| CG17 | 31 | . | 1.3 | 1.3 | 1.0 |
| CG18 | 32 | . | 2.0 | 2.0 | 2.3 |
| CL1 | 33 | . | 3.3 | 3.3 | 2.3 |
| Ms72 | 34 | 3.0 | 1.7 | 2.3 | 3.0 |
| Ms74 | 35 | 3.0 | 2.0 | 2.5 | 2.3 |
| W117H† * | 36 | 4.0 | 2.0 | 3.0 | 1.0 |
| Mean | | 3.2 | 2.0 | 2.4 | 2.5 |
| LSD 0.05 | | 0.6 | 0.9 | NS | NS |
| CV% | | 11.5 | 27.6 | | |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

Table 17.  Ear rot susceptibility evaluation of the 100-300 matutity
          inbred lines.

| Entry | No. | Fusarium | Gibberella |
|-------|-----|----------|------------|
|       |     | MN | MI |
|       |     | (1-9) | (0-5) |
| CM105 * | 1 | 1.8 | 1.3 |
| CO109 * | 2 | 4.3 | 1.5 |
| A661 | 3 | 1.6 | 1.8 |
| A665 | 4 | 4.6 | 3.8 |
| A666 | 5 | 2.2 | 1.3 |
| A671 | 6 | 1.8 | 1.2 |
| ND100 | 7 | 4.2 | 1.4 |
| ND240 | 8 | 3.8 | 1.5 |
| ND241 | 9 | 3.7 | 0.9 |
| ND245 | 10 | 1.8 | 0.2 |
| ND246 | 11 | 1.3 | 0.5 |
| ND300 | 12 | 5.1 | 3.2 |
| ND301 | 13 | 2.2 | 1.9 |
| ND376 | 14 | 4.2 | 2.2 |
| ND408 | 15 | 4.7 | 1.9 |
| ND474 | 16 | 1.6 | 0.8 |
| Pa326 | 17 | 3.4 | 2.2 |
| Pa329 | 18 | 3.1 | 2.2 |
| Pa373 | 19 | . | 2.4 |
| Pa374 | 20 | . | 1.8 |
| CK52 | 21 | 4.0 | 0.0 |
| CK64 | 22 | 2.5 | . |
| CK69 | 23 | 3.6 | 0.9 |
| CK75 | 24 | . | 1.2 |
| CG11 | 25 | 2.1 | 0.3 |
| CG12 | 26 | 5.7 | 0.0 |
| CG13 | 27 | 1.4 | 0.5 |
| CG14 | 28 | 2.0 | 0.7 |
| CG15 | 29 | 1.9 | 0.5 |
| CG16 | 30 | 2.4 | 1.3 |
| CG17 | 31 | 3.2 | 0.7 |
| CG18 | 32 | 1.6 | 1.4 |
| CL1 | 33 | 1.4 | 0.0 |
| Ms72 | 34 | 1.6 | 3.2 |
| Ms74 | 35 | 1.8 | 1.3 |
| W117Ht * | 36 | 1.6 | 2.1 |
| Mean |  | 2.8 | 1.4 |
| LSD 0.05 |  | 1.4 | 1.6 |
| CV% |  | 30.8 | 69.8 |

*  Check entry.

Table 18. Fungal leaf disease susceptibility evaluation of the 100-300 maturity inbred lines.

| Entry | No. | Eyespot | | | North. leaf spot | Southern leaf blight | | Northern leaf blight | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | MI | CANSTJ | Mean | MI | Date 1 IL | Date 2 IL | MI | Race 1 IL | Race 2 IL |
| | | (1-5) | (1-5) | (1-5) | (1-5) | (%LA$^{\#}$) | (%LA) | (1-5) | (%LA) | (%LA) |
| CM105 * | 1 | 2.7 | 1.8 | 2.2 | 2.0 | 13.3 | 36.7 | 3.7 | 14.3 | . |
| CO109 * | 2 | 4.3 | 3.3 | 3.8 | 5.0 | 8.3 | 60.0 | 5.0 | 12.2 | 12.2 |
| A661 | 3 | 2.3 | 1.5 | 1.9 | 4.0 | 10.0 | 36.7 | 3.7 | 4.8 | 8.2 |
| A665 | 4 | 3.3 | 2.1 | 2.7 | 2.7 | 8.3 | 76.7 | 5.0 | 11.5+ | 28.3 |
| A666 | 5 | 3.0 | 1.6 | 2.3 | 2.7 | 16.7 | 40.0 | 2.3 | 3.3 | 3.3 |
| A671 | 6 | 2.3 | 1.9 | 2.1 | 3.0 | 26.7 | 56.7 | 2.0 | 7.2 | 2.5+ |
| ND100 | 7 | 4.3 | 2.4 | 3.4 | 3.7 | 6.7 | 60.0 | 3.3 | 20.8 | 23.3 |
| ND240 | 8 | 3.3 | 2.3 | 2.8 | 5.0 | 13.3 | 86.7 | 5.0 | 20.8 | 43.3 |
| ND241 | 9 | 3.7 | 2.4 | 3.0 | 5.0 | 15.0+ | 85.0+ | 5.0 | 24.3+ | 36.7 |
| ND245 | 10 | 4.3 | 2.3 | 3.3 | 4.7 | 16.7 | 80.0 | 5.0 | 8.5 | 13.2 |
| ND246 | 11 | 5.0 | 2.6 | 3.8 | 5.0 | 16.7 | 73.3 | 5.0 | 10.2 | 17.5 |
| ND300 | 12 | 4.3 | 2.3 | 3.3 | 4.7 | 16.7 | 40.0 | 5.0 | 9.3+ | 45.0++ |
| ND301 | 13 | 4.3 | 1.6 | 3.0 | 4.3 | 10.0 | 16.7 | 5.0 | 8.0 | 13.3+ |
| ND376 | 14 | 4.0 | 1.8 | 2.9 | 3.0 | 10.0+ | 35.0+ | 5.0 | 35.0 | . |
| ND408 | 15 | 3.0 | 1.7 | 2.4 | 3.3 | 26.7 | 83.3 | 5.0 | 33.3 | 47.5+ |
| ND474 | 16 | 3.7 | 2.2 | 2.9 | 5.0 | 20.0+ | 90.0+ | 5.0 | 2.0++ | 6.5++ |
| Pa326 | 17 | 4.7 | 2.4 | 3.5 | 5.0 | 16.7 | 56.7 | 4.7 | 8.3+ | 9.7 |
| Pa329 | 18 | 3.0 | 2.1 | 2.5 | 3.3 | . | . | 1.7 | 4.0++ | 4.0++ |
| Pa373 | 19 | 2.7 | . | 2.7 | 2.7 | 5.0++ | 20.0++ | 2.3 | 4.0++ | . |
| Pa374 | 20 | 2.3 | 1.4+ | 2.0 | 3.3 | . | . | 1.3 | 2.0++ | . |
| CK52 | 21 | 3.7 | 2.5 | 3.1 | 4.3 | 5.0 | 53.3 | 5.0 | 9.0 | 14.0 |
| CK64 | 22 | 4.0 | 4.1 | 4.0 | 5.0 | 10.0 | 100.0 | 5.0 | 32.5+ | 52.5+ |
| CK69 | 23 | 3.0 | 1.7 | 2.3 | 4.7 | 13.3 | 63.3 | 5.0 | 16.2 | 9.7 |
| CK75 | 24 | 3.3 | 1.3 | 2.3 | 4.7 | 16.7 | 100.0 | 5.0 | 4.8 | 8.7 |
| CG11 | 25 | 3.3 | 3.1 | 3.2 | 5.0 | 8.3 | 76.7 | 5.0 | 30.0 | 25.0 |
| CG12 | 26 | 4.3 | 3.8 | 4.1 | 5.0 | 10.0 | 76.7 | 5.0 | 17.2 | 21.5 |
| CG13 | 27 | 4.0 | 3.3 | 3.6 | 4.7 | 11.7 | 53.3 | 4.3 | 17.2 | 8.3 |
| CG14 | 28 | 3.0 | 1.6 | 2.3 | 4.3 | 5.0 | 40.0 | 3.7 | 7.0 | 10.5 |
| CG15 | 29 | 3.3 | 1.9 | 2.6 | 3.7 | 6.7 | 36.7 | 4.3 | 15.0 | 20.8 |
| CG16 | 30 | 1.7 | 1.8 | 1.7 | 3.3 | 20.0 | 76.7 | 4.7 | 12.8 | 20.0++ |
| CG17 | 31 | 1.7 | 1.4 | 1.5 | 3.3 | 16.7 | 86.7 | 4.7 | 11.3 | 20.0++ |
| CG18 | 32 | 2.3 | 1.4 | 1.9 | 3.7 | 5.0 | 26.7 | 4.3 | 12.8 | 8.3 |
| CL1 | 33 | 3.0 | 3.6 | 3.3 | 5.0 | 40.0 | 100.0 | 5.0 | 21.7 | 31.7 |
| Ms72 | 34 | 2.0 | 1.3 | 1.6 | 3.3 | 5.0 | 36.7 | 3.7 | 24.5 | 17.5+ |
| Ms74 | 35 | 2.3 | 1.5 | 1.9 | 3.7 | 6.7 | 33.3 | 3.7 | 7.5 | 16.7 |
| W117H† * | 36 | 4.3 | 3.1 | 3.7 | 3.7 | 10.0 | 30.0 | 3.3 | 8.7 | 23.3 |
| Mean | | 3.3 | 2.2 | 2.8 | 4.0 | 13.2 | 60.0 | 4.2 | 14.4 | 19.1 |
| LSD 0.05 | | 1.4 | 0.8 | 1.1 | 0.9 | 9.0 | 22.1 | 0.6 | 12.8 | 12.8 |
| CV% | | 25.5 | 21.6 | 32.9 | 15.2 | 41.6 | 22.6 | 9.4 | 54.6 | 41.1 |

\* Check entry.
\+ Data missing from one replication.
++ Data missing from two replications.
\# Represents percent of leaf area infected.

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Table 19. Smut susceptibility evaluation of the 100-300 maturity inbred lines.

| Entry | No. | Commn. Infct. CANSTJ | Head Infct. TX |
|---|---|---|---|
| | | (%) | (%) |
| CM105 * | 1 | 0.0 | 1.1 |
| CO109 * | 2 | 0.0 | 1.7 |
| A661 | 3 | 0.0 | 0.0 |
| A665 | 4 | 0.0 | 0.0 |
| A666 | 5 | 7.6 | 1.7 |
| A671 | 6 | 0.0 | 8.8 |
| ND100 | 7 | 0.0 | 18.3 |
| ND240 | 8 | 0.0 | 10.0 |
| ND241 | 9 | 3.0 | 1.1 |
| ND245 | 10 | 0.0 | 23.3 |
| ND246 | 11 | 0.0 | 27.8 |
| ND300 | 12 | 0.0 | 0.0 |
| ND301 | 13 | 0.0 | 7.2 |
| ND376 | 14 | 0.0 | 1.7 |
| ND408 | 15 | 1.4 | 0.0 |
| ND474 | 16 | 2.1 | 0.0 |
| Pa326 | 17 | 6.7 | 0.0 |
| Pa329 | 18 | 0.0 | 0.0 |
| Pa373 | 19 | . | 1.7 |
| Pa374 | 20 | 25.0+ | 9.5 |
| CK52 | 21 | 4.8 | 3.3 |
| CK64 | 22 | 0.0 | 0.0 |
| CK69 | 23 | 4.8 | 2.2 |
| CK75 | 24 | 0.0 | 1.7 |
| CG11 | 25 | 1.2 | 0.0 |
| CG12 | 26 | 6.5 | 2.9 |
| CG13 | 27 | 3.8 | 3.3 |
| CG14 | 28 | 0.0 | 3.3 |
| CG15 | 29 | 0.0 | 20.0 |
| CG16 | 30 | 0.0 | 0.0 |
| CG17 | 31 | 6.5 | 0.0 |
| CG18 | 32 | 5.8 | 0.0 |
| CL1 | 33 | 1.3 | 0.0 |
| Ms72 | 34 | 1.7 | 0.0 |
| Ms74 | 35 | 1.2 | 3.3 |
| W117H+ * | 36 | 9.1 | 3.3 |
| Mean | | 2.4 | 4.4 |
| LSD 0.05 | | NS | 11.7 |
| CV% | | | 166.3 |

* Check entry.
+ Data missing from one replication.

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Table 20.  Stalk rot susceptibility evaluation of the 100-300 maturity inbred lines.

| Entry | No. | Anthracnose | | | | | Diplo. rating | Stalk rot infct. |
|---|---|---|---|---|---|---|---|---|
| | | Rating | | | Intnd. infct. | > 50% infct. | | |
| | | MI | WI | Mean | IL | IL | IL | CANSTJ |
| | | (1-5) | (1-5) | (1-5) | No. | No. | (1-5) | (%) |
| CM105 * | 1 | 3.3 | 3.3 | 3.3 | 2.3 | 1.7 | 2.3 | 13.6 |
| CO109 * | 2 | 5.0 | 4.0 | 4.5 | 2.6 | 1.9 | 3.9 | 0.0 |
| A661 | 3 | 5.0 | 2.3 | 3.7 | 1.5 | 1.0 | 3.7 | 0.0 |
| A665 | 4 | 2.3 | 3.7 | 3.0 | 2.8 | 2.1 | 3.4 | 0.0 |
| A666 | 5 | 2.3 | 3.0 | 2.7 | 1.5 | 0.5 | 3.7 | 1.9 |
| A671 | 6 | 2.3 | 2.3 | 2.3 | 1.0 | 0.0 | 1.8 | 0.0 |
| ND100 | 7 | 4.0 | 3.7 | 3.8 | 2.5 | 2.0 | 4.0 | 5.4 |
| ND240 | 8 | 4.7 | 4.3 | 4.5 | 3.0 | 2.6 | 3.9 | 27.4 |
| ND241 | 9 | 5.0 | 4.0 | 4.5 | 2.8 | 2.8 | 4.3 | 29.8 |
| ND245 | 10 | 5.0 | 3.3 | 4.2 | 1.6 | 1.0 | 3.4 | 1.4 |
| ND246 | 11 | 5.0 | 3.3 | 4.2 | 2.3 | 1.7 | 3.3 | 1.2 |
| ND300 | 12 | 5.0 | 4.0 | 4.5 | 2.9 | 1.9 | 2.8+ | 0.0 |
| ND301 | 13 | 4.7 | 3.7 | 4.2 | 2.5 | 1.8 | 3.3 | 3.8 |
| ND376 | 14 | 3.3 | 3.0 | 3.2 | 1.5 | 0.9 | 2.9 | 0.0 |
| ND408 | 15 | 4.3 | 3.0 | 3.7 | 1.9 | 1.0 | 3.0 | 0.0 |
| ND474 | 16 | 5.0 | 3.3 | 4.2 | 2.3+ | 1.5+ | 4.2 | 31.7 |
| Pa326 | 17 | 4.7 | 2.7 | 3.7 | 1.4 | 0.6 | 3.0 | 5.6 |
| Pa329 | 18 | 2.7 | 2.0 | 2.3 | 2.4 | 1.6 | 3.7 | 0.0 |
| Pa373 | 19 | 2.0 | . | 2.0 | 1.9+ | 0.9+ | 2.7 | . |
| Pa374 | 20 | 3.3 | . | 3.3 | 1.3 | 1.7 | 3.2 | 0.0+ |
| CK52 | 21 | 5.0 | 4.3 | 4.7 | 2.3 | 2.0 | 3.8 | 20.2 |
| CK64 | 22 | 5.0 | 4.3 | 4.7 | 2.4 | 1.8 | 3.2 | 41.2 |
| CK69 | 23 | 5.0 | 4.0 | 4.5 | 3.1 | 2.8 | 2.7 | 8.3 |
| CK75 | 24 | 5.0 | 4.7 | 4.8 | 2.8 | 2.1 | 4.3 | 0.0 |
| CG11 | 25 | 5.0 | 3.3 | 4.2 | 1.8 | 1.3 | 4.5 | 4.0 |
| CG12 | 26 | 5.0 | 3.7 | 4.3 | 2.5 | 2.0 | 4.7 | 7.2 |
| CG13 | 27 | 4.7 | 2.0 | 3.3 | 1.3 | 0.4 | 2.0 | 12.8 |
| CG14 | 28 | 3.7 | 4.0 | 3.8 | 1.5 | 0.5 | 2.9 | 6.2 |
| CG15 | 29 | 3.3 | 2.7 | 3.0 | 2.2 | 1.1 | 2.7 | 8.1 |
| CG16 | 30 | 2.7 | 3.3 | 3.0 | 1.3 | 1.0 | 3.9 | 1.3 |
| CG17 | 31 | 3.3 | 4.0 | 3.7 | 1.9 | 1.1 | 3.7 | 1.2 |
| CG18 | 32 | 3.3 | 3.3 | 3.3 | 1.8 | 0.8 | 3.3 | 10.3 |
| CL1 | 33 | 5.0 | 3.7 | 4.3 | 1.7 | 1.1 | 3.7 | 34.6 |
| Ms72 | 34 | 2.3 | 2.0 | 2.2 | 1.8 | 0.5 | 1.4 | 0.0 |
| Ms74 | 35 | 4.0 | 4.0 | 4.0 | 3.1 | 2.6 | 3.7 | 14.8 |
| W117Ht * | 36 | 4.0 | 2.0 | 3.0 | 1.4 | 0.9 | 3.2 | 0.0 |
| Mean | | 4.0 | 3.4 | 3.7 | 2.1 | 1.4 | 3.3 | 8.4 |
| LSD 0.05 | | 0.7 | 1.2 | 1.9 | 1.0 | 1.0 | 0.8 | 13.2 |
| CV% | | 10.2 | 22.3 | 31.4 | 29.9 | 42.6 | 14.0 | 95.6 |

* Check entry.
+ Data missing from one replication.

Table 21. Virus susceptibility evaluation of the 100-300 maturity inbred lines.

| Entry | No. | MCDV OH | MDMV OH | CLN rating KS | Virus rating OH |
|---|---|---|---|---|---|
| | | (%) | (%) | (1-9) | (1-9) |
| CM105 * | 1 | 75.0 | 57.8 | 8.0 | 3.0 |
| C0109 * | 2 | 38.9 | 81.6 | 7.3 | 3.3 |
| A661 | 3 | 80.4 | 85.1 | 7.7 | 3.3 |
| A665 | 4 | 74.1 | 85.1 | 7.7 | 3.7 |
| A666 | 5 | 97.4 | 63.0 | 8.3 | 3.7 |
| A671 | 6 | 64.1 | 78.5 | 8.3 | 3.7 |
| ND100 | 7 | 75.0 | 68.8 | 7.7 | 4.0 |
| ND240 | 8 | 71.3 | 77.5 | 8.0 | 3.7 |
| ND241 | 9 | 89.3 | 78.8 | 7.7 | 4.0 |
| ND245 | 10 | 17.9 | 67.9 | 9.0 | 2.7 |
| ND246 | 11 | 36.9 | 70.2 | 7.7 | 3.3 |
| ND300 | 12 | 87.5 | 65.0 | 8.3 | 4.0 |
| ND301 | 13 | 59.0 | 71.8 | 8.0 | 3.7 |
| ND376 | 14 | 36.4 | 0.0 | 8.7 | 2.7 |
| ND408 | 15 | 90.6 | 93.8 | 7.5+ | 4.7 |
| ND474 | 16 | 66.7 | 87.5 | 6.7 | 4.0 |
| Pa326 | 17 | 75.0 | 47.2 | 9.0 | 3.7 |
| Pa329 | 18 | 100.0 | 20.0 | 8.0 | 3.0 |
| Pa373 | 19 | . | . | 7.7 | . |
| Pa374 | 20 | . | . | 7.7 | . |
| CK52 | 21 | 96.9 | 90.2 | 7.7 | 4.0 |
| CK64 | 22 | 78.0 | 71.0 | 7.7 | 3.7 |
| CK69 | 23 | 90.4 | 94.1 | 8.0+ | 4.0 |
| CK75 | 24 | 100.0 | 100.0 | 8.0 | 5.0 |
| CG11 | 25 | 69.2 | 61.5 | 8.0 | 4.0 |
| CG12 | 26 | 92.9 | 87.0 | 7.3 | 5.0 |
| CG13 | 27 | 40.5 | 34.3 | 7.7 | 2.0 |
| CG14 | 28 | 69.6 | 51.0 | 7.0 | 3.0 |
| CG15 | 29 | 90.3 | 58.2 | 7.0 | 4.0 |
| CG16 | 30 | 83.3 | 96.7 | 7.3 | 4.0 |
| CG17 | 31 | 42.3 | 45.0 | 7.3 | 3.7 |
| CG18 | 32 | 93.8 | 58.3 | 7.7 | 3.7 |
| CL1 | 33 | 84.4 | 21.7 | 8.3 | 4.0 |
| Ms72 | 34 | 54.6 | 20.4 | 7.7 | 3.0 |
| Ms74 | 35 | 68.6 | 38.6 | 8.0 | 4.0 |
| W117H+ * | 36 | 79.6 | 70.8 | 7.0 | 4.0 |
| Mean | | 72.6 | 64.7 | 7.8 | 3.7 |
| LSD 0.05 | | 22.9 | 21.6 | NS | 0.6 |
| CV% | | 19.3 | 20.5 | | 10.3 |

* Check entry.
+ Data missing from one replication.

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Table 22. Insect susceptibility evaluation of the 100-300 maturity inbred lines.

| Entry | No. | ECB | |
|-------|-----|-----|------|
| | | First IA | Second IA |
| | | (1-9) | (1-9) |
| CM105 * | 1 | 2.0 | 9.0 |
| CO109 * | 2 | 4.3 | 9.0 |
| A661 | 3 | 2.3 | 7.7 |
| A665 | 4 | 4.7 | 8.7 |
| A666 | 5 | 5.7 | 9.0 |
| A671 | 6 | 3.0 | 9.0 |
| ND100 | 7 | 5.7 | 8.3 |
| ND240 | 8 | 5.7 | 8.3 |
| ND241 | 9 | 5.3 | 9.0 |
| ND245 | 10 | 4.7 | 7.7 |
| ND246 | 11 | 2.3 | 8.3 |
| ND300 | 12 | 2.3 | 9.0 |
| ND301 | 13 | 2.3 | 8.7 |
| ND376 | 14 | 2.7 | 9.0 |
| ND408 | 15 | 2.7 | 9.0 |
| ND474 | 16 | 2.7 | 9.0+ |
| Pa326 | 17 | 2.0 | 8.3 |
| Pa329 | 18 | 2.3 | 7.7 |
| Pa373 | 19 | . | . |
| Pa374 | 20 | 2.5+ | 9.0+ |
| CK52 | 21 | 2.7 | 9.0 |
| CK64 | 22 | 2.7 | 9.0 |
| CK69 | 23 | 2.7 | 9.0 |
| CK75 | 24 | 3.0 | 9.0 |
| CG11 | 25 | 3.7 | 9.0 |
| CG12 | 26 | 2.3 | 8.3 |
| CG13 | 27 | 2.7 | 7.3 |
| CG14 | 28 | 3.0 | 9.0 |
| CG15 | 29 | 2.7 | 8.3 |
| CG16 | 30 | 6.3 | 9.0 |
| CG17 | 31 | 2.3 | 9.0 |
| CG18 | 32 | 4.3 | 7.7 |
| CL1 | 33 | 3.7 | 9.0 |
| Ms72 | 34 | 7.3 | 7.0 |
| Ms74 | 35 | 2.7 | 8.7 |
| W117Ht * | 36 | 6.0 | 9.0 |
| Mean | | 3.5 | 8.6 |
| LSD 0.05 | | 1.9 | 1.2 |
| CV% | | 33.0 | 8.4 |

* Check entry.
+ Data missing from one replication.

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Table 23.   Trifluralin tolerance index for 100-300 maturity inbred
            lines.  High values represent high levels of tolerance.

| Entry | No. | Incorporation depth 7.5 cm | | | Incorporation depth 15.0 cm | | |
|---|---|---|---|---|---|---|---|
| | | 1982# | 1983# | Mean | 1982# | 1983# | Mean |
| CM105 * | 1 | 17.8 | 21.8 | 19.8 | 54.1 | 36.3 | 45.2 |
| CO109 * | 2 | 15.3 | 21.7 | 18.5 | 32.0 | 35.5 | 33.7 |
| A661 | 3 | 47.2 | 19.0 | 33.1 | 43.7 | 28.3 | 36.0 |
| A665 | 4 | 25.4 | 41.2 | 33.3 | 31.1 | 39.6 | 35.3 |
| A666 | 5 | 0.8 | 18.1 | 9.5 | 27.4 | 26.8 | 27.1 |
| A671 | 6 | 34.9 | 42.6 | 38.8 | 43.3 | 28.1 | 35.7 |
| ND100 | 7 | 22.3 | 15.8 | 19.0 | 16.7 | 13.4 | 15.1 |
| ND240 | 8 | 32.0 | 10.7 | 21.4 | 18.9 | 10.6 | 14.8 |
| ND241 | 9 | 24.9 | 14.5 | 19.7 | 19.7 | 6.3 | 13.0 |
| ND245 | 10 | 39.9 | 28.8 | 34.3 | 34.8 | 15.5 | 25.2 |
| ND246 | 11 | 36.2 | 14.1 | 25.2 | 39.3 | 18.1 | 28.7 |
| ND300 | 12 | 41.4 | 27.5 | 34.4 | 49.4 | 17.3 | 33.3 |
| ND301 | 13 | 14.0 | 11.4 | 12.7 | 31.5 | 22.2 | 26.9 |
| ND376 | 14 | 18.4 | 20.5 | 19.4 | 27.5 | 14.7 | 21.1 |
| ND408 | 15 | 9.6 | 5.3 | 7.5 | 21.2 | 5.3 | 13.2 |
| ND474 | 16 | 9.2 | 3.7 | 6.5 | 25.9 | 1.2 | 13.5 |
| Pa326 | 17 | 17.9 | 20.9 | 19.4 | 44.3 | 19.8 | 32.1 |
| Pa329 | 18 | 6.0 | 18.3 | 12.1 | 21.3 | 16.5 | 18.9 |
| Pa373 | 19 | 0.2 | 21.6 | 10.9 | 1.5 | 25.9 | 13.7 |
| Pa374 | 20 | 1.4 | 41.6 | 21.5 | 8.3 | 46.3 | 27.3 |
| CK52 | 21 | 47.9 | 29.8 | 38.8 | 60.7 | 26.1 | 43.4 |
| CK64 | 22 | 36.8 | 1.1 | 19.0 | 50.3 | 0.2 | 25.2 |
| CK69 | 23 | 39.1 | 6.4 | 22.8 | 46.5 | 10.1 | 28.3 |
| CK75 | 24 | 13.5 | 12.3 | 12.9 | 34.9 | 24.7 | 29.8 |
| CG11 | 25 | 13.7 | 20.7 | 17.2 | 33.3 | 26.6 | 29.9 |
| CG12 | 26 | 21.8 | 26.7 | 24.3 | 40.5 | 39.3 | 39.9 |
| CG13 | 27 | 18.7 | 13.6 | 16.2 | 38.9 | 17.0 | 28.0 |
| CG14 | 28 | 19.7 | 33.3 | 26.5 | 37.4 | 50.3 | 43.8 |
| CG15 | 29 | 14.8 | 22.9 | 18.8 | 21.9 | 37.3 | 29.6 |
| CG16 | 30 | 16.7 | 38.8 | 27.7 | 48.6 | 47.3 | 47.9 |
| CG17 | 31 | 19.0 | 29.9 | 24.5 | 35.4 | 35.4 | 35.4 |
| CG18 | 32 | 23.7 | 33.6 | 28.6 | 37.2 | 45.6 | 41.4 |
| CL1 | 33 | 28.5 | 39.3 | 33.9 | 35.6 | 39.5 | 37.6 |
| Ms72 | 34 | 10.0 | 24.4 | 17.2 | 30.8 | 23.2 | 27.0 |
| Ms74 | 35 | 12.7 | 20.8 | 16.7 | 24.4 | 32.3 | 28.4 |
| W117H† * | 36 | 5.6 | 12.1 | 8.9 | 23.4 | 10.3 | 16.8 |
| Mean | | 21.0 | 21.8 | 21.4 | 33.1 | 24.8 | 29.0 |
| LSD 0.05 | | | | NS | | | NS |

*   Check entry.
#   Data from one replication.

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## COOPERATORS CONTRIBUTING TO THE 400-600 MATURITY EVALUATION:
(In order of character presentation in the tables)

| Cooperator | Site code | Organization and location | Characters |
|---|---|---|---|
| Russell | IA | Iowa State Univ., Ames | Agronomic |
| Schreiber | IA(H) | Holden's Foundation Seeds, Williamsburg | Agronomic |
| Bauman | IN | Purdue Univ., West Lafayette | Agrnonmic |
| Rossman | MI | Michigan State Univ., East Lansing | Agronomic |
| Geadelmann | MN | Univ. of Minnesota, St. Paul | Agronomic |
| Darrah | MO | USDA/Univ. of Missouri, Columbia | Agronomic |
| Johnson | PA | Pennsylvania State Univ., Univ. Park | Agronomic |
| Bagnara | CANHAR | Agric. Canada, Harrow, Ontario | Agronomic |
| Politowski | MO | Pfizer Genetics, St. Louis | Stewart's wilt |
| Trainor | IL | Northrup, King & Co., St. Joseph | Stewart's wilt |
| Turner | NE | Funk Seeds International, Clearwater | Goss' wilt |
| Trainor | MN | Northrup, King & Co., Eden Prarie | Fusarium ear rot |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | Gibberella ear rot Eyespot |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | North. leaf spot |
| White | IL | Univ. of Illinios, Urbana | South. leaf blight North. leaf blight |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | North. leaf blight |
| Johnson | PA | Pennsylvania State Univ., Univ. Park | North. leaf blight |
| Bockholt and Frederiksen | TX | Texas A&M Univ., Halfway | Head smut |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | Anthracnose stalk rot |
| Trainor | IL | Northrup, King & Co., St. Joseph | Anthracnose stalk rot |
| White | IL | Univ. of Illinois | Anthracnose stalk rot Diplodia stalk rot |
| Findley and Louie | OH | USDA/OARDC, Wooster | MCDV MDMV |
| Trainor | IL | Northrup, King & Co., St. Joseph | MDMV |
| Turner | KS | Funk Seeds International, Norton | CLN |
| Findley and Louie | OH | USDA/OARDC, Wooster | Virus rating |
| Guthrie | IA | USDA | European corn borer |
| Widstrom | GA | USDA | Corn ear worm Fall army worm |
| Penner, Roggenbuck, and Rossman | MI | Michigan State Univ., East Lansing | Trifluralin tolerance |

Table 24. Yield (q/ha) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | IA(H) | IN | MI | MN | PA | CANHAR | Mean |
|-------|-----|------|-------|------|------|------|------|--------|------|
| A619 * | 1 | 44.3 | 46.2 | 49.1 | 32.2 | 45.8 | 24.9 | 43.9 | 40.9 |
| A632 * | 2 | 60.7 | 31.6 | 69.6 | 25.3 | 40.5 | 35.2 | 65.6 | 46.9 |
| B85 | 3 | 30.8 | 42.3 | 41.3 | 31.6 | 42.0 | 12.1 | 37.0 | 33.9 |
| A634 | 4 | 38.8 | 38.1 | 32.0 | 22.4 | 33.0 | 19.0 | 35.6 | 31.3 |
| A635 | 5 | 41.9 | 42.6 | 30.5 | 22.7 | 42.4 | 14.2 | 37.0 | 33.0 |
| A659 | 6 | 28.1 | 25.1 | 21.9 | 18.8 | 15.5 | 7.7 | 19.7 | 19.5 |
| A670 | 7 | 58.6 | 46.8 | 61.4 | 26.5 | 18.5 | 28.3 | 40.1 | 40.0 |
| Mo42 | 8 | 55.0 | 23.1 | 51.3 | 43.2 | 51.3 | 31.9 | 57.9 | 44.8 |
| AY499 | 9 | 42.0 | 40.3 | 34.6 | 27.2 | 30.4 | 22.9 | 31.2 | 32.7 |
| NY562 | 10 | 40.7 | 22.8 | 30.1 | 21.5 | 30.7 | 23.3 | 31.2 | 28.6 |
| NY378 | 11 | 27.9 | 34.8 | 32.0 | 22.5 | 34.4 | 19.3 | 22.5 | 27.6 |
| NY821LERF | 12 | 33.8 | 57.6 | 48.4 | 32.7 | 57.8 | 21.0 | 47.7 | 42.7 |
| NYD410 | 13 | 47.4 | 39.4 | 42.8 | 33.2 | 52.5 | 16.6 | 42.2 | 39.1 |
| NYRW3 | 14 | 41.2 | 42.0 | 45.0 | 25.2 | 25.2 | 23.4 | 40.0 | 34.6 |
| NYRW20 | 15 | 53.3 | 41.0 | 41.3 | 14.7 | 33.0 | 9.7 | 40.8 | 33.4 |
| NYRW23 | 16 | 57.9 | 36.4 | 44.6 | 27.7 | 42.2 | 14.8 | 31.2 | 36.4 |
| Pa405 | 17 | 46.2 | 49.5 | 48.4 | 42.7 | 41.8 | 27.1 | 54.8 | 44.4 |
| FR19 | 18 | 35.3 | 65.1 | 42.8 | 22.9 | 40.5 | 22.3 | 43.2 | 38.8 |
| CH9 | 19 | 27.4 | 48.5 | 36.1 | 22.0 | 29.8 | 9.2 | 20.0 | 27.6 |
| CH581-13 | 20 | 35.8 | 34.8 | 52.8 | 35.3 | 54.4 | 21.4 | 48.1 | 40.4 |
| CH586-12 | 21 | 35.2 | 24.7 | 40.5 | 34.3 | 37.1 | 29.2 | 42.1 | 34.7 |
| CH591-36 | 22 | 36.2 | 44.6 | 55.8 | 35.6 | 35.1 | 19.9 | 40.0 | 38.2 |
| CH592-46 | 23 | 34.6 | 19.8 | 34.6 | 15.7 | 17.4 | 20.0 | 29.2 | 24.5 |
| CH593-9 | 24 | 38.3 | 27.3 | 41.7 | 41.7 | 44.7 | 24.2 | 50.2 | 38.3 |
| CH606-11 | 25 | 41.4 | 34.8 | 32.7 | 20.8 | 17.9 | 16.1 | 36.5 | 28.6 |
| CH663-8 | 26 | 41.2 | 50.8 | 37.2 | 37.3 | 50.7 | 35.6 | 44.3 | 42.4 |
| B87 | 27 | 48.4 | 41.0 | 49.8 | 22.1 | 41.4 | 25.8 | 43.4 | 38.9 |
| Ms71 | 28 | 49.8 | 44.6 | 39.4 | 33.6 | 46.8 | 23.5 | 45.6 | 40.5 |
| Ms75 | 29 | 53.8 | 32.2 | 53.9 | 52.0 | 63.0 | 26.3 | 51.6 | 47.5 |
| Ms76 | 30 | 49.5 | 36.4 | 49.5 | 27.2 | 27.7 | 19.2 | 48.5 | 36.9 |
| Ms200 | 31 | 46.5 | 33.2 | 46.9 | 37.3 | 48.1 | 21.9 | 44.6 | 39.8 |
| H95 | 32 | 42.9 | 35.5 | 42.8 | 23.7 | 9.5 | 14.8 | 33.7 | 29.0 |
| H99 | 33 | 30.7 | 41.5+ | 35.7 | 25.4 | 36.6 | 25.1 | 36.7 | 32.7 |
| W64A * | 34 | 36.5 | 12.0 | 42.4 | 35.5 | 51.7 | 20.9 | 52.3 | 35.9 |
| W548 | 35 | 45.0 | 36.4 | 35.0 | 17.1 | 28.2 | 12.0 | 36.4 | 30.0 |
| W552C | 36 | 40.0 | 52.7 | 43.9 | 24.1 | 61.4 | 21.9 | 44.7 | 41.2 |
| W562 | 37 | 41.7 | 46.2 | 37.6 | 20.2 | 23.1 | 15.4 | 40.7 | 32.1 |
| W570 | 38 | 59.1 | 17.6 | 46.9 | 9.3 | 4.6 | 8.8 | 33.2 | 25.7 |
| CH753-4 | 39 | 39.3 | 46.8 | 36.8 | 29.6 | 47.2 | 21.9 | 46.4 | 38.3 |
| CH671-28 | 40 | 63.4 | 46.8 | 52.5 | 33.7 | 18.5 | 25.6 | 48.7 | 41.3 |
| Mean | | 43.0 | 38.3 | 42.8 | 28.2 | 36.8 | 20.8 | 41.0 | 35.8 |
| LSD 0.05 | | 8.9 | 15.8 | 9.3 | 2.6 | 8.5 | 7.4 | 10.2 | 8.8 |
| CV% | | 12.7 | 25.4 | 13.4 | 5.6 | 14.1 | 21.7 | 15.3 | 40.7 |

* Check entry.
+ Data missing from one replication.

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Table 25. Stand (percent) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | IA(H) | IN | MN | PA | CANHAR | Mean |
|-------|-----|------|-------|-------|-------|-------|--------|-------|
| A619 * | 1 | 88.9 | 71.1 | 100.0 | 77.8 | 100.0 | 98.9 | 89.4 |
| A632 * | 2 | 95.6 | 82.2 | 100.0 | 96.3 | 100.0 | 98.9 | 95.5 |
| B85 | 3 | 100.0 | 92.2 | 100.0 | 87.0 | 100.0 | 100.0 | 96.5 |
| A634 | 4 | 91.1 | 82.2 | 100.0 | 87.0 | 100.0 | 100.0 | 93.4 |
| A635 | 5 | 66.7 | 83.3 | 100.0 | 22.2 | 100.0 | 100.0 | 78.7 |
| A659 | 6 | 75.6 | 58.9 | 100.0 | 63.0 | 100.0 | 98.9 | 82.7 |
| A670 | 7 | 95.6 | 80.0 | 100.0 | 96.3 | 100.0 | 100.0 | 95.3 |
| Mo42 | 8 | 91.1 | 76.7 | 100.0 | 94.4 | 100.0 | 96.7 | 93.1 |
| AY499 | 9 | 93.3 | 78.9 | 100.0 | 92.6 | 100.0 | 97.8 | 93.8 |
| NY562 | 10 | 82.2 | 85.6 | 100.0 | 63.0 | 100.0 | 100.0 | 88.5 |
| NY378 | 11 | 95.6 | 62.2 | 100.0 | 79.6 | 100.0 | 100.0 | 89.6 |
| NY821LERF | 12 | 88.9 | 77.8 | 100.0 | 88.9 | 100.0 | 90.0 | 90.9 |
| NYD410 | 13 | 71.1 | 73.3 | 100.0 | 81.5 | 100.0 | 95.6 | 86.9 |
| NYRW3 | 14 | 73.3 | 75.6 | 100.0 | 96.3 | 100.0 | 100.0 | 90.9 |
| NYRW20 | 15 | 82.2 | 80.0 | 100.0 | 87.0 | 100.0 | 98.9 | 91.4 |
| NYRW23 | 16 | 68.9 | 90.0 | 100.0 | 64.8 | 100.0 | 91.1 | 85.8 |
| Pa405 | 17 | 80.0 | 82.2 | 100.0 | 72.2 | 100.0 | 93.3 | 88.0 |
| FR19 | 18 | 77.8 | 81.1 | 100.0 | 83.3 | 100.0 | 98.9 | 90.2 |
| CH9 | 19 | 55.6 | 81.1 | 100.0 | 35.2 | 100.0 | 94.4 | 77.7 |
| CH581-13 | 20 | 80.0 | 72.2 | 100.0 | 72.2 | 100.0 | 97.8 | 87.0 |
| CH586-12 | 21 | 88.9 | 74.4 | 100.0 | 88.9 | 100.0 | 100.0 | 92.0 |
| CH591-36 | 22 | 88.9 | 72.2 | 100.0 | 96.3 | 100.0 | 97.8 | 92.5 |
| CH592-46 | 23 | 85.6 | 65.6 | 100.0 | 96.3 | 100.0 | 100.0 | 91.2 |
| CH593-9 | 24 | 86.7 | 97.8 | 100.0 | 83.3 | 100.0 | 92.2 | 93.3 |
| CH606-11 | 25 | 93.3 | 64.4 | 100.0 | 79.6 | 100.0 | 97.8 | 89.2 |
| CH663-8 | 26 | 100.0 | 84.4 | 100.0 | 118.5 | 100.0 | 97.8 | 100.1 |
| B87 | 27 | 86.7 | 84.4 | 100.0 | 88.9 | 100.0 | 100.0 | 93.3 |
| Ms71 | 28 | 73.3 | 68.9 | 100.0 | 83.3 | 100.0 | 97.8 | 87.2 |
| Ms75 | 29 | 77.8 | 85.6 | 100.0 | 96.3 | 100.0 | 93.3 | 92.2 |
| Ms76 | 30 | 64.4 | 85.6 | 100.0 | 64.8 | 100.0 | 95.6 | 85.1 |
| Ms200 | 31 | 77.8 | 56.7 | 100.0 | 77.8 | 100.0 | 98.9 | 85.2 |
| H95 | 32 | 84.4 | 85.6 | 100.0 | 77.8 | 100.0 | 100.0 | 91.3 |
| H99 | 33 | 66.7 | 65.6 | 100.0 | 68.5 | 100.0 | 93.3 | 82.3 |
| W64A * | 34 | 95.6 | 68.9 | 100.0 | 90.7 | 100.0 | 96.7 | 92.0 |
| W548 | 35 | 88.9 | 84.4 | 100.0 | 85.2 | 100.0 | 100.0 | 93.1 |
| W552C | 36 | 75.6 | 85.6 | 100.0 | 94.4 | 100.0 | 88.9 | 90.7 |
| W562 | 37 | 93.3 | 85.6 | 100.0 | 77.8 | 100.0 | 100.0 | 92.8 |
| W570 | 38 | 68.9 | 34.4 | 100.0 | 59.3 | 100.0 | 100.0 | 77.1 |
| CH753-4 | 39 | 66.7 | 76.7 | 100.0 | 14.8 | 100.0 | 98.9 | 76.2 |
| CH671-28 | 40 | 73.3 | 77.8 | 100.0 | 83.3 | 100.0 | 98.9 | 88.9 |
| Mean | | 82.3 | 76.8 | 100.0 | 79.2 | 100.0 | 97.5 | 89.3 |
| LSD 0.05 | | 18.5 | 16.6 | NS | 23.7 | NS | NS | 11.2 |
| CV% | | 13.8 | 13.3 | | 18.4 | | | 19.1 |

* Check entry.

Table 26. Root lodging (percent) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | IA(H) | IN | MN | PA | CANHAR | Mean |
|-------|-----|------|-------|-----|------|------|--------|------|
| A619 * | 1 | 3.8 | 11.6 | 0.0 | 17.7 | 0.0 | 0.0 | 5.5 |
| A632 * | 2 | 2.2 | 0.0 | 0.0 | 15.5 | 0.0 | 0.0 | 2.9 |
| B85 | 3 | 18.9 | 4.9 | 0.0 | 52.0 | 0.0 | 0.0 | 12.6 |
| A634 | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | 1.1 | 0.4 |
| A635 | 5 | 0.0 | 0.0 | 0.0 | 8.3 | 0.0 | 1.1 | 1.6 |
| A659 | 6 | 1.7 | 0.0 | 0.7 | 10.1 | 0.0 | 7.8 | 3.4 |
| A670 | 7 | 4.8 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 1.0 |
| Mo42 | 8 | 0.0 | 0.0 | 0.0 | 14.3 | 0.0 | 0.0 | 2.4 |
| AY499 | 9 | 1.2 | 27.1 | 0.0 | 0.0 | 0.0 | 0.0 | 4.7 |
| NY562 | 10 | 10.3 | 21.5 | 0.0 | 38.4 | 0.0 | 4.4 | 12.4 |
| NY378 | 11 | 30.6 | 0.0 | 0.7 | 2.8 | 5.6 | 1.1 | 6.8 |
| NY821LERF | 12 | 27.2 | 12.3 | 0.0 | 4.5 | 1.1 | 3.6 | 8.1 |
| NYD410 | 13 | 11.1 | 0.0 | 3.0 | 23.0 | 2.2 | 0.0 | 6.5 |
| NYRW3 | 14 | 1.2 | 0.0 | 0.0 | 12.3 | 0.0 | 1.1 | 2.4 |
| NYRW20 | 15 | 1.3 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.4 |
| NYRW23 | 16 | 0.0 | 0.0 | 0.0 | 22.9 | 0.0 | 0.0 | 3.8 |
| Pa405 | 17 | 6.7 | 14.3 | 0.0 | 32.7 | 0.0 | 0.0 | 9.0 |
| FR19 | 18 | 10.8 | 1.4 | 0.0 | 28.4 | 0.0 | 0.0 | 6.8 |
| CH9 | 19 | 7.9 | 2.8 | 0.0 | 15.2 | 0.0 | 12.8 | 6.4 |
| CH581-13 | 20 | 26.5 | 19.6 | 5.9 | 56.4 | 10.0 | 13.6 | 22.0 |
| CH586-12 | 21 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 1.1 | 0.3 |
| CH591-36 | 22 | 10.3 | 0.0 | 0.0 | 3.7 | 0.0 | 1.1 | 2.5 |
| CH592-46 | 23 | 13.1 | 14.2 | 0.0 | 63.9 | 0.0 | 0.0 | 15.2 |
| CH593-9 | 24 | 1.3 | 2.3 | 0.0 | 30.0 | 2.2 | 0.0 | 6.0 |
| CH606-11 | 25 | 3.6 | 0.0 | 0.0 | 69.1 | 0.0 | 1.1 | 12.3 |
| CH663-8 | 26 | 3.3 | 1.3 | 0.0 | 8.2 | 0.0 | 0.0 | 2.1 |
| B87 | 27 | 0.0 | 20.5 | 0.7 | 37.0 | 0.0 | 1.1 | 9.9 |
| Ms71 | 28 | 0.0 | 9.6 | 0.0 | 0.0 | 0.0 | 0.0 | 1.6 |
| Ms75 | 29 | 1.5 | 0.0 | 0.0 | 38.0 | 1.1 | 6.7 | 7.9 |
| Ms76 | 30 | 0.0 | 1.2 | 0.7 | 33.9 | 0.0 | 0.0 | 6.0 |
| Ms200 | 31 | 41.0 | 0.0 | 0.0 | 18.6 | 0.0 | 0.0 | 9.9 |
| H95 | 32 | 1.2 | 0.0 | 0.0 | 20.4 | 1.1 | 0.0 | 3.8 |
| H99 | 33 | 0.0 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| W64A * | 34 | 2.4 | 14.9 | 0.0 | 6.0 | 0.0 | 0.0 | 3.9 |
| W548 | 35 | 0.0 | 1.2 | 0.0 | 3.9 | 0.0 | 0.0 | 0.9 |
| W552C | 36 | 9.0 | 2.3 | 0.0 | 18.0 | 0.0 | 0.0 | 4.9 |
| W562 | 37 | 0.0 | 13.6 | 0.0 | 2.1 | 0.0 | 0.0 | 2.6 |
| W570 | 38 | 0.0 | 0.0 | 0.0 | 16.1 | 0.0 | 0.0 | 2.7 |
| CH753-4 | 39 | 3.6 | 0.0 | 1.5 | 16.7 | 1.1 | 0.0 | 3.8 |
| CH671-28 | 40 | 29.9 | 0.0 | 0.0 | 27.7 | 0.0 | 0.0 | 9.6 |
| Mean | | 7.2 | 5.0 | 0.4 | 19.2 | 0.7 | 1.4 | 5.6 |
| LSD 0.05 | | 15.9 | 14.4 | 1.6 | 23.4 | 2.3 | NS | 9.9 |
| CV% | | 136.9 | 178.8 | 279.4 | 75.1 | 216.3 | | 271.1 |

* Check entry.

Table 27.  Stalk lodging (percent) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | IA(H) | IN | MN | PA | CANHAR | Mean |
|-------|-----|------|-------|------|------|------|--------|------|
| A619 * | 1 | 4.9 | 19.2 | 17.0 | 7.1 | 4.4 | 0.0 | 8.8 |
| A632 * | 2 | 9.5 | 0.0 | 37.0 | 0.0 | 2.2 | 1.1 | 8.3 |
| B85 | 3 | 18.9 | 76.5 | 6.7 | 0.0 | 2.2 | 0.0 | 17.4 |
| A634 | 4 | 15.4 | 23.1 | 18.5 | 8.1 | 0.0 | 1.1 | 11.0 |
| A635 | 5 | 1.7 | 52.8 | 8.9 | 0.0 | 1.1 | 1.1 | 10.9 |
| A659 | 6 | 3.2 | 8.9 | 12.6 | 2.4 | 8.9 | 3.4 | 6.6 |
| A670 | 7 | 10.4 | 2.7 | 2.2 | 0.0 | 4.4 | 1.1 | 3.5 |
| Mo42 | 8 | 8.4 | 44.8 | 11.9 | 5.6 | 0.0 | 0.0 | 11.8 |
| AY499 | 9 | 0.0 | 36.2 | 8.9 | 0.0 | 1.1 | 1.1 | 7.9 |
| NY562 | 10 | 6.4 | 27.5 | 2.2 | 0.0 | 1.1 | 1.1 | 6.4 |
| NY378 | 11 | 21.1 | 64.5 | 49.6 | 37.4 | 28.9 | 1.1 | 33.8 |
| NY821LERF | 12 | 11.5 | 24.2 | 42.2 | 43.2 | 10.0 | 3.4 | 22.4 |
| NYD410 | 13 | 2.1 | 0.0 | 13.3 | 0.0 | 0.0 | 0.0 | 2.6 |
| NYRW3 | 14 | 1.9 | 8.0 | 7.4 | 0.0 | 0.0 | 1.1 | 3.1 |
| NYRW20 | 15 | 5.6 | 80.5 | 42.2 | 2.0 | 3.3 | 3.3 | 22.8 |
| NYRW23 | 16 | 5.8 | 16.4 | 20.7 | 12.6 | 14.4 | 7.4 | 12.9 |
| Pa405 | 17 | 10.9 | 6.8 | 34.1 | 5.8 | 0.0 | 1.2 | 9.8 |
| FR19 | 18 | 2.1 | 76.2 | 23.7 | 7.4 | 2.2 | 1.1 | 18.8 |
| CH9 | 19 | 5.8 | 23.8 | 1.5 | 13.1 | 6.7 | 0.0 | 8.5 |
| CH581-13 | 20 | 2.5 | 37.4 | 5.9 | 6.4 | 1.1 | 0.0 | 8.9 |
| CH586-12 | 21 | 1.3 | 82.0 | 3.0 | 0.0 | 7.8 | 1.1 | 15.8 |
| CH591-36 | 22 | 0.0 | 92.5 | 0.0 | 0.0 | 0.0 | 0.0 | 15.4 |
| CH592-46 | 23 | 6.6 | 8.0 | 9.6 | 0.9 | 3.3 | 0.0 | 4.8 |
| CH593-9 | 24 | 24.7 | 79.5 | 65.2 | 43.3 | 1.1 | 0.0 | 35.6 |
| CH606-11 | 25 | 1.2 | 8.9 | 8.1 | 0.0 | 1.1 | 0.0 | 3.2 |
| CH663-8 | 26 | 5.6 | 43.4 | 20.0 | 4.7 | 11.1 | 5.6 | 15.1 |
| B87 | 27 | 6.4 | 2.8 | 11.9 | 0.0 | 3.3 | 1.1 | 4.3 |
| Ms71 | 28 | 4.5 | 1.7 | 3.7 | 0.0 | 0.0 | 0.0 | 1.7 |
| Ms75 | 29 | 1.9 | 63.3 | 4.4 | 0.0 | 1.1 | 0.0 | 11.8 |
| Ms76 | 30 | 0.0 | 47.9 | 2.2 | 1.4 | 1.1 | 1.1 | 9.0 |
| Ms200 | 31 | 35.4 | 39.4 | 54.1 | 45.5 | 17.8 | 14.5 | 34.5 |
| H95 | 32 | 0.0 | 24.4 | 0.7 | 0.0 | 0.0 | 0.0 | 4.2 |
| H99 | 33 | 17.1 | 15.3 | 11.9 | 4.2 | 2.2 | 1.1 | 8.6 |
| W64A * | 34 | 5.7 | 12.0 | 14.1 | 17.0 | 3.3 | 0.0 | 8.7 |
| W548 | 35 | 9.7 | 0.0 | 11.9 | 0.0 | 2.2 | 6.7 | 5.1 |
| W552C | 36 | 8.8 | 11.6 | 2.2 | 0.0 | 0.0 | 1.1 | 4.0 |
| W562 | 37 | 3.6 | 35.0 | 3.0 | 0.0 | 0.0 | 0.0 | 6.9 |
| W570 | 38 | 0.0 | 2.1 | 1.5 | 0.0 | 0.0 | 0.0 | 0.6 |
| CH753-4 | 39 | 0.0 | 63.7 | 9.6 | 0.0 | 0.0 | 0.0 | 12.2 |
| CH671-28 | 40 | 14.8 | 28.5 | 38.5 | 2.1 | 23.3 | 16.9 | 20.7 |
| Mean | | 7.4 | 32.3 | 16.1 | 6.8 | 4.3 | 2.0 | 11.5 |
| LSD 0.05 | | 15.3 | 24.7 | 13.1 | 12.5 | 10.2 | 4.9 | 14.9 |
| CV% | | 127.4 | 47.0 | 50.1 | 114.2 | 146.2 | 154.8 | 199.1 |

*  Check entry.

Table 28.  Usable ears (per 100 plants) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | PA | CANHAR | Mean |
|---|---|---|---|---|---|
| A619 * | 1 | 96.7 | 98.3 | 100.0 | 98.3 |
| A632 * | 2 | 146.7 | 150.0 | 196.7 | 164.4 |
| B85 | 3 | 96.7 | 83.3 | 101.7 | 93.9 |
| A634 | 4 | 110.0 | 98.3 | 101.7 | 103.3 |
| A635 | 5 | 100.0 | 93.3 | 101.7 | 98.3 |
| A659 | 6 | 110.0 | 80.0 | 91.7 | 93.9 |
| A670 | 7 | 120.0 | 86.7 | 90.0 | 98.9 |
| Mo42 | 8 | 136.7 | 100.0 | 156.7 | 131.1 |
| AY499 | 9 | 93.3 | 100.0 | 100.0 | 97.8 |
| NY562 | 10 | 96.7 | 98.3 | 95.0 | 96.7 |
| NY378 | 11 | 130.0 | 96.7 | 131.7 | 119.4 |
| NY821LERF | 12 | 106.7 | 100.0 | 108.3 | 105.0 |
| NYD410 | 13 | 120.0 | 95.0 | 96.7 | 103.9 |
| NYRW3 | 14 | 100.0 | 98.3 | 91.7 | 96.7 |
| NYRW20 | 15 | 96.7 | 70.0 | 100.0 | 88.9 |
| NYRW23 | 16 | 126.7 | 83.3 | 105.0 | 105.0 |
| Pa405 | 17 | 103.3 | 93.3 | 116.7 | 104.4 |
| FR19 | 18 | 110.0 | 95.0 | 113.3 | 106.1 |
| CH9 | 19 | 93.3 | 68.3 | 76.7 | 79.4 |
| CH581-13 | 20 | 96.7 | 98.3 | 100.0 | 98.3 |
| CH586-12 | 21 | 96.7 | 101.7 | 125.0 | 107.8 |
| CH591-36 | 22 | 86.7 | 98.3 | 98.3 | 94.4 |
| CH592-46 | 23 | 100.0 | 100.0 | 95.0 | 98.3 |
| CH593-9 | 24 | 96.7 | 93.3 | 103.3 | 97.8 |
| CH606-11 | 25 | 90.0 | 91.7 | 91.7 | 91.1 |
| CH663-8 | 26 | 106.7 | 101.7 | 136.7 | 115.0 |
| B87 | 27 | 116.7 | 100.0 | 130.0 | 115.6 |
| Ms71 | 28 | 93.3 | 100.0 | 101.7 | 98.3 |
| Ms75 | 29 | 100.0 | 100.0 | 100.0 | 100.0 |
| Ms76 | 30 | 106.7 | 90.0 | 98.3 | 98.3 |
| Ms200 | 31 | 96.7 | 90.0 | 100.0 | 95.6 |
| H95 | 32 | 103.3 | 90.0 | 118.3 | 103.9 |
| H99 | 33 | 103.3 | 100.0 | 116.7 | 106.7 |
| W64A * | 34 | 93.3 | 95.0+ | 100.0 | 96.2 |
| W548 | 35 | 153.3 | 100.0 | 120.0 | 124.4 |
| W552C | 36 | 100.0 | 93.3 | 96.7 | 96.7 |
| W562 | 37 | 103.3 | 88.3 | 100.0 | 97.2 |
| W570 | 38 | 146.7 | 81.7 | 118.3 | 115.6 |
| CH753-4 | 39 | 110.0 | 100.0 | 125.0 | 111.7 |
| CH671-28 | 40 | 106.7 | 96.7 | 103.3 | 102.2 |
| Mean | | 107.5 | 95.0 | 108.3 | 103.8 |
| LSD 0.05 | | 26.1 | 17.9 | 16.2 | 18.7 |
| CV% | | 14.9 | 11.6 | 9.1 | 19.1 |

*  Check entry.
+  Data missing from one replication.

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Table 29. Plant height (cm) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | IA(H) | IN | MI | MN | MO | PA | CANHAR | Mean |
|---|---|---|---|---|---|---|---|---|---|---|
| A619 * | 1 | 117.3 | 170.3 | 195.0 | 143.3 | 136.0 | 153.3 | 152.3 | 178.7 | 155.8 |
| A632 * | 2 | 192.3 | 142.3 | 215.0 | 170.0 | 166.7 | 173.3 | 192.3 | 221.7 | 184.2 |
| B85 | 3 | 149.3 | 199.7 | 216.7 | 151.7 | 144.7 | 158.3 | 151.7 | 213.0 | 173.1 |
| A634 | 4 | 162.7 | 198.3 | 191.7 | 151.7 | 147.7 | 141.7 | 162.3 | 184.3 | 167.5 |
| A635 | 5 | 139.7 | 164.7 | 170.0 | 128.3 | 134.7 | 130.0 | 150.0 | 178.7 | 149.5 |
| A659 | 6 | 153.7 | 156.0 | 205.0 | 163.3 | 156.0 | 148.3 | 186.3 | 200.0 | 171.1 |
| A670 | 7 | 165.0 | 174.7 | 220.0 | 171.7 | 157.0 | 175.0 | 178.3 | 204.3 | 180.8 |
| Mo42 | 8 | 176.7 | 183.7 | 230.0 | 175.0 | 172.3 | 163.3 | 188.0 | 224.3 | 189.2 |
| AY499 | 9 | 155.0 | 206.3 | 206.7 | 166.7 | 139.3 | 145.0 | 181.7 | 207.3 | 176.0 |
| NY562 | 10 | 138.7 | 179.0 | 210.0 | 168.3 | 151.7 | 151.7 | 184.3 | 205.3 | 173.6 |
| NY378 | 11 | 153.3 | 169.3 | 173.3 | 148.3 | 136.0 | 155.0 | 172.3 | 182.0 | 161.2 |
| NY821LERF | 12 | 124.3 | 227.7 | 190.0 | 131.7 | 131.7 | 135.0 | 134.0 | 167.7 | 155.3 |
| NYD410 | 13 | 145.3 | 121.7 | 211.7 | 138.3 | 143.7 | 136.7 | 147.7 | 192.0 | 154.6 |
| NYRW3 | 14 | 153.3 | 143.7 | 203.3 | 153.3 | 144.3 | 151.7 | 170.7 | 191.0 | 163.9 |
| NYRW20 | 15 | 176.3 | 186.3 | 195.0 | 150.0 | 151.7 | 153.3 | 151.3 | 194.3 | 169.8 |
| NYRW23 | 16 | 156.7 | 186.7 | 188.3 | 146.7 | 135.3 | 141.7 | 150.7 | 187.0 | 161.6 |
| Pa405 | 17 | 158.7 | 194.3 | 185.0 | 148.3 | 137.7 | 145.0 | 159.3 | 189.7 | 164.8 |
| FR19 | 18 | 160.7 | 217.0 | 193.3 | 155.0 | 152.7 | 153.3 | 170.0 | 195.7 | 174.7 |
| CH9 | 19 | 147.0 | 188.3 | 206.7 | 160.0 | 147.7 | 155.0 | 184.7 | 220.3 | 176.2 |
| CH581-13 | 20 | 152.7 | 188.3 | 218.3 | 173.3 | 170.0 | 176.7 | 176.0 | 218.3 | 184.2 |
| CH586-12 | 21 | 118.7 | 181.7 | 151.7 | 128.3 | 115.0 | 123.3 | 130.0 | 154.0 | 137.8 |
| CH591-36 | 22 | 147.3 | 158.7 | 196.7 | 160.0 | 143.7 | 168.3 | 190.3 | 194.0 | 169.9 |
| CH592-46 | 23 | 163.0 | 193.0 | 191.7 | 158.3 | 146.0 | 158.3 | 186.7 | 189.7 | 173.3 |
| CH593-9 | 24 | 152.3 | 183.7 | 186.7 | 158.3 | 147.3 | 146.7 | 154.7 | 199.7 | 166.2 |
| CH606-11 | 25 | 165.0 | 168.0 | 220.0 | 168.3 | 161.3 | 156.7 | 174.0 | 203.3 | 177.1 |
| CH663-8 | 26 | 161.0 | 167.3 | 211.7 | 165.0 | 151.3 | 156.7 | 190.0 | 193.0 | 174.5 |
| B87 | 27 | 159.0 | 200.3 | 221.7 | 161.7 | 153.3 | 151.7 | 175.7 | 223.3 | 180.8 |
| Ms71 | 28 | 155.0 | 158.7 | 173.3 | 150.0 | 135.7 | 128.3 | 161.3 | 177.7 | 155.0 |
| Ms75 | 29 | 154.7 | 149.7 | 196.7 | 143.3 | 150.7 | 138.3 | 169.3 | 185.7 | 161.0 |
| Ms76 | 30 | 150.0 | 198.7 | 163.3 | 136.7 | 132.0 | 128.3 | 132.7 | 169.0 | 151.3 |
| Ms200 | 31 | 133.3 | 187.7 | 171.7 | 138.3 | 129.0 | 140.0 | 151.3 | 172.0 | 152.9 |
| H95 | 32 | 148.7 | 171.7 | 200.0 | 150.0 | 144.3 | 143.3 | 158.3 | 200.3 | 164.6 |
| H99 | 33 | 98.3 | 164.3 | 136.7 | 106.7 | 107.0 | 108.3 | 119.0 | 129.0 | 121.2 |
| W64A * | 34 | 129.3 | 189.7 | 176.7 | 130.0 | 133.0 | 130.0 | 146.0 | 174.0 | 151.1 |
| W548 | 35 | 162.0 | 167.7 | 175.0 | 138.3 | 140.3 | 143.3 | 163.0 | 192.3 | 160.3 |
| W552C | 36 | 119.7 | 196.3 | 165.0 | 121.7 | 134.3 | 131.7 | 160.7 | 154.7 | 148.0 |
| W562 | 37 | 165.7 | 198.3 | 173.3 | 130.0 | 131.7 | 150.0 | 165.0 | 181.0 | 161.9 |
| W570 | 38 | 174.7 | 151.7 | 205.0 | 145.0 | 146.3 | 156.7 | 183.0 | 216.0 | 172.3 |
| CH753-4 | 39 | 133.3 | 180.7 | 151.7 | 151.7 | 122.0 | 131.7 | 145.3 | 165.3 | 147.7 |
| CH671-28 | 40 | 192.0 | 165.0 | 230.0 | 180.0 | 165.3 | 173.3 | 202.3 | 236.0 | 193.0 |
| Mean | | 151.4 | 178.3 | 193.1 | 150.4 | 143.7 | 147.7 | 165.1 | 191.6 | 165.2 |
| LSD 0.05 | | 11.9 | 11.7 | 11.2 | 17.2 | 8.8 | 13.1 | 19.2 | 16.1 | 13.0 |
| CV% | | 4.8 | 4.0 | 3.4 | 7.0 | 3.8 | 5.5 | 7.2 | 5.2 | 13.9 |

* Check entry.

Table 30.  Ear height (cm) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | IA(H) | IN | MI | MN | MO | PA | CANHAR | Mean |
|---|---|---|---|---|---|---|---|---|---|---|
| A619 * | 1 | 36.4 | 80.0 | 46.3 | 50.0 | 41.0 | 40.0 | 51.7 | 51.0 | 49.5 |
| A632 * | 2 | 94.9 | 49.7 | 89.0 | 86.7 | 83.3 | 81.7 | 91.7 | 94.0 | 83.9 |
| B85 | 3 | 64.1 | 88.3 | 71.0 | 75.0 | 71.7 | 68.3 | 76.0 | 81.0 | 74.4 |
| A634 | 4 | 73.5 | 109.3 | 76.0 | 71.7 | 68.3 | 60.0 | 77.3 | 79.0 | 76.9 |
| A635 | 5 | 57.7 | 85.3 | 62.3 | 56.7 | 56.0 | 50.0 | 63.3 | 76.7 | 63.5 |
| A659 | 6 | 52.5 | 70.7 | 60.7 | 73.3 | 60.0 | 53.3 | 81.0 | 77.0 | 66.1 |
| A670 | 7 | 62.6 | 74.3 | 65.7 | 71.7 | 61.3 | 60.0 | 72.0 | 61.7 | 66.2 |
| Mo42 | 8 | 66.9 | 76.7 | 74.3 | 78.3 | 72.7 | 56.7 | 76.0 | 80.3 | 72.7 |
| AY499 | 9 | 58.3 | 97.0 | 72.7 | 76.7 | 56.7 | 48.3 | 82.3 | 71.0 | 70.4 |
| NY562 | 10 | 47.0 | 89.7 | 70.0 | 75.0 | 58.7 | 46.7 | 75.0 | 61.3 | 65.4 |
| NY378 | 11 | 68.0 | 88.0 | 65.7 | 65.0 | 54.0 | 56.7 | 81.0 | 63.7 | 67.7 |
| NY821LERF | 12 | 42.6 | 110.7 | 56.0 | 56.7 | 47.7 | 40.0 | 51.0 | 51.0 | 57.0 |
| NYD410 | 13 | 50.7 | 40.3 | 65.7 | 63.3 | 50.7 | 40.0 | 63.3 | 51.0 | 53.1 |
| NYRW3 | 14 | 58.5 | 75.7 | 71.7 | 71.7 | 59.0 | 51.7 | 73.0 | 68.3 | 66.2 |
| NYRW20 | 15 | 74.9 | 84.3 | 81.3 | 76.7 | 70.3 | 58.3 | 66.0 | 74.3 | 73.3 |
| NYRW23 | 16 | 62.9 | 83.3 | 62.3 | 66.7 | 57.3 | 56.7 | 67.0 | 63.3 | 64.9 |
| Pa405 | 17 | 74.8 | 91.7 | 78.3 | 78.3 | 66.7 | 73.3 | 77.3 | 87.0 | 78.4 |
| FR19 | 18 | 72.9 | 116.0 | 74.3 | 68.3 | 67.3 | 63.3 | 80.0 | 78.3 | 77.6 |
| CH9 | 19 | 38.4 | 85.0 | 54.3 | 55.0 | 34.7 | 41.7 | 60.0 | 56.3 | 53.2 |
| CH581-13 | 20 | 51.9 | 92.3 | 63.0 | 71.7 | 67.7 | 66.7 | 66.0 | 64.7 | 68.0 |
| CH586-12 | 21 | 45.5 | 85.0 | 59.0 | 61.7 | 54.7 | 50.0 | 62.3 | 70.3 | 61.1 |
| CH591-36 | 22 | 52.7 | 84.7 | 65.7 | 70.0 | 53.3 | 65.0 | 78.7 | 71.7 | 67.7 |
| CH592-46 | 23 | 75.0 | 72.7 | 93.7 | 83.3 | 83.7 | 71.7 | 103.7 | 80.3 | 83.0 |
| CH593-9 | 24 | 61.6 | 81.0 | 58.0 | 78.3 | 66.3 | 60.0 | 69.0 | 75.3 | 68.7 |
| CH606-11 | 25 | 72.0 | 78.0 | 86.7 | 85.0 | 77.7 | 58.3 | 79.0 | 80.7 | 77.2 |
| CH663-8 | 26 | 72.0 | 71.0 | 84.0 | 73.3 | 69.7 | 63.3 | 95.0 | 73.7 | 75.2 |
| B87 | 27 | 58.8 | 80.3 | 73.7 | 68.3 | 66.0 | 56.7 | 75.3 | 77.0 | 69.5 |
| Ms71 | 28 | 61.0 | 85.0 | 58.7 | 60.0 | 48.7 | 48.3 | 70.7 | 52.3 | 60.6 |
| Ms75 | 29 | 66.7 | 49.7 | 70.0 | 66.7 | 71.3 | 48.3 | 76.0 | 74.0 | 65.3 |
| Ms76 | 30 | 64.3 | 85.0 | 70.0 | 65.0 | 63.7 | 58.3 | 61.7 | 68.7 | 67.1 |
| Ms200 | 31 | 63.8 | 82.0 | 67.7 | 73.3 | 64.3 | 66.7 | 74.7 | 78.3 | 71.3 |
| H95 | 32 | 56.9 | 91.7 | 56.3 | 65.0 | 63.3 | 53.3 | 68.3 | 68.3 | 65.4 |
| H99 | 33 | 25.9 | 46.7 | 58.3 | 41.7 | 37.3 | 28.3 | 51.7 | 39.0 | 41.1 |
| W64A * | 34 | 46.3 | 56.3 | 60.3 | 61.7 | 56.3 | 45.0 | 63.0 | 47.7 | 54.6 |
| W548 | 35 | 84.1 | 68.3 | 71.7 | 80.0 | 75.3 | 73.3 | 79.3 | 82.3 | 76.8 |
| W552C | 36 | 33.5 | 79.3 | 48.3 | 41.7 | 51.3 | 35.0 | 52.7 | 48.3 | 48.8 |
| W562 | 37 | 75.8 | 82.0 | 75.7 | 68.3 | 58.0 | 66.7 | 79.3 | 78.7 | 73.1 |
| W570 | 38 | 72.1 | 68.0 | 89.3 | 71.7 | 66.0 | 70.0 | 83.0 | 81.3 | 75.2 |
| CH753-4 | 39 | 59.8 | 81.0 | 58.7 | 81.7 | 53.7 | 58.3 | 72.0 | 72.0 | 67.1 |
| CH671-28 | 40 | 89.3 | 73.3 | 84.0 | 95.0 | 85.3 | 78.3 | 103.0 | 95.0 | 87.9 |
| Mean | | 61.2 | 79.7 | 68.8 | 69.5 | 61.8 | 56.7 | 73.2 | 70.2 | 67.6 |
| LSD 0.05 | | 6.0 | 12.7 | 16.2 | 13.0 | 6.6 | 12.2 | 16.4 | 14.0 | 8.5 |
| CV% | | 6.1 | 9.8 | 14.5 | 11.5 | 6.6 | 13.2 | 13.7 | 12.3 | 22.3 |

*  Check entry.

Table 31. Moisture (percent) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | IA(H) | IN | MI | MN | PA | CANHAR | Mean |
|-------|-----|------|------|------|------|------|------|------|------|
| A619 * | 1 | 18.2 | 18.5 | 19.1 | 45.6 | 33.5 | 51.1 | 30.2 | 30.9 |
| A632 * | 2 | 12.1 | 18.8 | 15.4 | 44.0 | 31.7 | 49.1 | 24.6 | 28.0 |
| B85 | 3 | 22.8 | 16.2 | 17.1 | 38.5 | 24.6 | 51.9 | 32.3 | 29.1 |
| A634 | 4 | 11.2 | 17.0 | 14.0 | 43.3 | 25.0 | 47.1 | 21.3 | 25.6 |
| A635 | 5 | 6.1 | 15.5 | 14.0 | 35.4 | 23.9 | 45.0 | 14.7 | 22.1 |
| A659 | 6 | 8.2 | 14.9 | 14.4 | 42.8 | 30.9 | 58.8 | 32.7 | 29.0 |
| A670 | 7 | 23.4 | 18.1 | 21.2 | 45.6 | 34.7 | 53.1 | 37.7 | 33.4 |
| Mo42 | 8 | 14.0 | 16.3 | 15.0 | 36.4 | 26.3 | 45.8 | 24.7 | 25.5 |
| AY499 | 9 | 14.4 | 19.2 | 17.3 | 36.8 | 28.5 | 43.5 | 29.0 | 27.0 |
| NY562 | 10 | 11.9 | 19.4 | 16.1 | 44.6 | 26.7 | 43.7 | 32.3 | 27.8 |
| NY378 | 11 | 8.5 | 16.4 | 15.0 | 26.9 | 17.3 | 28.9 | 19.2 | 18.9 |
| NY821LERF | 12 | 9.4 | 21.5 | 15.3 | 29.1 | 21.1 | 30.5 | 19.1 | 20.9 |
| NYD410 | 13 | 19.8 | 18.0 | 17.1 | 43.3 | 27.2 | 54.3 | 29.3 | 29.8 |
| NYRW3 | 14 | 14.9 | 17.7 | 18.5 | 38.7 | 32.2 | 43.2 | 29.9 | 27.9 |
| NYRW20 | 15 | 20.8 | 18.1 | 16.7 | 53.5 | 33.5 | 63.3 | 34.8 | 34.4 |
| NYRW23 | 16 | 15.4 | 13.3 | 16.6 | 45.8 | 35.7 | 51.5 | 32.2 | 30.1 |
| Pa405 | 17 | 8.0 | 17.6 | 14.9 | 28.8 | 22.7 | 40.8 | 17.7 | 21.5 |
| FR19 | 18 | 6.6 | 18.2 | 14.1 | 41.2 | 20.2 | 37.1 | 14.0 | 21.6 |
| CH9 | 19 | 6.9 | 21.5 | 15.3 | 41.1 | 22.1 | 45.5 | 29.1 | 26.0 |
| CH581-13 | 20 | 8.1 | 18.5 | 16.2 | 37.3 | 25.0 | 44.5 | 25.1 | 25.0 |
| CH586-12 | 21 | 9.1 | 17.4 | 15.1 | 33.7 | 28.9 | 42.0 | 16.6 | 23.3 |
| CH591-36 | 22 | 8.9 | 19.0 | 16.0 | 37.1 | 28.9 | 49.7 | 25.6 | 26.5 |
| CH592-46 | 23 | 6.8 | 17.5 | 15.2 | 46.7 | 29.2 | 53.1 | 23.3 | 27.4 |
| CH593-9 | 24 | 7.2 | 15.2 | 15.2 | 24.2 | 19.9 | 36.1 | 18.2 | 19.4 |
| CH606-11 | 25 | 8.2 | 20.8 | 18.3 | 45.8 | 36.3 | 48.6 | 30.2 | 29.7 |
| CH663-8 | 26 | 10.4 | 17.2 | 14.8 | 31.0 | 24.5 | 40.6 | 23.6 | 23.2 |
| B87 | 27 | 16.9 | 15.9 | 19.0 | 41.7 | 32.0 | 47.6 | 29.4 | 28.9 |
| Ms71 | 28 | 16.7 | 24.5 | 14.6 | 38.0 | 27.7 | 47.0 | 28.2 | 28.1 |
| Ms75 | 29 | 16.8 | 15.8 | 15.8 | 31.5 | 27.4 | 47.3 | 27.1 | 26.0 |
| Ms76 | 30 | 26.1 | 16.7 | 18.3 | 40.3 | 37.6 | 55.4 | 38.8 | 33.3 |
| Ms200 | 31 | 14.0 | 16.1 | 16.6 | 34.1 | 26.2 | 41.1 | 21.2 | 24.2 |
| H95 | 32 | 13.8 | 17.0 | 15.2 | 43.9 | 32.2 | 58.9 | 31.2 | 30.3 |
| H99 | 33 | 11.9 | 23.8 | 16.2 | 39.9 | 26.0 | 39.0 | 26.9 | 26.4 |
| W64A * | 34 | 10.9 | 17.5 | 14.7 | 34.8 | 23.4 | 42.2 | 28.8 | 24.6 |
| W548 | 35 | 7.8 | 17.9 | 14.8 | 43.8 | 35.4 | 54.1 | 30.9 | 29.3 |
| W552C | 36 | 16.7 | 23.0 | 15.8 | 39.2 | 26.6 | 39.7 | 26.4 | 26.8 |
| W562 | 37 | 15.8 | 18.7 | 14.7 | 44.4 | 36.9 | 53.8 | 30.5 | 30.7 |
| W570 | 38 | 9.8 | 15.9 | 14.8 | 45.5 | 23.2 | 50.6 | 31.3 | 27.3 |
| CH753-4 | 39 | 11.0 | 15.1 | 14.1 | 33.9 | 21.2 | 42.1 | 17.4 | 22.1 |
| CH671-28 | 40 | 16.7 | 22.2 | 18.8 | 41.1 | 34.0 | 50.3 | 31.7 | 30.7 |
| Mean | | 12.9 | 18.0 | 16.0 | 39.2 | 28.0 | 46.7 | 26.8 | 26.8 |
| LSD 0.05 | | 4.5 | 3.9 | 1.2 | 2.0 | 5.6 | 9.4 | 4.8 | 4.1 |
| CV% | | 21.3 | 13.2 | 4.4 | 3.1 | 12.4 | 12.4 | 11.1 | 25.6 |

* Check entry.

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Table 32. Days-to-tassel evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | IA(H) | MN | MO | PA | CANHAR | Mean |
|-------|-----|------|-------|------|------|------|--------|------|
| A619 * | 1 | 86.7 | 69.0 | 81.3 | 77.3 | 73.7 | 56.0 | 74.0 |
| A632 * | 2 | 90.7 | 62.0 | 83.0 | 79.0 | 79.0 | 71.0 | 77.4 |
| B85 | 3 | 87.7 | 64.7 | 80.7 | 76.3 | 77.7 | 56.0 | 73.8 |
| A634 | 4 | 89.0 | 66.0 | 82.0 | 78.7 | 76.3 | 68.0 | 76.7 |
| A635 | 5 | 87.0 | 69.7 | 82.3 | 80.0 | 74.7 | 69.0 | 77.1 |
| A659 | 6 | 91.0 | 65.3 | 85.0 | 78.3 | 79.7 | 73.0 | 78.7 |
| A670 | 7 | 92.0 | 68.0 | 84.3 | 79.3 | 78.3 | 69.0 | 78.5 |
| Mo42 | 8 | 89.0 | 68.7 | 81.0 | 77.0 | 74.0 | 68.0 | 76.3 |
| AY499 | 9 | 87.7 | 66.3 | 81.7 | 77.3 | 77.3 | 60.0 | 75.1 |
| NY562 | 10 | 86.3 | 65.7 | 81.3 | 78.7 | 73.7 | 60.0 | 74.3 |
| NY378 | 11 | 85.7 | 68.3 | 78.0 | 76.0 | 73.0 | 54.0 | 72.5 |
| NY821LERF | 12 | 84.7 | 68.7 | 78.7 | 76.0 | 72.7 | 55.0 | 72.6 |
| NYD410 | 13 | 90.3 | 64.0 | 84.0 | 78.3 | 80.0 | 69.0 | 77.6 |
| NYRW3 | 14 | 88.3 | 68.0 | 82.7 | 78.0 | 74.3 | 68.0 | 76.6 |
| NYRW20 | 15 | 90.0 | 68.7 | 84.3 | 81.3 | 84.0 | 69.0 | 79.6 |
| NYRW23 | 16 | 90.3 | 65.3 | 82.0 | 80.0 | 82.3 | 73.0 | 78.8 |
| Pa405 | 17 | 88.7 | 65.3 | 81.3 | 79.7 | 78.7 | 64.0 | 76.3 |
| FR19 | 18 | 88.7 | 67.0 | 82.3 | 79.3 | 81.0 | 60.0 | 76.4 |
| CH9 | 19 | 84.3 | 68.0 | 80.0 | 76.3 | 74.0 | 60.0 | 73.8 |
| CH581-13 | 20 | 86.0 | 64.0 | 80.3 | 78.3 | 74.0 | 64.0 | 74.4 |
| CH586-12 | 21 | 86.7 | 67.3 | 83.7 | 78.7 | 74.7 | 56.0 | 74.5 |
| CH591-36 | 22 | 87.0 | 66.3 | 80.3 | 77.7 | 75.0 | 56.0 | 73.7 |
| CH592-46 | 23 | 87.7 | 65.3 | 81.3 | 78.7 | 77.7 | 60.0 | 75.1 |
| CH593-9 | 24 | 83.7 | 63.3 | 78.0 | 75.3 | 72.3 | 54.0 | 71.1 |
| CH606-11 | 25 | 87.7 | 69.3 | 82.3 | 77.3 | 77.7 | 56.0 | 75.1 |
| CH663-8 | 26 | 88.3 | 66.0 | 80.7 | 76.0 | 77.0 | 56.0 | 74.0 |
| B87 | 27 | 89.0 | 67.0 | 83.3 | 79.0 | 76.0 | 68.0 | 77.1 |
| Ms71 | 28 | 90.0 | 69.7 | 82.3 | 77.7 | 74.7 | 64.0 | 76.4 |
| Ms75 | 29 | 85.7 | 63.7 | 80.3 | 76.0 | 72.7 | 56.0 | 72.4 |
| Ms76 | 30 | 90.3 | 68.0 | 82.3 | 81.7 | 78.3 | 72.3 | 78.8 |
| Ms200 | 31 | 87.3 | 69.0 | 81.3 | 79.0 | 75.0 | 64.0 | 75.9 |
| H95 | 32 | 94.3 | 69.7 | 87.3 | 81.7 | 85.3 | 73.0 | 81.9 |
| H99 | 33 | 85.7 | 63.0 | 81.3 | 76.7 | 73.0 | 56.0 | 72.6 |
| W64A * | 34 | 87.0 | 63.7 | 81.0 | 76.3 | 74.3 | 53.0 | 72.6 |
| W548 | 35 | 93.3 | 71.3 | 86.3 | 81.7 | 81.3 | 72.3 | 81.1 |
| W552C | 36 | 82.7 | 67.3 | 77.0 | 74.0 | 72.0 | 52.7 | 70.9 |
| W562 | 37 | 94.0 | 68.7 | 86.3 | 82.0 | 83.3 | 73.0 | 81.2 |
| W570 | 38 | 93.3 | 66.0 | 88.0 | 78.3 | 82.0 | 73.0 | 80.1 |
| CH753-4 | 39 | 87.0 | 66.7 | 80.7 | 76.7 | 73.7 | 56.0 | 73.4 |
| CH671-28 | 40 | 92.7 | 69.7 | 85.3 | 79.0 | 80.7 | 69.0 | 79.4 |
| Mean |  | 88.4 | 66.8 | 82.1 | 78.2 | 76.9 | 63.2 | 75.9 |
| LSD 0.05 |  | 2.3 | 2.1 | 1.7 | 2.2 | 2.4 | 5.5 | 3.1 |
| CV% |  | 1.6 | 2.0 | 1.3 | 1.8 | 1.9 | 5.4 | 6.2 |

* Check entry.

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Table 33. Days-to-silk evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | IA(H) | IN | MI | MN | PA | CANHAR | Mean |
|---|---|---|---|---|---|---|---|---|---|
| A619 * | 1 | 87.3 | 70.0 | 76.7 | 85.3 | 82.0 | 79.7 | 69.0 | 78.6 |
| A632 * | 2 | 92.3 | 63.7 | 76.3 | 87.3 | 83.3 | 82.3 | 71.0 | 79.5 |
| B85 | 3 | 90.3 | 64.0 | 77.0 | 83.7 | 81.7 | 82.0 | 69.0 | 78.2 |
| A634 | 4 | 89.7 | 66.3 | 75.7 | 84.3 | 82.3 | 81.0 | 70.0 | 78.5 |
| A635 | 5 | 88.0 | 70.0 | 76.7 | 84.7 | 83.0 | 81.7 | 69.0 | 79.0 |
| A659 | 6 | 92.3 | 66.0 | . | 86.3 | 86.0 | 85.7 | 73.0 | 81.6 |
| A670 | 7 | 93.7 | 69.7 | 77.0 | 88.7 | 85.7 | 83.0 | 72.3 | 81.4 |
| Mo42 | 8 | 91.7 | 70.0 | 76.0 | 85.0 | 83.0 | 80.7 | 69.0 | 79.3 |
| AY499 | 9 | 89.0 | 69.7 | 77.3 | 82.7 | 85.3 | 79.7 | 69.0 | 79.0 |
| NY562 | 10 | 90.3 | 68.0 | . | 87.0 | 84.3 | 83.7 | 70.0 | 80.6 |
| NY378 | 11 | 85.0 | 68.3 | 72.3 | 81.3 | 78.7 | 74.3 | 56.0 | 73.7 |
| NY821LERF | 12 | 84.3 | 69.3 | 71.3 | 80.7 | 78.7 | 74.3 | 56.0 | 73.5 |
| NYD410 | 13 | 91.3 | 64.7 | 76.7 | 83.0 | 84.3 | 84.0 | 71.0 | 79.3 |
| NYRW3 | 14 | 92.3 | 69.3 | 78.0 | 86.3 | 85.7 | 81.3 | 71.7 | 80.7 |
| NYRW20 | 15 | 93.3 | 69.7 | 76.0 | 90.0 | 85.0 | 90.0 | 71.7 | 82.2 |
| NYRW23 | 16 | 91.0 | 68.0 | 76.7 | 84.0 | 83.3 | 84.3 | 73.0 | 80.0 |
| Pa405 | 17 | 89.3 | 64.7 | 76.0 | 82.7 | 81.7 | 79.3 | 69.0 | 77.5 |
| FR19 | 18 | 89.0 | 67.7 | 75.7 | 84.0 | 84.3 | 81.7 | 68.0 | 78.6 |
| CH9 | 19 | 86.3 | 69.7 | 71.7 | 81.3 | 80.3 | 82.0 | 69.0 | 77.2 |
| CH581-13 | 20 | 90.0 | 63.3 | 76.7 | 83.3 | 83.3 | 81.7 | 71.0 | 78.5 |
| CH586-12 | 21 | 89.7 | 66.7 | 76.0 | 82.0 | 85.7 | 80.7 | 68.0 | 78.4 |
| CH591-36 | 22 | 93.7 | 68.3 | 76.0 | 82.3 | 83.3 | 82.0 | 70.0 | 79.4 |
| CH592-46 | 23 | 91.3 | 71.0 | 77.3 | 88.0 | 83.3 | 83.0 | 68.0 | 80.3 |
| CH593-9 | 24 | 83.3 | 62.7 | 68.3 | 80.7 | 79.0 | 76.0 | 56.0 | 72.3 |
| CH606-11 | 25 | 90.7 | 70.3 | . | 89.0 | 86.3 | 84.7 | 69.0 | 81.7 |
| CH663-8 | 26 | 87.0 | 66.0 | 71.7 | 82.7 | 80.3 | 77.3 | 56.0 | 74.4 |
| B87 | 27 | 90.7 | 68.0 | 77.3 | 85.7 | 84.0 | 82.0 | 70.0 | 79.7 |
| Ms71 | 28 | 92.3 | 70.3 | 77.0 | 85.3 | 84.0 | 80.7 | 71.0 | 80.1 |
| Ms75 | 29 | 86.3 | 62.7 | 69.7 | 81.0 | 80.0 | 78.7 | 56.0 | 73.5 |
| Ms76 | 30 | 93.0 | 68.0 | 77.0 | 86.3 | 84.7 | 85.3 | 72.3 | 81.0 |
| Ms200 | 31 | 92.0 | 71.3 | 74.7 | 82.7 | 82.7 | 80.3 | 69.0 | 79.0 |
| H95 | 32 | 95.0 | 71.7 | . | 90.7 | 88.0 | 89.7 | 73.7 | 84.8 |
| H99 | 33 | 86.0 | 65.0 | 75.0 | 82.3 | 83.0 | 75.7 | 56.0 | 74.7 |
| W64A * | 34 | 87.3 | 68.3 | 70.7 | 81.0 | 81.7 | 78.3 | 56.0 | 74.8 |
| W548 | 35 | 94.0 | 73.0 | 76.0++ | 86.7 | 87.3 | 83.7 | 73.0 | 82.6 |
| W552C | 36 | 84.3 | 69.3 | 69.7 | 83.3 | 78.7 | 75.0 | 56.0 | 73.8 |
| W562 | 37 | 95.0 | 70.7 | 77.0++ | 89.3 | 88.0 | 86.7 | 73.0 | 83.4 |
| W570 | 38 | 95.7 | 67.3 | . | 90.7 | 88.7 | 87.7 | 73.7 | 83.9 |
| CH753-4 | 39 | 87.7 | 67.0 | 73.7 | 82.3 | 81.3 | 81.0 | 68.0 | 77.3 |
| CH671-28 | 40 | 93.0 | 69.3 | 77.0++ | 86.7 | 86.3 | 84.0 | 71.7 | 81.6 |
| Mean | | 90.1 | 68.0 | 75.0 | 84.8 | 83.4 | 81.6 | 67.6 | 78.7 |
| LSD 0.05 | | 2.5 | 2.0 | 1.2 | 1.9 | 2.0 | 2.7 | 2.0 | 2.4 |
| CV% | | 1.7 | 1.8 | 1.3 | 1.4 | 1.5 | 2.0 | 1.8 | 5.0 |

* Check entry.
++ Data missing from two replications.

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Table 34. Ear row number evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | PA | CANHAR | Mean |
|-------|-----|------|------|--------|------|
| A619 * | 1 | 16.9 | 16.1 | 16.7 | 16.6 |
| A632 * | 2 | 14.3 | 13.7 | 14.7 | 14.2 |
| B85 | 3 | 13.0 | 12.6 | 14.1 | 13.2 |
| A634 | 4 | 14.5 | 14.8 | 14.9 | 14.8 |
| A635 | 5 | 14.1 | 13.9 | 14.5 | 14.2 |
| A659 | 6 | 14.7 | 14.9 | 15.3 | 15.0 |
| A670 | 7 | 14.3 | 14.1 | 14.9 | 14.4 |
| Mo42 | 8 | 11.3 | 10.8 | 11.4 | 11.2 |
| AY499 | 9 | 13.8 | 13.7 | 14.1 | 13.9 |
| NY562 | 10 | 14.3 | 14.2 | 14.1 | 14.2 |
| NY378 | 11 | 11.5 | 11.5 | 12.1 | 11.7 |
| NY821LERF | 12 | 11.9 | 12.5 | 13.7 | 12.7 |
| NYD410 | 13 | 15.9 | 14.7 | 16.9 | 15.8 |
| NYRW3 | 14 | 14.4 | 13.5 | 14.3 | 14.1 |
| NYRW20 | 15 | 15.1 | 13.7 | 14.3 | 14.4 |
| NYRW23 | 16 | 15.5 | 15.0 | 15.1 | 15.2 |
| Pa405 | 17 | 15.2 | 14.1 | 15.2 | 14.8 |
| FR19 | 18 | 16.9 | 17.1 | 18.0 | 17.3 |
| CH9 | 19 | 16.8 | 17.7 | 18.6 | 17.7 |
| CH581-13 | 20 | 17.9 | 16.9 | 18.3 | 17.7 |
| CH586-12 | 21 | 17.5 | 17.3 | 18.5 | 17.8 |
| CH591-36 | 22 | 18.5 | 18.5 | 18.9 | 18.6 |
| CH592-46 | 23 | 13.0 | 13.2 | 14.1 | 13.4 |
| CH593-9 | 24 | 15.5 | 15.0 | 15.5 | 15.3 |
| CH606-11 | 25 | 17.4 | 16.9 | 19.1 | 17.8 |
| CH663-8 | 26 | 12.6 | 12.3 | 12.5 | 12.5 |
| B87 | 27 | 12.2 | 12.5 | 12.9 | 12.5 |
| Ms71 | 28 | 15.5 | 14.9 | 16.1 | 15.5 |
| Ms75 | 29 | 15.8 | 15.5 | 16.5 | 15.9 |
| Ms76 | 30 | 17.4 | 17.4 | 17.4 | 17.4 |
| Ms200 | 31 | 17.1 | 16.9 | 18.1 | 17.3 |
| H95 | 32 | 15.5 | 15.7 | 16.1 | 15.8 |
| H99 | 33 | 11.4 | 12.0 | 11.7 | 11.7 |
| W64A * | 34 | 16.1 | 15.7 | 15.7 | 15.8 |
| W548 | 35 | 14.3 | 15.0 | 16.1 | 15.1 |
| W552C | 36 | 18.9 | 19.5 | 19.9 | 19.4 |
| W562 | 37 | 15.3 | 16.3 | 16.2 | 15.9 |
| W570 | 38 | 13.7 | 14.0 | 14.6 | 14.1 |
| CH753-4 | 39 | 12.7 | 12.9 | 13.9 | 13.2 |
| CH671-28 | 40 | 18.5 | 18.0 | 19.3 | 18.6 |
| Mean | | 15.0 | 14.9 | 15.6 | 15.2 |
| LSD 0.05 | | 0.8 | 0.8 | 0.7 | 0.7 |
| CV% | | 3.1 | 3.4 | 2.9 | 4.8 |

* Check entry.

Table 35. Ear length (cm) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | PA | CANHAR | Mean |
|---|---|---|---|---|---|
| A619 * | 1 | 13.8 | 12.5 | 14.5 | 13.6 |
| A632 * | 2 | 13.4 | 13.5 | 14.2 | 13.7 |
| B85 | 3 | 15.1 | 12.7 | 15.5 | 14.5 |
| A634 | 4 | 12.8 | 11.9 | 14.8 | 13.2 |
| A635 | 5 | 16.5 | 12.3 | 15.7 | 14.8 |
| A659 | 6 | 11.7 | 10.3 | 11.1 | 11.0 |
| A670 | 7 | 19.3 | 15.8 | 16.2 | 17.1 |
| Mo42 | 8 | 19.0 | 16.4 | 18.9 | 18.1 |
| AY499 | 9 | 12.0 | 11.3 | 12.5 | 11.9 |
| NY562 | 10 | 18.5 | 17.0 | 17.1 | 17.5 |
| NY378 | 11 | 14.1 | 13.5 | 11.7 | 13.1 |
| NY821LERF | 12 | 19.4 | 19.2 | 19.5 | 19.4 |
| NYD410 | 13 | 15.4 | 12.5 | 16.6 | 14.8 |
| NYRW3 | 14 | 13.3 | 11.5 | 13.4 | 12.7 |
| NYRW20 | 15 | 16.9 | 12.4 | 15.8 | 15.0 |
| NYRW23 | 16 | 17.9 | 15.8 | 16.1 | 16.6 |
| Pa405 | 17 | 14.4 | 12.0 | 14.3 | 13.6 |
| FR19 | 18 | 13.8 | 13.3 | 15.1 | 14.1 |
| CH9 | 19 | 10.2 | 8.8 | 9.4 | 9.5 |
| CH581-13 | 20 | 12.3 | 11.3 | 12.4 | 12.0 |
| CH586-12 | 21 | 12.6 | 11.9 | 12.4 | 12.3 |
| CH591-36 | 22 | 13.5 | 12.3 | 13.1 | 13.0 |
| CH592-46 | 23 | 18.4 | 14.1 | 15.0 | 15.8 |
| CH593-9 | 24 | 13.7 | 11.8 | 14.9 | 13.5 |
| CH606-11 | 25 | 15.5 | 12.7 | 13.9 | 14.0 |
| CH663-8 | 26 | 14.9 | 14.3 | 14.1 | 14.5 |
| B87 | 27 | 18.2 | 15.5 | 16.5 | 16.7 |
| Ms71 | 28 | 16.4 | 13.2 | 15.4 | 15.0 |
| Ms75 | 29 | 14.3 | 12.7 | 15.7 | 14.2 |
| Ms76 | 30 | 15.8 | 14.4 | 16.3 | 15.5 |
| Ms200 | 31 | 12.2 | 11.8 | 13.7 | 12.5 |
| H95 | 32 | 15.0 | 12.5 | 14.5 | 14.0 |
| H99 | 33 | 13.9 | 13.0 | 14.1 | 13.7 |
| W64A * | 34 | 13.2 | 11.0 | 14.4 | 12.9 |
| W548 | 35 | 14.7 | 12.9 | 14.4 | 14.0 |
| W552C | 36 | 11.2 | 10.2 | 11.7 | 11.0 |
| W562 | 37 | 15.7 | 12.5 | 15.3 | 14.5 |
| W570 | 38 | 16.7 | 13.8 | 13.4 | 14.7 |
| CH753-4 | 39 | 15.6 | 12.0 | 14.9 | 14.2 |
| CH671-28 | 40 | 14.3 | 12.7 | 13.6 | 13.6 |
| Mean | | 14.9 | 13.0 | 14.6 | 14.1 |
| LSD 0.05 | | 0.9 | 1.1 | 1.2 | 1.4 |
| CV% | | 3.7 | 5.3 | 5.2 | 10.8 |

* Check entry.

Table 36. Ear diameter (cm) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | PA | CANHAR | Mean |
|-------|-----|-----|-----|--------|------|
| A619 * | 1 | 4.7 | 4.1 | 4.6 | 4.5 |
| A632 * | 2 | 3.9 | 3.5 | 3.8 | 3.7 |
| B85 | 3 | 3.6 | 3.1 | 3.8 | 3.5 |
| A634 | 4 | 4.1 | 3.5 | 3.8 | 3.8 |
| A635 | 5 | 3.9 | 3.3 | 3.8 | 3.7 |
| A659 | 6 | 4.2 | 3.7 | 4.2 | 4.0 |
| A670 | 7 | 4.1 | 3.6 | 4.0 | 3.9 |
| Mo42 | 8 | 3.7 | 3.3 | 3.7 | 3.6 |
| AY499 | 9 | 3.8 | 3.4 | 3.7 | 3.6 |
| NY562 | 10 | 3.9 | 3.4 | 3.8 | 3.7 |
| NY378 | 11 | 3.3 | 3.1 | 3.3 | 3.2 |
| NY821LERF | 12 | 3.1 | 2.9 | 3.4 | 3.1 |
| NYD410 | 13 | 4.1 | 3.4 | 3.9 | 3.8 |
| NYRW3 | 14 | 4.0 | 3.4 | 3.9 | 3.8 |
| NYRW20 | 15 | 4.3 | 3.1 | 3.9 | 3.8 |
| NYRW23 | 16 | 4.2 | 3.4 | 3.9 | 3.8 |
| Pa405 | 17 | 3.8 | 3.4 | 4.0 | 3.7 |
| FR19 | 18 | 4.0 | 3.5 | 4.0 | 3.8 |
| CH9 | 19 | 4.5 | 4.0 | 4.7 | 4.4 |
| CH581-13 | 20 | 4.3 | 3.8 | 4.5 | 4.2 |
| CH586-12 | 21 | 4.0 | 3.6 | 4.1 | 3.9 |
| CH591-36 | 22 | 4.2 | 3.7 | 4.2 | 4.0 |
| CH592-46 | 23 | 3.8 | 3.3 | 3.6 | 3.6 |
| CH593-9 | 24 | 3.7 | 3.3 | 3.9 | 3.6 |
| CH606-11 | 25 | 4.1 | 3.7 | 4.2 | 4.0 |
| CH663-8 | 26 | 3.5 | 3.4 | 3.5 | 3.5 |
| B87 | 27 | 3.9 | 3.5 | 3.8 | 3.7 |
| Ms71 | 28 | 4.0 | 3.3 | 3.9 | 3.8 |
| Ms75 | 29 | 4.0 | 3.4 | 3.9 | 3.8 |
| Ms76 | 30 | 4.2 | 3.5 | 4.2 | 4.0 |
| Ms200 | 31 | 4.3 | 3.6 | 4.2 | 4.1 |
| H95 | 32 | 4.2 | 3.3 | 3.9 | 3.8 |
| H99 | 33 | 3.5 | 3.4 | 3.6 | 3.5 |
| W64A * | 34 | 4.2 | 3.7 | 4.3 | 4.1 |
| W548 | 35 | 3.7 | 3.2 | 3.8 | 3.6 |
| W552C | 36 | 4.3 | 3.8 | 4.6 | 4.2 |
| W562 | 37 | 3.9 | 3.4 | 4.0 | 3.8 |
| W570 | 38 | 3.9 | 3.2 | 3.8 | 3.6 |
| CH753-4 | 39 | 3.5 | 3.2 | 3.7 | 3.5 |
| CH671-28 | 40 | 4.7 | 3.8 | 4.6 | 4.4 |
| Mean | | 4.0 | 3.5 | 4.0 | 3.8 |
| LSD 0.05 | | 0.2 | 0.2 | 0.2 | 0.1 |
| CV% | | 2.4 | 3.2 | 3.1 | 5.6 |

* Check entry.

Table 37. Three-hundred kernel weight (g) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | IA | PA | CANHAR | Mean |
|-------|-----|------|------|--------|------|
| A619 * | 1 | 71.0 | 48.7 | 62.0 | 60.6 |
| A632 * | 2 | 69.2 | 58.0 | 58.0 | 61.7 |
| B85 | 3 | 65.1 | 45.3 | 64.3 | 58.3 |
| A634 | 4 | 84.7 | 41.7 | 62.3 | 62.9 |
| A635 | 5 | 60.8 | 36.0 | 61.3 | 52.7 |
| A659 | 6 | 75.3 | 46.0 | 67.7 | 63.0 |
| A670 | 7 | 66.5 | 51.3 | 67.3 | 61.7 |
| Mo42 | 8 | 80.1 | 62.7 | 72.0 | 71.6 |
| AY499 | 9 | 81.3 | 54.3 | 73.3 | 69.7 |
| NY562 | 10 | 69.8 | 49.0 | 75.3 | 64.7 |
| NY378 | 11 | 59.9 | 44.3 | 64.3 | 56.2 |
| NY821LERF | 12 | 69.2 | 47.3 | 67.0 | 61.2 |
| NYD410 | 13 | 52.2 | 34.7 | 45.7 | 44.2 |
| NYRW3 | 14 | 59.5 | 45.7 | 63.3 | 56.2 |
| NYRW20 | 15 | 71.8 | 35.0 | 59.7 | 55.5 |
| NYRW23 | 16 | 66.6 | 33.3 | 47.7 | 49.2 |
| Pa405 | 17 | 48.8 | 40.7 | 55.7 | 48.4 |
| FR19 | 18 | 54.2 | 32.3 | 50.7 | 45.7 |
| CH9 | 19 | 68.1 | 31.7 | 77.7 | 59.1 |
| CH581-13 | 20 | 46.7 | 36.3 | 57.7 | 46.9 |
| CH586-12 | 21 | 49.9 | 40.0 | 50.0 | 46.6 |
| CH591-36 | 22 | 58.3 | 38.0 | 58.3 | 51.5 |
| CH592-46 | 23 | 71.0 | 49.0 | 64.0 | 61.3 |
| CH593-9 | 24 | 48.8 | 40.3 | 59.0 | 49.4 |
| CH606-11 | 25 | 53.4 | 41.3 | 57.0 | 50.6 |
| CH663-8 | 26 | 71.9 | 61.7 | 73.7 | 69.1 |
| B87 | 27 | 73.5 | 51.3 | 64.3 | 63.1 |
| Ms71 | 28 | 77.9 | 43.0 | 70.0 | 63.6 |
| Ms75 | 29 | 73.1 | 46.0 | 61.0 | 60.0 |
| Ms76 | 30 | 65.9 | 37.3 | 63.0 | 55.4 |
| Ms200 | 31 | 61.8 | 38.7 | 53.3 | 51.3 |
| H95 | 32 | 71.8 | 40.0 | 59.3 | 57.0 |
| H99 | 33 | 62.8 | 54.0 | 66.0 | 60.9 |
| W64A * | 34 | 54.5 | 39.3 | 60.3 | 51.4 |
| W548 | 35 | 54.8 | 35.3 | 53.3 | 47.8 |
| W552C | 36 | 65.1 | 44.7 | 75.3 | 61.7 |
| W562 | 37 | 66.3 | 44.0 | 65.3 | 58.6 |
| W570 | 38 | 75.2 | 57.7 | 72.7 | 68.5 |
| CH753-4 | 39 | 54.1 | 51.0 | 62.7 | 55.9 |
| CH671-28 | 40 | 79.1 | 47.3 | 73.0 | 66.5 |
| Mean | | 65.3 | 44.4 | 62.9 | 57.5 |
| LSD 0.05 | | 7.5 | 7.0 | 8.0 | 9.5 |
| CV% | | 7.1 | 9.7 | 7.8 | 17.5 |

* Check entry.

Table 38. Stalk crushing strength (load-kg) evaluation of the 400-600 maturity inbred lines.

| Entry | No. | MO |
|-------|-----|------|
| A619 * | 1 | 169.3 |
| A632 * | 2 | 219.4 |
| B85 | 3 | 322.1 |
| A634 | 4 | 152.7 |
| A635 | 5 | 223.9 |
| A659 | 6 | 145.3 |
| A670 | 7 | 295.1 |
| Mo42 | 8 | 157.2 |
| AY499 | 9 | 215.3 |
| NY562 | 10 | 338.5 |
| NY378 | 11 | 267.5 |
| NY821LERF | 12 | 150.9 |
| NYD410 | 13 | 184.5 |
| NYRW3 | 14 | 438.5 |
| NYRW20 | 15 | 217.6 |
| NYRW23 | 16 | 242.8 |
| Pa405 | 17 | 178.4 |
| FR19 | 18 | 232.5 |
| CH9 | 19 | 235.4 |
| CH581-13 | 20 | 265.4 |
| CH586-12 | 21 | 184.2 |
| CH591-36 | 22 | 244.9 |
| CH592-46 | 23 | 417.3 |
| CH593-9 | 24 | 323.4 |
| CH606-11 | 25 | 303.8 |
| CH663-8 | 26 | 207.1 |
| B87 | 27 | 273.7 |
| Ms71 | 28 | 331.1 |
| Ms75 | 29 | 158.2 |
| Ms76 | 30 | 494.4 |
| Ms200 | 31 | 201.2 |
| H95 | 32 | 310.0 |
| H99 | 33 | 142.1 |
| W64A * | 34 | 215.6 |
| W548 | 35 | 178.4 |
| W552C | 36 | 145.5 |
| W562 | 37 | 441.5 |
| W570 | 38 | 341.7 |
| CH753-4 | 39 | 297.9 |
| CH671-28 | 40 | 247.8 |
| Mean | | 252.8 |
| LSD 0.05 | | 122.7 |
| CV% | | 29.9 |

* Check entry.

Table 39. Bacterial wilt susceptibility evaluation of the 400-600 maturity inbred lines.

| Entry | No. | Stewart's wilt | | | Goss' wilt |
|-------|-----|------|------|------|------|
| | | MO | IL | Mean | NE |
| | | (1-5) | (1-5) | (1-5) | (1-9) |
| A619 * | 1 | 3.0++ | 2.0 | 2.3 | 2.7 |
| A632 * | 2 | 3.5+ | 2.0 | 2.6 | 2.7 |
| B85 | 3 | 3.0++ | 1.0 | 1.5 | 3.0 |
| A634 | 4 | 4.0++ | 2.0 | 2.5 | 1.0 |
| A635 | 5 | 4.0++ | 1.3 | 2.0 | 2.0 |
| A659 | 6 | 3.0++ | 1.0 | 1.5 | 1.3 |
| A670 | 7 | 3.0++ | 2.0 | 2.3 | 1.0 |
| Mo42 | 8 | 4.0++ | 1.3 | 2.0 | 2.3 |
| AY499 | 9 | . | 1.0 | 1.0 | 1.7 |
| NY562 | 10 | . | 1.0 | 1.0 | 1.7 |
| NY378 | 11 | . | 1.3 | 1.3 | 1.3 |
| NY821LERF | 12 | 1.5+ | 1.7 | 1.6 | 1.0 |
| NYD410 | 13 | . | . | . | 1.7 |
| NYRW3 | 14 | . | 1.0 | 1.0 | 1.0 |
| NYRW20 | 15 | 2.0++ | 1.0 | 1.3 | 1.0 |
| NYRW23 | 16 | . | 1.0 | 1.0 | 1.0 |
| Pa405 | 17 | . | 1.0 | 1.0 | 2.0 |
| FR19 | 18 | 4.0++ | 1.3 | 2.0 | 1.3 |
| CH9 | 19 | . | 1.0 | 1.0 | 2.3 |
| CH581-13 | 20 | . | 1.7 | 1.7 | 1.0 |
| CH586-12 | 21 | . | 2.0 | 2.0 | 3.0 |
| CH591-36 | 22 | . | 2.0 | 2.0 | 1.0 |
| CH592-46 | 23 | . | 1.7 | 1.7 | 1.7 |
| CH593-9 | 24 | 1.0 | 1.0 | 1.0 | 4.0 |
| CH606-11 | 25 | 3.0++ | 1.7 | 2.0 | 1.7 |
| CH663-8 | 26 | . | 2.0 | 2.0 | 1.3 |
| B87 | 27 | 3.7 | 1.3 | 2.5 | 1.0 |
| Ms71 | 28 | 2.3 | 1.0 | 1.7 | 3.3 |
| Ms75 | 29 | 2.7 | 2.0 | 2.3 | 1.3 |
| Ms76 | 30 | . | 1.7 | 1.7 | 1.7 |
| Ms200 | 31 | 3.0++ | 1.0 | 1.5 | 2.3 |
| H95 | 32 | 2.0 | 1.3 | 1.7 | 2.0 |
| H99 | 33 | 2.0 | 1.0 | 1.5 | 1.0 |
| W64A * | 34 | 3.3 | 1.7 | 2.5 | 1.0 |
| W548 | 35 | 3.7 | 1.3 | 2.5 | 4.0 |
| W552C | 36 | 3.7 | 1.7 | 2.7 | 5.0 |
| W562 | 37 | 3.3 | 1.3 | 2.3 | 3.3 |
| W570 | 38 | 4.0++ | 2.0 | 2.5 | 1.3 |
| CH753-4 | 39 | 3.0 | 2.0 | 2.5 | 1.0 |
| CH671-28 | 40 | 2.7 | 1.0 | 1.8 | 1.0 |
| Mean | | 2.9 | 1.4 | 1.9 | 1.9 |
| LSD 0.05 | | 1.1 | 0.6 | NS | 2.1 |
| CV% | | 22.6 | 26.9 | | 71.9 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

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Table 40. Ear rot susceptibility evaluation of the 400-600 maturity
inbred lines.

| Entry | No. | Fusarium MN | Gibberella MI |
|-------|-----|-------------|---------------|
|       |     | (1-9)       | (0-5)         |
| A619 * | 1 | 2.7 | 1.7 |
| A632 * | 2 | 1.4 | 0.7 |
| B85    | 3 | 1.7 | 0.3 |
| A634   | 4 | 2.2 | 3.5 |
| A635   | 5 | 2.4 | 2.7 |
| A659   | 6 | 1.4 | 2.1 |
| A670   | 7 | .   | 0.9 |
| Mo42   | 8 | .   | 0.2 |
| AY499  | 9 | 1.1 | 0.5 |
| NY562  | 10 | 1.3 | 0.0 |
| NY378    | 11 | 4.9 | 1.3 |
| NY821LERF | 12 | 2.6 | 1.2 |
| NYD410   | 13 | .   | 0.8 |
| NYRW3    | 14 | 2.1 | 2.9 |
| NYRW20   | 15 | 1.2 | 0.9 |
| NYRW23   | 16 | 5.1 | 2.5 |
| Pa405    | 17 | 1.6 | 1.0 |
| FR19     | 18 | 2.3 | 1.1 |
| CH9      | 19 | .   | 0.5 |
| CH581-13 | 20 | .   | 2.1 |
| CH586-12 | 21 | 1.4 | 1.3 |
| CH591-36 | 22 | 1.4 | 0.5 |
| CH592-46 | 23 | 2.2 | 0.7 |
| CH593-9  | 24 | 2.3 | 0.6 |
| CH606-11 | 25 | .   | 1.0 |
| CH663-8 | 26 | 1.3 | 1.6 |
| B87     | 27 | 1.5 | 2.2 |
| Ms71    | 28 | 3.8 | 1.4 |
| Ms75    | 29 | 1.3 | 1.6 |
| Ms76    | 30 | 4.3 | 3.1 |
| Ms200   | 31 | .   | 3.2 |
| H95     | 32 | .   | 2.8 |
| H99     | 33 | .   | 0.7 |
| W64A *  | 34 | 1.7 | 1.3 |
| W548    | 35 | 2.7 | 3.5 |
| W552C    | 36 | 1.3 | 2.0 |
| W562     | 37 | 1.7 | 2.0 |
| W570     | 38 | 1.1 | 3.8 |
| CH753-4  | 39 | 1.6 | 1.2 |
| CH671-28 | 40 | 2.2 | 3.7 |
| Mean     |    | 2.1  | 1.6  |
| LSD 0.05 |    | 1.5  | 1.6  |
| CV%      |    | 43.1 | 63.6 |

* Check entry.

Table 41. Fungal leaf disease susceptibility evaluation of the 400-600 maturity inbred lines.

| Entry | No. | Eye-spot MI | North. leaf spot MI | Southern leaf blight Date 1 IL | Date 2 IL | Northern leaf blight MI | Race 1 IL | Race 2 IL | Race 2 PA |
|---|---|---|---|---|---|---|---|---|---|
| | | (1-5) | (1-5) | (%LA[#]) | (%LA) | (1-5) | (%LA) | (%LA) | (1-5) |
| A619 * | 1 | 3.7 | 2.7 | 8.3 | 16.7 | 2.7 | 4.3 | 6.0 | 1.5 |
| A632 * | 2 | 2.7 | 1.3 | 6.7 | 23.3 | 1.7 | 6.5 | 7.5 | 0.7 |
| B85 | 3 | 3.3 | 1.7 | 6.7 | 10.0 | 1.0 | 1.3 | 1.7 | 0.8 |
| A634 | 4 | 2.7 | 4.0 | 26.7 | 66.7 | 5.0 | 20.0 | 35.0 | 2.0 |
| A635 | 5 | 2.3 | 3.3 | 13.3 | 80.0 | 5.0 | 15.5 | 35.0++ | 1.7 |
| A659 | 6 | 3.7 | 4.7 | 30.0 | 50.0 | 5.0 | 20.0 | 27.5+ | 1.5 |
| A670 | 7 | 3.3 | 3.3 | 16.7 | 40.0 | 3.0 | 8.8 | 18.3 | 1.0 |
| Mo42 | 8 | 3.3 | 2.0 | 6.7 | 13.3 | 1.3 | 3.8 | 3.2 | 0.5 |
| AY499 | 9 | 1.3 | 2.3 | 6.7 | 20.0 | 1.3 | 2.3 | 3.7 | 1.8 |
| NY562 | 10 | 3.0 | 2.3 | 10.0 | 13.3 | 2.0 | 3.7 | 7.5 | 1.7 |
| NY378 | 11 | 3.7 | 3.7 | 40.0 | 83.3 | 5.0 | 46.7 | 51.7 | 3.0 |
| NY821LERF | 12 | 3.7 | 3.3 | 13.3 | 33.3 | 2.3 | 3.0 | 7.5 | 0.7 |
| NYD410 | 13 | 5.0 | 2.3 | 16.7 | 40.0 | 2.0 | 19.2 | 30.0 | 1.0 |
| NYRW3 | 14 | 4.3 | 3.0 | 20.0 | 46.7 | 2.0 | 9.3 | 17.8 | 1.5 |
| NYRW20 | 15 | 3.3 | 2.7 | 16.7 | 23.3 | 1.0 | 2.0 | 1.0 | 1.8 |
| NYRW23 | 16 | 4.7 | 2.0 | 20.0 | 40.0 | 1.3 | 6.2 | 7.7 | 0.7 |
| Pa405 | 17 | 4.3 | 3.0 | 20.0 | 53.3 | 2.3 | 3.5+ | 10.2 | 1.0 |
| FR19 | 18 | 3.3 | 2.7 | 8.3 | 50.0 | 3.7 | 21.7 | 35.0 | 1.5 |
| CH9 | 19 | 4.3 | 3.3 | 8.3 | 16.7 | 4.7 | 19.3+ | 25.0++ | 2.3 |
| CH581-13 | 20 | 5.0 | 3.0 | 13.3 | 36.7 | 3.0 | 9.2 | 26.7 | 0.7 |
| CH586-12 | 21 | 3.0 | 1.3 | 8.3 | 10.0 | 2.0 | 8.5 | 7.0 | 0.2 |
| CH591-36 | 22 | 4.0 | 2.0 | 11.7 | 33.3 | 3.3 | 13.3 | 26.7 | 1.7 |
| CH592-46 | 23 | 2.3 | 3.0 | 10.0+ | 65.0+ | 2.3 | 9.8 | 21.7 | 1.0 |
| CH593-9 | 24 | 2.7 | 2.0 | 16.7 | 73.3 | 3.3 | 7.7 | 6.7 | 0.5 |
| CH606-11 | 25 | 2.3 | 1.7 | 11.7 | 53.3 | 5.0 | 26.7 | 28.5 | 2.2 |
| CH663-8 | 26 | 3.7 | 2.3 | 26.7 | 80.0 | 4.3 | 2.0 | 5.2 | 0.8 |
| B87 | 27 | 3.3 | 1.7 | 10.0 | 36.7 | 3.0 | 15.3 | 22.3 | 1.2 |
| Ms71 | 28 | 3.0 | 2.0 | 11.7 | 36.7 | 2.3 | 2.7 | 4.7 | 1.2 |
| Ms75 | 29 | 1.7 | 1.3 | 5.0 | 10.0 | 1.0 | 2.0 | 2.0+ | 0.3 |
| Ms76 | 30 | 2.0 | 1.7 | 20.0 | 66.7 | 1.3 | 5.0+ | 3.5+ | 0.8 |
| Ms200 | 31 | 3.0 | 2.0 | 11.7 | 50.0 | 3.0 | 14.5 | 28.3 | 1.7 |
| H95 | 32 | 2.3 | 1.7 | 6.7 | 13.3 | 1.0 | 1.0 | 1.7 | 0.2 |
| H99 | 33 | 3.3 | 2.7 | 6.7 | 13.3 | 1.0 | 1.0 | 1.0 | 0.5 |
| W64A * | 34 | 3.3 | 3.3 | 26.7 | 80.0 | 2.0 | 2.3 | 28.8 | 1.2 |
| W548 | 35 | 3.3 | 3.3 | 5.0 | 26.7 | 2.3 | 4.5 | 12.5+ | 1.3 |
| W552C | 36 | 2.0 | 3.3 | 8.3 | 33.3 | 1.7 | 5.2 | 9.3 | 1.5 |
| W562 | 37 | 3.7 | 3.0 | 20.0 | 73.3 | 2.7 | 4.0 | 4.8+ | 1.3 |
| W570 | 38 | 3.3 | 2.0 | 10.0 | 20.0 | 3.3 | 10.8 | 9.7 | 0.5 |
| CH753-4 | 39 | 3.7 | 2.0 | 10.0 | 56.7 | 3.7 | 20.0++ | 25.0 | 1.2 |
| CH671-28 | 40 | 3.0 | 2.0 | 10.0 | 33.3 | 3.7 | 11.2 | 28.3 | 1.0 |
| Mean | | 3.3 | 2.5 | 13.9 | 40.3 | 2.7 | 9.7 | 15.6 | 1.2 |
| LSD 0.05 | | 0.8 | 0.9 | 9.2 | 18.5 | 0.7 | 7.3 | 12.8 | 0.8 |
| CV% | | 16.6 | 23.2 | 42.7 | 29.6 | 15.7 | 48.5 | 52.6 | 42.8 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.
# Represents percent of leaf area infected.

Table 42. Smut susceptibility evaluation of the 400-600 maturity
         inbred lines.

| Entry | No. | Head infct. TX |
|---|---|---|
| | | (%) |
| A619 * | 1 | 11.7 |
| A632 * | 2 | 1.3 |
| B85 | 3 | 11.7 |
| A634 | 4 | 1.7 |
| A635 | 5 | 1.7 |
| A659 | 6 | 8.8 |
| A670 | 7 | 1.1 |
| Mo42 | 8 | 15.0 |
| AY499 | 9 | 0.0 |
| NY562 | 10 | 3.8 |
| NY378 | 11 | 11.1 |
| NY821LERF | 12 | 12.2 |
| NYD410 | 13 | 13.9 |
| NYRW3 | 14 | 0.0 |
| NYRW20 | 15 | 1.7 |
| NYRW23 | 16 | 10.3 |
| Pa405 | 17 | 7.3 |
| FR19 | 18 | 1.0 |
| CH9 | 19 | 0.0 |
| CH581-13 | 20 | 3.3 |
| CH586-12 | 21 | 0.0 |
| CH591-36 | 22 | 1.0 |
| CH592-46 | 23 | 1.1 |
| CH593-9 | 24 | 1.1 |
| CH606-11 | 25 | 4.4 |
| CH663-8 | 26 | 8.3 |
| B87 | 27 | 4.3 |
| Ms71 | 28 | 0.0 |
| Ms75 | 29 | 7.8 |
| Ms76 | 30 | 4.5 |
| Ms200 | 31 | 18.3 |
| H95 | 32 | 1.1 |
| H99 | 33 | 0.0 |
| W64A * | 34 | 0.0 |
| W548 | 35 | 4.2 |
| W552C | 36 | 2.2 |
| W562 | 37 | 1.3 |
| W570 | 38 | 7.8 |
| CH753-4 | 39 | 5.0 |
| CH671-28 | 40 | 3.3 |
| Mean | | 4.8 |
| LSD 0.05 | | 9.3 |
| CV% | | 118.6 |

* Check entry.

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| Entry | No. | Anthracnose | | | Intnd. infct. IL | > 50% infct. IL | Diplo. rating IL |
|-------|-----|-------------|---|---|--------|--------|--------|
| | | Rating | | | | | |
| | | MI | IL | Mean | | | |
| | | (1-5) | (1-5) | (1-5) | No. | No. | (1-5) |
| A619 * | 1 | 2.7 | 4.3 | 3.5 | 3.7 | 3.0 | 2.7 |
| A632 * | 2 | 1.0 | 4.0 | 2.5 | 3.4 | 2.3 | 2.5+ |
| B85 | 3 | 1.3 | 2.7 | 2.0 | 1.8 | 1.2 | 2.9 |
| A634 | 4 | 3.7 | 4.3 | 4.0 | 3.8 | 2.7 | 2.0 |
| A635 | 5 | 2.0 | 3.0 | 2.5 | 3.4 | 2.9 | 3.7+ |
| A659 | 6 | 2.7 | 3.7 | 3.2 | 2.4 | 1.3 | 2.7 |
| A670 | 7 | 2.7 | 3.7 | 3.2 | 3.5 | 2.5 | 1.7 |
| Mo42 | 8 | 1.3 | 4.0 | 2.7 | 3.2 | 2.4 | 3.2 |
| AY499 | 9 | 1.3 | 3.3 | 2.3 | 2.9 | 1.5 | 3.4 |
| NY562 | 10 | 1.7 | 1.0 | 1.3 | 2.0 | 0.8 | 3.1 |
| NY378 | 11 | 3.3 | 3.7 | 3.5 | 2.7 | 2.1 | 3.5 |
| NY821LERF | 12 | 2.3 | 4.0 | 3.2 | 2.2 | 1.5 | 3.3 |
| NYD410 | 13 | 2.0 | 3.3 | 2.7 | 3.4 | 1.8 | 2.3 |
| NYRW3 | 14 | 2.0 | 2.7 | 2.3 | 3.0 | 2.3 | 3.3 |
| NYRW20 | 15 | 1.7 | 3.3 | 2.5 | 3.3 | 1.4 | 3.2 |
| NYRW23 | 16 | 1.3 | 3.0 | 2.2 | 2.9 | 1.8 | 2.8 |
| Pa405 | 17 | 1.7 | 4.0 | 2.8 | 4.5 | 4.2 | 4.1 |
| FR19 | 18 | 2.0 | 4.0 | 3.0 | 2.2 | 1.2 | 1.3 |
| CH9 | 19 | 3.0 | 1.0 | 2.0 | 2.5 | 1.7 | 2.3 |
| CH581-13 | 20 | 3.3 | 4.0 | 3.7 | 3.1 | 2.2 | 2.0 |
| CH586-12 | 21 | 1.0 | 2.7 | 1.8 | 3.3 | 2.5 | 2.6 |
| CH591-36 | 22 | 2.7 | 1.7 | 2.2 | 3.8 | 3.0 | 3.0 |
| CH592-46 | 23 | 3.0 | 2.7 | 2.8 | 2.9 | 1.8 | 3.7 |
| CH593-9 | 24 | 1.7 | 4.3 | 3.0 | 3.3 | 2.6 | 3.2 |
| CH606-11 | 25 | 1.7 | 3.3 | 2.5 | 3.4 | 2.4 | 2.9 |
| CH663-8 | 26 | 2.0 | 3.7 | 2.8 | 4.0 | 2.4 | 1.8 |
| B87 | 27 | 1.7 | 2.0 | 1.8 | 3.6 | 2.4 | 2.3 |
| Ms71 | 28 | 2.3 | 3.0 | 2.7 | 3.3 | 2.6 | 2.8 |
| Ms75 | 29 | 1.0 | 2.0 | 1.5 | 3.7 | 2.7 | 1.8 |
| Ms76 | 30 | 1.0 | 2.7 | 1.8 | 4.1 | 3.3 | 2.4 |
| Ms200 | 31 | 1.0 | 4.0 | 2.5 | 3.2 | 1.5 | 1.5 |
| H95 | 32 | 1.0 | 2.3 | 1.7 | 1.6 | 0.7 | 2.9 |
| H99 | 33 | 2.3 | 5.0 | 3.7 | 2.7 | 1.7 | 2.7 |
| W64A * | 34 | 2.7 | 3.7 | 3.2 | 2.4 | 1.7 | 2.9 |
| W548 | 35 | 2.3 | 3.7 | 3.0 | 3.0 | 2.4 | 3.9 |
| W552C | 36 | 2.7 | 4.3 | 3.5 | 2.6 | 2.0 | 3.1 |
| W562 | 37 | 2.7 | 3.7 | 3.2 | 3.8 | 3.0 | 3.7 |
| W570 | 38 | 1.3 | 1.3 | 1.3 | 3.3 | 2.5 | 2.7 |
| CH753-4 | 39 | 1.3 | 4.0 | 2.7 | 2.7 | 1.8 | 2.6 |
| CH671-28 | 40 | 2.0 | 4.0 | 3.0 | 4.1 | 3.4 | 4.5+ |
| Mean | | 2.0 | 3.3 | 2.6 | 3.1 | 2.2 | 2.8 |
| LSD 0.05 | | 0.7 | 1.2 | NS | 0.6 | 0.7 | 0.7 |
| CV% | | 22.4 | 23.9 | | 12.6 | 20.6 | 15.4 |

* Check entry.
+ Data missing from one replication.

Table 44.  Virus susceptibility evaluation of the 400-600 maturity
           inbred lines.

| Entry | No. | MCDV OH | MDMV | | | MDMV rating IL | CLN rating KS | Virus rating OH |
| | | | IL | OH | Mean | | | |
|---|---|---|---|---|---|---|---|---|
| | | (%) | (%) | (%) | (%) | (1-5) | (1-9) | (1-5) |
| A619 * | 1 | 61.4 | 72.2 | 79.2 | 75.7 | 3.3 | 7.7 | 3.7 |
| A632 * | 2 | 73.8 | 55.6 | 45.1 | 50.3 | 2.0 | 7.7 | 3.0 |
| B85 | 3 | 30.0 | 46.0 | 36.5 | 41.3 | 2.0 | 8.3 | 2.7 |
| A634 | 4 | 50.6 | 87.5 | 19.0 | 53.2 | 3.0 | 7.0 | 3.3 |
| A635 | 5 | 76.7 | 90.5 | 63.3 | 76.9 | 3.0 | 7.7 | 3.7 |
| A659 | 6 | 72.1 | 100.0 | 86.2 | 93.1 | 4.0 | 6.7 | 4.0 |
| A670 | 7 | 83.6 | 100.0 | 83.6 | 91.8 | 4.0 | 6.3 | 4.0 |
| Mo42 | 8 | 58.0 | 95.8 | 60.0 | 77.9 | 3.0 | 7.7 | 3.0 |
| AY499 | 9 | 63.8 | 91.7 | 25.6 | 58.6 | 4.0 | 7.7 | 3.3 |
| NY562 | 10 | 92.3 | . | 87.5 | 87.5 | . | 8.0 | 3.7 |
| NY378 | 11 | 59.0 | 63.5 | 70.0 | 66.7 | 2.7 | 7.3 | 3.7 |
| NY821LERF | 12 | 55.7 | 68.8 | 58.0 | 63.4 | 3.0 | 7.3 | 3.3 |
| NYD410 | 13 | 75.0 | 100.0 | 53.1 | 76.6 | 4.0 | 7.7 | 3.0 |
| NYRW3 | 14 | 90.9 | 87.5 | 93.2 | 90.3 | 3.0 | 8.0 | 4.0 |
| NYRW20 | 15 | 78.9 | 93.3 | 92.9 | 93.1 | 4.3 | 7.7 | 4.0 |
| NYRW23 | 16 | 97.6 | . | 97.6 | 97.6 | . | 6.7 | 4.0 |
| Pa405 | 17 | 48.5 | 0.0 | 4.5 | 2.3 | 1.0 | 7.3 | 2.7 |
| FR19 | 18 | 93.2 | 35.6 | 60.1 | 47.8 | 1.7 | 7.0 | 3.7 |
| CH9 | 19 | 41.7 | 80.6 | 33.3 | 56.9 | 2.7 | 8.0 | 2.0 |
| CH581-13 | 20 | 78.6 | 80.2 | 40.2 | 60.2 | 2.7 | 6.7 | 3.0 |
| CH586-12 | 21 | 78.3 | 66.7 | 47.7 | 57.2 | 2.3 | 7.3 | 3.0 |
| CH591-36 | 22 | 26.2 | 54.2 | 0.0 | 27.1 | 2.0 | 7.3 | 2.0 |
| CH592-46 | 23 | 85.7 | 93.3 | 92.9 | 93.1 | 3.3 | 7.0 | 4.0 |
| CH593-9 | 24 | 55.9 | . | 31.0 | 31.0 | . | 6.3 | 3.0 |
| CH606-11 | 25 | 86.2 | 100.0 | 96.9 | 98.4 | 3.3 | 7.7 | 4.0 |
| CH663-8 | 26 | 91.2 | 82.0 | 72.8 | 77.4 | 2.7 | 6.7 | 3.7 |
| B87 | 27 | 36.1 | . | 65.7 | 65.7 | . | 6.7 | 3.0 |
| Ms71 | 28 | 81.7 | 100.0 | 85.0 | 92.5 | 3.0 | 8.3 | 3.7 |
| Ms75 | 29 | 90.6 | 100.0 | 59.9 | 80.0 | 3.7 | 5.0 | 3.0 |
| Ms76 | 30 | 66.7 | 45.8 | 45.2 | 45.5 | 2.3 | 7.0 | 3.7 |
| Ms200 | 31 | 95.5 | 82.2 | 87.6 | 84.9 | 2.7 | 8.0 | 3.7 |
| H95 | 32 | 55.5 | 100.0 | 56.2 | 78.1 | 3.7 | 6.7 | 3.0 |
| H99 | 33 | 69.4 | 45.2 | 42.9 | 44.1 | 2.3 | 6.3 | 3.0 |
| W64A * | 34 | 39.9 | 95.8 | 81.3 | 88.6 | 3.3 | 8.0 | 3.0 |
| W548 | 35 | 80.3 | 91.7 | 56.3 | 74.0 | 3.7 | 7.0 | 3.0 |
| W552C | 36 | 50.7 | 79.6 | 79.9 | 79.7 | 2.7 | 8.0 | 3.3 |
| W562 | 37 | 66.6 | 75.4 | 50.3 | 62.8 | 2.0 | 7.3 | 3.0 |
| W570 | 38 | 52.8 | 100.0 | 44.4 | 72.2 | 3.7 | 7.7 | 3.0 |
| CH753-4 | 39 | 75.6 | 22.0 | 47.4 | 34.7 | 1.7 | 7.7 | 3.7 |
| CH671-28 | 40 | 53.8 | 100.0 | 88.8 | 94.4 | 3.7 | 6.7 | 3.0 |
| Mean | | 68.0 | 77.3 | 60.5 | 68.5 | 2.9 | 7.3 | 2.3 |
| LSD 0.05 | | 19.0 | 24.7 | 19.3 | 34.5 | 0.8 | NS | 0.7 |
| CV% | | 18.0 | 20.6 | 20.6 | 43.0 | 17.7 | | 13.5 |

*  Check entry.

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Table 45.  Insect susceptibility evaluation of the 400-600 maturity
          inbred lines.

| Entry | No. | ECB | | CEW tuni. GA | FAW# GA |
|-------|-----|-----|-----|------|------|
| | | First IA | Second IA | | |
| | | (1-9) | (1-9) | (cm) | (0-9) |
| A619 * | 1 | 3.0 | 8.0 | 9.4 | 5.6 |
| A632 * | 2 | 6.7 | 7.0 | 9.5 | 5.4 |
| B85 | 3 | 2.7 | 5.0 | 9.5 | 5.9 |
| A634 | 4 | 7.0 | 7.7 | 10.1 | 5.4 |
| A635 | 5 | 6.3 | 6.7 | 10.3 | 5.4 |
| A659 | 6 | 4.3 | 8.3 | 9.6 | 5.8 |
| A670 | 7 | 4.3 | 4.7 | 12.2 | 5.4 |
| Mo42 | 8 | 6.7 | 7.7 | 14.0 | 5.7 |
| AY499 | 9 | 4.7 | 8.3 | 9.2 | 6.4 |
| NY562 | 10 | 2.7 | 8.3 | 12.6 | 6.0 |
| NY378 | 11 | 9.0 | 7.0 | 10.2 | 5.9 |
| NY821LERF | 12 | 5.3 | 7.7 | 10.9 | 6.0 |
| NYD410 | 13 | 8.3 | 7.3 | 11.9 | 5.7 |
| NYRW3 | 14 | 7.3 | 7.0 | 11.3 | 5.6 |
| NYRW20 | 15 | 3.3 | 7.0 | 11.9 | 6.0 |
| NYRW23 | 16 | 8.3 | 6.3 | 12.6 | 5.7 |
| Pa405 | 17 | 4.0 | 8.3 | 8.0 | 5.5 |
| FR19 | 18 | 7.7 | 9.0 | 9.7 | 5.5 |
| CH9 | 19 | 2.3 | 8.0 | 10.4 | 6.1 |
| CH581-13 | 20 | 4.3 | 7.7 | 10.4 | 5.8 |
| CH586-12 | 21 | 2.0 | 7.7 | 8.9 | 6.6 |
| CH591-36 | 22 | 4.3 | 6.0 | 9.7 | 5.0 |
| CH592-46 | 23 | 9.0 | 6.3 | 9.7 | 6.1 |
| CH593-9 | 24 | 4.7 | 7.3 | 10.2 | 5.5 |
| CH606-11 | 25 | 6.3 | 6.0 | 12.8 | 6.2 |
| CH663-8 | 26 | 6.5+ | 8.0 | 8.5 | 6.3 |
| B87 | 27 | 3.0 | 7.7 | 11.6 | 5.4 |
| Ms71 | 28 | 6.3 | 7.7 | 9.6 | 4.9 |
| Ms75 | 29 | 7.7 | 5.0 | 10.7 | 5.8 |
| Ms76 | 30 | 4.0 | 7.0 | 13.1 | 5.9 |
| Ms200 | 31 | 3.7 | 9.0 | 10.2 | 5.4 |
| H95 | 32 | 7.7 | 8.0 | 10.0 | 5.5 |
| H99 | 33 | 3.3 | 9.0 | 10.2 | 6.0 |
| W64A * | 34 | 6.3 | 6.0 | 9.8 | 5.8 |
| W548 | 35 | 3.7 | 7.7 | 10.6 | 6.0 |
| W552C | 36 | 4.7 | 6.7 | 8.0 | 4.9 |
| W562 | 37 | 5.3 | 8.3 | 10.9 | 6.1 |
| W570 | 38 | 6.7 | 6.0 | 10.2 | 6.0 |
| CH753-4 | 39 | 6.3 | 6.3 | 9.5 | 6.1 |
| CH671-28 | 40 | 3.7 | 6.7 | 11.8 | 5.3 |
| Mean | | 5.3 | 7.2 | 10.5 | 5.8 |
| LSD 0.05 | | 2.5 | 1.6 | 2.1 | NS |
| CV% | | 28.7 | 13.3 | 12.1 | |

*  Check entry.
+  Data missing from one replication.
#  Data from four replications.

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Table 46. Trifluralin tolerance index for 400-600 maturity inbred
lines. High values represent high levels of tolerance.

| Entry | No. | Incorporation depth 7.5 cm | | | Incorporation depth 15.0 cm | | |
|---|---|---|---|---|---|---|---|
| | | 1982# | 1983# | Mean | 1982# | 1983# | Mean |
| A619 * | 1 | 33.3 | 32.2 | 32.8 | 35.3 | 28.2 | 31.7 |
| A632 * | 2 | 25.4 | 32.9 | 29.1 | 45.8 | 43.5 | 44.6 |
| B85 | 3 | 21.7 | 47.9 | 34.8 | 45.5 | 50.4 | 48.0 |
| A634 | 4 | 35.1 | 39.0 | 37.1 | 36.7 | 40.0 | 38.4 |
| A635 | 5 | 20.1 | 34.4 | 27.2 | 37.2 | 35.8 | 36.5 |
| A659 | 6 | 20.9 | 30.3 | 25.6 | 47.3 | 23.8 | 35.5 |
| A670 | 7 | 40.9 | 32.4 | 36.6 | 60.4 | 24.6 | 42.5 |
| Mo42 | 8 | 27.9 | 29.7 | 28.8 | 39.1 | 43.6 | 41.3 |
| AY499 | 9 | 14.0 | 18.3 | 16.1 | 25.3 | 18.9 | 22.1 |
| NY562 | 10 | 34.9 | 19.3 | 27.1 | 50.3 | 29.4 | 39.8 |
| NY378 | 11 | 27.5 | 4.9 | 16.2 | 26.3 | 9.7 | 18.0 |
| NY821LERF | 12 | 10.1 | 17.9 | 14.0 | 38.4 | 24.0 | 31.2 |
| NYD410 | 13 | 18.5 | 22.3 | 20.4 | 43.7 | 19.9 | 31.8 |
| NYRW3 | 14 | 13.1 | 14.8 | 13.9 | 44.6 | 31.7 | 38.2 |
| NYRW20 | 15 | 25.8 | 8.1 | 17.0 | 47.5 | 2.7 | 25.1 |
| NYRW23 | 16 | 22.3 | 12.8 | 17.5 | 52.0 | 12.0 | 32.0 |
| Pa405 | 17 | 19.4 | 23.5 | 21.4 | 34.4 | 38.3 | 36.4 |
| FR19 | 18 | 17.6 | 13.2 | 15.4 | 42.5 | 21.6 | 32.1 |
| CH9 | 19 | 18.6 | 16.9 | 17.8 | 41.5 | 26.7 | 34.1 |
| CH581-13 | 20 | 36.9 | 12.1 | 24.5 | 52.0 | 35.1 | 43.5 |
| CH586-12 | 21 | 8.4 | 7.4 | 7.9 | 58.3 | 25.6 | 41.9 |
| CH591-36 | 22 | 26.8 | 6.1 | 16.4 | 49.5 | 38.8 | 44.1 |
| CH592-46 | 23 | 19.3 | 8.4 | 13.8 | 50.0 | 28.5 | 39.3 |
| CH593-9 | 24 | 28.4 | 12.0 | 20.2 | 43.7 | 24.2 | 33.9 |
| CH606-11 | 25 | 21.2 | 14.8 | 18.0 | 59.5 | 21.3 | 40.4 |
| CH663-8 | 26 | 41.6 | 35.3 | 38.4 | 39.0 | 54.5 | 46.7 |
| B87 | 27 | 29.2 | 34.5 | 31.9 | 58.4 | 46.5 | 52.5 |
| Ms71 | 28 | 25.0 | 33.9 | 29.5 | 46.8 | 56.0 | 51.4 |
| Ms75 | 29 | 23.6 | 22.7 | 23.2 | 63.9 | 47.0 | 55.4 |
| Ms76 | 30 | 38.7 | 35.8 | 37.2 | 65.2 | 54.8 | 60.0 |
| Ms200 | 31 | 38.1 | 21.8 | 29.9 | 43.7 | 39.7 | 41.7 |
| H95 | 32 | 9.7 | 7.4 | 8.5 | 39.4 | 44.2 | 41.8 |
| H99 | 33 | 17.0 | 18.0 | 17.5 | 29.9 | 24.3 | 27.1 |
| W64A * | 34 | 20.2 | 29.7 | 25.0 | 58.1 | 56.2 | 57.1 |
| W548 | 35 | 20.0 | 58.1 | 39.1 | 32.8 | 58.5 | 45.6 |
| W552C | 36 | 26.3 | 34.9 | 30.6 | 34.6 | 55.1 | 44.8 |
| W562 | 37 | 24.5 | 52.3 | 38.4 | 38.8 | 53.9 | 46.4 |
| W570 | 38 | 34.8 | 4.1 | 19.4 | 35.7 | 6.9 | 21.3 |
| CH753-4 | 39 | 29.9 | 22.3 | 26.1 | 37.9 | 46.2 | 42.1 |
| CH671-28 | 40 | 29.8 | 16.9 | 23.3 | 61.1 | 25.9 | 43.5 |
| Mean | | 24.9 | 23.5 | 24.2 | 44.8 | 34.2 | 39.5 |
| LSD 0.05 | | | | NS | | | |

* Check entry.
# Data from one replication.

## COOPERATORS CONTRIBUTING TO THE 700-800 MATURITY EVALUATION:
### (In order of character presentation in the tables)

| Cooperator | Site code | Organization and location | Characters |
|---|---|---|---|
| Russell | IA | Iowa State Univ., Ames | Agronomic |
| Schreiber | IA(H) | Holden's Foundation Seeds, Williamsburg | Agronomic |
| Dudley | IL | Univ. of Illinois, Urbana | Agronomic |
| Bauman | IN | Purdue Univ., West Lafayette | Agrnonmic |
| Poneleit | KY | Univ. of Kentucky, Lexington | Agronomic |
| Rossman | MI | Michigan State Univ., East Lansing | Agronomic |
| Darrah | MO | USDA/Univ. of Missouri, Columbia | Agronomic |
| Johnson | PA | Pennsylvania State Univ., Univ. Park | Agronomic |
| Bockholt | TX | Texas A&M Univ., College Station | Agronomic |
| Politowski | MO | Pfizer Genetics, St. Louis | Stewart's wilt |
| Turner | NE | Funk Seeds International, Clearwater | Goss' wilt |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | Gibberella ear rot<br>Eyespot<br>North. leaf spot |
| White | IL | Univ. of Illinios, Urbana | South. leaf blight<br>North. leaf blight |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | North. leaf blight |
| Johnson | PA | Pennsylvania State Univ., Univ. Park | North. leaf blight |
| Bockholt and Frederiksen | TX | Texas A&M Univ., Halfway | Head smut |
| Hart and Rossman | MI | Michigan State Univ., East Lansing | Anthracnose stalk rot |
| Trainor | IL | Northrup, King & Co., St Joseph | Anthracnose stalk rot |
| White | IL | Univ. of Illinois | Anthracnose stalk rot<br>Diplodia stalk rot |
| Findley and Louie | OH | USDA/OARDC, Wooster | MCDV<br>MDMV |
| Trainor | IL | Northrup, King & Co., St. Joseph | MDMV |
| Turner | KS | Funk Seeds International, Norton | CLN |
| Findley and Louie | OH | USDA/OARDC, Wooster | Virus rating |
| Guthrie | IA | USDA | European corn borer |
| Widstrom | GA | USDA | Corn ear worm<br>Fall army worm |
| Penner, Roggenbuck, and Rossman | MI | Michigan State Univ., East Lansing | Trifluralin tolerance |

Table 47.  Yield (q/ha) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IL | IN# | KY | MI | PA | TX | Mean |
|-------|-----|------|------|------|------|------|------|------|------|
| B73 * | 1 | 69.3 | 65.0 | 69.2 | 35.2 | 22.9 | 31.4 | 17.6 | 43.1 |
| Mo17 * | 2 | 54.3 | 47.3 | 56.9 | 34.9 | 15.1 | 27.6 | 3.4 | 33.1 |
| N28Ht * | 3 | 70.1 | 58.5 | 59.7 | 32.1 | 37.9 | 37.4 | 17.2 | 44.0 |
| B68 | 4 | 50.8 | 17.9 | 22.3 | 13.3 | 6.3 | 6.9 | 14.2 | 18.6 |
| B75 | 5 | 40.2 | 32.6 | 47.4 | 24.1 | 14.8 | 11.3 | 14.2 | 25.3 |
| B76 | 6 | 54.1 | 49.0 | 55.8 | 30.9 | 37.0 | 34.4 | 16.1 | 38.8 |
| B77 | 7 | 48.9 | 49.9 | 30.1 | 20.1 | 22.3 | 31.6 | 17.9 | 31.6 |
| B79 | 8 | 38.4 | 39.6 | 37.4 | 15.9 | 16.9 | 9.5 | 7.5 | 22.9 |
| B84 | 9 | 62.9 | 69.0 | 60.3 | 29.2 | 20.8 | 20.5 | 23.5 | 39.9 |
| Mo14W | 10 | 33.1 | 21.5 | 0.0 | 11.2 | 6.1 | 2.9 | 6.7 | 12.2 |
| Mo20W | 11 | 28.8 | 45.9 | 44.1 | 34.3 | 27.4 | 42.1 | 32.5 | 36.1 |
| Mo40 | 12 | 54.8 | 39.5 | 48.5 | 27.1 | 22.4 | 20.4 | 13.1 | 31.5 |
| Mo42 | 13 | 49.3 | 46.6 | 53.0 | 23.2 | 44.9 | 39.2 | 20.9 | 38.9 |
| N132 | 14 | 59.3 | 66.8 | 74.8 | 37.3 | 48.0 | 48.5 | 36.6 | 51.9 |
| N139 | 15 | 53.3 | 63.3 | 64.7 | 29.2 | 31.6 | 27.0 | 21.7 | 40.4 |
| N152 | 16 | 79.8 | 75.4 | 77.6 | 48.0 | 54.5 | 55.5 | 28.4 | 59.0 |
| Oh509A | 17 | 47.6 | 32.3 | 48.5 | 30.6 | 29.3 | 30.3 | 21.7 | 33.6 |
| Oh514 | 18 | 53.6 | 45.4 | 54.7 | 35.0 | 29.8 | 38.6 | 11.6 | 37.6 |
| Pa91 | 19 | 55.8 | 36.3 | 50.2 | 36.1 | 24.5 | 27.0 | 4.5 | 32.7 |
| Pa762 | 20 | 57.0 | 41.3 | 54.7 | 33.1 | 42.5 | 30.7 | 10.5 | 37.7 |
| Pa871 | 21 | 34.1 | 41.7 | 41.3 | 27.8+ | 35.4 | 28.2 | 6.4 | 30.3 |
| Pa872 | 22 | 30.8 | 15.8 | 40.7 | 20.9 | 33.7 | 28.0 | 6.0 | 24.4 |
| FR16 | 23 | 37.1 | 33.3 | 40.7 | 22.9 | 26.1 | 23.3 | 9.3 | 26.9 |
| FR20 | 24 | 64.1 | 48.1 | 59.7 | 31.2 | 41.0 | 34.1 | 11.2 | 40.4 |
| FR21 | 25 | 54.5 | 54.3 | 59.1 | 23.9 | 33.2 | 16.2 | 11.2 | 34.9 |
| H60 | 26 | 31.0 | 22.3 | 31.2 | 19.2 | 7.6 | 16.7 | 5.6 | 18.5 |
| H84 | 27 | 52.2 | 47.5 | 59.7 | 34.8 | 34.5 | 29.5 | 22.4 | 39.1 |
| H93 | 28 | 39.8 | 23.2 | 29.0 | 18.2 | 14.2 | 18.4 | 4.9 | 20.7 |
| H98 | 29 | 45.8 | 45.1 | 53.0 | 30.9+ | 35.2 | 39.6 | 11.2 | 36.8 |
| H100 | 30 | 55.1 | 54.3 | 63.1 | 23.2 | 12.7 | 21.9 | 4.1 | 32.0 |
| H102 | 31 | 40.7 | 22.1 | 44.6 | 20.7 | 13.4 | 4.0 | 6.7 | 20.6 |
| H103 | 32 | 40.2 | 36.2 | 39.1 | 28.0 | 29.4 | 4.5+ | 6.0 | 26.7 |
| Mean | | 49.6 | 43.3 | 49.1 | 27.5 | 27.2 | 26.4 | 13.9 | 33.1 |
| LSD 0.05 | | 9.0 | 19.7 | 11.0 | 6.2 | 3.2 | 12.7 | 7.2 | 8.7 |
| CV% | | 11.1 | 27.8 | 11.0 | 13.8 | 7.3 | 29.4 | 31.5 | 40.1 |

\* Check entry.
+ Data missing from one replication.
# Data from two replications.

Table 48. Stand (percent) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IL | IN# | KY | PA | TX | Mean |
|-------|-----|------|-------|-------|-------|-------|------|------|
| B73 * | 1 | 95.6 | 100.0 | 100.0 | 100.0 | 100.0 | 72.2 | 94.3 |
| Mo17 * | 2 | 82.2 | 100.0 | 100.0 | 98.0 | 100.0 | 65.3 | 90.4 |
| N28Ht * | 3 | 73.3 | 100.0 | 100.0 | 93.1 | 100.0 | 65.3 | 88.0 |
| B68 | 4 | 82.2 | 91.7 | 100.0 | 98.0 | 100.0 | 80.6 | 91.6 |
| B75 | 5 | 73.3 | 95.0 | 100.0 | 100.0 | 100.0 | 69.4 | 89.0 |
| B76 | 6 | 82.2 | 96.7 | 100.0 | 89.2 | 100.0 | 65.3 | 88.2 |
| B77 | 7 | 86.7 | 100.0 | 100.0 | 97.1 | 100.0 | 79.2 | 93.5 |
| B79 | 8 | 86.7 | 88.3 | 100.0 | 100.0 | 100.0 | 68.1 | 90.0 |
| B84 | 9 | 88.9 | 100.0 | 100.0 | 99.0 | 100.0 | 76.4 | 93.7 |
| Mo14W | 10 | 65.6 | 90.0 | 100.0 | 97.1 | 100.0 | 69.4 | 86.2 |
| Mo20W | 11 | 86.7 | 100.0 | 100.0 | 99.0 | 100.0 | 86.1 | 95.0 |
| Mo40 | 12 | 80.0 | 100.0 | 100.0 | 93.1 | 100.0 | 70.8 | 90.1 |
| Mo42 | 13 | 84.4 | 100.0 | 100.0 | 96.1 | 100.0 | 84.7 | 93.9 |
| N132 | 14 | 48.9 | 98.3 | 100.0 | 94.1 | 100.0 | 68.1 | 84.0 |
| N139 | 15 | 64.4 | 100.0 | 100.0 | 98.0 | 100.0 | 61.1 | 86.5 |
| N152 | 16 | 66.7 | 100.0 | 100.0 | 99.0 | 100.0 | 70.8 | 88.8 |
| Oh509A | 17 | 80.0 | 98.3 | 100.0 | 98.0 | 100.0 | 80.6 | 92.4 |
| Oh514 | 18 | 84.4 | 100.0 | 100.0 | 99.0 | 100.0 | 66.7 | 91.2 |
| Pa91 | 19 | 42.2 | 98.3 | 100.0 | 98.0 | 100.0 | 62.5 | 82.5 |
| Pa762 | 20 | 37.8 | 95.0 | 100.0 | 85.3 | 100.0 | 69.4 | 80.1 |
| Pa871 | 21 | 88.9 | 91.7 | 100.0 | 64.7 | 100.0 | 80.6 | 86.9 |
| Pa872 | 22 | 28.9 | 53.3 | 100.0 | 65.7 | 80.0 | 47.2 | 60.3 |
| FR16 | 23 | 62.2 | 100.0 | 100.0 | 95.1 | 100.0 | 73.6 | 87.8 |
| FR20 | 24 | 68.9 | 100.0 | 100.0 | 97.1 | 100.0 | 81.9 | 90.8 |
| FR21 | 25 | 77.8 | 96.7 | 100.0 | 94.1 | 100.0 | 66.7 | 88.6 |
| H60 | 26 | 88.9 | 78.3 | 100.0 | 93.1 | 100.0 | 61.1 | 86.1 |
| H84 | 27 | 66.7 | 93.3 | 100.0 | 98.0 | 100.0 | 80.6 | 89.2 |
| H93 | 28 | 88.9 | 98.3 | 100.0 | 77.5 | 100.0 | 72.2 | 88.9 |
| H98 | 29 | 82.2 | 100.0 | 100.0 | 65.7 | 100.0 | 69.4 | 85.4 |
| H100 | 30 | 71.1 | 96.7 | 100.0 | 97.1 | 100.0 | 66.7 | 87.9 |
| H102 | 31 | 73.3 | 70.0 | 100.0 | 93.1 | 100.0 | 62.5 | 82.2 |
| H103 | 32 | 64.4 | 100.0 | 100.0 | 88.2 | 100.0 | 55.6 | 83.8 |
| Mean | | 73.6 | 94.7 | 100.0 | 92.5 | 99.4 | 70.3 | 87.7 |
| LSD 0.05 | | 22.4 | 18.0 | NS | NS | 5.1 | 16.5 | 9.4 |
| CV% | | 18.7 | 11.6 | | | 3.1 | 14.3 | 16.0 |

* Check entry.
# Data from two replications.

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Table 49. Root lodging (percent) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IL | IN# | KY | PA | TX | Mean |
|-------|-----|-----|-----|------|------|------|-----|------|
| B73 * | 1 | 0.0 | 0.0 | 2.2 | 1.0 | 0.0 | 0.0 | 0.4 |
| Mo17 * | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 0.4 |
| N28H† * | 3 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.2 |
| B68 | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| B75 | 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.3 |
| B76 | 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| B77 | 7 | 1.4 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.6 |
| B79 | 8 | 6.3 | 0.0 | 0.0 | 1.0 | 0.0 | 4.4 | 2.1 |
| B84 | 9 | 1.4 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.4 |
| Mo14W | 10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mo20W | 11 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.6 | 2.0 |
| Mo40 | 12 | 7.1 | 0.0 | 0.0 | 1.1 | 1.1 | 0.0 | 1.6 |
| Mo42 | 13 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.2 |
| N132 | 14 | 0.0 | 0.0 | 3.3 | 1.0 | 0.0 | 5.3 | 1.5 |
| N139 | 15 | 0.0 | 0.0 | 6.7 | 2.0 | 0.0 | 0.0 | 1.1 |
| N152 | 16 | 2.1 | 1.7 | 7.8 | 1.0 | 0.0 | 0.0 | 1.7 |
| Oh509A | 17 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Oh514 | 18 | 1.4 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| Pa91 | 19 | 0.0 | 0.0 | 0.0 | 2.1 | 1.1 | 0.0 | 0.6 |
| Pa762 | 20 | 7.4 | 0.0 | 0.0 | 1.1 | 0.0 | 0.0 | 1.5 |
| Pa871 | 21 | 1.4 | 0.0 | 14.4 | 1.5+ | 0.0 | 0.0 | 2.2 |
| Pa872 | 22 | 0.0 | 0.0 | 1.1 | 0.0 | 2.8 | 2.6 | 1.1 |
| FR16 | 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 0.4 |
| FR20 | 24 | 0.0 | 1.7 | 0.0 | 0.0 | 2.2 | 0.0 | 0.7 |
| FR21 | 25 | 1.5 | 0.0 | 1.1 | 0.0 | 2.2 | 1.7 | 1.1 |
| H60 | 26 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| H84 | 27 | 0.0 | 0.0 | 0.0 | 2.9 | 0.0 | 0.0 | 0.5 |
| H93 | 28 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| H98 | 29 | 3.6 | 0.0 | 0.0 | 0.0+ | 0.0 | 0.0 | 0.7 |
| H100 | 30 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| H102 | 31 | 0.0 | 0.0 | 6.7 | 2.1 | 0.0 | 8.6 | 2.7 |
| H103 | 32 | 17.6 | 0.0 | 8.9 | 5.3 | 13.3 | 8.9 | 9.0 |
| Mean | | 1.8 | 0.2 | 1.6 | 0.8 | 0.7 | 1.3 | 1.1 |
| LSD 0.05 | | 6.7 | 1.5 | NS | NS | 4.2 | NS | 2.3 |
| CV% | | 230.6 | 428.8 | | | 359.5 | | 329.0 |

* Check entry.
+ Data missing from one replication.

Table 50. Stalk lodging (percent) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IL | IN# | KY | PA | TX | Mean |
|-------|-----|------|-------|------|-------|-------|-------|-------|
| B73 * | 1 | 3.4 | 1.7 | 2.2 | 2.9 | 1.1 | 5.1 | 2.8 |
| Mo17 * | 2 | 6.7 | 0.0 | 1.1 | 6.1 | 4.4 | 2.1 | 3.5 |
| N28Ht * | 3 | 21.8 | 1.7 | 6.7 | 17.6 | 0.0 | 2.4 | 8.5 |
| B68 | 4 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.2 |
| B75 | 5 | 1.7 | 3.3 | 2.2 | 3.9 | 0.0 | 1.9 | 2.2 |
| B76 | 6 | 2.5 | 0.0 | 10.0 | 3.6 | 0.0 | 0.0 | 2.3 |
| B77 | 7 | 2.6 | 0.0 | 41.1 | 11.3 | 10.0 | 1.7 | 9.3 |
| B79 | 8 | 0.0 | 0.0 | 8.9 | 2.9 | 3.3 | 0.0 | 2.2 |
| B84 | 9 | 6.0 | 0.0 | 3.3 | 9.9 | 4.4 | 1.8 | 4.3 |
| Mo14W | 10 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.4 |
| Mo20W | 11 | 0.0 | 0.0 | 5.6 | 2.0 | 1.1 | 0.0 | 1.2 |
| Mo40 | 12 | 5.6 | 5.0 | 11.1 | 7.6 | 0.0 | 0.0 | 4.5 |
| Mo42 | 13 | 2.6 | 3.3 | 16.7 | 8.1 | 0.0 | 0.0 | 4.4 |
| N132 | 14 | 8.3 | 0.0 | 14.4 | 2.9 | 0.0 | 0.0 | 3.7 |
| N139 | 15 | 2.1 | 0.0 | 6.7 | 6.1 | 0.0 | 0.0 | 2.2 |
| N152 | 16 | 10.8 | 6.7 | 13.3 | 22.1 | 0.0 | 0.0 | 8.6 |
| Oh509A | 17 | 2.6 | 0.0 | 0.0 | 6.0 | 0.0 | 0.0 | 1.5 |
| Oh514 | 18 | 2.6 | 0.0 | 0.0 | 3.1 | 1.1 | 0.0 | 1.2 |
| Pa91 | 19 | 2.4 | 1.7 | 2.2 | 8.0 | 1.1 | 0.0 | 2.6 |
| Pa762 | 20 | 0.0 | 0.0 | 7.8 | 10.1 | 0.0 | 1.7 | 3.0 |
| Pa871 | 21 | 0.0 | 3.9 | 8.9 | 7.5+ | 2.2 | 2.1 | 3.6 |
| Pa872 | 22 | 0.0 | 0.0 | 2.2 | 5.8 | 1.1 | 2.6 | 1.9 |
| FR16 | 23 | 10.6 | 1.7 | 16.7 | 7.1 | 0.0 | 0.0 | 5.4 |
| FR20 | 24 | 3.6 | 0.0 | 4.4 | 4.1 | 3.3 | 0.0 | 2.5 |
| FR21 | 25 | 15.3 | 1.7 | 14.4 | 27.1 | 2.2 | 6.7 | 11.0 |
| H60 | 26 | 0.0 | 0.0 | 2.2 | 0.0 | 1.1 | 0.0 | 0.5 |
| H84 | 27 | 0.0 | 0.0 | 5.6 | 7.2 | 2.2 | 0.0 | 2.3 |
| H93 | 28 | 0.0 | 0.0 | 0.0 | 4.0 | 1.1 | 1.8 | 1.2 |
| H98 | 29 | 2.6 | 0.0 | 3.3 | 10.3+ | 0.0 | 1.8 | 2.5 |
| H100 | 30 | 0.0 | 0.0 | 5.6 | 0.0 | 0.0 | 2.4 | 1.1 |
| H102 | 31 | 4.9 | 0.0 | 15.6 | 25.2 | 0.0 | 4.5 | 7.9 |
| H103 | 32 | 6.9 | 0.0 | 23.3 | 27.6 | 8.9 | 13.6 | 12.8 |
| Mean | | 3.9 | 1.0 | 8.0 | 8.2 | 1.5 | 1.6 | 3.8 |
| LSD 0.05 | | 8.1 | 3.3 | 12.8 | 10.8 | 4.5 | 5.9 | 4.9 |
| CV% | | 126.8 | 212.7 | 78.4 | 80.5 | 182.3 | 222.0 | 194.4 |

* Check entry.
+ Data missing from one replication.
# Data from two replications.

Table 51. Usable ears (per 100 plants) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IL | KY | PA | Mean |
|-------|-----|------|------|------|------|------|
| B73 * | 1 | 143.3 | 105.0 | 96.7 | 101.7 | 111.7 |
| Mo17 * | 2 | 106.7 | 93.3 | 98.3 | 95.0 | 98.3 |
| N28Ht * | 3 | 173.3 | 118.3 | 98.3 | 120.0 | 127.5 |
| B68 | 4 | 150.0 | 85.0 | 95.0 | 61.7 | 97.9 |
| B75 | 5 | 100.0 | 75.0 | 100.0 | 68.3 | 85.8 |
| B76 | 6 | 110.0 | 91.7 | 96.7 | 95.0 | 98.3 |
| B77 | 7 | 173.3 | 156.7 | 100.0 | 143.3 | 143.3 |
| B79 | 8 | 176.7 | 91.7 | 98.3 | 103.3 | 117.5 |
| B84 | 9 | 110.0 | 113.3 | 91.7 | 91.7 | 101.7 |
| Mo14W | 10 | 106.7 | 30.0 | 61.7 | 30.0 | 57.1 |
| Mo20W | 11 | 103.3 | 91.7 | 92.5+ | 111.7 | 100.5 |
| Mo40 | 12 | 146.7 | 83.3 | 100.0 | 90.0 | 105.0 |
| Mo42 | 13 | 130.0 | 101.7 | 100.0 | 105.0 | 109.2 |
| N132 | 14 | 106.7 | 95.0+ | 88.3 | 106.7 | 99.5 |
| N139 | 15 | 110.0 | 101.7 | 100.0 | 91.7 | 100.8 |
| N152 | 16 | 133.3 | 108.3 | 100.0 | 118.3 | 115.0 |
| Oh509A | 17 | 116.7 | 86.7 | 100.0 | 103.3 | 101.7 |
| Oh514 | 18 | 123.3 | 101.7 | 95.0 | 106.7 | 106.7 |
| Pa91 | 19 | 106.7 | 75.0 | 100.0 | 103.3 | 96.2 |
| Pa762 | 20 | 113.3 | 80.0 | 95.0 | 88.3 | 94.2 |
| Pa871 | 21 | 173.3 | 121.7 | 100.0+ | 138.3 | 136.4 |
| Pa872 | 22 | 150.0 | 48.3 | 91.7 | 110.0 | 100.0 |
| FR16 | 23 | 126.7 | 96.7 | 98.3 | 100.0 | 105.4 |
| FR20 | 24 | 120.0 | 91.7 | 100.0 | 98.3 | 102.5 |
| FR21 | 25 | 120.0 | 111.7 | 96.7 | 68.3 | 99.2 |
| H60 | 26 | 103.3 | 63.3 | 96.7 | 95.0 | 89.6 |
| H84 | 27 | 140.0 | 85.0 | 98.3 | 106.7 | 107.5 |
| H93 | 28 | 126.7 | 70.0 | 78.3 | 88.3 | 90.8 |
| H98 | 29 | 123.3 | 91.7 | 97.5+ | 113.3 | 107.3 |
| H100 | 30 | 180.0 | 143.3 | 98.3 | 110.0 | 132.9 |
| H102 | 31 | 110.0 | 66.7 | 96.7 | 50.0 | 80.8 |
| H103 | 32 | 103.3 | 85.0 | 96.7 | 23.3 | 77.1 |
| Mean | | 128.6 | 92.5 | 95.5 | 94.9 | 103.0 |
| LSD 0.05 | | 25.5 | 32.4 | 15.9 | 27.4 | 23.6 |
| CV% | | 12.1 | 21.5 | 10.2 | 17.1 | 28.0 |

* Check entry.
+ Data missing from one replication.

Table 52. Plant height (cm) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IA(H) | IL | IN | KY | MI | MO | PA | TX | Mean |
|-------|-----|------|-------|------|------|--------|------|------|------|------|------|
| B73 * | 1 | 188.3 | 192.3 | 199.7 | 238.3 | 210.0 | 185.0 | 188.3 | 177.3 | 161.7 | 193.4 |
| Mo17 * | 2 | 176.7 | 200.7 | 181.7 | 230.0 | 193.3 | 181.7 | 181.7 | 165.0 | 141.4 | 183.6 |
| N28Ht * | 3 | 175.3 | 160.0 | 176.0 | 210.0 | 156.7 | 160.0 | 160.0 | 163.0 | 162.6 | 169.3 |
| B68 | 4 | 188.7 | 183.7 | 196.0 | 218.3 | 186.7 | 165.0 | 188.3 | 172.0 | 179.5 | 186.5 |
| B75 | 5 | 139.0 | 137.3 | 172.3 | 216.7 | 181.7 | 151.7 | 153.3 | 142.7 | 145.6 | 160.0 |
| B76 | 6 | 155.0 | 187.7 | 174.3 | 205.0 | 183.3 | 161.7 | 138.3 | 157.0 | 132.1 | 166.0 |
| B77 | 7 | 186.7 | 200.3 | 204.7 | 233.3 | 195.0 | 160.0 | 170.0 | 179.3 | 185.4 | 190.5 |
| B79 | 8 | 137.0 | 186.0 | 158.3 | 186.7 | 171.7 | 148.3 | 140.0 | 149.0 | 133.8 | 156.8 |
| B84 | 9 | 160.0 | 144.0 | 177.3 | 215.0 | 173.3 | 155.0 | 158.3 | 164.0 | 165.1 | 168.0 |
| Mo14W | 10 | 137.7 | 179.3 | 184.0 | 213.3 | 156.7 | 150.0 | 138.3 | 156.3 | 143.1 | 162.1 |
| Mo20W | 11 | 134.0 | 172.3 | 148.0 | 175.0 | 131.7 | 125.0 | 133.3 | 142.0 | 129.5 | 143.4 |
| Mo40 | 12 | 163.0 | 184.0 | 173.0 | 220.0 | 178.3 | 143.3 | 163.3 | 156.7 | 154.1 | 170.6 |
| Mo42 | 13 | 172.7 | 176.0 | 184.7 | 238.3 | 186.7 | 170.0 | 175.0 | 168.3 | 168.5 | 182.2 |
| N132 | 14 | 137.3 | 187.3 | 171.0 | 223.3 | 165.0 | 165.0 | 161.7 | 165.3 | 177.0 | 172.6 |
| N139 | 15 | 164.3 | 198.3 | 185.3 | 233.3 | 198.3 | 168.3 | 175.0 | 165.0 | 164.3 | 183.6 |
| N152 | 16 | 160.7 | 184.7 | 196.7 | 243.3 | 200.0 | 176.7 | 170.0 | 158.0 | 178.6 | 185.4 |
| Oh509A | 17 | 147.3 | 156.7 | 180.7 | 213.3 | 168.3 | 168.3 | 155.0 | 159.0 | 128.7 | 164.2 |
| Oh514 | 18 | 194.0 | 200.0 | 203.7 | 243.3 | 195.0 | 195.0 | 186.7 | 190.3 | 182.9 | 199.0 |
| Pa91 | 19 | 157.0 | 203.7 | 197.3 | 245.0 | 196.7 | 175.0 | 146.7 | 170.3 | 150.7 | 182.5 |
| Pa762 | 20 | 133.3 | 159.0 | 145.3 | 196.7 | 183.3 | 143.3 | 141.7 | 134.7 | 132.1 | 152.2 |
| Pa871 | 21 | 133.3 | 143.0 | 169.7 | 191.7 | 190.0+ | 148.3 | 155.0 | 145.3 | 136.3 | 155.7 |
| Pa872 | 22 | 118.0 | 156.0 | 139.7 | 173.3 | 175.0 | 136.7 | 130.0 | 129.0 | 117.7 | 141.7 |
| FR16 | 23 | 112.7 | 210.3 | 160.0 | 180.0 | 153.3 | 138.3 | 128.3 | 133.7 | 104.1 | 146.8 |
| FR20 | 24 | 178.3 | 168.3 | 187.7 | 230.0 | 186.7 | 170.0 | 176.7 | 172.0 | 163.4 | 181.5 |
| FR21 | 25 | 163.0 | 187.3 | 187.0 | 233.3 | 190.0 | 160.0 | 156.7 | 150.3 | 142.2 | 174.4 |
| H60 | 26 | 154.3 | 165.7 | 174.7 | 218.3 | 190.0 | 145.0 | 145.0 | 151.7 | 127.0 | 163.5 |
| H84 | 27 | 134.0 | 189.3 | 156.3 | 186.7 | 153.3 | 145.0 | 135.0 | 141.0 | 140.5 | 153.5 |
| H93 | 28 | 174.7 | 195.7 | 179.7 | 220.0 | 181.7 | 170.0 | 160.0 | 167.3 | 161.7 | 179.0 |
| H98 | 29 | 122.0 | 187.7 | 155.3 | 178.3 | 160.0+ | 138.3 | 120.0 | 137.7 | 138.9 | 148.3 |
| H100 | 30 | 168.7 | 178.0 | 186.0 | 216.7 | 185.0 | 150.0 | 173.3 | 171.3 | 150.7 | 175.5 |
| H102 | 31 | 163.7 | 179.3 | 159.3 | 190.0 | 161.7 | 136.7 | 153.3 | 159.0 | 144.8 | 160.9 |
| H103 | 32 | 167.7 | 171.7 | 185.0 | 220.0 | 186.7 | 146.7 | 163.3 | 166.0 | 138.0 | 171.7 |
| Mean |  | 156.2 | 178.9 | 176.6 | 213.6 | 179.0 | 157.3 | 156.9 | 158.1 | 149.4 | 169.5 |
| LSD 0.05 |  | 12.0 | 14.1 | 12.9 | 11.9 | 15.5 | 15.1 | 15.1 | 15.5 | 23.1 | 10.5 |
| CV% |  | 4.7 | 4.8 | 4.5 | 3.4 | 5.3 | 5.9 | 5.9 | 6.0 | 9.5 | 11.6 |

* Check entry.

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Table 53. Ear height (cm) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IA(H) | IL | IN | KY | MI | MO | PA | TX | Mean |
|-------|-----|------|-------|-------|-------|-------|-------|------|------|-------|------|
| B73 * | 1 | 83.0 | 71.7 | 98.3 | 95.0 | 90.0 | 98.3 | 80.0 | 90.0 | 89.7 | 88.5 |
| Mo17 * | 2 | 82.3 | 99.0 | 88.0 | 87.3 | 60.0 | 96.7 | 81.7 | 74.7 | 74.5 | 82.7 |
| N28H† * | 3 | 76.8 | 65.0 | 87.0 | 79.3 | 65.0 | 80.0 | 61.7 | 78.7 | 77.9 | 74.6 |
| B68 | 4 | 88.0 | 91.3 | 89.7 | 85.7 | 81.7 | 93.3 | 75.0 | 86.0 | 101.6 | 88.0 |
| B75 | 5 | 53.6 | 51.0 | 77.7 | 79.3 | 65.0 | 71.7 | 66.7 | 57.0 | 72.8 | 66.1 |
| B76 | 6 | 70.3 | 82.3 | 80.7 | 81.0 | 71.7 | 85.0 | 60.0 | 80.0 | 66.9 | 75.3 |
| B77 | 7 | 71.4 | 99.7 | 96.7 | 83.3 | 76.7 | 83.3 | 70.0 | 79.7 | 72.0 | 81.4 |
| B79 | 8 | 66.3 | 82.3 | 81.7 | 75.0 | 68.3 | 75.0 | 71.7 | 79.3 | 77.0 | 75.2 |
| B84 | 9 | 80.4 | 74.0 | 97.0 | 91.7 | 76.7 | 80.0 | 75.0 | 83.3 | 89.7 | 83.1 |
| Mo14W | 10 | 68.9 | 73.0 | 108.7 | 93.3 | 73.3 | 80.0 | 68.3 | 80.0 | 71.1 | 79.6 |
| Mo20W | 11 | 60.3 | 92.3 | 69.3 | 68.3 | 58.3 | 65.0 | 56.7 | 76.0 | 61.0 | 67.5 |
| Mo40 | 12 | 68.6 | 88.3 | 79.0 | 75.0 | 66.7 | 71.7 | 61.7 | 72.7 | 56.7 | 71.1 |
| Mo42 | 13 | 62.9 | 100.0 | 73.7 | 81.7 | 55.0 | 78.3 | 66.7 | 73.3 | 69.4 | 73.4 |
| N132 | 14 | 55.2 | 86.7 | 82.3 | 86.0 | 58.3 | 81.7 | 76.7 | 79.3 | 76.2 | 75.8 |
| N139 | 15 | 49.8 | 88.3 | 73.0 | 68.3 | 58.3 | 78.3 | 56.7 | 53.3 | 73.7 | 66.6 |
| N152 | 16 | 70.2 | 75.3 | 89.3 | 91.7 | 73.3 | 91.7 | 70.0 | 75.7 | 99.1 | 81.8 |
| Oh509A | 17 | 63.7 | 76.7 | 92.3 | 81.7 | 73.3 | 90.0 | 71.7 | 71.3 | 70.3 | 76.8 |
| Oh514 | 18 | 83.7 | 85.0 | 108.0 | 101.7 | 86.7 | 101.7 | 91.7 | 97.0 | 97.4 | 94.7 |
| Pa91 | 19 | 58.5 | 91.7 | 89.0 | 87.0 | 73.3 | 81.7 | 61.7 | 70.3 | 66.9 | 75.6 |
| Pa762 | 20 | 45.8 | 78.3 | 60.7 | 69.3 | 65.0 | 65.0 | 50.0 | 55.3 | 55.9 | 60.6 |
| Pa871 | 21 | 43.6 | 56.7 | 60.3 | 56.7 | 70.0+ | 63.3 | 60.0 | 58.7 | 62.7 | 58.7 |
| Pa872 | 22 | 41.7 | 62.7 | 60.0 | 54.3 | 60.0 | 60.0 | 48.3 | 59.3 | 52.5 | 55.4 |
| FR16 | 23 | 44.4 | 109.3 | 78.7 | 61.7 | 46.7 | 63.3 | 46.7 | 50.3 | 61.0 | 62.4 |
| FR20 | 24 | 77.4 | 91.7 | 96.7 | 82.7 | 58.3 | 83.3 | 76.7 | 79.7 | 72.8 | 79.9 |
| FR21 | 25 | 72.3 | 71.0 | 95.7 | 89.3 | 73.3 | 90.0 | 63.3 | 71.3 | 64.3 | 76.7 |
| H60 | 26 | 59.8 | 73.3 | 86.7 | 81.7 | 65.0 | 75.0 | 60.0 | 69.3 | 58.4 | 69.9 |
| H84 | 27 | 43.4 | 84.0 | 56.0 | 68.3 | 56.7 | 68.3 | 40.0 | 54.0 | 77.0 | 60.9 |
| H93 | 28 | 70.8 | 103.0 | 78.3 | 85.0 | 71.7 | 81.7 | 63.3 | 74.7 | 72.0 | 77.8 |
| H98 | 29 | 62.9 | 93.3 | 80.0 | 80.0 | 67.5+ | 75.0 | 55.0 | 74.7 | 72.0 | 73.6 |
| H100 | 30 | 60.9 | 92.3 | 80.7 | 78.3 | 66.7 | 76.7 | 73.3 | 68.3 | 71.1 | 74.3 |
| H102 | 31 | 75.8 | 95.0 | 84.7 | 86.7 | 73.3 | 70.0 | 75.0 | 83.3 | 67.7 | 79.1 |
| H103 | 32 | 84.2 | 56.7 | 108.7 | 102.3 | 86.7 | 88.3 | 91.7 | 95.3 | 90.6 | 89.4 |
| Mean | | 65.5 | 82.5 | 84.0 | 80.9 | 68.5 | 79.5 | 66.5 | 73.5 | 73.2 | 74.9 |
| LSD 0.05 | | 7.1 | 14.1 | 15.9 | 10.5 | 9.4 | 8.0 | 13.3 | 10.8 | 20.3 | 7.9 |
| CV% | | 6.6 | 10.4 | 11.6 | 7.9 | 8.4 | 6.2 | 12.2 | 9.0 | 17.0 | 19.7 |

* Check entry.
+ Data missing from one replication.

Table 54.  Moisture (percent) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IL | IN# | KY | MI | PA | Mean |
|-------|-----|------|------|------|------|------|------|------|
| B73 * | 1 | 21.4 | 16.7 | 19.1 | 8.1 | 43.3 | 41.6 | 25.4 |
| Mo17 * | 2 | 23.0 | 16.3 | 16.8 | 6.9 | 48.4 | 38.8 | 25.5 |
| N28Ht * | 3 | 25.0 | 19.2 | 23.1 | 8.9 | 40.6 | 46.0 | 27.4 |
| B68 | 4 | 30.7 | 20.5 | 20.1 | 14.6 | 57.0 | 52.2 | 33.3 |
| B75 | 5 | 17.4 | 14.8 | 17.8 | 7.0 | 39.7 | 42.3 | 23.5 |
| B76 | 6 | 24.2 | 15.1 | 16.2 | 6.5 | 41.0 | 44.3 | 25.0 |
| B77 | 7 | 18.4 | 16.5 | 17.6 | 8.1 | 46.6 | 43.1 | 25.5 |
| B79 | 8 | 28.8 | 17.9 | 18.3 | 6.4 | 49.0 | 56.3 | 30.1 |
| B84 | 9 | 21.7 | 16.0 | 18.8 | 8.0 | 45.4 | 50.0 | 27.1 |
| Mo14W | 10 | 34.8 | 12.3++ | 0.0 | 10.5 | 59.8 | 66.1 | 35.1 |
| Mo20W | 11 | 26.3 | 15.8 | 19.4 | 9.6 | 36.9 | 40.6 | 25.1 |
| Mo40 | 12 | 13.6 | 16.7 | 15.9 | 6.1 | 41.0 | 44.4 | 23.4 |
| Mo42 | 13 | 14.0 | 15.9 | 14.0 | 5.1 | 32.6 | 35.0 | 19.7 |
| N132 | 14 | 24.0 | 16.0 | 18.7 | 7.2 | 37.8 | 41.9 | 24.6 |
| N139 | 15 | 28.1 | 15.5 | 17.3 | 6.8 | 46.3 | 47.9 | 27.5 |
| N152 | 16 | 19.7 | 14.5 | 16.9 | 6.4 | 38.1 | 40.0 | 22.9 |
| Oh509A | 17 | 28.2 | 14.1 | 18.4 | 6.2 | 41.8 | 47.8 | 26.5 |
| Oh514 | 18 | 27.8 | 15.5 | 19.4 | 13.9 | 35.3 | 37.0 | 25.1 |
| Pa91 | 19 | 28.4 | 18.2 | 21.3 | 13.3 | 48.1 | 44.4 | 29.4 |
| Pa762 | 20 | 16.9 | 14.2 | 18.4 | 6.7 | 35.7 | 42.1 | 22.6 |
| Pa871 | 21 | 9.0 | 13.5 | 12.8 | 4.7+ | 28.2 | 21.3 | 15.7 |
| Pa872 | 22 | 12.2 | 12.3 | 13.3 | 5.3 | 28.5 | 33.3 | 17.7 |
| FR16 | 23 | 22.4 | 17.2 | 17.4 | 8.1 | 35.5 | 41.0 | 24.0 |
| FR20 | 24 | 16.7 | 15.3 | 16.0 | 5.5 | 34.8 | 40.9 | 21.9 |
| FR21 | 25 | 17.5 | 15.6 | 18.3 | 8.9 | 39.1 | 41.5 | 23.8 |
| H60 | 26 | 19.5 | 14.1 | 13.5 | 4.9 | 53.2 | 51.0 | 26.8 |
| H84 | 27 | 15.0 | 16.7 | 17.9 | 9.0 | 41.7 | 35.2 | 22.9 |
| H93 | 28 | 35.3 | 16.2+ | 17.0 | 8.6 | 50.6 | 52.5 | 31.7 |
| H98 | 29 | 15.7 | 15.2 | 16.1 | 6.3+ | 39.4 | 40.5 | 23.6 |
| H100 | 30 | 17.3 | 16.1 | 16.8 | 8.8 | 44.6 | 50.5 | 26.2 |
| H102 | 31 | 32.2 | 16.2+ | 20.3 | 10.5 | 48.9 | 52.8 | 31.6 |
| H103 | 32 | 18.4 | 14.5 | 18.0 | 7.3 | 45.3 | 44.9+ | 23.9 |
| Mean | | 22.0 | 15.8 | 17.0 | 8.0 | 42.3 | 44.0 | 25.4 |
| LSD 0.05 | | 3.6 | 3.1 | 1.6 | 1.8 | 3.0 | 7.4 | 5.0 |
| CV% | | 10.1 | 12.0 | 4.6 | 13.7 | 4.3 | 10.3 | 29.2 |

*   Check entry.
+   Data missing from one replication.
++  Data missing from two replications.
#   Data from two replications.

Table 55. Days-to-tassel evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IA(H) | IL | KY | MO | PA | Mean |
|-------|-----|------|-------|------|-------|------|------|------|
| B73 *    | 1  | 93.3  | 69.3 | 84.0 | 74.3  | 81.7 | 80.7 | 80.6 |
| Mo17 *   | 2  | 92.0  | 70.0 | 82.3 | 70.7  | 80.0 | 79.0 | 79.0 |
| N28Ht *  | 3  | 93.3  | 66.7 | 86.3 | 75.7  | 82.7 | 81.0 | 80.9 |
| B68      | 4  | 98.0  | 68.0 | 89.7 | 78.3  | 87.7 | 82.3 | 84.0 |
| B75      | 5  | 91.0  | 67.3 | 81.0 | 68.0  | 80.3 | 78.3 | 77.7 |
| B76      | 6  | 91.7  | 66.7 | 80.0 | 71.0  | 81.0 | 75.7 | 77.7 |
| B77      | 7  | 93.3  | 68.3 | 86.7 | 77.3  | 82.7 | 80.0 | 81.4 |
| B79      | 8  | 95.7  | 69.0 | 86.7 | 78.3  | 84.3 | 81.7 | 82.6 |
| B84      | 9  | 94.7  | 67.0 | 82.7 | 76.3  | 84.7 | 82.0 | 81.2 |
| Mo14W    | 10 | 104.3 | 70.7 | 94.7 | 83.3  | 85.3 | 89.7 | 88.0 |
| Mo20W    | 11 | 93.3  | 69.3 | 79.3 | 73.0  | 81.7 | 74.3 | 78.5 |
| Mo40     | 12 | 93.3  | 68.0 | 85.7 | 77.0  | 82.0 | 81.3 | 81.2 |
| Mo42     | 13 | 90.3  | 79.0 | 77.3 | 67.3  | 78.3 | 71.0 | 77.2 |
| N132     | 14 | 96.0  | 68.0 | 82.0 | 72.7  | 81.3 | 78.0 | 79.7 |
| N139     | 15 | 93.7  | 72.0 | 84.3 | 75.0  | 80.7 | 76.7 | 80.4 |
| N152     | 16 | 90.7  | 70.3 | 82.3 | 72.3  | 80.0 | 75.3 | 78.5 |
| Oh509A   | 17 | 94.0  | 68.0 | 85.3 | 76.3  | 84.0 | 79.3 | 81.2 |
| Oh514    | 18 | 95.0  | 70.3 | 86.3 | 74.7  | 83.3 | 82.0 | 81.9 |
| Pa91     | 19 | 94.3  | 72.0 | 90.0 | 77.7  | 84.0 | 81.3 | 83.2 |
| Pa762    | 20 | 90.3  | 71.0 | 84.0 | 76.3  | 82.0 | 79.0 | 80.4 |
| Pa871    | 21 | 88.7  | 68.0 | 81.0 | 72.5+ | 78.3 | 72.7 | 77.1 |
| Pa872    | 22 | 89.7  | 70.3 | 84.7 | 71.0  | 79.7 | 74.7 | 78.3 |
| FR16     | 23 | 90.3  | 68.0 | 84.0 | 73.7  | 80.3 | 74.3 | 78.4 |
| FR20     | 24 | 91.0  | 68.0 | 83.0 | 68.3  | 80.0 | 74.3 | 77.4 |
| FR21     | 25 | 92.3  | 69.0 | 83.0 | 72.3  | 79.7 | 79.0 | 79.2 |
| H60      | 26 | 98.3  | 68.7 | 86.0 | 77.7  | 82.0 | 80.0 | 82.1 |
| H84      | 27 | 89.3  | 70.7 | 81.0 | 71.7  | 78.7 | 74.3 | 77.6 |
| H93      | 28 | 94.3  | 68.0 | 83.7 | 74.0  | 80.7 | 79.3 | 80.0 |
| H98      | 29 | 90.7  | 70.0 | 83.7 | 73.0+ | 81.7 | 75.3 | 79.4 |
| H100     | 30 | 95.0  | 70.0 | 85.0 | 72.7  | 83.0 | 79.7 | 80.9 |
| H102     | 31 | 98.0  | 70.0 | 87.7 | 76.7  | 83.7 | 83.0 | 83.2 |
| H103     | 32 | 93.3  | 68.0 | 85.0 | 75.0  | 83.3 | 84.3 | 81.5 |
| Mean     |    | 93.4  | 69.4 | 84.3 | 74.2  | 81.8 | 78.7 | 80.3 |
| LSD 0.05 |    | 2.1   | 2.4  | 5.6  | 2.3   | 2.3  | 2.3  | 2.5  |
| CV%      |    | 1.4   | 2.1  | 4.1  | 1.9   | 1.8  | 1.8  | 4.7  |

* Check entry.
+ Data missing from one replication.

Table 56. Days-to-silk evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IA(H) | IL | KY | MI | PA | TX | Mean |
|-------|-----|------|-------|------|-------|------|------|------|------|
| B73 * | 1 | 93.7 | 69.0 | 83.0 | 75.7 | 91.3 | 84.0 | 72.7 | 81.3 |
| Mo17 * | 2 | 94.3 | 69.7 | 86.7 | 74.7 | 91.3 | 84.7 | 73.7 | 82.1 |
| N28H† * | 3 | 94.0 | 67.7 | 86.7 | 75.0 | 87.7 | 84.3 | 73.0 | 81.2 |
| B68 | 4 | 100.0 | 68.3 | 92.0 | 84.3 | 91.0 | 89.0 | 77.0 | 86.0 |
| B75 | 5 | 93.0 | 68.0 | 83.7 | 71.7 | 87.7 | 86.7 | 70.7 | 80.2 |
| B76 | 6 | 92.7 | 70.0 | 80.0 | 73.0 | 85.0 | 79.7 | 70.3 | 78.7 |
| B77 | 7 | 94.0 | 70.0 | 87.3 | 78.7 | 89.7 | 84.0 | 73.7 | 82.5 |
| B79 | 8 | 96.7 | 74.7 | 86.7 | 79.0 | 89.7 | 86.3 | 79.0 | 84.6 |
| B84 | 9 | 96.3 | 68.3 | 84.0 | 77.3 | 93.7 | 86.7 | 73.3 | 82.8 |
| Mo14W | 10 | 105.0 | 76.7 | 98.0 | 87.3 | 93.3 | 98.0 | 82.7 | 91.6 |
| Mo20W | 11 | 94.7 | 70.3 | 81.3 | 74.0 | 85.3 | 79.7 | 70.3 | 79.4 |
| Mo40 | 12 | 95.0 | 68.0 | 87.7 | 77.7 | 89.0 | 87.0 | 76.0 | 82.9 |
| Mo42 | 13 | 91.3 | 83.7 | 78.7 | 69.0 | 83.7 | 76.0 | 69.7 | 78.9 |
| N132 | 14 | 96.7 | 69.0 | 83.7 | 74.0 | 86.7 | 82.0 | 74.3 | 80.9 |
| N139 | 15 | 96.0 | 75.0 | 85.7 | 77.3 | 88.0 | 84.3 | 73.3 | 82.8 |
| N152 | 16 | 93.0 | 67.7 | 83.7 | 75.0 | 86.3 | 79.7 | 71.3 | 79.5 |
| Oh509A | 17 | 95.7 | 69.7 | 86.7 | 77.3 | 89.7 | 85.3 | 73.7 | 82.6 |
| Oh514 | 18 | 95.0 | 70.3 | 86.3 | 75.0 | 90.3 | 82.7 | 75.3 | 82.1 |
| Pa91 | 19 | 96.7 | 78.0 | 91.3 | 80.0 | 90.7 | 85.7 | 79.0 | 85.9 |
| Pa762 | 20 | 91.0 | 71.0 | 84.0 | 77.0 | 85.7 | 81.3 | 74.7 | 80.7 |
| Pa871 | 21 | 89.0 | 69.0 | 83.0 | 73.5+ | 84.3 | 78.0 | 69.0 | 78.2 |
| Pa872 | 22 | 91.7 | 72.7 | 85.7 | 73.7 | 85.7 | 81.3 | 70.0 | 80.1 |
| FR16 | 23 | 92.7 | 68.3 | 84.7 | 75.0 | 86.7 | 80.7 | 72.7 | 80.1 |
| FR20 | 24 | 94.0 | 69.0 | 85.0 | 74.0 | 88.0 | 83.0 | 72.7 | 80.8 |
| FR21 | 25 | 93.7 | 71.0 | 84.3 | 74.3 | 90.7 | 86.7 | 70.7 | 81.6 |
| H60 | 26 | 101.7 | 70.0 | 90.7 | 79.7 | 88.7 | 86.3 | 72.3 | 84.2 |
| H84 | 27 | 92.3 | 74.0 | 84.3 | 73.7 | 89.0 | 81.0 | 73.3 | 81.1 |
| H93 | 28 | 98.3 | 70.3 | 88.3 | 78.0 | 90.0 | 86.3 | 77.7 | 84.1 |
| H98 | 29 | 90.7 | 70.3 | 84.3 | 75.5+ | 86.0 | 80.7 | 72.3 | 80.2 |
| H100 | 30 | 95.7 | 73.0 | 84.3 | 76.0 | 90.7 | 84.0 | 75.3 | 82.7 |
| H102 | 31 | 99.0 | 70.3 | 89.0 | 79.3 | 90.3 | 90.0 | 77.0 | 85.0 |
| H103 | 32 | 95.3 | 76.7 | 86.3 | 76.7 | 90.7 | 93.7 | 74.7 | 84.9 |
| Mean | | 95.0 | 71.2 | 85.8 | 76.4 | 88.6 | 84.3 | 73.8 | 82.2 |
| LSD 0.05 | | 1.9 | 3.9 | 6.1 | 2.5 | 2.4 | 2.8 | 2.8 | 2.5 |
| CV% | | 1.2 | 3.3 | 4.4 | 2.0 | 1.6 | 2.1 | 2.3 | 5.0 |

* Check entry.
+ Data missing from one replication.

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Table 57.  Ear row number evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IL | KY | PA | Mean |
|---|---|---|---|---|---|---|
| B73 * | 1 | 16.8 | 17.6 | 17.7 | 17.1 | 17.3 |
| Mo17 * | 2 | 11.1 | 11.6 | 10.7 | 10.8 | 11.0 |
| N28Ht * | 3 | 15.8 | 15.7 | 15.7 | 16.0 | 15.8 |
| B68 | 4 | 14.9 | 14.7 | 12.7 | 14.4 | 14.2 |
| B75 | 5 | 15.1 | 15.1 | 14.3 | 13.7 | 14.6 |
| B76 | 6 | 13.0 | 13.6 | 13.7 | 12.7 | 13.2 |
| B77 | 7 | 13.8 | 12.9 | 12.0 | 13.3 | 13.0 |
| B79 | 8 | 16.3 | 17.3 | 17.3 | 16.0 | 16.7 |
| B84 | 9 | 14.7 | 14.9 | 14.0 | 14.4 | 14.5 |
| Mo14W | 10 | 19.3 | 17.0 | 16.7 | 16.7 | 17.4 |
| Mo20W | 11 | 17.3 | 16.3 | 16.7 | 17.1 | 16.8 |
| Mo40 | 12 | 14.6 | 14.7 | 14.7 | 14.6 | 14.6 |
| Mo42 | 13 | 10.9 | 11.3 | 11.0 | 10.6 | 10.9 |
| N132 | 14 | 16.5 | 17.2 | 17.3 | 15.9 | 16.7 |
| N139 | 15 | 17.5 | 17.6 | 17.0 | 16.2 | 17.1 |
| N152 | 16 | 18.6 | 18.8 | 17.7 | 17.3 | 18.1 |
| Oh509A | 17 | 13.8 | 13.5 | 13.7 | 13.4 | 13.6 |
| Oh514 | 18 | 13.5 | 13.6 | 13.7 | 13.5 | 13.5 |
| Pa91 | 19 | 16.5 | 16.5 | 15.7 | 15.5 | 16.0 |
| Pa762 | 20 | 14.6 | 14.7 | 14.3 | 14.3 | 14.5 |
| Pa871 | 21 | 13.2 | 12.9 | 13.5+ | 12.5 | 13.0 |
| Pa872 | 22 | 13.3 | 14.3 | 13.7 | 14.4 | 13.9 |
| FR16 | 23 | 12.1 | 12.3 | 12.7 | 12.5 | 12.4 |
| FR20 | 24 | 12.1 | 11.2 | 11.3 | 10.6 | 11.3 |
| FR21 | 25 | 14.0 | 13.9 | 14.0 | 12.5 | 13.6 |
| H60 | 26 | 11.5 | 11.9 | 11.3 | 11.3 | 11.5 |
| H84 | 27 | 16.7 | 16.4 | 17.3 | 14.7 | 16.3 |
| H93 | 28 | 12.5 | 13.0 | 13.3 | 13.1 | 13.0 |
| H98 | 29 | 13.7 | 14.9 | 14.0+ | 14.7 | 14.4 |
| H100 | 30 | 14.1 | 14.3 | 14.0 | 13.1 | 13.9 |
| H102 | 31 | 12.5 | 13.5 | 12.0 | 11.4 | 12.4 |
| H103 | 32 | 13.7 | 14.5 | 13.7 | 13.0+ | 13.8 |
| Mean | | 14.5 | 14.6 | 14.3 | 14.0 | 14.4 |
| LSD 0.05 | | 1.0 | 1.2 | 1.2 | 1.5 | 0.8 |
| CV% | | 4.3 | 4.9 | 5.2 | 6.4 | 6.5 |

* Check entry.
+ Data missing from one replication.

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Table 58. Ear length (cm) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IL | KY | PA | Mean |
|-------|-----|------|------|------|------|------|
| B73 * | 1 | 14.6 | 15.3 | 14.0 | 13.2 | 14.3 |
| Mo17 * | 2 | 19.2 | 19.4 | 17.4 | 17.1 | 18.3 |
| N28Ht * | 3 | 14.5 | 13.7 | 14.8 | 13.4 | 14.1 |
| B68 | 4 | 17.8 | 18.5 | 18.8 | 17.5 | 18.2 |
| B75 | 5 | 13.4 | 14.0 | 12.5 | 10.5 | 12.6 |
| B76 | 6 | 15.2 | 15.4 | 14.5 | 15.0 | 15.0 |
| B77 | 7 | 14.0 | 15.3 | 15.5 | 14.5 | 14.8 |
| B79 | 8 | 11.8 | 13.8 | 14.2 | 12.6 | 13.1 |
| B84 | 9 | 17.1 | 17.8 | 16.0 | 14.1 | 16.2 |
| Mo14W | 10 | 13.4 | 14.3 | 14.0 | 14.6 | 14.1 |
| Mo20W | 11 | 10.1 | 13.4 | 13.5 | 13.3 | 12.6 |
| Mo40 | 12 | 17.1 | 15.9 | 14.9 | 12.8 | 15.2 |
| Mo42 | 13 | 18.9 | 19.2 | 17.3 | 17.6 | 18.2 |
| N132 | 14 | 14.3 | 17.3 | 16.0 | 15.4 | 15.7 |
| N139 | 15 | 15.3 | 16.1 | 15.6 | 13.3 | 15.1 |
| N152 | 16 | 16.9 | 17.5 | 17.2 | 15.6 | 16.8 |
| Oh509A | 17 | 13.7 | 14.3 | 14.5 | 13.6 | 14.0 |
| Oh514 | 18 | 14.4 | 15.6 | 14.7 | 14.1 | 14.7 |
| Pa91 | 19 | 18.5 | 18.0 | 17.4 | 15.6 | 17.4 |
| Pa762 | 20 | 14.3 | 15.0 | 16.2 | 14.4 | 15.0 |
| Pa871 | 21 | 18.0 | 18.6 | 17.9+ | 17.3 | 18.0 |
| Pa872 | 22 | 17.4 | 17.3 | 17.4 | 15.7 | 17.0 |
| FR16 | 23 | 14.3 | 14.4 | 14.6 | 13.1 | 14.1 |
| FR20 | 24 | 20.6 | 19.4 | 18.2 | 17.0 | 18.8 |
| FR21 | 25 | 21.1 | 21.2 | 18.5 | 17.6 | 19.6 |
| H60 | 26 | 14.7 | 16.4 | 17.1 | 14.9 | 15.8 |
| H84 | 27 | 13.9 | 14.5 | 14.2 | 14.3 | 14.2 |
| H93 | 28 | 15.4 | 15.4 | 15.8 | 13.8 | 15.1 |
| H98 | 29 | 17.5 | 18.1 | 15.5+ | 17.3 | 17.2 |
| H100 | 30 | 15.8 | 16.1 | 16.3 | 16.1 | 16.1 |
| H102 | 31 | 17.5 | 16.7 | 16.1 | 12.2 | 15.6 |
| H103 | 32 | 14.1 | 16.8 | 15.4 | 13.3+ | 15.1 |
| Mean | | 15.8 | 16.4 | 15.8 | 14.7 | 15.7 |
| LSD 0.05 | | 1.2 | 1.3 | 1.5 | 2.0 | 1.3 |
| CV% | | 4.5 | 4.8 | 5.5 | 8.3 | 10.2 |

* Check entry.
+ Data missing from one replication.

Table 59. Ear diameter (cm) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IL | KY | PA | Mean |
|---|---|---|---|---|---|---|
| B73 * | 1 | 4.5 | 4.9 | 4.4 | 3.9 | 4.4 |
| Mo17 * | 2 | 3.7 | 3.9 | 3.8 | 3.4 | 3.7 |
| N28H† * | 3 | 4.3 | 4.4 | 4.2 | 3.8 | 4.2 |
| B68 | 4 | 4.0 | 3.8 | 3.5 | 3.3 | 3.6 |
| B75 | 5 | 3.9 | 4.0 | 4.0 | 3.4 | 3.8 |
| B76 | 6 | 4.4 | 4.5 | 4.1 | 3.8 | 4.2 |
| B77 | 7 | 3.6 | 3.7 | 3.5 | 3.3 | 3.5 |
| B79 | 8 | 4.1 | 4.3 | 4.2 | 3.7 | 4.0 |
| B84 | 9 | 4.3 | 4.6 | 2.8 | 3.7 | 3.8 |
| Mo14W | 10 | 4.1 | 3.8 | 4.0 | 3.2 | 3.8 |
| Mo20W | 11 | 4.4 | 4.5 | 4.3 | 4.1 | 4.3 |
| Mo40 | 12 | 4.0 | 4.1 | 4.0 | 3.6 | 3.9 |
| Mo42 | 13 | 3.7 | 3.8 | 3.5 | 3.4 | 3.6 |
| N132 | 14 | 4.2 | 4.6 | 4.4 | 3.9 | 4.3 |
| N139 | 15 | 4.5 | 4.7 | 4.3 | 3.9 | 4.4 |
| N152 | 16 | 4.7 | 5.0 | 4.7 | 4.2 | 4.6 |
| Oh509A | 17 | 4.1 | 4.1 | 4.0 | 3.7 | 4.0 |
| Oh514 | 18 | 4.1 | 4.1 | 4.0 | 3.6 | 4.0 |
| Pa91 | 19 | 4.1 | 4.2 | 4.1 | 3.7 | 4.1 |
| Pa762 | 20 | 4.4 | 4.4 | 4.2 | 3.8 | 4.2 |
| Pa871 | 21 | 3.6 | 3.7 | 3.6+ | 3.2 | 3.5 |
| Pa872 | 22 | 3.5 | 3.7 | 3.6 | 3.6 | 3.6 |
| FR16 | 23 | 3.8 | 3.8 | 3.6 | 3.5 | 3.7 |
| FR20 | 24 | 4.0 | 3.9 | 3.8 | 3.4 | 3.8 |
| FR21 | 25 | 3.8 | 4.0 | 3.7 | 3.2 | 3.7 |
| H60 | 26 | 4.0 | 4.0 | 4.2 | 3.6 | 3.9 |
| H84 | 27 | ·4.2 | 4.4 | 4.2 | 3.5 | 4.1 |
| H93 | 28 | 4.0 | 3.8 | 3.9 | 3.5 | 3.8 |
| H98 | 29 | 4.0 | 4.3 | 3.7+ | 3.7 | 3.9 |
| H100 | 30 | 4.0 | 4.1 | 3.9 | 3.5 | 3.9 |
| H102 | 31 | 3.8 | 4.0 | 3.6 | 3.0 | 3.6 |
| H103 | 32 | 3.9 | 4.1 | 4.0 | 3.5+ | 3.9 |
| Mean | | 4.1 | 4.2 | 3.9 | 3.6 | 3.9 |
| LSD 0.05 | | 0.2 | 0.3 | 0.7 | 0.3 | 0.2 |
| CV% | | 2.8 | 4.2 | 11.2 | 4.7 | 7.7 |

*  Check entry.
+  Data missing from one replication.

Table 60. Three-hundred kernel weight (g) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | IA | IL | KY | PA | Mean |
|---|---|---|---|---|---|---|
| B73 * | 1 | 74.7 | 84.0 | 67.3 | 57.0 | 70.8 |
| Mo17 * | 2 | 93.7 | 106.3 | 101.3 | 76.0 | 94.3 |
| N28Ht * | 3 | 65.3 | 84.0 | 71.3 | 57.7 | 69.6 |
| B68 | 4 | 71.3 | 80.0 | 78.3 | 65.3 | 73.8 |
| B75 | 5 | 74.0 | 93.7 | 87.0 | 78.3 | 83.3 |
| B76 | 6 | 94.3 | 105.0 | 92.0 | 81.0 | 93.1 |
| B77 | 7 | 53.3 | 79.3 | 73.3 | 55.7 | 65.4 |
| B79 | 8 | 72.7 | 80.0 | 80.0 | 61.0 | 73.4 |
| B84 | 9 | 89.0 | 103.3 | 81.3 | 65.3 | 84.8 |
| Mo14W | 10 | 46.7 | 82.7 | 64.0 | 41.3 | 58.7 |
| Mo20W | 11 | 56.7 | 64.7 | 58.7 | 60.3 | 60.1 |
| Mo40 | 12 | 56.3 | 71.0 | 64.0 | 66.3 | 64.4 |
| Mo42 | 13 | 79.0 | 94.7 | 84.3 | 87.0 | 86.3 |
| N132 | 14 | 62.3 | 81.7 | 66.3 | 63.3 | 68.4 |
| N139 | 15 | 66.7 | 73.3 | 67.0 | 58.0 | 66.3 |
| N152 | 16 | 71.7 | 96.3 | 80.0 | 71.3 | 79.8 |
| Oh509A | 17 | 74.7 | 91.0 | 84.0 | 74.0 | 80.9 |
| Oh514 | 18 | 86.0 | 90.7 | 85.0 | 77.7 | 84.8 |
| Pa91 | 19 | 70.0 | 87.7 | 81.3 | 63.0 | 75.5 |
| Pa762 | 20 | 78.0 | 88.3 | 81.0 | 72.0 | 79.8 |
| Pa871 | 21 | 46.3 | 71.7 | 69.0+ | 48.0 | 57.8 |
| Pa872 | 22 | 48.7 | 73.3 | 71.0 | 51.3 | 61.1 |
| FR16 | 23 | 73.0 | 86.3 | 73.7 | 71.7 | 76.2 |
| FR20 | 24 | 83.3 | 95.7 | 89.0 | 79.7 | 86.9 |
| FR21 | 25 | 65.7 | 81.7 | 60.3 | 53.0 | 65.2 |
| H60 | 26 | 88.0 | 105.0 | 95.0 | 85.0 | 93.3 |
| H84 | 27 | 63.0 | 78.3 | 72.3 | 56.7 | 67.6 |
| H93 | 28 | 105.0 | 110.7 | 98.0 | 81.3 | 98.8 |
| H98 | 29 | 81.0 | 90.7 | 76.0+ | 73.7 | 80.7 |
| H100 | 30 | 77.0 | 98.0 | 92.3 | 74.0 | 85.3 |
| H102 | 31 | 69.3 | 80.3 | 74.7 | 66.3 | 72.7 |
| H103 | 32 | 88.0 | 99.3 | 101.7 | 76.5+ | 92.7 |
| Mean | | 72.6 | 87.8 | 78.9 | 67.1 | 76.6 |
| LSD 0.05 | | 6.9 | 7.5 | 8.0 | 8.9 | 7.5 |
| CV% | | 5.8 | 5.2 | 6.2 | 8.1 | 12.1 |

* Check entry.
+ Data missing from one replication.

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Table 61.  Stalk crushing strength (load-kg) evaluation of the 700-800 maturity inbred lines.

| Entry | No. | MO |
|-------|-----|-----|
| B73 * | 1 | 379.5 |
| Mo17 * | 2 | 299.7 |
| N28Ht * | 3 | 244.9 |
| B68 | 4 | 553.5 |
| B75 | 5 | 402.2 |
| B76 | 6 | 496.8 |
| B77 | 7 | 240.4 |
| B79 | 8 | 397.7 |
| B84 | 9 | 332.0 |
| Mo14W | 10 | 456.9 |
| Mo20W | 11 | 229.4 |
| Mo40 | 12 | 418.2 |
| Mo42 | 13 | 175.4 |
| N132 | 14 | 384.4 |
| N139 | 15 | 273.7 |
| N152 | 16 | 233.3 |
| Oh509A | 17 | 366.2 |
| Oh514 | 18 | 547.3 |
| Pa91 | 19 | 372.7 |
| Pa762 | 20 | 231.6 |
| Pa871 | 21 | 251.0 |
| Pa872 | 22 | 241.6 |
| FR16 | 23 | 174.2 |
| FR20 | 24 | 285.8 |
| FR21 | 25 | 235.9 |
| H60 | 26 | 302.4 |
| H84 | 27 | 355.3 |
| H93 | 28 | 518.6 |
| H98 | 29 | 284.9 |
| H100 | 30 | 365.9 |
| H102 | 31 | 300.3 |
| H103 | 32 | 362.9 |
| Mean | | 338.4 |
| LSD 0.05 | | 116.3 |
| CV% | | 21.3 |

*  Check entry.

Table 62. Bacterial wilt susceptibility evaluation of the 700-800 maturity inbred lines.

| Entry | No. | Stewart's wilt MO | Goss' wilt NE |
|---|---|---|---|
| | | (1-5) | (1-9) |
| B73 * | 1 | 3.3 | 1.3 |
| Mo17 * | 2 | 1.3 | 3.0 |
| N28Ht * | 3 | 2.3 | 2.7 |
| B68 | 4 | 3.0 | 1.0 |
| B75 | 5 | . | 1.3 |
| B76 | 6 | . | 1.0 |
| B77 | 7 | 2.0 | 1.3 |
| B79 | 8 | 2.0+ | 2.0 |
| B84 | 9 | 2.0 | 1.0 |
| Mo14W | 10 | 3.0++ | 2.7 |
| Mo20W | 11 | 1.0 | 1.0 |
| Mo40 | 12 | . | 2.3 |
| Mo42 | 13 | 2.7 | 4.0 |
| N132 | 14 | 1.0++ | 1.3 |
| N139 | 15 | 3.0 | 1.3 |
| N152 | 16 | 3.0+ | 3.3 |
| Oh509A | 17 | . | 1.3 |
| Oh514 | 18 | 3.0++ | 1.0 |
| Pa91 | 19 | 1.0 | 1.7 |
| Pa762 | 20 | 2.0 | 1.0 |
| Pa871 | 21 | 2.0 | 1.0 |
| Pa872 | 22 | 2.0++ | 1.0 |
| FR16 | 23 | 1.0 | 1.0 |
| FR20 | 24 | 1.7 | 1.0 |
| FR21 | 25 | 2.7 | 1.0 |
| H60 | 26 | 1.0 | 1.3 |
| H84 | 27 | 2.3 | 2.7 |
| H93 | 28 | 2.0 | 1.0 |
| H98 | 29 | 1.0 | 1.0 |
| H100 | 30 | 3.0 | 1.0 |
| H102 | 31 | 1.7 | 1.7 |
| H103 | 32 | 2.7 | 1.0 |
| Mean | | 2.1 | 1.6 |
| LSD 0.05 | | 0.6 | NS |
| CV% | | 17.5 | |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

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Table 63. Ear rot susceptibility evaluation of the 700-800 maturity inbred lines.

| Entry | No. | Gibberella MI |
|-------|-----|---------------|
|       |     | (0-5)         |
| B73 *   | 1  | 2.4 |
| Mo17 *  | 2  | 2.1 |
| N28Ht * | 3  | 3.3 |
| B68     | 4  | 4.7 |
| B75     | 5  | 3.5 |
| B76     | 6  | 1.0 |
| B77     | 7  | 3.8 |
| B79     | 8  | 4.4 |
| B84     | 9  | 3.5 |
| Mo14W   | 10 | 3.6 |
| Mo20W   | 11 | 5.0 |
| Mo40    | 12 | 4.1 |
| Mo42    | 13 | 1.2 |
| N132    | 14 | 3.5 |
| N139    | 15 | 2.7 |
| N152    | 16 | 3.2 |
| Oh509A  | 17 | 2.6 |
| Oh514   | 18 | 3.1 |
| Pa91    | 19 | 4.4 |
| Pa762   | 20 | 2.9 |
| Pa871   | 21 | 3.0 |
| Pa872   | 22 | 2.9 |
| FR16    | 23 | 3.1 |
| FR20    | 24 | 1.3 |
| FR21    | 25 | 3.8 |
| H60     | 26 | 3.5 |
| H84     | 27 | 3.2 |
| H93     | 28 | 4.2 |
| H98     | 29 | 3.4 |
| H100    | 30 | 3.0 |
| H102    | 31 | 1.5 |
| H103    | 32 | 4.1 |
| Mean     |    | 3.2  |
| LSD 0.05 |    | 1.5  |
| CV%      |    | 28.1 |

* Check entry.

Table 64. Fungal leaf disease susceptibility evaluation of the 700-800 maturity inbred lines.

| Entry | No. | Eye-spot MI | North. leaf spot MI | Southern leaf blight Date 1 IL | Southern leaf blight Date 2 IL | Northern leaf blight MI | Northern leaf blight Race 1 IL | Northern leaf blight Race 2 IL | Northern leaf blight Race 2 PA |
|---|---|---|---|---|---|---|---|---|---|
| | | (1-5) | (1-5) | (%LA#) | (%LA) | (1-5) | (%LA) | (%LA) | (1-5) |
| B73 * | 1 | 2.7 | 3.0 | 16.7 | 53.3 | 3.3 | 5.5 | 5.8 | 2.5 |
| Mo17 * | 2 | 3.0 | 2.0 | 10.0 | 20.0 | 1.0 | 1.3 | 1.3 | 0.7 |
| N28Ht * | 3 | 2.7 | 2.0 | 26.7 | 66.7 | 1.7 | 3.5+ | 16.3 | 2.3 |
| B68 | 4 | 1.7 | 1.0 | 6.7 | 20.0 | 1.7 | 7.8+ | 7.8 | 0.7 |
| B75 | 5 | 2.7 | 2.0 | 5.0 | 16.7 | 1.7 | 2.5+ | 2.0+ | 1.0 |
| B76 | 6 | 3.0 | 2.0 | 8.3 | 20.0 | 2.3 | 4.0++ | 4.7 | 2.3 |
| B77 | 7 | 1.7 | 1.3 | 8.3 | 36.7 | 1.7 | 2.3 | 4.3 | 0.8 |
| B79 | 8 | 2.7 | 2.0 | 16.7 | 70.0 | 2.3 | 3.5+ | 9.7 | 2.7 |
| B84 | 9 | 2.7 | 2.0 | 16.7 | 83.3 | 2.3 | 5.0 | 11.5 | 1.5 |
| Mo14W | 10 | 4.0 | 1.3 | 20.0 | 40.0 | 1.3 | 3.0 | 9.2 | 0.5 |
| Mo20W | 11 | 3.0 | 2.7 | 5.0 | 20.0 | 1.7 | 2.0 | 4.0 | 1.7 |
| Mo40 | 12 | 2.7 | 2.0 | 16.7 | 23.3 | 2.0 | 2.5+ | 4.2 | 0.7 |
| Mo42 | 13 | 2.7 | 1.3 | 5.0 | 16.7 | 2.0 | 3.0 | 3.0+ | 1.3 |
| N132 | 14 | 2.7 | 2.0 | 30.0+ | 60.0+ | 2.0 | 5.3+ | 7.3 | 2.0 |
| N139 | 15 | 3.0 | 2.3 | 10.0 | 73.3 | 5.0 | 14.5+ | 20.8 | 2.0 |
| N152 | 16 | 3.0 | 3.0 | 13.3 | 56.7 | 5.0 | 4.0 | 13.3 | 1.2 |
| Oh509A | 17 | 1.7 | 1.7 | 6.7 | 16.7 | 3.0 | 3.0 | 6.3 | 0.5 |
| Oh514 | 18 | 3.0 | 2.0 | 8.3 | 23.3 | 1.3 | 4.0+ | 5.5 | 0.8 |
| Pa91 | 19 | 3.3 | 2.3 | 6.7 | 16.7 | 2.7 | 9.2 | 12.0 | 0.8 |
| Pa762 | 20 | 2.3 | 2.0 | 6.7 | 6.7 | 2.0 | 2.7 | 3.3 | 1.3 |
| Pa871 | 21 | 2.7 | 2.7 | 6.7 | 16.7 | 2.0 | 4.3+ | 1.7 | 1.8 |
| Pa872 | 22 | 3.0 | 3.0 | 10.0 | 10.0 | 2.3 | 7.0++ | 5.0+ | 2.0 |
| FR16 | 23 | 3.3 | 3.0 | 8.3 | 10.3 | 1.7 | 1.3 | 1.7 | 1.3 |
| FR20 | 24 | 3.0 | 1.7 | 5.0 | 20.0 | 1.0 | 3.3 | 2.7 | 0.8 |
| FR21 | 25 | 4.0 | 2.0 | 6.7 | 20.0 | 1.7 | 3.0 | 3.8 | 1.0 |
| H60 | 26 | 2.7 | 1.0 | 20.0 | 40.0 | 1.0 | 1.0+ | 1.0 | 0.5 |
| H84 | 27 | 2.3 | 1.7 | 6.7 | 10.0 | 1.0 | 3.5+ | 13.5+ | 2.0 |
| H93 | 28 | 2.7 | 2.0 | 6.7 | 16.7 | 1.7 | 2.7 | 8.3+ | 1.3 |
| H98 | 29 | 3.3 | 2.3 | 10.0 | 36.7 | 2.7 | 4.0+ | 14.3 | 1.3 |
| H100 | 30 | 3.3 | 2.7 | 20.0 | 70.0 | 4.7 | 26.2 | 28.3 | 2.5 |
| H102 | 31 | 1.7 | 1.7 | 6.7 | 20.0 | 1.0 | 1.0++ | 1.0+ | 1.2 |
| H103 | 32 | 2.3 | 3.3 | 16.7 | 66.7 | 2.3 | 5.3+ | 3.5+ | 2.3 |
| Mean | | 2.8 | 2.1 | 11.3 | 33.4 | 2.2 | 4.8 | 7.6 | 1.4 |
| LSD 0.05 | | 0.8 | 0.8 | 6.1 | 13.4 | 0.7 | 4.8 | 7.1 | 0.8 |
| CV% | | 18.8 | 22.1 | 33.1 | 24.5 | 20.3 | 59.9 | 57.1 | 35.2 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.
# Represents percent of leaf area infected.

Table 65. Smut susceptibility evaluation of the 700-800 maturity inbred lines.

| Entry | No. | Head infct. TX |
|-------|-----|----------------|
| | | (%) |
| B73 * | 1 | 0.0 |
| Mo17 * | 2 | 0.0 |
| N28Ht * | 3 | 1.3 |
| B68 | 4 | 0.0 |
| B75 | 5 | 1.3 |
| B76 | 6 | 5.7 |
| B77 | 7 | 0.0 |
| B79 | 8 | 0.0 |
| B84 | 9 | 0.0 |
| Mo14W | 10 | 4.4 |
| Mo20W | 11 | 1.3 |
| Mo40 | 12 | 1.1 |
| Mo42 | 13 | 5.8 |
| N132 | 14 | 4.4 |
| N139 | 15 | 2.2 |
| N152 | 16 | 5.0 |
| Oh509A | 17 | 1.1 |
| Oh514 | 18 | 0.0 |
| Pa91 | 19 | 15.3 |
| Pa762 | 20 | 0.0 |
| Pa871 | 21 | 1.3 |
| Pa872 | 22 | 3.3 |
| FR16 | 23 | 1.7 |
| FR20 | 24 | 0.0 |
| FR21 | 25 | 1.1 |
| H60 | 26 | 3.3 |
| H84 | 27 | 0.0 |
| H93 | 28 | 4.4 |
| H98 | 29 | 2.2 |
| H100 | 30 | 0.0 |
| H102 | 31 | 4.1 |
| H103 | 32 | 0.0 |
| Mean | | 2.2 |
| LSD 0.05 | | 6.7 |
| CV% | | 185.6 |

* Check entry.

Table 65. Smut susceptibility evaluation of the 700-800 maturity inbred lines.

| Entry | No. | Head infct. TX |
|-------|-----|----------------|
| | | (%) |
| B73 * | 1 | 0.0 |
| Mo17 * | 2 | 0.0 |
| N28Ht * | 3 | 1.3 |
| B68 | 4 | 0.0 |
| B75 | 5 | 1.3 |
| B76 | 6 | 5.7 |
| B77 | 7 | 0.0 |
| B79 | 8 | 0.0 |
| B84 | 9 | 0.0 |
| Mo14W | 10 | 4.4 |
| Mo20W | 11 | 1.3 |
| Mo40 | 12 | 1.1 |
| Mo42 | 13 | 5.8 |
| N132 | 14 | 4.4 |
| N139 | 15 | 2.2 |
| N152 | 16 | 5.0 |
| Oh509A | 17 | 1.1 |
| Oh514 | 18 | 0.0 |
| Pa91 | 19 | 15.3 |
| Pa762 | 20 | 0.0 |
| Pa871 | 21 | 1.3 |
| Pa872 | 22 | 3.3 |
| FR16 | 23 | 1.7 |
| FR20 | 24 | 0.0 |
| FR21 | 25 | 1.1 |
| H60 | 26 | 3.3 |
| H84 | 27 | 0.0 |
| H93 | 28 | 4.4 |
| H98 | 29 | 2.2 |
| H100 | 30 | 0.0 |
| H102 | 31 | 4.1 |
| H103 | 32 | 0.0 |
| Mean | | 2.2 |
| LSD 0.05 | | 6.7 |
| CV% | | 185.6 |

* Check entry.

Table 66. Stalk rot susceptibility evaluation of the 700-800 maturity inbred lines.

| Entry | No. | Anthracnose | | | | | Diplo. rating |
|-------|-----|-----|-----|------|-----------------|----------------|----------------|
| | | Rating | | | Intnd. infct. | > 50% infct. | |
| | | MI | IL | Mean | IL | IL | IL |
| | | (1-5) | (1-5) | (1-5) | No. | No. | (1-5) |
| B73 * | 1 | 2.3 | 2.0 | 2.2 | 3.5 | 1.9 | 4.7 |
| Mo17 * | 2 | 1.3 | 3.7 | 2.5 | 1.9 | 0.6 | 2.0 |
| N28Ht * | 3 | 1.3 | 3.3 | 2.3 | 2.9 | 1.3 | 2.4 |
| B68 | 4 | 1.0 | 1.0 | 1.0 | 3.2 | 1.4 | 2.0 |
| B75 | 5 | 1.0 | 1.0 | 1.0 | 1.5 | 0.6 | 2.1 |
| B76 | 6 | 1.7 | 2.0 | 1.8 | 3.7 | 2.8 | 3.0 |
| B77 | 7 | 2.0 | 4.0 | 3.0 | 4.0 | 3.2 | 3.8 |
| B79 | 8 | 1.7 | 2.0 | 1.8 | 2.8 | 1.7 | 4.3 |
| B84 | 9 | 2.0 | 3.0 | 2.5 | 2.0 | 1.0 | 3.2 |
| Mo14W | 10 | 1.3 | 1.0 | 1.2 | 1.4 | 0.2 | 1.9 |
| Mo20W | 11 | 2.7 | 4.0 | 3.3 | 2.6 | 1.1 | 3.1 |
| Mo40 | 12 | 2.0 | 2.3 | 2.2 | 1.7 | 0.6 | 2.2 |
| Mo42 | 13 | 1.3 | 3.7 | 2.5 | 3.4 | 2.6 | 3.7 |
| N132 | 14 | 2.3 | . | 2.3 | 3.0 | 2.3 | 2.2 |
| N139 | 15 | 2.7 | 3.7 | 3.2 | 3.6 | 2.7 | 2.2 |
| N152 | 16 | 2.7 | 4.0 | 3.3 | 3.4 | 2.6 | 3.9 |
| Oh509A | 17 | 1.7 | 1.7 | 1.7 | 3.7 | 3.1 | 2.6 |
| Oh514 | 18 | 1.0 | 1.0 | 1.0 | 3.1 | 1.3 | 1.6 |
| Pa91 | 19 | 2.3 | 3.0 | 2.7 | 3.3 | 2.0 | 4.5 |
| Pa762 | 20 | 2.3 | 3.0 | 2.7 | 2.4 | 0.7 | 2.6 |
| Pa871 | 21 | 2.3 | 3.7 | 3.0 | 2.0 | 0.5 | 2.0 |
| Pa872 | 22 | 3.0 | 3.0 | 3.0 | 1.9++ | 0.4++ | 1.4+ |
| FR16 | 23 | 2.7 | 1.7 | 2.2 | 2.0 | 1.1 | 3.2 |
| FR20 | 24 | 1.7 | 3.0 | 2.3 | 1.6 | 0.7 | 1.9 |
| FR21 | 25 | 2.0 | 3.3 | 2.7 | 3.9 | 3.0 | 1.7 |
| H60 | 26 | 1.0 | 3.0 | 2.0 | 3.0 | 1.5 | 4.2 |
| H84 | 27 | 1.3 | 2.0 | 1.7 | 2.9 | 1.8 | 2.5 |
| H93 | 28 | 1.3 | 3.0 | 2.2 | 3.9 | 2.3 | 4.7 |
| H98 | 29 | 3.3 | 2.7 | 3.0 | 1.7 | 0.6 | 3.1 |
| H100 | 30 | 2.3 | 1.7 | 2.0 | 2.5 | 0.7 | 1.7 |
| H102 | 31 | 1.0 | 2.7 | 1.8 | 3.0 | 2.0 | 2.1 |
| H103 | 32 | 2.3 | 1.3 | 1.8 | 2.4 | 1.2 | 2.7 |
| Mean | | 1.9 | 2.6 | 2.2 | 2.8 | 1.6 | 2.8 |
| LSD 0.05 | | 0.7 | 0.8 | NS | 0.6 | 0.6 | 0.8 |
| CV% | | 23.8 | 18.9 | | 14.0 | 22.5 | 18.4 |

\* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

Table 67. Virus susceptibility evaluation of the 700-800 maturity
inbred lines.

| Entry | No. | MCDV OH | MDMV IL | MDMV OH | MDMV Mean | MDMV rating IL | CLN rating KS | Virus rating OH |
|---|---|---|---|---|---|---|---|---|
| | | (%) | (%) | (%) | (%) | (1-5) | (1-9) | (1-5) |
| B73 * | 1 | 88.2 | 84.7 | 78.9 | 81.8 | 2.7 | 7.0 | 4.0 |
| Mo17 * | 2 | 80.0 | 87.0 | 81.3 | 84.2 | 4.0 | 6.3 | 4.0 |
| N28Ht * | 3 | 71.0 | 100.0 | 52.1 | 76.0 | 4.0 | 6.3 | 3.0 |
| B68 | 4 | 44.6 | 8.3 | 12.5 | 10.4 | 1.0 | 7.0 | 2.7 |
| B75 | 5 | 48.9 | 83.8 | 50.0 | 66.9 | 3.3 | 8.3 | 3.7 |
| B76 | 6 | 61.6 | 100.0 | 50.3 | 75.1 | 4.0 | 6.7 | 3.0 |
| B77 | 7 | 32.9 | 76.2 | 81.3 | 78.7 | 3.0 | 7.0 | 3.7 |
| B79 | 8 | 67.9 | . | 70.1 | 70.1 | . | 7.0 | 3.3 |
| B84 | 9 | 83.5 | 85.7 | 58.1 | 71.9 | 3.0 | 7.3 | 3.3 |
| Mo14W | 10 | 36.3 | 88.9 | 63.4 | 76.1 | 3.0 | 8.7 | 3.0 |
| Mo20W | 11 | 38.2 | 27.3 | 0.0 | 13.7 | 1.7 | 7.7 | 2.3 |
| Mo40 | 12 | 49.1 | 91.7 | 53.8 | 72.7 | 3.3 | 8.0 | 3.3 |
| Mo42 | 13 | 53.1 | 86.1 | 47.2 | 66.7 | 3.3 | 9.0 | 3.0 |
| N132 | 14 | 50.8 | 52.2 | 3.3 | 27.8 | 2.7 | 8.7 | 3.0 |
| N139 | 15 | 38.2 | 68.6 | 17.6 | 43.1 | 2.3 | 7.0 | 2.7 |
| N152 | 16 | 37.5 | 100.0 | 71.8 | 85.9 | 3.7 | 6.3 | 2.7 |
| Oh509A | 17 | 57.1 | 87.8 | 28.6 | 58.2 | 3.7 | 7.0 | 3.0 |
| Oh514 | 18 | 27.3 | 59.4 | 0.0 | 29.7 | 2.7 | 8.0 | 2.7 |
| Pa91 | 19 | 50.3 | 81.9 | 89.4 | 85.7 | 3.3 | 6.3 | 3.7 |
| Pa762 | 20 | 100.0 | 100.0 | 100.0 | 100.0 | 3.7 | 6.7 | 4.0 |
| Pa871 | 21 | 73.6 | 83.8 | 77.7 | 80.8 | 2.3 | 8.0 | 4.0 |
| Pa872 | 22 | . | 80.0 | . | 80.0 | 2.3 | 7.0 | . |
| FR16 | 23 | 100.0 | 95.2 | 80.4 | 87.8 | 3.3 | 7.7 | 4.0 |
| FR20 | 24 | 58.8 | 100.0 | 77.4 | 88.7 | 3.7 | 7.7 | 3.3 |
| FR21 | 25 | 81.6 | 86.3 | 96.9 | 91.6 | 2.7 | 7.7 | 3.7 |
| H60 | 26 | 90.0 | 84.1 | 91.1 | 87.6 | 3.3 | 6.7 | 4.0 |
| H84 | 27 | 74.1 | 95.8 | 30.8 | 63.3 | 4.0 | 5.7 | 3.7 |
| H93 | 28 | 83.3 | 100.0 | 77.8 | 88.9 | 4.0 | 7.3 | 3.7 |
| H98 | 29 | 76.8 | 100.0 | 96.9 | 98.4 | 3.7 | 6.3 | 4.0 |
| H100 | 30 | 81.7 | 94.4 | 79.2 | 86.8 | 3.7 | 6.7 | 3.7 |
| H102 | 31 | 87.1 | 90.5 | 97.2 | 93.8 | 4.0 | 8.0 | 4.0 |
| H103 | 32 | 84.4 | 91.7 | 88.5 | 90.1 | 4.0 | 7.7 | 4.0 |
| Mean | | 64.8 | 83.0 | 61.4 | 72.2 | 3.2 | 7.3 | 3.4 |
| LSD 0.05 | | 15.2 | 25.3 | 15.0 | 33.5 | 1.0 | NS | 0.7 |
| CV% | | 14.4 | 18.7 | 14.9 | 39.2 | 19.9 | | 12.2 |

* Check entry.

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Table 68.  Insect susceptibility evaluation of the 700-800 maturity
          inbred lines.

|  | | ECB | | CEW | |
| Entry | No. | First IA | Second IA | tuni. GA | FAW# GA |
|---|---|---|---|---|---|
| | | (1-9) | (1-9) | (cm) | (0-9) |
| B73 * | 1 | 7.3 | 8.0 | 11.3 | 5.6 |
| Mo17 * | 2 | 7.3 | 8.0 | 11.4 | 6.1 |
| N28Ht * | 3 | 5.0 | 7.0 | 9.7 | 6.2 |
| B68 | 4 | 5.0 | 7.0 | 13.9 | 6.1 |
| B75 | 5 | 2.0 | 8.0 | 8.5 | 5.2 |
| B76 | 6 | 7.0 | 7.7 | 12.7 | 6.3 |
| B77 | 7 | 5.0 | 8.3 | 8.9 | 6.1 |
| B79 | 8 | 5.0 | 6.3 | 11.1 | 5.8 |
| B84 | 9 | 6.3 | 7.7 | 11.1 | 6.3 |
| Mo14W | 10 | 2.0 | 7.3 | 11.2 | 4.8 |
| Mo20W | 11 | 9.0 | 7.5+ | 8.7 | 6.2 |
| Mo40 | 12 | 6.7 | 7.0 | 9.9 | 7.1 |
| Mo42 | 13 | 8.3 | 8.3 | 13.8 | 5.9 |
| N132 | 14 | 2.0+ | 8.0 | 10.2 | 6.0 |
| N139 | 15 | 4.3 | 5.7 | 9.6 | 6.5 |
| N152 | 16 | 7.3 | 7.0 | 10.1 | 6.4 |
| Oh509A | 17 | 8.3 | 7.3 | 13.2 | 4.9 |
| Oh514 | 18 | 9.0 | 8.0 | 10.7 | 6.2 |
| Pa91 | 19 | 6.3 | 6.3 | 11.9 | 5.4 |
| Pa762 | 20 | 2.7 | 9.0 | 10.0 | 6.8 |
| Pa871 | 21 | 2.7 | 7.3 | 12.2 | 5.6 |
| Pa872 | 22 | 2.5+ | 8.7 | 12.9 | 6.3 |
| FR16 | 23 | 2.3 | 7.0 | 10.7 | 5.6 |
| FR20 | 24 | 5.7 | 8.7 | 11.5 | 6.8 |
| FR21 | 25 | 3.0 | 7.3 | 10.4 | 5.9 |
| H60 | 26 | 3.7 | 7.7 | 11.3 | 5.9 |
| H84 | 27 | 5.7 | 7.0 | 7.9 | 6.1 |
| H93 | 28 | 4.7 | 7.3 | 11.1 | 5.9 |
| H98 | 29 | 6.3 | 8.3 | 10.4 | 5.5 |
| H100 | 30 | 4.0 | 6.0 | 11.3 | 6.0 |
| H102 | 31 | 3.7 | 7.3 | 10.8 | 5.3 |
| H103 | 32 | 3.0 | 8.0 | 10.5 | 5.7 |
| Mean | | 5.2 | 7.5 | 10.9 | 6.0 |
| LSD 0.05 | | 2.4 | 1.3 | 3.0 | NS |
| CV% | | 29.0 | 10.3 | 16.9 | |

* Check entry.
+ Data missing from one replication.
# Data from four replications.

Table 69. Trifluralin tolerance index for 700-800 maturity inbred
lines. High values represent high levels of tolerance.

| Entry | No. | Incorporation depth 7.5 cm | | | Incorporation depth 15.0 cm | | |
|---|---|---|---|---|---|---|---|
| | | 1982# | 1983# | Mean | 1982# | 1983# | Mean |
| B73 * | 1 | 35.5 | 33.3 | 34.4 | 45.8 | 39.5 | 42.6 |
| Mo17 * | 2 | 33.1 | 27.5 | 30.3 | 49.2 | 53.5 | 51.3 |
| N28Ht * | 3 | 28.3 | 51.9 | 40.1 | 45.1 | 50.8 | 47.9 |
| B68 | 4 | 26.8 | 2.8 | 14.8 | 27.6 | 4.5 | 16.0 |
| B75 | 5 | 30.1 | 20.1 | 25.1 | 51.1 | 51.5 | 51.3 |
| B76 | 6 | 36.3 | 33.3 | 34.8 | 46.8 | 38.8 | 42.8 |
| B77 | 7 | 13.9 | 20.1 | 17.0 | 39.5 | 43.3 | 41.4 |
| B79 | 8 | 27.9 | 30.4 | 29.2 | 35.8 | 50.9 | 43.3 |
| B84 | 9 | 6.7 | 22.1 | 14.4 | 44.3 | 35.9 | 40.1 |
| Mo14W | 10 | 15.9 | 10.7 | 13.3 | 38.9 | 23.3 | 31.1 |
| Mo20W | 11 | 43.8 | 17.1 | 30.4 | 46.3 | 36.0 | 41.1 |
| Mo40 | 12 | 19.9 | 9.5 | 14.7 | 27.1 | 28.7 | 27.9 |
| Mo42 | 13 | 35.8 | 14.9 | 25.3 | 52.6 | 37.4 | 45.0 |
| N132 | 14 | 24.8 | 16.7 | 20.8 | 31.8 | 28.0 | 29.9 |
| N139 | 15 | 15.9 | 9.9 | 12.9 | 46.3 | 32.8 | 39.6 |
| N152 | 16 | 48.4 | 16.6 | 32.5 | 53.2 | 41.6 | 47.4 |
| Oh509A | 17 | 43.7 | 33.1 | 38.4 | 66.7 | 51.0 | 58.8 |
| Oh514 | 18 | 31.1 | 7.5 | 19.3 | 44.2 | 40.6 | 42.4 |
| Pa91 | 19 | 16.8 | 12.7 | 14.8 | 38.8 | 36.6 | 37.7 |
| Pa762 | 20 | 37.1 | 16.5 | 26.8 | 54.0 | 36.0 | 45.0 |
| Pa871 | 21 | 25.6 | 11.8 | 18.7 | 29.3 | 34.2 | 31.8 |
| Pa872 | 22 | 21.1 | 33.3 | 27.2 | 17.1 | 33.6 | 25.4 |
| FR16 | 23 | 12.8 | 16.5 | 14.6 | 39.8 | 38.5 | 39.2 |
| FR20 | 24 | 16.0 | 25.4 | 20.7 | 47.6 | 44.7 | 46.1 |
| FR21 | 25 | 21.1 | 24.9 | 23.0 | 40.1 | 40.8 | 40.5 |
| H60 | 26 | 22.4 | 40.9 | 31.6 | 34.1 | 55.0 | 44.6 |
| H84 | 27 | 35.0 | 21.3 | 28.1 | 63.2 | 42.1 | 52.6 |
| H93 | 28 | 44.3 | 32.9 | 38.6 | 64.4 | 48.9 | 56.6 |
| H98 | 29 | 25.5 | 36.3 | 30.9 | 45.7 | 35.2 | 40.4 |
| H100 | 30 | 25.8 | 20.0 | 22.9 | 22.6 | 32.8 | 27.7 |
| H102 | 31 | 24.7 | 1.8 | 13.2 | 42.0 | 0.9 | 21.4 |
| H103 | 32 | 42.5 | . | 42.5 | 36.0 | . | 36.0 |
| Mean | | 28.1 | 21.7 | 24.8 | 42.4 | 38.3 | 40.2 |
| LSD 0.05 | | | | NS | | | 18.7 |
| CV% | | | | | | | 22.6 |

* Check entry.
# Data from one replication.

## COOPERATORS CONTRIBUTING TO THE 900-1000 MATURITY EVALUATION:
(In order of character presentation in the tables)

| Cooperator | Site code | Organization and location | Characters |
|---|---|---|---|
| York | AR | Univ. of Arkansas, Fayetteville | Agronomic |
| Poneleit | KY | Univ. of Kentucky, Lexington | Agronomic |
| Darrah | MO | USDA/Univ. of Missouri, Columbia | Agronomic |
| Scott | MS | USDA/Mississippi State Univ., Mississippi State | Agronomic |
| West | TN | Univ. of Tennessee, Knoxville | Agronomic |
| Bockholt | TX | Texas A&M Univ., College Station | Agronomic |
| Politowski | MO | Pfizer Genetics, St. Louis | Stewart's wilt |
| Turner | NE | Funk Seeds International, Clearwater | Goss' wilt |
| Scott | MS | USDA/Mississippi State Univ. Mississippi State | Downy mildew |
| White | IL | Univ. of Illinios, Urbana | South. leaf blight<br>North. leaf blight |
| Scott | MS | USDA/Mississippi State Univ. Mississippi State | South. leaf rust |
| Bockholt and Frederiksen | TX | Texas A&M Univ., Halfway | Head smut |
| Findley and Louie | OH | USDA/OARDC, Wooster | MCDV<br>MDMV |
| Scott | MS | USDA/Mississippi State Univ. Mississippi State | MDMV |
| Turner | KS | Funk Seeds International, Norton | CLN |
| Findley and Louie | OH | USDA/OARDC, Wooster | Virus rating |
| Guthrie | IA | USDA | European corn borer |
| Widstrom | GA | USDA | Corn ear worm<br>Fall army worm |
| Scott | MS | USDA/Mississippi State Univ. Mississippi State | Southwestern corn borer |

Table 70. Yield (q/ha) evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | AR | KY | MS | TN | TX | Mean |
|-------|-----|------|------|------|--------|------|------|
| CI66 * | 1 | 25.8 | 19.7+ | 19.4 | 19.8 | 14.6 | 19.9 |
| FR802W * | 2 | 18.5 | 25.3+ | 21.6 | 15.0 | 2.6 | 16.0 |
| FR805W * | 3 | 27.4 | 23.2+ | 28.6 | 32.9 | 16.5 | 25.9 |
| Ga209 | 4 | 32.7 | 13.3+ | 24.4 | 42.2 | 25.5 | 28.7 |
| Mo17 | 5 | 13.5 | 30.4 | 24.2 | 26.5 | 13.5 | 21.6 |
| T145 | 6 | 9.3 | 14.2 | 9.7 | 9.5 | 8.6 | 10.3 |
| T147 | 7 | 35.5 | 13.2 | 21.5 | 28.5 | 12.8 | 22.3 |
| T151 | 8 | 30.0 | 20.6+ | 24.7 | 33.9 | 25.5 | 27.4 |
| T153 | 9 | 5.4 | 8.3 | 6.1 | 10.8 | 3.4 | 6.8 |
| T155 | 10 | 27.4 | 24.6 | 22.2 | 35.4 | 17.6 | 25.5 |
| T159 | 11 | 17.7 | 13.8 | 13.3 | 17.3 | 25.1 | 17.5 |
| T250 | 12 | 17.3 | 22.0 | 33.0 | 28.5 | 26.6 | 25.5 |
| T254 | 13 | 13.5 | 16.5 | 14.5 | 17.3 | 10.1 | 14.4 |
| T256 | 14 | 17.9 | 16.4 | 18.6 | 24.9 | 20.3 | 19.6 |
| T258 | 15 | 30.8 | 27.6 | 32.1 | 44.7 | 28.1 | 32.7 |
| Ar258 | 16 | 5.8 | 7.9 | 18.6 | 12.0 | 6.8 | 10.2 |
| Ar262 | 17 | 29.2 | 14.4 | 10.1 | . | 15.4 | 17.3 |
| Ar266 | 18 | 18.0 | 20.3 | 16.5 | 21.1 | 13.1 | 17.8 |
| Tx29A | 19 | 41.7 | 21.0 | 36.6 | 28.3 | 37.9 | 33.1 |
| Tx61M | 20 | 33.5 | 34.2+ | 29.9 | 40.9 | 35.7 | 34.9 |
| Tx403 | 21 | 31.6 | 19.4 | 18.1 | 27.4 | 2.6 | 19.8 |
| Tx5855 | 22 | 55.3 | 9.6 | 15.7+ | . | 16.5 | 25.0 |
| Tx6252 | 23 | 45.6 | 11.5 | 9.9 | 43.4++ | 14.6 | 22.2 |
| Mean | | 25.4 | 18.2 | 20.5 | 26.1 | 17.1 | 21.4 |
| LSD 0.05 | | 8.3 | 6.4 | 6.3 | 9.9 | 7.1 | 21.4 |
| CV% | | 19.9 | 21.5 | 18.8 | 23.0 | 25.3 | 57.6 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

Table 71. Stand (percent) evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | AR | KY | MS | TN | TX | Mean |
|-------|-----|------|--------|------|-------|------|------|
| CI66 * | 1 | 101.1 | 98.5+ | 88.3 | 101.7 | 72.2 | 91.9 |
| FR802W * | 2 | 98.9 | 94.1+ | 70.0 | 91.7 | 58.3 | 81.8 |
| FR805W * | 3 | 96.7 | 100.0+ | 92.5 | 101.7 | 81.9 | 94.2 |
| Ga209 | 4 | 95.6 | 100.0+ | 83.3 | 98.3 | 81.9 | 91.2 |
| Mo17 | 5 | 93.3 | 100.0 | 87.5 | 100.0 | 68.1 | 89.8 |
| T145 | 6 | 86.7 | 98.0 | 83.3 | 100.0 | 77.8 | 89.2 |
| T147 | 7 | 95.6 | 78.4 | 89.2 | 103.3 | 72.2 | 87.7 |
| T151 | 8 | 63.3 | 86.8+ | 64.2 | 91.7 | 80.6 | 76.6 |
| T153 | 9 | 65.6 | 90.2 | 39.2 | 98.3 | 73.6 | 73.4 |
| T155 | 10 | 95.6 | 97.1 | 85.8 | 100.0 | 75.0 | 90.7 |
| T159 | 11 | 98.9 | 94.1 | 71.7 | 98.3 | 84.7 | 89.5 |
| T250 | 12 | 100.0 | 100.0 | 91.7 | 100.0 | 88.9 | 96.1 |
| T254 | 13 | 71.1 | 84.3 | 81.7 | 98.3 | 77.8 | 82.6 |
| T256 | 14 | 87.8 | 99.0 | 66.7 | 100.0 | 80.6 | 86.8 |
| T258 | 15 | 98.9 | 99.0 | 85.8 | 100.0 | 84.7 | 93.7 |
| Ar258 | 16 | 102.2 | 76.5 | 81.7 | 93.3 | 65.3 | 83.8 |
| Ar262 | 17 | 32.2 | 36.3 | 17.5 | 41.7 | 51.4 | 35.8 |
| Ar266 | 18 | 68.9 | 95.1 | 88.3 | 98.3 | 70.8 | 84.3 |
| Tx29A | 19 | 98.9 | 71.6 | 92.5 | 96.7 | 70.8 | 86.1 |
| Tx61M | 20 | 90.0 | 94.1+ | 84.2 | 100.0 | 72.2 | 87.7 |
| Tx403 | 21 | 48.9 | 61.8 | 42.5 | 83.3 | 69.4 | 61.2 |
| Tx5855 | 22 | 17.8 | 30.4 | 18.8+ | 31.7 | 51.4 | 30.8 |
| Tx6252 | 23 | 17.8 | 46.1 | 10.8 | 43.3 | 61.1 | 35.8 |
| Mean | | 79.4 | 82.9 | 71.1 | 90.1 | 72.6 | 79.2 |
| LSD 0.05 | | 14.1 | 21.0 | 16.0 | 15.1 | 18.9 | 13.6 |
| CV% | | 10.8 | 15.4 | 13.7 | 10.2 | 15.8 | 23.6 |

* Check entry.
+ Data missing from one replication.

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Table 72. Root lodging (percent) evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | AR | KY | MS | TN | TX | Mean |
|-------|-----|-----|------|------|------|------|------|
| CI66 * | 1 | 0.0 | 0.0+ | 0.0 | 0.0 | 0.0 | 0.0 |
| FR802W * | 2 | 0.0 | 0.0+ | 0.0 | 0.0 | 0.0 | 0.0 |
| FR805W * | 3 | 0.0 | 0.0+ | 0.0 | 0.0 | 0.0 | 0.0 |
| Ga209 | 4 | 0.0 | 0.0+ | 0.0 | 0.0 | 3.0 | 0.6 |
| Mo17 | 5 | 2.4 | 0.0 | 0.0 | 0.0 | 1.8 | 0.8 |
| T145 | 6 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| T147 | 7 | 0.0 | 0.0 | 0.0 | 1.5 | 16.9 | 3.7 |
| T151 | 8 | 5.8 | 4.7+ | 0.0 | 3.7 | 22.5 | 7.5 |
| T153 | 9 | 1.4 | 4.2 | 1.6 | 10.2 | 24.9 | 8.5 |
| T155 | 10 | 0.0 | 1.0 | 0.0 | 0.0 | 2.9 | 0.8 |
| T159 | 11 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| T250 | 12 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| T254 | 13 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| T256 | 14 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| T258 | 15 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Ar258 | 16 | 2.1 | 0.0 | 0.0 | 0.0 | 4.0 | 1.2 |
| Ar262 | 17 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 0.6 |
| Ar266 | 18 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 |
| Tx29A | 19 | 0.0 | 14.3 | 0.0 | 0.0 | 12.0 | 5.3 |
| Tx61M | 20 | 2.4 | 0.0+ | 0.0 | 0.0 | 11.3 | 2.9 |
| Tx403 | 21 | 1.7 | 2.4 | 0.0 | 0.0 | 6.1 | 2.0 |
| Tx5855 | 22 | 0.0 | 0.0 | 0.0+ | 0.0 | 2.0 | 0.4 |
| Tx6252 | 23 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Mean | | 0.8 | 1.2 | 0.1 | 0.7 | 4.8 | 1.5 |
| LSD 0.05 | | 2.9 | NS | NS | 2.4 | 13.0 | 4.2 |
| CV% | | 235.0 | | | 218.4 | 164.8 | 378.1 |

* Check entry.
+ Data missing from one replication.

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Table 73. Stalk lodging (percent) evaluation of the 900-1000 maturity
         inbred lines.

| Entry | No. | AR | KY | MS | TN | TX | Mean |
|-------|-----|-----|------|-------|-----|-----|------|
| CI66 * | 1 | 0.0 | 11.9+ | 4.7 | 1.7 | 0.0 | 3.1 |
| FR802W * | 2 | 0.0 | 28.1+ | 2.4 | 5.7 | 0.0 | 5.8 |
| FR805W * | 3 | 4.6 | 10.3+ | 1.0 | 1.7 | 0.0 | 3.0 |
| Ga209 | 4 | 3.5 | 4.4+ | 1.0 | 0.0 | 0.0 | 1.6 |
| Mo17 | 5 | 1.2 | 0.0 | 9.6 | 0.0 | 0.0 | 2.2 |
| T145 | 6 | 1.4 | 7.0 | 2.0 | 8.3 | 0.0 | 3.7 |
| T147 | 7 | 0.0 | 8.3 | 1.0 | 0.0 | 1.4 | 2.1 |
| T151 | 8 | 7.1 | 5.0+ | 2.6 | 0.0 | 3.9 | 3.6 |
| T153 | 9 | 0.0 | 8.0 | 5.4 | 0.0 | 0.0 | 2.7 |
| T155 | 10 | 6.8 | 12.1 | 2.7 | 1.7 | 0.0 | 4.6 |
| T159 | 11 | 1.1 | 0.0 | 2.8 | 1.8 | 0.0 | 1.1 |
| T250 | 12 | 1.0 | 3.9 | 1.8 | 0.0 | 0.0 | 1.3 |
| T254 | 13 | 0.0 | 3.8 | 4.1 | 0.0 | 0.0 | 1.6 |
| T256 | 14 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| T258 | 15 | 0.0 | 1.0 | 1.0 | 0.0 | 1.6 | 0.7 |
| Ar258 | 16 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.4 |
| Ar262 | 17 | 0.0 | 2.6 | 0.0 | 0.0 | 2.8 | 1.1 |
| Ar266 | 18 | 2.0 | 26.9 | 0.0 | 8.5 | 2.0 | 7.9 |
| Tx29A | 19 | 3.3 | 26.6 | 6.2 | 5.3 | 0.0 | 8.3 |
| Tx61M | 20 | 7.5 | 23.0+ | 6.0 | 5.0 | 0.0 | 7.3 |
| Tx403 | 21 | 0.0 | 25.0 | 10.1 | 4.8 | 2.0 | 8.4 |
| Tx5855 | 22 | 6.7 | 0.0 | 0.0+ | 6.7 | 2.0 | 3.3 |
| Tx6252 | 23 | 0.0 | 7.0 | 0.0 | 0.0 | 3.9 | 2.2 |
| Mean | | 2.1 | 9.0 | 2.8 | 2.2 | 0.8 | 3.3 |
| LSD 0.05 | | NS | 11.0 | 5.0 | NS | NS | 0.2 |
| CV% | | | 73.9 | 106.2 | | | 7.4 |

* Check entry.
+ Data missing from one replication.

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Table 74.    Usable ears (per 100 plants) evaluation of the 900-1000
             maturity inbred lines.

| Entry | No. | KY | MS | TN | Mean |
|-------|-----|-----|-----|-----|------|
| CI66 * | 1 | 100.0+ | 91.7 | 86.7 | 91.9 |
| FR802W * | 2 | 95.0+ | 93.3 | 91.7 | 93.1 |
| FR805W * | 3 | 95.0+ | 111.7 | 120.0 | 110.6 |
| Ga209 | 4 | 95.0+ | 101.7 | 160.0 | 121.9 |
| Mo17 | 5 | 100.0 | 100.0 | 98.3 | 99.4 |
| T145 | 6 | 95.0 | 101.7 | 78.3 | 91.7 |
| T147 | 7 | 60.0 | 98.3 | 116.7 | 91.7 |
| T151 | 8 | 87.5+ | 128.3 | 133.3 | 120.0 |
| T153 | 9 | 93.3 | 66.7 | 96.7 | 85.6 |
| T155 | 10 | 100.0+ | 103.3 | 125.0 | 110.6 |
| T159 | 11 | 100.0 | 86.7 | 95.0 | 93.9 |
| T250 | 12 | 93.3 | 113.3 | 106.7 | 104.4 |
| T254 | 13 | 95.0 | 96.7 | 100.0 | 97.2 |
| T256 | 14 | 100.0 | 100.0 | 96.7 | 98.9 |
| T258 | 15 | 98.3 | 103.3 | 173.3 | 125.0 |
| Ar258 | 16 | 55.0 | 95.0 | 58.3 | 69.4 |
| Ar262 | 17 | 48.3 | 38.3 | 73.3 | 53.3 |
| Ar266 | 18 | 100.0 | 96.7 | 100.0 | 98.9 |
| Tx29A | 19 | 68.3 | 123.3 | 95.0 | 95.6 |
| Tx61M | 20 | 100.0+ | 115.0 | 160.0 | 128.1 |
| Tx403 | 21 | 80.0 | 80.0 | 103.3 | 87.8 |
| Tx5855 | 22 | 33.3 | 70.0+ | 26.7 | 40.0 |
| Tx6252 | 23 | 56.7 | 36.7 | 63.3 | 52.2 |
| Mean | | 83.5 | 93.9 | 102.5 | 93.6 |
| LSD 0.05 | | 23.5 | 19.1 | 30.5 | 28.7 |
| CV% | | 17.2 | 12.5 | 18.1 | 32.5 |

*   Check entry.
+   Data missing from one replication.

Table 75. Plant height (cm) evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | AR | KY | MO | MS | TN | TX | Mean |
|-------|-----|------|--------|-------|-------|-------|-------|-------|
| CI66 * | 1 | 127.0 | 132.5+ | 163.3 | 137.7 | 148.0 | 157.5 | 145.0 |
| FR802W * | 2 | 172.0 | 200.0+ | 191.7 | 205.0 | 194.0 | 176.1 | 189.2 |
| FR805W * | 3 | 138.0 | 170.0+ | 158.3 | 181.0 | 171.0 | 159.2 | 162.5 |
| Ga209 | 4 | 164.3 | 190.0+ | 191.7 | 170.3 | 191.0 | 184.6 | 181.5 |
| Mo17 | 5 | 145.7 | 190.0 | 180.0 | 174.3 | 162.0 | 176.1 | 171.4 |
| T145 | 6 | 194.0 | 205.0 | 195.0 | 203.3 | 222.7 | 210.8 | 205.1 |
| T147 | 7 | 179.3 | 186.7 | 191.7 | 183.7 | 213.0 | 191.3 | 190.9 |
| T151 | 8 | 175.3 | 210.0+ | 191.7 | 205.7 | 189.7 | 184.6 | 191.8 |
| T153 | 9 | 177.3 | 216.7 | 195.0 | 201.3 | 221.3 | 202.4 | 202.3 |
| T155 | 10 | 160.7 | 185.0 | 176.7 | 159.7 | 186.0 | 186.3 | 175.7 |
| T159 | 11 | 147.0 | 196.7 | 180.0 | 162.7 | 174.7 | 169.3 | 171.7 |
| T250 | 12 | 147.3 | 196.7 | 196.7 | 186.0 | 190.0 | 182.9 | 183.3 |
| T254 | 13 | 130.0 | 161.7 | 160.0 | 143.3 | 147.0 | 136.3 | 146.4 |
| T256 | 14 | 131.0 | 165.0 | 151.7 | 153.3 | 167.3 | 164.3 | 155.4 |
| T258 | 15 | 133.0 | 165.0 | 146.7 | 154.7 | 169.3 | 161.7 | 155.1 |
| Ar258 | 16 | 116.7 | 168.3 | 136.7 | 140.7 | 148.0 | 150.7 | 143.5 |
| Ar262 | 17 | 197.3 | 223.3 | 183.3 | 206.3 | 215.0 | 238.8 | 210.7 |
| Ar266 | 18 | 98.3 | 145.0 | 123.3 | 113.3 | 101.7 | 132.1 | 119.0 |
| Tx29A | 19 | 201.3 | 233.3 | 183.3 | 201.0 | 225.3 | 210.8 | 209.2 |
| Tx61M | 20 | 170.0 | 190.0+ | 196.7 | 184.0 | 169.7 | 214.2 | 187.3 |
| Tx403 | 21 | 160.0 | 168.3 | 171.7 | 160.7 | 180.0 | 152.4 | 165.5 |
| Tx5855 | 22 | 171.0 | 211.7 | 165.0 | 176.0+ | 189.0 | 193.0 | 184.8 |
| Tx6252 | 23 | 131.3 | 201.7 | 163.3 | 149.3 | 144.0 | 146.5 | 156.0 |
| Mean | | 155.1 | 188.0 | 173.6 | 171.8 | 179.1 | 177.4 | 174.0 |
| LSD 0.05 | | 15.5 | 25.5 | NS | 24.4 | 20.1 | 25.8 | 13.0 |
| CV% | | 6.1 | 8.2 | | 8.6 | 6.8 | 8.8 | 11.3 |

* Check entry.
+ Data missing from one replication.

Table 76.  Ear height (cm) evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | AR | KY | MO | MS | TN | TX | Mean |
|-------|-----|------|--------|--------|-------|-------|-------|-------|
| C166 * | 1 | 61.7 | 57.5+ | 81.7 | 75.7 | 67.0 | 94.8 | 74.0 |
| FR802W * | 2 | 62.7 | 75.0+ | 88.3 | 79.3 | 82.0 | 86.4 | 79.2 |
| FR805W * | 3 | 67.0 | 75.0+ | 88.3 | 99.7 | 92.0 | 82.1 | 84.6 |
| Ga209 | 4 | 77.0 | 82.5+ | 96.7 | 86.0 | 97.0 | 105.0 | 91.2 |
| Mo17 | 5 | 59.3 | 56.7 | 91.7 | 69.3 | 73.0 | 81.3 | 71.9 |
| T145 | 6 | 109.3 | 113.3 | 85.0 | 112.7 | 121.0 | 124.5 | 111.0 |
| T147 | 7 | 90.7 | 93.3 | 91.7 | 105.0 | 114.0 | 98.2 | 98.8 |
| T151 | 8 | 89.0 | 102.5+ | 91.7 | 110.3 | 97.7 | 103.3 | 98.9 |
| T153 | 9 | 58.7 | 73.3 | 66.7 | 76.7 | 90.0 | 89.7 | 75.8 |
| T155 | 10 | 69.7 | 78.3 | 76.7 | 71.3 | 76.0 | 87.2 | 76.5 |
| T159 | 11 | 31.3 | 50.0 | 61.7 | 50.0 | 43.0 | 61.0 | 49.5 |
| T250 | 12 | 58.3 | 61.7 | 101.7 | 78.7 | 77.0 | 77.9 | 75.9 |
| T254 | 13 | 33.7 | 48.3 | 60.0 | 53.7 | 49.0 | 56.7 | 50.2 |
| T256 | 14 | 26.0 | 41.7 | 46.7 | 54.0 | 55.0 | 66.0 | 48.2 |
| T258 | 15 | 40.7 | 31.7 | 48.3 | 43.0 | 62.3 | 64.3 | 48.4 |
| Ar258 | 16 | 58.3 | 73.3 | 70.0 | 73.7 | 63.0 | 88.1 | 71.1 |
| Ar262 | 17 | 56.7 | 73.3 | 88.3 | 82.0 | 84.3 | 104.1 | 81.5 |
| Ar266 | 18 | 44.7 | 50.0 | 58.3 | 59.0 | 50.3 | 65.2 | 54.6 |
| Tx29A | 19 | 85.3 | 108.3 | 101.7 | 112.0 | 110.7 | 127.8 | 107.6 |
| Tx61M | 20 | 117.7 | 120.0+ | 125.0 | 104.0 | 103.7 | 102.4 | 111.7 |
| Tx403 | 21 | 65.0 | 68.3 | 76.7 | 75.7 | 87.0 | 83.8 | 76.1 |
| Tx5855 | 22 | 81.0 | 95.0 | 121.7+ | 91.5+ | 96.3 | 101.6 | 98.2 |
| Tx6252 | 23 | 65.0 | 80.0 | 88.3 | 73.7 | 80.0 | 77.0 | 77.3 |
| Mean | | 65.6 | 73.3 | 82.9 | 79.7 | 81.4 | 88.2 | 78.6 |
| LSD 0.05 | | 21.2 | 13.5 | 39.1 | 9.0 | 26.7 | 21.4 | 9.8 |
| CV% | | 19.6 | 11.1 | 28.7 | 6.9 | 19.9 | 14.7 | 18.9 |

* Check entry.
+ Data missing from one replication.

Table 77.   Moisture (percent) evaluation of the 900-1000 maturity
            inbred lines.

| Entry | No. | AR | KY | TN | Mean |
|-------|-----|------|-------|------|------|
| CI66 * | 1 | 13.8 | 11.5+ | 24.6 | 17.3 |
| FR802W * | 2 | 13.2 | 9.4+ | 18.6 | 14.3 |
| FR8C5W * | 3 | 12.9 | 7.3+ | 17.7 | 13.3 |
| Ga209 | 4 | 13.3 | 22.6+ | 25.4 | 20.1 |
| Mo17 | 5 | 12.9 | 7.1 | 13.7 | 11.2 |
| T145 | 6 | 12.9 | 10.1 | 19.6 | 14.2 |
| T147 | 7 | 13.2 | 23.7 | 23.6 | 20.1 |
| T151 | 8 | 12.4 | 10.6+ | 19.0 | 14.4 |
| T153 | 9 | 12.6 | 12.6 | 26.8 | 17.3 |
| T155 | 10 | 12.9 | 10.6 | 21.1 | 14.9 |
| T159 | 11 | 12.9 | 27.9 | 31.7 | 24.1 |
| T250 | 12 | 12.6 | 10.8 | 17.1 | 13.5 |
| T254 | 13 | 12.8 | 12.4 | 23.1 | 16.1 |
| T256 | 14 | 13.0 | 21.1 | 30.7 | 21.6 |
| T258 | 15 | 13.4 | 12.9 | 16.2 | 14.2 |
| Ar258 | 16 | 12.2 | 16.9 | 30.5 | 19.9 |
| Ar262 | 17 | 13.0 | 11.8 | 23.1 | 16.0 |
| Ar266 | 18 | 12.6 | 7.9 | 18.4 | 13.0 |
| Tx29A | 19 | 13.4 | 16.7 | 17.9 | 16.0 |
| Tx61M | 20 | 13.3 | 17.7+ | 21.0 | 17.3 |
| Tx403 | 21 | 12.6 | 17.1 | 18.9 | 16.2 |
| Tx5855 | 22 | 13.0 | 8.3 | 15.6 | 12.3 |
| Tx6252 | 23 | 13.2 | 15.1 | 24.5 | 17.6 |
| Mean | | 13.0 | 14.1 | 21.7 | 16.3 |
| LSD 0.05 | | NS | 6.3 | 2.8 | 5.7 |
| CV% | | | 27.0 | 7.8 | 36.6 |

*   Check entry.
+   Data missing from one replication.

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Table 78. Days-to-tassel evaluation of the 900-1000 maturity inbred
         lines.

| Entry | No. | KY | MO | TN | Mean |
|-------|-----|-----|-----|-----|------|
| CI66 * | 1 | 82.5+ | 92.5+ | 75.7 | 82.4 |
| FR802W * | 2 | 78.0+ | 83.3 | 67.7 | 76.1 |
| FR805W * | 3 | 77.0+ | 83.3 | 66.3 | 75.4 |
| Ga209 | 4 | 83.5+ | 88.3 | 70.0 | 80.3 |
| Mo17 | 5 | 71.7 | 81.0 | 63.7 | 72.1 |
| T145 | 6 | 77.7 | 84.3 | 65.3 | 75.8 |
| T147 | 7 | 85.7 | 87.0 | 68.0 | 80.2 |
| T151 | 8 | 84.5+ | 92.0 | 70.7 | 82.1 |
| T153 | 9 | 76.3 | 84.0 | 66.7 | 75.7 |
| T155 | 10 | 78.0 | 82.3 | 63.7 | 74.7 |
| T159 | 11 | 85.0 | 89.7 | 70.3 | 81.7 |
| T250 | 12 | 75.0 | 82.3 | 64.7 | 74.0 |
| T254 | 13 | 81.0 | 85.0 | 65.7 | 77.2 |
| T256 | 14 | 82.3 | 37.3 | 70.3 | 80.0 |
| T258 | 15 | 79.0 | 87.3 | 65.7 | 77.3 |
| Ar258 | 16 | 88.0 | 95.0 | 73.7 | 85.6 |
| Ar262 | 17 | 77.7 | 86.3 | 65.7 | 76.6 |
| Ar266 | 18 | 78.3 | 87.0 | 67.3 | 77.6 |
| Tx29A | 19 | 80.7 | 87.3 | 68.7 | 78.9 |
| Tx61M | 20 | 81.0+ | 88.7 | 70.7 | 80.0 |
| Tx403 | 21 | 78.0 | 86.0 | 67.3 | 77.1 |
| Tx5855 | 22 | 83.0 | 90.3 | 69.7 | 81.0 |
| Tx6252 | 23 | 80.3 | 88.0 | 67.7 | 78.7 |
| Mean | | 80.1 | 86.8 | 68.0 | 78.2 |
| LSD 0.05 | | 1.9 | 3.0 | 1.7 | 2.3 |
| CV% | | 1.4 | 2.1 | 1.5 | 3.1 |

* Check entry.
+ Data missing from one replication.

Table 79. Days-to-silk evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | AR | KY | MS | TN | TX | Mean |
|---|---|---|---|---|---|---|---|
| CI66 * | 1 | 97.0 | 86.0+ | 79.0 | 77.7 | 81.7 | 84.1 |
| FR802W * | 2 | 89.7 | 82.5+ | 75.0 | 70.0 | 80.0 | 79.2 |
| FR805W * | 3 | 85.7 | 79.0+ | 72.7 | 66.7 | 75.7 | 75.7 |
| Ga209 | 4 | 94.7 | 87.0+ | 76.3 | 73.7 | 76.3 | 81.2 |
| Mo17 | 5 | 85.7 | 73.7 | 71.7 | 65.3 | 76.0 | 74.5 |
| T145 | 6 | 90.0 | 81.0 | 79.0 | 69.0 | 79.0 | 79.6 |
| T147 | 7 | 92.3 | 88.3 | 77.0 | 71.3 | 81.0 | 82.0 |
| T151 | 8 | 93.3 | 86.5+ | 76.7 | 72.7 | 76.3 | 80.7 |
| T153 | 9 | 91.0 | 79.3 | 76.0 | 68.7 | 81.7 | 79.3 |
| T155 | 10 | 90.7 | 81.3 | 73.0 | 67.0 | 78.0 | 78.0 |
| T159 | 11 | 94.3 | 87.7 | 80.7 | 74.0 | 76.3 | 82.6 |
| T250 | 12 | 86.3 | 76.7 | 75.3 | 66.7 | 70.7 | 75.1 |
| T254 | 13 | 91.3 | 82.7 | 74.3 | 68.7 | 74.3 | 78.3 |
| T256 | 14 | 95.0 | 85.0 | 80.7 | 73.7 | 74.3 | 81.7 |
| T258 | 15 | 87.0 | 81.3 | 75.3 | 67.7 | 73.3 | 76.9 |
| Ar258 | 16 | 95.7 | 90.3 | 81.0 | 76.7 | 83.0 | 85.3 |
| Ar262 | 17 | 89.3 | 78.3 | 74.0 | 67.3 | 78.7 | 77.5 |
| Ar266 | 18 | 92.3 | 83.0 | 77.0 | 71.3 | 79.3 | 80.6 |
| Tx29A | 19 | 91.3 | 84.3 | 73.0 | 70.7 | 74.0 | 78.7 |
| Tx61M | 20 | 91.7 | 82.5+ | 74.7 | 72.7 | 73.7 | 78.8 |
| Tx403 | 21 | 89.3 | 82.0 | 75.7 | 69.7 | 79.7 | 79.3 |
| Tx5855 | 22 | 89.7 | 83.7 | 75.0+ | 71.0 | 79.7 | 80.1 |
| Tx6252 | 23 | 90.0 | 82.7 | 75.3 | 69.3 | 78.7 | 79.2 |
| Mean | | 91.0 | 82.7 | 76.0 | 70.5 | 77.4 | 79.5 |
| LSD 0.05 | | 2.6 | 2.7 | 3.2 | 1.8 | 2.2 | 2.5 |
| CV% | | 1.8 | 2.0 | 2.5 | 1.5 | 1.7 | 4.4 |

* Check entry.
+ Data missing from one replication.

Table 80.  Ear row number evaluation of the 900-1000 maturity inbred
          lines.

| Entry | No. | AR | KY | MS | TN | Mean |
|-------|-----|------|------|------|------|------|
| CI66 * | 1 | 16.0 | 15.5+ | 14.7 | 16.7 | 15.7 |
| FR802W * | 2 | 9.3 | 9.5+ | 10.1 | 10.0 | 9.7 |
| FR805W * | 3 | 14.7 | 14.0+ | 14.7 | 16.0 | 14.9 |
| Ga209 | 4 | 13.5 | 12.5+ | 13.5 | 13.3 | 13.3 |
| Mo17 | 5 | 10.9 | 10.7 | 10.9 | 11.3 | 11.0 |
| T145 | 6 | 11.1 | 10.3 | 10.4 | 12.0 | 11.0 |
| T147 | 7 | 12.9 | 13.0 | 12.5 | 13.3 | 12.9 |
| T151 | 8 | 12.5 | 11.0+ | 11.8 | 12.0 | 11.9 |
| T153 | 9 | 10.4 | 10.7 | 10.6 | 12.0 | 10.9 |
| T155 | 10 | 13.5 | 13.0 | 14.0 | 15.3 | 14.0 |
| T159 | 11 | 11.6 | 11.7 | 12.0 | 12.7 | 12.0 |
| T250 | 12 | 10.1 | 10.7 | 10.9 | 10.7 | 10.6 |
| T254 | 13 | 12.5 | 12.0 | 12.8 | 13.3 | 12.7 |
| T256 | 14 | 12.7 | 11.7 | 12.2 | 14.0 | 12.6 |
| T258 | 15 | 12.4 | 12.0 | 11.6 | 12.0 | 12.0 |
| Ar258 | 16 | 11.6 | 14.3 | 14.4 | 16.0 | 14.1 |
| Ar262 | 17 | 15.2 | 15.3 | 14.3 | 16.7 | 15.4 |
| Ar266 | 18 | 14.1 | 14.0 | 13.6 | 14.0 | 13.9 |
| Tx29A | 19 | 13.2 | 14.0 | 13.5 | 14.7 | 13.8 |
| Tx61M | 20 | 12.9 | 13.5+ | 12.7 | 12.7 | 12.9 |
| Tx403 | 21 | 15.3 | 15.0 | 14.6 | 16.7 | 15.4 |
| Tx5855 | 22 | 13.9 | 13.7 | 13.7+ | 14.0 | 13.8 |
| Tx6252 | 23 | 15.2 | 16.0 | 16.0 | 16.0 | 15.8 |
| Mean | | 12.9 | 12.8 | 12.8 | 13.7 | 13.1 |
| LSD 0.05 | | 0.9 | 1.3 | 0.9 | 1.7 | 0.8 |
| CV% | | 4.5 | 6.3 | 4.1 | 7.6 | 7.8 |

* Check entry.
+ Data missing from one replication.

Table 81. Ear length (cm) evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | AR | KY | MS | TN | Mean |
|---|---|---|---|---|---|---|
| CI66 * | 1 | 15.2 | 12.7+ | 11.9 | 15.1 | 13.8 |
| FR802W * | 2 | 19.8 | 19.2+ | 14.7 | 19.5 | 18.2 |
| FR805W * | 3 | 14.5 | 14.6+ | 10.7 | 14.7 | 13.6 |
| Ga209 | 4 | 15.3 | 13.1+ | 13.1 | 17.3 | 14.8 |
| Mo17 | 5 | 18.2 | 17.3 | 15.6 | 18.8 | 17.4 |
| T145 | 6 | 14.0 | 13.3 | 11.1 | 13.8 | 13.0 |
| T147 | 7 | 15.9 | 12.7 | 11.8 | 14.7 | 13.7 |
| T151 | 8 | 16.4 | 15.9+ | 13.5 | 14.8 | 15.1 |
| T153 | 9 | 14.1 | 12.4 | 11.3 | 16.9 | 13.7 |
| T155 | 10 | 14.9 | 14.2 | 11.3 | 14.8 | 13.8 |
| T159 | 11 | 17.0 | 15.5 | 14.5 | 16.6 | 15.9 |
| T250 | 12 | 19.9 | 17.2 | 15.7 | 22.0 | 18.7 |
| T254 | 13 | 18.6 | 16.7 | 14.6 | 16.5 | 16.6 |
| T256 | 14 | 17.4 | 16.9 | 14.8 | 19.7 | 17.2 |
| T258 | 15 | 15.4 | 14.8 | 14.7 | 16.8 | 15.4 |
| Ar258 | 16 | 12.9 | 13.6 | 13.0 | 14.4 | 13.5 |
| Ar262 | 17 | 16.4 | 16.5 | 14.9 | 17.5 | 16.3 |
| Ar266 | 18 | 15.0 | 12.8 | 11.8 | 15.6 | 13.8 |
| Tx29A | 19 | 18.3 | 15.6 | 14.4 | 17.3 | 16.4 |
| Tx61M | 20 | 17.0 | 15.2+ | 12.6 | 15.6 | 15.1 |
| Tx403 | 21 | 17.5 | 15.0 | 13.8 | 16.6 | 15.7 |
| Tx5855 | 22 | 15.5 | 13.7 | 11.2+ | 14.6 | 14.0 |
| Tx6252 | 23 | 17.2 | 14.9 | 14.0 | 17.6 | 15.9 |
| Mean | | 16.4 | 14.9 | 13.3 | 16.6 | 15.3 |
| LSD 0.05 | | 1.5 | 1.3 | 1.4 | 1.7 | 1.2 |
| CV% | | 5.5 | 5.4 | 6.4 | 6.4 | 9.9 |

* Check entry.
+ Data missing from one replication.

Table 82. Ear diameter (cm) evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | AR | KY | MS | TN | Mean |
|---|---|---|---|---|---|---|
| CI66 * | 1 | 4.3 | 3.8+ | 3.8 | 4.5 | 4.1 |
| FR802W * | 2 | 3.8 | 3.9+ | 3.6 | 4.1 | 3.9 |
| FR805W * | 3 | 4.2 | 4.2+ | 4.2 | 4.7 | 4.3 |
| Ga209 | 4 | 3.9 | 3.7+ | 3.7 | 4.2 | 3.9 |
| Mo17 | 5 | 3.7 | 3.8 | 3.5 | 4.0 | 3.7 |
| T145 | 6 | 3.6 | 3.4 | 3.0 | 3.7 | 3.4 |
| T147 | 7 | 4.0 | 3.7 | 3.6 | 4.1 | 3.9 |
| T151 | 8 | 4.0 | 3.4+ | 3.7 | 4.1 | 3.8 |
| T153 | 9 | 3.9 | 3.7 | 3.7 | 4.3 | 3.9 |
| T155 | 10 | 3.9 | 4.0 | 3.9 | 4.3 | 4.0 |
| T159 | 11 | 3.4 | 3.6 | 3.4 | 4.2 | 3.6 |
| T250 | 12 | 3.5 | 3.7 | 3.6 | 3.8 | 3.6 |
| T254 | 13 | 3.7 | 4.0 | 3.8 | 4.2 | 3.9 |
| T256 | 14 | 3.6 | 3.5 | 3.4 | 4.1 | 3.6 |
| T258 | 15 | 3.7 | 3.6 | 3.7 | 4.1 | 3.8 |
| Ar258 | 16 | 3.6 | 4.1 | 3.9 | 4.5 | 4.0 |
| Ar262 | 17 | 4.0 | 4.2 | 3.8 | 4.2 | 4.0 |
| Ar266 | 18 | 3.8 | 3.7 | 3.5 | 3.8 | 3.7 |
| Tx29A | 19 | 4.3 | 4.1 | 4.0 | 4.4 | 4.2 |
| Tx61M | 20 | 4.0 | 4.0+ | 3.8 | 4.3 | 4.0 |
| Tx403 | 21 | 4.3 | 4.2 | 3.9 | 4.6 | 4.3 |
| Tx5855 | 22 | 4.0 | 3.7 | 3.8+ | 4.2 | 3.9 |
| Tx6252 | 23 | 4.1 | 3.9 | 4.1 | 4.7 | 4.2 |
| Mean | | 3.9 | 3.8 | 3.7 | 4.2 | 3.9 |
| LSD 0.05 | | 0.2 | 0.4 | 0.3 | 0.3 | 0.2 |
| CV% | | 2.7 | 6.5 | 5.5 | 4.0 | 6.1 |

* Check entry.
+ Data missing from one replication.

Table 83. Three-hundred kernel weight (g) evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | AR# | KY | MS | TN | Mean |
|-------|-----|-----|-----|-----|-----|------|
| CI66 * | 1 | 70.0 | 67.0+ | 74.9 | 65.3 | 69.4 |
| FR802W * | 2 | 88.0 | 93.0+ | 75.5 | 74.0 | 80.3 |
| FR805W * | 3 | 71.0 | 76.5+ | 70.5 | 60.3 | 68.5 |
| Ga209 | 4 | 82.0 | 86.5+ | 78.6 | 85.3 | 83.0 |
| Mo17 | 5 | 83.0 | 101.0 | 70.6 | 87.3 | 86.0 |
| T145 | 6 | 90.0 | 88.3 | 75.2 | 73.3 | 80.0 |
| T147 | 7 | 61.0 | 84.0 | 62.7 | 68.3 | 70.6 |
| T151 | 8 | 85.0 | 78.0+ | 75.9 | 73.3 | 76.5 |
| T153 | 9 | 120.0 | 127.0 | 115.6 | 106.7 | 116.8 |
| T155 | 10 | 69.0 | 70.7 | 62.3 | 59.3 | 64.6 |
| T159 | 11 | 68.0 | 84.0 | 72.8 | 77.7 | 77.1 |
| T250 | 12 | 100.0 | 114.3 | 86.2 | 92.3 | 97.9 |
| T254 | 13 | 67.0 | 73.7 | 62.5 | 62.7 | 66.3 |
| T256 | 14 | 68.0 | 80.7 | 74.9 | 77.7 | 76.8 |
| T258 | 15 | 63.0 | 69.0 | 64.4 | 58.3 | 63.8 |
| Ar258 | 16 | 111.0 | 73.7 | 67.3 | 58.7 | 71.0 |
| Ar262 | 17 | 71.0 | 76.0 | 65.5 | 68.7 | 70.1 |
| Ar266 | 18 | 66.0 | 54.0 | 70.8 | 59.7 | 61.9 |
| Tx29A | 19 | 93.0 | 76.3 | 72.5 | 68.3 | 74.5 |
| Tx61M | 20 | 88.0 | 86.0+ | 74.5 | 73.3 | 78.2 |
| Tx403 | 21 | 94.0 | 88.3 | 72.8 | 65.7 | 77.4 |
| Tx5855 | 22 | 65.0 | 63.3 | 68.1+ | 54.7 | 61.7 |
| Tx6252 | 23 | 55.0 | 60.7 | 62.2 | 65.3 | 61.9 |
| Mean | | 79.5 | 81.4 | 72.9 | 71.1 | 75.5 |
| LSD 0.05 | | | 12.7 | 13.1 | 7.1 | 9.6 |
| CV% | | | 9.5 | 10.9 | 6.0 | 14.2 |

* Check entry.
+ Data missing from one replication.
# Data from one replication.

Table 84. Stalk crushing strength (load-kg) evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | MO |
|-------|-----|------|
| CI66 * | 1 | 385.6 |
| FR802W * | 2 | 378.0 |
| FR805W * | 3 | 210.2 |
| Ga209 | 4 | 343.5 |
| Mo17 | 5 | 288.8 |
| T145 | 6 | 627.5 |
| T147 | 7 | 530.7 |
| T151 | 8 | 520.1 |
| T153 | 9 | 427.9 |
| T155 | 10 | 352.3 |
| T159 | 11 | 554.9 |
| T250 | 12 | 323.6 |
| T254 | 13 | 305.4 |
| T256 | 14 | 474.8 |
| T258 | 15 | 352.3 |
| Ar258 | 16 | 433.3 |
| Ar262 | 17 | 331.1 |
| Ar266 | 18 | 194.3 |
| Tx29A | 19 | 461.2 |
| Tx61M | 20 | 450.0 |
| Tx403 | 21 | 414.3 |
| Tx5855 | 22 | 291.0+ |
| Tx6252 | 23 | 422.3 |
| Mean | | 396.0 |
| LSD 0.05 | | 126.7 |
| CV% | | 19.4 |

* Check entry.
+ Data missing from one replication.

Table 85. Bacterial wilt susceptibility evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | Stewart's wilt MO | Goss' wilt NE |
|-------|-----|-------------------|---------------|
|       |     | (1-5)             | (1-9)         |
| CI66 * | 1 | 1.3 | 1.0 |
| FR802W * | 2 | 1.7 | 1.3 |
| FR805W * | 3 | 1.3 | 1.0 |
| Ga209 | 4 | 2.0++ | 1.3 |
| Mo17 | 5 | 2.3 | 1.3 |
| T145 | 6 | 2.0++ | 1.0 |
| T147 | 7 | 2.0++ | 1.0 |
| T151 | 8 | . | 2.0 |
| T153 | 9 | 3.5+ | 1.0 |
| T155 | 10 | 3.3 | 1.0 |
| T159 | 11 | . | 1.0 |
| T250 | 12 | 1.0 | 1.7 |
| T254 | 13 | 3.0++ | 1.0 |
| T256 | 14 | . | 1.0 |
| T258 | 15 | . | 2.0 |
| Ar258 | 16 | 1.3 | 1.3 |
| Ar262 | 17 | . | 1.3 |
| Ar266 | 18 | 3.7 | 1.3 |
| Tx29A | 19 | 2.0 | 1.0 |
| Tx61M | 20 | 2.0 | 1.0 |
| Tx403 | 21 | 2.0 | 1.7 |
| Tx5855 | 22 | . | 1.0 |
| Tx6252 | 23 | 3.0++ | 1.3 |
| Mean |  | 2.1 | 1.2 |
| LSD 0.05 |  | 1.0 | NS |
| CV% |  | 27.2 |  |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.

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Table 86. Fungal leaf disease and rust susceptibility evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | Downy mildew infct. MS (%) | Southern leaf blight Date 1 IL (%LA#) | Southern leaf blight Date 2 IL (%LA) | Northern leaf blight Race 1 IL (%LA) | Northern leaf blight Race 2 IL (%LA) | South. leaf rust MS (0-9) |
|---|---|---|---|---|---|---|---|
| CI66 * | 1 | 4.3 | 6.7 | 26.7 | 1.0 | 1.3 | 6.7 |
| FR802W * | 2 | 0.0 | 16.7 | 33.3 | 2.3 | 4.5+ | 5.7 |
| FR805W * | 3 | 2.0 | 6.7 | 23.3 | 6.2 | 4.0 | 6.3 |
| Ga209 | 4 | 0.0 | 20.0 | 36.7 | 2.0 | 2.0 | 7.7 |
| Mo17 | 5 | 0.0 | 6.7 | 20.0 | 1.7 | 2.3 | 6.3 |
| T145 | 6 | 6.7 | 8.3 | 16.7 | 5.0+ | 5.0+ | 7.7 |
| T147 | 7 | 18.7 | 8.3 | 20.0 | 3.5 | 6.2 | 7.7 |
| T151 | 8 | 4.0 | 23.3 | 40.0 | 4.2 | 3.5+ | 6.7 |
| T153 | 9 | 2.0 | 12.5+ | 20.0+ | 5.0++ | 6.7 | 6.7 |
| T155 | 10 | 4.0 | 6.7 | 23.3 | 2.7 | 5.3+ | 7.0 |
| T159 | 11 | 49.0 | 6.7 | 10.0 | 2.0+ | 3.5+ | 6.7 |
| T250 | 12 | 0.0 | 6.7 | 23.3 | 3.0 | 3.0+ | 6.7 |
| T254 | 13 | 0.0 | 10.0++ | 20.0++ | 4.0+ | 6.3+ | 6.0 |
| T256 | 14 | 42.7 | 7.5+ | 15.0+ | 1.5+ | 5.3+ | 7.7 |
| T258 | 15 | 66.0 | 10.0 | 30.0 | 3.3 | 4.0+ | 8.0 |
| Ar258 | 16 | 8.0 | 10.0++ | 20.0++ | 1.0++ | 2.7 | 5.3 |
| Ar262 | 17 | 32.7 | 10.0++ | 50.0++ | 13.5++ | 5.2 | 8.0 |
| Ar266 | 18 | 6.0 | 10.0 | 33.3 | 10.0++ | 7.0 | 8.7 |
| Tx29A | 19 | 11.3 | 11.7 | 40.0 | 4.8 | 3.0 | 8.7 |
| Tx61M | 20 | 0.0 | 8.3 | 46.7 | 2.0++ | 2.3 | 8.7 |
| Tx403 | 21 | 0.0 | 10.0++ | 30.0++ | 4.0++ | . | 7.7 |
| Tx5855 | 22 | 0.0 | . | . | . | . | 8.0 |
| Tx6252 | 23 | 0.0 | 10.0++ | 30.0++ | 3.8+ | . | 8.3 |
| Mean | | 11.2 | 10.4 | 27.6 | 3.5 | 4.1 | 7.2 |
| LSD 0.05 | | 17.9 | 6.9 | 10.4 | 2.4 | NS | 1.3 |
| CV% | | 97.9 | 39.7 | 22.7 | 40.0 | | 10.8 |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.
# Represents percent of leaf area infected.

Table 87.  Smut susceptibility evaluation of the 900-1000 maturity
          inbred lines.

| Entry | No. | Head Infct. TX |
|-------|-----|----------------|
|       |     | (%)            |
| CI66 *    | 1  | 0.0  |
| FR802W *  | 2  | 1.7  |
| FR805W *  | 3  | 5.0  |
| Ga209     | 4  | 6.1  |
| Mo17      | 5  | 0.0  |
| T145      | 6  | 3.3  |
| T147      | 7  | 11.7 |
| T151      | 8  | 7.8  |
| T153      | 9  | 2.8  |
| T155      | 10 | 6.3  |
| T159      | 11 | 3.0  |
| T250      | 12 | 0.0  |
| T254      | 13 | 18.9 |
| T256      | 14 | 1.3  |
| T258      | 15 | 5.6  |
| Ar258     | 16 | 0.0  |
| Ar262     | 17 | 5.0  |
| Ar266     | 18 | 16.7 |
| Tx29A     | 19 | 13.2 |
| Tx61M     | 20 | 1.3  |
| Tx403     | 21 | 23.3 |
| Tx5855    | 22 | 6.7  |
| Tx6252    | 23 | 6.7  |
| Mean      |    | 6.6  |
| LSD 0.05  |    | NS   |

* Check entry.

Table 88. Virus susceptibility evaluation of the 900-1000 maturity
inbred lines.

| Entry | No. | MCDV OH | MDMV | | | MDMV rating MS | CLN rating KS | Virus rating OH |
|---|---|---|---|---|---|---|---|---|
| | | | MS | OH | Mean | | | |
| | | (%) | (%) | (%) | (%) | (1-5) | (1-9) | (1-5) |
| CI66 * | 1 | 61.9 | 79.4 | 8.2 | 43.8 | 2.6 | 7.3 | 3.0 |
| FR802W * | 2 | 0.0 | 34.0 | 0.0 | 17.0 | 1.5 | 7.0 | 1.0 |
| FR805W * | 3 | 60.6 | 22.3 | 44.4 | 33.4 | 1.4 | 7.0 | 3.0 |
| Ga209 | 4 | 47.3 | 34.0 | 10.1 | 22.0 | 1.6 | 7.3 | 2.7 |
| Mo17 | 5 | 45.7 | 91.7 | 54.3 | 73.0 | 3.7 | 7.3 | 3.0 |
| T145 | 6 | 13.4 | 74.2 | 0.0 | 37.1 | 2.4 | 8.0 | 2.0 |
| T147 | 7 | 58.7 | 34.0 | 41.3 | 37.6 | 1.7 | 6.3 | 3.0 |
| T151 | 8 | 9.2 | 40.7 | 9.2 | 25.0 | 1.7 | 6.7 | 2.0 |
| T153 | 9 | 87.5 | 62.3 | 93.8 | 78.0 | 2.4 | 7.7 | 3.0 |
| T155 | 10 | 47.8 | 58.1 | 21.1 | 39.6 | 2.1 | 8.0 | 3.0 |
| T159 | 11 | 27.9 | 88.6 | 16.5 | 52.6 | 2.9 | 7.0 | 3.0 |
| T250 | 12 | 30.2 | 6.6 | 3.8 | 5.2 | 1.1 | 8.0 | 3.0 |
| T254 | 13 | 56.2 | 81.5 | 43.3 | 62.4 | 2.8 | 7.3 | 3.3 |
| T256 | 14 | 33.9 | 97.1 | 29.2 | 63.1 | 3.0 | 7.0 | 3.0 |
| T258 | 15 | 67.2 | 35.9 | 14.4 | 25.1 | 1.5 | 7.3 | 3.0 |
| Ar258 | 16 | 25.0 | 32.8 | 9.7 | 21.2 | 1.7 | 7.7 | 3.0 |
| Ar262 | 17 | . | 9.3 | . | 9.3 | 1.1 | 8.0 | . |
| Ar266 | 18 | 33.3 | 36.0 | 3.6 | 19.8 | 1.7 | 7.3 | 3.0 |
| Tx29A | 19 | 47.7 | 51.3 | 61.4 | 56.3 | 2.0 | 7.0 | 3.0 |
| Tx61M | 20 | 85.0 | 24.5 | 15.0 | 19.7 | 1.4 | 7.0 | 3.0 |
| Tx403 | 21 | 96.4 | 92.3 | 100.0 | 96.2 | 2.9 | 7.7 | 3.7 |
| Tx5855 | 22 | 46.4 | 71.7 | 34.3 | 53.0 | 2.4 | 8.0 | 3.0 |
| Tx6252 | 23 | 75.0 | 86.9 | 88.3 | 87.6 | 2.8 | 7.3 | 3.7 |
| Mean | | 48.0 | 54.1 | 31.9 | 43.3 | 2.1 | 7.4 | 2.9 |
| LSD 0.05 | | 21.5 | 32.5 | 12.7 | 45.4 | 0.7 | NS | 0.4 |
| CV% | | 26.7 | 36.8 | 23.8 | 86.5 | 19.8 | | 8.6 |

* Check entry.

Table 89. Insect susceptibility evaluation of the 900-1000 maturity inbred lines.

| Entry | No. | ECB | | CEW tunl. GA | FAW# GA | SWCB MS |
|---|---|---|---|---|---|---|
| | | First IA | Second IA | | | |
| | | (1-9) | (1-9) | (cm) | (0-9) | (1-9) |
| C166 * | 1 | 2.3 | 6.0 | 7.6 | 4.7 | 8.7 |
| FR802W * | 2 | 6.7 | 9.0 | 11.7 | 5.6 | 8.5 |
| FR805W * | 3 | 6.3 | 6.3 | 7.6 | 5.2 | 9.0 |
| Ga209 | 4 | 7.7 | 6.3 | 7.6 | 4.8 | 8.9 |
| Mo17 | 5 | 6.7 | 7.3 | 12.2 | 5.9 | 8.9 |
| T145 | 6 | 5.3 | 7.3 | 8.0 | 6.1 | 8.9 |
| T147 | 7 | 4.7 | 5.3 | 9.5 | 4.8 | 8.8 |
| T151 | 8 | 9.0 | 7.0 | 7.7 | 4.5 | 8.9 |
| T153 | 9 | 8.3 | 7.0 | 10.7 | 6.2 | 9.0 |
| T155 | 10 | 5.3 | 7.0 | 8.3 | 5.2 | 8.7 |
| T159 | 11 | 7.3 | 7.0 | 8.5 | 5.8 | 8.8 |
| T250 | 12 | 4.3 | 6.7 | 13.8 | 5.2 | 8.9 |
| T254 | 13 | 9.0 | 7.0 | 8.6 | 5.6 | 8.9 |
| T256 | 14 | 3.3 | 7.3 | 9.9 | 6.2 | 8.8 |
| T258 | 15 | 3.3 | 6.0 | 6.6 | 4.8 | 8.4 |
| Ar258 | 16 | 9.0 | 8.0 | 10.4 | 5.7 | 8.9 |
| Ar262 | 17 | 4.5+ | 7.3 | 10.3 | 5.5 | 8.9 |
| Ar266 | 18 | 5.7 | 7.3 | 10.7 | 5.6 | 8.7 |
| Tx29A | 19 | 6.7 | 6.3 | 9.3 | 4.8 | 8.6 |
| Tx61M | 20 | 5.7 | 5.7 | 9.5 | 4.5 | 8.5 |
| Tx403 | 21 | 7.0 | 7.7 | 11.4 | . | 8.9 |
| Tx5855 | 22 | 5.0++ | 7.0+ | 8.4 | . | 9.0 |
| Tx6252 | 23 | 5.0 | . | 10.3 | . | 9.0 |
| Mean | | 6.1 | 6.9 | 9.5 | 5.3 | 8.8 |
| LSD 0.05 | | 2.5 | 1.4 | NS | 1.0 | NS |
| CV% | | 25.0 | 12.4 | | 13.3 | |

* Check entry.
+ Data missing from one replication.
++ Data missing from two replications.
# Data from four replications.

## COOPERATORS CONTRIBUTING TO THE 1100-1200 MATURITY EVALUATION:
### (In order of character presentation in the tables)

| Cooperator | Site code | Organization and location | Characters |
|---|---|---|---|
| Gudauskas | AL | Auburn Univ., Auburn | Agronomic |
| Widstrom | GA | USDA | Agronomic |
| Darrah | MO | USDA/Univ. of Missouri, Columbia | Agronomic |
| Scott | MS | USDA/Mississippi State Univ., Mississippi State | Agronomic |
| West | TN | Univ. of Tennessee, Knoxville | Agronomic |
| Bockholt | TX | Texas A&M Univ., College Station | Agronomic |
| Politowski | MO | Pfizer Genetics, St. Louis | Stewart's wilt |
| Turner | NE | Funk Seeds International, Clearwater | Goss' wilt |
| Scott | MS | USDA/Mississippi State Univ. Mississippi State | Downy mildew |
| Gudauskas | AL | Auburn Univ., Auburn | North. leaf spot<br>South. leaf blight<br>North. leaf blight |
| White | IL | Univ. of Illinios, Urbana | South. leaf blight<br>North. leaf blight |
| Scott | MS | USDA/Mississippi State Univ. Mississippi State | South. leaf rust |
| Gudauskas | AL | Auburn Univ., Auburn | Common smut |
| Bockholt and Frederiksen | TX | Texas A&M Univ., Halfway | Head smut |
| Findley and Louie | OH | USDA/OARDC, Wooster | MCDV<br>MDMV |
| Scott | MS | USDA/Mississippi State Univ. Mississippi State | MDMV |
| Turner | KS | Funk Seeds International, Norton | CLN |
| Findley and Louie | OH | USDA/OARDC, Wooster | Virus rating |
| Guthrie | IA | USDA | European corn borer |
| Widstrom | GA | USDA | Corn ear worm<br>Fall army worm |
| Scott | MS | USDA/Mississippi State Univ. Mississippi State | Southwestern corn borer |

Table 90. Yield (q/ha) evaluation of the 1100-1200 maturity inbred lines.

| Entry | No. | GA | MS | TN | TX | Mean |
|-------|-----|------|------|------|------|------|
| SC76 * | 1 | 15.3 | 16.9 | 18.7 | 7.5 | 14.6 |
| SC213 * | 2 | 15.3 | 15.1 | 25.0 | 11.2 | 16.7 |
| T232 * | 3 | 27.3 | 18.9 | 12.5 | 13.8 | 18.1 |
| GT112RF | 4 | 13.7 | 11.5 | 14.6 | 12.7 | 13.1 |
| NC246 | 5 | 25.4 | 33.8 | 46.3 | 18.7 | 31.0 |
| NC248 | 6 | 23.7 | 11.2 | 23.8 | 12.3 | 17.7 |
| SC12 | 7 | 20.7 | 13.9 | 32.4 | 11.2 | 19.6 |
| SC43 | 8 | 44.2 | 30.4 | 47.2 | 25.8 | 36.9 |
| SC55 | 9 | 13.0 | 15.1 | 27.3 | 17.6 | 18.2 |
| Mp496 | 10 | 6.3 | 13.9 | 11.2 | 16.4 | 12.0 |
| Tx601 | 11 | 14.4 | 9.7 | 7.7 | 8.2 | 10.0 |
| Mean | | 20.0 | 17.3 | 24.2 | 14.1 | 18.9 |
| LSD 0.05 | | 19.2 | 7.5 | 6.0 | 8.0 | 8.7 |
| CV% | | 56.6 | 25.3 | 14.5 | 33.3 | 54.9 |

* Check entry.

Table 91.  Stand (percent) evaluation of the 1100-1200 maturity inbred
          lines.

| Entry | No. | AL | GA | MS | TN | TX | Mean |
|-------|-----|------|------|------|-------|------|------|
| SC76 * | 1 | 88.9 | 93.9 | 75.8 | 100.0 | 69.4 | 85.6 |
| SC213 * | 2 | 89.6 | 86.4 | 75.0 | 100.0 | 63.9 | 83.0 |
| T232 * | 3 | 94.8 | 103.0 | 83.3 | 100.0 | 73.6 | 91.0 |
| GT112RF | 4 | 94.1 | 100.0 | 70.0 | 96.7 | 76.4 | 87.4 |
| NC246 | 5 | 89.6 | 93.9 | 69.2 | 98.3 | 61.1 | 82.4 |
| NC248 | 6 | 89.6 | 87.9 | 70.0 | 90.0 | 63.9 | 80.3 |
| SC12 | 7 | 94.1 | 90.9 | 74.2 | 96.7 | 72.2 | 85.6 |
| SC43 | 8 | 91.9 | 86.4 | 65.8 | 100.0 | 63.9 | 81.6 |
| SC55 | 9 | 90.4 | 84.8 | 81.7 | 98.3 | 79.2 | 86.9 |
| Mp496 | 10 | 91.1 | 47.0 | 71.7 | 83.3 | 65.3 | 71.7 |
| Tx601 | 11 | 73.3 | 34.8 | 35.0 | 75.0 | 72.2 | 58.1 |
| Mean | | 89.8 | 82.6 | 70.2 | 94.4 | 69.2 | 81.2 |
| LSD 0.05 | | 10.9 | 25.4 | 22.7 | 12.4 | NS | 11.9 |
| CV% | | 7.1 | 18.0 | 19.0 | 7.7 | | 19.9 |

* Check entry.

Table 92. Root lodging (percent) evaluation of the 1100-1200 maturity
inbred lines.

| Entry | No. | AL | GA | MS | TN | TX | Mean |
|-------|-----|------|------|-----|-----|-----|------|
| SC76 * | 1 | 1.6 | 1.9 | 0.0 | 0.0 | 2.6 | 1.2 |
| SC213 * | 2 | 0.9 | 1.8 | 0.0 | 0.0 | 0.0 | 0.5 |
| T232 * | 3 | 1.5 | 1.4 | 0.0 | 0.0 | 3.3 | 1.2 |
| GT112RF | 4 | 5.4 | 0.0 | 0.0 | 0.0 | 2.0 | 1.5 |
| NC246 | 5 | 12.3 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 |
| NC248 | 6 | 1.7 | 7.0 | 0.0 | 0.0 | 0.0 | 1.7 |
| SC12 | 7 | 2.3 | 1.4 | 0.0 | 0.0 | 0.0 | 0.7 |
| SC43 | 8 | 2.8 | 0.0 | 0.0 | 0.0 | 2.0 | 0.9 |
| SC55 | 9 | 0.0 | 2.0 | 0.0 | 0.0 | 1.8 | 0.7 |
| Mp496 | 10 | 5.6 | 20.0 | 0.0 | 5.9 | 0.0 | 6.3 |
| Tx601 | 11 | 0.0 | 5.6 | 0.0 | 2.2 | 3.7 | 2.3 |
| Mean | | 3.1 | 3.7 | 0.0 | 0.7 | 1.4 | 1.8 |
| LSD 0.05 | | 6.4 | NS | NS | NS | NS | NS |
| CV% | | 122.1 | | | | | |

* Check entry.

Table 93.  Stalk lodging (percent) evaluation of the 1100-1200
           maturity inbred lines.

| Entry | No. | AL | GA | MS | TN | TX | Mean |
|-------|-----|------|------|-----|------|-----|------|
| SC76 * | 1 | 0.0 | 0.0 | 6.4 | 0.0 | 0.0 | 1.3 |
| SC213 * | 2 | 1.5 | 1.8 | 3.5 | 0.0 | 0.0 | 1.4 |
| T232 * | 3 | 11.0 | 0.0 | 5.0 | 6.7 | 0.0 | 4.5 |
| GT112RF | 4 | 13.5 | 5.0 | 5.6 | 10.0 | 0.0 | 6.8 |
| NC246 | 5 | 5.0 | 0.0 | 3.9 | 3.5 | 2.2 | 2.9 |
| NC248 | 6 | 1.7 | 0.0 | 6.1 | 5.3 | 2.8 | 3.2 |
| SC12 | 7 | 2.4 | 0.0 | 2.0 | 0.0 | 0.0 | 0.9 |
| SC43 | 8 | 4.1 | 6.5 | 0.0 | 0.0 | 0.0 | 2.1 |
| SC55 | 9 | 1.6 | 5.4 | 2.0 | 0.0 | 0.0 | 1.8 |
| Mp496 | 10 | 4.9 | 0.0 | 2.4 | 0.0 | 0.0 | 1.5 |
| Tx601 | 11 | 2.0 | 11.1 | 9.5 | 0.0 | 0.0 | 4.5 |
| Mean | | 4.3 | 2.7 | 4.2 | 2.3 | 0.5 | 2.8 |
| LSD 0.05 | | NS | NS | NS | NS | NS | NS |
| CV% | | | | | | | |

* Check entry.

Table 94.  Usable ears (per 100 plants) evaluation of the 1100-1200
maturity inbred lines.

| Entry | No. | GA | MS | TN | Mean |
|-------|-----|------|------|------|------|
| SC76 * | 1 | 130.0 | 131.7 | 111.7 | 124.4 |
| SC213 * | 2 | 95.0 | 115.0 | 138.3 | 116.1 |
| T232 * | 3 | 80.0 | 111.7 | 78.3 | 90.0 |
| GT112RF | 4 | 80.0 | 116.7 | 116.7 | 104.4 |
| NC246 | 5 | 103.3 | 146.7 | 148.3 | 132.8 |
| NC248 | 6 | 118.3 | 116.7 | 106.7 | 113.9 |
| SC12 | 7 | 96.7 | 125.0 | 151.7 | 124.4 |
| SC43 | 8 | 121.7 | 140.0 | 180.0 | 147.2 |
| SC55 | 9 | 66.7 | 98.3 | 120.0 | 95.0 |
| Mp496 | 10 | 36.7 | 100.0 | 76.7 | 71.1 |
| Tx601 | 11 | 40.0 | 91.7 | 73.3 | 68.3 |
| Mean | | 88.0 | 117.6 | 118.3 | 108.0 |
| LSD 0.05 | | 36.7 | 30.0 | 28.4 | 28.8 |
| CV% | | 24.5 | 15.0 | 14.1 | 27.2 |

*   Check entry.

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Table 95. Plant height (cm) evaluation of the 1100-1200 maturity
inbred lines.

| Entry | No. | GA | MO | MS | TN | TX | Mean |
|-------|-----|------|-------|-------|-------|-------|-------|
| SC76 * | 1 | 126.3 | 180.0 | 170.0 | 182.0 | 171.0 | 165.9 |
| SC213 * | 2 | 133.7 | 216.7 | 172.3 | 200.0 | 176.1 | 179.8 |
| T232 * | 3 | 128.0 | 223.3 | 207.0 | 210.0 | 175.3 | 188.7 |
| GT112RF | 4 | 163.0 | 231.7 | 178.3 | 240.0 | 217.6 | 206.1 |
| NC246 | 5 | 144.3 | 226.7 | 173.3 | 208.0 | 177.0 | 185.9 |
| NC248 | 6 | 142.3 | 226.7 | 171.7 | 221.7 | 188.0 | 190.1 |
| SC12 | 7 | 139.3 | 231.7 | 206.3 | 232.0 | 169.3 | 195.7 |
| SC43 | 8 | 140.3 | 190.0 | 170.3 | 181.0 | 172.7 | 170.9 |
| SC55 | 9 | 133.0 | 171.7 | 165.7 | 220.0 | 158.3 | 169.7 |
| Mp496 | 10 | 120.3 | 178.3 | 149.3 | 181.0 | 147.3 | 155.3 |
| Tx601 | 11 | 152.7 | 200.0 | 187.7 | 213.0 | 194.7++ | 188.0 |
| Mean | | 138.5 | 207.4 | 177.5 | 208.1 | 177.0 | 181.4 |
| LSD 0.05 | | 13.6 | 18.3 | 26.0 | 11.3 | 24.3 | 16.0 |
| CV% | | 5.8 | 5.2 | 8.6 | 3.1 | 8.1 | 12.0 |

* Check entry.
++ Data missing from two replications.

Table 96. Ear height (cm) evaluation of the 1100-1200 maturity inbred lines.

| Entry | No. | GA | MO | MS | TN | TX | Mean |
|-------|-----|------|--------|--------|-------|-------|-------|
| SC76 * | 1 | 66.7 | 108.3 | 107.3 | 101.7 | 116.8 | 100.2 |
| SC213 * | 2 | 43.7 | 91.7 | 74.0 | 76.0 | 89.7 | 75.0 |
| T232 * | 3 | 58.3 | 118.3 | 96.3 | 94.0 | 97.4 | 92.9 |
| GT112RF | 4 | 60.3 | 118.3 | 89.7 | 113.0 | 107.5 | 97.8 |
| NC246 | 5 | 60.0 | 100.0 | 82.3 | 84.0 | 88.1 | 82.9 |
| NC248 | 6 | 63.7 | 118.3 | 88.7 | 106.0 | 94.0 | 94.1 |
| SC12 | 7 | 40.7 | 113.3 | 85.3 | 107.0 | 82.1 | 85.7 |
| SC43 | 8 | 69.7 | 100.0 | 88.7 | 101.3 | 85.5 | 89.0 |
| SC55 | 9 | 64.7 | 105.0 | 93.7 | 110.0 | 96.5 | 94.0 |
| Mp496 | 10 | 55.7 | 88.3 | 83.0 | 89.0 | 73.7 | 77.9 |
| Tx601 | 11 | 76.7 | 120.0++ | 113.3 | 121.0 | 124.5 | 109.7 |
| Mean | | 60.0 | 106.6 | 91.1 | 100.3 | 96.0 | 90.6 |
| LSD 0.05 | | 14.5 | NS | 10.8 | 13.2 | 16.4 | 9.6 |
| CV% | | 14.2 | | 7.0 | 7.7 | 10.0 | 14.4 |

* Check entry.
++ Data missing from two replications.

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Table 97.  Moisture (percent) evaluation of the 1100-1200 maturity
           inbred lines.

| Entry | No. | GA | TN | Mean |
|-------|-----|------|------|------|
| SC76 * | 1 | 12.8 | 29.9 | 21.3 |
| SC213 * | 2 | 18.8 | 30.2 | 24.5 |
| T232 * | 3 | 7.1 | 24.7 | 15.9 |
| GT112RF | 4 | 17.3 | 31.4 | 24.3 |
| NC246 | 5 | 22.0 | 24.0 | 23.0 |
| NC248 | 6 | 17.4 | 28.3 | 22.9 |
| SC12 | 7 | 24.7 | 31.7 | 28.2 |
| SC43 | 8 | 8.6 | 20.3 | 14.4 |
| SC55 | 9 | 4.9 | 22.9 | 13.9 |
| Mp496 | 10 | 7.1 | 29.9 | 18.5 |
| Tx601 | 11 | 19.6 | 47.6 | 33.6 |
| Mean | | 14.6 | 29.2 | 21.9 |
| LSD 0.05 | | 10.7 | 6.0 | NS |
| CV% | | 43.1 | 12.0 | |

* Check entry.

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Table 98.   Days-to-tassel evaluation of the 1100-1200 maturity inbred
            lines.

| Entry | No. | GA | MO | TN | Mean |
|-------|-----|------|--------|------|-------|
| SC76 * | 1 | 85.0 | 100.0 | 81.7 | 88.9 |
| SC213 * | 2 | 77.0 | 91.0 | 76.3 | 81.4 |
| T232 * | 3 | 74.3 | 88.0 | 67.3 | 76.6 |
| GT112RF | 4 | 84.0 | 98.7 | 78.3 | 87.0 |
| NC246 | 5 | 77.0 | 88.0 | 71.7 | 78.9 |
| NC248 | 6 | 80.0 | 92.7 | 75.0 | 82.6 |
| SC12 | 7 | 75.3 | 86.7 | 67.7 | 76.6 |
| SC43 | 8 | 71.3 | 87.0 | 67.3 | 75.2 |
| SC55 | 9 | 81.3 | 98.7 | 75.7 | 85.2 |
| Mp496 | 10 | 78.3 | 95.0 | 74.7 | 82.7 |
| Tx601 | 11 | . | 103.0++ | . | 103.0 |
| Mean | | 78.4 | 92.9 | 73.6 | 81.7 |
| LSD 0.05 | | 2.1 | 2.0 | 3.3 | 2.6 |
| CV% | | 1.6 | 1.3 | 2.7 | 3.2 |

*  Check entry.
++ Data missing from two replications.

Table 99.   Days-to-silk evaluation of the 1100-1200 maturity inbred
            lines.

| Entry | No. | AL# | GA | MS | TN | TX | Mean |
|-------|-----|------|------|------|------|------|------|
| SC76 * | 1 | 87.0 | 86.7 | 83.0 | 83.7 | 81.7 | 84.4 |
| SC213 * | 2 | 77.0 | 79.0 | 78.7 | 78.3 | 76.3 | 77.9 |
| T232 * | 3 | 78.0 | 76.7 | 76.0 | 69.3 | 79.3 | 75.9 |
| GT112RF | 4 | 87.0 | 85.3 | 81.7 | 80.3 | 79.7 | 82.8 |
| NC246 | 5 | 77.0 | 74.0 | 74.3 | 73.3 | 74.7 | 74.7 |
| NC248 | 6 | 79.0 | 81.3 | 77.7 | 77.0 | 79.7 | 78.9 |
| SC12 | 7 | 78.0 | 79.7 | 81.7 | 71.3 | 78.7 | 77.9 |
| SC43 | 8 | 74.0 | 72.3 | 73.3 | 68.7 | 73.7 | 72.4 |
| SC55 | 9 | 87.0 | 83.3 | 82.0 | 77.3 | 78.3 | 81.6 |
| Mp496 | 10 | 77.0 | 80.3 | 76.7 | 77.0 | 75.0 | 77.2 |
| Tx601 | 11 | 87.0 | 84.7 | 80.7 | 81.7 | 86.0 | 84.0 |
| Mean | | 80.7 | 80.3 | 78.7 | 76.2 | 78.5 | 78.9 |
| LSD 0.05 | | | 3.7 | 2.8 | 3.3 | 4.3 | 1.4 |
| CV% | | | 2.7 | 2.1 | 2.5 | 3.2 | 4.8 |

*   Check entry.
#   Data from one replication.

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Table 100.  Ear row number evaluation of the 1100-1200 maturity inbred lines.

| Entry | No. | GA | MS | TN | Mean |
|---|---|---|---|---|---|
| SC76 * | 1 | 12.1 | 12.3 | 13.3 | 12.6 |
| SC213 * | 2 | 10.7 | 9.9 | 10.0 | 10.2 |
| T232 * | 3 | 12.5 | 11.7 | 12.0 | 12.1 |
| GT112RF | 4 | 13.7 | 12.1 | 12.0 | 12.6 |
| NC246 | 5 | 14.3 | 11.5 | 11.3 | 12.4 |
| NC248 | 6 | 12.4 | 10.5 | 10.7 | 11.2 |
| SC12 | 7 | 13.6 | 11.1 | 12.7 | 12.5 |
| SC43 | 8 | 14.9 | 13.7 | 16.0 | 14.9 |
| SC55 | 9 | 16.1 | 14.7 | 14.0 | 14.9 |
| Mp496 | 10 | 17.3 | 14.1 | 15.3 | 15.6 |
| Tx601 | 11 | 16.4 | 13.4 | 14.0 | 14.6 |
| Mean | | 14.0 | 12.3 | 12.8 | 13.0 |
| LSD 0.05 | | 2.0 | 1.1 | 1.7 | 1.4 |
| CV% | | 8.3 | 5.3 | 7.7 | 10.5 |

*  Check entry.

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Table 101. Ear length (cm) evaluation of the 1100-1200 maturity
inbred lines.

| Entry | No. | GA | MS | TN | Mean |
|-------|-----|------|------|------|------|
| SC76 * | 1 | 9.9 | 9.7 | 12.5 | 10.7 |
| SC213 * | 2 | 14.3 | 13.0 | 18.6 | 15.3 |
| T232 * | 3 | 11.9 | 12.1 | 15.2 | 13.1 |
| GT112RF | 4 | 11.7 | 10.5 | 16.1 | 12.8 |
| NC246 | 5 | 13.2 | 11.1 | 16.7 | 13.7 |
| NC248 | 6 | 12.4 | 11.1 | 14.2 | 12.5 |
| SC12 | 7 | 13.7 | 13.7 | 16.3 | 14.6 |
| SC43 | 8 | 15.5 | 12.1 | 14.4 | 14.0 |
| SC55 | 9 | 10.8 | 7.8 | 13.0 | 10.5 |
| Mp496 | 10 | 11.0 | 9.4 | 13.9 | 11.4 |
| Tx601 | 11 | 15.2 | 12.9 | 14.9 | 14.3 |
| Mean | | 12.7 | 11.2 | 15.1 | 13.0 |
| LSD 0.05 | | 1.8 | 1.5 | 1.6 | 1.8 |
| CV% | | 8.2 | 7.6 | 6.3 | 13.7 |

* Check entry.

Table 102. Ear diameter (cm) evaluation of the 1100-1200 maturity
inbred lines.

| Entry | No. | GA | MS | TN | Mean |
|-------|-----|-----|-----|-----|------|
| SC76 * | 1 | 3.5 | 3.2 | 3.8 | 3.5 |
| SC213 * | 2 | 3.5 | 2.9 | 3.6 | 3.3 |
| T232 * | 3 | 3.7 | 3.5 | 3.9 | 3.7 |
| GT112RF | 4 | 4.1 | 3.3 | 4.2 | 3.9 |
| NC246 | 5 | 4.0 | 3.5 | 4.3 | 4.0 |
| | | | | | |
| NC248 | 6 | 4.1 | 3.1 | 3.7 | 3.6 |
| SC12 | 7 | 3.7 | 3.0 | 4.2 | 3.6 |
| SC43 | 8 | 4.6 | 3.5 | 4.0 | 4.0 |
| SC55 | 9 | 4.2 | 3.7 | 4.5 | 4.1 |
| Mp496 | 10 | 4.2 | 3.4 | 4.2 | 3.9 |
| | | | | | |
| Tx601 | 11 | 4.6 | 3.4 | 4.2 | 4.0 |
| | | | | | |
| Mean | | 4.0 | 3.3 | 4.0 | 3.8 |
| LSD 0.05 | | 0.6 | NS | 0.3 | 0.4 |
| CV% | | 8.8 | | 4.5 | 9.7 |

* Check entry.

Table 103. Three-hundred kernel weight (g) evaluation of the 1100-1200 maturity inbred lines.

| Entry | No. | GA | MS | TN | Mean |
|-------|-----|------|-------|-------|-------|
| SC76 * | 1 | 60.0 | 55.4 | 59.7 | 58.3 |
| SC213 * | 2 | 79.7 | 78.0 | 87.3 | 81.7 |
| T232 * | 3 | 100.3 | 108.1 | 113.0 | 107.1 |
| GT112RF | 4 | 65.3 | 62.7 | 81.3 | 69.8 |
| NC246 | 5 | 87.7 | 77.4 | 88.7 | 84.6 |
| NC248 | 6 | 72.7 | 66.5 | 85.7 | 74.9 |
| SC12 | 7 | 53.7 | 73.3 | 79.7 | 68.9 |
| SC43 | 8 | 67.3 | 53.8 | 53.7 | 58.3 |
| SC55 | 9 | 53.3 | 67.5 | 70.7 | 63.8 |
| Mp496 | 10 | 57.0 | 58.2 | 66.7 | 60.6 |
| Tx601 | 11 | 62.3 | 94.8 | 95.0 | 84.1 |
| Mean | | 69.0 | 72.3 | 80.1 | 73.8 |
| LSD 0.05 | | 10.5 | 8.4 | 9.8 | 13.9 |
| CV% | | 8.9 | 6.8 | 7.2 | 19.1 |

* Check entry.

Table 104.  Stalk crushing strength (load-kg) evaluation of the 1100-
1200 maturity inbred lines.

| Entry | No. | MO |
|-------|-----|-------|
| SC76 * | 1 | 325.2 |
| SC213 * | 2 | 382.5 |
| T232 * | 3 | 425.0 |
| GT112RF | 4 | 379.5 |
| NC246 | 5 | 405.2 |
| NC248 | 6 | 531.9 |
| SC12 | 7 | 423.4 |
| SC43 | 8 | 424.1 |
| SC55 | 9 | 376.8 |
| Mp496 | 10 | 449.1 |
| Tx601 | 11 | 279.9 |
| Mean | | 408.0 |
| LSD 0.05 | | 115.3 |
| CV% | | 16.6 |

*   Check entry.

Table 105.  Bacterial wilt susceptibility evaluation of the 1100-1200
            maturity inbred lines.

| Entry | No. | Stewart's wilt MO | Goss' wilt NE |
|-------|-----|-------------------|---------------|
|       |     | (1-5) | (1-9) |
| SC76 * | 1 | 3.3 | 2.7 |
| SC213 * | 2 | 1.3 | 1.3 |
| T232 * | 3 | 2.0+ | 2.0 |
| GT112RF | 4 | 2.0++ | 1.0 |
| NC246 | 5 | 3.3 | 1.0 |
| NC248 | 6 | 3.0++ | 1.0 |
| SC12 | 7 | 3.0++ | 1.7 |
| SC43 | 8 | 2.0++ | 1.0 |
| SC55 | 9 | 3.0++ | 1.0 |
| Mp496 | 10 | 3.3 | 3.3 |
| Tx601 | 11 | . | 3.3 |
| Mean |  | 2.7 | 1.8 |
| LSD 0.05 |  | 0.5 | NS |
| CV% |  | 8.9 |  |

*  Check entry.
+  Data missing from one replication.
++ Data missing from two replications.

Table 106. Fungal leaf disease and rust susceptibility evaluation of the 1100-1200 maturity inbred lines.

| Entry | No. | Downy mildew Infct. MS | North. leaf spot AL | Southern leaf blight | | | Northern leaf blight | | | South. leaf rust MS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | AL | Date 1 IL | Date 2 IL | AL | Race 1 IL | Race 2 IL | |
| | | (%) | (1-5) | (1-5) | (%LA#) | (%LA) | (0-5) | (%LA) | (%LA) | (0-9) |
| SC76 * | 1 | 1.7 | 0.7 | 1.7 | 13.3 | 33.3 | 0.0 | 2.0 | 7.0 | 6.3 |
| SC213 * | 2 | 3.3 | 1.7 | 3.3 | 6.7 | 26.7 | 0.0 | 4.3 | 4.3 | 7.3 |
| T232 * | 3 | 11.7 | 0.3 | 2.0 | 8.3 | 20.0 | 0.0 | 3.7 | 10.3 | 7.3 |
| GT112RF | 4 | 32.3 | 0.7 | 2.7 | 23.3 | 40.0 | 0.0 | 9.3 | 7.0 | 7.0 |
| NC246 | 5 | 5.3 | 1.3 | 2.3 | 5.0 | 20.0 | 0.0 | 3.3 | 10.5 | 7.3 |
| NC248 | 6 | 0.0 | 1.0 | 2.7 | 5.0 | 26.7 | 0.3 | 7.7 | 10.3 | 6.7 |
| SC12 | 7 | 15.3 | 1.3 | 3.0 | 6.7 | 26.7 | 0.0 | 3.3 | 4.0 | 7.7 |
| SC43 | 8 | 0.0 | 1.0 | 3.3 | 6.7 | 20.0 | 0.0 | 5.7 | 3.3 | 6.7 |
| SC55 | 9 | 10.3 | 1.3 | 2.0 | 10.0 | 26.7 | 0.3 | 13.0 | 10.0 | 7.3 |
| Mp496 | 10 | 3.7 | 0.7 | 1.3 | 8.3 | 16.7 | 0.0 | 1.0++ | 3.0++ | 4.0 |
| Tx601 | 11 | 0.0 | 0.3 | 0.7 | . | . | 0.0 | 1.7 | . | 6.3 |
| Mean | | 7.6 | 0.9 | 2.3 | 9.3 | 25.7 | 0.1 | 5.3 | 7.3 | 6.7 |
| LSD 0.05 | | 12.1 | NS | NS | 7.7 | NS | NS | 4.4 | NS | 1.1 |
| CV% | | 93.1 | | | 47.9 | | | 48.3 | | 9.3 |

\* Check entry.
++ Data missing from two replications.
\# Represents percent of leaf area infected.

Table 107. Smut susceptibility evaluation of the 1100-1200 maturity
inbred lines.

| Entry | No. | Commn. infct. AL | Head infct. TX |
|-------|-----|------------------|----------------|
|       |     | (%)              | (%)            |
| SC76 * | 1 | 0.9 | 4.4 |
| SC213 * | 2 | 1.8 | 0.0 |
| T232 * | 3 | 3.7 | 3.3 |
| GT112RF | 4 | 1.5 | 6.7 |
| NC246 | 5 | 1.6 | 0.0 |
| NC248 | 6 | 2.4 | 1.7 |
| SC12 | 7 | 1.6 | 3.3 |
| SC43 | 8 | 1.5 | 3.3 |
| SC55 | 9 | 1.6 | 5.0 |
| Mp496 | 10 | 0.8 | 46.7 |
| Tx601 | 11 | 3.0 | 1.7 |
| Mean |  | 1.9 | 6.9 |
| LSD 0.05 |  | NS | 15.8 |
| CV% |  |  | 133.1 |

* Check entry.

Table 108. Virus susceptibility evaluation of the 1100-1200 maturity inbrid lines.

| Entry | No. | MCDV OH | MDMV | | | MDMV rating | CLN rating | Virus rating |
| | | | MS | OH | Mean | MS | KS | OH |
| | | (%) | (%) | (%) | (%) | (1-5) | (1-9) | (1-5) |
|-------|-----|---------|------|------|------|------|------|------|
| SC76 * | 1 | 65.6 | 2.4 | 6.3 | 4.3 | 1.0 | 7.7 | 3.0 |
| SC213 * | 2 | 52.8 | 68.3 | 27.3 | 47.8 | 2.6 | 6.7 | 3.0 |
| T232 * | 3 | 28.1 | 3.8 | 0.0 | 1.9 | 1.0 | 7.7 | 2.7 |
| GT112RF | 4 | 65.0 | 72.9 | 50.0 | 61.4 | 3.6 | 6.3 | 3.7 |
| NC246 | 5 | 72.0 | 69.1 | 55.8 | 62.4 | 2.4 | 6.3 | 3.0 |
| NC248 | 6 | 91.7 | 70.6 | 63.3 | 67.0 | 2.6 | 7.0 | 4.0 |
| SC12 | 7 | 25.0 | 70.9 | 25.0 | 48.0 | 2.4 | 7.3 | 3.0 |
| SC43 | 8 | 17.9 | 81.3 | 20.5 | 50.9 | 3.1 | 7.0 | 2.7 |
| SC55 | 9 | 35.9 | 24.8 | 11.8 | 18.3 | 1.3 | 7.0 | 3.0 |
| Mp496 | 10 | 51.7 | 18.3 | 0.0 | 9.2 | 1.4 | 7.7 | 2.7 |
| Tx601 | 11 | 64.3 | 0.0 | 3.6 | 1.8 | 1.0 | 7.7 | 3.7 |
| Mean | | 51.8 | 43.9 | 24.0 | 33.9 | 2.0 | 7.1 | 3.1 |
| LSD 0.05 | | 31.4 | 17.5 | 29.6 | 33.0 | 0.8 | NS | 0.8 |
| CV% | | 35.3 | 23.2 | 72.1 | 76.0 | 23.2 | | 15.9 |

* Check entry.

Table 109. Insect susceptibility evaluation of the 1100-1200 maturity inbred lines.

| Entry | No. | ECB | | CEW tunl. GA | FAW# GA | SWCB MS |
|---|---|---|---|---|---|---|
| | | First IA | Second IA | | | |
| | | (1-9) | (1-9) | (cm) | (0-9) | (1-9) |
| SC76 * | 1 | 8.3 | 6.7 | 7.5 | 4.7 | 8.1 |
| SC213 * | 2 | 4.7 | 4.3 | 5.5 | 4.6 | 7.7 |
| T232 * | 3 | 4.0 | 7.0 | 6.2 | 5.2 | 7.0 |
| GT112RF | 4 | 6.3 | 6.0 | 6.1 | 4.7 | 7.9 |
| NC246 | 5 | 4.7 | 6.0 | 5.9 | 4.4 | 8.1 |
| NC248 | 6 | 3.3 | 5.0 | 6.5 | 4.8 | 7.6 |
| SC12 | 7 | 4.0 | 4.7 | 6.2 | 4.3 | 7.2 |
| SC43 | 8 | 4.7 | 6.7 | 5.5 | 4.2 | 7.4 |
| SC55 | 9 | 6.0 | 7.3 | 7.9 | 4.4 | 8.1 |
| Mp496 | 10 | 2.3 | 6.3 | 7.4 | 3.8 | 6.8 |
| Tx601 | 11 | 9.0++ | 7.3 | 6.0 | 4.3 | 7.8 |
| Mean | | 5.0 | 6.1 | 6.4 | 4.5 | 7.6 |
| LSD 0.05 | | 2.0 | 1.5 | NS | NS | 0.4 |
| CV% | | 23.9 | 14.8 | | | 3.1 |

* Check entry.
++ Data missing from two replications.
# Data from four replications.