

THE UNIFORM SOYBEAN TESTS NORTHERN REGION

1999

Coordinated by:

J. R. Wilcox, USDA, ARS
Department of Agronomy
Purdue University, W. Lafayette, IN 47907-1150
Office phone 765-494-8074
Lab phone 765-583-3932
FAX 765-496-3452
Email jwilcox@purdue.edu

TABLE OF CONTENTS

Uniform Test participants, 1999	1
Introduction	4
Policy on Evaluation and Use of Strains	4
Strain Designations	5
Methods	6
Disease Methods	8
Procedure for Testing and Release of Strains	9
Uniform Test Strains Released in 1999	11
Identification of Parent Strains 1999	12
Sencor Tolerance	18
1999 Disease, Shattering, and Descriptive Data	19
1999 Uniform and Preliminary Test Locations	20
Uniform Test 00	22
Uniform Test 0	29
Preliminary Test 0	40
Uniform Test I	51
Preliminary Test I	70
Uniform Test II	81
Preliminary Test IIA	112
Preliminary Test IIB	129
Uniform Test III	146
Preliminary Test IIIA	177
Preliminary Test IIIB	194
Uniform Test IV	211
Preliminary Test IVA	230
Preliminary Test IVB	247

ACKNOWLEDGMENTS

The cooperation of Donna I. Thomas and Warren E. Rayford, NCR Unit Laboratory, National Center for Agricultural Utilization Research, Peoria, Illinois, in analyses of Uniform Test samples for protein and oil concentration of the seeds is gratefully acknowledged. The assistance of Wad Crochet, Gary Nowling, and Jerry Powell in packaging and distributing seed for the Uniform Tests, for Phytophthora evaluations, and for summarizing data for the Uniform Test Report is sincerely appreciated.

UNIFORM TEST PARTICIPANTS - 1999

Gary R. Ablett
Ridgetown College Main St. E.
Ridgetown, Ontario
Canada NOP 2C0
Ph: 519-674-1505
FAX: 519-674-1515
email: gablett@ridgetowc.uoguelph.ca

T. Scott Abney, USDA-ARS
Dept. of Botany and Plant Pathology
Purdue University
West Lafayette, IN 47907-1155
Ph: 765-494-9859
FAX: 765-496-3452
email: abney@btmy.purdue.edu

Sam Anand
210 Waters Hall
University of Missouri
Columbia, MO 65211
Ph: 573-379-5431
FAX: 573-379-5875
email: anands@missouri.edu

Glenn Bowers
Department of Agronomy
Purdue University
West Lafayette, IN 47907-1150
Ph: 765-496-3756
FAX: 765-496-2926
email: gbowers@purdue.edu

John F. Boyse
Department of Crop and Soil Sciences
286 Plant Sciences Building
Michigan State University
East Lansing, MI 48824-1325
Ph: 517-355-2287
FAX: 517-353-3515
email: boyse@pilot.msu.edu

Glenn R. Buss
Dept. of Crop, Soil, and Environ. Sci.
Virginia Polytechnic Institute
Blacksburg, VA 24061-0404
Ph: 540-231-9788
FAX: 540-231-3431
email: gbuss@vt.edu

Kerry M. Clark
Research Support Service
3600 New Haven Road
Columbia, MO 65201
Ph: 573-882-4450
FAX: 573-884-5911
email: clarkk@missouri.edu

Richard L. Cooper, USDA-ARS
Dept. of Horticultural and Crop Science
1680 Madison Ave.
OARDC-OSU
Wooster, OH 44691
Ph: 330-263-3875
FAX: 330-263-3887
email: cooper.16@osu.edu

Perry B. Cregan, USDA-ARS
Soybean Research Laboratory
Bldg. 001, HH 19, BARC West
Beltsville, MD 20705
Ph: 301-504-5070
FAX: 301-504-5728
email: pcregan@nal.usda.gov

Thomas E. Devine, USDA-ARS
Plant Molecular Biology Lab.
Bldg. 006, BARC-West
Beltsville, MD 20705
Ph: 301-504-6375
FAX:
email: reisingr@asrr.arsusda.gov

Brian Diers
Turner Hall-Agronomy
1102 S. Goodwin St.
University of Illinois
Urbana, IL 61801
Ph: 517-353-4587
FAX: 517-353-3955
email: bdiers@uiuc.edu

Walt R. Fehr
Department of Agronomy, Rm 1212
Iowa State University
Ames, IA 50011-1010
Ph: 515-294-6865
FAX: 515-294-6514
email: wfahr@iastate.edu

Ron Fioritto
Dept. of Horticultural and Crop Science
1680 Madison Ave.
OARDC-OSU
Wooster, OH
Ph: 330-263-3851
FAX 330-263-3887
email: fioritto.1@osu.edu

George L. Graef
319 Keim Hall
University of Nebraska
Lincoln, NE 68583
Ph: 402-472-1537
FAX: 402-472-7904
email: ggtraef@unlinfo.unl.edu

UNIFORM TEST PARTICIPANTS - 1999

R. Guillemette
Agriculture & Agri-Food Canada, Res. Branch
Plant Research Centre
Ottawa, Ontario
K1A 0C6 Canada
Ph: 613-759-1611
FAX: 613-759-6597
email: guillemette@em.agr.ca

Ted Helms
Dept. of Plant Sciences
North Dakota State University
Fargo, ND 58105-5051
Ph: 701-231-8136
FAX: 701-231-8474
email: helms@badlands.nodak.edu

Joe Hoeck
1210 Agronomy Hall
Iowa State University
Ames, IA 50011-1010
Ph: 515-294-0726
FAX: 515-294-6514
email: jhoeck@iastate.edu

Bill J. Kenworthy
Room 1112, H. J. Patterson Hall
University of Maryland
College Park, MD 20742-5821
Ph: 301-405-1324
FAX: 301-314-9041
email: wk7@umail.umd.edu

Les Korte
Stewart Seed Lab., Room 107
University of Nebraska
Lincoln, NE 68583-0827
Ph: 402-472-6343
FAX: 402-472-7904
email: llk@unlinfo.unl.edu

Randy L. Nelson, USDA-ARS
National Soybean Research Lab.
1101 W. Peabody Dr.
Urbana, IL 61801
Ph: 217-244-4346
FAX: 217-333-4639
email: rlnelson@uiuc.edu

Cecil D. Nickell
Turner Hall - Crop Science
1102 S. Goodwin St.
University of Illinois
Urbana, IL 61801
Ph: 217-333-9461
FAX: 217-333-9817
email: cnickell@uiuc.edu

Gary Nowling, USDA-ARS
4540 Hwy. 52 West
West Lafayette, IN 47906
Ph: 765-583-2952
FAX: 765-496-3452
email: gnowling@purdue.edu

Ed Oplinger
1575 Linden Drive
University of Wisconsin
Madison, WI 53706-1597
Ph: 608-263-7436
FAX: 608-262-5216
email: esopling@facstaff.wisc.edu

Jim H. Orf
Department of Agronomy, 411 Borlaug Hall
University of Minnesota
1991 Buford Circle
St. Paul, MN 55108
Ph: 612-625-8275 Lab. -9263
FAX: 612-625-1268
email: orfxx001@maroon.tc.umn.edu
schau002@maroon.tc.umn.edu

Tod W. Pfeiffer
Dept. of Agronomy
N106 Agric. Sci. Bldg. North
University of Kentucky
Lexington, KY 40546
Ph: 606-257-4678
FAX: 606-323-1952
email: tpfeiffer@ca.uky.edu

Viana Poysa
Agriculture & Agri-Food Canada, Res. Branch
Plant Research Centre
Harrow, Ontario, N0R 1G0 Canada
Ph: 519-738-2251 ext. 467
FAX: 519-738-2929
email: poysav@em.agr.ca

Istvan Rajcan
Department of Plant Agriculture
Crop Science Division
University of Guelph
Guelph, Ontario
Canada N1G 2W1
Ph: 519-824-4120 ext. 3564
FAX: 519-763-8933
email: irajcan@plant.uoguelph.ca

W. T. Schapaugh, Jr.
Dept. of Agronomy, Throckmorton Hall
Kansas State University
Manhattan, KS 66506
Ph: 785-532-7242
FAX: 785-532-6094
email: scha0035@ksu.edu

UNIFORM TEST PARTICIPANTS - 1999

M. Schmidt
Dept. of Plant and Soil Science
Mailcode 4415, Southern Illinois University
Carbondale, IL 62901-4415
Ph: 618-453-2496
FAX: 618-453-7457
email: mesch@siu.edu

Roy Scott
Dept. of Plant Science
South Dakota State University
Brookings, SD 57007
Ph: 605-688-4749
FAX: 605-688-4452
email: rscott@iitctel.com

J. Singer
Department of Plant Science
164 Foran Hall
59 Dudley Rd.
New Brunswick, NJ 08901-8520
Ph: 732-932-9711
FAX: 732-932-9441
email:

David A. Sleper
Dept. of Plant Science, 201 Waters Hall
University of Missouri
Columbia, MO 65211
Ph: 573-882-7320
FAX: 573-882-1467
email: sleperd@missouri.edu

Steve K. St. Martin
Dept. of Horticultural and Crop Science
202 Koffman Hall, 2021 Coffey Rd.
Ohio State University
Columbus, OH 43210
Ph: 614-292-8499
FAX: 614-292-7162
email: stmartin+@osu.edu

Gilles Tremblay
Station de Recherche du MAPAQ
335 Chemin des 25 Est
Saint-Bruno de Montarville (Quebec)
J3V 4P6 Canada
Ph: 514-653-4413
FAX: 514-441-5694
email: gilles.tremblay@agr.gouv.qc.ca

Robert Uniatowski
Dept. of Plant and Soil Science
University of Delaware
Newark, DE 19717-1303
Ph: 302-831-2531
FAX: 302-831-3656
email: robert.uniatowski@mus.udel.edu

Mark Uphoff
Dept. of Plant Pathology, 351 Bessey Hall
Iowa State University
Ames, IA 50011-1020
Ph: 515-294-5896
FAX: 515-294-9420
email: mduphoff@iastate.edu

Tom Warkentin
Agriculture and Agri-Food Canada
Morden Research Center
Unit 100-101 Route 100
Morden, Manitoba
Canada R6M 1Y5
Ph: 204-822-7233
FAX: 204-822-7207
email: twarkentin@em.agr.ca

Jim Wilcox, USDA-ARS
Department of Agronomy
Purdue University
West Lafayette, IN 47907-1150
Ph: 765 494-8074
FAX: 765-496-3452
email: jwilcox@purdue.edu

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
ORC	Ridgetown, 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
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 Compositing 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	Traill	
0	Lambert -	6 to +2	Traill (E)	Parker (L)
I	Parker	-4 to +4	Lambert (0)	IA1008 (L)
II	IA2021	3 to +5	IA1008 (I)	IA2038 (L)
III	IA3010 -	6 to +2	IA3038 (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 IA2036 (SCN) for resistance to the soybean cyst nematode in UT II, 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 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, Imp~~er~~fect 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 = Stem termination: Determinate, Indeterminate, Semi-Determinate
- 8 = Ep high seed coat peroxidase, ep low seed coat peroxidase, H heterogeneous

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. Clear-cut 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 sojae</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	<u>Soja virus 1</u>
TS	Target spot	<u>Corynespora cassicola</u>
WF	Wildfire	<u>Pseudomonas syringae</u> var. <u>tabaci</u>
YMV	Yellow mosaic virus	<u>Phaseolus virus 2</u>

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 1999

Variety	Experimental designation	Uniform Test evaluations
IA1008	A95-483010	SCN I 1996-1999, UT I 1998-1999
IA1009	A95-583021	SCN I 1997-1998, UT I 1998
LN92-7369	LN92-7369	PT IIA 1995
Brand	LS92-4173	PT IVA 1995, UT IV 1996-1998 SCN PT IV 1995, SCN IV 1996-1998
Brand	LS93-0375	PT IVB 1996, UT IV 1997-1998 SCN PT IV 1996, SCN IV 1997-1998
MN 0901	M91-821	UT 0 1995-1998
MN 1801	M91-1137	PT I 1995, UT I 1996-1998
NE1900	U95-2418	PT IIA 1996, UT I 1997-1998
NE3400	U95-3231	PT IIIA 1996, UT III 1997-1998
OAC Stratford	OAC 97-06	PT 0 1999
Stout	HC94-421	PT IIIB 1997, UT III 1998
Sturdie	HC94-422	PT IVB 1997, UT IV 1998
Turner	SD93-522	PT IIB 1995, UT II 1996-1998, SCN II 1998

Variety	Release date	Releasing states	Foundation seed production
IA1008	February, 1999	IA	1999
IA1009	February, 1999	IA	1999
LN92-7369	August, 1999	IL	1999
LS92-4173	February, 1999	IL	1999
LS93-0375	February, 1999	IL	1999
MN 0901	February, 1999	MN, SD	1998
MN 1801	February, 1999	MN	1998
NE1900	December, 1999	NE	1999
NE3400	December, 1999	NE	1999
OAC Stratford	July, 1999	ON	1999
Stout	September, 1999	OH	1999
Sturdie	September, 1999	OH	1999
Turner	March, 1999	MN, SD	1999

IDENTIFICATION OF PARENT STRAINS 1999

Strain	Parentage
A2	M63-17 x C1453
A17	BSR 101 x CN210
A72-507	Amsoy x Wayne
A72-512	Amsoy x Wayne
A73-21030	L65-1342 x IVR 4311
A75-10521	Corsoy(2) x L65-1342 or Anoka x Mack
A75-204018	IVR Ex4731 x Wirth
A76-304020	(Beeson x AP68-1016) x (L15 x Calland)
A77-314013	A73-21030 x Williams
A79-134008	AP6(1YT)(F4)C2
A79-136012	Pride B216 x Land O' Lakes 4102
80-147002	Northrup King S1492 x Pella
A80-244003	Northrup King S1492 x Pella
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
A86-152032	AP9
A86-301024	A81-356022 x Hack
A86-303014	A81-356022 x Hack
A87-186011	AP9 Populations
A87-187020	Jacques J103 x A81-151026
A91-501002	AgriPro AP2190 x A86-301024
A91-701035	A86-301024 x Dekalb 226
A92-525014	IA2008 x Kenwood
A92-535059	Asgrow A2187 x [(A87-186011 x DSR 252) x A87-187020]
A92-627030	Kenwood x Asgrow A3205
A93-552034	IA2008 x Kenwood
93-554040	Kenwood x Asgrow A3427
A93-554045	Northrup King S30-31 x Archer
A178-5	Amcor(6) x Williams 82
AC90-115043	(Northrup King S23-03 x A86-152032) x Sturdy
AgriPro 26	Beeson x Calland
AM90-112003	Agripro AP2190 x Asgrow A3427
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 A2234	[(Calland x Amsoy) x Century(3)] x Williams 82
Asgrow A2242	Sherman x XP1928
Asgrow A2396	Asgrow A2943 x CM214
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

IDENTIFICATION OF PARENT STRAINS 1999

Strain	Parentage
AX56P64-1	Adams x Harosoy
BD22115-13	(Amsoy x Portage) x Holmberg 840-7-3 (From Sven A. Holmberg, Sweden)
C1079	Lincoln x Ogden
C1253	Blackhawk x Harosoy
C1266R	Harosoy x C1079
C1453	C1266R x C1253
C1678	Hobbit x Lakota
C1726	Low 16:0 mutant of Century
C1834	C1678 x Resnik
C1842	[Spencer(2) x Pella 86] x Resnik
CX1038	Cutler 71(4) x Pando
CX1307	Cutler 71(5) x Pando
CX1311	Pride B216 x CX1038-63
CX1345	CX1038-63 x Kenwood
CX1538	N79-2077-12 x C1726
D49-2491	S-100 x CNS
D51-4877	Roanoke x N45-745
D55-3818	(N45-2994 x Ogden) x (N44-92 x N48-186)
D55-4168	Ogden x Biloxi
D56-1185	Perry x Lee
D58-3358	Jackson(4) x D49-2491
D59-9289	D51-4877 x D55-4168
D62-7816	D49-2491(5) x PI 181537
D65-6765	D58-3358 x D59-9289
D67-B5	D62-7816 x [D49-2491(5) x Arksoy]
Dairyland DSR217	(Corsoy x Hark) x Asgrow A3127
Dairyland DSR 304	Williams x Unknown
E86-237	Prosoy PS104 x HW8028
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
HC78-352BC	(L72U-2567 x Essex) (6) x Williams 82
HC78-676	L70T-543G x L74D-619
HC78-676BC	HC78-676(6) x Williams 82
HC80-1756	L73U-632 x Elf
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
HC85-618	Sprite x Asgrow A3127
HC85-744	HC78-676 x Asgrow A3127
HC85-2206	Elf x Williams 82
HC85-5844	Pixie x HC78-676
HC85-6423	Williams 82 x Gnome
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

IDENTIFICATION OF PARENT STRAINS 1999

Strain	Parentage
HC87-5844	Pixie x HC78-676
HF91-070	HM8473 x Elgin BC
HM9148	HM84100 x Thompson TS400
HM84100	(Hardin x Williams 82) x (Asgrow A3127 x Williams 82)
HS84-6224	HW79015(5) x HW79149
HS84-6276	
HS88-4906	Harper(3) x Williams 82
HS88-4909	Conrad x Hayes
HS88-4914	Winchester x A83-271027
HS89-2988	GR8963 x Asgrow A2943
HS90-3487	HS84-6276 x Conrad
HS90-37100	HS84-6224 x Conrad
HS10C2	Crop Sci. 37:1370-1373
HW74-3400	Williams x Ransom
HW8028	A75-10521 x Century
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)
IVR Ex4731	Amsoy x Wayne
K88-22-42	Hamilton x N84-507
K1230	Sherman x Asgrow A3127
Ky88-5037	Asgrow A4595 x Dekalb CX445
Ky90-1208	Asgrow A3935 x Hutcheson
L1-5	Century(5) x PI 408.251
L15	Wayne(6) x Clark 63
L57-0034	Clark x Adams
L62-1926	Clark(6) x PI 86.024, <u>e2</u>
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
L76-0022	Williams(4) x PI 171.451
L77-906	Williams x PI 209.332
L78-189	Corsoy x Kingwa
L85P-558	L73-4673 x Fayette
Land O'Lakes 4102	[Wayne x (Clark x Adams)] x Cutler
LG84-1096	PI 297.515 x PI 290.126B
LG88-2044	
LG89-7629	
LN89-3264	
LG89-6661	Sherman x LG84-1096
LG89-7657	Ripley x PI 438.206
LG89-8665	PI 436.682 x Ripley
LN85-10234	LN8179 x A80-244003
LN86-1947	PI 437.833 x Elgin
LN88-9242	Sherman x Chamberlain
LN88-9709	Sherman x Asgrow A2932

IDENTIFICATION OF PARENT STRAINS 1999

Strain	Parentage
LN89-295	Sherman x Resnik
LN89-334	Sherman x Resnik
LN90-4104	Burlison x Asgrow A3733
LNx8179	Northrup King S1492 x PI 92.717-2
LS87-1922	Schmidt
M10	Lincoln(2) x Richland
M42-37	Lincoln(2) x Richland
M53-117	M10 x PI 180.501
M54-139	Renville x Capital
M54-240	Korean x M42-37
M59-120	M54-240 x M54-139
M60-406	Blackhawk x Harosoy
M61-224	Merit x Harosoy
M62-263	Grant x M319W
M63-17	M402 x M406
M63-217Y	Corsoy x M53-117
M64-3	Traverse x PI 196.163
M64-157	Merit x Amsoy
M65-442	Anoka x Amsoy
M68-49	Evans x M59-120
M68-49-26	Evans x M59-120
M68-303	M60-406 x Beeson
M69-20	Merit x Clay
M70-127	Evans x M63-217Y
M70-187	Merit x SS65-5702
M70-271	Merit x M64-3
M70-597	Steele x AP68-1016
M71-38	Wilkin x M62-263
M71-148	Clay x Evans
M72-3	Evans x Hodgson
M73-62	M61-224 x PI 297.518
M74-38	M68-49 x Hodgson
M74-160	Pike x M64-157
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
M76-148	M70-271 x Hodgson 78
M76-151	M70-127 x Hodgson 78
M81-18	Evans x M65-442
M81-621	Unknown
M82-556	Hodgson 78 x Vickery
M82-776	M68-49-26 x M70-597
M82-996	M72-3 x Peterson 1677
M83-3	McCall x Maple Presto
M83-15	A2 x Hodgson 78
M83-18	A2 x Hodgson 78
M83-449	M74-38 x M74-160
M83-499	M71-38 x L78-189
M84-93	M71-148 x Ozzie

IDENTIFICATION OF PARENT STRAINS 1999

Strain	Parentage
M84-855	M76-148 x Glenwood
M84-916	A79-136012 x Dawson
M85-619	Fayette x McCall
M85-993	Fayette x McCall
M85-1665	Cartter x M85-933
M86-1973	L77-906 x M75-89
M87-135	Sibley x Hack
M87-170	Sibely x Hack
M87-180	Sibley x Hack
M87-227	A82-161034 x Dawson
M87-330	M76-55 x Ozzie
M87-346	M76-55 x Simpson
M87-1247	M81-621 x M73-62
M87-1329	M73-62 x Dassel
M88-84	M83-15 x M82-776
M88-390	Ozzie x M74-498
M88-504	M83-499 x M83-18
M88-523	M83-449 x M83-18
M88-829	Evans x Sturdy
M89-1678	M70-187 x M85-619
M90-665	M83-3 x McCall
M319W	Lincoln x Hawkeye
M402	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
MSBP2	Male-sterile (ms2) intermated population
MSBP3	Male-sterile (ms2) intermated population
MSBP4	G. Graef
MSBPF6	G. Graef
N45-745	Ogden x CNS
N44-92	Haberlandt x Ogden
N48-186	Volstate x CNS
N55-5931	Roanoke x D49-2491
N64-2451	(N55-5931 x N55-3818) x D56-1185
N70-1549	Dare x D65-6765
N70-2173	Hampton x Ransom
N72-3213	D67-B5 x N64-2451
N77-114	Essex x N70-2173
N77-179	N70-1549 x N72-3212
N77-907	N70-1549 x Centennial
N79-2077	Low 16:0 from recurrent selection
N84-507	N77-114 x N77-907
N85-578	N77-179 x Johnston
ND88-800	Maple Amber x Evans
ND(M)87-2263	McCall x PI 470.930
ND(M)88-621	M82-556 x M81-18
Northrup King S19-90	Pride B152 x Pella
Northrup King S20-20	Pride B152 x CM497

IDENTIFICATION OF PARENT STRAINS 1999

Strain	Parentage
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 S1474	Hark x Wayne
Northrup King S1492	Corsoy x Wayne
OAC 92-01	OAC Eclipse x Maple Glen
OAC 92-03	Maple Glen x Eclipse
ORC8805	A80-147002 x Pride B152
ORC9002	A81-151026 x Elgin
ORC9205	Conrad x RCAT Alliance
OT88-11	Maple Ridge x Lakota
OT90-9	Thompson 7803 x (BD22115-13) x McCall
Peterson 1677	Rampage x Corsoy(2)
Peterson PX20	Blend of 50% Wells : 50% P6122
Pioneer 1677	Rampage x Corsoy(2)
Pioneer 2981	Hark x (Corsoy x Calland)
Pioneer 5096-03D	Asgrow A3127 x PI 273.483
Pioneer 9061	Wells x Pioneer 1677
Pioneer 9181	Beeson 80 x 2981
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 9441	Williams x Essex
Pioneer 9442	Pioneer P9441 x Asgrow A3127
PS 42	Ablett
RCAT 9208	(Maple Presto x PI 317.334A) x Asgrow A3127
S 02-30	KG 60 x Bicentennial
S88-19561	Forrest(3) x PI 437.654
S92-2702	(PI 437.654 x Forrest)(F2) x Williams 82
SD(M)91-1574	L1-5 x Glenwood
Sigco KG20	McCall x 2S11
SS65-5702	Clark x [Scott(2) x Peking]
U91-2527	Sturdy x A86-204022
U93-3204	LN85-10234 x Asgrow A3205
U94-2229	Uphoff 3100 x Corsica
U94-2629	Parker x Uphoff 3100
U94-3403	Uphoff 3100 x ORC8805
U94-3412	Parker x Holt
UP1C2-14	S1 line intermated population
UP1C2-72	S1 line intermating population
UP1F3-30	G. Graef
UP1Fe-95-9	G. Graef
UP3YC1	Intermated population
Y3916F38	9061 x 9181
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	SENSITIVE
HC94-644	IA2021	OAC97-01	U97-2406	M92-105082
HC93-2356	IA2036	SD95-789	OAC98-02	ND95-931
M92-1645	SD96-152	SD(ND)95-1663	LAMBERT	M90-135046
A97-871009	SD96-1043	A97-771041	M92-281	
LN95-5414	HC93-868	IA3010	IA1006	
U97-2140	HC94-1065	A97-770031	U97-2340	
HC93-2690	HC95-155PR	A97-770051	TRAILL	
HC94-2729	HC95-259PR	HS96-3347	M91-188076	
HC95-261PR	K1410	CHARLESTON	GLACIER	
LN95-5910	U96-3106	M91-131051	PARKER	
Md95-5358	U97-2002	A96-591033	U97-3635	
A97-770012	SD96-170	U96-2208	LN95-6353	
M91-113037	M92-106016	U96-2236	HS93-4118	
M91-240082	HC94-168	OAC98-04	TRAILL4	
M92-1731	LN95-6446	M92-225124	M91-236030	
HC92-984	M90-217007	M92-227032	M91-196123	
LN95-872	HS96-3332	SD95-748	M92-542	
HC94-398	M90-184111	MACON	A96-591046	
HC94-399	ORC9702	ND95-1215	U96-2408	
LS94-2435	C1973	U96-2233	U97-3642	
IA1008	HS96-3326	MUSTANG	SD95-1520	
M90-166054	A96-494018	TROLL	SURGE	
C1963	A97-771039	McCALL	OT98-14	
U97-3114	U96-3103	M91-188039		
KS4694	SS93-2274	M93-118045		
HC94-2726	OT98-16	M91-163126		
HC94-2727	C1966	SD(ND)95-1664		
LS95-0709	U97-3229	SS94-10476		
U96-2416	HC93-1088	M91-134038		
HC94-96PR	SS93-1027	U97-2104		
LN95-5420	M91-234086	M92-154045		
LN95-5928	SD96-782	E95505		
HC94-2664	IA2038	M92-1571		

1999 DISEASE, SHATTERING, AND DESCRIPTIVE DATA

	Location	Tests Conducted By:	Tests	UT	PT
IA	Ames	W. Fehr	Emergence Score	I-III	
	Humboldt	W. Fehr	Fe Chlorosis	I-III	I-III
IL	Blomington	M. Schmidt,	SDS	III	
	Pontiac	J. Klein,		I,II	
	Ullin	& R. Whelan		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	0-IV
	Lafayette	J. Wilcox	Descriptive Code	00-IV	0-IV
MN	Yellow Medicine Co.	J.H. Orf	Fe Chlorosis	00-II	0-I
ND	Casselton	T. Helms	Fe Chlorosis	00-0	0
KS	Manhattan	W. Schapaugh, Jr.	Shattering Score	00-IV	0-IV

1999 UNIFORM AND PRELIMINARY TEST LOCATIONS

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	Alden	W. Fehr				X								
	Ames	W. Fehr			X	X	X			X	X	X		
	Crawfordsville	W. Fehr					X					X		
	Griswold	W. Fehr					X							
	Kanawha	W. Fehr			X									
	Rippey	W. Fehr				X								
	Sioux Rapids	W. Fehr			X					X	X			
IL	Belleville	M. Schmidt						X						X
	Dekalb	C. Nickell				X								
	Dewight	C. Nickell				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*		
	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
MAN	Morden	A. Sloan	X*											
MD	Queenstown	W. Kenworhty & P. Creegan					X	X						X
MI	Ingham Co.	J. Boyse			X	X*				X*	X*			
	Lenawee Co.	J. Boyse				X								
	Saginaw Co.	J. Boyse			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*				

1999 UNIFORM AND PRELIMINARY TEST LOCATIONS

Tests Conducted Location By:			Uniform Tests						Preliminary Tests				
			00	0	I	II	III	IV	0	I	II	III	IV
MO	Columbia	D. Sleper					X	X				X	X
	Portageville	G. Shannon						X					
NE	Beemer	G. Graef			X	X					X		
	Bryon	& L. Korte					X						
	Cotesfield	G. Graef				X					X		
	Falls City	& L. Korte					X						
	McCool Jct.	G. Graef				X						X*	
	Tekamah	& L. Korte					X					X	
NJ	Adelphia	J. Singer				X	X						
ND	Cassleton	T. Helms	X*	X					X				
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	X
	Wooster	R. Fioritto				X	X*						
ONT	Elora	I. Rajcan	X										
	Harrow	V. Poysa				X*					X*		
	Ottawa	E. Cober	X*	X*									
	Ridgetown	G. Ablett			X	X							
	Talbotville	I. Rajcan			X								
	Woodstock	I. Rajcan		X									
QUE	Saint Bruno	G. Tremblay	X*	X*					X*				
SD	Brookings	R. Scott		X	X	X			X	X	X		
	Watertown	R. Scott		X	X				X				
WI	Arlington	E. Oplinger		X	X	X							
X Location With Agronomic Data			8	9	14	22	23	16	6	6	10	10	9
X* Location With Seed Composition Data			4	4	4	5	5	3	3	3	5	4	3

Uniform Test 00, 1999

	Strain	Parentage	Previous Testing	Generation Composited	Unique Traits
1.	McCall (00)	(Acme x Chippewa) x Hark	24	F5	
2.	Glacier	McCall x Altona	3	F4	Rps6
3.	Traill (0)	M82-996 x Sigco KG20	4	F5	
4.	M92-154045	M87-330 x Agassiz	-	F5	Rps1a
5.	M93-118045	Agassiz x ND(M)87-2263	-	F4	Rps1a
6.	ND95-1215	M90-665 x ND88-800	I	F4	Rps6
7.	OAC 97-01	KG 20 x OAC 92-03	-	F5	
8.	OAC 98-02	S 02-30 x M87-170	-	F5	
9.	OAC 98-04	S 02-30 x M88-84	-	F5	
10.	OT98-14	Maple Glen x (Maple Glen x AC Proteus)	-	F5	High Pro.
11.	OT98-16	Maple Glen x (Maple Glen x AC Proteus)	-	F5	

UNIFORM TEST 00, 1999
DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	<u>Chlorosis</u> Score		<u>Shatter</u> Score Manhattan	<u>PR</u> Lafayette Race 7
		Casselton	Yellow Medicine		
McCall (00)	PGTIYYIEp	2.0	2.3	2.0	R
Glacier	PTBIYYIEp	1.7	2.7	4.0	R
Traill (0)	PTBSYYIEp	1.7	1.8	3.0	R
M92-154045	PGBDYYIEp	1.3	2.0	2.0	S
M93-118045	PGBDYYIEp	1.3	1.7	1.0	S
ND95-1215	PGTDYYIEp	2.7	2.5	1.0	S
OAC 97-01	PGTSYYIEp	1.0	2.0	1.0	H
OAC 98-02	PTB+TSYBrIEp	2.3	4.5	1.0	R
OAC 98-04	PTBSYBIIIEp	2.3	3.2	2.0	S
OT98-14	PTBDYYIEp	2.0	3.5	4.0	S
OT98-16	PTBDYBrIEp	1.7	3.0	5.0	S

UNIFORM TEST 00, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 7 bu/a	Rank 7 No.	Maturity 8 Date	Lodging 8 Score	Plant Height 8 In	Seed Size 7 g/100	Composition	
							Protein 4 %	Oil 4 %
McCall (00)	42.6	10	9/12	1.4	26	15.8	39.8	20.9
Glacier	48.0	5	7.4	1.4	28	18.1	42.1	20.2
Traill (0)	49.2	4	7.6	1.3	28	17.6	42.0	20.1
M92-154045	45.6	7	7.1	1.2	28	15.7	41.2	20.7
M93-118045	49.9	3	11.5	1.9	31	16.8	40.4	20.5
ND95-1215	44.0	8	7.1	1.7	29	16.7	39.4	21.3
OAC 97-01	42.1	11	0.9	1.4	26	20.4	40.9	20.1
OAC 98-02	50.6	2	17.4	1.4	33	18.4	41.0	20.4
OAC 98-04	54.9	1	14.3	1.1	27	20.5	39.7	20.8
OT98-14	47.7	6	6.9	1.1	27	18.4	43.5	19.2
OT98-16	43.5	9	1.9	1.1	25	19.2	42.9	20.0

112.5 Days After Planting

UNIFORM TEST 00, 1999

1998-1999 2-YEAR MEAN

No. of Tests Strain	Yield 14 bu/a	Rank 14 No.	Maturity 15 Date	Lodging 15 Score	Plant Height 15 In.	Seed Size 13 g/100	Composition	
							Protein 9 %	Oil 9 %
McCall (00)	43.9	4	9/13	1.2	25	16.1	40.1	20.9
Glacier	47.2	2	6.5	1.2	26	17.4	41.5	20.4
Traill (0)	49.8	1	7.9	1.2	27	17.7	41.8	20.3
ND95-1215	46.1	3	6.4	1.4	28	16.0	39.8	21.1

112.6 Days After Planting

UNIFORM TEST 00, 1999

YIELD (bu/a)

Strain	Mean 7 Tests	Morden Man.	Crook- ston* MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	Saint Bruno Que.
McCall (00)	42.6	81.3	37.4	24.7	41.3	38.0	50.3	36.8	25.6
Glacier	48.0	89.9	46.3	30.3	48.5	42.0	49.9	40.8	34.8
Traill (0)	49.2	90.8	50.4	33.3	45.1	41.9	54.6	44.4	34.0
M92-154045	45.6	83.2	29.9	25.9	41.8	37.9	53.0	40.2	37.5
M93-118045	49.9	83.2	28.0	40.0	42.6	39.3	58.3	46.5	39.2
ND95-1215	44.0	79.2	17.3	25.6	44.3	28.5	53.4	46.2	31.1
OAC 97-01	42.1	85.1	33.0	24.3	37.3	33.5	50.1	36.8	27.4
OAC 98-02	50.6	69.8	22.2	41.8	50.6	33.9	62.4	45.8	49.8
OAC 98-04	54.9	95.1	24.1	38.0	50.0	39.9	62.5	52.0	46.6
OT98-14	47.7	88.8		34.9	41.4	35.7	54.6	39.7	39.0
OT98-16	43.5	79.0	33.5	34.6	39.0	34.6	48.0	40.9	28.6
C.V. (%)		5.0	31.0	16.9	9.5	10.9	4.3	7.0	4.7
L.S.D. (5%)		5.9	16.2	9.1	7.1	6.8	2.8	3.0	2.6
Row Sp. (in.)		8	12	10	10	30	14	16	7
Rows/Plot		5	8	8	8	4	4	4	5
Reps		3	3	3	3	3	4	4	3

* Data not included in the mean.

UNIFORM TEST 00, 1999

YIELD RANK

Strain	Yield Rank	Morden Man.	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	Saint Bruno Que.
McCall (00)	10	8	3	10	9	6	8	11	11
Glacier	5	3	2	7	3	1	10	7	6
Traill (0)	4	2	1	6	4	2	4	5	7
M92-154045	7	6	6	8	7	5	7	8	5
M93-118045	3	7	7	2	6	4	3	2	3
ND95-1215	8	9	10	9	5	11	6	3	8
OAC 97-01	11	5	5	11	11	10	9	10	10
OAC 98-02	2	11	9	1	1	9	2	4	1
OAC 98-04	1	1	8	3	2	3	1	1	2
OT98-14	6	4		4	8	7	5	9	4
OT98-16	9	10	4	5	10	8	11	6	9

UNIFORM TEST 00, 1999

MATURITY (date)

Strain	Mean 8 Tests	Morden Man.	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	Saint Bruno Que.
McCall (00)	09/12	09/25	09/20	09/14	09/13	09/18	09/04	09/02	09/05
Glacier	7.4	9	9	8	11	6	6	1	9
Traill (0)	7.6	8	9	10	9	8	6	1	10
M92-154045	7.1	10	2	8	11	6	5	5	10
M93-118045	11.5	12	11	12	13	12	7	11	14
ND95-1215	7.1	7	14	0	8	12	6	-1	11
OAC 97-01	0.9	0	3	0	1	-2	1	2	2
OAC 98-02	17.4	13	16	20	20	18	12	15	25
OAC 98-04	14.3	11	19	16	17	14	10	10	17
OT98-14	6.9	9		12	8	7	4	4	4
OT98-16	1.9	2	5	6	2	1	-1	0	0
Date Planted	5/23	05/19	05/27	05/27	05/28	05/29	05/21	05/17	05/17
Days to Mature	113	129	116	110	108	112	106	108	111

UNIFORM TEST 00, 1999

LODGING (score)

Strain	Mean 8 Tests	Morden Man.	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	Saint Bruno Que.
McCall (00)	1.4	1.0	1.0	1.0	1.3	1.0	1.5	1.5	3.0
Glacier	1.4	1.3	1.0	1.0	2.0	1.0	1.0	1.1	2.7
Traill (0)	1.3	1.0	1.0	1.0	1.7	1.0	1.0	1.5	2.0
M92-154045	1.2	1.0	1.0	1.0	1.3	1.0	1.0	1.1	2.0
M93-118045	1.9	2.7	1.0	1.3	2.3	1.0	1.5	2.1	3.3
ND95-1215	1.7	1.3	1.0	1.7	2.0	1.0	1.0	2.5	3.0
OAC 97-01	1.4	1.0	1.0	1.7	1.3	1.0	1.5	1.4	2.0
OAC 98-02	1.4	1.7	1.0	2.0	2.0	1.0	1.0	1.0	1.7
OAC 98-04	1.1	1.0	1.0	1.0	1.3	1.0	1.0	1.0	1.3
OT98-14	1.1	1.0		1.0	1.0	1.0	1.0	1.0	1.7
OT98-16	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.7

UNIFORM TEST 00, 1999

PLANT HEIGHT (inches)

Strain	Mean 8 Tests	Morden Man.	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	Saint Bruno Que.
McCall (00)	26	33	20	18	31	29	31	25	24
Glacier	28	35	21	21	34	26	31	26	30
Traill (0)	28	35	25	20	33	27	30	26	30
M92-154045	28	34	19	21	37	26	31	29	31
M93-118045	31	37	23	22	38	26	36	34	34
ND95-1215	29	34	25	19	35	26	33	28	30
OAC 97-01	26	33	20	19	31	27	31	25	26
OAC 98-02	33	36	23	31	42	30	36	32	37
OAC 98-04	27	33	18	25	33	25	29	25	31
OT98-14	27	33		23	31	23	29	24	29
OT98-16	25	29	17	21	30	25	28	22	24

UNIFORM TEST 00, 1999

SEED SIZE (g/100)

Strain	Mean 7 Tests	Morden Man.	Crook- ston MN	Moor- head MN	Shelly MN	Cassel- ton ND	Elora Ont.	Ottawa Ont.	Saint Bruno Que.
McCall (00)	15.8		13.9	15.1	17.0	16.4	16.9	15.0	16.2
Glacier	18.1		17.5	19.2	17.9	17.4	18.3	18.3	18.0
Traill (0)	17.6		17.9	17.4	17.0	16.9	19.1	17.6	17.4
M92-154045	15.7		14.2	15.8	14.7	15.6	15.9	16.5	17.2
M93-118045	16.8		15.8	17.0	16.9	17.2	17.1	15.3	18.6
ND95-1215	16.7		21.1	16.1	16.7	14.7	17.7	14.8	15.9
OAC 97-01	20.4		16.6	21.4	17.8	21.1	21.8	22.6	21.2
OAC 98-02	18.4		16.5	18.2	17.8	17.7	20.0	17.8	20.6
OAC 98-04	20.5		20.4	20.3	20.1	18.2	22.6	20.5	21.2
OT98-14	18.4			20.4	17.8	17.4	19.7	16.6	18.6
OT98-16	19.2		20.6	19.4	19.4	19.1	18.7	18.7	18.4

UNIFORM TEST 00, 1999

PROTEIN (%)

Strain	Mean 4 Tests	Morden Man.	Casselton ND	Ottawa Ont.	Saint Bruno Que.
McCall (00)	39.8	41.3	39.7	39.8	38.4
Glacier	42.1	42.9	41.4	42.0	42.0
Traill (0)	42.0	42.9	41.3	42.1	41.5
M92-154045	41.2	41.9	41.0	41.4	40.7
M93-118045	40.4	40.1	40.7	41.0	39.9
ND95-1215	39.4	39.8	39.8	39.1	39.1
OAC 97-01	40.9	41.3	39.1	42.0	41.4
OAC 98-02	41.0	40.6	41.7	41.4	40.5
OAC 98-04	39.7	39.2	39.2	39.6	40.8
OT98-14	43.5	45.2	38.4	46.1	44.5
OT98-16	42.9	42.8	43.9	42.9	41.8

UNIFORM TEST 00, 1998

OIL (%)

Strain	Mean 4 Tests	Morden Man.	Casselton ND	Ottawa Ont.	Saint Bruno Que.
McCall (00)	20.9	19.7	19.6	21.5	22.7
Glacier	20.2	19.0	18.8	21.2	21.8
Traill (0)	20.1	19.1	18.5	20.9	21.9
M92-154045	20.7	19.6	19.7	21.3	22.4
M93-118045	20.5	19.8	18.6	21.5	22.3
ND95-1215	21.3	20.1	20.1	22.2	22.9
OAC 97-01	20.1	19.6	19.0	20.7	21.3
OAC 98-02	20.4	19.7	18.6	21.3	22.1
OAC 98-04	20.8	20.3	18.8	22.1	21.8
OT98-14	19.2	18.5	19.5	18.5	20.3
OT98-16	20.0	20.0	17.1	20.9	22.0

Uniform Test 0, 1999

	Strain	Parentage	Previous Testing	Generation Composited	Unique Traits
1.	Lambert (0)	M75-274 x M76-151	11	F5	Rps1
2.	Parker (I)	A79-136012 x Dawson	8	F5	Rps1
3.	Surge	A86-204022 x Kato	-	F5	
4.	Traill (E)	M82-996 x Sigco KG20	3	F5	
5.	Traill4 (Rps6)	Traill(4) x Glacier	-	F5	Rps6
6.	M90-135046	Ozzie x OT88-11	2	F5	Rps1
7.	M90-217007	M84-93 x Archer	2	F5	Rps1k, BSR
8.	M91-131051	Harmony x Agassiz	PT 0	F5	Rps1a
9.	M91-134038	Harmony x Ozzie	PT 0	F5	Rps1a
10.	M91-196123	M87-1247 x Kato	PT 0	F5	Rps1a
11.	M91-236030	Harmony x Hardin 91	PT 0	F5	Rps1k
12.	M92-281	Sturdy x A17	1	F5	Rps1
13.	M92-542	M84-855 x Bert	3	F4	Rps1
14.	M92-1571	Jack x Alpha	2	F5	SCN
15.	M92-105082	Agassiz x [Sturdy (4) x Elgin 87]	PT 0	F4	Rps1k
16.	ND95-931	ND88-800 x Pioneer 9061	PT 0	F4	Rps6
17.	SD95-1520	Glenwood x Parker	PT 0	F5	

UNIFORM TEST 0, 1999

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	<u>Shattering</u>	<u>Chlorosis</u>		<u>PR</u>
		Score Manhattan	Casselton	Yellow Medicine	Lafayette Race 7
Lambert (0)	PGBSYBflEp	2.0	1.0	2.3	S
Parker (I)	WGBDYBflEp	1.0	1.3	2.8	H
Surge	PGBSYIbIep	1.0	1.3	3.2	R
Traill (E)	PTBSYYIEp	4.0	1.3	1.8	R
Traill4 (Rps6)	PTBSYYIEp	3.0		2.3	H
M90-135046	PTBDYYIEp	1.0	1.0	2.3	S
M90-217007	PGTDYBflEp	1.0	1.0	1.3	R
M91-131051	P+WGBDYBflEp	1.0	1.3	2.7	S
M91-134038	PG+TBDYBflEp	1.0	1.3	1.7	H
M91-196123	PTBDYBflEp	2.0	1.7	3.3	H
M91-236030	WTBIYBrIep	3.0	2.3	3.0	R
M92-281	PGBDYIbIep	4.0	1.3	2.5	R
M92-542	PGBDYYYIEp	4.0	1.7	3.0	S
M92-1571	WTTSYYIEp	3.0	1.0	2.2	R
M92-105082	PGBDYIbIep	2.0	1.7	2.5	S
ND95-931	PGBDYBflEp	4.0	1.7	2.2	S
SD95-1520	PGBSYIbIep	1.0	1.3	2.3	S

UNIFORM TEST 0, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 9 bu/a	Rank 9 No.	Maturity 9 Date	Lodging 9 Score	Plant Height 9 In.	Seed Size 9 g/100	Composition	
							Protein 4 %	Oil 4 %
Lambert (0)	47.9	7	9/16	1.5	32	16.5	41.6	21.1
Parker (I)	52.1	2	8.7	2.5	39	18.1	41.0	20.6
Surge	53.2	1	2.8	1.5	33	20.2	42.1	20.7
Traill (E)	42.8	17	-9.3	1.7	29	15.5	40.6	20.2
Traill4 (Rps6)	45.7	13	-11.0	1.7	30	16.7	42.1	19.9
M90-135046	43.4	16	-5.2	1.7	34	14.2	43.4	20.0
M90-217007	46.6	12	-3.6	1.1	32	15.4	40.9	21.1
M91-131051	47.4	9	-3.8	1.5	31	13.6	41.4	20.7
M91-134038	44.6	15	1.1	1.4	33	14.5	40.9	20.9
M91-196123	46.7	11	0.2	1.6	33	19.3	42.9	19.6
M91-236030	47.5	8	1.2	1.4	35	14.1	39.1	21.8
M92-281	48.2	6	3.4	1.8	35	15.9	42.1	19.9
M92-542	50.1	3	3.8	1.4	36	19.9	41.1	20.8
M92-1571	47.3	10	1.4	1.7	33	14.1	42.7	19.9
M92-105082	50.0	4	1.6	1.5	33	17.5	42.6	20.3
ND95-931	44.8	14	-4.8	1.5	33	17.2	40.8	21.5
SD95-1520	49.1	5	0.7	1.7	36	19.8	41.6	20.3

123.4 Days After Planting

UNIFORM TEST 0, 1999

1998-1999 2-YEAR MEAN

No. of Tests Strain	Yield 18 bu/a	Rank 18 No.	Maturity 18 Date	Lodging 18 Score	Plant Height 18 In.	Seed Size 17 g/100	Composition	
							Protein 9 %	Oil 9 %
Lambert (0)	50.3	4	9/16	1.5	31	17.1	41.3	21.4
Parker (I)	55.4	1	6.8	2.3	37	18.5	41.0	20.7
Traill (E)	43.5	8	-7.9	1.8	28	16.5	41.3	20.3
M90-135046	44.9	7	-4.7	1.7	32	15.0	43.2	20.1
M90-217007	47.2	6	-3.3	1.2	31	15.9	40.7	21.1
M92-281	52.3	3	3.0	1.9	34	16.5	42.0	20.0
M92-542	52.4	2	2.4	1.6	34	19.9	40.9	20.8
M92-1571	49.5	5	1.0	1.6	32	14.5	42.7	19.8

123.2 Days After Planting

1997-1999 3-YEAR MEAN

No. of Tests Strain	26	26	26	26	26	24	14	14
Lambert (0)	47.0	3	9/15	1.5	30	16.9	41.0	21.0
Parker (I)	52.6	1	7.6	2.2	36	18.4	40.9	20.4
Traill (E)	40.9	7	-7.4	1.7	27	16.6	41.7	19.8
M90-135046	42.7	6	-4.3	1.7	32	14.9	42.9	19.6
M90-217007	44.9	5	-3.1	1.2	31	15.7	40.4	20.9
M92-542	49.3	2	2.7	1.5	33	19.6	40.8	20.5
M92-1571	46.9	4	1.2	1.5	31	14.6	42.3	19.8

123.6 Days After Planting

1996-1999 4-YEAR MEAN

No. of Tests Strain	34	34	33	34	34	32	19	19
Lambert (0)	47.1	3	9/17	1.5	31	16.8	41.6	21.1
Parker (I)	51.2	1	7.5	2.4	37	18.1	41.2	20.4
M92-542	48.6	2	2.6	1.6	34	19.5	41.3	20.6

122.6 Days After Planting

UNIFORM TEST 0, 1999

YIELD (bu/a)

Strain	Mean 9 Tests	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Lambert (0)	47.9	47.1	56.6	39.7	53.6
Parker (I)	52.1	54.2	67.7	43.2	52.9
Surge	53.2	45.2	65.6	48.7	53.8
Traill (E)	42.8	40.7	51.4	39.7	47.3
Traill4 (Rps6)	45.7	44.5	50.9		48.4
M90-135046	43.4	47.7	51.3	39.0	48.3
M90-217007	46.6	48.1	57.6	43.0	47.9
M91-131051	47.4	44.1	64.7	41.6	49.0
M91-134038	44.6	47.7	53.9	33.2	45.8
M91-196123	46.7	46.5	52.2	43.5	51.5
M91-236030	47.5	51.7	59.5	36.0	48.8
M92-281	48.2	49.5	58.7	43.9	43.1
M92-542	50.1	52.4	67.5	45.1	52.8
M92-1571	47.3	52.8	59.8	41.6	48.8
M92-105082	50.0	53.1	64.7	43.0	48.7
ND95-931	44.8	43.5	59.3	43.7	47.0
SD95-1520	49.1	51.0	61.8	43.4	53.3
C.V. (%)		10.3	8.5	7.7	6.0
L.S.D. (5%)		8.3	8.4	5.4	3.5
Row Sp. (In.)		10	10	30	16
Rows/Plot		10	10	4	4
Reps		3	3	3	4

UNIFORM TEST 0, 1999

YIELD RANK

Strain	Yield Rank	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Lambert (0)	7	11	12	12	2
Parker (I)	2	1	1	7	4
Surge	1	13	3	1	1
Traill (E)	17	17	15	12	14
Traill4 (Rps6)	13	14	17		11
M90-135046	16	9	16	14	12
M90-217007	12	8	11	8	13
M91-131051	9	15	4	10	7
M91-134038	15	9	13	16	16
M91-196123	11	12	14	5	6
M91-236030	8	5	8	15	9
M92-281	6	7	10	3	17
M92-542	3	4	2	2	5
M92-1571	10	3	7	10	8
M92-105082	4	2	4	8	10
ND95-931	14	16	9	4	15
SD95-1520	5	6	6	6	3

UNIFORM TEST 0, 1999

YIELD (bu/a)

Strain	Wood-stock Ont.	Saint- Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Lambert (0)	61.0	43.7	33.7	39.0	56.7
Parker (I)	63.8	48.9	43.2	41.6	53.7
Surge	64.1	53.3	44.5	40.6	62.9
Traill (E)	49.7	33.7	33.2	38.9	50.8
Traill4 (Rps6)	49.8	34.9			
M90-135046	52.1	35.2	31.1	35.3	50.2
M90-217007	57.6	42.4	32.2	36.9	53.9
M91-131051	51.5	41.0	36.6	39.2	59.0
M91-134038	51.6	40.3	35.5	41.1	52.3
M91-196123	59.7	43.1	37.2	34.1	52.7
M91-236030	58.9	39.4	34.7	40.9	57.2
M92-281	54.9	48.3	39.4	39.9	56.5
M92-542	60.1	42.6	39.3	39.1	51.9
M92-1571	50.1	48.0	33.3	35.3	55.8
M92-105082	60.2	46.2	39.0	34.5	60.4
ND95-931	52.2	41.9	31.2	36.4	47.6
SD95-1520	59.4	49.4	29.1	37.2	57.6
C.V. (%)	7.0	6.3	11.4	9.4	6.7
L.S.D. (5%)	5.5	4.2	5.6	4.9	3.9
Row Sp. (In.)	14	7	30	30	15
Rows/Plot	4	5	4	4	6
Reps	3	3	3	3	3

UNIFORM TEST 0, 1999

YIELD RANK

Strain	Wood-stock Ont.	Saint- Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Lambert (0)	3	7	10	8	6
Parker (I)	2	3	2	1	10
Surge	1	1	1	4	1
Traill (E)	17	17	12	9	14
Traill4 (Rps6)	16	16			
M90-135046	12	15	15	14	15
M90-217007	9	10	13	11	9
M91-131051	14	12	7	6	3
M91-134038	13	13	8	2	12
M91-196123	6	8	6	16	11
M91-236030	8	14	9	3	5
M92-281	10	4	3	5	7
M92-542	5	9	4	7	13
M92-1571	15	5	11	13	8
M92-105082	4	6	5	15	2
ND95-931	11	11	14	12	16
SD95-1520	7	2	16	10	4

UNIFORM TEST 0, 1999

MATURITY (date)

Strain	Mean 9 Tests	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Lambert (0)	9/16	09/20	09/20	10/03	09/14
Parker (I)	8.7	8	7	5	12
Surge	2.8	1	0	2	5
Traill (E)	-9.3	-7	-14	-9	-9
Traill4 (Rps6)	-11.0	-7	-13		-10
M90-135046	-5.2	-6	-9	-7	-1
M90-217007	-3.6	-3	-6	-5	-1
M91-131051	-3.8	-4	-8	-1	-1
M91-134038	1.1	3	1	-1	2
M91-196123	0.2	0	-5	2	4
M91-236030	1.2	1	-1	3	3
M92-281	3.4	3	-1	2	6
M92-542	3.8	4	0	4	4
M92-1571	1.4	2	1	-2	5
M92-105082	1.6	4	0	2	5
ND95-931	-4.8	-4	-8	-4	-2
SD95-1520	0.7	2	-3	-1	4
Date Planted	5/15	05/20	05/22	05/29	05/17
Days to Mature	123	123	121	127	120

UNIFORM TEST 0, 1999

LODGING (score)

Strain	Mean 9 Tests	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Lambert (0)	1.5	1.7	2.0	1.0	1.9
Parker (I)	2.5	2.0	2.7	1.0	3.0
Surge	1.5	1.0	2.0	1.0	1.2
Traill (E)	1.7	1.7	2.0	1.0	1.8
Traill4 (Rps6)	1.7	1.3	2.0		1.4
M90-135046	1.7	1.3	1.7	1.0	1.6
M90-217007	1.1	1.0	1.0	1.0	1.0
M91-131051	1.5	1.3	2.0	1.0	1.3
M91-134038	1.4	1.0	1.0	1.0	1.8
M91-196123	1.6	1.3	2.3	1.0	0.9
M91-236030	1.4	1.0	2.0	1.0	1.4
M92-281	1.8	1.3	2.0	1.0	1.7
M92-542	1.4	1.3	2.0	1.0	1.5
M92-1571	1.7	1.3	2.0	1.0	1.2
M92-105082	1.5	1.0	2.0	1.0	1.2
ND95-931	1.5	1.0	2.0	1.0	1.3
SD95-1520	1.7	1.3	1.7	1.0	1.5

UNIFORM TEST 0, 1999

MATURITY (date)

Strain	Wood-stock Ont.	Saint-Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Lambert (0)	09/10	10/02	09/05	09/05	09/08
Parker (I)	10	3	11	15	7
Surge	7	0	2	7	1
Traill (E)	-8	-18	-6	-4	-9
Traill4 (Rps6)	-9	-16			
M90-135046	-2	-13	-1	-4	-4
M90-217007	-2	-13	3	-2	-3
M91-131051	-3	-4	-8	-2	-3
M91-134038	4	2	-3	0	2
M91-196123	3	-8	-2	7	1
M91-236030	3	-3	-1	5	1
M92-281	5	-2	9	7	2
M92-542	7	-3	7	7	4
M92-1571	3	-5	-1	9	1
M92-105082	5	-3	0	-1	2
ND95-931	-2	-11	-6	-2	-4
SD95-1520	3	-2	-1	5	-1
Date Planted	05/19	05/17	05/02	05/13	05/04
Days to Mature	114	138	126	115	127

UNIFORM TEST 0, 1999

LODGING (score)

Strain	Wood-stock Ont.	Saint-Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Lambert (0)	2.0	1.0	1.0	1.0	2.0
Parker (I)	2.5	2.7	3.0	3.0	3.0
Surge	2.0	1.0	1.0	2.0	2.0
Traill (E)	2.0	1.7	1.0	2.0	2.0
Traill4 (Rps6)	2.0	1.7			
M90-135046	2.0	1.7	2.0	2.0	2.0
M90-217007	1.5	1.0	1.0	1.0	1.0
M91-131051	2.0	1.3	1.0	2.0	2.0
M91-134038	2.0	1.7	1.0	1.0	2.0
M91-196123	2.0	1.3	2.0	2.0	2.0
M91-236030	1.5	1.3	2.0	1.0	1.0
M92-281	2.0	1.3	2.0	2.0	3.0
M92-542	2.0	1.0	1.0	1.0	2.0
M92-1571	2.0	1.7	2.0	2.0	2.0
M92-105082	1.5	1.7	2.0	1.0	2.0
ND95-931	1.5	1.7	2.0	1.0	2.0
SD95-1520	2.0	1.7	2.0	2.0	2.0

UNIFORM TEST 0, 1999

PLANT HEIGHT (inches)

Strain	Mean 9 Tests	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Lambert (0)	32	34	36	30	36
Parker (I)	39	39	43	35	40
Surge	33	38	38	27	33
Traill (E)	29	31	30	27	31
Traill4 (Rps6)	30	32	32		30
M90-135046	34	36	36	29	36
M90-217007	32	35	36	28	36
M91-131051	31	31	35	27	33
M91-134038	33	36	33	29	35
M91-196123	33	32	36	31	36
M91-236030	35	38	39	28	38
M92-281	35	33	40	32	36
M92-542	36	39	39	31	40
M92-1571	33	35	36	29	38
M92-105082	33	33	38	28	37
ND95-931	33	34	37	29	34
SD95-1520	36	43	25	33	38

UNIFORM TEST 0, 1999

SEED SIZE (g/100)

Strain	Mean 9 Tests	Morris MN	Rose- mount MN	Cassel- ton ND	Ottawa Ont.
Lambert (0)	16.5	17.3	18.7	16.9	17.0
Parker (I)	18.1	18.2	18.4	18.2	17.7
Surge	20.2	21.0	21.6	21.2	18.8
Traill (E)	15.5	15.6	15.7	16.8	16.6
Traill4 (Rps6)	16.7	16.1	15.4		16.8
M90-135046	14.2	14.4	13.8	15.8	14.8
M90-217007	15.4	15.1	16.4	16.0	14.7
M91-131051	13.6	14.0	14.2	13.6	13.4
M91-134038	14.5	14.0	14.9	14.0	15.1
M91-196123	19.3	20.3	19.5	19.2	18.7
M91-236030	14.1	13.2	14.3	13.8	14.7
M92-281	15.9	16.4	17.2	16.6	15.0
M92-542	19.9	21.4	21.9	20.4	19.3
M92-1571	14.1	14.5	14.5	14.1	14.2
M92-105082	17.5	19.7	18.2	21.6	16.2
ND95-931	17.2	17.0	18.2	21.5	17.4
SD95-1520	19.8	19.9	20.3	23.0	18.7

UNIFORM TEST 0, 1999

PLANT HEIGHT (inches)

Strain	Wood-stock Ont.	Saint-Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Lambert (0)	33	33	28	30	31
Parker (I)	40	39	39	39	34
Surge	33	32	30	35	32
Traill (E)	29	27	28	30	27
Traill4 (Rps6)	28	28			
M90-135046	34	34	32	33	33
M90-217007	33	33	26	33	31
M91-131051	31	30	28	31	30
M91-134038	35	35	30	31	32
M91-196123	35	33	29	31	32
M91-236030	39	35	31	35	33
M92-281	34	36	35	36	32
M92-542	38	34	35	32	35
M92-1571	35	35	29	31	32
M92-105082	39	34	29	30	32
ND95-931	32	34	32	33	31
SD95-1520	39	37	34	37	34

UNIFORM TEST 0, 1999

SEED SIZE (g/100)

Strain	Wood-stock Ont.	Saint-Bruno Que.	Brookings SD	Watertown SD	Arlington WI
Lambert (0)	18.4	19.2	12.9	14.4	14.0
Parker (I)	21.2	19.8	17.3	15.4	16.8
Surge	22.3	22.9	19.1	16.7	18.1
Traill (E)	17.5	17.1	12.8	13.6	13.7
Traill4 (Rps6)	18.1	17.2			
M90-135046	16.5	16.1	11.9	11.4	12.9
M90-217007	16.1	16.5	15.5	13.7	14.3
M91-131051	17.5	15.3	11.9	10.6	11.5
M91-134038	16.3	16.1	13.6	13.0	13.6
M91-196123	23.2	21.9	17.1	16.2	17.2
M91-236030	17.1	16.3	12.9	12.0	12.3
M92-281	17.4	18.6	13.5	14.0	14.5
M92-542	22.1	22.1	19.1	15.2	17.9
M92-1571	16.2	15.3	13.2	12.3	12.7
M92-105082	18.5	18.6	16.4	12.5	15.9
ND95-931	17.7	20.3	15.3	13.2	14.3
SD95-1520	22.0	21.2	18.3	17.3	17.4

UNIFORM TEST 0, 1999

PROTEIN (%)

Strain	Mean 4 Tests	Morris MN	Rosemount MN	Ottawa Ont.	Saint Bruno Man.
Lambert (0)	41.6	40.4	42.8	41.5	41.7
Parker (I)	41.0	41.3	40.4	42.2	40.3
Surge	42.1	42.0	42.2	42.1	42.3
Traill (E)	40.6	36.3	42.2	42.6	41.2
Traill4 (Rps6)	42.1	42.8	42.4	41.9	41.2
M90-135046	43.4	42.6	43.3	44.2	43.3
M90-217007	40.9	40.3	41.7	41.2	40.5
M91-131051	41.4	40.8	41.6	42.1	41.1
M91-134038	40.9	40.7	41.0	40.9	40.9
M91-196123	42.9	42.5	43.7	42.4	43.1
M91-236030	39.1	38.2	39.5	39.4	39.4
M92-281	42.1	41.8	41.9	43.0	41.6
M92-542	41.1	41.4	41.2	41.9	40.0
M92-1571	42.7	42.5	41.8	43.1	43.4
M92-105082	42.6	42.9	42.3	42.4	42.6
ND95-931	40.8	40.2	41.8	40.7	40.5
SD95-1520	41.6	41.1	42.1	41.7	41.3

UNIFORM TEST 0, 1999

OIL (%)

Strain	Mean 4 Tests	Morris MN	Rosemount MN	Ottawa Ont.	Saint Bruno Man.
Lambert (0)	21.1	19.2	19.5	22.4	23.2
Parker (I)	20.6	19.9	19.3	21.1	22.1
Surge	20.7	19.0	19.7	21.9	22.3
Traill (E)	20.2	18.8	19.2	20.8	22.1
Traill4 (Rps6)	19.9	18.4	18.6	21.0	21.8
M90-135046	20.0	19.4	19.0	20.3	21.4
M90-217007	21.1	20.5	19.5	21.6	22.6
M91-131051	20.7	19.9	19.7	20.9	22.3
M91-134038	20.9	19.6	19.5	22.0	22.5
M91-196123	19.6	18.4	18.2	21.0	20.7
M91-236030	21.8	20.7	20.0	22.9	23.7
M92-281	19.9	18.7	19.0	20.6	21.3
M92-542	20.8	19.6	19.6	21.3	22.5
M92-1571	19.9	18.1	19.1	21.1	21.1
M92-105082	20.3	19.2	19.5	21.1	21.4
ND95-931	21.5	20.6	20.2	22.2	23.0
SD95-1520	20.3	19.4	19.5	21.0	21.5

Preliminary Test 0, 1999

	Strain	Parentage	Generation Composited	Unique Traits
1.	Lambert (0)	M75-274 x M76-151	F5	Rps1
2.	Parker (I)	A79-136012 x Dawson	F5	Rps1
3.	Surge	A86-204022 x Kato	F5	
4.	Trall (E)	M82-996 x Sigco KG20	F5	
5.	M92-155010	Agassiz x Glacier	F5	Rps1a
6.	M92-160047	ND(M)88-621 x Maple Glen	F5	Rps1a
7.	M92-179009	Parker x Pioneer 5096-03D	F5	Rps1a
8.	M92-179024	Parker x Pioneer 5096-03D	F5	Rps1a
9.	M92-185003	Archer a Glacier	F5	Rps1k, Rps6
10.	M92-187018	M88-523 x Lambert	F5	Rps1k
11.	M92-187022	M88-523 x Lambert	F5	Rps1k
12.	M92-195102	IA2008 x M87-346	F5	Rps1a
13.	M92-285024	Sturdy x Evans	F5	Rps1a
14.	M93-142040	Kasota x Kato	F4	Rps1a
15.	ND95-958	ND88-800 x Pioneer 9061	F4	Rps6
16.	ND95-6296	ND88-800 x Pioneer 9091	F5	Rps6
17.	ND95-6339	ND88-800 x Pioneer 9091	F5	Rps6
18.	ND95-6634	Alpha x OT90-9	F5	SCN
19.	ND96-1006	Glacier x Council	F4	Rps6
20.	ND96-1593	ND88-800 x Council	F5	Rps6
21.	ND96-8929	ND88-800 x Council	F5	Rps6
22.	ND96-8994	Glacier x Council	F4	Rps6
23.	ND96-8811	ND88-800 x Council	F5	Rps6
24.	ND96-9188	Glacier x Council	F4	Rps6
25.	OAC 97-06	M87-330 x OAC 92-01	F5	
26.	OAC 98-06	Y3916F38 x M84-916	F5	
27.	ORC 9801	RCAT 9201 x Pioneer 9273	F5	
28.	ORC 9802	RCAT 9208 x Blackjack 21	F5	
29.	ORC 9803	PS42 x Northrup King S20-20	F5	
30.	OT96-15	(Maple Arrow x PI 361.088B)4 x Maple Glen	F5	
31.	OT96-25	(Maple Arrow x PI 361.088B)2 x Maple Glen(4) x Maple Donovan	F5	
32.	OT98-1	(OR87-8 x AC Proteus)3 x (OT87-8 x KenFeng)	F5	
33.	OT98-7	(AC Proteus x Maple Glen)2 x Maple Glen	F5	
34.	SD96-16	IA2008 x Ozzie	F5	
35.	SD96-33	IA2008 x Hendricks	F5	
36.	SD96-367	Evans x Vinton 81	F5	Tofu
37.	SD96-702	ORC9002 x Ozzie	F5	
38.	SD96-1659	Kato x Hendricks	F5	
39.	SD96-1712	Kato x Hendricks	F5	
40.	SD96-2156	Parker x SD(M)91-1574	F5	
41.	SD96-2286	Evans x Hendricks	F5	
42.	SD96-DG5	Dawson x Glenwood	F5	
43.	SD96-LS14	Lambert x Simpson	F4	

PRELIMINARY TEST 0, 1999

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score		Shattering Score Manhattan	PR Lafayette Race 7
		Casselton	Yellow Medicine		
Lambert (0)	PGBSYBfleP	1.3	2.3	1.0	S
Parker (I)	WGBDYBfleP	1.7	2.8	1.0	H
Surge	PGBSYBfleP	1.0	3.2	2.0	R
Traill (E)	PTBSYYIEp	1.3	1.8	4.0	R
M92-155010	PGTDYBfleP	1.3	1.7	4.0	S
M92-160047	P+WGBDYBfleH	2.7	3.0	2.0	S
M92-179009	PGBDYYIEp	1.0	2.3	1.0	S
M92-179024	PGBDYYIEp	1.7	3.3	1.0	S
M92-185003	PGTDYBfleP	1.3	2.2	3.0	R
M92-187018	P+WGBIYBfleP	1.7	2.3	2.0	R
M92-187022	WGBSYBfleP	1.7	2.7	1.0	S
M92-195102	P+WG+TBDYHlep	2.0	2.5	4.0	R
M92-285024	PGBSYBfleP	1.3	2.3	3.0	S
M93-142040	P+WTBDYBrllep	1.7	2.2	3.0	R
ND95-958	WGBDYYIEp	2.0	2.7	3.0	S
ND95-6296	P+WGTIYYIEp	1.7	3.2	5.0	S
ND95-6339	WGBDYBfleP	2.3	2.2	4.0	H
ND95-6634	PGBDYBfleP	1.7	3.2	4.0	S
ND96-1006	PG+TBDYYYIEp	1.3	2.0	5.0	S
ND96-1593	WGBDYYIEp	2.3	2.0	2.0	S
ND96-8929	PGBDYYIEp	1.0	1.7	4.0	H
ND96-8994	PGBDYYIEp	2.7	1.7	4.0	H
ND96-8811	PGBDYYIH	1.0	1.8	3.0	R
ND96-9188	PGBDYYIEp	1.3	3.5	3.0	S
OAC 97-06	PGBSYBfleP	2.0	2.7	2.0	R
OAC 98-06	PTBIYYIEp	2.0	4.0	1.0	R
ORC 9801	PTBSYBfleH	1.3	3.5	4.0	S
ORC 9802	PTB+TDYBfleP	1.7	4.5	3.0	S
ORC 9803	PTBDYYIEp	2.3	1.7	1.0	R
OT96-15	PGBBSYBfleP	1.7	2.2	5.0	S
OT96-25	PTSYYIEp	2.7	2.2	4.0	H
OT98-1	WTBSYYIEp	1.3	2.2	3.0	S
OT98-7	PTBDYYIEp	2.3	4.0	3.0	S
SD96-16	P+WGTDYYIEp	1.3	1.7	4.0	S
SD96-33	WGTDYBfleP	1.0	1.5	5.0	S
SD96-367	WGBDYYIEp	1.3	3.0	2.0	S
SD96-702	PGBDYBfleP	1.0	2.2	3.0	S
SD96-1659	PTBDYYIEp	1.3	3.0	2.0	R
SD96-1712	PGBIYBfleP	1.0	2.5	2.0	S
SD96-2156	WTBDYBfleP	1.0	3.3	1.0	R
SD96-2286	WGBDYYIEp	1.3	2.0	1.0	S
SD96-DG5	PGBDYHIEp	1.0	2.3	2.0	S
SD96-LS14	PGBDYBfleH	1.0	2.7	2.0	S

PRELIMINARY TEST 0, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 6 bu/a	Rank 6 No.	Maturity 6 Date	Lodging 6 Score	Plant Height 6 In.	Seed Size 6 g/100	Composition	
							Protein 3 %	Oil 3 %
Lambert (0)	42.5	24	9/21	1.5	36	16.1	40.9	21.1
Parker (I)	46.4	5	7.3	2.3	41	17.2	40.1	20.2
Surge	48.8	1	1.8	1.4	34	19.0	41.9	20.7
Trail (E)	37.2	39	-8.3	1.7	30	15.3	41.9	19.7
M92-155010	40.3	35	-5.2	1.5	31	16.4	41.7	20.0
M92-160047	43.8	20	2.5	1.8	37	15.3	39.2	21.0
M92-179009	45.4	9	0.8	1.4	34	16.8	39.6	21.1
M92-179024	46.7	4	-1.5	1.8	36	14.8	39.8	20.5
M92-185003	41.5	34	-5.0	1.8	33	16.3	41.1	20.6
M92-187018	44.3	14	-1.0	1.9	37	15.4	41.4	20.8
M92-187022	44.2	15	-0.7	1.6	36	15.4	41.8	20.9
M92-195102	42.5	24	-0.3	1.8	35	14.8	40.0	20.9
M92-285024	45.7	7	1.3	2.2	42	16.0	40.0	20.2
M93-142040	45.4	9	-0.2	1.2	38	17.2	43.1	19.7
ND95-958	42.5	24	-3.0	1.5	35	15.8	39.7	21.8
ND95-6296	44.2	15	-3.7	1.3	34	17.4	40.9	20.3
ND95-6339	42.9	23	-3.7	1.6	34	16.2	40.3	20.7
ND95-6634	42.4	28	-4.8	1.5	34	13.4	40.4	20.0
ND96-1006	35.2	43	-11.7	1.9	31	14.5	40.4	19.9
ND96-1593	43.4	22	-1.7	2.0	36	17.1	40.1	20.6
ND96-8929	37.0	40	-6.7	1.1	32	15.5	40.6	20.8
ND96-8994	36.1	42	-6.2	1.7	32	14.7	39.8	20.7
ND96-8811	41.6	32	-1.0	1.6	37	17.2	39.4	21.4
ND96-9188	40.2	36	-4.2	1.9	34	16.0	41.6	20.3
OAC 97-06	42.0	29	0.2	2.0	36	19.2	41.7	20.1
OAC 98-06	42.5	24	5.5	1.9	40	16.8	40.9	19.4
ORC 9801	46.9	3	-2.2	1.5	36	16.4	38.7	21.5
ORC 9802	45.6	8	1.2	1.3	30	13.4	40.1	20.7
ORC 9803	45.2	11	2.7	1.5	38	16.5	41.2	19.7
OT96-15	41.6	32	-7.3	1.7	32	16.5	42.0	20.4
OT96-25	36.6	41	-7.8	1.2	30	15.7	39.4	22.1
OT98-1	42.0	29	-5.3	1.8	35	14.2	45.8	18.0
OT98-7	39.1	38	-6.0	1.4	33	19.9	43.4	19.9
SD96-16	41.8	31	0.0	2.1	37	14.1	40.3	20.5
SD96-33	45.2	11	0.5	1.2	37	13.9	42.2	20.2
SD96-367	39.7	37	4.5	1.6	39	21.2	43.7	19.4
SD96-702	48.8	1	-1.2	1.5	36	16.2	39.6	21.1
SD96-1659	44.2	15	-2.3	1.2	33	17.9	41.9	19.9
SD96-1712	45.9	6	-1.3	1.5	37	18.1	42.9	20.1
SD96-2156	44.8	13	-1.8	2.1	37	17.1	41.5	20.3
SD96-2286	43.6	21	-1.0	1.6	39	17.0	38.8	21.5
SD96-DG5	44.1	18	3.5	2.1	39	15.7	40.8	19.7
SD96-LS14	44.1	18	3.0	2.0	36	13.8	41.0	20.2

PRELIMINARY TEST 0, 1999

YIELD (bu/a)

Strain	Mean 6 Tests	Morris MN	Rosemount MN	Casselton ND	Saint Bruno Que.	Brookings SD	Watertown SD
Lambert (0)	42.5	47.1	46.7	44.8	43.2	31.3	41.6
Parker (I)	46.4	45.1	54.7	38.6	46.3	43.8	49.6
Surge	48.8	46.9	50.6	50.8	52.5	40.0	52.1
Traill (E)	37.2	37.6	45.9	44.3	33.3	26.0	36.3
M92-155010	40.3	42.6	47.6	44.3	40.5	30.0	37.1
M92-160047	43.8	49.1	51.1	39.7	47.6	36.5	39.0
M92-179009	45.4	45.4	52.3	49.1	51.9	40.6	33.1
M92-179024	46.7	45.5	51.6	44.1	50.8	42.0	46.1
M92-185003	41.5	45.8	49.0	44.2	41.1	34.8	34.3
M92-187018	44.3	45.7	46.3	43.9	50.0	34.9	45.0
M92-187022	44.2	46.5	46.4	48.7	51.7	34.3	37.8
M92-195102	42.5	47.0	45.8	46.0	40.5	35.7	39.7
M92-285024	45.7	47.2	50.5	43.8	47.4	39.1	46.2
M93-142040	45.4	46.0	48.8	46.9	49.5	35.9	45.3
ND95-958	42.5	46.7	45.0	46.1	41.7	36.5	39.3
ND95-6296	44.2	45.7	46.5	44.2	40.7	39.1	48.7
ND95-6339	42.9	48.6	44.8	47.2	44.2	36.7	36.1
ND95-6634	42.4	43.0	47.8	49.4	42.0	34.6	37.3
ND96-1006	35.2	38.4	44.9	36.1	30.4	26.0	35.7
ND96-1593	43.4	46.9	44.4	49.4	44.8	36.2	38.9
ND96-8929	37.0	36.4	46.2	39.1	35.1	29.0	36.0
ND96-8994	36.1	35.5	47.1	27.9	39.2	31.3	35.5
ND96-8811	41.6	42.9	42.4	40.5	44.9	36.3	42.5
ND96-9188	40.2	39.4	46.1	40.1	41.6	36.0	37.9
OAC 97-06	42.0	42.1	50.8	42.5	45.1	32.9	38.9
OAC 98-06	42.5	48.2	45.7	28.6	50.8	39.7	41.8
ORC 9801	46.9	45.6	52.7	55.2	47.2	38.4	42.4
ORC 9802	45.6	47.3	54.2	44.4	49.6	38.8	39.1
ORC 9803	45.2	41.1	52.0	43.2	49.2	37.1	48.4
OT96-15	41.6	47.1	48.2	47.2	42.1	27.9	37.0
OT96-25	36.6	36.3	31.6	41.9	36.1	34.7	39.3
OT98-1	42.0	45.3	50.7	47.2	39.4	34.5	34.9
OT98-7	39.1	42.7	43.0	43.0	40.0	32.4	33.2
SD96-16	41.8	45.0	51.6	44.1	39.7	28.4	41.7
SD96-33	45.2	47.2	57.5	44.0	46.0	38.3	38.0
SD96-367	39.7	42.8	50.6	32.2	44.7	32.5	35.5
SD96-702	48.8	49.8	57.8	50.3	52.5	37.8	44.4
SD96-1659	44.2	42.9	50.3	46.6	47.3	42.5	35.4
SD96-1712	45.9	44.3	47.4	50.8	50.3	39.1	43.2
SD96-2156	44.8	43.9	50.1	50.9	45.1	39.9	39.2
SD96-2286	43.6	46.5	47.9	47.6	44.2	34.7	40.7
SD96-DG5	44.1	43.7	44.8	46.7	52.2	40.1	37.3
SD96-LS14	44.1	49.0	51.3	43.0	45.0	38.9	37.5
C.V. (%)		10.3	9.7	11.3	8.5	11.4	14.5
L.S.D. (5%)		9.3	9.5	8.1	3.0	5.6	6.3
Row Sp. (In.)		10	10	30	7	30	30
Rows/Plot		4	4	4	5	4	4
Reps		2	2	3	3	2	2

PRELIMINARY TEST 0, 1999

YIELD RANK

Strain	Yield Rank	Morris MN	Rosemount MN	Casseltown ND	Saint Bruno Que.	Brookings SD	Watertown SD
Lambert (0)	24	9	27	19	27	35	15
Parker (I)	5	25	3	39	17	1	2
Surge	1	12	14	3	2	6	1
Traill (E)	39	40	33	21	42	43	33
M92-155010	35	35	24	21	35	37	31
M92-160047	20	2	11	37	13	19	23
M92-179009	9	23	6	8	4	4	43
M92-179024	4	22	8	25	7	3	6
M92-185003	34	18	19	23	32	26	41
M92-187018	14	19	30	28	9	25	8
M92-187022	15	15	29	9	5	31	28
M92-195102	24	11	34	18	34	24	18
M92-285024	7	7	16	29	14	11	5
M93-142040	9	17	20	14	11	23	7
ND95-958	24	14	36	17	30	18	19
ND95-6296	15	19	28	23	33	10	3
ND95-6339	23	4	38	11	26	17	34
ND95-6634	28	30	23	6	29	29	29
ND96-1006	43	39	37	40	43	42	36
ND96-1593	22	12	40	6	23	21	25
ND96-8929	40	41	31	38	41	38	35
ND96-8994	42	43	26	43	39	36	37
ND96-8811	32	31	42	35	22	20	11
ND96-9188	36	38	32	36	31	22	27
OAC 97-06	29	36	12	33	20	32	24
OAC 98-06	24	5	35	42	6	8	13
ORC 9801	3	21	5	1	16	13	12
ORC 9802	8	6	4	20	10	12	22
ORC 9803	11	37	7	30	12	16	4
OT96-15	32	9	21	11	28	40	32
OT96-25	41	42	43	34	40	28	20
OT98-1	29	24	13	11	38	30	40
OT98-7	38	34	41	31	36	34	42
SD96-16	31	26	8	25	37	39	14
SD96-33	11	7	2	27	18	14	26
SD96-367	37	33	14	41	24	33	38
SD96-702	1	1	1	5	1	15	9
SD96-1659	15	31	17	16	15	2	39
SD96-1712	6	27	25	3	8	9	10
SD96-2156	13	28	18	2	19	7	21
SD96-2286	21	15	22	10	25	27	17
SD96-DG5	18	29	38	15	3	5	30
SD96-LS14	18	3	10	32	21	12	29

PRELIMINARY TEST 0, 1999

MATURITY (date)

Strain	Mean 6 Tests	Morris MN	Rosemount MN	Casselton ND	Saint Bruno Que.	Brookings SD	Watertown SD
Lambert (0)	9/21	09/20	09/21	10/05	10/03	09/05	09/12
Parker (I)	7.3	5	8	4	3	15	9
Surge	1.8	2	1	2	0	2	4
Traill (E)	-8.3	-2	-5	-9	-20	-4	-10
M92-155010	-5.2	-5	-1	-5	-10	-5	-5
M92-160047	2.5	2	5	2	-1	3	4
M92-179009	0.8	0	8	-1	-5	3	0
M92-179024	-1.5	1	4	-4	2	-4	-8
M92-185003	-5.0	-1	-1	-4	-10	-5	-9
M92-187018	-1.0	1	0	1	4	-4	-8
M92-187022	-0.7	1	1	0	-1	-2	-3
M92-195102	-0.3	-1	1	0	-4	2	0
M92-285024	1.3	3	1	1	2	2	-1
M93-142040	-0.2	1	-1	0	-7	1	5
ND95-958	-3.0	0	-1	0	-8	-4	-5
ND95-6296	-3.7	1	1	-1	-12	-4	-7
ND95-6339	-3.7	-3	-1	2	-9	-4	-7
ND95-6634	-4.8	2	-5	-6	-9	-3	-8
ND96-1006	-11.7	-5	-9	-13	-24	-9	-10
ND96-1593	-1.7	0	1	-1	-4	-3	-3
ND96-8929	-6.7	-5	-5	-6	-12	-2	-10
ND96-8994	-6.2	-7	-5	-3	-13	-2	-7
ND96-8811	-1	2	1	-1	-7	0	-1
ND96-9188	-4.2	-3	-1	-5	-7	-3	-6
OAC 97-06	0.2	2	1	2	-5	3	-2
OAC 98-06	5.5	3	5	4	6	8	7
ORC 9801	-2.2	-1	-1	1	-9	-2	-1
ORC 9802	1.2	1	1	3	-3	5	0
ORC 9803	2.7	3	4	2	-4	7	4
OT96-15	-7.3	-4	-5	-7	-18	-1	-9
OT96-25	-7.8	-2	-9	-7	-11	-7	-11
OT98-1	-5.3	-1	1	-5	-15	-5	-7
OT98-7	-6.0	-2	-1	-5	-19	-1	-8
SD96-16	0.0	0	1	1	-3	0	1
SD96-33	0.5	-5	7	1	-2	2	0
SD96-367	4.5	0	8	4	3	5	7
SD96-702	-1.2	2	1	-2	-6	-1	-1
SD96-1659	-2.3	2	0	-5	-10	-2	1
SD96-1712	-1.3	-1	1	1	-5	-2	-2
SD96-2156	-1.8	-2	1	-1	-6	0	-3
SD96-2286	-1.0	0	1	1	-6	-1	-1
SD96-DG5	3.5	0	5	2	5	3	6
SD96-LS14	3.0	-2	4	2	-1	12	3
Date Planted	5/17	05/20	05/22	05/29	05/17	05/02	05/13
Days to Mature	127	123	122	129	139	126	122

PRELIMINARY TEST 0, 1999

LODGING (score)

Strain	Mean 6 Tests	Morris MN	Rosemount MN	Casselton ND	Saint Bruno Que.	Brookings SD	Watertown SD
Lambert (0)	1.5	1.5	2.0	1.0	1.3	1.0	2.0
Parker (I)	2.3	1.5	3.0	1.0	3.3	2.0	3.0
Surge	1.4	1.0	2.0	1.0	1.3	1.0	2.0
Traill (E)	1.7	1.5	1.5	1.0	3.0	1.0	2.0
M92-155010	1.5	1.5	1.5	1.0	1.7	1.0	2.0
M92-160047	1.8	1.0	2.5	1.0	2.0	2.0	2.0
M92-179009	1.4	1.0	1.5	1.0	2.7	1.0	1.0
M92-179024	1.8	1.0	2.0	1.0	2.7	2.0	2.0
M92-185003	1.8	1.0	2.0	1.0	2.7	2.0	2.0
M92-187018	1.9	1.0	2.5	1.0	2.0	2.0	3.0
M92-187022	1.6	1.0	2.0	1.0	1.3	2.0	2.0
M92-195102	1.8	1.5	2.0	1.0	2.3	2.0	2.0
M92-285024	2.2	1.5	2.5	1.0	2.3	2.0	4.0
M93-142040	1.2	1.0	1.0	1.0	1.0	1.0	2.0
ND95-958	1.5	1.0	1.5	1.0	1.7	2.0	2.0
ND95-6296	1.3	1.0	1.5	1.0	2.0	1.0	1.0
ND95-6339	1.6	1.0	1.5	1.0	2.0	2.0	2.0
ND95-6634	1.5	1.0	2.0	1.0	2.0	2.0	1.0
ND96-1006	1.9	1.5	2.0	1.0	1.7	2.0	3.0
ND96-1593	2.0	1.0	2.5	1.0	2.3	2.0	3.0
ND96-8929	1.1	1.0	1.0	1.0	1.3	1.0	1.0
ND96-8994	1.7	1.0	2.0	1.0	2.3	2.0	2.0
ND96-8811	1.6	1.0	2.0	1.0	1.7	2.0	2.0
ND96-9188	1.9	1.0	3.0	1.0	1.5	2.0	3.0
OAC 97-06	2.0	1.0	2.0	1.0	3.0	2.0	3.0
OAC 98-06	1.9	1.0	3.0	1.0	2.3	2.0	2.0
ORC 9801	1.5	1.0	2.0	1.0	2.0	1.0	2.0
ORC 9802	1.3	1.0	1.5	1.0	1.3	1.0	2.0
ORC 9803	1.5	1.0	2.0	1.0	1.7	1.0	2.0
OT96-15	1.7	1.0	2.0	1.0	2.3	1.0	3.0
OT96-25	1.2	1.0	1.0	1.0	1.3	1.0	2.0
OT98-1	1.8	1.0	2.0	1.0	2.7	2.0	2.0
OT98-7	1.4	1.0	1.5	1.0	2.0	1.0	2.0
SD96-16	2.1	1.0	2.5	1.0	2.3	2.0	4.0
SD96-33	1.2	1.0	2.0	1.0	1.3	1.0	1.0
SD96-367	1.6	1.0	2.0	1.0	2.7	2.0	1.0
SD96-702	1.5	1.0	2.0	1.0	1.7	1.0	2.0
SD96-1659	1.2	1.0	2.0	1.0	1.3	1.0	1.0
SD96-1712	1.5	1.0	2.0	1.0	2.0	1.0	2.0
SD96-2156	2.1	1.0	2.0	1.0	3.3	2.0	3.0
SD96-2286	1.6	1.0	2.5	1.0	2.0	1.0	2.0
SD96-DG5	2.1	1.0	3.0	1.0	2.7	2.0	3.0
SD96-LS14	2.0	1.0	3.0	1.0	2.7	2.0	2.0

PRELIMINARY TEST 0, 1999

PLANT HEIGHT (inches)

Strain	Mean 6 Tests	Morris MN	Rosemount MN	Casselton ND	Saint Bruno Que.	Brookings SD	Watertown SD
Lambert (0)	36	40	40	35	35	30	35
Parker (I)	41	40	44	37	40	42	41
Surge	34	35	37	34	36	29	32
Traill (E)	30	34	34	29	28	25	32
M92-155010	31	32	35	28	33	27	33
M92-160047	37	37	43	35	37	34	36
M92-179009	34	37	37	34	36	29	32
M92-179024	36	37	40	32	37	31	37
M92-185003	33	33	37	29	35	29	35
M92-187018	37	35	41	34	36	37	40
M92-187022	36	36	39	33	37	32	37
M92-195102	35	32	38	34	34	32	39
M92-285024	42	41	47	38	41	40	42
M93-142040	38	35	43	38	35	35	41
ND95-958	35	40	38	35	33	28	36
ND95-6296	34	36	34	30	34	30	37
ND95-6339	34	36	35	34	36	31	34
ND95-6634	34	39	33	33	33	33	32
ND96-1006	31	34	34	28	29	26	34
ND96-1593	36	39	38	33	37	32	36
ND96-8929	32	37	34	30	32	26	30
ND96-8994	32	34	37	25	33	29	35
ND96-8811	37	39	41	32	36	34	40
ND96-9188	34	35	38	26	32	31	40
OAC 97-06	36	38	37	31	37	34	36
OAC 98-06	40	37	44	39	43	41	38
ORC 9801	36	36	41	35	37	31	34
ORC 9802	30	32	33	31	30	20	33
ORC 9803	38	36	47	34	38	33	39
OT96-15	32	34	35	33	31	28	32
OT96-25	30	33	28	30	29	27	31
OT98-1	35	38	37	36	33	31	37
OT98-7	33	37	37	28	32	31	32
SD96-16	37	36	43	33	36	33	38
SD96-33	37	33	42	36	39	36	38
SD96-367	39	39	43	39	40	37	38
SD96-702	36	35	41	34	37	34	36
SD96-1659	33	35	42	33	36	29	20
SD96-1712	37	40	40	38	35	33	37
SD96-2156	37	37	40	35	36	37	39
SD96-2286	39	37	44	36	38	37	41
SD96-DG5	39	40	44	36	38	31	42
SD96-LS14	36	38	37	37	40	33	33

PRELIMINARY TEST 0, 1999

SEED SIZE (g/100)

Strain	Mean 6 Tests	Morris MN	Rosemount MN	Casselton ND	Saint Bruno Que.	Brookings SD	Watertown SD
Lambert (0)	16.1	16.7	16.0	17.2	19.1	12.7	14.6
Parker (I)	17.2	18.0	17.7	17.1	18.8	16.2	15.6
Surge	19.0	20.2	20.0	20.7	22.3	14.7	16.2
Trail (E)	15.3	16.4	15.6	16.8	17.5	13.1	12.3
M92-155010	16.4	17.6	16.9	18.7	18.3	13.1	13.6
M92-160047	15.3	16.4	15.1	15.9	18.4	12.9	12.9
M92-179009	16.8	18.3	16.7	18.7	19.9	13.1	14.3
M92-179024	14.8	15.9	15.8	15.7	16.8	12.7	11.9
M92-185003	16.3	17.9	17.6	18.7	17.8	13.0	12.6
M92-187018	15.4	16.5	15.2	16.0	17.7	12.1	15.0
M92-187022	15.4	16.7	15.1	16.0	18.7	12.6	13.3
M92-195102	14.8	16.7	15.6	16.2	16.4	12.0	12.0
M92-285024	16.0	17.9	17.2	16.1	19.0	12.8	13.2
M93-142040	17.2	19.3	17.2	18.0	20.2	13.5	15.2
ND95-958	15.8	17.6	15.5	15.9	18.3	14.0	13.6
ND95-6296	17.4	17.1	17.8	20.5	19.4	15.2	14.4
ND95-6339	16.2	18.9	16.1	17.7	18.5	13.3	12.4
ND95-6634	13.4	14.8	13.8	14.4	14.9	11.6	10.9
ND96-1006	14.5	15.6	14.7	15.9	15.8	11.8	13.4
ND96-1593	17.1	19.5	16.7	18.1	19.3	13.8	15.2
ND96-8929	15.5	16.3	15.7	16.4	17.3	13.4	13.6
ND96-8994	14.7	16.1	15.5	15.2	16.6	12.7	11.8
ND96-8811	17.2	18.8	17.5	17.5	19.1	14.6	15.7
ND96-9188	16.0	16.8	16.4	17.0	17.9	14.5	13.6
OAC 97-06	19.2	21.7	19.6	20.2	22.3	16.0	15.6
OAC 98-06	16.8	18.4	15.7	17.4	18.8	14.6	15.7
ORC 9801	16.4	17.0	17.0	17.8	18.1	13.3	14.9
ORC 9802	13.4	14.4	14.1	14.0	15.0	11.8	11.1
ORC 9803	16.5	17.5	17.5	17.2	18.5	13.6	14.5
OT96-15	16.5	18.7	17.0	18.6	18.4	12.7	13.5
OT96-25	15.7	15.9	15.3	17.0	17.6	14.2	14.3
OT98-1	14.2	15.0	14.9	15.4	16.9	10.8	12.3
OT98-7	19.9	20.7	21.8	21.7	21.9	16.6	16.7
SD96-16	14.1	15.8	15.1	14.8	16.5	9.8	12.7
SD96-33	13.9	15.0	14.4	14.5	15.6	11.5	12.2
SD96-367	21.2	22.5	22.7	22.6	24.1	17.5	17.9
SD96-702	16.2	17.5	16.6	17.0	19.6	12.1	14.3
SD96-1659	17.9	19.5	18.3	18.9	22.1	15.7	12.8
SD96-1712	18.1	19.3	19.1	19.1	21.2	13.9	15.8
SD96-2156	17.1	18.9	17.2	18.7	19.0	13.7	15.2
SD96-2286	17.0	17.8	15.7	18.4	19.4	14.8	16.0
SD96-DG5	15.7	16.5	15.1	15.9	19.9	12.6	14.3
SD96-LS14	13.8	14.8	13.6	14.9	16.6	11.1	11.6

PRELIMINARY TEST 0, 1999

PROTEIN (%)

Strain	Mean 3 Tests	Morris MN	Rosemount MN	Saint Bruno Que.
Lambert (0)	40.9	40.9	40.4	41.4
Parker (I)	40.1	40.4	40.4	39.6
Surge	41.9	41.6	42.2	42.0
Traill (E)	41.9	42.4	42.0	41.2
M92-155010	41.7	42.5	41.8	40.8
M92-160047	39.2	40.0	39.2	38.5
M92-179009	39.6	40.0	38.8	40.1
M92-179024	39.8	39.6	39.9	39.8
M92-185003	41.1	40.6	40.1	42.6
M92-187018	41.4	41.4	40.6	42.3
M92-187022	41.8	41.6	41.6	42.3
M92-195102	40.0	40.4	40.1	39.6
M92-285024	40.0	40.8	39.0	40.2
M93-142040	43.1	44.0	42.1	43.1
ND95-958	39.7	40.4	39.2	39.5
ND95-6296	40.9	41.2	40.6	40.9
ND95-6339	40.3	41.1	40.2	39.7
ND95-6634	40.4	40.8	40.7	39.8
ND96-1006	40.4	41.5	40.9	38.9
ND96-1593	40.1	40.8	40.2	39.2
ND96-8929	40.6	41.3	40.5	39.9
ND96-8994	39.8	40.3	40.6	38.6
ND96-8811	39.4	40.1	39.6	38.5
ND96-9188	41.6	41.4	42.3	41.1
OAC 97-06	41.7	42.9	41.6	40.6
OAC 98-06	40.9	41.9	39.3	41.4
ORC 9801	38.7	39.3	38.0	38.8
ORC 9802	40.1	40.5	40.0	39.8
ORC 9803	41.2	40.6	41.5	41.6
OT96-15	42.0	43.1	42.4	40.6
OT96-25	39.4	40.1	39.6	38.4
OT98-1	45.8	45.7	46.6	45.1
OT98-7	43.4	43.7	43.3	43.3
SD96-16	40.3	40.2	40.2	40.4
SD96-33	42.2	41.8	42.4	42.3
SD96-367	43.7	44.3	43.0	43.9
SD96-702	39.6	40.7	39.3	38.7
SD96-1659	41.9	41.6	41.7	42.5
SD96-1712	42.9	42.4	42.9	43.3
SD96-2156	41.5	41.6	41.3	41.6
SD96-2286	38.8	39.6	38.2	38.6
SD96-DG5	40.8	41.2	40.7	40.5
SD96-LS14	41.0	42.1	39.5	41.5

PRELIMINARY TEST 0, 1999

OIL (%)

Strain	Mean 3 Tests	Morris MN	Rosemount MN	Saint Bruno Que.
Lambert (0)	21.1	19.9	20.0	23.3
Parker (I)	20.2	19.2	19.2	22.3
Surge	20.7	20.0	19.5	22.6
Traill (E)	19.7	18.8	18.6	21.7
M92-155010	20.0	18.9	19.1	22.0
M92-160047	21.0	19.6	20.0	23.5
M92-179009	21.1	20.1	20.3	23.0
M92-179024	20.5	19.9	19.4	22.2
M92-185003	20.6	20.0	20.3	21.6
M92-187018	20.8	19.9	20.2	22.3
M92-187022	20.9	20.0	20.0	22.6
M92-195102	20.9	19.6	20.0	23.0
M92-285024	20.2	19.0	19.5	22.0
M93-142040	19.7	18.4	19.2	21.6
ND95-958	21.8	20.4	21.2	23.8
ND95-6296	20.3	19.3	19.5	22.1
ND95-6339	20.7	19.9	19.7	22.5
ND95-6634	20.0	19.1	19.2	21.8
ND96-1006	19.9	18.8	18.7	22.1
ND96-1593	20.6	19.7	19.5	22.7
ND96-8929	20.8	19.7	20.0	22.7
ND96-8994	20.7	19.8	19.6	22.7
ND96-8811	21.4	20.8	20.0	23.5
ND96-9188	20.3	19.6	19.1	22.1
OAC 97-06	20.1	19.4	19.1	21.9
OAC 98-06	19.4	18.3	18.8	21.0
ORC 9801	21.5	20.5	20.7	23.4
ORC 9802	20.7	19.6	19.8	22.7
ORC 9803	19.7	18.6	18.7	21.7
OT96-15	20.4	18.2	19.7	23.3
OT96-25	22.1	21.2	21.3	23.9
OT98-1	18.0	17.1	16.5	20.5
OT98-7	19.9	18.7	19.5	21.6
SD96-16	20.5	20.2	19.3	22.0
SD96-33	20.2	19.2	19.1	22.2
SD96-367	19.4	18.2	19.1	20.9
SD96-702	21.1	19.6	20.5	23.1
SD96-1659	19.9	19.3	18.9	21.6
SD96-1712	20.1	19.3	19.4	21.6
SD96-2156	20.3	19.1	20.1	21.8
SD96-2286	21.5	20.2	20.6	23.8
SD96-DG5	19.7	18.5	18.7	21.8
SD96-LS14	20.2	18.7	19.6	22.3

Uniform Test I, 1999

	Strain	Parentage	Previous Testing	Generation Compositied	Unique Traits
1.	Parker (I)	A79-136012 x Dawson	10	F5	Rps1
2.	IA1006 (BSR)	IA2008 x Kenwood	5	F5	BSR
3.	IA1008 (L) (SCN)	Northrup King S20-20 x Jack	1	F5	SCN
4.	Lambert (O)	M75-274 x M76-151	7	F5	Rps1
5.	A96-494018	Northrup King S24-92 x A91-501002	1	F5	BSR
6.	A97-770012	Northrup King S20-20 x Asgrow A2234	PT I	F5	Chlorosis
7.	A97-770031	A92-535059 x Pioneer 9273	PT II	F5	
8.	A97-771039	A92-627030 x ORC 9205	PT II	F5	
9.	M90-166054	Parker x Archer	1	F5	Rps1-k, BSR
10.	M90-184111	L85P-558 x M86-1973	2	F5	Rps1, SCN
11.	M91-113037	Parker x Archer	1	F4	Rps1-k, BSR
12.	M91-163126	E86-237 x M87-135	PT I	F5	Rps1a
13.	M91-188039	Leslie x M88-390	PT I	F5	Rps1a
14.	M91-188076	Leslie x M88-390	PT I	F5	Rps1a
15.	M91-234086	Lambert x Archer	PT I	F5	Rps1k, BSR
16.	M92-1645	Faribault x Bell	3	F5	SCN
17.	M92-106016	Hendricks x Archer	PT I	F4	Rps1k, BSR
18.	M92-225124	Parker x M89-1678	SCN UT I	F5	Rps1a, SCN 3
19.	M92-227032	M86-1973 x M89-1665	SCN UT I	F5	SCN 3
20.	ORC 9702	PS 42 x Northrup King S20-20	PT I	F5	
21.	SD95-748	Lambert x Parker	PT I	F5	
22.	SD95-789	Lambert x Parker	PT I	F5	
23.	SD96-782	ORC 9002 x Agassiz	PT IIB	F5	
24.	SD(ND)95-1663	Parker x Pioneer 9061	PT 0	F5	
25.	SD(ND)95-1664	Parker x Pioneer 9061	PT 0	F5	
26.	U97-2002	U93-3204 x UP1C2-14	PT IIA	F6	dtI

UNIFORM TEST I, 1999
DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	<u>Chlorosis Score</u>		<u>Emerg.</u>	<u>Shattering</u>	<u>PR</u>	<u>Hard Seed</u>	<u>PS</u>	<u>PSB</u>
		Hum-boldt	Yellow Medicine	Score Ames	Manhattan	Laf. Race 7	Lafayette %	a %	n %
Parker (I)	WGBDYBfEp	3.0	2.8	5	1.0	H	10	46	2
IA1006 (BSR)	WTBSYBIIEp	3.8	3.5	3	1.0	S	0	16	0
IA1008 (L) (SCN)	WGBDYIIEp	4.3	3.8	4	1.0	R	6	30	8
Lambert (0)	PGBSYBfEp	2.4	2.3	4	2.0	S	16	48	6
A96-494018	PTBSYBIIEp	4.8	3.5	1	5.0	S	0	4	0
A97-770012	PGBDYIIEp	3.4	1.7	4	4.0	R	4	10	0
A97-770031	PGBSYIIEp	1.6	1.7	3	1.0	S	0	26	4
A97-771039	PTTSYBfEp	4.0	3.2	2	4.0	S	4	32	2
M90-166054	WGBDYBfEp	2.8	2.5	3	1.0	R	2	18	0
M90-184111	WGBDYBfEp	4.4	3.0	1	1.0	R	6	40	0
M91-113037	WGTDYBfIH	3.6	3.3	5	1.0	R	0	28	0
M91-163126	WGBIYIIEp	2.4	1.8	5	1.0	R	16	14	0
M91-188039	PGBDYIIEp	4.5	3.0	5	1.0	R	0	26	10
M91-188076	PGTDYBfEp	3.6	3.2	3	1.0	H	2	26	0
M91-234086	PGTIYBfEp	2.5	1.8	2	2.0	H	0	30	2
M92-1645	PGTIYIIEp	3.1	2.7	1	2.0	R	0	60	4
M92-106016	PGBDYBfEp	1.8	2.0	4	2.0	R	4	14	4
M92-225124	WGBDYBfEp	3.5	2.0	4	2.0	R	10	38	0
M92-227032	PGTDYBfEp	2.0	1.3	2	1.0	R	10	6	2
ORC 9702	PGBDYIIEp	2.0	2.0	4	1.0	R	0	38	2
SD95-748	PGBDYBfEp	2.9	2.0	1	2.0	H	0	30	2
SD95-789	PGBSYBfEp	2.4	2.2	5	1.0	R	0	40	2
SD96-782	PGTDYBfEp	3.0	2.0	2	1.0	R	0	12	0
SD(ND)95-1663	PGBDYBfEp	3.3	3.5	5	1.0	S	0	28	0
SD(ND)95-1664	PGBDYBfEp	3.9	3.0	5	1.0	S	0	40	0
U97-2002	PTBDYBIIEp	3.1	2.8	3	1.0	S	0	8	2

UNIFORM TEST I, 1999

SDS DATA

Strain	DX	SDS Data	DS
		Pontiac DI	
Parker (I)	0.1	1	0.3
IA1006 (BSR)	0.2	2	1
IA1008 (L) (SCN)	0.0	0	0
Lambert (0)	0.0	0	0
A96-494018	0.2	2	1
A97-770012	8.3	52	1
A97-770031	1.0	7	0
A97-771039	0.1	1	0
M90-166054	0.0	0	0
M90-184111	0.0	0	0
M91-113037	0.1	1	0
M91-163126	0.0	0	0
M91-188039	0.0	0	0
M91-188076	0.0	0	0
M91-234086	0.0	0	0
M92-1645	0.1	1	0
M92-106016	0.1	1	0
M92-225124	0.1	1	0
M92-227032	0.1	1	0
ORC 9702	0.0	0	0
SD95-748	0.1	1	0
SD95-789	0.1	1	0
SD96-782	0.6	5	0
SD(ND)95-1663	0.3	2	1
SD(ND)95-1664	0.2	1	1
U97-2002	0.0	0	0

UNIFORM TEST I, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 14 bu/a	Rank 14 No.	Maturity 12 Date	Lodging 14 Score	Plant Height 14 In.	Seed Size 14 g/100	Composition	
							Protein 4 %	Oil 4 %
Parker (I)	51.6	7	9/13	2.4	38	17.5	40.2	20.1
IA1006 (BSR)	51.5	9	2.0	2.0	38	15.7	40.2	19.1
IA1008 (L) (SCN)	52.5	4	3.3	1.6	37	17.4	39.7	18.9
Lambert (O)	43.3	25	-6.4	1.5	29	15.4	40.8	20.7
A96-494018	55.5	1	4.6	1.5	34	15.8	40.8	19.2
A97-770012	51.2	12	2.6	1.7	37	17.0	39.6	19.9
A97-770031	49.4	18	3.1	1.4	38	16.4	41.0	20.1
A97-771039	52.6	3	3.8	1.6	33	15.7	40.7	19.4
M90-166054	51.2	12	0.8	1.8	36	16.5	40.8	19.3
M90-184111	54.8	2	2.6	2.0	34	15.6	38.5	21.3
M91-113037	52.1	5	-0.4	1.7	34	17.2	39.5	20.2
M91-163126	47.0	23	1.0	1.4	36	16.1	41.2	19.7
M91-188039	45.2	24	-2.7	1.7	34	16.1	40.4	20.1
M91-188076	52.0	6	-0.1	2.0	36	18.0	40.5	20.5
M91-234086	51.2	12	-1.3	1.7	35	15.8	40.2	20.0
M92-1645	51.2	12	1.6	1.7	33	14.9	41.4	19.9
M92-106016	51.4	10	-2.5	1.8	33	17.7	39.4	20.3
M92-225124	50.3	16	1.1	2.1	35	17.6	40.1	20.0
M92-227032	49.4	18	-2.6	1.4	31	15.6	39.1	19.4
ORC 9702	47.3	22	-4.9	1.4	35	16.4	41.9	19.7
SD95-748	41.6	26	-7.8	1.6	29	14.6	41.6	20.0
SD95-789	49.7	17	0.8	2.1	37	17.2	40.4	20.0
SD96-782	48.8	21	0.6	1.6	37	14.9	40.2	20.2
SD(ND)95-1663	51.6	7	-3.6	2.1	34	15.9	38.5	20.9
SD(ND)95-1664	48.9	20	-2.9	1.8	33	15.9	38.1	21.0
U97-2002	51.3	11	2.7	1.8	34	18.9	0.0	0.0

123.5 Days After Planting

UNIFORM TEST I, 1999

1998-1999 2-YEAR MEAN

No. of Tests Strain	Yield 26 bu/a	Rank 26 No.	Maturity 23 Date	Lodging 26 Score	Plant Height 26 In.	Seed Size 25 g/100	Composition	
							Protein 9 %	Oil 9 %
Parker (I)	51.4	8	9/14	2.8	38	17.7	41.3	20.2
IA1006 (BSR)	53.5	4	2.0	2.2	38	16.2	41.0	19.4
IA1008 (L)(SCN)	54.7	3	3.4	1.7	38	18.0	40.8	19.3
Lambert (O)	45.1	9	-5.7	1.9	29	16.0	41.8	20.5
A96-494018	57.6	1	4.1	1.7	33	16.5	41.3	19.6
M90-166054	52.8	6	1.3	2.2	35	17.2	41.6	19.7
M90-184111	55.1	2	2.9	2.3	34	16.1	39.3	21.4
M91-113037	53.3	5	0.3	1.8	34	17.6	40.1	20.5
M92-1645	52.5	7	1.7	1.9	33	15.6	42.0	20.1

124.0 Days After Planting

1997-1999 3-YEAR MEAN

No. of Tests Strain	41	41	35	41	41	39	14	14
Parker (I)	49.7	4	9/16	2.7	37	17.6	41.0	20.2
IA1006 (BSR)	52.2	2	2.4	2.1	37	16.4	40.7	19.6
Lambert (O)	44.1	5	-6.3	1.8	30	16.1	41.4	20.5
M90-184111	53.3	1	3.4	2.2	33	16.3	39.4	21.3
M92-1645	50.9	3	1.9	1.8	33	15.7	41.6	20.2

124.6 Days After Planting

1996-1999 4-YEAR MEAN

No. of Tests Strain	55	55	48	55	55	53	19	19
Parker (I)	49.6	2	9/17	2.6	37	17.6	41.2	20.3
Lambert (O)	43.7	3	-6.2	1.7	30	16.2	41.8	20.6
M92-1645	50.3	1	2.1	1.7	32	15.8	41.9	20.4

122.8 Days After Planting

UNIFORM TEST I, 1999

YIELD (bu/a)

Strain	Mean 14 Tests	Ames IA	Kanawha IA	Sioux Rapids IA	Lafayette IN	Ingham County MI	Saginaw County MI	Lamber- ton MN	Waseca MN
Parker (I)	51.6	53.8	59.0	59.3	32.0	40.8	56.8	53.4	59.1
IA1006 (BSR)	51.5	54.5	53.3	59.1	33.5	43.9	52.3	55.2	58.3
IA1008 (L) (SCN)	52.5	54.4	56.1	57.0	39.2	47.0	64.2	53.1	53.1
Lambert (O)	43.3	39.0	47.9	44.9	21.1	25.2	51.9	52.9	46.8
A96-494018	55.5	61.5	55.4	58.0	39.1	54.6	59.7	56.0	57.7
A97-770012	51.2	57.1	53.8	58.6	36.6	48.0	58.8	45.4	54.7
A97-770031	49.4	54.7	50.4	56.3	34.3	45.3	56.3	46.0	46.8
A97-771039	52.6	56.0	59.3	58.4	34.4	45.0	52.5	50.9	60.7
M90-166054	51.2	57.1	57.0	64.4	34.3	43.5	54.3	45.8	55.6
M90-184111	54.8	59.1	58.9	63.7	37.2	43.1	66.1	44.0	56.9
M91-113037	52.1	56.5	63.0	61.5	32.4	43.6	55.9	42.4	56.1
M91-163126	47.0	42.8	49.4	53.7	28.4	44.0	47.7	44.0	52.9
M91-188039	45.2	39.2	45.6	54.9	26.9	37.1	49.9	39.5	51.1
M91-188076	52.0	51.3	55.4	64.1	30.1	44.2	60.3	53.3	54.8
M91-234086	51.2	55.1	56.1	56.6	30.6	38.4	55.7	56.3	56.8
M92-1645	51.2	56.1	58.7	55.1	27.5	51.3	58.4	50.7	52.4
M92-106016	51.4	47.8	55.5	62.2	31.7	43.4	58.2	62.3	53.1
M92-225124	50.3	47.0	58.2	59.7	30.3	34.0	55.9	50.3	52.7
M92-227032	49.4	35.9	49.3	54.9	28.6	44.6	59.1	60.7	58.4
ORC 9702	47.3	45.7	49.5	54.7	30.1	47.5	56.8	50.5	53.7
SD95-748	41.6	32.0	42.6	44.9	21.2	33.5	52.4	51.7	48.5
SD95-789	49.7	55.4	54.6	58.7	33.4	38.4	58.3	54.3	51.4
SD96-782	48.8	47.7	51.4	59.4	30.6	50.9	50.2	49.4	53.7
SD(ND)95-1663	51.6	51.3	60.6	59.7	33.3	41.1	59.7	44.6	57.7
SD(ND)95-1664	48.9	46.5	55.6	55.0	29.7	41.4	50.5	45.6	55.7
U97-2002	51.3	55.5	55.8	58.0	34.8	47.5	50.8	48.2	53.7
C.V. (%)		9.8	9.0	8.2	9.6	9.3	4.8	12.4	10.1
L.S.D. (5%)		2.8	2.8	2.7	4.9	9.8	6.0	10.1	9.0
Row Sp. (In.)		27	27	27	24	15	15	10	10
Rows/Plot		4	4	4	4	6	6	10	10
Reps		2	2	2	3	2	2	3	3

UNIFORM TEST I, 1999

YIELD (bu/a)

Strain	Beemer NE	Ridge- town Ont.	Talbot- ville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Parker (I)	52.9	63.9	54.9	37.8	39.5	59.6
IA1006 (BSR)	52.3	62.7	54.2	37.4	41.9	61.9
IA1008 (L) (SCN)	50.5	66.6	50.7	42.0	40.4	61.3
Lambert (O)	44.3	60.4	48.7	32.3	37.8	52.7
A96-494018	53.4	66.2	57.6	44.7	44.3	69.2
A97-770012	51.8	61.3	49.1	43.8	40.4	58.1
A97-770031	56.0	61.8	50.5	38.0	39.5	56.4
A97-771039	49.2	65.7	52.5	43.0	45.4	62.8
M90-166054	48.6	65.1	52.0	38.8	35.9	64.5
M90-184111	54.4	74.0	56.7	52.2	44.9	55.4
M91-113037	53.9	67.2	50.5	41.2	43.2	62.7
M91-163126	45.2	65.6	50.8	37.8	39.4	56.3
M91-188039	51.0	58.3	47.8	41.4	39.9	50.6
M91-188076	52.7	66.9	53.3	40.4	39.8	61.2
M91-234086	49.4	69.9	49.9	41.2	40.4	60.8
M92-1645	49.2	64.4	52.5	38.9	39.3	62.3
M92-106016	49.8	63.6	54.3	40.1	37.4	59.7
M92-225124	47.8	71.6	51.9	40.9	39.9	63.6
M92-227032	44.9	62.0	50.1	43.0	38.2	61.9
ORC 9702	42.1	64.2	46.1	36.3	33.1	52.4
SD95-748	37.1	54.3	44.9	36.9	34.7	47.6
SD95-789	48.9	62.8	53.6	35.5	36.2	54.2
SD96-782	46.3	67.6	51.0	35.2	35.1	55.3
SD(ND)95-1663	50.9	71.4	53.0	42.0	41.5	55.2
SD(ND)95-1664	49.8	67.5	55.3	37.7	38.8	56.1
U97-2002	52.7	66.6	55.0	39.2	38.8	62.0
C.V. (%)	7.3	7.5	5.2	11.3	8.3	6.1
L.S.D. (5%)	5.9	6.7	3.2	6.2	4.5	3.8
Row Sp. (In.)	30	17	14	30	30	15
Rows/Plot	2	5	4	4	4	6
Reps	3	3	4	3	3	3

UNIFORM TEST I, 1999

YIELD RANK

Strain	Yield Rank	Ames IA	Kanawha IA	Sioux Rapids IA	Lafayette IN	Ingham County MI	Saginaw County MI	Lamberton MN	Waseca MN
Parker (I)	7	13	4	8	13	20	11	7	2
IA1006 (BSR)	9	11	16	9	9	13	20	5	4
IA1008 (L) (SCN)	4	12	9	14	1	7	2	9	17
Lambert (O)	25	22	22	22	26	26	21	10	25
A96-494018	1	1	13	13	2	1	4	4	5
A97-770012	12	3	15	11	4	4	7	21	13
A97-770031	18	10	18	16	7	9	13	18	25
A97-771039	3	6	3	12	6	8	18	12	1
M90-166054	12	3	8	1	7	15	17	19	11
M90-184111	2	2	5	3	3	17	1	23	7
M91-113037	5	4	1	5	12	14	14	25	9
M91-163126	23	20	20	21	22	12	26	22	19
M91-188039	24	21	23	19	24	23	25	26	23
M91-188076	6	14	13	2	19	11	3	8	12
M91-234086	12	9	9	15	15	21	16	3	8
M92-1645	12	5	6	17	23	2	8	13	21
M92-106016	10	15	12	4	14	16	10	1	17
M92-225124	16	17	7	6	17	24	14	15	20
M92-227032	18	23	21	19	21	10	6	2	3
ORC 9702	22	19	19	20	18	5	11	14	14
SD95-748	26	24	24	22	25	25	19	11	24
SD95-789	17	8	14	10	10	21	9	6	22
SD96-782	21	16	17	7	15	3	24	16	15
SD(ND)95-1663	7	14	2	6	11	19	4	22	5
SD(ND)95-1664	20	18	11	18	20	18	23	20	10
U97-2002	11	7	10	13	5	5	22	17	15

UNIFORM TEST I, 1999

YIELD RANK

Strain	Beemer NE	Ridge- town Ont.	Talbot- ville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Parker (I)	5	17	5	18	14	14
IA1006 (BSR)	8	20	7	21	5	8
IA1008 (L) (SCN)	12	9	17	6	8	10
Lambert (O)	24	24	23	26	20	23
A96-494018	4	11	1	2	3	1
A97-770012	9	23	22	3	9	15
A97-770031	1	22	18	17	13	16
A97-771039	16	12	11	4	1	4
M90-166054	19	14	13	16	23	2
M90-184111	2	1	2	1	2	19
M91-113037	3	7	18	10	4	5
M91-163126	22	13	16	19	15	17
M91-188039	10	25	24	8	11	25
M91-188076	6	8	9	12	12	11
M91-234086	15	4	21	9	7	12
M92-1645	17	15	11	15	16	6
M92-106016	14	18	6	13	21	13
M92-225124	20	2	14	11	10	3
M92-227032	23	21	20	5	19	9
ORC 9702	25	16	25	23	26	24
SD95-748	26	26	26	22	25	26
SD95-789	18	19	8	24	22	22
SD96-782	21	5	15	25	24	20
SD(ND)95-1663	11	3	10	7	6	21
SD(ND)95-1664	13	6	3	20	17	18
U97-2002	7	9	4	14	18	7

UNIFORM TEST I, 1999

MATURITY (date)

Strain	Mean 12 Tests	Ames IA	Kanawha IA	Sioux Rapids IA	Lafayette IN	Ingham County MI	Saginaw County MI	Lamber- ton MN	Waseca MN
Parker (I)	9/13	09/07			08/31	09/06	09/07	09/23	09/27
IA1006 (BSR)	2.0	3			0	0	+2	0	2
IA1008 (L) (SCN)	3.3	4			5	+3	+1	2	0
Lambert (O)	-6.4	-12			-7	-1	-2	-8	-12
A96-494018	4.6	11			6	+5	+5	1	4
A97-770012	2.6	5			1	+6	+3	2	1
A97-770031	3.1	6			2	+3	+2	2	1
A97-771039	3.8	8			4	+3	+5	1	3
M90-166054	0.8	1			1	+1	0	0	1
M90-184111	2.6	3			3	0	+4	1	1
M91-113037	-0.4	-3			-3	0	0	-1	0
M91-163126	1.0	0			-1	+2	+2	-1	-1
M91-188039	-2.7	-3			-5	-1	-2	-5	-8
M91-188076	-0.1	-1			0	+2	-1	-2	1
M91-234086	-1.3	-2			-2	0	-1	-2	-2
M92-1645	1.6	4			3	-6	0	-1	0
M92-106016	-2.5	-7			-3	0	-2	-3	-4
M92-225124	1.1	-2			0	-1	-1	0	-1
M92-227032	-2.6	-9			-3	-1	0	-3	-7
ORC 9702	-4.9	-10			-8	+1	-1	-8	-11
SD95-748	-7.8	-9			-8	-1	-2	-11	-13
SD95-789	0.8	0			0	-1	+1	-2	1
SD96-782	0.6	0			-1	+3	-1	-1	1
SD(ND)95-1663	-3.6	-7			-4	0	-2	-5	-4
SD(ND)95-1664	-2.9	-8			-4	0	-2	-5	-6
U97-2002	2.7	5			3	+7	+3	1	1
Date Planted	5/12	05/03			05/11	05/14	05/05	05/19	05/26
Days to Mature	124	127			112	115	125	127	124

UNIFORM TEST I, 1999

MATURITY (date)

Strain	Beemer NE	Ridge- town Ont.	Talbot- ville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Parker (I)	09/21	09/10	09/12	09/10	09/21	09/14
IA1006 (BSR)	3	+1	-1	5	4	8
IA1008 (L) (SCN)	4	+1	2	11	3	9
Lambert (O)	-1	-8	-5	-6	-11	-6
A96-494018	6	+5	2	11	5	9
A97-770012	3	+2	2	8	3	6
A97-770031	4	+2	3	9	2	8
A97-771039	2	+5	2	11	6	9
M90-166054	0	0	-1	5	-3	6
M90-184111	4	+5	2	8	2	7
M91-113037	1	+1	-2	6	-2	-1
M91-163126	0	+2	3	8	0	4
M91-188039	0	-1	-2	-2	-4	-1
M91-188076	0	+1	1	-1	0	1
M91-234086	-1	0	-2	-1	-3	1
M92-1645	1	+1	0	7	1	5
M92-106016	-1	-1	-2	-2	-6	1
M92-225124	1	0	0	12	-1	6
M92-227032	-5	-1	1	-2	-3	1
ORC 9702	-7	-3	-3	-1	-5	-2
SD95-748	-10	-8	-7	-6	-12	-7
SD95-789	-3	0	2	8	-1	5
SD96-782	0	+1	0	8	-2	3
SD(ND)95-1663	-4	-2	-4	-3	-4	-5
SD(ND)95-1664	-2	0	-3	5	-5	-5
U97-2002	1	+5	2	10	1	8
Date Planted	05/29	05/12	05/14	05/02	05/13	05/04
Days to Mature	115	121	121	131	131	133

UNIFORM TEST I, 1999

LODGING (score)

Strain	Mean 14 Tests	Ames IA	Kanawha IA	Sioux Rapids IA	Lafayette IN	Ingham County MI	Saginaw County MI	Lamber- ton MN	Waseca MN
Parker (I)	2.4	2.9	2.2	2.3	1.5	2.3	3.5	4.0	3.7
IA1006 (BSR)	2.0	1.9	1.7	2.2	1.2	1.5	3.0	3.3	3.0
IA1008 (L) (SCN)	1.6	1.4	1.6	1.4	1.0	1.6	3.0	2.3	2.3
Lambert (O)	1.5	1.6	1.6	1.5	1.0	1.0	2.0	2.3	1.3
A96-494018	1.5	1.9	1.5	1.7	1.2	1.1	2.5	1.7	2.0
A97-770012	1.7	1.6	1.6	1.7	1.0	1.6	3.0	2.7	2.0
A97-770031	1.4	1.4	1.6	1.7	1.0	0.9	3.0	1.3	2.0
A97-771039	1.6	2.0	1.5	2.0	1.0	0.7	2.0	2.0	2.0
M90-166054	1.8	1.9	1.9	2.2	1.2	1.9	3.0	3.0	3.0
M90-184111	2.0	1.7	2.2	2.3	1.0	1.5	3.0	3.7	2.7
M91-113037	1.7	1.7	1.6	2.0	1.0	1.8	2.5	2.7	2.7
M91-163126	1.4	1.4	1.4	1.8	1.0	1.2	2.0	1.7	1.7
M91-188039	1.7	2.3	1.6	2.2	1.0	0.9	3.0	2.3	2.0
M91-188076	2.0	1.9	1.7	2.3	1.0	1.4	4.0	3.3	3.0
M91-234086	1.7	2.0	1.5	1.5	1.0	1.5	4.0	2.7	2.0
M92-1645	1.7	1.8	1.7	2.0	1.0	1.5	3.5	2.7	2.3
M92-106016	1.8	1.3	1.6	2.0	1.0	1.7	3.5	3.0	2.0
M92-225124	2.1	1.5	2.2	2.6	1.2	2.0	3.5	3.3	3.0
M92-227032	1.4	1.4	1.4	1.5	1.0	1.3	1.5	2.0	1.3
ORC 9702	1.4	1.3	1.4	1.2	1.0	1.7	2.0	1.3	1.0
SD95-748	1.6	1.4	1.4	1.6	1.0	1.0	3.0	2.7	1.3
SD95-789	2.1	1.9	2.2	2.4	1.2	1.5	3.0	3.3	3.0
SD96-782	1.6	1.5	2.0	2.2	1.0	1.6	2.5	2.3	3.0
SD(ND)95-1663	2.1	2.2	1.7	2.3	1.2	2.4	3.5	4.0	2.7
SD(ND)95-1664	1.8	2.0	1.5	1.9	1.0	2.0	2.5	3.3	2.7
U97-2002	1.8	2.1	1.9	2.2	1.0	1.3	2.5	2.7	2.3

UNIFORM TEST I, 1999

LODGING (score)

Strain	Beemer NE	Ridge- town Ont.	Talbot- ville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Parker (I)	1.0	1.0	1.5	2.0	3.0	2.0
IA1006 (BSR)	1.0	1.0	1.5	2.0	2.0	2.0
IA1008 (L) (SCN)	1.0	1.0	1.0	2.0	1.0	2.0
Lambert (O)	1.0	1.0	1.0	1.0	2.0	2.0
A96-494018	1.0	1.3	1.5	1.0	1.0	2.0
A97-770012	1.0	1.0	1.0	2.0	1.0	2.0
A97-770031	1.0	1.0	1.0	1.0	1.0	2.0
A97-771039	1.0	1.0	1.5	2.0	2.0	1.0
M90-166054	1.0	1.0	1.0	1.0	2.0	1.0
M90-184111	1.0	1.0	1.5	2.0	1.0	3.0
M91-113037	1.0	1.0	1.0	2.0	2.0	1.0
M91-163126	1.0	1.0	1.0	1.0	1.0	2.0
M91-188039	1.0	1.0	1.0	1.0	2.0	2.0
M91-188076	1.0	1.3	1.5	2.0	2.0	2.0
M91-234086	1.0	1.0	1.0	1.0	1.0	2.0
M92-1645	1.0	1.0	1.0	1.0	1.0	2.0
M92-106016	1.0	1.0	1.5	2.0	2.0	2.0
M92-225124	1.0	1.3	1.5	2.0	2.0	2.0
M92-227032	1.0	1.0	1.5	1.0	2.0	2.0
ORC 9702	1.0	1.0	1.0	2.0	2.0	1.0
SD95-748	1.0	1.0	1.5	1.0	2.0	2.0
SD95-789	1.0	1.0	1.5	3.0	2.0	2.0
SD96-782	1.0	1.0	1.5	1.0	1.0	1.0
SD(ND)95-1663	1.0	1.0	1.5	2.0	2.0	2.0
SD(ND)95-1664	1.0	1.0	1.5	2.0	1.0	2.0
U97-2002	1.0	1.0	1.5	2.0	1.0	2.0

UNIFORM TEST I, 1999

PLANT HEIGHT (inches)

Strain	Mean 14 Tests	Ames IA	Kanawha IA	Sioux Rapids IA	Lafayette IN	Ingham County MI	Saginaw County MI	Lamber- ton MN	Waseca MN
Parker (I)	38	34	38	41	31	42	45	47	36
IA1006 (BSR)	38	37	38	41	33	33	44	47	38
IA1008 (L) (SCN)	37	34	38	41	31	35	43	48	38
Lambert (O)	29	27	32	25	22	21	32	39	27
A96-494018	34	33	34	38	29	30	37	40	36
A97-770012	37	36	38	40	31	34	41	46	37
A97-770031	38	38	39	40	33	35	45	47	39
A97-771039	33	32	34	34	29	34	35	43	35
M90-166054	36	34	36	36	28	37	45	44	34
M90-184111	34	31	34	35	24	32	41	44	34
M91-113037	34	30	36	36	27	36	33	45	33
M91-163126	36	31	36	39	28	35	40	45	34
M91-188039	34	33	34	34	27	30	41	44	36
M91-188076	36	34	37	38	27	34	41	44	37
M91-234086	35	30	35	38	28	36	44	44	33
M92-1645	33	34	32	34	24	33	38	39	34
M92-106016	33	28	34	36	25	34	41	40	33
M92-225124	35	26	36	40	27	33	40	44	36
M92-227032	31	22	29	32	23	31	36	41	34
ORC 9702	35	28	33	36	27	33	43	40	37
SD95-748	29	23	28	31	21	26	36	36	27
SD95-789	37	33	40	40	29	36	42	44	39
SD96-782	37	34	38	40	31	35	44	46	38
SD(ND)95-1663	34	31	34	34	28	34	41	46	33
SD(ND)95-1664	33	29	33	36	27	31	37	40	37
U97-2002	34	33	36	36	30	30	40	43	38

UNIFORM TEST I, 1999

PLANT HEIGHT (inches)

Strain	Beemer NE	Ridge- town Ont.	Talbot- ville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Parker (I)	35	37	30	42	39	36
IA1006 (BSR)	30	42	31	38	40	38
IA1008 (L) (SCN)	34	40	26	40	36	39
Lambert (0)	29	25	26	31	35	32
A96-494018	30	38	27	34	30	34
A97-770012	34	40	25	39	36	36
A97-770031	38	42	26	40	38	38
A97-771039	29	37	26	35	29	34
M90-166054	32	37	27	38	34	37
M90-184111	32	33	28	39	32	34
M91-113037	33	35	26	34	35	33
M91-163126	31	39	28	35	40	36
M91-188039	30	35	28	37	37	32
M91-188076	32	39	28	44	38	36
M91-234086	31	37	28	40	35	35
M92-1645	27	34	24	34	35	35
M92-106016	32	30	27	34	37	35
M92-225124	35	36	27	34	38	34
M92-227032	28	31	30	36	35	32
ORC 9702	30	39	28	36	37	38
SD95-748	30	30	28	33	33	29
SD95-789	35	37	29	35	39	36
SD96-782	35	38	29	41	35	38
SD(ND)95-1663	31	35	25	35	36	35
SD(ND)95-1664	31	36	29	35	35	32
U97-2002	29	37	26	33	29	35

UNIFORM TEST I, 1999

SEED SIZE (g/100)

Strain	Mean 14 Tests	Ames IA	Kanawha IA	Sioux Rapids IA	Lafayette IN	Ingham County MI	Saginaw County MI	Lamber- ton MN	Waseca MN
Parker (I)	17.5	15.2	18.0	18.3	13.9	14.9	19.0	20.1	18.3
IA1006 (BSR)	15.7	13.9	16.2	16.7	11.5	14.1	16.5	15.7	16.3
IA1008 (L) (SCN)	17.4	15.4	18.4	18.2	14.3	15.8	19.5	17.8	16.2
Lambert (O)	15.4	14.3	15.9	15.4	14.2	14.5	16.3	16.4	16.1
A96-494018	15.8	15.0	15.8	16.3	13.6	16.5	16.2	14.6	15.9
A97-770012	17.0	14.0	18.1	18.1	12.9	16.8	19.0	17.4	16.7
A97-770031	16.4	15.2	16.3	16.5	13.5	16.1	17.5	16.1	16.0
A97-771039	15.7	14.5	16.8	17.1	12.7	14.3	16.7	15.7	15.7
M90-166054	16.5	15.0	17.5	17.6	13.5	15.1	17.6	16.9	17.7
M90-184111	15.6	13.1	15.8	16.0	14.0	13.6	17.3	15.7	16.1
M91-113037	17.2	15.8	18.8	18.9	13.7	14.5	19.3	18.3	17.6
M91-163126	16.1	12.7	16.9	18.0	12.4	14.1	17.4	16.3	16.4
M91-188039	16.1	14.2	16.9	17.9	14.0	15.1	16.7	16.6	17.0
M91-188076	18.0	14.4	18.8	19.1	15.5	16.4	19.9	18.7	19.3
M91-234086	15.8	13.5	16.2	16.4	12.9	15.6	15.6	17.0	15.8
M92-1645	14.9	12.5	16.4	16.4	13.3	13.2	15.4	15.3	15.0
M92-106016	17.7	15.5	17.5	18.7	15.2	17.0	20.1	18.4	17.7
M92-225124	17.6	15.4	18.6	18.5	14.3	17.2	19.7	18.2	16.9
M92-227032	15.6	12.7	14.6	15.9	13.6	14.6	16.7	15.9	15.5
ORC 9702	16.4	13.3	15.8	17.3	14.7	15.5	19.5	16.6	15.8
SD95-748	14.6	12.5	13.9	15.4	12.8	13.2	17.1	14.8	14.6
SD95-789	17.2	14.5	18.5	17.4	14.6	15.6	18.0	18.4	18.4
SD96-782	14.9	13.0	15.2	15.2	11.9	14.1	15.5	15.4	15.6
SD(ND)95-1663	15.9	14.6	16.3	16.8	13.2	13.2	16.3	17.4	16.7
SD(ND)95-1664	15.9	14.6	16.6	17.1	12.6	13.3	14.5	16.1	16.9
U97-2002	18.9	16.8	19.8	20.2	16.2	18.6	21.1	19.1	17.8

UNIFORM TEST I, 1999

SEED SIZE (g/100)

Strain	Beemer NE	Ridge- town Ont.	Talbot- ville Ont.	Brook- ings SD	Water- town SD	Arlington WI
Parker (I)	16.1	20.9	21.5	15.7	16.7	16.7
IA1006 (BSR)	13.2	18.1	19.3	14.2	16.2	17.2
IA1008 (L) (SCN)	15.5	19.9	20.5	16.3	17.2	18.3
Lambert (O)	14.2	18.6	20.0	13.4	12.1	14.1
A96-494018	14.5	18.1	18.9	13.5	15.4	16.8
A97-770012	15.1	19.5	20.9	15.1	17.1	17.8
A97-770031	14.7	18.9	21.0	13.9	17.5	16.4
A97-771039	13.7	16.9	19.2	14.0	16.3	16.3
M90-166054	14.7	19.1	20.6	14.6	14.0	17.3
M90-184111	13.8	19.2	20.0	14.3	14.6	15.3
M91-113037	16.5	20.5	20.4	14.1	15.4	17.6
M91-163126	14.6	18.7	20.9	14.3	15.5	17.4
M91-188039	15.3	19.4	19.4	12.5	14.4	15.9
M91-188076	15.6	21.4	22.4	16.2	16.2	17.5
M91-234086	14.8	18.7	19.6	13.3	15.1	16.1
M92-1645	14.5	16.9	17.7	13.5	13.7	14.7
M92-106016	15.4	20.4	21.8	15.0	16.5	18.0
M92-225124	15.3	21.2	21.1	16.1	16.1	18.2
M92-227032	14.7	18.6	21.5	13.2	15.7	15.5
ORC 9702	14.5	18.4	19.9	15.4	15.0	17.3
SD95-748	13.6	17.2	19.1	12.9	13.5	13.8
SD95-789	15.7	18.9	21.4	15.3	16.4	17.4
SD96-782	13.7	17.3	19.2	12.8	14.1	15.6
SD(ND)95-1663	15.0	18.4	20.9	13.4	15.0	15.0
SD(ND)95-1664	15.1	19.6	21.8	14.8	14.3	14.9
U97-2002	16.1	20.6	23.0	15.8	18.4	21.2

UNIFORM TEST I, 1999

PROTEIN (%)

Strain	Mean 4 Tests	Lafayette IN	Saginaw Co. MI	Lamberton MN	Waseca MN
Parker (I)	40.2	42.2	40.3	39.3	38.9
IA1006 (BSR)	40.2	40.7	41.1	39.9	39.1
IA1008 (L) (SCN)	39.7	40.9	41.0	38.6	38.3
Lambert (O)	40.8	42.0	41.6	39.5	40.0
A96-494018	40.8	41.8	42.1	40.1	39.1
A97-770012	39.6	38.8	41.1	39.5	39.1
A97-770031	41.0	42.6	42.0	39.9	39.3
A97-771039	40.7	41.9	41.5	39.7	39.7
M90-166054	40.8	43.3	40.6	39.8	39.3
M90-184111	38.5	39.9	39.7	36.7	37.5
M91-113037	39.5	40.1	40.8	38.5	38.6
M91-163126	41.2	43.1	41.5	39.6	40.4
M91-188039	40.4	41.6	40.2	39.7	39.9
M91-188076	40.5	41.7	40.1	40.0	40.2
M91-234086	40.2	41.3	40.5	39.6	39.2
M92-1645	41.4	44.6	40.5	40.0	40.3
M92-106016	39.4	40.1	40.3	38.2	39.0
M92-225124	40.1	41.6	41.6	38.9	38.4
M92-227032	39.1	41.3	39.5	37.5	38.2
ORC 9702	41.9	42.9	44.2	41.7	38.7
SD95-748	41.6	43.3	41.4	40.9	40.6
SD95-789	40.4	41.0	42.1	39.1	39.2
SD96-782	40.2	40.9	40.8	38.9	40.0
SD(ND)95-1663	38.5	39.1	39.5	37.8	37.7
SD(ND)95-1664	38.1	38.4	38.7	37.9	37.4
U97-2002	41.6	43.0	42.2	40.9	40.4

UNIFORM TEST I, 1999

OIL (%)

Strain	Mean 4 Tests	Lafayette IN	Saginaw Co. MI	Lamberton MN	Waseca MN
Parker (I)	20.1	19.4	20.7	20.1	20.3
IA1006 (BSR)	19.1	18.9	19.2	19.2	19.0
IA1008 (L) (SCN)	18.9	18.7	18.9	19.0	19.1
Lambert (O)	20.7	21.1	20.3	21.0	20.5
A96-494018	19.2	18.6	19.3	19.7	19.3
A97-770012	19.9	19.8	20.0	19.7	20.0
A97-770031	20.1	20.1	20.1	20.2	20.0
A97-771039	19.4	18.6	19.7	19.4	19.7
M90-166054	19.3	18.6	19.6	19.6	19.5
M90-184111	21.3	21.0	21.5	21.6	21.0
M91-113037	20.2	20.1	20.5	20.2	20.0
M91-163126	19.7	19.0	20.2	19.9	19.8
M91-188039	20.1	20.4	20.5	20.1	19.5
M91-188076	20.5	20.4	20.8	20.4	20.3
M91-234086	20.0	20.4	20.2	19.6	19.9
M92-1645	19.9	18.5	20.6	20.2	20.3
M92-106016	20.3	20.9	20.3	20.1	19.9
M92-225124	20.0	19.4	20.6	20.0	20.1
M92-227032	19.4	18.7	19.5	19.9	19.5
ORC 9702	19.7	20.5	19.3	19.2	19.7
SD95-748	20.0	20.3	19.7	19.7	20.1
SD95-789	20.0	20.3	20.0	20.1	19.7
SD96-782	20.2	19.7	20.5	20.4	20.3
SD(ND)95-1663	20.9	21.4	20.4	21.1	20.7
SD(ND)95-1664	21.0	21.6	20.5	21.0	20.8
U97-2002	18.6	18.4	18.9	18.5	18.4

Preliminary Test I, 1999

	Strain	Parentage	Generation Composited	Unique Traits
1.	Parker (I)	A79-136012 x Dawson	F5	Rps1
2.	IA1006 (BSR)	IA2008 x Kenwood	F5	BSR
3.	Lambert (O)	M75-274 x M76-151	F5	Rps1
4.	IA1008 (L) (SCN)	Northrup King S20-20 x Jack	F5	SCN
5.	A98-781041	Pioneer P9204 x Pioneer P9281	F5	
6.	A98-781059	Northrup King S24-92 x AgriPro 3355	F4	
7.	A98-883014	Pioneer P9204 x Pioneer P9281	F5	
8.	A98-883023	Northrup King S24-92 x Pioneer P9281	F5	
9.	A98-883030	Pioneer P9321 x Northrup King S24-92	F5	
10.	A98-883033	Pioneer P9321 x Pioneer P9281	F5	
11.	A98-883036	IA1006 x Pioneer P9204	F4	BSR
12.	A98-883038	A93-552034 x Pioneer P9281	F5	BSR
13.	A98-884003	IA1006 x A93-552034	F5	BSR
14.	C1995	CX1538-64-7-2 x Archer	F5	
15.	M92-187088	M88-523 x Lambert	F5	Rps1k
16.	M92-268023	M87-227 x AC90-115043	F5	Rps1a
17.	M93-108103	Sturdy x AC90-115043	F4	Rps1a
18.	M93-146040	M87-180 x M88-829	F4	Rps1a
19.	M93-146056	M87-180 x M88-829	F4	Rps1a
20.	M93-146058	M87-180 x M88-829	F4	Rps1a
21.	M93-146067	M87-180 x M88-829	F4	Rps1a
22.	M93-149059	Sturdy x ORC9002	F4	Rps1a
23.	M93-149112	Sturdy x ORC9002	F4	Rps1a
24.	M93-149115	Sturdy x ORC9002	F4	Rps1a
25.	ORC 9804	RCAT9208 x Blackjack 21	F5	
26.	SD92-26	IA2008 x Ozzie	F5	
27.	SD96-111	IA2008 x HS88-4909	F5	
28.	SD96-206	IA2008 x HS88-4909	F5	
29.	SD96-343	Evans x Vinton 81	F5	Tofu
30.	SD96-373K	(Freeborn x Surge) x Hendricks	F5	
31.	SD96-586	IA2008 x Lambert	F5	
32.	SD96-648	ORC9002 x Hendricks	F5	
33.	SD96-755	ORC9002 x Agassiz	F5	
34.	SD96-1699	Kato x Hendricks	F5	
35.	SD96-1954	Hardin 91 x Asgrow A1662	F5	
36.	SD96-2392	Asgrow A2234 x Lambert	F5	

PRELIMINARY TEST I, 1999
DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score		Shattering Score Manhattan	PR Lafayette Race 7	Hard Seed %	PS Lafayette a %	PSB n %
		Humboldt	Yellow Medicine					
Parker (I)	WGBDYBfIEp	3.6	2.8	1.0	H	10	46	2
IA1006 (BSR)	WTBSYBfIEp	3.4	3.5	1.0	S	0	16	0
Lambert (0)	PGBSYBfIEp	2.0	2.3	2.0	S	16	42	6
IA1008 (L) (SCN)	WGBDYYIEp	3.8	3.8	1.0	R	6	30	8
A98-781041	PTBDYBfIEp	2.9	1.5	1.0	R	0	26	0
A98-781059	PTBIYBfIEp	3.4	3.8	1.0	R	0	16	0
A98-883014	PTBIYBfIEp	3.5	1.7	1.0	S	0	20	0
A98-883023	PTBDYBfIEp	3.6	3.3	1.0	S	0	6	0
A98-883030	PGBDYBrIEp	4.5	3.5	1.0	S	0	8	0
A98-883033	PTBSYBrIEp	4.0	3.0	4.0	S	0	20	0
A98-883036	PTBDYBfIEp	3.1	2.3	5.0	S	0	4	0
A98-883038	PTBDYBfIEp	2.8	2.7	1.0	R	0	16	2
A98-884003	PTTDYBfIEp	3.3	1.8	1.0	H	0	12	0
C1995	PGTSYBfIEp	3.0	3.7	1.0	R	0	4	0
M92-187088	P+WGBDYBfIEp	2.8	2.7	4.0	R	36	18	0
M92-268023	WGBDYYIEp	1.9	2.5	2.0	H	0	32	2
M93-108103	PG+TBDYHfIEp	2.0	2.2	3.0	R	14	4	6
M93-146040	WGTSYBfIEp	3.0	2.5	1.0	H	0	36	2
M93-146056	WGTSYBfIEp	3.4	2.2	1.0	S	0	26	0
M93-146058	WG+TBr+TSYBfIH	3.4	2.3	1.0	S	0	48	2
M93-146067	WGTSYBfIEp	3.4	2.2	1.0	S	0	30	6
M93-149059	P+WG+TBSYHfIEp	2.8	2.7	3.0	H	0	0	4
M93-149112	PGTIYBfIEp	3.5	2.5	4.0	R	0	8	0
M93-149115	PG+TBDYBfIH	3.4	2.0	2.0	R	0	12	2
ORC 9804	PTTDYBfIEp	3.8	2.7	2.0	S	0	0	0
SD92-26	PGTDYBfIEp	1.3	2.0	1.0	H	0	28	2
SD96-111	WGBDYBfIEp	3.3	2.5	2.0	R	0	64	2
SD96-206	PGTDYBfIEp	2.3	2.0	2.0	R	0	28	0
SD96-343	PGTDYYIEp	3.3	2.7	1.0	S	0	8	0
SD96-373K	WTBDYHfIEp	3.6	1.8	1.0	S	0	40	18
SD96-586	WGTSYBfIEp	2.1	2.8	3.0	H	0	28	12
SD96-648	PTBDYBfIEp	1.9	2.0	1.0	S	0	2	0
SD96-755	PGTDYBfIEp	1.8	2.0	1.0	H	0	6	0
SD96-1699	PTBDYGrIEp	1.5	2.5	2.0	R	0	36	4
SD96-1954	PTBDYBfIEp	3.3	4.5	2.0	R	0	20	0
SD96-2392	WTBSYBrIEp	2.3	2.0	4.0	R	0	22	4

PRELIMINARY TEST I, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 6 bu/a	Rank 6 No.	Maturity 5 Date	Lodging 6 Score	Plant Height 6 In.	Seed Size 6 g/100	Composition	
							Protein 3 %	Oil 3 %
Parker (I)	50.8	12	9/15	2.7	39	16.7	40.6	19.8
IA1006 (BSR)	52.1	9	1.8	2.5	38	15.7	40.0	19.4
Lambert (O)	38.3	36	-8.4	1.7	30	14.9	40.8	20.5
IA1008 (L) (SCN)	50.3	14	3.0	1.9	40	16.8	39.6	19.5
A98-781041	56.2	1	2.8	2.2	35	12.9	40.2	19.7
A98-781059	55.0	3	2.6	1.8	35	14.8	38.2	20.8
A98-883014	53.7	6	4.8	2.4	36	13.3	38.3	19.5
A98-883023	56.1	2	4.2	2.2	35	13.3	39.4	20.0
A98-883030	53.9	4	4.0	1.9	34	13.9	40.5	19.4
A98-883033	53.9	4	5.8	2.2	35	14.5	40.5	18.8
A98-883036	52.3	8	3.6	1.9	34	14.9	40.3	18.6
A98-883038	53.7	6	4.2	1.9	37	14.6	39.7	19.6
A98-884003	48.6	19	4.8	2.8	43	15.2	38.7	19.4
C1995	41.9	35	4.8	3.8	39	15.1	41.5	19.3
M92-187088	42.8	34	-6.4	2.4	30	13.9	40.0	19.7
M92-268023	47.0	26	-3.8	2.2	33	14.2	40.8	19.5
M93-108103	51.2	11	-1.2	1.8	35	16.2	41.7	19.1
M93-146040	48.2	22	-3.2	1.5	32	15.4	40.9	20.0
M93-146056	47.8	24	-2.8	1.6	33	15.7	41.1	20.4
M93-146058	46.1	27	-2.4	1.7	33	15.6	40.2	20.3
M93-146067	48.3	20	-3.0	1.7	33	15.6	40.5	20.1
M93-149059	49.6	16	-2.8	1.6	34	16.2	40.6	20.0
M93-149112	50.5	13	-1.2	2.1	36	15.6	39.9	19.7
M93-149115	48.3	20	-4.4	1.5	34	14.2	41.2	19.2
ORC 9804	46.1	27	-3.8	1.3	30	13.3	39.3	20.1
SD92-26	49.0	18	-1.6	2.1	37	13.0	41.1	19.3
SD96-111	49.2	17	-2.8	2.1	38	13.9	39.6	20.8
SD96-206	49.9	15	5.0	3.0	41	14.6	38.7	19.5
SD96-343	44.1	32	1.4	1.8	37	18.8	42.9	19.1
SD96-373K	45.4	30	-3.0	1.6	33	15.9	41.0	20.5
SD96-586	43.7	33	-4.4	2.3	33	13.2	39.0	20.4
SD96-648	45.6	29	-0.2	2.5	39	14.4	40.6	19.4
SD96-755	51.4	10	-1.6	2.4	39	14.7	39.0	19.6
SD96-1699	45.1	31	-7.2	1.7	34	17.1	41.3	20.2
SD96-1954	47.3	25	-2.6	2.5	38	16.9	41.0	20.4
SD96-2392	47.9	23	1.8	2.7	40	18.3	42.5	18.8

125.8 Days After Planting

PRELIMINARY TEST I, 1999

YIELD (bu/a)

Strain	Mean 6 Tests	Ames IA	Sioux Rapids IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD
Parker (I)	50.8	53.2	62.0	43.7	45.1	60.7	40.3
IA1006 (BSR)	52.1	52.7	56.9	49.6	48.0	65.3	40.4
Lambert (O)	38.3	27.6	38.9	32.5	40.5	51.9	38.7
IA1008 (L) (SCN)	50.3	55.4	58.2	44.3	47.3	60.4	36.4
A98-781041	56.2	63.6	58.0	52.7	51.7	66.7	44.8
A98-781059	55.0	59.0	55.8	53.3	52.0	66.9	42.8
A98-883014	53.7	65.3	61.8	43.3	45.2	63.3	43.1
A98-883023	56.1	65.4	57.2	50.2	50.3	73.9	39.8
A98-883030	53.9	59.5	60.4	47.6	43.0	70.3	42.4
A98-883033	53.9	56.6	58.6	50.3	48.0	68.3	41.7
A98-883036	52.3	53.4	61.5	48.8	47.3	63.3	39.7
A98-883038	53.7	59.5	59.9	51.0	48.2	59.3	44.6
A98-884003	48.6	56.5	52.9	42.6	44.1	59.2	36.1
C1995	41.9	42.5	48.4	42.9	37.0	47.5	33.3
M92-187088	42.8	28.8	55.4	32.5	40.0	61.2	39.0
M92-268023	47.0	42.4	54.0	37.2	46.1	62.1	40.0
M93-108103	51.2	48.4	58.5	44.4	53.2	62.1	40.6
M93-146040	48.2	51.3	54.3	40.9	42.6	59.9	40.3
M93-146056	47.8	50.0	54.9	40.4	42.0	62.2	37.3
M93-146058	46.1	47.1	55.5	38.0	41.7	57.2	37.4
M93-146067	48.3	51.4	52.4	43.8	43.1	60.4	38.7
M93-149059	49.6	45.3	58.0	48.0	45.6	62.5	38.1
M93-149112	50.5	55.4	60.7	42.3	43.7	62.6	38.3
M93-149115	48.3	51.1	55.9	40.2	49.0	55.2	38.7
ORC 9804	46.1	40.5	53.3	50.1	40.3	56.8	35.7
SD92-26	49.0	45.1	53.1	51.4	44.3	60.4	39.6
SD96-111	49.2	46.7	63.8	42.1	42.0	61.4	39.2
SD96-206	49.9	61.8	53.9	42.9	45.6	52.5	42.6
SD96-343	44.1	45.5	48.9	44.2	40.5	52.9	32.4
SD96-373K	45.4	52.1	51.2	34.9	38.3	58.4	37.4
SD96-586	43.7	44.8	40.9	37.3	43.8	54.6	40.7
SD96-648	45.6	48.6	49.9	42.5	42.0	51.3	39.1
SD96-755	51.4	59.6	58.6	45.2	49.6	58.4	36.7
SD96-1699	45.1	40.8	57.4	38.1	41.0	57.7	35.5
SD96-1954	47.3	47.5	58.8	45.4	41.1	54.2	36.6
SD96-2392	47.9	53.7	55.1	45.8	40.8	54.3	37.7
C.V. (%)		8.8	9.6	9.4	9.5	8.6	5.7
L.S.D. (5%)		2.1	2.5	8.7	8.6	10.4	3.7
Row Sp. (In.)		27	27	15	10	10	30
Rows/Plot		4	4	6	4	4	4
Reps		2	2	2	2	2	2

PRELIMINARY TEST I, 1999

YIELD RANK

Strain	Yield Rank	Ames IA	Sioux Rapids IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD
Parker (I)	12	13	2	19	16	16	11
IA1006 (BSR)	9	14	15	8	8	6	10
Lambert (O)	36	34	34	35	31	34	21
IA1008 (L) (SCN)	14	10	11	16	10	17	31
A98-781041	1	3	12	2	3	5	1
A98-781059	3	7	17	1	2	4	4
A98-883014	6	2	3	20	15	7	3
A98-883023	2	1	14	6	4	1	14
A98-883030	4	6	6	11	22	2	6
A98-883033	4	8	9	5	8	3	7
A98-883036	8	12	4	8	10	7	15
A98-883038	6	6	7	4	7	21	2
A98-884003	19	9	27	23	18	22	32
C1995	35	29	32	21	36	36	35
M92-187088	34	33	19	35	34	15	19
M92-268023	26	30	23	33	12	12	13
M93-108103	11	21	10	15	1	12	9
M93-146040	22	17	22	27	23	20	12
M93-146056	24	19	21	28	24	11	28
M93-146058	27	23	18	31	27	26	27
M93-146067	20	16	28	18	21	17	22
M93-149059	16	26	12	10	13	10	24
M93-149112	13	10	5	25	20	9	23
M93-149115	20	18	16	29	6	28	20
ORC 9804	27	32	25	7	33	27	33
SD92-26	18	27	26	3	17	17	16
SD96-111	17	24	1	26	24	14	17
SD96-206	15	4	24	21	13	33	5
SD96-343	32	25	31	17	31	32	36
SD96-373K	30	15	29	34	35	23	26
SD96-586	33	28	33	32	19	29	8
SD96-648	29	20	30	24	24	35	18
SD96-755	10	5	9	14	5	23	29
SD96-1699	31	31	13	30	29	25	34
SD96-1954	25	22	8	13	28	31	30
SD96-2392	23	11	20	12	30	30	25

PRELIMINARY TEST I, 1999

MATURITY (date)

Strain	Mean 5 Tests	Ames IA	Sioux Rapids IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD
Parker (I)	9/15	09/06		09/06	09/21	09/27	09/18
IA1006 (BSR)	1.8	5		+3	2	0	2
Lambert (O)	-8.4	-13		-1	-8	-10	-10
IA1008 (L) (SCN)	3.0	5		+3	3	1	6
A98-781041	2.8	5		+4	1	2	6
A98-781059	2.6	6		+5	3	1	3
A98-883014	4.8	10		+7	3	4	7
A98-883023	4.2	11		+6	3	2	5
A98-883030	4.0	8		+4	4	3	5
A98-883033	5.8	13		+6	4	4	8
A98-883036	3.6	7		+5	3	2	6
A98-883038	4.2	8		+5	4	4	5
A98-884003	4.8	9		+4	3	4	8
C1995	4.8	6		+11	7	4	7
M92-187088	-6.4	-12		-1	-3	-4	-12
M92-268023	-3.8	-3		-1	-3	-2	-10
M93-108103	-1.2	-2		0	0	0	-4
M93-146040	-3.2	-2		-1	-2	-1	-10
M93-146056	-2.8	-2		0	-2	-2	-8
M93-146058	-2.4	-2		0	-1	-1	-8
M93-146067	-3.0	-3		-1	-2	-1	-8
M93-149059	-2.8	-2		0	0	-3	-9
M93-149112	-1.2	0		+1	-1	0	-5
M93-149115	-4.4	-3		-1	-1	-5	-12
ORC 9804	-3.8	-5		+1	-1	-4	-9
SD92-26	-1.6	-2		+2	0	-1	-5
SD96-111	-2.8	-3		0	-1	0	-10
SD96-206	5.0	9		+5	6	4	6
SD96-343	1.4	1		+4	2	1	3
SD96-373K	-3.0	-1		0	-1	-3	-10
SD96-586	-4.4	-7		0	-2	-2	-11
SD96-648	-0.2	-2		+2	0	1	0
SD96-755	-1.6	2		+1	-2	1	-9
SD96-1699	-7.2	-10		-1	-2	-10	-13
SD96-1954	-2.6	-1		+1	1	-5	-8
SD96-2392	1.8	2		+3	3	2	2
Date Planted	5/12	05/03		05/14	05/19	05/26	05/02
Days to Mature	126	126		115	125	124	139

PRELIMINARY TEST I, 1999

LODGING (score)

Strain	Mean 6 Tests	Ames IA	Sioux Rapids IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD
Parker (I)	2.7	1.9	2.6	2.0	4.0	3.5	2.0
IA1006 (BSR)	2.5	2.0	2.2	2.0	3.5	3.0	2.0
Lambert (O)	1.7	1.5	1.5	1.0	3.0	2.0	1.0
IA1008 (L) (SCN)	1.9	1.4	2.0	1.0	2.5	2.5	2.0
A98-781041	2.2	1.9	2.2	1.0	3.5	2.5	2.0
A98-781059	1.8	1.9	2.0	1.0	3.0	2.0	1.0
A98-883014	2.4	1.9	2.4	1.0	4.0	3.0	2.0
A98-883023	2.2	1.7	2.5	1.0	3.5	3.5	1.0
A98-883030	1.9	1.6	2.0	1.0	3.5	2.0	1.0
A98-883033	2.2	1.9	1.9	1.1	3.5	2.5	2.0
A98-883036	1.9	1.5	1.6	1.0	3.0	2.5	2.0
A98-883038	1.9	1.9	2.3	0.9	3.0	2.5	1.0
A98-884003	2.8	2.0	2.5	2.0	3.5	4.0	3.0
C1995	3.8	2.5	2.9	3.6	4.5	5.0	4.0
M92-187088	2.4	1.6	2.2	1.0	4.0	3.5	2.0
M92-268023	2.2	1.7	2.0	1.4	3.5	3.5	1.0
M93-108103	1.8	1.5	1.9	0.9	3.0	2.5	1.0
M93-146040	1.5	1.5	1.6	1.0	2.0	2.0	1.0
M93-146056	1.6	1.6	1.6	1.1	2.5	2.0	1.0
M93-146058	1.7	1.6	1.9	0.9	2.5	2.0	1.0
M93-146067	1.7	1.8	1.6	0.9	2.5	1.5	2.0
M93-149059	1.6	1.6	1.7	1.0	2.5	2.0	1.0
M93-149112	2.1	1.7	2.0	1.1	3.0	3.0	2.0
M93-149115	1.5	1.6	1.7	0.9	2.5	1.5	1.0
ORC 9804	1.3	1.3	1.3	0.9	2.0	1.5	1.0
SD92-26	2.1	1.7	2.5	1.0	4.0	2.5	1.0
SD96-111	2.1	1.7	2.2	1.1	3.5	3.0	1.0
SD96-206	3.0	2.2	2.7	1.5	4.0	4.5	3.0
SD96-343	1.8	1.6	2.0	0.9	2.5	2.5	1.0
SD96-373K	1.6	1.7	1.5	1.0	2.5	2.0	1.0
SD96-586	2.3	1.6	2.4	1.1	3.5	3.0	2.0
SD96-648	2.5	1.7	2.6	1.5	3.5	3.5	2.0
SD96-755	2.4	2.0	2.6	2.0	4.0	3.0	1.0
SD96-1699	1.7	1.7	1.6	1.0	3.0	2.0	1.0
SD96-1954	2.5	2.0	2.2	2.5	3.5	3.0	2.0
SD96-2392	2.7	1.9	2.6	2.0	4.0	4.5	1.0

PRELIMINARY TEST I, 1999

PLANT HEIGHT (inches)

Strain	Mean 6 Tests	Ames IA	Sioux Rapids IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD
Parker (I)	39	36	39	40	40	39	42
IA1006 (BSR)	38	36	41	33	45	35	39
Lambert (O)	30	24	29	27	35	33	33
IA1008 (L) (SCN)	40	37	42	32	45	42	39
A98-781041	35	33	33	31	39	37	34
A98-781059	35	32	36	32	39	38	32
A98-883014	36	34	36	30	39	37	37
A98-883023	35	35	34	30	39	39	32
A98-883030	34	33	35	28	37	38	33
A98-883033	35	34	35	29	39	39	32
A98-883036	34	33	35	30	37	39	31
A98-883038	37	34	39	33	42	37	36
A98-884003	43	40	47	37	46	44	45
C1995	39	35	41	38	40	42	40
M92-187088	30	21	33	26	35	34	32
M92-268023	33	29	33	30	37	37	31
M93-108103	35	31	35	32	39	37	35
M93-146040	32	30	31	26	36	34	34
M93-146056	33	30	34	28	38	35	30
M93-146058	33	30	32	29	36	35	35
M93-146067	33	28	30	29	37	36	35
M93-149059	34	29	35	31	40	35	32
M93-149112	36	35	33	32	41	38	34
M93-149115	34	29	36	27	38	35	36
ORC 9804	30	25	27	29	34	32	32
SD92-26	37	32	37	33	42	40	37
SD96-111	38	32	37	36	44	38	39
SD96-206	41	39	46	40	42	41	39
SD96-343	37	35	34	32	42	41	38
SD96-373K	33	32	31	28	38	35	34
SD96-586	33	28	33	28	38	37	35
SD96-648	39	36	38	37	42	38	43
SD96-755	39	36	40	33	42	40	41
SD96-1699	34	29	32	27	43	37	37
SD96-1954	38	34	40	36	41	37	40
SD96-2392	40	37	45	35	44	36	42

PRELIMINARY TEST I, 1999

SEED SIZE (g/100)

Strain	Mean 6 Tests	Ames IA	Sioux Rapids IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD
Parker (I)	16.7	15.3	18.7	15.3	17.3	18.2	15.6
IA1006 (BSR)	15.7	14.3	16.4	16.0	15.4	18.6	13.6
Lambert (O)	14.9	14.9	16.0	14.7	15.4	14.9	13.4
IA1008 (L) (SCN)	16.8	15.9	18.0	15.7	16.7	17.8	16.4
A98-781041	12.9	12.1	13.7	13.4	12.4	14.1	11.8
A98-781059	14.8	14.2	15.8	15.4	14.0	15.9	13.4
A98-883014	13.3	13.0	14.4	13.5	12.8	14.0	12.1
A98-883023	13.3	12.6	14.3	13.9	13.0	13.9	12.1
A98-883030	13.9	13.5	15.2	14.1	12.9	14.3	13.2
A98-883033	14.5	13.7	16.0	14.8	14.5	14.7	13.5
A98-883036	14.9	13.3	15.8	18.9	13.6	15.8	11.9
A98-883038	14.6	14.5	16.0	14.7	14.2	15.0	13.0
A98-884003	15.2	14.7	17.0	15.5	14.4	15.6	14.0
C1995	15.1	12.5	17.0	16.0	15.7	15.9	13.2
M92-187088	13.9	13.0	15.7	13.4	14.5	14.9	12.0
M92-268023	14.2	12.3	15.5	13.7	14.0	17.2	12.3
M93-108103	16.2	13.4	18.2	16.0	17.0	17.2	15.4
M93-146040	15.4	14.4	16.9	15.1	16.6	16.1	13.4
M93-146056	15.7	14.5	17.3	15.3	16.0	17.5	13.4
M93-146058	15.6	13.8	16.9	15.9	15.8	17.4	13.7
M93-146067	15.6	14.0	16.7	14.8	16.3	18.4	13.4
M93-149059	16.2	14.5	18.4	14.3	17.8	18.4	14.0
M93-149112	15.6	14.6	18.0	14.9	16.7	15.6	13.6
M93-149115	14.2	12.6	16.0	13.1	15.0	15.5	13.0
ORC 9804	13.3	12.8	14.2	13.0	13.0	14.1	12.6
SD92-26	13.0	12.0	14.6	12.9	14.3	13.6	10.8
SD96-111	13.9	13.2	14.9	13.5	14.3	14.9	12.4
SD96-206	14.6	13.6	15.6	16.0	13.5	14.5	14.1
SD96-343	18.8	17.2	20.3	19.4	20.1	17.4	18.1
SD96-373K	15.9	15.1	17.3	15.0	17.1	17.2	13.5
SD96-586	13.2	12.3	14.5	13.2	13.9	14.0	11.1
SD96-648	14.4	12.6	15.8	14.9	15.0	15.2	12.8
SD96-755	14.7	14.2	16.2	14.5	13.8	16.4	13.3
SD96-1699	17.1	15.8	18.7	16.7	19.2	18.0	14.4
SD96-1954	16.9	15.0	18.4	16.5	18.1	18.9	14.3
SD96-2392	18.3	15.8	19.6	18.6	19.4	19.6	16.8

PRELIMINARY TEST I, 1999

PROTEIN (%)

Strain	Mean 3 Tests	Ingham Co. MI	Lamberton MN	Waseca MN
Parker (I)	40.6	42.5	39.8	39.6
IA1006 (BSR)	40.0	40.6	39.6	39.8
Lambert (O)	40.8	41.8	39.9	40.6
IA1008 (L) (SCN)	39.6	40.6	38.5	39.6
A98-781041	40.2	41.4	39.1	40.1
A98-781059	38.2	39.9	37.2	37.6
A98-883014	38.3	40.1	37.0	37.7
A98-883023	39.4	40.9	38.4	39.0
A98-883030	40.5	41.7	39.9	39.9
A98-883033	40.5	41.8	40.0	39.8
A98-883036	40.3	41.3	40.1	39.4
A98-883038	39.7	39.7	39.2	40.2
A98-884003	38.7	39.9	38.1	38.0
C1995	41.5	41.9	41.7	41.0
M92-187088	40.0	40.8	39.1	40.2
M92-268023	40.8	42.3	39.4	40.7
M93-108103	41.7	43.3	40.0	41.9
M93-146040	40.9	43.1	39.4	40.1
M93-146056	41.1	42.6	39.7	40.9
M93-146058	40.2	41.1	39.6	39.9
M93-146067	40.5	41.2	40.0	40.3
M93-149059	40.6	41.5	39.7	40.5
M93-149112	39.9	41.2	38.3	40.3
M93-149115	41.2	42.9	39.8	40.9
ORC 9804	39.3	39.3	39.3	39.4
SD92-26	41.1	41.0	41.0	41.2
SD96-111	39.6	41.4	38.3	39.2
SD96-206	38.7	40.6	36.4	39.2
SD96-343	42.9	43.3	42.4	42.9
SD96-373K	41.0	41.6	40.3	41.0
SD96-586	39.0	40.0	37.8	39.2
SD96-648	40.6	41.7	40.0	40.1
SD96-755	39.0	39.4	38.5	39.0
SD96-1699	41.3	42.1	40.7	41.2
SD96-1954	41.0	41.8	40.2	41.0
SD96-2392	42.5	44.7	41.3	41.5

PRELIMINARY TEST I, 1999

OIL (%)

Strain	Mean 3 Tests	Ingham Co. MI	Lamberton MN	Waseca MN
Parker (I)	19.8	19.3	19.8	20.3
IA1006 (BSR)	19.4	19.5	19.4	19.4
Lambert (O)	20.5	20.4	20.7	20.4
IA1008 (L) (SCN)	19.5	19.2	20.0	19.3
A98-781041	19.7	19.0	20.0	20.1
A98-781059	20.8	20.5	20.9	20.9
A98-883014	19.5	18.8	19.9	19.9
A98-883023	20.0	19.7	20.2	20.0
A98-883030	19.4	19.3	19.4	19.6
A98-883033	18.8	18.5	18.7	19.1
A98-883036	18.6	18.6	18.5	18.8
A98-883038	19.6	19.8	19.8	19.2
A98-884003	19.4	19.6	19.2	19.3
C1995	19.3	19.4	19.1	19.3
M92-187088	19.7	19.5	19.9	19.7
M92-268023	19.5	19.9	19.5	19.1
M93-108103	19.1	18.5	19.3	19.6
M93-146040	20.0	19.0	21.0	20.1
M93-146056	20.4	19.8	21.2	20.2
M93-146058	20.3	19.9	20.6	20.5
M93-146067	20.1	20.0	20.7	19.7
M93-149059	20.0	19.9	20.1	19.9
M93-149112	19.7	19.3	20.0	19.8
M93-149115	19.2	18.6	19.5	19.6
ORC 9804	20.1	20.2	20.0	20.0
SD92-26	19.3	19.3	19.3	19.4
SD96-111	20.8	20.6	21.1	20.6
SD96-206	19.5	19.6	20.0	19.0
SD96-343	19.1	19.2	18.9	19.2
SD96-373K	20.5	20.5	20.6	20.3
SD96-586	20.4	20.3	20.6	20.3
SD96-648	19.4	19.5	19.4	19.4
SD96-755	19.6	19.4	19.5	19.8
SD96-1699	20.2	20.2	20.2	20.2
SD96-1954	20.4	20.4	20.3	20.4
SD96-2392	18.8	18.3	18.8	19.2

Uniform Test II, 1999

	Strain	Parentage	Previous Testing	Generation Composited	Unique Traits
1.	IA2021 (II)	Elgin 87 x Marcus	5	F5	
2.	IA1008 (I)	Northrup King S20-20 x Jack	UT I	?	SCN
3.	IA2036 (SCN)	Jack x A86-301024	3	F5	SCN
4.	IA2038 (L)	Pioneer 9303 x Kenwood	3	F5	
5.	A96-591033	IA3003 x Pioneer 9273	1	F5	
6.	A96-591046	Northrup King S24-92 x Parker	1	F5	
7.	A97-770051	Pioneer 9273 x (A92-535059 x IA1006)	PT IIA	F5	BSR
8.	A97-771041	A92-627030 x ORC 9205	PT IIA	F5	
9.	A97-871009	Northrup King S20-20 x (A92-535029 x IA2021)	PT IIA	F5	
10.	C1963	HC86-4367 x HS88-4909	1	F5	
11.	C1973	C1834 x CX1311-99	PT IIA	F5	
12.	E95505	Felix x Northrup King S19-90	1	F5	
13.	HS96-3326	Parker x HS90-37100	PT IIB	F5	
14.	HS96-3332	Parker x HS90-37100	PT IIB	F5	
15.	HS96-3347	Pioneer 9268-003 x Vertex	PT IIB	F5	Unknown Rps
16.	LN95-5414	Jack x IA3003	SCN II	F5	SCN
17.	M91-240082	Bert x Archer	PT IIB	F5	Rps1k, BSR
18.	M92-1731	Sturdy x Bell	2	F5	Rps1, SCN
19.	SD96-152	IA2008 x HS88-4909	PT IIB	F5	
20.	SD96-170	IA2008 x HS88-4909	PT IIB	F5	
21.	SD96-1043	M87-1329 x Ozzie	PT IIB	F5	
22.	U96-2233	Colfax x A91-701035	1	F4	dt1
23.	U96-2408	Colfax x Iroquois	1	F4	
24.	U96-2416	MSBP2 (F1 bulk)	1	F7	
25.	U97-2104	MSBP3F6	PT IIA	F7	
26.	U97-2340	MSBP3F6	PT IIA	F7	
27.	U97-2406	U91-2527 x UP1C2-72	PT IIA	F6	

UNIFORM TEST II, 1999

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score		Emerg. Score Ames	Shattering Score Manhattan	PR Laf. Race 7	Hard Seed %	PS Lafayette a %	PSB n %
		Hum-boldt	Yellow Medicine						
IA2021 (II)	WTBSYBllep	3.6	3.3	4	2.0	R	16	16	2
IA1008 (I)	WGBDYllep	3.6	3.2	4	1.0	R	6	30	8
IA2036 (SCN)	PGBSYllep	3.5	3.0	1	2.0	R	0	26	0
IA2038 (L)	PTBDYBllep	4.8	4.2	4	2.0	R	2	22	0
A96-591033	PTBSYBllep	2.9	2.0	1	1.0	S	0	16	0
A96-591046	WGBIYBllep	3.5	3.2	1	2.0	H	0	8	0
A97-770051	PTBSYBllep	3.6	2.0	1	1.0	S	0	4	0
A97-771041	PTTSYBllep	3.3	2.3	1	1.0	R	0	4	0
A97-871009	WGBDYllep	2.5	2.3	3	2.0	R	0	12	0
C1963	PTBSYBllep	3.4	4.2	2	1.0	R	0	0	0
C1973	PTBSYBllep	3.8	2.5	2	1.0	R	0	2	0
E95505	PGBIYBllep	1.6	2.8	4	1.0	R	0	14	0
HS96-3326	PGBDYBllep	4.8	4.0	1	1.0	R	0	12	0
HS96-3332	PGBDYBllep	4.3	3.7	1	1.0	R	0	14	0
HS96-3347	PG+TBSYHllep	4.5	4.8	1	1.0	H	0	6	0
LN95-5414	PGBDYGrlep	4.3	4.3	3	1.0	R	0	0	0
M91-240082	PGTDYHllep	3.4	2.8	1	2.0	R	4	20	0
M92-1731	PTTDYBllep	2.6	3.7	5	1.0	R	0	10	8
SD96-152	WGBDYBllep	2.6	3.3	3	3.0	R	6	22	0
SD96-170	PGB+TDYBllep	3.3	2.2	3	3.0	R	0	0	0
SD96-1043	PGBDYllep	4.5	4.3	2	3.0	R	0	16	0
U96-2233	PGTSYBllep	3.1	2.7	2	2.0	S	0	6	0
U96-2408	WGBDYBllep	2.8	3.3	1	2.0	H	0	0	0
U96-2416	WTTSYBllep	3.0	2.8	3	1.0	R	0	2	0
U97-2104	WGBDYBllep	3.9	3.2	2	1.0	H	0	8	0
U97-2340	PTBSYBllep	3.5	3.3	1	2.0	H	0	2	2
U97-2406	PTBDYBllep	2.6	2.5	5	1.0	S	0	10	0

UNIFORM TEST II, 1999

SDS DATA

Strain	DX	SDS Data	DS
		Pontiac DI	
IA2021 (II)	0.1	1	1
IA1008 (I)	0.1	1	0
IA2036 (SCN)	0.1	1	0
IA2038 (L)	0.0	0	0
A96-591033	0.0	0	0
A96-591046	0.1	1	0
A97-770051	0.1	1	1
A97-771041	0.1	1	0
A97-871009	1.6	12	1
C1963	1.5	12	1
C1973	0.8	7	1
E95505	0.9	7	1
HS96-3326	0.0	0	0
HS96-3332	0.0	0	0
HS96-3347	0.2	2	1
LN95-5414	0.1	1	0
M91-240082	0.0	0	0
M92-1731	0.0	0	0
SD96-152	0.5	4	1
SD96-170	0.1	1	0
SD96-1043	0.0	0	0
U96-2233	0.0	0	0
U96-2408	2.3	18	1
U96-2416	0.2	2	1
U97-2104	0.2	2	0
U97-2340	0.0	0	0
U97-2406	0.2	2	1

UNIFORM TEST II, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 22 bu/a	Rank 22 No.	Maturity 18 Date	Lodging 21 Score	Plant Height 21 In.	Seed Size 21 g/100	Composition	
							Protein 5 %	Oil 5 %
IA2021 (II)	53.5	17	9/15	1.6	29	15.9	39.2	21.2
IA1008 (I)	52.6	20	-1.7	1.3	34	16.7	39.9	20.2
IA2036 (SCN)	50.5	23	2.0	2.2	38	14.5	40.8	19.0
IA2038 (L)	55.1	8	4.3	1.6	34	18.1	40.7	20.7
A96-591033	56.6	4	2.0	1.2	34	17.4	41.6	20.0
A96-591046	58.6	1	3.3	1.7	37	14.8	41.1	20.4
A97-770051	57.3	2	3.0	1.3	31	14.4	40.5	20.9
A97-771041	55.4	5	3.2	1.5	35	15.6	41.5	19.6
A97-871009	53.7	16	3.1	1.8	34	17.2	39.9	21.0
C1963	54.1	13	2.6	1.5	33	14.8	39.0	21.2
C1973	48.0	27	3.7	1.4	34	16.6	46.2	18.0
E95505	54.9	9	-2.0	1.4	32	15.2	39.2	20.2
HS96-3326	53.9	14	4.7	1.7	39	15.3	39.5	20.4
HS96-3332	56.7	3	4.5	1.9	38	15.3	39.2	20.2
HS96-3347	54.3	11	3.9	1.6	35	16.8	40.0	20.4
LN95-5414	50.5	23	2.7	1.5	29	16.4	40.5	20.6
M91-240082	53.0	19	-0.9	1.8	35	15.5	40.3	19.8
M92-1731	48.7	26	-2.9	1.9	33	16.6	42.1	20.0
SD96-152	50.4	25	2.6	2.0	37	15.0	39.2	20.4
SD96-170	54.2	12	4.0	1.7	35	16.7	39.3	20.3
SD96-1043	52.3	21	0.6	2.1	34	15.1	40.3	20.4
U96-2233	53.2	18	2.6	1.2	25	16.5	40.5	20.0
U96-2408	55.2	7	5.1	1.4	35	14.3	40.7	20.3
U96-2416	52.3	21	4.5	1.4	35	15.6	40.2	21.3
U97-2104	55.4	5	3.2	1.3	31	15.1	39.8	20.0
U97-2340	53.8	15	2.2	1.5	36	15.0	39.5	21.0
U97-2406	54.5	10	2.4	1.9	37	17.2	40.4	20.5

123.4 Days After Planting

UNIFORM TEST II, 1999

1998-1999 2-YEAR MEAN

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant	Seed	Composition	
	41 bu/a	41 No.	36 Date	40 Score	Height 39 In.	Size 39 g/100	Protein 10 %	Oil 10 %
IA2021 (II)	56.5	7	9/15	1.8	31	16.4	39.5	21.3
IA2036 (SCN)	52.9	10	1.2	2.6	38	14.8	41.1	19.2
IA2038 (L)	57.8	4	3.5	1.8	35	19.0	41.0	20.8
A96-591033	59.8	2	1.5	1.3	35	17.8	41.7	20.0
A96-591046	60.8	1	2.6	1.8	37	14.8	41.4	20.5
C1963	57.8	4	2.4	1.8	35	15.4	39.5	21.2
E95505	56.3	8	-2.1	1.6	34	15.7	40.0	20.2
M92-1731	51.3	11	-3.2	2.1	33	17.1	42.0	20.3
U96-2233	56.7	6	1.7	1.3	26	16.7	41.0	20.2
U96-2408	58.1	3	3.9	1.6	37	14.6	41.4	20.1
U96-2416	55.3	9	3.8	1.8	37	15.6	40.8	21.2

123.5 Days After Planting

1997-1999 3-YEAR MEAN

No. of Tests Strain	64	64	57	63	62	60	15	15
IA2021 (II)	55.6	2	9/17	1.8	30	16.9	38.9	21.4
IA2036 (SCN)	51.9	3	1.0	2.5	38	15.0	40.6	19.3
IA2038 (L)	57.4	1	3.7	1.8	35	19.6	40.4	20.8
M92-1731	50.0	4	-3.0	2.1	34	17.4	41.7	20.4

125.1 Days After Planting

UNIFORM TEST II, 1999

YIELD (bu/a)

Strain	Mean 22 Tests	Alden IA	Ames IA	Ripley IA	Dekalb IL	Dwight IL	Urbana IL
IA2021 (II)	53.5	48.5	56.0	55.3	72.7	53.3	59.5
IA1008 (I)	52.6	53.0	57.2	59.3	62.4	58.9	56.2
IA2036 (SCN)	50.5	55.8	56.3	47.2	63.2	63.7	58.4
IA2038 (L)	55.1	48.7	57.8	49.0	76.6	62.3	65.0
A96-591033	56.6	54.5	66.5	53.6	69.6	57.9	57.3
A96-591046	58.6	60.6	67.6	61.5	75.2	55.0	67.9
A97-770051	57.3	50.0	63.8	53.8	71.2	64.1	58.8
A97-771041	55.4	50.8	60.0	51.1	69.5	60.6	59.9
A97-871009	53.7	43.8	61.1	47.1	69.4	54.1	61.3
C1963	54.1	43.0	64.7	61.4	67.3	56.9	58.6
C1973	48.0	40.6	51.9	51.6	62.2	52.7	58.6
E95505	54.9	57.0	59.4	56.3	67.9	52.5	60.1
HS96-3326	53.9	47.1	58.6	49.8	71.7	58.5	65.0
HS96-3332	56.7	48.2	65.1	55.7	73.9	65.2	65.4
HS96-3347	54.3	45.0	63.0	56.5	73.9	55.5	67.3
LN95-5414	50.5	55.2	53.5	49.4	70.7	74.8	61.8
M91-240082	53.0	51.3	57.1	56.7	64.3	58.3	57.0
M92-1731	48.7	55.9	55.2	47.9	61.1	57.8	54.8
SD96-152	50.4	51.1	59.0	50.2	65.0	45.8	55.0
SD96-170	54.2	47.9	61.9	55.0	66.2	59.3	59.7
SD96-1043	52.3	41.3	52.6	57.0	70.9	57.2	52.3
U96-2233	53.2	46.7	58.2	53.4	73.1	53.3	61.0
U96-2408	55.2	49.3	67.3	50.4	69.3	59.0	62.4
U96-2416	52.3	46.7	55.9	57.4	68.1	55.5	62.3
U97-2104	55.4	51.3	64.9	54.3	71.0	63.1	57.1
U97-2340	53.8	46.4	57.0	59.9	68.3	56.1	62.2
U97-2406	54.5	43.2	57.9	57.2	74.1	55.3	56.1
C.V. (%)		10.2	7.2	7.9	5.2	10.0	7.9
L.S.D. (5%)		2.8	2.4	2.4	5.9	9.8	7.8
Row Sp. (In.)		27	27	27	30	30	30
Rows/Plot		4	4	4	4	4	4
Reps		2	2	2	3	3	3

UNIFORM TEST II, 1999

YIELD (bu/a)

Strain	Lafayette IN	Wanatah IN	Ingham County MI	Lanawee County MI	Lamberton MN	Waseca MN
IA2021 (II)	28.0	27.1	47.0	56.4	55.3	60.8
IA1008 (I)	35.0	27.4	46.0	48.6	47.6	56.7
IA2036 (SCN)	36.4	33.9	46.1	48.4	44.2	43.8
IA2038 (L)	36.5	30.6	46.9	55.1	46.2	55.1
A96-591033	35.8	24.7	48.7	54.4	50.6	54.7
A96-591046	38.3	32.2	48.4	59.5	45.6	57.3
A97-770051	48.3	32.1	52.2	51.8	46.6	52.1
A97-771041	36.7	31.9	44.9	52.0	41.1	52.8
A97-871009	36.8	28.8	47.4	54.4	48.1	51.7
C1963	39.3	33.5	45.3	47.8	42.8	49.3
C1973	35.1	31.1	41.0	48.6	34.7	44.0
E95505	27.0	26.2	47.9	52.5	53.1	55.5
HS96-3326	34.4	30.1	40.3	47.5	38.9	47.9
HS96-3332	37.0	33.5	43.3	49.7	40.8	53.7
HS96-3347	38.0	35.1	44.6	52.4	44.5	46.2
LN95-5414	39.1	14.6	45.0	51.2	46.5	50.8
M91-240082	30.8	30.2	45.0	50.3	48.9	43.0
M92-1731	27.9	29.6	41.1	48.9	41.4	51.3
SD96-152	30.0	32.1	44.5	50.8	37.5	47.3
SD96-170	37.5	25.4	43.3	54.3	47.3	46.1
SD96-1043	32.4	35.0	50.1	55.3	48.0	57.7
U96-2233	35.3	30.3	42.7	51.4	52.9	51.1
U96-2408	37.1	31.9	51.3	50.6	53.1	46.7
U96-2416	36.2	31.1	45.9	46.3	47.4	44.2
U97-2104	36.9	33.3	43.8	53.1	45.5	55.3
U97-2340	39.0	34.5	41.1	47.8	35.6	46.3
U97-2406	38.3	27.4	43.2	50.2	46.0	46.4
C.V. (%)	9.6	17.1	7.6	5.5	1.3	8.5
L.S.D. (5%)	5.5	8.4	8.0	5.9	9.9	7.1
Row Sp. (In.)	24	26	15	15	10	10
Rows/Plot	4	4	6	6	10	10
Reps	3	3	2	2	3	3

UNIFORM TEST II, 1999

YIELD (bu/a)

Strain	Beemer NE	Cotesfield NE	McCool Junction NE	Adelphia NJ	Hoytville OH
IA2021 (II)	53.1	57.6	52.9	51.2	52.8
IA1008 (I)	47.6	66.4	52.1	48.6	44.1
IA2036 (SCN)	45.8	59.4	49.2	45.9	48.1
IA2038 (L)	48.6	64.6	50.2	67.3	50.6
A96-591033	53.2	78.5	59.5	62.6	51.1
A96-591046	57.8	77.5	57.1	67.1	52.9
A97-770051	58.4	70.3	57.4	71.5	50.9
A97-771041	56.5	69.9	56.5	66.6	49.7
A97-871009	55.4	61.9	54.1	54.9	51.7
C1963	54.2	69.5	57.8	57.6	46.2
C1973	45.1	53.2	46.9	52.7	47.9
E95505	55.3	71.9	53.1	71.3	52.5
HS96-3326	56.1	70.8	51.1	66.7	51.1
HS96-3332	56.4	81.3	56.6	68.0	48.4
HS96-3347	54.1	69.6	60.0	54.0	52.0
LN95-5414	48.0	34.7	51.0	54.2	47.2
M91-240082	54.7	64.4	49.6	55.4	48.8
M92-1731	48.8	52.0	43.1	50.8	38.9
SD96-152	53.0	64.8	57.8	53.2	45.7
SD96-170	59.0	74.5	60.4	60.3	45.5
SD96-1043	57.0	66.6	48.9	50.2	52.6
U96-2233	57.7	63.8	53.7	44.1	53.8
U96-2408	53.4	67.9	52.6	66.0	46.1
U96-2416	52.6	63.1	58.6	48.1	45.7
U97-2104	57.0	67.3	54.9	61.5	53.0
U97-2340	51.7	73.4	58.3	62.6	48.7
U97-2406	53.3	71.3	58.2	74.3	49.6
C.V. (%)	5.3	9.6	5.7	15.3	5.3
L.S.D. (5%)	4.6	11.0	5.0	14.7	3.6
Row Sp. (In.)	30	30	30	8	7.5
Rows/Plot	4	4	4	10	8
Reps	3	3	3	3	3

UNIFORM TEST II, 1999

YIELD (bu/a)

Strain	Wooster OH	Harrow Ont.	Ridgetown Ont.	Brookings SD	Arlington WI
IA2021 (II)	42.5	68.4	67.9	46.3	63.6
IA1008 (I)	47.3	68.1	75.1	38.4	60.7
IA2036 (SCN)	36.3	63.2	64.7	37.2	64.7
IA2038 (L)	48.0	74.6	69.1	36.3	72.4
A96-591033	51.2	75.9	73.7	39.9	72.3
A96-591046	54.1	74.5	68.3	40.8	69.5
A97-770051	53.5	78.2	65.7	39.9	70.1
A97-771041	60.9	68.6	67.9	38.6	72.3
A97-871009	57.8	71.0	68.7	42.2	60.1
C1963	50.7	71.4	71.6	37.7	64.4
C1973	43.6	64.0	62.0	32.7	55.1
E95505	47.9	62.3	72.5	37.9	66.9
HS96-3326	51.7	74.1	64.2	38.0	71.6
HS96-3332	55.3	73.7	67.6	38.0	71.3
HS96-3347	51.0	70.5	64.7	39.1	58.6
LN95-5414	47.5	76.3	57.2	37.3	46.2
M91-240082	50.1	73.4	69.7	40.6	67.5
M92-1731	43.9	57.4	64.9	37.0	60.6
SD96-152	38.2	67.8	63.5	36.6	60.2
SD96-170	43.8	73.7	67.4	39.0	64.2
SD96-1043	27.0	77.8	61.8	37.3	62.2
U96-2233	54.9	69.0	68.2	35.3	61.4
U96-2408	49.5	71.6	69.8	37.8	72.3
U96-2416	47.6	71.6	65.3	37.7	63.0
U97-2104	53.1	67.1	74.8	40.9	60.6
U97-2340	55.6	70.1	64.6	39.1	65.2
U97-2406	61.2	73.3	66.5	34.9	61.5
C.V. (%)	12.7	6.7	4.8	8.4	6.8
L.S.D. (5%)	8.8	5.1	4.4	4.4	4.7
Row Sp. (In.)	7.5	17	17	30	15
Rows/Plot	8	5	5	4	6
Reps	3	3	3	3	3

UNIFORM TEST II, 1999

YIELD RANK

Strain	Yield Rank	Alden IA	Ames IA	Ripley IA	Dekalb IL	Dwight IL	Urbana IL
IA2021 (II)	17	14	22	12	7	23	15
IA1008 (I)	20	7	18	4	25	10	23
IA2036 (SCN)	23	4	21	26	24	4	19
IA2038 (L)	8	13	17	24	1	6	4
A96-591033	4	6	3	16	13	13	20
A96-591046	1	1	1	1	2	21	1
A97-770051	2	11	7	15	9	3	16
A97-771041	5	10	11	19	14	7	13
A97-871009	16	21	10	27	15	22	10
C1963	13	23	6	2	20	16	17
C1973	27	25	27	18	26	25	17
E95505	9	2	12	10	19	26	12
HS96-3326	14	17	14	22	8	11	4
HS96-3332	3	15	4	11	4	2	3
HS96-3347	11	20	8	9	4	18	2
LN95-5414	23	5	25	23	12	1	9
M91-240082	19	8	19	8	23	12	22
M92-1731	26	3	24	25	27	14	26
SD96-152	25	9	13	21	22	27	25
SD96-170	12	16	9	13	21	8	14
SD96-1043	21	24	26	7	11	15	27
U96-2233	18	18	15	17	6	23	11
U96-2408	7	12	2	20	16	9	6
U96-2416	21	18	23	5	18	18	7
U97-2104	5	8	5	14	10	5	21
U97-2340	15	19	20	3	17	17	8
U97-2406	10	22	16	6	3	20	24

UNIFORM TEST II, 1999

YIELD RANK

Strain	Lafayette IN	Wanatah IN	Ingham County MI	Lanawee County MI	Lamberton MN	Waseca MN
IA2021 (II)	25	23	8	2	1	1
IA1008 (I)	20	21	11	21	9	4
IA2036 (SCN)	15	4	10	23	19	26
IA2038 (L)	14	15	9	4	14	7
A96-591033	17	26	4	5	5	8
A96-591046	5	8	5	1	16	3
A97-770051	1	9	1	12	12	11
A97-771041	13	11	16	11	22	10
A97-871009	12	20	7	5	7	12
C1963	2	5	13	24	20	16
C1973	19	13	26	21	27	25
E95505	27	24	6	9	2	5
HS96-3326	21	18	27	26	24	17
HS96-3332	10	5	20	19	23	9
HS96-3347	7	1	17	10	18	22
LN95-5414	3	27	14	14	13	15
M91-240082	23	17	14	17	6	27
M92-1731	26	19	25	20	21	13
SD96-152	24	9	18	15	25	18
SD96-170	8	25	20	7	11	23
SD96-1043	22	2	3	3	8	2
U96-2233	18	16	23	13	4	14
U96-2408	9	11	2	16	2	19
U96-2416	16	13	12	27	10	24
U97-2104	11	7	19	8	17	6
U97-2340	4	3	24	24	26	21
U97-2406	5	21	22	18	15	20

UNIFORM TEST II, 1999

YIELD RANK

Strain	Beemer NE	Cotesfield NE	McCool Junction NE	Adelphia NJ	Hoytville OH
IA2021 (II)	18	24	17	21	4
IA1008 (I)	25	16	19	24	26
IA2036 (SCN)	26	23	24	26	18
IA2038 (L)	23	18	22	5	12
A96-591033	17	2	3	11	9
A96-591046	3	3	10	6	3
A97-770051	2	9	9	2	11
A97-771041	7	10	12	8	13
A97-871009	10	22	14	16	8
C1963	13	12	8	14	21
C1973	27	25	26	20	19
E95505	11	6	16	3	6
HS96-3326	9	8	20	7	9
HS96-3332	8	1	11	4	17
HS96-3347	14	11	2	18	7
LN95-5414	24	27	21	17	20
M91-240082	12	19	23	15	15
M92-1731	22	26	27	22	27
SD96-152	19	17	7	19	23
SD96-170	1	4	1	13	25
SD96-1043	6	15	25	23	5
U96-2233	4	20	15	27	1
U96-2408	15	13	18	9	22
U96-2416	20	21	4	25	23
U97-2104	5	14	13	12	2
U97-2340	21	5	5	10	16
U97-2406	16	7	6	1	14

UNIFORM TEST II, 1999

YIELD RANK

Strain	Wooster OH	Harrow Ont.	Ridgetown Ont.	Brookings SD	Arlington WI
IA2021 (II)	24	20	12	1	16
IA1008 (I)	20	21	1	12	21
IA2036 (SCN)	26	25	20	21	13
IA2038 (L)	16	5	8	24	1
A96-591033	11	4	3	7	2
A96-591046	7	6	10	4	8
A97-770051	8	1	17	6	7
A97-771041	2	19	12	11	2
A97-871009	3	15	9	2	25
C1963	13	14	5	17	14
C1973	23	24	25	27	27
E95505	17	26	4	15	10
HS96-3326	10	7	23	13	5
HS96-3332	5	8	14	14	6
HS96-3347	12	16	20	8	26
LN95-5414	19	3	27	20	28
M91-240082	14	10	7	5	9
M92-1731	21	27	19	22	22
SD96-152	25	22	24	23	24
SD96-170	22	9	15	10	15
SD96-1043	27	2	26	19	18
U96-2233	6	18	11	25	20
U96-2408	15	12	6	16	2
U96-2416	18	13	18	18	17
U97-2104	9	23	2	3	22
U97-2340	4	17	22	9	12
U97-2406	1	11	16	26	19

UNIFORM TEST II, 1999

MATURITY (date)

Strain	Mean 18 Tests	Alden IA	Ames IA	Ripley IA	Dekalb IL	Dwight IL	Urbana IL
IA2021 (II)	9/15		09/16		09/19	09/07	09/01
IA1008 (I)	-1.7		-4		-3	-1	-2
IA2036 (SCN)	2.0		3		4	3	1
IA2038 (L)	4.3		4		5	3	7
A96-591033	2.0		0		2	3	0
A96-591046	3.3		6		5	6	3
A97-770051	3.0		4		5	5	2
A97-771041	3.2		5		5	6	4
A97-871009	3.1		3		5	4	2
C1963	2.6		3		5	4	2
C1973	3.7		4		6	8	4
E95505	-2.0		-5		-3	-3	-6
HS96-3326	4.7		7		6	7	6
HS96-3332	4.5		8		5	6	4
HS96-3347	3.9		6		7	6	6
LN95-5414	2.7		4		3	3	4
M91-240082	-0.9		-5		-2	-1	-3
M92-1731	-2.9		-7		-9	-4	-6
SD96-152	2.6		6		5	1	-1
SD96-170	4.0		5		9	2	2
SD96-1043	0.6		-2		2	-1	-2
U96-2233	2.6		1		4	1	3
U96-2408	5.1		7		8	8	6
U96-2416	4.5		7		5	8	5
U97-2104	3.2		4		7	3	3
U97-2340	2.2		3		4	6	4
U97-2406	2.4		0		4	1	0
Date Planted	5/14		05/03		05/21	05/11	05/04
Days to Mature	123		136		121	119	120

UNIFORM TEST II, 1999

MATURITY (date)

Strain	Lafayette IN	Wanatah IN	Ingham County MI	Lanawee County MI	Lamberton MN	Waseca MN
IA2021 (II)	09/03	09/03	09/08	09/04	09/25	10/01
IA1008 (I)	0	-1	+2	-1	-2	-2
IA2036 (SCN)	5	6	+3	+3	4	1
IA2038 (L)	9	5	+3	+6	5	2
A96-591033	4	3	+3	0	3	0
A96-591046	7	5	+6	+5	3	2
A97-770051	10	3	+7	+6	3	1
A97-771041	6	4	+3	+4	3	1
A97-871009	5	2	+4	+5	4	1
C1963	7	4	+3	+5	4	1
C1973	7	6	+4	+6	3	3
E95505	-4	-1	+2	0	-1	-1
HS96-3326	8	7	+6	+7	7	2
HS96-3332	7	6	+5	+7	8	1
HS96-3347	7	3	+4	+3	6	1
LN95-5414	6	5	+4	+5	3	1
M91-240082	-2	-2	+2	0	4	1
M92-1731	-2	-3	+1	-1	-1	-3
SD96-152	3	4	+4	+2	4	1
SD96-170	7	4	+5	+6	6	2
SD96-1043	2	1	+2	+2	0	1
U96-2233	6	4	+4	+3	3	2
U96-2408	11	5	+10	+7	7	2
U96-2416	9	7	+8	+5	9	2
U97-2104	7	3	+8	+7	2	2
U97-2340	5	1	+6	+4	2	1
U97-2406	3	3	+4	+5	7	1
Date Planted	05/11	05/04	05/14	05/10	05/19	05/25
Days to Mature	115	122	117	117	129	129

UNIFORM TEST II, 1999

MATURITY (date)

Strain	Beemer NE	Cotesfield NE	McCool Junction NE	Adelphia NJ	Hoytville OH
IA2021 (II)	09/27	09/22		10/05	09/07
IA1008 (I)	-2	0		-2	-2
IA2036 (SCN)	2	5		-3	2
IA2038 (L)	3	8		3	11
A96-591033	0	4		3	3
A96-591046	3	6		4	4
A97-770051	3	4		4	6
A97-771041	2	6		1	5
A97-871009	4	7		3	5
C1963	2	4		4	2
C1973	1	4		3	7
E95505	-4	-1		1	-3
HS96-3326	4	9		3	9
HS96-3332	5	8		3	9
HS96-3347	1	6		4	6
LN95-5414	3	6		-2	3
M91-240082	-3	-1		2	-1
M92-1731	-6	-2		3	-2
SD96-152	4	7		1	5
SD96-170	5	8		3	6
SD96-1043	2	2		0	1
U96-2233	4	2		4	4
U96-2408	6	7		4	7
U96-2416	2	6		1	7
U97-2104	3	5		2	5
U97-2340	0	4		2	4
U97-2406	2	6		1	5
Date Planted	05/29	05/25		05/21	05/10
Days to Mature	121	120		137	120

UNIFORM TEST II, 1999

MATURITY (date)

Strain	Wooster OH	Harrow Ont.	Ridgetown Ont.	Brookings SD	Arlington WI
IA2021 (II)	09/08	09/23	09/13		09/23
IA1008 (I)	-6	-3	-1		2
IA2036 (SCN)	-2	1	+3		5
IA2038 (L)	5	2	+8		5
A96-591033	3	2	+2		5
A96-591046	-1	2	+6		5
A97-770051	-2	3	+4		4
A97-771041	1	4	+6		5
A97-871009	1	3	+5		5
C1963	-1	1	+3		6
C1973	0	7	+7		3
E95505	-3	-3	-2		2
HS96-3326	2	3	+8		5
HS96-3332	3	3	+6		6
HS96-3347	2	2	+5		7
LN95-5414	1	3	+6		5
M91-240082	-6	-1	+1		4
M92-1731	-4	-5	0		-1
SD96-152	0	3	+9		4
SD96-170	1	3	+8		10
SD96-1043	-1	2	+5		4
U96-2233	1	5	+5		3
U96-2408	2	5	+9		6
U96-2416	2	3	+6		8
U97-2104	2	5	+8		4
U97-2340	0	2	+6		3
U97-2406	2	3	+7		4
Date Planted	04/29	06/07	05/20		05/04
Days to Mature	132	108	116		142

UNIFORM TEST II, 1999

LODGING (score)

Strain	Mean 21 Tests	Alden IA	Ames IA	Rippey IA	Dekalb IL	Dwight IL	Urbana IL
IA2021 (II)	1.6	1.6	1.7	2.4	2.3	1.3	1.2
IA1008 (I)	1.3	1.5	1.4	2.6	1.3	1.3	1.2
IA2036 (SCN)	2.2	2.0	2.6	2.8	2.2	2.3	2.2
IA2038 (L)	1.6	1.6	1.8	2.6	1.5	1.2	1.5
A96-591033	1.2	1.4	1.4	1.7	1.0	1.0	1.0
A96-591046	1.7	1.6	1.9	2.1	2.0	1.0	1.3
A97-770051	1.3	1.5	1.4	1.9	1.3	1.2	1.0
A97-771041	1.5	1.9	1.7	2.0	1.3	1.7	1.3
A97-871009	1.8	1.5	1.9	2.7	2.2	1.5	1.5
C1963	1.5	1.6	1.9	2.4	1.3	1.2	1.2
C1973	1.4	1.4	1.9	2.0	1.3	1.7	1.5
E95505	1.4	1.4	1.3	2.0	1.0	1.3	1.0
HS96-3326	1.7	1.7	2.2	2.4	1.5	1.8	1.5
HS96-3332	1.9	1.7	2.3	2.0	1.7	2.2	1.5
HS96-3347	1.6	1.6	1.9	2.3	1.7	1.5	1.3
LN95-5414	1.5	1.6	1.7	1.9	1.3	1.5	1.5
M91-240082	1.8	1.6	1.9	2.6	2.5	2.2	1.8
M92-1731	1.9	1.6	1.7	2.7	2.7	2.5	1.7
SD96-152	2.0	2.0	2.7	2.6	2.0	1.7	1.5
SD96-170	1.7	1.7	2.0	2.2	2.5	1.5	1.3
SD96-1043	2.1	1.7	3.0	3.0	2.7	2.3	1.3
U96-2233	1.2	1.2	1.0	1.6	1.0	1.0	1.0
U96-2408	1.4	1.4	1.9	2.2	1.5	1.2	1.3
U96-2416	1.4	1.5	1.7	2.6	1.7	1.3	1.3
U97-2104	1.3	1.5	1.4	1.6	1.2	1.0	1.0
U97-2340	1.5	1.5	1.8	2.2	1.5	1.5	1.5
U97-2406	1.9	1.6	1.9	2.4	2.0	1.5	1.2

UNIFORM TEST II, 1999

LODGING (score)

Strain	Lafayette IN	Wanatah IN	Ingham County MI	Lanawee County MI	Lamberton MN	Waseca MN
IA2021 (II)	1.0	1.0	1.5	1.0	3.7	3.0
IA1008 (I)	1.0	1.0	1.0	1.0	2.0	2.0
IA2036 (SCN)	1.7	1.2	2.0	3.0	4.0	4.3
IA2038 (L)	1.0	1.0	1.5	1.5	3.0	2.0
A96-591033	1.0	1.0	1.0	1.0	1.7	2.0
A96-591046	1.0	1.0	2.0	2.0	3.3	2.7
A97-770051	1.0	1.0	1.0	1.0	2.7	2.0
A97-771041	1.0	1.0	1.5	1.0	3.0	2.3
A97-871009	1.5	1.0	1.5	3.1	3.7	2.3
C1963	1.0	1.0	1.0	1.5	3.0	2.3
C1973	1.0	1.0	1.5	1.4	2.3	2.0
E95505	1.0	1.0	1.0	1.0	3.0	3.0
HS96-3326	1.0	1.0	2.0	2.0	4.0	2.3
HS96-3332	1.2	1.0	2.5	2.5	4.0	3.0
HS96-3347	1.0	1.0	1.5	1.5	3.0	2.3
LN95-5414	1.2	1.0	1.5	1.1	3.0	2.3
M91-240082	1.0	1.0	2.5	2.0	4.0	3.0
M92-1731	1.0	1.0	2.0	1.9	3.7	3.3
SD96-152	1.2	1.3	3.0	1.5	4.0	3.0
SD96-170	1.0	1.0	1.5	2.0	3.3	2.7
SD96-1043	1.0	1.0	3.5	1.5	4.0	3.0
U96-2233	1.0	1.0	1.0	0.9	2.0	2.3
U96-2408	1.0	1.0	1.0	1.6	2.3	2.7
U96-2416	1.3	1.0	1.0	1.1	2.0	2.0
U97-2104	1.0	1.0	1.0	0.9	2.7	2.0
U97-2340	1.0	1.0	1.0	1.5	2.0	2.0
U97-2406	1.0	1.0	2.5	3.0	4.0	3.0

UNIFORM TEST II, 1999

LODGING (score)

Strain	Beemer NE	Cotesfield NE	McCool Junction NE	Adelphia NJ	Hoytville OH
IA2021 (II)	1.0	1.3		1.0	1.2
IA1008 (I)	1.0	1.0		1.0	1.2
IA2036 (SCN)	1.0	3.0		1.2	1.9
IA2038 (L)	1.0	2.0		1.0	1.1
A96-591033	1.0	1.0		1.0	1.0
A96-591046	1.0	1.7		1.0	1.1
A97-770051	1.0	1.0		1.0	1.2
A97-771041	1.0	2.0		1.2	1.1
A97-871009	1.0	2.0		1.0	1.0
C1963	1.0	1.3		1.0	1.0
C1973	1.0	1.7		1.0	1.0
E95505	1.0	1.3		1.0	1.1
HS96-3326	1.0	2.0		1.0	1.3
HS96-3332	1.0	2.0		1.0	1.7
HS96-3347	1.0	2.0		1.0	1.0
LN95-5414	1.0	1.7		1.3	1.0
M91-240082	1.0	2.0		1.0	1.0
M92-1731	1.0	2.0		1.0	1.2
SD96-152	1.0	2.3		1.0	1.3
SD96-170	1.0	2.0		1.0	1.4
SD96-1043	1.0	2.3		1.0	1.1
U96-2233	1.0	1.0		1.0	1.0
U96-2408	1.0	1.3		1.0	1.0
U96-2416	1.0	2.0		1.2	1.0
U97-2104	1.0	1.0		1.0	1.0
U97-2340	1.0	2.3		1.2	1.0
U97-2406	1.0	1.7		1.0	1.4

UNIFORM TEST II, 1999

LODGING (score)

Strain	Wooster OH	Harrow Ont.	Ridgetown Ont.	Brookings SD	Arlington WI
IA2021 (II)	1.2	1.0	1.0	2.0	2.0
IA1008 (I)	1.3	1.0	1.0	2.0	1.0
IA2036 (SCN)	1.3	1.0	1.7	2.0	3.0
IA2038 (L)	1.4	1.0	1.7	2.0	2.0
A96-591033	1.3	1.0	1.0	2.0	1.0
A96-591046	1.2	1.0	1.0	2.0	3.0
A97-770051	1.2	1.0	1.0	2.0	1.0
A97-771041	1.4	1.0	1.0	2.0	1.0
A97-871009	1.5	1.0	1.0	2.0	3.0
C1963	1.2	1.0	1.0	2.0	2.0
C1973	1.4	1.0	1.3	2.0	1.0
E95505	1.2	1.0	1.0	1.0	2.0
HS96-3326	1.2	1.0	1.7	2.0	2.0
HS96-3332	1.3	1.0	1.3	2.0	3.0
HS96-3347	1.4	1.0	1.3	2.0	2.0
LN95-5414	1.5	1.0	1.7	2.0	1.0
M91-240082	1.3	1.3	1.0	2.0	1.0
M92-1731	1.4	1.0	1.7	2.0	2.0
SD96-152	1.2	1.0	2.3	2.0	4.0
SD96-170	1.4	1.0	1.0	2.0	2.0
SD96-1043	1.3	1.3	1.7	2.0	4.0
U96-2233	1.2	1.0	1.0	1.0	1.0
U96-2408	1.3	1.0	1.3	1.0	1.0
U96-2416	1.4	1.0	1.0	2.0	1.0
U97-2104	1.2	1.0	1.0	2.0	2.0
U97-2340	1.4	1.0	1.3	2.0	1.0
U97-2406	1.5	1.0	1.3	2.0	3.0

UNIFORM TEST II, 1999

PLANT HEIGHT (inches)

Strain	Mean 21 Tests	Alden IA	Ames IA	Ripley IA	Dekalb IL	Dwight IL	Urbana IL
IA2021 (II)	29	30	30	32	34	31	26
IA1008 (I)	34	36	36	41	38	33	31
IA2036 (SCN)	38	41	37	44	43	37	35
IA2038 (L)	34	35	32	38	40	34	34
A96-591033	34	33	37	37	36	33	30
A96-591046	37	38	35	43	41	37	35
A97-770051	31	33	33	36	36	33	31
A97-771041	35	37	34	39	37	37	33
A97-871009	34	33	31	39	41	35	31
C1963	33	33	34	41	39	30	30
C1973	34	33	37	38	38	36	31
E95505	32	33	32	38	37	33	30
HS96-3326	39	39	40	42	44	45	37
HS96-3332	38	39	39	44	40	44	36
HS96-3347	35	34	37	41	43	35	32
LN95-5414	29	31	26	34	36	30	29
M91-240082	35	36	35	37	39	38	34
M92-1731	33	35	32	39	35	34	31
SD96-152	37	41	37	43	41	33	31
SD96-170	35	37	36	42	41	34	31
SD96-1043	34	35	33	41	36	32	30
U96-2233	25	26	23	27	28	23	24
U96-2408	35	35	38	37	39	39	35
U96-2416	35	36	37	39	41	39	34
U97-2104	31	30	31	38	32	30	27
U97-2340	36	36	35	41	41	39	31
U97-2406	37	36	39	44	42	39	32

UNIFORM TEST II, 1999

PLANT HEIGHT (inches)

Strain	Lafayette IN	Wanatah IN	Ingham County MI	Lanawee County MI	Lamberton MN	Waseca MN
IA2021 (II)	26	25	29	36	40	37
IA1008 (I)	33	27	33	44	45	42
IA2036 (SCN)	38	32	38	48	45	45
IA2038 (L)	34	31	35	39	42	40
A96-591033	35	29	36	40	44	39
A96-591046	38	30	40	41	46	42
A97-770051	32	26	31	33	40	39
A97-771041	35	30	35	39	43	41
A97-871009	33	30	35	48	41	41
C1963	35	30	36	33	42	41
C1973	36	31	35	39	42	41
E95505	29	27	38	32	40	38
HS96-3326	38	36	42	43	46	42
HS96-3332	39	36	41	43	47	46
HS96-3347	33	32	39	39	43	40
LN95-5414	30	20	29	35	37	35
M91-240082	33	28	39	41	48	43
M92-1731	31	25	35	36	44	40
SD96-152	33	32	41	44	48	44
SD96-170	34	30	41	41	47	42
SD96-1043	32	33	39	37	45	40
U96-2233	22	18	24	31	31	32
U96-2408	33	30	36	39	46	43
U96-2416	35	34	33	39	47	41
U97-2104	31	27	32	33	39	41
U97-2340	37	30	37	41	46	41
U97-2406	36	28	37	42	44	43

UNIFORM TEST II, 1999

PLANT HEIGHT (inches)

Strain	Beemer NE	Cotesfield NE	McCool Junction NE	Adelphia NJ	Hoytville OH
IA2021 (II)	27		26	19	27
IA1008 (I)	34		29	21	30
IA2036 (SCN)	38		35	21	34
IA2038 (L)	29		29	22	31
A96-591033	35		28	23	28
A96-591046	33		32	25	33
A97-770051	28		28	21	26
A97-771041	34		32	23	29
A97-871009	32		30	25	31
C1963	33		32	21	30
C1973	32		31	22	31
E95505	32		28	21	28
HS96-3326	36		34	24	36
HS96-3332	37		32	24	34
HS96-3347	34		27	20	31
LN95-5414	27		31	20	25
M91-240082	31		28	24	29
M92-1731	31		26	22	29
SD96-152	39		33	25	36
SD96-170	35		31	22	28
SD96-1043	36		29	21	29
U96-2233	28		27	15	22
U96-2408	33		31	23	30
U96-2416	35		34	22	31
U97-2104	30		29	21	27
U97-2340	33		33	26	29
U97-2406	34		32	26	32

UNIFORM TEST II, 1999

PLANT HEIGHT (inches)

Strain	Wooster OH	Harrow Ont.	Ridgetown Ont.	Brookings SD	Arlington WI
IA2021 (II)	19	26	35	27	33
IA1008 (I)	24	29	39	33	38
IA2036 (SCN)	24	33	41	35	48
IA2038 (L)	25	29	42	31	38
A96-591033	24	28	40	34	40
A96-591046	24	34	45	38	42
A97-770051	21	27	38	30	34
A97-771041	27	24	44	34	39
A97-871009	24	30	41	30	39
C1963	22	27	42	32	40
C1973	23	28	41	27	37
E95505	23	27	38	32	39
HS96-3326	25	32	47	39	42
HS96-3332	26	36	47	33	42
HS96-3347	24	31	41	32	38
LN95-5414	24	27	34	21	32
M91-240082	26	32	45	33	41
M92-1731	24	28	39	33	40
SD96-152	24	30	49	39	44
SD96-170	24	31	45	31	41
SD96-1043	23	34	40	37	40
U96-2233	17	21	30	22	29
U96-2408	24	28	46	30	40
U96-2416	28	29	41	34	38
U97-2104	20	23	38	30	36
U97-2340	27	31	43	35	41
U97-2406	28	32	43	36	45

UNIFORM TEST II, 1999

SEED SIZE (g/100)

Strain	Mean 21 Tests	Alden IA	Ames IA	Ripley IA	Dekalb IL	Dwight IL	Urbana IL
IA2021 (II)	15.9	15.9	14.0	15.2	16.5	16.3	17.4
IA1008 (I)	16.7	17.6	16.2	17.0	16.7	15.7	17.4
IA2036 (SCN)	14.5	14.5	14.3	14.3	15.1	15.0	15.3
IA2038 (L)	18.1	18.3	16.9	17.8	19.0	19.0	20.5
A96-591033	17.4	17.0	16.0	16.3	17.2	18.1	16.6
A96-591046	14.8	13.8	13.6	14.0	14.5	15.7	16.3
A97-770051	14.4	14.0	12.8	12.8	14.3	13.8	14.3
A97-771041	15.6	15.2	14.8	15.0	16.2	16.5	14.9
A97-871009	17.2	17.1	15.5	16.1	17.9	16.2	16.4
C1963	14.8	14.4	13.7	14.6	15.1	14.1	16.1
C1973	16.6	16.5	14.8	15.9	16.8	18.2	16.8
E95505	15.2	15.3	14.4	14.7	15.4	15.5	15.2
HS96-3326	15.3	14.9	14.6	14.3	16.6	15.7	16.0
HS96-3332	15.3	15.0	13.8	14.6	16.9	16.1	15.4
HS96-3347	16.8	16.4	15.3	16.0	18.4	16.0	18.0
LN95-5414	16.4	15.6	14.8	15.6	18.1	17.9	15.9
M91-240082	15.5	16.1	14.0	16.1	15.9	14.7	15.2
M92-1731	16.6	17.4	14.6	16.1	17.1	15.3	17.0
SD96-152	15.0	15.0	14.2	14.5	15.0	15.5	17.1
SD96-170	16.7	15.9	15.9	16.3	18.0	16.4	17.8
SD96-1043	15.1	14.8	13.1	14.1	15.5	15.0	15.8
U96-2233	16.5	15.9	15.2	15.5	17.5	16.7	16.6
U96-2408	14.3	13.7	12.9	13.8	15.4	14.1	13.7
U96-2416	15.6	14.6	14.1	14.5	15.9	15.9	16.8
U97-2104	15.1	15.2	13.3	14.8	16.3	14.8	15.0
U97-2340	15.0	14.8	14.6	14.8	15.5	15.7	15.3
U97-2406	17.2	17.0	15.1	16.3	18.6	16.2	17.9

UNIFORM TEST II, 1999

SEED SIZE (g/100)

Strain	Lafayette IN	Wanatah IN	Ingham County MI	Lanawee County MI	Lamberton MN	Waseca MN
IA2021 (II)	12.8	11.3	14.9	15.5	15.9	15.8
IA1008 (I)	14.2	12.2	16.4	15.3	16.1	16.6
IA2036 (SCN)	12.1	12.4	14.0	14.4	13.7	13.4
IA2038 (L)	17.5	14.0	17.3	17.3	17.6	16.8
A96-591033	14.5	12.1	17.2	18.1	17.1	16.0
A96-591046	13.9	12.5	13.9	14.5	12.5	12.6
A97-770051	13.8	10.2	15.0	13.6	14.2	13.0
A97-771041	13.5	11.8	14.5	14.6	14.5	15.7
A97-871009	14.6	13.2	18.0	18.1	16.9	15.6
C1963	13.3	11.1	14.6	14.2	14.0	14.3
C1973	15.5	12.4	17.0	17.4	15.9	14.7
E95505	11.2	11.4	14.4	13.6	16.8	16.3
HS96-3326	13.2	11.7	14.5	14.6	14.3	13.7
HS96-3332	12.9	11.4	14.4	14.8	14.3	14.0
HS96-3347	14.3	12.3	17.5	15.9	16.4	15.4
LN95-5414	15.0	11.0	14.8	15.5	15.0	14.9
M91-240082	13.2	11.7	13.6	15.0	14.5	13.1
M92-1731	13.8	13.0	17.0	16.8	17.7	17.6
SD96-152	12.1	10.8	14.6	14.2	14.8	14.0
SD96-170	14.4	12.6	16.5	16.5	15.9	15.5
SD96-1043	13.3	12.4	15.0	14.3	14.2	15.0
U96-2233	13.9	12.5	16.1	15.2	16.1	16.5
U96-2408	12.7	10.4	13.9	15.0	13.8	12.4
U96-2416	14.5	11.5	15.4	15.5	13.9	14.0
U97-2104	12.5	10.4	15.0	13.8	14.3	14.3
U97-2340	12.6	10.5	15.0	14.8	13.1	14.3
U97-2406	14.5	12.6	16.9	16.3	16.8	15.9

UNIFORM TEST II, 1999

SEED SIZE (g/100)

Strain	Beemer NE	Cotesfield NE	McCool Junction NE	Adelphia NJ	Hoytville OH
IA2021 (II)	14.8	17.4	17.4	18.9	12.5
IA1008 (I)	16.3	19.4	18.9	18.2	14.0
IA2036 (SCN)	13.1	15.5	15.8	18.7	11.6
IA2038 (L)	17.0	18.1	18.5	22.1	14.5
A96-591033	14.9	20.0	19.2	23.9	14.7
A96-591046	14.6	17.3	17.4	20.5	11.5
A97-770051	14.2	16.1	16.3	18.2	11.9
A97-771041	15.6	17.2	17.3	20.9	12.8
A97-871009	15.9	17.3	18.4	25.1	13.0
C1963	13.7	16.8	17.0	20.9	11.3
C1973	14.8	16.7	17.5	22.2	13.7
E95505	14.8	17.3	15.8	19.6	12.4
HS96-3326	14.6	15.7	18.3	20.8	12.9
HS96-3332	14.7	16.0	17.2	21.0	12.7
HS96-3347	15.4	18.8	18.9	21.1	13.6
LN95-5414	14.7	18.6	18.7	23.4	13.5
M91-240082	14.3	17.1	18.1	20.9	13.3
M92-1731	15.3	17.4	17.1	20.6	13.1
SD96-152	14.6	16.9	17.3	17.7	12.6
SD96-170	16.3	18.1	19.3	22.4	13.2
SD96-1043	14.7	17.1	15.6	18.2	13.3
U96-2233	15.3	18.6	17.3	21.7	13.3
U96-2408	13.2	15.8	14.8	20.0	11.1
U96-2416	14.9	16.6	17.3	22.3	12.9
U97-2104	14.2	17.1	17.2	21.5	11.8
U97-2340	14.3	17.3	16.7	19.6	11.8
U97-2406	16.0	19.1	19.4	24.3	14.2

UNIFORM TEST II, 1999

SEED SIZE (g/100)

Strain	Wooster OH	Harrow Ont.	Ridgetown Ont.	Brookings SD	Arlington WI
IA2021 (II)	18.8	20.5		14.9	16.4
IA1008 (I)	18.1	19.9		15.8	18.6
IA2036 (SCN)	17.0	16.0		12.3	16.3
IA2038 (L)	20.5	22.1		15.4	19.5
A96-591033	20.8	22.0		15.5	18.5
A96-591046	17.1	16.8		14.0	14.5
A97-770051	16.4	18.0		14.1	15.3
A97-771041	18.4	19.3		12.4	16.7
A97-871009	18.7	22.8		15.9	18.8
C1963	15.9	17.6		13.5	15.5
C1973	18.6	21.1		14.2	18.5
E95505	17.0	17.8		14.3	17.0
HS96-3326	15.9	18.5		14.9	16.5
HS96-3332	16.9	18.2		14.2	16.3
HS96-3347	19.4	19.5		15.5	17.9
LN95-5414	18.1	21.7		14.0	17.2
M91-240082	19.5	18.4		14.4	16.8
M92-1731	18.1	19.9		14.6	18.1
SD96-152	16.5	18.0		13.7	15.6
SD96-170	18.8	20.1		13.5	17.4
SD96-1043	17.5	18.9		12.9	16.4
U96-2233	20.1	21.0		14.4	16.7
U96-2408	17.0	17.7		12.7	16.1
U96-2416	18.4	18.7		14.4	16.3
U97-2104	17.8	18.0		13.7	16.3
U97-2340	16.9	18.0		12.9	16.9
U97-2406	19.7	21.1		14.6	19.3

UNIFORM TEST II, 1999

PROTEIN (%)

Strain	Mean 5 Tests	Urbana IL	Lafayette IN	Ingham Co. MI	Hoytville OH	Harrow Ont.
IA2021 (II)	39.2	41.6	38.9	39.6	37.0	38.7
IA1008 (I)	39.9	40.5	40.7	40.1	38.8	39.3
IA2036 (SCN)	40.8	42.7	41.7	40.9	40.4	38.5
IA2038 (L)	40.7	42.2	41.5	40.8	39.8	39.3
A96-591033	41.6	42.3	41.0	41.4	41.3	41.8
A96-591046	41.1	42.4	41.7	42.4	38.8	40.4
A97-770051	40.5	40.7	41.4	40.7	38.7	40.9
A97-771041	41.5	42.7	42.0	42.4	40.0	40.5
A97-871009	39.9	41.2	40.7	41.0	37.3	39.4
C1963	39.0	40.0	40.2	41.0	35.5	38.1
C1973	46.2	46.5	46.9	48.3	43.7	45.8
E95505	39.2	40.6	40.7	40.1	37.2	37.5
HS96-3326	39.5	41.2	39.9	40.3	37.7	38.5
HS96-3332	39.2	40.2	38.8	40.8	37.3	38.7
HS96-3347	40.0	40.8	40.2	41.0	39.0	39.2
LN95-5414	40.5	41.1	40.6	41.7	39.7	39.5
M91-240082	40.3	42.7	40.4	39.9	39.7	39.0
M92-1731	42.1	42.8	42.6	42.4	40.6	42.2
SD96-152	39.2	41.3	38.7	39.9	38.5	37.4
SD96-170	39.3	40.7	39.5	40.5	37.1	38.5
SD96-1043	40.3	42.3	40.2	41.6	36.7	40.9
U96-2233	40.5	41.4	41.1	41.7	38.3	39.8
U96-2408	40.7	41.2	41.9	41.7	38.5	40.1
U96-2416	40.2	41.0	40.8	41.6	37.3	40.2
U97-2104	39.8	40.1	39.9	40.3	39.9	38.9
U97-2340	39.5	39.9	39.9	40.3	39.2	38.3
U97-2406	40.4	42.2	40.7	41.4	38.5	39.1

UNIFORM TEST II, 1999

OIL (%)

Strain	Mean 5 Tests	Urbana IL	Lafayette IN	Ingham Co. MI	Hoytville OH	Harrow Ont.
IA2021 (II)	21.2	21.0	21.1	20.0	21.1	22.8
IA1008 (I)	20.2	20.7	18.9	19.8	19.8	21.9
IA2036 (SCN)	19.0	18.5	17.8	18.7	18.8	21.3
IA2038 (L)	20.7	20.8	20.0	19.8	20.2	22.5
A96-591033	20.0	20.3	19.6	19.4	19.6	21.1
A96-591046	20.4	20.6	19.8	19.8	20.3	21.5
A97-770051	20.9	21.2	20.2	20.1	21.0	21.9
A97-771041	19.6	18.8	19.1	18.9	19.7	21.3
A97-871009	21.0	21.2	20.1	19.9	21.4	22.5
C1963	21.2	21.6	20.0	19.9	22.0	22.7
C1973	18.0	17.3	17.7	16.9	18.7	19.3
E95505	20.2	20.6	18.6	19.0	20.2	22.4
HS96-3326	20.4	20.3	20.0	19.1	20.7	21.9
HS96-3332	20.2	20.2	20.0	19.0	20.1	21.6
HS96-3347	20.4	20.7	19.9	19.4	20.3	21.8
LN95-5414	20.6	20.6	20.0	19.5	20.8	22.2
M91-240082	19.8	19.5	18.8	19.4	19.5	21.9
M92-1731	20.0	20.5	19.6	19.0	19.5	21.5
SD96-152	20.4	20.5	19.8	19.1	20.3	22.1
SD96-170	20.3	20.6	20.0	18.9	20.5	21.7
SD96-1043	20.4	20.4	20.1	19.2	20.8	21.3
U96-2233	20.0	20.3	19.3	18.7	20.2	21.7
U96-2408	20.3	20.2	19.6	19.1	20.8	21.8
U96-2416	21.3	21.6	20.6	19.9	21.7	22.7
U97-2104	20.0	20.7	19.5	19.4	18.8	21.7
U97-2340	21.0	20.9	20.6	19.8	21.0	22.9
U97-2406	20.5	20.5	19.8	19.2	20.8	22.4

Preliminary Test IIA, 1999

	Strain	Parentage	Generation Composited	Unique Traits
1.	IA2021 (II)	Elgin 87 x Marcus	F5	
2.	IA1008 (I) (SCN)	Northrup King S20-20 x Jack	F5	SCN
3.	IA2038 (L)	Pioneer 9303 x Kenwood	F5	
4.	A98-883005	A93-552034 x Pioneer P9204	F5	BSR
5.	A98-884010	A93-554045 x Pioneer P9321	F5	BSR
6.	A98-884013	Pioneer P9204 x Northrup King S24-92	F5	
7.	A98-884020	Northrup King S24-92 x Pioneer P9281	F5	
8.	A98-884024	IA1006 x AgriPro 3355	F5	BSR
9.	A98-884031	Pioneer P9321 x Pioneer P9281	F5	
10.	A98-884034	Pioneer P9321 x Pioneer P9281	F5	
11.	A98-884037	A93-552034 x Pioneer P9281	F5	BSR
12.	A98-884047	LN89-295 x Pioneer P9321	F4	
13.	A98-980003	Pioneer P9321 x Northrup King S24-92	F5	
14.	A98-980014	IA1006 x AgriPro 3355	F5	BSR
15.	A98-980017	Pioneer P9321 x Northrup King S24-92	F5	
16.	A98-980022	IA1006 x Pioneer P9204	F4	BSR
17.	A98-980036	Northrup King S24-92 x Pioneer P9281	F5	
18.	A98-980037	Northrup King S24-92 x Pioneer P9281	F5	
19.	E96502	IA3003 x Dairyland DSR-217	F4	
20.	E96659	Northrup King S19-90 x Northrup King S24-92	F4	
21.	E96665	Northrup King S19-90 x Northrup King S24-92	F4	
22.	E96695	Northrup King S19-90 x IA3003	F4	BSR
23.	LN95-556	HS88-4906 x C1842	F5	
24.	LN96-824	LN89-334 x IA3003	F5	Rps1k
25.	LN96-1660	Piatt x IA2007	F5	Rps1a
26.	SD96-77	IA2008 x Ozzie	F5	
27.	SD96-119	IA2008 x HS88-4909	F5	
28.	SD96-190	IA2008 x HS88-4909	F5	
29.	SD96-195	IA2008 x HS88-4909	F5	
30.	SD96-203	IA2008 x HS88-4909	F5	
31.	SD96-421	Evans x Vinton 81	F5	Tofu
32.	SD96-1425	Hardin 91 x Parker	F5	
33.	SD96-1960	Hardin 91 x Asgrow A1662	F5	
34.	SD96-2088	Hardin 91 x M87-180	F5	
35.	SD96-2138	Parker x SD(M)91-1574	F5	

PRELIMINARY TEST IIA, 1999
DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Humboldt	Shattering Score Manhattan	PR Lafayette Race 7	Hard Seed Lafayette %	PS Lafayette a %	PSB n %
IA2021 (II)	WTBSYBllep	3.9	2.0	R	16	16	2
IA1008 (I) (SCN)	WGBDYIlep	3.4	1.0	R	6	30	8
IA2038 (L)	PTBDYBrlep	4.3	1.0	R	2	22	0
A98-883005	PG+TTDYHIlep	3.6	1.0	R	8	34	0
A98-884010	PGTSYIlep	2.9	2.0	R	0	2	0
A98-884013	PTBDYBllep	3.9	1.0	R	0	2	0
A98-884020	PTBDYBllep	3.8	1.0	R	0	0	0
A98-884024	PTBSYBllep	4.4	1.0	R	0	6	0
A98-884031	PTBIYBrlep	3.6	1.0	H	0	10	0
A98-884034	PTBSYBrlep	3.8	1.0	S	0	16	0
A98-884037	PTTSYBllep	2.4	2.0	R	0	10	0
A98-884047	PTBDYHIlep	3.4	1.0	S	0	4	0
A98-980003	PTBDYBrlep	3.6	1.0	S	0	2	0
A98-980014	PGBSYBrlep	3.9	2.0	R	0	8	0
A98-980017	WTBIYBllep	3.5	2.0	H	0	4	0
A98-980022	PTBSYBllep	2.8	1.0	S	0	4	0
A98-980036	PTBSYBllep	3.8	1.0	H	0	16	2
A98-980037	PTBSYBlIH	3.3	1.0	R	0	2	0
E96502	PTTDYBlIH	2.0	1.0	S	0	22	0
E96659	PTB+TIYGrIH	2.8	1.0	R	0	12	0
E96665	PTTSYGrIH	3.0	1.0	R	0	8	0
E96695	PTTSYGrlep	3.3	1.0	S	0	18	0
LN95-556	PGTDYBfIH	3.1	1.0	R	0	8	0
LN96-824	WTBSYBllep	4.0	1.0	R	0	8	0
LN96-1660	PGTDYBllep	3.3	1.0	R	0	6	0
SD96-77	WGTDYBllep	1.9	2.0	H	0	16	0
SD96-119	PGTIYBllep	3.6	1.0	R	0	18	0
SD96-190	PGBDYBflep	3.5	1.0	R	0	18	2
SD96-195	PGTSYBllep	2.8	3.0	R	0	18	0
SD96-203	WGBIYBflep	2.9	1.0	R	0	2	2
SD96-421	WGB+TDYIlep	2.3	2.0	H	0	14	0
SD96-1425	PGBDYIIH	3.4	1.0	R	0	22	0
SD96-1960	PGBDYBlIH	3.5	1.0	R	0	10	2
SD96-2088	PGBDYIIH	3.3	1.0	R	0	40	0
SD96-2138	WTBSYBlIH	3.5	1.0	S	6	56	0

PRELIMINARY TEST IIA, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 10 bu/a	Rank 10 No.	Maturity 8 Date	Lodging 10 Score	Plant Height 10 In.	Seed Size 10 g/100	Composition	
							Protein 5 %	Oil 5 %
IA2021 (II)	56.5	2	9/14	1.4	30	15.6	39.0	21.2
IA1008 (I) (SCN)	53.0	25	-2.0	1.3	34	17.1	39.4	20.1
IA2038 (L)	54.6	15	5.5	1.5	34	18.0	41.0	20.3
A98-883005	54.0	20	2.5	1.6	33	13.6	41.7	19.1
A98-884010	53.6	21	4.4	1.9	36	13.4	39.0	19.7
A98-884013	54.8	13	2.2	1.4	31	14.0	40.2	20.5
A98-884020	53.5	22	1.3	1.1	28	13.7	40.6	20.5
A98-884024	50.3	30	2.4	1.7	35	15.4	39.4	21.1
A98-884031	55.5	8	1.9	1.5	32	14.8	41.3	19.9
A98-884034	53.1	24	0.6	1.3	32	14.3	41.5	19.5
A98-884037	57.1	1	4.0	1.7	35	16.6	40.5	20.3
A98-884047	55.7	7	4.0	1.5	33	14.2	41.5	19.4
A98-980003	55.8	6	5.9	1.5	34	13.7	41.5	19.6
A98-980014	55.9	5	4.9	1.5	31	14.4	39.9	19.7
A98-980017	49.8	31	3.3	2.2	36	13.2	39.0	19.8
A98-980022	56.1	4	5.7	1.6	33	14.9	41.7	19.4
A98-980036	55.5	8	4.9	1.4	32	15.1	41.2	20.3
A98-980037	52.8	26	5.7	1.6	33	14.6	42.4	19.9
E96502	55.2	10	0.2	1.6	34	16.1	40.3	20.1
E96659	54.7	14	0.3	1.3	36	14.9	40.1	19.9
E96665	53.4	23	-0.3	1.7	36	15.7	39.8	20.3
E96695	55.0	11	-0.9	1.4	33	16.7	40.3	19.6
LN95-556	54.3	17	6.6	1.6	36	15.2	39.5	20.2
LN96-824	55.0	11	3.7	1.6	33	15.9	42.1	19.7
LN96-1660	52.5	29	4.1	1.3	40	14.5	40.3	20.2
SD96-77	46.8	33	-2.8	1.7	38	14.2	39.9	21.0
SD96-119	54.5	16	-0.7	2.1	38	15.7	38.9	20.9
SD96-190	54.2	19	1.0	1.7	40	14.9	39.2	20.9
SD96-195	46.1	34	-5.4	1.6	33	16.6	39.9	20.5
SD96-203	56.5	2	-0.6	1.6	34	17.0	39.7	19.9
SD96-421	40.8	35	-3.5	1.7	33	18.1	42.4	20.2
SD96-1425	52.6	27	0.5	2.1	35	15.3	40.2	19.9
SD96-1960	54.3	17	-0.1	1.4	27	17.1	41.2	20.4
SD96-2088	52.6	27	-2.7	2.1	35	14.3	40.7	20.7
SD96-2138	49.1	32	-1.8	2.3	36	17.0	41.0	20.0

120.5 Days After Planting

PRELIMINARY TEST IIA, 1999

YIELD (bu/a)

Strain	Mean 10 Tests	Ames IA	Sioux Rapids IA	Urbana IL	Lafay- ette IN	Ingham County MI
IA2021 (II)	56.5	64.2	58.8	62.3	31.1	50.8
IA1008 (I) (SCN)	53.0	55.0	57.2	61.4	33.3	53.1
IA2038 (L)	54.6	61.6	58.0	59.4	36.4	49.3
A98-883005	54.0	61.1	55.2	52.0	34.6	49.9
A98-884010	53.6	64.9	49.4	55.6	35.3	47.1
A98-884013	54.8	62.0	53.3	61.6	35.3	45.5
A98-884020	53.5	64.0	57.5	47.0	36.3	47.3
A98-884024	50.3	59.8	51.2	46.6	24.3	44.3
A98-884031	55.5	56.6	56.9	48.1	37.8	49.7
A98-884034	53.1	61.9	57.2	50.5	34.3	48.3
A98-884037	57.1	63.5	59.9	54.0	39.1	49.0
A98-884047	55.7	63.7	53.1	62.1	35.8	49.5
A98-980003	55.8	63.5	50.4	64.9	36.3	45.6
A98-980014	55.9	64.0	52.2	55.2	41.2	49.1
A98-980017	49.8	53.3	55.0	46.4	30.5	40.5
A98-980022	56.1	64.2	53.0	56.6	36.8	46.8
A98-980036	55.5	62.2	49.2	50.7	42.6	46.1
A98-980037	52.8	64.5	50.5	51.7	36.5	48.6
E96502	55.2	65.2	57.7	51.9	38.4	50.0
E96659	54.7	62.2	55.4	55.5	38.8	44.1
E96665	53.4	61.6	56.4	52.1	35.0	46.3
E96695	55.0	57.8	53.6	61.2	35.0	48.1
LN95-556	54.3	58.7	49.4	63.4	37.5	47.6
LN96-824	55.0	56.7	53.3	62.3	32.7	46.3
LN96-1660	52.5	59.1	52.5	56.5	37.7	40.1
SD96-77	46.8	50.6	50.3	43.6	17.1	47.0
SD96-119	54.5	58.3	60.8	64.5	35.5	43.2
SD96-190	54.2	60.7	56.3	56.4	37.2	46.0
SD96-195	46.1	52.6	59.1	42.6	17.6	45.7
SD96-203	56.5	67.4	60.8	61.2	33.8	49.2
SD96-421	40.8	43.4	47.8	37.9	18.8	37.6
SD96-1425	52.6	52.0	60.3	54.2	31.5	46.4
SD96-1960	54.3	55.2	53.3	54.0	34.8	50.9
SD96-2088	52.6	52.0	62.9	55.1	32.4	45.6
SD96-2138	49.1	56.5	57.2	48.7	30.9	46.1
C.V. (%)		7.2	7.1	11.6	11.0	5.6
L.S.D. (5%)		2.1	1.9	12.9	7.5	5.9
Row Sp. (In.)		27	27	30	24	15
Rows/Plot		4	4	4	4	6
Reps		2	2	2	2	2

PRELIMINARY TEST IIA, 1999

YIELD (bu/a)

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.	Brookings SD
IA2021 (II)	54.6	72.7	50.1	69.2	51.7
IA1008 (I) (SCN)	53.8	73.2	39.6	63.7	39.4
IA2038 (L)	51.4	68.8	46.5	77.7	36.7
A98-883005	53.5	73.9	43.5	70.7	46.1
A98-884010	55.4	70.6	41.3	77.0	39.0
A98-884013	57.2	70.2	43.0	72.2	47.9
A98-884020	53.1	78.6	40.6	70.8	39.7
A98-884024	52.5	72.0	47.2	67.9	37.7
A98-884031	56.0	73.3	48.5	81.3	46.4
A98-884034	59.2	68.6	35.3	72.2	43.7
A98-884037	56.3	81.2	45.9	76.4	46.1
A98-884047	55.2	82.7	46.3	74.0	34.2
A98-980003	56.0	72.5	44.3	76.9	48.1
A98-980014	57.0	79.8	39.3	77.3	43.4
A98-980017	48.9	76.1	37.5	68.2	41.9
A98-980022	54.9	85.1	43.6	79.5	40.0
A98-980036	56.2	80.9	40.6	79.4	46.6
A98-980037	54.6	71.2	40.4	75.1	34.8
E96502	53.9	71.5	39.6	80.9	43.2
E96659	56.6	84.3	35.9	67.5	46.9
E96665	56.5	82.3	34.3	67.7	41.9
E96695	56.9	79.1	40.9	70.5	47.1
LN95-556	54.5	77.3	42.2	75.0	37.5
LN96-824	51.3	71.4	54.2	78.3	43.1
LN96-1660	47.6	77.5	45.2	77.9	30.5
SD96-77	53.7	67.1	35.0	62.3	41.1
SD96-119	55.4	70.1	46.4	69.6	41.0
SD96-190	53.7	74.2	38.1	71.1	48.8
SD96-195	54.6	63.4	18.0	64.9	42.6
SD96-203	56.2	77.1	43.0	73.9	41.9
SD96-421	45.4	53.7	29.1	58.3	36.0
SD96-1425	55.5	73.6	40.7	78.3	33.3
SD96-1960	55.6	83.3	34.7	73.2	47.6
SD96-2088	51.3	71.7	42.1	68.3	44.4
SD96-2138	52.8	56.7	39.7	63.3	39.1
C.V. (%)	5.2	8.3	6.8	5.2	11.4
L.S.D. (5%)	5.7	11.1	4.7	4.9	8.1
Row Sp. (In.)	30	30	7.5	17	30
Rows/Plot	4	4	8	5	4
Reps	2	2	2	2	2

PRELIMINARY TEST IIA, 1999

YIELD RANK

Strain	Yield Rank	Ames IA	Sioux Rapids IA	Urbana IL	Lafayette IN	Ingham County MI
IA2021 (II)	2	5	6	4	29	3
IA1008 (I) (SCN)	25	24	10	8	25	1
IA2038 (L)	15	12	7	11	12	8
A98-883005	20	13	15	23	22	5
A98-884010	21	3	27	15	17	17
A98-884013	13	10	18	7	17	29
A98-884020	22	6	9	30	13	16
A98-884024	30	15	23	31	32	30
A98-884031	8	21	11	29	6	6
A98-884034	24	11	10	27	23	13
A98-884037	1	8	4	20	3	11
A98-884047	7	7	19	6	15	7
A98-980003	6	8	25	1	13	27
A98-980014	5	6	22	17	2	10
A98-980017	31	25	16	32	31	33
A98-980022	4	5	20	12	10	19
A98-980036	8	9	28	26	1	23
A98-980037	26	4	24	25	11	12
E96502	10	2	8	24	5	4
E96659	14	9	14	16	4	31
E96665	23	12	12	22	19	21
E96695	11	19	17	9	19	14
LN95-556	17	17	27	3	8	15
LN96-824	11	20	18	4	26	21
LN96-1660	29	16	21	13	7	34
SD96-77	33	28	26	33	35	18
SD96-119	16	18	2	2	16	32
SD96-190	19	14	13	14	9	25
SD96-195	34	26	5	34	34	26
SD96-203	2	1	2	9	24	9
SD96-421	35	29	29	35	33	35
SD96-1425	27	27	3	19	28	20
SD96-1960	17	23	18	20	21	2
SD96-2088	27	27	1	18	27	27
SD96-2138	32	22	10	28	30	23

PRELIMINARY TEST IIA, 1999

YIELD RANK

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.	Brookings SD
IA2021 (II)	20	20	2	25	1
IA1008 (I) (SCN)	23	19	24	32	25
IA2038 (L)	30	30	5	8	30
A98-883005	26	16	12	22	11
A98-884010	15	27	17	10	27
A98-884013	2	28	13	19	4
A98-884020	27	10	20	21	24
A98-884024	29	22	4	28	28
A98-884031	11	18	3	1	9
A98-884034	1	31	30	18	13
A98-884037	7	6	8	12	10
A98-884047	16	4	7	15	33
A98-980003	10	21	10	11	3
A98-980014	3	8	26	9	14
A98-980017	33	14	28	27	19
A98-980022	17	1	11	3	23
A98-980036	8	7	20	4	8
A98-980037	19	26	22	13	32
E96502	22	24	24	2	15
E96659	5	2	29	30	7
E96665	6	5	33	29	20
E96695	4	9	18	23	6
LN95-556	21	12	15	14	29
LN96-824	32	25	1	6	16
LN96-1660	34	11	9	7	35
SD96-77	24	32	31	34	21
SD96-119	14	29	6	24	22
SD96-190	25	15	27	20	2
SD96-195	18	33	35	31	17
SD96-203	9	13	13	16	18
SD96-421	35	35	34	35	31
SD96-1425	13	17	19	5	34
SD96-1960	12	3	32	17	5
SD96-2088	31	23	16	26	12
SD96-2138	28	34	23	33	26

PRELIMINARY TEST IIA, 1999

MATURITY (date)

Strain	Mean 8 Tests	Ames IA	Sioux Rapids IA	Urbana IL	Lafay- ette IN	Ingham County MI
IA2021 (II)	9/14	09/18		09/02	09/04	09/10
IA1008 (I) (SCN)	-2.0	-4		-2	-1	+2
IA2038 (L)	5.5	4		6	11	+3
A98-883005	2.5	4		3	3	+4
A98-884010	4.4	5		5	5	+7
A98-884013	2.2	1		2	3	+4
A98-884020	1.3	3		-1	3	+2
A98-884024	2.4	3		0	3	+4
A98-884031	1.9	1		-1	5	+4
A98-884034	0.6	0		0	2	+2
A98-884037	4.0	4		5	9	+6
A98-884047	4.0	5		5	6	+5
A98-980003	5.9	7		6	8	+8
A98-980014	4.9	5		4	9	+5
A98-980017	3.3	4		1	5	+3
A98-980022	5.7	8		5	11	+5
A98-980036	4.9	6		5	10	+6
A98-980037	5.7	6		3	10	+8
E96502	0.2	-4		0	1	+2
E96659	0.3	-1		-1	3	+2
E96665	-0.3	-2		-4	2	+3
E96695	-0.9	-4		-2	1	-1
LN95-556	7	7		6	10	+7
LN96-824	3.7	5		3	8	+6
LN96-1660	4.1	4		4	6	+7
SD96-77	-2.8	-6		-6	-3	+3
SD96-119	-0.7	-3		0	1	+3
SD96-190	1.0	-2		0	1	+2
SD96-195	-5.4	-10		-9	-5	-2
SD96-203	-0.6	-3		-1	1	+4
SD96-421	-3.5	-5		-6	-5	-2
SD96-1425	0.5	-4		-4	1	-1
SD96-1960	-0.1	-6		-3	2	+3
SD96-2088	-2.7	-8		-6	-3	-1
SD96-2138	-1.8	-6		-1	-2	0
Date Planted	5/16	05/03		05/04	05/11	05/14
Days to Mature	121	138		121	116	119

PRELIMINARY TEST IIA, 1999

MATURITY (date)

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.	Brookings SD
IA2021 (II)	09/27	09/21	09/08	09/24	
IA1008 (I) (SCN)	-2	0	-3	-4	
IA2038 (L)	3	8	8	4	
A98-883005	2	3	4	1	
A98-884010	2	8	8	3	
A98-884013	2	3	4	3	
A98-884020	1	5	-1	0	
A98-884024	1	6	3	3	
A98-884031	1	5	3	1	
A98-884034	1	3	-1	0	
A98-884037	4	7	2	1	
A98-884047	3	6	3	4	
A98-980003	3	9	9	5	
A98-980014	4	8	6	3	
A98-980017	2	6	6	3	
A98-980022	2	7	9	4	
A98-980036	3	6	6	4	
A98-980037	5	8	8	6	
E96502	0	4	0	1	
E96659	2	3	-1	-2	
E96665	1	1	0	-1	
E96695	1	1	-2	-1	
LN95-556	3	11	8	7	
LN96-824	1	6	4	3	
LN96-1660	4	7	5	3	
SD96-77	-2	0	-3	-3	
SD96-119	-1	2	-2	-3	
SD96-190	2	6	-1	2	
SD96-195	-5	-3	-4	-6	
SD96-203	0	3	-2	-3	
SD96-421	-4	-2	-2	-2	
SD96-1425	2	6	2	2	
SD96-1960	1	3	0	2	
SD96-2088	-1	0	-2	-1	
SD96-2138	-2	0	-3	-1	
Date Planted	05/29	05/25	05/10	06/07	
Days to Mature	121	119	121	109	

PRELIMINARY TEST IIA, 1999

LODGING (score)

Strain	Mean 10 Tests	Ames IA	Sioux Rapids IA	Urbana IL	Lafay- ette IN	Ingham County MI
IA2021 (II)	1.4	2.4	1.9	1.5	1.3	1.4
IA1008 (I) (SCN)	1.3	1.7	1.7	1.3	1.0	1.5
IA2038 (L)	1.5	1.9	1.9	1.5	1.3	1.5
A98-883005	1.6	2.4	2.2	1.5	1.0	1.1
A98-884010	1.9	2.8	1.9	1.8	1.5	2.0
A98-884013	1.4	1.9	1.7	1.5	1.0	1.0
A98-884020	1.1	1.5	1.6	1.0	1.0	1.0
A98-884024	1.7	2.4	2.4	1.8	1.3	1.5
A98-884031	1.5	1.7	2.0	1.0	1.0	0.9
A98-884034	1.3	1.8	2.0	1.3	1.0	1.0
A98-884037	1.7	2.4	2.2	1.5	1.0	2.1
A98-884047	1.5	2.1	2.4	1.5	1.0	1.0
A98-980003	1.5	2.4	1.7	1.5	1.0	1.5
A98-980014	1.5	2.0	1.6	1.5	1.0	1.5
A98-980017	2.2	2.7	3.0	1.5	1.5	1.9
A98-980022	1.6	2.0	2.2	1.0	1.3	0.9
A98-980036	1.4	1.9	2.0	1.0	1.0	0.9
A98-980037	1.6	1.9	2.0	1.0	1.0	1.5
E96502	1.6	1.7	2.4	1.3	1.0	1.6
E96659	1.3	1.6	2.0	1.3	1.0	1.1
E96665	1.7	1.7	1.9	1.3	1.0	2.0
E96695	1.4	1.5	2.3	1.0	1.0	1.0
LN95-556	1.6	2.1	2.2	1.5	1.0	1.5
LN96-824	1.6	1.9	2.3	1.5	1.0	0.9
LN96-1660	1.3	1.5	1.9	1.3	1.0	1.1
SD96-77	1.7	2.6	2.4	1.5	1.0	1.9
SD96-119	2.1	2.5	2.6	2.3	1.3	2.1
SD96-190	1.7	1.9	2.2	1.8	1.8	1.1
SD96-195	1.6	1.9	2.2	1.3	1.0	1.5
SD96-203	1.6	1.7	2.2	1.8	1.0	1.0
SD96-421	1.7	2.1	2.8	1.5	1.0	2.4
SD96-1425	2.1	2.5	2.9	2.3	1.0	2.5
SD96-1960	1.4	2.0	2.3	1.0	1.0	1.5
SD96-2088	2.1	2.3	2.7	2.0	1.5	2.0
SD96-2138	2.3	2.9	3.0	2.5	2.8	3.1

PRELIMINARY TEST IIA, 1999

LODGING (score)

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.	Brookings SD
IA2021 (II)	1.0	1.5	1.2	1.0	1.0
IA1008 (I) (SCN)	1.0	1.0	1.2	1.0	2.0
IA2038 (L)	1.0	2.0	1.4	1.0	2.0
A98-883005	1.0	2.5	1.3	1.0	2.0
A98-884010	1.0	3.0	1.2	1.0	3.0
A98-884013	1.0	2.0	1.4	1.0	2.0
A98-884020	1.0	1.0	1.1	1.0	1.0
A98-884024	1.0	2.0	1.3	1.0	2.0
A98-884031	1.0	2.0	1.3	1.0	3.0
A98-884034	1.0	1.5	1.3	1.0	1.0
A98-884037	1.0	2.0	1.3	1.0	2.0
A98-884047	1.0	2.0	1.4	1.0	2.0
A98-980003	1.0	2.0	1.3	1.0	2.0
A98-980014	1.0	1.5	1.3	1.0	3.0
A98-980017	1.0	3.5	1.5	1.0	4.0
A98-980022	1.0	2.0	1.4	1.0	3.0
A98-980036	1.0	2.0	1.3	1.0	2.0
A98-980037	1.0	2.0	1.2	1.0	3.0
E96502	1.0	3.0	1.3	1.0	2.0
E96659	1.0	2.0	1.2	1.0	1.0
E96665	1.0	2.5	1.4	1.0	3.0
E96695	1.0	2.0	1.2	1.0	2.0
LN95-556	1.0	2.0	1.2	1.0	2.0
LN96-824	1.0	2.0	1.3	1.0	3.0
LN96-1660	1.0	2.0	1.3	1.0	1.0
SD96-77	1.0	2.5	1.3	1.0	2.0
SD96-119	1.0	2.5	1.7	2.0	3.0
SD96-190	1.0	2.5	1.4	1.5	2.0
SD96-195	1.0	2.5	1.2	1.5	2.0
SD96-203	1.0	3.5	1.3	1.0	2.0
SD96-421	1.0	2.5	1.3	1.0	1.0
SD96-1425	1.0	3.5	1.6	1.0	3.0
SD96-1960	1.0	1.0	1.4	1.0	2.0
SD96-2088	1.0	3.0	1.2	2.0	3.0
SD96-2138	1.0	4.0	2.0	1.0	1.0

PRELIMINARY TEST IIA, 1999

PLANT HEIGHT (inches)

Strain	Mean 10 Tests	Ames IA	Sioux Rapids IA	Urbana IL	Lafay- ette IN	Ingham County MI
IA2021 (II)	30	31	34	30	31	29
IA1008 (I) (SCN)	34	33	40	34	31	33
IA2038 (L)	34	34	36	33	35	33
A98-883005	33	35	37	32	33	31
A98-884010	36	36	42	34	35	37
A98-884013	31	33	33	28	33	37
A98-884020	28	28	33	26	31	29
A98-884024	35	35	42	33	35	35
A98-884031	32	30	37	27	33	30
A98-884034	32	34	38	27	32	32
A98-884037	35	35	41	29	36	36
A98-884047	33	34	37	31	34	34
A98-980003	34	37	40	34	34	33
A98-980014	31	33	37	30	34	31
A98-980017	36	35	41	33	37	39
A98-980022	33	37	36	31	35	34
A98-980036	32	34	38	26	33	31
A98-980037	33	33	41	29	34	34
E96502	34	31	42	32	33	34
E96659	36	36	40	35	36	35
E96665	36	36	40	33	37	36
E96695	33	34	38	33	33	34
LN95-556	36	36	43	35	35	36
LN96-824	33	33	38	33	35	32
LN96-1660	40	43	47	36	38	37
SD96-77	38	36	40	38	36	39
SD96-119	38	37	42	42	36	43
SD96-190	40	36	44	34	36	41
SD96-195	33	31	38	30	30	35
SD96-203	34	33	42	35	33	36
SD96-421	33	33	41	31	31	33
SD96-1425	35	32	44	34	32	37
SD96-1960	27	28	32	24	25	29
SD96-2088	35	34	38	34	31	37
SD96-2138	36	35	42	35	35	41

PRELIMINARY TEST IIA, 1999

PLANT HEIGHT (inches)

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.	Brookings SD
IA2021 (II)	28	34	25	25	32
IA1008 (I) (SCN)	36	38	30	28	40
IA2038 (L)	30	40	31	29	37
A98-883005	33	38	28	25	36
A98-884010	35	37	32	29	40
A98-884013	29	34	27	24	32
A98-884020	25	33	23	22	30
A98-884024	34	41	31	27	39
A98-884031	32	37	31	26	35
A98-884034	33	36	27	25	35
A98-884037	34	42	30	30	40
A98-884047	32	36	30	25	34
A98-980003	33	38	29	26	35
A98-980014	29	36	26	25	31
A98-980017	36	38	33	28	37
A98-980022	32	38	30	26	35
A98-980036	29	38	27	24	38
A98-980037	30	37	31	26	34
E96502	37	38	30	28	38
E96659	36	42	33	31	41
E96665	35	44	32	30	36
E96695	34	36	30	25	38
LN95-556	34	43	32	26	40
LN96-824	34	34	30	25	36
LN96-1660	38	47	37	33	45
SD96-77	37	47	34	31	46
SD96-119	37	38	32	30	44
SD96-190	43	48	32	33	48
SD96-195	32	40	26	28	38
SD96-203	33	40	29	27	37
SD96-421	34	37	29	25	38
SD96-1425	35	39	30	30	35
SD96-1960	28	30	23	21	30
SD96-2088	37	39	25	31	44
SD96-2138	38	41	32	29	32

PRELIMINARY TEST IIA, 1999

SEED SIZE (g/100)

Strain	Mean 10 Tests	Ames IA	Sioux Rapids IA	Urbana IL	Lafay- ette IN	Ingham County MI
IA2021 (II)	15.6	14.4	17.3	16.0	13.1	15.6
IA1008 (I) (SCN)	17.1	16.2	17.7	19.5	14.7	17.2
IA2038 (L)	18.0	16.7	18.9	21.0	16.1	18.4
A98-883005	13.6	12.8	14.5	14.8	11.7	13.4
A98-884010	13.4	12.5	13.9	13.6	11.5	13.5
A98-884013	14.0	12.9	14.1	15.6	12.5	13.5
A98-884020	13.7	13.1	14.7	13.3	12.2	13.8
A98-884024	15.4	15.0	17.0	14.1	13.0	16.0
A98-884031	14.8	13.5	15.1	14.2	13.6	14.8
A98-884034	14.3	14.0	15.0	13.8	13.5	14.4
A98-884037	16.6	16.0	17.2	16.7	14.8	16.2
A98-884047	14.2	13.2	14.8	14.7	12.1	14.4
A98-980003	13.7	12.5	13.5	15.3	13.2	13.0
A98-980014	14.4	14.0	15.0	14.3	13.9	13.0
A98-980017	13.2	13.2	14.2	12.8	11.6	13.0
A98-980022	14.9	14.3	15.9	14.6	13.8	14.9
A98-980036	15.1	13.6	14.8	14.8	13.8	15.0
A98-980037	14.6	14.7	15.1	13.3	11.2	14.8
E96502	16.1	15.9	16.6	16.2	15.4	16.1
E96659	14.9	13.9	16.2	14.1	14.2	15.0
E96665	15.7	14.8	17.1	15.6	13.6	16.5
E96695	16.7	16.8	18.1	17.3	14.7	15.5
LN95-556	15.2	15.4	16.4	14.9	12.8	14.3
LN96-824	15.9	15.3	17.1	17.2	13.1	16.9
LN96-1660	14.5	14.1	14.9	14.9	11.5	14.8
SD96-77	14.2	13.5	15.1	14.7	11.2	15.2
SD96-119	15.7	14.8	17.4	17.6	14.6	15.5
SD96-190	14.9	15.2	15.0	16.3	12.9	14.9
SD96-195	16.6	15.5	18.3	18.2	13.7	15.7
SD96-203	17.0	16.4	18.4	19.0	14.7	16.6
SD96-421	18.1	17.6	20.1	19.9	14.0	18.5
SD96-1425	15.3	14.2	16.8	16.1	13.1	13.5
SD96-1960	17.1	15.0	18.0	19.2	15.5	18.0
SD96-2088	14.3	13.1	15.4	16.1	12.5	13.6
SD96-2138	17.0	16.3	18.8	17.3	14.6	15.8

PRELIMINARY TEST IIA, 1999

SEED SIZE (g/100)

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.	Brookings SD
IA2021 (II)	14.8	17.8	13.0	20.3	14.1
IA1008 (I) (SCN)	16.6	21.0	12.9	19.8	15.2
IA2038 (L)	16.7	18.0	15.1	23.7	14.9
A98-883005	13.2	15.8	11.4	17.2	11.6
A98-884010	13.5	14.6	11.4	17.6	12.0
A98-884013	13.5	15.4	11.4	17.5	13.4
A98-884020	13.5	15.5	10.5	18.1	12.4
A98-884024	15.0	17.7	13.3	19.7	13.1
A98-884031	14.1	16.3	13.2	19.0	13.7
A98-884034	14.2	14.8	12.1	18.1	12.8
A98-884037	17.0	19.7	13.6	19.5	14.9
A98-884047	13.5	16.5	11.7	18.2	12.5
A98-980003	12.9	15.5	11.5	18.1	11.6
A98-980014	14.3	16.2	12.0	18.6	12.9
A98-980017	13.2	15.2	11.3	15.5	12.1
A98-980022	14.6	15.6	12.7	18.9	13.3
A98-980036	13.9	16.5	11.6	19.2	17.7
A98-980037	15.4	16.8	11.7	20.1	12.7
E96502	15.3	18.6	12.8	20.9	13.4
E96659	14.7	17.4	11.4	17.9	13.8
E96665	15.8	18.5	12.5	18.9	14.0
E96695	15.9	19.2	13.6	20.6	15.2
LN95-556	16.0	17.1	13.6	19.5	12.5
LN96-824	15.1	17.1	12.9	20.5	13.7
LN96-1660	14.0	17.5	11.8	19.2	12.2
SD96-77	14.0	16.6	11.5	17.2	12.8
SD96-119	14.8	18.2	12.7	18.2	13.7
SD96-190	14.0	17.8	11.2	17.8	13.8
SD96-195	16.0	21.0	13.3	19.4	15.0
SD96-203	15.6	21.1	13.4	21.3	13.7
SD96-421	17.2	19.9	14.7	22.9	16.2
SD96-1425	15.7	18.5	13.1	18.5	13.8
SD96-1960	16.1	18.8	14.2	20.5	16.1
SD96-2088	13.8	17.0	11.7	16.7	13.2
SD96-2138	17.1	19.1	14.8	21.8	14.1

PRELIMINARY TEST IIA, 1999

PROTEIN (%)

Strain	Mean 5 Tests	Urbana IL	Lafayette IN	Ingham Co. MI	Hoytville OH	Harrow Ont.
IA2021 (II)	39.0	41.3	38.1	38.9	39.4	37.3
IA1008 (I) (SCN)	39.4	42.5	38.3	40.3	38.0	37.7
IA2038 (L)	41.0	43.1	40.7	40.6	40.9	39.7
A98-883005	41.7	43.8	40.5	42.1	41.1	40.9
A98-884010	39.0	41.0	39.4	38.6	37.5	38.4
A98-884013	40.2	42.4	40.2	41.0	39.1	38.2
A98-884020	40.6	40.9	40.6	41.9	40.6	39.2
A98-884024	39.4	40.6	39.8	40.1	39.6	37.0
A98-884031	41.3	41.9	42.4	41.8	40.9	39.7
A98-884034	41.5	43.8	41.9	40.9	41.1	39.6
A98-884037	40.5	44.2	40.5	40.5	38.1	39.2
A98-884047	41.5	43.0	42.2	40.6	41.4	40.5
A98-980003	41.5	43.0	40.9	44.1	39.7	39.7
A98-980014	39.9	41.0	39.5	42.0	38.1	38.9
A98-980017	39.0	39.9	39.2	41.4	36.9	37.4
A98-980022	41.7	42.9	42.4	42.4	39.9	40.8
A98-980036	41.2	42.5	41.9	41.2	39.7	40.5
A98-980037	42.4	43.1	42.6	43.4	41.3	41.7
E96502	40.3	41.8	40.8	39.7	39.9	39.2
E96659	40.1	40.6	39.4	41.9	39.1	39.7
E96665	39.8	40.8	38.6	41.1	39.5	38.8
E96695	40.3	41.0	40.5	40.8	40.6	38.8
LN95-556	39.5	41.0	39.0	41.4	37.4	38.7
LN96-824	42.1	42.1	42.0	42.8	42.6	41.1
LN96-1660	40.3	42.3	39.9	41.5	38.2	39.4
SD96-77	39.9	43.3	40.2	39.5	39.0	37.6
SD96-119	38.9	41.6	39.0	38.8	38.2	37.1
SD96-190	39.2	42.3	39.8	40.0	37.5	36.6
SD96-195	39.9	42.1	39.4	39.7	40.3	38.1
SD96-203	39.7	41.3	39.6	40.2	38.4	39.1
SD96-421	42.4	44.4	40.4	42.9	42.9	41.2
SD96-1425	40.2	42.4	38.9	40.7	40.0	39.2
SD96-1960	41.2	42.4	41.5	41.0	42.1	39.2
SD96-2088	40.7	41.9	40.0	41.3	41.7	38.5
SD96-2138	41.0	44.1	40.0	40.2	41.0	39.6

PRELIMINARY TEST IIA, 1999

OIL (%)

Strain	Mean 5 Tests	Urbana IL	Lafayette IN	Ingham Co. MI	Hoytville OH	Harrow Ont.
IA2021 (II)	21.2	20.9	20.8	20.6	20.4	23.4
IA1008 (I) (SCN)	20.1	19.3	19.5	19.6	19.4	22.6
IA2038 (L)	20.3	19.9	19.6	19.6	20.1	22.3
A98-883005	19.1	18.5	18.7	18.3	18.8	21.0
A98-884010	19.7	19.3	18.5	19.6	19.7	21.4
A98-884013	20.5	19.9	19.8	19.6	20.3	22.9
A98-884020	20.5	20.7	19.7	19.5	19.9	22.8
A98-884024	21.1	20.5	20.1	20.2	21.5	23.3
A98-884031	19.9	20.3	19.0	18.7	19.8	21.9
A98-884034	19.5	18.7	18.5	19.5	19.0	21.6
A98-884037	20.3	19.9	20.1	18.9	20.6	21.9
A98-884047	19.4	18.8	18.5	19.5	18.9	21.5
A98-980003	19.6	18.8	19.6	18.0	19.7	21.9
A98-980014	19.7	19.1	19.6	18.2	20.0	21.6
A98-980017	19.8	19.9	18.9	18.4	19.8	22.2
A98-980022	19.4	18.9	18.6	18.5	19.7	21.2
A98-980036	20.3	19.9	19.5	19.7	20.4	22.0
A98-980037	19.9	19.8	19.1	18.9	20.1	21.7
E96502	20.1	20.3	18.9	19.8	19.4	22.0
E96659	19.9	20.1	18.8	19.1	19.7	22.0
E96665	20.3	20.7	19.6	19.4	19.1	22.5
E96695	19.6	20.3	18.7	18.6	18.6	22.0
LN95-556	20.2	19.7	19.9	18.8	20.6	21.8
LN96-824	19.7	19.9	19.4	18.7	19.0	21.7
LN96-1660	20.2	19.6	19.3	19.2	20.8	21.9
SD96-77	21.0	20.9	20.1	20.8	20.3	23.1
SD96-119	20.9	20.6	20.2	20.2	20.5	22.8
SD96-190	20.9	21.2	20.0	19.0	21.3	23.1
SD96-195	20.5	20.5	19.9	19.7	19.7	22.5
SD96-203	19.9	20.1	19.0	18.8	19.8	21.6
SD96-421	20.2	20.1	20.2	19.4	19.1	22.0
SD96-1425	19.9	19.7	19.9	19.3	18.8	21.7
SD96-1960	20.4	20.9	19.7	20.1	19.0	22.3
SD96-2088	20.7	20.7	20.7	20.3	19.2	22.8
SD96-2138	20.0	19.4	19.2	19.4	19.6	22.2

Preliminary Test IIB, 1999

	Strain	Parentage	Generation Composited	Unique Traits
1.	IA2021 (II)	Elgin x Marcus 95	F5	
2.	IA1008 (I) (SCN)	Northrup King S20-20 x Jack	F5	SCN
3.	IA2038 (L)	Pioneer 9303 x Kenwood	F5	
4.	C1979	IA3003 x Stressland	F5	
5.	C1994	Stressland x Probst	F5	
6.	HC95-3867	IA2008 x HC86-3403	F4	Dt1
7.	HC95-3885	IA2008 x A178-5	F4	Dt1
8.	HF97-011	LN88-9709 x Resnik	F5	Rps1k
9.	HF97-052	Resnik x LN88-9242	F5	Rps1k
10.	HF97-074	LN88-9709 x Thorne	F5	Rps1k
11.	HF97-076	Thorne x Iroquois	F5	Rps1k
12.	HS95-4908	HS89-2988 x IA2003	F5	Rps1k, fan
13.	HS96-3316	IA2007 x (HS88-4909 x HS88-4914)	F4	Rps1k
14.	HS96-6147	HS10C2	S2	Rps1c
15.	HS97-4544	Pioneer P9268-003 x Vertex	F6	Rps PI92718-2
16.	HS97-4925	IA2007 x Conrad 94	F5	
17.	M92-191023	M88-504 x Kenwood	F5	Rps1k
18.	M93-149021	Sturdy x ORC9002	F4	Rps1a
19.	ORC 9807	Asgrow A2234 x RCAT Calico	F5	
20.	ORC 9808	Pioneer 9273 x RCAT Calico	F5	
21.	U97-200574	A92-525014 x UP1Fe-95-9	F5	
22.	U97-200644	A93-554040 x UP1Fe-95-9	F5	
23.	U97-200668	A93-554040 x UP1Fe-95-9	F5	
24.	U97-200726	A93-554040 x UP1Fe-95-9	F5	
25.	U97-201201	U94-3297 x UP1Fe-95-9	F5	
26.	U97-201204	U94-3297 x UP1Fe-95-9	F5	
27.	U97-201855	LN89-3264 x UP1Fe-95-9	F5	FeCl
28.	U97-202661	A93-554045 x UP1Fe-30	F5	FeCl
29.	U97-202942	Ky90-1208 x UP1Fe-95-9	F5	
30.	U97-202973	NE3297 x UP1Fe-95-9	F5	FeCl
31.	U97-203026	NE3297 x UP1Fe-95-9	F5	FeCl
32.	U97-203048	U94-3403 x UP1Fe-30	F5	
33.	U97-207134	MSBP4F6	F7	
34.	U97-207135	MSBP4F6	F7	
35.	U97-207143	MSBP4F6	F7	

PRELIMINARY TEST IIB, 1999
DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Humboldt	Shattering Score Manhattan	PR Lafayette Race 7	Hard Seed %	PS Lafayette a %	PSB n %
IA2021 (II)	WTBSYBIIep	3.8	2.0	R	16	16	2
IA1008 (I) (SCN)	WGBDYIIep	3.6	1.0	R	6	30	8
IA2038 (L)	PTBDYBrIep	4.1	1.0	R	2	22	0
C1979	PTTSYBIIeP	4.1	1.0	S	0	14	0
C1994	PTTIYBIIH	4.4	3.0	S	0	4	0
HC95-3867	PTTDYBIIep	2.6	2.0	S	0	2	0
HC95-3885	PGTIYYIH	3.3	3.0	S	0	8	0
HF97-011	P+WTBSYBrIep	4.5	1.0	H	0	0	0
HF97-052	PTTDYBIIep	4.4	2.0	R	0	2	0
HF97-074	WGBDYBfleP	2.9	1.0	R	0	8	0
HF97-076	P+WGBDYHlep	4.3	1.0	R	0	8	0
HS95-4908	WGBDYBfIH	3.9	1.0	R	0	2	0
HS96-3316	PTBDYBrIep	3.9	1.0	R	0	14	0
HS96-6147	PTTDYIH	4.4	1.0	S	0	6	0
HS97-4544	PG+TBSYBfIep	4.4	1.0	R	0	2	0
HS97-4925	PTTDYBrIH	4.1	1.0	R	0	8	0
M92-191023	PTBIYBIIH	4.0	1.0	R	8	16	0
M93-149021	PGBDYIbIep	2.6	1.0	H	4	26	2
ORC 9807	PTBDYBrIep	2.6	2.0	R	0	10	0
ORC 9808	PGTDYIbIep	3.8	1.0	S	0	14	0
U97-200574	WGBDYBfleP	2.0	1.0	S	0	14	0
U97-200644	PG+TBDYHlep	3.4	1.0	S	0	12	0
U97-200668	PG+TBDYHIEp	2.9	1.0	S	0	10	0
U97-200726	PTBDYBIIep	4.0	1.0	S	0	14	0
U97-201201	PG+TTDYHIIH	1.8	1.0	S	0	6	0
U97-201204	PGTDYHIEp	2.4	1.0	S	0	4	0
U97-201855	WG+TBIYHlep	2.5	1.0	S	0	10	0
U97-202661	PGTDYHlep	1.9	1.0	R	0	4	0
U97-202942	PGTDYIbIH	3.3	1.0	R	8	4	0
U97-202973	PGBDYHIIH	2.4	1.0	S	0	22	0
U97-203026	PTBDYHIEp	3.1	1.0	S	0	10	0
U97-203048	PG+TBDYHIIH	2.9	1.0	H	0	12	2
U97-207134	WTTDYBrlep	3.1	1.0	R	0	8	0
U97-207135	WGBDYBfleP	3.1	3.0	H	0	4	0
U97-207143	PTBSYBIIep	3.1	1.0	S	0	12	0

PRELIMINARY TEST IIB, 1999

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 9 g/100	Composition	
							Protein 5 %	Oil 5 %
IA2021 (II)	56.4	4	9/13	1.4	30	16.2	38.7	21.3
IA1008 (I) (SCN)	54.1	15	-1.7	1.3	34	17.1	39.7	19.9
IA2038 (L)	54.6	13	5.1	1.6	34	18.1	40.7	20.3
C1979	60.5	1	2.3	1.5	33	13.5	42.0	19.9
C1994	54.8	12	2.7	1.7	38	13.9	39.3	19.8
HC95-3867	47.3	35	10.9	1.6	43	13.9	42.0	19.1
HC95-3885	51.4	28	5.2	1.6	41	13.5	38.3	19.6
HF97-011	57.6	3	7.8	1.7	34	15.6	41.6	20.4
HF97-052	53.3	20	10.2	1.7	37	14.4	42.0	19.9
HF97-074	54.0	17	10.5	1.4	34	15.5	41.9	20.2
HF97-076	54.9	11	7.3	1.5	34	15.2	41.9	19.9
HS95-4908	49.6	32	1.8	1.4	34	17.2	41.9	20.5
HS96-3316	52.8	23	4.9	1.5	32	16.3	40.6	20.3
HS96-6147	56.1	6	2.8	1.5	37	15.2	39.4	19.8
HS97-4544	56.1	6	2.8	1.8	35	16.4	39.0	20.7
HS97-4925	54.6	13	4.3	1.2	34	16.0	40.5	20.5
M92-191023	56.3	5	-0.4	2.0	36	16.0	39.0	20.6
M93-149021	52.1	27	-2.3	1.3	32	16.4	40.5	20.3
ORC 9807	51.3	30	0.6	1.2	31	14.2	44.4	18.7
ORC 9808	59.2	2	3.7	1.1	32	15.3	43.1	19.1
U97-200574	52.4	24	1.4	1.4	32	15.6	41.5	19.4
U97-200644	50.2	31	1.7	1.6	34	15.4	41.0	20.0
U97-200668	54.0	16	1.5	1.3	31	15.9	41.3	20.4
U97-200726	53.4	19	3.6	1.7	37	17.0	41.0	19.8
U97-201201	55.8	8	0.6	1.5	34	16.5	40.7	19.8
U97-201204	52.2	26	-0.3	1.3	32	15.2	41.4	19.2
U97-201855	48.6	33	4.3	1.5	33	16.5	39.9	20.0
U97-202661	52.3	25	-0.4	1.4	35	15.6	39.8	19.6
U97-202942	53.5	18	-0.1	1.9	34	16.2	41.1	19.9
U97-202973	55.1	10	1.6	1.5	33	18.1	40.9	19.3
U97-203026	51.4	28	5.1	1.9	41	15.3	41.9	19.3
U97-203048	48.6	33	-0.4	2.0	39	15.0	40.5	19.6
U97-207134	55.5	9	3.9	1.6	34	15.7	42.1	19.0
U97-207135	53.3	20	5.0	1.7	43	14.0	40.2	19.8
U97-207143	53.0	22	5.9	1.5	39	14.9	42.2	19.4

120.0 Days After Planting

PRELIMINARY TEST IIB, 1999

YIELD (bu/a)

Strain	Mean 9 Tests	Ames IA	Sioux Rapids IA	Urbana IL	Lafay- ette IN	Ingham County MI
IA2021 (II)	56.4	59.5	61.8	51.4	30.1	51.3
IA1008 (I) (SCN)	54.1	55.2	57.9	54.5	32.4	49.9
IA2038 (L)	54.6	60.8	51.5	46.2	35.0	53.5
C1979	60.5	72.4	54.0	59.5	38.1	54.8
C1994	54.8	67.2	49.0	53.3	36.3	45.8
HC95-3867	47.3	49.2	30.1	44.1	32.7	44.5
HC95-3885	51.4	58.9	45.6	41.3	32.8	44.5
HF97-011	57.6	59.8	44.3	55.4	37.8	51.3
HF97-052	53.3	52.5	45.1	59.0	36.4	45.7
HF97-074	54.0	58.2	38.8	51.2	41.9	52.3
HF97-076	54.9	54.3	51.5	54.4	37.5	51.4
HS95-4908	49.6	51.8	51.8	45.8	30.9	47.2
HS96-3316	52.8	53.4	50.7	53.1	35.9	51.6
HS96-6147	56.1	61.5	53.7	58.3	39.1	47.3
HS97-4544	56.1	65.2	53.8	64.2	36.2	46.0
HS97-4925	54.6	58.8	53.4	56.3	33.9	52.1
M92-191023	56.3	60.4	56.0	56.4	36.4	54.0
M93-149021	52.1	55.1	59.7	51.8	24.5	51.0
ORC 9807	51.3	52.3	51.6	47.9	34.5	42.3
ORC 9808	59.2	66.0	57.4	53.5	40.5	53.6
U97-200574	52.4	62.8	55.4	41.9	32.6	47.4
U97-200644	50.2	58.6	52.9	47.8	32.3	46.6
U97-200668	54.0	59.9	59.8	46.8	32.0	51.7
U97-200726	53.4	56.6	49.9	52.9	37.1	49.2
U97-201201	55.8	65.5	60.2	54.1	35.7	52.5
U97-201204	52.2	60.1	53.0	47.4	31.0	49.2
U97-201855	48.6	63.3	47.3	45.6	30.5	45.7
U97-202661	52.3	59.3	50.9	47.9	31.7	50.6
U97-202942	53.5	63.0	56.4	52.9	34.0	51.8
U97-202973	55.1	66.8	62.2	53.6	29.3	51.2
U97-203026	51.4	56.7	41.9	51.9	37.7	49.1
U97-203048	48.6	55.0	54.5	47.3	28.0	49.1
U97-207134	55.5	63.2	55.5	58.0	34.7	50.1
U97-207135	53.3	56.8	51.8	48.9	37.9	47.1
U97-207143	53.0	61.2	51.2	52.7	32.2	45.1
C.V. (%)		7.5	12.7	11.8	9.7	8.0
L.S.D. (5%)		2.2	3.2	12.5	6.8	8.9
Row Sp. (In.)		27	27	30	24	15
Rows/Plot		4	4	4	4	6
Reps		2	2	2	2	2

PRELIMINARY TEST IIB, 1999

YIELD (bu/a)

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.
IA2021 (II)	56.6	70.5	47.6	78.8
IA1008 (I) (SCN)	53.7	65.9	47.4	70.1
IA2038 (L)	50.5	63.5	50.4	79.8
C1979	59.8	78.9	47.7	79.0
C1994	51.4	68.3	47.2	74.4
HC95-3867	47.4	64.5	42.7	70.8
HC95-3885	49.5	72.1	42.9	74.8
HF97-011	56.8	74.7	47.3	90.6
HF97-052	47.8	67.4	48.5	77.4
HF97-074	53.3	68.3	41.8	80.0
HF97-076	51.4	67.1	47.3	79.1
HS95-4908	47.5	60.1	44.7	66.4
HS96-3316	49.7	55.7	51.1	73.8
HS96-6147	50.3	73.4	46.7	74.3
HS97-4544	52.7	68.9	48.4	69.8
HS97-4925	52.8	61.5	48.7	73.9
M92-191023	52.1	71.6	49.5	70.8
M93-149021	53.8	59.3	41.0	72.4
ORC 9807	49.0	59.8	51.5	72.9
ORC 9808	53.7	73.7	53.1	81.1
U97-200574	54.1	63.1	44.1	70.2
U97-200644	47.7	41.8	51.4	72.6
U97-200668	53.0	57.5	50.6	74.9
U97-200726	52.0	59.7	50.9	72.5
U97-201201	56.0	57.2	49.3	71.6
U97-201204	55.2	61.0	44.0	68.9
U97-201855	51.0	41.2	48.4	64.0
U97-202661	54.0	56.6	47.1	72.8
U97-202942	51.2	63.3	42.2	67.1
U97-202973	58.1	53.0	50.0	71.4
U97-203026	53.8	58.3	45.2	67.9
U97-203048	52.9	47.5	38.1	65.3
U97-207134	54.6	66.3	44.9	71.8
U97-207135	45.6	65.4	47.7	78.9
U97-207143	54.4	66.6	46.2	67.1
C.V. (%)	6.2	8.3	4.6	6.3
L.S.D. (5%)	6.6	11.0	3.9	6.1
Row Sp. (In.)	30	30	7.5	17
Rows/Plot	4	4	8	5
Reps	2	2	2	2

PRELIMINARY TEST IIB, 1999

YIELD RANK

Strain	Yield Rank	Ames IA	Sioux Rapids IA	Urbana IL	Lafayette IN	Ingham County MI
IA2021 (II)	4	18	2	21	32	12
IA1008 (I) (SCN)	15	27	6	9	24	18
IA2038 (L)	13	13	21	30	16	4
C1979	1	1	13	2	4	1
C1994	12	2	26	14	12	29
HC95-3867	35	35	33	33	22	33
HC95-3885	28	20	28	35	21	33
HF97-011	3	17	30	8	6	12
HF97-052	20	32	29	3	10	30
HF97-074	17	23	32	22	1	6
HF97-076	11	30	21	10	8	11
HS95-4908	32	34	19	31	30	25
HS96-3316	23	31	24	15	14	10
HS96-6147	6	11	15	4	3	24
HS97-4544	6	6	14	1	13	28
HS97-4925	13	21	16	7	20	7
M92-191023	5	14	9	6	10	2
M93-149021	27	28	5	20	35	15
ORC 9807	30	33	20	24	18	35
ORC 9808	2	4	7	13	2	3
U97-200574	24	10	11	34	23	23
U97-200644	31	22	18	26	25	27
U97-200668	16	16	4	29	27	9
U97-200726	19	26	25	16	9	19
U97-201201	8	5	3	11	15	5
U97-201204	26	15	17	27	29	19
U97-201855	33	7	27	32	31	30
U97-202661	25	19	23	24	28	16
U97-202942	18	9	8	16	19	8
U97-202973	10	3	1	12	33	14
U97-203026	28	25	31	19	7	21
U97-203048	33	29	12	28	34	21
U97-207134	9	8	10	5	17	17
U97-207135	20	24	19	23	5	26
U97-207143	22	12	22	18	26	32

PRELIMINARY TEST IIB, 1999

YIELD RANK

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.
IA2021 (II)	4	7	17	8
IA1008 (I) (SCN)	13	15	18	27
IA2038 (L)	26	18	7	4
C1979	1	1	15	6
C1994	22	10	21	12
HC95-3867	34	17	31	24
HC95-3885	29	5	30	11
HF97-011	3	2	19	1
HF97-052	31	11	12	9
HF97-074	15	9	33	3
HF97-076	23	12	19	5
HS95-4908	33	23	27	33
HS96-3316	28	31	4	15
HS96-6147	27	4	23	13
HS97-4544	19	8	13	28
HS97-4925	18	21	11	14
M92-191023	20	6	9	25
M93-149021	12	26	34	20
ORC 9807	30	24	2	16
ORC 9808	14	3	1	2
U97-200574	9	20	28	26
U97-200644	32	34	3	18
U97-200668	16	28	6	10
U97-200726	21	25	5	19
U97-201201	5	29	10	22
U97-201204	6	22	29	29
U97-201855	25	35	13	35
U97-202661	10	30	22	17
U97-202942	24	19	32	31
U97-202973	2	32	8	23
U97-203026	11	27	25	30
U97-203048	17	33	35	34
U97-207134	7	14	26	21
U97-207135	35	16	15	7
U97-207143	8	13	24	32

PRELIMINARY TEST IIB, 1999

MATURITY (date)

Strain	Mean 8 Tests	Ames IA	Sioux Rapids IA	Urbana IL	Lafay- ette IN	Ingham County MI
IA2021 (II)	9/13	09/17		08/30	09/03	09/10
IA1008 (I) (SCN)	-1.7	-3		1	-1	-1
IA2038 (L)	5.1	8		10	9	+4
C1979	2.3	5		3	3	+7
C1994	2.7	6		5	5	+7
HC95-3867	10.9	18		13	14	+11
HC95-3885	5.2	8		7	7	+8
HF97-011	7.8	9		13	12	+11
HF97-052	10.2	14		18	13	+13
HF97-074	10.5	15		11	17	+13
HF97-076	7.3	10		8	12	+12
HS95-4908	1.8	2		3	5	+7
HS96-3316	4.9	7		7	8	+8
HS96-6147	2.8	6		6	7	+4
HS97-4544	2.8	6		6	6	+3
HS97-4925	4.3	6		5	6	+4
M92-191023	-0.4	0		1	2	+2
M93-149021	-2.3	-4		-2	-3	+2
ORC 9807	0.6	0		0	3	+1
ORC 9808	3.7	2		6	7	+7
U97-200574	1.4	1		2	3	+6
U97-200644	1.7	3		4	5	+4
U97-200668	1.5	2		2	4	+3
U97-200726	3.6	5		7	9	+6
U97-201201	0.6	0		5	2	+4
U97-201204	-0.3	0		4	0	+3
U97-201855	4.3	8		3	11	+6
U97-202661	-0.4	0		-1	4	+7
U97-202942	-0.1	-1		1	3	+9
U97-202973	1.6	4		4	4	+4
U97-203026	5.1	9		10	10	+7
U97-203048	-0.4	0		2	2	+2
U97-207134	3.9	7		9	6	+5
U97-207135	5.0	9		6	9	+7
U97-207143	5.9	10		8	13	+9
Date Planted	5/16	05/03		05/04	05/11	05/14
Days to Mature	120	137		118	115	119

PRELIMINARY TEST IIB, 1999

MATURITY (date)

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.
IA2021 (II)	09/27	09/23	09/08	09/23
IA1008 (I) (SCN)	-4	-2	-3	-2
IA2038 (L)	1	2	9	2
C1979	3	2	1	2
C1994	1	3	1	1
HC95-3867	9	11	15	8
HC95-3885	5	4	7	4
HF97-011	6	6	11	6
HF97-052	8	6	15	8
HF97-074	6	11	15	9
HF97-076	3	8	12	6
HS95-4908	0	1	2	2
HS96-3316	2	3	9	3
HS96-6147	0	1	2	0
HS97-4544	-1	2	3	1
HS97-4925	4	4	5	4
M92-191023	-5	-1	-1	1
M93-149021	-6	-2	-2	1
ORC 9807	-3	0	3	2
ORC 9808	0	4	7	4
U97-200574	-1	3	2	1
U97-200644	-4	2	3	1
U97-200668	-2	1	3	2
U97-200726	-1	5	3	1
U97-201201	-4	1	1	0
U97-201204	-4	-2	0	-1
U97-201855	-1	7	4	2
U97-202661	-4	1	-1	-3
U97-202942	-4	0	0	1
U97-202973	-2	1	2	1
U97-203026	1	2	7	3
U97-203048	-4	-2	2	-3
U97-207134	2	5	2	1
U97-207135	2	3	7	4
U97-207143	2	3	9	3
Date Planted	05/29	05/25	05/10	06/07
Days to Mature	121	121	121	108

PRELIMINARY TEST IIB, 1999

LODGING (score)

Strain	Mean 9 Tests	Ames IA	Sioux Rapids IA	Urbana IL	Lafay- ette IN	Ingham County MI
IA2021 (II)	1.4	2.9	2.3	1.3	1.0	0.9
IA1008 (I) (SCN)	1.3	1.8	1.6	1.0	1.0	1.6
IA2038 (L)	1.6	2.3	2.2	1.3	1.0	1.6
C1979	1.5	2.2	2.3	1.3	1.0	1.1
C1994	1.7	2.3	2.4	1.8	1.3	2.3
HC95-3867	1.6	2.6	2.2	1.3	1.0	1.4
HC95-3885	1.6	1.9	2.3	1.5	1.3	1.6
HF97-011	1.7	2.7	2.2	1.5	1.5	1.8
HF97-052	1.7	2.5	2.5	2.3	1.3	1.3
HF97-074	1.4	1.7	1.7	1.0	1.0	1.4
HF97-076	1.5	2.5	2.0	1.0	1.3	1.5
HS95-4908	1.4	1.5	2.3	1.3	1.0	1.6
HS96-3316	1.5	2.4	2.0	1.5	1.0	1.2
HS96-6147	1.5	2.2	2.2	1.5	1.3	1.1
HS97-4544	1.8	3.2	2.5	2.0	1.3	2.1
HS97-4925	1.2	1.9	1.9	1.3	1.0	0.8
M92-191023	2.0	2.6	2.6	2.0	1.8	3.1
M93-149021	1.3	2.2	1.7	1.0	1.0	1.5
ORC 9807	1.2	1.7	1.9	1.0	1.0	1.3
ORC 9808	1.1	1.5	1.7	1.0	1.0	0.9
U97-200574	1.4	2.0	2.0	1.3	1.0	1.2
U97-200644	1.6	2.2	2.2	1.0	1.3	1.9
U97-200668	1.3	2.0	1.9	1.3	1.0	1.6
U97-200726	1.7	2.6	2.2	1.5	1.5	1.6
U97-201201	1.5	1.8	2.0	1.5	1.0	2.0
U97-201204	1.3	1.7	2.2	1.3	1.0	1.0
U97-201855	1.5	2.0	2.2	1.3	1.0	1.2
U97-202661	1.4	1.8	1.5	1.0	1.0	1.6
U97-202942	1.9	3.1	2.5	1.5	1.3	2.8
U97-202973	1.5	2.0	2.0	1.5	1.0	1.9
U97-203026	1.9	3.2	2.4	1.8	1.5	2.4
U97-203048	2.0	3.2	2.5	1.8	1.0	2.5
U97-207134	1.6	2.4	2.2	1.5	1.0	1.5
U97-207135	1.7	2.5	2.2	1.5	1.0	2.0
U97-207143	1.5	2.3	1.8	1.3	1.0	1.4

PRELIMINARY TEST IIB, 1999

LODGING (score)

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.
IA2021 (II)	1.0	1.0	1.5	1.0
IA1008 (I) (SCN)	1.0	1.0	1.3	1.0
IA2038 (L)	1.0	2.0	1.6	1.0
C1979	1.0	2.0	1.5	1.0
C1994	1.0	2.0	1.5	1.0
HC95-3867	1.0	2.5	1.6	1.0
HC95-3885	1.0	2.0	1.4	1.0
HF97-011	1.0	2.0	1.5	1.0
HF97-052	1.0	2.0	1.5	1.0
HF97-074	1.0	2.0	1.4	1.0
HF97-076	1.0	1.5	1.5	1.0
HS95-4908	1.0	2.0	1.4	1.0
HS96-3316	1.0	2.0	1.3	1.0
HS96-6147	1.0	1.5	1.5	1.0
HS97-4544	1.0	2.0	1.5	1.0
HS97-4925	1.0	1.0	1.2	1.0
M92-191023	1.0	2.0	1.8	1.0
M93-149021	1.0	1.0	1.3	1.0
ORC 9807	1.0	1.0	1.3	1.0
ORC 9808	1.0	1.0	1.2	1.0
U97-200574	1.0	1.5	1.4	1.0
U97-200644	1.0	2.0	1.5	1.0
U97-200668	1.0	1.0	1.3	1.0
U97-200726	1.0	2.0	1.5	1.0
U97-201201	1.0	2.0	1.3	1.0
U97-201204	1.0	1.0	1.3	1.0
U97-201855	1.0	2.5	1.4	1.0
U97-202661	1.0	2.0	1.4	1.0
U97-202942	1.0	2.0	1.5	1.0
U97-202973	1.0	2.0	1.4	1.0
U97-203026	1.0	2.0	1.6	1.0
U97-203048	1.0	2.5	1.7	1.5
U97-207134	1.0	2.0	1.5	1.5
U97-207135	1.0	2.0	1.8	1.0
U97-207143	1.0	2.0	1.4	1.0

PRELIMINARY TEST IIB, 1999

PLANT HEIGHT (inches)

Strain	Mean 9 Tests	Ames IA	Sioux Rapids IA	Urbana IL	Lafay- ette IN	Ingham County MI
IA2021 (II)	30	31	33	29	29	30
IA1008 (I) (SCN)	34	35	38	33	33	37
IA2038 (L)	34	35	36	34	33	35
C1979	33	34	40	31	34	35
C1994	38	41	40	35	40	46
HC95-3867	43	48	46	38	42	45
HC95-3885	41	43	48	40	39	45
HF97-011	34	38	37	34	36	36
HF97-052	37	41	42	38	38	40
HF97-074	34	37	37	35	37	35
HF97-076	34	37	39	33	36	34
HS95-4908	34	34	40	33	33	37
HS96-3316	32	36	35	29	35	35
HS96-6147	37	37	41	39	37	40
HS97-4544	35	39	40	35	36	37
HS97-4925	34	40	40	30	32	36
M92-191023	36	35	39	35	34	41
M93-149021	32	33	39	34	29	35
ORC 9807	31	33	36	31	32	32
ORC 9808	32	37	36	31	32	32
U97-200574	32	34	38	32	33	31
U97-200644	34	38	39	32	35	39
U97-200668	31	33	37	31	31	33
U97-200726	37	39	43	37	36	40
U97-201201	34	35	37	33	35	36
U97-201204	32	31	38	32	31	35
U97-201855	33	37	35	31	37	35
U97-202661	35	35	42	33	34	35
U97-202942	34	35	42	31	34	38
U97-202973	33	36	39	33	32	32
U97-203026	41	48	41	40	43	43
U97-203048	39	37	42	36	39	43
U97-207134	34	35	40	34	35	37
U97-207135	43	44	50	39	44	45
U97-207143	39	44	45	36	40	40

PRELIMINARY TEST IIB, 1999

PLANT HEIGHT (inches)

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.
IA2021 (II)	28	32	29	25
IA1008 (I) (SCN)	36	35	32	26
IA2038 (L)	29	38	33	29
C1979	31	35	33	27
C1994	36	39	37	31
HC95-3867	39	50	41	35
HC95-3885	37	49	38	32
HF97-011	32	36	33	26
HF97-052	32	40	36	27
HF97-074	32	35	33	24
HF97-076	32	33	35	25
HS95-4908	31	38	34	28
HS96-3316	27	32	33	24
HS96-6147	35	37	37	29
HS97-4544	35	39	33	26
HS97-4925	36	33	34	23
M92-191023	34	41	34	30
M93-149021	29	35	29	26
ORC 9807	31	33	31	22
ORC 9808	30	34	30	23
U97-200574	31	35	31	22
U97-200644	32	33	33	29
U97-200668	27	31	30	26
U97-200726	32	37	38	31
U97-201201	33	38	33	26
U97-201204	34	35	30	25
U97-201855	33	35	32	25
U97-202661	34	37	34	28
U97-202942	32	37	28	28
U97-202973	33	34	29	27
U97-203026	38	45	39	36
U97-203048	38	42	38	35
U97-207134	32	37	31	27
U97-207135	39	50	39	35
U97-207143	38	41	37	30

PRELIMINARY TEST IIB, 1999

SEED SIZE (g/100)

Strain	Mean 9 Tests	Ames IA	Sioux Rapids IA	Urbana IL	Lafay- ette IN	Ingham County MI
IA2021 (II)	16.2	15.0	17.9	14.3	12.1	15.9
IA1008 (I) (SCN)	17.1	16.3	18.1	18.4	13.8	16.9
IA2038 (L)	18.1	16.8	19.0	18.7	16.1	17.3
C1979	13.5	13.2	13.8	13.4	10.7	14.0
C1994	13.9	12.8	14.1	13.9	11.4	14.3
HC95-3867	13.9	13.1	12.9	14.0	13.6	13.0
HC95-3885	13.5	13.1	13.3	11.6	11.9	13.4
HF97-011	15.6	15.3	15.7	15.3	13.7	16.0
HF97-052	14.4	13.9	14.6	14.2	13.1	14.4
HF97-074	15.5	14.4	14.8	13.3	13.9	17.8
HF97-076	15.2	13.2	15.5	14.1	14.0	16.5
HS95-4908	17.2	16.3	18.9	17.7	15.0	17.4
HS96-3316	16.3	14.2	17.3	16.2	14.2	18.3
HS96-6147	15.2	13.7	15.7	16.2	13.2	15.0
HS97-4544	16.4	15.5	16.6	16.9	14.3	17.2
HS97-4925	16.0	14.9	16.9	15.4	14.6	15.9
M92-191023	16.0	14.7	17.5	16.5	13.4	16.2
M93-149021	16.4	13.8	18.6	16.6	12.9	16.8
ORC 9807	14.2	12.1	17.0	12.0	11.7	14.6
ORC 9808	15.3	13.7	16.2	14.6	13.4	15.3
U97-200574	15.6	14.9	17.1	14.8	13.1	15.7
U97-200644	15.4	14.8	16.8	13.6	12.9	15.7
U97-200668	15.9	15.3	17.0	15.5	14.1	15.2
U97-200726	17.0	16.4	18.0	17.0	14.3	17.3
U97-201201	16.5	15.8	18.0	15.7	13.6	16.5
U97-201204	15.2	14.1	15.9	14.6	13.0	15.4
U97-201855	16.5	15.3	17.7	16.0	15.2	16.9
U97-202661	15.6	14.8	15.8	13.5	13.6	17.1
U97-202942	16.2	14.8	17.4	13.7	13.6	17.4
U97-202973	18.1	16.6	20.4	16.5	16.3	18.8
U97-203026	15.3	15.0	15.0	15.0	13.3	15.6
U97-203048	15.0	14.4	15.8	15.5	13.4	15.4
U97-207134	15.7	14.8	16.5	16.2	13.6	16.1
U97-207135	14.0	13.1	14.0	13.2	11.4	14.2
U97-207143	14.9	13.8	14.8	13.9	13.5	15.9

PRELIMINARY TEST IIB, 1999

SEED SIZE (g/100)

Strain	Beemer NE	Cotesfield NE	Hoytville OH	Harrow Ont.
IA2021 (II)	14.6	19.4	14.3	22.7
IA1008 (I) (SCN)	16.0	20.5	14.2	20.1
IA2038 (L)	16.6	19.5	16.0	22.9
C1979	12.5	15.1	11.2	17.2
C1994	13.5	16.1	11.9	17.0
HC95-3867	13.7	14.2	13.1	17.6
HC95-3885	13.7	15.3	11.3	17.7
HF97-011	14.8	16.5	13.0	20.1
HF97-052	14.1	15.2	12.3	18.1
HF97-074	14.9	16.1	13.5	20.6
HF97-076	13.9	16.3	13.4	19.9
HS95-4908	15.6	18.7	14.1	21.4
HS96-3316	14.9	16.9	14.2	20.3
HS96-6147	14.4	16.7	13.4	18.3
HS97-4544	15.0	17.9	14.2	20.0
HS97-4925	14.7	17.7	13.7	20.3
M92-191023	14.7	17.4	13.7	20.2
M93-149021	15.7	18.4	13.8	21.0
ORC 9807	13.0	15.2	12.6	19.6
ORC 9808	13.2	17.1	12.7	21.3
U97-200574	14.4	16.3	14.0	20.2
U97-200644	15.0	16.7	13.8	19.3
U97-200668	14.3	17.4	14.0	20.2
U97-200726	16.4	17.9	15.0	20.9
U97-201201	15.9	17.5	14.6	20.6
U97-201204	14.6	16.8	13.0	19.1
U97-201855	14.1	17.1	14.3	21.5
U97-202661	15.1	17.4	14.2	19.1
U97-202942	15.8	17.3	13.9	21.9
U97-202973	17.4	17.9	16.0	23.4
U97-203026	16.2	15.3	13.4	19.3
U97-203048	14.6	16.0	12.6	17.7
U97-207134	14.6	17.6	13.2	18.6
U97-207135	13.2	15.9	12.3	19.1
U97-207143	14.0	15.8	12.7	19.7

PRELIMINARY TEST IIB, 1999

PROTEIN (%)

Strain	Mean 5 Tests	Urbana IL	Lafayette IN	Ingham Co. MI	Hoytville OH	Harrow Ont.
IA2021 (II)	38.7	39.9	37.0	39.9	38.1	38.8
IA1008 (I) (SCN)	39.7	41.2	38.6	40.8	39.3	38.4
IA2038 (L)	40.7	42.0	41.5	41.1	40.2	38.8
C1979	42.0	43.8	40.9	43.9	38.8	42.4
C1994	39.3	40.5	38.5	40.5	37.7	39.3
HC95-3867	42.0	44.0	41.2	42.8	40.6	41.2
HC95-3885	38.3	40.2	38.7	39.3	35.8	37.6
HF97-011	41.6	44.7	39.9	43.2	39.5	40.7
HF97-052	42.0	42.4	42.6	42.3	41.3	41.4
HF97-074	41.9	42.5	41.3	42.9	41.1	41.7
HF97-076	41.9	43.4	41.5	42.4	41.2	40.8
HS95-4908	41.9	43.9	42.1	42.7	40.0	40.8
HS96-3316	40.6	40.9	39.7	41.1	41.6	39.9
HS96-6147	39.4	41.1	39.1	41.0	37.9	37.9
HS97-4544	39.0	40.0	37.9	41.0	37.6	38.5
HS97-4925	40.5	40.9	39.8	41.4	40.3	39.9
M92-191023	39.0	41.1	37.5	40.1	38.5	37.9
M93-149021	40.5	41.2	40.0	41.5	39.5	40.1
ORC 9807	44.4	45.7	42.3	45.5	44.0	44.4
ORC 9808	43.1	44.3	42.3	43.5	43.0	42.4
U97-200574	41.5	43.1	40.1	42.4	41.1	41.0
U97-200644	41.0	42.1	39.0	42.2	41.0	40.5
U97-200668	41.3	43.2	40.7	42.1	40.0	40.3
U97-200726	41.0	43.5	39.1	42.2	40.0	40.1
U97-201201	40.7	43.1	39.0	41.4	39.3	40.7
U97-201204	41.4	43.6	40.9	42.1	39.6	40.6
U97-201855	39.9	40.2	38.8	42.2	38.1	40.0
U97-202661	39.8	40.8	38.2	41.1	39.4	39.5
U97-202942	41.1	41.6	39.7	41.4	41.5	41.5
U97-202973	40.9	42.0	38.8	41.8	40.8	41.1
U97-203026	41.9	45.5	41.1	42.6	39.4	41.1
U97-203048	40.5	42.9	39.6	41.3	39.4	39.3
U97-207134	42.1	45.2	41.4	42.1	41.2	40.8
U97-207135	40.2	41.0	39.1	42.0	39.1	40.0
U97-207143	42.2	43.9	41.7	43.2	40.6	41.8

PRELIMINARY TEST IIB, 1999

OIL (%)

Strain	Mean 5 Tests	Urbana IL	Lafayette IN	Ingham Co. MI	Hoytville OH	Harrow Ont.
IA2021 (II)	21.3	21.7	21.1	20.3	20.6	22.8
IA1008 (I) (SCN)	19.9	19.6	19.3	19.2	19.4	22.2
IA2038 (L)	20.3	19.6	19.5	19.6	19.9	22.7
C1979	19.9	19.0	19.4	18.9	20.5	21.8
C1994	19.8	19.8	18.5	18.6	20.3	21.6
HC95-3867	19.1	17.9	19.1	18.1	19.6	20.8
HC95-3885	19.6	19.2	19.5	17.9	20.2	21.2
HF97-011	20.4	19.2	20.8	19.2	20.8	22.0
HF97-052	19.9	19.6	19.2	19.5	19.6	21.5
HF97-074	20.2	20.0	20.3	19.3	20.1	21.1
HF97-076	19.9	19.8	19.7	18.6	20.1	21.5
HS95-4908	20.5	20.6	19.6	19.0	20.7	22.4
HS96-3316	20.3	20.3	20.2	19.7	19.7	21.7
HS96-6147	19.8	19.7	19.7	18.2	19.9	21.5
HS97-4544	20.7	20.7	20.5	19.2	21.1	22.2
HS97-4925	20.5	20.5	20.0	19.8	20.2	22.0
M92-191023	20.6	20.5	20.3	19.6	20.1	22.3
M93-149021	20.3	20.7	20.0	19.4	19.5	21.8
ORC 9807	18.7	17.7	19.0	18.1	18.2	20.4
ORC 9808	19.1	18.6	18.9	18.7	18.6	20.5
U97-200574	19.4	19.0	19.0	18.9	19.4	20.9
U97-200644	20.0	19.7	19.6	19.2	19.8	21.8
U97-200668	20.4	19.9	19.5	19.9	20.3	22.2
U97-200726	19.8	18.7	19.9	18.8	19.8	21.7
U97-201201	19.8	19.1	20.3	18.7	19.9	21.1
U97-201204	19.2	18.8	18.6	18.0	19.4	21.2
U97-201855	20.0	19.9	19.6	19.6	19.5	21.4
U97-202661	19.6	19.5	19.3	18.7	19.3	21.4
U97-202942	19.9	20.6	20.0	18.5	19.1	21.1
U97-202973	19.3	19.6	19.6	18.2	18.6	20.5
U97-203026	19.3	17.9	19.3	18.4	20.5	20.6
U97-203048	19.6	19.1	19.4	18.6	19.2	21.5
U97-207134	19.0	17.9	18.3	19.0	18.7	21.2
U97-207135	19.8	19.2	19.2	19.2	20.1	21.5
U97-207143	19.4	19.3	19.0	18.3	19.7	20.8

Uniform Test III, 1999

	Strain	Parentage	Previous Testing	Generation Compositated	Unique Traits
1.	IA3010 (III)	Jacques J285 x Northrup King S29-39	3	F5	
2.	Charleston (dt1)	HC74-634RE x HC78-676	10	F5	dt1
3.	IA2038 (II)	Pioneer 9303 x Kenwood	1	F5	
4.	Macon (L)	Sherman x Resnik	6	F5	
5.	C1966	HS88-4909 x HC85-2206	PT IIA	F5	
6.	HC92-984	HC84-2556 x HC78-676BC	2	F5	dt1
7.	HC93-868	HC85-6723 x Sprite 87	1	F5	dt1
8.	HC94-96PR	HC85-606(4) x HC74-634REBC	1	BC3F3	dt1, Rps1-k
9.	HC94-1065	HC85-607 x HC78-676BC	PT IIIB	F5	dt1
10.	LN95-872	HS88-4906 x Resnik	PT IIB	F5	BSR
11.	LN95-5420	Jack x IA3003	SCN P III	F5	SCN
12.	LN95-5928	Jack x C1842	SCN P III	F5	SCN
13.	LN95-6353	Jack x Iroquois	SCN P III	F5	SCN
14.	U96-2208	Colfax x A91-701035	1	F4	dt1
15.	U96-2236	MSBP2 x (F1 SSD) F6	1	F7	
16.	U96-3103	MSBP2 (F1 SSD)	1	F7	
17.	U97-2140	MSBP3F6	PT IIA	F7	
18.	U97-3114	MSBP3F6	PT IIIB	F7	
19.	U97-3229	MSBP3F6	PT IIIB	F7	
20.	U97-3642	UP3YC1	PT IIIB	F7	

UNIFORM TEST III, 1999

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis	Emerg.	Shattering	PR	Hard Seed	PS	PSB
		Score Humboldt	Score Ames	Score Manhattan	Laf. Race 7	Lafayette %	a %	n %
IA3010 (III)	PTTDYGrlep	2.5	2	1.0	R	0	2	0
Charleston (dt1)	PTTSYBIDep	3.4	2	1.0	S	0	0	0
IA2038 (II)	PTBDYBrlep	4.1	4	1.0	R	2	22	0
Macon (L)	WTBSYBIIep	4.4	1	1.0	S	0	4	2
C1966	PGBSYBflep	4.1	1	1.0	R	0	10	0
HC92-984	PTBSYBIDep	3.9	2	1.0	R	2	6	0
HC93-868	WTTIYBIDep	3.4	3	1.0	R	0	2	0
HC94-96PR	P+WTTIYBIDep	4.6	1	1.0	R	8	0	0
HC94-1065	PTBSYBIDep	3.6	2	1.0	R	0	0	0
LN95-872	PGTSYHIH	3.1	1	1.0	R	0	12	0
LN95-5420	WGBDYIlep	4.0	2	1.0	S	0	10	2
LN95-5928	PGTDYIlep	4.4	2	1.0	S	0	28	0
LN95-6353	PGBIYIlep	4.0	3	1.0	R	0	10	0
U96-2208	WGBSYBfDEp	3.6	2	1.0	H	0	10	0
U96-2236	PTTDYBIIep	2.9	1	1.0	S	4	14	0
U96-3103	PGBSYBrlep	2.5	3	1.0	S	0	2	0
U97-2140	PGTSYIblep	2.6	2	1.0	R	0	2	0
U97-3114	PGBDYHIep	3.3	3	1.0	R	0	4	2
U97-3229	WGBSYBflep	4.5	3	1.0	R	0	12	0
U97-3642	PGTSYIblep	3.3	1	1.0	H	0	2	0

UNIFORM TEST III, 1999

SDS DATA

Strain	DX	SDS Data Blomington	DS
		DI	
IA3010 (III)	8	48	2
Charleston (dt1)	1	5	1
IA2038 (II)	1	10	1
Macon (L)	0	2	1
C1966	1	12	1
HC92-984	3	24	1
HC93-868	7	47	1
HC94-96PR	0	3	1
HC94-1065	2	17	1
LN95-872	4	27	1
LN95-5420	1	9	1
LN95-5928	2	11	1
LN95-6353	2	15	1
U96-2208	1	9	1
U96-2236	19	88	2
U96-3103	2	16	1
U97-2140	3	17	1
U97-3114	4	31	1
U97-3229	1	11	1
U97-3642	1	7	0

UNIFORM TEST III, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Size	Composition	
	22 bu/a	22 No.	19 Date	22 Score	22 In.	22 g/100	Protein 5 %	Oil 5 %
IA3010 (III)	53.9	1	9/21	1.2	28	14.2	39.1	19.9
Charleston (dt1)	48.2	20	2.3	1.3	21	14.3	41.1	19.5
IA2038 (II)	48.7	18	-3.2	1.5	30	18.2	40.7	20.6
Macon (L)	50.5	10	5.0	1.5	33	15.7	40.7	19.6
C1966	50.7	9	2.9	2.0	36	15.9	39.7	20.4
HC92-984	48.6	19	1.5	1.2	21	14.4	42.6	18.7
HC93-868	48.8	17	3.9	1.3	20	15.4	39.7	20.8
HC94-96PR	52.1	6	2.0	1.2	22	14.6	39.7	20.4
HC94-1065	52.4	5	3.7	1.2	20	14.6	38.7	20.4
LN95-872	50.0	14	-1.7	1.5	32	15.1	39.1	21.0
LN95-5420	49.4	16	2.1	1.8	35	12.7	39.6	19.8
LN95-5928	50.2	13	-0.5	1.7	37	13.4	41.6	20.4
LN95-6353	50.3	11	-0.7	1.8	37	13.3	40.5	20.3
U96-2208	53.5	2	-2.1	1.2	22	17.2	40.0	20.2
U96-2236	50.3	11	-2.3	1.3	31	13.4	38.1	20.2
U96-3103	52.0	7	-0.6	1.5	32	13.4	41.5	19.3
U97-2140	50.0	14	-1.1	1.2	29	16.0	39.6	21.5
U97-3114	52.7	4	0.2	1.6	34	16.2	40.1	20.5
U97-3229	50.8	8	0.6	1.6	33	14.3	40.4	19.8
U97-3642	53.3	3	2.0	1.7	34	15.1	39.7	20.6

129.2 Days After Planting

UNIFORM TEST III, 1999

1998-1999 2-YEAR MEAN

No. of Tests Strain	Yield 45 bu/a	Rank 45 No.	Maturity 38 Date	Lodging 44 Score	Plant Height 44 In.	Seed Size 43 g/100	Composition	
							Protein 10 %	Oil 10 %
IA3010 (III)	54.5	1	9/19	1.2	29	14.3	39.4	20.1
Charleston (dt1)	49.1	8	2.1	1.3	21	14.3	41.5	19.8
IA2038 (II)	50.1	7	-3.2	1.6	31	18.6	40.7	20.9
Macon (L)	51.7	4	4.3	1.6	33	16.0	41.0	19.9
HC92-984	49.1	8	1.8	1.2	21	14.6	42.4	19.2
HC93-868	49.1	8	3.5	1.3	20	15.3	40.3	21.0
HC94-96PR	50.8	6	1.9	1.2	22	14.6	39.9	20.7
U96-2208	54.2	2	-2.0	1.2	23	17.2	40.0	20.5
U96-2236	51.7	4	-2.2	1.3	32	13.5	38.3	20.6
U96-3103	53.2	3	-0.7	1.6	32	13.7	41.8	19.4

125.0 Days After Planting

1997-1999 3-YEAR MEAN

No. of Tests Strain	68	68	57	67	67	64	15	15
IA3010 (III)	55.8	1	9/21	1.2	29	14.9	39.5	20.4
Charleston (dt1)	51.3	3	2.9	1.4	23	14.8	41.5	19.8
Macon (L)	53.6	2	4.5	1.5	33	16.4	40.7	20.2
HC92-984	51.3	3	2.4	1.2	22	15.1	42.1	19.4

125.8 Days After Planting

UNIFORM TEST III, 1999

YIELD (bu/a)

Strain	Mean 22 Tests	George- town DE	Ames IA	Crawfords- ville IA	Griswold IA	Newton IL	Ridg- way IL
IA3010 (III)	53.9	48.0	69.4	61.7	53.5	41.4	42.3
Charleston (dt1)	48.2	33.6	55.2	61.2	47.1	37.8	39.7
IA2038 (II)	48.7	45.9	67.4	57.6	58.1	36.7	38.4
Macon (L)	50.5	44.6	58.6	54.6	49.7	38.0	41.4
C1966	50.7	41.1	60.9	60.5	56.7	38.5	42.6
HC92-984	48.6	36.8	52.0	53.4	45.6	35.9	44.4
HC93-868	48.8	45.5	50.5	49.9	44.5	38.5	42.0
HC94-96PR	52.1	52.9	58.8	59.8	39.9	38.2	45.2
HC94-1065	52.4	49.7	49.3	65.1	48.4	36.0	51.6
LN95-872	50.0	45.5	59.6	58.6	54.1	39.2	48.9
LN95-5420	49.4	45.0	62.5	53.2	55.6	44.1	45.5
LN95-5928	50.2	43.9	56.5	58.2	58.5	47.5	40.3
LN95-6353	50.3	48.0	57.8	61.9	52.6	43.6	46.6
U96-2208	53.5	50.1	72.6	55.3	57.9	30.9	47.1
U96-2236	50.3	45.7	60.4	59.4	55.5	37.0	38.0
U96-3103	52.0	42.0	72.0	60.3	52.7	38.0	47.1
U97-2140	50.0	39.7	56.5	56.7	62.0	41.8	38.2
U97-3114	52.7	40.6	73.4	62.1	61.6	39.7	43.7
U97-3229	50.8	45.3	66.9	54.5	57.4	38.5	37.4
U97-3642	53.3	40.6	66.1	64.0	63.8	40.4	46.1
C.V. (%)		5.1	12.4	6.8	11.7	9.2	12.8
L.S.D. (5%)		6.9	5.0	2.6	4.2	6.0	9.2
Row Sp. (in.)		15	27	27	27	30	30
Rows/Plot		5	4	4	4	4	4
Reps		3	2	2	2	3	3

UNIFORM TEST III, 1999

YIELD (bu/a)

Strain	Urbana IL	Butler- ville* IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS
IA3010 (III)	75.2	44.3	38.3	39.4	43.1	32.1	60.4
Charleston (dt1)	68.4	37.8	35.7	28.3	19.5	28.2	53.1
IA2038 (II)	57.8	29.7	31.9	32.2	46.8	25.5	53.6
Macon (L)	65.2	49.7	35.4	27.6	40.7	33.2	58.9
C1966	72.3	36.3	36.6	34.8	37.2	25.4	60.4
HC92-984	66.9	25.0	34.8	23.4	30.4	27.6	46.6
HC93-868	69.0	18.9	37.5	30.3	33.8	32.6	58.1
HC94-96PR	77.3	32.0	37.6	23.7	27.9	33.2	55.8
HC94-1065	70.9	18.2	39.3	22.6	39.7	32.9	57.8
LN95-872	63.2	38.3	37.0	34.9	39.7	30.5	58.2
LN95-5420	59.8	43.0	33.8	33.0	48.8	26.4	54.2
LN95-5928	59.2	31.8	33.8	36.8	46.7	28.4	61.4
LN95-6353	64.5	41.3	31.7	34.4	53.5	28.3	59.3
U96-2208	68.2	20.9	39.0	30.8	54.2	31.5	55.9
U96-2236	62.7	32.6	38.0	32.0	53.3	27.3	63.8
U96-3103	67.1	50.2	37.5	34.8	43.3	30.8	56.9
U97-2140	67.2	36.0	37.8	33.2	47.8	32.1	55.6
U97-3114	66.2	37.3	36.0	31.1	54.8	33.8	60.9
U97-3229	59.8	44.4	31.0	33.0	49.3	30.0	56.1
U97-3642	64.8	61.2	33.8	38.0	50.0	30.0	69.3
C.V. (%)	9.8	19.0	8.6	11.9	11.5	6.5	8.5
L.S.D. (5%)	10.8	11.4	5.1	6.2	8.2	3.2	8.1
Row Sp. (in.)	30	26	24	26	30	30	30
Rows/Plot	4	4	4	4	4	4	4
Reps	3	3	3	3	3	3	3

* Data not included in mean.

UNIFORM TEST III, 1999

YIELD (bu/a)

Strain	Queens- town MD	Colum- bia MO	Byron NE	Falls City NE	Tekamah NE	Adel- phia NJ
IA3010 (III)	54.3	20.0	72.9	58.8	56.7	72.4
Charleston (dt1)	55.0	17.9	65.7	54.9	52.9	59.0
IA2038 (II)	52.4	20.9	67.8	51.4	58.9	47.6
Macon (L)	59.8	33.5	66.1	56.9	52.9	70.1
C1966	60.4	25.6	67.4	50.6	54.7	59.1
HC92-984	59.7	20.8	70.8	47.9	58.4	62.6
HC93-868	51.3	13.4	70.9	57.6	50.9	52.1
HC94-96PR	58.8	24.7	69.2	59.7	60.8	69.0
HC94-1065	62.7	18.2	74.3	57.1	52.5	66.4
LN95-872	56.2	16.1	72.1	49.6	55.9	53.3
LN95-5420	54.7	16.7	59.9	50.1	56.1	66.6
LN95-5928	48.2	24.4	64.6	51.6	55.3	63.2
LN95-6353	50.2	24.1	66.6	50.4	55.9	55.7
U96-2208	59.8	16.0	77.3	65.5	57.7	52.2
U96-2236	53.1	20.5	72.5	48.4	59.1	52.9
U96-3103	62.0	21.9	73.0	54.5	60.0	55.6
U97-2140	53.6	25.5	69.6	55.7	61.0	44.9
U97-3114	56.3	24.9	70.1	53.8	60.6	52.9
U97-3229	58.6	14.2	72.0	57.8	59.2	61.6
U97-3642	57.6	26.2	69.4	56.0	60.1	53.2
C.V. (%)	8.4	11.0	3.7	8.7	10.5	14.3
L.S.D. (5%)	7.8	3.8	4.1	7.8	10.8	13.9
Row Sp. (in.)	24	30	30	30	30	8
Rows/Plot	4	4	4	4	4	10
Reps	3	3	3	3	3	3

UNIFORM TEST III, 1999

YIELD (bu/a)

Strain	Hoyt- ville OH	Plain City OH	So. Charl- eston OH	Wooster OH
IA3010 (III)	55.7	51.1	66.4	72.4
Charleston (dt1)	46.2	61.0	72.7	68.2
IA2038 (II)	51.3	50.5	64.1	53.6
Macon (L)	49.2	51.4	67.2	55.1
C1966	53.7	51.9	67.2	57.8
HC92-984	53.0	63.4	74.3	59.9
HC93-868	52.4	58.5	75.8	59.3
HC94-96PR	55.7	53.1	75.0	70.0
HC94-1065	52.7	61.5	71.8	71.3
LN95-872	54.0	48.2	66.7	59.0
LN95-5420	44.4	51.3	60.0	65.8
LN95-5928	44.8	57.1	60.3	62.8
LN95-6353	47.7	51.7	62.0	59.9
U96-2208	60.0	53.5	71.2	70.9
U96-2236	51.3	53.5	66.3	55.1
U96-3103	52.2	55.1	65.8	62.5
U97-2140	49.8	48.2	68.6	55.0
U97-3114	47.2	47.0	71.3	72.2
U97-3229	55.4	54.5	69.6	55.8
U97-3642	52.8	55.1	70.5	64.6
C.V. (%)	7.0	7.6	4.8	6.8
L.S.D. (5%)	4.9	6.8	5.4	5.8
Row Sp. (in.)	7.5	15	7.5	7.5
Rows/Plot	8	6	8	8
Reps	3	3	3	3

UNIFORM TEST III, 1999

YIELD RANK

Strain	Yield Rank	George- town DE	Ames IA	Crawfords- ville IA	Griswold IA	Newton IL	Ridg- way IL
IA3010 (III)	1	4	4	5	12	5	12
Charleston (dt1)	20	20	16	6	17	15	16
IA2038 (II)	18	6	5	13	5	17	17
Macon (L)	10	12	13	16	15	13	14
C1966	9	15	9	7	8	9	11
HC92-984	19	19	17	18	18	19	9
HC93-868	17	8	18	20	19	9	13
HC94-96PR	6	1	12	9	20	12	8
HC94-1065	5	3	19	1	16	18	1
LN95-872	14	8	11	11	11	8	2
LN95-5420	16	11	8	19	9	2	7
LN95-5928	13	13	15	12	4	1	15
LN95-6353	11	4	14	4	14	3	5
U96-2208	2	2	2	15	6	20	3
U96-2236	11	7	10	10	10	16	19
U96-3103	7	14	3	8	13	13	3
U97-2140	14	18	15	14	2	4	18
U97-3114	4	16	1	3	3	7	10
U97-3229	8	10	6	17	7	9	20
U97-3642	3	16	7	2	1	6	6

UNIFORM TEST III, 1999

YIELD RANK

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS
IA3010 (III)	2	5	3	1	12	6	5
Charleston (dt1)	6	9	12	16	20	15	19
IA2038 (II)	20	16	18	11	9	19	18
Macon (L)	12	3	13	17	13	2	8
C1966	3	11	10	5	16	20	5
HC92-984	10	17	14	19	18	16	20
HC93-868	5	19	7	15	17	5	10
HC94-96PR	1	14	6	18	19	2	15
HC94-1065	4	20	1	20	14	4	11
LN95-872	15	8	9	4	14	10	9
LN95-5420	17	6	15	9	7	18	17
LN95-5928	19	15	15	3	10	13	3
LN95-6353	14	7	19	7	3	14	7
U96-2208	7	18	2	14	2	8	14
U96-2236	16	13	4	12	4	17	2
U96-3103	9	2	7	5	11	9	12
U97-2140	8	12	5	8	8	6	16
U97-3114	11	10	11	13	1	1	4
U97-3229	17	4	20	9	6	11	13
U97-3642	13	1	15	2	5	11	1

UNIFORM TEST III, 1999

YIELD RANK

Strain	Queens- town MD	Colum- bia MO	Byron NE	Falls City NE	Tekamah NE	Adel- phia NJ
IA3010 (III)	14	13	4	3	11	1
Charleston (dt1)	12	15	18	10	18	10
IA2038 (II)	17	10	14	14	8	19
Macon (L)	4	1	17	7	17	2
C1966	3	3	15	15	16	9
HC92-984	6	11	9	20	9	7
HC93-868	18	20	8	5	20	18
HC94-96PR	7	6	13	2	2	3
HC94-1065	1	14	2	6	19	5
LN95-872	11	17	6	18	14	13
LN95-5420	13	16	20	17	12	4
LN95-5928	20	7	19	13	15	6
LN95-6353	19	8	16	16	13	11
U96-2208	4	18	1	1	10	17
U96-2236	16	12	5	19	7	16
U96-3103	2	9	3	11	5	12
U97-2140	15	4	11	9	1	20
U97-3114	10	5	10	12	3	15
U97-3229	8	19	7	4	6	8
U97-3642	9	2	12	8	4	14

UNIFORM TEST III, 1999

YIELD RANK

Strain	Hoyt- ville OH	Plain City OH	So. Charl- eston OH	Wooster OH
IA3010 (III)	2	16	14	1
Charleston (dt1)	18	3	4	6
IA2038 (II)	12	17	17	20
Macon (L)	15	14	11	17
C1966	6	12	11	15
HC92-984	7	1	3	11
HC93-868	10	4	1	13
HC94-96PR	2	11	2	5
HC94-1065	9	2	5	3
LN95-872	5	18	13	14
LN95-5420	20	15	20	7
LN95-5928	19	5	19	9
LN95-6353	16	13	18	11
U96-2208	1	9	7	4
U96-2236	12	9	15	17
U96-3103	11	6	16	10
U97-2140	14	18	10	19
U97-3114	17	20	6	2
U97-3229	4	8	9	16
U97-3642	8	6	8	8

UNIFORM TEST III, 1999

MATURITY (date)

Strain	Mean 19 Tests	George- town DE	Ames IA	Crawfords- ville IA	Griswold IA	Newton IL	Ridg- way IL
IA3010 (III)	9/21	09/28	09/29			09/16	09/05
Charleston (dt1)	2.3	1	1			2	-1
IA2038 (II)	-3.2	-3	-3			-2	-13
Macon (L)	5.0	5	2			5	4
C1966	2.9	2	4			2	2
HC92-984	1.5	4	-2			1	-1
HC93-868	3.9	2	1			1	2
HC94-96PR	2.0	2	0			1	-2
HC94-1065	3.7	6	1			2	4
LN95-872	-1.7	0	-3			0	-3
LN95-5420	2.1	2	2			1	1
LN95-5928	-0.5	2	1			-1	-3
LN95-6353	-0.7	0	-2			0	0
U96-2208	-2.1	1	-6			-6	-4
U96-2236	-2.3	1	-5			-4	-4
U96-3103	-0.6	4	0			0	-2
U97-2140	-1.1	4	-5			1	2
U97-3114	0.2	-1	1			-1	-1
U97-3229	0.6	3	1			-1	-2
U97-3642	2.0	4	2			1	0
Date Planted	5/15	05/27	05/03			05/28	05/25
Days to Mature	129	124	149			111	103

UNIFORM TEST III, 1999

MATURITY (date)

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS
IA3010 (III)	09/14	09/10	09/17	09/19	10/01		10/01
Charleston (dtl)	7	0	1	0	0		2
IA2038 (II)	-4	-9	-2	-5	0		1
Macon (L)	7	8	6	5	6		3
C1966	9	2	3	2	3		3
HC92-984	5	-3	2	1	1		0
HC93-868	7	1	5	3	7		4
HC94-96PR	9	-2	2	-4	5		1
HC94-1065	8	-1	4	2	2		-1
LN95-872	-5	-8	-4	-1	1		1
LN95-5420	1	2	2	4	9		3
LN95-5928	1	-5	-1	2	5		4
LN95-6353	0	-1	-1	1	3		-1
U96-2208	-3	-7	-5	-5	0		2
U96-2236	-5	-6	-3	-4	-1		-1
U96-3103	2	-3	0	-4	1		-1
U97-2140	-1	-6	-3	-6	2		-2
U97-3114	-1	-2	0	-2	6		1
U97-3229	-3	-4	-2	-4	7		4
U97-3642	1	1	1	3	6		1
Date Planted	05/04	05/03	05/11	05/04	05/28		05/19
Days to Mature	133	130	129	138	126		135

UNIFORM TEST III, 1999

MATURITY (date)

Strain	Queens- town MD	Colum- bia MO	Byron NE	Falls City NE	Tekamah NE	Adel- phia NJ
IA3010 (III)	09/29	09/08	09/28		10/03	10/19
Charleston (dt1)	4	-1	4		4	2
IA2038 (II)	-2	0	0		-4	-2
Macon (L)	4	5	4		5	1
C1966	5	1	3		5	-3
HC92-984	3	1	1		3	0
HC93-868	5	2	1		4	4
HC94-96PR	2	1	1		3	0
HC94-1065	5	2	1		4	2
LN95-872	-2	-1	1		-1	2
LN95-5420	4	0	1		3	-4
LN95-5928	-2	-1	1		1	-4
LN95-6353	-3	1	1		-1	-5
U96-2208	-1	-1	0		-2	-1
U96-2236	-4	-1	1		-4	1
U96-3103	0	-1	0		-3	-2
U97-2140	-2	0	2		-1	-2
U97-3114	1	-1	4		0	-1
U97-3229	3	-2	3		3	0
U97-3642	2	0	2		5	1
Date Planted	06/04	05/03	06/05		05/27	05/18
Days to Mature	117	128	115		129	154

UNIFORM TEST III, 1999

MATURITY (date)

Strain	Hoyt- ville OH	Plain City OH	So. Charl- eston OH	Wooster OH
IA3010 (III)	09/22	09/13	09/12	09/10
Charleston (dt1)	1	5	8	3
IA2038 (II)	-5	-7	0	-2
Macon (L)	3	8	10	2
C1966	0	4	7	1
HC92-984	0	4	8	1
HC93-868	5	7	12	3
HC94-96PR	1	6	10	2
HC94-1065	5	12	11	2
LN95-872	-3	-4	-1	-1
LN95-5420	0	3	4	1
LN95-5928	-6	-3	0	1
LN95-6353	-4	0	1	-1
U96-2208	-3	0	0	0
U96-2236	-4	-1	2	-1
U96-3103	0	-1	1	-3
U97-2140	-3	-3	1	1
U97-3114	-3	-2	4	1
U97-3229	-1	1	4	1
U97-3642	-1	2	4	3
Date Planted	05/10	04/27	05/04	04/29
Days to Mature	135	139	131	134

UNIFORM TEST III, 1999

LODGING (score)

Strain	Mean 22 Tests	George- town DE	Ames IA	Crawfords- ville IA	Griswold IA	Newton IL	Ridg- way IL
IA3010 (III)	1.2	1.7	1.9	2.0	1.9	1.0	1.0
Charleston (dtl)	1.3	1.3	1.7	2.0	1.6	1.0	1.0
IA2038 (II)	1.5	1.3	2.8	2.7	2.8	1.2	1.5
Macon (L)	1.5	1.7	2.2	2.6	2.5	1.0	1.5
C1966	2.0	3.0	3.4	3.0	2.9	1.2	1.7
HC92-984	1.2	2.0	1.7	1.7	1.5	1.0	1.0
HC93-868	1.3	2.7	1.7	2.2	1.5	1.0	1.0
HC94-96PR	1.2	2.0	2.0	2.0	1.4	1.0	1.0
HC94-1065	1.2	1.0	1.7	1.9	1.4	1.0	1.0
LN95-872	1.5	2.0	2.8	2.5	2.2	1.2	1.5
LN95-5420	1.8	1.0	2.5	3.0	2.7	1.7	1.8
LN95-5928	1.7	2.0	3.0	3.0	2.7	1.3	1.5
LN95-6353	1.8	2.0	3.2	3.0	2.9	1.5	1.7
U96-2208	1.2	2.3	1.7	1.8	1.6	1.0	1.0
U96-2236	1.3	1.3	1.7	2.3	1.9	1.0	1.0
U96-3103	1.5	2.3	2.4	2.5	2.8	1.0	1.5
U97-2140	1.2	1.7	1.7	1.6	1.9	1.0	1.0
U97-3114	1.6	2.3	2.2	2.9	2.3	1.0	1.0
U97-3229	1.6	4.3	1.9	2.6	2.2	1.5	1.2
U97-3642	1.7	2.0	2.8	2.7	2.3	1.3	1.5

UNIFORM TEST III, 1999

LODGING (score)

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS
IA3010 (III)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Charleston (dt1)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
IA2038 (II)	1.5	1.0	1.2	1.0	1.0	1.0	1.0
Macon (L)	1.3	1.0	1.3	1.0	1.7	1.0	1.0
C1966	1.8	1.0	1.8	1.0	1.7	1.0	1.0
HC92-984	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC93-868	1.2	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
HC94-1065	1.2	1.0	1.0	1.0	1.0	1.0	1.0
LN95-872	1.3	1.0	1.3	1.0	1.3	1.0	1.0
LN95-5420	1.7	1.0	1.5	1.3	2.0	1.0	1.3
LN95-5928	1.5	1.0	1.3	1.0	1.7	1.0	1.3
LN95-6353	1.5	1.0	1.2	1.0	1.3	1.0	1.7
U96-2208	1.2	1.0	1.0	1.0	1.0	1.0	1.0
U96-2236	1.2	1.0	1.0	1.0	1.0	1.0	1.0
U96-3103	1.2	1.0	1.3	1.0	1.0	1.0	1.0
U97-2140	1.0	1.0	1.0	1.0	1.3	1.0	1.0
U97-3114	1.5	1.0	1.7	1.0	1.0	1.0	1.3
U97-3229	1.3	1.0	1.2	1.0	1.3	1.0	1.3
U97-3642	1.3	1.0	1.8	1.0	2.0	1.0	1.3

UNIFORM TEST III, 1999

LODGING (score)

Strain	Queens- town MD	Colum- bia MO	Byron NE	Falls City NE	Tekamah NE	Adel- phia NJ
IA3010 (III)	1.8	1.0	1.0		1.3	1.0
Charleston (dtl)	1.5	1.0	3.0		1.0	1.0
IA2038 (II)	2.5	1.0	1.0		2.7	1.0
Macon (L)	2.3	1.0	1.0		3.7	1.0
C1966	3.0	1.0	3.0		3.7	1.0
HC92-984	1.7	1.0	1.0		1.0	1.0
HC93-868	2.2	1.0	2.3		1.0	1.0
HC94-96PR	2.0	1.0	1.0		1.0	1.0
HC94-1065	1.7	1.0	1.7		1.3	1.0
LN95-872	2.3	1.0	1.0		2.7	1.0
LN95-5420	2.8	1.0	3.0		3.0	1.0
LN95-5928	2.3	1.0	3.0		2.7	1.0
LN95-6353	2.7	1.0	3.0		2.7	1.0
U96-2208	2.0	1.0	1.0		1.3	1.0
U96-2236	2.2	1.0	1.0		2.3	1.0
U96-3103	2.0	1.0	1.7		2.3	1.0
U97-2140	1.8	1.0	1.0		1.0	1.0
U97-3114	2.5	1.0	1.7		3.0	1.0
U97-3229	2.3	1.0	1.0		2.7	1.0
U97-3642	2.5	1.0	1.7		3.7	1.0

UNIFORM TEST III, 1999

LODGING (score)

Strain	Hoyt- ville OH	Plain City OH	So. Charl- eston OH	Wooster OH
IA3010 (III)	1.2	1.1	1.0	1.2
Charleston (dt1)	1.2	1.0	1.3	1.4
IA2038 (II)	1.3	1.1	1.8	1.4
Macon (L)	1.3	1.1	1.0	1.3
C1966	1.7	1.2	2.3	1.6
HC92-984	1.1	1.0	1.0	1.3
HC93-868	1.2	1.0	1.0	1.3
HC94-96PR	1.2	1.0	1.0	1.6
HC94-1065	1.2	1.0	1.0	1.4
LN95-872	1.4	1.1	1.0	1.4
LN95-5420	1.6	1.3	1.5	1.5
LN95-5928	1.4	1.1	1.3	1.3
LN95-6353	1.7	1.4	2.0	1.5
U96-2208	1.3	1.0	1.0	1.3
U96-2236	1.3	1.0	1.0	1.2
U96-3103	1.3	1.2	1.0	1.3
U97-2140	1.3	1.1	1.0	1.3
U97-3114	1.4	1.2	1.7	1.4
U97-3229	1.4	1.0	1.0	1.3
U97-3642	1.4	1.2	1.7	1.5

UNIFORM TEST III, 1999

PLANT HEIGHT (inches)

Strain	Mean 22 Tests	George- town DE	Ames IA	Crawfords- ville IA	Griswold IA	Newton IL	Ridg- way IL
IA3010 (III)	28	29	35	33	33	23	30
Charleston (dt1)	21	26	17	27	17	21	21
IA2038 (II)	30	21	34	37	35	26	31
Macon (L)	33	33	37	40	38	28	37
C1966	36	29	43	43	43	32	37
HC92-984	21	24	19	25	16	20	29
HC93-868	20	34	17	22	17	19	20
HC94-96PR	22	33	21	24	19	20	22
HC94-1065	20	18	16	23	19	20	23
LN95-872	32	33	35	39	37	28	33
LN95-5420	35	21	37	41	40	35	38
LN95-5928	37	32	44	42	42	32	35
LN95-6353	37	29	40	44	44	34	39
U96-2208	22	27	26	26	20	22	20
U96-2236	31	27	34	38	36	28	30
U96-3103	32	33	38	40	35	27	33
U97-2140	29	24	34	34	35	25	29
U97-3114	34	31	40	40	37	30	33
U97-3229	33	33	38	39	36	29	31
U97-3642	34	29	38	40	38	29	33

UNIFORM TEST III, 1999

PLANT HEIGHT (inches)

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS
IA3010 (III)	31	25	29	30	29	26	29
Charleston (dt1)	27	15	20	19	14	19	17
IA2038 (II)	31	28	35	30	33	30	31
Macon (L)	35	29	37	34	36	29	35
C1966	38	32	41	37	37	31	41
HC92-984	26	14	20	19	13	21	18
HC93-868	23	13	21	17	14	19	17
HC94-96PR	28	15	23	17	15	20	20
HC94-1065	27	13	22	18	15	22	16
LN95-872	35	27	36	34	32	28	33
LN95-5420	34	31	39	37	39	30	35
LN95-5928	40	32	37	38	41	34	42
LN95-6353	35	30	38	37	42	33	42
U96-2208	25	18	24	22	18	22	19
U96-2236	31	28	34	33	34	30	32
U96-3103	33	29	34	32	36	28	31
U97-2140	33	25	32	29	32	26	32
U97-3114	34	28	36	30	38	32	36
U97-3229	32	29	36	34	35	31	35
U97-3642	34	31	36	35	34	30	37

UNIFORM TEST III, 1999

PLANT HEIGHT (inches)

Strain	Queens- town MD	Colum- bia MO	Byron NE	Falls City NE	Tekamah NE	Adel- phia NJ
IA3010 (III)	22	23	29		39	21
Charleston (dt1)	15	17	27		26	15
IA2038 (II)	28	25	33		40	20
Macon (L)	28	29	35		43	22
C1966	31	29	38		48	26
HC92-984	20	15	26		28	16
HC93-868	17	15	24		25	15
HC94-96PR	18	20	26		28	18
HC94-1065	18	20	25		26	17
LN95-872	27	28	36		41	22
LN95-5420	29	28	39		47	23
LN95-5928	30	31	40		45	25
LN95-6353	30	32	43		48	24
U96-2208	21	15	30		29	18
U96-2236	25	27	35		41	21
U96-3103	26	25	37		42	23
U97-2140	24	23	33		38	20
U97-3114	25	31	37		46	24
U97-3229	28	29	36		42	22
U97-3642	28	32	35		45	24

UNIFORM TEST III, 1999

PLANT HEIGHT (inches)

Strain	Hoyt- ville OH	Plain City OH	So. Charl- eston OH	Wooster OH
IA3010 (III)	29	28	30	22
Charleston (dt1)	22	24	26	24
IA2038 (II)	31	31	35	26
Macon (L)	36	36	36	23
C1966	39	38	39	30
HC92-984	21	22	27	24
HC93-868	20	20	25	21
HC94-96PR	25	21	28	25
HC94-1065	21	18	26	22
LN95-872	35	33	31	23
LN95-5420	35	37	37	29
LN95-5928	38	40	36	28
LN95-6353	37	39	36	30
U96-2208	24	21	26	22
U96-2236	34	32	34	24
U96-3103	32	35	34	26
U97-2140	29	31	31	22
U97-3114	34	37	36	28
U97-3229	35	34	35	24
U97-3642	34	35	35	27

UNIFORM TEST III, 1999

SEED SIZE (g/100)

Strain	Mean 22 Tests	George- town DE	Ames IA	Crawfords- ville IA	Griswold IA	Newton IL	Ridg- way IL
IA3010 (III)	14.2		13.1	14.5	13.0	11.8	10.7
Charleston (dt1)	14.3		13.6	14.1	14.0	12.6	10.3
IA2038 (II)	18.2		17.4	17.7	17.9	15.7	12.4
Macon (L)	15.7		15.9	16.5	14.3	13.0	10.4
C1966	15.9		16.0	16.9	15.7	12.9	11.4
HC92-984	14.4		13.6	14.3	14.4	12.9	10.5
HC93-868	15.4		14.6	15.5	14.8	13.6	11.6
HC94-96PR	14.6		14.5	14.9	14.6	13.0	11.1
HC94-1065	14.6		14.2	14.6	14.2	13.0	12.4
LN95-872	15.1		14.9	15.3	14.7	13.9	12.3
LN95-5420	12.7		12.5	12.7	12.7	10.8	8.1
LN95-5928	13.4		13.0	13.3	13.1	11.4	10.0
LN95-6353	13.3		12.4	12.9	12.8	11.4	10.5
U96-2208	17.2		16.8	15.9	17.1	15.5	14.8
U96-2236	13.4		12.5	13.6	12.7	12.0	9.8
U96-3103	13.4		12.6	13.2	12.8	12.8	9.5
U97-2140	16.0		15.0	15.6	14.8	14.3	10.4
U97-3114	16.2		15.0	16.6	16.2	13.8	11.7
U97-3229	14.3		14.8	15.0	13.5	12.4	10.3
U97-3642	15.1		13.8	15.2	14.9	14.0	9.8

UNIFORM TEST III, 1999

SEED SIZE (g/100)

Strain	Urbana IL	Butler- ville IN	Lafay- ette IN	Wanatah IN	Man- hattan KS	Pow- hattan KS	Topeka KS
IA3010 (III)	14.6	13.5	12.6	12.4	16.0	13.8	15.0
Charleston (dt1)	14.7	13.9	13.3	11.0	16.6	15.5	17.0
IA2038 (II)	21.8	19.1	16.5	14.8	20.7	18.4	22.0
Macon (L)	16.3	15.3	15.5	11.0	17.8	15.7	19.0
C1966	16.7	15.1	14.0	12.8	18.1	17.6	17.0
HC92-984	14.2	13.6	13.9	11.9	16.5	15.8	16.0
HC93-868	15.0	15.1	14.3	13.2	19.2	16.8	17.0
HC94-96PR	15.4	14.6	13.3	11.6	18.7	15.5	16.0
HC94-1065	13.4	14.8	12.7	12.0	18.1	15.4	17.0
LN95-872	14.6	14.1	12.8	12.4	18.0	15.3	19.0
LN95-5420	13.5	12.0	11.3	10.6	14.2	12.5	14.0
LN95-5928	14.3	12.1	12.3	10.5	15.5	12.5	18.0
LN95-6353	14.0	12.6	12.7	11.2	14.8	13.5	16.0
U96-2208	16.7	15.3	14.3	16.0	21.2	18.0	23.0
U96-2236	14.2	12.0	12.6	10.8	14.5	14.4	15.0
U96-3103	13.6	13.1	11.9	10.8	14.4	14.3	17.0
U97-2140	17.0	14.3	13.8	12.0	17.2	17.7	19.0
U97-3114	16.6	14.4	14.7	12.8	18.5	17.1	19.0
U97-3229	15.6	13.0	11.8	10.5	18.1	14.1	18.0
U97-3642	16.0	14.5	13.7	11.7	18.0	15.6	18.0

UNIFORM TEST III, 1999

SEED SIZE (g/100)

Strain	Queens- town MD	Colum- bia MO	Byron NE	Falls City NE	Tekamah NE	Adel- phia NJ
IA3010 (III)	16.0	13.0	15.8	14.0	15.0	19.5
Charleston (dt1)	15.0	13.0	15.2	15.5	13.8	19.4
IA2038 (II)	20.6	15.0	18.7	18.2	19.4	20.2
Macon (L)	15.9	14.0	17.7	16.1	15.8	22.0
C1966	18.6	14.0	17.8	16.7	16.0	20.4
HC92-984	15.0	12.0	15.7	13.8	15.6	18.6
HC93-868	14.6	14.0	16.2	16.0	15.2	19.9
HC94-96PR	14.7	12.0	15.3	15.0	14.1	19.4
HC94-1065	14.8	14.0	15.0	15.6	14.2	18.8
LN95-872	15.0	13.0	16.6	14.8	16.5	20.0
LN95-5420	14.3	10.0	14.2	12.5	14.3	17.6
LN95-5928	13.8	12.0	14.5	13.0	13.6	18.6
LN95-6353	14.0	12.0	14.3	13.0	12.9	18.5
U96-2208	17.9	16.0	18.6	17.3	17.4	21.7
U96-2236	13.8	11.0	15.6	13.0	13.8	18.0
U96-3103	15.5	11.0	15.2	13.9	14.0	18.1
U97-2140	15.4	16.0	18.0	16.7	16.5	23.1
U97-3114	18.3	12.0	18.2	15.7	18.4	22.6
U97-3229	14.8	9.0	15.8	14.8	16.0	19.1
U97-3642	16.5	14.0	16.8	15.4	15.0	21.8

UNIFORM TEST III, 1999

SEED SIZE (g/100)

Strain	Hoyt- ville OH	Plain City OH	So. Charl- eston OH	Wooster OH
IA3010 (III)	13.6	13.9	13.1	16.9
Charleston (dt1)	11.8	15.2	13.3	16.3
IA2038 (II)	16.5	18.1	18.4	21.3
Macon (L)	13.7	16.5	14.6	18.1
C1966	13.9	16.6	14.4	17.1
HC92-984	12.8	15.2	13.7	16.6
HC93-868	13.9	15.7	14.7	18.3
HC94-96PR	12.5	14.9	14.1	17.1
HC94-1065	12.1	15.3	13.0	15.9
LN95-872	13.8	15.0	13.4	17.2
LN95-5420	11.4	13.1	11.7	15.1
LN95-5928	11.9	14.0	12.7	15.2
LN95-6353	11.7	13.5	12.2	14.8
U96-2208	15.0	15.6	14.9	20.3
U96-2236	12.8	14.7	13.5	15.5
U96-3103	11.6	13.6	12.0	15.0
U97-2140	14.9	16.0	15.3	19.8
U97-3114	14.2	15.5	15.1	20.1
U97-3229	12.5	14.4	13.1	17.0
U97-3642	12.7	14.2	12.8	17.3

UNIFORM TEST III, 1999

PROTEIN (%)

Strain	Mean 5 Tests	Ridgway IL	Urbana IL	Lafayette IN	Hoytville OH	Wooster OH
IA3010 (III)	39.1	39.3	41.6	39.4	37.2	37.8
Charleston (dt1)	41.1	41.8	44.1	41.1	37.6	40.8
IA2038 (II)	40.7	41.3	42.5	40.7	39.6	39.4
Macon (L)	40.7	39.8	43.4	40.9	38.9	40.5
C1966	39.7	40.1	44.0	38.8	37.2	38.2
HC92-984	42.6	44.4	45.0	42.2	40.8	40.6
HC93-868	39.7	40.8	41.2	40.0	37.5	39.2
HC94-96PR	39.7	41.2	41.6	40.3	36.6	39.0
HC94-1065	38.7	38.9	41.1	38.8	36.5	38.3
LN95-872	39.1	37.6	41.3	39.5	38.9	38.2
LN95-5420	39.6	38.0	43.2	40.5	37.8	38.4
LN95-5928	41.6	40.7	43.9	42.8	38.5	42.0
LN95-6353	40.5	38.8	44.5	41.3	38.1	39.7
U96-2208	40.0	39.3	42.1	40.0	39.0	39.8
U96-2236	38.1	38.5	41.2	38.4	34.8	37.8
U96-3103	41.5	41.1	45.0	42.4	38.9	40.0
U97-2140	39.6	38.3	42.4	39.4	38.3	39.6
U97-3114	40.1	39.9	42.2	40.4	37.1	41.0
U97-3229	40.4	39.7	43.5	40.5	38.0	40.4
U97-3642	39.7	38.8	41.7	39.5	40.1	38.4

UNIFORM TEST III, 1999

OIL (%)

Strain	Mean 5 Tests	Ridgway IL	Urbana IL	Lafayette IN	Hoytville OH	Wooster OH
IA3010 (III)	19.9	19.7	19.2	19.1	20.2	21.1
Charleston (dt1)	19.5	19.8	18.4	19.9	19.8	19.8
IA2038 (II)	20.6	21.4	20.6	20.1	20.4	20.7
Macon (L)	19.6	20.6	18.7	19.3	19.1	20.2
C1966	20.4	20.7	19.7	20.3	20.9	20.4
HC92-984	18.7	17.7	17.9	19.4	18.5	20.2
HC93-868	20.8	20.9	20.4	20.5	21.1	21.3
HC94-96PR	20.4	20.2	19.9	20.3	20.7	21.1
HC94-1065	20.4	21.0	19.6	20.4	20.8	20.4
LN95-872	21.0	22.4	20.3	20.4	20.8	21.3
LN95-5420	19.8	20.1	18.9	19.3	20.4	20.3
LN95-5928	20.4	21.2	19.4	19.8	21.5	20.3
LN95-6353	20.3	21.6	18.5	20.0	21.0	20.2
U96-2208	20.2	21.4	18.9	20.0	19.8	20.7
U96-2236	20.2	20.7	19.3	20.1	20.8	20.1
U96-3103	19.3	19.8	18.2	19.0	19.6	20.0
U97-2140	21.5	21.7	20.1	21.5	21.7	22.3
U97-3114	20.5	21.3	20.2	20.0	20.6	20.3
U97-3229	19.8	20.1	18.7	19.3	20.4	20.6
U97-3642	20.6	21.4	19.5	20.0	20.8	21.1

Preliminary Test IIIA, 1999

	Strain	Parentage	Generation Composited	Unique Traits
1.	IA3010 (III)	Jacques J285 x Northrup King S29-39	F5	
2.	IA2038 (II)	Pioneer 9303 x Kenwood	F5	
3.	Macon (L)	Sherman x Resnik	F5	
4.	A98-884009	A93-552034 x Pioneer P9281	F5	BSR
5.	A98-980012	Northrup King S24-92 x Pioneer P9281	F5	
6.	A98-980013	Northrup King S24-92 x Pioneer P9281	F5	
7.	A98-980025	IA1006 x Pioneer P9281	F5	BSR
8.	A98-980044	Pioneer P9321 x Northrup King S24-92	F5	
9.	A98-980046	Pioneer P9321 x Northrup King S24-92	F5	
10.	A98-980047	Pioneer P9321 x Northrup King S24-92	F5	
11.	A98-980048	Pioneer P9321 x Northrup King S24-92	F5	
12.	A98-980049	Pioneer P9321 x Pioneer P9281	F5	
13.	A98-980051	Pioneer P9321 x Pioneer P9281	F5	
14.	A98-980052	Pioneer P9321 x Pioneer P9281	F5	
15.	A98-980057	Pioneer P9321 x Pioneer P9204	F5	
16.	A98-980065	A93-554045 x Northrup King S24-92	F4	BSR
17.	HF97-122	Resnik x AM90-112003	F5	
18.	HF97-136	Resnik x IA2007	F5	Rpslc
19.	HF97-166	Thorne x Corsica	F5	Rpslc
20.	HF97-187	(HF91-070 x HM9148) x HS90-37100	F5	Rpslk
21.	HF97-188	(HF91-070 x HM9148) x HS90-37100	F5	Rpslk
22.	K1442	KS4694 x P6929-004	F5	
23.	K1444	P6929-004 x Corsica	F5	
24.	K1445	LG89-6661 x LN89-295	F5	
25.	K1446	LN89-295 x IA2007	F5	
26.	K1447	P6929-004 x Corsica	F5	
27.	K1448	LG89-6661 x KS4694	F5	
28.	K1449	KS4694 x P6929-004	F5	
29.	K1450	LG89-6661 x KS4694	F5	
30.	K1451	LG89-6661 x LN89-295	F5	
31.	LN95-543	HS88-4906 x C1842	F5	
32.	LN95-558	HS88-4906 x C1842	F5	
33.	LN95-2783	Thorne x C1842	F5	
34.	LN95-3058	Thorne x HS88-4906	F5	
35.	LN95-3830	Iroquois x C1842	F5	
36.	LN95-3853	Iroquois x C1842	F5	
37.	LN96-23	Thorne x LN90-4104	F5	Rpslk
38.	LN96-95	Thorne x LN90-4104	F5	Rpslk
39.	LN96-2280	Piatt x Resnik	F5	
40.	LN96-2335	Piatt x Edison	F5	Rpsla

PRELIMINARY TEST IIIA, 1999

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Humboldt	Shattering Score Manhattan	PR Lafayette Race 7	Hard Seed %	PS Lafayette a %	PSB n %
IA3010 (III)	PTTDYGrlep	2.8	1.0	R	0	2	0
IA2038 (II)	PTBDYBrlep	4.5	1.0	R	2	22	0
Macon (L)	WTBSYBllep	4.3	2.0	S	0	4	2
A98-884009	PGBDYBllep	3.9	1.0	H	0	22	0
A98-980012	PTBDYBllep	4.0	1.0	S	0	12	0
A98-980013	PGBSYBrlep	3.9	3.0	S	0	12	0
A98-980025	PTBSYBllep	2.5	1.0	S	0	6	2
A98-980044	PGBSYBrlep	4.6	1.0	S	0	0	0
A98-980046	PGBDYBrlep	4.3	1.0	S	0	6	0
A98-980047	PGBSYBrlep	3.8	1.0	S	0	4	0
A98-980048	PGBSYBrlep	3.0	1.0	S	0	4	0
A98-980049	PTBSYHlep	3.1	1.0	H	0	4	0
A98-980051	PTBIYBrlep	3.6	2.0	R	0	0	0
A98-980052	PGBSYBllep	3.0	1.0	R	0	4	0
A98-980057	PGBDYBllep	3.6	1.0	S	4	2	0
A98-980065	P+WTBDYBllep	2.9	1.0	S	0	6	0
HF97-122	PTTDYBllep	3.9	1.0	R	0	0	0
HF97-136	PTBDYBrlep	3.8	1.0	R	4	8	0
HF97-166	P+WTBDYBllep	3.5	1.0	R	0	6	0
HF97-187	PTBDYBllep	3.0	1.0	R	0	0	0
HF97-188	PTBDYBllep	3.4	1.0	R	2	0	0
K1442	WGBDYHlep	3.6	1.0	S	0	6	0
K1444	PTBDYBllep	3.3	1.0	S	0	4	0
K1445	WGBDYBflep	3.5	1.0	S	0	2	0
K1446	WTBDYBllep	3.5	1.0	S	6	0	0
K1447	WTTDYBllep	3.5	1.0	S	0	0	0
K1448	WGBDYBflep	2.9	1.0	H	4	4	0
K1449	WGBSYBllep	2.9	1.0	S	14	0	0
K1450	WGBSYBflep	4.4	1.0	S	0	4	0
K1451	WTBSYBllep	4.6	1.0	S	8	0	0
LN95-543	PGTDYHlep	3.8	1.0	R	0	2	2
LN95-558	PGTSYBflep	4.0	1.0	R	0	8	0
LN95-2783	PTBDYBllep	4.0	1.0	R	0	0	0
LN95-3058	WGBSYBflep	3.4	2.0	R	0	0	0
LN95-3830	PTBIYBllep	4.3	1.0	R	0	2	0
LN95-3853	PGTDYBllep	4.3	1.0	R	0	2	0
LN96-23	PTBDYBllep	3.0	1.0	R	0	6	0
LN96-95	PTTDYBllep	2.8	1.0	S	0	0	4
LN96-2280	PTTSYBllep	4.0	1.0	R	0	4	0
LN96-2335	PGTIYBllep	3.9	1.0	S	0	6	0

PRELIMINARY TEST IIIA, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 10 bu/a	Rank 10 No.	Maturity 8 Date	Lodging 9 Score	Plant Height 10 In.	Seed Size 10 g/100	Composition	
							Protein 4 %	Oil 4 %
IA3010 (III)	54.4	3	9/20	1.4	31	13.8	38.7	19.7
IA2038 (II)	47.5	37	-1.7	1.8	33	17.7	41.5	20.0
Macon (L)	49.6	26	6.3	1.9	37	15.4	41.2	18.9
A98-884009	50.0	22	-3.2	1.6	32	15.6	42.1	19.6
A98-980012	51.8	12	1.1	1.6	36	13.5	41.5	18.4
A98-980013	54.6	2	-0.4	1.9	35	13.2	41.8	18.4
A98-980025	47.6	36	-0.4	2.1	37	14.7	41.7	19.6
A98-980044	54.1	4	-1.1	1.8	35	13.1	41.2	18.5
A98-980046	53.3	7	-0.3	1.7	34	14.8	42.0	18.9
A98-980047	56.8	1	-0.4	2.0	35	13.2	41.2	18.9
A98-980048	54.0	5	0.0	2.3	36	13.4	41.6	18.9
A98-980049	49.7	25	0.5	1.9	33	13.7	41.4	18.8
A98-980051	52.6	9	3.8	1.7	36	14.4	41.8	19.2
A98-980052	53.3	7	2.2	1.8	35	14.6	41.5	18.8
A98-980057	53.7	6	2.6	1.9	35	14.7	41.6	18.8
A98-980065	51.0	17	5.5	1.5	37	16.0	40.9	19.2
HF97-122	49.1	29	4.8	1.8	39	13.1	42.1	19.1
HF97-136	46.0	39	7.4	2.0	40	14.7	41.6	19.7
HF97-166	52.4	11	5.3	1.9	35	15.0	41.9	19.6
HF97-187	51.6	14	7.1	1.7	39	12.3	41.7	18.8
HF97-188	48.5	32	8.8	1.6	39	12.7	41.8	18.7
K1442	50.1	21	5.8	1.9	36	13.7	40.6	19.8
K1444	51.2	15	6.9	1.9	37	13.2	40.2	20.0
K1445	46.9	38	3.5	2.2	34	14.1	39.9	19.7
K1446	49.3	27	6.8	1.7	35	15.3	40.5	19.6
K1447	47.9	35	5.0	1.7	34	14.4	42.5	19.5
K1448	48.9	30	9.1	1.8	35	13.3	42.7	19.1
K1449	48.6	31	8.4	2.2	37	13.2	42.0	18.7
K1450	49.9	23	8.0	2.1	39	14.2	41.0	18.9
K1451	46.0	39	6.0	2.4	40	15.2	41.1	19.5
LN95-543	48.4	33	0.5	2.5	39	15.5	39.0	20.1
LN95-558	49.2	28	-1.9	2.5	37	16.6	39.6	20.1
LN95-2783	48.3	34	3.5	1.8	36	14.3	41.8	19.5
LN95-3058	50.2	19	7.4	2.1	39	15.1	38.3	20.5
LN95-3830	51.2	15	6.1	1.7	38	15.5	41.6	19.4
LN95-3853	52.6	9	5.9	1.5	37	14.2	41.2	19.7
LN96-23	49.9	23	4.2	1.9	38	15.3	41.3	19.6
LN96-95	51.8	12	5.9	1.6	33	15.1	42.2	19.2
LN96-2280	50.2	19	1.6	1.6	34	13.2	42.0	18.9
LN96-2335	50.3	18	1.6	1.7	36	13.3	41.0	19.2

131.9 Days After Planting

PRELIMINARY TEST IIIA, 1999

YIELD (bu/a)

Strain	Mean 10 Tests	Ames IA	Crawfords- ville IA	Urbana IL	Lafay- ette IN	Man- hattan KS
IA3010 (III)	54.4	59.4	65.6	71.1	42.8	35.3
IA2038 (II)	47.5	59.0	60.9	56.7	30.4	44.3
Macon (L)	49.6	50.6	59.5	70.1	36.6	32.3
A98-884009	50.0	68.4	62.9	61.9	31.8	48.4
A98-980012	51.8	57.5	63.2	68.5	35.3	40.9
A98-980013	54.6	62.9	67.1	71.0	37.3	38.7
A98-980025	47.6	58.4	61.0	70.3	30.0	28.9
A98-980044	54.1	55.8	68.4	70.5	40.2	32.8
A98-980046	53.3	58.9	63.6	75.5	40.3	50.0
A98-980047	56.8	64.3	72.0	66.3	41.2	46.5
A98-980048	54.0	60.3	68.8	66.4	40.1	25.3
A98-980049	49.7	60.3	69.2	70.2	40.3	18.1
A98-980051	52.6	54.4	66.7	72.0	38.8	34.9
A98-980052	53.3	54.7	59.9	65.4	38.8	47.1
A98-980057	53.7	62.0	63.1	69.8	35.6	35.8
A98-980065	51.0	58.4	55.2	65.0	34.4	46.7
HF97-122	49.1	53.1	52.7	65.2	28.0	57.6
HF97-136	46.0	55.1	49.8	61.8	29.9	41.4
HF97-166	52.4	57.7	61.7	61.4	32.2	60.0
HF97-187	51.6	52.8	53.5	69.1	32.4	53.5
HF97-188	48.5	48.8	54.2	71.0	36.5	52.5
K1442	50.1	52.6	59.6	67.5	31.0	43.2
K1444	51.2	48.3	55.1	70.0	34.0	53.8
K1445	46.9	47.6	59.6	64.7	36.2	26.5
K1446	49.3	54.9	56.3	71.7	35.0	31.0
K1447	47.9	49.6	59.5	72.2	32.4	39.0
K1448	48.9	49.1	52.5	72.8	37.2	46.7
K1449	48.6	52.6	54.9	64.4	32.1	47.0
K1450	49.9	54.9	56.8	67.4	32.3	44.4
K1451	46.0	50.9	57.6	68.3	30.8	14.7
LN95-543	48.4	50.2	57.6	64.5	39.4	47.4
LN95-558	49.2	56.6	59.1	66.3	36.7	16.5
LN95-2783	48.3	53.0	58.9	62.2	33.5	53.2
LN95-3058	50.2	53.9	57.5	65.3	30.0	43.8
LN95-3830	51.2	55.9	60.3	68.7	38.0	38.8
LN95-3853	52.6	51.2	55.7	60.7	34.8	55.7
LN96-23	49.9	52.7	54.0	62.8	35.8	46.3
LN96-95	51.8	54.1	59.8	69.2	36.5	49.5
LN96-2280	50.2	53.7	55.2	68.3	33.0	48.7
LN96-2335	50.3	57.2	60.4	71.3	34.0	44.8
C.V. (%)		7.8	8.6	11.5	8.7	12.2
L.S.D. (5%)		1.9	2.3	15.8	6.2	10.3
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIIA, 1999

YIELD (bu/a)

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	41.9	48.5	60.5	49.2	69.3
IA2038 (II)	14.8	45.6	50.2	49.6	63.7
Macon (L)	33.2	55.7	49.8	44.5	64.0
A98-884009	16.2	54.2	60.7	48.2	47.0
A98-980012	29.7	53.9	55.0	49.3	65.0
A98-980013	27.9	53.8	62.3	54.3	70.4
A98-980025	15.7	58.5	57.2	46.7	49.5
A98-980044	24.6	60.6	60.6	53.9	73.7
A98-980046	24.9	53.9	57.1	50.9	58.4
A98-980047	27.6	59.5	57.3	57.9	75.3
A98-980048	21.9	61.9	59.8	59.9	75.7
A98-980049	25.0	49.9	57.9	45.8	60.5
A98-980051	28.2	59.0	59.0	46.6	66.6
A98-980052	32.6	58.5	60.3	58.1	58.0
A98-980057	32.4	57.8	67.0	47.8	65.6
A98-980065	24.6	57.5	55.2	45.7	66.9
HF97-122	28.1	48.1	55.0	44.2	58.8
HF97-136	27.2	50.2	42.5	40.7	61.5
HF97-166	35.8	53.2	56.5	42.8	62.7
HF97-187	33.5	57.0	53.2	42.8	68.4
HF97-188	31.7	49.3	44.0	39.9	57.4
K1442	29.9	53.2	51.1	47.1	66.3
K1444	28.6	57.0	56.5	48.2	60.4
K1445	31.0	53.6	50.5	44.0	55.6
K1446	36.6	49.7	50.5	38.3	69.0
K1447	27.2	46.5	49.0	44.0	60.1
K1448	27.3	51.9	45.8	38.4	67.5
K1449	32.0	54.2	41.6	45.1	61.6
K1450	33.1	53.7	47.7	47.4	61.5
K1451	28.2	54.2	48.5	44.8	61.8
LN95-543	26.1	52.1	48.7	44.3	53.6
LN95-558	23.3	63.8	52.0	49.5	68.2
LN95-2783	26.1	47.7	46.2	45.3	56.9
LN95-3058	31.3	56.5	47.8	47.8	68.4
LN95-3830	33.1	50.8	51.4	50.2	64.3
LN95-3853	39.8	56.7	59.3	44.7	67.2
LN96-23	30.8	49.7	56.0	51.5	59.5
LN96-95	26.4	53.1	58.1	47.0	64.5
LN96-2280	28.0	49.7	56.5	49.2	59.6
LN96-2335	22.2	52.8	52.3	45.6	62.6
C.V. (%)	11.2	7.6	10.3	9.6	10.7
L.S.D. (5%)	6.4	9.2	11.8	7.6	13.7
Row Sp. (In.)	30	30	30	7.5	7.5
Rows/Plot	4	4	4	8	8
Reps	2	2	2	2	2

PRELIMINARY TEST IIIA, 1999

YIELD RANK

Strain	Yield Rank	Ames IA	Crawfordsville IA	Urbana IL	Lafayette IN	Manhattan KS
IA3010 (III)	3	6	7	7	1	30
IA2038 (II)	37	7	14	40	36	21
Macon (L)	26	30	20	13	14	33
A98-884009	22	1	11	36	33	11
A98-980012	12	11	9	19	20	25
A98-980013	2	3	5	8	11	28
A98-980025	36	9	13	11	37	35
A98-980044	4	15	4	10	5	32
A98-980046	7	8	8	1	3	8
A98-980047	1	2	1	25	2	17
A98-980048	5	5	3	24	6	37
A98-980049	25	5	2	12	3	38
A98-980051	9	19	6	4	8	31
A98-980052	7	18	17	27	8	13
A98-980057	6	4	10	15	19	29
A98-980065	17	9	28	30	23	15
HF97-122	29	23	34	29	40	2
HF97-136	39	16	36	37	39	24
HF97-166	11	10	12	38	31	1
HF97-187	14	25	33	17	28	5
HF97-188	32	34	31	8	15	7
K1442	21	27	19	22	34	23
K1444	15	35	29	14	24	4
K1445	38	36	19	31	17	36
K1446	27	17	26	5	21	34
K1447	35	32	20	3	28	26
K1448	30	33	35	2	12	15
K1449	31	27	30	33	32	14
K1450	23	17	25	23	30	20
K1451	39	29	23	20	35	40
LN95-543	33	31	23	32	7	12
LN95-558	28	13	21	25	13	39
LN95-2783	34	24	22	35	26	6
LN95-3058	19	21	24	28	37	22
LN95-3830	15	14	16	18	10	27
LN95-3853	9	28	27	39	22	3
LN96-23	23	26	32	34	18	18
LN96-95	12	20	18	16	15	9
LN96-2280	19	22	28	20	27	10
LN96-2335	18	12	15	6	24	19

PRELIMINARY TEST IIIA, 1999

YIELD RANK

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	1	36	5	12	5
IA2038 (II)	40	40	29	9	20
Macon (L)	6	14	30	30	19
A98-884009	38	15	3	12	40
A98-980012	17	18	20	11	16
A98-980013	23	20	2	4	4
A98-980025	39	7	13	21	39
A98-980044	33	3	4	5	3
A98-980046	32	19	14	7	33
A98-980047	24	4	12	3	2
A98-980048	37	2	7	1	1
A98-980049	31	31	11	23	27
A98-980051	20	5	9	22	13
A98-980052	9	6	6	2	34
A98-980057	10	8	1	17	15
A98-980065	33	9	19	24	12
HF97-122	21	37	21	32	32
HF97-136	26	30	39	37	25
HF97-166	4	24	15	35	21
HF97-187	5	11	22	35	7
HF97-188	12	35	38	38	35
K1442	16	23	26	19	14
K1444	18	10	15	12	28
K1445	14	22	27	33	37
K1446	3	34	28	40	6
K1447	26	39	31	33	29
K1448	25	28	37	39	10
K1449	11	17	40	27	24
K1450	7	21	35	18	25
K1451	19	16	33	28	23
LN95-543	29	27	32	31	38
LN95-558	35	1	24	10	9
LN95-2783	29	38	36	26	36
LN95-3058	13	13	34	17	7
LN95-3830	7	29	25	8	18
LN95-3853	2	12	8	29	11
LN96-23	15	33	18	6	31
LN96-95	28	25	10	20	17
LN96-2280	22	32	17	12	30
LN96-2335	36	26	23	25	22

PRELIMINARY TEST IIIA, 1999

MATURITY (date)

Strain	Mean 8 Tests	Ames IA	Crawfords- ville IA	Urbana IL	Lafay- ette IN	Man- hattan KS
IA3010 (III)	09/20	09/28		09/12	09/17	09/30
IA2038 (II)	-1.7	-1		-2	-3	5
Macon (L)	6.3	3		8	7	8
A98-884009	-3.2	0		-2	-3	-1
A98-980012	1.1	0		4	1	4
A98-980013	-0.4	1		0	-2	-1
A98-980025	-0.4	1		4	-3	1
A98-980044	-1.1	-1		0	-1	-1
A98-980046	-0.3	1		-1	0	2
A98-980047	-0.4	0		2	-1	-1
A98-980048	0.0	0		6	-2	-1
A98-980049	0.5	0		5	1	3
A98-980051	3.8	5		-1	4	7
A98-980052	2.2	5		-2	2	6
A98-980057	2.6	5		5	1	-1
A98-980065	5.5	3		10	4	7
HF97-122	4.8	4		10	1	8
HF97-136	7.4	8		14	3	8
HF97-166	5.3	7		9	2	6
HF97-187	7.1	7		15	3	8
HF97-188	8.8	6		18	7	10
K1442	5.8	4		10	1	9
K1444	6.9	6		11	4	7
K1445	3.5	1		6	3	6
K1446	6.8	5		11	6	8
K1447	5.0	2		11	2	8
K1448	9.1	7		15	8	9
K1449	8.4	7		14	6	10
K1450	8.0	8		12	7	9
K1451	6.0	7		11	5	6
LN95-543	0.5	0		0	1	7
LN95-558	-1.9	-2		-3	-4	2
LN95-2783	3.5	0		5	3	7
LN95-3058	7.4	9		6	4	13
LN95-3830	6.1	6		11	4	8
LN95-3853	5.9	5		10	5	8
LN96-23	4.2	7		5	2	8
LN96-95	5.9	4		12	5	8
LN96-2280	1.6	-1		7	1	2
LN96-2335	1.6	1		7	0	1
Date Planted	5/11	05/03		05/04	05/11	05/28
Days to Mature	132	148		131	129	125

PRELIMINARY TEST IIIA, 1999

MATURITY (date)

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	09/07		10/02	09/22	09/14
IA2038 (II)	0		-4	-6	-3
Macon (L)	7		5	4	9
A98-884009	2		-3	-9	-10
A98-980012	1		-3	-3	5
A98-980013	0		1	-5	3
A98-980025	0		1	-5	-2
A98-980044	0		-2	-6	2
A98-980046	0		-1	-4	0
A98-980047	1		-1	-6	2
A98-980048	0		0	-5	1
A98-980049	1		-3	-4	1
A98-980051	4		3	2	7
A98-980052	4		0	1	2
A98-980057	2		3	1	4
A98-980065	8		3	2	8
HF97-122	3		5	3	6
HF97-136	7		5	6	9
HF97-166	4		5	2	8
HF97-187	9		4	4	8
HF97-188	9		5	6	10
K1442	7		5	4	7
K1444	9		4	5	9
K1445	5		2	3	3
K1446	10		3	3	9
K1447	7		2	3	6
K1448	8		6	7	14
K1449	6		6	6	14
K1450	3		6	5	15
K1451	7		2	5	6
LN95-543	0		1	-4	-2
LN95-558	1		-1	-6	-2
LN95-2783	9		0	-1	5
LN95-3058	10		6	4	8
LN95-3830	11		3	1	6
LN95-3853	11		3	0	6
LN96-23	7		1	1	3
LN96-95	8		3	2	7
LN96-2280	3		0	-2	3
LN96-2335	2		1	-3	4
Date Planted	05/03		05/28	05/10	05/04
Days to Mature	127		127	135	133

PRELIMINARY TEST IIIA, 1999

LODGING (score)

Strain	Mean 9 Tests	Ames IA	Crawfords- ville IA	Urbana IL	Lafay- ette IN	Man- hattan KS
IA3010 (III)	1.4	1.6	1.9	1.0	1.0	1.0
IA2038 (II)	1.8	2.3	3.0	1.3	1.3	1.5
Macon (L)	1.9	2.5	2.5	1.3	1.8	3.5
A98-884009	1.6	2.3	2.6	1.3	1.0	1.5
A98-980012	1.6	2.4	2.4	1.3	1.0	1.0
A98-980013	1.9	3.2	2.6	1.3	1.0	2.0
A98-980025	2.1	2.4	3.0	2.0	1.5	2.5
A98-980044	1.8	2.9	2.7	1.3	1.3	1.0
A98-980046	1.7	3.0	2.6	1.8	1.5	1.0
A98-980047	2.0	3.4	2.7	1.5	1.5	1.0
A98-980048	2.3	3.5	2.7	1.5	1.3	3.0
A98-980049	1.9	3.4	2.7	2.0	1.5	1.0
A98-980051	1.7	2.4	2.6	1.3	1.3	2.5
A98-980052	1.8	2.7	2.6	1.5	1.3	1.0
A98-980057	1.9	3.3	2.9	1.3	1.3	2.0
A98-980065	1.5	1.9	2.5	1.3	1.0	1.0
HF97-122	1.8	2.6	2.5	2.0	1.0	1.5
HF97-136	2.0	2.7	2.9	1.5	1.3	2.0
HF97-166	1.9	3.1	3.0	1.8	1.0	1.0
HF97-187	1.7	2.6	2.7	1.5	1.0	1.0
HF97-188	1.6	2.1	2.7	1.5	1.3	1.5
K1442	1.9	3.3	2.9	1.5	1.3	1.5
K1444	1.9	3.0	2.9	1.3	1.3	1.5
K1445	2.2	3.6	2.9	1.3	1.8	3.5
K1446	1.7	2.4	2.5	1.0	1.3	2.0
K1447	1.7	2.9	2.8	1.0	1.0	2.0
K1448	1.8	3.2	2.5	1.3	1.3	1.0
K1449	2.2	3.5	2.9	2.3	1.8	2.0
K1450	2.1	3.0	3.0	1.8	1.5	2.0
K1451	2.4	3.2	3.0	2.3	1.5	4.5
LN95-543	2.5	3.7	3.0	1.8	2.3	2.5
LN95-558	2.5	3.2	3.0	1.8	1.8	4.0
LN95-2783	1.8	3.2	2.7	1.8	1.0	1.0
LN95-3058	2.1	3.5	3.2	2.0	1.0	2.0
LN95-3830	1.7	2.2	2.6	1.5	1.5	2.0
LN95-3853	1.5	2.0	2.4	1.3	1.0	1.0
LN96-23	1.9	2.2	3.0	1.3	1.5	1.0
LN96-95	1.6	2.2	2.6	1.0	1.5	1.0
LN96-2280	1.6	1.7	2.0	1.0	1.0	1.0
LN96-2335	1.7	2.2	2.8	1.3	1.0	1.5

PRELIMINARY TEST IIIA, 1999

LODGING (score)

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	1.0		3.0	1.2	1.0
IA2038 (II)	1.0		3.0	1.5	1.5
Macon (L)	1.0		2.5	1.3	1.0
A98-884009	1.0		2.5	1.3	1.0
A98-980012	1.0		2.5	1.5	1.0
A98-980013	1.0		3.0	1.8	1.5
A98-980025	1.0		2.5	1.8	2.0
A98-980044	1.0		2.0	1.6	2.0
A98-980046	1.0		2.5	1.3	1.0
A98-980047	1.0		3.5	1.5	2.0
A98-980048	1.0		3.0	2.0	2.3
A98-980049	1.0		2.5	1.4	1.3
A98-980051	1.0		2.0	1.4	1.0
A98-980052	1.0		3.5	1.7	1.3
A98-980057	1.0		3.5	1.3	1.0
A98-980065	1.0		2.5	1.4	1.0
HF97-122	1.0		2.0	1.7	1.5
HF97-136	1.0		3.5	1.5	1.5
HF97-166	1.0		3.0	1.6	1.3
HF97-187	1.0		2.5	1.6	1.0
HF97-188	1.0		2.0	1.4	1.0
K1442	1.0		2.0	1.8	1.5
K1444	1.0		3.0	1.4	1.8
K1445	1.0		3.0	1.4	1.0
K1446	1.0		3.0	1.3	1.0
K1447	1.0		2.5	1.3	1.0
K1448	1.0		2.5	1.6	1.5
K1449	1.0		3.0	1.8	1.8
K1450	1.0		3.0	1.9	1.5
K1451	1.0		2.5	1.7	2.0
LN95-543	1.0		4.0	1.9	2.5
LN95-558	1.0		3.0	2.0	2.8
LN95-2783	1.0		3.0	1.3	1.3
LN95-3058	1.0		3.0	1.8	1.3
LN95-3830	1.0		2.0	1.4	1.0
LN95-3853	1.0		2.5	1.3	1.0
LN96-23	1.0		3.0	1.7	2.0
LN96-95	1.0		2.5	1.5	1.5
LN96-2280	1.0		4.0	1.4	1.0
LN96-2335	1.0		3.0	1.5	1.0

PRELIMINARY TEST IIIA, 1999

PLANT HEIGHT (inches)

Strain	Mean 10 Tests	Ames IA	Crawfords- ville IA	Urbana IL	Lafay- ette IN	Man- hattan KS
IA3010 (III)	31	35	35	26	28	28
IA2038 (II)	33	35	36	31	36	30
Macon (L)	37	40	42	38	37	32
A98-884009	32	37	37	27	35	28
A98-980012	36	41	40	35	39	34
A98-980013	35	38	40	32	34	32
A98-980025	37	39	39	40	36	33
A98-980044	35	37	41	35	32	31
A98-980046	34	38	37	35	35	30
A98-980047	35	39	40	32	36	31
A98-980048	36	41	38	37	36	29
A98-980049	33	37	37	36	35	26
A98-980051	36	39	39	37	36	35
A98-980052	35	37	39	33	32	30
A98-980057	35	37	36	36	36	31
A98-980065	37	39	41	34	37	35
HF97-122	39	42	46	43	40	38
HF97-136	40	42	41	40	39	39
HF97-166	35	38	39	35	37	34
HF97-187	39	43	44	37	35	39
HF97-188	39	43	44	39	41	40
K1442	36	41	39	37	32	34
K1444	37	39	40	36	36	36
K1445	34	38	39	30	33	35
K1446	35	39	41	36	36	29
K1447	34	36	38	34	33	31
K1448	35	39	39	34	35	34
K1449	37	42	38	38	35	35
K1450	39	44	43	40	38	42
K1451	40	40	45	42	41	33
LN95-543	39	45	40	37	39	37
LN95-558	37	38	42	37	41	29
LN95-2783	36	40	39	36	34	36
LN95-3058	39	46	40	42	37	42
LN95-3830	38	44	41	35	39	39
LN95-3853	37	42	40	34	36	35
LN96-23	38	41	40	36	36	39
LN96-95	33	33	37	30	32	34
LN96-2280	34	41	38	33	33	35
LN96-2335	36	41	40	37	35	34

PRELIMINARY TEST IIIA, 1999

PLANT HEIGHT (inches)

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	30	27	47	29	29
IA2038 (II)	30	31	36	34	35
Macon (L)	31	31	45	37	33
A98-884009	31	29	36	31	32
A98-980012	30	31	46	34	36
A98-980013	33	32	45	33	34
A98-980025	32	35	44	37	35
A98-980044	28	34	40	34	36
A98-980046	28	32	44	32	30
A98-980047	24	29	45	35	37
A98-980048	31	34	44	37	33
A98-980049	27	28	47	33	29
A98-980051	30	32	43	36	35
A98-980052	30	32	47	35	32
A98-980057	32	32	46	34	35
A98-980065	33	34	45	35	36
HF97-122	35	33	36	41	37
HF97-136	34	38	45	44	38
HF97-166	29	30	44	33	33
HF97-187	33	34	44	43	38
HF97-188	33	34	45	40	35
K1442	30	34	44	38	36
K1444	29	36	50	35	35
K1445	27	32	43	34	30
K1446	30	31	42	34	31
K1447	30	31	43	31	34
K1448	25	35	40	35	33
K1449	33	33	40	38	35
K1450	31	36	44	41	36
K1451	32	41	49	44	37
LN95-543	32	37	48	40	33
LN95-558	34	36	43	37	38
LN95-2783	29	31	47	35	34
LN95-3058	33	36	42	37	39
LN95-3830	30	32	44	38	36
LN95-3853	30	36	46	37	34
LN96-23	30	33	45	40	36
LN96-95	25	30	44	34	32
LN96-2280	25	30	42	35	32
LN96-2335	29	30	47	38	33

PRELIMINARY TEST IIIA, 1999

SEED SIZE (g/100)

Strain	Mean 10 Tests	Ames IA	Crawfords- ville IA	Urbana IL	Lafay- ette IN	Man- hattan KS
IA3010 (III)	13.8	12.6	14.6	14.2	13.2	16.1
IA2038 (II)	17.7	17.2	18.3	20.2	16.3	19.5
Macon (L)	15.4	14.4	16.5	15.6	15.3	18.6
A98-884009	15.6	14.9	15.3	16.3	14.1	17.7
A98-980012	13.5	12.2	14.2	14.6	12.9	15.3
A98-980013	13.2	11.9	13.6	14.1	11.9	15.2
A98-980025	14.7	14.4	15.7	15.7	12.7	17.3
A98-980044	13.1	11.8	13.9	13.0	13.1	14.0
A98-980046	14.8	13.5	15.3	13.5	14.3	16.9
A98-980047	13.2	12.4	13.6	12.6	12.5	14.9
A98-980048	13.4	12.5	13.6	13.4	12.2	15.5
A98-980049	13.7	12.6	14.0	14.8	13.3	15.1
A98-980051	14.4	12.9	14.5	16.8	13.4	16.6
A98-980052	14.6	13.5	15.5	12.6	13.9	16.0
A98-980057	14.7	12.7	14.6	17.6	13.9	17.6
A98-980065	16.0	15.3	16.7	18.3	14.9	16.8
HF97-122	13.1	12.6	14.0	12.4	12.3	15.6
HF97-136	14.7	14.0	14.9	16.3	13.8	16.5
HF97-166	15.0	15.1	16.1	13.5	13.7	17.4
HF97-187	12.3	11.5	12.8	13.5	11.6	13.3
HF97-188	12.7	11.4	13.5	14.2	13.0	13.9
K1442	13.7	13.1	14.7	13.2	11.8	16.7
K1444	13.2	11.8	13.8	13.2	12.5	15.6
K1445	14.1	12.9	14.9	14.2	13.0	16.4
K1446	15.3	15.2	16.4	14.3	15.3	17.8
K1447	14.4	13.3	13.6	14.8	13.0	18.5
K1448	13.3	12.9	14.2	14.5	12.9	13.9
K1449	13.2	13.3	13.9	13.2	12.6	16.5
K1450	14.2	13.6	15.2	14.1	13.0	17.5
K1451	15.2	14.7	16.0	16.0	14.1	18.0
LN95-543	15.5	14.9	16.7	16.2	14.4	18.7
LN95-558	16.6	15.3	17.2	14.1	15.3	21.0
LN95-2783	14.3	13.4	14.7	13.0	13.6	16.1
LN95-3058	15.1	15.7	17.2	15.9	13.3	18.4
LN95-3830	15.5	15.1	16.0	15.3	15.2	17.6
LN95-3853	14.2	13.9	14.6	13.0	14.1	16.1
LN96-23	15.3	15.0	16.3	13.8	15.0	17.4
LN96-95	15.1	15.0	15.7	15.0	14.1	17.9
LN96-2280	13.2	11.8	12.9	13.3	12.2	15.7
LN96-2335	13.3	12.1	13.3	13.0	11.3	17.8

PRELIMINARY TEST IIIA, 1999

SEED SIZE (g/100)

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	12.0	15.4	14.5	12.8	12.8
IA2038 (II)	16.0	17.5	18.9	15.8	17.5
Macon (L)	13.0	16.5	16.0	13.7	14.8
A98-884009	13.0	18.6	17.9	14.4	14.3
A98-980012	12.0	14.8	14.0	11.9	13.3
A98-980013	13.0	14.5	13.8	11.3	12.5
A98-980025	13.0	15.2	15.6	13.7	13.2
A98-980044	13.0	15.1	13.4	11.0	13.0
A98-980046	14.0	16.3	16.2	13.1	14.4
A98-980047	13.0	15.0	13.7	11.4	13.1
A98-980048	13.0	15.5	13.7	11.2	13.4
A98-980049	12.0	15.4	15.1	12.4	12.0
A98-980051	13.0	16.1	14.2	12.5	13.5
A98-980052	15.0	17.0	16.1	13.2	13.2
A98-980057	14.0	15.9	14.4	13.0	13.6
A98-980065	14.0	17.8	16.3	14.6	15.2
HF97-122	11.0	14.7	13.3	12.0	13.3
HF97-136	14.0	15.5	13.3	13.7	15.0
HF97-166	15.0	16.1	14.7	13.1	14.9
HF97-187	10.0	14.0	12.8	11.7	12.2
HF97-188	11.0	13.8	11.8	12.0	12.3
K1442	13.0	15.3	13.9	12.7	13.1
K1444	13.0	15.1	12.7	11.6	12.6
K1445	13.0	16.3	14.6	12.9	13.2
K1446	13.0	16.5	15.8	13.8	14.6
K1447	15.0	15.4	13.4	13.0	13.7
K1448	14.0	14.1	12.0	12.2	12.7
K1449	11.0	14.0	12.6	12.0	13.2
K1450	15.0	15.2	12.7	12.3	13.8
K1451	14.0	15.5	14.9	13.9	14.6
LN95-543	14.0	17.5	15.0	13.7	13.5
LN95-558	14.0	19.7	17.3	14.8	17.1
LN95-2783	15.0	15.6	14.7	13.4	13.8
LN95-3058	14.0	15.7	14.1	13.5	13.1
LN95-3830	17.0	16.1	14.4	14.7	13.9
LN95-3853	15.0	14.8	14.3	13.3	12.6
LN96-23	15.0	16.1	15.3	14.9	13.7
LN96-95	14.0	15.2	15.7	14.0	14.2
LN96-2280	13.0	14.9	13.9	12.1	12.4
LN96-2335	13.0	14.7	13.6	11.4	12.5

PRELIMINARY TEST IIIA, 1999

PROTEIN (%)

Strain	Mean 4 Tests	Urbana IL	Lafayette IN	McCool Junction NE	Hoytville OH
IA3010 (III)	38.7	40.1	39.2	38.5	37.0
IA2038 (II)	41.5	42.5	40.9	42.3	40.1
Macon (L)	41.2	43.1	41.3	41.2	39.1
A98-884009	42.1	42.7	41.7	42.4	41.6
A98-980012	41.5	44.5	41.7	40.9	39.0
A98-980013	41.8	44.2	42.4	42.0	38.4
A98-980025	41.7	43.9	40.5	42.1	40.2
A98-980044	41.2	42.5	42.5	41.6	38.3
A98-980046	42.0	43.3	43.1	41.1	40.5
A98-980047	41.2	41.7	41.7	41.9	39.3
A98-980048	41.6	42.7	41.7	42.3	39.7
A98-980049	41.4	43.8	41.3	41.7	38.9
A98-980051	41.8	44.0	41.7	41.6	39.8
A98-980052	41.5	42.8	41.8	41.3	40.1
A98-980057	41.6	44.4	41.4	41.2	39.5
A98-980065	40.9	43.5	41.1	41.3	37.7
HF97-122	42.1	43.9	42.2	42.2	40.1
HF97-136	41.6	44.2	41.5	41.4	39.2
HF97-166	41.9	43.3	41.9	42.8	39.4
HF97-187	41.7	43.3	42.8	40.9	39.9
HF97-188	41.8	44.5	42.3	40.8	39.5
K1442	40.6	41.6	41.0	40.0	39.9
K1444	40.2	42.4	41.6	39.0	37.9
K1445	39.9	38.4	39.6	42.1	39.3
K1446	40.5	42.8	40.9	39.7	38.4
K1447	42.5	44.3	42.2	42.7	40.6
K1448	42.7	45.9	42.2	41.5	41.3
K1449	42.0	44.1	41.3	41.8	40.8
K1450	41.0	42.7	41.2	42.3	37.8
K1451	41.1	42.9	41.6	42.6	37.4
LN95-543	39.0	41.6	39.3	41.0	34.1
LN95-558	39.6	39.8	40.2	41.0	37.3
LN95-2783	41.8	43.5	42.7	41.3	39.5
LN95-3058	38.3	39.8	38.5	39.0	35.9
LN95-3830	41.6	43.3	42.7	40.1	40.4
LN95-3853	41.2	42.2	41.1	42.1	39.5
LN96-23	41.3	42.3	41.2	41.4	40.2
LN96-95	42.2	44.0	42.7	41.8	40.2
LN96-2280	42.0	44.6	42.8	40.6	39.9
LN96-2335	41.0	42.4	42.3	41.1	38.2

PRELIMINARY TEST IIIA, 1999

OIL (%)

Strain	Mean 4 Tests	Urbana IL	Lafayette IN	McCool Junction NE	Hoytville OH
IA3010 (III)	19.7	19.1	19.9	19.4	20.5
IA2038 (II)	20.0	19.8	19.8	19.9	20.3
Macon (L)	18.9	18.9	18.8	18.4	19.5
A98-884009	19.6	20.1	19.5	19.6	19.2
A98-980012	18.4	17.6	18.5	18.3	19.1
A98-980013	18.4	17.7	18.0	18.3	19.4
A98-980025	19.6	19.1	20.3	18.8	20.2
A98-980044	18.5	17.9	17.9	18.6	19.4
A98-980046	18.9	17.8	18.6	19.6	19.4
A98-980047	18.9	18.9	18.6	18.4	19.7
A98-980048	18.9	19.7	18.5	19.0	18.5
A98-980049	18.8	18.7	18.8	18.0	19.8
A98-980051	19.2	18.9	19.4	18.8	19.8
A98-980052	18.8	17.7	19.6	18.4	19.6
A98-980057	18.8	18.2	19.3	18.6	19.0
A98-980065	19.2	18.8	19.2	18.1	20.7
HF97-122	19.1	19.2	19.4	18.4	19.3
HF97-136	19.7	19.2	19.6	19.9	20.1
HF97-166	19.6	19.7	19.7	18.6	20.4
HF97-187	18.8	19.3	18.7	18.5	18.5
HF97-188	18.7	18.6	18.7	18.5	19.1
K1442	19.8	20.1	20.0	19.1	19.9
K1444	20.0	19.8	19.7	19.5	20.8
K1445	19.7	20.3	19.9	18.4	20.3
K1446	19.6	19.4	19.7	19.1	20.0
K1447	19.5	19.4	19.6	18.7	20.1
K1448	19.1	18.3	19.8	18.6	19.5
K1449	18.7	18.5	18.8	19.0	18.4
K1450	18.9	18.9	19.1	17.9	19.8
K1451	19.5	19.3	19.8	18.7	20.1
LN95-543	20.1	19.5	20.1	18.9	21.9
LN95-558	20.1	21.2	19.9	18.7	20.4
LN95-2783	19.5	19.0	19.4	19.4	20.3
LN95-3058	20.5	20.5	20.8	19.7	20.9
LN95-3830	19.4	19.9	19.4	18.6	19.7
LN95-3853	19.7	19.6	20.1	19.3	19.7
LN96-23	19.6	19.8	20.2	18.5	19.9
LN96-95	19.2	19.4	19.5	17.7	20.1
LN96-2280	18.9	18.1	19.3	18.9	19.4
LN96-2335	19.2	18.5	18.9	18.9	20.5

Preliminary Test IIIB, 1999

	Strain	Parentage	Generation Composited	Unique Traits
1.	IA3010 (III)	Jacques J285 x Northrup King S29-39	F5	
2.	IA2038 (II)	Pioneer 9303 x Kenwood	F5	
3.	Macon (L)	Sherman x Resnik	F5	
4.	C1974	HS88-4909 x HC85-2206	F6	
5.	C1976	IA3003 x Stressland	F5	
6.	C1977	IA3003 x Stressland	F5	
7.	C1978	IA3003 x Stressland	F5	
8.	C1980	IA3003 x Stressland	F5	
9.	C1984	Probst x Stressland	F5	
10.	C1985	IA3003 x CX1345-115	F5	
11.	C1986	CX1345-115 x Probst	F5	
12.	C1987	CX1345-115 x Probst	F5	
13.	C1988	CX1345-115 x Olympus	F5	
14.	C1992	Stressland x Olympus	F5	
15.	C1993	Stressland x Olympus	F5	
16.	HS97-4555	Pioneer P9268-003 x Vertex	F6	Rps P I92718-2
17.	LG96-1795	LG89-8665 x LG89-7657	F6	
18.	U97-201128	NE3399 x UP1Fe-95-9	F5	
19.	U97-201847	U94-2629 x UP1Fe-30	F5	FeCl
20.	U97-201856	LN89-3264 x UP1Fe-95-9	F5	
21.	U97-202103	U94-2229 x UP1Fe-30	F5	
22.	U97-203021	NE3297 x UP1Fe-95-9	F5	
23.	U97-203024	NE3297 x UP1Fe-95-9	F5	
24.	U97-203025	NE3297 x UP1Fe-95-9	F5	
25.	U97-207103	MSBPF6	F7	
26.	U97-207115	MSBPF6	F7	
27.	U97-303723	MSBPF6	F7	
28.	U97-304004	MSBPF6	F7	
29.	Charleston (dt1)	HC74-634RE x HC78-676	F5	dt1
30.	HC94-1946	Charleston x HC74-634REBC	F4	dt1
31.	HC95-1389	Hobbit 87 x HC87-5844	F4	dt1
32.	HC95-1390	Hobbit 87 x HC87-5844	F4	dt1
33.	HC95-1463	Hobbit 87 x HC87-5844	F4	dt1
34.	HC95-1947	Charleston x HC78-352BC	F4	dt1
35.	HC95-2082	HC78-676BC x HC85-618	F4	dt1
36.	HC95-2299	HC85-6577(2) x HC78-676BC	F4	dt1
37.	HC95-2303	HC85-6577(2) x HC78-676BC	F4	dt1
38.	HC95-2516	HC85-744(2) x HC78-676BC	F4	dt1
39.	HC95-4334	HC85-164(2) x Hobbit 87	F4	dt1
40.	HC96-73PR	Charleston(5) x HC74-634REBC	BC4F4	dt1

PRELIMINARY TEST IIIB, 1999

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis	Shattering	PR	Hard Seed	PS	PSB
		Score Humboldt	Score Manhattan	Laf. Race 7	%	Lafayette a %	n %
IA3010 (III)	PTTDYGrlep	2.9	1.0	R	0	2	0
IA2038 (II)	PTBDYBrlep	4.5	1.0	R	2	22	0
Macon (L)	WTBSYBllep	3.6	1.0	S	0	4	2
C1974	PGBSYBfllep	4.0	1.0	R	0	4	0
C1976	PTBSYBllep	3.5	1.0	S	0	2	0
C1977	PTBSYBllep	3.8	1.0	S	0	0	2
C1978	PTBDYBllep	3.8	1.0	S	0	0	0
C1980	PTTSYBllep	4.1	1.0	S	0	0	0
C1984	PTTSYBllep	4.0	1.0	S	0	2	0
C1985	PTBSYBllep	4.0	1.0	S	6	0	0
C1986	PTBSYBllep	3.9	1.0	S	0	0	0
C1987	PTBIYBllep	3.3	1.0	R	0	2	0
C1988	PTBSYBllep	4.6	1.0	S	0	2	0
C1992	PTTDYBlIH	4.4	1.0	S	0	2	0
C1993	PTBDYBllep	4.4	1.0	S	0	0	0
HS97-4555	PTBIYBfllep	4.0	1.0	R	0	0	2
LG96-1795	PTBSYBfllep	3.9	1.0	S	0	0	0
U97-201128	WGBDYBllep	3.6	1.0	S	0	6	0
U97-201847	WGBSYHlep	1.8	1.0	R	0	0	0
U97-201856	WG+TB+TSYHD+lep	2.4	1.0	S	0	6	0
U97-202103	PGBDYHlep	2.6	1.0	S	0	8	0
U97-203021	PTBDYHlep	2.5	1.0	S	0	2	2
U97-203024	PTBDYHlep	3.1	1.0	S	0	0	4
U97-203025	PGBDYHlep	3.4	1.0	S	0	2	0
U97-207103	WTTSYBllep	3.3	1.0	S	0	8	2
U97-207115	PTTSYBllep	2.5	1.0	R	0	2	2
U97-303723	WGTSYBfllep	4.3	2.0	S	0	0	0
U97-304004	PG+TBIYHlep	4.3	1.0	S	0	4	0
Charleston (dt1)	PTTSYBllep	3.9	1.0	S	0	2	0
HC94-1946	WTTSYBllep	3.8	1.0	S	0	0	0
HC95-1389	WTTSYBrDH	3.6	1.0	S	0	0	0
HC95-1390	PTTSYBrDep	4.1	1.0	S	0	0	2
HC95-1463	WTTIYBrDep	3.3	1.0	S	0	0	0
HC95-1947	PTBSYBrDep	3.5	1.0	R	0	0	2
HC95-2082	PTBSYBrDep	3.6	1.0	R	8	6	0
HC95-2299	PTTSYBllep	3.9	2.0	R	0	2	0
HC95-2303	PTTSYBllep	3.0	1.0	S	8	6	0
HC95-2516	WTBSYBrDep	2.6	1.0	R	2	0	0
HC95-4334	PTTSYBllep	3.8	1.0	R	0	2	0
HC96-73PR	PTTSYBllep	3.9	1.0	R	0	2	0

PRELIMINARY TEST IIIB, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 10 bu/a	Rank 10 No.	Maturity 8 Date	Lodging 9 Score	Plant Height 10 In.	Seed Size 10 g/100	Composition	
							Protein 4 %	Oil 4 %
IA3010 (III)	54.4	1	9/21	1.3	30	13.9	39.4	19.7
IA2038 (II)	52.2	6	-1.6	1.7	33	18.4	41.9	19.7
Macon (L)	49.7	18	6.4	1.7	35	15.3	41.6	18.8
C1974	48.6	27	4.9	2.3	45	15.1	41.8	19.3
C1976	50.3	15	-3.3	1.7	34	15.8	41.3	19.6
C1977	50.9	13	-0.5	1.7	37	15.6	42.7	19.3
C1978	49.3	23	-0.6	1.8	34	15.2	42.8	19.4
C1980	50.5	14	0.4	1.4	29	14.5	44.7	18.3
C1984	52.2	6	3.7	1.9	33	13.4	42.4	18.9
C1985	49.0	25	-0.9	1.8	34	14.5	46.2	17.5
C1986	44.2	38	2.8	1.4	38	13.4	48.2	16.0
C1987	48.4	28	0.6	1.6	35	14.9	45.6	17.8
C1988	46.3	34	1.9	1.8	37	14.4	46.1	16.9
C1992	49.6	20	3.1	2.0	37	12.0	42.3	19.1
C1993	52.5	4	-0.6	2.0	36	13.3	40.0	19.2
HS97-4555	54.0	2	0.9	1.8	37	14.6	41.0	19.6
LG96-1795	48.1	29	5.7	2.2	32	13.7	40.7	18.7
U97-201128	52.6	3	2.9	1.7	37	14.0	42.5	19.0
U97-201847	48.1	29	-1.3	1.6	31	16.2	41.1	19.4
U97-201856	49.6	21	0.1	1.6	35	16.3	41.3	19.1
U97-202103	52.4	5	-1.3	1.4	34	14.6	41.7	18.7
U97-203021	48.7	26	1.8	1.7	37	14.2	41.7	19.5
U97-203024	49.4	22	-0.4	1.9	36	16.1	42.3	19.3
U97-203025	49.1	24	-0.8	1.8	38	16.3	42.7	19.1
U97-207103	47.2	32	-0.3	2.2	43	16.9	41.4	19.5
U97-207115	46.6	33	-1.0	1.8	33	17.1	39.9	21.1
U97-303723	47.8	31	3.9	1.8	36	14.4	41.1	19.0
U97-304004	49.7	18	0.7	1.8	33	13.5	40.6	19.5
Charleston (dt1)	50.3	15	3.9	1.4	22	13.7	41.7	18.7
HC94-1946	52.1	8	4.8	1.2	23	13.7	40.4	19.5
HC95-1389	51.9	9	5.6	1.2	24	15.1	39.9	19.5
HC95-1390	49.8	17	4.1	1.2	21	15.2	40.3	19.7
HC95-1463	51.2	11	5.0	1.2	24	14.7	41.0	19.6
HC95-1947	45.1	37	7.5	1.4	25	15.4	41.4	19.2
HC95-2082	45.2	36	4.4	1.2	21	13.8	42.2	18.2
HC95-2299	43.9	40	5.3	1.2	21	14.9	41.4	19.0
HC95-2303	44.0	39	4.1	1.3	23	14.0	40.6	19.4
HC95-2516	46.3	34	4.9	1.2	21	14.0	41.1	19.2
HC95-4334	51.9	9	6.2	1.2	23	13.6	39.8	19.7
HC96-73PR	51.0	12	6.5	1.3	24	13.1	42.1	18.4

129.5 Days After Planting

PRELIMINARY TEST IIIB, 1999

YIELD (bu/a)

Strain	Mean 10 Tests	Ames IA	Crawfords- ville IA	Urbana IL	Lafay- ette IN	Man- hattan KS
IA3010 (III)	54.4	66.5	63.9	74.4	39.3	47.7
IA2038 (II)	52.2	65.6	64.6	62.7	33.3	50.9
Macon (L)	49.7	55.5	57.2	73.4	36.8	28.8
C1974	48.6	53.2	58.8	70.2	32.3	46.7
C1976	50.3	65.1	54.6	61.1	33.5	48.2
C1977	50.9	56.5	53.0	68.7	33.8	50.0
C1978	49.3	66.0	60.8	63.2	34.2	37.5
C1980	50.5	64.3	56.9	64.3	37.0	35.2
C1984	52.2	60.2	60.0	72.3	36.9	54.1
C1985	49.0	59.2	59.2	67.4	27.6	46.7
C1986	44.2	53.4	51.0	59.8	29.3	43.2
C1987	48.4	57.3	59.3	68.7	29.7	40.6
C1988	46.3	52.0	52.0	65.5	34.5	40.2
C1992	49.6	60.2	49.3	76.9	31.1	43.5
C1993	52.5	63.4	69.4	64.6	38.5	48.3
HS97-4555	54.0	63.9	60.6	77.6	38.4	51.0
LG96-1795	48.1	57.2	50.2	70.9	32.4	45.5
U97-201128	52.6	63.2	58.0	68.4	42.1	51.3
U97-201847	48.1	51.7	55.1	65.5	36.5	41.9
U97-201856	49.6	47.4	59.3	68.4	32.7	41.5
U97-202103	52.4	61.6	66.6	63.0	37.4	44.3
U97-203021	48.7	56.0	57.0	68.6	31.4	38.8
U97-203024	49.4	58.8	57.5	66.0	30.1	45.7
U97-203025	49.1	64.3	59.1	65.6	33.3	40.8
U97-207103	47.2	54.9	56.5	62.9	29.0	31.9
U97-207115	46.6	55.4	59.9	58.1	33.3	20.8
U97-303723	47.8	51.9	51.9	69.9	35.4	47.0
U97-304004	49.7	59.3	52.8	65.9	38.2	46.5
Charleston (dt1)	50.3	57.0	62.5	70.5	36.4	24.9
HC94-1946	52.1	53.4	61.1	74.0	39.7	27.9
HC95-1389	51.9	48.9	61.3	69.4	34.8	37.9
HC95-1390	49.8	46.2	55.9	72.8	37.8	24.3
HC95-1463	51.2	57.1	52.6	69.8	43.5	43.3
HC95-1947	45.1	33.6	55.4	68.7	34.6	31.8
HC95-2082	45.2	49.6	45.5	71.4	35.8	12.4
HC95-2299	43.9	34.2	56.9	68.2	37.7	13.5
HC95-2303	44.0	42.5	48.5	65.7	32.5	14.4
HC95-2516	46.3	50.4	53.6	67.7	27.4	21.7
HC95-4334	51.9	60.7	55.0	77.1	37.5	29.4
HC96-73PR	51.0	54.2	54.3	72.6	38.8	31.2
C.V. (%)		12.1	8.8	4.7	9.0	13.7
L.S.D. (5%)		3.1	2.3	6.6	6.4	10.5
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIIB, 1999

YIELD (bu/a)

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	31.4	48.8	57.7	51.9	62.8
IA2038 (II)	29.3	42.5	62.5	54.5	55.8
Macon (L)	30.7	51.5	52.6	44.0	66.3
C1974	30.8	48.1	48.7	42.0	54.9
C1976	16.5	56.5	62.2	46.6	59.0
C1977	21.1	51.5	60.9	53.1	60.5
C1978	26.1	45.0	61.0	47.0	52.6
C1980	29.0	57.4	51.5	47.8	62.0
C1984	18.9	54.1	55.9	54.8	55.1
C1985	21.3	48.1	55.9	48.2	56.8
C1986	26.5	43.2	42.9	41.3	51.0
C1987	27.9	48.3	51.8	40.6	59.5
C1988	22.4	44.7	49.5	48.9	53.3
C1992	26.9	49.9	49.9	49.7	58.9
C1993	16.8	49.5	64.3	43.5	66.5
HS97-4555	31.0	47.6	53.3	52.0	64.6
LG96-1795	30.0	49.0	53.7	36.5	55.4
U97-201128	17.1	48.5	55.6	52.0	70.0
U97-201847	21.9	44.8	49.3	52.4	62.4
U97-201856	22.8	42.6	59.4	53.7	67.9
U97-202103	20.2	51.4	63.3	49.5	66.8
U97-203021	14.6	56.2	52.9	51.0	60.1
U97-203024	20.6	51.5	55.7	50.2	58.0
U97-203025	19.5	44.7	57.0	45.7	60.6
U97-207103	30.8	48.5	58.7	49.1	49.6
U97-207115	25.7	52.3	52.9	50.3	57.1
U97-303723	26.1	38.1	53.7	47.6	56.8
U97-304004	20.6	52.5	54.6	44.2	62.6
Charleston (dtl)	25.3	58.2	47.7	51.6	69.0
HC94-1946	28.2	60.7	56.3	51.6	68.2
HC95-1389	31.7	58.6	49.9	61.2	65.8
HC95-1390	25.8	58.9	54.5	54.0	67.8
HC95-1463	25.0	56.6	56.3	45.5	61.9
HC95-1947	22.5	51.8	46.6	49.5	56.4
HC95-2082	22.2	50.0	53.3	53.6	58.5
HC95-2299	18.2	48.7	47.6	45.8	68.0
HC95-2303	22.1	56.3	49.2	48.9	60.3
HC95-2516	24.1	53.4	53.9	45.6	64.8
HC95-4334	29.7	59.3	51.9	46.8	71.5
HC96-73PR	33.8	58.5	50.0	44.8	72.0
C.V. (%)	11.0	8.6	8.0	9.1	8.2
L.S.D. (5%)	5.5	8.4	8.7	7.5	10.1
Row Sp. (In.)	30	30	30	7.5	7.5
Rows/Plot	4	4	4	8	8
Reps	2	2	2	2	2

PRELIMINARY TEST IIIB, 1999

YIELD RANK

Strain	Yield Rank	Ames IA	Crawfordsville IA	Urbana IL	Lafayette IN	Manhattan KS
IA3010 (III)	1	1	4	4	4	8
IA2038 (II)	6	3	3	37	26	4
Macon (L)	18	21	18	6	15	32
C1974	27	26	15	13	32	10
C1976	15	4	26	38	25	7
C1977	13	19	29	17	24	5
C1978	23	2	8	34	23	26
C1980	14	5	20	33	13	27
C1984	6	11	10	9	14	1
C1985	25	13	13	25	39	10
C1986	38	25	34	39	37	18
C1987	28	15	12	17	36	22
C1988	34	27	32	30	22	23
C1992	20	11	36	3	34	16
C1993	4	7	1	32	6	6
HS97-4555	2	6	9	1	7	3
LG96-1795	29	16	35	11	31	14
U97-201128	3	8	16	21	2	2
U97-201847	29	29	24	30	16	19
U97-201856	21	33	12	21	29	20
U97-202103	5	9	2	35	12	15
U97-203021	26	20	19	20	33	24
U97-203024	22	14	17	26	35	13
U97-203025	24	5	14	29	26	21
U97-207103	32	23	21	36	38	28
U97-207115	33	22	11	40	26	37
U97-303723	31	28	33	14	19	9
U97-304004	18	12	30	27	8	12
Charleston (dt1)	15	18	5	12	17	34
HC94-1946	8	25	7	5	3	33
HC95-1389	9	32	6	16	20	25
HC95-1390	17	34	22	7	9	35
HC95-1463	11	17	31	15	1	17
HC95-1947	37	37	23	17	21	29
HC95-2082	36	31	38	10	18	40
HC95-2299	40	36	20	23	10	39
HC95-2303	39	35	37	28	30	38
HC95-2516	34	30	28	24	40	36
HC95-4334	9	10	25	2	11	31
HC96-73PR	12	24	27	8	5	30

PRELIMINARY TEST IIIB, 1999

YIELD RANK

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	3	25	9	11	15
IA2038 (II)	10	39	3	3	33
Macon (L)	7	17	26	35	11
C1974	5	30	36	37	36
C1976	39	9	4	28	25
C1977	30	19	6	7	21
C1978	16	33	5	26	38
C1980	11	7	29	24	18
C1984	35	12	14	2	35
C1985	29	31	14	23	30
C1986	15	37	40	38	39
C1987	13	29	28	39	24
C1988	25	35	33	21	37
C1992	14	22	31	17	26
C1993	38	23	1	36	10
HS97-4555	4	32	22	9	14
LG96-1795	8	24	20	40	34
U97-201128	37	27	16	9	3
U97-201847	28	34	34	8	17
U97-201856	23	38	7	5	7
U97-202103	33	20	2	18	9
U97-203021	40	11	25	14	23
U97-203024	31	18	15	16	28
U97-203025	34	36	10	30	20
U97-207103	5	28	8	20	40
U97-207115	19	15	24	15	29
U97-303723	16	40	21	25	30
U97-304004	31	14	17	34	16
Charleston (dt1)	20	6	37	12	4
HC94-1946	12	1	12	12	5
HC95-1389	2	4	32	1	12
HC95-1390	18	3	18	4	8
HC95-1463	21	8	11	32	19
HC95-1947	24	16	39	18	32
HC95-2082	26	21	23	6	27
HC95-2299	36	26	38	29	6
HC95-2303	27	10	35	21	22
HC95-2516	22	13	19	31	13
HC95-4334	9	2	27	27	2
HC96-73PR	1	5	30	33	1

PRELIMINARY TEST IIIB, 1999

MATURITY (date)

Strain	Mean 8 Tests	Ames IA	Crawfords- ville IA	Urbana IL	Lafay- ette IN	Man- hattan KS
IA3010 (III)	09/21	09/29		09/13	09/16	09/30
IA2038 (II)	-1.6	-6		-1	0	1
Macon (L)	6.4	4		9	8	4
C1974	4.9	7		12	4	2
C1976	-3.3	-3		-3	-2	-2
C1977	-0.5	1		-2	0	1
C1978	-0.6	0		-1	0	1
C1980	0.4	-1		-3	1	3
C1984	3.7	2		3	6	3
C1985	-0.9	-2		-3	0	3
C1986	2.8	2		7	3	5
C1987	0.6	0		2	1	3
C1988	1.9	0		6	4	2
C1992	3.1	1		8	4	1
C1993	-0.6	-1		0	-1	2
HS97-4555	0.9	1		1	0	3
LG96-1795	5.7	3		12	6	-1
U97-201128	2.9	1		5	6	5
U97-201847	-1.3	-4		-1	-1	2
U97-201856	0.1	-4		1	2	3
U97-202103	-1.3	-4		-2	-1	-1
U97-203021	1.8	0		5	1	0
U97-203024	-0.4	-1		1	-1	0
U97-203025	-0.8	-1		0	-2	0
U97-207103	-0.3	0		-1	2	0
U97-207115	-1.0	-1		-2	0	1
U97-303723	3.9	2		8	6	2
U97-304004	0.7	0		-1	3	0
Charleston (dt1)	3.9	1		10	3	-2
HC94-1946	4.8	1		12	2	1
HC95-1389	5.6	3		13	5	4
HC95-1390	4.1	0		10	2	2
HC95-1463	5.0	1		9	6	3
HC95-1947	7.5	8		16	8	3
HC95-2082	4.4	4		15	6	-10
HC95-2299	5.3	3		16	5	-9
HC95-2303	4.1	1		12	4	-9
HC95-2516	4.9	1		13	6	0
HC95-4334	6.2	1		15	7	1
HC96-73PR	6.5	2		15	5	-2
Date Planted	5/15	05/03		05/04	05/11	05/28
Days to Mature	130	149		132	128	125

PRELIMINARY TEST IIIB, 1999

MATURITY (date)

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	09/20		10/03	09/22	09/11
IA2038 (II)	1		-2	-5	-1
Macon (L)	3		5	4	15
C1974	2		4	-1	9
C1976	-1		-2	-10	-4
C1977	1		1	-7	2
C1978	1		2	-7	-1
C1980	1		3	-2	2
C1984	1		2	1	12
C1985	1		2	-7	-1
C1986	1		3	-3	4
C1987	1		2	-5	2
C1988	1		2	-3	4
C1992	1		4	0	6
C1993	1		-1	-6	1
HS97-4555	1		0	-2	3
LG96-1795	2		2	6	16
U97-201128	1		3	-2	5
U97-201847	1		-3	-5	1
U97-201856	2		-2	-3	2
U97-202103	1		-3	-4	3
U97-203021	1		0	0	8
U97-203024	1		0	-5	2
U97-203025	1		0	-6	2
U97-207103	1		0	-6	2
U97-207115	2		0	-7	-1
U97-303723	1		4	2	6
U97-304004	1		1	-3	4
Charleston (dt1)	1		5	3	10
HC94-1946	1		6	5	11
HC95-1389	2		4	3	12
HC95-1390	2		4	2	11
HC95-1463	1		6	3	12
HC95-1947	1		6	5	14
HC95-2082	1		5	3	11
HC95-2299	2		6	3	17
HC95-2303	1		5	4	16
HC95-2516	1		4	4	11
HC95-4334	2		3	5	16
HC96-73PR	2		7	6	17
Date Planted	06/04		05/27	05/10	05/04
Days to Mature	108		129	135	130

PRELIMINARY TEST IIIB, 1999

LODGING (score)

Strain	Mean 9 Tests	Ames IA	Crawfords- ville IA	Urbana IL	Lafay- ette IN	Man- hattan KS
IA3010 (III)	1.3	1.7	1.9	1.0	1.0	1.0
IA2038 (II)	1.7	2.4	2.8	1.5	1.3	1.0
Macon (L)	1.7	2.3	2.4	1.0	1.3	1.5
C1974	2.3	3.4	3.4	1.8	1.8	2.0
C1976	1.7	3.0	2.6	1.0	1.5	1.0
C1977	1.7	2.7	2.9	1.3	1.0	1.0
C1978	1.8	2.8	2.9	1.5	1.0	1.5
C1980	1.4	1.9	2.4	1.5	1.0	1.0
C1984	1.9	2.3	3.0	2.5	1.5	1.0
C1985	1.8	3.3	2.7	1.3	1.0	1.0
C1986	1.4	2.0	2.5	1.3	1.0	1.0
C1987	1.6	2.2	2.6	1.8	1.0	1.0
C1988	1.8	2.4	2.7	1.5	1.3	1.0
C1992	2.0	2.4	2.9	1.8	1.5	1.5
C1993	2.0	2.9	2.9	1.5	1.0	2.5
HS97-4555	1.8	2.6	2.9	1.3	1.5	1.5
LG96-1795	2.2	4.2	2.5	2.5	1.5	1.0
U97-201128	1.7	2.8	2.7	1.0	1.3	1.0
U97-201847	1.6	2.0	2.5	1.5	1.0	1.0
U97-201856	1.6	2.0	2.7	1.5	1.0	1.0
U97-202103	1.4	2.2	2.1	1.0	1.0	1.0
U97-203021	1.7	2.5	2.5	1.0	1.0	1.0
U97-203024	1.9	3.0	3.0	1.5	1.3	1.5
U97-203025	1.8	2.8	2.9	1.5	1.3	1.5
U97-207103	2.2	2.9	3.2	2.0	1.5	2.0
U97-207115	1.8	3.4	2.6	1.0	1.5	1.5
U97-303723	1.8	3.2	2.9	1.3	1.0	1.0
U97-304004	1.8	2.6	2.9	1.5	1.0	1.0
Charleston (dt1)	1.4	1.7	2.2	1.0	1.0	1.0
HC94-1946	1.2	1.7	1.9	1.0	1.0	1.0
HC95-1389	1.2	1.7	1.7	1.0	1.0	1.0
HC95-1390	1.2	1.7	1.9	1.0	1.0	1.0
HC95-1463	1.2	1.7	1.7	1.0	1.0	1.0
HC95-1947	1.4	2.0	2.0	1.0	1.0	1.0
HC95-2082	1.2	1.7	1.9	1.0	1.0	1.0
HC95-2299	1.2	1.7	2.0	1.0	1.0	1.0
HC95-2303	1.3	1.9	1.9	1.0	1.0	1.0
HC95-2516	1.2	1.7	1.9	1.0	1.0	1.0
HC95-4334	1.2	1.7	1.9	1.0	1.0	1.0
HC96-73PR	1.3	1.7	2.0	1.0	1.0	1.0

PRELIMINARY TEST IIIB, 1999

LODGING (score)

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	1.0		1.5	1.2	1.0
IA2038 (II)	1.0		3.0	1.6	1.0
Macon (L)	1.0		3.5	1.6	1.0
C1974	1.0		3.0	2.3	2.0
C1976	1.0		2.0	1.8	1.5
C1977	1.0		2.0	1.8	1.3
C1978	1.0		2.5	1.6	1.0
C1980	1.0		1.5	1.5	1.0
C1984	1.0		3.0	1.5	1.0
C1985	1.0		3.0	1.6	1.5
C1986	1.0		1.5	1.4	1.0
C1987	1.0		2.0	1.9	1.0
C1988	1.0		3.0	1.7	1.3
C1992	1.0		3.5	1.5	1.8
C1993	1.0		3.0	1.7	1.5
HS97-4555	1.0		3.0	1.8	1.0
LG96-1795	1.0		4.0	1.9	1.3
U97-201128	1.0		3.0	1.4	1.0
U97-201847	1.0		3.0	1.3	1.0
U97-201856	1.0		3.0	1.5	1.0
U97-202103	1.0		2.0	1.3	1.0
U97-203021	1.0		3.0	1.6	1.3
U97-203024	1.0		2.5	1.6	1.5
U97-203025	1.0		2.0	1.9	1.3
U97-207103	1.0		3.5	2.1	2.0
U97-207115	1.0		3.0	1.6	1.0
U97-303723	1.0		3.0	1.5	1.0
U97-304004	1.0		3.0	2.1	1.3
Charleston (dt1)	1.0		2.0	1.3	1.3
HC94-1946	1.0		1.0	1.2	1.3
HC95-1389	1.0		1.0	1.3	1.0
HC95-1390	1.0		1.0	1.3	1.0
HC95-1463	1.0		1.0	1.2	1.0
HC95-1947	1.0		2.0	1.3	1.3
HC95-2082	1.0		1.0	1.3	1.0
HC95-2299	1.0		1.0	1.2	1.0
HC95-2303	1.0		1.5	1.2	1.0
HC95-2516	1.0		1.0	1.2	1.0
HC95-4334	1.0		1.0	1.2	1.0
HC96-73PR	1.0		2.0	1.3	1.0

PRELIMINARY TEST IIIB, 1999

PLANT HEIGHT (inches)

Strain	Mean 10 Tests	Ames IA	Crawfords- ville IA	Urbana IL	Lafay- ette IN	Man- hattan KS
IA3010 (III)	30	32	34	29	31	28
IA2038 (II)	33	33	35	32	32	32
Macon (L)	35	38	39	34	38	32
C1974	45	48	49	48	47	49
C1976	34	34	38	31	39	25
C1977	37	40	40	36	38	34
C1978	34	35	36	36	34	30
C1980	29	30	32	33	31	24
C1984	33	34	36	34	33	30
C1985	34	35	36	34	34	34
C1986	38	40	40	38	36	41
C1987	35	36	38	38	35	35
C1988	37	38	38	38	38	39
C1992	37	39	40	39	36	35
C1993	36	36	39	31	38	40
HS97-4555	37	40	40	34	37	38
LG96-1795	32	36	35	32	34	23
U97-201128	37	38	42	33	39	38
U97-201847	31	31	33	33	31	28
U97-201856	35	37	40	33	36	32
U97-202103	34	37	38	34	37	33
U97-203021	37	41	43	38	38	35
U97-203024	36	37	41	35	37	38
U97-203025	38	42	40	41	37	30
U97-207103	43	46	50	46	47	44
U97-207115	33	35	37	30	35	36
U97-303723	36	36	38	32	37	34
U97-304004	33	34	35	33	35	30
Charleston (dt1)	22	17	23	26	22	16
HC94-1946	23	21	23	26	21	16
HC95-1389	24	18	25	26	23	17
HC95-1390	21	16	23	22	21	13
HC95-1463	24	20	24	27	23	18
HC95-1947	25	15	25	31	24	18
HC95-2082	21	15	22	24	21	11
HC95-2299	21	17	23	25	21	12
HC95-2303	23	18	23	24	22	13
HC95-2516	21	18	23	22	19	12
HC95-4334	23	23	23	26	20	14
HC96-73PR	24	20	23	28	22	16

PRELIMINARY TEST IIIB, 1999

PLANT HEIGHT (inches)

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	20	26	40	27	31
IA2038 (II)	28	31	41	35	33
Macon (L)	27	32	42	38	34
C1974	31	41	53	45	44
C1976	25	35	41	37	33
C1977	24	33	44	40	36
C1978	23	31	42	35	34
C1980	21	27	35	30	29
C1984	23	30	39	36	32
C1985	23	30	42	35	33
C1986	29	33	47	38	35
C1987	29	31	34	36	36
C1988	28	34	49	36	33
C1992	28	34	46	40	35
C1993	26	33	44	36	34
HS97-4555	25	35	46	37	34
LG96-1795	27	32	38	35	34
U97-201128	26	34	44	38	34
U97-201847	22	26	40	32	33
U97-201856	21	32	45	37	33
U97-202103	21	32	43	32	33
U97-203021	26	34	47	39	34
U97-203024	27	33	44	35	34
U97-203025	32	38	49	37	34
U97-207103	37	38	41	43	43
U97-207115	23	31	42	35	31
U97-303723	30	33	46	39	34
U97-304004	24	30	42	36	36
Charleston (dt1)	21	21	27	26	27
HC94-1946	24	20	28	27	29
HC95-1389	22	25	31	25	28
HC95-1390	23	22	27	23	24
HC95-1463	23	23	30	25	25
HC95-1947	22	23	38	27	26
HC95-2082	20	22	28	26	19
HC95-2299	22	19	28	23	23
HC95-2303	23	22	29	25	27
HC95-2516	18	20	31	23	27
HC95-4334	24	22	28	26	25
HC96-73PR	22	21	33	24	28

PRELIMINARY TEST IIIB, 1999

SEED SIZE (g/100)

Strain	Mean 10 Tests	Ames IA	Crawfords- ville IA	Urbana IL	Lafay- ette IN	Man- hattan KS
IA3010 (III)	13.9	13.1	14.6	16.5	13.2	13.9
IA2038 (II)	18.4	16.9	18.2	20.6	15.8	21.8
Macon (L)	15.3	15.7	16.7	16.5	15.1	16.0
C1974	15.1	14.9	17.1	17.2	14.9	14.0
C1976	15.8	15.6	16.3	16.5	14.4	18.5
C1977	15.6	15.1	16.1	15.5	14.4	17.6
C1978	15.2	15.0	16.3	15.3	14.3	16.5
C1980	14.5	14.1	14.8	14.7	13.8	18.1
C1984	13.4	13.2	14.0	13.6	13.3	14.0
C1985	14.5	13.4	15.2	15.1	13.7	17.7
C1986	13.4	12.4	13.8	15.3	13.3	15.3
C1987	14.9	14.9	15.5	16.3	13.5	16.8
C1988	14.4	14.0	14.7	15.1	14.7	17.0
C1992	12.0	11.8	12.9	12.0	10.8	14.4
C1993	13.3	12.3	13.4	13.3	12.0	18.6
HS97-4555	14.6	13.8	15.7	17.2	13.4	14.5
LG96-1795	13.7	13.4	16.0	13.3	12.6	14.9
U97-201128	14.0	7.7	15.2	15.8	14.5	17.9
U97-201847	16.2	15.6	16.5	17.3	14.6	16.4
U97-201856	16.3	15.2	16.6	17.9	15.0	19.5
U97-202103	14.6	13.4	15.1	15.3	13.4	16.0
U97-203021	14.2	13.5	14.8	15.9	12.7	17.2
U97-203024	16.1	15.8	17.2	16.7	14.6	18.1
U97-203025	16.3	15.6	17.0	17.6	14.4	19.1
U97-207103	16.9	16.2	16.9	16.9	16.1	20.4
U97-207115	17.1	16.7	17.6	18.5	14.5	20.4
U97-303723	14.4	13.8	14.8	14.6	13.8	17.4
U97-304004	13.5	13.4	12.9	12.6	12.3	16.9
Charleston (dt1)	13.7	13.4	14.2	14.9	13.0	13.3
HC94-1946	13.7	12.9	14.1	14.6	12.9	15.1
HC95-1389	15.1	13.9	15.1	15.6	13.5	19.8
HC95-1390	15.2	14.3	15.6	15.5	13.6	19.1
HC95-1463	14.7	13.9	15.4	15.5	15.1	17.1
HC95-1947	15.4	15.2	16.2	16.2	15.2	16.3
HC95-2082	13.8	14.2	14.3	14.3	13.5	13.7
HC95-2299	14.9	14.6	15.4	17.1	14.9	14.0
HC95-2303	14.0	13.3	14.1	16.1	13.5	14.4
HC95-2516	14.0	13.4	14.8	15.9	14.0	14.8
HC95-4334	13.6	13.1	14.3	14.8	13.5	16.3
HC96-73PR	13.1	12.8	13.4	13.6	12.0	15.6

PRELIMINARY TEST IIIB, 1999

SEED SIZE (g/100)

Strain	Columbia MO	McCool Junction NE	Tekamah NE	Hoyt- ville OH	So. Charles- ton OH
IA3010 (III)	13.0	14.7	14.3	12.9	13.0
IA2038 (II)	16.0	19.3	21.1	16.3	17.7
Macon (L)	12.0	16.9	15.3	13.9	15.0
C1974	13.0	17.3	14.5	13.8	14.3
C1976	13.0	19.2	17.5	13.6	13.6
C1977	15.0	17.9	16.7	13.5	14.1
C1978	12.0	18.7	16.3	14.2	13.8
C1980	12.0	15.7	15.2	13.6	12.8
C1984	11.0	15.1	13.5	12.8	13.2
C1985	12.0	17.2	14.9	13.1	13.1
C1986	11.0	14.2	13.1	12.5	12.8
C1987	14.0	16.4	14.9	13.5	13.5
C1988	13.0	15.4	14.3	12.9	12.9
C1992	10.0	13.3	11.9	11.2	12.0
C1993	11.0	14.2	13.8	11.9	12.0
HS97-4555	12.0	17.4	15.2	12.8	14.0
LG96-1795	11.0	14.1	14.1	13.1	14.6
U97-201128	11.0	15.1	15.8	13.1	13.5
U97-201847	15.0	18.0	18.0	15.2	15.4
U97-201856	15.0	17.4	17.2	13.0	16.2
U97-202103	13.0	15.6	16.2	13.3	14.5
U97-203021	12.0	16.2	14.4	12.3	13.5
U97-203024	14.0	17.7	16.5	15.1	14.8
U97-203025	15.0	17.4	16.9	14.4	15.7
U97-207103	15.0	18.1	18.9	15.1	15.3
U97-207115	17.0	18.4	17.2	14.9	16.0
U97-303723	13.0	15.1	13.7	13.6	14.6
U97-304004	12.0	14.7	14.1	13.4	12.9
Charleston (dt1)	13.0	15.8	13.5	12.2	14.0
HC94-1946	12.0	15.9	13.4	12.3	13.3
HC95-1389	16.0	15.3	14.0	13.1	14.7
HC95-1390	15.0	16.5	15.3	12.8	14.2
HC95-1463	13.0	16.1	13.9	13.5	13.7
HC95-1947	13.0	17.7	15.0	14.3	14.5
HC95-2082	12.0	15.9	13.6	12.6	13.6
HC95-2299	12.0	17.3	14.7	13.5	15.8
HC95-2303	11.0	15.8	14.1	13.0	15.2
HC95-2516	12.0	15.5	14.2	12.2	13.5
HC95-4334	12.0	14.6	12.3	12.1	13.0
HC96-73PR	12.0	15.1	11.9	11.7	12.8

PRELIMINARY TEST IIIB, 1999

PROTEIN (%)

Strain	Mean 4 Tests	Urbana IL	Lafayette IN	McCool Junction NE	Hoytville OH
IA3010 (III)	39.4	40.7	38.7	39.6	38.4
IA2038 (II)	41.9	43.1	41.3	41.8	41.3
Macon (L)	41.6	44.3	40.8	41.8	39.3
C1974	41.8	45.7	40.9	41.9	38.8
C1976	41.3	42.1	41.5	41.9	39.8
C1977	42.7	44.6	42.3	42.3	41.4
C1978	42.8	44.4	42.3	43.3	41.0
C1980	44.7	46.8	44.5	43.9	43.6
C1984	42.4	44.6	42.1	42.4	40.5
C1985	46.2	47.8	45.5	46.9	44.4
C1986	48.2	51.9	48.0	47.7	45.1
C1987	45.6	48.3	46.0	45.0	43.2
C1988	46.1	49.6	46.7	44.7	43.3
C1992	42.3	45.1	41.3	42.9	39.9
C1993	40.0	41.3	40.0	40.7	38.1
HS97-4555	41.0	42.5	41.2	41.3	38.9
LG96-1795	40.7	42.7	40.6	40.1	39.3
U97-201128	42.5	44.8	41.7	42.2	41.4
U97-201847	41.1	43.2	39.7	40.8	40.6
U97-201856	41.3	44.5	39.6	40.8	40.1
U97-202103	41.7	43.8	40.5	42.3	40.0
U97-203021	41.7	43.1	41.3	41.2	41.1
U97-203024	42.3	44.3	41.1	42.8	41.0
U97-203025	42.7	44.3	42.2	42.7	41.5
U97-207103	41.4	42.8	40.4	42.1	40.3
U97-207115	39.9	41.3	39.2	40.3	38.8
U97-303723	41.1	43.8	39.6	41.6	39.4
U97-304004	40.6	42.6	39.9	40.9	39.1
Charleston (dt1)	41.7	43.2	41.2	41.2	41.0
HC94-1946	40.4	44.2	38.9	40.1	38.4
HC95-1389	39.9	42.3	39.7	38.8	38.7
HC95-1390	40.3	41.8	40.2	40.4	38.9
HC95-1463	41.0	42.8	41.2	40.5	39.4
HC95-1947	41.4	43.2	40.6	41.3	40.5
HC95-2082	42.2	45.0	41.1	41.8	40.9
HC95-2299	41.4	43.5	40.7	40.8	40.5
HC95-2303	40.6	43.8	39.2	39.8	39.6
HC95-2516	41.1	42.7	41.1	41.3	39.3
HC95-4334	39.8	42.6	39.2	38.5	38.7
HC96-73PR	42.1	44.9	42.1	41.3	40.0

PRELIMINARY TEST IIIB, 1999

OIL (%)

Strain	Mean 4 Tests	Urbana IL	Lafayette IN	McCool Junction NE	Hoytville OH
IA3010 (III)	19.7	20.2	19.8	19.0	19.9
IA2038 (II)	19.7	20.0	19.5	19.7	19.4
Macon (L)	18.8	18.5	18.8	18.7	19.0
C1974	19.3	18.2	19.8	19.1	20.1
C1976	19.6	19.5	19.5	19.4	20.1
C1977	19.3	18.9	19.6	19.3	19.3
C1978	19.4	19.3	19.9	18.7	19.8
C1980	18.3	17.7	18.5	18.3	18.5
C1984	18.9	18.0	18.8	19.1	19.5
C1985	17.5	17.2	17.8	16.9	18.0
C1986	16.0	15.1	16.2	15.7	17.1
C1987	17.8	17.4	16.6	18.4	18.6
C1988	16.9	15.8	16.5	17.4	17.7
C1992	19.1	19.1	19.3	18.3	19.7
C1993	19.2	19.6	18.7	18.9	19.6
HS97-4555	19.6	19.4	19.9	19.3	19.6
LG96-1795	18.7	18.4	18.7	18.8	18.8
U97-201128	19.0	19.7	19.3	18.9	18.2
U97-201847	19.4	19.5	19.5	19.4	19.1
U97-201856	19.1	18.3	19.6	18.8	19.7
U97-202103	18.7	18.4	18.5	18.8	18.9
U97-203021	19.5	19.5	19.9	19.4	19.1
U97-203024	19.3	19.2	19.9	18.8	19.3
U97-203025	19.1	19.2	19.3	18.6	19.3
U97-207103	19.5	19.2	19.5	19.4	19.9
U97-207115	21.1	21.2	21.2	20.6	21.2
U97-303723	19.0	18.8	19.6	18.2	19.4
U97-304004	19.5	19.6	20.0	19.4	19.0
Charleston (dt1)	18.7	18.9	19.0	18.7	18.2
HC94-1946	19.5	18.8	20.2	19.1	19.9
HC95-1389	19.5	19.4	19.6	19.7	19.4
HC95-1390	19.7	19.7	19.4	19.8	20.0
HC95-1463	19.6	19.7	19.8	19.6	19.1
HC95-1947	19.2	19.1	19.7	18.8	19.2
HC95-2082	18.2	17.4	18.8	18.7	17.8
HC95-2299	19.0	19.6	19.0	19.1	18.3
HC95-2303	19.4	18.9	19.9	19.7	19.0
HC95-2516	19.2	19.0	19.8	19.3	18.8
HC95-4334	19.7	18.9	20.2	20.0	19.6
HC96-73PR	18.4	18.2	18.7	18.3	18.4

Uniform Test IV, 1999

	Strain	Parentage	Previous Testing	Generation Composited	Unique Traits
1.	HS93-4118 (IV)	IA2007 x Dairyland DSR 304	3	F5	Rps1c
2.	KS4694 (L)	Sherman x Toano	8	F5	
3.	Macon (III)	Sherman x Resnik	3	F5	
4.	Mustang (SCN)	Fayette x Pyramid	2	F5	SCN
5.	Troll (dt1)	Sprite 87 x HC80-1756	4	F5	dt1
6.	HC93-1088	Charleston x HC78-676-2	PT IVB	F5	dt1
7.	HC93-2356	HC78-676BC x Kenwood	1	F5	Dt1
8.	HC93-2690	HC78-676BC x A86-303014	1	F5	Dt1
9.	HC94-168	Charleston x Pella 86	PT IVB	F5	dt1
10.	HC94-398	Sprite 87 x HC85-6577	PT IVB	F5	dt1
11.	HC94-399	Sprite 87 x HC85-6577	PT IVB	F5	dt1
12.	HC94-644	HC78-676BC x HC85-164	PT IVB	F5	dt1
13.	HC94-2664	HC86-3403 x Resnik	PT IVA	F5	Dt1
14.	HC94-2726	HC84-4850 x Resnik	PT IVA	F5	Dt1
15.	HC94-2727	HC84-4850 x Resnik	PT IVA	F5	Dt1
16.	HC94-2729	HC84-4850 x Resnik	PT IVA	F5	Dt1
17.	HC95-155PR	HC85-6723(4) x HC78-676BC	PT IVB	BC3F3	dt1, Rps1k
18.	HC95-259PR	HC85-5844(4) x HC78-676BC	PT IVB	BC3F3	dt1, Rps1k
19.	HC95-261PR	HC85-5844(4) x HC78-676BC	PT IVB	BC3F3	dt1, Rps1k
20.	K1410	KS4694 x C1842	PT IVA	F5	
21.	LN95-5910	Jack x C1842	SCN P IV	F5	SCN
22.	LN95-6446	Jack x Iroquois	SCN P IV	F5	SCN
23.	LS94-2435	Resnik x Asgrow A4009	1	F6	SCN
24.	LS95-0709	Dekalb 469C x LS87-1922	PT IVB	F6	SCN
25.	Md95-5358	S88-19561 x Corsica	PT IVA	F5	SCN 3
26.	SS93-1027	Yale x Asgrow A3935	PT IVA	?	
27.	SS93-2274	Asgrow A3733 x (Pioneer 9442 x Asgrow A4009)	PT IVA	?	
28.	SS94-10476	Pioneer 9341 x Asgrow A3935	1	F5	
29.	U96-3106	MSBP2 (F1 bulk)	1	F7	
30.	U97-3635	UP3YC1	PT IIIB	F7	

UNIFORM TEST IV, 1999
DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Shattering Score		PR	Hard Seed	PS	PSB
		Portage-ville	Man-hattan	Lafayette Race 7	%	Lafayette a %	n %
HS93-4118 (IV)	WGBDYBllep	3.0	1.0	R	2	2	0
KS4694 (L)	WGBSYBfleP	2.0	1.0	S	0	2	12
Macon (III)	WTBSYBllep	0.0	1.0	S	0	4	2
Mustang (SCN)	WGTYBfleP	5.0	1.0	S	24	4	0
Troll (dt1)	WTTDYBlDep	0.0	1.0	R	18	0	0
HC93-1088	PTTSYBlDep	0.0	1.0	R	6	0	0
HC93-2356	PTBIYBllep	4.0	1.0	R	0	2	0
HC93-2690	PTTIYBrlep	0.0	3.0	R	0	0	0
HC94-168	PTTSYBlDep	3.0	2.0	R	8	0	0
HC94-398	WTTDYBlDep	3.0	1.0	R	0	0	2
HC94-399	WTTDYBlDep	2.0	1.0	R	6	2	2
HC94-644	PTBDYBrDep	1.0	1.0	R	0	0	0
HC94-2664	PTTDYBllep	0.0	1.0	R	14	0	2
HC94-2726	P+WTTSYBllep	0.0	1.0	R	0	0	0
HC94-2727	PTTSYBllep	2.0	1.0	R	10	0	0
HC94-2729	P+WTTSYBllep	0.0	1.0	R	12	0	2
HC95-155PR	P+WTTIYBlDep	2.0	1.0	R	10	4	4
HC95-259PR	PTTDYBrDep	2.0	1.0	S	0	0	0
HC95-261PR	PTTDYBrDep	0.0	1.0	R	28	0	2
K1410	PGBDYIblep	4.0	3.0	R	0	2	0
LN95-5910	PGBDYBfleP	5.0	1.0	R	26	2	2
LN95-6446	WGBDYBfleP	5.0	1.0	R	18	2	0
LS94-2435	WTTDYBllep	5.0	1.0	R	16	0	0
LS95-0709	PTTSYBrlep	0.0	2.0	S	4	2	0
Md95-5358	PG+TTDYHlep	0.0	1.0	S	20	4	0
SS93-1027	PGTDYIblep	3.0	2.0	R	2	0	0
SS93-2274	PTTIYBllep	0.0	1.0	S	0	0	0
SS94-10476	PTTDYBllep	2.0	1.0	S	12	4	0
U96-3106	PTTDYBrlep	0.0	1.0	R	4	0	0
U97-3635	PGBIYIblep	5.0	1.0	R	32	10	0

UNIFORM TEST IV, 1999

SDS DATA

Strain	DX	SDS Data	DS
		Ullin DI	
HS93-4118 (IV)	0.0	0	0
KS4694 (L)	0.0	0	0
Macon (III)	0.0	0	0
Mustang (SCN)	0.0	0	0
Troll (dtl)	3.8	28	1
HC93-1088	0.0	0	0
HC93-2356	0.2	2	0
HC93-2690	9.4	63	1
HC94-168	1.4	12	1
HC94-398	0.0	0	0
HC94-399	0.0	0	0
HC94-644	0.4	3	0
HC94-2664	1.5	13	0
HC94-2726	2.2	17	0
HC94-2727	0.0	0	0
HC94-2729	0.2	2	0
HC95-155PR	4.6	30	1
HC95-259PR	4.1	33	1
HC95-261PR	3.1	23	1
K1410	0.0	0	0
LN95-5910	0.0	0	0
LN95-6446	0.0	0	0
LS94-2435	0.0	0	0
LS95-0709	0.0	0	0
Md95-5358	0.0	0	0
SS93-1027	0.0	0	0
SS93-2274	0.0	0	0
SS94-10476	0.7	5	0
U96-3106	10.0	60	1
U97-3635	0.0	0	0

UNIFORM TEST IV, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield	Rank	Maturity	Lodging	Plant	Seed	Composition	
	15 bu/a	15 No.	15 Date	16 Score	16 In.	15 g/100	Protein 3 %	Oil 3 %
HS93-4118 (IV)	49.3	3	9/21	1.5	32	14.6	40.9	19.4
KS4694 (L)	44.0	24	6.9	1.4	35	14.9	41.9	19.5
Macon (III)	47.4	10	-0.4	1.4	32	15.1	40.8	20.4
Mustang (SCN)	46.1	18	3.6	1.5	37	13.8	42.9	18.4
Troll (dt1)	46.2	17	0.7	1.2	22	15.1	40.5	21.0
HC93-1088	46.4	16	-2.9	1.3	22	13.8	42.9	19.7
HC93-2356	44.8	23	0.6	1.8	35	12.2	41.4	19.6
HC93-2690	46.8	13	1.5	1.5	33	14.7	41.8	19.9
HC94-168	45.3	21	0.5	1.1	21	14.0	42.0	19.6
HC94-398	40.2	29	-0.2	1.1	19	15.9	40.7	20.8
HC94-399	40.0	30	-0.4	1.2	20	15.3	42.5	19.6
HC94-644	43.2	27	-1.8	1.2	19	13.2	41.4	20.1
HC94-2664	47.5	8	-1.0	1.5	34	14.1	43.8	20.1
HC94-2726	46.7	14	0.9	1.3	33	13.6	42.1	20.1
HC94-2727	47.4	10	0.5	1.5	35	13.5	40.7	20.8
HC94-2729	46.9	12	1.7	1.3	34	13.6	41.0	20.5
HC95-155PR	44.0	24	0.6	1.2	20	14.8	43.5	19.9
HC95-259PR	45.3	21	-0.8	1.3	21	13.7	41.6	20.1
HC95-261PR	45.5	20	0.1	1.2	20	13.7	41.2	19.5
K1410	48.4	4	1.8	1.4	32	15.1	41.9	20.7
LN95-5910	48.4	4	-0.6	1.6	38	12.9	39.5	21.2
LN95-6446	48.4	4	-2.6	1.3	32	13.3	42.6	19.8
LS94-2435	43.5	26	0.0	1.5	32	14.4	43.6	19.1
LS95-0709	46.1	18	2.7	1.6	38	13.6	41.6	19.1
Md95-5358	47.5	8	2.3	1.6	36	16.1	42.5	19.4
SS93-1027	46.7	14	5.0	1.4	34	13.1	41.7	19.9
SS93-2274	42.9	28	3.4	1.4	30	14.1	42.5	20.0
SS94-10476	47.6	7	2.2	1.3	32	14.7	42.8	19.3
U96-3106	50.8	1	-1.5	1.5	37	15.2	39.7	20.6
U97-3635	49.5	2	-2.0	1.6	36	15.0	39.2	21.0

127.4 Days After Planting

UNIFORM TEST IV, 1999

1998-1999 2-YEAR MEAN

No. of Tests Strain	Yield 33 bu/a	Rank 33 No.	Maturity 31 Date	Lodging 34 Score	Plant Height 34 In.	Seed Size 31 g/100	Composition	
							Protein 6 %	Oil 6 %
HS93-4118 (IV)	50.9	2	9/20	1.4	33	14.3	41.3	19.4
KS4694 (L)	46.4	10	7.7	1.5	35	14.6	42.6	19.2
Macon (III)	49.0	5	-0.2	1.4	32	15.3	41.6	20.3
Mustang (SCN)	48.2	6	4.4	1.5	38	13.3	42.8	18.7
Troll (dtl)	46.9	9	0.5	1.1	22	14.8	40.7	20.8
HC93-2356	47.8	7	0.8	1.9	36	12.1	42.3	19.4
HC93-2690	49.8	4	2.3	1.7	35	14.8	42.3	19.9
LS94-2435	47.2	8	-0.1	1.6	34	14.2	43.6	19.3
SS94-10476	49.9	3	2.7	1.3	33	14.7	43.3	19.5
U96-3106	51.4	1	-0.9	1.5	37	14.9	40.5	21.1

124.4 Days After Planting

UNIFORM TEST IV, 1999

YIELD (bu/a)

Strain	Mean 15 Tests	George- town DE	Belle- ville IL	Newton IL	Ridg- way IL	Ullin IL	Urbana IL	Butler- ville IN
HS93-4118 (IV)	49.3	40.9	57.6	39.4	43.5	37.3	66.2	68.7
KS4694 (L)	44.0	55.4	57.3	36.2	29.0	24.7	56.6	68.6
Macon (III)	47.4	50.2	59.6	45.7	43.3	33.5	64.4	62.5
Mustang (SCN)	46.1	43.0	55.4	46.3	35.9	30.9	58.1	62.4
Troll (dt1)	46.2	41.2	58.0	43.9	38.5	30.3	59.3	54.2
HC93-1088	46.4	50.1	55.4	38.9	40.8	37.2	63.2	54.5
HC93-2356	44.8	50.2	54.2	42.0	38.7	31.3	57.6	62.0
HC93-2690	46.8	48.6	55.9	44.6	43.6	36.4	59.2	62.2
HC94-168	45.3	56.9	48.4	34.3	35.3	29.9	62.2	51.3
HC94-398	40.2	43.5	44.5	36.7	44.9	28.3	57.1	26.2
HC94-399	40.0	46.0	46.2	36.5	40.9	25.6	53.7	25.0
HC94-644	43.2	46.9	44.5	39.8	44.5	35.6	58.8	39.9
HC94-2664	47.5	55.9	58.1	43.7	41.0	29.8	54.8	67.4
HC94-2726	46.7	39.7	55.8	45.4	38.7	38.8	56.9	57.1
HC94-2727	47.4	33.1	57.4	44.9	43.4	36.6	52.9	72.3
HC94-2729	46.9	38.8	56.1	43.0	41.6	33.8	58.1	67.8
HC95-155PR	44.0	49.2	46.7	41.3	34.8	36.1	57.4	43.5
HC95-259PR	45.3	50.4	56.2	42.6	42.1	34.7	60.5	50.2
HC95-261PR	45.5	45.0	53.9	36.8	38.7	35.6	62.8	59.6
K1410	48.4	57.2	58.5	38.8	42.5	31.0	65.1	60.1
LN95-5910	48.4	50.0	52.9	42.8	43.1	38.2	72.1	65.2
LN95-6446	48.4	57.4	59.1	49.5	45.8	30.7	64.4	58.9
LS94-2435	43.5	47.1	43.5	45.9	39.1	31.0	54.2	57.3
LS95-0709	46.1	54.0	55.3	44.0	40.2	32.8	53.4	73.0
Md95-5358	47.5	55.1	55.3	44.0	32.8	41.4	62.2	57.7
SS93-1027	46.7	53.7	55.3	48.5	30.2	28.2	60.6	62.3
SS93-2274	42.9	50.7	47.4	42.6	31.2	29.7	64.4	52.6
SS94-10476	47.6	47.5	53.0	43.5	31.2	38.1	61.3	70.9
U96-3106	50.8	53.3	53.4	38.4	48.2	40.5	65.5	66.4
U97-3635	49.5	42.6	60.0	42.7	42.2	35.1	61.9	65.1
C.V. (%)		4.9	8.0	9.6	13.9	13.6	9.7	12.6
L.S.D. (5%)		6.2	7.0	6.7	9.0	7.5	9.7	11.9
Row Sp. (In.)		15	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, 1999

YIELD (bu/a)

Strain	Manhat- tan KS	Ottawa KS	Topeka KS	Lexing- ton* KY	Queens- town MD	Colum- bia MO	Portage ville MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	37.9	38.7	62.0	20.7	57.8	28.2	39.1	52.0	70.7
KS4694 (L)	30.6	38.8	51.3	19.7	52.1	23.6	38.5	44.2	53.8
Macon (III)	20.1	39.4	54.9	25.3	46.7	27.4	40.5	53.8	68.7
Mustang (SCN)	47.6	39.4	53.1	18.0	46.5	25.0	38.1	51.8	57.7
Troll (dt1)	41.7	38.2	57.7	19.3	48.0	30.3	31.5	54.7	65.3
HC93-1088	30.7	36.6	58.3	19.0	49.9	22.4	30.7	52.5	74.2
HC93-2356	17.4	41.4	58.1	16.7	50.0	18.9	36.4	50.9	62.2
HC93-2690	20.2	40.8	57.7	22.0	52.2	22.5	39.1	56.8	62.4
HC94-168	42.7	35.4	56.0	13.6	46.3	18.5	28.0	61.3	72.8
HC94-398	23.2	39.9	42.0	25.0	48.5	20.7	26.7	50.3	71.0
HC94-399	20.4	37.4	45.9	22.3	45.1	24.4	24.8	55.9	72.3
HC94-644	15.3	31.3	54.3	21.7	56.2	22.9	31.8	53.2	73.0
HC94-2664	44.3	36.6	58.2	25.0	44.7	27.9	36.2	50.5	63.0
HC94-2726	42.3	39.0	58.3	25.7	48.6	30.8	40.2	50.9	58.2
HC94-2727	41.6	39.8	59.3	24.3	50.9	26.3	38.5	53.8	60.8
HC94-2729	33.8	42.1	53.7	27.7	51.7	27.3	37.9	51.3	66.3
HC95-155PR	33.0	39.7	56.7	23.0	41.0	19.3	30.8	55.3	76.0
HC95-259PR	27.8	39.5	58.5	28.0	54.1	13.3	32.0	47.3	70.3
HC95-261PR	36.4	37.4	58.8	22.0	52.5	13.7	26.1	53.7	71.9
K1410	45.2	41.4	57.4	19.7	49.8	20.1	42.0	50.5	66.5
LN95-5910	45.7	40.0	59.3	20.7	52.6	15.1	39.5	48.8	61.3
LN95-6446	49.7	42.8	59.1	18.3	51.6	23.0	37.6	38.6	57.7
LS94-2435	23.0	37.9	53.5	22.0	54.2	25.2	41.3	42.0	57.9
LS95-0709	26.2	42.7	59.4	25.3	55.6	28.8	31.8	41.4	52.7
Md95-5358	47.2	36.8	59.3	18.0	56.5	23.1	37.3	48.1	56.3
SS93-1027	23.7	35.4	57.6	24.3	54.7	25.6	41.2	63.8	60.3
SS93-2274	24.8	36.2	47.4	20.3	53.2	24.8	36.3	44.4	57.3
SS94-10476	45.7	36.1	57.0	23.7	55.1	24.6	37.5	49.6	62.2
U96-3106	52.8	39.7	64.8	22.3	44.2	31.4	41.5	53.7	68.1
U97-3635	48.4	47.6	61.1	14.3	48.8	32.3	34.6	52.1	68.1
C.V. (%)	17.0	5.5	5.8	21.7	13.6	10.7	7.0	13.1	7.9
L.S.D. (5%)	9.6	3.5	5.3	6.4	ns	4.1	4.1	11.1	8.4
Row Sp. (In.)	30	30	30	15	24	30	30	15	7.5
Rows/Plot	4	4	4	6	4	4	4	6	8
Reps	3	3	3	3	3	3	3	3	3

* Data not included in mean.

UNIFORM TEST IV, 1999

YIELD RANK

Strain	Yield Rank	George-town DE	Belle-ville IL	Newton IL	Ridg-way IL	Ullin IL	Urbana IL	Butler-ville IN
HS93-4118 (IV)	3	27	7	22	6	6	2	4
KS4694 (L)	24	6	9	29	30	30	25	5
Macon (III)	10	13	2	5	8	16	5	11
Mustang (SCN)	18	24	14	3	23	21	19	12
Troll (dt1)	17	26	6	11	22	23	16	23
HC93-1088	16	11	14	23	16	7	8	22
HC93-2356	23	14	19	19	19	18	21	15
HC93-2690	13	17	12	8	5	9	17	14
HC94-168	21	3	24	30	24	24	9	25
HC94-398	29	23	28	27	3	27	23	29
HC94-399	30	21	27	28	15	29	28	30
HC94-644	27	20	28	21	4	11	18	28
HC94-2664	8	4	5	12	14	25	26	7
HC94-2726	14	28	13	6	19	3	24	21
HC94-2727	10	30	8	7	7	8	30	2
HC94-2729	12	29	11	14	13	15	19	6
HC95-155PR	24	16	26	20	25	10	22	27
HC95-259PR	21	12	10	17	12	14	15	26
HC95-261PR	20	22	20	26	19	11	9	17
K1410	4	2	4	24	10	19	4	16
LN95-5910	4	15	23	15	9	4	1	9
LN95-6446	4	1	3	1	2	22	5	18
LS94-2435	26	19	30	4	18	19	27	20
LS95-0709	18	7	16	9	17	17	29	1
Md95-5358	8	4	17	9	26	1	10	19
SS93-1027	14	8	17	2	29	28	14	13
SS93-2274	28	10	25	17	27	26	5	24
SS94-10476	7	18	22	13	27	5	13	3
U96-3106	1	9	21	25	1	2	3	8
U97-3635	2	25	1	16	11	13	12	10

UNIFORM TEST IV, 1999

YIELD RANK

Strain	Manhat- tan KS	Ottawa KS	Topeka KS	Lexing- ton KY	Queens- town MD	Colum- bia MO	Portage ville MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	14	18	2	18	1	6	8	14	8
KS4694 (L)	19	17	27	21	13	17	10	27	29
Macon (III)	28	14	22	4	24	8	5	7	10
Mustang (SCN)	4	14	26	26	25	13	12	15	25
Troll (dt1)	12	19	15	23	23	4	24	6	15
HC93-1088	18	24	11	24	18	22	26	12	2
HC93-2356	29	5	14	28	17	26	17	17	18
HC93-2690	27	7	15	14	12	21	8	3	17
HC94-168	10	28	21	30	26	27	27	2	4
HC94-398	24	9	30	6	22	23	28	21	7
HC94-399	26	21	29	12	27	16	30	4	5
HC94-644	30	30	23	17	3	20	22	11	3
HC94-2664	9	24	13	6	28	7	19	19	16
HC94-2726	11	16	11	3	21	3	6	17	23
HC94-2727	13	10	5	8	16	10	10	7	21
HC94-2729	16	4	24	2	14	9	13	16	14
HC95-155PR	17	11	20	11	30	25	25	5	1
HC95-259PR	20	13	10	1	8	30	21	25	9
HC95-261PR	15	21	9	14	11	29	29	9	6
K1410	8	5	18	21	19	24	1	19	13
LN95-5910	6	8	5	18	10	28	7	23	20
LN95-6446	2	2	8	25	15	19	14	30	25
LS94-2435	25	20	25	14	7	12	3	28	24
LS95-0709	21	3	4	4	4	5	22	29	30
Md95-5358	5	23	5	26	2	18	16	24	28
SS93-1027	23	28	17	8	6	11	4	1	22
SS93-2274	22	26	28	20	9	14	18	26	27
SS94-10476	6	27	19	10	5	15	15	22	18
U96-3106	1	11	1	12	29	2	2	9	11
U97-3635	3	1	3	29	20	1	20	13	11

UNIFORM TEST IV, 1999

MATURITY (date)

Strain	Mean 15 Tests	George- town DE	Belle- ville IL	Newton IL	Ridg- way IL	Ullin IL	Urbana IL	Butler- ville IN
HS93-4118 (IV)	9/21	10/05	09/25	09/23	09/09	09/08	09/23	09/17
KS4694 (L)	6.9	5	9	7	5	7	12	13
Macon (III)	-0.4	-1	1	1	0	0	1	0
Mustang (SCN)	3.6	-4	6	3	2	5	10	8
Troll (dtl)	0.7	0	2	0	-1	0	1	2
HC93-1088	-2.9	-3	-5	-4	-5	-2	-5	-3
HC93-2356	0.6	4	0	0	-1	2	2	2
HC93-2690	1.5	0	3	2	-2	4	4	1
HC94-168	0.5	6	0	-2	-3	4	-1	2
HC94-398	-0.2	-1	0	-2	-2	0	0	0
HC94-399	-0.4	-1	1	-1	-4	-1	0	4
HC94-644	-1.8	3	-1	-2	-5	0	-3	0
HC94-2664	-1.0	-2	-1	-2	-2	2	0	-3
HC94-2726	0.9	7	1	0	1	1	-1	1
HC94-2727	0.5	7	2	-1	0	1	-3	0
HC94-2729	1.7	3	6	2	0	2	4	0
HC95-155PR	0.6	7	3	0	-2	-2	0	2
HC95-259PR	-0.8	0	0	-1	-3	0	-1	0
HC95-261PR	0.1	6	2	0	-3	-1	0	1
K1410	1.8	5	3	1	0	0	3	3
LN95-5910	-0.6	2	1	-2	-1	-1	-1	0
LN95-6446	-2.6	-1	-2	-6	-6	-5	-4	-3
LS94-2435	0.0	-1	0	-3	0	5	1	1
LS95-0709	2.7	0	4	1	5	7	4	5
Md95-5358	2.3	0	3	0	1	6	4	2
SS93-1027	5.0	0	9	5	4	7	10	9
SS93-2274	3.4	7	6	3	2	7	5	5
SS94-10476	2.2	-1	4	2	0	6	5	4
U96-3106	-1.5	0	-1	-3	0	0	-2	-1
U97-3635	-2.0	-2	0	-2	-5	-2	-3	-2
Date Planted	5/17	05/27	05/27	05/28	05/25	05/20	05/04	05/03
Days to Mature	127	131	121	118	107	111	142	137

UNIFORM TEST IV, 1999

MATURITY (date)

Strain	Manhat- tan KS	Ottawa KS	Topeka KS	Lexing- ton KY	Queens- town MD	Colum- bia MO	Portage ville MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	10/08		10/07	09/11	10/04	09/17	09/09	09/14	09/24
KS4694 (L)	4		8	+10	6	3	+11	13	11
Macon (III)	-1		0	+6	-2	0	+5	-4	0
Mustang (SCN)	3		2	+10	-1	2	+6	10	7
Troll (dt1)	1		1	+4	-2	0	+3	4	1
HC93-1088	-7		-1	-2	-2	-4	-2	-2	-1
HC93-2356	0		0	+2	2	-3	-2	0	1
HC93-2690	0		4	+6	4	1	0	-1	2
HC94-168	-3		0	+4	1	-4	+2	5	2
HC94-398	-3		0	+7	-1	0	+3	4	2
HC94-399	-6		0	+6	-2	-2	+2	4	2
HC94-644	-7		-1	-3	-2	-4	-3	-2	-3
HC94-2664	0		0	+3	-2	-3	+1	-1	0
HC94-2726	2		1	+6	0	0	+5	2	-1
HC94-2727	2		1	+7	1	-1	0	0	-1
HC94-2729	2		3	+8	2	0	+3	0	2
HC95-155PR	0		0	+1	0	-1	+3	-1	4
HC95-259PR	-5		0	+2	0	-3	+1	0	0
HC95-261PR	-5		0	+2	0	0	0	2	0
K1410	2		3	+7	2	3	+5	0	2
LN95-5910	1		1	0	0	-1	-2	-3	-3
LN95-6446	0		0	-2	-2	0	-3	-5	-6
LS94-2435	1		-4	+6	-2	0	+2	3	-1
LS95-0709	2		2	+9	2	-2	+5	5	6
Md95-5358	1		1	+7	3	1	+3	9	4
SS93-1027	2		7	+6	4	1	+8	10	8
SS93-2274	2		2	+7	1	1	+7	6	4
SS94-10476	1		2	+8	3	-2	+5	5	3
U96-3106	0		-6	+2	0	-4	+4	-1	-5
U97-3635	-1		0	-2	-2	-4	-1	-3	-3
Date Planted	05/28		05/19	05/12	06/04	05/03	05/21	05/02	05/04
Days to Mature	133		141	122	122	137	111	135	143

UNIFORM TEST IV, 1999

LODGING (score)

Strain	Mean 16 Tests	George- town DE	Belle- ville IL	Newton IL	Ridg- way IL	Ullin IL	Urbana IL	Butler- ville IN
HS93-4118 (IV)	1.5	5.0	1.0	1.0	1.3	1.0	1.2	1.0
KS4694 (L)	1.4	3.0	1.3	1.0	1.3	1.0	1.5	1.2
Macon (III)	1.4	2.7	1.0	1.0	1.5	1.0	1.0	1.0
Mustang (SCN)	1.5	2.7	1.0	1.0	1.5	1.0	1.8	1.3
Troll (dt1)	1.2	2.3	1.0	1.0	1.0	1.0	1.0	1.0
HC93-1088	1.3	4.0	1.0	1.0	1.0	1.0	1.2	1.0
HC93-2356	1.8	3.0	1.2	1.0	1.5	1.0	2.8	1.7
HC93-2690	1.5	1.7	1.2	1.0	1.5	1.0	1.5	1.8
HC94-168	1.1	2.0	1.0	1.0	1.0	1.0	1.0	1.0
HC94-398	1.1	1.7	1.0	1.0	1.0	1.0	1.0	1.0
HC94-399	1.2	3.7	1.0	1.0	1.0	1.0	1.0	1.0
HC94-644	1.2	3.7	1.0	1.0	1.0	1.0	1.2	1.0
HC94-2664	1.5	4.3	1.0	1.0	1.3	1.0	1.3	1.0
HC94-2726	1.3	1.0	1.0	1.0	1.3	1.0	2.0	1.2
HC94-2727	1.5	1.0	1.0	1.0	1.5	1.0	1.7	1.3
HC94-2729	1.3	1.7	1.0	1.0	1.5	1.0	1.5	1.0
HC95-155PR	1.2	3.7	1.0	1.0	1.0	1.0	1.0	1.0
HC95-259PR	1.3	4.3	1.0	1.0	1.0	1.0	1.0	1.0
HC95-261PR	1.2	2.3	1.0	1.0	1.0	1.0	1.0	1.0
K1410	1.4	3.7	1.0	1.0	1.2	1.0	1.3	1.0
LN95-5910	1.6	3.3	1.0	1.0	1.5	1.0	1.8	1.0
LN95-6446	1.3	1.3	1.0	1.2	1.3	1.0	1.2	1.0
LS94-2435	1.5	3.7	1.0	1.0	1.0	1.0	1.8	1.0
LS95-0709	1.6	1.3	1.0	1.2	1.5	1.0	2.2	1.3
Md95-5358	1.6	4.7	1.2	1.0	1.3	1.0	1.7	1.2
SS93-1027	1.4	3.3	1.0	1.0	1.2	1.0	1.5	1.2
SS93-2274	1.4	3.0	1.0	1.0	1.2	1.0	1.5	1.0
SS94-10476	1.3	2.3	1.0	1.0	1.2	1.0	1.5	1.0
U96-3106	1.5	3.7	1.0	1.0	1.3	1.0	1.8	1.5
U97-3635	1.6	2.7	1.2	1.0	1.5	1.0	2.0	1.2

UNIFORM TEST IV, 1999

LODGING (score)

Strain	Manhat- tan KS	Ottawa KS	Topeka KS	Lexing- ton KY	Queens- town MD	Colum- bia MO	Portage ville MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	2.3	1.0	1.0	1.0	3.0	1.0	1.0	1.3	1.2
KS4694 (L)	2.0	1.0	1.3	1.0	2.3	1.0	1.0	1.5	1.5
Macon (III)	3.3	1.0	1.0	1.0	2.5	1.0	1.0	1.1	1.0
Mustang (SCN)	1.7	1.0	1.0	1.0	3.0	1.0	2.0	1.5	1.0
Troll (dt1)	1.0	1.0	1.0	1.0	1.8	1.0	1.0	1.4	1.0
HC93-1088	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.4	1.0
HC93-2356	3.7	1.0	1.7	1.0	3.2	1.0	1.0	1.7	2.5
HC93-2690	3.7	1.0	1.7	1.0	2.7	1.0	1.0	1.3	1.5
HC94-168	1.0	1.0	1.0	1.0	1.8	1.0	1.0	1.3	1.0
HC94-398	1.0	1.0	1.0	1.0	1.7	1.0	1.0	1.1	1.0
HC94-399	1.0	1.0	1.0	1.0	1.3	1.0	1.0	1.1	1.0
HC94-644	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.1	1.0
HC94-2664	2.3	1.0	1.0	1.0	2.7	1.0	1.0	1.2	1.2
HC94-2726	2.0	1.0	1.0	1.0	2.7	1.0	1.0	1.6	1.2
HC94-2727	2.7	1.3	1.3	1.0	3.2	1.0	2.0	1.4	1.3
HC94-2729	2.0	1.0	1.0	1.0	3.3	1.0	1.0	1.3	1.0
HC95-155PR	1.0	1.0	1.0	1.0	1.7	1.0	1.0	1.0	1.0
HC95-259PR	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.2	1.2
HC95-261PR	1.0	1.0	1.0	1.0	2.2	1.0	1.0	1.2	1.0
K1410	2.0	1.0	1.0	1.0	2.3	1.0	1.0	1.2	1.0
LN95-5910	2.3	1.0	1.3	1.0	3.0	1.0	2.0	1.7	1.2
LN95-6446	1.7	1.0	1.0	1.0	3.3	1.0	1.0	1.3	1.0
LS94-2435	2.7	1.0	1.0	1.0	3.0	1.0	1.0	1.2	1.0
LS95-0709	3.3	1.3	1.3	1.0	3.2	1.0	2.0	1.6	1.5
Md95-5358	2.3	1.0	1.0	1.0	2.5	1.0	1.0	2.3	1.0
SS93-1027	2.3	1.0	1.0	1.0	2.7	1.0	1.0	1.4	1.3
SS93-2274	2.0	1.0	1.0	1.0	3.2	1.0	2.0	1.1	1.0
SS94-10476	1.3	1.0	1.0	1.0	2.8	1.0	1.0	1.2	1.0
U96-3106	2.0	1.0	1.0	1.0	2.5	1.0	1.0	1.5	1.5
U97-3635	2.3	1.3	1.7	1.0	2.8	1.0	1.0	1.8	1.8

UNIFORM TEST IV, 1999

PLANT HEIGHT (inches)

Strain	Mean 16 Tests	George- town DE	Belle- ville IL	Newton IL	Ridg- way IL	Ullin IL	Urbana IL	Butler- ville IN
HS93-4118 (IV)	32	38	35	30	35	33	37	32
KS4694 (L)	35	33	39	33	36	36	39	36
Macon (III)	32	38	36	31	36	32	34	32
Mustang (SCN)	37	31	42	36	42	37	43	39
Troll (dt1)	22	29	22	22	24	20	28	18
HC93-1088	22	39	22	22	24	19	27	17
HC93-2356	35	37	42	34	38	36	40	37
HC93-2690	33	32	40	31	37	33	36	37
HC94-168	21	22	20	21	24	22	28	17
HC94-398	19	22	18	19	21	17	25	16
HC94-399	20	33	19	19	21	19	25	14
HC94-644	19	38	18	21	19	14	25	16
HC94-2664	34	40	37	31	37	30	37	36
HC94-2726	33	19	39	33	36	34	35	35
HC94-2727	35	21	45	35	40	38	38	37
HC94-2729	34	23	41	35	38	38	37	38
HC95-155PR	20	34	17	21	21	20	20	17
HC95-259PR	21	34	21	22	23	18	26	16
HC95-261PR	20	20	21	22	21	18	25	17
K1410	32	38	36	28	34	32	33	33
LN95-5910	38	42	43	34	43	42	43	39
LN95-6446	32	32	32	30	35	33	33	33
LS94-2435	32	34	36	32	34	31	36	32
LS95-0709	38	24	43	38	43	41	42	40
Md95-5358	36	37	43	33	37	42	40	39
SS93-1027	34	34	37	34	36	30	40	36
SS93-2274	30	40	32	30	33	29	33	28
SS94-10476	32	27	35	31	33	33	41	31
U96-3106	37	33	40	31	40	38	38	38
U97-3635	36	41	41	33	39	38	41	39

UNIFORM TEST IV, 1999

PLANT HEIGHT (inches)

Strain	Manhat- tan KS	Ottawa KS	Topeka KS	Lexing- ton KY	Queens- town MD	Colum- bia MO	Portage ville MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	30	27	35	27	28	22	32	40	39
KS4694 (L)	35	27	41	29	29	27	34	40	40
Macon (III)	24	28	36	27	26	23	32	35	35
Mustang (SCN)	36	34	44	30	32	31	42	42	39
Troll (dt1)	15	19	21	23	16	18	18	29	27
HC93-1088	12	21	20	21	18	16	16	28	26
HC93-2356	36	30	42	29	28	24	37	40	38
HC93-2690	35	29	39	27	27	24	34	39	34
HC94-168	16	18	18	22	19	15	18	27	28
HC94-398	14	19	18	18	16	17	15	29	25
HC94-399	12	18	18	19	15	17	17	26	24
HC94-644	11	16	16	19	16	13	14	26	24
HC94-2664	35	29	38	28	28	26	36	39	38
HC94-2726	34	30	38	30	27	30	33	37	34
HC94-2727	34	32	42	32	32	28	33	43	36
HC94-2729	34	21	38	31	31	24	37	39	37
HC95-155PR	13	19	18	18	15	17	16	27	23
HC95-259PR	11	19	20	21	16	16	16	32	25
HC95-261PR	14	17	19	21	18	14	16	30	25
K1410	32	27	37	27	24	24	33	33	34
LN95-5910	42	33	45	34	32	25	36	43	37
LN95-6446	34	28	36	25	27	27	33	36	32
LS94-2435	30	27	35	27	27	25	31	36	34
LS95-0709	34	34	46	33	33	32	40	43	39
Md95-5358	36	29	42	31	33	25	37	43	36
SS93-1027	31	29	40	27	27	26	34	41	35
SS93-2274	27	27	31	26	27	24	28	34	29
SS94-10476	30	27	35	27	27	28	27	39	35
U96-3106	41	31	41	31	32	32	39	42	39
U97-3635	36	30	43	28	27	29	32	39	38

UNIFORM TEST IV, 1999

SEED SIZE (g/100)

Strain	Mean 15 Tests	George- town DE	Belle- ville IL	Newton IL	Ridg- way IL	Ullin IL	Urbana IL	Butler- ville IN
HS93-4118 (IV)	14.6		15.0	14.8	9.8	10.6	15.3	15.2
KS4694 (L)	14.9		14.2	13.3	9.7	9.9	15.0	15.1
Macon (III)	15.1		15.4	14.4	10.9	10.8	15.6	15.4
Mustang (SCN)	13.8		13.5	13.4	9.9	9.9	14.5	13.5
Troll (dt1)	15.1		16.6	14.9	10.2	11.1	15.2	16.8
HC93-1088	13.8		14.6	14.5	9.7	10.7	14.3	15.1
HC93-2356	12.2		11.8	11.3	6.7	8.6	11.5	12.9
HC93-2690	14.7		14.6	15.2	10.6	11.6	13.5	15.1
HC94-168	14.0		14.9	14.3	8.6	10.4	13.0	15.8
HC94-398	15.9		16.0	14.6	11.8	12.5	15.6	19.6
HC94-399	15.3		15.6	15.4	11.7	11.5	14.5	18.8
HC94-644	13.2		14.3	13.6	9.5	10.7	12.1	16.0
HC94-2664	14.1		14.1	13.5	9.2	11.5	14.6	14.9
HC94-2726	13.6		14.5	12.8	9.1	10.1	12.9	14.8
HC94-2727	13.5		14.3	12.5	8.7	10.2	13.6	14.5
HC94-2729	13.6		14.1	13.4	9.6	10.1	14.0	14.7
HC95-155PR	14.8		15.3	15.1	9.9	10.9	13.8	16.5
HC95-259PR	13.7		15.1	14.5	9.9	10.1	13.4	14.7
HC95-261PR	13.7		14.6	12.6	9.7	10.6	13.2	14.9
K1410	15.1		16.0	14.8	10.0	10.7	16.0	15.7
LN95-5910	12.9		12.8	11.0	9.2	10.2	13.7	13.0
LN95-6446	13.3		13.4	11.8	9.3	10.1	14.2	13.0
LS94-2435	14.4		13.6	13.4	9.9	10.8	15.5	15.0
LS95-0709	13.6		12.7	12.2	10.3	10.6	13.3	14.3
Md95-5358	16.1		16.4	15.9	10.7	12.4	16.4	16.3
SS93-1027	13.1		12.8	11.8	8.0	9.5	13.0	13.4
SS93-2274	14.1		13.9	13.4	9.7	10.5	14.3	15.7
SS94-10476	14.7		14.4	14.1	9.8	10.9	13.6	15.7
U96-3106	15.2		14.8	14.6	10.5	12.2	15.1	15.4
U97-3635	15.0		15.2	15.0	9.3	11.8	14.6	14.1

UNIFORM TEST IV, 1999

SEED SIZE (g/100)

Strain	Manhat- tan KS	Ottawa KS	Topeka KS	Lexing- ton KY	Queens- town MD	Colum- bia MO	Portage ville MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	18.2	15.1	17.0	12.7	17.3	13.0	12.0	17.6	15.2
KS4694 (L)	16.6	15.2	20.0	14.8	18.6	14.0	11.9	19.2	15.7
Macon (III)	17.1	15.7	19.0	15.0	17.4	14.0	12.1	17.4	15.7
Mustang (SCN)	15.7	15.3	17.0	13.0	14.8	14.0	10.9	17.8	14.3
Troll (dtl)	19.6	14.4	21.0	13.8	14.6	14.0	12.2	18.2	14.3
HC93-1088	15.4	14.4	17.0	13.4	13.6	15.0	9.6	16.3	13.6
HC93-2356	14.3	14.2	15.0	12.9	15.5	11.0	10.0	14.5	12.9
HC93-2690	16.6	16.1	17.0	13.9	17.8	15.0	11.6	17.6	14.1
HC94-168	17.0	13.9	18.0	11.3	15.4	14.0	11.1	18.9	14.1
HC94-398	20.5	15.7	19.0	15.3	16.0	15.0	12.4	18.4	16.7
HC94-399	16.1	16.2	19.0	15.6	14.6	14.0	12.1	18.8	16.0
HC94-644	16.2	14.0	15.0	13.7	12.5	13.0	9.4	15.1	13.2
HC94-2664	15.8	14.0	17.0	13.0	16.0	13.0	13.0	17.0	14.7
HC94-2726	15.7	14.2	16.0	12.6	15.5	14.0	12.3	15.9	13.0
HC94-2727	16.6	13.9	17.0	12.3	15.3	14.0	10.4	15.4	13.2
HC94-2729	16.3	13.9	18.0	12.6	15.4	12.0	10.8	15.3	13.8
HC95-155PR	19.5	15.9	19.0	12.2	14.5	16.0	11.6	17.0	14.7
HC95-259PR	15.0	15.2	16.0	13.2	12.8	15.0	11.0	16.7	13.6
HC95-261PR	16.0	14.4	16.0	12.4	14.7	16.0	11.0	17.0	13.1
K1410	16.8	15.8	19.0	13.2	18.2	15.0	12.4	17.5	16.0
LN95-5910	14.2	15.1	17.0	11.3	14.2	13.0	9.9	14.9	14.1
LN95-6446	15.7	15.0	17.0	12.0	15.7	15.0	10.3	14.1	12.8
LS94-2435	17.6	15.2	19.0	12.1	15.7	14.0	11.9	16.7	16.1
LS95-0709	15.5	13.6	15.0	13.9	15.2	14.0	10.6	18.2	15.0
Md95-5358	17.3	16.1	20.0	14.0	20.0	15.0	12.4	20.7	18.0
SS93-1027	14.7	13.8	17.0	12.3	15.3	13.0	11.4	16.1	14.0
SS93-2274	16.7	14.5	17.0	12.9	13.5	14.0	12.4	17.4	15.1
SS94-10476	16.7	15.2	18.0	14.5	16.7	15.0	12.7	17.6	15.8
U96-3106	17.0	16.3	17.0	15.5	18.7	14.0	13.5	18.5	15.4
U97-3635	16.4	16.1	19.0	12.9	18.4	16.0	13.4	16.8	15.7

UNIFORM TEST IV, 1999

PROTEIN (%)

Strain	Mean 3 Tests	Urbana IL	Butlerville IN	Mt. Orab OH
HS93-4118 (IV)	40.9	42.4	39.4	40.9
KS4694 (L)	41.9	42.8	40.6	42.2
Macon (III)	40.8	41.9	40.3	40.3
Mustang (SCN)	42.9	44.0	41.5	43.2
Troll (dt1)	40.5	40.6	39.4	41.4
HC93-1088	42.9	43.8	41.0	43.9
HC93-2356	41.4	43.2	39.9	41.2
HC93-2690	41.8	43.2	39.9	42.3
HC94-168	42.0	42.8	40.3	42.9
HC94-398	40.7	41.3	40.3	40.4
HC94-399	42.5	43.2	41.8	42.4
HC94-644	41.4	41.6	41.0	41.6
HC94-2664	43.8	45.5	42.4	43.6
HC94-2726	42.1	42.5	40.8	42.9
HC94-2727	40.7	41.8	39.3	41.0
HC94-2729	41.0	42.3	39.8	40.9
HC95-155PR	43.5	43.6		43.4
HC95-259PR	41.6	43.9	39.3	41.6
HC95-261PR	41.2	41.8	39.9	42.0
K1410	41.9	43.1	40.5	42.1
LN95-5910	39.5	40.8	37.8	39.8
LN95-6446	42.6	44.8	40.8	42.2
LS94-2435	43.6	45.0	42.6	43.2
LS95-0709	41.6	42.3	40.1	42.4
Md95-5358	42.5	44.6	39.4	43.4
SS93-1027	41.7	42.4	40.6	42.0
SS93-2274	42.5	43.5	41.2	42.9
SS94-10476	42.8	44.5	41.6	42.4
U96-3106	39.7	40.6	38.9	39.7
U97-3635	39.2	40.5	37.6	39.5

UNIFORM TEST IV, 1999

OIL (%)

Strain	Mean 3 Tests	Urbana IL	Butlerville IN	Mt. Orab OH
HS93-4118 (IV)	19.4	18.3	20.3	19.5
KS4694 (L)	19.5	18.9	20.0	19.7
Macon (III)	20.4	18.9	20.9	21.3
Mustang (SCN)	18.4	17.8	18.7	18.6
Troll (dt1)	21.0	20.6	21.2	21.2
HC93-1088	19.7	19.0	20.3	19.9
HC93-2356	19.6	18.4	20.0	20.5
HC93-2690	19.9	18.5	20.8	20.3
HC94-168	19.6	18.6	20.3	20.0
HC94-398	20.8	20.2	21.1	21.0
HC94-399	19.6	18.8	20.1	19.9
HC94-644	20.1	19.4	20.3	20.7
HC94-2664	20.1	19.1	20.6	20.6
HC94-2726	20.1	19.3	20.6	20.5
HC94-2727	20.8	19.8	21.2	21.3
HC94-2729	20.5	19.6	21.0	21.0
HC95-155PR	19.9	19.0		20.7
HC95-259PR	20.1	18.6	20.9	20.7
HC95-261PR	19.5	18.7	19.9	20.0
K1410	20.7	19.2	21.0	21.8
LN95-5910	21.2	19.6	22.5	21.6
LN95-6446	19.8	18.1	20.8	20.4
LS94-2435	19.1	18.0	19.8	19.6
LS95-0709	19.1	18.5	19.5	19.3
Md95-5358	19.4	18.3	20.6	19.3
SS93-1027	19.9	19.3	20.3	20.0
SS93-2274	20.0	19.0	20.7	20.3
SS94-10476	19.3	17.6	20.5	19.8
U96-3106	20.6	19.8	21.1	20.9
U97-3635	21.0	19.9	21.8	21.2

Preliminary Test IVA, 1999

	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.	C1975	IA3003 x Stressland	F5	
5.	C1981	Olympus x CX1307-205	F5	
6.	C1982	Olympus x CX1307-205	F5	
7.	C1983	Olympus x CX1307-205	F5	
8.	C1989	Stressland x Archer	F5	
9.	C1990	Stressland x Archer	F5	
10.	C1991	Stressland x Archer	F5	
11.	HC95-3374	HC85-6423 x Thorne	F4	Dt1
12.	HC95-3465	Jack x A178-5	F4	Dt1
13.	HC95-3558	HC85-6577 x Resnik	F4	Dt1
14.	HC95-3565	Hobbit 87 x A87-196014	F4	Dt1
15.	HC95-3649	Hobbit x Jack	F4	Dt1
16.	HC95-3650	Hobbit 87 x Jack	F4	Dt1
17.	HC95-3657	Hobbit 87 x Jack	F4	Dt1
18.	HC95-3761	A87-196014 x HC84-4850	F4	Dt1
19.	HC95-3792	A87-196014 x HC74-634REBC	F4	Dt1
20.	HC95-3798	A87-196014 x HC84-4850	F4	Dt1
21.	HC95-4019	N85-578 x Resnik	F4	Dt1
22.	HC96-166PR	HC84-4850(4) x A178-5	BC3F4	Dt1
23.	HC96-182PR	Stressland(4) x HC78-676BC	BC3F4	Dt1
24.	HC96-4503	Stressland x S92-2702	F4	Dt1
25.	LN95-2714	Thorne x C1842	F5	
26.	LN95-6146	Jack x Thorne	F5	
27.	LN95-8605	Burlison x LN90-4104	F5	
28.	LN96-60	Thorne x LN90-4104	F5	
29.	Md96-5722	KS4694 x Corsica	F5	
30.	Md96-5744	KS4694 x Corsica	F5	
31.	Md96-5759	KS4694 x Corsica	F5	
32.	Md96-5912	Williams- Rps2 x Corsica	F5	

PRELIMINARY TEST IVA, 1999

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Shattering Score Manhattan	PR Lafayette Race 7	Hard Seed %	PS Lafayette a %	PSB n %
HS93-4118 (IV)	WGBDYBIIep	1.0	R	2	2	0
KS4694 (L)	WGBSYBfIep	1.0	S	0	2	12
Macon (III)	WTBSYBIIep	1.0	S	0	4	2
C1975	PTBDYBIIep	1.0	S	0	0	0
C1981	PTTDYBIIep	1.0	S	0	0	0
C1982	PTTDYBIIep	1.0	S	0	4	0
C1983	PTTDYBIIep	1.0	S	0	0	0
C1989	PGTSYIbIep	1.0	S	0	0	0
C1990	PGTIYIbIep	1.0	R	0	4	0
C1991	PTTDYBIIep	1.0	S	0	4	2
HC95-3374	WTBDYBIIep	1.0	R	0	4	4
HC95-3465	PGBDYIIep	1.0	R	0	0	4
HC95-3558	PTTDYBIIep	1.0	S	0	2	2
HC95-3565	WTTDYBIIep	1.0	R	0	0	4
HC95-3649	WTTIYBIIep	1.0	H	0	0	2
HC95-3650	WTBSYBIIep	1.0	R	0	2	4
HC95-3657	WTBDYBIIep	1.0	H	0	0	0
HC95-3761	WGTDYBfIep	1.0	R	0	4	0
HC95-3792	WTTDYBIIep	1.0	R	0	0	0
HC95-3798	WTTSYBIIep	2.0	R	0	0	0
HC95-4019	PLtTTDYBIIH	2.0	R	0	0	0
HC96-166PR	P+WTTDYBIIep	2.0	R	0	0	0
HC96-182PR	PTBDYHIIep	1.0	H	0	0	0
HC96-4503	PTTSYBIIep	1.0	R	0	4	0
LN95-2714	WTBDYBIIep	1.0	R	0	0	0
LN95-6146	WGBSYBfIep	1.0	S	0	4	0
LN95-8605	PTTSYBIIep	1.0	S	0	0	0
LN96-60	PTTIYBIIep	1.0	S	0	0	0
Md96-5722	PGBIYIbIep	1.0	S	0	0	0
Md96-5744	WTBDYBrIep	2.0	H	0	2	0
Md96-5759	PTBDYBIIH	1.0	H	0	2	0
Md96-5912	PTTDYBIIep	1.0	S	0	2	0

PRELIMINARY TEST IVA, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 9 bu/a	Rank 9 No.	Maturity 9 Date	Lodging 9 Score	Plant Height 9 In.	Seed Size 9 g/100	Composition	
							Protein 3 %	Oil 3 %
HS93-4118 (IV)	48.9	1	9/23	1.2	31	15.2	41.2	19.4
KS4694 (L)	43.3	21	7	1.5	34	15.3	40.7	20.2
Macon (III)	45.8	8	0	1.5	32	15.6	41.4	20.2
C1975	44.0	16	4	2.0	36	15.3	44.5	18.8
C1981	47.9	5	3	1.8	37	13.2	44.1	19.6
C1982	44.1	14	3	1.9	36	13.4	43.5	19.6
C1983	43.8	19	0	1.5	32	13.9	44.1	19.3
C1989	44.0	16	2	1.9	36	13.4	44.1	19.4
C1990	40.0	31	-1	1.8	34	15.3	42.4	20.1
C1991	44.1	14	0	1.7	38	14.5	41.4	20.3
HC95-3374	41.6	25	2	2.0	37	15.8	44.0	19.6
HC95-3465	39.7	32	0	2.4	39	13.7	40.2	19.3
HC95-3558	40.7	29	1	1.6	33	15.6	42.7	19.8
HC95-3565	42.4	23	2	1.9	36	14.9	40.9	20.4
HC95-3649	41.5	26	1	2.1	39	13.8	42.6	19.6
HC95-3650	42.8	22	3	2.0	40	14.8	41.4	19.9
HC95-3657	40.9	28	2	1.9	42	14.8	41.9	19.8
HC95-3761	40.6	30	2	2.3	37	14.8	42.1	19.3
HC95-3792	41.1	27	2	2.1	37	17.0	44.2	19.4
HC95-3798	45.7	9	3	1.8	36	14.8	41.8	18.4
HC95-4019	43.4	20	1	1.7	36	13.9	41.4	19.8
HC96-166PR	44.4	13	3	2.4	39	15.1	41.6	19.9
HC96-182PR	46.1	7	1	1.5	35	14.2	43.4	19.7
HC96-4503	42.1	24	1	1.9	34	15.0	43.3	19.4
LN95-2714	48.2	4	0	1.3	34	15.5	42.3	19.3
LN95-6146	44.5	12	-2	1.2	31	14.9	42.4	19.8
LN95-8605	48.6	2	-2	1.1	32	17.3	41.0	19.9
LN96-60	48.3	3	-1	1.2	28	15.9	43.2	19.3
Md96-5722	46.7	6	3	1.5	36	16.4	41.4	19.7
Md96-5744	44.9	11	4	1.4	33	14.9	42.1	19.5
Md96-5759	45.1	10	5	1.4	34	15.3	43.0	19.2
Md96-5912	44.0	16	3	1.4	35	16.4	43.1	19.2

132.9 Days After Planting

PRELIMINARY TEST IVA, 1999

YIELD (bu/a)

Strain	Mean 9 Tests	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	48.9	47.8	77.4	67.5	48.9	21.5
KS4694 (L)	43.3	47.0	49.4	66.7	39.4	18.5
Macon (III)	45.8	52.6	67.9	63.6	18.6	22.3
C1975	44.0	45.6	59.0	71.3	19.7	29.5
C1981	47.9	51.8	62.2	65.1	34.0	25.1
C1982	44.1	53.8	56.6	62.3	34.9	29.4
C1983	43.8	43.8	59.1	66.9	45.9	19.3
C1989	44.0	50.6	63.6	62.3	33.5	26.4
C1990	40.0	52.3	54.9	65.4	19.0	19.9
C1991	44.1	45.8	60.0	61.0	47.0	20.4
HC95-3374	41.6	46.8	51.4	59.0	36.0	28.2
HC95-3465	39.7	47.0	50.8	56.4	32.0	15.9
HC95-3558	40.7	56.2	59.3	54.9	15.5	21.8
HC95-3565	42.4	49.9	50.9	58.8	38.4	19.1
HC95-3649	41.5	47.0	58.2	57.4	34.1	22.5
HC95-3650	42.8	55.4	53.6	58.5	33.5	19.4
HC95-3657	40.9	52.0	56.3	58.5	26.7	16.9
HC95-3761	40.6	51.6	48.4	63.2	33.9	19.4
HC95-3792	41.1	51.9	53.0	57.7	28.5	25.8
HC95-3798	45.7	51.3	55.5	63.4	50.8	25.5
HC95-4019	43.4	50.5	56.0	60.3	17.7	29.3
HC96-166PR	44.4	54.3	53.5	67.2	35.9	24.2
HC96-182PR	46.1	52.3	56.4	67.2	33.9	26.7
HC96-4503	42.1	47.7	53.6	57.2	30.4	22.4
LN95-2714	48.2	49.4	63.5	65.6	54.0	22.0
LN95-6146	44.5	43.4	65.6	54.4	55.9	19.6
LN95-8605	48.6	57.4	60.0	68.0	41.6	28.9
LN96-60	48.3	53.7	54.3	64.2	54.2	24.5
Md96-5722	46.7	48.8	57.6	70.9	33.9	29.0
Md96-5744	44.9	47.4	60.8	60.4	39.8	24.0
Md96-5759	45.1	54.3	60.0	62.9	39.7	19.0
Md96-5912	44.0	50.4	58.0	65.7	36.0	25.2
C.V. (%)		11.7	8.2	8.2	13.4	14.7
L.S.D. (5%)		12.0	9.7	10.4	9.9	5.8
Row Sp. (In.)		30	30	26	30	15
Rows/Plot		4	4	4	4	6
Reps		2	2	2	2	2

PRELIMINARY TEST IVA, 1999

YIELD (bu/a)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	35.6	20.1	58.2	63.3
KS4694 (L)	34.8	25.1	64.7	44.1
Macon (III)	39.2	20.5	62.0	65.8
C1975	37.4	26.6	58.6	48.0
C1981	40.8	34.6	63.7	53.6
C1982	37.8	23.5	49.9	48.5
C1983	39.7	15.2	55.0	49.0
C1989	35.5	20.5	56.8	46.7
C1990	35.8	25.6	47.5	39.6
C1991	37.8	27.5	52.2	45.2
HC95-3374	29.3	20.0	48.5	55.5
HC95-3465	38.1	19.0	48.0	50.1
HC95-3558	29.9	21.1	52.6	55.3
HC95-3565		16.2	53.3	52.5
HC95-3649	35.9	15.7	48.6	53.9
HC95-3650	39.4	20.3	54.5	50.8
HC95-3657	37.4	16.2	53.8	50.4
HC95-3761	30.2	18.4	53.0	47.6
HC95-3792	33.6	21.8	52.5	44.9
HC95-3798	27.0	27.8	51.0	59.4
HC95-4019	41.1	30.3	51.1	54.0
HC96-166PR	35.5	19.6	56.2	53.4
HC96-182PR	35.2	33.0	56.1	54.3
HC96-4503	35.2	30.3	48.5	53.5
LN95-2714	32.2	31.3	58.1	57.6
LN95-6146	30.5	24.8	56.4	49.5
LN95-8605	27.7	32.7	58.0	63.2
LN96-60	35.9	33.5	57.0	57.1
Md96-5722	40.2	25.7	58.7	55.5
Md96-5744	32.9	28.9	58.3	51.9
Md96-5759	27.8	27.0	57.1	57.8
Md96-5912	33.3	24.9	52.9	49.8
C.V. (%)	14.4	9.3	10.6	11.4
L.S.D. (5%)	9.9	4.6	ns	12.2
Row Sp. (In.)	24	30	15	7.5
Rows/Plot	4	4	6	8
Reps	2	2	2	2

PRELIMINARY TEST IVA, 1999

YIELD RANK

Strain	Yield Rank	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	1	22	1	4	5	21
KS4694 (L)	21	27	31	8	11	30
Macon (III)	8	8	2	14	30	18
C1975	16	30	13	1	28	1
C1981	5	13	6	12	18	12
C1982	14	6	17	18	16	2
C1983	19	31	12	7	7	27
C1989	16	16	4	18	22	8
C1990	31	9	22	11	29	23
C1991	14	29	8	20	6	22
HC95-3374	25	28	28	23	13	6
HC95-3465	32	25	30	30	24	32
HC95-3558	29	2	11	31	32	20
HC95-3565	23	19	29	24	12	28
HC95-3649	26	25	14	28	17	16
HC95-3650	22	3	24	25	22	25
HC95-3657	28	11	19	25	27	31
HC95-3761	30	14	32	16	19	25
HC95-3792	27	12	27	27	26	9
HC95-3798	9	15	21	15	4	10
HC95-4019	20	17	20	22	31	3
HC96-166PR	13	4	26	5	15	14
HC96-182PR	7	9	18	5	19	7
HC96-4503	24	23	24	29	25	17
LN95-2714	4	20	5	10	3	19
LN95-6146	12	32	3	32	1	24
LN95-8605	2	1	8	3	8	5
LN96-60	3	7	23	13	2	13
Md96-5722	6	21	16	2	19	4
Md96-5744	11	24	7	21	9	15
Md96-5759	10	4	8	17	10	29
Md96-5912	16	18	15	9	13	11

PRELIMINARY TEST IVA, 1999

YIELD RANK

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	15	24	7	2
KS4694 (L)	20	15	1	31
Macon (III)	6	21	3	1
C1975	10	12	5	26
C1981	2	1	2	14
C1982	8	18	27	25
C1983	4	32	16	24
C1989	16	21	12	28
C1990	14	14	32	32
C1991	8	10	24	29
HC95-3374	28	25	29	8
HC95-3465	7	27	31	21
HC95-3558	27	20	22	10
HC95-3565	32	29	19	17
HC95-3649	12	31	28	13
HC95-3650	5	23	17	19
HC95-3657	10	29	18	20
HC95-3761	26	28	20	27
HC95-3792	21	19	23	30
HC95-3798	31	9	26	4
HC95-4019	1	6	25	12
HC96-166PR	16	26	14	16
HC96-182PR	18	3	15	11
HC96-4503	18	6	29	15
LN95-2714	24	5	8	6
LN95-6146	25	17	13	23
LN95-8605	30	4	9	3
LN96-60	12	2	11	7
Md96-5722	3	13	4	8
Md96-5744	23	8	6	18
Md96-5759	29	11	10	5
Md96-5912	22	16	21	22

PRELIMINARY TEST IVA, 1999

MATURITY (date)

Strain	Mean 9 Tests	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	09/23	09/28	09/27	09/16	10/06	09/10
KS4694 (L)	6.6	4	5	12	6	+11
Macon (III)	-0.2	3	-3	1	-1	+6
C1975	4.2	1	4	10	3	+9
C1981	2.9	4	2	5	2	+10
C1982	2.9	0	2	6	3	+10
C1983	-0.2	4	-6	6	0	+4
C1989	2.0	-3	2	-1	4	+9
C1990	-0.9	2	-4	-1	-1	+6
C1991	0.4	-5	-2	3	3	+7
HC95-3374	1.5	-3	0	4	5	+10
HC95-3465	0.0	-7	-3	1	2	+4
HC95-3558	1.2	5	1	2	-1	+8
HC95-3565	1.6	2	0	3	2	+7
HC95-3649	1.4	0	0	3	4	+5
HC95-3650	2.5	3	0	5	3	+8
HC95-3657	1.7	5	0	2	1	+8
HC95-3761	2.2	3	0	5	2	+7
HC95-3792	2.4	4	2	3	3	+9
HC95-3798	3.4	1	3	5	5	+8
HC95-4019	0.7	3	0	0	1	+5
HC96-166PR	3.0	4	1	3	5	+11
HC96-182PR	0.7	-2	-1	2	1	+7
HC96-4503	0.9	1	-2	3	2	+9
LN95-2714	0.1	1	-2	1	1	+6
LN95-6146	-1.9	-5	-2	-1	3	-1
LN95-8605	-1.5	-3	-8	2	1	+5
LN96-60	-1.4	2	-8	-2	2	+7
Md96-5722	2.8	2	2	2	4	+9
Md96-5744	4.2	2	3	9	5	+8
Md96-5759	5.1	0	3	10	3	+9
Md96-5912	2.6	5	2	1	2	+9
Date Planted	5/13	05/27	05/04	05/03	05/28	05/12
Days to Mature	133	124	146	136	131	121

PRELIMINARY TEST IVA, 1999

MATURITY (date)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	10/02	09/15	09/15	09/28
KS4694 (L)	7	4	13	8
Macon (III)	0	2	-4	0
C1975	2	3	8	8
C1981	2	-1	6	7
C1982	1	2	6	6
C1983	-1	-5	-2	3
C1989	-1	3	7	7
C1990	-1	-2	-1	1
C1991	1	0	1	3
HC95-3374	2	4	1	1
HC95-3465	2	0	3	3
HC95-3558	0	0	2	2
HC95-3565	0	-1	5	4
HC95-3649	1	-2	5	2
HC95-3650	3	0	4	5
HC95-3657	3	3	2	0
HC95-3761	0	-1	7	5
HC95-3792	0	3	5	2
HC95-3798	4	3	6	5
HC95-4019	-1	2	1	1
HC96-166PR	3	2	6	3
HC96-182PR	0	1	4	1
HC96-4503	0	-1	4	2
LN95-2714	0	-1	0	2
LN95-6146	-1	-4	-3	-3
LN95-8605	0	0	-4	-2
LN96-60	-1	-2	-1	-3
Md96-5722	3	3	5	4
Md96-5744	2	4	8	6
Md96-5759	5	4	13	8
Md96-5912	2	2	4	6
Date Planted	06/04	05/03	05/02	05/04
Days to Mature	120	135	136	147

PRELIMINARY TEST IVA, 1999

LODGING (score)

Strain	Mean 9 Tests	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	1.2	1.0	1.0	1.0	1.5	1.0
KS4694 (L)	1.5	1.0	1.5	1.0	2.5	1.0
Macon (III)	1.5	1.0	1.5	1.0	3.5	1.0
C1975	2.0	1.0	2.0	1.8	3.5	1.0
C1981	1.8	1.0	1.9	1.3	3.0	1.0
C1982	1.9	1.0	2.5	1.3	3.5	1.0
C1983	1.5	1.0	2.3	1.3	1.5	1.0
C1989	1.9	1.0	2.3	1.3	3.0	1.0
C1990	1.8	1.0	2.3	1.5	3.0	1.0
C1991	1.7	1.0	2.8	1.8	2.0	1.0
HC95-3374	2.0	1.0	2.8	1.8	2.5	1.0
HC95-3465	2.4	1.0	3.4	2.3	2.5	1.0
HC95-3558	1.6	1.0	1.4	1.0	4.0	1.0
HC95-3565	1.9	1.0	1.5	2.5	3.0	1.0
HC95-3649	2.1	1.0	3.5	2.3	2.0	1.0
HC95-3650	2.0	1.0	3.5	1.8	2.5	1.0
HC95-3657	1.9	1.0	3.4	1.5	2.0	1.0
HC95-3761	2.3	1.0	2.8	3.3	3.0	1.0
HC95-3792	2.1	1.0	2.0	2.0	4.0	1.0
HC95-3798	1.8	1.0	2.8	2.3	2.0	1.0
HC95-4019	1.7	1.0	1.3	1.0	4.5	1.0
HC96-166PR	2.4	1.0	3.8	2.3	3.5	1.0
HC96-182PR	1.5	1.0	2.0	1.0	2.5	1.0
HC96-4503	1.9	1.0	2.8	2.3	1.5	1.0
LN95-2714	1.3	1.0	2.3	1.0	1.0	1.0
LN95-6146	1.2	1.0	1.8	1.0	1.0	1.0
LN95-8605	1.1	1.0	1.0	1.0	2.0	1.0
LN96-60	1.2	1.0	1.5	1.0	1.0	1.0
Md96-5722	1.5	1.0	2.3	1.0	2.0	1.0
Md96-5744	1.4	1.0	1.5	1.0	2.5	1.0
Md96-5759	1.4	1.0	1.5	1.0	2.0	1.0
Md96-5912	1.4	1.0	1.5	1.0	3.0	1.0

PRELIMINARY TEST IVA, 1999

LODGING (score)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	2.0	1.0	1.1	1.0
KS4694 (L)	1.8	1.0	1.7	1.8
Macon (III)	2.3	1.0	1.1	1.0
C1975	2.5	1.0	2.2	2.8
C1981	2.8	1.0	2.0	2.5
C1982	2.3	1.0	2.0	2.3
C1983	2.5	1.0	1.3	1.5
C1989	2.3	1.0	2.3	2.5
C1990	3.0	1.0	1.7	1.5
C1991	3.0	1.0	1.4	1.5
HC95-3374	3.0	1.0	2.7	2.3
HC95-3465	3.0	1.0	3.7	3.3
HC95-3558	2.0	1.0	1.3	1.5
HC95-3565	2.3	1.0	2.7	2.0
HC95-3649	3.3	1.0	2.0	2.8
HC95-3650	3.0	1.0	2.1	2.5
HC95-3657	3.0	1.0	1.9	2.0
HC95-3761	3.0	1.0	3.3	2.5
HC95-3792	3.0	1.0	2.4	2.3
HC95-3798	2.5	1.0	1.8	1.8
HC95-4019	2.0	1.0	1.3	1.8
HC96-166PR	3.0	1.0	3.0	3.3
HC96-182PR	2.0	1.0	1.3	1.5
HC96-4503	3.0	1.0	2.6	2.0
LN95-2714	2.0	1.0	1.3	1.3
LN95-6146	2.0	1.0	1.1	1.0
LN95-8605	1.0	1.0	1.1	1.0
LN96-60	2.0	1.0	1.2	1.3
Md96-5722	2.0	1.0	1.4	1.5
Md96-5744	1.8	1.0	1.5	1.5
Md96-5759	1.8	1.0	1.9	1.5
Md96-5912	2.0	1.0	1.5	1.0

PRELIMINARY TEST IVA, 1999

PLANT HEIGHT (inches)

Strain	Mean 9 Tests	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	31	39	35	35	28	25
KS4694 (L)	34	40	42	37	37	28
Macon (III)	32	35	37	35	33	27
C1975	36	34	43	41	38	33
C1981	37	41	45	40	40	31
C1982	36	38	42	39	40	32
C1983	32	34	35	39	37	28
C1989	36	37	43	35	39	32
C1990	34	36	40	38	32	35
C1991	38	36	42	46	42	36
HC95-3374	37	37	42	41	42	34
HC95-3465	39	34	43	45	41	37
HC95-3558	33	40	36	35	31	29
HC95-3565	36	39	40	41	40	33
HC95-3649	39	38	47	43	46	34
HC95-3650	40	41	48	46	41	33
HC95-3657	42	41	47	49	46	34
HC95-3761	37	37	39	41	39	33
HC95-3792	37	39	42	42	41	33
HC95-3798	36	33	44	39	41	29
HC95-4019	36	40	41	39	38	31
HC96-166PR	39	37	44	45	42	33
HC96-182PR	35	40	42	41	37	31
HC96-4503	34	39	39	38	34	31
LN95-2714	34	39	40	37	38	27
LN95-6146	31	42	35	33	36	26
LN95-8605	32	37	35	35	35	28
LN96-60	28	39	30	30	32	22
Md96-5722	36	36	40	39	36	33
Md96-5744	33	39	37	36	35	30
Md96-5759	34	37	38	38	35	30
Md96-5912	35	36	38	37	39	30

PRELIMINARY TEST IVA, 1999

PLANT HEIGHT (inches)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	24	32	34	32
KS4694 (L)	24	29	37	34
Macon (III)	23	29	34	34
C1975	27	28	41	38
C1981	27	31	40	38
C1982	25	28	43	34
C1983	24	27	33	32
C1989	26	31	40	42
C1990	25	28	39	34
C1991	28	30	44	38
HC95-3374	31	32	41	36
HC95-3465	30	33	46	42
HC95-3558	23	30	38	36
HC95-3565	21	34	41	38
HC95-3649	33	31	44	38
HC95-3650	29	37	45	41
HC95-3657	33	36	46	44
HC95-3761	28	34	44	39
HC95-3792	29	34	42	35
HC95-3798	26	31	38	41
HC95-4019	26	33	41	39
HC96-166PR	29	34	43	41
HC96-182PR	25	30	37	36
HC96-4503	25	31	39	34
LN95-2714	22	32	35	36
LN95-6146	19	27	32	27
LN95-8605	21	30	37	33
LN96-60	19	23	30	30
Md96-5722	25	27	43	42
Md96-5744	22	27	38	35
Md96-5759	23	29	40	36
Md96-5912	25	33	41	35

PRELIMINARY TEST IVA, 1999

SEED SIZE (g/100)

Strain	Mean 9 Tests	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	15.2	11.7	16.0	15.1	16.3	12.9
KS4694 (L)	15.3	14.2	16.9	14.3	15.4	12.2
Macon (III)	15.6	13.9	16.8	15.0	17.0	12.9
C1975	15.3	14.0	14.3	14.2	16.0	13.4
C1981	13.2	12.3	12.9	12.6	15.1	11.8
C1982	13.4	13.9	12.1	12.4	14.4	11.7
C1983	13.9	14.6	13.3	12.3	14.3	12.4
C1989	13.4	14.1	11.4	13.2	14.6	11.8
C1990	15.3	13.8	14.4	14.9	16.3	12.6
C1991	14.5	13.8	13.8	12.3	15.2	13.0
HC95-3374	15.8	14.0	14.8	15.4	17.1	14.2
HC95-3465	13.7	13.4	13.0	12.8	14.2	10.3
HC95-3558	15.6	13.6	13.4	15.4	19.8	13.1
HC95-3565	14.9	13.8	14.8	13.9	17.1	11.8
HC95-3649	13.8	11.7	13.5	13.0	15.3	12.8
HC95-3650	14.8	15.0	13.8	13.0	16.4	13.3
HC95-3657	14.8	13.2	14.5	13.6	15.6	14.6
HC95-3761	14.8	16.7	13.9	13.4	14.8	14.0
HC95-3792	17.0	13.6	17.0	16.3	18.7	15.3
HC95-3798	14.8	12.8	15.6	13.6	15.5	13.6
HC95-4019	13.9	14.2	12.6	13.2	15.4	11.6
HC96-166PR	15.1	15.2	14.7	13.3	16.7	14.0
HC96-182PR	14.2	12.8	12.8	13.6	16.0	12.8
HC96-4503	15.0	11.8	15.4	14.7	16.3	12.7
LN95-2714	15.5	12.7	13.6	15.6	17.3	13.5
LN95-6146	14.9	14.2	15.6	14.6	16.3	13.3
LN95-8605	17.3	14.0	16.3	17.6	18.9	15.6
LN96-60	15.9	13.9	13.8	15.8	18.6	14.9
Md96-5722	16.4	12.7	15.5	16.1	16.0	14.1
Md96-5744	14.9	12.8	14.8	13.9	17.1	12.5
Md96-5759	15.3	13.3	13.8	15.5	17.5	12.0
Md96-5912	16.4	15.8	15.0	14.5	18.8	14.4

PRELIMINARY TEST IVA, 1999

SEED SIZE (g/100)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	16.8	14.0	17.8	15.8
KS4694 (L)	16.8	13.0	18.3	17.0
Macon (III)	15.9	14.0	17.0	17.7
C1975	17.5	13.0	18.5	16.9
C1981	14.0	11.0	15.5	13.7
C1982	14.3	11.0	15.8	14.7
C1983	15.4	11.0	15.5	16.6
C1989	13.6	12.0	15.7	13.9
C1990	17.1	14.0	18.3	16.3
C1991	16.7	12.0	17.3	16.3
HC95-3374	17.6	14.0	18.9	16.2
HC95-3465	16.7	12.0	15.6	15.3
HC95-3558	16.8	13.0	19.0	16.4
HC95-3565	15.3	14.0	16.7	17.1
HC95-3649	15.8	12.0	15.6	14.7
HC95-3650	16.1	13.0	16.6	15.7
HC95-3657	17.8	13.0	16.1	15.2
HC95-3761	15.3	12.0	17.9	15.6
HC95-3792	18.0	17.0	20.1	16.9
HC95-3798	16.0	14.0	16.8	15.3
HC95-4019	14.3	13.0	15.6	15.1
HC96-166PR	17.3	13.0	16.8	15.1
HC96-182PR	15.1	13.0	16.9	14.8
HC96-4503	16.1	15.0	17.5	15.2
LN95-2714	18.8	13.0	17.5	17.3
LN95-6146	15.5	13.0	16.3	15.2
LN95-8605	18.1	17.0	19.9	18.3
LN96-60	16.8	14.0	18.6	16.6
Md96-5722	21.0	16.0	19.3	17.2
Md96-5744	15.7	13.0	18.3	16.2
Md96-5759	16.8	14.0	18.0	17.0
Md96-5912	18.8	15.0	17.6	17.3

PRELIMINARY TEST IVA, 1999

PROTEIN (%)

Strain	Mean 3 Tests	Urbana IL	Butlerville IN	Mt. Orab OH
HS93-4118 (IV)	41.2	42.7	38.6	42.2
KS4694 (L)	40.7	42.6	38.8	----
Macon (III)	41.4	43.3	38.9	42.1
C1975	44.5	45.8	42.5	45.1
C1981	44.1	46.1	42.1	44.1
C1982	43.5	45.5	41.0	44.1
C1983	44.1	47.0	42.0	43.3
C1989	44.1	46.3	40.4	45.5
C1990	42.4	45.8	39.5	41.8
C1991	41.4	43.6	39.4	41.3
HC95-3374	44.0	45.9	40.7	45.4
HC95-3465	40.2	43.2	37.0	40.4
HC95-3558	42.7	44.4	40.0	43.6
HC95-3565	40.9	43.6	37.8	41.3
HC95-3649	42.6	44.6	39.8	43.4
HC95-3650	41.4	44.4	38.1	41.6
HC95-3657	41.9	45.0	38.6	42.2
HC95-3761	42.1	44.9	39.9	41.6
HC95-3792	44.2	45.9	41.9	44.9
HC95-3798	41.8	44.2	38.7	42.6
HC95-4019	41.4	44.7	38.2	41.3
HC96-166PR	41.6	44.4	38.5	41.9
HC96-182PR	43.4	46.4	39.7	44.2
HC96-4503	43.3	46.0	40.3	43.6
LN95-2714	42.3	45.3	40.3	41.3
LN95-6146	42.4	44.8	40.5	42.0
LN95-8605	41.0	43.1	37.0	43.0
LN96-60	43.2	45.6	40.9	43.1
Md96-5722	41.4	43.3	37.3	43.6
Md96-5744	42.1	43.7	39.1	43.5
Md96-5759	43.0	44.4	40.7	43.8
Md96-5912	43.1	44.8	41.6	43.0

PRELIMINARY TEST IVA, 1999

OIL (%)

Strain	Mean 3 Tests	Urbana IL	Butlerville IN	Mt. Orab OH
HS93-4118 (IV)	19.4	18.4	20.3	19.5
KS4694 (L)	20.2	19.4	20.9	----
Macon (III)	20.2	18.8	21.1	20.6
C1975	18.8	18.2	19.6	18.7
C1981	19.6	18.2	20.4	20.1
C1982	19.6	18.2	20.9	19.7
C1983	19.3	17.6	20.4	19.8
C1989	19.4	18.3	20.7	19.3
C1990	20.1	18.3	21.3	20.6
C1991	20.3	19.5	21.0	20.4
HC95-3374	19.6	18.5	21.1	19.3
HC95-3465	19.3	17.9	20.5	19.4
HC95-3558	19.8	18.7	21.3	19.5
HC95-3565	20.4	19.3	21.9	19.9
HC95-3649	19.6	18.3	21.1	19.5
HC95-3650	19.9	18.7	21.4	19.5
HC95-3657	19.8	18.2	21.5	19.7
HC95-3761	19.3	18.1	20.2	19.6
HC95-3792	19.4	18.8	20.4	19.0
HC95-3798	18.4	17.5	20.1	17.6
HC95-4019	19.8	18.1	21.3	19.9
HC96-166PR	19.9	18.6	20.9	20.2
HC96-182PR	19.7	18.4	21.3	19.5
HC96-4503	19.4	17.9	21.0	19.3
LN95-2714	19.3	17.8	20.0	20.1
LN95-6146	19.8	18.5	21.1	19.9
LN95-8605	19.9	18.8	20.8	20.2
LN96-60	19.3	18.7	21.0	18.2
Md96-5722	19.7	18.7	21.4	19.1
Md96-5744	19.5	19.1	20.6	18.7
Md96-5759	19.2	18.4	19.7	19.4
Md96-5912	19.2	17.9	20.0	19.8

Preliminary Test IVB, 1999

	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.	K1452	LG89-6661 x KS4694	F5	
5.	K1453	Hutcheson x K1230	F5	
6.	K1454	KS4694 x HS90-3487	F5	
7.	K1455	Asgrow A4715 x K88-22-42	F5	
8.	K1456	KS4694 x HS90-3487	F5	
9.	K1457	LG89-6661 x KS4694	F5	
10.	K1458	KS4694 x HS90-3487	F5	
11.	K1459	Asgrow A4715 x K88-22-42	F5	
12.	K1460	KS4694 x Ky88-5037	F5	
13.	LG96-1789	LG89-8665 x LG89-7657	F6	
14.	LG96-1797	LG89-8665 x LG89-7657	F6	
15.	LG96-3089	LG88-2044 x LG89-7629	F6	
16.	LS96-0735	Flyer x Asgrow A4715	F6	
17.	Troll (dt1)	Sprite 87 x HC80-1756	F5	dt1
18.	HC94-380	Hobbit 87 x HC85-6577	F4	dt1
19.	HC94-419	Sprite 87 x HC85-6577	F4	dt1
20.	HC95-257PR	HC85-5844(4) x HC78-676BC	BC3F4	dt1
21.	HC95-260PR	HC85-5844(4) x HC78-676BC	F4	dt1
22.	HC95-262PR	HC85-5855(4) x HC78-676BC	BC3F4	dt1
23.	HC95-727	Hobbit 87 x HC85-6577	F4	dt1
24.	HC95-830	Hobbit 87 x Edison	F4	dt1
25.	HC95-933	Sprite 87 x Conrad	F4	dt1
26.	HC95-1277	Hobbit 87 x HC87-5844	F4	dt1
27.	HC95-1347	Hobbit x HC87-5844	F4	dt1
28.	HC95-1597	HC74-634REBC x HC85-164	F4	dt1
29.	HC95-1949	Charleston x HC78-352BC	F4	dt1
30.	HC95-2005	Charleston x HC78-352BC	F4	dt1
31.	HC95-2068	HC74-634REBC x HC85-6577	F4	dt1
32.	HC95-2154	HC74-634REBC x HC85-6577	F4	dt1
33.	HC95-4337	HC85-164(2) x Hobbit 87	F4	dt1

PRELIMINARY TEST IVB, 1999
DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Shattering Score Manhattan	PR Lafayette Race 7	Hard Seed %	PS Lafayette a %	PSB n %
HS93-4118 (IV)	WGBDYBfleP	1.0	R	2	2	0
KS4694 (L)	WGBSYBfleP	1.0	S	0	2	12
Macon (III)	WTBSYBfleP	1.0	S	0	4	2
K1452	WGBIYBfleP	1.0	S	0	0	0
K1453	P+WTBDYBrfleP	1.0	S	0	0	0
K1454	PGBSYBfleP	1.0	H	24	0	0
K1455	WGTSYBfleP	1.0	S	12	2	0
K1456	WGTDYBfleP	1.0	S	0	2	0
K1457	WGBSYBfleP	1.0	H	6	0	0
K1458	P+WTTSYBfleP	1.0	R	0	4	0
K1459	WGTSYBfleH	1.0	S	6	2	0
K1460	WGTSYBfleP	1.0	R	0	0	0
LG96-1789	PGBSYYIEP	1.0	R	14	0	0
LG96-1797	PGBSYYIEP	1.0	R	8	0	0
LG96-3089	WGBDYYYIEP	1.0	R	22	0	0
LS96-0735	WLtTTDYBfleP	1.0	R	0	2	2
Troll (dt1)	WTTDYBfleDep	1.0	R	0	0	0
HC94-380	WTTDYBfleDep	1.0	R	8	0	0
HC94-419	WTTSYBfleDep	1.0	S	0	2	0
HC95-257PR	PTTIYBrDep	1.0	R	14	0	0
HC95-260PR	PTTSYBrDH	1.0	R	0	0	0
HC95-262PR	PTBSYBrDep	1.0	S	28	0	0
HC95-727	WTTSYBfleDep	1.0	R	0	0	0
HC95-830	P+WTTDYBfleDH	1.0	R	0	0	0
HC95-933	PTTSYBfleDep	1.0	S	0	0	0
HC95-1277	PTTSYBrDep	1.0	R	0	0	0
HC95-1347	PTTSYBrDep	1.0	R	0	0	0
HC95-1597	WTBSYBfleDep	1.0	H	0	2	2
HC95-1949	PTTIYBfleDep	1.0	R	0	2	0
HC95-2005	PTTDYBfleDep	1.0	R	0	0	0
HC95-2068	PTTSYBfleDep	1.0	H	0	0	2
HC95-2154	WTTSYBfleDep	1.0	H	0	2	4
HC95-4337	P+WTTSYBfleDep	1.0	R	2	0	0

PRELIMINARY TEST IVB, 1999

REGIONAL SUMMARY

No. of Tests Strain	Yield 9 bu/a	Rank 9 No.	Maturity 9 Date	Lodging 9 Score	Plant Height 9 In.	Seed Size 9 g/100	Composition	
							Protein 3 %	Oil 3 %
HS93-4118 (IV)	48.0	9	9/22	1.2	31	15.7	41.3	19.5
KS4694 (L)	44.9	23	8	1.3	35	15.6	41.8	19.7
Macon (III)	48.9	4	-1	1.4	32	15.4	41.1	20.4
K1452	48.3	7	2	1.1	30	15.6	43.5	19.5
K1453	45.9	13	5	1.6	35	16.9	42.9	19.9
K1454	52.9	1	4	1.4	35	14.9	42.0	19.8
K1455	48.4	6	1	1.3	32	16.8	42.6	19.4
K1456	47.5	11	9	1.4	35	14.5	41.6	19.8
K1457	51.4	3	3	1.3	34	16.7	43.2	19.2
K1458	48.2	8	4	1.4	36	15.8	42.2	19.4
K1459	52.7	2	3	1.4	34	15.2	41.6	19.8
K1460	48.0	9	5	1.8	36	13.4	42.3	19.4
LG96-1789	44.2	26	-1	1.5	28	14.1	43.1	17.7
LG96-1797	45.1	22	-1	1.7	28	14.7	41.7	19.1
LG96-3089	44.6	24	1	1.9	33	14.7	42.7	19.6
LS96-0735	43.6	28	6	1.3	35	14.9	44.0	19.6
Troll (dt1)	45.9	13	1	1.1	22	15.7	40.2	21.1
HC94-380	45.7	15	2	1.1	20	16.8	41.5	20.7
HC94-419	42.8	31	1	1.2	21	16.9	42.7	20.4
HC95-257PR	43.4	29	-1	1.1	20	14.5	41.2	19.9
HC95-260PR	44.3	25	-2	1.1	20	14.9	40.9	19.8
HC95-262PR	45.7	15	-2	1.1	21	14.3	41.4	19.9
HC95-727	45.4	18	2	1.1	20	16.7	43.3	20.4
HC95-830	45.5	17	2	1.2	19	13.3	40.7	20.5
HC95-933	48.8	5	1	1.3	22	14.8	42.8	19.9
HC95-1277	45.4	18	0	1.2	23	15.3	42.1	20.5
HC95-1347	42.1	32	1	1.2	20	13.5	40.8	20.3
HC95-1597	42.9	30	0	1.1	21	17.9	43.0	20.0
HC95-1949	44.0	27	2	1.2	19	15.8	42.7	20.9
HC95-2005	38.5	33	-2	1.1	19	14.3	42.9	20.3
HC95-2068	45.4	18	2	1.2	22	15.9	43.0	19.1
HC95-2154	45.3	21	1	1.2	23	17.4	42.4	20.3
HC95-4337	47.5	11	2	1.2	20	13.8	41.6	20.2

132.6 Days After Planting

PRELIMINARY TEST IVB, 1999

YIELD (bu/a)

Strain	Mean 9 Tests	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	48.0	68.4	67.2	56.8	43.3	26.1
KS4694 (L)	44.9	61.8	49.6	69.5	35.0	16.8
Macon (III)	48.9	64.2	70.4	68.4	28.7	21.1
K1452	48.3	66.7	65.5	67.7	49.6	23.5
K1453	45.9	60.7	68.1	60.4	42.1	20.9
K1454	52.9	71.0	62.5	76.4	45.5	25.6
K1455	48.4	58.7	64.9	58.4	42.6	23.8
K1456	47.5	65.8	64.4	77.4	38.7	15.7
K1457	51.4	65.9	65.2	69.3	42.6	26.9
K1458	48.2	67.4	59.8	71.1	42.2	25.7
K1459	52.7	60.6	73.0	65.3	47.4	32.9
K1460	48.0	59.4	61.1	66.9	38.8	28.1
LG96-1789	44.2	61.6	61.1	62.8	27.1	23.6
LG96-1797	45.1	60.4	58.0	62.3	28.6	32.0
LG96-3089	44.6	59.5	62.1	69.4	34.1	23.7
LS96-0735	43.6	58.3	56.8	61.9	36.2	24.2
Troll (dt1)	45.9	66.6	61.6	52.9	28.3	21.2
HC94-380	45.7	59.3	60.7	43.7	35.0	27.3
HC94-419	42.8	67.1	62.7	45.1	19.7	22.2
HC95-257PR	43.4	52.5	65.5	42.3	18.0	29.8
HC95-260PR	44.3	64.5	61.6	45.4	25.4	25.6
HC95-262PR	45.7	66.2	65.7	46.3	20.8	21.0
HC95-727	45.4	65.8	60.6	50.2	28.9	23.2
HC95-830	45.5	65.2	68.1	41.2	26.2	23.6
HC95-933	48.8	59.8	70.7	58.3	23.8	19.3
HC95-1277	45.4	71.4	65.9	47.8	34.2	20.1
HC95-1347	42.1	56.1	67.5	37.0	20.7	20.8
HC95-1597	42.9	66.6	71.2	24.7	38.3	20.5
HC95-1949	44.0	64.2	68.2	37.6	21.7	22.7
HC95-2005	38.5	58.3	56.6	19.6	13.4	18.6
HC95-2068	45.4	63.4	65.7	53.5	18.8	25.6
HC95-2154	45.3	62.2	67.9	48.5	25.8	22.3
HC95-4337	47.5	63.3	65.1	43.3	30.8	30.0
C.V. (%)		9.1	9.2	11.8	6.7	17.0
L.S.D. (5%)		11.7	12.0	13.0	4.4	6.8
Row Sp. (In.)		30	30	26	30	15
Rows/Plot		4	4	4	4	6
Reps		2	2	2	2	2

PRELIMINARY TEST IVB, 1999

YIELD (bu/a)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	28.1	22.0	58.2	62.3
KS4694 (L)	41.3	16.1	64.7	49.5
Macon (III)	35.4	26.7	62.0	63.0
K1452	33.4	10.5	59.9	57.5
K1453	32.8	19.5	46.4	62.5
K1454	43.6	24.3	62.9	64.7
K1455	38.1	30.4	54.8	64.1
K1456	38.1	20.1	55.2	51.8
K1457	40.2	27.7	62.5	62.4
K1458	27.5	31.8	50.2	58.5
K1459	31.2	32.9	61.5	69.7
K1460	40.7	28.1	52.3	56.3
LG96-1789	25.1	28.0	50.2	58.4
LG96-1797	38.2	25.1	52.9	48.5
LG96-3089	32.5	15.2	52.8	52.4
LS96-0735	43.1	17.7	48.1	45.8
Troll (dt1)	33.0	15.7	65.6	68.3
HC94-380	35.5	24.5	61.4	64.3
HC94-419	25.8	16.0	53.2	73.3
HC95-257PR	33.5	20.8	57.5	70.8
HC95-260PR	33.2	11.2	53.7	78.1
HC95-262PR	36.8	25.3	54.8	74.8
HC95-727	29.3	19.1	62.8	68.8
HC95-830	30.7	22.0	64.2	68.5
HC95-933	34.9	30.0	63.9	78.9
HC95-1277	29.6	14.1	53.3	72.4
HC95-1347	30.3	15.4	59.1	72.4
HC95-1597	24.7	19.4	53.1	67.9
HC95-1949	35.0	30.4	51.9	64.1
HC95-2005	29.3	26.4	49.2	75.1
HC95-2068	31.1	29.1	57.7	63.7
HC95-2154	33.0	26.7	57.7	63.7
HC95-4337	35.6	28.4	64.1	67.2
C.V. (%)	18.8	10.4	10.2	10.6
L.S.D. (5%)	ns	4.8	ns	13.8
Row Sp. (In.)	24	30	15	7.5
Rows/Plot	4	4	6	8
Reps	2	2	2	2

PRELIMINARY TEST IVB, 1999

YIELD RANK

Strain	Yield Rank	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	9	3	10	17	4	8
KS4694 (L)	23	20	33	4	13	32
Macon (III)	4	15	4	7	19	24
K1452	7	6	14	8	1	18
K1453	13	22	6	14	8	26
K1454	1	2	21	2	3	10
K1455	6	29	18	15	5	14
K1456	11	11	19	1	10	33
K1457	3	10	16	6	5	7
K1458	8	4	29	3	7	9
K1459	2	23	1	10	2	1
K1460	9	27	25	9	9	5
LG96-1789	26	21	25	11	22	16
LG96-1797	22	24	30	12	20	2
LG96-3089	24	26	22	5	16	15
LS96-0735	28	30	31	13	12	13
Troll (dt1)	13	8	23	19	21	23
HC94-380	15	28	27	26	13	6
HC94-419	31	5	20	25	30	22
HC95-257PR	29	33	14	28	32	4
HC95-260PR	25	14	23	24	25	10
HC95-262PR	15	9	12	23	28	25
HC95-727	18	11	28	20	18	19
HC95-830	17	13	6	29	23	16
HC95-933	5	25	3	16	26	30
HC95-1277	18	1	11	22	15	29
HC95-1347	32	32	9	31	29	27
HC95-1597	30	7	2	32	11	28
HC95-1949	27	15	5	30	27	20
HC95-2005	33	30	32	33	33	31
HC95-2068	18	17	12	18	31	10
HC95-2154	21	19	8	21	24	21
HC95-4337	11	18	17	27	17	3

PRELIMINARY TEST IVB, 1999

YIELD RANK

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	29	18	14	24
KS4694 (L)	3	26	2	31
Macon (III)	12	11	9	21
K1452	16	33	12	27
K1453	20	22	33	22
K1454	1	17	6	15
K1455	7	3	19	17
K1456	7	21	18	30
K1457	5	10	8	23
K1458	30	2	29	25
K1459	22	1	10	9
K1460	4	8	27	28
LG96-1789	32	9	29	26
LG96-1797	6	15	25	32
LG96-3089	21	30	26	29
LS96-0735	2	25	32	33
Troll (dt1)	18	28	1	12
HC94-380	11	16	11	16
HC94-419	31	27	23	5
HC95-257PR	15	20	17	8
HC95-260PR	17	32	21	2
HC95-262PR	9	14	19	4
HC95-727	27	24	7	10
HC95-830	24	18	3	11
HC95-933	14	5	5	1
HC95-1277	26	31	22	6
HC95-1347	25	29	13	6
HC95-1597	33	23	24	13
HC95-1949	13	3	28	17
HC95-2005	27	13	31	3
HC95-2068	23	6	15	19
HC95-2154	18	11	15	19
HC95-4337	10	7	4	14

PRELIMINARY TEST IVB, 1999

MATURITY (date)

Strain	Mean 9 Tests	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	09/22	09/26	09/25	09/18	10/07	09/12
KS4694 (L)	8.2	11	7	11	6	+11
Macon (III)	-1.2	0	-2	-1	-4	+4
K1452	1.6	4	0	5	1	+6
K1453	5.2	10	6	7	4	+11
K1454	4.2	9	4	5	1	+8
K1455	0.9	6	1	0	1	+6
K1456	8.5	12	7	16	4	+10
K1457	3.1	6	3	2	1	+8
K1458	3.7	7	5	4	1	+9
K1459	2.7	5	4	2	2	+9
K1460	5.1	9	6	9	1	+10
LG96-1789	-0.9	1	-3	-3	-7	+3
LG96-1797	-1.1	1	-5	-3	-7	+5
LG96-3089	0.7	5	4	4	1	+2
LS96-0735	5.6	6	5	8	2	+8
Troll (dt1)	1.4	2	-2	2	-2	+3
HC94-380	2.2	5	2	3	-2	+2
HC94-419	1.3	4	-1	1	-5	+4
HC95-257PR	-0.6	2	0	-3	-7	0
HC95-260PR	-1.6	1	-4	-4	-7	-2
HC95-262PR	-1.6	2	-1	-3	-7	+2
HC95-727	2.4	4	3	2	-3	+7
HC95-830	2.0	4	2	3	-4	+6
HC95-933	1.0	5	2	0	-6	-3
HC95-1277	-0.1	1	0	-2	-3	-3
HC95-1347	0.8	4	-1	0	-4	-2
HC95-1597	-0.3	3	-1	-2	-3	+2
HC95-1949	2.1	7	3	0	-5	+5
HC95-2005	-1.9	1	-5	-3	-7	+3
HC95-2068	1.9	4	4	2	-8	+5
HC95-2154	1.3	1	3	-3	-3	+4
HC95-4337	2.1	5	2	2	-5	+4
Date Planted	5/13	05/27	05/04	05/03	05/28	05/12
Days to Mature	133	122	144	138	132	123

PRELIMINARY TEST IVB, 1999

MATURITY (date)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	10/02	09/17	09/15	09/22
KS4694 (L)	9	2	13	16
Macon (III)	1	-3	-4	2
K1452	0	-2	0	6
K1453	3	3	6	8
K1454	4	1	5	9
K1455	0	0	-1	2
K1456	10	2	13	13
K1457	5	1	3	8
K1458	3	0	7	7
K1459	0	1	3	8
K1460	6	-3	9	9
LG96-1789	-1	-3	2	6
LG96-1797	0	-3	2	5
LG96-3089	1	-7	-1	-1
LS96-0735	6	3	8	12
Troll (dt1)	1	1	6	5
HC94-380	3	-2	5	6
HC94-419	2	1	2	8
HC95-257PR	1	0	0	2
HC95-260PR	-1	0	-2	3
HC95-262PR	0	-4	-3	2
HC95-727	5	1	3	7
HC95-830	1	1	4	7
HC95-933	5	-5	1	8
HC95-1277	1	-4	0	6
HC95-1347	0	-1	4	6
HC95-1597	1	-2	-2	3
HC95-1949	4	-3	5	8
HC95-2005	0	-4	0	1
HC95-2068	1	1	6	8
HC95-2154	4	0	4	6
HC95-4337	3	0	5	7
Date Planted	06/04	05/03	05/02	05/04
Days to Mature	120	137	136	141

PRELIMINARY TEST IVB, 1999

LODGING (score)

Strain	Mean 9 Tests	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	1.2	1.0	1.3	1.0	1.0	1.0
KS4694 (L)	1.3	1.0	1.5	1.0	1.0	1.0
Macon (III)	1.4	1.0	1.5	1.0	2.5	1.0
K1452	1.1	1.0	1.0	1.0	1.0	1.0
K1453	1.6	1.0	2.5	1.0	2.0	1.0
K1454	1.4	1.0	1.5	1.0	2.0	1.0
K1455	1.3	1.0	1.3	1.0	1.5	1.0
K1456	1.4	1.0	2.0	1.5	1.5	1.0
K1457	1.3	1.0	1.5	1.0	1.0	1.0
K1458	1.4	1.0	1.7	1.3	1.5	1.0
K1459	1.4	1.0	2.2	1.0	1.0	1.0
K1460	1.8	1.3	4.0	1.3	1.5	1.0
LG96-1789	1.5	1.0	2.3	1.0	1.5	1.0
LG96-1797	1.7	1.0	2.5	1.5	1.5	1.0
LG96-3089	1.9	2.5	3.2	1.5	1.5	1.0
LS96-0735	1.3	1.0	1.8	1.0	1.0	1.0
Troll (dt1)	1.1	1.0	1.0	1.0	1.0	1.0
HC94-380	1.1	1.0	1.0	1.0	1.0	1.0
HC94-419	1.2	1.0	1.5	1.0	1.0	1.0
HC95-257PR	1.1	1.0	1.0	1.0	1.0	1.0
HC95-260PR	1.1	1.0	1.0	1.0	1.0	1.0
HC95-262PR	1.1	1.0	1.0	1.0	1.0	1.0
HC95-727	1.1	1.0	1.0	1.0	1.0	1.0
HC95-830	1.2	1.0	1.0	1.0	1.0	1.0
HC95-933	1.3	1.0	1.0	1.0	1.0	1.0
HC95-1277	1.2	1.0	1.0	1.0	1.0	1.0
HC95-1347	1.2	1.0	1.0	1.0	1.0	1.0
HC95-1597	1.1	1.0	1.0	1.0	1.0	1.0
HC95-1949	1.2	1.0	1.0	1.0	1.0	1.0
HC95-2005	1.1	1.0	1.0	1.0	1.0	1.0
HC95-2068	1.2	1.0	1.0	1.0	1.0	1.0
HC95-2154	1.2	1.0	1.0	1.0	1.0	1.0
HC95-4337	1.2	1.0	1.0	1.0	1.0	1.0

PRELIMINARY TEST IVB, 1999

LODGING (score)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	2.3	1.0	1.1	1.0
KS4694 (L)	2.0	1.0	1.7	1.5
Macon (III)	2.5	1.0	1.1	1.0
K1452	2.0	1.0	1.3	1.0
K1453	2.8	1.0	1.7	1.5
K1454	2.3	1.0	1.2	1.5
K1455	2.5	1.0	1.3	1.3
K1456	2.0	1.0	1.8	1.0
K1457	2.3	1.0	1.3	1.5
K1458	2.3	1.0	1.6	1.0
K1459	2.5	1.0	1.3	2.0
K1460	2.8	1.0	1.8	1.5
LG96-1789	2.0	1.0	1.6	1.8
LG96-1797	2.5	1.0	2.4	1.5
LG96-3089	2.8	1.0	1.4	1.8
LS96-0735	2.3	1.0	1.2	1.0
Troll (dt1)	2.0	1.0	1.1	1.0
HC94-380	1.5	1.0	1.1	1.0
HC94-419	1.5	1.0	1.5	1.0
HC95-257PR	1.3	1.0	1.2	1.0
HC95-260PR	1.3	1.0	1.3	1.0
HC95-262PR	1.5	1.0	1.2	1.0
HC95-727	1.5	1.0	1.1	1.0
HC95-830	2.3	1.0	1.1	1.0
HC95-933	2.8	1.0	1.3	1.3
HC95-1277	2.5	1.0	1.4	1.0
HC95-1347	2.3	1.0	1.1	1.3
HC95-1597	1.5	1.0	1.1	1.3
HC95-1949	2.5	1.0	1.2	1.3
HC95-2005	1.5	1.0	1.1	1.0
HC95-2068	2.3	1.0	1.3	1.3
HC95-2154	2.0	1.0	1.4	1.0
HC95-4337	2.0	1.0	1.2	1.5

PRELIMINARY TEST IVB, 1999

PLANT HEIGHT (inches)

Strain	Mean 9 Tests	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	31	39	31	33	31	27
KS4694 (L)	35	42	42	36	34	28
Macon (III)	32	40	35	36	34	28
K1452	30	40	34	34	33	26
K1453	35	44	39	37	37	31
K1454	35	45	39	36	37	33
K1455	32	36	38	33	35	29
K1456	35	46	42	39	37	28
K1457	34	43	38	35	36	28
K1458	36	45	43	39	38	31
K1459	34	41	39	36	40	29
K1460	36	47	41	36	39	30
LG96-1789	28	33	34	29	19	28
LG96-1797	28	33	29	33	21	31
LG96-3089	33	41	36	37	33	29
LS96-0735	35	44	38	41	33	29
Troll (dt1)	22	28	25	18	15	22
HC94-380	20	21	24	16	15	21
HC94-419	21	26	26	19	13	20
HC95-257PR	20	23	24	15	10	22
HC95-260PR	20	25	24	17	12	19
HC95-262PR	21	23	25	16	13	22
HC95-727	20	25	23	15	13	17
HC95-830	19	21	24	15	10	20
HC95-933	22	25	25	19	13	24
HC95-1277	23	28	32	19	14	20
HC95-1347	20	22	26	16	11	18
HC95-1597	21	24	24	15	13	21
HC95-1949	19	22	25	16	12	20
HC95-2005	19	20	24	15	9	21
HC95-2068	22	26	24	20	13	23
HC95-2154	23	29	28	19	13	23
HC95-4337	20	22	25	15	12	20

PRELIMINARY TEST IVB, 1999

PLANT HEIGHT (inches)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	24	23	34	34
KS4694 (L)	25	24	37	43
Macon (III)	23	25	34	35
K1452	22	18	34	33
K1453	25	24	39	36
K1454	22	28	38	35
K1455	25	27	36	33
K1456	24	27	37	35
K1457	24	25	35	41
K1458	24	27	39	41
K1459	23	29	36	35
K1460	27	26	38	37
LG96-1789	21	25	32	36
LG96-1797	19	25	32	34
LG96-3089	25	23	36	35
LS96-0735	28	26	37	39
Troll (dt1)	18	21	25	27
HC94-380	16	17	27	26
HC94-419	15	18	26	28
HC95-257PR	15	18	26	26
HC95-260PR	16	18	24	24
HC95-262PR	15	19	28	24
HC95-727	18	17	25	25
HC95-830	16	17	28	25
HC95-933	22	15	33	27
HC95-1277	19	15	29	27
HC95-1347	14	18	23	29
HC95-1597	18	15	29	27
HC95-1949	14	18	22	24
HC95-2005	17	19	24	23
HC95-2068	19	21	30	26
HC95-2154	19	18	30	26
HC95-4337	16	18	26	30

PRELIMINARY TEST IVB, 1999

SEED SIZE (g/100)

Strain	Mean 9 Tests	Belleville IL	Urbana IL	Butlerville IN	Manhattan KS	Lexington KY
HS93-4118 (IV)	15.7	15.7	15.7	16.0	17.0	14.4
KS4694 (L)	15.6	14.4	17.1	14.7	16.5	12.6
Macon (III)	15.4	15.7	16.7	15.1	17.1	14.0
K1452	15.6	15.3	16.3	15.7	17.0	13.7
K1453	16.9	16.9	16.3	18.4	18.7	13.8
K1454	14.9	14.6	14.5	14.6	15.5	14.1
K1455	16.8	17.4	16.0	17.3	17.6	13.3
K1456	14.5	14.4	14.0	14.0	16.1	13.0
K1457	16.7	15.9	17.3	16.1	17.7	15.9
K1458	15.8	16.2	16.4	16.2	17.0	13.2
K1459	15.2	13.7	16.1	14.8	15.0	12.8
K1460	13.4	12.9	13.9	13.0	13.0	12.0
LG96-1789	14.1	14.8	12.3	14.4	15.4	14.3
LG96-1797	14.7	14.9	12.6	15.1	16.1	15.0
LG96-3089	14.7	15.3	15.1	15.1	17.6	11.7
LS96-0735	14.9	14.2	15.8	13.4	15.5	14.4
Troll (dt1)	15.7	16.9	15.7	15.9	18.7	13.7
HC94-380	16.8	17.8	17.5	16.1	19.6	13.9
HC94-419	16.9	16.9	17.7	19.5	17.6	13.4
HC95-257PR	14.5	16.1	14.2	14.5	15.8	11.8
HC95-260PR	14.9	15.5	14.8	15.7	15.0	12.8
HC95-262PR	14.3	15.7	14.0	14.5	16.2	11.1
HC95-727	16.7	18.0	18.4	16.8	17.0	13.0
HC95-830	13.3	14.0	13.5	15.1	15.4	11.3
HC95-933	14.8	15.1	14.9	14.5	15.4	14.5
HC95-1277	15.3	16.3	16.9	15.1	16.0	12.8
HC95-1347	13.5	13.7	12.8	14.9	14.9	11.7
HC95-1597	17.9	19.7	18.2	20.9	21.0	13.0
HC95-1949	15.8	17.1	15.4	17.7	17.1	13.5
HC95-2005	14.3	15.0	13.7	16.6	15.4	12.5
HC95-2068	15.9	16.7	17.1	16.8	15.7	13.3
HC95-2154	17.4	18.5	18.2	19.5	19.5	12.6
HC95-4337	13.8	13.8	14.5	14.2	14.9	13.6

PRELIMINARY TEST IVB, 1999

SEED SIZE (g/100)

Strain	Queenstown MD	Columbia MO	Mt. Orab OH	South Charleston OH
HS93-4118 (IV)	16.4	15.0	17.8	13.5
KS4694 (L)	17.1	13.0	18.3	16.4
Macon (III)	16.0	12.0	17.0	15.1
K1452	16.5	13.0	18.4	14.8
K1453	18.2	14.0	19.7	16.2
K1454	15.6	12.0	18.6	14.6
K1455	16.4	16.0	20.0	17.1
K1456	16.0	11.0	17.6	14.7
K1457	17.1	15.0	20.7	14.9
K1458	16.1	13.0	18.1	15.7
K1459	14.6	15.0	18.2	16.5
K1460	14.4	12.0	15.8	13.2
LG96-1789	13.2	12.0	17.0	13.7
LG96-1797	14.5	12.0	17.2	14.5
LG96-3089	14.0	12.0	17.4	14.5
LS96-0735	15.3	12.0	16.9	16.5
Troll (dt1)	14.9	14.0	17.0	14.9
HC94-380	16.0	15.0	18.4	17.2
HC94-419	15.6	16.0	18.0	17.2
HC95-257PR	13.8	15.0	15.6	13.3
HC95-260PR	13.8	16.0	15.6	14.6
HC95-262PR	14.0	14.0	15.8	13.7
HC95-727	16.8	14.0	19.2	17.2
HC95-830	12.9	11.0	14.1	12.2
HC95-933	15.0	12.0	17.5	13.9
HC95-1277	14.2	15.0	16.5	14.9
HC95-1347	12.0	13.0	15.6	12.6
HC95-1597	16.5	16.0	18.0	17.9
HC95-1949	15.0	14.0	17.3	15.4
HC95-2005	12.1	14.0	15.6	13.8
HC95-2068	13.8	15.0	19.1	15.7
HC95-2154	16.4	16.0	19.4	16.8
HC95-4337	12.6	13.0	15.3	12.7

PRELIMINARY TEST IVB, 1999

PROTEIN (%)

Strain	Mean 3 Tests	Urbana IL	Butlerville IN	Mt. Orab OH
HS93-4118 (IV)	41.3	42.4	40.3	41.2
KS4694 (L)	41.8	43.1	40.6	41.8
Macon (III)	41.1	42.7	40.1	40.5
K1452	43.5	44.9	41.8	43.8
K1453	42.9	44.4	41.4	43.0
K1454	42.0	44.0	39.9	42.1
K1455	42.6	44.1	41.0	42.7
K1456	41.6	42.8	39.6	42.5
K1457	43.2	44.6	41.5	43.4
K1458	42.2	44.5	39.9	42.2
K1459	41.6	43.6	39.7	41.6
K1460	42.3	44.9	40.3	41.6
LG96-1789	43.1	45.2	40.5	43.6
LG96-1797	41.7	44.2	39.0	42.0
LG96-3089	42.7	44.3	40.4	43.4
LS96-0735	44.0	44.1	42.4	45.6
Troll (dt1)	40.2	41.2	38.8	40.5
HC94-380	41.5	42.7	40.0	41.9
HC94-419	42.7	44.0	41.7	42.4
HC95-257PR	41.2	43.0	39.8	40.8
HC95-260PR	40.9	41.4	40.1	41.2
HC95-262PR	41.4	43.0	39.5	41.8
HC95-727	43.3	44.5	40.8	44.6
HC95-830	40.7	41.8	39.3	41.0
HC95-933	42.8	44.0	41.0	43.4
HC95-1277	42.1	43.1	40.0	43.3
HC95-1347	40.8	41.5	40.6	40.4
HC95-1597	43.0	43.9	42.1	43.0
HC95-1949	42.7	43.3	42.0	42.8
HC95-2005	42.9	43.1	43.1	42.4
HC95-2068	43.0	44.8	41.8	42.4
HC95-2154	42.4	43.1	41.7	42.4
HC95-4337	41.6	40.8	41.4	42.5

PRELIMINARY TEST IVB, 1999

OIL (%)

Strain	Mean 3 Tests	Urbana IL	Butlerville IN	Mt. Orab OH
HS93-4118 (IV)	19.5	18.7	20.2	19.7
KS4694 (L)	19.7	19.2	20.3	19.7
Macon (III)	20.4	19.3	20.9	20.9
K1452	19.5	18.4	20.3	19.7
K1453	19.9	19.2	20.8	19.8
K1454	19.8	18.9	20.5	19.9
K1455	19.4	18.4	20.2	19.7
K1456	19.8	19.2	20.7	19.4
K1457	19.2	17.9	20.1	19.5
K1458	19.4	17.9	19.9	20.4
K1459	19.8	18.4	20.8	20.3
K1460	19.4	18.1	20.2	19.9
LG96-1789	17.7	16.1	18.9	18.2
LG96-1797	19.1	17.9	20.7	18.6
LG96-3089	19.6	18.9	20.2	19.7
LS96-0735	19.6	19.4	19.9	19.4
Troll (dt1)	21.1	20.6	21.4	21.4
HC94-380	20.7	20.3	21.0	20.8
HC94-419	20.4	19.8	20.8	20.6
HC95-257PR	19.9	19.1	20.6	20.1
HC95-260PR	19.8	18.9	20.5	20.1
HC95-262PR	19.9	19.0	20.3	20.3
HC95-727	20.4	19.6	21.5	20.0
HC95-830	20.5	20.0	20.7	20.9
HC95-933	19.9	19.5	20.1	20.1
HC95-1277	20.5	19.8	21.2	20.6
HC95-1347	20.3	19.5	20.6	20.8
HC95-1597	20.0	19.3	20.3	20.3
HC95-1949	20.9	20.1	21.3	21.2
HC95-2005	20.3	19.9	20.3	20.7
HC95-2068	19.1	18.1	19.4	19.7
HC95-2154	20.3	19.6	20.8	20.6
HC95-4337	20.2	20.0	20.4	20.1

