

THE UNIFORM SOYBEAN TESTS NORTHERN REGION

1998

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INTRODUCTION

The purpose of The Uniform Soybean Tests is to critically evaluate the best of the experimental soybean lines developed by federal and state research personnel in the U.S. and Canada, for their potential release as new varieties.

A test is established for each of ten maturity groups. Uniform Test 00 includes maturity Group 00 strains adapted to production in the northern fringe of the present area of soybean production. Uniform Tests 0 through IV include later maturing strains adapted to locations progressively further south in the North Central States and areas of similar latitude. Each year new selections are added and others that have been sufficiently tested are dropped from the tests. The summary of performance of strains in Uniform Tests 00 through IV in the northern region is included in this report. The report on Uniform Tests IVS through VIII in the southern states is issued by the USDA-ARS Soybean Production Research Unit, P.O. Box 196, Stoneville, MS 38776.

Data from the Uniform Soybean Tests are the basis for decisions on the regional release of soybean varieties. Preliminary Tests are grown at a limited number of locations throughout the region to evaluate the experimental strains for one year before they are entered in the Uniform Tests. Uniform Tests are grown at more locations with more replications than Preliminary Tests.

The Uniform Soybean Test Report is a progress report containing statements which may or may not be verified by subsequent experiments. Statements or data in the report, therefore, should not be published unless permission has been obtained previously by those concerned.

The USDA-Agricultural Research Service does not vouch for the authenticity of either the parentage or ancestry of entries in the Uniform Soybean Tests. This agency is not responsible for the accuracy of data submitted to and included in The Uniform Test Report.

POLICY ON EVALUATION AND RELEASE OF STRAINS

Qualifications for inclusion in the Uniform Tests.

1) Experimental lines entered in the Uniform Tests, including Preliminary Tests, must be free of restrictions on their potential release as varieties or their use as parents in biparental crosses or as parents in recurrent selection programs.

2) It is recommended that breeders obtain written permission for the use of privately developed varieties or strains that are used as parents in the development of lines included in the Uniform Tests.

Use of Uniform Test entries in soybean breeding and research.

1) Seed of Uniform Test entries is for evaluation in the Uniform Tests only and may not be distributed to non-participants in these tests without prior approval by the originator of the entry.

2) Entries in the Uniform Tests may be used by Uniform Test participants as parents only in biparental crosses or in developing recurrent selection populations

3) Uniform Test participants must obtain prior approval before using any entry, other than their own, as a recurrent parent in backcrossing, in any breeding or genetic studies, or for any other research.

4) Experimental strains entered in the Uniform Tests should be labeled "Experimental Strain" and should not be identified by strain designation when grown in demonstration plots or when the Uniform Tests are shown on field days or farm tours.

Release of Uniform Test entries.

1) Entries in the Uniform Tests are released according to USDA-Agricultural Research Service and State Agricultural Experiment Station or Canadian government policies.

2) Restricted or contractual releases cannot impose any restriction on the prior use of an entry as a parent by Uniform Test Participants.

STRAIN DESIGNATIONS

Experimental (i.e., unreleased) strains are identified by a number with a state or province code letter prefix. The code letters have been agreed upon in meetings of experiment station agronomists with the U.S. Department of Agriculture. Additional code letters may be used to designate the individual within a state or province that developed the strain.

A	Iowa A.E.S.
Ar	Arizona A.E.S.
Au	Alabama A. E. S.
B	California
C	Purdue (Indiana) A.R.P.
CM	Canada Dept. of Agriculture, Morden, Manitoba
D	Mississippi A.E.S.
E	Michigan A.E.S.
F	Florida A.E.S.
FC	Forage and Range Research Branch, USDA
Ga	Georgia A.E.S.
H	Ohio A.R.D.C. (HC=R.L. Cooper, HF=R. Fioritto, HS=S.K. St. Martin)
K	Kansas A.E.S.
Ky	Kentucky A.E.S.
L	Illinois A.E.S. (LN=C.D. Nickell, LG=R.L. Nelson)
La	Louisiana A.E.S.
LS	Southern Illinois University
M	Minnesota A.E.S.
Md	Maryland A.E.S.
Me	Maine A.E.S.
N	North Carolina A.E.S.
ND	North Dakota A.E.S.
OAC	University of Guelph, Guelph, Ontario
OX	Research Station, Harrow, Ontario
PI	Plant Inventory
R	Arkansas A.E.S.
S	Missouri A.E.S. (SS=D.Sleper)
SC	South Carolina A.E.S.
SD	South Dakota A.E.S.
Ts	Texas A.E.S.
T	Soybean Genetic Type Collection, USDA, Urbana, IL
N U	Nebraska A.E.S.
UD	Delaware A.E.S.
UM	University of Manitoba, Winnipeg, Manitoba
UT	Tennessee A.E.S.
V	Virginia A.E.S.
W	Wisconsin A.E.S.
X(Y)	Two or more states cooperatively, e.g. ND(M) North Dakota and Minnesota

METHODS

Uniform tests are planted in multiple-row plots with three or four replications, and the center rows are harvested for yield and seed quality determinations. Preliminary Tests are multiple-row plots with two replications. Usually 15 to 20 feet of row are planted and 12 to 16 feet harvested, to eliminate end-of-row effects. Coefficients of variability are included with all replicated test data. Discretion is used in including data with high CVs in the regional means. If the CV is greater than 15, participants should include the reason, such as disease or environmental conditions. Lines may be heterogeneous for morphological traits the first year in the Uniform Tests but must be pure lines the second year of testing. It is the responsibility of the breeder to purify heterogeneous lines.

Generation Compositd is the generation after the final single-plant selection, when seeds from plants or rows are composited.

Previous Testing is the number of previous years in the same Uniform Test or, in the case of new entries, a reference to the previous year's test, abbreviated to PT IIA for Preliminary Test IIA, for example.

Yield is measured after the seeds have been dried to a uniform moisture content and is recorded in bushels (60 pounds) per acre. To convert to kilograms/hectare multiply by 67.25.

Maturity is the date when 95% of the pods have ripened, as indicated by their mature pod color. Delayed leaf drop and green stems are not considered in assigning maturity. Maturity is expressed as days earlier (-) or later (+) than the average date of the reference variety. To aid in maturity group classification, one earlier(E) and one later (L) check variety are given in the maturity column for each test, or a maturity check from an earlier or later maturity group is included. Current reference and check varieties and the maturity group limits relative to the reference varieties are:

<u>Group</u>	<u>Reference</u>	<u>Range</u>	<u>Early check</u>	<u>Late check</u>
00	McCall	-7 to +5		Agassiz
0	Lambert	-6 to +2	Agassiz (E)	Parker (L)
I	Parker	-4 to +4	Lambert (0)	Marcus 95 (L)
II	IA2021	-3 to +5	Marcus 95 (I)	A94-674017 (L)
III	A94-774021	-6 to +2	A94-674017 (II)	Macon (L)
IV	HS93-4118	-2 to +9	Macon (III)	KS4694 (L)

These maturity group ranges are based on long-term means over many locations. When using data from other environments, the interval between reference varieties may vary, and the division between maturity groups should be estimated in proportion to the above figures. Additional check varieties may be included in specific tests such as Freeborn (SCN) for resistance to the soybean cyst nematode in UT I, or Charleston (dt1) as a determinate check in UT IV.

Lodging is rated at maturity according to the following scores:

- 1 = Almost all plants erect
- 2 = All plants leaning slightly or a few plants down.
- 3 = All plants leaning moderately (45 degrees), or 25% to 50% of the plants down.
- 4 = All plants leaning considerably, or 50% to 80% of the plants down.
- 5 = Almost all plants down.

Height is the average length in inches of mature plants from the ground to the tip of the main stem. To convert to centimeters, multiply by 2.54.

Seed Quality is rated according to the following scores considering the amount and degree of wrinkling, defective seed coat (growth cracks), greenishness, and moldy or rotten seeds. Threshing or handling damage is not considered, nor is mottling or other pigment. Ratings for seed quality are:

- 1 - Very good 2 - Good 3 - Fair 4 - Poor 5 - Very poor

Seed Size (i.e. weight per seed) is recorded in grams per 100 seeds based on a 100- or 200-seed sample. To convert to seeds per pound, divide this into 45,359.2.

Seed Composition is measured on samples submitted to the USDA-ARS National Center for Agricultural Utilization Research, Peoria, Illinois. A 25-gram sample of clean seed is prepared by taking an equal volume or weight of seed from each replication. Protein and oil percentages are measured on these samples using near infrared transmittance, and are reported on a moisture-free basis.

Descriptive Code: 1 2 3 4 5 6 7 8 abbreviated as underlined below.

- 1 = Flower color: Purple, White
- 2 = Pubescence color: Tawny, Gray, Light tawny
- 3 = Pod color: Brown, Tan
- 4 = Seed coat luster: Dull, Shiny, Intermediate
- 5 = Seed coat color = Yellow, Gray, Light gray, Green
- 6 = Hilum color: Black, Imperfect black, Brown, Buff, Gray, Yellow; prefixes indicate Light or Dark shades, e.g. Lbf = light buff, Dib = dark imperfect black. H indicates heterogeneous for hilum color.
- 7 = Ep high seed coat peroxidase, ep low seed coat peroxidase, H heterogeneous
- 8 = Stem termination: Determinate, Indeterminate, Semi-Determinate

Shattering is scored at a specified time after maturity and is based on estimates of the percent of open pods as follows:

- 1 = No shattering
- 2 = 1% to 10% shattered
- 3 = 10% to 25% shattered
- 4 = 25% to 50% shattered
- 5 = Over 50% shattered

Iron chlorosis is rated from 1, no chlorosis, to 5, severe chlorosis.

Emergence score is related to hypocotyl elongation and is measured at Ames, Iowa by germination at 25 C (a critical temperature for differentiating strains). Four replications of 25 seeds/entry are planted in a 5-inch plastic pot at a 4.5 inch depth in sand. Seedlings that have emerged by 12 days after planting are counted and emergence score in relation to percent of seeds that germinate and emerge are as follows:

- 1 > 95%
- 2 = 91 to 95%
- 3 = 85 to 90%
- 4 = 76 to 84%
- 5 < 76%

DISEASE

Disease reactions are listed according to "Soybean Disease Survey Standards", March, 1960, unless otherwise specified. Disease reaction is scored from 1 (no disease) to 5 (very severe), or in some cases as percent infected or simply as + (present) or 0 (absent). Purple seed stain and seed mottling follow the disease severity class rating:

Disease severity class rating	1	2	3	4	5
Number of diseased seed in sample 0	1-3%	4-8%	9-19%	20-100%	

An additional classification to describe the extent of seedcoat mottling as M (mild), E (extensive), or S (severe), is included. Pod and stem blight is rated as percent of infected seed on a four-week delayed ("d") harvest sample. The location where the test was made is identified in the column heading, and the letter "a" or "n" signifies artificial or natural infection. Clearcut and consistent reactions are given by letter instead of number: R = resistant, S = susceptible, I = intermediate, and H = heterogeneous. Natural infection ratings are from agronomic tests in some instances and from special disease plantings in others. Absence of symptoms under natural infection does not necessarily mean high resistance.

Abbreviation	Disease	Pathogen
BB	Bacterial blight	<u>Pseudomonas syringa</u> pv. <u>glycinea</u>
BBV	Bud blight	Tobacco ringspot virus
BP	Bacterial pustule	<u>Xanthomonas campestris</u> pv. <u>phaseoli</u>
BS	Brown spot	<u>Septoria glycines</u>
BSR	Brown stem rot	<u>Phialophora gregata</u>
BTS	Bacterial tan spot	<u>Corynebacterium flaccumfaciens</u>
CN	Cyst nematode	<u>Heterodera glycines</u>
CR	Charcoal rot	<u>Macrophomina phaseolina</u>
DM	Downy mildew	<u>Peronospora manshurica</u>
FE	Frogeye leafspot	<u>Cercospora sojina</u>
PM	Powdery mildew	<u>Microsphaera diffusa</u>
PR	Phytophthora rot	<u>Phytophthora sojae</u>
PS	Purple stain	<u>Cercospora kikuchii</u>
PSB	Pod & stem blight	<u>Phomopsis</u> spp.
Pyd	Pythium root rot	<u>Pythium debaryanum</u>
Pyu	Pythium root rot	<u>Pythium ultimum</u>
RK	Root knot nematode	<u>Meloidogyne</u> spp.
RP	Rhizoctonia root rot	<u>Rhizoctonia solani</u>
SB	Sclerotial blight	<u>Sclerotium rolfsii</u>
SC	Stem canker	<u>Diaporthe phaseolorum</u> var. <u>caulivora</u>
SCL	Sclerotinia stem rot	<u>Sclerotinia sclerotiorum</u>
SDS	Sudden death syndrome	<u>Fusarium solani</u>
SMV	Soybean mosaic virus	Soja virus 1
TS	Target spot	<u>Corvnespora cassicola</u>
WF	Wildfire	<u>Pseudomonas syringae</u> var. <u>tabaci</u>
YMV	Yellow mosaic virus	<u>Phaseolus</u> virus 2

Rating for BB, BP, DM, FE, and PM are based on leaf symptoms; those for BSR on percent of plants with stem browning, or percent of stem length browned.

The percent purple stain and Phomopsis seed infection is based on a 100-seed sample plated on potato-dextrose agar in petri dishes.

The percent green seed is based on a 100-seed sample and is the number of seed with a green or partially green seedcoat.

Abbreviations used in sudden death syndrome (SDS) ratings are as follows:

R6Date = Days from planting to R6.2 growth stage

R6DI = SDS Disease Incidence (% of plants with visible leaf symptoms)

R6DS = SDS Disease Severity (1=mild chlorosis, 5=severe leaf scorch, 9=premature death of the plant)

R6DX = SDS Disease index (R6DI x R6DS/9)

PROCEDURE FOR TESTING AND RELEASE OF STRAINS

This policy on testing and release of soybean strains evaluated in the Uniform Soybean Tests Northern Region, has been agreed upon by public soybean breeders. The policy was developed to assist breeders in preparing schedules for seed increases and to assist individuals and committees responsible for approving releases. The policy will aid private breeders in the U.S. and foreign countries to understand how releases will be made that may affect their programs.

Development and release of soybean strains is carried out by many public institutions. The programs at these institutions operate independently until strains are available for advanced testing in the Uniform Soybean Tests. The Uniform Soybean Tests are coordinated by the USDA-Agricultural Research Service. The tests are divided into those in the Northern Region, for strains in maturity groups 00 to IV, and those in the Southern States, for strains in maturity groups IVS to VIII. Group IV maturity strains are divided into a IVN test for the northern region and a IVS test for the southern states. Public soybean breeders are encouraged to enter superior strains they develop into the Uniform Soybean Tests.

Strains are evaluated for one year in the Preliminary Tests (PT), which are conducted at eight or more locations in several states. When the tests are completed, each public breeder is given the opportunity to review the results and to decide which strains merit further testing. In instances where there is little consensus among the breeders on the merits of a strain, the originator of the strain generally makes the final decision.

Strains that merit further testing are evaluated in the Uniform Tests (UT) conducted at more locations than Preliminary Tests and with three or four replications. Lines developed by four or more backcrosses to a released cultivar may be entered directly into the UT without prior evaluation in PT. Strains evaluated in Regional Cyst Nematode (SCN) tests may also be entered directly into the UT.

Strains may be considered for release after they have been evaluated for two years in the UT. Exceptions to this are special purpose strains or strains derived from four or more backcrosses to a released cultivar; these may be considered for release after one year in the UT. Consideration for release of any strains in the UT may be requested by any institution or breeder participating in the Uniform Soybean Tests, however it is usually initiated by the institution that developed the strain.

A strain should be released only if it is distinctly superior to existing varieties in one or more characteristics important for the crop, or it is superior in overall performance in areas where adapted. A single major production hazard which a new cultivar can overcome, e.g., a highly destructive disease, may be the overriding consideration in releasing a variety. Strains with a very limited range in adaptation should not be released unless performance in that limited range is outstandingly superior, or the strain possesses important use values not otherwise available, including diversification of the germplasm base for the species.

When a decision has been made to multiply a strain for release, the originating institution will inform other UT participants of the decision by February 15. This will give each UT participant the opportunity to participate in the multiplication and release of the strains.

By March 15 all institutions intending to participate in the multiplication of the strain must notify the originating institution of their intent. A final decision to participate in the release of the strain may be delayed until an additional year's data are available for review. By April 1 the originating institution should notify all UT participants what states will be participating in the multiplication and are considering participating in the release of the strain. Breeders seed is distributed to foundation seed organizations in participating states for production during the summer. At this time, if a final decision to release has been made, a sample of seed may be distributed to non-participants in the UT, including private soybean breeders, in accordance with a State's Experiment Station policy. This distribution is made only by the originating institution.

A release notice to soybean seed producers listing all institutions participating in the release of the cultivar is prepared by the originating institutions. This notice is circulated for signature by all participating institutions. Assistance in the preparation and circulation of this release notice may be obtained by Dr. Judith St. John, Associate Deputy Administrator for Plant Science, USDA, ARS, Bldg. 005, BARC-West, Beltsville, MD 20705, phone 301-504-6252. The office for clearance of proposed names of new soybean cultivars is : Mr. James P. Triplett, Chief, Seed Regulatory & Testing Branch, Livestock and Seed Division, AMS/USDA, Bldg. 506, BARC-East, Beltsville, MD 20705-2350, phone 301-504-9430. The date for simultaneous publicity release on new soybean cultivars by participating states is determined by the originating state, and is usually in August but may be delayed until the following April if additional UT data are being reviewed and a final decision to release has not been made.

If an additional year of UT data are being reviewed prior to a final decision on release, states producing foundation seed must notify the originating state by February 15 of their intent to participate in the release of the cultivar. The release notice to soybean seed producers should be distributed for signature by the participating institutions by April 1.

Foundation seed under the name of the new cultivar is distributed to qualified certified seed producers in states releasing the new cultivar by April 1. At this time a sample of seed may be distributed to non-participants in the UT, including private plant breeders, for testing and crossing if this distribution has not been made previously.

UNIFORM TEST STRAINS RELEASED IN 1998

Variety	Experimental designation	Uniform Test evaluations
Brand	HF93-035	PT IIB 1995, UT III 1996-97
Brand	HF93-083	PT IIB 1995, UT III 1996
Darby	HS93-3779	PT IIIB 1996
Dwight	LN92-10507	SCN II 1997, UT II 1997
HS93-4118	HS93-4118	PT IVA 1995, UT IV 1996-1998
IA2038	A94-674017	PT IIA 1995, UT II 1996-1997
IA2039	A94-673009	SCN II 1996-1997, UT II 1997
IA3010	A94-774021	PT IIIA 1995, UT III 1996-1998
Ina	LN94-10527	SCN IV 1997, UT IV 1997-1998
NE3399	U94-2306	PT IIA 1995, UT III 1996-1997
Pana	LN92-10855	SCN III 1997, UT III 1997
Rend	LN92-10725	SCN IV 1997, UT IV 1997
Tiffin	HF93-082	PT IIB 1995, UT II 1996
Titan	E93147	PT I 1995, UT I 1996-1997
Troll	HC90-196	PT IVB 1995, UTIV 1995-1998
Westag 97	ORC 9404	UT I 1996

Variety	Release date	Releasing states	Foundation seed production
Brand	August, 1998	IN, OH	1998
Brand	August, 1998	OH	1998
Darby	August 1, 1998	OH	1998
Dwight	? 1997	IL	1997
HS93-4118	August 1, 1998	OH	1998
IA2038	January, 1998	IA, MI, CAN	1998
IA2039	January, 1998	IA, KS, MI	1998
IA3010	January, 1998	IA, MI	1998
Ina	August, 1998	IL, IN	1998
NE3399	August, 1998	NE	1998
Pana	August, 1997	IL	1997
Rend	August, 1998	IL	1998
Tiffin	August, 1998	IN, OH	1998
Titan	February, 1998	MI	1998
Troll	September 30, 1998	OH	1998
Westag 97	April, 1997	ON	1998

IDENTIFICATION OF PARENT STRAINS 1998

Strain	Parentage
A1	Anoka x Mack
A4	L15 x AP68-1016
A13	Selection from AP9 Fe (S1) C7
A17	BSR 101 x CN210
A20	BSR 101 x CN210
A55-5629-4	Roanoke x Hawkeye
A56P64-1	Adams x Harosoy
A72-507	Amsoy x Wayne
A72-507BC	[A72-507(6) x A1] x [A72-507(5) x PI 82.263-2]
A72-512	Amsoy x Wayne
A73-21030	L65-1342 x IVR 4311
A75-10521	Corsoy(2) x L65-1342 or Anoka x Mack
A75-332035	L15 x AP68-1016
A76-202015	AP6
A76-304020	(Beeson x AP68-1016) x (L15 x Calland)
A77-314013	A73-21030 x Williams
A78-123018	Pride B216 x Hodgson
A79-134008	AP6(1YT)(F4)C2
A79-136012	Pride B216 x Land O' Lakes 4102
A80-344003	A75-332035 x Century
A81-151026	A75-204018 x Century
A81-356022	Century x A76-304020
A82-161034	A77-314013 x Pride B216
A83-271027	Northrup King S1492 x Asgrow A3127
A86-204022	Hack x Zane
A86-301024	A81-356022 x Hack
A86-303014	A81-356022 x Hack
A87-186011	AP9 Populations
A90-311023	Conrad x L80-4187
A91-501002	AgriPro AP2190 x A86-301024
A91-607024	Asgrow A3205 x Dairyland DSR 304
A91-701035	A86-301024 x Dekalb 226
A92-535059	Asgrow A2187 x [(A87-186011 x DSR 252) x A87-187020]
A92-625002	Kenwood x LN86-1947
A92-627030	Kenwood x Asgrow A3205
A92-725035	LN86-1947 x Dairyland DSR-304
A92-727017	Kenwood x Asgrow A3205
AgriPro 26	Beeson x Calland
AgriPro AP1989	AgriPro 26 x Vickery
AgriPro AP3035	
AP6	Crop Science 15:739
AP9	Crop Science 20:677
AP68-1016	Clark(5) x PI 84.946-2
Asgrow A1564	Hark x C1453
Asgrow A1662	Asgrow A3127 x (Century 84(2) x A79-134008)
Asgrow A1937	Hodgson 78 x Wayne
Asgrow A2234	[(Calland x Amsoy) x Century(3)] x Williams 82
Asgrow A2242	Sherman x XP1928
Asgrow A2396	Asgrow A2943 x CM214

IDENTIFICATION OF PARENT STRAINS 1998

Strain	Parentage
Asgrow A2943	Asgrow A1564 x Asgrow A3127
Asgrow A3127	Williams x Essex
Asgrow A3205	Northrup King S1474 x Asgrow A3127
Asgrow A3733	Elf x Asgrow A3127
Asgrow A3860	Williams x Essex
Asgrow A3935	M0474C x Asgrow A3127
Asgrow A4009	Asgrow A3860 x Fayette
Asgrow A4393	X4136 x Elf
AX56P64-1	Adams x Harosoy
C1079	Lincoln x Ogden
C1253	Blackhawk x Harosoy
C1266R	Harosoy x C1079
C1453	C1266R x C1253
C1528	Calland x L63-1397
C1678	Hobbit x Lakota
C1747	A80-244003 x Williams 82
C1834	C1678 x Resnik
C1841	[Spencer(2) x Pella 86] x Resnik
C1842	[Spencer(2) x Pella 86] x Resnik
C1843	[Spencer(2) x Pella 86] x Resnik
CVS13	Henong No. 33 (Chinese cultivar)
CX458	
CX1038	Cutler 71(3) x Pando
CX1311	Pride B216 x CX1038-63
D49-2491	S100 x CNS
Dairyland DSR 171	Wayne x Hark
Dairyland DSR217	(Corsoy x Hark) x Asgrow A3127
Dairyland DSR 288	Dairyland DSR 171 x Asgrow A3127
Dairyland DSR 304	Williams x Unknown
Dekalb 469C	
Dekalb Pfizer CX415	Unknown
E86-237	Prosoy PS104 x HW8028
GR8936	Asgrow A3127 x L24A
HC74-634RE	Williams x Ransom
HC74-634REBC	HC74-634RE(6) x Williams 82
HC78-279	L72U-2567 x Essex
HC78-350	L72U-2567 x Essex
HC78-676	L70T-543G x L74D-619
HC78-676BC	HC78-676(6) x Williams 82
HC80-1756	L73U-632 x Elf
HC83-123-9	Pixie x PI 229.358
HC84-2556	HW74-3400 x L76-0022
HC84-4850	Sprite x Williams 82
HC85-164	HC78-676 x Sprite
HC85-606	Sprite x Asgrow A3127
HC85-607	Sprite x Asgrow A3127
HC85-2206	Elf x Williams 82
HC85-5148	Pella x Gnome
HC85-5844	Pixie x HC78-676

IDENTIFICATION OF PARENT STRAINS 1998

Strain	Parentage
HC85-6577	HC78-350 x HC78-676
HC85-6723	HC74-634RE x HC78-676
HC86-3403	HC78-279 x Asgrow A3127
HC86-4367	Asgrow A3127 x Sprite 87
HM8493	(Hardin x Williams 82) x [Asgrow A3127 x (A72-507BC x K74-104-76-1650)]
HM8580	Unknown, (sister line to Edison)
Holmberg 827-4	PI 438.473
HS84-6224	HW79015(5) x HW79149
HS86-6363	HM8493 x [Zane(6) x HW79149]
HS87-5974	Winchester x A83-271027
HS88-4906	Conrad x Hayes
HS88-4909	Conrad x Hayes
HS88-4914	Winchester x A83-271027
HS89-5689	GR8936 x (HM8580 x GR8936)
HS90-37100	HS84-6224 x Conrad
HS90-6765	HS86-6363 x HS87-5974
HS91-4621	GR8936 x (HM8580 x GR8936)
HW74-3400	Williams x Ransom
HW8028	A75-10521 x Century
HW8221	A76-202015 x (Tracy x Williams)
HW79015	A72-512 x Oakland
HW79149	[A72-507(6) x A1] x [A72-507(5) x PI 82.263-2]
IVR 1120	Provar x (AX56P64-1 x PI 191.110-1)
IX93	A71-5558-1 x L61-344
J103	Clay x Williams
K1200	Sherman x Asgrow A3127
K1212	Sherman x Hutcheson
K1262	Spencer x Dekalb Pfizer CX415
L15	Wayne(6) x Clark 63
L24A	Williams(7) x Kingwa
L57-0034	Clark x Adams
L62-361	Harosoy(6) x T117, <u>Dt2</u>
L62-1926	Clark(6) x PI 86.024, <u>e2</u>
L63-1397	Harosoy(6) <u>Dt2</u> x PI 80.837
L65-1342	Wayne(2) x L62-1926
L66L-140	Wayne x L57-0034
L70T-543G	L15 x Amsoy 71
L72U-2567	Williams x Ransom
L73-4673	Corsoy x L57-0034
L73U-632	Miller 67 x L66L-140
L74D-619	Williams x Ransom
L77-808	Williams x PI 87.631
L77-906	Williams x PI 209.332
L78-189	Corsoy x Kingwa
L80-4187	Williams(2) x PI 88.788
L81-4583	Williams(5) x PI 157.440
L85P-558	L73-4673 x Fayette
LG84-1269	PI 227.333 x PI 91.730-1
LG85-3343	PI 361.064 x PI 407.710

IDENTIFICATION OF PARENT STRAINS 1998

Strain	Parentage
LG87-1991	PI 189.930 x PI 68.600
Land O'Lakes 4102	[Wayne x (Clark x Adams)] x Cutler
LN78-257	Union x C1578
LN81-1029	K74-114-75-000 x Pella
LN84-7577	Hack x Elgin
LN84-8588	Hack x Harper
LN86-983	Hack x BSR 101
LN86-1947	PI 437.833 x Elgin
LN86-3357	LN78-257 x Asgrow A3127
LN88-7616	Hack x HW8221
LN88-10534	LN81-1029 x Asgrow A2943
LN89-334	Sherman x Resnik
LS344	Variety from Poland
LS-436	Variety from Poland
LS87-1922	Schmidt
M10	Lincoln(2) x Richland
M53-117	M10 x PI 180.501
M59-120	M54-240 x M54-139
M60-406	Blackhawk x Harosoy
M61-20	Merit x Comet
M61-224	Merit x Harosoy
M62-173	M387 x M406
M63-194	Corsoy x PI 132.207
M63-217Y	Corsoy x M53-117
M64-3	Traverse x PI 196.163
M65-442	Anoka x Amsoy
M66-30	Magna x M61-20
M68-49	Evans x M59-120
M68-49-26	Evans x M59-120
M68-201	Evans x Steele
M68-256	Evans x Steele
M68-303	M60-406 x Beeson
M69-20	Merit x Clay
M70-9	M64-3 x Amsoy 71
M70-127	Evans x M63-217Y
M70-187	Merit x SS65-5702
M70-271	Merit x M64-3
M70-597	Steele x AP68-1016
M71-148	Clay x Evans
M72-3	Evans x Hodgson
M73-62	M61-224 x PI 297.518
M74-179	M68-256 x Clay
M74-227	M68-49 x M63-194
M74-394	Hodgson x Wells
M74-498	Peteson PX20 x M554-10
M75-89	Corsoy x M68-303
M75-274	Evans x L70T-543
M76-55	M69-20 x McCall
M76-142	M70-271 x Corsoy

IDENTIFICATION OF PARENT STRAINS 1998

Strain	Parentage
M76-148	M70-271 x Hodgson 78
M76-151	M70-127 x Hodgson 78
M77-75	Coles x M66-30
M81-18	Evans x M65-442
M81-98	M70-9 x M68-201
M81-621	Unknown
M82-772	M68-256 x M70-597
M82-996	M72-3 x Peterson 1677
M83-3	McCall x Maple Presto
M83-64	M74-227 x L78-189
M83-766	Evans x M74-394
M83-899	M74-270 x A78-123018
M84-93	M71-148 x Ozzie
M84-855	M76-148 x Glenwood
M85-23	M71-148 x Simpson
M85-122	M74-179 x M77-75
M86-918	J103 x Ozzie
M86-1008	L81-4583 x Hodgson 78
M86-1973	L77-906 x M75-89
M86-2337	Evans x Asgrow A1937
M87-135	Sibley x Hack
M87-180	Sibley x Hack
M87-330	M76-55 x Ozzie
M87-332	M76-55 x Ozzie
M87-1088	Evans x Ozzie
M87-1247	M81-621 x M73-62
M87-1329	M73-62 x Dassel
M87-1569	M70-187 x L77-808
M88-390	Ozzie x M74-498
M89-206	M81-98 x Ozzie
M89-209	M81-98 x Ozzie
M89-1356	Sibley x M82-772
M90-665	M83-3 x McCall
M387	Renville x Capital
M406	Harosoy x Norchief
M554-10	Hodgson(4) x Merit
M0385	IVR 1120 x Calland
M0474C	White-flowered off-type in Mitchell
MSBP1	Male-sterile (ms2) intermated population
MSBP2	Male-sterile (ms2) intermated population
MSBP3	Male-sterile (ms2) intermated population
ND88-800	Maple Amber x Evans
Northrup King S19-90	Pride B152 x Pella
Northrup King S20-20	Pride B152 x CM497
Northrup King S23-03	
Northrup King S24-92	Asgrow A3127 x [(IVR1120 x Calland) x (Mitchell x Cutler 71)]
Northrup King S29-39	Pride B152 x 9240R
Northrup King S35-35	
Northrup King S1346	A55-5629-4 x PI 257.435

IDENTIFICATION OF PARENT STRAINS 1998

Strain	Parentage
Northrup King S1474	Hark x Wayne
ORC9002	A81-151026 x Elgin
ORC9205	Conrad x RCAT Alliance
OT80-18	(M62-173 x Holmberg 827-4) x (Evans x CM 145)
OT88-11	Maple Ridge x Lakota
OX611	Harcor x (SRF200 x OX708)
OX708	L62-361 x Harosoy 63
Peterson 1677	Rampage x Corsoy(2)
Peterson PX20	Blend of 50% Wells : 50% P6122
Pioneer 1677	Rampage x Corsoy(2)
Pioneer 9061	Wells x Pioneer 1677
Pioneer 9231	
Pioneer 9241	
Pioneer 9268-003	PI 92.718-2 x Pioneer 9271
Pioneer 9271	(Corsoy x Magna) x Williams
Pioneer 9273	Pioneer Brand 2981 x Asgrow A3127
Pioneer 9303	Pioneer Brand 2981 x M0385
Pioneer 9341	CM304 x Asgrow A3127
Pioneer 9402	
Pioneer 9441	Williams x Essex
Pioneer 442	Pioneer P9441 x Asgrow A3127
Pioneer 9461	(351-29 x Asgrow A4268) x (Pioneer P9401 x Asgrow A3127)
Pioneer 9501	(Pioneer 1011 x Pioneer 3481) x (Pioneer 1262-41 x Pioneer 4280)
Pride B152	Northrup King S1346(6) x Mack
Pride B216	Corsoy x Wayne
PS 42	Ablett
RAGT86L2870	From Dr. Pierre Gayraud, France
RMHI0ILS5	Intermated population
S88-19561	Forrest(3) x PI 437.654
SD87001	Fiskeby x IX93-100
Sigco KG20	McCall x 2S11
SS65-5702	Clark x [Scott(2) x Peking]
SV513	Graef
T117	AK114 (from AK) x PI 65.394
T8508	
U91-2527	Sturdy x A86-204022
U93-3204	LN85-10234 x Asgrow A3205
UP1C2-14	S1 line intermated population
UP1C2-72	S1 line intermating population
UP3YC1	Intermated population
XP1928	(Hardin x Williams 82) x {[Tracy x Williams) x HW79149] x Asgrow A3127}
059-903	Fiskeby III selection
2S11	059-903 x Hardome

SENCOR TOLERANCE

Evaluations for reaction to Sencor were determined by JoAnn R. Tinney, Agricultural Division of the Bayer Company. Tolerance to Sencor (metribuzin) was determined in a single hydroponic test. Additional field and greenhouse tests are recommended to accurately determine tolerance of these strains to metribuzin. Strains are placed in one of three groups: 1) Above Normal Tolerance, soybean plants showing the greatest tolerance to Sencor, 2) Normal Tolerance, soybean plants showing good tolerance to Sencor, and 3) Sensitive, soybean plants showing the least tolerance to Sencor and for which the use of Sencor is not recommended. Strains listed towards the top in the left column of the normal category expressed higher levels of than those listed towards the bottom in the right column.

SENCOR TOLERANCE TABLE

ABOVE NORMAL TOLERANCE	NORMAL TOLERANCE	NORMAL TOLERANCE	NORMAL TOLERANCE	NORMAL TOLERANCE	SENSITIVE
A95-483010	M90-239130	M90-249101	IA1006(BSR)	HC94-81PR	M90-135046
M90-166054	M92-1571	SD(ND)94-9218	A96-494018	A95-583021	M90-162034
M91-1137	IA2036(SCN)	M90-184111	U96-2208	U95-2418	Maple Ridge
M92-1645	HC94-96PR	A94-774021	HC94-126PR	E95505	
Dwight(SCN)	HC93-979	HC93-868	K1386	A96-591046	
A95-483031	U96-3123	SS94-11075	Lambert	U96-2233	
C1964	Freeborn(SCN)	M91-821	SD94-215	ORC9608	
Md94-5463	SD94-1370	SD(ND)94-9231	SD95-1276	E95151	
KS4694	HC93-1086	ND93-5936	A96-591072	A94-674017	
K1377	SS93-4915	LS93-0375	U96-2408	A96-691006	
K1381	SS94-11114	AC Oxford	HC94-421	A96-691030	
LN92-10725	M90-137050	SD94-808	HC94-422	ND91-2735	
LN94-3122	LS92-4173	M90-178161	K1378	A94-674017	
LN94-10527	M92-281	SD93-828	LN93-11945	U96-3434	
LS94-2435	U96-2416	U96-2436	ND91-2721	OT95-12	
Marcus 95	HC93-941	E95562	A96-492058	A96-692057	
U96-2426	McCall	SS94-10476	A96-591033	U95-3231	
M92-1731	M92-542	Parker	HC93-596	Ky94-1501	
U96-3413	HC93-1329	Traill	Agassiz	U96-3103	
HC90-196	HS93-4118	M92-597	ND93-5936	M90-144096	
U96-3106	HC93-1558	E95882	SD93-522	HC93-1835	
LN93-11632	Mustang(SCN)	HC92-984	E95147	Glacier	
M90-217007	ND95-1215	M90-147022	Charleston	A96-597021	
A96-492041				U96-2236	
ND(SD)92-2381					
IA2021					
C1963					
HC93-2356					
Macon					
K1379					
M91-113037					
M92-1708					
IA2008R(BSR)					
HS95-4830					
HC93-2690					
K1380					

1998 DISEASE, SHATTERING, AND DESCRIPTIVE DATA

Location		Tests Conducted By:	Tests	UT	PT
IA	Ames	W. Fehr & J. Hoeck	Emergence Score	00, I-IV	I-III
	Ames	W. Fehr & J. Hoeck	Iron Chlorosis	00, I-III	
IL	Bloomington	M. Schmidt	SDS	I-III	
	Ullin	& Jim Klein	SDS	IV	
IN	Lafayette	T. Abney	PS	I-IV	I-IV
	Lafayette	T. Abney	PSB	I-IV	I-IV
	Lafayette	T. Abney	Hard Seed	I-IV	I-IV
	Lafayette	J. Wilcox	PR7	00-IV	I-IV
	Lafayette	J. Wilcox	Descriptive Codes	00-IV	I-IV
MN	Yellow Medicine Co.	J.H. Orf	Fe Chlorosis	00-IV	0-I
WI	Arlington	E. Oplinger	BSR	0-II	

1998 UNIFORM AND PRELIMINARY TEST LOCATIONS

Location	Tests Conducted By:	Uniform Tests						Preliminary Tests				
		00	0	I	II	III	IV	0	I	II	III	IV
DE Georgetown	B. Uniatowski					X	X					
IA Ames	W. Fehr				X*					X*	X*	
Fairfield	W. Fehr										X	
Grand Junction	W. Fehr				X					X(A)		
Grizwold	W. Fehr					X*						
Kanawha	W. Fehr			X*					X*			
Sioux Rapids	W. Fehr			X*					X*			
Winterset	W. Fehr					X						
IL Dekalb	C. Nickell				X							
Dewight	C. Nickell				X							
Nashville	M. Schmidt						X					X
Newton	C. Nickell					X	X					
Ridgway	C. Nickell					X	X*					
Ullin	M. Schmidt						X					
Urbana	C. Nickell				X*	X*	X*			X*	X*	X*
IN Butlerville	J. Wilcox					X	X					X*
Lafayette	J. Wilcox			X	X*	X*	X*			X*	X*	
Wanatah	J. Wilcox				X	X						
KS Manhattan	W. Schapaugh Jr.					X	X				X	X
Ottawa	W. Schapaugh Jr.						X					
Powhattan	W. Schapaugh Jr.					X						
Topeka	W. Schapaugh Jr.					X	X					
KY Lexington	T. Pfeiffer					X	X					X*
MD Queenstown	W. Kenworthy & P. Creegan					X	X					X
MN Crookston	J. Orf	X*										
Lamberton	J. Orf			X	X				X			
Moorhead	J. Orf	X*										
Morris	J. Orf		X*					X*				
Rosemount	J. Orf		X*					X*				
Shelly	J. Orf	X										
Waseca	J. Orf			X	X				X*			
MO Columbia	D. Slepser					X	X				X	X
Portageville	S. Anand						X					

1998 UNIFORM AND PRELIMINARY TEST LOCATIONS

Location			Tests Conducted By:			Uniform Tests						Preliminary Tests				
						00	0	I	II	III	IV	0	I	II	III	IV
NE	Byron	G. Graef						X					X(A)			
	Cotesfield	& L. Korte			X							X(B)				
	Falls City	G. Graef					X						X*			
	Hartington	& L. Korte			X*	X*						X(B)				
	Hildreth	G. Graef				X						X(A)	X(B)			
	McCool Jct.	& L. Korte				X						X(A)				
	Tekamah	G. Graef					X*									
ND	Casselton	T. Helms	X*	X*						X*						
NJ	Adelphia	J. Singer					X	X				X(B)				
OH	Hoytville	R. Fioritto				X*	X*					X	X*			
	Mt. Orab	S. St. Martin						X						X		
	Plain City	S. St. Martin					X									
	So. Charleston	R. Cooper					X	X						X(A)		
	Wooster	R. Fioritto				X	X									
ONT	Elora	I. Rajcan	X													
	Ottawa	R. Guillemette	X*	X*												
	Ridgetown	G. Ablett			X	X										
	Talbotville	I. Rajcan			X											
	Woodslee	V. Poysa				X						X*				
	Woodstock	I. Rajcan		X												
QUE	L'Acadia	G. Tremblay	X*	X												
SD	Beresford	R. Scott				X						X				
	Brookings	R. Scott		X	X	X			X*	X	X					
	Watertown	R. Scott		X*	X*											
WI	Arlington	E. Oplinger		X	X*	X										
X Location With Agronomic Data			7	9	12	19	23	18	4	5	10	9	9			
X* Location With Seed Composition Data			5	5	5	5	5	3	4	3	5	5	3			

Uniform Test 00, 1998

	Strain	Parentage	Previous Testing	Generation Composited	Unique Traits
1.	Agassiz (0)	Simpson x M71-148	9	F5	Rps1
2.	Glacier	McCall x Altona	2	F4	Rps6
3.	Maple Ridge	Fiskeby III x Evans	17	F5	
4.	McCall (00)	(Acme x Chippewa) x Hark	23	F5	
5.	Traill	M82-996 x Sigco KG20	3	F5	
6.	AC Orford	OT80-18 x (OX611 x Maple Presto)	-	F8	
7.	M90-137050	M87-332 x Maple Ridge	1	F5	Rps1
8.	M90-144096	LS-344 x Maple Ridge	1	F5	Rps1
9.	M90-147022	LS-436 x Maple Ridge	1	F5	Rps1
10.	ND91-2721 (Jim)	Sigco KG20 x M81-18	3	F5	
11.	ND91-2735 (Daksoy)	Sigco KG20 x M81-18	3	F5	
12.	ND95-1215	M90-665 x ND88-800	-	F4	Rps6
13.	OT95-12	Maple Glen x RAGT86L2870	-	F5	
14.	SD95-1276	Kenwood x Glenwood	-	F5	

UNIFORM TEST 00, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	<u>Chlorosis Score</u>		<u>Emergence</u>	<u>PR</u>
		Humboldt	Yellow Medicine Co.	Score Ames	Lafayette Race 7
Agassiz (0)	PGBIYBfEpl	2.6	3.5	1.0	S
Glacier	PTBDYYEpl	2.9	3.3	1.0	S
Maple Ridge	PTBDYYEpl	2.1	3.0	1.0	S
McCall (00)	PGBSYYEpl	2.6	3.7	1.0	S
Traill	PTBSYYEpl	2.5	3.5	1.0	R
AC Orford	PTBSYYEpl	3.4	3.5	2.0	S
M90-137050	PGBDYYEpl	2.3	3.0	1.0	S
M90-144096	PTBDYYEpl	1.5	2.8	2.0	S
M90-147022	PGBDYYEpl	2.1	3.3	2.0	S
ND91-2721 (Jim)	PGBDYYEpl	2.8	4.2	1.0	S
ND91-2735 (Daksoy)	PGBDYYEpl	2.8	3.8	2.0	S
ND95-1215	PGTDYYEpl	3.6	4.7	1.0	S
OT95-12	WTBDYYEpl	4.4	4.5	1.0	S
SD95-1276	PTBDYBI Epl	4.8	4.7	4.0	S

UNIFORM TEST 00, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Size	<u>Composition</u>	
	7 bu/a	7 No.	7 Date	7 Score	7 In	6 g/100	5 %	5 %
Agassiz (0)	49.2	3	7.5	1.0	26	15.7	41.1	21.0
Glacier	46.4	8	5.5	1.0	24	16.6	40.8	20.5
Maple Ridge	41.6	12	-2.3	1.0	21	16.7	41.1	20.4
McCall (00)	45.2	10	09/13	1.0	23	16.3	40.3	20.8
Traill	50.4	1	8.1	1.1	25	17.8	41.6	20.4
AC Orford	48.6	5	7.6	1.0	23	20.4	41.2	20.8
M90-137050	48.9	4	6.5	1.0	24	17.8	41.5	20.1
M90-144096	41.5	13	-1.5	1.0	23	17.6	41.9	20.3
M90-147022	47.4	7	4.1	1.1	28	16.9	39.6	21.4
ND91-2721 (Jim)	50.2	2	2.8	1.0	22	18.3	40.3	20.6
ND91-2735 (Daksoy)	41.3	14	3.7	1.0	22	17.0	40.8	20.5
ND95-1215	48.1	6	5.7	1.1	26	15.2	40.1	20.9
OT95-12	45.0	11	0.7	1.2	26	17.2	41.0	21.3
SD95-1276	45.3	9	14.6	1.0	26	15.6	40.5	20.8

112.6 Days After Planting

UNIFORM TEST 00, 1998

1997-1998 2-YEAR MEAN

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Size	Composition	
	13 bu/a	13 No.	13 Date	13 Score	13 In.	12 g/100	Protein 9 %	Oil 9 %
Agassiz (0)	43.3	4	7.6	1.1	27	15.1	40.9	20.7
Glacier	39.8	6	4.4	1.1	25	16.0	40.8	19.9
Maple Ridge	37.4	10	-3.0	1.0	23	16.1	40.8	20.0
McCall (00)	38.1	8	9/10	1.0	24	15.8	39.8	20.5
Traill	43.5	1	7.3	1.2	26	17.3	41.7	19.7
M90-137050	43.4	2	5.4	1.0	25	17.1	41.5	19.6
M90-144096	37.8	9	-1.9	1.1	24	17.1	41.9	19.7
M90-147022	41.9	5	2.9	1.2	29	16.2	39.6	20.8
ND91-2721	43.4	2	2.2	1.1	24	17.2	40.4	20.1
ND91-2735	38.3	7	2.0	1.1	24	15.6	40.5	20.1

108.4 Days After Planting

1995-1998 4-YEAR MEAN

No. of Tests Strain	23	23	23	23	23	22	17	17
Agassiz (0)	42.8	2	7.3	1.2	29	14.8	41.7	20.6
Maple Ridge	37.3	5	-3.7	1.1	25	16.1	41.7	20.0
McCall (00)	38.6	4	9/10	1.2	27	15.6	40.8	20.3
ND91-2721	45.1	1	1.8	1.3	27	17.6	40.9	20.0
ND91-2735	41.8	3	0.9	1.2	27	16.1	41.3	20.1

108.0 Days After Planting

UNIFORM TEST 00, 1998

YIELD (bu/a)

Strain	Mean 7 Tests	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	St. Bruno de-Mont. Que.
Agassiz (0)	49.2	40.5	20.4	24.4	62.6	49.6	54.3	92.8
Glacier	46.4	46.0	27.3	22.0	50.7	48.3	43.4	87.0
Maple Ridge	41.6	40.2	29.3	29.1	40.9	46.4	39.1	66.0
McCall (00)	45.2	44.8	29.4	30.0	42.2	46.2	43.0	80.8
Traill	50.4	49.6	26.7	22.0	58.2	49.8	51.5	95.2
AC Orford	48.6	27.6	24.4	22.0	56.8	53.8	58.0	97.5
M90-137050	48.9	48.9	21.7	22.2	53.9	54.9	48.2	92.2
M90-144096	41.5	32.4	28.7	29.1	39.7	49.9	39.2	71.5
M90-147022	47.4	50.6	19.1	27.5	51.8	52.0	46.5	84.5
ND91-2721 (Jim)	50.2	47.1	30.1	39.8	48.9	51.2	47.8	86.5
ND91-2735 (Daksoy)	41.3	32.8	23.0	33.8	47.4	41.3	35.1	76.0
ND95-1215	48.1	37.5	33.7	34.7	46.3	52.1	45.3	87.0
OT95-12	45.0	33.0	24.0	28.9	45.2	50.4	45.2	88.2
SD95-1276	45.3	33.3	19.7	30.7	44.5	51.7	48.4	88.5
C.V. (%)		14.2	22.5	14.9	9.5	4.9	5.4	6.1
L.S.D. (5%)		9.6	9.4	7.0	7.8	3.5	2.5	7.4
Row Sp. (in.)		12	10	10	30	14	16	7
Rows/Plot		8	8	8	4	4	4	5
Reps		3	3	3	3	4	4	4

YIELD RANK

Strain	Yield Rank	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	St. Bruno de-Mont. Que.
Agassiz (0)	3	7	12	10	1	10	2	3
Glacier	8	5	6	12	6	11	12	8
Maple Ridge	12	8	4	6	13	12	15	14
McCall (00)	10	6	3	5	12	13	13	11
Traill	1	2	7	12	2	9	3	2
AC Orford	5	14	8	12	3	2	1	1
M90-137050	4	3	11	11	4	1	6	4
M90-144096	13	13	5	6	14	8	14	13
M90-147022	7	1	14	9	5	4	8	10
ND91-2721 (Jim)	2	4	2	1	7	6	7	9
ND91-2735 (Daksoy)	14	12	10	3	8	14	16	12
ND95-1215	6	9	1	2	9	3	9	7
OT95-12	11	11	9	8	10	7	10	6
SD95-1276	9	10	13	4	11	5	5	5

UNIFORM TEST 00, 1998

MATURITY (date)

Strain	Mean 7 Tests	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	St. Bruno de-Mont. Que.
Agassiz (0)	7.5	2	14	10	8	4	7	7
Glacier	5.5	7	5	7	8	0	4	7
Maple Ridge	-2.3	-5	-2	-3	-2	0	-3	-1
McCall (00)	09/13	09/17	09/06	09/09	09/07	10/06	09/09	09/13
Traill	8.1	6	13	11	6	5	8	8
AC Orford	7.6	13	8	10	10	2	5	5
M90-137050	6.5	4	8	9	7	3	6	8
M90-144096	-1.5	-3	-1	-2	-2	-1	0	-1
M90-147022	4.1	7	6	4	2	3	4	3
ND91-2721 (Jim)	2.8	2	6	3	1	2	4	1
ND91-2735 (Daksoy)	3.7	5	8	3	4	4	2	0
ND95-1215	5.7	5	1	2	10	5	7	10
OT95-12	0.7	3	0	-1	3	0	-1	1
SD95-1276	14.6	16	21	17	18	7	10	13
Date Planted	05/24	05/29	05/26	05/26	05/25	05/28	05/21	05/15
Days to Mature	112.6	111	103	106	105	131	111	121

LODGING (score)

Strain	Mean 7 Tests	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	St. Bruno de-Mont. Que.
Agassiz (0)	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.0
Glacier	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0
Maple Ridge	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
McCall (00)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Traill	1.1	1.0	1.0	1.0	1.0	1.0	1.3	1.3
AC Orford	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0
M90-137050	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
M90-144096	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
M90-147022	1.1	1.0	1.0	1.0	1.0	1.0	1.4	1.0
ND91-2721 (Jim)	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.0
ND91-2735 (Daksoy)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
ND95-1215	1.1	1.0	1.0	1.0	1.0	1.0	1.4	1.0
OT95-12	1.2	1.0	1.0	1.0	1.3	1.3	1.7	1.0
SD95-1276	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0

UNIFORM TEST 00, 1998

PLANT HEIGHT (inches)

Strain	Mean 7 Tests	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	St. Bruno de-Mont. Que.
Agassiz (0)	26	20	23	20	31	27	31	28
Glacier	24	22	20	17	27	24	30	28
Maple Ridge	21	14	17	15	24	25	27	23
McCall (00)	23	20	20	19	23	27	29	26
Traill	25	22	22	18	30	25	32	28
AC Orford	23	13	18	18	28	27	31	26
M90-137050	24	20	17	18	29	26	31	29
M90-144096	23	19	24	17	23	26	29	26
M90-147022	28	23	22	23	32	31	33	30
ND91-2721 (Jim)	22	19	16	17	25	25	28	25
ND91-2735 (Daksoy)	22	16	16	16	30	24	27	26
ND95-1215	26	23	24	21	26	29	31	30
OT95-12	26	17	20	22	27	31	34	31
SD95-1276	26	17	21	24	29	31	33	30

SEED SIZE (g/100)

Strain	Mean 6 Tests	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	St. Bruno de-Mont. Que.
Agassiz (0)	15.7	13.9	15.2	15.3	17.0	13.6	17.9	16.7
Glacier	16.6	16.8	13.2	14.1	16.6	16.7	19.4	19.7
Maple Ridge	16.7	18.2	14.0	14.5	17.4	16.0	18.8	17.9
McCall (00)	16.3	16.4	13.7	15.5	17.0	15.7	18.2	17.4
Traill	17.8	18.6	16.2	16.3	17.9	16.7	19.6	19.4
AC Orford	20.4	18.7	17.2	18.0	20.8	19.2	25.6	23.4
M90-137050	17.8	18.6	15.4	15.9	18.9	16.1	20.4	19.5
M90-144096	17.6	18.5	15.4	16.8	17.0	16.8	19.8	19.0
M90-147022	16.9	17.6	15.7	15.8	16.8	15.6	18.4	18.5
ND91-2721 (Jim)	18.3	20.8	16.3	15.2	18.0	17.2	20.7	19.8
ND91-2735 (Daksoy)	17.0	17.7	16.4	14.9	17.8	15.9	18.3	17.8
ND95-1215	15.2	16.1	12.5	12.1	15.2	16.0	17.0	17.2
OT95-12	17.2	18.3	13.6	14.9	17.9	16.4	20.0	19.3
SD95-1276	15.6	16.6	13.6	12.9	15.6	15.0	18.1	17.2

UNIFORM TEST 00, 1998

PROTEIN (%)

Strain	Mean 5 Tests	Crookston MN	Moorhead MN	Casselton ND	Ottawa Ont.	St. Bruno de Montarville Que.
Agassiz (0)	41.1	41.8	39.7	40.5	42.4	41.2
Glacier	40.8	41.5	38.8	39.5	42.9	41.4
Maple Ridge	41.1	41.9	40.0	40.3	43.4	40.1
McCall (00)	40.3	40.0	38.9	40.5	41.8	40.1
Traill	41.6	42.4	38.0	41.6	43.3	42.8
AC Orford	41.2	41.3	39.5	40.6	42.7	42.1
M90-137050	41.5	41.8	39.7	41.9	42.3	41.8
M90-144096	41.9	42.5	40.1	41.4	43.5	41.8
M90-147022	39.6	40.1	38.1	38.9	41.3	39.7
ND91-2721 (Jim)	40.3	40.6	38.9	39.2	42.5	40.2
ND91-2735 (Daksoy)	40.8	42.4	39.3	40.0	42.4	40.1
ND95-1215	40.1	41.2	38.0	41.0	40.3	40.1
OT95-12	41.0	42.9	37.1	41.4	43.1	40.3
SD95-1276	40.5	41.2	39.7	40.0	41.3	40.5

OIL (%)

Strain	Mean 5 Tests	Crookston MN	Moorhead MN	Casselton ND	Ottawa Ont.	St. Bruno de Montarville Que.
Agassiz (0)	21.0	20.6	22.1	20.8	20.6	21.1
Glacier	20.5	19.5	21.5	20.8	20.0	20.7
Maple Ridge	20.4	19.7	20.9	20.4	19.8	21.2
McCall (00)	20.8	20.2	21.8	20.6	20.3	21.0
Traill	20.4	20.3	21.8	20.1	19.8	19.8
AC Orford	20.8	20.3	21.5	20.6	20.6	20.8
M90-137050	20.1	19.3	21.3	20.0	19.8	19.9
M90-144096	20.3	19.7	20.8	20.2	19.9	20.7
M90-147022	21.4	20.4	22.0	21.4	21.2	21.8
ND91-2721 (Jim)	20.6	20.1	21.7	20.8	19.8	20.8
ND91-2735 (Daksoy)	20.5	19.4	21.2	20.8	20.0	21.1
ND95-1215	20.9	19.6	22.6	20.0	21.2	21.2
OT95-12	21.3	19.7	23.1	20.9	20.8	22.2
SD95-1276	20.8	20.1	21.5	20.0	21.2	21.0

Uniform Test 0, 1998

Strain	Parentage	Previous Testing	Generation Compositied	Unique Traits
1. Agassiz (E)	Simpson x M71-148	6	F5	Rps1
2. Lambert (0)	M75-274 x M76-151	10	F5	Rps1
3. Parker (I)	A79-136012 x Dawson	7	F5	Rps1
4. Traill	M82-996 x Sigco KG20	3	F5	
5. M90-135046	Ozzie x OT88-11	1	F5	Rps1
6. M90-217007	M84-93 x Archer	1	F5	Rps1-k, BSR
7. M90-239130	M85-122 x Lambert	1	F5	Rps1
8. M90-249101	M86-2337 x M86-918	1	F5	Rps1
9. M91-821	M83-766 x Leslie	3	F5	Rps1
10. M92-281	Sturdy x A17	UT I	F5	Rps1
11. M92-542	M84-855 x Bert	2	F4	Rps1
12. M92-597	Pioneer 9061 x Ozzie	2	F5	Rps1
13. M92-1571	Jack x Alpha	1	F5	SCN
14. ND(SD)92-2381	M83-64 x Pioneer 9061	1	F5	Rps1-k
15. ND93-5936	M83-899 x Pioneer 9061	1	F4	
16. SD(ND)94-9231	Lambert x Pioneer 9061	1	F5	

UNIFORM TEST 0, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	<u>Chlorosis</u>	<u>BSR</u>	<u>PR</u>
		Score Yellow Medicine Co.	Arlington (0-11)	Lafayette Race 7
Agassiz (E)	PGBIYBfEpI	3.5	3.0	S
Lambert (0)	PGBSYBfepSD	3.3	5.0	S
Parker (I)	WGBDYBfEpI	5.0	4.3	S
Traill	PTBSYYEpI	3.5	4.3	R
M90-135046	PTBDYYEpSD	3.3	2.7	S
M90-217007	PGTDYBfHI	2.7	5.0	R
M90-239130	PGBDYYepSD	3.3	5.7	S
M90-249101	PGBDYYEpI	3.2	1.7	S
M91-821	WGBSYYEpI	5.0	4.7	S
M92-281	PGBDYIbHI	4.2	4.0	S
M92-542	P+WGBDYYEpI	4.7	2.3	S
M92-597	PGBSYYEpI	3.5	5.3	S
M92-1571	WTTSYYepI	3.7	0.7	H
ND(SD)92-2381	PGBDYYEpSD	4.5	4.7	R
ND93-5936	PGBDYBfEpI	4.5	4.0	S
SD(ND)94-9231	PGBSYYHI	3.8	5.7	S

UNIFORM TEST 0, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant	Seed	Composition	
	9 bu/a	9 No.	9 Date	9 Score	9 Height In.	8 Size g/100	5 Protein %	5 Oil %
Agassiz (E)	43.0	16	-7.2	1.2	27	15.6	41.0	21.2
Lambert (0)	52.6	7	09/15	1.5	29	17.6	41.1	21.7
Parker (I)	58.6	1	5.0	2.1	36	18.9	40.9	20.9
Traill	44.2	15	-6.4	1.8	26	17.6	42.1	20.3
M90-135046	46.4	14	-4.2	1.7	31	15.7	43.0	20.2
M90-217007	47.9	13	-3.0	1.3	30	16.5	40.4	21.2
M90-239130	49.6	11	-0.5	1.4	28	18.4	41.4	21.4
M90-249101	49.3	12	-3.8	1.6	28	16.7	40.7	21.4
M91-821	54.0	4	1.1	1.6	32	17.5	40.0	21.7
M92-281	56.3	2	2.6	2.0	32	17.1	42.0	20.1
M92-542	54.6	3	1.1	1.7	33	19.8	40.8	20.9
M92-597	53.0	6	0.8	1.4	32	17.7	41.5	20.7
M92-1571	51.8	8	0.6	1.5	30	14.8	42.6	19.8
ND(SD)92-2381	53.1	5	2.9	1.7	31	16.6	40.4	21.3
ND93-5936	51.3	9	1.5	1.8	34	17.0	39.8	21.3
SD(ND)94-9231	51.3	9	0.8	1.7	30	17.0	41.0	20.9

122.9 Days After Planting

UNIFORM TEST 0, 1998

1997-1998 2-YEAR MEAN

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant	Seed	Composition	
	17 bu/a	17 No.	17 Date	17 Score	Height 17 In.	Size 15 g/100	Protein 10 %	Oil 10 %
Agassiz (E)	38.9	15	-6.9	1.3	27	15.2	40.4	20.6
Lambert (O)	46.6	9	9/15	1.5	29	17.1	40.7	21.0
Parker (I)	52.9	1	7.1	2.1	35	18.6	40.8	20.3
Traill	39.9	14	-6.5	1.7	26	17.2	42.3	19.6
M90-135046	42.3	13	-3.9	1.6	31	15.2	42.7	19.4
M90-217007	44.1	12	-2.8	1.3	30	15.9	40.2	20.8
M90-239130	46.3	10	1.0	1.3	29	18.2	41.1	20.6
M90-249101	44.6	11	-3.5	1.6	28	16.2	40.4	20.7
M91-821	48.9	2	2.0	1.5	32	17.2	39.6	21.2
M92-542	48.9	2	2.1	1.6	32	19.4	40.7	20.3
M92-597	48.1	4	1.9	1.5	32	17.2	41.5	19.9
M92-1571	46.7	7	1.1	1.4	30	14.8	42.1	19.7
ND(SD)92-2381	47.9	6	4.1	1.7	31	16.3	40.0	20.9
ND93-5936	48.0	5	2.5	1.8	33	17.0	39.5	20.8
SD(ND)94-9231	46.7	7	0.7	1.6	30	16.8	40.6	20.4

123.7 Days After Planting

1996-1998 3-YEAR MEAN

No. of Tests Strain	25	25	24	25	25	23	15	15
Agassiz (E)	39.2	6	-7.1	1.3	28	14.9	41.8	20.6
Lambert (O)	46.8	5	9/17	1.5	30	16.9	41.6	21.1
Parker (I)	50.9	1	7.1	2.3	36	18.1	41.3	20.4
M91-821	47.6	4	2.1	1.6	32	16.8	40.5	21.3
M92-542	48.1	2	2.2	1.6	33	19.3	41.3	20.5
M92-597	47.7	3	2.1	1.7	33	16.8	42.7	20.0

122.3 Days After Planting

UNIFORM TEST 0, 1998

YIELD (bu/a)

Strain	Mean 9 Tests	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Agassiz (E)	43.0	57.7	27.1	54.0	33.2
Lambert (0)	52.6	64.4	39.6	55.9	48.1
Parker (I)	58.6	65.1	52.2	63.0	55.5
Traill	44.2	54.4	29.1	54.3	37.2
M90-135046	46.4	56.5	43.5	51.6	37.4
M90-217007	47.9	63.1	33.9	56.7	40.1
M90-239130	49.6	59.8	34.4	55.7	43.8
M90-249101	49.3	64.7	35.6	60.3	37.3
M91-821	54.0	68.1	51.6	59.4	45.1
M92-281	56.3	60.4	44.1	57.4	49.3
M92-542	54.6	61.0	42.2	62.1	43.8
M92-597	53.0	65.4	41.1	57.3	45.5
M92-1571	51.8	60.5	44.3	56.0	44.5
ND(SD)92-2381	53.1	63.4	40.3	61.4	39.9
ND93-5936	51.3	66.6	39.4	57.5	42.6
SD(ND)94-9231	51.3	63.8	38.8	56.6	44.0
C.V. (%)		7.3	16.8	5.8	8.6
L.S.D. (5%)		7.6	11.2	5.4	3.6
Row Sp. (In.)		10	10	30	16
Rows/Plot		10	10	4	4
Reps		3	3	3	4

YIELD RANK

Strain	Yield Rank	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Agassiz (E)	16	14	16	15	16
Lambert (0)	7	6	9	12	3
Parker (I)	1	4	1	1	1
Traill	15	16	15	14	15
M90-135046	14	15	5	16	13
M90-217007	13	9	14	9	11
M90-239130	11	13	13	13	8
M90-249101	12	5	12	4	14
M91-821	4	1	2	5	5
M92-281	2	12	4	7	2
M92-542	3	10	6	2	9
M92-597	6	3	7	8	4
M92-1571	8	11	3	11	6
ND(SD)92-2381	5	8	8	3	12
ND93-5936	9	2	10	6	10
SD(ND)94-9231	9	7	11	10	7

UNIFORM TEST 0, 1998

YIELD (bu/a)

Strain	Woodstock Ont.	Saint- Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Agassiz (E)	28.0	68.4	20.8	39.9	57.9
Lambert (O)	36.3	94.0	30.1	41.0	64.0
Parker (I)	37.6	113.4	32.0	47.3	61.2
Traill	27.3	80.5	23.3	40.6	50.8
M90-135046	29.3	81.6	26.8	39.8	51.2
M90-217007	28.4	80.7	25.5	40.8	61.7
M90-239130	30.5	89.9	25.0	45.1	62.3
M90-249101	31.5	82.8	24.2	45.7	62.0
M91-821	30.0	86.7	31.9	49.0	64.4
M92-281	33.7	113.4	34.4	46.7	67.5
M92-542	30.3	103.6	31.1	48.4	69.1
M92-597	29.8	93.5	38.1	46.4	60.2
M92-1571	29.6	87.9	27.7	53.3	62.2
ND(SD)92-2381	27.5	110.2	37.6	36.0	61.2
ND93-5936	33.0	85.3	35.9	39.7	61.7
SD(ND)94-9231	33.1	89.1	35.6	35.1	66.0
C.V. (%)	10.9	9.0	18.6	8.7	8.2
L.S.D. (5%)	4.8	12.5	9.3	6.3	3.5
Row Sp. (In.)	14	7	30	30	7.5
Rows/Plot	4	5	4	4	8
Reps	4	4	3	3	3

YIELD RANK

Strain	Woodstock Ont.	Saint- Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Agassiz (E)	14	16	16	12	15
Lambert (O)	2	5	9	9	5
Parker (I)	1	1	6	4	11
Traill	16	15	15	11	18
M90-135046	12	13	11	13	17
M90-217007	13	14	12	10	9
M90-239130	7	7	13	8	6
M90-249101	6	12	14	7	8
M91-821	9	10	7	2	4
M92-281	3	1	5	5	2
M92-542	8	4	8	3	1
M92-597	10	6	1	6	14
M92-1571	11	9	10	1	7
ND(SD)92-2381	15	3	2	15	11
ND93-5936	5	11	3	14	9
SD(ND)94-9231	4	8	4	16	3

UNIFORM TEST 0, 1998

MATURITY (date)

Strain	Mean 9 Tests	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Agassiz (E)	-7.2	-9	-11	-8	-6
Lambert (O)	09/15	09/20	09/08	09/23	9/19
Parker (I)	5.0	3	11	8	10
Traill	-6.4	-9	-1	-9	-8
M90-135046	-4.2	-6	-1	-7	-4
M90-217007	-3.0	-9	0	-4	-2
M90-239130	-0.5	0	2	0	1
M90-249101	-3.8	-9	-1	-5	-2
M91-821	1.1	0	4	1	4
M92-281	2.6	1	11	1	2
M92-542	1.1	0	2	1	3
M92-597	0.8	0	6	1	2
M92-1571	0.6	-2	3	-4	4
ND(SD)92-2381	2.9	0	11	4	6
ND93-5936	1.5	0	7	2	5
SD(ND)94-9231	0.8	0	3	1	4
Date Planted	05/15	05/22	05/04	05/25	5/22
Days to Mature	122.9	121	127	121	120

LODGING (score)

Strain	Mean 9 Tests	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Agassiz (E)	1.2	1.0	1.0	1.0	1.0
Lambert (O)	1.5	1.0	1.3	1.0	1.0
Parker (I)	2.1	1.0	2.3	1.0	1.2
Traill	1.8	1.0	1.0	1.0	1.0
M90-135046	1.7	1.0	1.7	1.0	1.0
M90-217007	1.3	1.0	1.3	1.0	1.0
M90-239130	1.4	1.0	1.0	1.0	1.0
M90-249101	1.6	1.0	2.0	1.0	1.0
M91-821	1.6	1.0	1.3	1.0	1.0
M92-281	2.0	1.0	2.3	1.0	1.0
M92-542	1.7	1.0	1.7	1.0	1.0
M92-597	1.4	1.0	1.7	1.0	1.0
M92-1571	1.5	1.0	1.3	1.0	1.0
ND(SD)92-2381	1.7	1.0	2.0	1.0	1.0
ND93-5936	1.8	1.0	1.7	1.0	1.2
SD(ND)94-9231	1.7	1.0	1.7	1.0	1.0

UNIFORM TEST 0, 1998

MATURITY (date)

Strain	Woodstock Ont.	Saint- Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Agassiz (E)	-4	-12	-8	-7.0	-8
Lambert (O)	10/06	09/09	08/29	09/15	09/12
Parker (I)	6	3	+11	+3	4
Traill	-3	-10	-9	-8.0	-9
M90-135046	-3	-7	-6	-5.0	-5
M90-217007	-2	-2	-6	-3.0	-5
M90-239130	1	-5	-1	-2.0	-2
M90-249101	-1	-6	-2	-3.0	-7
M91-821	2	0	+5	+1	-2
M92-281	3	3	+4	+4	2
M92-542	2	2	+1	+1	-1
M92-597	1	-1	+1	0	-2
M92-1571	1	2	+2	-1	1
ND(SD)92-2381	4	1	+5	+3	0
ND93-5936	2	-2	+2	+3	-0
SD(ND)94-9231	1	-2	+4	+3	0
Date Planted	05/26	05/15	05/04	05/11	05/12
Days to Mature	133	117	117	127	123

LODGING (score)

Strain	Woodstock Ont.	Saint- Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Agassiz (E)	1.0	0.8	1.0	2.0	2.3
Lambert (O)	1.0	1.3	2.0	2.0	3.3
Parker (I)	1.0	2.6	2.0	3.0	4.3
Traill	1.0	1.7	2.0	3.0	4.7
M90-135046	1.0	1.3	2.0	2.0	4.3
M90-217007	1.0	1.8	1.0	2.0	2.0
M90-239130	1.0	1.0	2.0	3.0	1.7
M90-249101	1.0	1.0	1.0	3.0	3.3
M91-821	1.0	1.4	2.0	3.0	3.0
M92-281	1.0	1.7	2.0	4.0	4.0
M92-542	1.0	2.2	2.0	3.0	2.7
M92-597	1.0	1.3	1.0	2.0	2.7
M92-1571	1.0	2.0	2.0	2.0	2.3
ND(SD)92-2381	1.0	2.4	1.0	3.0	3.3
ND93-5936	1.0	1.8	2.0	3.0	3.7
SD(ND)94-9231	1.0	1.2	2.0	3.0	3.0

UNIFORM TEST 0, 1998

PLANT HEIGHT (inches)

Strain	Mean 9 Tests	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Agassiz (E)	27	36	28	33	23
Lambert (0)	29	38	32	33	25
Parker (I)	36	44	38	38	32
Traill	26	36	23	29	23
M90-135046	31	40	31	33	27
M90-217007	30	39	31	32	25
M90-239130	28	40	26	33	24
M90-249101	28	37	29	31	22
M91-821	32	40	35	36	27
M92-281	32	40	38	32	27
M92-542	33	41	34	36	28
M92-597	32	40	34	36	26
M92-1571	30	36	30	34	28
ND(SD)92-2381	31	39	32	34	25
ND93-5936	34	46	35	36	29
SD(ND)94-9231	30	43	29	35	26

SEED SIZE (g/100)

Strain	Mean 8 Tests	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Agassiz (E)	15.6	16.3	15.3	16.6	16.0
Lambert (0)	17.6	18.9	16.4	18.6	18.9
Parker (I)	18.9	19.8	18.4	18.4	22.2
Traill	17.6	17.9	16.3	18.2	19.3
M90-135046	15.7	17.3	15.6	16.7	16.5
M90-217007	16.5	17.2	16.0	16.8	16.9
M90-239130	18.4	20.9	18.2	19.1	20.4
M90-249101	16.7	18.0	14.8	17.4	17.8
M91-821	17.5	18.8	18.6	17.7	18.8
M92-281	17.1	18.2	17.2	16.2	20.1
M92-542	19.8	21.2	19.0	19.8	21.6
M92-597	17.7	18.7	18.2	18.0	19.4
M92-1571	14.8	16.4	14.7	14.4	17.2
ND(SD)92-2381	16.6	17.4	17.8	15.5	18.0
ND93-5936	17.0	17.4	17.8	16.8	17.9
SD(ND)94-9231	17.0	17.6	17.4	17.5	18.1

UNIFORM TEST 0, 1998

PLANT HEIGHT (inches)

Strain	Woodstock Ont.	Saint- Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Agassiz (E)	21	28	25	26	27
Lambert (0)	23	29	22	28	32
Parker (I)	30	38	29	34	38
Traill	21	29	21	26	27
M90-135046	23	33	29	30	32
M90-217007	22	31	27	30	30
M90-239130	20	29	25	28	29
M90-249101	21	27	26	28	27
M91-821	22	31	31	32	32
M92-281	24	32	32	30	35
M92-542	24	36	28	36	32
M92-597	23	31	28	32	33
M92-1571	22	31	30	30	31
ND(SD)92-2381	23	33	26	31	33
ND93-5936	26	34	31	33	34
SD(ND)94-9231	24	28	28	29	30

SEED SIZE (g/100)

Strain	Woodstock Ont.	Saint- Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Agassiz (E)	13.1	15.8	15.2	16.6	
Lambert (0)	15.4	19.0	14.9	18.6	
Parker (I)	16.2	20.8	16.8	18.6	
Traill	15.4	21.3	14.0	18.2	
M90-135046	13.2	16.5	13.1	17.1	
M90-217007	13.5	19.1	15.6	17.1	
M90-239130	15.8	18.1	16.1	18.9	
M90-249101	14.2	19.8	14.6	16.7	
M91-821	14.2	18.9	15.8	17.3	
M92-281	15.0	18.9	13.7	17.9	
M92-542	16.9	22.0	18.5	19.5	
M92-597	14.7	19.2	16.4	17.3	
M92-1571	12.8	14.7	13.1	15.5	
ND(SD)92-2381	13.5	18.7	15.1	16.8	
ND93-5936	14.4	17.7	16.3	17.7	
SD(ND)94-9231	14.4	18.3	15.5	17.1	

UNIFORM TEST 0, 1998

PROTEIN (%)

Strain	Mean 5 Tests	Morris MN	Rosemount MN	Casselton ND	Ottawa Ont.	Watertown SD
Agassiz (E)	41.0	41.8	41.6	40.0	39.5	41.9
Lambert (O)	41.1	42.0	41.7	40.9	38.1	42.6
Parker (I)	40.9	40.6	42.6	40.1	38.6	42.6
Traill	42.1	42.9	42.8	41.7	39.6	43.3
M90-135046	43.0	43.2	43.4	43.7	40.8	44.0
M90-217007	40.4	40.6	41.2	40.6	37.9	41.9
M90-239130	41.4	42.0	42.3	41.6	38.9	42.4
M90-249101	40.7	41.0	41.2	41.3	38.7	41.5
M91-821	40.0	41.8	41.0	38.7	37.0	41.7
M92-281	42.0	43.1	42.6	41.1	39.5	43.7
M92-542	40.8	41.8	41.3	40.8	38.2	41.8
M92-597	41.5	42.0	42.1	40.8	39.2	43.4
M92-1571	42.6	43.5	43.0	42.5	41.0	43.1
ND(SD)92-2381	40.4	40.8	41.9	39.8	37.6	42.1
ND93-5936	39.8	40.8	40.6	39.3	36.6	41.5
SD(ND)94-9231	41.0	42.6	41.5	40.6	38.1	42.0

OIL (%)

Strain	Mean 5 Tests	Morris MN	Rosemount MN	Casselton ND	Ottawa Ont.	Watertown SD
Agassiz (E)	21.2	20.6	20.8	21.6	22.4	20.8
Lambert (O)	21.7	21.4	21.1	20.4	23.9	21.6
Parker (I)	20.9	20.9	19.9	21.7	21.8	20.1
Traill	20.3	19.8	19.3	20.5	22.1	19.9
M90-135046	20.2	20.1	19.6	19.7	21.7	19.8
M90-217007	21.2	21.1	20.6	20.9	23.1	20.3
M90-239130	21.4	20.8	20.8	21.2	22.9	21.1
M90-249101	21.4	21.1	20.6	21.2	22.7	21.2
M91-821	21.7	20.8	21.1	22.1	23.6	21.1
M92-281	20.1	19.8	19.4	20.3	21.4	19.4
M92-542	20.9	21.0	20.4	21.0	22.1	20.0
M92-597	20.7	20.2	20.7	20.7	21.7	20.0
M92-1571	19.8	19.1	19.9	19.7	21.0	19.3
ND(SD)92-2381	21.3	21.1	20.4	21.5	22.8	20.8
ND93-5936	21.3	20.8	20.5	21.7	23.0	20.5
SD(ND)94-9231	20.9	20.3	20.0	20.9	23.0	20.4

Preliminary Test 0, 1998

Strain	Parentage	Generation Composited	Unique Traits
1. Agassiz (E)	Simpson x M71-148	F5	Rps1
2. Lambert (0)	M75-274 x M76-151	F5	Rps1
3. Parker (I)	A79-136012 x Dawson	F5	Rps1
4. Surge	A86-204022 x Kato	F5	
5. Traill	M82-996 x Sigco KG20	F5	
6. M91-131051	Harmony x Agassiz	F5	Rps1-a
7. M91-134038	Harmony x Ozzie	F5	Rps1-a
8. M91-141046	M87-330 x McCall	F5	Rps1-k
9. M91-193070	Ozzie x M89-1356	F5	Rps1-a, BSR
10. M91-193087	Ozzie x M89-1356	F5	Rps1-a, BSR
11. M91-196123	M87-1247 x Kato	F5	Rps1-a
12. M91-236013	Harmony x Hardin 91	F5	Rps1-k
13. M91-236030	Harmony x Hardin 91	F5	Rps1-k
14. M91-245147	Faribault x M87-1569	F5	Rps1-a, SCN
15. M92-105082	Agassiz x [Sturdy(4) x Elgin 87]	F4	Rps1-k
16. M92-105113	Agassiz x [Sturdy(4) x Elgin 87]	F4	Rps1-k
17. M92-105165	Agassiz x [Sturdy(4) x Elgin 87]	F4	Rps1-k
18. M92-120014	M87-1088 x Dawson	F4	Rps1-a
19. M92-120020	M87-1088 x Dawson	F4	Rps1-a
20. M(ND)91-191052	Agassiz x M89-206	F5	
21. ND94-8401	Pioneer 9061 x Evans	F4	
22. ND94-9035	M81-18 x Sigco KG20	F4	
23. ND94-9063	M81-18 x Sigco KG20	F4	
24. ND94-9117	M81-18 x Sigco KG20	F4	
25. ND94-9123	Lambert x Pioneer 9061	F4	
26. ND94-9148	M81-18 x Sigco KG20	F4	
27. ND94-9306	Lambert x Pioneer 9061	F4	
28. ND94-9313	Lambert x Pioneer 9061	F4	
29. ND94-9332	Lambert x Pioneer 9061	F4	
30. ND94-9344	Lambert x Pioneer 9061	F4	
31. ND95-931	ND88-800 x Pioneer 9061	F4	Rps6
32. ND95-952	ND88-800 x Pioneer 9061	F4	Rps6
33. ND95-955	ND88-800 x Pioneer 9061	F4	Rps6
34. ND95-956	ND88-800 x Pioneer 9061	F4	Rps6
35. ND95-962	ND88-800 x Pioneer 9061	F4	Rps6
36. SD95-242	Parker x Lambert	F5	
37. SD95-794	Lambert x Parker	F5	
38. SD95-1189	Glenwood x Lambert	F5	
39. SD95-1518	Glenwood x Parker	F5	
40. SD95-1520	Glenwood x Parker	F5	
41. SD95-1521	Glenwood x parker	F5	
42. SD95-1567	Glenwood x parker	F5	
43. SD(ND)95-1663	Parker x Pioneer 9061	F5	
44. SD(ND)95-1664	Parker x Pioneer 9061	F5	

PRELIMINARY TEST 0, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis	PR
		Score Yellow Medicine Co.	Lafayette Race 7
Agassiz (E)	PGBIYBfEpl	3.5	S
Lambert (0)	PGBSYBfepSD	3.3	S
Parker (I)	WGBDYBfEpl	5.0	S
Surge	PGBSYlbepI	4.2	S
Traill	PTBSYYEpl	3.5	R
M91-131051	P+WGBIYBfEpl	4.2	S
M91-134038	P+WG+TBDYBfEpl	3.0	S
M91-141046	PGBDYHEpl	3.3	S
M91-193070	PGBDYEEpl	3.5	S
M91-193087	PGBDYEEpl	3.3	S
M91-196123	PTBDYBIEpl	4.8	H
M91-236013	WTBSYBrEpD	4.7	S
M91-236030	WTBSYBrepI	4.8	R
M91-245147	WTTDYBIEpl	4.0	S
M92-105082	PGBDYlbEpl	4.3	S
M92-105113	PGBDYHEpl	3.7	S
M92-105165	PGBDYHEpl	4.5	S
M92-120014	PGBDYEEpl	3.2	S
M92-120020	P+WGBDYEEpl	3.5	S
M(ND)91-191052	PGTDYEEpl	4.0	S
ND94-8401	P+WGBDYEEpl	4.3	S
ND94-9035	PGBDYEEpl	4.7	S
ND94-9063	PGBDYEEpl	4.0	S
ND94-9117	PGBDYEEpl	4.2	S
ND94-9123	PGBDYEEpl	4.2	S
ND94-9148	PGBDYEEpl	4.0	S
ND94-9306	PGBSYHEpl	4.8	S
ND94-9313	PGBSYEEpl	3.8	S
ND94-9332	PGBSYBfepI	4.3	S
ND94-9344	PGBIYBfepI	4.5	S
ND95-931	PGBDYBfepI	4.7	S
ND95-952	WGBDYEpl	4.8	H
ND95-955	WGBDYBfepI	4.5	S
ND95-956	WGBDYBfepI	4.0	S
ND95-962	P+WGBDYEEpl	4.5	S
SD95-242	P+WGBDYlbEpl	4.7	S
SD95-794	WGBSYBfEpSD	4.3	S
SD95-1189	PGBSYlbepSD	3.8	S
SD95-1518	PGBDYBfEpl	4.3	S
SD95-1520	PGBDYlbEpl	4.7	S
SD95-1521	WGBDYlbEpl	4.5	S
SD95-1567	WGBDYlbEpl	4.8	S
SD(ND)95-1663	PGBDYBfEpl	4.5	S
SD(ND)95-1664	PGBDYBfEpl	4.7	S

PRELIMINARY TEST 0, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield 4 bu/a	Rank 4 No.	Maturity 4 Date	Lodging 4 Score	Plant Height 4 In.	Seed Size 4 g/100	Composition	
							Protein 4 %	Oil 4 %
Agassiz (E)	36.1	41	-5.3	1.1	30	16.1	40.7	21.1
Lambert (O)	40.3	26	9/13	1.5	34	17.3	40.7	21.2
Parker (I)	47.0	2	6.5	1.9	34	17.9	41.1	20.9
Surge	45.1	6	1.3	1.0	30	21.1	41.9	20.8
Trall	33.0	43	-6.3	1.3	27	16.5	41.7	20.2
M91-131051	41.3	21	-2.3	1.1	32	14.7	41.3	20.7
M91-134038	45.2	5	1.5	1.0	32	15.9	40.4	21.3
M91-141046	43.0	13	1.5	1.5	35	15.2	40.8	20.9
M91-193070	41.9	16	3.3	1.3	36	17.9	42.0	20.5
M91-193087	40.2	28	-1.8	1.0	36	18.0	41.4	20.5
M91-196123	43.3	9	0.8	1.9	33	20.3	43.0	19.7
M91-236013	32.8	44	-4.3	1.0	21	13.7	41.6	20.2
M91-236030	42.9	15	-0.5	1.4	29	14.1	39.4	21.6
M91-245147	37.0	37	-2.8	1.3	32	14.3	41.4	20.1
M92-105082	46.9	3	1.5	1.6	33	18.3	42.1	20.7
M92-105113	38.9	33	-0.8	1.3	32	16.6	41.8	20.6
M92-105165	34.8	42	-1.0	1.2	27	17.7	42.1	20.1
M92-120014	36.4	38	0.0	1.1	31	16.5	40.6	21.3
M92-120020	36.4	38	-3.0	1.0	30	15.6	39.8	21.3
M(ND)91-191052	36.4	38	-7.0	1.0	28	16.2	40.2	21.5
ND94-8401	41.6	17	-1.0	1.3	31	16.5	39.2	21.6
ND94-9035	40.2	28	-2.0	1.1	31	17.9	39.4	21.9
ND94-9063	40.7	23	-4.0	1.1	32	18.0	40.0	21.7
ND94-9117	40.3	26	-4.0	1.3	29	17.4	39.5	21.8
ND94-9123	41.4	20	-3.3	1.2	30	18.2	39.4	21.8
ND94-9148	39.7	31	-3.5	1.1	29	18.3	39.9	21.6
ND94-9306	43.0	13	-0.8	1.5	32	15.4	39.8	21.5
ND94-9313	43.1	11	-0.5	1.3	31	15.6	39.6	21.6
ND94-9332	44.3	7	-0.8	1.6	34	16.9	39.8	21.3
ND94-9344	40.4	25	-1.3	1.4	31	16.2	40.6	21.2
ND95-931	40.6	24	-2.5	1.5	33	18.9	40.6	21.4
ND95-952	39.2	32	-1.5	1.0	31	18.2	40.3	21.5
ND95-955	41.6	17	0.5	1.0	31	17.6	40.4	21.4
ND95-956	43.1	11	-1.5	1.0	32	17.2	40.6	21.3
ND95-962	38.5	34	-4.8	1.0	32	17.5	40.1	21.4
SD95-242	43.6	8	5.0	1.7	37	18.0	40.6	21.4
SD95-794	37.1	36	0.3	1.4	34	16.4	41.2	21.1
SD95-1189	40.9	22	0.8	1.3	35	17.7	41.8	21.1
SD95-1518	38.4	35	2.0	1.9	36	18.2	41.2	20.7
SD95-1520	41.6	17	0.5	1.5	36	22.0	41.0	21.0
SD95-1521	43.3	9	3.8	2.2	34	20.4	40.6	21.2
SD95-1567	40.0	30	4.5	2.2	36	16.1	39.9	21.4
SD(ND)95-1663	46.8	4	4.0	1.5	37	18.1	39.8	21.9
SD(ND)95-1664	47.3	1	3.5	1.3	36	18.3	39.6	21.9

PRELIMINARY TEST 0, 1998

YIELD (bu/a)

Strain	Mean 4 Tests	Morris MN	Rosemount MN	Casselton ND	Brookings SD
Agassiz (E)	36.1	45.6	16.1	64.2	18.4
Lambert (O)	40.3	46.9	28.8	61.3	24.2
Parker (I)	47.0	55.0	40.7	60.9	31.6
Surge	45.1	50.9	41.2	63.8	24.5
Traill	33.0	40.6	17.7	57.4	16.3
M91-131051	41.3	47.9	31.8	62.2	23.2
M91-134038	45.2	53.7	34.3	59.8	33.0
M91-141046	43.0	49.6	37.4	61.2	23.7
M91-193070	41.9	49.0	33.0	57.7	28.1
M91-193087	40.2	48.7	34.2	51.9	26.2
M91-196123	43.3	48.5	35.6	56.7	32.3
M91-236013	32.8	49.2	16.2	54.5	11.2
M91-236030	42.9	51.4	26.6	64.1	29.4
M91-245147	37.0	44.0	21.2	56.8	26.1
M92-105082	46.9	51.9	42.8	65.0	27.9
M92-105113	38.9	49.9	24.7	60.2	21.0
M92-105165	34.8	45.3	16.3	56.9	20.7
M92-120014	36.4	45.0	19.9	59.8	20.7
M92-120020	36.4	48.0	18.4	57.7	21.3
M(ND)91-191052	36.4	46.4	20.5	54.7	24.0
ND94-8401	41.6	48.7	24.4	65.4	28.0
ND94-9035	40.2	51.5	30.3	61.5	17.3
ND94-9063	40.7	50.4	31.5	63.7	17.2
ND94-9117	40.3	52.1	30.7	61.2	17.1
ND94-9123	41.4	48.8	31.6	62.4	22.7
ND94-9148	39.7	45.9	26.0	62.6	24.2
ND94-9306	43.0	50.9	33.3	63.3	24.4
ND94-9313	43.1	48.1	35.7	60.6	27.9
ND94-9332	44.3	51.7	29.1	68.5	27.8
ND94-9344	40.4	49.7	21.4	60.1	30.2
ND95-931	40.6	49.7	24.4	61.6	26.9
ND95-952	39.2	48.1	21.1	59.0	28.5
ND95-955	41.6	52.1	20.5	62.0	31.8
ND95-956	43.1	45.7	28.4	63.7	34.5
ND95-962	38.5	45.8	17.0	62.5	28.8
SD95-242	43.6	46.8	34.0	58.4	35.1
SD95-794	37.1	47.3	29.1	51.1	21.0
SD95-1189	40.9	49.0	38.0	55.8	20.6
SD95-1518	38.4	40.7	25.5	54.3	33.0
SD95-1520	41.6	45.1	31.7	62.7	26.7
SD95-1521	43.3	50.5	27.8	61.3	33.4
SD95-1567	40.0	42.2	25.2	62.3	30.3
SD(ND)95-1663	46.8	47.5	39.8	68.2	31.5
SD(ND)95-1664	47.3	43.6	44.6	70.5	30.4
C.V. (%)		10.7	13.9	7.4	15.3
L.S.D. (5%)		10.3	8.1	7.2	7.9
Row Sp. (In.)		10	10	30	30
Rows/Plot		4	4	4	4
Reps		2	2	3	2

PRELIMINARY TEST 0, 1998

YIELD RANK

Strain	Yield Rank	Morris MN	Rosemount MN	Casselton ND	Brookings SD
Agassiz (E)	41	36	44	6	39
Lambert (O)	26	30	23	21	27
Parker (I)	2	1	4	25	8
Surge	6	9	3	8	25
Traill	43	44	40	35	43
M91-131051	21	27	15	17	31
M91-134038	5	2	10	29	4
M91-141046	13	16	7	23	30
M91-193070	16	18	14	33	16
M91-193087	28	21	11	43	23
M91-196123	9	23	9	38	6
M91-236013	44	17	43	41	44
M91-236030	15	8	26	7	13
M91-245147	37	40	34	37	24
M92-105082	3	5	2	5	18
M92-105113	33	13	30	27	34
M92-105165	42	37	42	36	36
M92-120014	38	39	38	29	36
M92-120020	38	26	39	33	33
M(ND)91-191052	38	32	36	40	29
ND94-8401	17	21	31	4	17
ND94-9035	28	7	20	20	40
ND94-9063	23	12	18	9	41
ND94-9117	26	3	19	23	42
ND94-9123	20	20	17	15	32
ND94-9148	31	33	27	13	27
ND94-9306	13	9	13	11	26
ND94-9313	11	24	8	26	18
ND94-9332	7	6	21	2	20
ND94-9344	25	14	33	28	12
ND95-931	24	14	31	19	21
ND95-952	32	24	35	31	15
ND95-955	17	3	36	18	7
ND95-956	11	35	24	9	2
ND95-962	34	34	41	13	14
SD95-242	8	31	12	32	1
SD95-794	36	29	21	44	34
SD95-1189	22	18	6	39	38
SD95-1518	35	43	28	42	4
SD95-1520	17	38	16	12	22
SD95-1521	9	11	25	21	3
SD95-1567	30	42	29	16	11
SD(ND)95-1663	4	28	5	3	9
SD(ND)95-1664	1	41	1	1	10

PRELIMINARY TEST 0, 1998

MATURITY (date)

Strain	Mean 4 Tests	Morris MN	Rosemount MN	Casselton ND	Brookings SD
Agassiz (E)	-5.3	-7	-8	-6	-10
Lambert (O)	09/13	09/18	09/06	09/25	09/05
Parker (I)	6.5	4	14	8	+4
Surge	1.3	0	5	0	+3
Trall	-6.3	-7	-6	-12	-3
M91-131051	-2.3	-5	-2	-2	-1
M91-134038	1.5	2	5	-1	+2
M91-141046	1.5	-3	8	1	+2
M91-193070	3.3	4	8	1	+2
M91-193087	-1.8	-3	0	-4	-3
M91-196123	0.8	0	5	-2	0
M91-236013	-4.3	-5	-7	-5	-3
M91-236030	-0.5	-5	5	-2	0
M91-245147	-2.8	-5	2	-8	-5
M92-105082	1.5	-2	5	3	+2
M92-105113	-0.8	-1	2	-4	-4
M92-105165	-1.0	0	2	-6	-4
M92-120014	0.0	-2	5	-3	-4
M92-120020	-3.0	-7	-2	-3	-4
M(ND)91-191052	-7.0	-5	-12	-11	-12
ND94-8401	-1.0	-5	2	-1	-3
ND94-9035	-2.0	-5	-1	-2	-4
ND94-9063	-4.0	-3	-8	-5	-10
ND94-9117	-4.0	-7	-3	-6	-9
ND94-9123	-3.3	-7	-3	-3	-10
ND94-9148	-3.5	-3	-6	-5	-10
ND94-9306	-0.8	-3	0	0	-3
ND94-9313	-0.5	-5	2	1	-3
ND94-9332	-0.8	-1	-1	-1	-3
ND94-9344	-1.3	-1	-3	-1	-3
ND95-931	-2.5	-5	-2	-3	-4
ND95-952	-1.5	-3	-2	-1	-4
ND95-955	0.5	2	2	-2	-3
ND95-956	-1.5	-7	2	-1	-3
ND95-962	-4.8	-7	-8	-4	-4
SD95-242	5.0	2	9	9	+5
SD95-794	0.3	-1	2	0	-1
SD95-1189	0.8	-3	5	1	+1
SD95-1518	2.0	0	7	1	0
SD95-1520	0.5	0	4	-2	+1
SD95-1521	3.8	2	7	6	-1
SD95-1567	4.5	3	8	7	+1
SD(ND)95-1663	4.0	2	7	7	+4
SD(ND)95-1664	3.5	-1	8	7	0
Date Planted	05/13	05/22	05/04	05/25	05/04
Days to Mature	122.8	119	125	123	124

PRELIMINARY TEST 0, 1998

LODGING (score)

Strain	Mean 4 Tests	Morris MN	Rosemount MN	Casselton ND	Brookings SD
Agassiz (E)	1.1	1.0	1.0	1.3	1.0
Lambert (O)	1.5	1.0	1.5	1.3	2.0
Parker (I)	1.9	2.0	2.0	1.7	2.0
Surge	1.0	1.0	1.0	1.0	1.0
Traill	1.3	1.0	1.0	1.0	2.0
M91-131051	1.1	1.0	1.0	1.3	1.0
M91-134038	1.0	1.0	1.0	1.0	1.0
M91-141046	1.5	1.0	1.5	1.3	2.0
M91-193070	1.3	1.0	2.0	1.0	1.0
M91-193087	1.0	1.0	1.0	1.0	1.0
M91-196123	1.9	1.0	2.5	2.0	2.0
M91-236013	1.0	1.0	1.0	1.0	1.0
M91-236030	1.4	1.0	1.5	1.0	2.0
M91-245147	1.3	1.0	2.0	1.0	1.0
M92-105082	1.6	2.0	1.0	1.3	2.0
M92-105113	1.3	2.0	1.0	1.0	1.0
M92-105165	1.2	1.0	1.5	1.3	1.0
M92-120014	1.1	1.0	1.5	1.0	1.0
M92-120020	1.0	1.0	1.0	1.0	1.0
M(ND)91-191052	1.0	1.0	1.0	1.0	1.0
ND94-8401	1.3	1.0	1.0	1.0	2.0
ND94-9035	1.1	1.0	1.0	1.3	1.0
ND94-9063	1.1	1.0	1.0	1.3	1.0
ND94-9117	1.3	1.0	1.0	1.0	2.0
ND94-9123	1.2	1.0	1.5	1.3	1.0
ND94-9148	1.1	1.0	1.0	1.3	1.0
ND94-9306	1.5	1.0	1.5	1.3	2.0
ND94-9313	1.3	1.0	1.0	1.3	2.0
ND94-9332	1.6	1.0	2.0	1.3	2.0
ND94-9344	1.4	1.0	1.5	1.0	2.0
ND95-931	1.5	1.0	1.5	1.3	2.0
ND95-952	1.0	1.0	1.0	1.0	1.0
ND95-955	1.0	1.0	1.0	1.0	1.0
ND95-956	1.0	1.0	1.0	1.0	1.0
ND95-962	1.0	1.0	1.0	1.0	1.0
SD95-242	1.7	1.0	1.5	2.3	2.0
SD95-794	1.4	1.0	1.5	1.0	2.0
SD95-1189	1.3	1.0	1.0	1.3	2.0
SD95-1518	1.9	1.0	2.5	2.0	2.0
SD95-1520	1.5	1.0	1.5	1.3	2.0
SD95-1521	2.2	3.0	1.5	2.3	2.0
SD95-1567	2.2	2.0	3.0	1.7	2.0
SD(ND)95-1663	1.5	1.0	1.5	1.3	2.0
SD(ND)95-1664	1.3	1.0	1.0	1.3	2.0

PRELIMINARY TEST 0, 1998

PLANT HEIGHT (inches)

Strain	Mean 4 Tests	Morris MN	Rosemount MN	Casselton ND	Brookings SD
Agassiz (E)	30	38	24	34	23
Lambert (O)	34	42	30	39	23
Parker (I)	34	43	35	38	20
Surge	30	36	24	33	25
Traill	27	32	23	31	22
M91-131051	32	37	27	36	26
M91-134038	32	40	27	38	24
M91-141046	35	43	31	39	26
M91-193070	36	44	31	39	28
M91-193087	36	47	30	40	28
M91-196123	33	40	28	35	28
M91-236013	21	34	11	28	12
M91-236030	29	35	23	34	25
M91-245147	32	40	28	35	26
M92-105082	33	38	28	37	28
M92-105113	32	46	25	34	24
M92-105165	27	34	21	32	22
M92-120014	31	35	27	36	25
M92-120020	30	40	25	32	24
M(ND)91-191052	28	36	24	30	21
ND94-8401	31	34	25	37	26
ND94-9035	31	38	26	35	25
ND94-9063	32	40	28	37	21
ND94-9117	29	35	25	34	22
ND94-9123	30	37	26	38	20
ND94-9148	29	36	24	35	22
ND94-9306	32	42	25	37	22
ND94-9313	31	37	27	34	24
ND94-9332	34	42	28	39	27
ND94-9344	31	39	25	35	25
ND95-931	33	42	26	35	30
ND95-952	31	41	24	31	28
ND95-955	31	39	23	36	25
ND95-956	32	40	22	36	28
ND95-962	32	41	26	32	27
SD95-242	37	45	34	39	29
SD95-794	34	42	31	36	27
SD95-1189	35	39	31	37	32
SD95-1518	36	45	30	38	30
SD95-1520	36	43	29	40	30
SD95-1521	34	42	26	38	30
SD95-1567	36	45	31	39	29
SD(ND)95-1663	37	46	34	37	29
SD(ND)95-1664	36	40	33	38	31

PRELIMINARY TEST 0, 1998

SEED SIZE (g/100)

Strain	Mean 4 Tests	Morris MN	Rosemount MN	Casselton ND	Brookings SD
Agassiz (E)	16.1	16.8	15.5	17.0	14.9
Lambert (O)	17.3	18.1	16.7	18.5	15.8
Parker (I)	17.9	17.1	19.0	17.9	17.7
Surge	21.1	21.6	21.0	21.7	20.1
Traill	16.5	17.1	16.6	17.7	14.7
M91-131051	14.7	14.5	15.4	15.8	13.1
M91-134038	15.9	16.7	15.7	17.0	14.3
M91-141046	15.2	16.1	14.5	15.8	14.3
M91-193070	17.9	18.4	18.0	18.5	16.8
M91-193087	18.0	18.5	18.5	18.1	16.9
M91-196123	20.3	21.5	20.9	19.9	19.0
M91-236013	13.7	13.9	13.9	13.4	13.4
M91-236030	14.1	14.9	13.1	15.1	13.1
M91-245147	14.3	14.7	14.9	14.6	13.1
M92-105082	18.3	19.0	19.5	18.8	16.0
M92-105113	16.6	17.2	19.0	15.7	14.6
M92-105165	17.7	18.8	19.1	17.1	15.8
M92-120014	16.5	14.8	19.2	16.2	15.8
M92-120020	15.6	15.9	15.7	15.9	14.9
M(ND)91-191052	16.2	17.5	15.8	16.1	15.2
ND94-8401	16.5	17.2	17.4	16.3	15.0
ND94-9035	17.9	18.6	17.7	18.7	16.5
ND94-9063	18.0	19.5	17.6	18.7	16.3
ND94-9117	17.4	18.3	17.3	18.8	15.3
ND94-9123	18.2	19.2	18.6	19.4	15.4
ND94-9148	18.3	19.1	17.8	19.9	16.3
ND94-9306	15.4	16.5	15.7	15.9	13.6
ND94-9313	15.6	15.7	16.4	16.1	14.2
ND94-9332	16.9	17.7	16.8	16.8	16.2
ND94-9344	16.2	17.6	16.5	16.3	14.4
ND95-931	18.9	20.2	18.6	19.3	17.6
ND95-952	18.2	19.8	17.0	18.7	17.2
ND95-955	17.6	18.4	18.1	17.4	16.4
ND95-956	17.2	17.9	18.7	17.4	14.9
ND95-962	17.5	18.8	16.5	18.3	16.3
SD95-242	18.0	17.7	18.1	19.0	17.0
SD95-794	16.4	15.7	17.1	17.5	15.4
SD95-1189	17.7	17.4	17.7	18.0	17.8
SD95-1518	18.2	18.1	18.9	19.0	16.8
SD95-1520	22.0	22.8	23.0	22.4	19.8
SD95-1521	20.4	19.5	21.2	22.6	18.3
SD95-1567	16.1	14.9	17.4	16.9	15.2
SD(ND)95-1663	18.1	17.4	20.4	18.6	16.1
SD(ND)95-1664	18.3	17.2	19.6	20.8	15.5

PRELIMINARY TEST 0, 1998

PROTEIN (%)

Strain	Mean 4 Tests	Morris MN	Rosemount MN	Casseltown ND	Brookings SD
Agassiz (E)	40.7	41.1	42.1	40.3	39.2
Lambert (O)	40.7	41.8	41.2	41.0	38.9
Parker (I)	41.1	41.2	42.3	40.1	40.6
Surge	41.9	42.0	42.4	42.7	40.6
Traill	41.7	43.0	42.3	40.5	40.9
M91-131051	41.3	42.1	42.2	40.6	40.4
M91-134038	40.4	41.4	41.2	39.6	39.4
M91-141046	40.8	42.6	41.8	40.1	38.7
M91-193070	42.0	42.7	42.8	41.8	40.8
M91-193087	41.4	41.7	42.6	40.3	40.8
M91-196123	43.0	42.7	44.6	42.7	42.1
M91-236013	41.6	41.7	43.1	40.8	40.8
M91-236030	39.4	40.0	40.9	38.4	38.2
M91-245147	41.4	40.6	43.5	41.1	40.4
M92-105082	42.1	42.8	42.2	42.7	40.8
M92-105113	41.8	42.0	42.9	41.0	41.1
M92-105165	42.1	42.7	43.3	40.7	41.6
M92-120014	40.6	40.1	42.4	39.8	40.2
M92-120020	39.8	40.6	41.3	39.0	38.1
M(ND)91-191052	40.2	41.5	41.0	39.2	39.1
ND94-8401	39.2	40.1	41.7	37.9	37.2
ND94-9035	39.4	39.4	40.7	39.7	37.9
ND94-9063	40.0	40.0	40.6	39.8	39.4
ND94-9117	39.5	39.7	41.3	39.0	38.1
ND94-9123	39.4	40.1	41.0	38.0	38.6
ND94-9148	39.9	40.6	40.2	39.1	39.7
ND94-9306	39.8	41.4	41.3	38.2	38.3
ND94-9313	39.6	39.8	41.0	39.5	38.2
ND94-9332	39.8	40.5	41.0	38.9	38.7
ND94-9344	40.6	41.6	41.6	39.9	39.1
ND95-931	40.6	41.5	41.7	40.3	38.9
ND95-952	40.3	40.5	41.7	39.4	39.6
ND95-955	40.4	41.0	41.5	39.6	39.5
ND95-956	40.6	40.7	42.1	40.2	39.2
ND95-962	40.1	40.1	41.3	39.1	39.9
SD95-242	40.6	40.7	41.8	40.7	39.0
SD95-794	41.2	42.2	42.4	40.4	39.7
SD95-1189	41.8	41.5	43.4	41.7	40.4
SD95-1518	41.2	40.8	42.9	41.8	39.4
SD95-1520	41.0	41.6	41.7	40.7	39.8
SD95-1521	40.6	39.8	42.2	41.5	39.0
SD95-1567	39.9	40.7	41.5	39.5	37.9
SD(ND)95-1663	39.8	40.6	41.2	39.2	38.3
SD(ND)95-1664	39.6	40.4	40.6	39.5	37.8

PRELIMINARY TEST 0, 1998

OIL (%)

Strain	Mean 4 Tests	Morris MN	Rosemount MN	Casselton ND	Brookings SD
Agassiz (E)	21.1	21.3	20.4	20.9	21.6
Lambert (O)	21.2	21.3	20.8	20.7	21.8
Parker (I)	20.9	21.1	20.2	20.6	21.5
Surge	20.8	21.2	20.5	20.3	21.2
Traill	20.2	19.9	19.9	20.6	20.5
M91-131051	20.7	20.7	20.4	20.7	21.1
M91-134038	21.3	21.0	21.2	20.8	22.1
M91-141046	20.9	20.2	19.8	21.0	22.4
M91-193070	20.5	20.5	20.7	19.8	21.0
M91-193087	20.5	20.6	19.9	20.8	20.6
M91-196123	19.7	20.5	18.7	19.5	19.9
M91-236013	20.2	20.4	19.4	20.6	20.3
M91-236030	21.6	21.7	21.0	21.3	22.5
M91-245147	20.1	20.2	19.4	20.7	20.1
M92-105082	20.7	20.4	21.0	20.3	21.0
M92-105113	20.6	20.6	20.3	20.8	20.7
M92-105165	20.1	20.1	19.6	20.3	20.2
M92-120014	21.3	21.9	20.8	21.2	21.2
M92-120020	21.3	21.5	20.7	21.7	21.4
M(ND)91-191052	21.5	21.7	21.5	21.6	21.3
ND94-8401	21.6	21.8	20.8	21.7	21.9
ND94-9035	21.9	22.0	21.8	21.7	22.0
ND94-9063	21.7	22.1	21.6	21.6	21.3
ND94-9117	21.8	21.7	21.5	21.9	22.2
ND94-9123	21.8	21.9	21.5	21.7	22.2
ND94-9148	21.6	21.9	21.4	21.4	21.7
ND94-9306	21.5	21.2	20.7	22.0	22.1
ND94-9313	21.6	21.9	20.9	21.6	21.9
ND94-9332	21.3	21.6	20.7	21.4	21.6
ND94-9344	21.2	21.0	20.6	21.4	21.6
ND95-931	21.4	21.3	21.2	21.1	21.9
ND95-952	21.5	21.4	21.5	21.7	21.5
ND95-955	21.4	21.1	21.3	21.2	21.8
ND95-956	21.3	21.5	20.6	21.2	22.0
ND95-962	21.4	21.4	21.1	21.5	21.4
SD95-242	21.4	21.3	21.0	21.0	22.3
SD95-794	21.1	20.8	20.7	20.9	22.1
SD95-1189	21.1	21.3	20.4	20.7	22.0
SD95-1518	20.7	21.3	19.9	19.9	21.5
SD95-1520	21.0	20.3	20.9	21.1	21.7
SD95-1521	21.2	21.7	20.9	20.3	22.0
SD95-1567	21.4	21.1	21.2	21.2	22.1
SD(ND)95-1663	21.9	21.8	21.2	21.9	22.6
SD(ND)95-1664	21.9	21.9	21.3	21.9	22.3

Uniform Test I, 1998

	Strain	Parentage	Previous Testing	Generation Compositied	Unique Traits
1.	Freeborn (SCN)	Ozzie x Fayette	2	F8	Rps1, SCN 3
2.	IA1006 (BSR)	IA2008 x Kenwood	4	F5	BSR
3.	Lambert (0)	M75-274 x M76-151	6	F5	Rps1
4.	Marcus 95 (L)	[Marcus (5) x Elgin 87] x [Marcus (5) x Preston BC-11-1]	5	BC4F2	Rps1-k, Rps6
5.	Parker (I)	A79-136012 x Dawson	9	F5	Rps1
6.	A95-483010	Northrup King S20-20 x Jack	SCN I	?	SCN
7.	A95-583021	Pioneer 9241 x Jack	SCN I	?	SCN
8.	A96-492041	NK S24-92 x NK S19-90	PT I	F5	
9.	A96-492058	IA3003 x NK S24-92	PT I	F5	
10.	A96-494018	Northrup King S24-92 x A91-501002	PT I	F5	BSR
11.	M90-166054	Parker x Archer	PT I	F5	Rps1-k, BSR
12.	M90-178161	M85-23 x A20	PT I	F5	Rps1, BSR
13.	M90-184111	L85P-558 x M86-1973	1	F5	Rps1, SCN
14.	M90-162034	Burlison x M84-93	UT 0	F5	Rps1-c, Rps3?
15.	M91-1137	Kasota x Kenwood	2	F5	Rps1-c
16.	M91-113037	Parker x Archer	PT I	F4	Rps1-k, BSR
17.	M92-1645	Faribault x Bell	2	F5	SCN
18.	M92-1708	Kato x Bell	2	F5	SCN
19.	ND93-5936	M83-899 x Pioneer 9061	UT 0	F4	
20.	ND(SD)92-2381	M83-64 x Pioneer 9091	UT 0	F5	Rps1-k
21.	SD94-215	Sibley x Archer	PT I	F5	BSR
22.	SD94-808	Parker x Archer	PT IIB	F5	
23.	SD94-1370	SD87001 x Leslie	PT I	F5	
24.	SD(ND)94-9218	Lambert x Pioneer 9061	UT 0	F5	
25.	U95-2418	MSBP1	1	F7	

UNIFORM TEST I, 1998

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score		Emerg. Score Ames
		Humboldt	Yellow Medicine Co.	
Freeborn (SCN)	WTBDYBlEpI	2.6	3.7	2.0
IA 1006 (BSR)	WTBSYBlEpI	2.9	4.2	3.0
Lambert (0)	PGBSYBfepSD	2.8	3.3	1.0
Marcus 95 (L)	WTTDYBfepI	4.6	4.8	1.0
Parker (I)	WGBDYBfEpI	4.0	5.0	5.0
A95-483010	WGBDYYesI	3.4	4.8	1.0
A95-583021	WGBIYYEpI	3.0	5.0	3.0
A96-492041	PTBDYGrepI	4.4	5.0	1.0
A96-492058	PTBDYBlEpI	5.0	4.8	2.0
A96-494018	PTBSYBlEpI	4.6	4.3	2.0
M90-166054	WGBDYBfHI	3.0	4.5	2.0
M90-178161	WGBSYBfHI	2.6	3.3	1.0
M90-184111	WGBDYBfEpI	3.6	4.0	1.0
M90-162034	WGTDYBfEpI	2.1	4.5	2.0
M91-1137	PGBSDYBfepI	2.5	3.7	1.0
M91-113037	WGTDYBfHI	4.8	4.7	5.0
M92-1645	PGTDYIbEpI	2.5	3.8	1.0
M92-1708	PTBDYBlEpI	2.9	4.0	5.0
ND93-5936	PGBDYBfEpI	3.3	4.5	3.0
ND(SD)92-2381	PGBDYYesI	3.0	4.5	4.0
SD94-215	PGBDYGrEpI	2.3	3.2	2.0
SD94-808	WGBDYBfepI	2.6		1.0
SD94-1370	PGTDYIbepI	3.0	4.0	2.0
SD(ND)94-9218	PGBSYBfHI	3.0	4.0	1.0
U95-2418	WGBDYYesI	3.8	4.8	2.0

UNIFORM TEST I, 1998

DISEASE DATA

Strain	BSR	PR	Hard Seed	PS	PSB
	Arlington (0-11)	Lafayette Race 7	%	Lafayette a %	n %
Freeborn (SCN)	0.0	R	12	26	6
IA1006 (BSR)	0.3	H	12	20	14
Lambert (0)	7.7	S	32	42	2
Marcus 95 (L)	4.3	R	14	40	8
Parker (I)	6.0	S	26	18	6
A95-483010	4.3	R	0	22	0
A95-583021	7.0	H	8	0	4
A96-492041	4.3	H	2	4	2
A96-492058	2.7	S	2	8	12
A96-494018	0.0	S	2	10	2
M90-166054	2.0	R	14	32	2
M90-178161	6.3	S	14	38	10
M90-184111	6.0	H	2	18	12
M90-162034	5.0	R	14	42	12
M91-1137	5.0	R	6	32	0
M91-113037	3.7	R	2	16	10
M92-1645	3.3	R	0	24	8
M92-1708	4.3	H	6	16	16
ND93-5936	6.7	S	4	28	4
ND(SD)92-2381	6.3	R	0	20	8
SD94-215	0.0	S	16	18	0
SD94-808	6.0	S	4	14	4
SD94-1370	0.7	R	14	14	4
SD(ND)94-9218	6.7	S	6	32	6
U95-2418	5.0	S	4	38	2

UNIFORM TEST I, 1998

SDS DATA

Strain	DX	SDS Data		Test
		Bloomington	DS	
Freeborn (SCN)	0.0	0.0	0.0	B1
IA1006 (BSR)	2.2	15.3	0.8	B1
Lambert (0)	0.1	0.7	0.3	B1
Marcus 95 (L)	0.2	1.7	0.7	B1
Parker (I)	0.1	1.3	0.3	B1
A95-483010	0.6	3.3	0.5	B1
A95-583021	0.4	2.7	1.4	B1
A96-492041	5.1	30.3	1.5	B1
A96-492058	0.7	5.7	0.7	B1
A96-494018	0.1	1.0	0.3	B1
M90-166054	0.1	0.7	0.5	B1
M90-178161	0.1	0.3	0.3	B1
M90-184111	0.3	2.3	0.9	B1
M90-162034	0.0	0.0	0.0	B1
M91-1137	0.5	4.3	0.7	B1
M91-113037	0.0	0.0	0.0	B1
M92-1645	0.0	0.0	0.0	B1
M92-1708	0.1	0.3	0.3	B1
ND93-5936	0.0	0.0	0.0	B1
ND(SD)92-2381	0.0	0.0	0.0	B1
SD94-215	0.3	2.3	0.7	B1
SD94-808	0.1	0.7	0.4	B1
SD94-1370	0.1	0.7	0.3	B1
SD(ND)94-9218	0.0	0.0	0.0	B1
U95-2418	3.8	27.3	1.1	B1

UNIFORM TEST I, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Size	Composition	
	12 bu/a	12 No.	11 Date	12 Score	12 In.	11 g/100	Protein 5 %	Oil 5 %
Freeborn (SCN)	51.8	15	1.3	2.0	34	18.2	43.3	20.3
IA1006 (BSR)	55.4	9	2.0	2.5	38	16.7	41.7	19.8
Lambert (0)	47.0	22	-5.1	2.3	29	16.6	42.7	20.2
Marcus 95 (L)	55.7	7	3.1	2.1	34	17.5	41.9	20.6
Parker (I)	51.2	16	09/14	3.2	37	17.9	42.3	20.2
A95-483010 <i>IA1008</i>	56.8	5	3.4	1.8	38	18.7	41.8	19.6
A95-583021 <i>IA1009</i>	55.9	6	2.9	3.3	35	15.4	41.6	20.4
A96-492041	57.9	4	2.6	1.4	32	16.1	40.4	20.0
A96-492058	58.4	2	2.4	1.8	33	17.6	42.2	20.0
A96-494018	59.6	1	3.6	1.9	33	17.2	41.8	19.9
M90-166054	54.4	12	1.8	2.6	35	17.9	42.4	20.0
M90-178161	50.2	19	-0.5	2.4	33	15.8	40.4	20.1
M90-184111	55.5	8	3.2	2.6	34	16.7	40.2	21.4
M90-162034	47.1	21	-4.0	1.6	29	17.1	43.5	19.2
M91-1137	54.5	10	1.8	2.3	38	16.0	42.7	20.4
M91-113037	54.5	10	1.0	2.0	34	17.9	40.7	20.7
M92-1645	53.9	13	1.8	2.1	34	16.2	42.6	20.3
M92-1708	50.0	20	0.7	2.1	34	20.1	43.8	19.5
ND93-5936	46.6	23	-3.7	2.5	34	16.0	40.7	20.7
ND(SD)92-2381	44.0	25	-3.3	2.5	32	15.9	41.4	20.6
SD94-215	51.0	17	2.7	2.5	35	17.8	41.5	20.4
SD94-808	53.6	14	3.3	2.8	38	17.7	41.5	20.5
SD94-1370	51.0	17	0.2	2.1	34	17.3	42.4	20.0
SD(ND)94-9218	44.7	24	-5.8	2.0	30	15.5	40.8	21.0
U95-2418	58.2	3	2.8	2.8	34	16.3	41.0	20.3

124.5 Days After Planting

UNIFORM TEST I, 1998

1997-1998 2-YEAR MEAN

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Size	Composition	
	27 bu/a	27 No.	23 Date	27 Score	27 In.	25 g/100	Protein 10 %	Oil 10 %
Freeborn (SCN)	48.0	9	0.6	1.7	33	18.0	42.4	20.3
IA1006 (BSR)	52.6	3	2.6	2.2	37	16.8	40.9	19.8
Lambert (0)	44.5	10	-6.2	1.9	30	16.5	41.7	20.4
Marcus 95 (L)	53.5	2	4.3	2.0	33	17.3	40.9	20.7
Parker (I)	48.8	7	9/17	2.8	37	17.7	41.4	20.2
M90-184111	52.5	4	3.8	2.3	33	16.6	39.8	21.3
M91-1137	51.5	5	2.1	2.0	37	15.7	41.8	20.2
M92-1645	50.8	6	2.0	1.8	33	16.1	41.7	20.4
M92-1708	48.4	8	0.4	1.9	34	19.8	43.4	19.3
U95-2418	55.5	1	3.6	2.2	34	16.3	40.6	20.2

125.2 Days After Planting

1996-1998 3-YEAR MEAN

No. of Tests Strain	41	41	36	41	41	39	15	15
Freeborn (SCN)	47.5	6	1.3	1.7	33	18.0	42.6	20.3
Lambert (0)	43.9	7	-6.2	1.8	30	16.5	42.2	20.5
Marcus 95 (L)	51.9	1	4.5	1.9	32	17.3	41.3	20.7
Parker (I)	48.9	4	9/18	2.7	36	17.6	41.5	20.3
M91-1137	51.3	2	2.5	1.8	37	15.7	42.1	20.3
M92-1645	50.0	3	2.3	1.7	32	16.1	42.1	20.5
M92-1708	48.1	5	0.8	1.8	33	20.0	43.7	19.4

122.5 Days After Planting

UNIFORM TEST I, 1998

YIELD (bu/a)

Strain	Mean 12 Tests	Kanawha IA	Sioux Rapids IA	Lafayette IN	Lamber- ton MN	Waseca MN
Freeborn (SCN)	51.8	50.8	55.1	50.7	42.8	65.0
IA1006 (BSR)	55.4	49.7	54.6	45.8	52.2	75.8
Lambert (O)	47.0	43.5	57.6	28.2	47.1	68.5
Marcus 95 (L)	55.7	47.7	63.0	40.2	51.5	77.7
Parker (I)	51.2	45.6	58.6	38.3	49.9	64.7
A95-483010	56.8	46.7	63.3	55.0	48.8	69.7
A95-583021	55.9	53.3	58.8	47.1	55.6	66.8
A96-492041	57.9	48.6	65.2	52.0	53.0	78.9
A96-492058	58.4	42.8	61.7	48.1	58.8	85.8
A96-494018	59.6	47.6	61.6	51.7	50.4	79.8
M90-166054	54.4	45.0	62.6	49.9	50.1	68.1
M90-178161	50.2	37.1	55.1	40.5	43.5	75.7
M90-184111	55.5	50.5	57.6	48.1	55.1	73.6
M90-162034	47.1	36.1	52.5	34.8	44.4	63.9
M91-1137	54.5	49.5	59.0	53.9	49.9	68.8
M91-113037	54.5	44.1	62.8	45.7	48.8	70.9
M92-1645	53.9	50.2	59.3	51.6	49.3	70.1
M92-1708	50.0	53.3	59.1	49.8	40.7	70.5
ND93-5936	46.6	36.8	54.6	36.9	44.3	75.8
ND(SD)92-2381	44.0	35.9	47.7	38.3	42.3	64.9
SD94-215	51.0	49.8	59.2	39.0	46.8	70.0
SD94-808	53.6	42.2	59.1	44.9	54.0	68.7
SD94-1370	51.0	46.2	55.9	43.7	51.0	69.9
SD(ND)94-9218	44.7	31.5	50.7	30.3	40.9	63.9
U95-2418	58.2	41.7	65.2	48.9	57.2	79.1
C.V. (%)		8.1	7.3	13.6	8.0	7.6
L.S.D. (5%)		3.0	3.4	9.9	6.4	8.9
Row Sp. (In.)		27	27	24	10	10
Rows/Plot		4	4	4	10	10
Reps		3	3	3	3	3

UNIFORM TEST I, 1998

YIELD (bu/a)

Strain	Cotes- field NE	Harting- ton NE	Ridge- town Ont.	Talbotville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Freeborn (SCN)	43.4	27.4	64.3	72.4	32.8	48.6	68.9
IA1006 (BSR)	44.6	43.6	65.0	75.1	37.4	53.4	68.3
Lambert (0)	29.5	26.2	67.7	67.0	22.6	51.2	54.8
Marcus 95 (L)	51.4	43.7	70.0	67.7	36.7	58.7	60.2
Parker (I)	40.9	39.9	57.3	71.1	36.5	50.4	61.8
A95-483010	50.6	44.5	71.0	76.4	38.7	50.9	66.5
A95-583021	54.6	46.8	69.7	66.2	40.3	57.0	54.9
A96-492041	51.4	48.2	72.7	73.9	37.1	55.2	59.0
A96-492058	51.8	42.8	74.7	72.0	43.1	57.2	62.1
A96-494018	55.3	53.7	74.3	68.6	38.4	59.2	74.7
M90-166054	48.8	37.5	74.0	67.2	31.9	54.9	63.5
M90-178161	33.7	25.2	71.0	78.1	34.7	51.3	56.0
M90-184111	52.5	35.1	67.0	73.0	34.3	58.3	61.0
M90-162034	32.7	24.4	66.0	67.5	35.2	49.2	58.9
M91-1137	52.4	42.0	57.7	70.4	34.2	55.3	60.5
M91-113037	51.4	36.9	69.3	66.9	36.6	54.5	65.6
M92-1645	41.9	37.2	64.3	66.5	34.9	54.6	66.5
M92-1708	36.3	29.8	57.3	66.9	32.5	50.1	53.4
ND93-5936	30.1	22.9	64.3	62.6	30.6	43.1	57.3
ND(SD)92-2381	32.4	23.1	64.3	54.2	31.1	41.8	51.6
SD94-215	38.3	39.3	57.7	69.2	36.2	51.7	55.4
SD94-808	47.9	41.7	66.7	72.5	36.5	51.6	56.9
SD94-1370	42.3	31.8	60.3	66.7	33.6	44.3	66.1
SD(ND)94-9218	34.7	20.0	62.0	65.7	27.0	51.1	58.1
U95-2418	51.7	46.8	71.7	68.3	42.8	64.1	60.7
C.V. (%)	8.4	8.5	8.5	6.2	16.5	6.9	7.6
L.S.D. (5%)	14.6	10.4	7.7	5.9	9.5	6.0	5.3
Row Sp. (In.)	30	30	17	14	30	30	7.5
Rows/Plot	4	4	5	4	4	4	8
Reps	2	3	3	4	2	3	3

UNIFORM TEST I, 1998

YIELD RANK

Strain	Yield Rank	Kanawha IA	Sioux Rapids IA	Lafayette IN	Lamber- ton MN	Waseca MN
Freeborn (SCN)	15	3	19	6	22	21
IA1006 (BSR)	9	7	21	13	7	6
Lambert (0)	22	17	16	25	17	18
Marcus 95 (L)	7	10	4	18	8	5
Parker (I)	16	14	15	20	12	23
A95-483010	5	12	3	1	15	15
A95-583021	6	1	14	12	3	20
A96-492041	4	9	1	3	6	4
A96-492058	2	18	7	10	1	1
A96-494018	1	11	8	4	10	2
M90-166054	12	15	6	7	11	19
M90-178161	19	21	20	17	21	8
M90-184111	8	4	17	10	4	9
M90-162034	21	23	23	23	19	24
M91-1137	10	8	13	2	12	16
M91-113037	10	16	5	14	15	10
M92-1645	13	5	9	5	14	12
M92-1708	20	2	11	8	25	11
ND93-5936	23	22	22	22	20	6
ND(SD)92-2381	25	24	25	20	23	22
SD94-215	17	6	10	19	18	13
SD94-808	14	19	12	15	5	17
SD94-1370	17	13	18	16	9	14
SD(ND)94-9218	24	25	24	24	24	24
U95-2418	3	20	2	9	2	3

UNIFORM TEST I, 1998

YIELD RANK

Strain	Cotes- field NE	Harting- ton NE	Ridge- town Ont.	Talbotville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Freeborn (SCN)	14	19	16	7	19	22	2
IA1006 (BSR)	13	7	15	3	6	12	3
Lambert (0)	25	20	11	17	25	16	25
Marcus 95 (L)	8	6	8	14	8	3	15
Parker (I)	17	11	24	9	10	19	10
A95-483010	10	5	6	2	4	18	4
A95-583021	2	3	9	22	3	6	24
A96-492041	9	2	4	4	7	8	16
A96-492058	5	8	1	8	1	5	9
A96-494018	1	1	2	12	5	2	1
M90-166054	11	13	3	16	21	9	8
M90-178161	21	21	6	1	15	15	22
M90-184111	3	16	12	5	16	4	12
M90-162034	22	22	14	15	13	21	17
M91-1137	4	9	22	10	17	7	14
M91-113037	7	15	10	19	9	11	7
M92-1645	16	14	16	21	14	10	4
M92-1708	19	18	24	18	20	20	26
ND93-5936	24	24	16	24	23	24	20
ND(SD)92-2381	23	23	16	25	22	25	27
SD94-215	18	12	22	11	12	13	23
SD94-808	12	10	13	6	10	14	21
SD94-1370	15	17	21	20	18	23	6
SD(ND)94-9218	20	25	20	23	24	17	18
U95-2418	6	4	5	13	2	1	13

UNIFORM TEST I, 1998

MATURITY (date)

Strain	Mean 11 Tests	Kanawha IA	Sioux Rapids IA	Lafayette IN	Lamber- ton MN	Waseca MN
Freeborn (SCN)	1.3	1		-1	3	0
IA1006 (BSR)	2.0	2		-1	5	1
Lambert (0)	-5.1	-7		-8	-6	-9
Marcus 95 (L)	3.1	3		4	7	3
Parker (I)	09/14	09/14		09/01	09/17	09/15
A95-483010	3.4	2		3	5	3
A95-583021	2.9	2		3	5	1
A96-492041	2.6	2		4	5	0
A96-492058	2.4	2		4	3	-1
A96-494018	3.6	2		4	4	-1
M90-166054	1.8	-1		1	2	1
M90-178161	-0.5	-1		-1	0	-2
M90-184111	3.2	3		1	7	1
M90-162034	-4.0	-7		-7	-6	-10
M91-1137	1.8	2		2	5	-2
M91-113037	1.0	-1		-1	2	-1
M92-1645	1.8	2		3	3	0
M92-1708	0.7	-2		2	2	-2
ND93-5936	-3.7	-7		-5	-4	-7
ND(SD)92-2381	-3.3	-5		-7	-3	-8
SD94-215	2.7	1		1	5	-2
SD94-808	3.3	3		2	7	3
SD94-1370	0.2	-1		-2	3	-1
SD(ND)94-9218	-5.8	-10		-8	-7	-10
U95-2418	2.8	2		4	7	2
Date Planted	05/13	05/18		05/16	05/12	05/05
Days to Mature	124.5	119		108	128	133

UNIFORM TEST I, 1998

MATURITY (date)

Strain	Cotes- field NE	Harting- ton NE	Ridge- town Ont.	Talbotville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Freeborn (SCN)	-1	-1	3	3	-3	+2	7
IA1006 (BSR)	4	2	3	0	-2	+6	6
Lambert (0)	-5	-7	-4	-7	-7	-3	-3
Marcus 95 (L)	3	3	3	1	-1	+6	7
Parker (I)	09/10	09/12	09/12	10/10	09/11	09/18	09/12
A95-483010	5	1	6	4	0	+5	9
A95-583021	6	4	6	3	-2	+1	2
A96-492041	6	5	2	3	0	+3	1
A96-492058	2	3	5	5	0	+4	3
A96-494018	8	6	4	4	0	+6	8
M90-166054	3	0	3	3	+1	0	7
M90-178161	0	-5	1	3	-2	0	-1
M90-184111	8	3	6	2	0	+2	4
M90-162034	-4	-5	-3	-1	-4	-6	-1
M91-1137	4	3	1	0	0	-1	5
M91-113037	4	1	1	1	-3	+2	5
M92-1645	1	1	2	3	0	+7	5
M92-1708	1	0	2	1	0	+2	4
ND93-5936	-5	-6	-2	-2	-2	+1	-3
ND(SD)92-2381	-4	-5	-1	-1	-2	+1	-2
SD94-215	7	2	4	4	-2	+6	8
SD94-808	3	3	5	5	+1	+5	5
SD94-1370	-2	-1	0	1	-2	+2	5
SD(ND)94-9218	-6	-8	-5	-6	-3	-8	-3
U95-2418	4	2	4	4	+2	+2	2
Date Planted	05/18	05/14	05/22	05/14	05/04	05/11	05/12
Days to Mature	115	121	113	149	130	130	123

UNIFORM TEST I, 1998

LODGING (score)

Strain	Mean 12 Tests	Kanawha IA	Sioux Rapids IA	Lafayette IN	Lamber- ton MN	Waseca MN
Freeborn (SCN)	2.0	1.7	2.4	1.3	2.7	2.3
IA1006 (BSR)	2.5	2.1	2.6	1.3	3.0	3.3
Lambert (O)	2.3	1.7	2.2	1.0	3.0	2.0
Marcus 95 (L)	2.1	1.8	2.3	1.2	2.3	3.0
Parker (I)	3.2	2.2	4.0	1.7	4.0	4.7
A95-483010	1.8	1.4	1.9	1.2	2.3	2.7
A95-583021	3.3	2.1	3.5	2.8	3.7	4.3
A96-492041	1.4	1.6	1.5	1.0	2.0	2.0
A96-492058	1.8	1.5	1.8	1.0	2.0	2.0
A96-494018	1.9	1.7	1.7	1.5	2.0	2.3
M90-166054	2.6	1.9	2.4	1.7	3.7	3.3
M90-178161	2.4	1.8	2.5	1.2	3.0	2.7
M90-184111	2.6	1.8	3.1	1.0	3.7	3.0
M90-162034	1.6	1.4	2.1	1.0	2.3	2.0
M91-1137	2.3	1.8	2.2	1.8	3.0	2.3
M91-113037	2.0	1.4	2.2	1.2	2.3	2.3
M92-1645	2.1	1.6	2.0	1.2	3.0	2.3
M92-1708	2.1	2.1	2.8	1.2	2.7	2.0
ND93-5936	2.5	2.0	2.8	1.7	3.0	2.0
ND(SD)92-2381	2.5	1.9	2.6	1.5	4.0	2.3
SD94-215	2.5	1.7	2.5	1.3	4.0	2.3
SD94-808	2.8	1.9	3.1	1.7	4.0	3.7
SD94-1370	2.1	1.7	2.5	1.3	2.7	2.7
SD(ND)94-9218	2.0	1.4	1.8	1.0	2.3	2.0
U95-2418	2.8	2.0	3.3	1.5	2.7	2.7

UNIFORM TEST I, 1998

LODGING (score)

Strain	Cotes- field NE	Harting- ton NE	Ridge- town Ont.	Talbotville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Freeborn (SCN)	1.7	1.0	2.3	2.1	1.0	3.0	3.0
IA1006 (BSR)	2.3	2.0	3.0	2.4	2.0	3.0	3.0
Lambert (O)	3.0	1.0	2.0	2.3	2.0	3.0	4.3
Marcus 95 (L)	2.0	1.3	2.0	1.9	2.0	3.0	2.7
Parker (I)	2.7	1.7	3.0	4.0	2.0	4.0	4.7
A95-483010	2.0	1.0	2.0	1.6	1.0	2.0	2.0
A95-583021	3.0	2.0	3.0	3.9	2.0	4.0	5.0
A96-492041	1.0	1.0	1.0	1.1	2.0	2.0	1.0
A96-492058	1.3	1.0	1.0	2.1	2.0	3.0	2.7
A96-494018	2.0	1.0	1.7	2.6	2.0	2.0	2.0
M90-166054	2.0	1.3	2.3	3.3	2.0	4.0	3.7
M90-178161	2.0	1.0	2.3	2.1	2.0	4.0	3.7
M90-184111	2.3	1.3	2.7	3.0	2.0	4.0	3.7
M90-162034	1.0	1.0	1.0	1.4	1.0	3.0	2.3
M91-1137	2.0	1.3	2.0	2.4	2.0	3.0	3.3
M91-113037	1.7	1.0	2.0	2.1	2.0	3.0	2.3
M92-1645	1.7	1.0	2.3	2.6	2.0	3.0	2.7
M92-1708	1.3	1.0	3.0	1.5	2.0	3.0	3.0
ND93-5936	2.3	1.0	2.3	3.1	2.0	3.0	4.7
ND(SD)92-2381	1.3	1.3	2.7	3.1	2.0	4.0	3.7
SD94-215	2.0	1.3	3.0	3.0	2.0	3.0	4.0
SD94-808	2.3	2.0	2.7	3.3	2.0	3.0	3.7
SD94-1370	1.7	1.0	1.3	2.1	2.0	3.0	2.7
SD(ND)94-9218	2.7	1.0	2.0	1.6	2.0	3.0	3.7
U95-2418	2.7	1.3	2.7	4.4	2.0	4.0	4.0

UNIFORM TEST I, 1998

PLANT HEIGHT (inches)

Strain	Mean 12 Tests	Kanawha IA	Sioux Rapids IA	Lafayette IN	Lamber- ton MN	Waseca MN
Freeborn (SCN)	34	30	35	33	41	36
IA1006 (BSR)	38	37	44	34	44	41
Lambert (0)	29	28	36	23	39	22
Marcus 95 (L)	34	34	41	28	42	39
Parker (I)	37	36	39	34	42	39
A95-483010	38	32	43	37	46	42
A95-583021	35	34	39	30	40	37
A96-492041	32	29	35	31	38	38
A96-492058	33	30	38	31	41	38
A96-494018	33	28	36	31	40	38
M90-166054	35	35	40	33	42	37
M90-178161	33	29	36	27	39	34
M90-184111	34	34	38	29	41	36
M90-162034	29	28	34	24	37	32
M91-1137	38	37	42	35	44	39
M91-113037	34	31	40	31	41	37
M92-1645	34	32	36	30	43	39
M92-1708	34	34	39	32	41	38
ND93-5936	34	33	39	31	40	39
ND(SD)92-2381	32	31	37	29	41	36
SD94-215	35	39	41	31	43	39
SD94-808	38	37	43	32	44	42
SD94-1370	34	31	38	30	41	39
SD(ND)94-9218	30	25	33	24	38	32
U95-2418	34	29	39	31	42	37

UNIFORM TEST I, 1998

PLANT HEIGHT (inches)

Strain	Cotes- field NE	Harting- ton NE	Ridge- town Ont.	Talbotville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Freeborn (SCN)	35	30	40	38	21	32	35
IA1006 (BSR)	35	36	42	42	26	37	36
Lambert (0)	28	27	36	39	17	27	30
Marcus 95 (L)	30	29	39	36	22	31	36
Parker (I)	40	33	41	44	25	37	36
A95-483010	36	33	41	43	26	35	39
A95-583021	35	30	41	38	25	34	33
A96-492041	27	28	33	33	26	30	33
A96-492058	27	29	35	37	25	28	34
A96-494018	32	28	36	37	25	28	36
M90-166054	37	32	37	39	22	36	33
M90-178161	31	32	37	43	23	34	35
M90-184111	34	30	40	37	19	32	33
M90-162034	24	26	34	34	22	30	28
M91-1137	36	34	39	41	30	37	39
M91-113037	34	31	37	38	24	32	35
M92-1645	30	30	39	37	20	33	35
M92-1708	35	30	37	38	21	33	35
ND93-5936	29	30	39	39	22	30	35
ND(SD)92-2381	26	29	35	36	23	34	31
SD94-215	31	35	38	37	27	31	25
SD94-808	38	34	39	44	28	38	36
SD94-1370	29	30	37	36	25	35	31
SD(ND)94-9218	31	27	32	33	19	30	33
U95-2418	34	30	38	36	24	29	34

UNIFORM TEST I, 1998

SEED SIZE (g/100)

Strain	Mean 11 Tests	Kanawha IA	Sioux Rapids IA	Lafayette IN	Lamber- ton MN	Waseca MN
Freeborn (SCN)	18.2	17.9	19.0	16.0	17.5	19.8
IA1006 (BSR)	16.7	16.4	18.2	14.6	16.3	18.5
Lambert (0)	16.6	17.6	17.0	14.1	15.7	15.8
Marcus 95 (L)	17.5	17.6	19.4	15.4	17.3	18.4
Parker (I)	17.9	17.5	18.6	16.6	16.9	19.7
A95-483010	18.7	18.9	19.5	18.4	17.6	18.1
A95-583021	15.4	14.4	16.0	13.8	15.1	17.8
A96-492041	16.1	15.5	17.0	14.4	15.1	17.0
A96-492058	17.6	17.5	18.8	16.1	16.8	18.8
A96-494018	17.2	17.0	17.9	14.5	16.4	18.9
M90-166054	17.9	17.6	18.3	17.0	16.5	18.6
M90-178161	15.8	15.0	16.2	12.7	14.5	16.5
M90-184111	16.7	16.5	16.8	14.2	15.9	18.7
M90-162034	17.1	17.3	18.0	15.5	15.9	16.3
M91-1137	16.0	16.1	17.2	14.7	15.6	16.6
M91-113037	17.9	17.9	19.0	16.1	17.2	18.7
M92-1645	16.2	16.2	16.7	14.5	18.1	15.9
M92-1708	20.1	20.1	20.8	18.9	18.9	19.7
ND93-5936	16.0	15.2	16.4	14.0	14.9	16.1
ND(SD)92-2381	15.9	15.0	16.1	13.2	14.7	16.8
SD94-215	17.8	17.5	19.2	14.6	17.3	18.5
SD94-808	17.7	17.3	18.1	14.5	16.4	18.5
SD94-1370	17.3	16.5	17.8	15.5	16.5	18.8
SD(ND)94-9218	15.5	15.1	16.3	12.6	14.9	15.3
U95-2418	16.3	15.4	17.9	14.3	16.2	16.6

UNIFORM TEST I, 1998

SEED SIZE (g/100)

Strain	Cotes- field NE	Harting- ton NE	Ridge- town Ont.	Talbotville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Freeborn (SCN)	16.9	16.8	19.9	20.6	16.9	18.4	
IA1006 (BSR)	15.7	15.4	18.2	18.9	13.9	17.2	
Lambert (0)	15.5	14.5	18.4	19.5	15.9	18.7	
Marcus 95 (L)	17.7	16.2	19.4	19.0	14.6	17.8	
Parker (I)	17.7	17.1	19.1	19.7	16.2	18.3	
A95-483010	19.0	17.1	19.5	20.7	17.0	19.7	
A95-583021	16.6	14.7	16.3	16.9	13.3	14.5	
A96-492041	16.5	14.7	18.7	18.0	13.7	17.0	
A96-492058	17.5	15.2	19.1	20.1	14.9	18.6	
A96-494018	18.9	15.9	18.4	19.0	16.7	15.9	
M90-166054	17.3	16.2	20.4	19.5	17.0	18.8	
M90-178161	16.1	14.3	20.0	18.1	13.5	16.9	
M90-184111	16.4	16.0	17.8	18.3	15.1	17.4	
M90-162034	16.6	15.2	19.0	18.8	15.5	19.4	
M91-1137	15.1	15.0	17.3	17.9	14.1	16.0	
M91-113037	18.0	18.3	19.7	18.2	15.9	17.6	
M92-1645	16.6	15.1	17.2	17.4	14.7	16.4	
M92-1708	19.1	18.2	21.4	22.6	20.7	21.1	
ND93-5936	17.3	14.6	17.4	18.1	14.9	17.6	
ND(SD)92-2381	17.3	14.8	17.3	16.5	16.0	17.2	
SD94-215	19.1	16.2	20.0	19.3	15.8	18.6	
SD94-808	17.6	16.2	19.6	20.3	18.0	18.6	
SD94-1370	16.5	15.9	18.7	19.5	17.2	17.1	
SD(ND)94-9218	15.2	13.5	17.7	17.6	15.7	16.9	
U95-2418	16.3	15.3	18.5	17.3	14.9	16.7	

UNIFORM TEST I, 1998

PROTEIN (%)

Strain	Mean 5 Tests	Kanawha IA	Sioux Rapids IA	Hartington NE	Watertown SD	Arlington WI
Freeborn (SCN)	43.3	42.9	42.5	43.7	43.5	43.8
IA1006 (BSR)	41.7	41.2	41.0	41.8	42.3	42.3
Lambert (O)	42.7	43.8	41.4	42.8	43.3	42.4
Marcus 95 (L)	41.9	41.1	41.7	42.0	42.9	42.0
Parker (I)	42.3	42.2	41.2	43.5	42.0	42.8
A95-483010	41.8	41.7	40.4	41.9	42.7	42.3
A95-583021	41.6	40.3	41.0	42.4	42.0	42.4
A96-492041	40.4	40.3	39.7	40.5	41.0	40.7
A96-492058	42.2	41.6	41.6	42.3	42.5	43.0
A96-494018	41.8	40.4	40.8	42.4	43.2	42.2
M90-166054	42.4	41.7	41.4	43.1	42.6	43.1
M90-178161	40.4	40.4	39.7	40.5	40.9	40.4
M90-184111	40.2	39.0	39.8	40.6	40.9	40.7
M90-162034	43.5	43.3	43.2	44.4	43.1	43.6
M91-1137	42.7	41.7	42.2	42.6	43.7	43.3
M91-113037	40.7	39.5	39.7	41.1	41.9	41.2
M92-1645	42.6	42.2	42.0	42.8	43.3	42.8
M92-1708	43.8	44.3	41.9	45.1	44.3	43.6
ND93-5936	40.7	41.0	39.7	40.2	42.0	40.6
ND(SD)92-2381	41.4	40.8	40.7	41.8	42.2	41.5
SD94-215	41.5	40.5	40.7	42.1	42.5	41.8
SD94-808	41.5	39.9	40.5	42.4	42.8	41.8
SD94-1370	42.4	41.0	41.4	43.1	44.2	42.2
SD(ND)94-9218	40.8	41.1	39.9	40.6	41.1	41.1
U95-2418	41.0	39.6	40.5	40.9	42.2	41.9

UNIFORM TEST I, 1998

OIL (%)

Strain	Mean 5 Tests	Kanawha IA	Sioux Rapids IA	Hartington NE	Watertown SD	Arlington WI
Freeborn (SCN)	20.3	20.2	20.7	20.3	20.2	19.9
IA1006 (BSR)	19.8	19.9	19.4	19.9	19.9	19.9
Lambert (0)	20.2	19.7	20.8	20.1	20.5	20.0
Marcus 95 (L)	20.6	20.9	20.6	20.6	20.3	20.7
Parker (I)	20.2	20.2	20.3	19.7	20.4	20.3
A95-483010	19.6	19.9	19.8	19.8	19.4	19.2
A95-583021	20.4	20.8	20.7	20.2	20.2	19.9
A96-492041	20.0	19.7	19.8	20.3	20.1	20.0
A96-492058	20.0	20.3	20.1	20.1	20.0	19.5
A96-494018	19.9	20.3	20.1	20.1	19.4	19.7
M90-166054	20.0	20.1	20.1	20.2	20.0	19.7
M90-178161	20.1	20.1	20.1	20.1	20.5	19.7
M90-184111	21.4	22.0	21.9	21.6	21.3	20.4
M90-162034	19.2	19.5	19.0	18.7	19.9	18.8
M91-1137	20.4	20.6	20.6	20.9	19.8	20.3
M91-113037	20.7	20.9	20.7	20.9	20.6	20.4
M92-1645	20.3	20.6	20.5	20.2	20.2	20.2
M92-1708	19.5	19.1	20.4	19.0	19.5	19.6
ND93-5936	20.7	21.1	20.7	20.8	20.2	20.6
ND(SD)92-2381	20.6	20.9	20.8	20.5	20.6	20.4
SD94-215	20.4	20.6	20.6	20.2	20.1	20.6
SD94-808	20.5	21.0	20.5	20.6	19.9	20.5
SD94-1370	20.0	20.6	20.1	19.7	19.4	20.2
SD(ND)94-9218	21.0	20.9	21.7	20.9	21.1	20.4
U95-2418	20.3	20.6	20.4	20.6	19.8	19.9

Preliminary Test I, 1998

	Strain	Parentage	Generation Composited	Unique Traits
1.	IA1006 (BSR)	IA2008 x Kenwood	F5	BSR
2.	Lambert (0)	M75-274 x M76-151	F5	Rps1
3.	Marcus 95 (L)	[Marcus (5) x Elgin 87] x [Marcus (5) x Preston BC-11-1]	BC4F2	Rps1-k, Rps6
4.	Parker (I)	A79-136012 x Dawson	F5	Rps1
5.	A97-770004	Northrup King S20-20 x Pioneer 9231	F5	Chlorosis
6.	A97-770012	Northrup King S20-20 x Asgrow A2234	F5	Chlorosis
7.	A97-771011	IA1006 x IA2021	F5	
8.	A97-771030	IA2021 x ORC 9205	F5	
9.	A97-772004	IA1006 x A92-625002	F5	BSR
10.	A97-772008	IA1006 x IA3003	F5	BSR
11.	A97-772021	A92-627030 x IA3003	F5	
12.	A97-772024	IA1006 x A92-725035	F5	
13.	A97-772030	A92-727017 x A92-625002	F5	
14.	E96006	Sturdy x IA2007	F4	
15.	M91-163126	E86-237 x M87-135	F5	Rps1-a
16.	M91-164003	Pioneer 9061 x Dawes	F5	Rps1-a
17.	M91-166008	IA2008 x Bert	F5	Rps1-a, BSR
18.	M91-166041	IA2008 x Bert	F5	Rps1-a, BSR
19.	M91-166056	IA2008 x Bert	F5	Rps1-a, BSR
20.	M91-166124	IA2008 x Bert	F5	Rps1-a, BSR
21.	M91-178046	M87-180 x Bert	F5	Rps1-a
22.	M91-188039	Leslie x M88-390	F5	Rps1-a
23.	M91-188076	Leslie x M88-390	F5	Rps1-a
24.	M91-234086	Lambert x Archer	F5	Rps1-k, BSR
25.	M91-234134	Lambert x Archer	F5	Rps1-k, BSR
26.	M91-240135	Bert x Archer	F5	Rps1-k, BSR
27.	M92-105044	Agassiz x [Sturdy (4) x Elgin 87]	F4	Rps1-k
28.	M92-106016	Hendricks x Archer	F4	Rps1-k, BSR
29.	ORC 9702	PS 42 x Northrup King S20-20	F5	
30.	ORC 9703	RCAT Tabby x Sturdy	F5	
31.	SD95-224	Parker x Lambert	F5	
32.	SD95-238	Parker x Lambert	F5	
33.	SD95-255	Parker x Lambert	F5	
34.	SD95-477	SD87001 x Archer	F5	
35.	SD95-748	Lambert x parker	F5	
36.	SD95-781	Lambert x Parker	F5	
37.	SD95-789	Lambert x Parker	F5	
38.	SD95-1043	Leslie x parker	F5	
39.	SD95-1480	Glenwood x Parker	F5	

PRELIMINARY TEST I, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis		PR	Hard Seed	PS	PSB
		Score		Lafayette		Lafayette	
		Humboldt	Yellow Medicine Co.	Race 7	%	a %	n %
IA1006 (BSR)	WTBSYBIepI	3.1	4.2	H	12	20	14
Lambert (0)	PGBSYBfepSD	2.6	3.3	S	32	42	2
Marcus 95 (L)	WTTDYBfepI	4.4	4.8	R	14	40	8
Parker (I)	WGBSYBfepI	3.0	5.0	S	26	18	6
A97-770004	PTTSYBIepI	2.9	4.3	R	6	2	4
A97-770012	PGBDYYepI	2.4	3.8	R	6	18	2
A97-771011	WTBSYBIepI	2.9	4.2	R	28	10	2
A97-771030	PTBSYBIepI	3.9	4.7	R	28	6	4
A97-772004	PTBSYGrepI	2.6	3.8	S	14	6	2
A97-772008	PTBSYBIHI	3.6	4.5	S	6	2	4
A97-772021	PTBDYBrepI	3.8	4.5	S	8	8	2
A97-772024	WTBSYBIepI	3.3	4.0	S	4	8	2
A97-772030	PTBDYBIepI	4.4	4.7	S	24	20	2
E96006	-----DYBlep-	3.5	5.0	S	6	0	8
M91-163126	WGBIYYHI	3.1	4.2	R	6	10	10
M91-164003	PGBSYIbEpI	4.1	4.3	S	14	18	2
M91-166008	PGBDYIbEpI	3.1	3.8	H	10	22	6
M91-166041	PGBSYIbEpI	3.0	4.7	R	12	16	0
M91-166056	WGBDYBfEpI	2.8	4.3	H	32	14	0
M91-166124	P+WGBDYBfEpI	4.0	4.2	S	12	12	2
M91-178046	WGTSYBfEpI	4.0	4.2	S	0	20	8
M91-188039	PGBDYIbEpI	3.9	5.0	S	14	14	8
M91-188076	PGB+TDYBfEpI	3.1	5.0	S	14	18	16
M91-234086	PGTDYBfepI	2.6	3.3	R	6	44	0
M91-234134	PGTDYIbepI	3.3	4.3	R	2	24	0
M91-240135	PGTDYBfHI	3.8	3.8	R	2	16	8
M92-105044	PGBDYIbEpI	2.9	3.5	S	6	10	16
M92-106016	PGBDYBfEpI	2.5	3.7	R	20	14	4
ORC 9702	PGBDYYepI	1.9	3.0	R	0	24	14
ORC 9703	WGTSYYepI	2.0	4.0	S	2	14	4
SD95-224	WGBDYBfEpI	3.4	4.3	S	2	0	4
SD95-238	WGBSYBfepI	2.9	3.7	S	34	6	2
SD95-255	PGBDYBfepI	3.4	4.7	S	0	0	2
SD95-477	PTBDYBIepI	3.5	4.3	S	0	64	0
SD95-748	PGBSYBfEpI	4.8	4.5	R	70	4	0
SD95-781	WGBDYBfEpI	3.9	4.8	H	76	8	0
SD95-789	PGBSYBfepI	2.5	3.3	S	30	32	0
SD95-1043	P+WTDYBfEpI	3.3	3.2	S	8	30	2
SD95-1480	PGBDYIbEpI	3.0	4.2	S	24	30	2

PRELIMINARY TEST I, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant	Seed	Composition	
	5 bu/a	5 No.	4 Date	5 Score	5 In.	5 g/100	3 %	3 %
IA1006 (BSR)	53.1	12	1.3	2.4	42	16.8	41.0	20.0
Lambert (0)	44.6	38	-4.3	2.1	36	16.3	42.5	20.4
Marcus 95 (L)	54.1	8	3.0	2.3	37	18.1	40.8	20.8
Parker (I)	51.1	21	9/15	3.1	41	17.4	41.4	20.5
A97-770004	50.1	26	1.3	2.2	37	16.9	41.9	19.0
A97-770012	58.1	1	2.8	1.8	40	17.9	41.0	20.7
A97-771011	55.1	6	3.0	2.5	38	18.1	40.6	20.4
A97-771030	55.2	5	2.8	2.9	43	16.3	41.5	19.8
A97-772004	52.2	17	2.5	2.4	36	16.3	41.9	19.4
A97-772008	53.6	10	1.0	1.9	37	19.0	42.4	19.9
A97-772021	52.6	15	2.5	1.7	33	16.6	41.1	20.4
A97-772024	55.6	4	2.3	2.3	37	16.3	40.0	20.1
A97-772030	56.3	3	4.3	2.4	36	16.4	40.3	20.8
E96006	42.4	39	2.0	2.0	35	16.8	41.2	20.1
M91-163126	54.1	8	1.8	1.8	40	17.3	42.0	20.2
M91-164003	50.1	25	2.0	2.2	40	15.7	41.5	20.6
M91-166008	48.6	31	1.0	3.1	45	13.5	41.5	19.7
M91-166041	51.2	20	0.8	2.6	43	15.3	41.2	20.2
M91-166056	51.5	19	0.8	2.4	42	14.9	41.4	20.0
M91-166124	50.5	24	1.0	2.7	42	13.9	40.9	19.8
M91-178046	47.0	34	-1.3	2.0	39	14.4	41.4	20.3
M91-188039	51.9	18	-2.0	2.1	38	17.0	41.6	20.7
M91-188076	53.1	12	0.0	2.5	40	18.9	41.8	20.8
M91-234086	52.9	14	-0.3	2.0	39	16.8	40.8	21.0
M91-234134	49.9	27	1.0	2.5	38	16.2	42.2	19.9
M91-240135	50.7	23	0.5	2.3	40	15.3	40.4	20.6
M92-105044	48.3	32	-2.5	2.2	35	17.1	42.1	20.0
M92-106016	54.6	7	-1.8	2.3	33	18.9	39.2	21.4
ORC 9702	47.3	33	-2.3	1.9	37	18.3	43.6	19.9
ORC 9703	57.6	2	3.3	1.7	35	18.2	41.9	20.0
SD95-224	48.9	30	-1.5	2.6	40	16.7	40.6	21.2
SD95-238	49.3	28	0.0	2.9	41	17.3	41.6	20.5
SD95-255	47.0	34	0.3	2.5	38	18.5	41.1	20.9
SD95-477	49.1	29	-2.0	2.5	36	15.3	41.1	19.9
SD95-748	52.6	15	1.3	2.6	39	16.2	42.3	20.6
SD95-781	47.0	34	0.0	2.4	36	16.7	42.1	20.4
SD95-789	53.4	11	0.3	2.4	39	18.5	41.4	20.8
SD95-1043	51.0	22	0.8	2.3	38	18.5	41.0	21.2
SD95-1480	46.4	37	-2.3	2.6	39	18.7	42.1	20.7

PRELIMINARY TEST I, 1998

YIELD (bu/a)

Strain	Mean 5 Tests	Kanawha IA	Sioux Rapids IA	Lamberton MN	Waseca MN	Brookings SD
IA1006 (BSR)	53.1	53.4	57.7	51.2	60.9	42.2
Lambert (0)	44.6	50.1	50.1	37.2	48.7	36.9
Marcus 95 (L)	54.1	48.7	54.0	66.5	64.3	37.0
Parker (I)	51.1	49.7	60.0	48.9	59.7	37.2
A97-770004	50.1	51.8	54.1	55.3	58.6	30.6
A97-770012	58.1	56.9	61.9	63.2	58.0	50.5
A97-771011	55.1	42.4	61.9	57.0	70.3	43.9
A97-771030	55.2	47.0	62.2	64.0	65.1	37.5
A97-772004	52.2	49.2	58.5	52.2	65.8	35.4
A97-772008	53.6	48.0	61.7	61.5	59.7	37.1
A97-772021	52.6	50.7	56.8	61.9	61.1	32.7
A97-772024	55.6	54.3	61.9	55.8	67.5	38.6
A97-772030	56.3	51.8	64.7	63.6	63.7	37.6
E96006	42.4	37.6	58.0	40.1	46.8	29.3
M91-163126	54.1	49.5	61.9	58.0	64.0	37.1
M91-164003	50.1	45.8	61.3	56.0	51.0	36.5
M91-166008	48.6	44.1	62.8	49.3	50.3	36.5
M91-166041	51.2	44.1	59.4	53.6	58.1	41.1
M91-166056	51.5	51.5	58.8	48.9	56.6	41.9
M91-166124	50.5	51.4	62.0	48.7	53.9	36.6
M91-178046	47.0	47.5	52.1	51.1	51.1	33.1
M91-188039	51.9	52.1	56.9	49.0	62.8	38.5
M91-188076	53.1	50.3	62.6	49.2	62.6	40.7
M91-234086	52.9	51.5	62.0	58.7	58.5	33.6
M91-234134	49.9	56.9	58.5	51.7	51.3	30.9
M91-240135	50.7	47.8	55.2	54.2	62.2	33.9
M92-105044	48.3	50.3	57.9	48.5	52.2	32.5
M92-106016	54.6	54.4	62.2	57.1	60.2	39.1
ORC 9702	47.3	48.7	55.7	46.6	49.3	36.0
ORC 9703	57.6	59.2	61.1	59.5	66.8	41.4
SD95-224	48.9	47.0	58.5	45.1	58.0	35.8
SD95-238	49.3	48.1	57.9	47.0	55.5	38.3
SD95-255	47.0	49.8	49.0	45.2	54.5	36.6
SD95-477	49.1	45.0	56.9	49.1	58.8	35.6
SD95-748	52.6	47.8	55.8	60.5	62.7	36.3
SD95-781	47.0	43.0	56.5	50.7	49.5	35.1
SD95-789	53.4	51.7	63.7	59.5	61.2	30.9
SD95-1043	51.0	46.6	58.8	52.0	55.4	42.1
SD95-1480	46.4	41.5	58.6	46.8	49.6	35.6
C.V. (%)		9.2	6.1	8.7	9.9	12.0
L.S.D. (5%)		4.5	3.6	9.4	11.7	9.0
Row Sp. (In.)		27	27	10	30	30
Rows/Plot		2	2	4	2	4
Reps		2	2	2	2	2

PRELIMINARY TEST I, 1998

YIELD RANK

Strain	Yield Rank	Kanawha IA	Sioux Rapids IA	Lamberton MN	Waseca MN	Brookings SD
IA1006 (BSR)	12	6	27	22	15	3
Lambert (0)	38	17	38	39	38	19
Marcus 95 (L)	8	22	36	1	6	18
Parker (I)	21	19	16	29	17	15
A97-770004	26	8	35	16	20	38
A97-770012	1	2	9	4	23	1
A97-771011	6	37	10	13	1	2
A97-771030	5	29	5	2	5	14
A97-772004	17	21	21	19	4	29
A97-772008	10	25	13	6	17	16
A97-772021	15	14	30	5	14	34
A97-772024	4	5	11	15	2	10
A97-772030	3	9	1	3	8	13
E96006	39	39	24	38	39	39
M91-163126	8	20	12	11	7	16
M91-164003	25	32	14	14	33	22
M91-166008	31	34	3	25	34	22
M91-166041	20	35	17	18	22	7
M91-166056	19	11	18	29	25	5
M91-166124	24	13	7	31	29	20
M91-178046	34	28	37	23	32	33
M91-188039	18	7	28	28	9	11
M91-188076	12	15	4	26	11	8
M91-234086	14	12	8	10	21	32
M91-234134	27	3	22	21	31	36
M91-240135	23	26	34	17	12	31
M92-105044	32	16	25	32	30	35
M92-106016	7	4	6	12	16	9
ORC 9702	33	23	33	35	37	25
ORC 9703	2	1	15	8	3	6
SD95-224	30	30	23	37	23	26
SD95-238	28	24	26	33	26	12
SD95-255	34	18	39	36	28	20
SD95-477	29	33	29	27	19	27
SD95-748	15	27	32	7	10	24
SD95-781	34	36	31	24	36	30
SD95-789	11	10	2	8	13	36
SD95-1043	22	31	19	20	27	4
SD95-1480	37	38	20	34	35	27

PRELIMINARY TEST I, 1998

MATURITY (date)

Strain	Mean 4 Tests	Kanawha IA	Sioux Rapids IA	Lamberton MN	Waseca MN	Brookings SD
IA1006 (BSR)	1.3	2		6	-3	-5
Lambert (0)	-4.3	-5		-2	-10	-9
Marcus 95 (L)	3.0	2		8	2	+3
Parker (I)	09/15	09/15		09/16	09/17	09/14
A97-770004	1.3	1		6	-2	-1
A97-770012	2.8	2		6	3	-1
A97-771011	3.0	2		7	3	+1
A97-771030	2.8	2		7	2	+1
A97-772004	2.5	3		7	0	-2
A97-772008	1.0	0		4	0	-3
A97-772021	2.5	2		7	1	-3
A97-772024	2.3	3		6	0	-5
A97-772030	4.3	4		9	4	-2
E96006	2.0	3		4	1	+3
M91-163126	1.8	1		7	-1	-1
M91-164003	2.0	2		7	-1	-2
M91-166008	1.0	1		4	-1	-3
M91-166041	0.8	1		5	-3	-2
M91-166056	0.8	2		3	-2	-5
M91-166124	1.0	1		4	-1	-3
M91-178046	-1.3	-2		3	-6	-5
M91-188039	-2.0	-2		0	-6	-3
M91-188076	0.0	0		2	-2	-2
M91-234086	-0.3	0		2	-3	-4
M91-234134	1.0	2		4	-2	-5
M91-240135	0.5	1		3	-2	-3
M92-105044	-2.5	-2		1	-9	-6
M92-106016	-1.8	-1		1	-7	-5
ORC 9702	-2.3	-4		0	-5	-9
ORC 9703	3.3	3		7	3	-3
SD95-224	-1.5	-2		0	-4	-4
SD95-238	0.0	0		1	-1	-3
SD95-255	0.3	1		1	-1	-4
SD95-477	-2.0	-1		1	-8	-7
SD95-748	1.3	2		3	0	-1
SD95-781	0.0	-2		3	-1	-5
SD95-789	0.3	0		3	-2	-2
SD95-1043	0.8	1		3	-1	-3
SD95-1480	-2.3	-3		0	-6	-3
Date Planted	05/09	05/18		05/12	05/05	05/04
Days to Mature	128.8	120		127	135	133

PRELIMINARY TEST I, 1998

LODGING (score)

Strain	Mean 5 Tests	Kanawha IA	Sioux Rapids IA	Lamberton MN	Waseca MN	Brookings SD
IA1006 (BSR)	2.4	2.1	2.7	3.0	2.0	2.0
Lambert (0)	2.1	2.4	2.5	2.5	2.0	1.0
Marcus 95 (L)	2.3	1.9	2.1	3.0	2.5	2.0
Parker (I)	3.1	3.0	4.0	4.0	2.5	2.0
A97-770004	2.2	2.1	2.3	2.5	2.0	2.0
A97-770012	1.8	1.7	1.7	2.5	2.0	1.0
A97-771011	2.5	1.5	2.5	4.0	2.5	2.0
A97-771030	2.9	2.1	3.5	4.0	3.0	2.0
A97-772004	2.4	2.3	2.9	3.0	2.0	2.0
A97-772008	1.9	1.6	2.0	3.0	2.0	1.0
A97-772021	1.7	1.9	1.7	2.0	2.0	1.0
A97-772024	2.3	1.9	2.5	3.0	2.0	2.0
A97-772030	2.4	1.6	2.4	3.5	2.5	2.0
E96006	2.0	1.9	1.7	2.5	2.0	2.0
M91-163126	1.8	1.6	2.1	2.5	2.0	1.0
M91-164003	2.2	1.9	2.9	3.0	2.0	1.0
M91-166008	3.1	2.5	2.8	4.0	4.0	2.0
M91-166041	2.6	2.1	3.0	4.0	2.0	2.0
M91-166056	2.4	2.3	2.7	3.5	2.5	1.0
M91-166124	2.7	2.6	2.7	3.5	2.5	2.0
M91-178046	2.0	1.7	2.5	3.0	2.0	1.0
M91-188039	2.1	2.0	2.3	3.0	2.0	1.0
M91-188076	2.5	2.0	2.7	3.0	3.0	2.0
M91-234086	2.0	1.9	2.3	3.0	2.0	1.0
M91-234134	2.5	2.5	2.5	3.5	2.0	2.0
M91-240135	2.3	1.7	2.7	3.0	2.0	2.0
M92-105044	2.2	1.9	2.5	3.5	2.0	1.0
M92-106016	2.3	1.9	2.7	3.0	2.0	2.0
ORC 9702	1.9	1.6	2.3	2.5	2.0	1.0
ORC 9703	1.7	1.2	1.5	2.0	2.0	2.0
SD95-224	2.6	2.1	3.4	3.0	2.5	2.0
SD95-238	2.9	2.6	3.9	3.5	2.5	2.0
SD95-255	2.5	2.1	3.0	3.0	2.5	2.0
SD95-477	2.5	2.1	3.4	3.5	2.5	1.0
SD95-748	2.6	2.4	2.9	3.0	2.5	2.0
SD95-781	2.4	1.9	3.0	3.0	3.0	1.0
SD95-789	2.4	1.9	2.7	3.0	2.5	2.0
SD95-1043	2.3	1.8	2.6	3.0	2.0	2.0
SD95-1480	2.6	2.4	2.6	3.5	3.5	1.0

PRELIMINARY TEST I, 1998

PLANT HEIGHT (inches)

Strain	Mean 5 Tests	Kanawha IA	Sioux Rapids IA	Lamberton MN	Waseca MN	Brookings SD
IA1006 (BSR)	42	38	45	47	41	39
Lambert (0)	36	33	33	41	40	34
Marcus 95 (L)	37	33	37	43	36	34
Parker (I)	41	39	38	45	44	38
A97-770004	37	34	38	42	39	34
A97-770012	40	38	42	44	39	35
A97-771011	38	33	40	44	38	35
A97-771030	43	43	44	49	41	38
A97-772004	36	34	38	41	36	32
A97-772008	37	33	40	42	37	31
A97-772021	33	29	34	40	34	30
A97-772024	37	34	39	43	38	29
A97-772030	36	34	37	41	35	33
E96006	35	31	36	40	38	28
M91-163126	40	37	41	45	42	33
M91-164003	40	36	45	46	38	36
M91-166008	45	41	46	48	51	39
M91-166041	43	39	47	45	44	41
M91-166056	42	43	46	43	39	41
M91-166124	42	40	45	44	37	42
M91-178046	39	37	44	42	37	36
M91-188039	38	35	40	42	37	34
M91-188076	40	37	43	43	38	37
M91-234086	39	35	41	44	41	33
M91-234134	38	38	41	45	37	27
M91-240135	40	38	48	46	39	30
M92-105044	35	36	34	39	35	30
M92-106016	33	31	34	39	34	27
ORC 9702	37	36	38	44	38	29
ORC 9703	35	35	35	41	35	27
SD95-224	40	36	44	47	40	31
SD95-238	41	39	48	47	38	32
SD95-255	38	36	41	42	41	31
SD95-477	36	36	40	42	34	27
SD95-748	39	36	43	43	37	36
SD95-781	36	33	44	40	36	25
SD95-789	39	37	44	45	40	31
SD95-1043	38	33	43	44	38	30
SD95-1480	39	38	43	44	38	34

PRELIMINARY TEST I, 1998

SEED SIZE (g/100)

Strain	Mean 5 Tests	Kanawha IA	Sioux Rapids IA	Lamberton MN	Waseca MN	Brookings SD
IA1006 (BSR)	16.8	16.6	17.9	16.8	17.4	15.1
Lambert (0)	16.3	17.7	17.2	15.8	15.0	15.8
Marcus 95 (L)	18.1	17.9	18.9	18.5	18.6	16.5
Parker (I)	17.4	16.9	18.1	17.9	18.1	16.2
A97-770004	16.9	16.8	18.2	16.7	17.8	14.8
A97-770012	17.9	17.3	18.8	18.9	18.6	15.8
A97-771011	18.1	18.6	20.2	17.8	18.7	15.1
A97-771030	16.3	16.5	17.5	16.5	17.0	13.7
A97-772004	16.3	16.7	17.6	16.9	16.7	13.5
A97-772008	19.0	18.6	20.8	19.4	19.2	17.1
A97-772021	16.6	15.7	17.8	17.2	17.5	15.0
A97-772024	16.3	16.8	17.6	16.8	16.0	14.3
A97-772030	16.4	17.0	18.3	16.6	16.4	13.6
E96006	16.8	16.2	18.2	17.1	17.8	14.9
M91-163126	17.3	17.0	19.2	17.5	18.6	14.4
M91-164003	15.7	15.1	16.3	16.3	16.9	14.0
M91-166008	13.5	13.7	14.6	13.8	14.2	11.5
M91-166041	15.3	14.6	16.3	15.3	16.6	13.6
M91-166056	14.9	14.9	15.6	14.6	16.4	13.1
M91-166124	13.9	13.8	15.3	14.4	14.3	12.0
M91-178046	14.4	14.5	16.1	13.9	14.6	12.7
M91-188039	17.0	16.3	18.0	17.0	17.9	15.6
M91-188076	18.9	18.4	20.2	17.8	21.0	17.1
M91-234086	16.8	16.7	18.0	16.7	17.0	15.9
M91-234134	16.2	16.4	17.5	14.7	17.4	14.8
M91-240135	15.3	14.8	16.9	15.1	16.7	13.3
M92-105044	17.1	17.8	17.4	17.6	17.1	15.5
M92-106016	18.9	19.1	20.0	19.0	19.7	16.9
ORC 9702	18.3	17.9	20.1	18.0	19.7	15.7
ORC 9703	18.2	17.6	19.7	17.4	18.6	17.5
SD95-224	16.7	16.9	16.5	16.3	16.7	17.1
SD95-238	17.3	16.7	18.2	16.4	17.7	17.5
SD95-255	18.5	18.9	19.1	18.6	19.7	15.9
SD95-477	15.3	14.9	16.1	15.1	15.6	14.9
SD95-748	16.2	15.7	17.0	16.1	17.2	15.2
SD95-781	16.7	16.5	17.3	15.7	17.1	16.8
SD95-789	18.5	18.4	18.8	17.7	19.3	18.1
SD95-1043	18.5	17.3	19.3	18.0	18.9	19.2
SD95-1480	18.7	18.0	19.2	18.7	19.4	18.3

PRELIMINARY TEST I, 1998

PROTEIN (%)

Strain	Mean 3 Tests	Kanawha IA	Sioux Rapids IA	Waseca MN
IA1006 (BSR)	41.0	41.2	41.0	40.7
Lambert (0)	42.5	44.5	41.7	41.2
Marcus 95 (L)	40.8	40.7	41.0	40.6
Parker (I)	41.4	41.5	41.4	41.4
A97-770004	41.9	42.4	41.3	42.1
A97-770012	41.0	40.4	41.0	41.7
A97-771011	40.6	40.8	40.8	40.3
A97-771030	41.5	42.7	41.1	40.8
A97-772004	41.9	42.1	41.7	42.0
A97-772008	42.4	43.1	42.2	41.9
A97-772021	41.1	41.1	41.2	41.0
A97-772024	40.0	40.0	40.4	39.7
A97-772030	40.3	39.8	40.9	40.2
E96006	41.2	41.3	40.8	41.4
M91-163126	42.0	42.9	41.8	41.3
M91-164003	41.5	41.6	41.8	41.2
M91-166008	41.5	41.9	41.0	41.5
M91-166041	41.2	41.7	40.6	41.2
M91-166056	41.4	41.7	41.6	41.0
M91-166124	40.9	41.0	40.5	41.1
M91-178046	41.4	42.3	41.8	40.2
M91-188039	41.6	42.2	41.4	41.2
M91-188076	41.8	42.4	41.5	41.6
M91-234086	40.8	41.0	40.3	41.1
M91-234134	42.2	42.7	42.8	41.2
M91-240135	40.4	41.1	40.1	39.9
M92-105044	42.1	42.7	42.1	41.5
M92-106016	39.2	39.3	39.2	39.2
ORC 9702	43.6	44.2	43.3	43.4
ORC 9703	41.9	42.3	41.7	41.8
SD95-224	40.6	41.1	40.6	40.2
SD95-238	41.6	42.5	40.9	41.5
SD95-255	41.1	41.3	41.0	41.1
SD95-477	41.1	41.4	41.3	40.7
SD95-748	42.3	41.6	42.7	42.7
SD95-781	42.1	42.1	42.7	41.4
SD95-789	41.4	41.8	41.4	40.9
SD95-1043	41.0	41.6	41.3	40.0
SD95-1480	42.1	42.4	42.0	42.0

PRELIMINARY TEST I, 1998

OIL (%)

Strain	Mean 3 Tests	Kanawha IA	Sioux Rapids IA	Waseca MN
IA1006 (BSR)	20.0	19.8	20.0	20.3
Lambert (0)	20.4	19.3	20.6	21.2
Marcus 95 (L)	20.8	20.9	20.9	20.6
Parker (I)	20.5	20.0	20.4	21.0
A97-770004	19.0	18.2	19.2	19.6
A97-770012	20.7	20.7	20.5	20.8
A97-771011	20.4	20.6	19.9	20.7
A97-771030	19.8	19.1	19.7	20.5
A97-772004	19.4	18.9	19.5	19.9
A97-772008	19.9	19.7	19.8	20.2
A97-772021	20.4	20.5	20.2	20.4
A97-772024	20.1	19.9	19.6	20.8
A97-772030	20.8	21.0	20.1	21.3
E96006	20.1	19.7	20.0	20.6
M91-163126	20.2	19.5	20.4	20.7
M91-164003	20.6	20.3	20.3	21.1
M91-166008	19.7	19.5	19.8	19.8
M91-166041	20.2	19.7	20.3	20.6
M91-166056	20.0	19.5	19.7	20.8
M91-166124	19.8	19.5	20.0	19.9
M91-178046	20.3	19.7	20.2	21.1
M91-188039	20.7	20.4	20.9	20.9
M91-188076	20.8	20.3	20.9	21.1
M91-234086	21.0	20.5	21.4	21.0
M91-234134	19.9	19.6	19.3	20.7
M91-240135	20.6	20.2	20.4	21.1
M92-105044	20.0	18.9	19.9	21.1
M92-106016	21.4	21.4	21.4	21.4
ORC 9702	19.9	19.3	19.8	20.5
ORC 9703	20.0	19.4	20.1	20.5
SD95-224	21.2	21.1	21.1	21.3
SD95-238	20.5	19.9	20.7	20.8
SD95-255	20.9	20.5	20.9	21.4
SD95-477	19.9	19.3	19.8	20.5
SD95-748	20.6	20.7	20.2	20.9
SD95-781	20.4	20.2	19.9	21.1
SD95-789	20.8	20.5	20.2	21.6
SD95-1043	21.2	20.8	20.9	22.0
SD95-1480	20.7	20.3	20.5	21.2

Uniform Test II, 1998

	Strain	Parentage	Previous Testing	Generation Compositied	Unique Traits
1.	Dwight (SCN)	Jack x A86-303014	1	F5	SCN
2.	IA2008R (BSR)	IA2008 x Archer	1	BC3F2	Rps1-k, BSR
3.	IA2021 (II)	Elgin 87 x Marcus	4	F5	
4.	IA2036 (SCN)	Jack x A86-301024	2	F5	SCN
5.	Marcus 95 (I)	[Marcus (5) x Elgin 87] x [Marcus (5) x Preston BC-11-1]	5	BC4F2	Rps1-k, Rps6
6.	A94-674017 (L)	Pioneer 9303 x Kenwood	2	F5	
7.	A95-483031	Jack x (Pioneer 9273 x A13)	SCN II	?	SCN
8.	A96-591033	IA3003 x Pioneer 9273	PT IIA	F5	
9.	A96-591046	Northrup King S24-92 x Parker	PT IIIB	F5	
10.	A96-591072	Northrup King S35-35 x IA3003	PT IIIB	F5	
11.	A96-597021	IA3003 x IA3004	PT IIA	F5	BSR
12.	C1963	HC86-4367 x HS88-4909	PT IIA	F5	
13.	E95147	Pioneer 9273 x Northrup King S19-90	PT IIA	F5	
14.	E95505	Felix x Northrup King S19-90	PT I	F5	
15.	E95882	Felix x Northrup King S19-90	PT IIA	F5	
16.	M92-1731	Sturdy x Bell	1	F5	Rps1, SCN
17.	SD93-522	Glenwood x Jack	2	F5	SCN
18.	SD93-828	Parker x Archer	1	F5	
19.	U96-2233	Colfax x A91-701035	PT IIB	F4	dtl
20.	U96-2408	Colfax x Iroquois	PT IIB	F4	
21.	U96-2416	MSBP2 (F1 bulk)	PT IIB	F7	
22.	U96-2426	Colfax x Asgrow A2242	PT IIB	F4	

UNIFORM TEST II, 1998
DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score		Emerg. Score Ames
		Humboldt	Yellow Medicine Co.	
Dwight (SCN)	PTTSYBlepI	4.1	4.0	1.0
IA2008R (BSR)	WGTSYBfEpI	3.4	4.5	1.0
IA2021 (II)	WTBSYBlepI	3.8	4.5	3.0
IA2036 (SCN)	PGBSYYepl	3.6	4.3	2.0
Marcus 95 (I)	WTTDYBfepI	4.4	4.8	1.0
A94-674017 (L)	PTBDYBrepI	5.0	4.8	2.0
A95-483031	PTBDYGrHI	3.4	5.0	1.0
A96-591033	PTBSYBlepI	4.0	3.8	1.0
A96-591046	WGBDYBfEpI	3.9	4.2	1.0
A96-591072	PTB+TSYBlepI	3.1	4.2	1.0
A96-597021	PTBSYBIepI	5.0	5.0	1.0
C1963	PTBSYBlepI	4.1	5.0	1.0
E95147	PTBSYBlepI	2.8	3.3	3.0
E95505	PGBIYIbEpI	3.1	4.3	5.0
E95882	PGTDYYEpI	3.4	5.0	5.0
M92-1731	PTTDYBIepI	3.0	4.5	5.0
SD93-522	WGBIYBfEpI	3.3	3.7	2.0
SD93-828	PGBSYIbepI	2.8	3.2	1.0
U96-2233	PGTIYIbepD	3.1	3.7	2.0
U96-2408	WGTDYIbepI	3.8	4.2	1.0
U96-2416	WTTDYBlepI	3.3	4.2	1.0
U96-2426	WTTDYBlepI	5.0	5.0	1.0

UNIFORM TEST II, 1998
DISEASE DATA

Strain	BSR	PR	Hard Seed	PS	PSB
	Arlington (0-11)	Laf. Race 7	%	Lafayette a %	n %
Dwight (SCN)	0.0	H	22	6	0
IA2008R (BSR)	0.0	R	20	12	2
IA2021 (II)	3.0	R	50	6	2
IA2036 (SCN)	0.7	H	14	44	6
Marcus 95 (I)	5.3	R	14	40	8
A94-674017 (L)	3.3	S	8	20	4
A95-483031	1.3	S	0	0	14
A96-591033	0.0	S	0	6	2
A96-591046	5.0	S	6	8	0
A96-591072	0.0	H	0	4	0
A96-597021	0.0	S	2	0	0
C1963	4.3	R	0	0	2
E95147	0.0	S	8	6	0
E95505	4.0	R	22	0	0
E95882	0.0	S	8	2	2
M92-1731	1.3	H	8	6	0
SD93-522	6.0	S	12	32	0
SD93-828	0.7	R	30	14	0
U96-2233	4.7	S	16	0	4
U96-2408	0.0	R	0	4	0
U96-2416	1.3	R	0	6	0
U96-2426	4.7	R	2	4	2

UNIFORM TEST II, 1998
SDS DATA

Strain	DX	<u>SDS Data</u> Bloomington		Test
		DI	DS	
Dwight (SCN)	0.4	3.3	0.7	B2L
IA2008R (BSR)	7.9	55.0	1.2	B2L
IA2021 (II)	0.9	6.7	0.4	B2L
IA2036 (SCN)	1.9	15.0	1.1	B2L
Marcus 95 (I)	0.1	0.7	0.5	B2E
A94-674017 (L)	0.8	6.7	0.7	B2L
A95-483031	0.1	0.7	0.3	B2E
A96-591033	0.1	0.7	0.3	B2E
A96-591046	0.8	6.7	1.1	B2L
A96-591072	0.3	2.3	0.4	B2L
A96-597021	0.4	3.3	1.1	B2E
C1963	1.8	15.0	1.1	B2L
E95147	0.0	0.0	0.0	B2L
E95505	2.2	16.7	0.4	B2E
E95882	0.0	0.3	0.0	B2E
M92-1731	0.0	0.0	0.0	B2E
SD93-522	0.1	0.3	0.5	B2E
SD93-828	0.0	0.3	0.3	B2E
U96-2233	3.2	23.3	1.2	B2L
U96-2408	7.0	40.0	1.3	B2L
U96-2416	0.2	2.0	0.7	B2L
U96-2426	2.4	18.3	1.2	B2L

UNIFORM TEST II, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Size	Composition	
	19 bu/a	19 No.	18 Date	19 Score	18 In.	18 g/100	Protein 5 %	Oil 5 %
Dwight (SCN)	62.4	3	3.8	1.9	34	14.4	41.5	19.4
IA2008R (BSR)	57.5	16	0.5	2.7	39	14.5	41.1	19.8
IA2021 (II)	59.6	12	9/14	2.0	32	16.9	39.8	21.3
IA2036 (SCN)	55.2	20	0.4	3.0	39	15.1	41.3	19.3
Marcus 95 (I)	55.7	19	-1.7	2.0	33	17.1	41.4	21.1
A94-674017 (L)	60.6	9	2.7	2.0	36	19.9	41.2	20.8
A95-483031	59.9	11	0.1	2.6	37	15.0	40.7	20.9
A96-591033	62.9	2	1.0	1.5	36	18.1	41.8	20.0
A96-591046	63.0	1	1.9	2.0	37	14.9	41.7	20.6
A96-591072	61.0	6	2.9	1.6	36	18.5	42.4	19.8
A96-597021	61.2	5	1.0	2.0	36	17.2	42.6	19.5
C1963	61.5	4	2.2	2.0	36	16.0	40.0	21.1
E95147	59.2	13	1.9	1.5	34	17.3	41.3	20.2
E95505	57.8	15	-2.2	1.9	35	16.1	40.8	20.2
E95882	37.9	22	1.5	1.5	31	15.6	40.4	20.4
M92-1731	53.9	21	-3.5	2.4	34	17.7	42.0	20.6
SD93-522	56.4	18	0.0	2.7	37	16.7	40.7	21.2
SD93-828	56.6	17	-2.1	2.2	35	16.0	39.9	21.2
U96-2233	60.1	10	0.7	1.4	28	16.9	41.5	20.3
U96-2408	61.0	6	2.7	1.8	38	14.9	42.2	19.9
U96-2416	58.4	14	3.0	2.2	38	15.6	41.3	21.2
U96-2426	60.7	8	2.7	2.3	36	14.4	41.1	20.4

123.7 Days After Planting

UNIFORM TEST II, 1998

1997-1998 2-YEAR MEAN

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Size	Composition	
	42 bu/a	42 No.	39 Date	42 Score	41 In.	39 g/100	Protein 10 %	Oil 10 %
Dwight (SCN)	57.7	2	4.6	1.8	33	15.0	40.7	19.7
IA2008R (BSR)	55.0	4	1.7	2.5	38	15.1	40.3	20.0
IA2021 (II)	56.6	3	9/18	1.9	31	17.4	38.7	21.5
IA2036 (SCN)	52.6	7	0.5	2.7	38	15.3	40.5	19.5
Marcus 95 (I)	51.6	8	-1.3	1.9	32	17.2	40.1	21.4
A94-674017 (L)	58.6	1	3.4	1.9	35	20.3	40.2	20.9
M92-1731	50.7	9	-3.0	2.2	34	17.8	41.5	20.6
SD93-522	53.3	6	1.0	2.4	37	17.0	40.2	21.2
SD93-828	53.5	5	-2.0	1.9	34	16.3	39.7	21.0

125.9 Days After Planting

1996-1998 3-YEAR MEAN

No. of Tests Strain	61	61	59	62	61	59	15	15
IA2021 (II)	55.0	2	9/20	1.8	30	17.4	39.9	21.6
Marcus 95 (I)	51.0	4	-1.0	1.8	31	17.1	40.4	21.5
A94-674017 (L)	57.9	1	3.3	1.8	34	20.4	40.7	20.9
SD93-522	52.2	3	1.1	2.2	35	16.8	40.4	21.2

124.4 Days After Planting

UNIFORM TEST II, 1998

YIELD (bu/a)

Strain	Mean 19 Tests	Ames IA	Grand Junction IA	Dekalb IL	Dwight IL	Urbana IL
Dwight (SCN)	62.4	69.1	53.7	78.3	58.9	68.1
IA2008R (BSR)	57.5	59.6	55.8	71.5	52.9	59.6
IA2021 (II)	59.6	71.2	53.4	80.6	50.3	55.2
IA2036 (SCN)	55.2	59.9	47.3	76.6	55.2	60.9
Marcus 95 (I)	55.7	67.5	50.4	74.6	50.8	51.1
A94-674017 (L)	60.6	63.3	52.0	76.7	55.8	59.5
A95-483031	59.9	62.1	57.2	75.0	60.6	59.8
A96-591033	62.9	70.0	57.3	79.8	57.9	54.3
A96-591046	63.0	73.2	54.0	85.7	51.5	62.0
A96-591072	61.0	69.5	49.4	82.2	54.6	58.7
A96-597021	61.2	68.3	57.1	81.4	54.1	64.1
C1963	61.5	73.9	54.1	78.5	59.9	60.1
E95147	59.2	62.3	42.8	80.5	55.7	57.2
E95505	57.8	71.3	38.1	80.4	44.0	52.4
E95882	37.9	50.0	31.6	75.4	34.4	27.8
M92-1731	53.9	59.3	44.9	65.8	53.9	55.5
SD93-522	56.4	62.5	44.1	69.1	57.9	54.8
SD93-828	56.6	66.0	53.7	70.8	51.5	48.9
U96-2233	60.1	76.3	46.2	79.9	56.3	55.2
U96-2408	61.0	65.1	48.8	81.3	56.1	58.0
U96-2416	58.4	73.4	45.2	74.9	47.4	56.9
U96-2426	60.7	71.6	45.6	78.6	51.4	56.2
C.V. (%)		8.8	12.3	5.2	7.9	8.5
L.S.D. (5%)		4.8	4.9	6.6	6.9	7.9
Row Sp. (In.)		27	27	30	30	30
Rows/Plot		4	4	4	4	4
Reps		3	3	3	3	3

UNIFORM TEST II, 1998

YIELD (bu/a)

Strain	Lafayette IN	Wanatah IN	Lamberton MN	Waseca MN
Dwight (SCN)	50.5	59.5	48.5	75.3
IA2008R (BSR)	45.1	50.9	52.1	71.0
IA2021 (II)	44.8	43.3	52.1	76.9
IA2036 (SCN)	45.0	47.5	51.7	61.9
Marcus 95 (I)	43.9	42.7	55.2	62.5
A94-674017 (L)	52.7	47.6	52.1	75.6
A95-483031	49.8	49.7	51.5	69.8
A96-591033	50.4	55.5	57.4	78.8
A96-591046	48.8	54.8	51.4	67.8
A96-591072	48.8	55.4	50.4	74.5
A96-597021	45.0	47.9	60.1	70.7
C1963	44.7	50.5	51.7	68.0
E95147	51.6	45.3	49.4	66.8
E95505	46.3	43.0	53.0	65.7
E95882	17.3	20.9	36.7	44.8
M92-1731	48.8	46.9	46.9	66.7
SD93-522	50.4	45.0	42.8	65.4
SD93-828	40.5	51.9	47.3	59.4
U96-2233	42.8	43.7	53.3	73.9
U96-2408	47.1	52.7	51.2	65.7
U96-2416	49.9	52.9	44.8	61.9
U96-2426	48.5	52.3	54.2	72.1
C.V. (%)	8.6	11.9	9.2	11.3
L.S.D. (5%)	6.6	8.7	7.7	12.8
Row Sp. (In.)	24	26	10	10
Rows/Plot	4	4	10	10
Reps	3	3	3	3

UNIFORM TEST II, 1998

YIELD (bu/a)

Strain	Hartington NE	Hildreth NE	McCool Junction NE	Hoytville OH
Dwight (SCN)	55.6	63.5	65.2	68.6
IA2008R (BSR)	54.3	38.0	64.3	69.5
IA2021 (II)	45.6	59.0	64.3	77.3
IA2036 (SCN)	44.7	50.4	53.2	67.0
Marcus 95 (I)	45.1	53.5	59.0	59.9
A94-674017 (L)	48.5	56.8	62.7	78.1
A95-483031	42.6	57.3	64.9	74.7
A96-591033	53.5	62.1	71.7	71.0
A96-591046	58.3	64.9	76.3	81.5
A96-591072	58.3	56.1	68.5	56.8
A96-597021	54.3	49.2	71.8	73.0
C1963	58.5	66.6	70.0	81.1
E95147	56.3	52.4	62.5	77.9
E95505	52.6	58.1	64.3	77.0
E95882	33.9	34.8	51.0	32.5
M92-1731	44.1	47.3	48.3	58.9
SD93-522	48.5	52.2	62.2	69.6
SD93-828	47.6	53.9	63.0	64.5
U96-2233	53.1	61.6	63.7	70.9
U96-2408	57.0	61.9	67.8	74.5
U96-2416	57.8	59.5	66.7	67.0
U96-2426	54.0	60.8	67.9	76.3
C.V. (%)	5.8	10.3	6.2	6.5
L.S.D. (5%)	7.1	12.6	7.2	6.6
Row Sp. (In.)	30	30	30	7.5
Rows/Plot	4	4	4	8
Reps	3	3	3	3

UNIFORM TEST II, 1998

YIELD (bu/a)

Strain	Wooster OH	Ridgetown Ont.	Woodslee Ont.	Beresford SD	Brookings SD	Arlington WI
Dwight (SCN)	63.4	81.0	65.9	60.0	29.4	71.6
IA2008R (BSR)	60.4	61.6	60.3	68.0	34.5	63.4
IA2021 (II)	54.3	79.0	67.2	64.4	36.3	56.7
IA2036 (SCN)	46.9	63.9	59.0	60.4	35.9	62.3
Marcus 95 (I)	56.8	65.2	62.2	66.1	34.5	57.6
A94-674017 (L)	70.7	68.4	64.5	69.9	37.9	59.2
A95-483031	66.3	64.3	59.2	69.9	37.5	65.5
A96-591033	62.6	75.8	64.3	65.5	34.7	72.5
A96-591046	62.1	71.6	63.1	69.5	40.7	59.1
A96-591072	71.9	69.9	59.8	66.4	37.1	69.8
A96-597021	61.9	75.3	59.2	66.4	39.7	63.0
C1963	49.7	63.9	66.7	73.2	36.7	60.1
E95147	63.2	73.5	63.6	62.5	35.5	65.6
E95505	68.1	76.1	55.3	67.7	32.6	52.8
E95882	47.7	68.6	50.3	27.3	15.0	20.4
M92-1731	58.9	54.7	62.5	64.6	36.1	59.2
SD93-522	66.3	60.8	66.1	67.7	33.7	52.8
SD93-828	62.8	70.7	56.5	65.9	34.3	65.5
U96-2233	59.5	71.7	66.4	70.2	33.2	63.7
U96-2408	64.8	70.5	66.8	64.1	36.2	70.1
U96-2416	62.8	64.7	61.7	61.9	34.5	65.1
U96-2426	67.0	69.2	57.9	70.6	38.0	61.5
C.V. (%)	11.2	10.9	8.1	8.1	11.0	6.4
L.S.D. (5%)	10.0	10.4	6.9	8.6	6.3	5.6
Row Sp. (In.)	7.5	17	24	30	30	7.5
Rows/Plot	8	5	4	4	4	8
Reps	3	3	3	3	3	3

UNIFORM TEST II, 1998

YIELD RANK

Strain	Yield Rank	Grand				
		Ames IA	Junction IA	Dekalb IL	Dwight IL	Urbana IL
Dwight (SCN)	3	10	7	12	3	1
IA2008R (BSR)	16	20	4	19	14	7
IA2021 (II)	12	7	9	5	19	15
IA2036 (SCN)	20	19	14	14	10	4
Marcus 95 (I)	19	12	11	18	18	20
A94-674017 (L)	9	15	10	13	8	8
A95-483031	11	18	2	16	1	6
A96-591033	2	8	1	9	4	18
A96-591046	1	4	6	1	15	3
A96-591072	6	9	12	2	11	9
A96-597021	5	11	3	3	12	2
C1963	4	2	5	11	2	5
E95147	13	17	20	6	9	11
E95505	15	6	21	7	21	19
E95882	22	22	22	15	22	22
M92-1731	21	21	18	22	13	14
SD93-522	18	16	19	21	4	17
SD93-828	17	13	8	20	15	21
U96-2233	10	1	15	8	6	15
U96-2408	6	14	13	4	7	10
U96-2416	14	3	17	17	20	12
U96-2426	8	5	16	10	17	13

UNIFORM TEST II, 1998

YIELD RANK

Strain	Lafayette IN	Wanatah IN	Lamberton MN	Waseca MN
Dwight (SCN)	3	1	17	4
IA2008R (BSR)	14	9	7	8
IA2021 (II)	17	19	7	2
IA2036 (SCN)	15	14	10	19
Marcus 95 (I)	19	21	3	18
A94-674017 (L)	1	13	7	3
A95-483031	7	11	12	10
A96-591033	4	2	2	1
A96-591046	8	4	13	12
A96-591072	8	3	15	5
A96-597021	15	12	1	9
C1963	18	10	10	11
E95147	2	16	16	13
E95505	13	20	6	14
E95882	22	22	22	22
M92-1731	8	15	19	14
SD93-522	4	17	21	17
SD93-828	21	8	18	21
U96-2233	20	18	5	6
U96-2408	12	6	14	14
U96-2416	6	5	20	19
U96-2426	11	7	4	7

UNIFORM TEST II, 1998

YIELD RANK

Strain	Hartington	Hildreth	McCool	Hoytville
	NE	NE	Junction NE	OH
Dwight (SCN)	7	3	9	15
IA2008R (BSR)	9	21	12	14
IA2021 (II)	17	9	11	5
IA2036 (SCN)	19	18	21	16
Marcus 95 (I)	18	15	19	19
A94-674017 (L)	14	12	16	3
A95-483031	21	11	10	8
A96-591033	11	4	3	11
A96-591046	3	2	1	1
A96-591072	2	13	5	21
A96-597021	9	19	2	10
C1963	1	1	4	2
E95147	6	16	17	4
E95505	13	10	13	6
E95882	22	22	22	22
M92-1731	20	20	23	20
SD93-522	15	17	18	13
SD93-828	16	14	15	18
U96-2233	12	6	14	12
U96-2408	5	5	7	9
U96-2416	4	8	8	16
U96-2426	10	7	6	7

UNIFORM TEST II, 1998

YIELD RANK

Strain	Wooster OH	Ridgetown Ont.	Woodslee Ont.	Beresford SD	Brookings SD	Arlington WI
Dwight (SCN)	8	1	6	21	21	3
IA2008R (BSR)	15	20	14	7	14	12
IA2021 (II)	19	2	1	16	8	21
IA2036 (SCN)	22	18	18	20	11	14
Marcus 95 (I)	18	15	12	12	14	20
A94-674017 (L)	2	14	7	4	4	17
A95-483031	5	17	16	4	5	7
A96-591033	12	4	8	14	13	2
A96-591046	13	8	10	6	1	19
A96-591072	1	11	15	10	6	5
A96-597021	14	5	17	10	2	13
C1963	20	18	3	1	7	16
E95147	9	6	9	18	12	6
E95505	3	3	21	8	20	22
E95882	21	13	22	22	22	24
M92-1731	17	22	11	15	10	17
SD93-522	5	21	5	8	18	22
SD93-828	10	9	20	13	17	8
U96-2233	16	7	4	3	19	10
U96-2408	7	10	2	17	9	4
U96-2416	10	16	13	19	14	9
U96-2426	4	12	19	2	3	15

UNIFORM TEST II, 1998

MATURITY (date)

Strain	Mean 18 Tests	Ames IA	Grand Junction IA	Dekalb IL	Dwight IL	Urbana IL
Dwight (SCN)	3.8	4		4	5	4
IA2008R (BSR)	0.5	1		0	1	-2
IA2021 (II)	09/14	09/13		09/19	09/09	09/08
IA2036 (SCN)	0.4	2		2	2	0
Marcus 95 (I)	-1.7	-2		-3	-1	-3
A94-674017 (L)	2.7	6		4	3	5
A95-483031	0.1	0		1	2	0
A96-591033	1.0	1		0	3	-1
A96-591046	1.9	3		2	3	1
A96-591072	2.9	3		3	4	3
A96-597021	1.0	3		1	2	-1
C1963	2.2	2		3	4	2
E95147	1.9	2		2	3	3
E95505	-2.2	-4		-3	-5	-9
E95882	1.5	-1		1	0	-5
M92-1731	-3.5	-8		-8	-3	-7
SD93-522	-0.0	0		1	2	-3
SD93-828	-2.1	-1		-4	-2	-3
U96-2233	0.7	0		2	2	-1
U96-2408	2.7	2		3	4	3
U96-2416	3.0	4		2	4	3
U96-2426	2.7	2		3	5	3
Date Planted	05/14	05/06		05/15	05/12	05/12
Days to Mature	123.7	130		127	120	119

UNIFORM TEST II, 1998

MATURITY (date)

Strain	Lafayette IN	Wanatah IN	Lamberton MN	Waseca MN
Dwight (SCN)	2	2	3	3
IA2008R (BSR)	-3	0	1	2
IA2021 (II)	09/08	09/13	09/23	09/20
IA2036 (SCN)	-1	-2	-1	0
Marcus 95 (I)	-3	-2	1	-1
A94-674017 (L)	0	2	0	2
A95-483031	1	-2	-1	0
A96-591033	1	-2	0	0
A96-591046	2	0	1	2
A96-591072	1	0	3	2
A96-597021	-2	-2	2	0
C1963	2	-2	2	1
E95147	1	2	1	1
E95505	-4	0	-1	-2
E95882	0	4	0	1
M92-1731	-5	-3	-2	-3
SD93-522	-2	-3	0	0
SD93-828	-4	-2	-1	-1
U96-2233	0	0	-1	0
U96-2408	2	0	2	3
U96-2416	3	-1	3	2
U96-2426	1	1	2	2
Date Planted	05/16	05/15	05/12	05/05
Days to Mature	115	121	134	138

UNIFORM TEST II, 1998

MATURITY (date)

Strain	Hartington	Hildreth	McCool	Hoytville
	NE	NE	Junction NE	OH
Dwight (SCN)	7	2	3	3
IA2008R (BSR)	1	-1	0	0
IA2021 (II)	09/20	09/11	09/15	09/18
IA2036 (SCN)	-2	0	1	0
Marcus 95 (I)	-3	-2	-1	-3
A94-674017 (L)	7	2	4	3
A95-483031	-3	-1	1	-1
A96-591033	-2	0	3	2
A96-591046	4	1	3	2
A96-591072	5	1	2	3
A96-597021	3	1	3	0
C1963	4	2	2	4
E95147	2	1	1	1
E95505	-4	-2	-1	-1
E95882	5	3	3	3
M92-1731	-6	-3	-5	-6
SD93-522	-3	-2	1	-0
SD93-828	-4	-2	0	-3
U96-2233	3	0	2	2
U96-2408	6	0	3	4
U96-2416	5	1	4	4
U96-2426	5	1	3	4
Date Planted	05/14	05/19	05/27	05/18
Days to Mature	129	115	111	123

UNIFORM TEST II, 1998

MATURITY (date)

Strain	Wooster OH	Ridgetown Ont.	Woodslee Ont.	Beresford SD	Brookings SD	Arlington WI
Dwight (SCN)	6	10	3	+4	+3	6
IA2008R (BSR)	1	5	-2	+2	-1	3
IA2021 (II)	09/04	09/16	09/23	09/14	09/13	09/20
IA2036 (SCN)	-2	5	1	-1	-3	2
Marcus 95 (I)	-6	-1	-3	-3	-5	2
A94-674017 (L)	4	5	1	+4	+2	2
A95-483031	-0	5	-0	-3	-2	1
A96-591033	2	5	0	-2	-1	5
A96-591046	1	6	1	-2	+1	2
A96-591072	6	8	3	+1	+2	6
A96-597021	1	5	0	-2	+3	2
C1963	2	7	1	-2	+1	4
E95147	3	5	2	-2	+3	4
E95505	-4	2	-3	-3	0	0
E95882	3	9	-2	-1	+6	2
M92-1731	-2	2	-4	-5	-4	-1
SD93-522	-1	7	2	-4	0	1
SD93-828	-5	0	-3	-4	-1	-2
U96-2233	1	3	-1	-2	+3	0
U96-2408	4	7	1	+3	+5	5
U96-2416	6	9	1	+1	+4	5
U96-2426	4	4	3	+1	+6	5
Date Planted	05/12	05/22	05/27	05/06	05/05	05/12
Days to Mature	115	117	119	131	131	131

UNIFORM TEST II, 1998

LODGING (score)

Strain	Mean	Ames IA	Grand Junction IA	Dekalb IL	Dwight IL	Urbana IL
	19 Tests					
Dwight (SCN)	1.9	1.4	1.2	2.2	2.2	1.3
IA2008R (BSR)	2.7	3.7	1.9	3.8	3.0	1.3
IA2021 (II)	2.0	2.0	2.2	3.5	2.3	1.0
IA2036 (SCN)	3.0	3.8	2.0	4.0	2.8	2.3
Marcus 95 (I)	2.0	2.8	2.0	3.2	2.0	1.0
A94-674017 (L)	2.0	1.6	1.6	2.5	2.2	1.0
A95-483031	2.6	3.2	1.9	3.8	2.8	1.8
A96-591033	1.5	1.3	1.2	2.2	1.3	1.0
A96-591046	2.0	2.5	1.5	3.0	2.2	1.0
A96-591072	1.6	1.2	1.4	2.2	1.3	1.0
A96-597021	2.0	2.0	1.6	2.2	1.7	1.0
C1963	2.0	1.6	1.5	2.7	2.0	1.0
E95147	1.5	1.2	1.2	2.3	1.7	1.0
E95505	1.9	2.4	1.2	2.7	1.7	1.0
E95882	1.5	1.2	1.1	2.0	1.0	1.0
M92-1731	2.4	2.8	1.5	3.8	2.2	1.2
SD93-522	2.7	3.2	1.9	4.0	2.8	1.5
SD93-828	2.2	2.3	1.6	3.7	2.3	1.0
U96-2233	1.4	1.0	1.1	2.2	1.5	1.0
U96-2408	1.8	2.5	1.3	2.3	1.8	1.0
U96-2416	2.2	1.7	1.6	2.3	1.8	1.0
U96-2426	2.3	1.6	1.4	3.5	2.7	1.3

UNIFORM TEST II, 1998

LODGING (score)

Strain	Lafayette IN	Wanatah IN	Lamberton MN	Waseca MN
Dwight (SCN)	1.5	1.3	2.7	2.0
IA2008R (BSR)	2.7	1.3	3.3	3.7
IA2021 (II)	1.5	1.2	2.7	2.3
IA2036 (SCN)	3.2	1.3	3.7	4.0
Marcus 95 (I)	1.5	1.0	2.3	1.7
A94-674017 (L)	1.8	1.2	2.3	1.7
A95-483031	3.0	1.3	4.0	3.3
A96-591033	1.0	1.0	2.0	1.0
A96-591046	1.3	1.5	3.0	2.0
A96-591072	1.2	1.0	2.3	2.0
A96-597021	1.7	1.0	3.0	1.7
C1963	1.3	1.2	3.3	2.0
E95147	1.0	1.2	2.3	2.0
E95505	1.7	1.0	3.0	2.0
E95882	1.5	1.2	2.3	1.0
M92-1731	2.0	1.0	3.3	2.7
SD93-522	2.3	1.5	3.7	3.3
SD93-828	1.5	1.3	3.3	3.3
U96-2233	1.0	1.0	1.7	1.3
U96-2408	1.5	1.0	2.3	2.0
U96-2416	2.0	1.3	3.0	2.0
U96-2426	1.3	1.0	3.0	2.3

UNIFORM TEST II, 1998

LODGING (score)

Strain	Hartington NE	Hildreth NE	McCool Junction NE	Hoytville OH
Dwight (SCN)	1.0	2.0	2.0	2.3
IA2008R (BSR)	1.0	3.0	2.0	2.9
IA2021 (II)	1.0	2.0	2.0	2.6
IA2036 (SCN)	2.0	3.0	3.3	3.0
Marcus 95 (I)	1.0	1.7	2.0	3.7
A94-674017 (L)	1.3	2.0	2.3	2.6
A95-483031	1.3	2.3	2.7	2.8
A96-591033	1.0	1.0	1.7	2.3
A96-591046	1.0	1.7	2.0	2.5
A96-591072	1.0	1.0	1.7	2.3
A96-597021	1.0	2.0	2.3	3.0
C1963	1.0	2.0	2.3	2.4
E95147	1.0	1.3	2.0	2.1
E95505	1.0	1.3	1.7	2.0
E95882	1.0	1.7	1.0	2.0
M92-1731	1.0	3.0	1.0	2.9
SD93-522	1.3	3.0	2.3	3.1
SD93-828	1.0	2.0	2.0	2.6
U96-2233	1.0	1.3	1.7	2.2
U96-2408	1.0	1.3	1.3	3.1
U96-2416	1.0	2.0	2.7	2.8
U96-2426	1.0	2.0	2.3	2.6

UNIFORM TEST II, 1998

LODGING (score)

Strain	Wooster OH	Ridgetown Ont.	Woodslee Ont.	Beresford SD	Brookings SD	Arlington WI
Dwight (SCN)	2.0	2.0	1.7	1.0	2.0	4.0
IA2008R (BSR)	2.7	3.0	2.3	2.0	2.0	4.7
IA2021 (II)	1.0	1.3	1.7	1.0	2.0	4.7
IA2036 (SCN)	2.0	3.0	3.0	3.0	2.0	4.7
Marcus 95 (I)	1.7	2.0	1.0	1.0	2.0	4.3
A94-674017 (L)	2.0	2.3	2.3	1.0	2.0	4.3
A95-483031	1.7	2.7	2.0	3.0	2.0	4.3
A96-591033	1.3	1.7	1.0	1.0	2.0	2.7
A96-591046	1.0	1.7	1.3	2.0	2.0	4.7
A96-591072	1.7	2.0	1.0	1.0	2.0	3.0
A96-597021	1.7	2.0	1.7	2.0	2.0	4.3
C1963	1.3	2.7	1.7	2.0	2.0	4.7
E95147	1.0	1.7	1.0	1.0	1.0	3.0
E95505	1.3	2.0	1.0	2.0	2.0	4.3
E95882	1.3	1.3	1.3	1.0	1.0	4.0
M92-1731	2.7	3.0	3.0	2.0	2.0	4.0
SD93-522	2.0	2.7	2.3	3.0	2.0	5.0
SD93-828	1.7	1.7	1.7	3.0	1.0	4.0
U96-2233	1.0	1.0	1.0	1.0	1.0	2.7
U96-2408	1.7	2.0	1.3	1.0	2.0	3.0
U96-2416	3.3	2.0	2.3	3.0	2.0	4.3
U96-2426	2.0	3.0	2.0	4.0	1.0	5.0

UNIFORM TEST II, 1998

PLANT HEIGHT (inches)

Strain	Mean 18 Tests	Ames IA	Grand Junction IA	Dekalb IL	Dwight IL	Urbana IL
Dwight (SCN)	34	40	31	36	37	33
IA2008R (BSR)	39	44	36	43	40	34
IA2021 (II)	32	36	31	33	31	28
IA2036 (SCN)	39	48	38	34	45	36
Marcus 95 (I)	33	38	31	36	34	28
A94-674017 (L)	36	43	35	37	41	31
A95-483031	37	40	35	35	43	33
A96-591033	36	42	33	36	36	30
A96-591046	37	43	36	43	42	35
A96-591072	36	39	29	39	38	30
A96-597021	36	41	35	37	37	32
C1963	36	42	35	38	39	30
E95147	34	42	29	38	36	29
E95505	35	43	30	40	34	31
E95882	31	37	26	37	33	22
M92-1731	34	39	30	36	38	29
SD93-522	37	45	33	42	42	30
SD93-828	35	41	34	37	40	29
U96-2233	28	29	22	29	29	23
U96-2408	38	45	33	39	41	35
U96-2416	38	43	34	38	42	36
U96-2426	36	40	30	38	40	31

UNIFORM TEST II, 1998

PLANT HEIGHT (inches)

Strain	Lafayette IN	Wanatah IN	Lamberton MN	Waseca MN
Dwight (SCN)	32	32	40	39
IA2008R (BSR)	38	36	46	46
IA2021 (II)	29	28	40	38
IA2036 (SCN)	36	37	48	47
Marcus 95 (I)	30	32	42	40
A94-674017 (L)	35	33	44	44
A95-483031	37	38	43	42
A96-591033	35	31	46	45
A96-591046	35	33	47	39
A96-591072	33	33	46	43
A96-597021	34	32	43	42
C1963	33	34	46	43
E95147	33	29	42	38
E95505	35	32	46	38
E95882	25	28	40	40
M92-1731	34	31	42	35
SD93-522	36	36	45	41
SD93-828	33	36	42	43
U96-2233	25	25	30	34
U96-2408	37	34	46	45
U96-2416	40	37	46	46
U96-2426	32	34	45	42

UNIFORM TEST II, 1998

PLANT HEIGHT (inches)

Strain	Hartington NE	Hildreth NE	McCool Junction NE	Hoytville OH
Dwight (SCN)		36	32	31
IA2008R (BSR)		38	37	32
IA2021 (II)		35	31	29
IA2036 (SCN)		39	37	36
Marcus 95 (I)		34	30	29
A94-674017 (L)		36	33	27
A95-483031		38	37	33
A96-591033		37	35	30
A96-591046		37	35	33
A96-591072		37	35	29
A96-597021		37	36	32
C1963		34	35	31
E95147		34	32	30
E95505		35	32	30
E95882		29	32	25
M92-1731		35	33	30
SD93-522		35	38	33
SD93-828		36	35	28
U96-2233		29	29	25
U96-2408		38	36	30
U96-2416		37	35	32
U96-2426		36	34	32

UNIFORM TEST II, 1998

PLANT HEIGHT (inches)

Strain	Wooster OH	Ridgetown Ont.	Woodslee Ont.	Beresford SD	Brookings SD	Arlington WI
Dwight (SCN)	33	39	30	34	23	38
IA2008R (BSR)	37	48	33	41	26	39
IA2021 (II)	27	35	27	35	25	34
IA2036 (SCN)	36	41	34	43	27	39
Marcus 95 (I)	29	37	26	35	21	34
A94-674017 (L)	33	40	31	39	28	37
A95-483031	35	45	30	41	30	37
A96-591033	35	42	29	35	28	41
A96-591046	34	41	33	38	29	40
A96-591072	42	41	28	35	27	39
A96-597021	33	41	29	37	30	40
C1963	32	38	31	40	29	38
E95147	31	39	26	37	29	35
E95505	44	39	27	38	24	33
E95882	32	36	25	30	27	38
M92-1731	34	42	28	39	27	38
SD93-522	35	40	33	32	32	41
SD93-828	33	40	28	32	29	37
U96-2233	29	34	26	29	24	32
U96-2408	34	44	31	40	30	44
U96-2416	36	43	31	41	33	43
U96-2426	32	46	33	37	30	36

UNIFORM TEST II, 1998

SEED SIZE (g/100)

Strain	Mean 18 Tests	Ames IA	Grand Junction IA	Dekalb IL	Dwight IL	Urbana IL
Dwight (SCN)	14.4	15.2	14.1	14.3	12.1	13.2
IA2008R (BSR)	14.5	13.5	13.7	14.5	12.6	14.4
IA2021 (II)	16.9	16.9	17.1	18.5	13.2	15.2
IA2036 (SCN)	15.1	15.6	15.0	15.6	13.3	14.2
Marcus 95 (I)	17.1	16.7	17.6	18.8	14.8	16.9
A94-674017 (L)	19.9	20.9	21.0	22.1	17.4	20.5
A95-483031	15.0	14.5	14.8	16.3	11.9	13.5
A96-591033	18.1	18.2	17.9	20.2	15.0	16.4
A96-591046	14.9	15.1	15.0	15.6	11.4	14.4
A96-591072	18.5	17.6	17.4	20.5	15.5	17.5
A96-597021	17.2	18.9	17.7	18.9	14.7	17.2
C1963	16.0	15.9	15.8	18.2	13.5	15.1
E95147	17.3	16.4	16.5	20.2	15.1	16.1
E95505	16.1	16.7	14.9	18.4	11.7	13.7
E95882	15.6	15.4	13.6	19.3	10.8	12.0
M92-1731	17.7	16.2	16.3	19.8	15.1	15.2
SD93-522	16.7	16.1	15.4	17.7	14.1	15.0
SD93-828	16.0	15.9	15.7	17.5	13.5	15.4
U96-2233	16.9	18.2	17.0	18.4	14.7	14.8
U96-2408	14.9	15.6	13.9	16.8	12.6	13.4
U96-2416	15.6	16.1	14.7	18.1	12.3	14.6
U96-2426	14.4	14.3	13.7	15.9	11.7	13.5

UNIFORM TEST II, 1998

SEED SIZE (g/100)

Strain	Lafayette IN	Wanatah IN	Lamberton MN	Waseca MN
Dwight (SCN)	12.2	14.7	14.2	15.5
IA2008R (BSR)	14.3	14.4	14.3	15.4
IA2021 (II)	15.8	16.3	16.7	19.5
IA2036 (SCN)	14.4	14.9	14.8	15.8
Marcus 95 (I)	15.6	16.7	16.7	18.1
A94-674017 (L)	19.7	18.1	18.8	21.4
A95-483031	13.8	15.7	14.3	16.1
A96-591033	16.9	18.9	18.0	19.3
A96-591046	13.8	14.8	14.3	14.3
A96-591072	17.1	17.6	18.5	19.5
A96-597021	15.4	17.2	17.1	19.2
C1963	14.9	15.4	16.2	17.0
E95147	16.7	16.7	17.0	19.5
E95505	14.5	15.5	16.0	18.4
E95882	14.0	17.3	15.9	17.3
M92-1731	16.5	18.8	17.0	18.7
SD93-522	14.9	17.0	15.8	17.8
SD93-828	15.6	18.0	15.9	15.8
U96-2233	13.2	16.7	17.2	19.1
U96-2408	12.9	14.1	14.6	16.7
U96-2416	14.9	14.5	14.6	16.5
U96-2426	13.2	14.0	14.7	16.1

UNIFORM TEST II, 1998

SEED SIZE (g/100)

Strain	McCool			
	Hartington NE	Hildreth NE	Junction NE	Hoytville OH
Dwight (SCN)	12.6	14.6	15.3	16.2
IA2008R (BSR)	13.5	15.1	15.3	15.5
IA2021 (II)	14.5	17.8	18.3	19.2
IA2036 (SCN)	13.7	16.2	15.7	15.2
Marcus 95 (I)	15.4	18.1	17.7	18.5
A94-674017 (L)	18.3	20.9	20.4	21.5
A95-483031	13.5	16.0	16.8	15.5
A96-591033	16.2	19.0	20.4	18.1
A96-591046	14.4	15.7	17.7	16.5
A96-591072	16.5	20.2	20.4	18.8
A96-597021	15.3	17.1	18.2	18.4
C1963	14.7	17.2	18.3	16.8
E95147	14.6	18.6	17.7	17.8
E95505	15.0	16.9	17.5	17.4
E95882	15.3	17.1	16.3	15.3
M92-1731	16.1	19.3	18.9	18.8
SD93-522	15.3	17.3	17.7	17.2
SD93-828	14.5	17.0	17.3	16.5
U96-2233	15.3	17.5	18.1	18.5
U96-2408	14.2	14.9	16.4	15.8
U96-2416	14.9	15.8	16.9	16.7
U96-2426	13.4	15.2	16.1	15.0

UNIFORM TEST II, 1998

SEED SIZE (g/100)

Strain	Wooster OH	Ridgetown Ont.	Woodslee Ont.	Beresford SD	Brookings SD	Arlington WI
Dwight (SCN)	13.9	19.4	16.7	14.2	11.4	
IA2008R (BSR)	13.7	17.5	16.5	14.6	11.9	
IA2021 (II)	13.9	21.7	20.0	15.4	15.1	
IA2036 (SCN)	12.7	19.0	17.5	14.5	12.8	
Marcus 95 (I)	14.0	21.4	20.0	16.2	14.1	
A94-674017 (L)	17.9	23.8	20.9	19.3	16.1	
A95-483031	14.0	17.2	16.3	14.4	14.8	
A96-591033	15.7	23.0	19.5	18.0	15.7	
A96-591046	12.6	17.1	16.4	14.4	13.9	
A96-591072	17.2	22.6	20.4	18.1	16.9	
A96-597021	14.3	21.1	18.1	17.0	13.6	
C1963	13.7	18.0	17.2	15.7	15.1	
E95147	15.9	20.6	19.4	17.1	15.4	
E95505	14.1	20.2	18.0	16.6	14.9	
E95882	15.1	19.4	17.6	15.9	13.7	
M92-1731	16.7	20.0	21.3	17.4	16.8	
SD93-522	15.0	20.9	19.4	16.6	17.4	
SD93-828	13.8	18.6	16.3	15.1	15.1	
U96-2233	14.5	19.5	18.5	16.3	16.2	
U96-2408	14.0	19.3	16.9	13.9	11.5	
U96-2416	15.3	19.2	17.1	15.1	13.6	
U96-2426	13.1	16.9	15.8	14.4	12.4	

UNIFORM TEST II, 1998

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Hartington NE	Hoytville OH
Dwight (SCN)	41.5	41.4	41.6	42.7	40.6	41.3
IA2008R (BSR)	41.1	42.0	42.3	42.1	39.3	39.9
IA2021 (II)	39.8	39.2	39.9	41.4	38.8	39.7
IA2036 (SCN)	41.3	41.8	41.8	43.3	40.2	39.5
Marcus 95 (I)	41.4	40.8	41.5	42.6	39.9	42.0
A94-674017 (L)	41.2	41.6	41.5	42.0	40.4	40.7
A95-483031	40.7	41.1	41.3	41.5	39.9	39.6
A96-591033	41.8	41.1	42.4	42.7	41.2	41.4
A96-591046	41.7	41.9	42.3	42.5	40.7	40.9
A96-591072	42.4	41.8	42.8	44.7	41.6	41.0
A96-597021	42.6	42.6	42.9	43.9	41.1	42.4
C1963	40.0	40.1	39.5	41.4	38.7	40.4
E95147	41.3	42.0	41.5	42.1	40.8	39.9
E95505	40.8	40.5	42.0	42.2	38.7	40.4
E95882	40.4	41.1	41.4	42.4	40.4	36.9
M92-1731	42.0	41.4	42.2	42.7	42.0	41.5
SD93-522	40.7	41.6	40.5	41.7	39.6	40.0
SD93-828	39.9	40.3	40.7	41.4	38.4	38.9
U96-2233	41.5	41.1	42.2	42.4	40.4	41.4
U96-2408	42.2	41.9	42.8	43.2	41.3	41.7
U96-2416	41.3	41.2	42.1	42.3	40.3	40.8
U96-2426	41.1	41.6	41.3	41.9	39.8	41.0

UNIFORM TEST II, 1998

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Hartington NE	Hoytville OH
Dwight (SCN)	19.4	19.6	20.2	18.5	19.7	19.1
IA2008R (BSR)	19.8	19.2	20.3	19.3	20.3	20.1
IA2021 (II)	21.3	21.0	22.3	20.9	21.6	20.9
IA2036 (SCN)	19.3	18.2	20.3	18.6	19.8	19.6
Marcus 95 (I)	21.1	20.8	21.6	20.9	21.6	20.4
A94-674017 (L)	20.8	20.4	21.8	21.1	20.6	20.3
A95-483031	20.9	20.7	21.5	20.7	21.1	20.7
A96-591033	20.0	20.0	20.8	19.6	20.6	19.2
A96-591046	20.6	20.3	21.6	19.9	21.1	20.0
A96-591072	19.8	19.5	20.5	19.5	19.9	19.4
A96-597021	19.5	19.3	20.3	19.0	19.6	19.1
C1963	21.1	20.6	22.5	20.6	21.8	20.2
E95147	20.2	19.8	21.0	20.4	20.2	19.7
E95505	20.2	20.3	20.5	19.5	20.7	19.9
E95882	20.4	19.3	20.5	20.1	20.6	21.4
M92-1731	20.6	20.8	21.2	20.5	20.3	20.1
SD93-522	21.2	20.2	22.2	20.9	21.6	21.0
SD93-828	21.2	20.7	21.8	20.5	21.7	21.2
U96-2233	20.3	20.0	20.8	20.1	20.5	20.2
U96-2408	19.9	20.2	20.6	19.3	20.4	19.1
U96-2416	21.2	21.0	21.8	20.7	21.9	20.5
U96-2426	20.4	19.9	21.1	20.3	20.8	20.1

Preliminary Test IIA, 1998

	Strain	Parentage	Generation Composited	Unique Traits
1.	IA2008R (BSR)	IA2008 x Archer	BC3F2	Rps1-k, BSR
2.	IA2021 (II)	Elgin 87 x Marcus	F5	
3.	A94-674017 (L)	Pioneer 9303 x Kenwood	F5	Rps1-k, Rps6
4.	Marcus 95 (I)	[Marcus (5) x Elgin 87] x [Marcus (5) x Preston BC-11-1]	BC4F2	
5.	A97-770011	Northrup King S20-20 x Asgrow A2234	F5	BSR
6.	A97-770031	A92-535059 x Pioneer 9273	F5	
7.	A97-770036	Pioneer 9273 x (A92-535059 x IA1006)	F5	
8.	A97-770051	Pioneer 9273 x (A92-535059 x ORC 9205)	F5	
9.	A97-771019	Macon x IA1006	F5	
10.	A97-771039	A92-627030 x ORC 9205	F5	
11.	A97-771041	A92-627030 x ORC 9205	F5	BSR
12.	A97-771050	IA2021 x A92-627030	F5	
13.	A97-871009	Northrup King S20-20 x (A92-535059 x IA2021)	F5	
14.	A97-871010	IA1006 x IA2021	F5	
15.	A97-871054	IA2021 x A92-627030	F5	
16.	A97-872010	A92-625002 x IA3003	F5	
17.	A87-872019	A92-727017 x A92-625002	F5	BSR
18.	A97-872013	A92-625002 x IA3003	F5	
19.	C1973	C1834 x CX1311-99	F5	dt1 dt1
20.	LG94-1126	LG85-3343 x LG87-1991	F6	
21.	LG94-1128	LG85-3343 x LG87-1991	F6	
22.	LG94-1133	LG85-3343 x LG87-1991	F6	
23.	LG94-1906	PI 468.377 x Asgrow A3205	F6	
24.	U97-2002	U93-3204 x UP1C2-14	F6	
25.	U97-2007	U91-2527 x UP1C2-72	F6	dt1 dt1
26.	U97-2030	A91-607024 x UP1C2-14	F6	
27.	U97-2103	MSBP3F6	F7	
28.	U97-2104	MSBP3F6	F7	
29.	U97-2110	MSBP3F6	F7	
30.	U97-2140	MSBP3F6	F7	
31.	U97-2210	MSBP3F6	F7	dt1 dt1
32.	U97-2225	SV513 x U93-3204	F4	
33.	U97-2238	MSBP3F6	F7	
34.	U97-2242	LN89-334 x CVS13	F4	
35.	U97-2304	MSBP3F6	F7	
36.	U97-2340	MSBP3F6	F7	
37.	U97-2406	U91-2527 x UP1C2-72	F6	dt1 dt1
38.	U97-2418	MSBP3F6	F7	

PRELIMINARY TEST IIA, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	<u>Chlorosis</u>	<u>PR</u>	<u>Hard Seed</u>	<u>PS</u>	<u>PSB</u>
		Score Humboldt	Lafayette Race 7	%	Lafayette a %	n %
IA2008R (BSR)	WGTDYBfEpI	3.3	R	20	12	2
IA2021 (II)	WTBSYBlepI	3.6	R	50	6	2
A94-674017 (L)	PTBDYBrepI	4.5	S	8	20	4
Marcus 95 (I)	WTTDYBfepI	4.6	R	14	40	8
A97-770011	PGBDYHepI	2.6	R	10	6	12
A97-770031	PGBSYYEpl	2.4	S	10	14	0
A97-770036	PG+TSYBfEpI	2.6	S	2	10	2
A97-770051	PGBSYBIepI	2.8	S	0	6	0
A97-771019	WTBDYBIepI	3.3	S	4	6	6
A97-771039	PTTSYBrEpI	4.3	S	4	22	6
A97-771041	PTTSYBIHI	4.5	S	6	8	2
A97-771050	WTTSYBIHI	4.0	S	34	0	0
A97-871009	WGBDYEpI	2.9	R	32	2	0
A97-871010	WTBSYBlepI	3.9	H	52	2	0
A97-871054	WTB+TIYBIHI	3.8	H	40	4	0
A97-872010	PTBSYBlepI	3.8	S	0	6	2
A87-872019	PTBDYBlepI	3.8	S	18	10	0
A97-872013	PTBDYBlepI	3.3	S	12	8	0
C1973	PTBSYBlepI	3.1	R	12	10	0
LG94-1126	PGBDYIbepI	5.0	R	0	6	0
LG94-1128	PGBDYIbepI	4.9	R	0	14	0
LG94-1133	PGBDYIbepI	5.0	R	2	8	2
LG94-1906	WGBIYBfepI	3.3	S	6	2	2
U97-2002	PTBDYBlepI	3.5	S	10	6	0
U97-2007	PGBDYIbepI	2.6	S	14	0	0
U97-2030	PG+TBIYBIepI	2.8	S	10	2	4
U97-2103	WTBDYBIepI	2.9	S	2	0	0
U97-2104	WGBDYBfEpI	3.5	S	4	2	0
U97-2110	PGBDYBfepI	4.0	S	2	18	0
U97-2140	PGBIYIbepI	2.9	R	0	0	0
U97-2210	WTTDYBIepI	4.0	S	4	0	8
U97-2225	P+WGBDYBfepI	3.6	S	14	10	0
U97-2238	PTTIYBlepI	4.0	S	2	4	4
U97-2242	WGBDYBfepI	3.8	R	4	12	0
U97-2304	PTBSYBIepI	4.8	S	20	6	2
U97-2340	PTBIYBlepI	3.3	S	8	8	2
U97-2406	PGBDYIbepI	2.6	S	10	4	0
U97-2418	PTBSYBIepI	3.9	S	4	12	0

PRELIMINARY TEST IIA, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield 10 bu/a	Rank 10 No.	Maturity 9 Date	Lodging 10 Score	Plant Height 10 In.	Seed Size 10 g/100	Composition	
							Protein 5 %	Oil 5 %
IA2008R (BSR)	51.4	38	-1.1	2.3	35	14.0	41.0	20.1
IA2021 (II)	57.6	15	9/13	1.9	29	16.5	40.3	21.3
A94-674017 (L)	57.9	10	2.3	1.8	35	19.5	41.2	21.2
Marcus 95 (I)	55.4	26	-0.9	1.7	31	17.3	41.1	21.5
A97-770011	55.7	25	-1.1	1.4	33	16.6	40.6	21.0
A97-770031	55.0	28	-2.9	1.3	36	17.1	42.1	20.9
A97-770036	56.0	22	0.4	2.2	36	15.4	41.5	20.6
A97-770051	60.9	2	1.2	1.3	32	15.2	40.8	21.5
A97-771019	58.5	4	0.5	2.1	36	16.8	41.6	20.5
A97-771039	58.2	8	-1.9	1.7	32	16.4	41.9	20.0
A97-771041	61.2	1	0.6	1.9	35	16.9	42.4	20.1
A97-771050	55.0	28	-0.4	1.7	34	17.3	40.6	20.7
A97-871009	58.3	5	1.3	2.2	34	18.3	41.2	21.2
A97-871010	55.8	24	0.3	2.8	37	16.2	41.8	20.1
A97-871054	58.3	5	2.9	2.2	39	15.0	40.0	21.6
A97-872010	56.3	21	-0.7	1.8	30	17.2	41.1	20.5
A87-872019	55.9	23	1.1	2.0	32	14.8	40.9	20.2
A97-872013	56.5	20	-0.6	1.7	32	16.9	43.0	19.9
C1973	53.8	33	1.6	1.5	35	17.8	46.9	18.1
LG94-1126	53.7	34	0.6	2.2	36	13.3	42.6	19.8
LG94-1128	54.7	30	1.2	2.5	36	13.4	42.8	19.7
LG94-1133	53.6	36	1.4	2.6	36	13.8	42.9	19.6
LG94-1906	53.4	37	3.4	2.0	37	14.8	41.0	20.3
U97-2002	56.8	19	-1.4	1.7	32	19.1	43.5	19.4
U97-2007	57.7	13	0.9	2.5	38	17.9	41.4	21.0
U97-2030	57.7	13	3.7	2.0	41	16.5	41.9	19.7
U97-2103	57.2	18	4.3	2.0	35	15.3	42.7	19.9
U97-2104	58.0	9	2.1	1.3	32	15.5	41.0	20.2
U97-2110	54.7	30	-0.6	1.5	36	15.6	40.3	21.5
U97-2140	58.8	3	3.7	1.3	35	16.3	40.8	21.6
U97-2210	53.7	34	2.4	2.2	42	14.6	41.8	20.6
U97-2225	57.5	16	1.9	2.9	34	19.1	41.1	20.5
U97-2238	57.3	17	2.9	2.0	35	16.2	41.2	21.6
U97-2242	57.8	12	1.9	2.0	35	17.6	41.7	20.7
U97-2304	54.1	32	1.8	1.8	37	14.7	41.6	20.6
U97-2340	58.3	7	1.0	1.7	36	15.5	40.9	21.6
U97-2406	57.9	10	1.8	2.4	37	17.5	41.5	20.9
U97-2418	55.2	27	1.4	2.0	35	15.9	42.4	20.6

121.8 Days After Planting

PRELIMINARY TEST IIA, 1998

YIELD (bu/a)

Strain	Mean 10 Tests	Ames IA	Grand Junction IA	Urbana IL	Lafayette IN
IA2008R (BSR)	51.4	60.6	35.1	35.1	46.9
IA2021 (II)	57.6	69.1	48.3	48.3	48.5
A94-674017 (L)	57.9	58.3	54.4	52.4	54.5
Marcus 95 (I)	55.4	64.0	44.5	52.7	50.0
A97-770011	55.7	67.9	31.1	50.7	49.6
A97-770031	55.0	66.7	40.8	36.9	48.3
A97-770036	56.0	62.2	48.1	52.0	54.2
A97-770051	60.9	69.9	53.8	53.8	51.0
A97-771019	58.5	65.7	48.9	56.2	55.1
A97-771039	58.2	68.2	52.7	54.6	50.1
A97-771041	61.2	72.2	53.8	53.2	53.3
A97-771050	55.0	67.3	56.5	37.8	51.3
A97-871009	58.3	71.3	51.7	47.2	54.5
A97-871010	55.8	60.2	48.1	56.0	51.5
A97-871054	58.3	67.9	54.6	49.4	46.5
A97-872010	56.3	69.1	52.9	49.4	51.2
A87-872019	55.9	71.5	36.0	54.0	51.6
A97-872013	56.5	68.2	42.2	52.9	53.8
C1973	53.8	65.9	48.9	48.1	47.3
LG94-1126	53.7	57.2	49.8	51.8	51.8
LG94-1128	54.7	59.9	47.0	52.4	48.4
LG94-1133	53.6	58.6	38.2	50.5	49.0
LG94-1906	53.4	55.5	50.6	49.8	47.8
U97-2002	56.8	69.9	46.9	45.7	49.3
U97-2007	57.7	74.2	47.6	50.9	49.7
U97-2030	57.7	63.3	51.5	51.5	50.8
U97-2103	57.2	69.0	45.5	55.0	43.8
U97-2104	58.0	71.0	57.2	50.0	45.7
U97-2110	54.7	67.1	57.9	41.9	44.7
U97-2140	58.8	75.6	52.7	43.7	51.3
U97-2210	53.7	63.6	49.0	38.6	47.3
U97-2225	57.5	63.6	48.7	48.3	52.0
U97-2238	57.3	63.9	54.1	47.2	49.8
U97-2242	57.8	67.0	54.0	46.9	48.8
U97-2304	54.1	63.6	56.0	36.8	49.7
U97-2340	58.3	70.7	63.3	51.5	45.2
U97-2406	57.9	70.5	47.8	52.3	54.4
U97-2418	55.2	58.0	53.2	39.4	48.2
C.V. (%)		6.9	15.0	14.2	7.3
L.S.D. (5%)		4.6	7.3	14.3	7.5
Row Sp. (In.)		27	27	30	24
Rows/Plot		2	2	4	4
Reps		2	2	2	2

PRELIMINARY TEST IIA, 1998

YIELD (bu/a)

Strain	Hildreth NE	McCool Junction NE	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R (BSR)	45.4	66.5	62.7	62.1	61.8	37.8
IA2021 (II)	61.2	62.7	74.7	69.7	57.3	36.3
A94-674017 (L)	63.5	70.4	70.3	59.0	59.6	36.5
Marcus 95 (I)	61.8	64.7	62.7	57.5	58.0	37.8
A97-770011	59.7	66.8	70.9	61.3	62.0	37.5
A97-770031	61.2	66.8	68.5	62.1	59.9	38.7
A97-770036	57.7	61.6	64.8	60.1	64.8	34.4
A97-770051	72.7	71.2	72.4	62.3	64.0	38.3
A97-771019	62.3	72.6	64.9	56.3	60.7	42.2
A97-771039	63.7	69.3	57.0	63.6	66.5	36.1
A97-771041	65.6	71.5	73.0	62.1	70.2	37.1
A97-771050	59.4	63.7	60.9	53.2	66.3	33.3
A97-871009	59.9	68.6	58.1	59.4	75.3	37.0
A97-871010	56.3	70.4	55.6	63.8	63.0	32.7
A97-871054	63.7	66.9	70.3	62.7	64.3	36.8
A97-872010	62.2	57.1	60.6	63.8	63.1	33.6
A87-872019	63.5	57.4	65.7	60.9	63.2	35.6
A97-872013	61.1	70.6	63.7	58.7	60.2	33.8
C1973	62.0	62.4	52.5	58.9	59.3	32.9
LG94-1126	53.1	66.1	60.3	55.0	57.6	33.8
LG94-1128	48.4	68.3	72.0	57.5	60.5	32.9
LG94-1133	59.1	67.3	61.5	58.8	58.5	34.7
LG94-1906	58.0	70.3	55.1	56.5	62.0	28.2
U97-2002	58.9	70.8	63.7	64.3	65.1	33.8
U97-2007	64.5	67.8	59.1	63.8	63.5	36.3
U97-2030	55.2	75.4	78.3	61.6	57.7	31.9
U97-2103	63.6	68.2	64.3	64.5	61.8	36.1
U97-2104	62.3	66.3	68.1	54.3	64.0	40.9
U97-2110	61.5	61.3	50.6	57.0	67.6	37.2
U97-2140	67.2	68.5	69.0	59.9	66.9	32.8
U97-2210	57.3	64.0	65.7	61.2	55.7	34.9
U97-2225	60.8	68.6	60.8	66.3	65.6	40.4
U97-2238	63.1	68.4	62.7	64.8	64.0	34.6
U97-2242	63.4	65.8	60.5	61.6	72.3	37.4
U97-2304	60.0	67.3	60.8	55.9	57.1	33.8
U97-2340	67.9	66.5	71.4	60.6	54.4	31.1
U97-2406	55.4	71.4	62.8	66.2	61.9	36.0
U97-2418	71.6	61.6	62.1	57.2	66.4	34.7
C.V. (%)	7.9	9.7	12.2	9.1	7.0	8.2
L.S.D. (5%)	11.2	13.6	13.3	9.3	8.9	5.9
Row Sp. (In.)	30	30	7.5	24	30	30
Rows/Plot	4	4	8	4	4	4
Reps	2	2	2	2	2	2

PRELIMINARY TEST IIA, 1998

YIELD RANK

Strain	Yield Rank	Ames IA	Grand Junction IA	Urbana IL	Lafayette IN
IA2008R (BSR)	38	31	37	38	33
IA2021 (II)	15	11	24	24	26
A94-674017 (L)	10	35	7	10	2
Marcus 95 (I)	26	24	32	9	18
A97-770011	25	16	38	18	22
A97-770031	28	21	34	36	28
A97-770036	22	30	25	13	5
A97-770051	2	9	10	6	15
A97-771019	4	23	21	1	1
A97-771039	8	14	14	4	17
A97-771041	1	3	11	7	7
A97-771050	28	18	4	35	12
A97-871009	5	5	16	27	2
A97-871010	24	32	26	2	11
A97-871054	5	17	6	22	34
A97-872010	21	12	13	22	14
A87-872019	23	4	36	5	10
A97-872013	20	15	33	8	6
C1973	33	22	22	26	31
LG94-1126	34	37	19	14	9
LG94-1128	30	33	29	10	27
LG94-1133	36	34	35	19	24
LG94-1906	37	38	18	21	30
U97-2002	19	10	30	30	23
U97-2007	13	2	28	17	20
U97-2030	13	29	17	15	16
U97-2103	18	13	31	3	38
U97-2104	9	6	3	20	35
U97-2110	30	19	2	32	37
U97-2140	3	1	15	31	12
U97-2210	34	26	20	34	31
U97-2225	16	27	23	24	8
U97-2238	17	25	8	27	19
U97-2242	12	20	9	29	25
U97-2304	32	28	5	37	20
U97-2340	7	7	1	15	36
U97-2406	10	8	27	12	4
U97-2418	27	36	12	33	29

PRELIMINARY TEST IIA, 1998

YIELD RANK

Strain	Hildreth NE	McCool Junction NE	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R (BSR)	38	24	22	13	23	6
IA2021 (II)	20	32	2	1	35	15
A94-674017 (L)	10	8	8	25	29	14
Marcus 95 (I)	18	29	22	29	32	6
A97-770011	26	23	7	18	20	8
A97-770031	21	22	11	15	28	4
A97-770036	31	35	16	22	11	25
A97-770051	1	5	4	12	13	5
A97-771019	14	2	15	34	25	1
A97-771039	8	11	34	10	6	17
A97-771041	5	3	3	14	3	11
A97-771050	27	31	26	38	8	31
A97-871009	25	12	33	24	1	12
A97-871010	33	9	35	7	19	35
A97-871054	7	21	8	11	12	13
A97-872010	16	38	29	8	18	30
A87-872019	11	37	13	20	17	20
A97-872013	22	7	18	28	27	26
C1973	17	33	37	26	30	32
LG94-1126	36	27	31	36	34	26
LG94-1128	37	16	5	30	26	32
LG94-1133	28	19	25	27	31	22
LG94-1906	30	10	36	33	20	38
U97-2002	29	6	18	6	10	26
U97-2007	6	18	32	9	16	15
U97-2030	35	1	1	16	33	36
U97-2103	9	17	17	5	23	17
U97-2104	15	26	12	37	13	2
U97-2110	19	36	38	32	4	10
U97-2140	4	14	10	23	5	34
U97-2210	32	30	13	19	37	21
U97-2225	23	13	27	2	9	3
U97-2238	13	15	22	4	13	24
U97-2242	12	28	30	17	2	9
U97-2304	24	20	27	35	36	26
U97-2340	3	25	6	21	38	37
U97-2406	34	4	21	3	22	19
U97-2418	2	34	20	31	7	22

PRELIMINARY TEST IIA, 1998

MATURITY (date)

Strain	Mean 9 Tests	Ames IA	Grand Junction IA	Urbana IL	Lafayette IN
IA2008R (BSR)	-1.1	-1		-7	-1
IA2021 (II)	09/13	09/15		09/10	09/07
A94-674017 (L)	2.3	4		2	5
Marcus 95 (I)	-0.9	-1		-5	-1
A97-770011	-1.1	-3		-5	0
A97-770031	-2.9	-7		-13	-1
A97-770036	0.4	2		-5	3
A97-770051	1.2	0		2	2
A97-771019	0.5	0		-1	3
A97-771039	-1.9	-4		-6	-1
A97-771041	0.6	-1		-1	3
A97-771050	-0.4	-2		-4	1
A97-871009	1.3	1		-1	1
A97-871010	0.3	0		-1	2
A97-871054	2.9	1		4	4
A97-872010	-0.7	-1		-6	2
A87-872019	1.1	0		-1	3
A97-872013	-0.6	0		-3	2
C1973	1.6	0		-1	4
LG94-1126	0.6	0		-3	3
LG94-1128	1.2	1		-2	3
LG94-1133	1.4	1		0	5
LG94-1906	3.4	4		2	6
U97-2002	-1.4	-4		-6	1
U97-2007	0.9	0		-3	2
U97-2030	3.7	4		3	8
U97-2103	4.3	3		5	7
U97-2104	2.1	2		-2	6
U97-2110	-0.6	-1		-7	2
U97-2140	3.7	1		2	8
U97-2210	2.4	2		2	6
U97-2225	1.9	2		-1	5
U97-2238	2.9	3		-1	5
U97-2242	1.9	-1		3	4
U97-2304	1.8	2		-2	4
U97-2340	1.0	0		-2	3
U97-2406	1.8	0		-1	2
U97-2418	1.4	2		-3	2
Date Planted	05/15	05/06		05/12	05/16
Days to Mature	121.8	132		121	114

PRELIMINARY TEST IIA, 1998

MATURITY (date)

Strain	Hildreth NE	McCool Junction NE	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R (BSR)	-1	0	0	1	-1	0
IA2021 (II)	09/11	09/16	09/18	09/21	09/11	09/16
A94-674017 (L)	3	3	1	3	+5	+3
Marcus 95 (I)	2	-1	-2	-1	-2	-2
A97-770011	-1	-1	-1	1	0	-1
A97-770031	-1	0	-3	-1	+1	-3
A97-770036	1	3	-1	1	+3	-1
A97-770051	1	3	-1	3	+4	-1
A97-771019	1	2	-1	1	+3	-2
A97-771039	-2	-2	-2	0	0	-1
A97-771041	0	2	-1	3	+1	-2
A97-771050	-1	1	1	1	+1	-1
A97-871009	3	3	0	5	+3	-2
A97-871010	1	1	0	0	+4	+1
A97-871054	6	1	4	7	+4	0
A97-872010	0	1	-2	-1	+3	-2
A87-872019	3	3	1	1	+4	0
A97-872013	-1	-1	-2	0	+1	0
C1973	3	3	2	4	+4	+1
LG94-1126	1	2	1	2	+4	+2
LG94-1128	0	3	2	4	+5	+2
LG94-1133	2	3	0	2	+5	+2
LG94-1906	6	4	4	5	+5	+1
U97-2002	-1	-1	-2	0	0	-3
U97-2007	1	3	1	5	+3	+2
U97-2030	3	4	5	6	+5	+3
U97-2103	6	5	7	6	+7	+5
U97-2104	4	3	1	5	+7	+3
U97-2110	1	1	-2	1	+1	-4
U97-2140	4	7	6	6	+8	+3
U97-2210	4	2	1	5	+2	+1
U97-2225	3	3	1	5	+4	+1
U97-2238	4	4	5	7	+6	+2
U97-2242	4	3	1	4	+4	+2
U97-2304	3	3	2	5	+4	+3
U97-2340	1	3	1	3	+1	+2
U97-2406	4	4	1	6	+4	+2
U97-2418	4	2	2	4	+3	0
Date Planted	05/19	05/27	05/18	05/27	05/06	05/05
Days to Mature	115	112	123	117	128	134

PRELIMINARY TEST IIA, 1998

LODGING (score)

Strain	Mean 10 Tests	Ames IA	Grand Junction IA	Urbana IL	Lafay- ette IN
IA2008R (BSR)	2.3	3.9	1.5	1.0	1.8
IA2021 (II)	1.9	3.0	1.5	1.0	2.0
A94-674017 (L)	1.8	2.5	1.7	1.0	1.0
Marcus 95 (I)	1.7	2.3	1.6	1.0	1.0
A97-770011	1.4	1.5	1.1	1.0	1.3
A97-770031	1.3	1.7	1.1	1.0	1.0
A97-770036	2.2	3.0	1.5	1.3	2.3
A97-770051	1.3	1.6	1.5	1.0	1.0
A97-771019	2.1	3.8	2.1	1.0	1.5
A97-771039	1.7	3.3	1.5	1.0	1.0
A97-771041	1.9	2.0	1.7	1.0	1.5
A97-771050	1.7	2.0	1.9	1.0	1.0
A97-871009	2.2	3.0	1.6	1.0	2.0
A97-871010	2.8	3.4	1.8	1.0	3.0
A97-871054	2.2	3.0	1.7	1.0	2.3
A97-872010	1.8	2.4	1.2	1.0	1.0
A87-872019	2.0	2.1	1.1	1.0	1.8
A97-872013	1.7	2.3	1.5	1.0	1.5
C1973	1.5	1.2	1.6	1.0	1.0
LG94-1126	2.2	3.1	1.3	1.0	2.5
LG94-1128	2.5	3.9	1.5	1.3	2.8
LG94-1133	2.6	4.4	1.5	1.0	3.3
LG94-1906	2.0	2.5	1.5	1.0	1.5
U97-2002	1.7	1.4	1.5	1.0	1.0
U97-2007	2.5	3.3	1.6	1.0	2.0
U97-2030	2.0	2.3	1.5	1.3	1.8
U97-2103	2.0	3.0	1.9	1.0	1.3
U97-2104	1.3	1.2	1.2	1.0	1.0
U97-2110	1.5	2.5	1.6	1.0	1.0
U97-2140	1.3	1.2	1.2	1.0	1.0
U97-2210	2.2	3.3	1.9	1.5	2.0
U97-2225	2.9	4.0	1.8	1.5	2.8
U97-2238	2.0	2.3	1.6	1.5	3.0
U97-2242	2.0	1.9	1.9	1.0	1.5
U97-2304	1.8	1.9	1.6	1.0	1.5
U97-2340	1.7	1.7	1.6	1.3	1.0
U97-2406	2.4	4.0	1.4	1.0	1.8
U97-2418	2.0	3.3	1.9	1.0	1.3

PRELIMINARY TEST IIA, 1998

LODGING (score)

Strain	Hildreth NE	McCool Junction NE	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R (BSR)	2.5	3.0	3.3	2.0	2.0	2.0
IA2021 (II)	1.5	2.0	3.5	2.0	1.0	2.0
A94-674017 (L)	2.0	2.0	2.4	2.0	1.0	2.0
Marcus 95 (I)	1.0	2.0	4.2	1.0	1.0	2.0
A97-770011	2.0	1.5	2.5	1.5	1.0	1.0
A97-770031	1.0	1.5	2.0	1.5	1.0	1.0
A97-770036	2.0	3.0	3.2	2.0	2.0	2.0
A97-770051	1.0	1.0	2.0	1.0	1.0	2.0
A97-771019	1.5	2.0	4.0	2.0	2.0	1.0
A97-771039	1.0	1.0	3.3	1.0	2.0	2.0
A97-771041	2.0	2.0	3.0	1.5	2.0	2.0
A97-771050	1.0	1.5	3.6	1.5	2.0	2.0
A97-871009	2.0	2.5	3.9	1.5	3.0	2.0
A97-871010	3.5	3.0	4.1	3.0	3.0	2.0
A97-871054	2.5	2.0	3.0	2.0	3.0	2.0
A97-872010	2.0	1.5	4.3	1.0	2.0	2.0
A87-872019	2.0	2.5	3.5	2.0	2.0	2.0
A97-872013	2.0	2.0	2.7	1.5	1.0	2.0
C1973	1.5	1.5	2.2	2.0	1.0	2.0
LG94-1126	3.0	3.5	2.9	1.5	2.0	1.0
LG94-1128	3.5	3.0	2.7	2.5	3.0	1.0
LG94-1133	2.5	3.5	2.8	2.5	4.0	1.0
LG94-1906	2.0	3.5	2.6	1.5	2.0	2.0
U97-2002	2.0	2.0	2.1	2.0	2.0	2.0
U97-2007	3.0	3.5	3.5	2.0	3.0	2.0
U97-2030	2.0	3.0	2.3	2.0	2.0	2.0
U97-2103	1.5	2.0	3.3	2.0	2.0	2.0
U97-2104	1.0	1.5	2.8	1.0	1.0	1.0
U97-2110	1.0	2.0	1.9	1.0	2.0	1.0
U97-2140	1.0	2.0	2.2	1.0	1.0	1.0
U97-2210	2.0	3.0	3.1	2.0	2.0	1.0
U97-2225	3.0	3.5	4.1	3.0	3.0	2.0
U97-2238	2.0	1.5	2.9	2.5	2.0	1.0
U97-2242	1.5	2.5	3.8	2.5	2.0	1.0
U97-2304	1.5	2.0	3.0	1.5	2.0	2.0
U97-2340	2.0	2.0	2.6	2.0	2.0	1.0
U97-2406	2.0	3.5	2.8	2.5	3.0	2.0
U97-2418	2.0	2.5	3.5	1.0	2.0	1.0

PRELIMINARY TEST IIA, 1998

PLANT HEIGHT (inches)

Strain	Mean 10 Tests	Ames IA	Grand Junction IA	Urbana IL	Lafayette IN
IA2008R (BSR)	35	45	30	30	35
IA2021 (II)	29	36	26	27	29
A94-674017 (L)	35	45	33	30	36
Marcus 95 (I)	31	39	30	27	30
A97-770011	33	44	23	31	36
A97-770031	36	44	29	27	36
A97-770036	36	45	30	30	37
A97-770051	32	38	27	27	32
A97-771019	36	44	32	31	35
A97-771039	32	41	30	29	31
A97-771041	35	44	34	30	36
A97-771050	34	38	31	27	35
A97-871009	34	41	32	33	35
A97-871010	37	44	33	34	38
A97-871054	39	51	35	32	36
A97-872010	30	40	24	26	30
A87-872019	32	40	20	30	32
A97-872013	32	37	28	29	33
C1973	35	41	34	32	35
LG94-1126	36	44	31	35	38
LG94-1128	36	45	34	35	36
LG94-1133	36	45	30	36	36
LG94-1906	37	45	35	35	37
U97-2002	32	37	28	26	34
U97-2007	38	46	37	32	38
U97-2030	41	53	36	39	45
U97-2103	35	40	31	34	34
U97-2104	32	39	26	25	33
U97-2110	36	50	33	29	36
U97-2140	35	45	32	29	35
U97-2210	42	50	42	38	45
U97-2225	34	41	29	35	33
U97-2238	35	39	34	32	36
U97-2242	35	40	34	30	33
U97-2304	37	49	35	30	37
U97-2340	36	44	37	32	34
U97-2406	37	46	31	34	38
U97-2418	35	42	33	28	35

PRELIMINARY TEST IIA, 1998

PLANT HEIGHT (inches)

Strain	Hildreth NE	McCool Junction NE	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R (BSR)	38	38	33	33	35	36
IA2021 (II)	34	32	27	26	30	28
A94-674017 (L)	38	35	32	31	36	33
Marcus 95 (I)	34	35	29	25	30	30
A97-770011	35	35	32	30	37	32
A97-770031	42	40	31	30	40	36
A97-770036	35	38	33	35	41	35
A97-770051	37	32	30	28	35	31
A97-771019	37	38	35	32	40	35
A97-771039	36	30	29	27	37	34
A97-771041	38	35	35	29	43	31
A97-771050	36	35	34	28	40	36
A97-871009	37	38	33	29	40	27
A97-871010	39	38	36	34	42	32
A97-871054	44	38	36	37	44	38
A97-872010	30	30	26	24	38	29
A87-872019	37	35	28	28	35	31
A97-872013	36	37	28	29	34	29
C1973	37	36	31	30	36	33
LG94-1126	37	39	34	32	39	36
LG94-1128	35	39	33	32	40	36
LG94-1133	35	38	33	32	39	34
LG94-1906	41	38	37	31	41	35
U97-2002	35	31	29	30	39	29
U97-2007	37	38	34	35	42	36
U97-2030	38	42	39	36	46	41
U97-2103	38	35	34	31	40	31
U97-2104	36	31	31	27	38	31
U97-2110	42	37	29	27	41	33
U97-2140	37	35	33	34	39	28
U97-2210	41	39	34	39	47	41
U97-2225	37	32	33	31	42	33
U97-2238	37	35	32	31	42	33
U97-2242	36	36	30	32	42	33
U97-2304	44	37	38	34	33	33
U97-2340	39	36	34	35	31	35
U97-2406	35	39	33	31	49	34
U97-2418	38	36	32	30	40	32

PRELIMINARY TEST IIA, 1998

SEED SIZE (g/100)

Strain	Mean 10 Tests	Ames IA	Grand Junction IA	Urbana IL	Lafay- ette IN
IA2008R (BSR)	14.0	14.1	13.2	12.2	13.0
IA2021 (II)	16.5	16.8	16.7	15.1	14.4
A94-674017 (L)	19.5	21.1	21.0	17.9	18.8
Marcus 95 (I)	17.3	17.0	16.7	16.7	16.3
A97-770011	16.6	16.9	15.2	13.7	15.4
A97-770031	17.1	17.3	16.1	13.5	16.7
A97-770036	15.4	15.3	15.0	13.9	14.1
A97-770051	15.2	15.3	14.9	13.4	13.4
A97-771019	16.8	17.7	16.3	15.3	16.5
A97-771039	16.4	17.3	16.4	15.1	15.3
A97-771041	16.9	17.3	16.3	15.1	16.0
A97-771050	17.3	17.5	17.8	13.1	15.9
A97-871009	18.3	18.9	17.0	15.4	17.6
A97-871010	16.2	16.4	16.0	14.7	14.4
A97-871054	15.0	14.9	14.9	14.0	12.7
A97-872010	17.2	18.0	17.3	15.8	16.9
A87-872019	14.8	15.1	13.9	13.2	13.7
A97-872013	16.9	17.1	15.6	15.2	15.7
C1973	17.8	18.4	18.0	16.0	16.7
LG94-1126	13.3	13.8	12.8	12.5	12.4
LG94-1128	13.4	14.3	13.4	12.1	12.9
LG94-1133	13.8	14.4	12.8	13.1	12.6
LG94-1906	14.8	15.2	14.6	13.1	13.4
U97-2002	19.1	20.2	18.2	15.5	18.7
U97-2007	17.9	17.8	17.5	14.6	15.7
U97-2030	16.5	16.3	16.0	14.6	16.3
U97-2103	15.3	16.7	14.7	12.9	12.2
U97-2104	15.5	16.5	14.7	13.7	13.1
U97-2110	15.6	16.4	15.3	13.2	14.8
U97-2140	16.3	17.5	15.4	13.4	14.7
U97-2210	14.6	14.6	14.6	11.0	12.4
U97-2225	19.1	19.1	18.3	17.1	18.0
U97-2238	16.2	17.7	16.7	14.4	14.5
U97-2242	17.6	18.2	17.0	14.8	16.7
U97-2304	14.7	15.8	14.5	11.3	13.6
U97-2340	15.5	16.3	15.6	13.8	13.9
U97-2406	17.5	18.1	16.8	15.1	17.2
U97-2418	15.9	16.3	15.4	13.3	14.9

PRELIMINARY TEST IIA, 1998

SEED SIZE (g/100)

Strain	Hildreth NE	McCool Junction NE	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R (BSR)	15.8	15.1	13.8	15.6	14.4	12.6
IA2021 (II)	18.3	17.9	17.0	19.4	14.8	14.6
A94-674017 (L)	22.3	20.8	19.3	19.8	19.3	15.0
Marcus 95 (I)	19.1	18.3	18.4	19.1	16.6	15.1
A97-770011	19.1	19.0	16.2	18.7	15.6	16.3
A97-770031	19.4	19.5	16.6	18.6	17.7	15.8
A97-770036	17.1	16.5	15.5	17.3	15.9	13.7
A97-770051	16.8	16.7	15.4	16.4	16.2	13.2
A97-771019	18.8	17.9	16.4	17.5	17.7	14.5
A97-771039	17.7	18.2	16.0	17.9	16.0	14.2
A97-771041	18.0	18.4	17.6	18.3	16.8	15.3
A97-771050	18.5	19.3	17.1	18.3	18.1	17.0
A97-871009	20.5	18.9	19.1	19.6	18.5	17.4
A97-871010	16.5	18.1	17.3	18.6	16.2	13.3
A97-871054	17.7	16.8	14.7	15.9	16.2	12.7
A97-872010	20.5	19.7	8.9	20.2	19.2	15.6
A87-872019	17.6	16.0	15.0	15.5	15.3	13.1
A97-872013	18.9	19.4	16.9	19.1	17.0	14.3
C1973	20.1	19.2	16.9	19.8	18.1	14.9
LG94-1126	14.1	15.1	13.4	15.0	12.9	11.1
LG94-1128	14.0	16.0	12.4	15.0	12.9	10.9
LG94-1133	14.6	15.5	13.9	15.3	14.9	11.2
LG94-1906	15.8	15.8	15.5	16.4	14.6	13.4
U97-2002	21.4	19.1	18.1	22.0	20.5	17.0
U97-2007	18.9	19.7	20.4	20.3	17.8	16.2
U97-2030	17.3	17.9	17.0	18.7	17.0	14.2
U97-2103	16.6	18.1	15.3	17.8	16.1	12.7
U97-2104	17.5	17.4	15.3	16.2	15.6	15.0
U97-2110	16.6	17.7	14.7	17.7	15.0	15.1
U97-2140	17.6	18.5	15.8	17.3	17.5	15.1
U97-2210	15.9	16.8	16.9	17.0	13.0	14.2
U97-2225	21.2	21.5	18.5	21.2	19.4	17.1
U97-2238	18.5	17.6	15.9	17.4	17.0	12.7
U97-2242	20.0	19.4	16.6	18.5	18.8	15.6
U97-2304	16.7	17.1	14.9	16.9	13.8	12.9
U97-2340	16.5	17.1	15.2	17.3	15.5	13.4
U97-2406	18.5	20.1	17.1	20.2	16.7	15.7
U97-2418	18.2	16.8	16.0	17.5	16.2	14.7

PRELIMINARY TEST IIA, 1998

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Hildreth NE	Woodslee Ont.
IA2008R (BSR)	41.0	40.8	40.6	42.1	39.8	41.9
IA2021 (II)	40.3	39.1	39.5	42.2	39.4	41.4
A94-674017 (L)	41.2	41.1	40.9	41.1	40.6	42.3
Marcus 95 (I)	41.1	40.5	41.1	41.9	39.4	42.8
A97-770011	40.6	39.4	40.1	41.2	40.5	41.7
A97-770031	42.1	41.1	40.7	43.7	41.4	43.7
A97-770036	41.5	40.4	41.5	42.2	40.9	42.4
A97-770051	40.8	40.5	39.7	40.8	41.1	41.8
A97-771019	41.6	40.5	41.2	41.7	40.9	43.6
A97-771039	41.9	41.8	41.6	42.4	40.4	43.2
A97-771041	42.4	41.7	41.6	43.3	41.9	43.5
A97-771050	40.6	40.0	40.1	42.0	39.8	40.9
A97-871009	41.2	40.8	42.2	42.5	40.8	39.8
A97-871010	41.8	41.0	40.9	42.4	40.6	43.9
A97-871054	40.0	39.4	39.2	40.5	39.6	41.1
A97-872010	41.1	40.2	40.6	42.3	40.2	42.4
A87-872019	40.9	39.9	39.9	41.3	40.8	42.8
A97-872013	43.0	42.0	42.7	43.5	41.9	45.0
C1973	46.9	45.0	47.2	47.4	46.1	48.7
LG94-1126	42.6	41.6	43.0	43.8	41.4	43.3
LG94-1128	42.8	42.1	42.7	43.3	41.4	44.6
LG94-1133	42.9	41.3	42.9	43.3	41.5	45.4
LG94-1906	41.0	40.6	40.5	41.5	40.5	42.0
U97-2002	43.5	42.9	42.4	45.0	42.5	44.8
U97-2007	41.4	41.3	40.7	41.6	40.7	42.8
U97-2030	41.9	40.8	41.1	43.0	41.5	43.0
U97-2103	42.7	42.1	42.9	43.9	41.5	43.2
U97-2104	41.0	41.2	40.6	41.2	39.9	42.2
U97-2110	40.3	39.2	40.2	41.9	39.9	40.3
U97-2140	40.8	39.7	40.0	41.2	40.9	42.1
U97-2210	41.8	41.4	41.2	42.5	40.9	43.2
U97-2225	41.1	40.4	40.3	42.3	39.9	42.4
U97-2238	41.2	40.3	40.9	42.6	39.6	42.8
U97-2242	41.7	40.4	41.4	42.8	41.2	42.8
U97-2304	41.6	40.9	41.3	42.2	41.4	42.4
U97-2340	40.9	39.6	40.7	41.3	40.5	42.3
U97-2406	41.5	40.8	41.3	42.2	40.7	42.3
U97-2418	42.4	41.8	41.7	43.6	41.7	43.3

PRELIMINARY TEST IIA, 1998

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Hildreth NE	Woodslee Ont.
IA2008R (BSR)	20.1	19.6	20.3	20.0	20.1	20.4
IA2021 (II)	21.3	20.8	21.9	20.6	21.3	21.7
A94-674017 (L)	21.2	20.2	21.9	21.6	20.6	21.5
Marcus 95 (I)	21.5	21.0	21.8	21.4	21.7	21.8
A97-770011	21.0	20.8	21.8	20.5	20.9	21.2
A97-770031	20.9	21.0	21.2	20.8	20.8	20.9
A97-770036	20.6	20.2	21.1	20.3	20.7	20.9
A97-770051	21.5	21.0	22.5	21.3	21.1	21.8
A97-771019	20.5	20.2	20.9	20.4	20.8	20.4
A97-771039	20.0	19.1	20.4	19.7	20.6	20.2
A97-771041	20.1	19.5	20.6	19.6	20.3	20.3
A97-771050	20.7	20.2	21.3	20.1	20.7	21.4
A97-871009	21.2	20.8	20.8	20.9	21.4	22.3
A97-871010	20.1	19.6	20.4	20.2	20.0	20.2
A97-871054	21.6	21.0	22.1	21.2	21.5	22.1
A97-872010	20.5	20.1	20.6	19.9	21.1	20.6
A87-872019	20.2	20.4	20.8	19.7	20.3	19.9
A97-872013	19.9	19.7	20.2	19.8	19.9	19.9
C1973	18.1	18.3	18.0	17.7	18.2	18.1
LG94-1126	19.8	19.9	19.9	19.2	19.9	20.0
LG94-1128	19.7	19.2	20.4	19.7	19.7	19.3
LG94-1133	19.6	19.4	19.8	19.9	20.0	19.0
LG94-1906	20.3	19.8	20.6	20.5	20.2	20.3
U97-2002	19.4	19.2	19.9	18.7	19.6	19.6
U97-2007	21.0	20.5	21.5	21.1	20.9	21.1
U97-2030	19.7	19.4	19.8	19.8	19.3	20.1
U97-2103	19.9	19.9	20.2	19.0	20.0	20.2
U97-2104	20.2	19.4	20.9	19.9	20.5	20.4
U97-2110	21.5	21.4	22.0	20.7	21.6	21.9
U97-2140	21.6	22.1	22.1	21.5	20.5	21.6
U97-2210	20.6	20.5	21.0	20.0	20.6	20.7
U97-2225	20.5	20.5	21.0	20.2	20.8	20.1
U97-2238	21.6	21.6	21.7	21.1	21.9	21.5
U97-2242	20.7	20.3	21.2	21.0	20.5	20.4
U97-2304	20.6	20.4	20.8	20.4	20.3	21.3
U97-2340	21.6	21.8	21.6	21.3	21.5	22.0
U97-2406	20.9	20.5	21.4	20.8	20.9	21.1
U97-2418	20.6	20.5	20.6	20.2	20.6	21.1

Preliminary Test IIB, 1998

Strain	Parentage	Generation Composited	Unique Traits
1. IA2008R	IA2008(4) x Archer	BC3 F2	BSR
2. IA2021 (II)	Elgin x Marcus 95	F5	
3. A94-674017 (L)	Pioneer 9303 x Kenwood	F5	
4. Marcus 95 (I)	[Marcus (5) x Elgin 87] x [Marcus (5) x Preston BC-11-1]	BC4F2	Rps1-k, Rps6
5. E96309	Dairyland DSR-288 x IA2007	F4	
6. E96486	Northrup King S20-20 x IA2007	F4	
7. E96502	IA3003 x Dairyland DSR-217	F4	
8. E96624	Northrup King S19-90 x Dairyland DSR-217	F4	
9. E96630	Northrup King S19-90 x Bell	F4	
10. E96659	Northrup King S19-90 x Northrup King S24-92	F4	
11. E96665	Northrup King S19-90 x Northrup King S24-92	F4	
12. E96694	Northrup King S19-90 x IA3003	F4	
13. E96695	Northrup King S19-90 x IA3003	F4	
14. HS96-3326	Parker x HS90-37100	F5	
15. HS96-3332	Parker x HS90-37100	F5	
16. HS96-3347	Pioneer 9268-003 x Vertex	F5	Unknown Rps
17. LN95-872	HS88-4906 x Resnik	F5	BSR
18. LN95-1059	HS88-4906 x Resnik	F5	BSR
19. LN95-1070	HS88-4906 x Resnik	F5	BSR
20. LN95-1532	HS88-4906 x Resnik	F5	BSR
21. LN95-2184	Thorne x IA2007	F5	BSR
22. LN95-3027	Thorne x HS88-4906	F5	BSR
23. LN95-3163	Thorne x HS88-4906	F5	BSR
24. LN95-3533	Iroquois x IA3003	F5	BSR
25. LN95-9556	LN84-8588 x LN86-983	F5	BSR
26. M91-166018	IA2008 x Bert	F5	Rps1-a, BSR
27. M91-233045	Parker x Hardin 91	F5	Rps1-k
28. M91-240082	Bert x Archer	F5	Rps1-k, BSR
29. ORC 9707	RCAT 9002 x HS88-4909	F5	
30. ORC 9709	PS 42 x RCAT Columbus	F5	
31. SD95-610	Traverse x Elgin	F5	
32. SD96-152	IA2008 x HS88-4909	F5	
33. SD96-170	IA2008 x HS88-4909	F5	
34. SD96-782	ORC 9002 x Agassiz	F5	
35. SD96-1043	M87-1329 x Ozzie	F5	
36. SD96-1249	Parker x Asgrow A1662	F5	
37. SD96-1475	Hardin 91 x Parker	F5	

PRELIMINARY TEST IIB, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	<u>Chlorosis</u>	<u>PR</u>	<u>Hard Seed</u>	<u>PS</u>	<u>PSB</u>
		Score Humboldt	Lafayette Race 7	%	Lafayette a %	n %
IA2008R	WGTDYBfEpl	3.3	R	20	12	2
IA2021 (II)	WTBSYBlepI	3.8	R	50	6	2
A94-674017 (L)	PTBDYBrepI	4.8	S	8	20	4
Marcus 95 (I)	WTTDYBfepI	4.6	R	14	40	8
E96309	WTBDYHepI	4.8	S	2	16	2
E96486	PTBDYHepI	4.3	R	20	12	6
E96502	PTTDYBlepI	3.4	S	26	10	2
E96624	PTTDYBIEpl	3.9	H	16	8	2
E96630	PTTDYGrepI	3.1	S	22	2	2
E96659	PTTDYGrEpl	3.8	R	2	0	0
E96665	PTTDYGrepI	3.5	R	4	6	0
E96694	PTBDYGrepI	3.5	S	8	6	4
E96695	PTTDYGrepI	4.0	S	4	2	6
HS96-3326	PGBDYIbEpl	3.5	R	6	6	2
HS96-3332	PGBDYIbEpl	3.5	R	8	4	0
HS96-3347	PG+TBSYBrEpl	4.3	H	2	2	0
LN95-872	PGTIYBfEpl	2.8	R	2	8	0
LN95-1059	PGTIYBfEpl	3.4	R	2	16	0
LN95-1070	PTTDYIbEpl	4.3	R	0	10	0
LN95-1532	PTTSYBfEpl	3.5	R	0	6	0
LN95-2184	WTBDYBrepI	3.5	R	0	4	2
LN95-3027	PTBDYBrepI	3.9	R	6	2	0
LN95-3163	PGBSYBfepI	3.0	R	8	16	0
LN95-3533	PTBDYBlepI	3.5	S	6	4	2
LN95-9556	WGTDYBfEpl	3.0	S	20	10	2
M91-166018	WGBDYIbEpl	4.1	S	22	14	8
M91-233045	PGBDYIEpl	4.0	R	16	8	8
M91-240082	PGTDYIbEpl	3.8	R	44	12	0
ORC 9707	PGBDYBfEpl	2.5	R	4	28	2
ORC 9709	PTTDYBIEpl	3.1	S	10	8	0
SD95-610	PGBSYIbepI	3.4	R	34	6	0
SD96-152	WGBDYIbEpl	4.3	R	22	6	8
SD96-170	PGB+TDYBfEpl	3.5	S	2	8	0
SD96-782	PGTDYBfepI	2.8	R	8	4	4
SD96-1043	PGBDYIEpl	3.8	R	26	0	0
SD96-1249	WTBDYBlepI	4.3	S	52	2	0
SD96-1475	P+WGBDYBfEpl	3.8	R	76	4	0

PRELIMINARY TEST IIB, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield 10 bu/a	Rank 10 No.	Maturity 10 Date	Lodging 10 Score	Plant Height 10 In.	Seed Size 10 g/100	Composition	
							Protein 5 %	Oil 5 %
IA2008R	53.1	25	-0.9	2.3	34	13.9	41.5	20.1
IA2021 (II)	53.9	20	9/15	1.7	28	16.2	40.6	21.4
A94-674017 (L)	57.5	8	3.3	1.8	33	19.3	41.4	21.1
Marcus 95 (I)	53.3	24	-1.4	1.8	29	17.0	41.5	21.2
E96309	45.3	33	0.2	1.2	27	16.5	41.1	21.0
E96486	41.3	35	1.7	1.4	32	15.9	41.6	20.9
E96502	46.9	32	-0.1	1.3	31	16.7	41.8	20.3
E96624	44.3	34	4.4	1.4	28	14.8	41.2	20.4
E96630	28.9	37	1.0	1.2	23	16.5	41.4	20.2
E96659	48.0	31	0.5	1.2	32	15.0	41.3	20.3
E96665	51.2	28	0.8	1.3	33	15.5	40.5	20.5
E96694	34.8	36	1.9	1.3	28	17.0	40.5	20.6
E96695	49.1	30	-0.6	1.5	31	16.6	41.9	19.9
HS96-3326	58.4	5	2.9	2.0	37	15.7	41.1	20.8
HS96-3332	59.3	3	2.8	2.1	37	15.4	40.9	20.9
HS96-3347	60.0	1	2.3	1.7	34	17.5	41.1	20.9
LN95-872	58.5	4	5.1	1.5	35	15.8	40.9	20.9
LN95-1059	54.5	19	1.0	1.7	34	17.3	42.0	20.7
LN95-1070	53.5	23	3.5	2.2	40	14.4	41.4	20.7
LN95-1532	56.1	13	4.2	1.4	31	14.0	42.8	19.3
LN95-2184	58.1	6	3.2	1.3	36	18.0	43.3	20.0
LN95-3027	56.8	10	1.1	2.3	30	14.5	41.7	20.2
LN95-3163	55.2	15	3.7	2.1	35	15.6	40.0	20.4
LN95-3533	56.2	11	0.6	1.7	34	17.0	42.6	20.4
LN95-9556	56.2	11	2.4	1.8	37	14.5	40.7	20.3
M91-166018	51.7	27	-2.7	2.6	38	14.5	41.8	19.9
M91-233045	53.8	21	-1.8	2.7	35	14.9	42.4	20.0
M91-240082	57.1	9	-1.8	2.1	36	16.0	41.4	20.1
ORC 9707	59.9	2	2.7	1.7	33	16.7	40.0	21.0
ORC 9709	55.2	15	3.2	1.2	35	15.7	41.9	20.0
SD95-610	51.1	29	-2.0	2.3	29	17.9	40.7	20.7
SD96-152	55.2	15	1.4	2.4	39	14.9	40.3	20.6
SD96-170	57.7	7	2.6	2.2	36	17.4	41.2	20.2
SD96-782	52.1	26	-4.9	1.6	35	16.0	42.1	20.7
SD96-1043	55.1	18	-0.2	2.8	36	16.0	42.1	20.3
SD96-1249	53.7	22	-1.6	3.0	36	15.1	43.0	19.3
SD96-1475	55.4	14	1.7	2.6	32	15.5	42.4	19.9

PRELIMINARY TEST IIB, 1998

YIELD (bu/a)

Strain	Mean 10 Tests	Ames IA	Urbana IL	Lafay- ette IN
IA2008R	53.1	67.6	39.1	46.2
IA2021 (II)	53.9	71.8	45.0	41.3
A94-674017 (L)	57.5	71.0	55.6	53.5
Marcus 95 (I)	53.3	67.1	52.4	47.3
E96309	45.3	64.2	44.9	37.4
E96486	41.3	56.0	41.6	31.4
E96502	46.9	64.0	48.0	36.0
E96624	44.3	59.6	44.6	36.9
E96630	28.9	54.8	36.2	23.0
E96659	48.0	66.0	48.9	40.3
E96665	51.2	69.9	41.2	43.7
E96694	34.8	47.8	42.1	27.6
E96695	49.1	69.3	37.8	43.2
HS96-3326	58.4	69.9	55.0	52.1
HS96-3332	59.3	69.5	58.4	47.9
HS96-3347	60.0	73.3	57.7	51.7
LN95-872	58.5	66.2	59.8	50.6
LN95-1059	54.5	64.5	54.1	49.8
LN95-1070	53.5	65.3	50.0	48.5
LN95-1532	56.1	63.7	48.4	46.5
LN95-2184	58.1	65.1	58.9	48.1
LN95-3027	56.8	66.2	60.6	45.8
LN95-3163	55.2	67.4	46.8	40.4
LN95-3533	56.2	66.2	57.6	47.9
LN95-9556	56.2	65.9	50.7	43.5
M91-166018	51.7	67.3	47.8	46.9
M91-233045	53.8	65.6	52.4	44.4
M91-240082	57.1	70.4	59.7	48.6
ORC 9707	59.9	74.2	53.4	53.3
ORC 9709	55.2	72.1	43.8	46.3
SD95-610	51.1	68.5	50.2	45.8
SD96-152	55.2	67.4	45.7	43.3
SD96-170	57.7	75.9	51.5	48.2
SD96-782	52.1	62.8	56.0	45.8
SD96-1043	55.1	67.9	45.9	46.9
SD96-1249	53.7	67.0	48.2	40.2
SD96-1475	55.4	64.2	54.8	50.4
C.V. (%)		8.2	11.7	7.0
L.S.D. (5%)		5.5	11.9	6.4
Row Sp. (In.)		27	30	24
Rows/Plot		2	4	4
Reps		2	2	2

PRELIMINARY TEST IIB, 1998

YIELD (bu/a)

Strain	Cotes- field NE	Harting- ton NE	Adelphia NJ	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R	55.5	48.3	56.7	64.0	61.8	54.7	36.9
IA2021 (II)	56.0	44.7	58.9	70.0	61.4	55.0	35.4
A94-674017 (L)	58.3	50.3	64.6	71.8	64.6	52.7	32.1
Marcus 95 (I)	50.4	47.3	50.9	72.4	54.1	57.5	33.2
E96309	27.2	45.6	45.8	58.0	56.7	46.0	27.2
E96486	34.7	33.8	49.2	49.8	57.7	33.2	26.1
E96502	39.6	42.9	48.8	58.7	61.2	42.5	27.6
E96624	32.9	48.6	47.8	48.5	57.7	39.1	27.6
E96630	9.7	31.0	23.9	30.7	33.1	24.1	23.1
E96659	47.1	41.9	50.7	53.2	55.6	45.9	30.7
E96665	45.7	56.7	57.9	59.6	54.1	45.9	37.3
E96694	18.7	40.6	41.7	42.0	46.8	14.7	25.9
E96695	41.9	49.0	51.9	65.7	49.4	47.5	35.3
HS96-3326	65.8	56.0	60.4	69.4	61.4	56.3	37.7
HS96-3332	71.0	57.0	60.1	75.1	63.5	56.2	34.1
HS96-3347	57.8	50.4	52.6	81.9	72.1	63.9	38.2
LN95-872	50.2	58.7	53.1	80.5	66.0	64.4	35.8
LN95-1059	55.5	49.7	47.8	72.3	59.6	58.0	33.3
LN95-1070	53.4	52.3	56.7	59.7	58.6	55.3	35.5
LN95-1532	58.4	53.5	50.6	81.8	64.3	59.7	34.5
LN95-2184	57.5	54.7	61.9	72.3	71.4	58.1	33.2
LN95-3027	55.4	56.7	54.0	75.8	60.5	58.2	34.6
LN95-3163	58.0	53.0	56.6	77.5	58.0	62.1	32.5
LN95-3533	59.9	49.9	62.4	65.9	58.0	59.4	35.1
LN95-9556	62.6	56.5	52.8	83.3	59.0	55.4	32.2
M91-166018	46.9	43.6	53.8	60.8	60.3	51.4	38.0
M91-233045	62.5	43.5	50.5	61.5	58.1	60.3	39.5
M91-240082	56.6	40.5	51.3	80.2	68.0	60.9	35.1
ORC 9707	65.1	58.4	50.1	73.4	65.0	66.4	39.9
ORC 9709	50.5	54.1	52.2	78.9	61.9	55.1	37.1
SD95-610	38.4	44.7	50.4	56.7	60.5	63.7	32.5
SD96-152	50.5	51.3	56.7	67.0	68.3	62.9	39.0
SD96-170	65.0	51.6	61.0	61.2	57.6	65.7	39.6
SD96-782	52.1	48.6	53.3	59.9	59.5	49.2	33.6
SD96-1043	54.2	48.2	53.1	67.8	64.9	66.4	35.5
SD96-1249	58.5	48.3	50.9	69.1	60.1	60.1	34.9
SD96-1475	56.1	49.6	49.6	69.9	62.6	62.1	34.6
C.V. (%)	15.2	8.4	7.2	8.7	10.3	10.3	9.0
L.S.D. (5%)	21.5	11.8	7.7	9.8	10.4	11.2	6.2
Row Sp. (In.)	30	30	30	7.5	24	30	30
Rows/Plot	4	4	4	8	4	4	4
Reps	2	2	2	2	2	2	2

PRELIMINARY TEST IIB, 1998

YIELD RANK

Strain	Yield Rank	Ames IA	Urbana IL	Lafayette IN
IA2008R	25	14	35	19
IA2021 (II)	20	5	28	28
A94-674017 (L)	8	6	9	1
Marcus 95 (I)	24	18	14	14
E96309	33	29	29	32
E96486	35	35	33	35
E96502	32	31	23	34
E96624	34	34	30	33
E96630	37	36	37	37
E96659	31	23	20	30
E96665	28	8	34	24
E96694	36	37	32	36
E96695	30	11	36	27
HS96-3326	5	9	10	3
HS96-3332	3	10	5	12
HS96-3347	1	3	6	4
LN95-872	4	20	2	5
LN95-1059	19	28	12	7
LN95-1070	23	26	19	9
LN95-1532	13	32	21	17
LN95-2184	6	27	4	11
LN95-3027	10	21	1	20
LN95-3163	15	15	25	29
LN95-3533	11	22	7	12
LN95-9556	11	24	17	25
M91-166018	27	17	24	15
M91-233045	21	25	14	23
M91-240082	9	7	3	8
ORC 9707	2	2	13	2
ORC 9709	15	4	31	18
SD95-610	29	12	18	22
SD96-152	15	16	27	26
SD96-170	7	1	16	10
SD96-782	26	33	8	20
SD96-1043	18	13	26	15
SD96-1249	22	19	22	31
SD96-1475	14	30	11	6

PRELIMINARY TEST IIB, 1998

YIELD RANK

Strain	Cotes- field NE	Harting- ton NE	Adelphia NJ	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R	17	24	9	24	13	25	10
IA2021 (II)	16	19	7	16	14	24	14
A94-674017 (L)	10	16	1	15	8	26	30
Marcus 95 (I)	25	26	24	12	33	18	25
E96309	35	27	35	32	31	30	34
E96486	33	36	31	35	29	35	35
E96502	31	32	32	31	16	33	32
E96624	34	22	33	36	28	34	32
E96630	37	37	37	38	37	36	37
E96659	27	33	26	34	32	31	31
E96665	29	5	8	30	34	31	8
E96694	36	34	36	37	36	37	36
E96695	30	20	21	23	35	29	15
HS96-3326	2	7	5	18	15	19	7
HS96-3332	1	3	6	10	10	20	22
HS96-3347	12	15	19	2	1	5	5
LN95-872	26	1	16	4	5	4	11
LN95-1059	18	18	33	13	21	17	24
LN95-1070	21	12	9	29	24	22	12
LN95-1532	9	10	27	3	9	13	21
LN95-2184	13	8	3	13	2	16	25
LN95-3027	19	5	13	9	17	15	19
LN95-3163	11	11	12	8	27	8	27
LN95-3533	7	17	2	22	26	14	16
LN95-9556	5	6	18	1	23	21	29
M91-166018	28	30	14	27	19	27	6
M91-233045	6	31	28	25	25	11	3
M91-240082	14	35	22	5	4	10	16
ORC 9707	3	2	23	11	6	1	1
ORC 9709	23	9	20	6	12	23	9
SD95-610	32	28	29	33	18	6	27
SD96-152	24	14	9	21	3	7	4
SD96-170	4	13	4	26	30	3	2
SD96-782	22	21	15	28	22	28	23
SD96-1043	20	25	16	20	7	1	12
SD96-1249	8	23	24	19	20	12	18
SD96-1475	15	19	30	17	11	8	19

PRELIMINARY TEST IIB, 1998

MATURITY (date)

Strain	Mean 10 Tests	Ames IA	Urbana IL	Lafayette IN
IA2008R	-0.9	1	-8	0
IA2021 (II)	09/15	09/13	09/07	09/06
A94-674017 (L)	3.3	6	3	6
Marcus 95 (I)	-1.4	0	-3	-2
E96309	0.2	-2	-3	3
E96486	1.7	0	-1	4
E96502	-0.1	1	-3	-1
E96624	4.4	4	3	10
E96630	1.0	-1	-4	3
E96659	0.5	0	0	3
E96665	0.8	1	-1	2
E96694	1.9	2	2	4
E96695	-0.6	-1	-4	1
HS96-3326	2.9	7	3	3
HS96-3332	2.8	6	2	2
HS96-3347	2.3	3	2	7
LN95-872	5.1	6	7	8
LN95-1059	1.0	2	0	4
LN95-1070	3.5	4	3	7
LN95-1532	4.2	3	4	7
LN95-2184	3.2	4	2	5
LN95-3027	1.1	2	0	1
LN95-3163	3.7	7	2	3
LN95-3533	0.6	2	-3	2
LN95-9556	2.4	2	0	2
M91-166018	-2.7	-4	-8	-2
M91-233045	-1.8	-2	-7	-1
M91-240082	-1.8	-2	-7	-1
ORC 9707	2.7	4	-1	5
ORC 9709	3.2	4	3	4
SD95-610	-2.0	-3	-3	-2
SD96-152	1.4	4	1	1
SD96-170	2.6	4	1	3
SD96-782	-4.9	-8	-11	-4
SD96-1043	-0.2	2	-4	0
SD96-1249	-1.6	-3	-6	-1
SD96-1475	1.7	2	-1	2
Date Planted	05/17	05/06	05/12	05/16
Days to Mature	121.2	130	118	113

PRELIMINARY TEST IIB, 1998

MATURITY (date)

Strain	Cotes- field NE	Harting- ton NE	Adelphia NJ	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R	-4	1	2	0	-1	0	-2
IA2021 (II)	09/17	09/18	09/23	09/18	09/24	09/11	09/15
A94-674017 (L)	4	7	4	3	1	+6	+3
Marcus 95 (I)	-6	-2	3	-2	-2	-1	-4
E96309	3	1	2	1	-3	+5	+7
E96486	2	6	3	2	1	+6	+9
E96502	0	2	2	1	-3	+4	+6
E96624	4	6	5	7	5	+7	+9
E96630	0	3	3	5	1	+3	+10
E96659	-3	3	3	1	-3	+3	+4
E96665	0	4	6	-1	-4	+3	+4
E96694	3	3	4	1	0	+3	+6
E96695	-3	-1	3	3	-4	+3	+4
HS96-3326	2	6	5	2	2	+4	+4
HS96-3332	3	5	6	3	2	+4	+4
HS96-3347	2	3	4	3	-1	+5	+1
LN95-872	4	9	6	7	4	+9	+2
LN95-1059	0	2	2	1	-1	+3	+2
LN95-1070	2	5	5	6	3	+5	+3
LN95-1532	1	8	9	6	4	+7	+3
LN95-2184	5	7	5	2	2	+7	+5
LN95-3027	0	3	4	1	-1	+5	+2
LN95-3163	4	7	6	4	4	+6	+4
LN95-3533	-1	0	4	2	0	+3	+2
LN95-9556	1	7	5	6	2	+5	+3
M91-166018	-5	-2	-2	-1	-3	-1	-3
M91-233045	-4	-2	0	-1	-1	-1	-3
M91-240082	-6	-2	5	-2	-4	0	-1
ORC 9707	5	6	2	3	3	+4	0
ORC 9709	3	7	5	5	1	+4	+3
SD95-610	-6	-2	1	-1	-4	-2	-2
SD96-152	2	2	2	1	1	0	-2
SD96-170	4	4	5	3	2	+1	0
SD96-782	-8	-3	-1	-6	-9	-2	-6
SD96-1043	-1	1	2	-1	-1	0	-3
SD96-1249	-2	0	1	-2	-3	+1	-1
SD96-1475	1	4	4	2	3	+1	-1
Date Planted	05/18	05/14	06/17	05/18	05/27	05/06	05/05
Days to Mature	122	127	98	123	120	128	133

PRELIMINARY TEST IIB, 1998

LODGING (score)

Strain	Mean	Ames IA	Urbana IL	Lafayette IN
	10 Tests			
IA2008R	2.3	3.9	1.3	1.8
IA2021 (II)	1.7	2.0	1.0	1.5
A94-674017 (L)	1.8	1.9	1.0	1.5
Marcus 95 (I)	1.8	2.8	1.0	1.3
E96309	1.2	1.2	1.0	1.0
E96486	1.4	1.9	1.0	1.0
E96502	1.3	2.1	1.0	1.0
E96624	1.4	1.5	1.0	1.0
E96630	1.2	1.4	1.0	1.0
E96659	1.2	1.4	1.0	1.0
E96665	1.3	1.5	1.0	1.0
E96694	1.3	1.2	1.0	1.0
E96695	1.5	2.1	1.0	1.0
HS96-3326	2.0	2.1	1.0	2.8
HS96-3332	2.1	2.5	1.8	3.0
HS96-3347	1.7	2.0	1.0	1.5
LN95-872	1.5	1.6	1.0	1.0
LN95-1059	1.7	2.0	1.0	1.3
LN95-1070	2.2	2.3	1.5	2.3
LN95-1532	1.4	1.4	1.0	1.3
LN95-2184	1.3	1.2	1.0	1.0
LN95-3027	2.3	3.3	1.3	2.3
LN95-3163	2.1	2.0	1.8	2.5
LN95-3533	1.7	2.5	1.0	1.0
LN95-9556	1.8	2.0	1.0	2.0
M91-166018	2.6	3.8	1.3	2.8
M91-233045	2.7	3.9	1.8	3.5
M91-240082	2.1	2.8	1.0	2.0
ORC 9707	1.7	1.7	1.0	1.5
ORC 9709	1.2	1.4	1.0	1.0
SD95-610	2.3	4.1	1.8	1.8
SD96-152	2.4	3.6	1.3	2.5
SD96-170	2.2	3.3	1.0	2.3
SD96-782	1.6	2.1	1.0	1.5
SD96-1043	2.8	3.9	1.5	3.3
SD96-1249	3.0	4.8	1.8	3.5
SD96-1475	2.6	4.9	1.3	3.0

PRELIMINARY TEST IIB, 1998

LODGING (score)

Strain	Cotes- field NE	Harting- ton NE	Adelphia NJ	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
1A2008R	2.0	2.0	1.5	3.4	3.0	2.0	2.0
1A2021 (II)	2.0	1.5	1.0	3.6	1.0	1.0	2.0
A94-674017 (L)	2.0	1.5	1.3	3.4	2.5	1.0	2.0
Marcus 95 (I)	1.5	1.0	1.3	4.2	1.0	2.0	2.0
E96309	1.0	1.0	1.0	1.7	1.0	1.0	2.0
E96486	1.5	1.0	1.0	2.1	1.0	1.0	2.0
E96502	1.5	1.0	1.0	1.6	1.0	1.0	2.0
E96624	2.0	1.0	1.0	1.5	1.0	1.0	3.0
E96630	1.0	1.0	1.0	1.5	1.0	1.0	2.0
E96659	1.0	1.0	1.0	2.0	1.0	1.0	2.0
E96665	1.0	1.0	1.0	2.8	1.0	1.0	2.0
E96694	1.5	1.5	1.0	1.6	1.0	1.0	2.0
E96695	1.5	1.0	1.0	3.3	1.0	1.0	2.0
HS96-3326	2.0	1.5	1.0	3.7	2.0	2.0	2.0
HS96-3332	2.0	1.5	1.3	3.4	1.5	3.0	1.0
HS96-3347	2.0	1.0	1.3	3.5	2.0	2.0	1.0
LN95-872	2.0	1.0	1.0	2.7	1.5	2.0	1.0
LN95-1059	3.0	1.0	1.3	3.4	2.0	1.0	1.0
LN95-1070	2.5	2.0	1.5	3.4	3.0	2.0	2.0
LN95-1532	2.0	1.0	1.3	3.1	1.0	1.0	1.0
LN95-2184	1.5	1.0	1.0	2.5	1.5	1.0	1.0
LN95-3027	2.5	1.5	1.8	4.4	2.0	2.0	2.0
LN95-3163	2.0	1.5	1.5	3.4	3.0	2.0	1.0
LN95-3533	2.0	1.5	1.0	2.5	1.0	2.0	2.0
LN95-9556	2.0	1.0	1.3	3.7	2.0	2.0	1.0
M91-166018	2.5	2.0	1.8	4.2	2.5	3.0	2.0
M91-233045	2.0	1.5	2.0	4.8	2.5	3.0	2.0
M91-240082	1.5	1.5	1.3	4.7	2.5	2.0	2.0
ORC 9707	2.0	1.0	1.0	3.9	1.5	1.0	2.0
ORC 9709	2.0	1.0	1.0	2.0	1.0	1.0	1.0
SD95-610	2.0	1.5	2.3	4.4	1.5	2.0	2.0
SD96-152	2.5	2.0	2.3	3.8	2.5	3.0	1.0
SD96-170	2.0	1.5	1.5	3.9	2.0	2.0	2.0
SD96-782	1.5	1.5	1.0	3.4	1.5	2.0	1.0
SD96-1043	2.5	2.0	1.8	4.1	2.5	4.0	2.0
SD96-1249	2.0	2.0	2.3	4.9	2.5	4.0	2.0
SD96-1475	2.0	2.0	1.5	4.8	2.0	4.0	1.0

PRELIMINARY TEST IIB, 1998

PLANT HEIGHT (inches)

Strain	Mean 10 Tests	Ames IA	Urbana IL	Lafayette IN
IA2008R	34	47	32	35
IA2021 (II)	28	35	27	29
A94-674017 (L)	33	43	33	37
Marcus 95 (I)	29	37	27	32
E96309	27	34	27	28
E96486	32	41	30	31
E96502	31	41	30	30
E96624	28	37	26	31
E96630	23	32	23	26
E96659	32	42	32	33
E96665	33	42	30	36
E96694	28	35	26	29
E96695	31	41	25	35
HS96-3326	37	46	40	44
HS96-3332	37	46	37	40
HS96-3347	34	44	31	36
LN95-872	35	45	34	37
LN95-1059	34	43	32	39
LN95-1070	40	52	35	40
LN95-1532	31	38	30	33
LN95-2184	36	44	34	40
LN95-3027	30	38	29	34
LN95-3163	35	43	32	37
LN95-3533	34	43	34	35
LN95-9556	37	45	36	38
M91-166018	38	46	37	41
M91-233045	35	42	34	35
M91-240082	36	45	35	38
ORC 9707	33	43	28	35
ORC 9709	35	46	31	38
SD95-610	29	37	27	30
SD96-152	39	50	34	40
SD96-170	36	44	32	39
SD96-782	35	42	33	37
SD96-1043	36	44	32	42
SD96-1249	36	47	33	34
SD96-1475	32	40	31	31

PRELIMINARY TEST IIB, 1998

PLANT HEIGHT (inches)

Strain	Cotes- field NE	Harting- ton NE	Adelphia NJ	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R	40	38	30	29	30	35	30
IA2021 (II)	33	27	23	28	27	29	27
A94-674017 (L)	38	32	25	28	29	37	29
Marcus 95 (I)	31	30	23	30	25	29	27
E96309	25	26	23	28	26	25	29
E96486	34	36	26	32	30	31	34
E96502	33	33	25	30	27	25	34
E96624	27	28	22	25	27	27	32
E96630	19	22	18	21	18	23	25
E96659	33	30	28	30	31	30	35
E96665	35	30	30	32	29	32	34
E96694	25	27	22	26	27	28	31
E96695	32	30	26	29	30	31	33
HS96-3326	36	36	25	34	35	40	34
HS96-3332	44	34	27	34	33	41	37
HS96-3347	37	33	25	32	32	37	34
LN95-872	38	35	26	33	33	39	33
LN95-1059	34	33	27	31	31	40	33
LN95-1070	44	39	33	40	39	42	40
LN95-1532	30	29	24	30	30	36	33
LN95-2184	33	35	28	36	32	38	36
LN95-3027	31	28	22	29	26	34	27
LN95-3163	38	36	28	34	34	39	31
LN95-3533	37	34	28	32	32	40	30
LN95-9556	41	36	29	36	35	41	36
M91-166018	45	37	28	32	33	41	37
M91-233045	40	33	26	32	26	41	37
M91-240082	38	36	25	31	33	45	37
ORC 9707	38	32	22	30	28	38	35
ORC 9709	38	34	27	35	30	39	35
SD95-610	33	28	21	25	25	33	30
SD96-152	43	41	31	32	35	43	38
SD96-170	42	35	31	31	32	40	33
SD96-782	40	33	27	32	32	42	33
SD96-1043	45	37	24	28	30	41	34
SD96-1249	40	33	29	32	36	40	33
SD96-1475	37	33	24	27	30	35	33

PRELIMINARY TEST IIB, 1998

SEED SIZE (g/100)

Strain	Mean 10 Tests	Ames IA	Urbana IL	Lafayette IN
IA2008R	13.9	14.8	11.6	12.7
IA2021 (II)	16.2	16.1	14.1	14.5
A94-674017 (L)	19.3	21.4	19.2	19.2
Marcus 95 (I)	17.0	17.1	16.4	15.4
E96309	16.5	16.6	15.0	15.0
E96486	15.9	16.1	13.5	13.3
E96502	16.7	17.2	14.3	14.3
E96624	14.8	15.6	11.7	12.3
E96630	16.5	17.2	14.3	15.2
E96659	15.0	15.6	12.8	12.9
E96665	15.5	16.0	13.1	13.9
E96694	17.0	18.0	15.6	15.9
E96695	16.6	17.9	13.8	15.6
HS96-3326	15.7	16.5	14.5	14.0
HS96-3332	15.4	16.7	14.6	14.2
HS96-3347	17.5	18.6	15.8	15.3
LN95-872	15.8	17.5	14.4	15.2
LN95-1059	17.3	17.8	16.3	16.7
LN95-1070	14.4	14.7	12.7	13.2
LN95-1532	14.0	14.7	12.6	12.0
LN95-2184	18.0	18.4	17.8	15.4
LN95-3027	14.5	16.1	14.1	12.9
LN95-3163	15.6	16.2	14.2	14.3
LN95-3533	17.0	18.6	15.9	15.1
LN95-9556	14.5	15.8	12.8	13.4
M91-166018	14.5	14.2	12.9	14.9
M91-233045	14.9	15.4	13.0	14.6
M91-240082	16.0	16.2	14.8	15.4
ORC 9707	16.7	17.9	15.6	15.3
ORC 9709	15.7	16.5	14.2	13.3
SD95-610	17.9	17.7	16.8	16.5
SD96-152	14.9	14.9	13.5	13.7
SD96-170	17.4	18.7	15.7	16.1
SD96-782	16.0	15.8	15.5	14.7
SD96-1043	16.0	16.4	13.9	16.2
SD96-1249	15.1	15.7	12.8	13.2
SD96-1475	15.5	15.9	13.6	14.8

PRELIMINARY TEST IIB, 1998

SEED SIZE (g/100)

Strain	Cotes- field NE	Harting- ton NE	Adelphia NJ	Hoytville OH	Woodslee Ont.	Beres- ford SD	Brookings SD
IA2008R	14.6	12.7	16.5	14.4	16.5	13.4	11.9
IA2021 (II)	17.6	14.3	18.5	17.4	19.4	15.6	14.7
A94-674017 (L)	18.7	16.5	22.5	20.6	20.4	18.5	15.7
Marcus 95 (I)	17.7	14.8	19.5	19.0	19.4	15.7	14.8
E96309	17.7	14.6	18.5	17.4	18.2	16.5	15.9
E96486	17.4	15.0	19.0	16.6	18.6	16.0	13.4
E96502	18.9	15.6	17.0	16.3	18.5	17.5	17.0
E96624	17.1	15.0	15.0	14.6	16.9	15.4	13.9
E96630	18.7	16.3	17.5	16.8	17.2	16.0	16.1
E96659	16.4	14.8	15.5	14.7	16.7	15.9	14.3
E96665	16.6	14.6	16.5	16.0	17.5	15.2	15.2
E96694	18.6	15.5	17.0	16.8	17.8	17.8	17.1
E96695	17.8	14.6	18.5	16.5	18.8	16.3	16.3
HS96-3326	16.7	13.7	17.5	16.1	18.5	15.8	14.2
HS96-3332	15.5	13.6	17.0	15.9	17.8	15.1	13.3
HS96-3347	19.2	16.1	18.5	19.5	20.2	16.0	15.7
LN95-872	17.4	14.0	16.5	16.4	16.9	16.0	14.1
LN95-1059	17.3	16.4	18.5	18.4	19.3	16.6	15.3
LN95-1070	16.2	13.6	14.5	15.3	16.5	15.2	12.1
LN95-1532	15.0	12.5	16.0	15.4	16.4	13.7	11.8
LN95-2184	20.4	15.2	21.0	18.9	20.7	19.6	13.1
LN95-3027	16.7	12.3	15.5	15.8	16.0	14.4	10.8
LN95-3163	17.1	14.8	17.0	16.0	18.5	15.7	12.5
LN95-3533	18.1	15.6	19.0	17.7	19.1	16.2	14.6
LN95-9556	14.8	13.2	17.0	16.2	16.5	13.5	11.9
M91-166018	14.2	13.4	16.5	14.7	16.7	14.0	13.7
M91-233045	15.8	13.4	16.5	16.1	15.6	14.3	13.9
M91-240082	16.3	14.3	19.0	16.6	18.9	14.1	14.4
ORC 9707	18.0	15.7	18.0	16.8	18.7	16.1	14.6
ORC 9709	16.7	13.9	18.0	16.6	17.4	16.9	13.8
SD95-610	18.4	15.5	22.0	18.8	20.9	16.6	16.2
SD96-152	15.3	14.0	16.5	15.1	17.3	13.9	15.2
SD96-170	18.7	15.9	19.5	17.4	17.8	18.1	16.6
SD96-782	16.3	15.1	19.5	15.4	18.4	14.4	15.0
SD96-1043	16.6	14.4	18.5	15.9	17.8	14.8	15.6
SD96-1249	17.0	13.1	18.0	15.8	17.2	13.6	14.9
SD96-1475	16.8	13.8	17.0	16.1	17.6	14.4	14.7

PRELIMINARY TEST IIB, 1998

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Hartington NE	Woodslee Ont.
IA2008R	41.5	41.1	41.2	42.4	41.2	41.6
IA2021 (II)	40.6	39.2	40.7	40.8	40.9	41.5
A94-674017 (L)	41.4	40.9	41.7	41.9	41.5	41.1
Marcus 95 (I)	41.5	40.1	41.8	41.7	41.8	42.1
E96309	41.1	39.9	40.8	41.0	41.7	41.9
E96486	41.6	41.1	41.0	40.8	42.7	42.5
E96502	41.8	41.4	40.5	41.7	42.7	42.8
E96624	41.2	40.9	41.4	41.4	41.3	40.9
E96630	41.4	40.4	40.5	41.7	43.2	41.4
E96659	41.3	40.3	40.4	41.9	42.1	41.9
E96665	40.5	39.2	40.0	40.5	41.2	41.8
E96694	40.5	40.4	40.9	40.0	40.9	40.2
E96695	41.9	40.6	41.1	42.0	42.5	43.1
HS96-3326	41.1	40.1	40.6	41.6	41.2	42.0
HS96-3332	40.9	40.5	41.3	41.3	40.2	41.4
HS96-3347	41.1	40.4	40.2	41.6	40.9	42.4
LN95-872	40.9	40.3	41.4	42.6	40.0	40.0
LN95-1059	42.0	41.6	40.6	42.5	41.9	43.5
LN95-1070	41.4	41.1	41.0	41.9	41.5	41.5
LN95-1532	42.8	42.5	42.9	43.8	42.0	42.6
LN95-2184	43.3	42.7	43.4	42.7	43.3	44.5
LN95-3027	41.7	40.4	41.7	41.6	41.5	43.4
LN95-3163	40.0	39.3	39.8	39.6	39.8	41.7
LN95-3533	42.6	41.7	42.2	43.1	42.3	43.7
LN95-9556	40.7	41.3	40.7	41.1	40.2	40.3
M91-166018	41.8	39.5	41.8	42.7	42.1	43.1
M91-233045	42.4	39.0	42.3	43.8	42.7	44.2
M91-240082	41.4	40.4	40.7	42.3	41.6	42.1
ORC 9707	40.0	39.7	39.7	40.5	40.1	40.1
ORC 9709	41.9	41.2	41.7	41.9	42.8	41.7
SD95-610	40.7	40.6	40.5	41.2	40.4	40.9
SD96-152	40.3	39.8	40.3	40.4	40.7	40.3
SD96-170	41.2	40.8	41.2	42.2	40.7	40.9
SD96-782	42.1	40.8	41.5	42.7	42.6	43.1
SD96-1043	42.1	41.2	41.1	42.9	41.9	43.4
SD96-1249	43.0	41.5	42.9	43.0	42.8	44.6
SD96-1475	42.4	41.6	42.1	43.1	42.2	42.9

PRELIMINARY TEST IIB, 1998

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Hartington NE	Woodslee Ont.
IA2008R	20.1	20.2	20.4	19.5	19.9	20.6
IA2021 (II)	21.4	21.2	21.8	21.4	20.8	21.9
A94-674017 (L)	21.1	20.6	21.4	21.1	20.5	22.1
Marcus 95 (I)	21.2	20.8	21.5	21.4	20.2	22.0
E96309	21.0	20.6	21.7	21.3	20.3	21.3
E96486	20.9	20.2	20.2	22.0	20.3	21.9
E96502	20.3	19.8	21.0	20.2	19.5	20.8
E96624	20.4	19.8	20.8	20.3	20.2	20.9
E96630	20.2	20.0	20.4	20.1	19.3	21.3
E96659	20.3	20.2	21.3	19.5	19.5	21.0
E96665	20.5	20.1	21.1	20.2	19.6	21.3
E96694	20.6	20.0	20.5	20.8	19.9	21.7
E96695	19.9	19.3	21.0	19.8	19.1	20.4
HS96-3326	20.8	20.5	21.7	20.5	20.3	21.1
HS96-3332	20.9	20.4	21.2	20.8	20.8	21.1
HS96-3347	20.9	20.5	21.7	20.7	20.6	20.8
LN95-872	20.9	20.5	21.1	20.7	20.5	21.7
LN95-1059	20.7	20.4	21.7	20.9	20.0	20.5
LN95-1070	20.7	20.1	21.1	20.6	20.3	21.6
LN95-1532	19.3	18.8	19.7	18.4	19.0	20.5
LN95-2184	20.0	19.3	20.5	20.5	19.3	20.3
LN95-3027	20.2	19.9	20.3	20.2	20.3	20.3
LN95-3163	20.4	20.1	21.2	20.8	20.0	20.1
LN95-3533	20.4	20.6	20.6	19.7	20.5	20.5
LN95-9556	20.3	20.1	20.6	20.1	19.7	20.9
M91-166018	19.9	20.1	20.0	19.8	19.9	19.9
M91-233045	20.0	20.2	20.3	19.9	19.4	20.1
M91-240082	20.1	20.3	20.5	19.5	20.1	20.3
ORC 9707	21.0	20.6	21.7	21.0	20.5	21.3
ORC 9709	20.0	19.8	20.5	19.8	19.2	20.8
SD95-610	20.7	20.5	20.7	20.2	20.8	21.5
SD96-152	20.6	20.2	21.1	20.8	20.0	21.1
SD96-170	20.2	20.0	20.5	20.0	19.9	20.8
SD96-782	20.7	20.3	20.8	20.1	21.1	21.2
SD96-1043	20.3	20.4	20.9	20.2	20.0	20.2
SD96-1249	19.3	19.5	19.1	18.6	19.2	19.9
SD96-1475	19.9	20.0	19.9	19.9	19.6	20.3

Uniform Test III, 1998

Strain	Parentage	Previous Testing	Generation Compositated	Unique Traits
1. Charleston (dt1)	HC74-634RE x HC78-676	9	F5	dt1
2. A94-674017 (II)	Pioneer 9303 x Kenwood	UT II	F5	
3. Macon (L)	Sherman x Resnik	5	F5	
4. A94-774021 (III)	Jacques J285 x Northrup King S29-39	2	F5	
5. A96-691006	Northrup King S24-92 x Northrup King S19-90	PT IIIB	F5	
6. A96-691030	AgriPro AP3035 x Pioneer 9273	PT IIA	F5	
7. A96-692057	AgriPro AP3035 x Northrup King S24-92	PT IIIB	F5	
8. C1964	HC86-4367 x HS88-4909	PT IIIA	F5	
9. E95151	Pioneer 9273 x Northrup King S19-90	PT IIA	F5	
10. E95562	Asgrow A2396 x Northrup King S19-90	PT IIA	F5	
11. HC92-984	HC84-2556 x HC78-676BC	1	F5	dt1
12. HC93-596	HC78-676BC x Kenwood	PT IIIB	F5	dt1
13. HC93-868	HC85-6723 x Sprite 87	PT IIIB	F5	dt1
14. HC93-1329	HC78-676BC x Flyer	PT IIIB	F5	dt1
15. HC94-81PR	Charleston(5) x Sprite 87	PT IIIB	BC4F3	dt1, Rps1-k
16. HC94-96PR	HC85-606(4) x HC74-634REBC	PT IIIB	BC3F3	dt1, Rps1-k
17. HC94-421	Sprite 87 x HC85-6577	PT IIIB	F5	dt1
18. HS95-4830	HS90-6765 x HS88-4909	PT IIIB	F5	Rps1-k
19. ORC 9608	Pioneer 9303 x T8508	PT IIB	F5	
20. U95-3231	MSBP1	1	F7	
21. U96-2208	Colfax x A91-701035	PT IIIB	F4	dt1
22. U96-2236	MSBP2 x (F1 SSD) F6	PT IIB	F7	
23. U96-2436	Colfax x Asgrow A2242	PT IIB	F4	dt1
24. U96-3103	MSBP2 (F1 SSD)	PT IIIA	F7	
25. U96-3413	Colfax x Asgrow A2242	PT IIIA	F4	
26. U96-3434	MSBP2 (F1 bulk)	PT IIIA	F7	

UNIFORM TEST III, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score		Emerg. Score Ames	PR Laf. Race 7	Hard Seed %	PS Lafayette a %	PSB n %
		Humboldt	Yellow Medicine Co.					
Charleston (dt1)	PTTSYBIepD	3.4	4.7	1.0	S	10	0	0
A94-674017 (II)	PTBDYBrepI	4.6	5.0	1.0	S	8	20	4
Macon (L)	WTBDYBIepI	3.9	4.0	1.0	S	8	10	2
A94-774021 (III)	PTTDYGrepI	2.8	4.0	1.0	R	4	4	4
A96-691006	PTTDYBlepI	3.9	4.7	1.0	S	14	16	4
A96-691030	PTBIYBlepI	2.6	4.5	1.0	S	0	2	6
A96-692057	PTBSYBIepI	4.3	4.5	1.0	S	8	2	0
C1964	P+WTTSYBrEpI	4.4	4.8	1.0	R	0	10	4
E95151	PTTSYBlepI	3.3	3.5	1.0	H	0	2	6
E95562	PGBIYGrepI	4.4	4.8	4.0	R	8	0	2
HC92-984	PTBDYBlepD	3.9	5.0	1.0	R	50	4	2
HC93-596	PTBDYBlepD	3.9	5.0	2.0	S	20	4	6
HC93-868	WTTSYBlepD	3.8	5.0	1.0	R	2	0	0
HC93-1329	PTBDYBIHD	4.1	4.5	2.0	R	24	0	2
HC94-81PR	PTTSYBIHD	3.9	4.5	2.0	R	0	0	8
HC94-96PR	P+WTTDYBIep	4.3	5.0	1.0	R	0	0	6
HC94-421	WTTDYBlepD	2.5	3.8	1.0	S	0	0	6
HS95-4830	PGBDYIbEpI	3.3	4.2	2.0	R	0	2	6
ORC 9608	PTBDYBrepI	3.6	4.7	1.0	H	28	2	4
U95-3231	PGTDYBfepI	3.6	4.8	2.0	S	0	16	6
U96-2208	WGTSYBfEpD	4.0	4.2	1.0	R	24	0	4
U96-2236	PTTDYBlepI	3.0	4.2	4.0	S	28	4	4
U96-2436	WGTDYBfEpI	2.6	4.2	2.0	R	0	10	22
U96-3103	PGBIYBrEpI	3.3	3.8	5.0	H	0	6	2
U96-3413	WTTDYBIepI	3.4	4.2	1.0	R	2	16	8
U96-3434	PTBDYBlepI	4.0	5.0	2.0	S	2	2	2

UNIFORM TEST III, 1998

SDS DATA

Strain	DX	SDS Data		Test
		Bloomington	DS	
Charleston (dt1)	6.4	43.3	1.3	B3L
A94-674017 (II)	0.4	2.7	0.4	B3E
Macon (L)	0.8	7.0	1.1	B3L
A94-774021 (III)	3.6	26.3	1.4	B3E
A96-691006	5.3	33.3	1.5	B3E
A96-691030	3.4	24.3	1.1	B3E
A96-692057	5.3	36.7	0.9	B3L
C1964	1.8	14.0	1.1	B3E
E95151	2.7	19.3	1.2	B3E
E95562	8.2	55.0	1.3	B3E
HC92-984	14.9	93.3	1.4	B3L
HC93-596	13.6	88.3	1.4	B3L
HC93-868	9.2	53.3	1.4	B3L
HC93-1329	8.5	57.0	1.2	B3L
HC94-81PR	7.1	51.7	1.3	B3L
HC94-96PR	10.2	75.0	1.2	B3L
HC94-421	1.0	8.3	0.7	B3L
HS95-4830	11.9	80.0	1.3	B3E
ORC 9608	2.8	18.3	1.4	B3E
U95-3231	14.1	95.0	1.3	B3L
U96-2208	4.8	35.0	1.5	B3E
U96-2236	18.5	100.0	1.7	B3E
U96-2436	6.2	35.0	1.3	B3E
U96-3103	2.7	21.7	1.1	B3E
U96-3413	1.8	15.7	1.0	B3L
U96-3434	2.8	21.0	1.3	B3L

UNIFORM TEST III, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant	Seed	Composition	
	23 bu/a	23 No.	19 Date	22 Score	Height 22 In.	Size 21 g/100	Protein 5 %	Oil 5 %
Charleston (dt1)	50.0	17	2.0	1.3	22	14.2	41.9	20.1
A94-674017 (II)	51.6	14	-3.1	1.7	32	19.0	40.6	21.1
Macon (L)	53.0	7	3.6	1.6	33	16.3	41.3	20.2
A94-774021 (III)	55.2	1	9/17	1.2	29	14.3	39.8	20.3
A96-691006	50.9	16	-1.4	1.4	34	14.9	42.5	19.8
A96-691030	53.1	6	-2.2	1.3	32	15.0	40.9	20.8
A96-692057	52.6	10	0.8	1.6	31	14.0	41.1	20.1
C1964	51.8	13	-3.3	1.6	30	15.4	40.5	20.8
E95151	51.9	12	-2.2	1.5	32	15.6	42.2	20.6
E95562	42.6	26	-0.9	1.2	27	14.7	40.7	20.2
HC92-984	49.6	18	2.1	1.2	21	14.9	42.2	19.7
HC93-596	45.9	24	0.2	1.2	20	12.2	39.4	20.3
HC93-868	49.4	19	3.1	1.3	20	15.1	40.8	21.2
HC93-1329	48.9	21	1.9	1.1	21	15.3	41.9	19.9
HC94-81PR	45.9	24	2.8	1.3	20	15.2	40.6	20.7
HC94-96PR	49.4	19	1.8	1.2	21	14.5	40.0	20.9
HC94-421	46.7	23	0.7	1.3	22	15.9	40.6	21.2
HS95-4830	53.8	5	-0.1	1.6	37	15.6	40.7	21.2
ORC 9608	52.7	9	-3.4	1.6	32	17.0	41.1	20.7
U95-3231	54.9	3	1.6	1.7	33	15.6	42.6	20.1
U96-2208	55.0	2	-1.9	1.2	24	17.3	40.0	20.9
U96-2236	53.0	7	-2.2	1.4	32	13.5	38.4	21.1
U96-2436	51.6	14	-1.3	1.4	31	13.3	39.5	20.9
U96-3103	54.3	4	-0.8	1.6	33	13.9	42.1	19.6
U96-3413	52.1	11	1.9	2.0	34	13.1	41.3	19.8
U96-3434	48.6	22	0.5	1.9	38	14.4	40.0	20.4

120.8 Days After Planting

UNIFORM TEST III, 1998

1997-1998 2-YEAR MEAN

No. of Tests Strain	Yield 46 bu/a	Rank 46 No.	Maturity 38 Date	Lodging 45 Score	Plant Height 45 In.	Seed Size 42 g/100	Composition	
							Protein 10 %	Oil 10 %
Charleston (dt1)	52.9	4	3.2	1.4	24	15.1	41.7	19.9
Macon (L)	55.2	3	4.2	1.5	33	16.8	40.7	20.5
A94-774021 (III)	56.7	1	9/21	1.2	29	15.2	39.7	20.6
HC92-984	52.7	5	2.8	1.2	23	15.5	41.8	19.8
U95-3231	55.9	2	3.1	1.6	33	16.5	41.8	20.5

124.1 Days After Planting

UNIFORM TEST III, 1998

YIELD (bu/a)

Strain	Mean 23 Tests	George- town DE	Grizwold IA	Winterset IA	Newton IL	Ridg- way IL
Charleston (dt1)	50.0	35.0	44.2	38.8	44.3	45.5
A94-674017 (II)	51.6	29.9	52.4	51.4	45.8	49.5
Macon (L)	53.0	42.2	51.3	44.8	45.4	43.1
A94-774021 (III)	55.2	39.1	53.0	50.8	45.0	47.8
A96-691006	50.9	45.9	50.1	47.8	36.8	46.9
A96-691030	53.1	35.7	55.4	50.5	48.2	42.1
A96-692057	52.6	49.1	54.4	48.6	41.4	44.7
C1964	51.8	25.5	56.2	50.8	43.8	40.7
E95151	51.9	25.4	54.9	43.0	45.8	44.7
E95562	42.6	9.3	48.4	41.3	23.9	22.4
HC92-984	49.6	35.0	41.3	40.8	39.5	42.4
HC93-596	45.9	37.8	36.1	38.8	34.4	38.9
HC93-868	49.4	29.2	43.7	34.4	41.6	39.0
HC93-1329	48.9	33.5	40.9	40.5	41.6	46.5
HC94-81PR	45.9	23.5	43.1	33.7	37.8	35.1
HC94-96PR	49.4	33.6	48.3	40.9	37.6	38.9
HC94-421	46.7	33.5	46.9	35.3	39.5	44.5
HS95-4830	53.8	50.5	50.4	53.9	49.0	49.6
ORC 9608	52.7	33.2	54.1	50.4	44.2	44.0
U95-3231	54.9	47.5	51.3	53.9	54.1	52.0
U96-2208	55.0	30.7	58.8	49.0	41.5	49.8
U96-2236	53.0	29.3	55.5	55.4	44.1	36.2
U96-2436	51.6	29.1	54.3	49.8	43.7	45.4
U96-3103	54.3	39.8	56.0	56.5	43.1	48.7
U96-3413	52.1	33.6	52.1	66.3	45.3	44.7
U96-3434	48.6	38.6	50.8	50.3	39.1	38.2
C.V. (%)		7.8	11.0	13.4	11.8	10.4
L.S.D. (5%)		10.1	5.6	5.1	8.3	7.5
Row Sp. (in.)		23	27	27	30	30
Rows/Plot		5	4	4	4	4
Reps		3	3	3	3	3

UNIFORM TEST III, 1998

YIELD (bu/a)

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS	Lexing- ton KY
Charleston (dt1)	58.4	28.8	46.8	49.9	67.6	34.3	51.6	59.2
A94-674017 (II)	68.2	30.6	52.3	52.9	56.4	37.1	52.4	60.7
Macon (L)	68.6	38.7	49.9	46.3	66.0	39.1	57.0	55.1
A94-774021 (III)	69.0	47.5	52.8	46.8	68.6	36.6	57.6	59.0
A96-691006	65.2	39.3	48.0	43.2	57.9	36.1	56.7	56.3
A96-691030	64.4	33.7	51.1	53.2	63.7	41.8	54.0	55.4
A96-692057	69.2	43.3	49.2	48.6	61.3	37.2	56.8	48.4
C1964	67.7	33.2	44.7	47.0	66.9	42.1	51.1	56.8
E95151	62.0	46.9	51.1	51.9	53.7	36.9	50.1	58.3
E95562	64.2	17.7	35.6	46.5	60.0	31.5	46.4	53.6
HC92-984	53.3	39.3	47.1	44.5	57.5	29.1	38.7	63.0
HC93-596	46.2	21.1	41.3	43.7	59.4	19.4	42.5	58.2
HC93-868	52.5	44.9	47.8	45.5	57.2	30.1	53.8	58.8
HC93-1329	58.3	31.9	43.7	50.1	59.0	25.4	51.1	62.6
HC94-81PR	52.0	36.8	41.8	45.2	58.1	28.0	52.9	57.0
HC94-96PR	60.5	38.1	47.7	46.2	68.0	28.1	67.6	56.8
HC94-421	50.0	25.7	44.3	48.1	61.9	17.1	34.6	66.4
HS95-4830	60.2	45.7	46.7	47.4	61.9	41.3	56.8	52.6
ORC 9608	61.1	34.3	50.5	51.7	63.9	33.2	52.4	49.5
U95-3231	67.9	37.7	48.5	49.8	64.8	47.8	63.7	57.9
U96-2208	73.8	29.2	53.1	56.2	65.3	36.2	53.2	60.4
U96-2236	65.0	30.9	49.7	47.8	68.5	39.9	56.9	53.2
U96-2436	68.2	36.7	45.3	47.2	60.2	42.6	52.5	56.9
U96-3103	66.0	38.7	48.4	43.2	68.2	43.8	59.9	52.2
U96-3413	64.1	37.0	48.6	43.5	60.8	42.3	55.8	47.8
U96-3434	52.3	39.7	46.0	40.3	57.1	44.7	59.7	48.5
C.V. (%)	9.0	19.0	6.8	8.3	5.3	13.7	7.7	6.0
L.S.D. (5%)	9.2	12.0	5.2	6.4	5.3	8.1	6.8	4.6
Row Sp. (in.)	30	26	24	26	30	30	30	15
Rows/Plot	4	4	4	4	4	4	4	4
Reps	3	3	3	3	3	3	3	3

UNIFORM TEST III, 1998

YIELD (bu/a)

Strain	Queens- town MD	Colum- bia MO	Bryon NE	Falls City NE	Tekamah NE	Adel- phia NJ	Hoyt- ville OH
Charleston (dt1)	28.6	50.7	60.3	29.3	69.4	51.9	70.5
A94-674017 (II)	35.3	44.8	68.1	32.7	68.3	55.8	70.9
Macon (L)	32.4	50.3	65.4	42.8	67.1	55.1	79.7
A94-774021 (III)	40.4	59.1	65.8	37.3	73.0	59.4	70.3
A96-691006	30.2	50.0	52.4	35.1	70.9	54.0	68.4
A96-691030	28.7	44.8	72.4	38.2	69.6	50.2	78.2
A96-692057	33.4	47.7	68.1	35.9	66.6	54.9	56.7
C1964	33.4	48.0	78.6	35.9	62.3	48.3	70.3
E95151	41.2	49.9	67.8	36.3	64.3	55.5	73.5
E95562	40.4	41.3	58.0	24.9	68.5	43.8	70.5
HC92-984	37.8	42.4	74.6	27.5	69.1	56.9	75.4
HC93-596	37.4	35.5	72.1	18.9	67.3	55.6	68.3
HC93-868	28.5	43.7	78.7	32.0	65.3	53.6	72.3
HC93-1329	35.0	32.6	69.2	22.3	65.0	58.3	69.8
HC94-81PR	30.5	34.1	71.0	21.2	65.4	48.1	68.3
HC94-96PR	26.6	47.5	71.1	25.0	67.4	50.1	68.5
HC94-421	34.4	39.5	72.3	23.9	65.9	51.2	65.7
HS95-4830	33.3	58.5	73.0	39.1	64.1	51.9	68.2
ORC 9608	42.1	54.7	67.4	29.8	71.3	54.7	82.4
U95-3231	31.2	51.3	58.4	48.4	68.9	54.6	64.5
U96-2208	30.5	61.9	74.2	36.6	69.9	53.4	84.1
U96-2236	35.3	57.8	73.3	33.6	69.2	49.8	76.9
U96-2436	32.7	53.6	73.2	34.3	67.2	51.5	74.4
U96-3103	32.8	63.5	70.3	38.0	71.8	48.0	77.9
U96-3413	30.0	54.7	67.7	40.5	66.2	47.1	65.2
U96-3434	29.9	44.6	63.2	39.3	60.9	48.3	51.1
C.V. (%)	16.3	9.1	10.4	4.8	5.9	7.0	11.2
L.S.D. (5%)	8.9	7.3	12.8	5.8	7.2	6.1	11.1
Row Sp. (in.)	30	30	30	30	30	30	7.5
Rows/Plot	4	4	4	4	4	4	8
Reps	3	3	3	3	3	3	3

UNIFORM TEST III, 1998

YIELD (bu/a)

Strain	South		
	Plain City OH	Charleston OH	Wooster OH
Charleston (dt1)	63.4	63.3	58.6
A94-674017 (II)	48.3	62.0	61.9
Macon (L)	49.4	69.9	59.6
A94-774021 (III)	59.5	68.0	63.4
A96-691006	52.2	70.7	56.8
A96-691030	57.4	70.6	60.9
A96-692057	62.5	72.0	59.1
C1964	58.0	63.7	65.9
E95151	50.7	68.0	62.7
E95562	23.2	47.1	60.4
HC92-984	63.1	60.5	62.8
HC93-596	56.9	63.7	62.4
HC93-868	57.3	67.8	57.6
HC93-1329	59.5	62.4	65.1
HC94-81PR	51.4	60.4	59.5
HC94-96PR	50.5	64.0	54.3
HC94-421	53.9	63.0	56.7
HS95-4830	56.7	68.3	58.5
ORC 9608	64.5	61.2	62.7
U95-3231	61.0	66.7	61.5
U96-2208	70.8	67.4	58.1
U96-2236	65.0	67.1	59.8
U96-2436	43.6	66.7	57.7
U96-3103	50.3	69.3	62.0
U96-3413	51.2	71.8	61.5
U96-3434	41.6	74.5	58.8
C.V. (%)	11.1	4.1	6.7
L.S.D. (5%)	10.9	5.5	5.9
Row Sp. (in.)	15	7.5	7.5
Rows/Plot	6	8	8
Reps	3	2	3

UNIFORM TEST III, 1998

YIELD RANK

Strain	Yield Rank	George- town DE	Grizwold IA	Winterset IA	Newton IL	Ridge- way IL
Charleston (dt1)	17	10	21	22	9	9
A94-674017 (II)	14	19	11	6	4	4
Macon (L)	7	5	13	16	6	16
A94-774021 (III)	1	7	10	7	8	6
A96-691006	16	4	17	15	24	7
A96-691030	6	11	5	9	3	18
A96-692057	10	2	7	14	18	11
C1964	13	23	2	8	12	19
E95151	12	24	6	17	4	11
E95562	26	26	18	18	26	26
HC92-984	18	12	24	20	19	17
HC93-596	24	9	26	23	25	21
HC93-868	19	21	22	25	15	20
HC93-1329	21	16	25	21	15	8
HC94-81PR	24	25	23	26	22	25
HC94-96PR	19	13	19	19	23	21
HC94-421	23	15	20	24	19	14
HS95-4830	5	1	16	4	2	3
ORC 9608	9	17	9	10	10	15
U95-3231	3	3	14	5	1	1
U96-2208	2	18	1	13	17	2
U96-2236	7	20	4	3	11	24
U96-2436	14	22	8	12	13	10
U96-3103	4	6	3	2	14	5
U96-3413	11	13	12	1	7	11
U96-3434	22	8	15	11	21	23

UNIFORM TEST III, 1998

YIELD RANK

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS	Lexing- ton KY
Charleston (dt1)	19	23	17	7	5	17	19	6
A94-674017 (II)	5	21	3	3	25	12	17	4
Macon (L)	4	9	7	17	7	10	6	18
A94-774021 (III)	3	1	2	15	1	14	5	7
A96-691006	10	7	13	24	21	16	10	16
A96-691030	12	17	4	3	11	7	12	17
A96-692057	2	5	9	9	14	11	8	25
C1964	8	18	21	14	6	6	20	14
E95151	15	2	4	4	26	13	22	9
E95562	13	26	26	16	17	19	23	19
HC92-984	21	7	16	21	22	21	25	2
HC93-596	26	25	25	22	18	25	24	10
HC93-868	22	4	14	19	23	20	13	8
HC93-1329	20	19	23	6	19	24	20	3
HC94-81PR	24	14	24	20	20	23	15	12
HC94-96PR	17	11	15	18	4	22	1	15
HC94-421	25	24	22	10	12	26	26	1
HS95-4830	18	3	18	12	12	8	8	21
ORC 9608	16	16	6	5	10	18	17	23
U95-3231	7	12	11	8	9	1	2	11
U96-2208	1	22	1	1	8	15	14	5
U96-2236	11	20	8	11	2	9	7	20
U96-2436	5	15	20	13	16	4	16	13
U96-3103	9	9	12	24	3	3	3	22
U96-3413	14	13	10	23	15	5	11	26
U96-3434	23	6	19	26	24	2	4	24

UNIFORM TEST III, 1998

YIELD RANK

Strain	Queens- town MD	Colum- bia MO	Bryon NE	Falls City NE	Tekamah NE	Adel- phia NJ	Hoyt- ville OH
Charleston (dt1)	24	10	23	19	7	14	12
A94-674017 (II)	7	17	15	16	12	4	11
Macon (L)	16	11	21	2	16	7	3
A94-774021 (III)	3	3	20	8	1	1	14
A96-691006	20	12	26	13	4	11	18
A96-691030	23	17	8	6	6	18	4
A96-692057	11	15	15	11	17	8	25
C1964	11	14	2	12	25	21	14
E95151	2	13	17	10	23	6	9
E95562	3	22	25	22	11	26	12
HC92-984	5	21	3	20	9	3	7
HC93-596	6	24	10	26	14	5	19
HC93-868	25	20	1	17	21	12	10
HC93-1329	9	26	14	24	22	2	16
HC94-81PR	18	25	12	25	20	23	19
HC94-96PR	26	16	11	21	13	19	17
HC94-421	10	23	9	23	19	17	22
HS95-4830	13	4	7	5	24	14	21
ORC 9608	1	6	19	18	3	9	2
U95-3231	17	9	24	1	10	10	24
U96-2208	18	2	4	9	5	13	1
U96-2236	7	5	5	15	8	20	6
U96-2436	15	8	6	14	15	16	8
U96-3103	14	1	13	7	2	24	5
U96-3413	21	6	18	3	18	25	23
U96-3434	22	19	22	4	26	21	26

UNIFORM TEST III, 1998

YIELD RANK

Strain	South		
	Plain City OH	Charleston OH	Wooster OH
Charleston (dt1)	4	19	19
A94-674017 (II)	23	22	9
Macon (L)	22	6	15
A94-774021 (III)	8	9	3
A96-691006	16	4	24
A96-691030	11	5	12
A96-692057	6	2	17
C1964	10	17	1
E95151	19	9	5
E95562	26	26	13
HC92-984	5	24	4
HC93-596	13	17	7
HC93-868	12	11	23
HC93-1329	8	21	2
HC94-81PR	17	25	16
HC94-96PR	20	16	26
HC94-421	15	20	25
HS95-4830	14	8	20
ORC 9608	3	23	5
U95-3231	7	14	10
U96-2208	1	12	21
U96-2236	2	13	14
U96-2436	24	14	22
U96-3103	21	7	8
U96-3413	18	3	10
U96-3434	25	1	18

UNIFORM TEST III, 1998

MATURITY (date)

Strain	Mean 19 Tests	George- town DE	Grizwold IA	Winterset IA	Newton IL	Ridg- way IL
Charleston (dt1)	2.0	2	2		3	1
A94-674017 (II)	-3.1	-7	3		-1	-2
Macon (L)	3.6	3	3		4	3
A94-774021 (III)	09/17	09/25	09/13		09/10	09/13
A96-691006	-1.4	0	3		0	0
A96-691030	-2.2	-2	1		-1	-1
A96-692057	0.8	2	2		1	2
C1964	-3.3	-6	3		-3	-2
E95151	-2.2	-4	3		-2	-1
E95562	-0.9	-2	0		-1	-0
HC92-984	2.1	4	3		1	2
HC93-596	0.2	-2	1		1	1
HC93-868	3.1	3	3		1	0
HC93-1329	1.9	1	3		2	4
HC94-81PR	2.8	0	1		1	0
HC94-96PR	1.8	2	2		1	-0
HC94-421	0.7	0	5		-1	2
HS95-4830	-0.1	3	4		0	2
ORC 9608	-3.4	-5	5		-3	-3
U95-3231	1.6	2	0		2	2
U96-2208	-1.9	-5	3		-3	1
U96-2236	-2.2	-5	5		-1	-1
U96-2436	-1.3	-5	1		0	-0
U96-3103	-0.8	-2	2		0	2
U96-3413	1.9	0	4		3	1
U96-3434	0.5	2	2		2	-1
Date Planted	05/19	06/02	05/09		05/20	06/02
Days to Mature	120.8	115	127		113	103

UNIFORM TEST III, 1998

MATURITY (date)

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS	Lexing- ton KY
Charleston (dt1)	0	0	5	3	5			1
A94-674017 (II)	-4	-6	-5	-1	3			-4
Macon (L)	1	2	4	3	6			5
A94-774021 (III)	09/15	09/15	09/16	09/17	09/24			09/04
A96-691006	-4	-1	0	-1	1			-3
A96-691030	-5	-3	-2	1	0			-3
A96-692057	-2	1	0	0	2			-2
C1964	-5	-8	-2	-2	0			-7
E95151	-3	-4	-1	-3	1			-3
E95562	-5	1	0	1	-1			-2
HC92-984	-2	0	4	1	7			-4
HC93-596	-4	-2	1	2	2			-1
HC93-868	-1	1	4	2	9			-3
HC93-1329	-2	-1	4	1	6			-1
HC94-81PR	-2	0	5	4	8			0
HC94-96PR	-2	0	4	3	6			-1
HC94-421	-4	0	1	1	5			-4
HS95-4830	-3	-2	-2	1	5			2
ORC 9608	-6	-7	-5	-3	1			-4
U95-3231	0	1	0	3	5			1
U96-2208	-4	-4	-3	3	-1			-2
U96-2236	-5	-2	-3	-4	-1			-1
U96-2436	-3	-3	-3	0	0			1
U96-3103	-3	-2	-2	-1	1			2
U96-3413	0	0	3	1	3			3
U96-3434	-4	2	-1	-3	3			1
Date Planted	05/12	05/19	05/16	05/15	05/21			05/13
Days to Mature	126	119	123	125	126			114

UNIFORM TEST III, 1998

MATURITY (date)

Strain	Queens- town MD	Colum- bia MO	Bryon NE	Falls City NE	Tekamah NE	Adel- phia NJ	Hoyt- ville OH
Charleston (dt1)	-2	-2		7	8	1	-3
A94-674017 (II)	-3	-3		-1	-6	-5	-3
Macon (L)	5	4		10	5	2	0
A94-774021 (III)	09/19	09/09		09/18	10/04	09/28	09/26
A96-691006	-3	-3		0	2	-2	-2
A96-691030	-2	-3		-2	-7	-3	-2
A96-692057	1	-1		1	2	2	-0
C1964	-2	-4		-2	-5	-4	-3
E95151	-3	-4		-3	-3	-2	-2
E95562	-2	-4		-2	-2	-2	-1
HC92-984	5	-1		5	7	1	1
HC93-596	-1	-3		4	4	-3	-1
HC93-868	6	3		9	6	4	3
HC93-1329	3	-2		6	3	3	0
HC94-81PR	4	2		8	7	4	0
HC94-96PR	3	0		8	4	-1	0
HC94-421	0	-1		6	5	-2	-1
HS95-4830	2	-2		-1	0	-2	-2
ORC 9608	0	-5		-3	-6	-7	-3
U95-3231	-3	1		8	3	0	1
U96-2208	-4	-4		-1	-1	-5	-2
U96-2236	-4	-5		-2	-2	-7	-2
U96-2436	-3	-2		-1	-2	-1	-2
U96-3103	0	-1		-2	0	-5	-1
U96-3413	0	0		6	3	0	1
U96-3434	-1	0		6	0	-1	-2
Date Planted	06/02	05/12		05/13	06/01	06/17	05/18
Days to Mature	109	120		128	125	103	131

UNIFORM TEST III, 1998

MATURITY (date)

Strain	South		
	Plain City OH	Charleston OH	Wooster OH
Charleston (dt1)	1	-1	6
A94-674017 (II)	-3	-6	-5
Macon (L)	3	+2	5
A94-774021 (III)	09/15	09/16	09/12
A96-691006	-4	-6	-3
A96-691030	-2	-5	-1
A96-692057	1	+1	3
C1964	-6	-8	-5
E95151	-3	-7	-4
E95562	1	-2	3
HC92-984	1	-1	3
HC93-596	0	-1	3
HC93-868	3	+2	6
HC93-1329	1	-1	4
HC94-81PR	3	+2	6
HC94-96PR	2	-1	5
HC94-421	-1	-4	3
HS95-4830	-3	-6	-3
ORC 9608	-6	-8	-4
U95-3231	-1	+1	4
U96-2208	-2	-6	-3
U96-2236	-1	-7	-1
U96-2436	-2	-3	1
U96-3103	-1	-4	-1
U96-3413	2	+1	6
U96-3434	0	0	5
Date Planted	05/06	05/06	05/12
Days to Mature	132	133	123

UNIFORM TEST III, 1998

LODGING (score)

Strain	Mean 22 Tests	George- town DE	Grizwold IA	Winterset IA	Newton IL	Ridg- way IL
Charleston (dt1)	1.3	1.3	1.3	1.0	1.3	1.0
A94-674017 (II)	1.7	3.6	1.9	1.5	1.2	1.0
Macon (L)	1.6	2.3	1.8	1.6	1.0	1.0
A94-774021 (III)	1.2	1.0	1.2	1.3	1.0	1.0
A96-691006	1.4	2.0	1.5	1.5	1.0	1.0
A96-691030	1.3	2.3	1.5	1.4	1.0	1.0
A96-692057	1.6	3.6	1.8	1.4	1.0	1.0
C1964	1.6	2.0	2.2	1.5	1.2	1.0
E95151	1.5	2.0	1.7	1.3	1.0	1.0
E95562	1.2	1.0	1.2	1.2	1.0	1.0
HC92-984	1.2	1.0	1.1	1.1	1.0	1.0
HC93-596	1.2	1.0	1.1	1.0	1.0	1.0
HC93-868	1.3	1.3	1.1	1.0	1.3	1.0
HC93-1329	1.1	1.0	1.1	1.0	1.0	1.0
HC94-81PR	1.3	1.0	1.2	1.1	1.0	1.0
HC94-96PR	1.2	1.3	1.2	1.0	1.0	1.0
HC94-421	1.3	1.3	1.2	1.0	1.2	1.0
HS95-4830	1.6	1.6	2.1	1.5	1.5	1.0
ORC 9608	1.6	1.3	1.8	1.5	1.3	1.0
U95-3231	1.7	1.6	1.6	1.5	1.0	1.2
U96-2208	1.2	1.3	1.3	1.1	1.0	1.0
U96-2236	1.4	1.0	1.6	1.5	1.0	1.0
U96-2436	1.4	1.3	1.8	1.4	1.2	1.0
U96-3103	1.6	1.0	1.7	1.5	1.0	1.0
U96-3413	2.0	1.3	2.2	1.9	1.5	1.2
U96-3434	1.9	1.3	2.7	1.8	1.7	1.0

UNIFORM TEST III, 1998

LODGING (score)

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS	Lexing- ton KY
Charleston (dt1)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.7
A94-674017 (II)	1.2	1.0	1.5	1.0	1.7	1.0	1.3	3.3
Macon (L)	1.3	1.0	1.5	1.3	1.0	1.0	2.0	3.8
A94-774021 (III)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
A96-691006	1.0	1.0	1.3	1.2	1.3	1.0	1.3	2.5
A96-691030	1.0	1.0	1.2	1.0	1.0	1.0	2.0	2.3
A96-692057	1.0	1.0	1.7	1.0	1.3	1.0	1.7	3.5
C1964	1.0	1.0	1.5	1.2	1.7	1.0	2.3	2.5
E95151	1.2	1.0	1.8	1.2	1.3	1.0	1.3	2.8
E95562	1.0	1.0	1.0	1.0	1.0	1.0	2.3	2.0
HC92-984	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC93-596	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC93-868	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5
HC93-1329	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC94-81PR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC94-96PR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2
HC94-421	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.7
HS95-4830	1.2	1.0	2.2	1.0	2.0	1.0	2.0	3.0
ORC 9608	1.2	1.0	1.5	1.3	2.0	1.0	1.7	2.7
U95-3231	2.5	1.0	2.2	1.2	1.7	1.0	2.0	4.0
U96-2208	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.7
U96-2236	1.2	1.0	1.2	1.2	1.3	1.0	1.3	2.3
U96-2436	1.2	1.0	1.2	1.0	1.7	1.0	1.3	4.0
U96-3103	1.5	1.0	1.7	1.2	1.7	1.0	2.0	4.0
U96-3413	1.8	1.0	3.0	1.2	2.3	1.0	3.0	4.5
U96-3434	2.0	1.0	1.8	1.2	2.0	1.0	2.7	4.3

UNIFORM TEST III, 1998

LODGING (score)

Strain	Queens- town MD	Colum- bia MO	Bryon NE	Falls City NE	Tekamah NE	Adel- phia NJ	Hoyt- ville OH
Charleston (dt1)	1.3	1.0		1.0	2.0	1.5	2.3
A94-674017 (II)	1.8	1.3		1.7	2.3	1.3	2.3
Macon (L)	2.0	1.7		1.3	2.7	1.0	2.0
A94-774021 (III)	1.3	1.0		1.0	1.3	1.0	2.0
A96-691006	1.5	1.0		1.3	1.7	1.2	2.0
A96-691030	1.2	1.0		1.0	1.3	1.0	2.0
A96-692057	1.5	1.3		1.3	2.7	1.2	2.3
C1964	1.3	1.0		1.3	3.3	1.2	2.4
E95151	2.0	1.0		1.0	2.7	1.5	2.3
E95562	1.3	1.0		1.0	1.0	1.0	2.6
HC92-984	1.5	1.0		1.0	1.7	1.2	2.0
HC93-596	1.0	1.0		1.0	1.7	1.0	2.4
HC93-868	1.2	1.0		1.0	2.0	1.3	3.0
HC93-1329	1.0	1.0		1.0	1.3	1.0	2.0
HC94-81PR	1.5	1.0		1.0	2.7	1.2	2.7
HC94-96PR	1.2	1.0		1.0	2.0	1.2	2.0
HC94-421	1.2	1.0		1.0	2.0	1.3	2.3
HS95-4830	1.5	1.3		1.3	2.0	1.0	2.3
ORC 9608	1.5	1.0		1.0	2.3	1.7	2.7
U95-3231	1.5	2.3		1.0	1.7	1.2	3.0
U96-2208	1.3	1.0		1.0	1.7	1.0	2.7
U96-2236	1.3	1.0		1.0	2.0	1.0	3.0
U96-2436	1.0	1.0		1.0	2.3	1.0	2.3
U96-3103	1.8	2.3		1.3	2.0	1.0	2.7
U96-3413	1.7	2.0		1.7	3.0	1.2	3.0
U96-3434	1.3	2.0		2.0	2.7	1.0	2.7

UNIFORM TEST III, 1998

LODGING (score)

Strain	Plain City OH	South Charleston OH	Wooster OH
Charleston (dt1)	1.1	1.2	3.3
A94-674017 (II)	1.1	1.3	2.8
Macon (L)	1.1	1.0	1.7
A94-774021 (III)	1.0	1.0	1.7
A96-691006	1.2	1.3	1.7
A96-691030	1.2	1.0	1.9
A96-692057	1.1	1.0	1.8
C1964	1.1	1.3	2.0
E95151	1.0	1.3	1.7
E95562	1.0	1.0	1.2
HC92-984	1.0	1.0	2.0
HC93-596	1.0	1.0	2.3
HC93-868	1.0	1.0	3.5
HC93-1329	1.0	1.0	2.3
HC94-81PR	1.1	1.0	2.1
HC94-96PR	1.0	1.0	2.5
HC94-421	1.1	1.3	3.9
HS95-4830	1.2	1.7	2.1
ORC 9608	1.2	1.3	2.3
U95-3231	1.3	1.0	2.9
U96-2208	1.0	1.0	1.7
U96-2236	1.2	1.2	2.5
U96-2436	1.1	1.0	1.6
U96-3103	1.2	1.2	1.8
U96-3413	1.1	2.2	2.8
U96-3434	1.2	1.5	2.6

UNIFORM TEST III, 1998

PLANT HEIGHT (inches)

Strain	Mean 22 Tests	George- town DE	Grizwold IA	Winterset IA	Newton IL	Ridg- way IL
Charleston (dt1)	22	16	18	21	22	26
A94-674017 (II)	32	21	32	33	32	32
Macon (L)	33	24	33	31	33	34
A94-774021 (III)	29	18	27	28	29	27
A96-691006	34	23	33	32	33	35
A96-691030	32	20	30	31	32	31
A96-692057	31	17	31	29	30	30
C1964	30	20	30	30	28	28
E95151	32	19	32	29	32	32
E95562	27	17	25	27	23	22
HC92-984	21	16	17	20	23	23
HC93-596	20	14	16	21	20	20
HC93-868	20	15	17	20	22	26
HC93-1329	21	16	16	21	22	24
HC94-81PR	20	12	16	19	20	24
HC94-96PR	21	16	19	22	22	29
HC94-421	22	17	17	18	22	26
HS95-4830	37	26	36	39	37	38
ORC 9608	32	20	31	32	31	32
U95-3231	33	22	32	31	33	34
U96-2208	24	16	23	21	22	30
U96-2236	32	20	31	32	32	31
U96-2436	31	18	31	31	31	34
U96-3103	33	20	32	33	31	33
U96-3413	34	22	34	36	35	32
U96-3434	38	23	38	40	40	39

UNIFORM TEST III, 1998

PLANT HEIGHT (inches)

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS	Lexing- ton KY
Charleston (dt1)	24	12	24	27	26	17	18	27
A94-674017 (II)	38	22	34	37	37	29	36	38
Macon (L)	41	22	38	35	43	30	40	40
A94-774021 (III)	35	20	33	32	38	22	35	37
A96-691006	41	22	38	37	46	31	41	41
A96-691030	39	19	35	33	43	30	39	40
A96-692057	38	21	34	35	40	29	39	37
C1964	35	18	32	31	41	28	38	34
E95151	38	19	36	35	41	30	38	39
E95562	36	14	30	32	39	25	35	38
HC92-984	22	14	25	25	23	14	18	27
HC93-596	21	10	23	25	26	14	19	25
HC93-868	22	13	23	24	22	15	18	22
HC93-1329	22	12	24	26	23	16	18	28
HC94-81PR	22	12	22	24	24	16	19	24
HC94-96PR	25	13	26	27	24	17	18	25
HC94-421	23	13	24	27	26	16	17	26
HS95-4830	43	25	42	39	55	35	44	46
ORC 9608	38	19	35	37	43	30	36	42
U95-3231	39	18	32	36	44	32	38	41
U96-2208	29	14	28	29	27	21	20	30
U96-2236	37	21	37	36	44	28	39	40
U96-2436	39	18	35	34	41	28	42	39
U96-3103	38	21	36	35	43	30	43	41
U96-3413	40	21	36	36	47	31	46	41
U96-3434	43	28	44	40	52	37	51	45

UNIFORM TEST III, 1998

PLANT HEIGHT (inches)

Strain	Queens- town MD	Colum- bia MO	Bryon NE	Falls City NE	Tekamah NE	Adel- phia NJ	Hoyt- ville OH
Charleston (dtl)	21	14		16	24	24	25
A94-674017 (II)	24	33		27	34	26	33
Macon (L)	26	36		28	35	27	38
A94-774021 (III)	21	31		24	32	25	30
A96-691006	23	37		29	36	29	34
A96-691030	25	38		27	35	27	35
A96-692057	22	34		24	32	28	33
C1964	22	35		27	30	24	32
E95151	27	31		26	38	30	35
E95562	22	31		24	30	25	30
HC92-984	21	15		16	26	23	27
HC93-596	20	13		14	25	21	26
HC93-868	20	14		14	23	21	24
HC93-1329	21	13		13	26	23	25
HC94-81PR	19	14		15	24	20	24
HC94-96PR	20	16		13	23	22	26
HC94-421	24	14		14	26	23	28
HS95-4830	26	43		28	39	32	39
ORC 9608	26	34		26	35	30	33
U95-3231	27	39		30	32	30	34
U96-2208	19	20		20	28	23	28
U96-2236	24	35		28	36	27	35
U96-2436	24	35		23	32	27	31
U96-3103	24	39		27	36	28	36
U96-3413	25	38		30	34	29	34
U96-3434	27	45		32	39	31	37

UNIFORM TEST III, 1998

PLANT HEIGHT (inches)

Strain	South		
	Plain City OH	Charleston OH	Wooster OH
Charleston (dt1)	22	24	27
A94-674017 (II)	34	31	33
Macon (L)	32	36	34
A94-774021 (III)	30	29	33
A96-691006	34	33	33
A96-691030	30	30	32
A96-692057	31	31	32
C1964	31	30	31
E95151	31	36	34
E95562	23	26	29
HC92-984	23	22	28
HC93-596	22	20	27
HC93-868	21	19	24
HC93-1329	22	20	26
HC94-81PR	23	21	24
HC94-96PR	22	19	28
HC94-421	21	22	30
HS95-4830	33	32	37
ORC 9608	35	29	34
U95-3231	34	32	34
U96-2208	22	22	29
U96-2236	33	28	32
U96-2436	27	29	33
U96-3103	32	30	32
U96-3413	31	32	35
U96-3434	30	36	38

UNIFORM TEST III, 1998

SEED SIZE (g/100)

Strain	Mean 21 Tests	George- town DE	Grizwold IA	Winterset IA	Newton IL	Ridg- way IL
Charleston (dt1)	14.2		13.7	13.4	13.3	11.3
A94-674017 (II)	19.0		17.4	19.7	17.6	17.3
Macon (L)	16.3		18.8	16.7	13.9	13.2
A94-774021 (III)	14.3		14.0	14.6	12.6	12.0
A96-691006	14.9		14.3	15.0	13.2	12.9
A96-691030	15.0		15.0	15.3	12.3	12.1
A96-692057	14.0		13.0	13.5	11.6	11.3
C1964	15.4		14.7	14.1	13.3	13.7
E95151	15.6		15.7	15.8	13.5	12.8
E95562	14.7		14.8	15.4	11.3	12.5
HC92-984	14.9		15.7	13.9	12.4	11.0
HC93-596	12.2		11.6	12.3	11.0	8.8
HC93-868	15.1		13.5	13.8	12.1	11.4
HC93-1329	15.3		13.8	13.8	13.4	12.7
HC94-81PR	15.2		14.6	14.7	12.6	10.6
HC94-96PR	14.5		14.5	13.4	11.7	10.9
HC94-421	15.9		16.1	15.2	14.9	12.2
HS95-4830	15.6		14.2	16.1	13.7	13.5
ORC 9608	17.0		15.5	15.9	14.0	15.8
U95-3231	15.6		14.6	16.1	13.4	13.8
U96-2208	17.3		14.9	17.7	12.6	14.3
U96-2236	13.5		13.6	14.1	11.0	10.9
U96-2436	13.3		12.8	13.3	11.0	10.7
U96-3103	13.9		13.1	14.7	12.3	12.7
U96-3413	13.1		12.0	13.4	11.3	11.2
U96-3434	14.4		13.8	14.7	12.2	10.8

UNIFORM TEST III, 1998

SEED SIZE (g/100)

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS	Lexing- ton KY
Charleston (dt1)	14.7	12.1	13.1	15.0	17.5	15.0	15.0	13.4
A94-674017 (II)	20.2	17.5	18.3	19.9	21.9	17.7	20.6	17.5
Macon (L)	15.7	13.5	14.4	15.2	18.9	15.6	19.4	14.5
A94-774021 (III)	14.9	12.7	13.2	14.1	15.8	13.9	15.8	13.0
A96-691006	15.1	13.0	13.2	15.1	17.0	14.8	15.4	14.7
A96-691030	16.7	12.4	13.4	15.1	18.7	16.0	15.8	14.4
A96-692057	13.5	12.3	12.0	14.6	16.2	14.6	15.0	15.2
C1964	16.0	12.9	13.9	15.5	19.2	15.2	15.9	15.5
E95151	15.9	14.5	14.2	17.1	18.0	16.0	15.8	14.7
E95562	13.6	13.6	13.7	14.9	16.6	14.4	15.5	13.7
HC92-984	15.3	13.9	15.0	15.4	18.1	13.4	15.2	14.0
HC93-596	13.2	10.5	10.6	12.6	14.2	13.3	14.3	10.4
HC93-868	14.0	13.8	14.3	16.3	18.3	15.1	15.6	15.1
HC93-1329	14.3	12.8	13.7	15.8	19.6	15.0	15.5	15.2
HC94-81PR	14.6	13.0	14.6	15.6	19.9	15.8	15.9	15.0
HC94-96PR	13.7	12.4	13.4	15.1	18.7	15.0	15.8	13.4
HC94-421	16.0	13.4	15.6	15.9	19.1	16.3	17.3	15.7
HS95-4830	14.3	13.1	15.2	17.0	18.6	15.5	16.8	15.9
ORC 9608	16.3	15.4	16.2	16.6	19.9	16.2	17.2	14.2
U95-3231	15.5	13.5	13.8	15.8	18.3	16.1	16.0	14.0
U96-2208	17.5	14.9	16.5	18.9	21.3	18.4	21.6	15.3
U96-2236	12.7	11.5	11.7	13.6	15.3	13.9	13.9	13.1
U96-2436	13.8	11.7	12.1	12.7	15.6	14.4	16.1	12.7
U96-3103	13.6	12.8	12.3	12.8	17.0	14.7	14.6	12.7
U96-3413	13.2	11.0	11.4	12.7	15.8	12.2	15.0	11.5
U96-3434	13.4	12.5	12.0	13.5	16.0	15.0	16.7	12.1

UNIFORM TEST III, 1998

SEED SIZE (g/100)

Strain	Queens- town MD	Colum- bia MO	Bryon NE	Falls City NE	Tekamah NE	Adel- phia NJ	Hoyt- ville OH
Charleston (dt1)	12.1		16.9	12.0	15.0	15.3	14.3
A94-674017 (II)	16.7		21.9	14.8	20.3	23.0	20.0
Macon (L)	15.0		17.6	15.4	18.2	19.7	17.5
A94-774021 (III)	14.1		16.5	13.0	15.7	17.0	15.0
A96-691006	14.6		16.9	12.6	17.5	17.3	16.2
A96-691030	13.8		18.0	12.2	16.8	16.0	16.5
A96-692057	14.1		16.4	12.7	16.2	15.7	14.3
C1964	14.4		19.4	13.4	17.2	17.0	16.3
E95151	14.0		17.8	12.8	17.5	18.0	16.3
E95562	14.9		16.4	13.9	15.7	16.3	15.4
HC92-984	13.9		17.5	12.8	16.5	17.7	14.5
HC93-596	11.2		14.1	10.0	13.3	13.7	11.4
HC93-868	13.1		19.2	13.6	15.9	17.7	15.6
HC93-1329	13.9		18.2	13.3	16.6	19.0	15.2
HC94-81PR	12.9		19.3	12.6	15.6	18.0	14.3
HC94-96PR	13.4		17.5	13.2	15.3	16.7	14.5
HC94-421	14.1		18.7	15.2	17.1	18.7	15.0
HS95-4830	14.7		18.4	12.5	16.8	17.7	16.2
ORC 9608	17.6		20.4	14.6	18.7	20.0	20.1
U95-3231	14.2		17.4	14.0	17.7	17.0	16.2
U96-2208	15.0		21.1	13.5	18.2	19.0	19.4
U96-2236	12.4		16.9	11.1	15.1	15.0	15.1
U96-2436	12.3		15.3	11.4	15.1	15.7	14.4
U96-3103	13.1		15.9	11.5	16.0	15.0	15.9
U96-3413	11.9		14.7	11.7	15.0	15.0	13.8
U96-3434	14.7		16.5	13.2	16.3	16.0	15.7

UNIFORM TEST III, 1998

SEED SIZE (g/100)

Strain	South		
	Plain City OH	Charleston OH	Wooster OH
Charleston (dt1)	15.6	14.1	15.4
A94-674017 (II)	20.1	18.5	17.4
Macon (L)	15.8	15.5	16.8
A94-774021 (III)	15.1	13.5	14.6
A96-691006	15.8	14.3	14.5
A96-691030	16.2	14.8	14.2
A96-692057	15.6	12.6	14.7
C1964	16.7	14.0	14.3
E95151	15.8	15.6	14.8
E95562	15.7	14.1	15.6
HC92-984	16.3	14.9	15.0
HC93-596	13.9	12.9	13.4
HC93-868	17.2	15.0	16.6
HC93-1329	16.6	15.2	16.8
HC94-81PR	16.3	15.5	17.9
HC94-96PR	16.7	14.5	15.7
HC94-421	17.6	15.8	14.8
HS95-4830	17.8	15.9	14.0
ORC 9608	19.8	16.7	16.8
U95-3231	17.3	16.3	15.6
U96-2208	19.0	17.3	16.1
U96-2236	15.7	13.5	13.7
U96-2436	13.2	12.4	11.6
U96-3103	15.4	13.5	13.1
U96-3413	13.8	13.2	15.5
U96-3434	16.7	15.2	14.8

UNIFORM TEST III, 1998

PROTEIN (%)

Strain	Mean 5 Tests	Grizwold IA	Urbana IL	Lafayette IN	Tekamah NE	Hoytville OH
Charleston (dt1)	41.9	42.9	41.9	43.5	40.1	41.0
A94-674017 (II)	40.6	41.9	41.1	41.1	40.0	39.0
Macon (L)	41.3	42.2	41.9	41.5	40.8	40.1
A94-774021 (III)	39.8	40.9	40.3	41.0	39.1	37.8
A96-691006	42.5	43.3	42.6	43.2	42.2	41.0
A96-691030	40.9	41.3	41.3	41.6	41.0	39.4
A96-692057	41.1	42.7	41.6	42.6	41.2	37.4
C1964	40.5	40.9	40.6	41.9	39.6	39.4
E95151	42.2	42.7	42.4	43.1	41.6	41.4
E95562	40.7	41.2	40.8	41.8	39.8	39.7
HC92-984	42.2	42.9	42.9	43.1	41.5	40.8
HC93-596	39.4	39.8	40.1	41.3	38.1	37.9
HC93-868	40.8	41.0	40.2	42.0	40.6	40.4
HC93-1329	41.9	41.6	41.8	43.8	40.9	41.2
HC94-81PR	40.6	41.2	40.6	41.8	40.3	39.3
HC94-96PR	40.0	40.2	39.8	41.1	39.6	39.4
HC94-421	40.6	40.2	40.7	41.9	40.2	39.8
HS95-4830	40.7	40.5	41.4	41.4	40.4	39.6
ORC 9608	41.1	41.4	40.8	41.9	40.4	41.1
U95-3231	42.6	43.2	42.9	43.2	42.0	41.9
U96-2208	40.0	40.1	39.9	40.8	39.1	40.2
U96-2236	38.4	37.8	38.7	39.3	37.9	38.1
U96-2436	39.5	39.4	40.3	40.4	39.4	37.9
U96-3103	42.1	41.9	42.4	43.5	41.2	41.6
U96-3413	41.3	42.4	41.3	42.0	41.2	39.5
U96-3434	40.0	41.3	40.6	41.2	40.4	36.4

UNIFORM TEST III, 1998

OIL (%)

Strain	Mean 5 Tests	Grizwold IA	Urbana IL	Lafayette IN	Tekamah NE	Hoytville OH
Charleston (dt1)	20.1	19.1	20.4	19.2	22.0	20.0
A94-674017 (II)	21.1	20.1	21.4	21.3	21.8	21.0
Macon (L)	20.2	19.6	20.6	20.3	20.5	19.9
A94-774021 (III)	20.3	19.4	21.0	20.3	20.7	20.3
A96-691006	19.8	18.7	20.7	19.2	20.2	20.0
A96-691030	20.8	20.6	21.6	20.4	21.4	20.2
A96-692057	20.1	19.5	20.6	19.2	20.3	20.7
C1964	20.8	20.8	21.2	20.3	21.5	20.3
E95151	20.6	20.4	21.1	20.5	21.3	19.9
E95562	20.2	20.1	20.5	20.2	21.0	19.1
HC92-984	19.7	19.3	20.5	19.3	20.2	19.2
HC93-596	20.3	20.2	20.7	19.1	21.5	20.0
HC93-868	21.2	20.3	22.2	20.9	21.7	20.8
HC93-1329	19.9	19.7	20.6	19.0	20.7	19.4
HC94-81PR	20.7	20.3	21.4	20.2	21.0	20.5
HC94-96PR	20.9	20.5	21.8	20.8	21.5	20.1
HC94-421	21.2	21.2	21.8	20.8	21.5	20.5
HS95-4830	21.2	20.3	21.7	20.8	21.5	21.5
ORC 9608	20.7	20.2	21.7	20.4	21.3	19.8
U95-3231	20.1	19.4	20.6	20.2	20.7	19.4
U96-2208	20.9	20.4	21.5	20.5	21.5	20.6
U96-2236	21.1	21.0	21.9	20.8	21.4	20.3
U96-2436	20.9	20.7	21.6	20.7	21.1	20.5
U96-3103	19.6	19.5	19.9	18.8	20.1	19.5
U96-3413	19.8	18.9	20.8	19.7	20.0	19.7
U96-3434	20.4	19.5	20.9	20.2	20.6	20.9

Preliminary Test IIIA, 1998

Strain	Parentage	Generation Composited	Unique Traits
1. A94-674017 (II)	Pioneer 9303 x Kenwood	F5	
2. A94-774021 (III)	Jacques J285 x Northrup King S29-39	F5	
3. IA3004 (BSR)	Northrup King S23-03 x A86-301024	F5	BSR
4. Macon (L)	Sherman x Resnik	F5	
5. A97-871071	LN89-334 x IA2021	F5	
6. A97-871077	Macon x HS91-4621	F5	
7. A97-872034	A92-627030 x IA3003	F5	BSR
8. A97-971004	LN89-334 x IA1006	F5	
9. A97-971021	LN89-334 x IA1006	F5	
10. A97-971057	Macon x A92-727017	F5	
11. A97-972018	IA1006 x IA3003	F5	BSR
12. A97-972024	IA2021 x IA3003	F5	BSR
13. C1965	HS88-4909 x HC85-2206	F5	
14. C1966	HS88-4909 x HC85-2206	F5	
15. C1967	HS88-4909 x HC85-2206	F5	
16. C1972	Parker x C1841	F5	
17. LG92-4208	LG84-1269 x Chamberlain	F6	BSR
18. LG94-1382	LG85-3343 x Flyer	F6	
19. LG94-1407	LG85-3343 x Flyer	F6	
20. K1402	LN88-10534 x C1843	F5	
21. K1403	LN86-3357 x KS4694	F5	
22. K1404	LN88-10534 x K1200	F5	
23. K1405	K1212 x LN86-3357	F5	
24. K1406	LN88-10534 x K1200	F5	
25. K1407	LN88-10534 x Corsica	F5	
26. K1408	LN86-3357 x KS4694	F5	
27. LN94-3452	Burlison x Resnik	F5	BSR
28. LN95-116	HS88-4906 x IA2007	F5	BSR
29. LN95-836	HS88-4906 x Resnik	F5	Rps1-k, BSR
30. LN95-1030	HS88-4906 x Resnik	F5	Rps1-k, BSR
31. LN95-1125	HS88-4906 x Resnik	F5	Rps1-k, BSR
32. LN95-1339	HS88-4906 x Edison	F5	Rps1-k, BSR
33. LN95-2979	Thorne x HS88-4906	F5	Rps1-k, BSR
34. LN95-3868	Iroquois x C1842	F5	BSR
35. LN95-10502	M86-1008 x Resnik	F5	BSR

PRELIMINARY TEST IIIA, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis	PR	Hard Seed	PS	PSB
		Score Humboldt	Lafayette Race 7	%	Lafayette a %	n %
A94-674017 (II)	PTBDYBrepI	4.9	S	8	20	4
A94-774021 (III)	PTTDYGrepI	2.9	R	4	4	4
IA3004 (BSR)	PGBSYIbEpI	4.8	H	4	0	0
Macon (L)	WTBDYBIEpI	4.4	S	8	10	2
A97-871071	WG+TBSYHepI	3.4	R	60	8	0
A97-871077	WTBDYBIHI	4.0	H	2	8	0
A97-872034	PTBSYBrepI	4.4	S	36	10	0
A97-971004	WGBDYBfEpI	3.3	R	0	4	8
A97-971021	WTBDYBrEpI	3.8	R	0	6	0
A97-971057	WTBDYBIEpI	3.6	S	4	6	2
A97-972018	PTBIYBlepI	4.0	S	0	4	2
A97-972024	P+WTBSYBlepI	3.4	H	4	18	4
C1965	PGTSYIbHI	3.8	R	20	12	2
C1966	PGB+TSYBfEpI	3.5	R	10	6	0
C1967	PTBSYBrepI	3.6	R	4	6	0
C1972	WGBDYBfEpI	3.8	R	8	30	0
LG92-4208	WTBSYHepI	3.1	S	0	10	0
LG94-1382	WTTDYBlepI	4.8	S	2	10	2
LG94-1407	WG+TB+TDYHEpI	4.3	S	4	4	0
K1402	PTTDYBIEpI	3.6	R	0	2	0
K1403	PGBSYIbepI	3.9	S	0	12	0
K1404	PGTDYIbEpI	4.3	S	10	12	0
K1405	PGTSYIbEpI	4.1	S	8	8	2
K1406	PGTDYIbEpI	3.0	R	0	6	0
K1407	PGBDYIbepI	3.5	S	4	0	2
K1408	PGBSYIbEpI	3.4	S	0	24	0
LN94-3452	WTBDYIbEpI	3.5	S	2	8	0
LN95-116	PTBDYBfepI	4.8	R	4	10	0
LN95-836	PGTIYBfepI	3.8	R	0	10	0
LN95-1030	PGTSYBfEpI	3.8	R	0	12	0
LN95-1125	PTTDYBIEpI	3.8	R	4	6	2
LN95-1339	PTTSYBlepI	5.0	R	2	2	2
LN95-2979	PGTDYYepI	2.9	R	4	14	0
LN95-3868	PTBDYBIEpI	4.1	R	4	10	0
LN95-10502	PTTDYBfEpI	3.8	R	8	4	0

PRELIMINARY TEST IIIA, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant	Seed	Composition	
	9 bu/a	9 No.	8 Date	9 Score	9 In.	8 g/100	Protein 5 %	Oil 5 %
A94-674017 (II)	55.6	19	-2.3	2.1	35	18.9	40.8	21.1
A94-774021 (III)	58.7	4	9/18	1.3	32	14.7	39.8	20.5
IA3004 (BSR)	60.1	2	-2.7	2.0	40	15.6	42.4	19.9
Macon (L)	57.7	8	3.8	2.1	38	16.6	41.5	20.5
A97-871071	60.5	1	-2.6	1.6	35	15.8	40.7	21.3
A97-871077	56.8	15	-1.9	1.7	39	16.3	41.6	20.5
A97-872034	54.8	26	-3.4	1.7	36	16.6	41.6	20.2
A97-971004	53.0	33	-0.8	2.7	40	15.3	41.4	20.3
A97-971021	55.6	19	-1.1	2.7	42	15.3	41.9	20.1
A97-971057	58.7	4	2.4	2.2	40	15.7	40.1	21.2
A97-972018	55.4	22	1.1	2.8	41	16.1	42.1	20.5
A97-972024	53.4	31	5.1	2.6	44	16.8	41.6	20.0
C1965	53.7	29	0.4	2.6	41	17.1	40.9	20.8
C1966	59.9	3	2.6	2.5	42	16.8	39.8	21.3
C1967	57.7	8	1.4	2.1	41	18.3	40.4	21.5
C1972	55.6	19	0.4	2.3	38	16.5	41.4	21.2
LG92-4208	55.1	24	1.6	3.2	40	14.6	41.2	19.6
LG94-1382	52.3	34	2.2	2.9	42	13.9	41.8	20.8
LG94-1407	54.8	26	-0.2	3.1	41	14.5	41.5	20.8
K1402	56.7	16	5.4	1.6	38	14.2	41.9	20.5
K1403	57.1	12	4.9	1.8	41	15.2	41.7	19.9
K1404	57.0	13	1.9	2.0	41	13.7	40.5	20.8
K1405	57.4	11	1.6	2.1	39	13.1	40.2	21.0
K1406	56.5	17	2.9	2.1	41	15.0	40.7	20.8
K1407	57.0	13	4.3	2.9	43	13.0	41.8	20.0
K1408	55.0	25	6.4	1.7	41	14.6	41.4	20.3
LN94-3452	58.6	6	3.6	1.8	38	16.8	41.1	20.4
LN95-116	53.3	32	1.0	2.4	42	15.6	41.5	20.8
LN95-836	57.6	10	-2.1	2.0	36	16.6	40.9	21.2
LN95-1030	55.3	23	-1.3	1.8	39	17.0	41.0	21.1
LN95-1125	53.6	30	2.1	2.4	41	15.2	41.1	20.7
LN95-1339	56.2	18	1.9	1.9	39	14.5	41.1	20.1
LN95-2979	54.5	28	-2.3	3.1	42	14.9	40.1	21.3
LN95-3868	58.6	6	2.0	2.0	42	16.6	42.1	20.7
LN95-10502	51.8	35	-0.9	3.0	38	15.5	43.2	20.0

126.8 Days After Planting

PRELIMINARY TEST IIIA, 1998

YIELD (bu/a)

Strain	Mean 9 Tests	Ames IA	Fair- field IA	Urbana IL	Lafay- ette IN	Man- hattan KS
A94-674017 (II)	55.6	65.9	46.3	63.2	56.3	64.6
A94-774021 (III)	58.7	72.5	54.0	64.9	49.9	67.9
IA3004 (BSR)	60.1	68.4	54.0	64.6	52.7	63.8
Macon (L)	57.7	65.4	59.4	63.8	53.1	62.5
A97-871071	60.5	80.9	52.0	69.5	46.9	64.9
A97-871077	56.8	67.8	53.5	65.6	51.0	63.1
A97-872034	54.8	66.4	51.4	62.7	50.0	60.6
A97-971004	53.0	61.4	56.3	64.9	44.1	68.2
A97-971021	55.6	59.1	47.8	62.1	47.1	62.5
A97-971057	58.7	65.1	58.6	67.3	51.5	63.0
A97-972018	55.4	49.5	54.9	65.3	51.1	60.7
A97-972024	53.4	63.4	50.9	64.2	46.3	59.1
C1965	53.7	66.5	55.8	64.7	54.9	60.7
C1966	59.9	63.0	59.2	78.2	56.7	57.7
C1967	57.7	67.0	54.8	68.1	52.8	59.6
C1972	55.6	69.6	51.8	68.5	47.3	71.2
LG92-4208	55.1	58.2	44.9	71.7	53.7	64.6
LG94-1382	52.3	55.8	49.7	64.6	44.8	56.8
LG94-1407	54.8	62.5	48.3	63.3	47.2	66.9
K1402	56.7	59.7	51.5	62.5	45.0	62.5
K1403	57.1	62.6	56.5	66.5	48.8	58.1
K1404	57.0	63.7	50.7	63.6	46.8	64.7
K1405	57.4	63.1	50.1	66.8	45.7	66.6
K1406	56.5	56.2	63.7	66.1	43.2	59.4
K1407	57.0	61.1	48.4	62.6	50.6	64.2
K1408	55.0	58.3	47.6	63.3	46.8	59.2
LN94-3452	58.6	69.3	52.0	61.5	48.3	64.3
LN95-116	53.3	60.5	49.5	63.4	48.8	60.5
LN95-836	57.6	69.3	46.1	63.0	45.2	68.5
LN95-1030	55.3	65.9	53.8	67.6	50.1	59.1
LN95-1125	53.6	54.8	51.7	64.6	45.5	62.5
LN95-1339	56.2	63.1	53.7	66.1	43.8	60.1
LN95-2979	54.5	64.5	43.9	66.6	46.6	67.7
LN95-3868	58.6	62.6	58.3	70.4	52.1	58.8
LN95-10502	51.8	59.7	48.9	66.5	48.0	61.4
C.V. (%)		9.0	9.6	4.8	7.1	3.7
L.S.D. (5%)		5.7	5.0	6.5	7.0	4.7
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		2	2	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIIA, 1998

YIELD (bu/a)

Strain	Columbia MO	Byron NE	Falls City NE	Hoytville OH
A94-674017 (II)	41.0	65.2	32.5	65.4
A94-774021 (III)	49.3	67.9	27.2	74.5
IA3004 (BSR)	53.1	70.3	32.8	81.7
Macon (L)	52.2	69.1	36.2	57.5
A97-871071	47.2	71.7	33.9	77.2
A97-871077	45.2	62.3	35.4	67.3
A97-872034	36.1	66.0	21.4	78.3
A97-971004	40.2	60.4	35.7	46.3
A97-971021	43.6	62.4	37.0	78.7
A97-971057	54.1	63.9	30.3	74.7
A97-972018	40.9	56.8	39.0	80.8
A97-972024	47.0	58.2	37.4	53.9
C1965	52.9	53.4	22.9	51.4
C1966	57.8	65.8	36.2	64.5
C1967	49.7	60.5	30.9	75.7
C1972	42.9	56.9	33.4	58.8
LG92-4208	42.8	61.1	34.4	64.5
LG94-1382	41.4	60.7	26.6	70.0
LG94-1407	38.3	68.1	30.9	68.0
K1402	54.3	60.8	41.4	72.5
K1403	49.6	66.4	40.6	65.3
K1404	50.8	66.9	38.6	67.1
K1405	43.8	65.4	38.9	76.0
K1406	45.7	67.2	34.9	72.3
K1407	52.2	62.4	36.5	75.2
K1408	53.8	68.2	40.0	58.0
LN94-3452	50.7	65.5	38.1	77.7
LN95-116	51.8	65.5	33.5	46.5
LN95-836	53.4	70.1	32.8	70.0
LN95-1030	53.5	59.0	32.7	56.2
LN95-1125	50.9	64.2	32.2	56.0
LN95-1339	50.0	72.3	35.2	61.5
LN95-2979	49.8	61.3	24.9	65.6
LN95-3868	55.0	67.4	34.6	68.3
LN95-10502	38.1	55.9	30.6	57.3
C.V. (%)	8.7	10.2	7.9	12.5
L.S.D. (5%)	8.5	14.4	11.1	14.2
Row Sp. (In.)	30	30	30	7.5
Rows/Plot	4	4	4	8
Reps	2	2	2	2

PRELIMINARY TEST IIIA, 1998

YIELD RANK

Strain	Yield Rank	Ames IA	Fair-field IA	Urbana IL	Lafayette IN	Manhattan KS
A94-674017 (II)	19	11	32	28	2	11
A94-774021 (III)	4	2	11	16	15	4
IA3004 (BSR)	2	6	12	19	7	14
Macon (L)	8	13	2	23	5	19
A97-871071	1	1	16	4	23	8
A97-871077	15	7	15	14	11	15
A97-872034	26	10	21	30	14	24
A97-971004	33	24	7	16	33	3
A97-971021	19	29	30	33	22	18
A97-971057	4	14	4	8	9	16
A97-972018	22	35	9	15	10	22
A97-972024	31	17	22	22	27	30
C1965	29	9	8	18	3	23
C1966	3	20	3	1	1	34
C1967	8	8	10	6	6	27
C1972	19	3	18	5	20	1
LG92-4208	24	31	34	2	4	10
LG94-1382	34	33	25	19	32	35
LG94-1407	26	23	29	26	21	6
K1402	16	27	20	32	31	17
K1403	12	21	6	11	16	33
K1404	13	16	23	24	24	9
K1405	11	18	24	9	28	7
K1406	17	32	1	12	35	28
K1407	13	25	28	31	12	13
K1408	25	30	31	26	24	29
LN94-3452	6	4	17	34	18	12
LN95-116	32	26	26	25	16	25
LN95-836	10	5	33	29	30	2
LN95-1030	23	12	13	7	13	30
LN95-1125	30	34	19	19	29	20
LN95-1339	18	19	14	12	34	26
LN95-2979	28	15	35	10	26	5
LN95-3868	6	22	5	3	8	32
LN95-10502	35	28	27	11	19	21

PRELIMINARY TEST IIIA, 1998

YIELD RANK

Strain	Columbia MO	Byron NE	Falls City NE	Hoytville OH
A94-674017 (II)	30	18	25	21
A94-774021 (III)	20	8	31	11
IA3004 (BSR)	8	3	22	1
Macon (L)	10	5	11	28
A97-871071	21	2	19	6
A97-871077	24	23	14	18
A97-872034	35	13	35	4
A97-971004	32	29	13	35
A97-971021	26	22	9	3
A97-971057	4	20	30	10
A97-972018	31	33	4	2
A97-972024	22	31	8	32
C1965	9	35	34	33
C1966	1	14	12	23
C1967	18	28	27	8
C1972	27	32	21	26
LG92-4208	28	25	18	23
LG94-1382	29	27	32	14
LG94-1407	33	7	28	17
K1402	3	26	1	12
K1403	19	12	2	22
K1404	14	11	6	19
K1405	25	17	5	7
K1406	23	10	16	13
K1407	10	21	10	9
K1408	5	6	3	27
LN94-3452	15	16	7	5
LN95-116	12	15	20	34
LN95-836	7	4	23	14
LN95-1030	6	30	24	30
LN95-1125	13	19	26	31
LN95-1339	16	1	15	25
LN95-2979	17	24	33	20
LN95-3868	2	9	17	16
LN95-10502	34	34	29	29

PRELIMINARY TEST IIIA, 1998

MATURITY (date)

Strain	Mean 8 Tests	Ames IA	Fair- field IA	Urbana IL	Lafay- ette IN	Man- hattan KS
A94-674017 (II)	-2.3	-3		-3	-3	-1
A94-774021 (III)	09/18	09/22		09/12	09/15	09/26
IA3004 (BSR)	-2.7	-4		-3	-3	-3
Macon (L)	3.8	1		5	6	5
A97-871071	-2.6	-4		-2	-4	-2
A97-871077	-1.9	-3		-2	0	-2
A97-872034	-3.4	-2		-4	-3	-3
A97-971004	-0.8	-1		-2	-2	0
A97-971021	-1.1	-2		-1	1	-1
A97-971057	2.4	3		0	3	3
A97-972018	1.1	0		2	4	4
A97-972024	5.1	5		6	8	5
C1965	0.4	0		3	4	1
C1966	2.6	2		6	6	1
C1967	1.4	1		4	5	2
C1972	0.4	3		2	-2	2
LG92-4208	1.6	0		4	5	1
LG94-1382	2.2	3		3	3	1
LG94-1407	-0.2	-2		1	0	2
K1402	5.4	3		6	5	7
K1403	4.9	4		5	7	4
K1404	1.9	1		1	3	1
K1405	1.6	0		3	3	1
K1406	2.9	4		3	4	2
K1407	4.3	4		4	6	4
K1408	6.4	6		5	8	5
LN94-3452	3.6	1		4	5	6
LN95-116	1.0	3		2	2	2
LN95-836	-2.1	-2		-1	-2	-2
LN95-1030	-1.3	-1		0	0	-3
LN95-1125	2.1	1		3	3	1
LN95-1339	1.9	-1		3	3	1
LN95-2979	-2.3	-1		-1	-1	-2
LN95-3868	2.0	0		2	1	4
LN95-10502	-0.9	-2		1	1	-1
Date Planted	5/14	05/06		05/12	05/16	05/21
Days to Mature	126.8	139		123	122	128

PRELIMINARY TEST IIIA, 1998

MATURITY (date)

Strain	Columbia MO	Byron NE	Falls City NE	Hoytville OH
A94-674017 (II)	-1	-2	-3	-3
A94-774021 (III)	09/09	09/18	09/19	09/27
IA3004 (BSR)	-3	0	-3	-3
Macon (L)	5	3	6	1
A97-871071	-3	-1	-3	-3
A97-871077	-4	-2	0	-3
A97-872034	-5	-2	-7	-2
A97-971004	-3	1	1	0
A97-971021	-2	-1	-2	-2
A97-971057	4	1	6	-1
A97-972018	1	0	-1	-1
A97-972024	5	2	8	2
C1965	0	0	-3	-1
C1966	2	2	-1	3
C1967	-1	1	-1	1
C1972	1	0	-2	0
LG92-4208	1	-1	3	0
LG94-1382	0	2	5	1
LG94-1407	-1	1	-1	-2
K1402	6	6	7	5
K1403	2	7	6	5
K1404	2	2	5	1
K1405	1	1	2	2
K1406	2	2	5	2
K1407	3	5	7	2
K1408	6	8		7
LN94-3452	6	3	3	1
LN95-116	-1	0	0	0
LN95-836	-5	0	-3	-2
LN95-1030	-2	0	-3	-2
LN95-1125	2	4	2	1
LN95-1339	3	2	5	1
LN95-2979	-3	-2	-7	-2
LN95-3868	5	1	4	-1
LN95-10502	-1	-2	-3	-2
Date Planted	05/12	05/20	05/13	05/18
Days to Mature	120	121	129	132

PRELIMINARY TEST IIIA, 1998

LODGING (score)

Strain	Mean 9 Tests	Ames IA	Fair- field IA	Urbana IL	Lafay- ette IN	Man- hattan KS
A94-674017 (II)	2.1	1.8	1.9	1.0	2.3	2.0
A94-774021 (III)	1.3	1.2	1.3	1.0	1.0	1.0
IA3004 (BSR)	2.0	1.6	1.7	1.3	1.5	1.5
Macon (L)	2.1	2.3	1.7	1.3	2.3	2.0
A97-871071	1.6	1.8	1.5	1.0	1.8	1.5
A97-871077	1.7	1.5	1.7	1.0	2.3	2.0
A97-872034	1.7	2.3	1.8	1.0	2.5	1.5
A97-971004	2.7	3.3	2.1	2.8	2.8	3.0
A97-971021	2.7	3.0	3.0	1.5	2.8	2.5
A97-971057	2.2	1.8	2.0	2.8	2.5	2.0
A97-972018	2.8	2.4	2.4	2.8	3.5	2.0
A97-972024	2.6	2.0	2.2	3.0	2.5	2.5
C1965	2.6	2.4	2.6	2.0	3.5	3.0
C1966	2.5	2.1	2.2	2.5	2.3	2.5
C1967	2.1	1.5	1.9	1.8	2.8	2.5
C1972	2.3	3.0	1.7	2.5	2.3	2.5
LG92-4208	3.2	3.3	1.7	3.5	2.8	3.5
LG94-1382	2.9	2.8	1.9	3.0	3.3	3.0
LG94-1407	3.1	4.0	2.9	2.0	3.3	3.5
K1402	1.6	1.4	1.5	1.0	2.3	1.0
K1403	1.8	1.4	1.9	1.3	2.0	1.5
K1404	2.0	2.4	1.7	1.3	1.8	2.0
K1405	2.1	2.3	2.4	1.3	2.0	2.0
K1406	2.1	2.6	2.5	1.3	2.3	2.0
K1407	2.9	3.4	2.3	2.8	3.3	3.0
K1408	1.7	1.4	1.5	1.0	1.8	2.0
LN94-3452	1.8	2.0	1.8	1.0	2.3	1.5
LN95-116	2.4	1.6	1.9	1.8	3.3	2.5
LN95-836	2.0	1.8	1.9	1.3	2.3	2.0
LN95-1030	1.8	1.9	2.1	1.5	2.3	2.0
LN95-1125	2.4	3.3	2.3	2.3	2.8	2.5
LN95-1339	1.9	2.8	1.8	1.3	1.8	2.0
LN95-2979	3.1	2.8	2.7	3.0	3.5	3.0
LN95-3868	2.0	2.3	1.8	1.5	2.0	1.5
LN95-10502	3.0	1.8	2.7	2.8	2.5	3.5

PRELIMINARY TEST IIIA, 1998

LODGING (score)

Strain	Columbia MO	Byron NE	Falls City NE	Hoytville OH
A94-674017 (II)	2.0	2.0	2.0	3.5
A94-774021 (III)	1.0	2.0	1.0	2.0
IA3004 (BSR)	2.5	2.0	1.0	4.5
Macon (L)	2.0	2.5	2.0	3.0
A97-871071	1.0	2.0	1.5	2.5
A97-871077	1.0	2.0	1.5	2.5
A97-872034	1.0	2.0	1.0	2.5
A97-971004	2.0	3.5	2.0	3.0
A97-971021	2.5	3.0	2.0	4.0
A97-971057	2.0	2.5	2.0	2.5
A97-972018	2.5	4.0	2.0	4.0
A97-972024	2.0	3.5	2.0	3.5
C1965	2.5	3.0	2.0	2.5
C1966	2.5	4.0	1.5	3.0
C1967	1.5	2.5	1.5	2.5
C1972	1.5	2.0	2.0	3.0
LG92-4208	4.0	4.5	2.0	3.5
LG94-1382	3.5	3.0	2.0	3.5
LG94-1407	3.5	4.0	1.5	3.5
K1402	1.5	2.0	1.0	3.0
K1403	1.0	3.0	1.5	2.5
K1404	1.0	2.5	2.0	3.0
K1405	1.0	3.0	1.5	3.0
K1406	1.0	2.0	1.5	4.0
K1407	2.5	3.0	1.5	4.0
K1408	1.5	3.0	1.5	2.0
LN94-3452	1.0	2.5	2.0	2.0
LN95-116	2.5	3.5	2.0	2.5
LN95-836	2.0	2.5	1.5	3.0
LN95-1030	1.0	2.0	1.5	2.0
LN95-1125	2.0	2.0	2.0	2.5
LN95-1339	1.5	1.5	2.0	2.0
LN95-2979	3.0	4.5	2.0	3.0
LN95-3868	1.5	2.5	1.5	3.0
LN95-10502	3.5	4.5	2.0	4.0

PRELIMINARY TEST IIIA, 1998

PLANT HEIGHT (inches)

Strain	Mean 9 Tests	Ames IA	Fair- field IA	Urbana IL	Lafay- ette IN	Man- hattan KS
A94-674017 (II)	35	44	32	36	36	42
A94-774021 (III)	32	41	30	34	31	41
IA3004 (BSR)	40	48	40	42	38	44
Macon (L)	38	45	37	40	38	43
A97-871071	35	42	33	38	34	39
A97-871077	39	45	38	40	40	45
A97-872034	36	46	35	35	42	42
A97-971004	40	47	36	42	39	46
A97-971021	42	49	41	45	43	46
A97-971057	40	42	41	43	40	46
A97-972018	41	48	40	41	41	47
A97-972024	44	50	43	45	43	51
C1965	41	46	38	43	39	48
C1966	42	50	41	44	43	49
C1967	41	44	36	45	41	49
C1972	38	44	32	40	36	44
LG92-4208	40	50	34	41	37	49
LG94-1382	42	50	41	47	40	48
LG94-1407	41	47	40	44	41	47
K1402	38	45	35	38	39	44
K1403	41	49	38	44	41	48
K1404	41	45	38	45	43	46
K1405	39	44	37	41	41	45
K1406	41	44	39	44	41	51
K1407	43	54	39	45	40	50
K1408	41	49	36	42	42	49
LN94-3452	38	42	36	38	39	44
LN95-116	42	52	38	41	41	52
LN95-836	36	42	35	37	37	42
LN95-1030	39	43	38	42	40	47
LN95-1125	41	45	40	42	42	45
LN95-1339	39	42	37	41	38	47
LN95-2979	42	47	40	44	38	52
LN95-3868	42	48	42	46	42	45
LN95-10502	38	43	38	40	38	43

PRELIMINARY TEST IIIA, 1998

PLANT HEIGHT (inches)

Strain	Columbia MO	Byron NE	Falls City NE	Hoytville OH
A94-674017 (II)	30	39	28	32
A94-774021 (III)	29	37	19	30
IA3004 (BSR)	41	45	25	35
Macon (L)	38	44	26	35
A97-871071	35	40	27	31
A97-871077	40	43	25	34
A97-872034	27	42	24	32
A97-971004	40	45	27	35
A97-971021	43	45	32	35
A97-971057	41	46	28	34
A97-972018	43	44	29	37
A97-972024	46	46	35	41
C1965	43	45	29	37
C1966	46	39	31	38
C1967	41	45	30	38
C1972	42	41	29	31
LG92-4208	44	43	30	36
LG94-1382	43	43	29	38
LG94-1407	41	44	30	37
K1402	38	42	28	33
K1403	38	45	30	38
K1404	40	45	28	40
K1405	38	42	28	36
K1406	40	47	28	40
K1407	46	47	28	43
K1408	37	46	29	37
LN94-3452	38	44	26	35
LN95-116	45	46	32	32
LN95-836	36	40	25	33
LN95-1030	38	44	28	34
LN95-1125	42	46	30	36
LN95-1339	42	44	29	35
LN95-2979	41	44	31	37
LN95-3868	42	46	31	38
LN95-10502	39	42	25	34

PRELIMINARY TEST IIIA, 1998

SEED SIZE (g/100)

Strain	Mean 8 Tests	Ames IA	Fair- field IA	Urbana IL	Lafay- ette IN	Man- hattan KS
A94-674017 (II)	18.9	14.6	19.0	20.2	19.5	22.2
A94-774021 (III)	14.7	15.0	15.1	13.6	13.1	16.7
IA3004 (BSR)	15.6	17.6	15.7	15.6	13.1	17.3
Macon (L)	16.6	17.9	17.5	15.6	15.5	17.3
A97-871071	15.8	17.8	15.7	14.6	14.4	16.5
A97-871077	16.3	17.3	15.6	15.6	15.3	18.2
A97-872034	16.6	17.6	16.9	16.1	15.1	19.1
A97-971004	15.3	15.7	16.3	15.3	13.3	16.9
A97-971021	15.3	16.1	15.5	14.9	13.6	15.0
A97-971057	15.7	15.6	16.0	15.1	13.6	19.0
A97-972018	16.1	16.5	17.5	16.2	14.4	17.6
A97-972024	16.8	18.2	17.6	16.5	15.1	18.6
C1965	17.1	17.8	17.7	17.3	16.4	19.1
C1966	16.8	17.0	17.6	18.0	15.2	18.9
C1967	18.3	19.2	18.7	18.5	16.7	20.3
C1972	16.5	17.7	16.4	17.0	13.6	18.5
LG92-4208	14.6	14.5	14.2	15.3	13.0	16.5
LG94-1382	13.9	13.6	13.5	14.1	11.2	17.6
LG94-1407	14.5	15.9	14.0	14.2	12.7	16.3
K1402	14.2	14.2	13.9	14.7	11.8	16.9
K1403	15.2	15.8	15.5	14.8	13.6	16.3
K1404	13.7	13.8	13.8	13.2	11.7	15.1
K1405	13.1	13.7	12.8	12.5	11.3	15.3
K1406	15.0	14.8	15.1	14.2	13.5	17.1
K1407	13.0	12.7	13.9	11.9	11.6	14.5
K1408	14.6	14.6	15.0	13.7	12.9	17.0
LN94-3452	16.8	18.5	17.6	16.5	14.8	18.3
LN95-116	15.6	15.3	15.9	16.2	14.6	15.7
LN95-836	16.6	17.8	15.6	16.2	15.1	19.0
LN95-1030	17.0	18.1	17.1	17.8	15.9	17.9
LN95-1125	15.2	15.9	15.4	15.6	13.2	17.5
LN95-1339	14.5	16.8	14.3	13.3	13.1	16.0
LN95-2979	14.9	17.0	14.0	14.9	12.5	18.2
LN95-3868	16.6	17.8	16.4	16.6	15.0	18.3
LN95-10502	15.5	16.3		15.5	13.4	18.0

PRELIMINARY TEST IIIA, 1998

SEED SIZE (g/100)

Strain	Columbia MO	Byron NE	Falls City NE	Hoytville OH
A94-674017 (II)		20.0	16.0	19.6
A94-774021 (III)		15.3	13.9	14.5
IA3004 (BSR)		16.7	13.1	15.6
Macon (L)		18.4	15.5	15.4
A97-871071		17.5	13.0	17.0
A97-871077		17.6	15.0	15.8
A97-872034		18.2	13.3	16.8
A97-971004		16.1	13.5	15.2
A97-971021		15.6	12.4	19.3
A97-971057		16.6	14.3	15.1
A97-972018		17.0	13.8	16.0
A97-972024		16.0	16.4	16.2
C1965		17.2	14.4	17.3
C1966		17.6	14.1	16.2
C1967		18.7	15.5	18.5
C1972		17.2	14.9	16.4
LG92-4208		15.4	12.8	15.0
LG94-1382		14.6	14.0	12.6
LG94-1407		15.4	13.2	13.9
K1402		13.8	14.1	14.0
K1403		15.1	14.7	15.8
K1404		14.4	13.9	13.5
K1405		13.6	12.8	12.6
K1406		16.2	14.2	14.6
K1407		13.9	12.5	13.2
K1408		14.6	15.0	14.3
LN94-3452		17.4	15.1	16.1
LN95-116		16.5	14.5	16.0
LN95-836		18.1	14.5	16.1
LN95-1030		17.7	14.3	16.8
LN95-1125		16.0	13.3	15.0
LN95-1339		15.6	13.0	14.1
LN95-2979		16.9	11.4	14.5
LN95-3868		17.6	14.4	16.8
LN95-10502		16.5	13.5	15.4

PRELIMINARY TEST IIIA, 1998

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Falls City NE	Hoytville OH
A94-674017 (II)	40.8	41.5	41.4	41.5	40.1	39.7
A94-774021 (III)	39.8	40.2	40.4	41.0	39.8	37.7
IA3004 (BSR)	42.4	42.0	43.8	43.6	39.9	42.5
Macon (L)	41.5	43.0	41.9	42.8	40.7	39.2
A97-871071	40.7	41.1	41.2	41.8	40.3	39.1
A97-871077	41.6	41.8	42.5	43.4	40.8	39.5
A97-872034	41.6	42.3	43.3	42.6	39.9	39.9
A97-971004	41.4	42.1	42.3	43.4	41.6	37.7
A97-971021	41.9	42.8	42.0	43.4	40.4	40.8
A97-971057	40.1	41.6	41.2	41.0	40.5	36.3
A97-972018	42.1	42.7	43.1	43.3	40.6	41.0
A97-972024	41.6	41.9	42.1	43.0	42.6	38.5
C1965	40.9	41.5	41.5	41.8	41.5	38.4
C1966	39.8	40.7	41.1	40.7	39.9	36.4
C1967	40.4	40.7	41.4	41.2	40.1	38.7
C1972	41.4	41.5	42.8	43.3	39.6	39.7
LG92-4208	41.2	42.3	41.6	42.8	41.1	38.4
LG94-1382	41.8	43.2	43.1	43.2	41.5	38.1
LG94-1407	41.5	43.0	43.1	43.3	40.2	37.8
K1402	41.9	43.2	42.5	42.7	42.2	38.7
K1403	41.7	42.3	41.7	42.7	40.8	41.2
K1404	40.5	41.0	41.4	41.6	40.4	38.0
K1405	40.2	40.6	40.7	41.3	39.6	38.8
K1406	40.7	40.9	41.2	42.3	39.2	39.7
K1407	41.8	42.6	41.3	42.8	41.6	40.6
K1408	41.4	42.1	42.4	42.9	41.5	38.0
LN94-3452	41.1	42.4	41.8	43.1	40.6	37.7
LN95-116	41.5	41.8	42.0	42.9	41.8	39.0
LN95-836	40.9	41.2	41.2	43.4	39.8	39.0
LN95-1030	41.0	41.4	42.3	42.9	39.8	38.6
LN95-1125	41.1	42.7	41.5	42.4	40.3	38.4
LN95-1339	41.1	41.4	41.3	43.2	40.5	39.1
LN95-2979	40.1	39.8	41.2	41.2	39.4	38.7
LN95-3868	42.1	42.5	42.4	43.9	41.6	40.1
LN95-10502	43.2	44.4	43.1	44.6	43.1	40.9

PRELIMINARY TEST IIIA, 1998

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Falls City NE	Hoytville OH
A94-674017 (II)	21.1	20.1	21.6	21.3	21.6	20.9
A94-774021 (III)	20.5	19.6	21.0	20.2	21.1	20.7
IA3004 (BSR)	19.9	20.2	19.9	18.8	21.3	19.2
Macon (L)	20.5	20.0	20.7	20.2	21.2	20.5
A97-871071	21.3	20.9	22.1	20.8	21.8	20.9
A97-871077	20.5	20.0	20.5	20.1	21.2	20.9
A97-872034	20.2	19.3	19.9	19.2	22.2	20.5
A97-971004	20.3	19.4	20.9	19.4	20.5	21.1
A97-971021	20.1	19.2	20.6	19.2	21.6	20.0
A97-971057	21.2	20.2	21.6	21.1	21.0	22.3
A97-972018	20.5	19.3	21.2	20.2	22.2	19.8
A97-972024	20.0	18.6	20.0	19.9	20.7	20.6
C1965	20.8	19.9	21.8	20.8	20.4	21.1
C1966	21.3	20.4	21.5	21.4	21.7	21.4
C1967	21.5	21.3	22.5	21.6	21.6	20.5
C1972	21.2	20.9	21.6	19.8	22.3	21.2
LG92-4208	19.6	18.5	20.5	19.0	20.3	19.7
LG94-1382	20.8	19.7	20.9	20.5	21.6	21.3
LG94-1407	20.8	20.1	21.0	20.1	21.5	21.3
K1402	20.5	19.2	21.2	20.2	21.0	21.1
K1403	19.9	19.0	20.3	19.6	20.5	20.2
K1404	20.8	19.9	21.0	20.5	21.8	20.6
K1405	21.0	20.2	21.1	20.6	22.5	20.4
K1406	20.8	20.3	20.7	20.4	22.3	20.3
K1407	20.0	18.8	20.7	19.8	21.0	19.9
K1408	20.3	18.7	21.2	19.7	21.1	21.0
LN94-3452	20.4	19.0	21.2	19.6	21.0	21.2
LN95-116	20.8	20.0	21.6	20.4	21.3	20.6
LN95-836	21.2	20.9	22.0	19.7	21.9	21.3
LN95-1030	21.1	19.9	21.7	20.6	22.3	21.0
LN95-1125	20.7	19.4	20.9	20.3	21.4	21.3
LN95-1339	20.1	19.5	20.7	19.1	20.7	20.4
LN95-2979	21.3	20.8	21.7	20.6	22.1	21.4
LN95-3868	20.7	20.1	21.2	19.9	21.3	20.9
LN95-10502	20.0	19.0	20.7	19.3	20.4	20.5

Preliminary Test IIIB, 1998

	Strain	Parentage	Generation Composited	Unique Traits
1.	A94-674017 (II)	Pioneer 9303 x Kenwood	F5	
2.	A94-774021 (III)	Jacques J285 x Northrup King S29-39	F5	
3.	Macon (L)	Sherman x Resnik	F5	
4.	HS96-3190	HS89-5689 x HS90-37100	F5	(Rps1-c or Rps1-k) + Rps3
5.	HS96-3305	IA2007 x (HS88-4909 x HS88-4914)	F5	
6.	HS96-3306	IA2007 x (HS88-4909 x HS88-4914)	F5	
7.	HS96-3321	IA2007 x (HS88-4909 x HS88-4914)	F5	
8.	HS96-3327	Parker x HS90-37100	F5	Rps1-c
9.	HS96-3329	Parker x HS90-37100	F5	
10.	HS96-3333	Parker x HS90-37100	F5	Rps1-c
11.	HS96-3416	HS89-5689 x HS90-37100	F5	(Rps1-c or Rps1-k) + Rps3
12.	U97-2128	MSBP3F6	F7	
13.	U97-3108	MSBP3F6	F7	
14.	U97-3114	MSBP3F6	F7	
15.	U97-3123	MSBP3F6	F7	
16.	U97-3212	MSBP3F6	F7	
17.	U97-3229	MSBP3F6	F7	
18.	U97-3239	MSBP3F6	F7	
19.	U97-3248	MSBP3F6	F7	
20.	U97-3302	MSBP3F6	F7	
21.	U97-3309	MSBP3F6	F7	
22.	U97-3407	MSBP3F6	F7	
23.	U97-3429	RMHI0ILS5	F6	
24.	U97-3621	UP3YC1	F7	
25.	U97-3635	UP3YC1	F7	
26.	U97-3642	UP3YC1	F7	
27.	Charleston (dt1)	LN84-7577 x Resnik	F5	dt1
28.	HC93-35PR	Charleston(5) x Sprite 87	BC4F5	dt1, Rps1-k
29.	HC94-85PR	HC85-606(4) x Hobbit 87	BC3F3	dt1, Rps1-k
30.	HC94-151	HC85-6723 x Flyer	F5	dt1
31.	HC94-228	Burlison x Hoyt BC	F5	dt1
32.	HC94-255	HC78-676BC x A86-303014	F5	dt1
33.	HC94-407	Sprite 87 x HC85-6577	F5	dt1
34.	HC94-974	HC85-606 x HC78-676BC	F5	dt1
35.	HC94-1014	HC85-607 x HC78-676BC	F5	dt1
36.	HC94-1017	HC85-607 x HC78-676BC	F5	dt1
37.	HC94-1065	HC85-607 x HC78-676BC	F5	dt1
38.	HC94-1382	Charleston x HC74-634REBC	F5	dt1
39.	HC94-1688	HC85-606 x HC78-676BC	F5	dt1

PRELIMINARY TEST IIIB, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis	PR	Hard Seed	PS	PSB
		Score Humboldt	Lafayette Race 7	%	Lafayette a %	n %
A94-674017 (II)	PTBDYBrepI	4.8	S	8	20	4
A94-774021 (III)	PTTDYGrepI	2.9	R	4	4	4
Macon (L)	WTBDYBIepI	3.9	S	8	10	2
HS96-3190	PTBDYBIHI	3.6	R	0	6	0
HS96-3305	PTBDYBrHI	4.3	R	4	4	0
HS96-3306	PTBIYBrEpI	3.8	R	8	10	2
HS96-3321	PTBDYBrEpI	3.6	R	10	0	2
HS96-3327	PGBDYBfEpI	3.9	R	20	8	0
HS96-3329	WGBDYIbHI	3.4	R	10	12	0
HS96-3333	PGBDYIbHI	3.4	R	14	8	0
HS96-3416	PTBDYBlepI	3.8	R	16	10	2
U97-2128	PTBDYBrEpI	3.5	S	0	26	0
U97-3108	PTBSYBIepI	3.5	R	12	14	2
U97-3114	PGBIYGrEpI	3.6	R	4	24	0
U97-3123	PG+TBDYBrEpI	3.5	S	2	8	0
U97-3212	PGTIYIbEpI	4.8	R	2	12	2
U97-3229	WGBSYBfEpI	4.8	S	0	8	0
U97-3239	WGTIYBfHI	4.1	S	0	8	0
U97-3248	PTBDYBlepI	3.6	S	0	28	0
U97-3302	PGBDYGrEpI	3.4	H	0	0	8
U97-3309	PGBSYIbEpI	3.8	S	0	6	0
U97-3407	PGBDYIbHI	3.9	S	4	0	2
U97-3429	PTBDYBIHI	3.6	R	0	8	0
U97-3621	PTBSYBlepI	4.6	S	0	2	0
U97-3635	PGBDYIbepI	3.9	S	2	20	2
U97-3642	PG+TTIYHepI	3.8	S	4	0	0
Charleston (dt1)	PTTSYBIepD	4.3	S	10	0	0
HC93-35PR	PTTSYBlepD	3.5	R	0	0	0
HC94-85PR	WTTDYBIHD	4.1	R	2	0	2
HC94-151	WTBDYBIepD	4.0	S	6	4	6
HC94-228	WTTIYBIepD	2.6	R	30	0	0
HC94-255	PTBIYBIepD	3.6	R	30	6	2
HC94-407	PTTDYBlepD	3.1	R	16	4	0
HC94-974	PTTSYBlepD	4.3	R	2	8	0
HC94-1014	PTBSYBrEpD	4.5	H	0	0	0
HC94-1017	PTBSYBrEpD	4.5	R	0	0	0
HC94-1065	PTBSYBlepD	3.5	R	0	4	4
HC94-1382	PTBDYBrepD	3.9	R	18	2	2
HC94-1688	WTTDYBrEpD	4.1	S	0	2	2

PRELIMINARY TEST IIIB, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield 9 bu/a	Rank 9 No.	Maturity 8 Date	Lodging 9 Score	Plant Height 9 In.	Seed Size 8 g/100	Composition	
							Protein 5 %	Oil 5 %
A94-674017 (II)	55.0	20	-1.6	1.7	35	19.3	41.2	21.1
A94-774021 (III)	59.4	2	9/18	1.3	33	14.3	40.6	20.3
Macon (L)	58.0	6	3.8	1.8	38	16.6	41.7	20.2
HS96-3190	48.6	31	-1.4	3.4	43	16.8	42.5	20.0
HS96-3305	52.7	23	0.3	2.2	37	14.6	41.4	20.4
HS96-3306	52.6	25	-1.1	1.8	36	16.4	42.0	20.2
HS96-3321	52.7	23	-1.1	1.7	35	16.2	42.2	20.4
HS96-3327	55.5	16	-0.8	2.6	40	15.0	41.8	20.8
HS96-3329	57.8	8	-0.2	2.8	44	16.3	40.6	21.6
HS96-3333	58.5	3	0.9	2.8	43	14.0	40.4	21.2
HS96-3416	50.4	27	-0.1	2.4	45	17.0	43.3	19.5
U97-2128	55.1	19	-2.3	2.6	44	16.7	40.1	21.0
U97-3108	56.9	11	0.9	1.5	38	15.8	40.5	19.6
U97-3114	61.0	1	0.9	1.7	38	17.2	41.1	20.8
U97-3123	56.3	13	-0.8	1.3	37	15.7	42.5	20.2
U97-3212	57.7	9	1.2	1.7	39	15.4	41.7	19.7
U97-3229	58.4	4	1.6	1.8	36	15.3	41.4	20.3
U97-3239	55.7	15	2.9	2.0	40	16.2	41.7	20.0
U97-3248	54.8	21	4.6	2.3	43	17.3	42.6	19.6
U97-3302	55.4	17	2.6	1.9	39	16.1	41.9	20.6
U97-3309	56.7	12	2.3	1.6	40	15.0	41.3	20.1
U97-3407	55.4	17	-1.3	1.7	38	14.7	42.0	20.3
U97-3429	56.0	14	3.6	2.0	39	16.2	41.8	20.2
U97-3621	57.0	10	0.1	2.4	39	14.0	40.3	21.0
U97-3635	58.1	5	4.2	3.0	43	14.8	40.6	20.9
U97-3642	57.9	7	1.3	2.3	39	15.2	40.0	21.1
Charleston (dt1)	50.3	28	2.6	1.4	23	14.5	42.4	19.6
HC93-35PR	48.2	33	1.8	1.3	20	15.0	42.2	19.9
HC94-85PR	47.6	35	2.0	1.2	20	15.1	41.3	20.8
HC94-151	34.8	39	4.3	1.1	19	17.0	42.7	20.1
HC94-228	35.6	38	3.3	1.2	18	16.1	43.3	19.4
HC94-255	45.0	36	0.3	1.2	19	15.8	43.4	18.7
HC94-407	42.4	37	0.8	1.5	21	17.2	40.1	21.1
HC94-974	50.3	28	3.0	1.3	20	14.3	42.3	19.8
HC94-1014	48.5	32	2.4	1.3	21	14.7	40.9	20.8
HC94-1017	48.8	30	0.3	1.3	22	14.7	41.3	20.4
HC94-1065	54.2	22	2.6	1.3	20	14.7	40.3	20.8
HC94-1382	51.3	26	2.9	1.4	22	14.4	40.2	20.3
HC94-1688	48.0	34	4.1	1.3	20	16.6	42.3	20.5

PRELIMINARY TEST IIIB, 1998

YIELD (bu/a)

Strain	Mean 9 Tests	Ames IA	Fair- field IA	Urbana IL	Lafay- ette IN	Man- hattan KS
A94-674017 (II)	55.0	65.9	50.6	55.7	46.9	61.5
A94-774021 (III)	59.4	73.3	55.8	69.3	47.3	60.2
Macon (L)	58.0	67.3	56.3	60.8	44.8	70.0
HS96-3190	48.6	46.7	55.4	58.8	38.2	56.6
HS96-3305	52.7	62.3	55.7	52.9	43.8	53.0
HS96-3306	52.6	62.0	58.8	53.5	44.6	52.5
HS96-3321	52.7	59.4	53.7	52.4	44.0	48.7
HS96-3327	55.5	65.4	63.4	60.3	41.2	64.6
HS96-3329	57.8	64.3	60.6	67.4	53.0	64.1
HS96-3333	58.5	75.3	63.3	64.8	40.7	59.3
HS96-3416	50.4	55.8	55.4	58.5	37.3	54.9
U97-2128	55.1	66.0	46.9	65.3	49.4	67.0
U97-3108	56.9	67.4	62.5	61.2	43.3	55.9
U97-3114	61.0	85.8	61.4	71.9	43.3	68.9
U97-3123	56.3	71.9	51.5	65.2	45.4	61.2
U97-3212	57.7	67.0	62.5	62.1	48.8	62.6
U97-3229	58.4	66.8	56.0	69.2	47.5	60.2
U97-3239	55.7	63.9	58.0	64.1	50.6	56.9
U97-3248	54.8	54.4	58.3	63.4	43.8	56.3
U97-3302	55.4	71.2	53.7	59.4	42.5	65.6
U97-3309	56.7	68.2	57.4	63.8	40.5	60.9
U97-3407	55.4	64.7	60.8	57.1	46.7	57.3
U97-3429	56.0	68.5	59.4	62.0	41.0	63.0
U97-3621	57.0	73.0	55.7	64.0	50.3	61.7
U97-3635	58.1	55.8	58.5	57.5	46.4	73.7
U97-3642	57.9	67.1	61.6	63.5	53.7	60.4
Charleston (dt1)	50.3	46.9	54.0	58.9	47.9	55.9
HC93-35PR	48.2	60.8	55.1	51.7	34.7	46.7
HC94-85PR	47.6	54.3	63.3	47.7	41.5	46.0
HC94-151	34.8	38.4	25.4	35.9	38.3	31.2
HC94-228	35.6	46.7	30.6	21.2	31.9	26.8
HC94-255	45.0	53.4	42.4	44.3	39.0	42.5
HC94-407	42.4	38.1	37.3	50.3	35.8	40.2
HC94-974	50.3	67.8	52.6	53.2	44.0	49.8
HC94-1014	48.5	59.6	42.8	57.3	41.5	50.2
HC94-1017	48.8	58.2	44.2	51.7	43.4	55.6
HC94-1065	54.2	68.8	51.7	48.1	55.4	59.6
HC94-1382	51.3	63.0	46.1	51.7	44.7	55.7
HC94-1688	48.0	60.6	48.4	51.2	46.9	38.8
C.V. (%)		15.8	16.1	7.3	9.3	7.5
L.S.D. (5%)		9.8	8.6	8.5	8.4	8.5
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		2	2	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIIB, 1998

YIELD (bu/a)

Strain	Columbia MO	Falls City NE	Hildreth NE	Hoytville OH
A94-674017 (II)	50.4	29.4	54.6	80.1
A94-774021 (III)	55.9	34.6	62.5	75.7
Macon (L)	60.5	36.2	57.8	68.0
HS96-3190	51.8	28.0	44.7	57.4
HS96-3305	52.7	31.1	51.1	72.0
HS96-3306	50.8	31.7	52.2	67.0
HS96-3321	51.3	32.9	57.1	75.2
HS96-3327	48.6	33.2	48.9	74.2
HS96-3329	49.8	36.6	55.1	69.5
HS96-3333	50.5	36.1	60.6	76.1
HS96-3416	47.5	28.8	45.7	70.1
U97-2128	62.1	25.2	50.2	63.5
U97-3108	57.1	38.9	56.9	69.0
U97-3114	48.8	34.0	63.2	71.5
U97-3123	52.1	31.1	60.6	67.9
U97-3212	53.8	36.0	51.8	74.4
U97-3229	52.7	29.4	59.5	83.9
U97-3239	50.5	32.7	52.8	71.7
U97-3248	56.7	36.4	51.5	72.2
U97-3302	48.9	35.6	55.8	66.4
U97-3309	53.3	32.3	54.6	79.3
U97-3407	54.6	29.3	58.9	69.1
U97-3429	51.5	36.0	51.6	71.2
U97-3621	49.3	33.4	58.7	67.3
U97-3635	53.3	36.5	58.0	83.6
U97-3642	47.8	34.6	57.3	74.9
Charleston (dt1)	37.7	25.5	61.9	64.1
HC93-35PR	33.4	17.4	58.8	75.0
HC94-85PR	34.3	13.8	58.4	68.8
HC94-151	18.8	9.6	55.9	59.7
HC94-228	31.1	8.9	58.8	64.4
HC94-255	41.6	17.5	60.3	64.5
HC94-407	35.5	12.6	59.0	73.3
HC94-974	37.2	16.2	64.0	68.5
HC94-1014	40.2	15.1	55.4	74.1
HC94-1017	43.6	17.3	58.8	66.5
HC94-1065	54.6	17.1	60.2	72.5
HC94-1382	43.6	20.7	61.1	75.6
HC94-1688	33.5	13.7	62.5	76.6
C.V. (%)	8.9	6.3	9.5	7.4
L.S.D. (5%)	8.6	8.9	12.7	8.9
Row Sp. (In.)	30	30	30	7.5
Rows/Plot	4	4	4	8
Reps	2	2	2	2

PRELIMINARY TEST IIIB, 1998

YIELD RANK

Strain	Yield Rank	Ames IA	Fair-field IA	Urbana IL	Lafayette IN	Manhattan KS
A94-674017 (II)	20	17	30	25	11	11
A94-774021 (III)	2	3	18	2	10	16
Macon (L)	6	12	16	16	16	2
HS96-3190	31	37	21	20	35	21
HS96-3305	23	24	19	28	21	28
HS96-3306	25	25	11	26	18	29
HS96-3321	23	29	25	29	19	32
HS96-3327	16	18	1	17	29	6
HS96-3329	8	21	9	4	3	7
HS96-3333	3	2	2	7	31	18
HS96-3416	27	31	22	21	36	27
U97-2128	19	16	32	5	6	4
U97-3108	11	11	4	15	24	23
U97-3114	1	1	7	1	24	3
U97-3123	13	5	29	6	15	12
U97-3212	9	14	5	13	7	9
U97-3229	4	15	17	3	9	15
U97-3239	15	22	14	8	4	20
U97-3248	21	33	13	12	21	22
U97-3302	17	6	26	18	26	5
U97-3309	12	9	15	10	32	13
U97-3407	17	20	8	24	13	19
U97-3429	14	8	10	14	30	8
U97-3621	10	4	20	9	5	10
U97-3635	5	32	12	22	14	1
U97-3642	7	13	6	11	2	14
Charleston (dt1)	28	36	24	19	8	23
HC93-35PR	33	26	23	30	38	33
HC94-85PR	35	34	3	36	27	34
HC94-151	39	39	39	38	34	38
HC94-228	38	38	38	39	39	39
HC94-255	36	35	36	37	33	35
HC94-407	37	40	37	34	37	36
HC94-974	28	10	27	27	19	31
HC94-1014	32	28	35	23	27	30
HC94-1017	30	30	34	30	23	26
HC94-1065	22	7	28	35	1	17
HC94-1382	26	23	33	30	17	25
HC94-1688	34	27	31	33	11	37

PRELIMINARY TEST IIIB, 1998

YIELD RANK

Strain	Columbia MO	Falls City NE	Hildreth NE	Hoytville OH
A94-674017 (II)	20	22	28	3
A94-774021 (III)	5	10	3	7
Macon (L)	2	5	20	28
HS96-3190	14	25	39	39
HS96-3305	11	19	35	18
HS96-3306	17	18	31	31
HS96-3321	16	15	22	9
HS96-3327	25	14	37	13
HS96-3329	21	2	27	23
HS96-3333	18	6	8	6
HS96-3416	27	24	38	22
U97-2128	1	27	36	37
U97-3108	3	1	23	25
U97-3114	24	12	2	20
U97-3123	13	20	7	29
U97-3212	8	8	32	12
U97-3229	11	21	11	1
U97-3239	18	16	30	19
U97-3248	4	4	34	17
U97-3302	23	9	25	33
U97-3309	9	17	29	4
U97-3407	6	23	13	24
U97-3429	15	7	33	21
U97-3621	22	13	16	30
U97-3635	9	3	19	2
U97-3642	26	11	21	11
Charleston (dt1)	32	26	5	36
HC93-35PR	37	30	14	10
HC94-85PR	35	35	18	26
HC94-151	39	38	24	38
HC94-228	38	39	15	35
HC94-255	30	29	9	34
HC94-407	34	37	12	15
HC94-974	33	33	1	27
HC94-1014	31	34	26	14
HC94-1017	28	31	17	32
HC94-1065	6	32	10	16
HC94-1382	28	28	69	8
HC94-1688	36	36	3	5

PRELIMINARY TEST IIIB, 1998

MATURITY (date)

Strain	Mean 8 Tests	Ames IA	Fair- field IA	Urbana IL	Lafay- ette IN	Man- hattan KS
A94-674017 (II)	-1.6	-3		-2	-4	1
A94-774021 (III)	09/18	09/22		09/12	09/15	09/24
Macon (L)	3.8	1		4	4	6
HS96-3190	-1.4	-1		-1	-2	-1
HS96-3305	0.3	1		0	2	-2
HS96-3306	-1.1	-1		1	0	-1
HS96-3321	-1.1	0		0	-2	-1
HS96-3327	-0.8	0		0	-3	1
HS96-3329	-0.2	0		1	0	3
HS96-3333	0.9	1		1	0	3
HS96-3416	-0.1	1		0	2	2
U97-2128	-2.3	-3		1	1	-1
U97-3108	0.9	0		1	-1	1
U97-3114	0.9	0		2	0	3
U97-3123	-0.8	-1		2	1	0
U97-3212	1.2	2		1	2	-1
U97-3229	1.6	1		3	0	7
U97-3239	2.9	0		2	5	3
U97-3248	4.6	4		4	5	6
U97-3302	2.6	1		4	3	3
U97-3309	2.3	0		5	0	2
U97-3407	-1.3	0		-1	-2	-1
U97-3429	3.6	1		4	3	5
U97-3621	0.1	-1		2	1	1
U97-3635	4.2	4		2	5	6
U97-3642	1.3	0		2	2	5
Charleston (dt1)	2.6	0		3	7	6
HC93-35PR	1.8	0		2	3	5
HC94-85PR	2.0	0		2	3	6
HC94-151	4.3	-1		5	4	10
HC94-228	3.3	0		3	2	7
HC94-255	0.3	-1		-1	0	4
HC94-407	0.8	-1		-1	2	8
HC94-974	3.0	0		5	7	7
HC94-1014	2.4	-2		5	3	8
HC94-1017	0.3	-1		0	3	3
HC94-1065	2.6	-1		3	8	7
HC94-1382	2.9	0		3	5	7
HC94-1688	4.1	4		5	8	9
Date Planted	5/14	05/06		05/12	05/16	05/21
Days to Mature	126.5	139		123	122	126

PRELIMINARY TEST IIIB, 1998

MATURITY (date)

Strain	Columbia MO	Falls City NE	Hildreth NE	Hoytville OH
A94-674017 (II)	1	-3	-1	-2
A94-774021 (III)	09/11	09/19	09/16	09/26
Macon (L)	3	7	4	2
HS96-3190	-2	-4	0	-2
HS96-3305	0	-4	3	2
HS96-3306	-1	-4	-2	-2
HS96-3321	-2	-3	-1	-1
HS96-3327	1	-3	-2	0
HS96-3329	-4	-2	1	-1
HS96-3333	-2	1	2	1
HS96-3416	-3	-4	1	0
U97-2128	-6	-10	0	-1
U97-3108	0	6	0	1
U97-3114	1	-3	3	2
U97-3123	-3	-3	-2	-1
U97-3212	1	3	0	2
U97-3229	0	0	1	1
U97-3239	0	7	5	2
U97-3248	3	6	7	2
U97-3302	-1	3	4	4
U97-3309	0	8	2	1
U97-3407	-2	-3	-1	-1
U97-3429	3	6	4	3
U97-3621	-2	-2	1	1
U97-3635	-3	6	10	4
U97-3642	-2	-1	1	4
Charleston (dt1)	-3	6	2	0
HC93-35PR	-2	6	-1	1
HC94-85PR	-2	6	1	0
HC94-151	1	7	8	1
HC94-228	1	7	5	2
HC94-255	-3	3	2	-2
HC94-407	-3	-1	3	-1
HC94-974	-3	6	0	2
HC94-1014	0	5	1	-1
HC94-1017	-2	2	-2	-1
HC94-1065	-1	7	-2	1
HC94-1382	-3	6	4	1
HC94-1688	-3	7	1	1
Date Planted	05/12	05/13	05/19	05/18
Days to Mature	122	129	120	131

PRELIMINARY TEST IIIB, 1998

LODGING (score)

Strain	Mean 9 Tests	Ames IA	Fair- field IA	Urbana IL	Lafay- ette IN	Man- hattan KS
A94-674017 (II)	1.7	1.8	1.9	1.0	1.8	2.0
A94-774021 (III)	1.3	1.2	1.4	1.0	1.0	1.0
Macon (L)	1.8	2.4	1.9	1.0	1.5	1.0
HS96-3190	3.4	4.3	2.7	3.0	3.5	3.0
HS96-3305	2.2	4.0	1.7	1.0	1.3	2.0
HS96-3306	1.8	2.5	1.9	1.0	1.3	1.5
HS96-3321	1.7	3.0	1.4	1.0	1.3	1.5
HS96-3327	2.6	2.1	2.1	2.8	2.3	2.0
HS96-3329	2.8	2.8	2.0	3.3	2.3	3.0
HS96-3333	2.8	3.5	2.1	3.5	2.8	2.5
HS96-3416	2.4	1.9	2.0	2.5	2.3	2.0
U97-2128	2.6	3.5	2.1	2.8	2.5	3.0
U97-3108	1.5	1.4	1.5	1.3	1.3	2.0
U97-3114	1.7	1.8	1.6	1.0	1.0	1.5
U97-3123	1.3	1.4	1.7	1.0	1.0	1.0
U97-3212	1.7	2.0	1.7	1.0	1.0	1.5
U97-3229	1.8	1.8	1.9	1.3	1.5	2.0
U97-3239	2.0	1.8	1.8	1.5	1.8	2.0
U97-3248	2.3	2.4	1.8	2.5	1.5	2.0
U97-3302	1.9	2.0	1.8	1.0	1.8	1.5
U97-3309	1.6	1.5	1.4	1.0	1.0	1.5
U97-3407	1.7	2.5	2.0	1.0	1.0	1.5
U97-3429	2.0	2.0	1.9	1.3	1.5	1.5
U97-3621	2.4	2.8	1.9	2.5	1.5	2.0
U97-3635	3.0	3.0	2.2	2.3	2.8	3.0
U97-3642	2.3	2.0	2.1	1.8	1.8	2.0
Charleston (dt1)	1.4	1.5	1.5	1.0	1.0	1.0
HC93-35PR	1.3	1.5	1.6	1.0	1.0	1.0
HC94-85PR	1.2	1.5	1.5	1.0	1.0	1.0
HC94-151	1.1	1.2	1.2	1.0	1.0	1.0
HC94-228	1.2	1.2	1.4	1.0	1.0	1.0
HC94-255	1.2	1.2	1.5	1.0	1.0	1.0
HC94-407	1.5	1.5	1.6	1.0	1.0	1.0
HC94-974	1.3	1.4	1.5	1.0	1.0	1.0
HC94-1014	1.3	1.2	1.5	1.0	1.0	1.0
HC94-1017	1.3	1.4	1.5	1.0	1.0	1.0
HC94-1065	1.3	1.2	1.2	1.0	1.0	1.0
HC94-1382	1.4	1.4	1.5	1.0	1.0	1.0
HC94-1688	1.3	1.4	1.4	1.0	1.0	1.0

PRELIMINARY TEST IIIB, 1998

LODGING (score)

Strain	Columbia MO	Falls City NE	Hildreth NE	Hoytville OH
A94-674017 (II)	1.0	1.0	1.5	3.5
A94-774021 (III)	1.0	1.0	2.0	2.0
Macon (L)	1.5	1.5	2.0	3.0
HS96-3190	4.5	2.0	3.5	4.0
HS96-3305	2.0	2.0	2.0	3.5
HS96-3306	1.5	1.0	2.0	3.5
HS96-3321	1.5	1.0	2.0	3.0
HS96-3327	3.5	1.5	3.0	4.0
HS96-3329	2.5	2.0	3.0	4.0
HS96-3333	2.5	1.5	3.5	3.0
HS96-3416	2.0	2.0	3.0	3.5
U97-2128	3.0	1.0	2.5	3.0
U97-3108	1.0	1.0	1.5	2.5
U97-3114	1.5	1.0	2.0	3.5
U97-3123	1.5	1.0	1.0	2.0
U97-3212	2.0	1.0	2.0	3.0
U97-3229	1.5	1.0	1.5	3.5
U97-3239	2.0	1.5	3.0	3.0
U97-3248	2.5	2.0	3.0	3.0
U97-3302	1.5	1.5	2.0	4.0
U97-3309	1.0	1.0	2.0	4.0
U97-3407	1.0	1.0	2.0	3.0
U97-3429	1.5	2.0	3.0	3.5
U97-3621	2.0	1.5	3.0	4.0
U97-3635	4.0	2.0	4.0	4.0
U97-3642	2.5	1.5	3.0	4.0
Charleston (dt1)	1.0	1.0	1.5	3.0
HC93-35PR	1.0	1.0	2.0	2.0
HC94-85PR	1.0	1.0	1.0	2.0
HC94-151	1.0	1.0	1.0	1.5
HC94-228	1.0	1.0	2.0	1.5
HC94-255	1.0	1.0	1.0	2.0
HC94-407	1.0	1.0	2.0	3.5
HC94-974	1.0	1.0	1.5	2.0
HC94-1014	1.0	1.0	1.0	3.0
HC94-1017	1.0	1.0	2.0	2.0
HC94-1065	1.0	1.0	2.0	2.0
HC94-1382	1.0	1.0	2.0	2.5
HC94-1688	1.0	1.0	1.5	2.0

PRELIMINARY TEST IIIB, 1998

PLANT HEIGHT (inches)

Strain	Mean 9 Tests	Ames IA	Fair- field IA	Urbana IL	Lafay- ette IN	Man- hattan KS
A94-674017 (II)	35	42	33	38	39	40
A94-774021 (III)	33	41	32	36	33	36
Macon (L)	38	46	38	39	39	42
HS96-3190	43	52	46	47	33	49
HS96-3305	37	43	34	38	34	39
HS96-3306	36	40	33	36	38	41
HS96-3321	35	40	32	37	37	39
HS96-3327	40	47	38	40	38	45
HS96-3329	44	52	44	46	39	50
HS96-3333	43	52	41	46	40	49
HS96-3416	45	54	45	47	38	52
U97-2128	44	50	40	51	41	50
U97-3108	38	46	35	40	39	44
U97-3114	38	47	39	40	30	44
U97-3123	37	41	34	39	40	41
U97-3212	39	47	35	41	39	45
U97-3229	36	43	37	38	31	44
U97-3239	40	47	38	41	38	44
U97-3248	43	51	40	45	45	49
U97-3302	39	48	35	40	38	45
U97-3309	40	47	37	42	42	43
U97-3407	38	45	40	39	37	43
U97-3429	39	50	42	41	31	44
U97-3621	39	48	37	40	39	44
U97-3635	43	54	40	44	39	45
U97-3642	39	46	40	42	39	43
Charleston (dt1)	23	28	22	24	27	24
HC93-35PR	20	24	24	20	24	17
HC94-85PR	20	18	25	21	24	21
HC94-151	19	19	19	18	26	19
HC94-228	18	20	16	13	23	22
HC94-255	19	22	19	16	23	20
HC94-407	21	19	21	24	31	20
HC94-974	20	23	23	19	26	18
HC94-1014	21	22	21	20	25	21
HC94-1017	22	23	25	20	30	22
HC94-1065	20	24	21	18	28	22
HC94-1382	22	23	21	20	40	20
HC94-1688	20	27	20	19	24	20

PRELIMINARY TEST IIIB, 1998

PLANT HEIGHT (inches)

Strain	Columbia MO	Falls City NE	Hildreth NE	Hoytville OH
A94-674017 (II)	35	26	36	30
A94-774021 (III)	33	23	35	28
Macon (L)	40	28	38	33
HS96-3190	44	35	46	40
HS96-3305	39	28	41	33
HS96-3306	36	27	38	32
HS96-3321	38	27	33	31
HS96-3327	43	29	40	36
HS96-3329	46	33	52	39
HS96-3333	45	33	45	36
HS96-3416	46	36	45	40
U97-2128	44	33	43	41
U97-3108	37	26	39	35
U97-3114	39	28	40	35
U97-3123	40	26	39	31
U97-3212	42	26	38	36
U97-3229	36	27	39	34
U97-3239	42	29	43	37
U97-3248	45	31	43	39
U97-3302	42	27	42	35
U97-3309	40	27	41	38
U97-3407	39	27	43	34
U97-3429	41	27	44	30
U97-3621	41	28	43	35
U97-3635	44	30	47	41
U97-3642	36	28	40	36
Charleston (dt1)	14	16	27	26
HC93-35PR	13	12	26	21
HC94-85PR	14	15	25	22
HC94-151	14	10	26	23
HC94-228	10	12	26	23
HC94-255	13	14	27	22
HC94-407	13	12	29	24
HC94-974	14	13	26	22
HC94-1014	15	12	26	24
HC94-1017	15	10	28	26
HC94-1065	18	11	19	21
HC94-1382	13	13	28	24
HC94-1688	13	13	24	23

PRELIMINARY TEST IIIB, 1998

SEED SIZE (g/100)

Strain	Mean 8 Tests	Ames IA	Fair- field IA	Urbana IL	Lafay- ette IN	Man- hattan KS
A94-674017 (II)	19.3	19.4	19.3	20.2	18.9	21.8
A94-774021 (III)	14.3	14.7	14.8	13.5	12.3	16.6
Macon (L)	16.6	19.1	16.8	15.7	15.1	19.8
HS96-3190	16.8	17.3	17.8	17.0	14.1	20.0
HS96-3305	14.6	16.3	15.2	13.0	13.3	15.3
HS96-3306	16.4	16.6	18.0	15.1	16.2	17.9
HS96-3321	16.2	17.4	17.1	15.4	15.0	15.4
HS96-3327	15.0	16.2	15.4	14.7	13.0	16.9
HS96-3329	16.3	17.7	16.6	15.5	13.9	19.5
HS96-3333	14.0	14.8	13.9	13.1	11.0	17.2
HS96-3416	17.0	17.8	17.4	16.4	16.2	20.0
U97-2128	16.7	16.7	16.8	17.2	16.7	20.0
U97-3108	15.8	16.5	17.0	15.2	14.1	17.2
U97-3114	17.2	19.5	18.3	16.8	15.4	17.9
U97-3123	15.7	16.7	16.6	15.3	13.6	17.4
U97-3212	15.4	16.9	16.4	14.5	14.4	17.3
U97-3229	15.3	16.4	18.5	15.6	13.8	15.9
U97-3239	16.2	15.3	17.7	14.3	15.4	16.6
U97-3248	17.3	18.0	18.3	17.4	16.2	19.0
U97-3302	16.1	17.8	17.3	15.7	14.7	15.4
U97-3309	15.0	15.5	15.3	14.0	12.4	17.5
U97-3407	14.7	17.0	14.6	13.9	12.8	15.8
U97-3429	16.2	18.1	16.7	15.1	13.8	19.3
U97-3621	14.0	15.8	14.4	14.0	12.3	14.6
U97-3635	14.8	14.8	15.3	12.5	12.8	17.5
U97-3642	15.2	17.0	15.5	14.8	13.9	16.1
Charleston (dt1)	14.5	15.5	15.0	14.2	13.6	17.3
HC93-35PR	15.0	15.4	16.1	13.9	13.4	19.3
HC94-85PR	15.1	16.0	15.4	13.9	13.6	20.1
HC94-151	17.0	17.9	17.8	16.2	14.8	22.4
HC94-228	16.1	15.4	16.2	15.7	14.1	22.1
HC94-255	15.8	15.8	16.0	15.0	13.8	21.5
HC94-407	17.2	17.7	17.8	16.3	16.1	21.6
HC94-974	14.3	15.5	14.7	14.0	13.1	17.5
HC94-1014	14.7	14.0	15.0	15.0	12.3	20.0
HC94-1017	14.7	14.9	15.4	14.7	13.1	18.0
HC94-1065	14.7	17.4	14.1	13.8	13.2	19.4
HC94-1382	14.4	15.5	14.8	13.3	12.9	17.6
HC94-1688	16.6	18.2	16.7	16.7	15.8	19.8

PRELIMINARY TEST IIIB, 1998

SEED SIZE (g/100)

Strain	Columbia MO	Falls City NE	Hildreth NE	Hoytville OH
A94-674017 (II)		14.7	18.4	21.5
A94-774021 (III)		13.3	14.2	15.2
Macon (L)		14.0	16.2	16.4
HS96-3190		15.3	15.8	16.9
HS96-3305		12.6	15.1	15.8
HS96-3306		14.4	16.5	16.9
HS96-3321		15.3	16.5	17.2
HS96-3327		12.9	14.2	16.3
HS96-3329		13.8	16.7	16.4
HS96-3333		12.3	15.2	14.2
HS96-3416		14.8	16.0	17.1
U97-2128		12.7	16.7	17.0
U97-3108		15.3	14.8	16.2
U97-3114		15.0	17.7	16.8
U97-3123		13.4	16.7	16.0
U97-3212		13.4	14.5	15.6
U97-3229		12.7	14.6	14.9
U97-3239		14.5	16.6	18.9
U97-3248		16.1	15.2	18.5
U97-3302		14.7	16.4	16.8
U97-3309		14.8	14.7	15.6
U97-3407		12.7	15.3	15.3
U97-3429		15.3	14.7	16.5
U97-3621		11.9	14.8	14.0
U97-3635		14.3	15.0	15.8
U97-3642		13.2	15.5	15.8
Charleston (dt1)		12.4	13.8	14.2
HC93-35PR		12.7	14.8	14.8
HC94-85PR		13.1	14.7	14.0
HC94-151		13.8	18.2	14.7
HC94-228		14.6	16.0	14.9
HC94-255		13.2	16.4	14.8
HC94-407		14.3	18.5	15.6
HC94-974		12.2	14.3	13.2
HC94-1014		13.0	14.4	14.2
HC94-1017		12.7	14.4	14.4
HC94-1065		13.0	13.1	13.5
HC94-1382		12.6	14.3	14.0
HC94-1688		13.9	15.6	16.2

PRELIMINARY TEST IIIB, 1998

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Falls City NE	Hoytville OH
A94-674017 (II)	41.2	40.4	41.1	42.1	40.4	42.0
A94-774021 (III)	40.6	40.7	40.0	41.8	40.3	40.0
Macon (L)	41.7	42.1	41.4	42.7	41.8	40.3
HS96-3190	42.5	43.4	43.3	43.0	42.6	40.2
HS96-3305	41.4	41.1	41.3	42.9	40.9	40.7
HS96-3306	42.0	42.0	41.5	43.1	41.3	42.0
HS96-3321	42.2	43.1	42.1	42.8	41.7	41.5
HS96-3327	41.8	41.3	41.9	43.0	41.3	41.3
HS96-3329	40.6	40.6	41.1	41.8	39.4	40.1
HS96-3333	40.4	40.9	40.9	40.8	40.2	39.0
HS96-3416	43.3	43.8	44.2	44.3	42.6	41.5
U97-2128	40.1	39.5	41.0	41.1	38.3	40.7
U97-3108	40.5	40.5	40.6	41.4	40.5	39.4
U97-3114	41.1	41.6	41.6	42.0	40.6	39.5
U97-3123	42.5	42.4	42.3	43.5	40.9	43.2
U97-3212	41.7	42.4	42.0	42.1	42.3	39.9
U97-3229	41.4	41.0	42.0	42.3	39.7	42.1
U97-3239	41.7	41.0	41.3	42.2	42.2	41.8
U97-3248	42.6	41.9	43.0	43.4	42.8	41.9
U97-3302	41.9	41.4	42.3	42.8	40.7	42.1
U97-3309	41.3	40.7	41.1	42.1	40.6	42.2
U97-3407	42.0	42.7	41.5	42.9	40.8	42.0
U97-3429	41.8	40.8	41.6	43.3	42.1	41.0
U97-3621	40.3	40.3	40.5	40.8	39.2	40.7
U97-3635	40.6	40.2	40.5	42.0	40.1	40.0
U97-3642	40.0	40.1	40.7	40.4	38.9	39.8
Charleston (dt1)	42.4	42.3	42.3	44.3	42.0	41.1
HC93-35PR	42.2	41.1	41.3	44.3	41.8	42.3
HC94-85PR	41.3	41.0	40.9	42.5	42.0	40.1
HC94-151	42.7	42.1	42.8	44.2	42.4	41.8
HC94-228	43.3	43.4	42.3	43.7	43.6	43.3
HC94-255	43.4	42.5	43.1	45.3	43.6	42.3
HC94-407	40.1	40.0	39.7	41.4	39.8	39.7
HC94-974	42.3	41.0	42.7	43.9	42.5	41.5
HC94-1014	40.9	39.1	40.8	42.5	41.1	40.8
HC94-1017	41.3	40.4	41.4	43.0	41.4	40.3
HC94-1065	40.3	40.8	39.3	41.3	39.6	40.4
HC94-1382	40.2	39.7	40.0	41.7	40.5	39.2
HC94-1688	42.3	41.6	41.9	43.5	42.2	42.3

PRELIMINARY TEST IIIB, 1998

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Falls City NE	Hoytville OH
A94-674017 (II)	21.1	21.0	21.7	21.1	21.9	19.8
A94-774021 (III)	20.3	19.9	20.9	20.4	20.6	19.7
Macon (L)	20.2	19.3	20.9	20.1	20.8	19.7
HS96-3190	20.0	18.9	19.9	20.3	20.2	20.9
HS96-3305	20.4	20.3	20.6	19.9	20.6	20.6
HS96-3306	20.2	19.7	20.7	20.0	20.9	19.6
HS96-3321	20.4	19.4	21.0	20.5	20.5	20.4
HS96-3327	20.8	20.5	21.6	20.0	21.2	20.8
HS96-3329	21.6	21.2	21.8	21.3	22.6	21.0
HS96-3333	21.2	20.9	21.3	20.8	21.6	21.4
HS96-3416	19.5	18.9	19.6	19.6	19.9	19.3
U97-2128	21.0	20.9	20.7	21.1	22.3	20.0
U97-3108	19.6	19.3	20.6	19.2	19.2	19.8
U97-3114	20.8	20.4	21.4	20.2	21.3	20.5
U97-3123	20.2	20.1	21.1	19.4	21.4	19.2
U97-3212	19.7	19.0	20.3	20.1	19.3	19.8
U97-3229	20.3	20.4	20.9	20.0	20.7	19.4
U97-3239	20.0	19.6	20.5	19.9	19.9	20.0
U97-3248	19.6	19.3	20.0	19.6	19.6	19.5
U97-3302	20.6	20.4	21.1	20.7	21.2	19.4
U97-3309	20.1	20.3	21.1	19.6	20.6	18.9
U97-3407	20.3	19.8	20.9	19.9	21.9	19.0
U97-3429	20.2	20.1	21.0	19.9	20.2	19.7
U97-3621	21.0	21.0	21.4	20.8	22.1	19.7
U97-3635	20.9	20.2	21.5	20.5	21.7	20.7
U97-3642	21.1	19.5	21.9	21.5	22.7	19.9
Charleston (dt1)	19.6	19.4	20.6	19.0	19.9	19.3
HC93-35PR	19.9	20.1	20.7	18.9	20.5	19.3
HC94-85PR	20.8	20.9	21.3	20.3	20.7	20.8
HC94-151	20.1	20.4	20.8	19.7	20.4	19.2
HC94-228	19.4	18.9	20.4	19.3	20.2	18.2
HC94-255	18.7	18.9	19.2	17.6	18.8	18.8
HC94-407	21.1	21.1	22.1	20.8	21.1	20.6
HC94-974	19.8	20.6	20.4	19.4	20.1	18.7
HC94-1014	20.8	20.9	21.4	20.1	21.3	20.3
HC94-1017	20.4	20.4	21.2	19.3	20.8	20.4
HC94-1065	20.8	20.0	21.8	20.5	21.5	20.3
HC94-1382	20.3	20.3	21.1	19.7	20.6	19.6
HC94-1688	20.5	21.0	21.0	20.4	20.8	19.4

Uniform Test IV, 1998

Strain	Parentage	Previous Testing	Generation Compositied	Unique Traits
1. KS4694 (L)	Sherman x Toano	7	F5	
2. Macon (III)	Sherman x Resnik	2	F5	
3. Mustang (SCN)	Fayette x Pyramid	1	F5	SCN
4. HC90-196 (dt1)	Sprite 87 x HC80-1756	3	F5	dt1
5. HS93-4118 (IV)	IA2007 x Dairyland DSR 304	2	F5	Rps1-c
6. HC93-941	HC85-6723 x HC78-676BC	PT IVB	F5	dt1
7. HC93-979	Charleston x Hoyt BC	PT IVB	F5	dt1
8. HC93-1086	Charleston x HC78-676BC	PT IVB	F5	dt1
9. HC93-1558	HC84-2556 x HC78-676BC	PT IVB	F5	dt1
10. HC93-1835	Hutcheson x Pixie BC	PT IVB	F5	dt1
11. HC93-2356	HC78-676BC x Kenwood	PT IVA	F5	Dt1
12. HC93-2690	HC78-676BC x A86-303014	PT IVA	F5	Dt1
13. HC94-126PR	HC85-6723(4) x PI 86050	PT IVB	BC3F2	dt1 Rps1-k
14. HC94-422	Sprite 87 x HC85-6577	PT IVB	F5	dt1
15. K1377	Pioneer 9341 x KS4694	PT IVB	F5	
16. K1378	KS4694 x Asgrow A3935	PT IVB	F5	
17. K1379	Pioneer 9341 x KS4694	PT IVB	F5	
18. K1380	Pioneer 9341 x KS4694	PT IVB	F5	
19. K1381	Jack x Flyer	PT IVB	F5	
20. K1386	Flyer x Corsica	PT IVB	F5	
21. Ky94-1501	Clifford x CX458	PT IVB	F5	
22. LN92-10725	Jack x Resnik	1	F5	SCN
23. LN93-11632	A86-301024 x Asgrow A3733	1	F5	
24. LN93-11945	LN84-7577 x Asgrow A3733	1	F5	
25. LN94-3122	Pioneer P9341 x Edison	PT IIIA	F5	
26. LN94-10527	Jack x Hartwig	1	F5	SCN
27. LS92-4173	Flyer x Pyramid	2	F6	SCN 3
28. LS93-0375	Asgrow A3935 x Pioneer 9402	1	F6	SCN
29. LS94-2435	Resnik x Asgrow A4009	PT IVA	F6	SCN
30. Md94-5463	Spencer x Corsica	PT IVB	F5	
31. SS93-4915	Pioneer P9461 x A90-311023	PT IVA	F5	
32. SS94-10476	Pioneer 9341 x Asgrow A3935	PT IIIB	F5	
33. SS94-11075	Pioneer 9442 x Asgrow A3935	PT IVA	F5	
34. SS94-11114	Pioneer 9442 x Asgrow A3935	PT IVA	F5	
35. U96-3106	MSBP2 (F1 bulk)	PT IIIA	F7	
36. U96-3123	MSBP2 (F1 bulk)	PT IVA	F7	

UNIFORM TEST IV, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis	Emerg.	PR	Hard Seed	PS	PSB
		Score Yellow Medicine Co.	Score Ames	Laf. Race 7	%	Lafayette a %	n %
KS4694 (L)	WGBDYBfEpl	4.5	2.0	R	0	14	10
Macon (III)	WTBDYBIepI	4.0	1.0	S	8	10	2
Mustang (SCN)	WGTDYIbEpl	4.2	4.0	H	0	8	2
HC90-196 (dt1)	WTTDYBIepD	4.7	1.0	R	0	0	12
HS93-4118 (IV)	WGBDYBIepI	4.5	1.0	R	0	16	2
HC93-941	WTBSYBIepD	4.2	4.0	R	10	4	0
HC93-979	PTTSYBIepD	4.7	1.0	R	0	0	14
HC93-1086	PTTSYBrEpD	5.0	1.0	R	22	4	2
HC93-1558	PTBSYBrepD	4.8	1.0	R	0	0	2
HC93-1835	P+WTTDYBrep	4.0	1.0	R	0	2	0
HC93-2356	PTBIYBIepI	4.2	4.0	R	0	18	0
HC93-2690	PTBSYBrHI	4.3	2.0	R	4	20	6
HC94-126PR	WTBIYBrepD	4.3	1.0	S	0	18	6
HC94-422	WTTDYBIepD	3.3	2.0	R	0	0	4
K1377	PGTIYBfEpl	3.8	3.0	S	2	16	2
K1378	WTBSYBIepI	4.0	5.0	S	0	2	2
K1379	PGBSYIbepI	5.0	1.0	S	0	12	12
K1380	PGTDYIbepI	4.8	2.0	S	0	6	2
K1381	PGTDYIbHI	4.0	2.0	S	0	6	2
K1386	PTTDYBIepI	5.0	2.0	R	0	6	0
Ky94-1501	WTBSYBIepI	4.3	1.0	S	0	2	8
LN92-10725	WGBDYBfepI	3.7	5.0	R	0	20	10
LN93-11632	PGBSYIbepI	4.3	1.0	H	0	16	6
LN93-11945	PGBSYIbepI	4.0	1.0	S	0	4	0
LN94-3122	WTTSYBrEpI	3.5	1.0	H	0	0	0
LN94-10527	WGBDYBfepI	4.2	4.0	S	0	14	2
LS92-4173	PGTDYIbEpl	3.8	1.0	S	0	2	18
LS93-0375	PTBDYBIepI	4.7	1.0	S	0	2	2
LS94-2435	WTTDYBIepI	4.5	1.0	H	0	4	0
Md94-5463	PTBDYBIepI	5.0	5.0	S	0	2	2
SS93-4915	PTTDYBrepI	4.8	2.0	S	0	16	30
SS94-10476	PTTDYBIepI	4.5	1.0	S	6	10	2
SS94-11075	PTTSYBIepI	5.0	1.0	S	0	20	2
SS94-11114	WTTSYBIepI	5.0	2.0	S	0	6	4
U96-3106	PTTDYBrepI	4.2	1.0	R	4	18	0
U96-3123	WGTDYBrEpI	4.2	5.0	S	0	12	4

UNIFORM TEST IV, 1998

SDS DATA

Strain	DX	DI	SDS Data		Test
			Ullin	DS	
KS4694 (L)	10.1	56.9		1.2	U4E
Macon (III)	29.6	86.5		2.9	U4E
Mustang (SCN)	59.6	95.8		5.4	U4E
HC90-196 (dt1)	13.3	65.6		1.9	U4E
HS93-4118 (IV)	27.0	63.6		3.0	U4E
HC93-941	15.0	82.9		1.7	U4E
HC93-979	25.5	58.8		3.1	U4E
HC93-1086	52.4	73.8		5.1	U4E
HC93-1558	28.3	72.5		3.2	U4E
HC93-1835	7.4	56.0		1.4	U4E
HC93-2356	68.0	100.5		6.2	U4E
HC93-2690	83.0	103.4		7.6	U4E
HC94-126PR	22.8	65.5		2.5	U4E
HC94-422	10.6	64.6		1.4	U4E
K1377	19.4	80.2		2.1	U4E
K1378	22.6	77.4		2.5	U4E
K1379	6.6	51.8		1.6	U4E
K1380	46.1	96.2		4.0	U4E
K1381	19.9	74.9		1.8	U4E
K1386	44.4	89.4		4.6	U4E
Ky94-1501	71.5	94.1		6.3	U4E
LN92-10725	16.8	68.9		1.9	U4E
LN93-11632	58.5	98.7		5.2	U4E
LN93-11945	56.5	107.8		5.2	U4E
LN94-3122	42.9	92.6		4.0	U4E
LN94-10527	2.8	3.5		0.8	U4E
LS92-4173	23.1	80.4		2.6	U4E
LS93-0375	13.3	58.6		1.8	U4E
LS94-2435	21.4	86.9		2.4	U4E
Md94-5463	23.8	65.2		2.7	U4E
SS93-4915	47.2	96.9		4.3	U4E
SS94-10476	25.8	73.0		2.6	U4E
SS94-11075	32.6	91.7		3.1	U4E
SS94-11114	34.2	96.7		3.3	U4E
U96-3106	54.7	95.9		4.7	U4E
U96-3123	6.9	27.1		1.5	U4E

UNIFORM TEST IV, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant	Seed	Composition	
	18 bu/a	18 No.	16 Date	18 Score	18 In.	16 g/100	3 %	3 %
KS4694 (L)	48.7	23	8.4	1.5	36	14.3	43.2	18.8
Macon (III)	50.7	14	0.0	1.4	32	15.6	42.3	20.2
Mustang (SCN)	50.3	17	5.1	1.5	39	12.8	42.6	19.0
HC90-196 (dt1)	47.6	25	0.4	1.1	22	14.5	41.0	20.6
HS93-4118 (IV)	52.4	7	9/19	1.3	33	14.0	41.7	19.5
HC93-941	45.5	30	1.0	1.1	19	15.1	42.7	19.9
HC93-979	41.0	35	1.3	1.0	19	12.8	43.0	19.7
HC93-1086	44.4	32	-1.1	1.0	18	13.1	43.0	19.0
HC93-1558	46.8	29	0.2	1.0	20	14.1	43.9	19.2
HC93-1835	40.8	36	-1.7	1.0	18	12.8	42.9	19.2
HC93-2356	50.8	13	0.9	2.0	37	12.1	43.2	19.1
HC93-2690	52.7	5	3.2	1.8	36	14.9	42.9	19.9
HC94-126PR	47.5	26	0.8	1.0	21	15.2	42.0	21.3
HC94-422	45.4	31	0.5	1.1	21	15.9	42.4	20.8
K1377	50.6	16	3.5	1.3	35	12.7	42.6	19.6
K1378	49.1	21	6.0	1.9	38	14.0	42.6	20.3
K1379	51.3	11	5.8	1.3	36	14.2	42.9	19.4
K1380	50.7	14	4.4	1.3	36	13.4	43.2	18.7
K1381	47.0	27	2.9	1.5	34	12.6	44.7	18.8
K1386	48.9	22	1.9	1.5	36	15.2	42.8	20.3
Ky94-1501	50.2	18	4.5	1.5	37	15.0	43.2	19.9
LN92-10725	53.9	2	3.1	2.0	41	11.9	43.4	19.4
LN93-11632	54.5	1	0.0	1.5	34	15.3	42.1	20.2
LN93-11945	53.4	4	3.2	1.5	33	17.3	43.3	20.8
LN94-3122	52.5	6	-0.7	1.3	34	12.6	42.2	19.9
LN94-10527	49.4	20	3.6	2.8	40	11.4	40.7	19.8
LS92-4173	46.9	28	8.0	1.7	38	12.9	40.9	19.6
LS93-0375	53.6	3	3.0	1.4	35	14.6	43.4	19.3
LS94-2435	50.9	12	-0.2	1.7	35	14.1	43.6	19.4
Md94-5463	43.4	34	1.2	1.2	32	16.6	43.6	19.9
SS93-4915	44.1	33	7.1	1.6	37	14.3	44.3	20.3
SS94-10476	52.2	8	3.1	1.3	34	14.6	43.7	19.8
SS94-11075	48.4	24	5.6	1.7	36	13.8	43.8	19.8
SS94-11114	49.9	19	2.9	1.4	34	12.9	43.3	19.7
U96-3106	52.0	9	-0.3	1.5	37	14.6	41.2	21.6
U96-3123	51.4	10	1.4	1.2	32	14.7	43.4	19.4

121.4 Days After Planting

UNIFORM TEST IV, 1998

1997-1998 2-YEAR MEAN

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Size	Composition	
	34 bu/a	34 No.	31 Date	35 Score	35 In.	31 g/100	8 %	8 %
KS4694 (L)	51.5	9	7.0	1.4	35	15.3	41.9	19.4
Macon (III)	53.5	6	-1.7	1.3	31	16.6	41.6	20.3
Mustang (SCN)	52.3	7	3.2	1.4	37	13.8	41.9	19.3
Troll (dt1) (HC90-196	50.2	11	-0.3	1.2	22	15.5	40.1	21.1
HS93-4118 (IV)	55.4	1	9/23	1.2	31	15.0	40.9	19.6
LN92-10725	55.3	2	1.3	1.8	39	12.7	42.8	19.6
LN93-11632	55.2	3	-1.6	1.4	32	16.4	41.5	20.1
LN93-11945	55.1	4	0.3	1.4	32	18.4	43.2	20.4
LN94-10527	51.9	8	2.9	2.3	39	12.4	40.3	19.9
LS92-4173	50.3	10	6.0	1.6	36	13.7	40.3	19.6
LS93-0375	53.8	5	1.7	1.3	33	15.9	42.8	19.4

128.1 Days After Planting

1996-1998 3-YEAR MEAN

No. of Tests Strain	49	49	47	52	52	47	24	24
KS4694 (L)	51.3	3	6.4	1.5	34	15.7	41.7	19.7
Macon (III)	52.0	2	-2.9	1.3	30	16.5	41.4	20.7
HS93-4118 (IV)	54.4	1	9/26	1.3	30	15.2	40.6	20.0
Troll (dt1) (HC90-196	50.5	4	-1.3	1.2	22	15.7	40.1	21.5
LS92-4173	49.2	5	5.5	1.7	35	14.1	40.4	19.7

125.9 Days After Planting

UNIFORM TEST IV, 1998

YIELD (bu/a)

Strain	Mean 18 Tests	George- town DE	Nashville IL	Ullin IL	Newton IL	Ridg- way IL	Urbana IL	Butler- ville IN
KS4694 (L)	48.7	62.5	49.4	41.9	44.1	32.7	47.9	45.9
Macon (III)	50.7	42.3	56.2	49.9	51.3	46.7	58.4	36.6
Mustang (SCN)	50.3	59.3	59.6	44.7	56.0	44.6	54.1	28.1
HC90-196 (dt1)	47.6	38.4	47.9	39.4	45.6	45.5	41.2	48.4
HS93-4118 (IV)	52.4	49.4	55.9	53.4	54.3	46.1	60.4	45.4
HC93-941	45.5	28.6	47.1	43.6	46.8	45.8	55.4	34.0
HC93-979	41.0	34.9	34.9	26.2	44.5	36.6	42.8	41.3
HC93-1086	44.4	33.1	41.2	34.2	43.6	38.7	53.2	32.6
HC93-1558	46.8	47.4	41.3	41.8	45.5	42.0	51.1	25.2
HC93-1835	40.8	32.0	40.7	37.6	44.3	35.2	46.9	34.9
HC93-2356	50.8	62.7	57.1	48.6	39.5	44.8	54.1	54.5
HC93-2690	52.7	56.8	51.8	51.7	49.8	43.6	60.2	46.4
HC94-126PR	47.5	33.9	43.1	43.1	52.1	46.3	52.3	38.6
HC94-422	45.4	37.1	43.6	42.3	44.7	44.7	45.2	36.2
K1377	50.6	59.7	56.9	50.9	55.3	45.0	59.2	38.1
K1378	49.1	60.9	52.5	44.2	48.1	38.1	48.8	53.0
K1379	51.3	57.5	56.4	50.5	55.4	49.4	53.5	36.9
K1380	50.7	54.1	55.1	46.0	57.0	45.9	54.6	35.4
K1381	47.0	39.3	51.7	41.0	51.8	35.6	53.6	36.1
K1386	48.9	33.4	48.4	43.2	50.7	44.7	55.7	46.0
Ky94-1501	50.2	55.7	54.6	53.1	43.3	47.1	57.0	33.0
LN92-10725	53.9	56.0	62.7	54.6	54.3	52.7	59.2	45.3
LN93-11632	54.5	57.0	57.1	54.8	55.0	46.8	62.6	54.1
LN93-11945	53.4	56.4	57.7	57.8	56.7	48.1	61.1	45.0
LN94-3122	52.5	54.5	54.9	54.5	56.5	43.4	59.1	49.3
LN94-10527	49.4	68.2	60.7	47.1	56.2	37.9	53.6	38.0
LS92-4173	46.9	61.5	59.8	43.9	54.9	49.1	45.3	41.1
LS93-0375	53.6	44.4	59.7	49.3	61.4	48.8	58.7	40.2
LS94-2435	50.9	47.0	58.5	50.3	58.6	43.0	57.2	51.6
Md94-5463	43.4	35.2	30.8	37.7	50.4	37.9	51.4	31.1
SS93-4915	44.1	45.5	46.3	45.0	44.8	43.1	46.3	27.7
SS94-10476	52.2	56.5	52.6	50.2	51.9	41.3	56.7	42.8
SS94-11075	48.4	56.5	52.7	45.9	51.7	38.3	51.8	31.1
SS94-11114	49.9	50.0	53.3	47.4	53.7	35.0	55.9	35.2
U96-3106	52.0	52.8	48.3	49.5	47.8	43.6	62.0	46.1
U96-3123	51.4	53.4	47.5	51.2	53.2	40.5	56.4	42.2
C.V. (%)		9.9	7.4	8.0	8.3	10.3	7.7	22.3
L.S.D. (5%)		10.7	6.2	6.0	6.0	7.3	6.8	14.5
Row Sp. (In.)		23	30	30	30	30	30	26
Rows/Plot		5	4	4	4	4	4	4
Reps		3	3	3	3	3	3	3

UNIFORM TEST IV, 1998

YIELD (bu/a)

Strain	Lafayette IN	Manhattan KS	Ottawa KS	Topeka KS	Lexington KY	Queens- town MD	Columbia MO	Portage ville MO
KS4694 (L)	45.8	57.5	40.3	69.5	47.0	44.6	31.9	43.9
Macon (III)	51.2	59.5	42.6	54.7	59.0	41.7	41.5	48.4
Mustang (SCN)	58.3	50.0	40.9	62.7	42.0	34.8	54.1	39.1
HC90-196 (dt1)	46.8	62.8	46.3	58.8	63.0	34.7	36.6	36.0
HS93-4118 (IV)	51.7	65.1	41.5	64.9	51.0	39.6	48.9	41.2
HC93-941	47.7	54.4	46.8	40.0	57.0	38.7	34.9	30.9
HC93-979	52.6	50.2	37.1	30.7	59.0	38.1	21.0	24.9
HC93-1086	53.8	55.9	38.7	50.6	59.0	38.2	36.0	28.4
HC93-1558	50.7	54.1	46.4	50.1	60.0	40.8	36.4	33.2
HC93-1835	48.6	49.2	38.1	39.0	53.0	41.0	29.4	17.6
HC93-2356	50.6	58.9	39.1	56.5	43.0	33.6	41.3	42.6
HC93-2690	60.2	62.3	41.4	63.6	53.0	44.0	37.2	41.7
HC94-126PR	54.0	54.2	41.9	49.7	57.0	37.3	42.1	30.8
HC94-422	53.8	52.2	40.7	39.0	56.0	39.7	34.3	32.5
K1377	50.3	62.3	42.7	63.5	44.0	37.0	34.1	44.3
K1378	49.3	55.7	39.9	59.6	40.0	42.5	41.2	38.5
K1379	52.0	58.2	40.5	58.2	58.0	38.1	47.5	41.1
K1380	52.9	58.0	38.7	68.0	48.0	40.3	49.3	39.4
K1381	53.2	64.3	43.1	61.0	44.0	38.1	38.4	38.8
K1386	52.5	61.4	40.0	59.6	49.0	40.8	44.6	41.9
Ky94-1501	56.1	58.0	40.8	53.1	49.0	41.5	42.1	46.0
LN92-10725	61.7	59.6	41.4	68.7	46.0	34.2	47.9	49.5
LN93-11632	62.4	59.5	42.0	61.9	55.0	35.0	46.4	41.6
LN93-11945	60.6	55.3	42.1	56.1	56.0	39.0	47.0	42.8
LN94-3122	54.0	66.5	44.0	59.6	54.0	40.9	37.1	41.2
LN94-10527	46.7	59.0	44.6	52.6	44.0	30.0	40.8	44.4
LS92-4173	44.0	54.1	36.4	59.9	35.0	34.9	44.6	41.6
LS93-0375	58.0	58.5	41.8	62.7	49.0	36.0	53.8	46.2
LS94-2435	54.8	52.4	41.4	58.0	48.0	39.6	35.4	43.9
Md94-5463	53.8	54.1	35.0	49.2	49.0	44.9	42.4	41.0
SS93-4915	56.1	56.4	36.8	52.7	47.0	44.6	45.2	41.7
SS94-10476	51.3	63.1	45.7	57.3	53.0	40.6	50.7	40.3
SS94-11075	51.8	56.9	42.6	59.1	40.0	36.5	46.5	45.4
SS94-11114	51.4	60.1	41.5	50.3	57.0	33.3	47.9	42.3
U96-3106	59.0	64.0	42.8	60.0	56.0	39.6	48.1	42.2
U96-3123	56.1	59.9	38.2	56.3	49.0	38.8	48.2	42.8
C.V. (%)	7.0	4.5	5.4	9.8	15.0	11.8	9.8	11.0
L.S.D. (5%)	6.1	4.3	3.6	9.0	9.1	7.4	6.7	7.1
Row Sp. (In.)	24	30	30	30	15	30	30	30
Rows/Plot	4	4	4	4	4	4	4	4
Reps	3	3	3	3	3	3	3	3

UNIFORM TEST IV, 1998

YIELD (bu/a)

Strain	Adelphia NJ	Mt. Orab OH	South Charleston OH
KS4694 (L)	55.3	61.2	55.0
Macon (III)	59.4	50.1	62.9
Mustang (SCN)	54.5	67.2	54.9
HC90-196 (dt1)	55.5	58.3	51.8
HS93-4118 (IV)	61.5	40.9	72.2
HC93-941	60.8	58.2	49.0
HC93-979	56.9	57.7	49.2
HC93-1086	58.0	51.5	52.8
HC93-1558	57.0	52.4	66.5
HC93-1835	49.2	53.7	44.0
HC93-2356	57.8	67.8	62.8
HC93-2690	59.3	58.0	67.8
HC94-126PR	59.1	62.4	57.9
HC94-422	54.6	60.0	60.5
K1377	55.0	52.9	60.2
K1378	58.3	54.3	58.6
K1379	58.1	57.7	55.0
K1380	56.9	58.1	55.4
K1381	58.8	46.4	50.1
K1386	55.0	59.6	53.4
Ky94-1501	55.9	55.5	61.6
LN92-10725	58.3	59.8	58.4
LN93-11632	57.0	68.6	64.5
LN93-11945	61.7	58.8	59.9
LN94-3122	56.2	59.0	59.8
LN94-10527	58.2	55.5	51.8
LS92-4173	54.2	35.5	49.2
LS93-0375	57.7	70.8	68.6
LS94-2435	54.1	66.0	56.1
Md94-5463	47.7	30.2	59.5
SS93-4915	44.5	24.7	44.7
SS94-10476	63.1	57.9	65.4
SS94-11075	48.4	58.2	57.6
SS94-11114	52.4	66.0	65.5
U96-3106	58.6	49.5	66.8
U96-3123	60.5	72.7	57.7
C.V. (%)	6.5	15.5	9.2
L.S.D. (5%)	6.0	15.2	10.9
Row Sp. (In.)	30	15	7.5
Rows/Plot	4	6	8
Reps	3	3	2

UNIFORM TEST IV, 1998

YIELD RANK

Strain	Yield Rank	George-town DE	Nashville IL	Ullin IL	Newton IL	Ridg-way IL	Urbana IL	Butler-ville IN
KS4694 (L)	23	3	23	29	33	36	30	10
Macon (III)	14	26	12	13	20	8	10	23
Mustang (SCN)	17	7	5	22	7	18	19	34
HC90-196 (dt1)	25	28	26	32	27	13	36	6
HS93-4118 (IV)	7	21	13	5	12	10	4	11
HC93-941	30	36	28	25	26	12	17	29
HC93-979	35	31	35	36	31	32	35	16
HC93-1086	32	34	33	35	34	27	24	31
HC93-1558	29	22	32	30	28	24	28	36
HC93-1835	36	35	34	34	32	34	31	28
HC93-2356	13	2	8	16	36	15	19	1
HC93-2690	5	10	21	7	23	19	5	7
HC94-126PR	26	32	31	27	16	9	25	19
HC94-422	31	29	30	28	30	16	34	24
K1377	16	6	10	9	9	14	6	20
K1378	21	5	20	23	24	29	29	3
K1379	11	8	11	10	8	2	23	22
K1380	14	17	14	19	3	11	18	26
K1381	27	27	22	31	18	33	21	25
K1386	22	33	24	26	21	16	16	9
Ky94-1501	18	15	16	6	35	6	12	30
LN92-10725	2	14	1	3	13	1	6	12
LN93-11632	1	9	8	2	10	7	1	2
LN93-11945	4	13	7	1	4	5	3	13
LN94-3122	6	16	15	4	5	21	8	5
LN94-10527	20	1	2	18	6	30	21	21
LS92-4173	28	4	3	24	11	3	33	17
LS93-0375	3	25	4	15	1	4	9	18
LS94-2435	12	23	6	11	2	23	11	4
Md94-5463	34	30	36	33	22	30	27	32
SS93-4915	33	24	29	21	29	22	32	35
SS94-10476	8	11	19	12	17	25	13	14
SS94-11075	24	11	18	20	19	28	26	32
SS94-11114	19	20	17	17	14	35	15	27
U96-3106	9	19	25	14	25	19	2	8
U96-3123	10	18	27	8	15	26	14	15

UNIFORM TEST IV, 1998

YIELD RANK

Strain	Lafayette IN	Manhattan KS	Ottawa KS	Topeka KS	Lexington KY	Queens-town MD	Columbia MO	Portage ville MO
KS4694 (L)	35	21	25	1	26	2	34	8
Macon (III)	26	13	10	24	3	6	20	2
Mustang (SCN)	6	35	21	7	33	31	1	26
HC90-196 (dt1)	33	6	3	17	1	32	27	29
HS93-4118 (IV)	23	2	16	4	18	15	5	20
HC93-941	32	27	1	33	8	20	31	32
HC93-979	19	34	33	36	4	22	36	35
HC93-1086	14	24	29	28	5	21	29	34
HC93-1558	27	29	2	30	2	10	28	30
HC93-1835	31	36	32	34	15	8	35	36
HC93-2356	28	16	28	21	32	34	21	12
HC93-2690	4	7	18	5	17	4	25	16
HC94-126PR	12	28	14	31	9	25	18	33
HC94-422	14	33	23	34	11	14	32	31
K1377	29	7	9	6	30	26	33	7
K1378	30	25	27	13	35	5	22	28
K1379	21	18	24	18	6	22	10	22
K1380	18	20	29	3	24	13	4	25
K1381	17	3	7	10	29	22	24	27
K1386	20	9	26	13	20	10	15	15
Ky94-1501	8	19	22	25	22	7	18	4
LN92-10725	2	12	18	2	28	33	8	1
LN93-11632	1	13	13	9	13	29	13	18
LN93-11945	3	26	12	23	10	18	11	10
LN94-3122	12	1	6	13	14	9	26	20
LN94-10527	34	15	5	27	31	36	23	6
LS92-4173	36	29	35	12	36	30	15	18
LS93-0375	7	17	15	7	21	28	2	3
LS94-2435	11	32	18	19	25	15	30	8
Md94-5463	14	29	36	32	19	1	17	23
SS93-4915	8	23	34	26	27	2	14	16
SS94-10476	25	5	4	20	16	12	3	24
SS94-11075	22	22	10	16	34	27	12	5
SS94-11114	24	10	16	29	7	35	8	13
U96-3106	5	4	8	11	12	15	7	14
U96-3123	8	11	31	22	23	19	6	10

UNIFORM TEST IV, 1998

YIELD RANK

Strain	Adelphia NJ	Mt. Orab OH	South Charleston OH
KS4694 (L)	25	9	24
Macon (III)	6	30	9
Mustang (SCN)	29	5	26
HC90-196 (dt1)	24	15	29
HS93-4118 (IV)	3	33	1
HC93-941	4	16	34
HC93-979	20	21	32
HC93-1086	15	29	28
HC93-1558	18	28	5
HC93-1835	33	26	36
HC93-2356	16	4	10
HC93-2690	7	19	3
HC94-126PR	8	8	19
HC94-422	28	10	12
K1377	26	27	13
K1378	11	25	17
K1379	14	21	24
K1380	20	18	23
K1381	9	32	31
K1386	26	12	27
Ky94-1501	23	23	11
LN92-10725	11	11	18
LN93-11632	18	3	8
LN93-11945	2	14	14
LN94-3122	22	13	15
LN94-10527	13	23	29
LS92-4173	30	34	32
LS93-0375	17	2	2
LS94-2435	31	6	22
Md94-5463	35	35	16
SS93-4915	36	36	35
SS94-10476	1	20	7
SS94-11075	34	16	21
SS94-11114	32	6	6
U96-3106	10	31	4
U96-3123	5	1	20

UNIFORM TEST IV, 1998

MATURITY (date)

Strain	Mean 16 Tests	George- town DE	Nashville IL	Ullin IL	Newton IL	Ridg- way IL	Urbana IL	Butler- ville IN
KS4694 (L)	8.4	8	9	7	10	6	12	7
Macon (III)	-0.0	-2	1	0	0	1	1	-2
Mustang (SCN)	5.1	1	6	5	6	7	8	3
HC90-196 (dt1)	0.4	-3	2	4	1	1	-0	-2
HS93-4118 (IV)	09/19	09/30	09/17	09/14	09/17	09/17	09/15	09/20
HC93-941	1.0	-1	4	3	1	-0	2	-2
HC93-979	1.3	-2	4	9	1	-1	2	0
HC93-1086	-1.1	-3	1	1	-2	-2	-1	-3
HC93-1558	0.2	-2	1	6	-1	-1	0	-3
HC93-1835	-1.7	-3	0	2	-0	-2	-0	-2
HC93-2356	0.9	2	5	0	2	-2	3	0
HC93-2690	3.2	4	4	3	2	3	6	0
HC94-126PR	0.8	2	2	1	1	1	1	-1
HC94-422	0.5	-2	3	4	2	0	1	-4
K1377	3.5	0	7	4	4	3	8	3
K1378	6.0	1	8	4	8	6	8	6
K1379	5.8	2	7	11	6	6	11	2
K1380	4.4	2	7	4	6	4	10	4
K1381	2.9	1	7	1	5	2	8	3
K1386	1.9	-1	2	1	2	2	6	1
Ky94-1501	4.5	2	6	8	3	6	8	3
LN92-10725	3.1	1	4	3	4	3	8	1
LN93-11632	0.0	-2	1	2	2	-0	4	-2
LN93-11945	3.2	2	6	7	4	2	8	-1
LN94-3122	-0.7	-2	0	-0	-2	-1	-0	0
LN94-10527	3.6	3	7	2	6	5	4	3
LS92-4173	8.0	7	9	11	10	8	12	7
LS93-0375	3.0	2	5	4	4	5	6	1
LS94-2435	-0.2	-3	-1	1	1	1	0	0
Md94-5463	1.2	0	3	2	3	3	1	0
SS93-4915	7.1	8	8	11	7	8	12	5
SS94-10476	3.1	2	6	7	2	2	2	1
SS94-11075	5.6	5	7	5	7	4	8	5
SS94-11114	2.9	0	6	1	4	2	4	4
U96-3106	-0.3	-1	-0	-0	-2	0	0	-2
U96-3123	1.4	0	1	3	3	-0	4	1
Date Planted	05/21	06/02	05/19	05/17	05/20	06/02	05/12	05/19
Days to Mature	121.4	120	121	120	120	107	126	124

UNIFORM TEST IV, 1998

MATURITY (date)

Strain	Lafayette IN	Manhattan KS	Ottawa KS	Topeka KS	Lexington KY	Queens-town MD	Columbia MO	Portage ville MO
KS4694 (L)	12	10			9	7	11	11
Macon (III)	0	0			3	-1	2	3
Mustang (SCN)	10	2			5	-1	7	6
HC90-196 (dt1)	2	1			-1	-1	1	5
HS93-4118 (IV)	09/21	09/30			09/08	09/28	09/10	09/10
HC93-941	2	2			0	3	0	3
HC93-979	4	3			-2	0	1	0
HC93-1086	1	2			-5	0	0	1
HC93-1558	2	1			-4	1	3	3
HC93-1835	0	-2			-4	-4	0	-2
HC93-2356	2	1			1	-1	1	4
HC93-2690	6	4			2	3	4	3
HC94-126PR	2	1			-4	3	2	4
HC94-422	3	3			-3	1	1	0
K1377	4	3			4	-1	6	4
K1378	6	10			6	3	9	10
K1379	6	9			5	3	10	6
K1380	6	2			5	-1	6	7
K1381	4	2			0	-2	3	6
K1386	4	2			1	0	2	4
Ky94-1501	5	7			2	5	6	9
LN92-10725	6	2			1	1	4	5
LN93-11632	1	-2			-2	-3	0	1
LN93-11945	2	5			4	-3	4	6
LN94-3122	0	-1			0	-2	0	3
LN94-10527	5	2			0	-1	7	5
LS92-4173	11	9			6	2	9	11
LS93-0375	6	0			6	1	2	5
LS94-2435	0	-2			2	-1	0	5
Md94-5463	3	1			1	0	2	3
SS93-4915	11	8			7	1	9	11
SS94-10476	3	3			3	3	4	6
SS94-11075	6	6			7	1	9	9
SS94-11114	3	2			5	-3	4	6
U96-3106	2	-2			0	-3	0	1
U96-3123	2	2			2	-3	1	2
Date Planted	05/16	05/21			05/13	06/02	05/12	05/19
Days to Mature	128	132			118	118	121	114

UNIFORM TEST IV, 1998

MATURITY (date)

Strain	Adelphia NJ	Mt. Orab OH	South Charleston OH
KS4694 (L)	8	7	+13
Macon (III)	-4	-3	0
Mustang (SCN)	6	3	8
HC90-196 (dt1)	-1	-3	1
HS93-4118 (IV)	10/09	09/21	09/19
HC93-941	5	-4	-1
HC93-979	3	-1	0
HC93-1086	-1	-5	-3
HC93-1558	2	-4	-1
HC93-1835	-3	-5	-3
HC93-2356	-3	-1	+3
HC93-2690	6	1	+5
HC94-126PR	3	-5	-1
HC94-422	0	-2	+1
K1377	6	1	+5
K1378	6	5	+10
K1379	6	3	+10
K1380	6	3	+5
K1381	5	1	+3
K1386	3	2	+2
Ky94-1501	3	0	+4
LN92-10725	5	1	+7
LN93-11632	2	-1	-2
LN93-11945	6	-1	+1
LN94-3122	-4	-2	0
LN94-10527	5	4	+5
LS92-4173	10	6	+11
LS93-0375	-1	2	+3
LS94-2435	-4	-2	-1
Md94-5463	0	-2	+2
SS93-4915	6	2	+9
SS94-10476	4	2	+5
SS94-11075	7	4	+9
SS94-11114	3	4	+4
U96-3106	3	-1	0
U96-3123	3	1	+4
Date Planted	06/17	05/20	05/06
Days to Mature	114	124	136

UNIFORM TEST IV, 1998

LODGING (score)

Strain	Mean 18 Tests	George- town DE	Nashville IL	Ullin IL	Newton IL	Ridg- way IL	Urbana IL	Butler- ville IN
KS4694 (L)	1.5	1.3	1.3	1.3	1.3	1.7	1.2	1.0
Macon (III)	1.4	2.0	1.0	1.0	1.5	1.2	1.0	1.0
Mustang (SCN)	1.5	1.3	1.0	1.2	1.5	1.2	1.0	1.0
HC90-196 (dt1)	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HS93-4118 (IV)	1.3	1.0	1.0	1.0	1.3	1.0	1.0	1.0
HC93-941	1.1	1.0	1.0	1.0	1.2	1.0	1.0	1.0
HC93-979	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC93-1086	1.0	1.0	1.0	1.0	1.3	1.0	1.0	1.0
HC93-1558	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC93-1835	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC93-2356	2.0	2.0	1.8	1.2	2.0	1.3	1.0	1.0
HC93-2690	1.8	1.3	1.2	1.0	2.0	1.0	1.0	1.0
HC94-126PR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC94-422	1.1	1.3	1.0	1.0	1.3	1.0	1.0	1.0
K1377	1.3	1.3	1.0	1.2	1.5	1.0	1.0	1.0
K1378	1.9	2.0	1.3	1.7	2.0	1.2	1.0	1.0
K1379	1.3	1.0	1.0	1.0	1.5	1.0	1.0	1.0
K1380	1.3	1.0	1.0	1.2	1.3	1.3	1.0	1.0
K1381	1.5	1.0	1.5	1.2	1.2	1.2	1.0	1.0
K1386	1.5	1.0	1.0	1.2	1.0	1.2	1.0	1.0
Ky94-1501	1.5	1.3	1.3	1.0	1.3	1.0	1.2	1.0
LN92-10725	2.0	2.0	1.5	1.3	2.2	2.2	1.7	1.0
LN93-11632	1.5	1.3	1.0	1.2	1.8	1.8	1.0	1.0
LN93-11945	1.5	1.0	1.0	1.3	1.5	1.0	1.0	1.0
LN94-3122	1.3	1.3	1.0	1.0	1.0	1.0	1.0	1.0
LN94-10527	2.8	4.6	3.5	2.3	3.0	3.0	2.7	1.2
LS92-4173	1.7	1.0	1.3	1.5	1.7	1.3	1.0	1.0
LS93-0375	1.4	1.0	1.2	1.0	1.2	1.2	1.0	1.0
LS94-2435	1.7	2.0	1.3	1.2	1.8	1.5	1.2	1.0
Md94-5463	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0
SS93-4915	1.6	1.0	1.2	1.2	1.5	1.0	1.0	1.0
SS94-10476	1.3	1.0	1.0	1.0	1.2	1.0	1.0	1.0
SS94-11075	1.7	1.6	1.2	1.2	1.7	1.7	1.0	1.0
SS94-11114	1.4	1.3	1.2	1.0	1.7	1.3	1.0	1.0
U96-3106	1.5	2.0	1.0	1.0	1.0	1.0	1.0	1.0
U96-3123	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0

UNIFORM TEST IV, 1998

LODGING (score)

Strain	Lafayette IN	Manhattan KS	Ottawa KS	Topeka KS	Lexington KY	Queens- town MD	Colum- bia MO	Portage ville MO
KS4694 (L)	2.2	2.0	1.0	1.3	2.8	1.5	1.0	1.5
Macon (III)	1.8	1.0	1.3	1.3	3.7	1.5	1.3	1.5
Mustang (SCN)	1.2	2.0	2.0	1.3	4.3	1.7	1.7	1.0
HC90-196 (dt1)	1.0	1.0	1.0	1.0	1.3	1.2	1.0	1.0
HS93-4118 (IV)	1.5	1.3	1.0	1.3	4.2	1.5	1.0	1.0
HC93-941	1.0	1.0	1.0	1.0	1.3	1.0	1.0	1.0
HC93-979	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC93-1086	1.0	1.0	1.0	1.0	1.2	1.0	1.0	1.0
HC93-1558	1.0	1.0	1.0	1.0	1.0	1.2	1.0	1.0
HC93-1835	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC93-2356	2.8	2.0	2.3	2.3	4.7	1.8	1.3	2.0
HC93-2690	1.5	2.0	2.3	1.3	4.5	1.8	2.7	1.5
HC94-126PR	1.0	1.0	1.0	1.0	1.2	1.0	1.0	1.0
HC94-422	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
K1377	2.0	1.7	1.3	1.3	2.7	1.5	1.3	1.0
K1378	2.2	2.0	2.0	2.3	3.0	1.8	2.7	2.0
K1379	1.5	1.7	1.3	1.0	2.8	1.8	1.7	1.0
K1380	1.5	1.3	1.0	1.7	3.2	1.7	1.0	1.0
K1381	1.5	1.7	2.7	2.3	2.8	1.5	1.7	1.5
K1386	2.3	1.3	2.0	2.0	2.8	2.0	1.0	2.0
Ky94-1501	1.8	1.7	1.0	1.0	3.5	1.8	1.3	2.0
LN92-10725	2.0	2.7	1.7	1.7	4.8	1.8	2.0	2.0
LN93-11632	1.5	2.0	1.7	1.7	3.2	1.7	1.3	1.0
LN93-11945	1.7	2.3	1.0	1.7	4.5	1.7	1.3	1.0
LN94-3122	1.5	1.3	1.7	1.0	3.0	1.3	1.3	1.0
LN94-10527	3.2	3.0	2.3	3.0	4.0	2.0	3.7	2.5
LS92-4173	1.7	2.0	1.3	2.3	3.0	1.5	2.7	2.5
LS93-0375	1.2	1.0	1.3	1.0	4.5	1.7	1.3	1.5
LS94-2435	2.0	2.0	1.7	2.0	3.5	1.8	1.3	2.0
Md94-5463	1.5	1.3	1.3	1.0	2.2	1.7	1.0	1.0
SS93-4915	1.8	2.0	2.0	1.7	3.5	2.0	2.0	1.5
SS94-10476	1.8	1.0	1.0	1.0	4.3	1.8	1.7	1.0
SS94-11075	2.0	2.0	2.0	2.0	3.3	2.0	1.7	2.0
SS94-11114	2.0	1.0	1.3	1.3	3.0	2.0	1.7	1.0
U96-3106	1.7	2.0	1.7	1.7	3.2	2.2	1.7	1.0
U96-3123	1.0	1.3	1.0	1.3	2.3	1.5	1.0	1.0

UNIFORM TEST IV, 1998

LODGING (score)

Strain	Adelphia NJ	Mt. Orab OH	South Charleston OH
KS4694 (L)	1.3	1.8	2.0
Macon (III)	1.0	1.1	1.0
Mustang (SCN)	1.5	1.2	1.5
HC90-196 (dt1)	1.3	1.1	1.0
HS93-4118 (IV)	1.0	1.0	1.3
HC93-941	1.7	1.0	1.0
HC93-979	1.3	1.1	1.0
HC93-1086	1.3	1.0	1.0
HC93-1558	1.0	1.1	1.0
HC93-1835	1.0	1.1	1.0
HC93-2356	1.7	1.8	3.5
HC93-2690	2.0	2.4	1.8
HC94-126PR	1.2	1.0	1.0
HC94-422	1.3	1.0	1.3
K1377	1.0	1.0	1.3
K1378	1.8	1.6	2.0
K1379	1.0	1.0	1.0
K1380	1.2	1.0	1.0
K1381	1.3	1.0	1.0
K1386	1.2	1.1	1.8
Ky94-1501	1.2	1.2	1.5
LN92-10725	1.5	1.4	2.0
LN93-11632	1.2	1.5	1.5
LN93-11945	1.0	1.1	1.0
LN94-3122	1.0	1.2	1.0
LN94-10527	1.3	2.0	2.5
LS92-4173	1.5	1.1	1.5
LS93-0375	1.0	1.1	1.3
LS94-2435	1.2	1.3	1.0
Md94-5463	1.0	1.0	1.0
SS93-4915	1.3	1.0	1.5
SS94-10476	1.0	1.0	1.0
SS94-11075	1.3	1.3	1.5
SS94-11114	1.0	1.1	1.8
U96-3106	1.5	1.2	1.5
U96-3123	1.2	1.2	1.0

UNIFORM TEST IV, 1998

PLANT HEIGHT (inches)

Strain	Mean 18 Tests	George- town DE	Nashville IL	Ullin IL	Newton IL	Ridg- way IL	Urbana IL	Butler- ville IN
KS4694 (L)	36	29	32	39	36	36	39	21
Macon (III)	32	23	32	33	35	36	38	20
Mustang (SCN)	39	27	42	43	38	40	41	21
HC90-196 (dt1)	22	16	19	16	24	26	22	15
HS93-4118 (IV)	33	23	32	33	36	36	35	21
HC93-941	19	13	21	14	23	24	21	12
HC93-979	19	15	18	13	23	26	19	12
HC93-1086	18	13	17	13	23	23	20	11
HC93-1558	20	16	19	14	23	24	23	11
HC93-1835	18	13	15	14	21	22	19	12
HC93-2356	37	26	34	39	35	37	42	27
HC93-2690	36	27	34	36	36	36	41	24
HC94-126PR	21	16	23	15	26	26	21	12
HC94-422	21	17	21	17	25	27	22	14
K1377	35	24	33	38	39	36	39	20
K1378	38	31	39	40	38	38	43	25
K1379	36	29	36	35	37	37	43	21
K1380	36	27	37	35	39	40	39	21
K1381	34	21	34	35	36	37	39	21
K1386	36	23	35	35	36	40	41	22
Ky94-1501	37	24	38	42	37	40	43	22
LN92-10725	41	29	44	45	44	41	46	25
LN93-11632	34	25	34	36	36	36	39	24
LN93-11945	33	26	34	37	34	36	39	21
LN94-3122	34	24	33	35	35	35	39	23
LN94-10527	40	32	46	42	43	41	46	26
LS92-4173	38	30	36	39	40	38	40	25
LS93-0375	35	23	35	35	36	35	40	23
LS94-2435	35	25	36	37	38	35	42	24
Md94-5463	32	21	29	30	34	32	37	20
SS93-4915	37	25	37	42	35	41	39	21
SS94-10476	34	24	33	36	38	35	38	19
SS94-11075	36	28	35	37	38	37	40	20
SS94-11114	34	23	34	36	39	34	40	20
U96-3106	37	25	34	39	39	37	41	25
U96-3123	32	23	28	33	31	32	36	20

UNIFORM TEST IV, 1998

PLANT HEIGHT (inches)

Strain	Lafayette IN	Manhattan KS	Ottawa KS	Topeka KS	Lexington KY	Queens-town MD	Columbia MO	Portage ville MO
KS4694 (L)	40	47	38	42	42	31	39	37
Macon (III)	37	43	36	33	40	26	38	30
Mustang (SCN)	45	52	47	44	45	30	48	37
HC90-196 (dtl)	30	29	23	18	30	20	18	18
HS93-4118 (IV)	39	42	38	38	38	24	36	35
HC93-941	23	26	22	15	27	19	14	14
HC93-979	26	27	22	13	24	20	11	15
HC93-1086	26	28	20	16	24	20	11	11
HC93-1558	24	24	22	17	22	19	14	15
HC93-1835	23	24	20	13	21	18	14	11
HC93-2356	39	48	40	43	40	31	43	40
HC93-2690	39	45	41	38	43	29	41	35
HC94-126PR	28	30	23	19	24	20	17	16
HC94-422	26	29	21	15	24	20	16	17
K1377	39	45	39	38	42	26	38	34
K1378	43	48	42	43	44	32	45	34
K1379	42	47	39	34	42	29	43	34
K1380	42	46	39	40	40	30	41	25
K1381	38	42	38	39	38	27	35	35
K1386	41	45	41	38	42	31	40	35
Ky94-1501	44	51	42	39	42	27	40	40
LN92-10725	45	49	44	44	44	29	45	41
LN93-11632	39	47	36	39	36	25	40	32
LN93-11945	38	45	39	34	34	26	39	25
LN94-3122	38	45	38	38	37	27	38	30
LN94-10527	42	51	47	51	40	33	45	38
LS92-4173	41	48	40	46	42	31	45	38
LS93-0375	40	43	39	37	40	27	40	32
LS94-2435	42	43	38	40	41	28	37	36
Md94-5463	37	40	37	33	41	27	37	34
SS93-4915	43	48	42	41	41	34	44	37
SS94-10476	40	43	40	37	38	30	41	26
SS94-11075	43	46	39	43	42	30	37	38
SS94-11114	41	43	40	36	40	28	40	34
U96-3106	42	48	41	42	43	31	42	41
U96-3123	38	42	35	39	37	27	40	28

UNIFORM TEST IV, 1998

PLANT HEIGHT (inches)

Strain	Adelphia NJ	Mt. Orab OH	South Charleston OH
KS4694 (L)	32	34	37
Macon (III)	27	26	31
Mustang (SCN)	34	31	38
HC90-196 (dt1)	24	24	24
HS93-4118 (IV)	30	25	36
HC93-941	22	18	20
HC93-979	25	20	21
HC93-1086	21	16	17
HC93-1558	22	19	25
HC93-1835	21	20	24
HC93-2356	30	30	38
HC93-2690	28	33	38
HC94-126PR	23	24	22
HC94-422	23	19	24
K1377	30	29	36
K1378	33	33	40
K1379	33	29	38
K1380	32	30	38
K1381	28	30	32
K1386	33	29	33
Ky94-1501	32	34	38
LN92-10725	37	38	39
LN93-11632	29	28	36
LN93-11945	29	25	32
LN94-3122	27	28	34
LN94-10527	35	34	36
LS92-4173	31	31	34
LS93-0375	29	32	35
LS94-2435	29	34	34
Md94-5463	25	24	33
SS93-4915	30	28	32
SS94-10476	31	27	36
SS94-11075	30	30	37
SS94-11114	28	29	34
U96-3106	34	30	39
U96-3123	29	30	35

UNIFORM TEST IV, 1998

SEED SIZE (g/100)

Strain	Mean 16 Tests	George- town DE	Nashville IL	Ullin IL	Newton IL	Ridg- way IL	Urbana IL	Butler- ville IN
KS4694 (L)	14.3		12.7	11.5	13.1	10.0	12.8	12.8
Macon (III)	15.6		15.9	14.6	14.2	12.0	15.2	13.1
Mustang (SCN)	12.8		12.0	11.0	12.3	10.7	11.7	11.4
HC90-196 (dt1)	14.5		14.2	12.7	13.9	11.7	12.6	12.4
HS93-4118 (IV)	14.0		13.2	12.3	13.0	11.1	13.1	12.7
HC93-941	15.1		14.5	13.2	13.8	11.9	14.8	12.8
HC93-979	12.8		11.5	11.9	13.0	10.9	11.4	10.9
HC93-1086	13.1		12.1	11.8	12.2	10.0	12.3	11.6
HC93-1558	14.1		12.9	12.9	12.6	10.8	12.6	12.5
HC93-1835	12.8		11.7	12.4	11.9	9.9	12.1	10.8
HC93-2356	12.1		11.9	10.3	12.2	9.9	12.7	10.8
HC93-2690	14.9		13.6	13.0	14.6	11.5	14.8	12.8
HC94-126PR	15.2		13.0	13.3	14.5	13.0	14.5	13.4
HC94-422	15.9		15.3	14.7	15.0	12.8	13.5	12.6
K1377	12.7		11.9	11.5	11.9	10.6	12.1	11.7
K1378	14.0		12.8	11.9	13.7	10.6	12.7	12.2
K1379	14.2		13.7	13.2	13.1	11.0	12.9	12.5
K1380	13.4		11.9	12.0	12.7	10.3	13.0	12.5
K1381	12.6		11.5	10.0	12.1	10.1	12.0	12.2
K1386	15.2		14.0	14.1	14.1	11.8	15.2	13.3
Ky94-1501	15.0		13.4	13.6	14.3	13.5	15.4	13.2
LN92-10725	11.9		11.7	9.9	11.1	10.5	11.7	10.6
LN93-11632	15.3		15.5	13.9	15.9	12.6	15.1	13.9
LN93-11945	17.3		16.6	16.8	17.6	14.0	15.9	14.5
LN94-3122	12.6		11.9	11.9	11.5	10.7	11.2	11.3
LN94-10527	11.4		10.8	9.1	11.2	9.2	10.8	9.7
LS92-4173	12.9		12.4	11.3	13.5	11.3	10.9	11.5
LS93-0375	14.6		14.2	13.5	14.4	12.1	13.6	12.6
LS94-2435	14.1		14.4	12.1	13.8	12.0	13.4	13.1
Md94-5463	16.6		16.6	15.7	16.6	13.6	15.6	15.4
SS93-4915	14.3		12.9	13.1	14.5	12.6	12.4	12.3
SS94-10476	14.6		14.1	12.9	14.1	11.8	13.4	13.1
SS94-11075	13.8		12.5	11.6	13.6	10.6	13.5	12.6
SS94-11114	12.9		13.1	11.3	12.8	10.3	11.9	11.9
U96-3106	14.6		13.2	13.2	13.2	12.4	14.3	13.1
U96-3123	14.7		14.1	13.1	14.2	11.1	14.8	12.7

UNIFORM TEST IV, 1998

SEED SIZE (g/100)

Strain	Lafayette IN	Manhattan KS	Ottawa KS	Topeka KS	Lexington KY	Queens- town MD	Columbia MO	Portage ville MO
KS4694 (L)	14.0	17.7	15.1	19.1	12.9	15.9		13.6
Macon (III)	14.2	18.0	17.5	19.2	15.5	17.1		15.0
Mustang (SCN)	13.0	14.8	13.5	16.1	10.5	14.5		12.5
HC90-196 (dt1)	14.4	19.4	15.1	18.0	13.6	14.1		14.4
HS93-4118 (IV)	13.3	16.3	14.2	17.1	12.8	16.2		13.4
HC93-941	15.3	18.0	15.4	18.0	15.0	17.4		13.9
HC93-979	12.8	16.2	13.2	14.6	11.8	14.5		11.1
HC93-1086	14.0	16.1	13.4	15.7	12.9	14.2		11.6
HC93-1558	14.1	19.2	14.1	15.6	19.7	14.1		12.5
HC93-1835	12.5	16.6	12.9	15.1	12.8	14.2		11.3
HC93-2356	11.7	14.8	12.4	12.1	10.9	11.8		11.9
HC93-2690	14.9	16.8	15.3	18.0	14.7	15.4		13.2
HC94-126PR	15.7	17.9	14.6	15.9	15.8	17.1		14.8
HC94-422	16.3	20.6	16.7	19.4	16.1	16.2		14.9
K1377	11.4	17.0	13.5	16.0	10.5	13.3		12.4
K1378	13.1	18.4	14.0	19.6	12.2	15.3		13.0
K1379	13.3	19.4	15.2	17.4	13.3	14.3		13.3
K1380	13.1	16.0	14.0	17.5	11.2	13.7		13.8
K1381	12.2	15.8	13.5	16.9	10.3	12.8		11.7
K1386	14.9	19.8	16.3	21.0	12.8	15.1		15.1
Ky94-1501	14.2	18.4	15.6	18.1	13.5	15.2		15.9
LN92-10725	11.3	14.9	12.5	15.1	9.5	12.3		11.9
LN93-11632	15.5	17.6	14.8	18.0	15.5	15.2		13.7
LN93-11945	16.7	21.0	17.2	23.2	15.9	17.2		17.6
LN94-3122	12.0	15.9	13.3	13.9	12.2	13.2		11.4
LN94-10527	10.8	12.3	11.9	13.8	12.9	10.7		12.0
LS92-4173	12.7	15.2	13.3	16.6	10.4	12.5		12.2
LS93-0375	13.8	17.7	15.4	18.2	13.3	15.5		13.0
LS94-2435	12.7	16.3	14.5	16.3	14.5	13.5		14.5
Md94-5463	17.4	18.8	17.1	19.1	14.1	15.8		15.8
SS93-4915	15.2	17.5	14.8	15.6	13.3	14.4		13.3
SS94-10476	13.5	17.6	15.4	18.3	13.0	15.1		14.8
SS94-11075	13.2	16.4	15.6	18.8	13.0	12.8		13.3
SS94-11114	12.1	16.0	13.5	15.1	11.8	13.1		12.3
U96-3106	14.6	17.8	15.0	17.3	14.8	14.7		12.9
U96-3123	14.9	18.4	15.5	18.4	13.9	14.7		13.7

UNIFORM TEST IV, 1998

SEED SIZE (g/100)

Strain	Adelphia NJ	Mt. Orab OH	South Charleston OH
KS4694 (L)	18.7	14.9	13.6
Macon (III)	19.0	14.9	14.3
Mustang (SCN)	16.3	12.3	12.2
HC90-196 (dt1)	17.3	14.6	13.0
HS93-4118 (IV)	17.7	14.3	13.4
HC93-941	18.7	14.3	14.2
HC93-979	16.0	12.7	11.8
HC93-1086	16.7	12.7	11.9
HC93-1558	16.7	13.2	12.4
HC93-1835	16.7	13.3	10.9
HC93-2356	14.7	12.9	12.1
HC93-2690	18.7	15.8	14.6
HC94-126PR	19.7	15.2	14.4
HC94-422	19.0	17.0	14.9
K1377	15.3	12.7	11.5
K1378	17.7	14.2	12.6
K1379	17.7	13.5	13.0
K1380	16.7	13.3	12.2
K1381	16.0	14.0	11.3
K1386	17.7	15.0	13.3
Ky94-1501	17.7	14.4	13.7
LN92-10725	14.0	12.1	11.1
LN93-11632	18.0	16.1	13.8
LN93-11945	20.0	17.0	15.9
LN94-3122	15.7	13.3	11.6
LN94-10527	15.0	11.4	11.1
LS92-4173	17.3	13.5	12.2
LS93-0375	18.0	15.0	14.0
LS94-2435	16.3	14.8	12.6
Md94-5463	20.0	16.4	17.0
SS93-4915	18.7	14.5	13.6
SS94-10476	18.7	14.5	13.9
SS94-11075	16.0	13.9	13.4
SS94-11114	15.7	13.6	11.8
U96-3106	18.7	14.9	14.0
U96-3123	18.3	14.8	13.1

UNIFORM TEST IV, 1998

PROTEIN (%)

Strain	Mean 3 Tests	Ridgway IL	Urbana IL	Lafayette IN
KS4694 (L)	43.2	43.5	42.6	43.6
Macon (III)	42.3	42.2	42.5	42.2
Mustang (SCN)	42.6	43.6	41.4	42.8
HC90-196 (dtl)	41.0	40.4	40.8	41.8
HS93-4118 (IV)	41.7	42.2	41.0	41.8
HC93-941	42.7	42.4	42.3	43.4
HC93-979	43.0	42.1	43.0	43.9
HC93-1086	43.0	42.7	42.4	43.9
HC93-1558	43.9	43.2	43.6	45.0
HC93-1835	42.9	43.2	42.1	43.4
HC93-2356	43.2	42.0	43.3	44.2
HC93-2690	42.9	43.0	42.9	42.7
HC94-126PR	42.0	41.2	41.8	42.9
HC94-422	42.4	41.8	41.9	43.4
K1377	42.6	42.2	42.2	43.3
K1378	42.6	43.5	42.7	41.7
K1379	42.9	41.8	43.9	43.1
K1380	43.2	42.5	43.5	43.6
K1381	44.7	45.7	44.6	43.8
K1386	42.8	43.1	42.3	43.0
Ky94-1501	43.2	44.0	42.8	42.9
LN92-10725	43.4	43.6	43.3	43.4
LN93-11632	42.1	41.9	42.4	42.1
LN93-11945	43.3	43.1	43.4	43.3
LN94-3122	42.2	42.4	42.1	42.0
LN94-10527	40.7	41.0	40.8	40.4
LS92-4173	40.9	41.0	40.9	40.7
LS93-0375	43.4	43.1	43.8	43.3
LS94-2435	43.6	43.4	44.0	43.4
Md94-5463	43.6	44.4	43.2	43.2
SS93-4915	44.3	44.4	44.3	44.3
SS94-10476	43.7	43.7	43.6	43.9
SS94-11075	43.8	44.1	44.1	43.2
SS94-11114	43.3	43.6	43.0	43.2
U96-3106	41.2	40.4	40.7	42.4
U96-3123	43.4	43.8	43.4	43.1

UNIFORM TEST IV, 1998

OIL (%)

Strain	Mean 3 Tests	Ridgway IL	Urbana IL	Lafayette IN
KS4694 (L)	18.8	17.9	19.1	19.4
Macon (III)	20.2	20.2	20.3	20.2
Mustang (SCN)	19.0	18.7	19.4	18.8
HC90-196 (dt1)	20.6	20.8	20.7	20.3
HS93-4118 (IV)	19.5	19.4	19.9	19.2
HC93-941	19.9	20.3	19.8	19.7
HC93-979	19.7	20.3	19.7	19.1
HC93-1086	19.0	18.9	19.0	19.1
HC93-1558	19.2	20.0	19.2	18.3
HC93-1835	19.2	18.9	19.8	18.9
HC93-2356	19.1	19.8	19.1	18.4
HC93-2690	19.9	20.1	19.7	20.0
HC94-126PR	21.3	22.0	20.9	20.9
HC94-422	20.8	21.3	21.0	20.2
K1377	19.6	19.8	19.9	19.1
K1378	20.3	19.6	20.3	21.1
K1379	19.4	20.0	18.5	19.8
K1380	18.7	18.3	18.9	18.8
K1381	18.8	18.1	18.9	19.4
K1386	20.3	20.1	20.5	20.4
Ky94-1501	19.9	19.4	20.5	19.7
LN92-10725	19.4	19.2	19.6	19.3
LN93-11632	20.2	20.5	20.0	20.0
LN93-11945	20.8	21.2	20.4	20.7
LN94-3122	19.9	19.9	19.7	20.0
LN94-10527	19.8	20.0	19.6	19.8
LS92-4173	19.6	20.1	18.9	19.7
LS93-0375	19.3	19.9	18.8	19.2
LS94-2435	19.4	19.7	19.1	19.5
Md94-5463	19.9	19.6	20.0	20.2
SS93-4915	20.3	20.6	20.0	20.2
SS94-10476	19.8	19.7	19.7	19.9
SS94-11075	19.8	19.5	19.6	20.2
SS94-11114	19.7	19.5	19.4	20.1
U96-3106	21.6	21.7	21.0	22.0
U96-3123	19.4	19.2	19.3	19.8

Preliminary Test IVA, 1998

	Strain	Parentage	Generation Composited	Unique Traits
1.	HS93-4118 (IV)	IA2007 x Dairyland DSR 304	F5	Rps1-c
2.	KS4694 (L)	Sherman x Toano	F5	
3.	Macon (III)	Sherman x Resnik	F5	
4.	LG94-4667	PI 458.511 x Flyer	F6	
5.	HC94-2664	HC86-3403 x Resnik	F5	
6.	HC94-2669	HC86-3403 x Resnik	F5	
7.	HC94-2724	HC84-4850 x Resnik	F5	
8.	HC94-2726	HC84-4850 x Resnik	F5	
9.	HC94-2727	HC84-4850 x Resnik	F5	
10.	HC94-2729	HC84-4850 x Resnik	F5	
11.	HC94-2769	HC84-4850 x Resnik	F5	
12.	HC94-2811	HC84-4850 x Flyer	F5	
13.	HC94-3008	HC84-4850 x HC86-3403	F5	
14.	HC94-3022	HC86-3403 x Resnik	F5	
15.	HC94-3413	HC85-5148 x Resnik	F5	
16.	HC94-3418	HC85-5148 x Resnik	F5	
17.	K1409	K1212 x LN86-3357	F5	dt1
18.	K1410	KS4694 x C1842	F5	
19.	K1411	KS4694 x Corsica	F5	
20.	K1412	K1212 x KS4694	F5	
21.	K1413	K1212 x LN88-10534	F5	
22.	K1414	KS4694 x C1842	F5	
23.	K1415	LN88-10534 x Corsica	F5	
24.	K1416	KS4997 x Spry	F5	
25.	K1417	Hutcheson x KS4694	F5	
26.	K1418	KS4694 x Corsica	F5	
27.	Md95-5358	S88-19561 x Corsica	F5	SCN 3
28.	Md95-5394	S88-19561 x Corsica	F5	
29.	Md95-5702	Morgan x Clifford	F5	
30.	Md95-5717	Morgan x Clifford	F5	
31.	SS93-1027	Yale x Asgrow A3935	?	
32.	SS93-2274	Asgrow A3733 x (Pioneer 9442 x Asgrow A4009)	?	
33.	SS94-10603	Pioneer 9442 x Asgrow A4393	?	
34.	V94-0188	C1747 x Corsica	F5	

PRELIMINARY TEST IVA, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	PR	Hard Seed	PS	PSB
		Lafayette		Lafayette	
		Race 7	%	a %	n %
HS93-4118 (IV)	WGBDYBlepI	R	0	4	0
KS4694 (L)	WGBDYBfEpI	R	0	14	10
Macon (III)	WTBDYBlepI	S	8	10	2
LG94-4667	WTTDYBlepI	R	0	0	0
HC94-2664	PTTIYBlepI	R	0	0	0
HC94-2669	PTTIYBlepI	S	0	2	2
HC94-2724	PTTSYBlepI	R	0	10	0
HC94-2726	P+WTTSYBlepI	R	0	8	0
HC94-2727	PTTSYBlepI	R	0	2	0
HC94-2729	P+WTTDYBlepI	R	0	10	0
HC94-2769	WTTSYBlepI	R	0	16	0
HC94-2811	WTTDYBlepI	R	0	16	0
HC94-3008	P+WTTSYBlepI	S	0	24	0
HC94-3022	PTTDYBlepI	S	4	12	0
HC94-3413	PTTIYBlepI	H	0	20	6
HC94-3418	PTTSYBlepI	S	2	16	4
K1409	WGTSYBfEpI	S	2	16	0
K1410	PGBDYIbEpI	R	0	8	0
K1411	PGBDYIbEpI	S	0	26	6
K1412	P+WGBSYBfepI	S	0	8	0
K1413	PGBSYBfepI	S	0	8	2
K1414	PGTSYIbEpI	S	0	18	0
K1415	PTTDYBlepI	S	0	6	0
K1416	PTTDYBlepI	S	0	0	4
K1417	PTTDYBlepI	S	2	8	0
K1418	PGTDYBfEpI	R	0	20	2
Md95-5358	PTTDYBlepI	S	6	8	2
Md95-5394	PTTDYBrEpI	S	6	10	2
Md95-5702	WTBSYBrepI	S	0	8	0
Md95-5717	PTTSYBlepI	S	0	2	0
SS93-1027	PGTDYIbEpI	S	0	8	6
SS93-2274	PTTDYBlepI	S	0	4	0
SS94-10603	PTTIYBlepI	S	0	24	0
V94-0188	WTTDYBlepI	R	0	6	0

PRELIMINARY TEST IVA, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Size	Composition	
	9 bu/a	9 No.	9 Date	9 Score	9 In.	10 g/100	Protein 3 %	Oil 3 %
HS93-4118 (IV)	55.8	1	9/18	1.4	33	13.7	41.2	19.5
KS4694 (L)	46.0	32	7.8	1.7	35	13.3	42.5	19.3
Macon (III)	51.6	10	0.5	1.6	33	15.3	41.7	20.7
LG94-4667	47.1	29	1.7	2.7	38	14.4	42.8	19.7
HC94-2664	53.1	5	0.2	1.6	36	13.4	43.2	20.1
HC94-2669	49.5	19	1.0	1.6	36	13.9	44.2	20.2
HC94-2724	50.3	16	3.2	1.7	39	12.9	42.2	20.1
HC94-2726	53.9	3	0.8	1.9	37	13.6	42.8	20.0
HC94-2727	52.9	6	1.3	1.8	39	13.2	41.5	20.7
HC94-2729	51.3	11	2.1	1.8	39	13.6	41.7	20.5
HC94-2769	49.0	23	0.4	1.7	34	13.4	43.0	20.2
HC94-2811	49.9	17	0.9	1.5	36	13.9	42.7	19.8
HC94-3008	50.9	14	0.6	1.9	40	13.4	42.8	20.2
HC94-3022	49.1	21	1.8	1.7	36	12.8	43.6	20.0
HC94-3413	48.1	26	-1.0	2.4	39	16.0	41.9	20.9
HC94-3418	47.4	28	-0.9	2.3	39	15.4	43.1	20.3
K1409	46.7	30	2.2	2.3	37	11.4	43.2	19.7
K1410	54.6	2	2.8	1.5	34	14.6	42.8	19.9
K1411	48.3	25	3.2	1.8	37	13.9	42.7	19.5
K1412	49.2	20	7.5	1.4	35	12.3	42.4	19.8
K1413	49.1	21	5.2	1.7	36	12.1	41.2	20.9
K1414	49.7	18	5.3	1.6	38	14.0	41.5	19.9
K1415	50.4	15	1.6	1.4	34	12.5	43.5	19.8
K1416	47.5	27	8.4	1.5	32	13.3	42.9	19.8
K1417	51.8	9	4.2	2.3	39	13.2	42.3	19.3
K1418	51.2	13	5.5	1.5	36	14.5	43.2	19.9
Md95-5358	53.3	4	1.8	1.8	39	16.2	41.5	20.2
Md95-5394	46.4	31	2.1	1.7	36	15.9	43.9	18.9
Md95-5702	45.5	33	5.0	1.8	42	15.8	43.3	19.2
Md95-5717	51.3	11	1.4	1.7	38	14.5	43.9	19.5
SS93-1027	52.3	7	5.7	1.5	37	12.1	43.0	19.3
SS93-2274	52.1	8	3.3	1.2	34	13.4	42.1	20.5
SS94-10603	45.3	34	2.9	1.8	38	12.6	43.2	19.7
V94-0188	48.5	24	2.7	1.8	36	13.5	43.3	19.7

123.8 Days After Planting

PRELIMINARY TEST IVA, 1998

YIELD (bu/a)

Strain	Mean 9 Tests	Nashville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	55.8	57.7	56.7	41.2	69.2	52.7
KS4694 (L)	46.0	51.4	46.6	44.0	58.8	38.3
Macon (III)	51.6	52.0	53.2	28.3	58.2	58.9
LG94-4667	47.1	47.8	49.8	37.3	59.1	39.6
HC94-2664	53.1	44.9	55.7	48.7	60.2	49.9
HC94-2669	49.5	48.1	45.4	53.3	58.6	48.6
HC94-2724	50.3	52.4	49.4	43.0	59.9	48.6
HC94-2726	53.9	55.8	56.5	47.4	65.9	47.3
HC94-2727	52.9	53.7	52.9	52.9	62.9	52.0
HC94-2729	51.3	45.3	53.5	47.1	62.6	44.0
HC94-2769	49.0	40.2	56.8	55.3	54.4	42.7
HC94-2811	49.9	50.0	49.2	47.6	58.0	51.8
HC94-3008	50.9	51.3	55.5	43.1	68.6	56.7
HC94-3022	49.1	42.9	46.4	43.7	61.1	56.6
HC94-3413	48.1	43.8	46.6	48.8	63.2	53.8
HC94-3418	47.4	38.9	46.7	36.8	56.3	51.2
K1409	46.7	50.6	45.3	46.7	63.9	40.5
K1410	54.6	59.0	56.7	52.5	65.3	51.4
K1411	48.3	49.1	51.3	41.0	59.3	40.3
K1412	49.2	55.3	45.5	35.7	60.2	40.3
K1413	49.1	45.9	48.5	50.1	59.5	47.9
K1414	49.7	54.5	41.6	42.7	61.8	46.4
K1415	50.4	48.6	52.6	36.8	57.0	49.0
K1416	47.5	49.8	41.9	48.8	61.4	42.3
K1417	51.8	58.2	52.4	46.8	61.7	43.8
K1418	51.2	57.0	50.7	43.3	57.1	47.7
Md95-5358	53.3	61.8	58.4	51.2	57.1	53.9
Md95-5394	46.4	44.2	46.7	36.0	56.1	38.4
Md95-5702	45.5	52.4	45.4	39.8	53.2	36.8
Md95-5717	51.3	51.1	50.6	46.1	49.2	51.7
SS93-1027	52.3	59.8	56.6	46.6	58.1	43.8
SS93-2274	52.1	49.5	52.4	55.2	58.9	53.3
SS94-10603	45.3	49.7	44.6	39.0	51.0	44.8
V94-0188	48.5	49.8	53.7	37.6	59.3	46.1
C.V. (%)		10.2	9.2	21.4	4.2	9.9
L.S.D. (5%)		10.5	9.5	19.3	5.1	7.9
Row Sp. (In.)		30	30	26	30	15
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IVA, 1998

YIELD (bu/a)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	38.9	52.7	54.2	78.7
KS4694 (L)	32.9	40.4	42.5	58.8
Macon (III)	46.2	52.5	46.6	69.0
LG94-4667	36.5	41.6	56.7	55.8
HC94-2664	41.7	56.2	56.2	64.7
HC94-2669	41.3	45.5	44.2	60.7
HC94-2724	37.7	50.8	51.9	58.9
HC94-2726	41.6	51.4	63.0	56.1
HC94-2727	34.6	56.4	53.9	57.3
HC94-2729	34.7	51.3	57.0	66.2
HC94-2769	31.0	47.5	49.4	63.6
HC94-2811	27.1	51.3	54.1	60.4
HC94-3008	29.3	43.5	44.9	64.9
HC94-3022	31.5	56.0	46.4	57.8
HC94-3413	38.0	47.2	33.7	57.8
HC94-3418	28.1	49.5	61.3	57.9
K1409	37.3	31.0	47.7	57.6
K1410	39.1	53.7	54.0	59.9
K1411	39.3	45.7	42.1	66.4
K1412	41.9	52.4	52.4	59.0
K1413	38.2	47.5	51.3	53.1
K1414	36.2	53.1	49.7	61.6
K1415	43.9	45.5	57.2	62.5
K1416	27.1	56.4	47.6	51.8
K1417	34.0	45.7	60.8	62.4
K1418	33.8	55.1	56.1	59.7
Md95-5358	39.3	48.8	51.4	58.0
Md95-5394	27.0	45.7	63.2	59.9
Md95-5702	30.8	43.1	48.0	60.2
Md95-5717	33.2	54.1	63.2	62.8
SS93-1027	32.5	55.1	57.7	60.3
SS93-2274	36.3	49.4	52.1	61.9
SS94-10603	33.3	48.1	48.6	49.0
V94-0188	24.7	45.6	57.2	62.4
C.V. (%)	17.9	6.8	15.9	8.1
L.S.D. (5%)	ns	6.9	13.9	10.0
Row Sp. (In.)	30	30	15	7.5
Rows/Plot	4	4	6	8
Reps	2	2	2	2

PRELIMINARY TEST IVA, 1998

YIELD RANK

Strain	Yield Rank	Nashville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	1	5	3	24	1	7
KS4694 (L)	32	14	25	18	21	33
Macon (III)	10	13	11	34	23	1
LG94-4667	29	26	19	29	19	31
HC94-2664	5	29	7	10	13	13
HC94-2669	19	25	29	3	22	15
HC94-2724	16	11	20	22	15	15
HC94-2726	3	7	6	12	3	19
HC94-2727	6	10	12	4	7	8
HC94-2729	11	28	10	13	8	23
HC94-2769	23	33	2	1	31	26
HC94-2811	17	18	21	11	25	9
HC94-3008	14	15	8	21	2	2
HC94-3022	21	32	27	19	12	3
HC94-3413	26	31	25	8	6	5
HC94-3418	28	34	23	30	29	12
K1409	30	17	31	15	5	28
K1410	2	3	3	5	4	11
K1411	25	23	16	25	17	30
K1412	20	8	28	33	13	29
K1413	21	27	22	7	16	17
K1414	18	9	34	23	9	20
K1415	15	24	13	31	28	14
K1416	27	19	33	9	11	27
K1417	9	4	14	14	10	24
K1418	13	6	17	20	26	18
Md95-5358	4	1	1	6	26	4
Md95-5394	31	30	23	32	30	32
Md95-5702	33	11	29	26	32	34
Md95-5717	11	16	18	17	34	10
SS93-1027	7	2	5	16	24	24
SS93-2274	8	22	14	2	20	6
SS94-10603	34	21	32	27	33	22
V94-0188	24	19	9	28	17	21

PRELIMINARY TEST IVA, 1998

YIELD RANK

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	10	10	13	1
KS4694 (L)	24	33	32	23
Macon (III)	1	11	28	2
LG94-4667	15	32	10	31
HC94-2664	4	3	11	6
HC94-2669	6	28	31	14
HC94-2724	13	16	19	22
HC94-2726	5	13	3	30
HC94-2727	19	1	16	29
HC94-2729	18	14	9	4
HC94-2769	27	21	23	7
HC94-2811	31	14	14	15
HC94-3008	29	30	30	5
HC94-3022	26	4	29	26
HC94-3413	12	23	34	26
HC94-3418	30	17	4	25
K1409	14	34	26	28
K1410	9	8	15	18
K1411	7	24	33	3
K1412	3	12	17	21
K1413	11	21	21	32
K1414	17	9	22	13
K1415	2	28	7	9
K1416	31	1	27	33
K1417	20	24	5	10
K1418	21	5	12	20
Md95-5358	7	19	20	24
Md95-5394	33	24	1	18
Md95-5702	28	31	25	17
Md95-5717	23	7	1	8
SS93-1027	25	5	6	16
SS93-2274	16	18	18	12
SS94-10603	22	20	24	34
V94-0188	34	27	7	10

PRELIMINARY TEST IVA, 1998

MATURITY (date)

Strain	Mean 9 Tests	Nashville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	09/18	09/19	09/14	09/19	09/30	09/10
KS4694 (L)	7.8	5	12	8	11	11
Macon (III)	0.5	2	1	-1	0	1
LG94-4667	1.7	1	3	1	1	5
HC94-2664	0.2	-2	2	-2	1	3
HC94-2669	1.0	2	2	1	-2	3
HC94-2724	3.2	4	6	4	2	4
HC94-2726	0.8	0	2	2	1	0
HC94-2727	1.3	2	3	1	1	1
HC94-2729	2.1	4	3	2	2	3
HC94-2769	0.4	0	2	1	1	1
HC94-2811	0.9	-1	5	2	-1	3
HC94-3008	0.6	0	4	-1	1	4
HC94-3022	1.8	-1	5	3	1	4
HC94-3413	-1.0	0	0	-2	1	-1
HC94-3418	-0.9	0	0	-2	0	1
K1409	2.2	-1	5	4	1	4
K1410	2.8	3	8	3	3	1
K1411	3.2	3	4	3	1	6
K1412	7.5	6	12	8	11	8
K1413	5.2	5	10	4	9	6
K1414	5.3	4	9	6	10	3
K1415	1.6	1	4	1	1	2
K1416	8.4	4	13	9	11	11
K1417	4.2	5	7	4	2	4
K1418	5.5	5	9	3	8	7
Md95-5358	1.8	2	2	3	1	1
Md95-5394	2.1	1	2	1	2	6
Md95-5702	5.0	3	9	6	2	10
Md95-5717	1.4	3	2	1	2	4
SS93-1027	5.7	3	12	5	9	5
SS93-2274	3.3	4	8	3	1	5
SS94-10603	2.9	3	7	5	1	1
V94-0188	2.7	3	6	3	0	4
Date Planted	5/17	05/19	05/12	05/19	05/21	05/13
Days to Mature	123.8	123	125	123	132	120

PRELIMINARY TEST IVA, 1998

MATURITY (date)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	09/22	09/10	09/19	09/20
KS4694 (L)	5	11	7	+11
Macon (III)	0	3	-1	-2
LG94-4667	0	3	2	+1
HC94-2664	-1	2	-1	0
HC94-2669	1	2	1	-1
HC94-2724	1	6	3	+2
HC94-2726	0	5	-2	-1
HC94-2727	0	5	-1	+1
HC94-2729	0	5	0	+1
HC94-2769	-2	2	-1	0
HC94-2811	-4	2	2	+1
HC94-3008	-4	3	-1	+1
HC94-3022	-1	4	2	+1
HC94-3413	-6	2	-3	-4
HC94-3418	-6	2	-3	-4
K1409	1	5	1	+5
K1410	2	6	0	+3
K1411	3	6	4	+5
K1412	6	11	6	+12
K1413	4	8	1	+6
K1414	5	7	4	+7
K1415	0	4	2	+1
K1416	8	11	9	+14
K1417	2	9	5	+5
K1418	3	10	5	+9
Md95-5358	1	4	3	+3
Md95-5394	1	3	4	+1
Md95-5702	3	8	4	+7
Md95-5717	-3	5	0	-2
SS93-1027	2	9	7	+10
SS93-2274	1	5	4	+2
SS94-10603	1	7	2	+3
V94-0188	2	5	2	+3
Date Planted	06/03	05/12	05/20	05/06
Days to Mature	111	121	122	137

PRELIMINARY TEST IVA, 1998

LODGING (score)

Strain	Mean 9 Tests	Nashville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	1.4	1.0	1.0	1.0	1.0	4.0
KS4694 (L)	1.7	1.0	1.0	1.0	2.0	3.8
Macon (III)	1.6	1.0	1.0	1.0	1.5	4.0
LG94-4667	2.7	1.5	1.5	1.0	4.0	5.0
HC94-2664	1.6	1.0	1.0	1.0	2.0	4.3
HC94-2669	1.6	1.3	1.0	1.0	1.5	4.3
HC94-2724	1.7	1.0	1.0	1.0	2.0	4.0
HC94-2726	1.9	1.3	1.0	1.0	2.0	4.5
HC94-2727	1.8	1.3	1.0	1.0	2.0	3.8
HC94-2729	1.8	1.0	1.0	1.0	2.0	4.3
HC94-2769	1.7	1.0	1.0	1.0	2.0	4.5
HC94-2811	1.5	1.0	1.0	1.0	1.0	4.3
HC94-3008	1.9	1.3	1.0	1.0	2.5	4.0
HC94-3022	1.7	1.0	1.0	1.0	1.5	4.0
HC94-3413	2.4	1.0	1.3	1.0	3.5	5.0
HC94-3418	2.3	1.0	1.3	1.0	3.0	5.0
K1409	2.3	1.3	1.0	1.0	3.0	4.5
K1410	1.5	1.3	1.0	1.0	1.5	3.5
K1411	1.8	1.0	1.0	1.0	2.5	4.3
K1412	1.4	1.0	1.0	1.0	1.0	2.8
K1413	1.7	1.0	1.0	1.0	2.5	3.8
K1414	1.6	1.0	1.0	1.0	2.0	3.0
K1415	1.4	1.0	1.0	1.0	1.5	3.5
K1416	1.5	1.0	1.0	1.0	1.0	3.3
K1417	2.3	1.5	1.0	1.0	2.0	4.5
K1418	1.5	1.0	1.0	1.0	1.5	4.0
Md95-5358	1.8	1.0	1.0	1.0	2.5	4.0
Md95-5394	1.7	1.0	1.0	1.0	2.0	3.8
Md95-5702	1.8	1.5	1.0	1.0	2.0	4.0
Md95-5717	1.7	1.5	1.0	1.0	2.0	4.0
SS93-1027	1.5	1.0	1.0	1.0	1.0	2.8
SS93-2274	1.2	1.0	1.0	1.0	1.0	2.3
SS94-10603	1.8	1.0	1.0	1.0	2.0	4.0
V94-0188	1.8	1.3	1.0	1.0	2.5	4.0

PRELIMINARY TEST IVA, 1998

LODGING (score)

Strain	Queenstown	Columbia	Mt. Orab	South
	MD	MO	OH	Charleston OH
HS93-4118 (IV)	1.0	1.5	1.1	1.3
KS4694 (L)	1.3	2.0	1.6	1.5
Macon (III)	1.8	2.0	1.0	1.0
LG94-4667	2.3	5.0	1.9	2.5
HC94-2664	1.3	1.5	1.0	1.0
HC94-2669	1.8	1.5	1.1	1.3
HC94-2724	1.8	2.0	1.0	1.8
HC94-2726	1.8	2.5	1.4	1.5
HC94-2727	1.8	2.0	1.1	1.8
HC94-2729	1.8	2.5	1.1	1.5
HC94-2769	1.8	1.0	1.3	1.5
HC94-2811	1.8	1.0	1.2	1.0
HC94-3008	2.0	1.5	1.1	2.8
HC94-3022	1.8	2.0	1.5	1.3
HC94-3413	2.0	4.0	1.1	2.5
HC94-3418	1.8	3.0	1.5	3.0
K1409	2.5	3.0	2.0	2.8
K1410	1.3	1.5	1.1	1.0
K1411	1.8	2.0	1.0	1.5
K1412	1.5	2.0	1.0	1.3
K1413	1.8	2.0	1.1	1.5
K1414	1.5	2.5	1.2	1.3
K1415	1.5	1.0	1.2	1.0
K1416	1.3	2.0	1.0	2.0
K1417	2.0	4.0	1.7	3.0
K1418	1.5	1.0	1.1	1.3
Md95-5358	1.3	2.5	1.5	1.3
Md95-5394	1.5	2.0	1.4	1.8
Md95-5702	1.5	2.5	1.2	1.8
Md95-5717	1.5	1.5	1.3	1.5
SS93-1027	1.5	2.5	1.3	1.0
SS93-2274	1.3	1.0	0.9	1.0
SS94-10603	1.8	2.5	1.3	1.5
V94-0188	1.0	2.5	1.4	1.8

PRELIMINARY TEST IVA, 1998

PLANT HEIGHT (inches)

Strain	Mean	Nashville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
	9 Tests					
HS93-4118 (IV)	33	33	37	20	45	40
KS4694 (L)	35	34	39	23	48	45
Macon (III)	33	28	36	18	46	40
LG94-4667	38	34	41	25	52	41
HC94-2664	36	30	39	26	47	48
HC94-2669	36	34	36	24	46	42
HC94-2724	39	36	41	29	51	45
HC94-2726	37	35	41	25	48	41
HC94-2727	39	34	43	29	51	46
HC94-2729	39	32	46	26	52	43
HC94-2769	34	32	39	23	48	36
HC94-2811	36	33	39	26	48	42
HC94-3008	40	38	46	27	52	47
HC94-3022	36	34	40	24	49	45
HC94-3413	39	35	42	29	55	50
HC94-3418	39	34	41	27	52	45
K1409	37	36	41	25	49	44
K1410	34	36	38	24	44	38
K1411	37	32	40	18	53	48
K1412	35	34	37	21	50	42
K1413	36	33	39	23	50	43
K1414	38	37	38	23	53	45
K1415	34	29	38	21	47	39
K1416	32	24	37	17	43	37
K1417	39	36	41	24	48	50
K1418	36	34	38	24	50	42
Md95-5358	39	40	43	23	51	44
Md95-5394	36	36	37	20	46	42
Md95-5702	42	44	42	28	52	56
Md95-5717	38	41	39	28	52	43
SS93-1027	37	34	38	23	48	43
SS93-2274	34	31	34	21	48	42
SS94-10603	38	36	41	25	48	46
V94-0188	36	34	40	22	49	43

PRELIMINARY TEST IVA, 1998

PLANT HEIGHT (inches)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	23	37	29	34
KS4694 (L)	26	42	28	35
Macon (III)	26	40	26	34
LG94-4667	32	48	35	37
HC94-2664	27	44	32	34
HC94-2669	28	42	34	37
HC94-2724	36	45	34	34
HC94-2726	29	45	32	34
HC94-2727	31	46	34	38
HC94-2729	34	45	35	36
HC94-2769	30	39	29	34
HC94-2811	26	40	34	36
HC94-3008	33	49	32	40
HC94-3022	29	42	32	34
HC94-3413	35	43	30	37
HC94-3418	31	45	39	40
K1409	32	40	31	34
K1410	26	38	30	34
K1411	30	44	30	38
K1412	28	44	27	36
K1413	29	42	31	35
K1414	30	46	33	36
K1415	27	44	31	32
K1416	29	35	27	36
K1417	35	43	37	40
K1418	30	44	31	35
Md95-5358	29	44	36	37
Md95-5394	29	43	35	35
Md95-5702	34	47	34	43
Md95-5717	28	46	29	39
SS93-1027	28	45	34	36
SS93-2274	27	39	27	34
SS94-10603	31	47	34	37
V94-0188	23	45	33	37

PRELIMINARY TEST IVA, 1998

SEED SIZE (g/100)

Strain	Mean	Nashville IL	Urbana IL	Butler IN	Manhattan KS	Lexington KY
	8 Tests					
HS93-4118 (IV)	13.7	13.5	12.7	12.4	16.7	12.2
KS4694 (L)	13.3	12.5	13.1	12.5	17.9	11.1
Macon (III)	15.3	14.9	15.2	13.5	18.4	15.3
LG94-4667	14.4	13.9	14.1	13.5	18.2	12.0
HC94-2664	13.4	12.6	13.7	11.8	15.5	12.8
HC94-2669	13.9	13.5	12.8	13.6	15.7	14.8
HC94-2724	12.9	13.2	12.4	13.4	16.1	12.2
HC94-2726	13.6	13.0	14.8	12.6	17.5	12.5
HC94-2727	13.2	12.6	14.3	11.6	16.5	13.0
HC94-2729	13.6	13.2	14.1	12.6	18.7	11.9
HC94-2769	13.4	12.9	14.4	12.6	17.1	12.1
HC94-2811	13.9	13.7	14.7	12.4	16.6	13.5
HC94-3008	13.4	13.5	13.7	11.7	17.1	12.5
HC94-3022	12.8	11.9	12.1	12.6	16.1	12.7
HC94-3413	16.0	15.4	16.3	14.8	20.0	14.5
HC94-3418	15.4	14.4	16.4	13.3	19.7	15.0
K1409	11.4	10.5	11.2	10.8	15.2	9.8
K1410	14.6	14.9	15.7	13.7	18.1	13.1
K1411	13.9	13.2	14.2	14.3	16.6	11.3
K1412	12.3	11.8	12.4	11.0	16.5	10.2
K1413	12.1	11.3	13.1	11.1	15.9	10.4
K1414	14.0	13.7	13.8	13.5	17.7	11.4
K1415	12.5	12.2	12.5	11.1	15.9	10.9
K1416	13.3	11.3	12.6	16.4	16.6	12.6
K1417	13.2	12.6	13.3	12.6	16.9	11.1
K1418	14.5	15.1	14.9	12.6	19.8	12.6
Md95-5358	16.2	16.7	16.9	15.0	18.8	15.0
Md95-5394	15.9	15.7	15.4	15.8	18.8	13.4
Md95-5702	15.8	15.5	15.4	15.0	19.4	13.5
Md95-5717	14.5	14.7	14.5	13.8	17.1	14.2
SS93-1027	12.1	11.4	12.6	10.6	15.4	11.0
SS93-2274	13.4	13.0	13.5	12.9	16.1	12.6
SS94-10603	12.6	11.9	12.4	12.0	16.2	11.2
V94-0188	13.5	12.8	13.5	12.1	17.4	12.4

PRELIMINARY TEST IVA, 1998

SEED SIZE (g/100)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	14.4		13.8	13.9
KS4694 (L)	11.9		13.9	13.5
Macon (III)	14.7		14.6	15.7
LG94-4667	14.3		14.6	14.2
HC94-2664	13.7		13.5	13.6
HC94-2669	13.3		14.1	13.4
HC94-2724	12.1		11.4	12.3
HC94-2726	13.0		13.5	12.3
HC94-2727	12.0		12.6	13.2
HC94-2729	11.9		12.6	14.1
HC94-2769	11.7		13.3	13.1
HC94-2811	11.7		14.5	14.0
HC94-3008	12.1		13.1	13.3
HC94-3022	10.9		13.5	12.4
HC94-3413	14.7		16.0	16.3
HC94-3418	13.8		15.2	15.2
K1409	10.9		11.0	11.4
K1410	14.1		14.1	13.2
K1411	13.3		14.1	14.0
K1412	12.6		11.7	12.5
K1413	11.6		11.4	11.9
K1414	13.4		14.0	14.2
K1415	11.9		13.2	12.5
K1416	11.5		11.8	13.6
K1417	12.9		13.0	13.1
K1418	12.6		14.1	14.4
Md95-5358	14.9		16.6	15.8
Md95-5394	15.0		16.2	16.5
Md95-5702	15.3		15.9	16.2
Md95-5717	13.9		14.4	13.6
SS93-1027	12.2		11.4	12.3
SS93-2274	12.6		12.7	13.6
SS94-10603	11.9		12.7	12.2
V94-0188	12.5		13.8	13.9

PRELIMINARY TEST IVA, 1998

PROTEIN (%)

Strain	Mean 3 Tests	Urbana IL	Butlerville IN	Lexington KY
HS93-4118 (IV)	41.2	40.5	40.6	42.6
KS4694 (L)	42.5	42.5	42.3	42.8
Macon (III)	41.7	41.8	40.8	42.4
LG94-4667	42.8	43.1	42.6	42.8
HC94-2664	43.2	43.0	42.7	43.9
HC94-2669	44.2	43.9	44.7	44.1
HC94-2724	42.2	41.4	42.8	42.5
HC94-2726	42.8	42.4	42.5	43.4
HC94-2727	41.5	41.3	41.0	42.2
HC94-2729	41.7	41.8	41.4	42.0
HC94-2769	43.0	43.0	42.3	43.7
HC94-2811	42.7	43.2	41.9	43.0
HC94-3008	42.8	43.2	42.6	42.5
HC94-3022	43.6	44.3	42.5	44.0
HC94-3413	41.9	41.9	41.6	42.3
HC94-3418	43.1	43.0	43.3	43.0
K1409	43.2	43.4	42.6	43.6
K1410	42.8	42.4	42.7	43.4
K1411	42.7	42.2	42.5	43.3
K1412	42.4	43.2	40.7	43.3
K1413	41.2	41.3	40.9	41.5
K1414	41.5	41.5	41.7	41.2
K1415	43.5	43.9	43.0	
K1416	42.9	42.8	42.2	43.6
K1417	42.3	42.0	42.0	42.9
K1418	43.2	43.5	42.2	43.8
Md95-5358	41.5	40.8	40.9	42.7
Md95-5394	43.9	43.3	43.7	44.6
Md95-5702	43.3	43.3	43.7	42.9
Md95-5717	43.9	44.0	43.6	44.1
SS93-1027	43.0	42.7	42.2	44.0
SS93-2274	42.1	42.7	41.6	42.0
SS94-10603	43.2	43.3	42.9	43.3
V94-0188	43.3	42.4	44.4	43.0

PRELIMINARY TEST IVA, 1998

OIL (%)

Strain	Mean	Urbana IL	Butlerville IN	Lexington KY
	3 Tests			
HS93-4118 (IV)	19.5	20.0	20.7	17.9
KS4694 (L)	19.3	19.6	20.1	18.1
Macon (III)	20.7	20.6	21.8	19.8
LG94-4667	19.7	20.1	20.4	18.6
HC94-2664	20.1	20.5	20.7	19.1
HC94-2669	20.2	19.9	20.7	19.9
HC94-2724	20.1	20.7	20.8	18.9
HC94-2726	20.0	20.5	20.5	19.1
HC94-2727	20.7	21.3	21.4	19.5
HC94-2729	20.5	20.8	21.3	19.5
HC94-2769	20.2	20.8	20.9	18.9
HC94-2811	19.8	20.0	20.5	18.9
HC94-3008	20.2	20.2	20.7	19.6
HC94-3022	20.0	19.8	20.5	19.6
HC94-3413	20.9	21.1	21.6	20.0
HC94-3418	20.3	20.6	20.1	20.3
K1409	19.7	19.4	20.9	18.8
K1410	19.9	20.7	20.4	18.6
K1411	19.5	20.0	20.3	18.2
K1412	19.8	19.7	21.2	18.4
K1413	20.9	21.1	21.6	19.9
K1414	19.9	20.2	21.2	18.4
K1415	19.8	19.5	20.1	
K1416	19.8	18.9	21.5	18.9
K1417	19.3	19.5	20.1	18.2
K1418	19.9	20.1	20.8	18.7
Md95-5358	20.2	20.7	21.1	18.8
Md95-5394	18.9	19.1	19.9	17.6
Md95-5702	19.2	19.7	19.7	18.1
Md95-5717	19.5	19.7	20.0	18.8
SS93-1027	19.3	19.7	20.0	18.2
SS93-2274	20.5	20.5	21.4	19.6
SS94-10603	19.7	19.7	20.1	19.4
V94-0188	19.7	20.3	20.4	18.3

Preliminary Test IVB, 1998

	Strain	Parentage	Generation Composited	Unique Traits
1.	HS93-4118 (IV)	IA2007 x Dairyland DSR 304	F5	Rps1-c
2.	KS4694 (L)	Sherman x Toano	F5	
3.	Macon (III)	Sherman x Resnik	F5	
4.	LN94-6928	Hamilton x Resnik	F5	BSR
5.	LN95-126	HS88-4906 x IA2007	F5	BSR
6.	LN95-160	HS88-4906 x IA2007	F5	BSR
7.	LN95-620	HS88-4906 x C1842	F5	Rps1-k, BSR
8.	LN95-740	HS88-4906 x C1842	F5	Rps1-k, BSR
9.	LN95-2880	Thorne x C1842	F5	Rps1-k, BSR
10.	LN95-3089	Thorne x HS88-4906	F5	Rps1-k, BSR
11.	LN95-4754	LN88-7616 x C1842	F5	BSR
12.	LS95-0259	Pioneer 9442 x LS87-1922	F6	SCN
13.	LS95-0709	Dekalb 469c x LS87-1922	F6	SCN
14.	LS95-1454	Asgrow A5403 x LS87-1922	F6	SCN
15.	U97-3405	K1262 x UP1C2-14	F6	
16.	HC90-196 (dt1)	Sprite 87 x HC80-1756	F5	dt1
17.	C1968	HS88-4909 x HC85-2206	F5	dt1
18.	C1969	HS88-4909 x HC85-2206	F5	dt1
19.	C1970	HS88-4909 x HC85-2206	F5	dt1
20.	C1971	HS88-4909 x HC85-2206	F5	dt1
21.	HC93-1088	Charleston x HC78-676-2	F5	dt1
22.	HC94-153	HC85-6723 x Flyer	F5	dt1
23.	HC94-168	Charleston x Pella 86	F5	dt1
24.	HC94-215	Hutchison x Flyer	F5	dt1
25.	HC94-398	Sprite 87 x HC85-6577	F5	dt1
26.	HC94-399	Sprite 87 x HC85-6577	F5	dt1
27.	HC94-561	Sprite 87 x HC85-6577	F5	dt1
28.	HC94-644	HC78-676BC x HC85-164	F5	dt1
29.	HC94-1373	Charleston x HC74-634REBC	F5	dt1
30.	HC94-1847	Conrad x Sprite 87	F5	dt1
31.	HC95-155PR	HC85-6723(4) x HC78-676BC	BC3F3	dt1, Rps1-k
32.	HC95-259PR	HC85-5844(4) x HC78-676BC	BC3F3	dt1, Rps1-k
33.	HC95-261PR	HC85-5844(4) x HC78-676BC	BC3F3	dt1, Rps1-k
34.	HC95-28MB	Hobbit 87 x HC83-123-9	F9	dt1, Insect resis.

PRELIMINARY TEST IVB, 1998

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	<u>PR</u>	<u>Hard Seed</u>	<u>PS</u>	<u>PSB</u>
		Lafayette		Lafayette	
		Race 7	%	a %	n %
HS93-4118 (IV)	WGBDYBlepI	R	0	10	0
KS4694 (L)	WGBDYBfEpI	R	0	14	10
Macon (III)	WTBDYBlepI	S	8	10	2
LN94-6928	WTTSYBfEpI	H	0	22	0
LN95-126	PGBDYBfepI	R	0	10	0
LN95-160	PGBDYBfepI	R	0	8	0
LN95-620	PTTSYBrEpI	R	0	0	0
LN95-740	PTTDYBlepI	R	6	12	2
LN95-2880	PTBDYBlepI	R	2	6	0
LN95-3089	PGTSYIbepI	R	2	4	2
LN95-4754	PGTDYIbEpI	R	0	4	0
LS95-0259	WTTDYBrEpI	S	0	0	2
LS95-0709	PTTSYBrEpI	S	0	8	0
LS95-1454	WTTSYBlepI	R	0	2	0
U97-3405	PTBDYHEpI	H	0	4	0
HC90-196 (dt1)	WTTDYBlepD	R	0	2	0
C1968	PG+TTSYBrEpD	R	2	2	0
C1969	PTTSYBlepD	R	36	0	0
C1970	PGTSYBfEpD	R	2	2	0
C1971	PTBSYBlepD	R	0	0	2
HC93-1088	PTTSYBlepD	R	0	4	0
HC94-153	WTTDYBlepD	R	8	8	6
HC94-168	PTTSYBlepD	S	4	0	0
HC94-215	PTTDYBrEpD	R	0	4	10
HC94-398	WTTDYBlepD	R	2	0	0
HC94-399	WTTDYBlepD	R	0	4	4
HC94-561	WTTDYBlepD	S	0	2	0
HC94-644	PTBIYBrepD	R	4	6	0
HC94-1373	PTTSYBlepD	R	0	2	2
HC94-1847	WTTDYBrepD	S	0	0	0
HC95-155PR	P+WTBSYBlepD	R	0	8	0
HC95-259PR	PTTIYBrepD	S	4	0	0
HC95-261PR	PTTSYBrepD	R	2	2	8
HC95-28MB	PTTDGr+YBlepD	R	0	4	0

PRELIMINARY TEST IVB, 1998

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Size	Composition	
	7 bu/a	7 No.	8 Date	8 Score	8 In.	7 g/100	Protein 3 %	Oil 3 %
HS93-4118 (IV)	50.8	1	9/17	1.6	28	13.6	41.3	19.9
KS4694 (L)	44.5	23	8.6	1.5	30	13.6	42.4	19.6
Macon (III)	50.0	3	0.0	1.5	26	15.3	41.2	21.0
LN94-6928	47.6	12	-0.6	1.4	27	13.1	41.2	21.7
LN95-126	44.1	25	-0.5	1.5	26	13.2	42.2	19.9
LN95-160	49.2	7	2.3	1.9	30	15.5	40.4	20.4
LN95-620	50.0	3	0.6	2.0	28	15.3	40.6	21.3
LN95-740	48.5	8	0.0	1.4	27	14.7	41.5	20.1
LN95-2880	48.2	9	-2.1	1.3	29	15.7	42.3	20.2
LN95-3089	49.8	5	-0.4	1.9	31	13.6	42.0	19.1
LN95-4754	45.3	20	1.9	1.4	28	14.2	41.6	20.4
LS95-0259	47.9	11	0.8	1.6	32	11.5	40.7	20.7
LS95-0709	50.8	1	3.1	1.9	35	12.4	41.2	19.9
LS95-1454	46.8	13	4.6	1.5	34	12.8	43.4	19.0
U97-3405	49.7	6	5.8	1.5	33	13.9	42.1	19.6
HC90-196 (dt1)	45.5	19	0.7	1.1	20	14.2	41.4	20.7
C1968	40.9	31	0.3	1.1	17	14.0	42.5	19.3
C1969	41.6	29	1.7	1.0	18	13.7	43.7	18.8
C1970	42.5	27	0.6	1.2	19	13.4	42.5	19.7
C1971	45.1	21	-0.2	1.2	21	14.7	43.1	19.7
HC93-1088	46.7	14	-2.6	1.1	20	13.2	42.8	19.9
HC94-153	36.2	32	-0.4	1.0	16	14.5	42.6	20.2
HC94-168	41.4	30	-1.1	1.1	19	12.7	43.3	18.8
HC94-215	27.6	34	1.3	1.0	14	14.5	41.5	20.9
HC94-398	45.7	18	1.5	1.0	20	15.3	40.3	21.4
HC94-399	43.1	26	1.0	1.0	19	15.0	41.3	20.7
HC94-561	41.7	28	-2.9	1.1	18	17.3	42.7	20.9
HC94-644	46.6	15	-1.3	1.1	19	13.0	41.8	20.0
HC94-1373	46.1	17	-2.4	1.1	20	14.8	42.9	19.7
HC94-1847	44.3	24	-1.6	1.0	20	13.0	41.2	20.3
HC95-155PR	46.5	16	0.4	1.1	20	14.1	42.4	20.2
HC95-259PR	44.7	22	-0.6	1.1	20	13.1	40.6	20.2
HC95-261PR	48.2	10	0.3	1.2	22	13.0	41.9	19.5
HC95-28MB	35.3	33	2.1	1.1	22	11.3	45.4	18.5

121.9 Days After Planting

PRELIMINARY TEST IVB, 1998

YIELD (bu/a)

Strain	Mean 7 Tests	Nashville IL	Urbana IL	Butlerville* IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	50.8	47.5	48.4	47.6	64.7	51.3
KS4694 (L)	44.5	49.8	48.5	46.8	60.6	43.9
Macon (III)	50.0	40.0	56.3	33.0	61.2	60.3
LN94-6928	47.6	47.2	50.4	24.0	57.1	57.4
LN95-126	44.1	36.8	46.1	47.0	64.9	45.3
LN95-160	49.2	48.8	53.1	41.8	63.7	42.2
LN95-620	50.0	48.6	46.7	48.7	63.2	46.8
LN95-740	48.5	53.5	53.4	50.2	64.6	57.3
LN95-2880	48.2	47.2	38.5	58.7	58.2	51.5
LN95-3089	49.8	52.6	55.4	48.3	59.6	46.9
LN95-4754	45.3	45.2	45.1	57.4	62.5	40.6
LS95-0259	47.9	56.6	54.8	27.3	56.6	43.3
LS95-0709	50.8	61.3	54.2	33.6	60.6	46.0
LS95-1454	46.8	55.9	51.0	52.0	50.7	44.2
U97-3405	49.7	46.9	54.3	41.1	62.5	50.2
HC90-196 (dt1)	45.5	45.9	38.4	51.3	60.6	62.7
C1968	40.9	45.1	42.1	37.0	54.5	49.0
C1969	41.6	44.6	44.0	29.4	49.9	56.3
C1970	42.5	43.0	39.0	44.2	53.9	58.3
C1971	45.1	42.8	38.6	39.8	49.8	68.0
HC93-1088	46.7	41.9	48.8	34.2	54.6	68.3
HC94-153	36.2	33.4	33.4	26.2	38.3	43.7
HC94-168	41.4	33.6	37.7	16.8	60.0	52.2
HC94-215	27.6	23.8	25.9	18.5	34.9	43.0
HC94-398	45.7	36.2	44.1	42.0	49.8	64.9
HC94-399	43.1	38.2	43.2	37.2	44.2	62.7
HC94-561	41.7	32.2	44.4	19.5	48.6	63.4
HC94-644	46.6	34.6	51.9	42.8	59.0	61.6
HC94-1373	46.1	40.2	44.6	40.7	57.9	56.0
HC94-1847	44.3	37.5	42.4	11.9	58.1	53.3
HC95-155PR	46.5	37.7	50.9	41.7	56.6	59.8
HC95-259PR	44.7	38.0	47.2	33.5	58.8	62.2
HC95-261PR	48.2	42.4	44.3	58.9	64.3	63.1
HC95-28MB	35.3	39.1	25.4	47.4	56.1	41.3
C.V. (%)		15.7	11.4	25.8	4.9	10.4
L.S.D. (5%)		13.8	10.6	20.5	5.7	9.4
Row Sp. (In.)		30	30	26	30	15
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

*Data not included in the mean.

PRELIMINARY TEST IVB, 1998

YIELD (bu/a)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH
HS93-4118 (IV)	34.1	55.3	54.2
KS4694 (L)	27.7	38.7	42.5
Macon (III)	38.4	47.4	46.6
LN94-6928	36.7	43.0	41.1
LN95-126	30.5	41.1	44.1
LN95-160	34.7	47.1	54.6
LN95-620	41.1	50.3	53.5
LN95-740	31.1	43.0	36.9
LN95-2880	37.0	40.6	64.7
LN95-3089	24.0	46.3	63.9
LN95-4754	24.9	47.1	51.7
LS95-0259	22.9	48.2	52.7
LS95-0709	23.0	52.0	58.2
LS95-1454	24.0	46.0	55.9
U97-3405	26.2	48.3	59.7
HC90-196 (dt1)	23.6	35.3	51.8
C1968	21.3	37.6	36.6
C1969	23.5	30.7	42.3
C1970	29.1	27.8	46.7
C1971	27.7	35.9	53.1
HC93-1088	30.6	27.5	55.3
HC94-153	34.1	21.1	49.7
HC94-168	32.0	29.7	44.3
HC94-215	27.5	0.0	38.3
HC94-398	41.7	32.7	50.6
HC94-399	36.0	26.7	51.0
HC94-561	36.3	27.6	39.5
HC94-644	36.1	27.4	55.7
HC94-1373	43.5	32.6	48.0
HC94-1847	37.0	36.4	45.2
HC95-155PR	36.9	27.5	56.4
HC95-259PR	31.1	35.5	40.2
HC95-261PR	30.3	33.6	59.5
HC95-28MB	27.2	15.8	42.1
C.V. (%)	18.9	9.8	16.6
L.S.D. (5%)	12.0	7.2	13.9
Row Sp. (In.)	30	30	15
Rows/Plot	4	4	6
Reps	2	2	2

PRELIMINARY TEST IVB, 1998

YIELD RANK

Strain	Yield Rank	Nashville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	1	9	14	9	2	20
KS4694 (L)	23	6	13	12	10	28
Macon (III)	3	22	1	26	9	10
LN94-6928	12	10	11	30	20	13
LN95-126	25	28	17	11	1	26
LN95-160	7	7	7	16	5	32
LN95-620	3	8	16	7	6	24
LN95-740	8	4	6	6	3	14
LN95-2880	9	10	29	2	17	19
LN95-3089	5	5	2	8	14	23
LN95-4754	20	14	18	3	7	34
LS95-0259	11	2	3	28	21	30
LS95-0709	1	1	5	24	10	25
LS95-1454	13	3	9	4	27	27
U97-3405	6	12	4	18	7	21
HC90-196 (dt1)	19	13	30	5	10	6
C1968	31	15	26	22	25	22
C1969	29	16	23	27	28	15
C1970	27	17	27	13	26	12
C1971	21	18	28	20	29	2
HC93-1088	14	20	12	23	24	1
HC94-153	32	32	32	29	33	29
HC94-168	30	31	31	33	13	18
HC94-215	34	34	33	32	34	31
HC94-398	18	29	22	15	29	3
HC94-399	26	24	24	21	32	7
HC94-561	28	33	20	31	31	4
HC94-644	15	30	8	14	15	9
HC94-1373	17	21	19	19	19	16
HC94-1847	24	27	25	34	18	17
HC95-155PR	16	26	10	17	21	11
HC95-259PR	22	25	15	25	16	8
HC95-261PR	10	19	21	1	4	5
HC95-28MB	33	23	34	10	23	33

PRELIMINARY TEST IVB, 1998

YIELD RANK

Strain	Queenstown MD	Columbia MO	Mt. Orab OH
HS93-4118 (IV)	13	1	11
KS4694 (L)	22	15	26
Macon (III)	4	6	22
LN94-6928	8	11	29
LN95-126	19	13	25
LN95-160	12	7	10
LN95-620	3	3	12
LN95-740	16	11	33
LN95-2880	5	14	1
LN95-3089	28	9	2
LN95-4754	27	7	16
LS95-0259	33	5	14
LS95-0709	32	2	5
LS95-1454	28	10	7
U97-3405	26	4	3
HC90-196 (dt1)	30	20	15
C1968	34	16	34
C1969	31	24	27
C1970	21	26	21
C1971	22	18	13
HC93-1088	18	28	9
HC94-153	13	32	19
HC94-168	15	25	24
HC94-215	24	34	32
HC94-398	2	22	18
HC94-399	11	31	17
HC94-561	9	27	31
HC94-644	10	30	8
HC94-1373	1	23	20
HC94-1847	5	17	23
HC95-155PR	7	28	6
HC95-259PR	16	19	30
HC95-261PR	20	21	4
HC95-28MB	25	33	28

PRELIMINARY TEST IVB, 1998

MATURITY (date)

Strain	Mean 8 Tests	Nashville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	09/17	09/17	09/16	09/20	09/29	09/07
KS4694 (L)	8.6	8	13	8	12	12
Macon (III)	0.0	2	0	0	1	-1
LN94-6928	-0.6	-2	-1	-3	1	1
LN95-126	-0.5	1	0	2	-1	1
LN95-160	2.3	6	6	2	4	3
LN95-620	0.6	2	-3	0	2	5
LN95-740	0.0	-1	2	-1	-1	1
LN95-2880	-2.1	-1	-3	-2	-3	-3
LN95-3089	-0.4	1	-1	0	0	3
LN95-4754	1.9	4	1	4	1	4
LS95-0259	0.8	1	4	2	0	2
LS95-0709	3.1	5	3	5	2	6
LS95-1454	4.6	6	8	6	2	4
U97-3405	5.8	5	10	7	4	8
HC90-196 (dt1)	0.7	3	0	0	1	0
C1968	0.3	2	1	2	1	-2
C1969	1.7	4	4	2	2	1
C1970	0.6	1	2	1	-1	1
C1971	-0.2	1	0	-3	1	-1
HC93-1088	-2.6	1	-3	-3	1	-5
HC94-153	-0.4	-1	0	-3	3	-2
HC94-168	-1.1	0	0	-2	1	1
HC94-215	1.3	-1	3	-2	4	3
HC94-398	1.5	1	4	-1	5	1
HC94-399	1.0	2	4	-2	4	1
HC94-561	-2.9	-2	-1	-5	3	-4
HC94-644	-1.3	-1	3	-3	3	-4
HC94-1373	-2.4	-2	-1	-3	-1	-5
HC94-1847	-1.6	-1	-1	-4	1	-3
HC95-155PR	0.4	1	3	-1	3	-3
HC95-259PR	-0.6	1	1	-1	3	-5
HC95-261PR	0.3	2	1	2	3	0
HC95-28MB	2.1	3	3	5	3	0
Date Planted	5/18	05/19	05/12	05/19	05/21	05/13
Days to Mature	121.9	121	127	124	131	117

PRELIMINARY TEST IVB, 1998

MATURITY (date)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH
HS93-4118 (IV)	09/22	09/11	09/19
KS4694 (L)	3	7	7
Macon (III)	-1	1	-1
LN94-6928	1	1	-3
LN95-126	-6	-1	0
LN95-160	-5	2	1
LN95-620	0	1	-1
LN95-740	0	0	0
LN95-2880	0	0	-5
LN95-3089	-5	0	-1
LN95-4754	-1	1	1
LS95-0259	-3	1	0
LS95-0709	-2	4	3
LS95-1454	0	6	5
U97-3405	1	5	7
HC90-196 (dt1)	0	3	-1
C1968	-2	2	-2
C1969	-1	3	0
C1970	-2	3	0
C1971	2	0	-1
HC93-1088	-7	0	-4
HC94-153	-1	2	-1
HC94-168	-5	0	-4
HC94-215	2	1	0
HC94-398	1	3	-1
HC94-399	0	2	-2
HC94-561	-6	0	-8
HC94-644	-3	0	-5
HC94-1373	-3	-1	-5
HC94-1847	-1	0	-4
HC95-155PR	-1	3	-1
HC95-259PR	-1	1	-3
HC95-261PR	-6	1	-1
HC95-28MB	0	2	2
Date Planted	06/03	05/12	05/20
Days to Mature	111	122	122

PRELIMINARY TEST IVB, 1998

LODGING (score)

Strain	Mean 8 Tests	Nashville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	1.6	1.0	1.0	1.0	2.0	4.0
KS4694 (L)	1.5	1.3	1.0	1.0	2.0	3.0
Macon (III)	1.5	1.0	1.0	1.0	2.0	3.8
LN94-6928	1.4	1.0	1.0	1.0	2.0	2.8
LN95-126	1.5	1.0	1.0	1.0	2.0	4.0
LN95-160	1.9	1.3	1.0	1.0	2.0	4.5
LN95-620	2.0	1.3	1.3	1.0	2.5	5.0
LN95-740	1.4	1.0	1.0	1.0	1.5	3.0
LN95-2880	1.3	1.0	1.0	1.0	1.5	2.5
LN95-3089	1.9	1.3	1.0	1.0	3.0	3.8
LN95-4754	1.4	1.0	1.0	1.0	1.5	3.3
LS95-0259	1.6	1.0	1.0	1.0	2.0	4.0
LS95-0709	1.9	1.5	1.0	1.0	2.0	4.3
LS95-1454	1.5	1.3	1.0	1.0	1.5	3.3
U97-3405	1.5	1.0	1.0	1.0	2.0	4.0
HC90-196 (dt1)	1.1	1.0	1.0	1.0	1.0	1.3
C1968	1.1	1.0	1.0	1.0	1.0	1.5
C1969	1.0	1.0	1.0	1.0	1.0	1.0
C1970	1.2	1.0	1.0	1.0	1.0	1.8
C1971	1.2	1.0	1.0	1.0	1.0	1.8
HC93-1088	1.1	1.0	1.0	1.0	1.0	1.8
HC94-153	1.0	1.0	1.0	1.0	1.0	1.0
HC94-168	1.1	1.0	1.0	1.0	1.0	1.5
HC94-215	1.0	1.0	1.0	1.0	1.0	1.0
HC94-398	1.0	1.0	1.0	1.0	1.0	1.3
HC94-399	1.0	1.0	1.0	1.0	1.0	1.0
HC94-561	1.1	1.0	1.0	1.0	1.0	1.3
HC94-644	1.1	1.0	1.0	1.0	1.0	1.3
HC94-1373	1.1	1.0	1.0	1.0	1.0	1.5
HC94-1847	1.0	1.0	1.0	1.0	1.0	1.0
HC95-155PR	1.1	1.0	1.0	1.0	1.0	1.5
HC95-259PR	1.1	1.0	1.0	1.0	1.0	1.8
HC95-261PR	1.2	1.0	1.0	1.0	1.0	2.0
HC95-28MB	1.1	1.0	1.0	1.0	1.0	1.8

PRELIMINARY TEST IVB, 1998

LODGING (score)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH
HS93-4118 (IV)	1.3	1.0	1.1
KS4694 (L)	1.5	1.0	1.6
Macon (III)	1.5	1.0	1.0
LN94-6928	1.5	1.0	1.0
LN95-126	1.0	1.0	1.0
LN95-160	1.0	2.5	1.7
LN95-620	2.0	2.0	1.3
LN95-740	1.3	1.0	1.0
LN95-2880	1.3	1.0	1.1
LN95-3089	1.3	2.0	1.8
LN95-4754	1.0	1.0	1.2
LS95-0259	1.8	1.0	1.2
LS95-0709	1.5	2.0	1.6
LS95-1454	1.5	1.5	1.3
U97-3405	1.0	1.0	1.1
HC90-196 (dt1)	1.3	1.0	1.1
C1968	1.0	1.0	1.0
C1969	1.0	1.0	1.0
C1970	1.5	1.0	1.0
C1971	1.5	1.0	1.0
HC93-1088	1.3	1.0	1.0
HC94-153	1.0	1.0	0.9
HC94-168	1.3	1.0	1.1
HC94-215	1.0	1.0	1.0
HC94-398	1.0	1.0	1.0
HC94-399	1.0	1.0	1.0
HC94-561	1.3	1.0	1.1
HC94-644	1.3	1.0	1.1
HC94-1373	1.3	1.0	1.0
HC94-1847	1.0	1.0	1.1
HC95-155PR	1.0	1.0	1.0
HC95-259PR	1.0	1.0	1.0
HC95-261PR	1.3	1.0	0.9
HC95-28MB	1.0	1.0	1.1

PRELIMINARY TEST IVB, 1998

PLANT HEIGHT (inches)

Strain	Mean 8 Tests	Nashville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	28	33	35	20	44	1
KS4694 (L)	30	31	39	21	49	2
Macon (III)	26	24	34	20	44	3
LN94-6928	27	31	35	18	46	4
LN95-126	26	21	32	21	45	5
LN95-160	30	32	35	21	48	6
LN95-620	28	30	31	24	43	7
LN95-740	27	32	33	22	42	8
LN95-2880	29	34	31	26	40	9
LN95-3089	31	32	38	23	45	10
LN95-4754	28	31	33	27	41	11
LS95-0259	32	38	40	18	50	12
LS95-0709	35	43	41	23	47	13
LS95-1454	34	40	39	25	48	14
U97-3405	33	39	40	27	48	15
HC90-196 (dt1)	20	23	22	16	29	16
C1968	17	16	19	12	23	17
C1969	18	20	19	12	23	18
C1970	19	19	19	12	30	19
C1971	21	23	22	15	27	20
HC93-1088	20	21	22	13	28	21
HC94-153	16	15	14	11	20	22
HC94-168	19	17	18	11	28	23
HC94-215	14	12	11	11	18	24
HC94-398	20	18	22	13	25	25
HC94-399	19	16	20	14	22	26
HC94-561	18	13	21	11	22	27
HC94-644	19	17	18	13	22	28
HC94-1373	20	19	18	15	29	29
HC94-1847	20	18	18	12	26	30
HC95-155PR	20	17	21	13	25	31
HC95-259PR	20	17	20	13	26	32
HC95-261PR	22	19	21	15	28	33
HC95-28MB	22	21	23	16	31	34

PRELIMINARY TEST IVB, 1998

PLANT HEIGHT (inches)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH
HS93-4118 (IV)	23	36	29
KS4694 (L)	28	40	28
Macon (III)	23	36	26
LN94-6928	25	37	23
LN95-126	25	34	27
LN95-160	26	42	28
LN95-620	27	36	30
LN95-740	22	34	26
LN95-2880	23	38	30
LN95-3089	24	40	32
LN95-4754	17	35	28
LS95-0259	27	42	33
LS95-0709	25	47	39
LS95-1454	27	44	36
U97-3405	24	39	34
HC90-196 (dt1)	21	16	20
C1968	21	17	13
C1969	20	15	17
C1970	23	16	17
C1971	24	20	18
HC93-1088	22	12	21
HC94-153	18	11	17
HC94-168	24	13	20
HC94-215	15	13	11
HC94-398	21	14	19
HC94-399	21	12	20
HC94-561	20	14	16
HC94-644	22	12	22
HC94-1373	23	11	18
HC94-1847	20	14	19
HC95-155PR	21	13	21
HC95-259PR	20	14	19
HC95-261PR	22	16	19
HC95-28MB	21	15	18

PRELIMINARY TEST IVB, 1998

SEED SIZE (g/100)

Strain	Mean	Nashville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
	7 Tests					
HS93-4118 (IV)	13.6	13.4	13.4	13.5	16.3	12.0
KS4694 (L)	13.6	12.0	14.2	13.1	17.5	12.3
Macon (III)	15.3	14.5	16.0	13.9	17.9	15.9
LN94-6928	13.1	12.5	13.9	11.5	15.9	14.3
LN95-126	13.2	12.3	13.2	13.3	15.3	12.2
LN95-160	15.5	15.8	16.2	14.5	19.1	13.4
LN95-620	15.3	14.5	15.1	13.8	19.6	14.1
LN95-740	14.7	14.4	14.9	13.9	17.3	15.2
LN95-2880	15.7	15.1	15.4	15.0	18.5	15.2
LN95-3089	13.6	13.0	13.4	13.2	16.7	12.1
LN95-4754	14.2	13.3	14.0	13.1	17.9	13.8
LS95-0259	11.5	10.6	12.4	11.2	14.0	11.4
LS95-0709	12.4	11.9	12.1	11.2	15.0	11.1
LS95-1454	12.8	12.8	13.0	11.8	16.0	12.4
U97-3405	13.9	14.4	15.1	13.4	16.2	12.3
HC90-196 (dt1)	14.2	13.6	15.2	13.0	18.5	15.0
C1968	14.0	13.2	14.8	12.0	17.9	15.5
C1969	13.7	13.9	13.9	13.3	18.1	13.7
C1970	13.4	12.2	12.5	11.3	18.7	14.0
C1971	14.7	13.5	14.5	12.0	19.9	16.3
HC93-1088	13.2	12.0	13.1	12.0	16.2	13.1
HC94-153	14.5	13.0	15.1	13.7	18.8	13.6
HC94-168	12.7	11.4	12.8	12.1	16.9	12.3
HC94-215	14.5	12.0	15.9	11.5	21.7	14.5
HC94-398	15.3	12.4	15.6	13.7	20.9	15.1
HC94-399	15.0	13.3	15.1	13.7	19.7	15.9
HC94-561	17.3	15.2	18.2	15.6	24.1	17.8
HC94-644	13.0	12.2	13.1	11.6	16.4	13.4
HC94-1373	14.8	13.9	13.7	12.2	19.9	14.6
HC94-1847	13.0	11.2	13.9	11.7	17.5	12.7
HC95-155PR	14.1	13.1	15.4	11.9	19.0	13.5
HC95-259PR	13.1	11.9	13.6	11.2	17.0	13.0
HC95-261PR	13.0	12.1	13.0	12.0	17.4	12.4
HC95-28MB	11.3	9.9	10.6	10.6	14.7	11.0

PRELIMINARY TEST IVB, 1998

SEED SIZE (g/100)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH
HS93-4118 (IV)	13.1		13.8
KS4694 (L)	12.3		13.9
Macon (III)	14.1		14.6
LN94-6928	11.9		11.9
LN95-126	12.4		13.6
LN95-160	13.4		16.2
LN95-620	14.7		15.6
LN95-740	13.2		13.9
LN95-2880	14.8		16.2
LN95-3089	12.5		14.2
LN95-4754	13.0		14.3
LS95-0259	9.5		11.2
LS95-0709	12.5		12.7
LS95-1454	10.8		13.0
U97-3405	12.1		13.8
HC90-196 (dt1)	10.4		13.7
C1968	11.7		13.2
C1969	10.4		12.6
C1970	11.8		13.3
C1971	13.2		13.8
HC93-1088	11.9		13.8
HC94-153	12.2		15.1
HC94-168	11.6		12.1
HC94-215	12.1		13.5
HC94-398	14.0		15.3
HC94-399	12.8		14.6
HC94-561	13.7		16.4
HC94-644	11.1		12.9
HC94-1373	14.8		14.3
HC94-1847	12.1		12.1
HC95-155PR	12.3		13.7
HC95-259PR	12.1		12.9
HC95-261PR	11.1		13.1
HC95-28MB	11.6		10.6

PRELIMINARY TEST IVB, 1998

PROTEIN (%)

Strain	Mean	Urbana IL	Butlerville IN	Lexington KY
	3 Tests			
HS93-4118 (IV)	41.3	41.3	40.7	42.0
KS4694 (L)	42.4	43.0	41.4	42.7
Macon (III)	41.2	41.1	40.5	42.0
LN94-6928	41.2	40.4	40.4	42.8
LN95-126	42.2	42.2	41.3	43.1
LN95-160	40.4	39.5	39.7	41.9
LN95-620	40.6	39.8	39.9	42.1
LN95-740	41.5	41.6	41.3	41.6
LN95-2880	42.3	42.3	41.5	43.1
LN95-3089	42.0	41.1	43.0	41.9
LN95-4754	41.6	41.3	41.2	42.2
LS95-0259	40.7	40.7	39.8	41.6
LS95-0709	41.2	41.7	40.7	41.1
LS95-1454	43.4	44.1	43.1	43.0
U97-3405	42.1	42.3	42.0	42.1
HC90-196 (dt1)	41.4	41.2	41.1	42.0
C1968	42.5	42.2	42.3	43.1
C1969	43.7	43.5	44.1	43.4
C1970	42.5	42.1	42.7	42.8
C1971	43.1	42.0	43.9	43.3
HC93-1088	42.8	42.4	43.5	42.5
HC94-153	42.6	42.5	42.8	42.5
HC94-168	43.3	42.9	43.3	43.7
HC94-215	41.5	41.0	42.2	41.2
HC94-398	40.3	40.3	40.3	40.2
HC94-399	41.3	40.6	42.1	41.2
HC94-561	42.7	42.0	43.0	43.1
HC94-644	41.8	41.5	42.1	41.7
HC94-1373	42.9	41.9	43.5	43.4
HC94-1847	41.2	40.8	41.8	41.1
HC95-155PR	42.4	42.4	42.4	42.3
HC95-259PR	40.6	40.8	40.2	40.9
HC95-261PR	41.9	41.6	42.0	42.0
HC95-28MB	45.4	44.8	45.8	45.5

PRELIMINARY TEST IVB, 1998

OIL (%)

Strain	Mean 3 Tests	Urbana IL	Butlerville IN	Lexington KY
HS93-4118 (IV)	19.9	20.5	20.6	18.6
KS4694 (L)	19.6	19.9	20.1	18.9
Macon (III)	21.0	20.9	21.6	20.5
LN94-6928	21.7	22.2	22.3	20.6
LN95-126	19.9	20.1	20.9	18.7
LN95-160	20.4	21.2	20.9	19.0
LN95-620	21.3	21.9	22.3	19.6
LN95-740	20.1	19.9	21.2	19.3
LN95-2880	20.2	19.9	21.2	19.5
LN95-3089	19.1	19.2	19.3	18.9
LN95-4754	20.4	20.6	20.9	19.7
LS95-0259	20.7	20.9	21.6	19.7
LS95-0709	19.9	19.3	20.7	19.6
LS95-1454	19.0	18.8	19.5	18.8
U97-3405	19.6	20.0	20.4	18.5
HC90-196 (dtl)	20.7	21.4	20.3	20.3
C1968	19.3	19.8	19.3	18.8
C1969	18.8	19.1	19.0	18.4
C1970	19.7	20.5	19.3	19.3
C1971	19.7	20.6	18.8	19.6
HC93-1088	19.9	20.5	19.3	19.8
HC94-153	20.2	20.6	20.2	19.8
HC94-168	18.8	19.7	19.2	17.6
HC94-215	20.9	21.7	20.4	20.6
HC94-398	21.4	21.8	21.6	20.8
HC94-399	20.7	21.0	20.4	20.7
HC94-561	20.9	21.4	20.7	20.6
HC94-644	20.0	20.4	19.9	19.7
HC94-1373	19.7	20.2	19.4	19.5
HC94-1847	20.3	20.7	19.9	20.2
HC95-155PR	20.2	20.8	20.0	19.8
HC95-259PR	20.2	20.6	20.3	19.7
HC95-261PR	19.5	20.0	19.7	18.8
HC95-28MB	18.5	18.9	18.3	18.2

