THE UNIFORM SOYBEAN TESTS

NORTHERN REGION

1993

Coordinated by:

J. R. Wilcox, USDA-ARS
Agronomy Department
Rm 2-310 Lilly Hall, Purdue University
West Lafayette, Indiana 47907-1150
Tel. (317) 494-8074 Office
(317) 494-6508 FAX
(317) 583-2952 Lab.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

The cooperation of Warren E. Rayford and Donna I. Thomas, Analytical Chemistry Support Unit, National Center for Agricultural Utilization Research, Peoria, Illinois, in their analyses of Uniform Test samples for protein and oil content of the seeds is gratefully acknowledged. The assistance of Wad Crochet, Gary Nowling, and Jerry Powell in packeting and distributing seed for the Uniform Tests and in data summarization is sincerely appreciated.

UNIFORM TEST PARTICIPANTS - 1993

G. R. Ablett
Ridgetown College ~~of~~
Agricultural Technology
Ridgetown, Ontario, Canada
Ph. 519-674-5456 Ext. 240

T.S. Abney, USDA-ARS
Dept. of Botany & Plant Pathology
Purdue University
West Lafayette, IN 47907
Ph. 317-494-9859

S. Anand
University of Missouri
Delta Research Center
Portageville, MO 63873
Ph. 314-379-5431

R. D. Brigham
Texas Agricultural Experiment Station
Route #3, Box 219
Lubbock, TX 79401
Ph. 806-746-6101

R. I. Buzzell
Agriculture Canada Research Station
Harrow, Ontario, Canada NOR 1GO
Ph. 519-738-2251

S. Cianzio
Department of Agronomy
Iowa State University
Ames, Iowa 50011
Ph. 515-294-6853 Iowa State
809-830-2390 Puerto Rico

R. L. Cooper, USDA-ARS
OARDC - OSU
1680 Madison Avenue
Wooster, OH 44691
Ph. 216-263-3875

P. B. Cregan USDA-ARS
Nit. Fix. and Soy. Gen. Lab.
Range 1, HH 19, BARC West
Beltsville, MD 20705
Ph. 301-344-1723

B. Diers
Crop Science Research Farm
Michigan State University
East Lansing, MI 48824
Ph. 517-355-2287

W. R. Fehr
Department of Agronomy, Room 1212
Iowa State University
Ames, IA 50011
Ph. 515-294-6865

R. Fioritto
Department of Agronomy
O.A.R.D.C.
Wooster, OH 44691
Ph. 216-263-3700

P. Gibson
Plant and Soil Science Dept.
Southern Illinois University
Carbondale, IL 62901
Ph. 618-453-~~1778~~ 2416

P. Gostovic
Dept. of Crop Science
University of Guelph
Guelph, Ontario, Canada N1G 2W1
Ph. 519-824-4120 Ext. ~~8508~~

G. L. Graef
319 Keim Hall
University of Nebraska
Lincoln, NE 68583
Ph. 402-472-~~1537~~

E. T. Gritton
Department of Agronomy
University of Wisconsin
1575 Linden Drive
Madison, WI 53706
Ph. 608-262-9539

T. Helms
333 Walster Hall
North Dakota State University
Fargo, ND 58105
Ph. 701-237-8136

~~J~~. R. Justin
Crop Science Department
Lipman Hall, Cook College
New Brunswick, NJ 08903
Ph. 908-932-9872

W. J. Kenworthy
Department of Agronomy
University of Maryland
College Park, MD 20742
Ph. 301-405-1324

UNIFORM TEST PARTICIPANTS - 1993

O. Myers, Jr.
Department of Plant & Soil Science
Southern Illinois University
Carbondale, IL 62901
Ph. 618-453-2496

C. D. Nickell
Turner Hall - Agronomy
1102 South Goodwin Street
University of Illinois
Urbana, IL 61801
Ph. 217-333-9461

J. H. Orf
Department of Agronomy
University of Minnesota
St. Paul, MN 55108
Ph. 612-625-8275 Office
612-625-9263 Lab.

Phil Owen
Research Support Service
3600 New Haven Road
Columbia, MO 65201
Ph. 314-882-4450

T. W. Pfeiffer
Department of Agronomy
N106 Agric. Sci. Bldg North
University of Kentucky
Lexington, KY 40546
Ph. 606-257-4678

R. Ruff
Plant Pathology Department
Rm 351 Bessey Hall
Ames, IA 50011
Ph. 515-294-8826

W. T. Schapaugh, Jr.
Agronomy Department
Throckmorton Hall
Kansas State University
Manhattan, KS 66506
Ph. 913-532-7242

M. Schmidt
Department of Plant and Soil Science
Southern Illinois University
Carbondale, IN 62901
Ph. 618-453-2496

A. F. Schmitthenner
OARDC - OSU
Department of Plant Pathology
Wooster, OH 44691
Ph. 216-263-3847

Roy Scott
SDSU — Plant Science Department
Box 2140C ~~South Dakota State University~~
Brookings, SD 57007
Ph. 605-688-4749

S. K. St. Martin
Department of Agronomy
2021 Coffey Road
Columbus, OH 43210
Ph. 614-292-8499

R. Uniatowski
Plant Science Department
University of Delaware
Newark, DE 19717
Ph. 302-831-2531

H. D. Voldeng
Agriculture Canada
Plant Research Centre, Building 12
Ottawa Research Station
Ottawa, Ontario, Canada KIA 0C6
Ph. 613-995-3700, Ext. 7653 or 7654

J. O. Yocum
Southeastern Field Research Lab.
P. O. Box 308
Landisville, PA 17538
Ph. 717-653-4728

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 for the northern fringe of the present area of soybean production. Uniform Tests 0 through IV include later 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. 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 separately.

Data from the Uniform Soybean Tests form 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 at a limited number of locations for one year before they are entered in the Uniform Tests. Uniform Tests are grown at a larger number of 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 Soybean 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 testing purposes only and may not be distributed to non-participants in the test without the approval of the originator of the entry.

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

3) The originator of a Uniform Test entry must be contacted prior to the use of any entry 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 labelled "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 Test are released according to USDA-Agricultural Research Service and State Agricultural Experiment Station or Canadian government policies.

2) Any state or province participating in the Uniform Test is offered the opportunity to participate in the release of any Uniform Test entry proposed for release.

3) Entries may be released on a restricted basis or on a contractual basis only after Uniform Test participants have been offered the opportunity to participate in the release of the entry.

4) Restricted or contractual releases cannot impose any restrictions on the prior use of an entry as a parent by Uniform Test participants.

STRAIN DESIGNATION

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 experimental station agronomists cooperating with the U.S. Department of Agriculture.

A	Iowa A.E.S. (AC - S. Cianzio, AM - L. Mansur)
Ar	Arizona A.E.S.
Au	Alabama A.E.S.
B	California
C	Purdue (Indiana) A.E.S.
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, U.S.D.A.
Ga	Georgia A.E.S.
H	Ohio A.R.D.C. (HC - R. L. Cooper, HM - B. A. McBlain, HF -R. Fioritto, HS - S. K. St. Martin)
K	Kansas A.E.S.
Ky	Kentucky A.E.S.
L	Illinois A.E.S. (L - R. L. Bernard, LG - R. Nelson, LL - S. M. Lim, LN - C. D. Nickell)
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
Ok	Oklahoma A.E.S.
ORC	Ridgetown College, Ontario
OT	Central Experimental Farm, Ottawa, Ontario
OX	Research Station, Harrow, Ontario
PI	Plant Inventory
R	Arkansas A.E.S.
S	Missouri A.E.S. (SO - P. Owen)
SC	South Carolina A.E.S.
SD	South Dakota A.E.S.
SL	Two or more states cooperatively
Ts	Texas A:E.S.
T	Soybean Genetic Type Collection, U.S.D.A., 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.

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 (the center rows harvested) with two replications. Usually 15 to 20 feet of row are planted and 12 to 16 feet harvested, to eliminate end-of-row effects. At the Soybean Workers Conference in Memphis, Tennessee, on February 24 and 25, 1976, the Northern Breeders discussed and made the following recommendation: Only data from bordered row plots will be included in the regional means. Yield means will not be included in regional means if they do not have a CV value. Discretion will be used when including values that have a high CV. If the CV value is high (greater than 15), participants should include the reason, such as disease or environmental conditions. Lines will be allowed to be heterogeneous the first year in the Uniform Soybean Tests but must be a pure line the second year of testing. It is up to the breeder to clean up heterogeneous lines. If the breeder plans on purifying the line, please so indicate, and the line will be marked so when test participants vote on it for further testing they will know it will be purified.

Generation Composited is the generation after the final single-plant selection in which the line is composited.

Previous Testing. The number of previous years in the same Uniform Test is given, or, in the case of new entries, a reference to last year's test, abbreviated UT 0 for Uniform Test 0, PT III for Preliminary Test III, etc.

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. 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 on the maturity table for each test. Current reference and check varieties and the maturity group limits relative to the reference varieties are:

Group	Reference	Range	Early Check	Late Check
00	McCall	-7 to +5		Agassiz (L)
0	Lambert	-6 to +2	Agassiz (00)	Parker (I)
I	Parker	-4 to +4	Lambert (0)	Sturdy (L)
II	Kenwood	-4 to +4	Sturdy (I)	IA2007 (L)
III	Resnik	-4 to +4	IA2007 (II)	Flyer (IV)
IV	Spencer	-4 to +7	Flyer (E)	K1191 (L)

These maturity group ranges are based on long-time 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.

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°), 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 plants from the ground to the tip of the main stem at the time of maturity. (To convert to centimeters, multiply by 2.54).

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

1 Very Good 2 Good 3 Fair 4 Poor 5 Very Poor

Seed Size (i.e., weight per seed) in grams per 100 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 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 using near infrared transmittance, and reported on moisture-free basis.

Descriptive Code: 1 2 3 4 5 6, abbreviated as underlined below:

1 = Flower Color: Purple, White
2 = Pubescence Color: Tawny, Gray, Light tawny
3 = Pod Color: Brown, Tan
4 = Seed Coat Luster: Dull, Shiny, Intermediate
5 = Seed Coat Color: Yellow, Gray, Light gray, Green
6 = Hilum Color: Black, Imperfect black, Brown, Buff, Gray, Tan, Yellow; prefixes indicate Light or Dark shades, e.g., Lbf = light buff, Dib = dark imperfect black.
7 = Stem termination: Determinate, Indeterminate, Semi-Determinate

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

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

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

Emergence Score is related to hypocotyl elongation and is measured at Ames, Iowa by germination at 25°C (a critical temperature for differentiating strains). Four replications of 25 seeds/entry are planted in a 5-inch plastic pot, at a 4 1/2 - inch depth in sand. Only the seedlings which have emerged by 12 days after planting are counted. Emergence score in relation to % of seeds which germinate and emerge are as follows:

1 $\geq$ 95%
2 = 91 - 95%
3 = 85 - 90%
4 = 76 - 84%
5 < 76

DISEASE

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

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

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

Abbreviation	Disease	Pathogen
BB	Bacterial blight	*Pseudomonas syringa* pv. *glycinea*
BBV	Bud blight	Tobacco ringspot virus
BP	Bacterial pustule	*Xanthomonas campestris* pv. *phaseoli*
BS	Brown spot	*Septoria glycines*
BSR	Brown stem rot	*Phialophora gregata*
BTS	Bacterial tan spot	*Corynebacterium flaccumfaciens*
CN	Cyst nematode	*Heterodera glycines*
CR	Charcoal rot	*Macrophomina phaseolina*
DM	Downy mildew	*Peronospora manshurica*
FE_1, FE_2	Frogeye, race 1, 2	*Cercospora sojina*
PM	Powdery mildew	*Microsphaera diffusa*
PR	Phytophthora rot	*Phytophthora megasperma* f. sp. *glycinea*
PS	Purple stain	*Cercospora kikuchii*
PSB	Pod & stem blight	*Diaporthe phaseolorum* var. *sojae*
Pyd	Pythium root rot	*Pythium debaryanum*
Pyu	Pythium root rot	*Pythium ultimum*
RK	Root knot nematode	*Meloidogyne spp.*
RP	Rhizoctonia root rot	*Rhizoctonia solani*
SB	Sclerotial blight	*Sclerotium rolfsii*
SC	Stem canker	*Diaporthe phaseolorum* var. *caulivora*
SDS	Sudden Death Syndrome	*Fusarium solani*
SMV	Soybean mosaic	*Soja* virus 1
TS	Target spot	*Corynespora cassiicola*
WF	Wildfire	*Pseudomonas syringae* pv. *tabaci*
YMV	Yellow mosaic	*Phaseolus* virus 2

Ratings for BB, BP, DM, FE_2, and PM are based on leaf symptoms; those for BSR on percent of plants with stem browning, or percent of stem length browned.

Tolerance rating categories for Phytophthora are as follows:
1 = No root rot, very vigorous.
2 = No root rot, better than average vigor.
3 = No root rot, average vigor.
4 = No root rot, slight stunting.
5 = Up to 10% dead plants, slight stunting.
6 = Up to 20% dead plants, moderate stunting.
7 = Up to 50% dead plants, moderate to severe stunting.
8 = More than 50% dead plants, severe stunting.
9 = All plants died before flowering.
10 = Plants did not emerge or died soon after emergence.

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

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 growth stage
R6DI - SDS Disease Incidence (% of plants with symptoms)
R6DS - SDS Disease Severity (1=mild yellow flecking, 5=severe leaf scorch, 9=premature plant death)
R6DX - SDS Disease indeX (R6DI x R6DS/9)

HYDROPONIC SENCOR TOLERANCE

Metribuzin tolerance tests were conducted by Miles Laboratories. Uniform test entries were evaluated for reaction to SENCOR in a hydroponics test. Entries were placed into one of three groups:
1) Above Normal Tolerance - strains consistently showing the greatest tolerance to SENCOR.
2) Normal Tolerance - strains showing good tolerance to SENCOR.
3) Sensitive - strains showing the least tolerance to SENCOR where use of SENCOR is not recommended

Within each tolerance group, strains were ranked according to their tolerance to metribuzin with tolerance decreasing from top to botton as strains moved down the list. Strains falling into the same vertical bracket showed equal tolerance. Commercial varieties with known tolerance were included as "marker" varieties to determine accuracy of the test. **The results are based on a single test and additional greenhouse/or field tests are recommended to accurately determine the tolerance of the strains to metribuzin.**

TOLERANT	NORMAL	NORMAL	NORMAL	SENSITIVE
HC87-173	A91-607052	OT92-9	U91-2316	CONRAD
HM9189	THORNE	ND88-597	K1235	A KENWOOD BC
RESNIK	HC88-1021	A91-607023	LN89-3615	SL91-0454M
FLYER	A MARCUS BC	U90-2310	HM9197	IA2008
C1832	M89-1006	U91-3516	HC88-4257	KENWOOD
M89-1635	A91-501023	M89-1074	KY88-1195	ORC9006
M89-1612	ORC9004	M89-643	K1236	ND89-1112
C1842	HC88-11	M87-731	HM9196	MAPLE RIDGE
CHARLESTON	ORC9002	AC90-115043	KY88-5037	ND86-22
HC89-50	ORC9203	SL89-1825	RIPLEY	OT92-2
LN89-764	M89-1743	McCALL	K1213	ND89-986
K1191	U91-3610	OT92-15	LN88-9883	ND88-800
	U91-3607	HC89-2241	LN89-1179	ND89-980
	SL89-1040	HC89-62	SPENCER	SL89-595
	HS90-3449	M89-1023	K1226	U91-2519
	HM9194	A91-701035	LS87-1311	
	OT92-14	HC89-2237	LS87-1123	
	M88-210	OT92-8	LS86-1922	
	SL89-314	U91-3133	U91-2527	
	MARCUS	STURDY	U91-2722	
	OT91-3	OT90-7	HS88-4905	
	M86-1322	AC HARMONY	DELSOY 4210	
	SL90-577	M88-84	MD88-5241	
	A91-702022	IA2007	HC89-2170	
	M87-1569	SL89-850	HC89-2207	
	K1230	M88-1	ORC9008	
	ND88-599	SL90-561	ORC9018	
	M86-356	LN88-10534	HM9143	
	K1232	ND88-709	HM9145	
	M89-74	A91-701007	HS89-5467	
	OT92-1	SL89-556	E91031	
	PARKER	SL89-111	M89-1644	
	M89-932	M89-1815	M89-1641	
	M89-198	SL91-3273N	ND89-997	
	LAMBERT	SL91-2856N	A91-501055	
	M89-1678	A91-607024	A CONRAD BC	
	SL90-576	A91-607032	SL91-1574M	
	M88-208	M88-77	ND89-512	
	M87-1621	SL88-621	K1231	
	M87-642	ND89-892		
	M88-207	SL88-686N		
	U91-3212	M89-358		
	A91-607053	HC86-3403		
	A91-501002	LN89-2546		
	AGASSIZ	K1237		
	OT92-4	K1233		
	ARCHER	HC85-2176		
	LN89-295	U91-2104		
	ORC9201	AM90-211003		

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 in 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 Agricultural Research Service, U.S. Department of Agriculture. The tests are divided into those in the Northern Region, for strains in maturity groups 00 to IV, and those in the Southern Region, for strains in maturity groups V to VIII. Group IV maturity strains are divided into a IV N test for the northern region and a IV S test for the southern region.

Public soybean breeders are encouraged to enter superior strains they develop into the Uniform Soybean Tests. Strains entered in these tests must have been evaluated by the breeder in a minimum of three environments of replicated yield tests. Strains developed by four or more backcrosses to a released cultivar may be entered without prior yield evaluations.

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 an 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 and with three or four replications. Lines developed by four or more backcrosses to a released cultivar may be entered directly in the UT without prior evaluation in the 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 generally 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 become 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.

Where 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 States Experiment Station's 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 from Dr. Howard J. Brooks, Assoc. Deputy Administrator for Plant Science, USDA, ARS, Bldg. 005, BARC-West, Beltsville, MD 20705 (Ph. 301-504-6252). The office for clearance of proposed names of new soybean cultivars is: Mr. James P. Triplett Chief, Seed Regulatore & Testing Branch Livestock and Seed Division, AMS/USDA, Bldg. 506, BARC-East, Belsville, MD 20705-2350 (phone 301-504-9430). The date for simultaneous publicity release on the new cultivar by participating states usually is August 1, but the date may be delayed until April 1 of the following year 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 for crossing if this distribution has not been made previously.

UNIFORM TEST STRAINS RELEASED IN 1993

Variety	Exp. Desig.	Uniform Test Evaluations
Bronson	C1804	SCN PT IV 1990, SCN IV 1991-1992 PT IV 1990, UT IV 1991-1992
Calhoun	Ky85-09073	PT IVB 1989, UT IV 1990
Colfax	U89-2035	PT IIB 1990, UT II 1991-1992
KS4694	K1191	PT IVB 1990, UT IV 1991-1993
Piatt	LN86-3357	PT IIIA 1990, UT III 1991-1992
Saline	LN87-2235	SCN PT III 1990, SCN III 1991-1992
Sandusky	HS88-4908	PT IIA 1990, UT III 1991
Vertex	HS88-4905	PT IIA 1990, UT II 1991-1992

Variety	Release Date	Releasing States	Found. Seed Production
Bronson	August 2, 1993	IL, IN	1993
Calhoun	June 1, 1993	KY	1992
Colfax	August, 1993	NB	1993
K4694	August, 1993	IL, KS, KY, MD, MO	1993
Piatt	August, 1993	IL, MO	1993
Saline	August, 1993	IL, MO	1994
Sandusky	August 1, 1993	OH	1993
Vertex	August 1, 1993	OH	1993

1993 DISEASE, SHATTERING, AND DESCRIPTIVE DATA

Location		Tests Conducted By:	Tests	U.T.	P.T.
IA	Ames	W. R. Fehr	Emergence Score	00-IV	
	Ames	W. R. Fehr	Iron Chlorosis	00-III	I-III
	Ames	R. Ruff	PR_4	I-III	I-III
	Boone	R. Ruff	BSR	I-III	I-III
	Hanska	W. R. Fehr	Iron Chlorosis	00-IV	I
IL	Ridgway	P. Gibson	SDS	III-IV	
	Ullin	P. Gibson	Stem Canker	III	
	Urbana	C. D. Nickell	SDS	III-IV	
IN	Lafayette	T. S. Abney & T. L. Richards	PS	I-IV	I-IV
	Lafayette	T. S. Abney & T. L. Richards	PSB, Germination	I-II	I-IV
	Vincennes	T. S. Abney & T. L. Richards	PSB, Germination	III-IV	
	Lafayette	J. R. Wilcox	PR_7	00-IV	I-IV
OH	Wooster	A.Schmitthenner	Root Rot Race 25	III-IV	II-IV
TX	Lubbock	R. D. Brigham	Shattering Score	III	

UNIFORM TEST LOCATIONS - 1993

	Location	Tests Conducted By:	Uniform Tests 00	0	I	II	III	IV	Preliminary Tests I	II	III	IV
DE	Georgetown	B. Uniatowski					X	X				
IA	Ames	W.R. Fehr				X				X		
	Fairfield	W.R. Fehr					X				X	
	Grand Junction	W.R. Fehr				X						
	Greene	W.R. Fehr			X							
	Griswold	W.R. Fehr					X					
	Kanawha	W.R. Fehr			X				X			
	Keystone	W.R. Fehr				X				X		
	Pomeroy	W.R. Fehr			X				X			
	Stuart	W.R. Fehr					X				X	
IL	Dekalb	C.D. Nickell				X						
	Dewight	C.D. Nickell				X						
	Newton	C.D. Nickell					X	X				
	Ridgway	C.D. Nickell					X	X				
	Ullin	M. Schmidt						X				
	Urbana	C.D. Nickell				X	X	X		X	X	X
IN	Bluffton	J.R. Wilcox				X	X					
	Lafayette	J.R. Wilcox			X	X	X	X		X	X	
	Vincennes	J.R. Wilcox					X	X				X
KS	Manhattan	W.T. Schapaugh					X	X*				
	Ottawa	W.T. Schapaugh						X				
	Powhattan	W.T. Schapaugh					X					
	Topeka	W.T. Schapaugh					X	X				
KY	Lexington	T. Pfeiffer					X	X				X
MD	Queenstown	W.J. Kenworthy & P.B. Creegan					X	X				X
MI	Ingham	B. Diers			X	X			X	X		
	Lanawee	B. Diers				X						
	Saginaw	B. Diers			X							
MN	Crookston	J.H. Orf	X									
	Lamberton	J.H. Orf			X	X			X			
	Moorhead	J.H. Orf	X									
	Morris	J.H. Orf		X								
	Rosemount	J.H. Orf		X								
	Shelly	J.H. Orf	X									
	Waseca	J.H. Orf			X	X			X			
MO	Columbia	P. Owen					X	X			X	X
	Portageville	S.C. Anand						X				

UNIFORM TEST LOCATIONS - 1993

Location		Tests Conducted By:	Uniform Tests 00	0	I	II	III	IV	Preliminary Tests I	II	III	IV
NE	David City	L. Korte			**X**	X	X			**X**	X	
	Falls City	& G. Graef					X					
	Hartington					X				X		
	Ord	L. Korte			X	X						
	Tekamah	& G. Graef					X				X	
ND	Casselton	T. Helms	**X**									
NJ	Adelphia	J.R. Justin				X	X	X		X		
OH	Hoytville	R. Fioritto ~~B.A. McBlain~~				**X**	**X**			**X**	**X**	
	Mt. Orab	S.St. Martin					X	**X**				**X**
	S. Charleston	R.L. Cooper					X	X			X	X
ONT	Chatham	G.R. Ablett								X		
	Elora	P. Gostovic	**X**									
	Inwood	G.R. Ablett			X							
	London	P. Gostovic			**X**							
	Ottawa	H.D. Voldeng	**X**	X								
	Ridgetown	G.R. Ablett				X						
	Woodslee	R.I. Buzzell				X						
	Woodstock	P. Gostovic		**X**								
PA	Landisville	J.O. Yocum			X		X	X				
	St. College	J.O. Yocum				X						
SD	Beresford	J.J. Bonneman								X		
	Brookings	J.J. Bonneman		**X***	**X**	X			**X**			
	Elk Point	J.J. Bonneman					X					
	Watertown	J.J. Bonneman			X							
WI	Arlington	E.T. Gritton			**X**	X			**X**	X		
	Ashland	E.T. Gritton	**X**									
	Spooner	E.T. Gritton		**X**								
X Location with Agronomic Data			7	5	16	22	25	17	7	12	9	7
X Location With Seed Compostion Data			5	5	5	5	5	4	5	5	4	4

* Seed Composition Data Only

IDENTIFICATION OF PARENT STRAINS, 1993

Strain	Parentage
A1	Anoka x Mack
A2	M63-17 x C1453
A7	Selection from AP9
A55-5629-4	Roanoke x Hawkeye
A71-5558-1	Unknown
A72-507	Amsoy x Wayne
A72-512	Amsoy x Wayne
A74-102011	M62-263 x IVR Ex4426
A75-204018	IVR Ex4731 x Wirth
A75-305022	Wye x (Amsoy x Wayne)
A75-332035	L15 x AP68-1016
A76-202015	AP6
A76-304020	(Beeson x AP68-1016) x (L15 x Calland)
A78-227015	Pride B216 x (Beeson x AP68-1012)
A79-131010	L69U40-19-1 x AX909-15-1
A79-135010	Pride B216 x Cumberland
A79-136012	Pride B216 x Land O'Lakes 4102
A79-138024	A74-102011 x C1523
A79-334010	Pride B216 x Land O'Lakes 4102
A80-244003	Northrup King S1492 x Pella
A80-244036	A74-204034 x Cumberland
A80-247007	A75-204018 x Weber
A80-344003	A75-332035 x Century
A81-151026	A75-204018 x Century
A81-155014	A76-202015 x A76-304020
A81-356022	Century x A76-304020
A83-271027	Northrup King S1492 x Asgrow A3127
A84-284033	H79015 x A80-247007
A84-382002	A79-138024 x Harper
A85-192034	A80-344003 x Asgrow A1937
A85-195013	A79-334010 x A79-131010
A85-293032	A80-344003 x Elgin
A86-152032	AP9
A86-204022	Hack x Zane
A86-301024	A81-356022 x Hack
A87-186011	AP9
A87-186035	AP9
A87-187020	AP6
AgriPro 35	L15 x Cutler
Agripro AP2190	CFS2000 x K464
Agripro NAPB Ex2323	Unknown
Agserv 8780	Unknown
Americana Rebel	Unknown
AP6	40 lines intermated (Crop Sci.15:739, 1975)
AP9	Iron-def. chlor. resis. (Crop Sci.20:677, 1980)
AP68-1012	Clark(5) x PI 84.946-2
AP68-1016	Clark(5) x PI 84.946-2
Asgrow A0949	Evans x Vickery
Asgrow A1564	Hark x C1453
Asgrow A1895	Asgrow A2575 x L73-827
Asgrow A1937	Hodgson 78 x Wayne
Asgrow A2187	A2 x Asgrow A2527
Asgrow A2234	[(Calland x Amsoy) x Century(3)] x Williams 82

IDENTIFICATION OF PARENT STRAINS, 1993

Strain	Parentage
Asgrow A2575	C1453 x Amsoy 71
Asgrow A2943	Asgrow A1564 x Asgrow A3127
Asgrow A3127	Williams x Essex
Asgrow A3205	Northrup King S1474 x Asgrow A3127
Asgrow A3427	X3836 x Asgrow A3127
Asgrow A3733	Elf x Asgrow A3127
Asgrow A3935	MO474C x Asgrow A3127
Asgrow A3966	Williams x Essex
Asgrow A4595	Douglas x Asgrow A3127
AX909-15-1	AP68-1016 x (C1426 x AP68-1016)
BK 22-1-3	Unknown
C1079	Lincoln x Ogden
C1253	Blackhawk x Harosoy
C1266R	Harosoy x C1079
C1426	C1253 x Kent
C1453	C1266R x C1253
C1523	Beeson x L63-1397 (Harosoy Dt2)
C1640	Century M2 fan (low 18:3)
C1655	Hobbit x Century
C1678	Hobbit x Lakota
C1717	HW79015 x Cumberland
CFS2000	C1426 x Amsoy Phyt.4
Coker 237	Hutton x N63-858
CX1022-90	Harper x C1640
CX1038-14	Cutler 71(3) x Pando
CX1038-63	Cutler 71(3) x Pando
D49-2491	S-100 x CNS
D49-2510	S-100 x CNS
D51-4877	Roanoke x N45-745
D55-4168	Ogden x Biloxi
D58-3358	Jackson (4) x D49-2491
D59-9289	D51-4877 x D55-4168
D60-9647	FC31745 x D49-2510
D67-3297	Hill(2) x PI 171.450
D68-18	Dyer x Bragg
Dairyland DSR 252	Unknown
Dairyland DSR 284	(Hark x Corsoy) x Corsoy 79
Dairyland DSR 304	Williams x Unknown
Dekalb 226	Unknown
Dekalb Pfizer CX415	Unknown
Dekalb Pfizer CX445	Unknown
DeltaPine 506	Bragg x Lee 68
E84108	Sprite x Hardin
E84150	Sprite x Century
E85100	A80-244003 x U76168
E85110	A80-244003 x U76168
E85166	A80-244003 x Miami
ELF BC	Elf(6) x Williams 82
F7-79	Mamloxi x CPI26673
FC31745	Farmer selection from Virginaia
FFR561	Essex x Experimental selection
GR8936	Asgrow A3127 x L24A
GR8836	HM8473

IDENTIFICATION OF PARENT STRAINS, 1993

Strain	Parentage
HC74-634RE	Williams x Ransom
HC76-4030	L72U-2567
HC78-279	L72U-2567 x Essex
HC78-291	Williams x F7-79
HC78-350	L72U-2567 x Essex
HC78-352	L72U 2567 x Essex
HC78-353	L72U-2567 x Essex
HC78-354	L72U-2567 x Essex
HC78-676	L70T-543G x L74D-619
HC78-676BC	HC78-676 x Williams 82
HC78-1946	L72U 2567 x Elf
HC79-478	L70T-543G x L74D-619
HC80-1944	L73U-632 x Elf
HC80-1946	L72U-2567 x Elf
HC83-4532	L74D-634 x Hobbit
HC84-553-1	Hobbit x K74-104-76-205
HM8472	Asgrow A3127(4) x Williams 82
HM8473	Asgrow A3127(4) x Williams 82
HM8477	Dawson x K79-1
HM8572	(Hardin x Williams 82) x [Asgrow A3127 x (A72-507BC x K10)]
HM8580	HW79116 x HW79149
HM8778	Zane(4) x HW79149
HS84-6224	HW79015(2) x HW79149
HS84-6247	Zane(3) x HW79149
HS84-6276	Harper(3) x Williams 82
HW74-3400	Williams x Ransom
HW7847	Evans x Williams
HW79015	A72-512 x Oakland
HW79116	Cumberland x Pella
HW79149	[A72-507(6) x A1] x [A72-507(5) x PI 82.263-2]
HW8372	Pride B216 x K-9
IVR Ex4731	Amsoy x Wayne
IX91-15	Chippewa x A71-5558-1
J74-5	Forrest x (D68-18 x PI 88.788)
J-231	Unknown
Ja53-7-6	Selection from Japanese variety
Jacques J822	Unknown
K-9	Tracy x Williams
K10	Tracy x Williams
K74-104-76-205	Tracy x Williams
K74-114-75-000	Tracy x Bonus
K79-1	Williams x D60-9647
K464	Beeson x Hark
K1028	Williams x Calland
K1106	(Williams x Calland) x Essex
K1126	HW7847 x Forrest
K1133	V75-345 x S76-2120
K0368-1-3-1	Maple Presto x Karikachi
KG20	[McCall x Hardome] x 059-903
KG30	Maple Arrow x McCall
KG60	Pride B216 x BK 22-1-3
L1-5	Century(5) x PI 408.251

IDENTIFICATION OF PARENT STRAINS, 1993

Strain	Parentage
L1L3-4-4	Germplasm release lacking lipoxygenases L1 L3 (Crop Sci.27:370-371)
L6	L8 x L7
L7	Clark(8) Rps1 x Blackhawk
L8	Clark(6) rxp x L49-4091
L15	Wayne(6) x Clark 63; Rps1 isoline
L24A	Williams(7) x Kingwa
L49-4091	[F3 Lincoln(2) x Richland] x (F1 Lincoln x CNS)
L57-0034	Clark x Adams
L61-2193	Sioux x Harosoy
L61-2196	Sioux x Harosoy
L62-1251	Clark(6) Dt2 x PI 196.166
L63-1397	Harosoy(6) x PI 80.837
L66L-140	Wayne x L57-0034
L66L-154	Wayne x L57-0034
L67-592	Clark(6) S x Higan
L69-202	L61-2193 x L61-2196
L69U37-17-5	Calland x Corsoy
L69U-40-19-1	Calland x Amsoy
L70T-543G	L15 x Amsoy 71
L72U-2567	Williams x Ransom
L73-827	L6 x (L67-592 x L62-1251); Clark Rps1 rxp S Dt2
L73-4673	Corsoy x L66L-154
L73U-632	Miller 67 x L66L-140
L74-3897	Williams x Beeson
L74D-619	Williams x Ransom
L74D-634	Williams x Ransom
L74D-634RE	Williams x Ransom
L75-0507	Wells(6) x T259 (Illinois male-sterile)
L77-808	Williams x PI 87.631-1
L77-906	Williams x PI 209.332
L77-1836	Williams(7) Rps1-b x Harrel
L78-189	Corsoy(8) x Kingwa
Land O Lakes 4102	(Mack x [Wayne x (Clark a Adams)]) x Cutler
LN78-2714	Evans x K1028
LN81-1029	K74-114-75-000 x Pella
LN82-4858	Williams 82 x L73-4673
LN83-2356	LN78-2714 x HC76-4030
LN84-452	A78-227015 x Asgrow A3127
LN84-3897	HW79149 x Harper
LN86-1947	PI 437.833 x Elgin
LN86-4668	Fayette X Hardin
LNX8401	F1 (Hack x Asgrow A2943)
LS78-W124-1	Franklin x J74-5
LS80-6521	Franklin x Pixie
M10	Lincoln(2) x Richland
M53-43	M10 x PI 180.501
M53-117	M10 x PI 180.501
M54-139	Renville x Capital
M54-240	[Lincoln(2) x Richland] x Korean
M59-120	M54-240 x M54-139
M60-406	Blackhawk x Harosoy
M62-93	Merit x M406

IDENTIFICATION OF PARENT STRAINS, 1993

Strain	Parentage
M62-173	M387 x M406
M62-263	Grant x M319W
M63-17	M402 x M406
M63-87	Chippewa x PI 261.475
M63-158	PI 261.475 x Pridesoy II
M63-217Y	Corsoy x M53-117; Y hilum sib of Hodgson
M64-3	Traverse x PI 196.163
M65-442	Anoka x Amsoy
M67-141	Corsoy x Wayne
M68-49-26	Evans x M59-120
M68-176	Merit x Beeson
M68-201	Evans x Steele
M68-256	Evans x Steele
M69-36	Merit x Corsoy
M69-45	M63-158(Bf) x Provar
M70-9	M64-3 x Amsoy 71
M70-127	Evans x M63-217Y
M70-184	Steele x (Evans x Lee)
M70-187	Merit x SS65-5702
M70-271	Merit x M64-3
M70-294	Ja53-7-6 x M63-217Y
M70-330	M62-93 x M64-3
M70-447	Provar x M53-43
M70-484	M63-87 x M53-43
M70-597	Steele x AP68-1016
M71-25	Clay x Evans
M71-148	Clay x Evans
M74-498	Peterson PX20 x [Hodgson(4) Rps1 x Merit]
M75-2	Hodgson x [M67-141 x (Chippewa x Higan)]
M75-274	Evans x L70T-543
M76-151	M70-271 x Hodgson 78
M76-281	M70-187 x Hodgson
M76-349	L69-202 x M69-45
M81-18	Evans x M65-442
M81-27	M68-49-26 x M70-294
M81-76	M68-49-26 x M70-184
M81-98	M70-9 x M68-201
M81-99	M70-9 x M68-201
M81-382	M70-127 x Century
M81-411	L75-0507 x McCall
M81-564	M69-36 x Weber
M81-610	Dawson x M70-447
M82-303	M70-330 x M68-176
M82-408	M71-25 x Hodgson 78
M82-556	Hodgson 78 x M69-45
M82-559	Vickery x Century
M82-601	M70-484 x Vickery
M82-772	M68-256 x M70-597
M82-776	M68-49-26 x M70-597
M82-791	M68-256 x L74-3897
M83-15	A2 x Hodgson 78
M83-16	A2 x Hodgson
M83-91	Weber x M75-2

IDENTIFICATION OF PARENT STRAINS, 1993

Strain	Parentage
M83-1023	Unknown
M84-492	A79-136012 x M75-2
M85-619	Fayette x McCall
M85-627	Fayette x McCall
M85-1430	L77-906 x L78-189
M319W	Lincoln x Hawkeye
M367	M10 x PI 180.501
M387	Renville x Capital
M402	Renville x Capital
M406	Harosoy x Norchief
MO474C	Unknown
N45-745	Ogden x CNS
N63-858	D58-3358 x D59-9289
Northrup King S23-03	Pride B216 x Hodgson
Northrup King S23-12	Northrup King S1346 x Asgrow A2575
Northrup King S42-30	Essex x AgriPro 35
Northrup King S1346	A55-5629-4 x PI 257.435
Northrup King S1474	Hark x Wayne
Northrup King S1492	Corsoy x Wayne
O59-903	Unknown
OT84-4	Evans(3) e3 x 840-7-3
OT84-14	Maple Arrow x Wayne
OX611	Unknown
Peterson PX20	Blend 50% Wells : 50% P6122
Pioneer 0877	[Clark x Chippewa 64] x Corsoy
Pioneer 1677	Ramplage x Corsoy(2)
Pioneer 9061	Wells x Pioneer 1677
Pioneer 9292	(Corsoy x Magna) x Williams
Pride B152	Northrup King S1346(6) x Mack
Pride B216	Corsoy x Wayne
Pridesoy II	Unknown
PRX54-59	Harosoy x Altona
S24-24	(Mack x Corsoy) x Pride B216
S76-2120	D67-3297 x Essex
SB 27	Unknown (Farmer selection)
SL5	Kent Rps1 rxp
SS65-5702	Clark x [Scott(2) x Peking]
U80-64032	L69U37-17-5 x Nebsoy
U76168	Williams x PI 89.075
UX106	Asgrow A2234 x PI 404.177
UX110	Agripro NAPB Ex 2323 x PI 423.949
UX111	Agripro NAPB Ex2323 x PI 360.843
UX112	M81-382 x PI 423.949
UX113	M81-382 x PI 360.483
UX114	LN83-2356 x PI 404.177
V68-1034	York x PI 71.506
V75-345	Essex x Shore
X2953	Unknown
X3836	Unknown
840-7-3	From Sven Holmberg, Sweden

UNIFORM TEST 00, 1993

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
AC Harmony	(Maple Presto x Williams) x Weber	5	F5	
Agassiz (0)	Simpson x M71-148	5	F5	Rps1
Maple Ridge	Fiskeby III x Evans	13	F5	
McCall (00)	(Acme x Chippewa) x Hark	19	F5	
M87-731	McCall x Altona	2	F4	Rps6
ND89-512	McCall x Maple Ridge	-	F4	
ND89-892	McCall x Maple Ridge	-	F4	
ND89-937	McCall x Maple Ridge	-	F4	
ND89-980	McCall x Maple Ridge	-	F4	
ND89-986	McCall x Maple Ridge	-	F4	
ND89-997	McCall x Maple Ridge	-	F4	
ND89-1112	McCall x Maple Ridge	-	F4	
OT90-7	(PI 196.529 x Harosoy $e3^4$) x McCall	2	F5	
OT92-8	Baron x Maple Donovan	-	F5	
OT92-9	[(Maple Presto x Evans) x OX611] x Maple Arrow	-	F5	
OT92-14	[(PI 196.529 x Maple $Arrow^6$) x (Maple Presto x Evans)] x OX611	-	F5	
OT92-15	{[(M62-173 x *G. sojae* T106) x Altona] x OX611} x Maple Amber	-	F5	

* Number of years in test or name of 1992 test

UNIFORM TEST 00, 1993

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Chlorosis Score Hanska	Emerg. Score Ames	PR Lafayette Race 7
AC Harmony	WTBSYBrI	2.1	3.5	3	S
Agassiz (0)	PGBDYIbI	2.8	4.0	1	S
MapleRidge	PTBSYYI	2.2	3.5	1	S
McCall (00)	PGBIYYI	2.0	3.5	1	S
M87-731	PTBDYYI	2.1	4.0	1	S
ND89-512	PG+TBDYYI	2.2	3.5	1	S
ND89-892	PTBDYYI	1.8	3.5	1	S
ND89-937	PG+TBDYYI	2.2	3.0	1	S
ND89-980	PGTDYYI	2.5	3.5	1	S
ND89-986	PTBDY+BYI	2.6	3.5	2	S
ND89-997	PGBDYYI	2.7	4.0	1	S
ND89-1112	PGBDYYI	2.8	3.0	1	S
OT90-7	PGBDYYI	3.8	4.5	5	S
OT92-8	PTBSYBrI	2.6	3.0	3	S
OT92-9	PTBDYBrSD	2.5	5.0	1	S
OT92-14	PTBIYBr+YSD	2.8	5.0	1	S
OT92-15	PTBDYYI	3.8	5.0	1	S

UNIFORM TEST 00, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 7 bu/a	Rank 7 No.	Maturity 7 Date	Lodging 7 Score	Plant Height 7 In	Seed Quality 7 Score	Seed Size 7 g/100	Composition Protein 5 %	Oil 5 %
AC Harmony	39.4	2	2.1	1.1	27	1.5	14.0	39.3	21.2
Agassiz (0)	39.1	3	6.4	1.2	29	1.7	12.6	41.1	19.1
MapleRidge	32.9	16	-3.3	1.1	24	1.6	15.7	40.3	19.2
McCall (00)	35.5	11	09/13*	1.4	27	1.6	13.7	40.5	18.9
M87-731	37.5	4	3.1	1.5	28	1.6	14.9	40.9	18.6
ND89-512	34.6	13	3.7	1.6	29	1.7	14.3	40.5	19.0
ND89-892	33.8	14	0.1	1.2	25	1.7	14.9	41.2	18.6
ND89-937	32.3	17	-1.9	1.1	25	1.8	14.2	40.6	19.2
ND89-980	35.8	10	2.7	1.1	27	1.6	15.3	39.6	19.3
ND89-986	36.4	6	2.9	1.4	27	1.7	15.2	39.9	19.1
ND89-997	36.2	8	2.6	1.4	28	1.8	14.8	41.2	18.7
ND89-1112	34.8	12	3.4	1.2	26	1.8	14.3	39.9	19.0
OT90-7	36.1	9	-0.1	1.6	27	1.4	14.0	40.6	19.5
OT92-8	39.6	1	2.7	1.5	27	1.7	17.0	39.5	20.0
OT92-9	36.4	6	4.1	1.1	27	1.6	16.7	39.8	19.9
OT92-14	36.5	5	0.0	1.2	25	1.6	15.3	40.5	19.7
OT92-15	33.3	15	-4.0	1.6	25	1.9	16.1	42.1	18.8

* 119.9 Days After Planting

1991-1993, 3-YEAR MEAN

Strain No. of Tests	Yield 19 bu/a	Rank 19 No.	Maturity 18 Date	Lodging 19 Score	Plant Height 19 In	Seed Quality 19 Score	Seed Size 19 g/100	Composition Protein 14 %	Oil 14 %
Agassiz (L)	34.0	1	4.5	1.4	28	2.0	12.8	40.0	19.5
Maple Ridge	28.3	5	-4.6	1.2	23	1.7	15.7	39.8	18.9
McCall (00)	30.9	4	09/11.3*	1.5	27	1.9	14.1	39.2	19.3
M87-731	33.3	3	2.2	1.7	27	1.9	15.2	39.6	19.1
OT90-7	33.4	2	-0.9	1.6	28	1.7	14.4	39.5	19.6

* 166.7 Days After Planting

UNIFORM TEST 00, 1993

YIELD (bu/a)

Strain	Mean 7 Tests	Crookston MN	Moorhead MN	Shelly MN	Casselton ND	Elora Ont.	Ottawa Ont.	Ashland WI
AC Harmony	39.4	45.6	19.2	38.6	33.0	47.7	51.2	40.3
Agassiz (0)	39.1	38.3	33.1	33.6	37.8	46.6	48.1	36.2
MapleRidge	32.9	39.6	16.9	33.7	23.6	41.7	45.5	29.3
McCall (00)	35.5	36.2	18.4	31.2	35.2	47.0	45.6	35.0
M87-731	37.5	35.0	34.9	33.6	29.6	47.0	42.1	40.3
ND89-512	34.6	38.3	18.7	29.1	27.7	48.3	43.3	37.1
ND89-892	33.8	41.2	14.0	30.6	23.3	48.5	43.3	35.4
ND89-937	32.3	36.8	15.9	28.4	26.3	43.1	40.0	35.6
ND89-980	35.8	43.1	15.9	34.1	30.8	50.7	46.6	29.3
ND89-986	36.4	41.1	21.9	33.3	29.2	51.3	43.4	34.8
ND89-997	36.2	40.0	25.6	29.6	33.7	48.4	44.6	31.8
ND89-1112	34.8	39.6	18.8	35.0	23.9	50.8	42.6	32.7
OT90-7	36.1	42.4	20.9	38.7	32.7	45.9	45.4	26.4
OT92-8	39.6	46.7	32.9	39.1	28.9	45.1	52.2	32.6
OT92-9	36.4	37.7	26.3	35.1	29.2	47.4	48.6	30.8
OT92-14	36.5	43.4	19.6	36.0	32.3	43.0	51.9	29.1
OT92-15	33.3	36.3	18.9	33.9	27.9	42.0	47.3	26.6
C.V. (%)		7.4	18.8	6.9	12.9	3.7	9.3	12.5
L.S.D. (5%)		4.2	8.9	3.9	6.2	2.5	6.0	6.9
Row Sp. (in.)		12	10	10	30	15	16	24
Rows/Plot		8	8	8	4	4	4	4
Reps		4	2	3	3	4	4	3

UNIFORM TEST 00, 1993

YIELD RANK

Strain	Yield Rank	Crook-ston MN	Moor-head MN	Shelly MN	Cassel-ton ND	Elora Ont.	Ottawa Ont.	Ash land WI
AC Harmony	2	2	9	3	4	7	3	1
Agassiz (0)	3	11	2	10	1	11	5	4
MapleRidge	16	9	14	9	16	17	9	13
McCall (00)	11	16	13	13	2	9	8	7
M87-731	4	17	1	10	8	9	16	1
ND89-512	13	11	12	16	13	6	13	3
ND89-892	14	6	17	14	17	4	13	6
ND89-937	17	14	15	17	14	14	17	5
ND89-980	10	4	15	7	7	3	7	14
ND89-986	6	7	6	12	9	1	12	8
ND89-997	8	8	5	15	3	5	11	11
ND89-1112	12	9	11	6	15	2	15	9
OT90-7	9	5	7	2	5	12	10	17
OT92-8	1	1	3	1	11	13	1	10
OT92-9	6	13	4	5	9	8	4	12
OT92-14	5	3	8	4	6	15	2	15
OT92-15	15	15	10	8	12	16	6	16

MATURITY (date)

Strain	Mean 7 Tests							
AC Harmony	2.1	0	1	2	0	2	4	6
Agassiz (0)	6.4	7	7	7	5	6	5	8
MapleRidge	-3.3	-4	-3	-2	-7	0	-4	-3
McCall (00)	09/13	09/03	09/11	09/14	09/14	09/14	09/16	09/24
M87-731	3.1	3	6	1	0	3	2	7
ND89-512	3.7	5	1	3	-1	7	3	8
ND89-892	0.1	-2	-2	2	-1	0	1	3
ND89-937	-1.9	-3	-1	1	-4	0	-3	-3
ND89-980	2.7	3	1	5	0	6	2	2
ND89-986	2.9	4	1	7	0	4	1	3
ND89-997	2.6	3	1	8	0	2	1	3
ND89-1112	3.4	4	1	7	2	6	2	2
OT90-7	-0.1	-3	0	4	1	1	-2	-2
OT92-8	2.7	2	1	3	-2	8	4	3
OT92-9	4.1	5	5	4	3	3	5	4
OT92-14	0.0	-1	2	-1	0	0	0	0
OT92-15	-4.0	-3	-4	0	-6	-4	-7	-4
Date Planted	05/16	05/06	05/10	05/11	05/14	05/28	05/30	05/19
Days to Mature	119.9	120	124	126	123	109	109	128

UNIFORM TEST 00, 1993

LODGING (score)

Strain	Mean 7 Tests	Crookston MN	Moorhead MN	Shelly MN	Casselton ND	Elora Ont.	Ottawa Ont.	Ashland WI
AC Harmony	1.1	1.0	1.0	1.0	1.3	1.5	1.0	1.0
Agassiz (0)	1.2	1.0	1.0	1.0	1.0	1.5	1.7	1.0
MapleRidge	1.1	1.0	1.0	1.0	1.0	1.5	0.9	1.3
McCall (00)	1.4	1.0	1.0	1.3	1.7	1.6	1.3	1.7
M87-731	1.5	1.0	1.0	1.7	1.3	2.0	1.5	1.7
ND89-512	1.6	1.0	1.0	2.7	1.3	2.1	1.2	1.7
ND89-892	1.2	1.0	1.0	1.3	1.0	1.8	1.5	1.0
ND89-937	1.1	1.0	1.0	1.0	1.0	1.5	1.1	1.3
ND89-980	1.1	1.0	1.0	1.0	1.0	1.4	1.0	1.0
ND89-986	1.4	1.0	1.0	2.3	1.0	2.3	1.0	1.0
ND89-997	1.4	1.0	1.0	2.3	1.3	2.0	1.2	1.3
ND89-1112	1.2	1.0	1.0	1.0	1.3	2.1	1.0	1.0
OT90-7	1.6	1.0	1.0	2.0	1.7	1.9	1.7	1.7
OT92-8	1.5	1.0	1.0	1.7	1.3	2.4	1.2	2.0
OT92-9	1.1	1.0	1.0	1.3	1.0	1.5	0.9	1.0
OT92-14	1.2	1.0	1.0	1.3	1.3	1.5	1.0	1.3
OT92-15	1.6	1.0	1.0	2.3	1.7	2.1	1.3	2.0

PLANT HEIGHT (inches)

Strain	Mean 7 Tests							
AC Harmony	27	26	19	34	23	29	33	27
Agassiz (0)	29	29	23	34	26	30	36	23
MapleRidge	24	21	19	31	21	27	33	18
McCall (00)	27	30	20	33	24	29	33	21
M87-731	28	27	26	32	21	30	36	25
ND89-512	29	33	23	29	25	34	35	25
ND89-892	25	26	18	32	19	28	31	22
ND89-937	25	25	19	33	22	27	27	21
ND89-980	27	30	19	33	21	30	34	21
ND89-986	27	30	20	32	22	30	34	24
ND89-997	28	29	21	35	24	31	32	24
ND89-1112	26	30	20	31	19	30	31	21
OT90-7	27	30	19	32	23	30	33	20
OT92-8	27	25	23	33	22	28	33	25
OT92-9	27	29	24	32	22	29	33	23
OT92-14	25	25	21	29	23	26	32	19
OT92-15	25	25	20	29	22	30	32	19

UNIFORM TEST 00, 1993

SEED QUALITY (score)

Strain	Mean 7 Tests	Crookston MN	Moorhead MN	Shelly MN	Casselton ND	Elora Ont.	Ottawa Ont.	Ashland WI
AC Harmony	1.5	1.5	1.3	2.3	1.0	1.0	1.7	2.0
Agassiz (0)	1.7	2.0	1.7	2.0	1.0	1.5	1.5	2.0
MapleRidge	1.6	2.0	1.3	1.7	1.0	1.5	1.9	2.0
McCall (00)	1.6	3.0	1.3	1.7	1.0	1.5	1.9	1.0
M87-731	1.6	2.0	1.3	1.3	1.0	1.5	2.0	2.0
ND89-512	1.7	2.5	1.3	1.7	1.0	1.5	2.1	2.0
ND89-892	1.7	1.5	1.7	1.3	2.0	1.5	2.0	2.0
ND89-937	1.8	2.0	1.7	1.3	2.0	1.5	2.0	2.0
ND89-980	1.6	1.5	1.7	1.3	1.0	1.5	2.0	2.0
ND89-986	1.7	2.0	1.3	1.3	1.0	2.0	2.0	2.0
ND89-997	1.8	2.5	1.7	2.0	1.0	1.5	2.0	2.0
ND89-1112	1.8	3.0	1.3	1.7	1.0	1.5	2.0	2.0
OT90-7	1.4	1.5	1.3	1.3	1.0	1.5	2.0	1.0
OT92-8	1.7	1.5	2.0	1.3	2.0	1.5	1.5	2.0
OT92-9	1.6	1.5	1.7	2.0	1.0	1.5	1.8	2.0
OT92-14	1.6	1.5	1.7	1.3	1.0	1.5	2.0	2.0
OT92-15	1.9	2.0	1.7	1.3	2.0	2.0	2.0	2.0

SEED SIZE (g/100)

Strain	Mean 7 Tests							
AC Harmony	14.0	13.4	12.7	14.8	15.8	14.1	12.7	14.8
Agassiz (0)	12.6	11.2	13.1	11.8	14.4	12.4	12.5	12.5
MapleRidge	15.7	16.0	15.3	15.0	18.6	15.4	14.1	15.7
McCall (00)	13.7	12.3	14.0	13.9	16.2	12.2	12.6	14.7
M87-731	14.9	13.6	15.1	14.6	16.8	14.4	13.0	17.1
ND89-512	14.3	13.8	13.8	14.7	15.5	13.8	12.5	15.7
ND89-892	14.9	14.5	14.8	14.0	17.9	13.9	13.1	15.9
ND89-937	14.2	12.9	14.3	13.6	17.5	13.4	12.4	15.4
ND89-980	15.3	13.5	16.2	15.2	16.7	15.6	14.2	16.0
ND89-986	15.2	14.0	15.3	15.1	18.0	14.0	12.9	16.8
ND89-997	14.8	12.9	14.9	15.4	17.1	13.2	13.1	16.7
ND89-1112	14.3	12.8	14.5	14.0	17.1	14.3	12.2	15.5
OT90-7	14.0	13.0	14.9	13.9	15.7	13.6	11.7	15.0
OT92-8	17.0	15.3	18.2	16.9	18.4	16.5	16.2	17.2
OT92-9	16.7	16.1	17.8	15.7	17.4	17.2	16.1	16.4
OT92-14	15.3	14.3	16.7	15.6	17.9	14.1	14.1	14.3
OT92-15	16.1	16.8	18.1	16.7	18.3	13.9	14.5	14.7

UNIFORM TEST 00, 1993

PROTEIN (%)

Strain	Mean 5 Tests	Crookston MN	Casselton ND	Elora Ont.	Ottawa Ont.	Ashland WI
AC Harmony	39.3	38.8	38.6	38.3	40.5	40.3
Agassiz (0)	41.1	40.8	39.2	40.5	43.5	41.5
MapleRidge	40.3	39.7	40.7	39.6	41.0	40.5
McCall (00)	40.5	41.1	39.9	39.4	42.1	40.0
M87-731	40.9	39.7	39.3	40.3	44.0	41.2
ND89-512	40.5	39.8	39.0	40.6	42.0	41.0
ND89-892	41.2	41.0	41.3	40.4	41.8	41.7
ND89-937	40.6	39.8	41.0	40.2	41.8	40.1
ND89-980	39.6	38.7	39.3	38.9	41.2	40.0
ND89-986	39.9	38.4	39.9	39.1	41.9	40.2
ND89-997	41.2	40.3	41.2	40.0	42.4	42.1
ND89-1112	39.9	39.7	39.6	38.8	42.3	39.2
OT90-7	40.6	41.4	39.7	40.2	41.1	40.7
OT92-8	39.5	38.0	39.8	39.1	40.8	39.7
OT92-9	39.8	38.4	39.5	39.0	41.1	40.9
OT92-14	40.5	39.8	39.5	40.6	41.2	41.3
OT92-15	42.1	40.6	43.0	41.3	42.2	43.2

OIL (%)

Strain	Mean 5 Tests					
AC Harmony	21.2	21.3	21.7	20.9	21.2	20.9
Agassiz (0)	19.1	18.8	20.7	18.5	18.6	18.9
MapleRidge	19.2	19.4	19.7	18.7	19.6	18.7
McCall (00)	18.9	18.4	20.0	18.3	18.5	19.2
M87-731	18.6	18.2	20.3	17.6	17.7	19.4
ND89-512	19.0	18.4	20.1	18.3	18.9	19.2
ND89-892	18.6	18.4	19.7	17.7	18.9	18.1
ND89-937	19.2	19.3	20.3	18.2	18.7	19.3
ND89-980	19.3	19.4	20.4	19.1	19.2	18.6
ND89-986	19.1	19.2	20.1	18.9	18.9	18.2
ND89-997	18.7	18.8	19.4	18.6	18.5	18.2
ND89-1112	19.0	18.9	20.0	18.9	18.2	18.8
OT90-7	19.5	18.9	20.4	19.1	19.8	19.2
OT92-8	20.0	19.9	20.5	19.5	20.6	19.4
OT92-9	19.9	20.1	20.3	19.5	20.4	19.0
OT92-14	19.7	20.2	20.4	19.3	20.1	18.5
OT92-15	18.8	19.4	19.0	18.1	19.7	18.0

UNIFORM TEST 0, 1993

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Agassiz (E)	Simpson x M71-148	1	F5	Rps1
Lambert (0)	M75-274 x M76-151	5	F5	Rps1
Parker (I)	A79-136012 x Dawson	2	F5	Rps1
M86-356	M81-610 x M76-349	3	F5	
M87-1569	M70-187 x L77-808	2	F5	Rps1 Het.
M88-84	M83-15 x M82-776	1	F5	Rps1
M88-210	M81-99 x Hardin	1	F5	Rps1
M89-74	OT84-14 x McCall	-	F4	
M89-198	M81-98 x Ozzie	-	F4	Rps1
M89-358	OT84-4 x M81-411	-	F5	Rps1
M89-643	Evans x M81-76	-	F5	Rps1
M89-932	M84-492 x M74-498	-	F5	Rps1-c, Hm
M89-1006	M81-27 x Corsoy 79	-	F5	Rps1-c
M89-1023	M81-27 x Corsoy 79	-	F5	Rps1-c
M89-1074	M81-27 x Elgin 87	-	F5	Rps1-k
M89-1698	M70-187 x M85-619	-	F5	Het Rps1, SCN 3
M89-1743	M76-281 x Alpha	-	F5	SCN 3
M89-1815	M81-27 x Dawson	-	F5	Rps1
ND86-22	Maple Amber x A7	-	F4	
ND88-597	Ozzie x Dawson	1	F4	
ND88-599	Ozzie x Dawson	1	F4	
ND88-709	Bicentennial x Swift	1	F4	
ND88-800	Evans x Maple Amber	1	F4	
ORC 9002	A81-151026 x Elgin	2	F5	
ORC 9201	Conrad x RCAT Alliance	-	F5	
ORC 9203	RCAT Alliance x S24-24	-	F5	
OT91-3	[(Maple Presto x Evans) x OX611] x Maple Amber	1	F5	Dt2, ln
OT92-1	{[(M62-173 x *G. sojae* T106) x Altona] x OX611} x Maple Amber	-	F5	
OT92-2	(McCall x PI 317.334A) x Baron	-	F5	E_1 dt_1 e_3 e_4
OT92-4	(McCall x PI 317.334A) x X2953	-	F5	E_1 dt_1 Lf_1 e_3 e_4
SL88-621	M82-556 x M81-18	UT 00	F5	Rps1
SL88-686N	Evans x Bicentennial	1	F4	
SL89-111	Maple Donovan x M82-303	-	F4	
SL89-556	M82-791 x M82-601	-	F4	
SL89-595	M81-564 x M83-16	-	F4	
SL89-850	M81-564 x McCall	-	F4	
SL90-561	$Evans_2$ x PI 417.511	-	F4	
SL90-576	$Evans_2$ x PI 417.511	-	F4	
SL90-577	$Evans^2$ x PI 417.511	-	F4	
SL91-0454M	M81-27 x M83-91	-	F5	
SL91-1574M	L1-5 x Glenwood	-	F5	
SL91-2856N	Ozzie x Asgrow A0949	-	F5	
SL91-3273N	Maple Presto x Asgrow A0949	-	F5	

* Number of years in test or name of 1992 test.

UNIFORM TEST 0, 1993

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Chlorosis Score Hanska	Emerg. Score Ames	PR Lafayette Race 7
Agassiz (E)	PGBDYIbI	2.5	3.0	1	S
Lambert (O)	PGTSYBfI	2.8	2.5	1	S
Parker (I)	WGBDYIbI	3.1	4.0	5	S
M86-356	PGTDYYI	4.2	5.0	4	S
M87-1569	PTTDYBlI	2.8	3.5	1	S
M88-84	PGBIYYI	2.6	3.5	5	S
M88-210	P+WGBSYYI	2.6	4.0	5	S
M89-74	WGTDYY+IbI	3.3	3.5	2	S
M89-198	WGB+TDYYI	3.7	4.5	5	S
M89-358	PGBDYGrI	3.2	4.0	5	S
M89-643	PGBDYGrI	3.1	5.0	2	S
M89-932	PGBDYBfI	3.3	4.5	5	R
M89-1006	WGBDYYI	4.1	5.0	5	R
M89-1023	WGBDYYI	3.6	3.5	5	R
M89-1074	WG+BDYBlI	3.8	3.5	5	R
M89-1678	PTTDYBrI	3.8	5.0	4	S
M89-1743	PTTDYYI	3.1	4.0	3	S
M89-1815	PGBDYYI	2.6	3.0	4	S
ND86-22	PTBDYBrI	3.0	4.5	5	S
ND88-597	PGBDYYI	2.5	3.5	5	S
ND88-599	PGBDYYI	3.0	4.0	5	S
ND88-709	WTBDYBrI	3.2	4.0	5	R
ND88-800	P+WGBDYBfI	3.3	4.5	2	S
ORC9002	PTBDYBrI	3.0	4.5	5	S
ORC9201	PG+BTDYBlI	3.5	5.0	5	S
ORC9203	PTBSYBrI	3.7	4.5	5	S
OT91-3	PGBDYBfSD	4.5	5.0	1	S
OT92-1	PGBDYBfSD	4.7	5.0	1	S
OT92-2	PTBDYBrSD	2.5	3.0	2	S
OT92-4	PGBDYBfI	2.5	4.0	1	S
SL88-621	PGBDYYI	4.2	4.0	5	S
SL88-686N	PGBDYGrI	3.7	5.0	1	S
SL89-111	P+WGB+TDYYI	2.7	3.5	5	S
SL89-556	PGTDYYI	3.5	3.0	2	S
SL89-595	PGBDYBfI	3.1	4.0	5	H
SL89-850	PGBDYYI	2.7	3.0	2	S
SL90-561	WGBDYGrI	3.5	3.0	3	S
SL90-576	WGBDYYI	3.2	3.5	3	S
SL90-577	WGBDYYI	2.7	4.0	4	S
SL91-0454M	P+WGBDYBfI	2.8	4.5	5	H
SL91-1574M	PTBDYBlI	3.5	4.5	3	S
SL91-2856N	WGBDYYI	3.1	3.5	5	R
SL91-3273N	P+WGBDYYI	2.6	4.0	3	S

UNIFORM TEST 0, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 3 bu/a	Rank 3 No.	Maturity 5 Date	Lodging 4 Score	Plant Height 5 In.	Seed Quality 5 Score	Seed Size 5 g/100	Composition Protein 5 %	Oil 5 %
Agassiz (E)	35.0	38	-10.0	1.3	23	1.5	13.8	41.5	19.6
Lambert (0)	43.7	3	09/18*	1.4	27	1.7	15.7	42.1	19.2
Parker (I)	44.8	2	8.0	1.6	32	2.3	16.8	40.1	19.1
M86-356	38.6	25	1.6	1.3	27	1.4	14.4	45.2	16.4
M87-1569	37.2	30	3.2	1.3	28	1.5	14.1	40.5	17.7
M88-84	36.8	31	0.6	1.3	23	1.4	16.0	41.6	19.9
M88-210	40.8	15	2.4	1.4	28	1.7	15.9	40.2	20.6
M89-74	36.6	33	1.2	1.5	27	2.1	15.3	41.1	18.9
M89-198	36.1	34	-3.0	1.3	24	1.5	15.0	40.1	20.0
M89-358	39.0	23	4.8	1.6	29	1.7	14.9	41.1	18.2
M89-643	35.2	37	-2.0	1.3	25	1.8	14.8	40.6	19.9
M89-932	37.4	29	0.6	1.3	25	1.7	14.4	40.9	19.3
M89-1006	41.1	13	2.0	1.3	28	1.4	14.3	43.2	18.0
M89-1023	42.1	5	4.2	1.4	29	2.0	14.9	40.2	19.5
M89-1074	39.0	23	3.0	1.3	28	1.9	16.2	41.1	19.1
M89-1678	36.8	31	4.6	1.3	25	1.9	15.7	40.0	19.9
M89-1743	39.3	22	5.4	1.4	28	1.9	12.5	42.6	17.4
M89-1815	38.6	25	-5.8	1.4	28	1.6	15.9	41.2	19.5
ND86-22	39.4	21	-8.2	1.6	23	1.5	16.6	41.4	19.9
ND88-597	39.8	19	-5.2	1.4	26	1.7	15.1	41.0	19.2
ND88-599	42.0	6	-2.6	1.3	27	1.6	16.2	41.8	19.0
ND88-709	35.6	36	-8.8	1.7	23	2.0	16.8	39.3	20.4
ND88-800	39.8	19	-0.6	1.3	27	1.7	17.2	42.0	19.7
ORC9002	44.9	1	2.8	1.3	25	2.0	16.0	40.2	19.6
ORC9201	41.8	8	7.6	1.3	32	2.0	16.9	41.0	19.4
ORC9203	34.3	39	-5.4	1.3	23	1.7	16.3	41.9	19.7
OT91-3	40.0	17	-1.0	1.5	26	1.7	13.9	40.0	20.3
OT92-1	42.5	4	3.2	1.4	29	2.1	14.2	39.7	19.8
OT92-2	41.8	8	-6.6	1.7	26	2.0	16.5	40.8	19.7
OT92-4	41.4	11	-5.4	1.6	24	1.4	14.2	41.0	19.5
SL88-621	34.2	41	-4.6	1.3	26	1.6	14.3	38.8	20.6
SL88-686N	41.0	14	5.6	1.5	33	2.1	16.9	41.7	19.6
SL89-111	41.2	12	-5.4	1.5	27	1.7	15.0	40.2	20.0
SL89-556	35.7	35	-7.4	1.3	26	1.5	14.8	40.6	19.8
SL89-595	38.1	28	-5.0	1.3	27	1.6	15.1	39.4	20.4
SL89-850	39.9	18	-4.8	1.3	27	1.4	13.9	41.6	19.1
SL90-561	34.3	39	-2.0	1.3	25	1.7	16.6	41.2	19.1
SL90-576	32.1	43	-3.2	1.3	23	1.7	15.7	41.5	19.4
SL90-577	33.3	42	-4.8	1.3	23	1.4	17.1	41.9	19.5
SL91-0454M	40.5	16	8.0	1.4	28	2.3	15.3	40.7	19.3
SL91-1574M	41.5	10	3.8	1.3	25	2.1	17.8	41.5	19.4
SL91-2856N	41.9	7	1.8	1.3	28	1.6	14.8	40.8	19.2
SL91-3273N	38.2	27	4.0	1.3	29	1.9	13.9	39.6	19.8

* 126.6 Days After Planting

UNIFORM TEST 0, 1993

1992-1993 2-YEAR MEAN

No. of Tests Strain	Yield 9 bu/a	Rank 9 No.	Maturity 10 Date	Lodging 11 Score	Plant Height 12 In.	Seed Quality 12 Score	Seed Size 12 g/100	Composition Protein 9 %	Oil 9 %
Agassiz (00)	34.6	12	-8.6	1.2	27	1.8	13.8	41.1	18.9
Lambert (0)	42.0	2	09/24.0*	1.5	29	1.7	15.9	41.4	18.9
Parker (I)	41.8	3	7.2	2.1	36	2.4	16.6	39.8	18.7
M86-356	35.9	10	1.0	1.3	29	1.5	14.3	45.4	15.9
M87-1569	35.1	11	2.8	1.6	32	1.7	13.9	40.5	16.2
M88-84	38.8	7	0.6	1.3	27	1.7	16.1	41.0	19.1
M88-210	40.4	4	1.7	1.5	31	1.9	16.8	39.9	20.2
ND88-597	39.1	6	-3.0	1.4	30	1.9	16.1	40.7	18.5
ND88-599	38.7	8	-1.4	1.3	30	1.7	16.7	41.4	18.7
ND88-709	33.2	13	-8.0	2.0	29	2.0	17.4	39.6	19.4
ND88-800	38.2	9	-0.7	1.6	29	1.9	17.7	41.1	19.0
ORC 9002	42.3	1	3.4	1.4	29	2.0	16.4	40.2	19.0
OT91-3	39.9	5	1.5	1.5	29	1.9	15.4	40.2	19.4

* 132.0 Days After Planting

1991-1993 3-YEAR MEAN

No. of Tests Strain	16	16	16	17	19	19	19	14	14
Lambert (0)	43.1	1	09/18.7*	1.4	30	1.8	16.0	41.2	19.4
Parker (I)	43.1	1	8.6	2.2	36	2.2	17.0	40.0	19.1
M86-356	37.1	4	1.3	1.2	30	1.6	14.5	45.0	16.6
ORC9002	43.0	3	3.1	1.3	28	1.9	16.7	40.1	19.3

* 124.9 Days After Planting

1990-1993 4-YEAR MEAN

No. of Tests Strain	23	23	23	24	26	26	26	19	19
Lambert (0)	42.8	1	09/19.8*	1.5	30	1.9	16.2	41.0	19.8
M86-356	37.2	2	1.8	1.4	30	1.8	14.6	44.5	17.2

* 124.4 Days After Planting

UNIFORM TEST 0, 1993

YIELD (bu/a)

Strain	Mean 3 Tests	Morris* MN	Rose-mount MN	Ottawa Ont.	Wood-stock Ont.	Spooner* WI
Agassiz (E)	35.0	13.3	30.9	40.4	33.6	30.0
Lambert (O)	43.7	24.9	38.5	47.2	45.4	34.5
Parker (I)	44.8	42.8	39.4	50.9	44.1	19.6
M86-356	38.6	25.7	35.2	42.0	38.6	26.8
M87-1569	37.2	28.2	34.7	39.0	37.8	18.3
M88-84	36.8	25.9	38.1	42.1	30.3	28.7
M88-210	40.8	32.0	35.5	48.2	38.7	25.7
M89-74	36.6	33.5	32.3	41.2	36.3	24.2
M89-198	36.1	18.0	32.0	45.6	30.7	20.2
M89-358	39.0	29.6	33.3	42.5	41.2	24.4
M89-643	35.2	28.0	32.7	37.3	35.5	23.3
M89-932	37.4	22.7	35.8	37.8	38.7	16.5
M89-1006	41.1	33.3	38.9	46.1	38.4	23.7
M89-1023	42.1	36.3	41.3	48.4	36.5	22.1
M89-1074	39.0	37.2	36.6	45.4	34.9	21.3
M89-1678	36.8	30.9	33.3	44.8	32.4	16.8
M89-1743	39.3	44.5	38.7	42.1	37.1	22.6
M89-1815	38.6	24.3	34.5	48.4	32.9	23.3
ND86-22	39.4	20.2	30.9	49.2	38.1	16.2
ND88-597	39.8	19.3	34.7	43.6	41.2	28.2
ND88-599	42.0	24.2	38.0	46.7	41.3	28.7
ND88-709	35.6	17.1	29.9	41.0	35.9	25.0
ND88-800	39.8	38.5	34.6	46.8	37.9	27.2
ORC9002	44.9	40.1	42.3	52.9	39.4	18.3
ORC9201	41.8	36.0	42.0	42.5	41.0	18.8
ORC9203	34.3	29.0	23.3	45.3	34.3	21.7
OT91-3	40.0	35.5	34.1	47.7	38.3	33.9
OT92-1	42.5	47.1	39.2	51.3	37.0	26.9
OT92-2	41.8	29.5	37.4	46.5	41.6	27.2
OT92-4	41.4	21.2	33.1	47.6	43.6	25.6
SL88-621	34.2	32.3	30.4	43.6	28.7	26.1
SL88-686N	41.0	51.4	35.3	48.4	39.2	30.7
SL89-111	41.2	28.7	39.9	45.6	38.0	26.4
SL89-556	35.7	22.3	31.7	39.5	35.9	24.8
SL89-595	38.1	34.7	31.4	45.2	37.8	24.0
SL89-850	39.9	37.1	32.4	45.7	41.6	25.4
SL90-561	34.3	34.5	32.5	39.7	30.7	22.0
SL90-576	32.1	23.6	29.2	37.9	29.1	23.9
SL90-577	33.3	22.4	33.3	35.7	30.9	22.2
SL91-0454M	40.5	36.3	40.4	40.1	40.9	17.9
SL91-1574M	41.5	30.3	40.7	40.4	43.3	20.8
SL91-2856N	41.9	30.9	41.6	44.6	39.5	21.2
SL91-3273N	38.2	43.8	39.9	42.3	32.4	15.1
C.V. (%)		20.4	10.2	11.3	12.8	19.0
L.S.D. (5%)		12.7	5.9	7.0	6.6	7.2
Row Sp. (In.)		10	10	16	15	36
Rows/Plot		10	10	4	4	4
Reps		2	3	4	4	3

* Data not included in the mean.

UNIFORM TEST 0, 1993

YIELD RANK

Strain	Yield Rank	Morris MN	Rose-mount MN	Ottawa Ont.	Wood-stock Ont.	Spooner WI
Agassiz (E)	38	43	38	34	34	4
Lambert (O)	3	31	13	11	1	1
Parker (I)	2	5	9	3	2	35
M86-356	25	30	21	31	17	11
M87-1569	30	27	22	39	23	37
M88-84	31	29	14	29	41	5
M88-210	15	19	19	8	15	14
M89-74	33	16	34	32	28	20
M89-198	34	41	35	17	39	34
M89-358	23	23	27	26	8	19
M89-643	37	28	31	42	31	24
M89-932	29	35	18	41	15	41
M89-1006	13	17	11	15	18	23
M89-1023	5	10	4	5	27	28
M89-1074	23	8	17	19	32	31
M89-1678	31	20	27	22	36	40
M89-1743	22	3	12	29	25	26
M89-1815	25	32	25	5	35	24
ND86-22	21	39	38	4	20	42
ND88-597	19	40	22	24	8	7
ND88-599	6	33	15	13	7	5
ND88-709	36	42	41	33	29	17
ND88-800	19	7	24	12	22	8
ORC9002	1	6	1	1	13	37
ORC9201	8	12	2	26	10	36
ORC9203	39	25	43	20	33	30
OT91-3	17	13	26	9	19	2
OT92-1	4	2	10	2	26	10
OT92-2	8	24	16	14	5	8
OT92-4	11	38	30	10	3	15
SL88-621	41	18	40	24	43	13
SL88-686N	14	1	20	5	14	3
SL89-111	12	26	7	17	21	12
SL89-556	35	37	36	38	29	18
SL89-595	28	14	37	21	23	21
SL89-850	18	9	33	16	5	16
SL90-561	39	15	32	37	39	29
SL90-576	43	34	42	40	42	22
SL90-577	42	36	27	43	38	27
SL91-0454M	16	10	6	36	11	39
SL91-1574M	10	22	5	34	4	33
SL91-2856N	7	20	3	23	12	32
SL91-3273N	27	4	7	28	36	43

UNIFORM TEST 0, 1993

MATURITY (date)

Strain	Mean 5 Tests	Morris MN	Rose-mount MN	Ottawa Ont.	Wood-stock Ont.	Spooner WI
Agassiz (E)	-10.0	-19	-9	-9	-6	-7
Lambert (0)	09/18	09/19	09/19	09/10	09/14	09/29
Parker (I)	8.0	11	13	5	13	-2
M86-356	1.6	0	7	-4	6	-1
M87-1569	3.2	2	6	-1	9	0
M88-84	0.6	-5	2	-2	10	-2
M88-210	2.4	5	4	1	2	0
M89-74	1.2	5	-2	1	2	0
M89-198	-3.0	-8	-2	0	-1	-4
M89-358	4.8	2	9	0	11	2
M89-643	-2.0	-2	-2	-2	-1	-3
M89-932	0.6	-4	3	0	5	-1
M89-1006	2.0	-1	2	-2	8	3
M89-1023	4.2	1	9	1	12	-2
M89-1074	3.0	2	5	1	5	2
M89-1678	4.6	4	4	3	9	3
M89-1743	5.4	6	11	1	11	-2
M89-1815	-5.8	-17	-4	-4	1	-5
ND86-22	-8.2	-11	-9	-10	-5	-6
ND88-597	-5.2	-17	0	-5	-1	-3
ND88-599	-2.6	-11	0	-1	0	-1
ND88-709	-8.8	-17	-7	-8	-4	-8
ND88-800	-0.6	-1	1	-2	1	-2
ORC9002	2.8	1	5	-2	8	2
ORC9201	7.6	8	12	2	13	3
ORC9203	-5.4	-8	-6	-9	-1	-3
OT91-3	-1.0	-2	1	-5	2	-1
OT92-1	3.2	4	7	-1	3	3
OT92-2	-6.6	-15	-7	-5	-1	-5
OT92-4	-5.4	-19	-6	-4	4	-2
SL88-621	-4.6	-15	-3	-2	-1	-2
SL88-686N	5.6	5	10	0	10	3
SL89-111	-5.4	-11	-4	-5	-3	-4
SL89-556	-7.4	-17	-6	-8	-3	-3
SL89-595	-5.0	-8	-6	-7	0	-4
SL89-850	-4.8	-11	-6	-3	0	-4
SL90-561	-2.0	-4	-2	-2	-3	1
SL90-576	-3.2	-5	-3	-6	-3	1
SL90-577	-4.8	-9	-5	-3	-3	-4
SL91-0454M	8.0	10	14	3	15	-2
SL91-1574M	3.8	0	8	1	7	3
SL91-2856N	1.8	-2	5	0	5	1
SL91-3273N	4.0	6	7	-1	6	2
Date Planted	05/14	05/04	05/12	05/23	05/20	05/14
Days to Mature	126.6	138	130	110	117	138

UNIFORM TEST 0, 1993

LODGING (score)

Strain	Mean 4 Tests	Morris MN	Rose-mount MN	Ottawa Ont.	Wood-stock Ont.	Spooner WI
Agassiz (E)	1.3	1.0	2.0	1.0	1.0	
Lambert (0)	1.4	1.0	2.0	1.0	1.5	
Parker (I)	1.6	1.0	3.0	1.0	1.4	
M86-356	1.3	1.0	2.0	1.0	1.0	
M87-1569	1.3	1.0	2.0	1.0	1.0	
M88-84	1.3	1.0	2.0	1.0	1.0	
M88-210	1.4	1.0	2.3	1.0	1.1	
M89-74	1.5	1.0	2.3	1.3	1.3	
M89-198	1.3	1.0	2.0	1.0	1.0	
M89-358	1.6	1.0	2.7	1.0	1.6	
M89-643	1.3	1.0	2.0	1.0	1.0	
M89-932	1.3	1.0	2.0	1.0	1.0	
M89-1006	1.3	1.0	2.0	1.0	1.0	
M89-1023	1.4	1.0	2.3	1.0	1.3	
M89-1074	1.3	1.0	2.0	1.0	1.0	
M89-1678	1.3	1.0	2.0	1.0	1.0	
M89-1743	1.4	1.0	2.7	1.0	1.0	
M89-1815	1.4	1.0	2.7	1.0	1.0	
ND86-22	1.6	1.0	3.0	1.0	1.3	
ND88-597	1.4	1.0	2.3	1.0	1.1	
ND88-599	1.3	1.0	2.0	1.0	1.0	
ND88-709	1.7	1.0	3.3	1.0	1.3	
ND88-800	1.3	1.0	2.3	1.0	1.0	
ORC9002	1.3	1.0	2.0	1.0	1.0	
ORC9201	1.3	1.0	2.0	1.0	1.3	
ORC9203	1.3	1.0	2.0	1.0	1.0	
OT91-3	1.5	1.0	3.0	1.0	1.1	
OT92-1	1.4	1.0	2.3	1.0	1.1	
OT92-2	1.7	1.0	2.3	1.8	1.8	
OT92-4	1.6	1.0	2.7	1.7	1.1	
SL88-621	1.3	1.0	2.0	1.0	1.0	
SL88-686N	1.5	1.0	3.0	1.0	1.0	
SL89-111	1.5	1.0	2.7	1.0	1.3	
SL89-556	1.3	1.0	2.0	1.0	1.1	
SL89-595	1.3	1.0	2.0	1.0	1.0	
SL89-850	1.3	1.0	2.3	1.0	1.0	
SL90-561	1.3	1.0	2.0	1.0	1.1	
SL90-576	1.3	1.0	2.0	1.0	1.0	
SL90-577	1.3	1.0	2.0	1.0	1.0	
SL91-0454M	1.4	1.0	2.3	1.0	1.3	
SL91-1574M	1.3	1.0	2.3	1.0	1.0	
SL91-2856N	1.3	1.0	2.0	1.0	1.3	
SL91-3273N	1.3	1.0	2.0	1.0	1.0	

UNIFORM TEST 0, 1993

PLANT HEIGHT (inches)

Strain	Mean 5 Tests	Morris MN	Rose-mount MN	Ottawa Ont.	Wood-stock Ont.	Spooner WI
Agassiz (E)	23	13	24	21	28	29
Lambert (O)	27	18	27	23	35	30
Parker (I)	32	28	32	27	40	35
M86-356	27	21	27	25	31	29
M87-1569	28	23	29	23	33	30
M88-84	23	19	24	19	28	26
M88-210	28	23	27	24	34	30
M89-74	27	18	27	26	35	31
M89-198	24	15	26	23	31	27
M89-358	29	21	29	24	38	31
M89-643	25	20	24	23	31	27
M89-932	25	19	26	21	31	26
M89-1006	28	22	28	25	34	29
M89-1023	29	22	31	25	37	32
M89-1074	28	24	29	26	31	29
M89-1678	25	23	26	22	26	28
M89-1743	28	26	31	24	29	30
M89-1815	28	21	28	29	33	30
ND86-22	23	17	22	26	31	21
ND88-597	26	19	26	25	31	28
ND88-599	27	21	26	25	33	29
ND88-709	23	16	23	21	32	24
ND88-800	27	21	28	26	32	27
ORC9002	25	22	28	21	28	26
ORC9201	32	26	32	28	37	35
ORC9203	23	21	24	22	28	22
OT91-3	26	22	27	25	29	28
OT92-1	29	23	29	29	34	29
OT92-2	26	21	23	26	33	28
OT92-4	24	18	23	26	26	29
SL88-621	26	21	26	24	30	29
SL88-686N	33	29	32	28	39	37
SL89-111	27	21	30	23	32	27
SL89-556	26	20	26	24	31	29
SL89-595	27	28	26	23	31	26
SL89-850	27	21	28	24	33	29
SL90-561	25	22	25	24	29	27
SL90-576	23	18	24	21	28	26
SL90-577	23	18	24	20	28	25
SL91-0454M	28	22	31	24	34	29
SL91-1574M	25	19	29	21	28	27
SL91-2856N	28	20	30	26	35	27
SL91-3273N	29	28	31	25	32	29

UNIFORM TEST 0, 1993

SEED QUALITY (score)

Strain	Mean 5 Tests	Morris MN	Rose-mount MN	Ottawa Ont.	Wood-stock Ont.	Spooner WI
Agassiz (E)	1.5	1.7	1.0	2.0	2.0	1.0
Lambert (O)	1.7	1.3	1.3	2.0	2.0	2.0
Parker (I)	2.3	3.0	2.0	1.8	2.5	2.0
M86-356	1.4	1.7	1.0	2.0	1.5	1.0
M87-1569	1.5	1.3	1.0	1.5	1.5	2.0
M88-84	1.4	1.3	1.3	1.7	1.5	1.0
M88-210	1.7	1.3	1.3	1.8	2.0	2.0
M89-74	2.1	1.7	2.0	2.2	2.5	2.0
M89-198	1.5	1.3	1.0	2.0	2.0	1.0
M89-358	1.7	1.3	1.0	2.0	2.0	2.0
M89-643	1.8	1.3	1.0	2.0	2.5	2.0
M89-932	1.7	1.3	1.0	2.0	2.0	2.0
M89-1006	1.4	1.3	1.3	2.0	1.5	1.0
M89-1023	2.0	1.7	2.3	2.0	2.0	2.0
M89-1074	1.9	2.3	1.0	2.0	2.0	2.0
M89-1678	1.9	2.0	1.0	2.0	2.5	2.0
M89-1743	1.9	1.7	2.0	2.0	2.0	2.0
M89-1815	1.6	1.3	1.0	2.0	2.5	1.0
ND86-22	1.5	1.3	1.3	2.0	2.0	1.0
ND88-597	1.7	1.7	1.3	1.7	2.0	2.0
ND88-599	1.6	1.3	1.0	2.0	2.5	1.0
ND88-709	2.0	1.7	1.7	2.2	2.5	2.0
ND88-800	1.7	1.3	1.0	2.0	2.0	2.0
ORC9002	2.0	2.0	1.7	2.0	2.5	2.0
ORC9201	2.0	2.0	1.3	2.0	2.5	2.0
ORC9203	1.7	1.7	1.0	2.0	2.0	2.0
OT91-3	1.7	1.7	1.0	2.0	2.0	2.0
OT92-1	2.1	2.7	1.7	2.1	2.0	2.0
OT92-2	2.0	1.3	1.3	2.3	3.0	2.0
OT92-4	1.4	1.3	1.3	1.5	2.0	1.0
SL88-621	1.6	1.7	1.0	1.8	2.5	1.0
SL88-686N	2.1	2.0	1.0	2.0	3.5	2.0
SL89-111	1.7	1.7	1.3	2.5	2.0	1.0
SL89-556	1.5	1.3	1.0	2.0	2.0	1.0
SL89-595	1.6	1.3	1.0	2.1	2.5	1.0
SL89-850	1.4	1.3	1.0	1.7	2.0	1.0
SL90-561	1.7	1.7	1.0	2.0	2.0	2.0
SL90-576	1.7	1.3	1.0	2.0	2.0	2.0
SL90-577	1.4	1.3	1.0	1.8	2.0	1.0
SL91-0454M	2.3	3.0	1.7	2.0	3.0	2.0
SL91-1574M	2.1	2.0	1.3	2.0	3.0	2.0
SL91-2856N	1.6	1.3	1.0	1.7	2.0	2.0
SL91-3273N	1.9	2.3	1.3	2.0	2.0	2.0

UNIFORM TEST 0, 1993

SEED SIZE (g/100)

Strain	Mean 5 Tests	Morris MN	Rose-mount MN	Ottawa Ont.	Wood-stock Ont.	Spooner WI
Agassiz (E)	13.8	14.7	13.1	12.9	13.1	15.0
Lambert (O)	15.7	15.8	14.6	15.4	16.0	16.8
Parker (I)	16.8	15.4	15.5	17.9	17.5	17.6
M86-356	14.4	13.5	14.8	14.1	14.3	15.1
M87-1569	14.1	13.4	14.0	13.3	15.2	14.6
M88-84	16.0	15.1	15.8	16.6	14.7	17.6
M88-210	15.9	14.6	15.9	16.2	15.7	17.1
M89-74	15.3	14.7	15.1	15.2	14.8	16.9
M89-198	15.0	14.9	14.3	16.4	13.8	15.7
M89-358	14.9	13.0	13.6	14.6	16.6	16.6
M89-643	14.8	14.4	15.3	15.0	14.7	14.6
M89-932	14.4	12.2	13.2	14.7	15.5	16.4
M89-1006	14.3	12.8	13.5	14.7	15.4	14.9
M89-1023	14.9	14.0	14.1	14.7	14.0	17.9
M89-1074	16.2	14.7	16.0	16.2	16.1	18.0
M89-1678	15.7	15.1	17.0	17.3	16.9	12.3
M89-1743	12.5	9.8	11.1	12.5	12.9	16.3
M89-1815	15.9	15.0	15.2	16.1	14.8	18.5
ND86-22	16.6	16.3	16.7	17.0	16.9	16.0
ND88-597	15.1	14.9	13.6	15.2	15.0	16.8
ND88-599	16.2	16.0	15.7	16.5	16.1	16.8
ND88-709	16.8	15.9	16.4	16.6	15.4	19.6
ND88-800	17.2	17.6	17.2	17.0	16.2	18.1
ORC9002	16.0	15.2	15.4	15.8	16.2	17.4
ORC9201	16.9	16.0	15.8	16.0	18.6	18.3
ORC9203	16.3	16.6	15.4	16.2	14.9	18.2
OT91-3	13.9	13.6	13.4	14.2	13.2	15.3
OT92-1	14.2	13.8	13.5	15.6	13.2	14.7
OT92-2	16.5	17.4	16.5	16.4	14.8	17.4
OT92-4	14.2	14.2	13.6	13.7	15.0	14.4
SL88-621	14.3	14.9	14.2	15.1	12.2	15.2
SL88-686N	16.9	16.3	16.2	17.3	16.4	18.4
SL89-111	15.0	14.4	15.2	15.1	13.1	17.1
SL89-556	14.8	15.7	14.7	14.9	12.3	16.6
SL89-595	15.1	15.3	15.3	13.8	14.1	16.8
SL89-850	13.9	13.3	12.9	13.7	14.3	15.5
SL90-561	16.6	17.7	15.6	16.6	15.8	17.2
SL90-576	15.7	16.3	15.7	15.3	14.2	16.8
SL90-577	17.1	18.0	16.6	17.5	15.3	18.2
SL91-0454M	15.3	13.8	15.0	15.4	15.9	16.3
SL91-1574M	17.8	17.7	17.6	17.8	17.8	18.1
SL91-2856N	14.8	13.7	14.1	16.0	14.7	15.4
SL91-3273N	13.9	13.6	13.9	14.1	13.6	14.4

UNIFORM TEST 0, 1993

PROTEIN (%)

Strain	Mean 5 Tests	Morris MN	Rosemount MN	Woodstock Ont.	Brookings SD	Spooner WI
Agassiz (E)	41.5	39.9	40.0	44.5	41.5	41.5
Lambert (O)	42.1	40.7	42.0	44.8	40.1	42.8
Parker (I)	40.1	38.2	40.7	41.5	41.0	39.3
M86-356	45.2	44.1	45.3	48.7	41.5	46.4
M87-1569	40.5	40.6	41.0	41.5	39.2	40.3
M88-84	41.6	40.3	41.0	45.1	40.5	41.3
M88-210	40.2	39.6	40.3	41.9	38.5	40.9
M89-74	41.1	39.0	40.7	42.3	42.1	41.3
M89-198	40.1	38.9	40.0	42.2	39.0	40.6
M89-358	41.1	40.0	40.8	43.3	39.2	42.0
M89-643	40.6	39.5	40.4	43.6	37.9	41.4
M89-932	40.9	40.5	41.0	42.5	38.9	41.8
M89-1006	43.2	41.4	41.5	47.0	43.6	42.7
M89-1023	40.2	39.3	40.9	42.9	39.1	38.8
M89-1074	41.1	40.3	40.8	43.3	39.4	41.7
M89-1678	40.0	39.7	40.4	42.1	38.6	39.2
M89-1743	42.6	40.9	43.0	44.5	40.6	44.0
M89-1815	41.2	39.4	40.1	43.0	40.7	42.6
ND86-22	41.4	41.0	40.5	43.0	40.9	41.8
ND88-597	41.0	39.5	40.5	44.0	40.0	41.2
ND88-599	41.8	40.9	41.5	45.0	40.3	41.3
ND88-709	39.3	37.0	38.8	41.3	40.1	39.5
ND88-800	42.0	41.2	41.9	44.6	40.6	41.8
ORC9002	40.2	38.8	39.6	41.7	41.2	39.9
ORC9201	41.0	39.8	40.5	43.5	40.0	41.3
ORC9203	41.9	41.2	41.7	42.7	40.6	43.4
OT91-3	40.0	38.7	39.5	41.8	40.6	39.5
OT92-1	39.7	38.2	40.1	41.6	39.4	39.3
OT92-2	40.8	40.5	41.2	43.5	38.2	40.4
OT92-4	41.0	40.8	42.0	42.4	39.4	40.2
SL88-621	38.8	38.0	38.7	41.0	37.9	38.4
SL88-686N	41.7	41.5	42.1	46.0	36.5	42.5
SL89-111	40.2	38.1	38.6	43.6	40.6	40.0
SL89-556	40.6	39.5	40.5	43.4	38.6	41.2
SL89-595	39.4	39.3	39.6	42.0	37.4	38.8
SL89-850	41.6	40.3	41.1	42.2	42.5	41.9
SL90-561	41.2	40.1	40.8	43.4	40.9	41.0
SL90-576	41.5	40.7	41.8	44.3	40.5	40.4
SL90-577	41.9	41.6	41.6	44.5	40.0	41.6
SL91-0454M	40.7	39.6	41.8	43.2	38.9	39.8
SL91-1574M	41.5	40.3	41.7	43.2	41.5	41.0
SL91-2856N	40.8	39.9	40.8	42.3	40.7	40.5
SL91-3273N	39.6	38.8	40.5	41.8	37.8	39.1

UNIFORM TEST 0, 1993

OIL (%)

Strain	Mean 5 Tests	Morris MN	Rosemount MN	Woodstock Ont.	Brookings SD	Spooner WI
Agassiz (E)	19.6	21.0	20.7	18.6	18.5	19.0
Lambert (0)	19.2	20.6	19.8	19.0	18.4	18.0
Parker (I)	19.1	19.9	18.9	18.9	18.7	18.9
M86-356	16.4	17.1	17.1	15.4	16.9	15.6
M87-1569	17.7	17.4	17.6	17.0	19.3	17.0
M88-84	19.9	21.2	20.6	18.4	19.3	20.1
M88-210	20.6	21.1	20.8	20.7	20.7	19.7
M89-74	18.9	20.4	19.5	18.9	16.8	19.1
M89-198	20.0	20.9	20.2	19.5	19.6	19.7
M89-358	18.2	19.3	19.0	18.1	16.9	17.5
M89-643	19.9	20.8	21.3	19.0	19.2	19.4
M89-932	19.3	19.4	19.1	19.2	20.1	18.5
M89-1006	18.0	19.0	19.3	16.3	17.6	17.9
M89-1023	19.5	20.5	20.7	18.9	19.1	18.5
M89-1074	19.1	19.6	19.9	18.7	18.9	18.6
M89-1678	19.9	20.9	19.9	19.1	19.9	19.7
M89-1743	17.4	17.9	16.9	17.0	18.7	16.3
M89-1815	19.5	20.7	21.1	18.9	18.6	18.2
ND86-22	19.9	20.4	21.1	19.4	18.9	19.5
ND88-597	19.2	20.5	20.1	18.0	19.3	18.2
ND88-599	19.0	19.5	19.6	17.7	19.1	18.9
ND88-709	20.4	21.5	21.7	19.8	19.0	20.1
ND88-800	19.7	20.5	20.3	19.4	19.4	18.9
ORC9002	19.6	20.3	20.4	19.7	18.2	19.4
ORC9201	19.4	19.7	19.5	19.4	18.6	19.9
ORC9203	19.7	20.4	20.3	19.8	19.1	18.9
OT91-3	20.3	20.9	20.8	20.0	19.7	19.9
OT92-1	19.8	20.3	20.4	19.2	19.7	19.6
OT92-2	19.7	20.4	20.6	17.3	20.4	19.6
OT92-4	19.5	19.9	19.3	19.3	19.6	19.3
SL88-621	20.6	21.8	21.7	20.5	19.0	19.9
SL88-686N	19.6	20.2	19.9	18.0	21.0	18.8
SL89-111	20.0	21.6	21.4	18.9	18.3	20.0
SL89-556	19.8	20.9	21.1	19.5	17.9	19.6
SL89-595	20.4	20.7	21.1	19.7	19.7	20.6
SL89-850	19.1	20.0	19.7	19.3	17.4	19.2
SL90-561	19.1	19.8	20.1	18.6	18.5	18.3
SL90-576	19.4	20.0	20.0	18.3	19.2	19.7
SL90-577	19.5	19.9	20.1	18.8	19.8	18.9
SL91-0454M	19.3	20.1	18.8	18.9	18.9	19.9
SL91-1574M	19.4	20.1	19.7	19.4	19.2	18.8
SL91-2856N	19.2	19.7	20.0	19.9	17.6	19.0
SL91-3273N	19.8	20.2	20.4	19.1	20.1	19.2

UNIFORM TEST I, 1993

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Archer	Williams 82 and PRX54-59 x BSR 101	PTI	BC4 F3	Rps1-k, Rps6
Lambert (0)	M75-274 x M76-151	1	F5	Rps1
Parker (I)	A79-136012 x Dawson	4	F5	Rps1
Sturdy (L)	M70-127 x Century	6	F5	
Marcus	A79-135010 x Asgrow A1937	-	F5	
A Marcus BC	(Marcus5 x Elgin 87) x (Marcus5 x Preston BC-11-8)	- -	BC4 F2	Rps1-k, Rps6
A91-501002	Agripro AP2190 x A86-301024	PTI	F5	BSR resis.
A91-501023	A86-301024 x NK S23-03	PTIIA	F5	BSR resis.
A91-607023	Dairyland DSR 304 x Kenwood	PTIIA	F5	
A91-607052	Elgin 87 x Marcus	PTIIA	F5	
AC90-115043	(NK S23-03 x A86-152032) x Sturdy	1	F5	Fe Chlor.
M86-1322	M75-2 x L77-906	SCN UTI	F5	SCN 3
M87-642	Sibley x BSR 101	1	F4	Rps1
M87-1621 (SCN)	Ozzie x Fayette	2	F8	Rps1 SCN 3
M88-1	BSR 101 x M82-776	PTI	F5	Rps1
M88-77	M83-15 x M82-776	PTI	F5	Rps1
M88-207	M81-99 x Hardin	PTI	F5	Rps1
M88-208	M81-99 x Hardin	PTI	F5	Rps1
M89-1612	Cartter x M85-1430	SCN UTII	F5	Rps1-k,SCN 3
M89-1635	M83-15 x M85-1430	SCN UTI	F5	Rps1-k,SCN 3
M89-1641	Cartter x M85-627	SCN UTI	F5	Rps1,SCN 3
M89-1644	Cartter x M85-627	SCN UTI	F5	Rps1,SCN 3
ORC 9004	Elgin x A81-155014	1	F5	
ORC 9006	KG 60 x Asgrow A2943	1	F5	

* Number of years in test or name of 1992 test.

UNIFORM TEST I, 1993

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score		Emerg. Score
		Ames	Hanska	Ames
Archer	PGTDYIbI	3.3	3.0	2
Lambert (0)	PGTSYBfI	3.5	2.5	1
Parker (I)	WGBDYIbI	4.6	4.0	5
Sturdy (L)	PGBSYIbI	3.1	3.0	5
Marcus	WTTSYBrI	4.0	5.0	2
A Marcus BC	WTBDYBrI	4.5	5.0	5
A91-501002	PGBSYIbI	4.3	3.5	3
A91-501023	PTBDYBlI	3.8	4.5	5
A91-607023	PTBDYBlI	5.0	5.0	4
A91-607052	WTBSYBlI	4.8	4.5	5
AC90-115043	PGBIYBfI	3.5	3.5	5
M86-1322	WGBDYBfI	5.0	4.0	5
M87-642	PGBDYIbI	3.5	3.5	4
M87-1621 (SCN)	WTBDYBlI	4.1	4.5	5
M88-1	PGBDYBfI	2.8	3.5	5
M88-77	WGBSYYI	2.2	3.5	5
M88-207	PGBSYYI	3.5	5.0	2
M88-208	PGBSYYI	4.3	4.5	2
M89-1612	WTTIYYI	4.3	4.5	5
M89-1635	WGB+TSYYI	4.1	4.0	5
M89-1641	PGTDYYI	3.7	3.5	3
M89-1644	WTBDYBlI	4.8	4.5	5
ORC9004	PTBSYBlI	3.7	4.5	4
ORC9006	PTBDYYI	4.5	4.5	1

UNIFORM TEST I, 1993

DISEASE DATA

Strain	BSR-Boone Plant n %	BSR-Boone Stem n %	PR Ames Race 4	PR Lafayette Race 7	PS a %	PSB Seed Lafayette n %	PSB Seed Lafayette Germ. %
Archer	33.3	8.5	R	R	84	13	58
Lambert (0)	90.0	76.3	S	S	62	6	52
Parker (I)	96.7	85.1	S	S	86	8	68
Sturdy (L)	100.0	50.0	S	S	69	22	51
Marcus	100.0	61.4	S	S	92	12	56
A Marcus BC	70.0	58.8	R	R	96	8	72
A91-501002	60.0	31.9	S	R	74	16	62
A91-501023	100.0	78.9	S	S	88	20	54
A91-607023	80.0	61.2	S	S	74	26	48
A91-607052	80.0	61.5	R	R	68	16	58
AC90-115043	100.0	56.4	R	S	42	36	58
M86-1322	50.0	15.3	S	H	88	4	72
M87-642	50.0	16.8	S	S	86	4	82
M87-1621 (SCN)	50.0	13.9	R	H	86	26	34
M88-1	0.0	0.0	S	S	98	4	70
M88-77	70.0	25.1	S	S	42	26	40
M88-207	100.0	83.4	S	S	84	12	68
M88-208	80.0	53.9	S	S	42	20	68
M89-1612	10.0	0.7	S	H	94	2	60
M89-1635	60.0	35.0	R	R	54	22	76
M89-1641	20.0	2.8	S	S	72	6	62
M89-1644	20.0	6.4	S	R	84	18	46
ORC9004	90.0	50.0	S	S	94	4	54
ORC9006	80.0	35.2	R	S	44	10	58

UNIFORM TEST I, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 15 bu/a	Rank 15 No.	Maturity 13 Date	Lodging 16 Score	Plant Height 16 In.	Seed Quality 16 Score	Seed Size 15 g/100	Composition Protein 5 %	 Oil 5 %
Archer	42.9	12	3.2	1.4	31	1.5	15.6	39.4	19.9
Lambert (0)	35.7	24	-2.6	1.3	23	1.6	16.3	40.9	20.2
Parker (I)	44.4	7	09/21*	1.8	30	1.7	17.2	40.3	20.1
Sturdy (L)	43.5	9	5.5	1.5	30	1.7	17.0	39.7	19.7
Marcus	45.2	5	3.8	1.6	27	1.9	15.6	39.8	20.2
A Marcus BC	47.1	1	4.4	1.5	27	1.9	16.4	40.3	19.8
A91-501002	44.3	8	1.6	1.2	27	1.6	17.9	40.0	20.7
A91-501023	44.9	6	4.2	1.8	29	1.8	16.1	40.0	20.1
A91-607023	46.3	4	5.4	1.6	30	1.7	15.2	39.3	19.8
A91-607052	46.5	2	5.8	1.5	26	1.8	16.0	38.7	20.6
AC90-115043	43.4	10	3.8	1.3	27	1.7	16.6	39.9	20.1
M86-1322	40.5	20	3.5	1.5	27	1.7	13.9	39.8	20.0
M87-642	41.6	15	2.8	1.4	28	1.5	15.7	40.1	19.6
M87-1621 (SCN)	39.5	21	1.9	1.2	25	1.6	16.7	41.2	20.0
M88-1	42.7	13	3.8	1.5	30	1.5	16.2	40.3	19.5
M88-77	40.8	18	0.9	1.3	28	1.5	17.8	39.5	20.4
M88-207	43.0	11	1.5	1.7	30	1.3	15.4	40.0	20.0
M88-208	40.8	18	1.8	1.7	29	1.4	15.2	39.9	20.3
M89-1612	37.9	22	3.8	1.4	28	1.5	14.6	40.5	19.4
M89-1635	37.6	23	1.3	1.5	29	1.5	13.6	40.4	19.8
M89-1641	41.0	16	4.3	2.1	31	1.4	14.2	40.0	19.3
M89-1644	41.0	16	4.0	2.0	30	1.6	13.2	39.6	20.0
ORC9004	46.4	3	4.7	1.5	29	1.9	18.1	39.2	20.4
ORC9006	42.5	14	1.5	1.1	25	1.6	17.5	40.2	20.3

* 124.3 Days After Planting

UNIFORM TEST I, 1993

1992-1993 2-YEAR MEAN

No. of Tests Strain	Yield 19 bu/a	Rank 19 No.	Maturity 23 Date	Lodging 21 Score	Plant Height 21 In.	Seed Quality 19 Score	Seed Size 19 g/100	Composition Protein 10 %	 Oil 10 %
Lambert (O)	39.0	8	-4.2	1.5	26	1.7	16.6	41.0	19.8
Parker (I)	46.9	2	09/21.5*	2.3	33	1.8	17.4	39.7	19.7
Sturdy (L)	45.5	3	5.2	1.9	33	1.9	18.0	40.0	19.5
M86-1322	41.2	7	3.5	1.9	30	1.8	13.9	38.9	20.0
M87-642	45.3	4	3.2	1.7	32	1.7	17.3	39.6	19.4
Ac90-115043	46.0	3	2.8	1.5	30	1.8	17.8	40.1	19.6
M87-1621	41.7	6	2.4	1.5	29	1.7	18.0	40.7	19.8
ORC9004	47.7	1	3.5	1.7	31	1.9	19.8	39.0	19.9
ORC9006	44.4	5	-0.2	1.2	28	1.7	18.8	41.0	19.8

* 128.1 Days After Planting

1990-1993 4-YEAR MEAN

No. of Tests Strain	59	59	51	60	60	56	59	20	20
Parker (I)	49.8	1	09/19.0*	2.4	35	1.9	18.0	39.9	20.4
Strudy (L)	48.5	2	5.1	2.0	35	1.9	18.6	40.2	20.1
M86-1322	43.2	3	1.2	2.1	32	2.2	14.0	39.4	20.8

* 125.1 Days After Planting

UNIFORM TEST I, 1993

YIELD (bu/a)

Strain	Mean 15 Tests	Greene IA	Kanawha IA	Pomeroy IA	Lafayette IN	Ingham MI	Saginaw MI	Lamber-ton MN	Waseca MN
Archer	42.9	39.0	34.6	43.4	61.4	44.2	54.5	55.0	43.5
Lambert (0)	35.7	28.1	18.7	37.6	34.0	36.4	59.2	49.3	30.8
Parker (I)	44.4	38.9	36.8	46.5	56.4	47.4	55.6	59.4	43.5
Sturdy (L)	43.5	44.1	36.4	43.6	58.7	47.6	55.0	56.8	43.1
Marcus	45.2	41.0	36.2	48.9	58.2	51.9	59.1	61.0	46.6
A Marcus BC	47.1	43.9	39.3	44.4	61.8	50.1	58.4	63.3	52.1
A91-501002	44.3	42.1	35.7	46.1	50.3	50.1	56.0	58.4	44.5
A91-501023	44.9	42.5	37.8	43.6	65.1	46.3	57.1	55.5	47.5
A91-607023	46.3	41.2	36.8	46.1	68.9	52.0	58.4	62.5	45.6
A91-607052	46.5	42.2	37.2	46.8	59.5	51.3	61.4	63.5	54.0
AC90-115043	43.4	42.4	37.3	47.1	51.9	43.3	54.7	53.9	42.7
M86-1322	40.5	37.4	28.6	38.7	52.9	39.7	55.0	50.2	39.8
M87-642	41.6	41.0	35.2	45.2	38.0	42.1	57.2	53.5	45.9
M87-1621 (SCN)	39.5	39.5	32.0	38.3	46.7	44.7	62.1	49.8	35.9
M88-1	42.7	39.2	31.7	45.4	60.7	43.7	54.2	54.3	38.5
M88-77	40.8	35.8	32.2	41.2	50.0	40.3	53.2	52.9	42.1
M88-207	43.0	29.9	30.6	42.8	62.0	47.7	63.5	60.6	47.9
M88-208	40.8	35.6	34.8	41.0	55.9	49.9	54.1	62.9	42.3
M89-1612	37.9	30.7	32.1	38.0	52.0	38.4	53.5	48.7	37.2
M89-1635	37.6	36.4	28.4	39.8	46.4	35.4	51.9	47.6	33.1
M89-1641	41.0	33.0	31.1	40.9	56.9	51.7	55.5	52.8	40.1
M89-1644	41.0	31.8	32.4	40.7	56.4	43.2	53.4	54.0	45.7
ORC9004	46.4	45.0	29.3	46.0	69.4	52.6	59.8	61.3	47.7
ORC9006	42.5	39.1	28.8	43.7	43.7	47.7	63.6	49.9	50.6
C.V. (%)		8.1	8.7	6.2	11.1	9.6	4.6	6.6	11.5
L.S.D. (5%)		5.1	4.8	4.5	10.1	9.1	5.4	6.1	8.2
Row Sp. (In.)		27	27	27	24	30	30	10	10
Rows/Plot		4	4	4	4	4	4	10	10
Reps		3	3	3	3	2	2	3	3

UNIFORM TEST I, 1993

YIELD (bu/a)

Strain	David City NE	Ord* NE	Inwood Ont.	London Ont.	State College PA	Brook-ings SD	Water-town SD	Arling-ton WI
Archer	47.7	38.2	40.0	46.7	30.2	30.8	17.7	54.9
Lambert (O)	34.0	19.2	25.6	48.6	19.6	29.0	25.1	59.1
Parker (I)	45.6	35.0	37.0	50.7	28.3	32.8	31.7	55.5
Sturdy (L)	49.3	24.9	32.9	49.1	28.4	29.0	20.0	58.0
Marcus	43.7	37.6	36.9	48.1	31.0	29.9	25.8	59.3
A Marcus BC	55.3	36.3	41.4	52.8	28.6	30.6	27.7	57.1
A91-501002	47.8	34.0	35.8	50.9	25.6	33.2	28.9	59.8
A91-501023	47.4	44.0	37.1	51.7	30.2	30.5	23.5	58.2
A91-607023	49.6	38.4	38.7	49.1	33.0	33.4	21.5	58.3
A91-607052	50.9	42.6	41.6	49.2	22.8	31.7	22.6	63.2
AC90-115043	46.1	43.4	34.8	47.9	31.2	31.8	24.6	61.7
M86-1322	47.9	32.4	38.6	41.3	29.9	35.5	19.3	53.0
M87-642	40.4	21.7	34.4	53.7	30.5	33.7	19.0	53.7
M87-1621 (SCN)	41.4	27.8	34.5	40.8	21.4	32.2	19.9	53.0
M88-1	42.3	36.4	39.7	50.9	26.7	35.4	20.1	58.0
M88-77	42.6	25.3	32.8	51.1	27.0	33.4	23.6	54.0
M88-207	38.8	20.6	18.0	54.5	33.2	35.8	25.0	55.1
M88-208	23.4	14.5	23.4	50.3	25.0	31.4	26.4	55.9
M89-1612	39.3	23.7	30.7	42.1	25.2	32.4	17.8	50.9
M89-1635	42.0	21.1	37.2	38.7	19.1	35.4	20.0	52.4
M89-1641	43.4	28.2	37.8	43.4	29.4	29.7	16.1	53.6
M89-1644	47.4	23.9	38.1	46.0	29.0	33.0	15.0	49.0
ORC9004	47.7	40.5	38.4	50.7	35.4	29.1	22.7	60.2
ORC9006	48.0	30.8	38.3	49.3	27.2	29.1	22.2	55.8
C.V. (%)	11.6	28.9	13.9	9.3	15.8	13.8	10.4	4.7
L.S.D. (5%)	10.3	18.3	8.1	6.2	7.2	6.1	3.2	4.3
Row Sp. (In.)	30	30	24	15	20	30	30	30
Rows/Plot	4	4	4	4	4	4	4	4
Reps	3	3	3	4	3	3	3	3

* Data not included in the mean.

UNIFORM TEST I, 1993

YIELD RANK

Strain	Yield Rank	Greene IA	Kanawha IA	Pomeroy IA	Lafayette IN	Ingham MI	Saginaw MI	Lamber-ton MN	Waseca MN
Archer	12	14	13	14	6	15	18	11	12
Lambert (0)	24	24	24	24	24	23	6	22	24
Parker (I)	7	15	6	4	12	12	13	8	12
Sturdy (L)	9	2	8	12	9	11	15	10	14
Marcus	5	9	9	1	10	3	7	6	7
A Marcus BC	1	3	1	10	5	6	9	2	2
A91-501002	8	7	10	5	18	6	12	9	11
A91-501023	6	4	3	12	3	13	11	11	6
A91-607023	4	8	6	5	2	2	8	4	10
A91-607052	2	6	5	3	8	5	4	1	1
AC90-115043	10	5	4	2	17	17	17	15	15
M86-1322	20	16	22	21	15	21	16	19	19
M87-642	15	9	11	9	23	19	10	16	8
M87-1621 (SCN)	21	11	17	22	20	14	3	21	22
M88-1	13	12	18	8	7	16	19	13	20
M88-77	18	18	15	16	19	20	23	17	17
M88-207	11	23	20	15	4	10	2	7	4
M88-208	18	19	12	17	14	8	20	3	16
M89-1612	22	22	16	23	16	22	21	23	21
M89-1635	23	17	23	20	21	24	24	24	23
M89-1641	16	20	19	18	11	4	14	18	18
M89-1644	16	21	14	19	12	18	22	14	9
ORC9004	3	1	1	7	1	1	5	5	5
ORC9006	14	13	21	11	22	9	1	20	3

UNIFORM TEST I, 1993

YIELD RANK

Strain	David City NE	Ord NE	Inwood Ont.	London Ont.	State College PA	Brook-ings SD	Water-town SD	Arling-ton WI
Archer	8	6	3	18	7	16	22	16
Lambert (O)	23	23	22	15	23	23	6	6
Parker (I)	13	10	13	8	14	10	1	14
Sturdy (L)	4	17	19	13	13	23	16	9
Marcus	14	7	14	16	5	19	5	5
A Marcus BC	1	9	2	3	12	17	3	11
A91-501002	7	11	15	6	18	8	2	4
A91-501023	11	1	12	4	7	18	10	8
A91-607023	3	5	5	13	3	7	14	7
A91-607052	2	3	1	12	21	14	12	1
AC90-115043	12	2	16	17	4	13	8	2
M86-1322	6	12	6	22	9	2	19	20
M87-642	20	20	18	2	6	5	20	18
M87-1621 (SCN)	19	15	17	23	22	12	18	20
M88-1	17	8	4	6	17	4	15	9
M88-77	16	16	20	5	16	6	9	17
M88-207	22	22	24	1	2	1	7	15
M88-208	24	24	23	10	20	15	4	12
M89-1612	21	19	21	21	19	11	21	23
M89-1635	18	21	11	24	24	3	17	22
M89-1641	15	14	10	20	10	20	23	19
M89-1644	10	18	9	19	11	9	24	24
ORC9004	9	4	7	8	1	21	11	3
ORC9006	5	13	8	11	15	21	13	13

UNIFORM TEST I, 1993

MATURITY (date)

Strain	Mean 13 Tests	Greene IA	Kanawha IA	Pomeroy IA	Lafayette IN	Ingham MI	Saginaw MI	Lamber-ton MN	Waseca MN
Archer	3.2	6	4		3	7	3	6	2
Lambert (0)	-2.6	-6	-10		-10	-6	-1	-9	-14
Parker (I)	09/21	09/23	09/27		09/03	09/19	09/27	09/27	09/29
Sturdy (L)	5.5	9	5		5	7	5	6	3
Marcus	3.8	5	5		7	5	3	3	3
A Marcus BC	4.4	6	4		9	5	3	4	3
A91-501002	1.6	4	1		0	3	2	3	2
A91-501023	4.2	7	5		10	4	4	6	2
A91-607023	5.4	8	6		9	7	8	6	2
A91-607052	5.8	10	6		9	7	5	6	4
AC90-115043	3.8	6	2		4	8	5	3	1
M86-1322	3.5	6	4		3	4	4	4	1
M87-642	2.8	6	3		2	6	3	4	1
M87-1621 (SCN)	1.9	4	1		-1	3	5	0	2
M88-1	3.8	6	2		6	8	4	5	-1
M88-77	0.9	1	0		-2	5	1	0	-2
M88-207	1.5	2	-1		5	7	5	0	-1
M88-208	1.8	2	0		4	8	5	0	0
M89-1612	3.8	4	5		10	7	6	1	0
M89-1635	1.3	1	0		5	4	3	0	-3
M89-1641	4.3	7	5		8	1	11	3	0
M89-1644	4.0	8	4		7	6	5	3	2
ORC9004	4.7	7	4		7	8	5	3	1
ORC9006	1.5	5	0		4	4	4	-1	0
Date Planted	05/19	05/25	05/14		05/12	05/15	05/27	05/19	05/20
Days to Mature	124.3	121	136		114	127	123	131	132

UNIFORM TEST I, 1993

MATURITY (date)

Strain	David City NE	Ord NE	Inwood Ont.	London Ont.	State College PA	Brook-ings SD	Water-town SD	Arling-ton WI
Archer	3	1	2	2	-6			8
Lambert (O)	-8	-9	-7	-7	-2			-4
Parker (I)	09/22	09/25	09/13	09/14	09/23			09/24
Sturdy (L)	4	2	4	8	5			8
Marcus	3	3	3	2	0			7
A Marcus BC	4	3	3	2	2			9
A91-501002	2	1	-1	-1	4			1
A91-501023	4	2	3	3	-4			9
A91-607023	5	2	5	4	-1			9
A91-607052	7	3	6	3	0			9
AC90-115043	3	2	2	1	6			7
M86-1322	2	0	4	8	-2			8
M87-642	1	3	1	2	0			4
M87-1621 (SCN)	1	2	2	3	-2			5
M88-1	3	1	2	2	3			8
M88-77	1	1	0	2	3			2
M88-207	2	-2	1	1	0			1
M88-208	2	-2	0	2	1			1
M89-1612	4	1	2	6	-2			6
M89-1635	1	-1	1	2	0			4
M89-1641	3	1	5	6	-2			8
M89-1644	3	1	4	3	-3			9
ORC9004	4	2	5	6	0			9
ORC9006	3	1	1	1	-4			2
Date Planted	06/08	05/25	05/18	05/14	05/18			05/13
Days to Mature	106	123	118	123	128			134

UNIFORM TEST I, 1993

LODGING (score)

Strain	Mean 16 Tests	Greene IA	Kanawha IA	Pomeroy IA	Lafayette IN	Ingham MI	Saginaw MI	Lamber-ton MN	Waseca MN
Archer	1.4	1.4	1.2	1.2	1.8	1.5	2.0	1.0	2.0
Lambert (0)	1.3	1.4	1.1	1.1	1.0	1.5	1.5	1.0	2.0
Parker (I)	1.8	1.9	1.1	1.2	2.8	3.0	3.0	2.0	2.3
Sturdy (L)	1.5	1.3	1.3	1.1	1.3	1.5	2.0	1.3	2.3
Marcus	1.6	1.5	1.5	1.4	1.7	2.5	2.5	1.7	2.3
A Marcus BC	1.5	1.6	1.4	1.3	1.8	2.0	2.0	1.0	2.0
A91-501002	1.2	1.3	1.0	1.0	1.0	1.5	1.0	1.0	2.3
A91-501023	1.8	1.6	1.5	1.3	2.5	2.0	3.0	1.7	2.3
A91-607023	1.6	1.5	1.3	1.1	1.5	2.0	3.0	1.0	2.3
A91-607052	1.5	1.5	1.5	1.5	1.5	2.0	1.5	1.0	2.3
AC90-115043	1.3	1.4	1.2	1.1	1.0	2.0	1.5	1.0	2.3
M86-1322	1.5	1.5	1.5	1.2	2.2	1.5	2.5	1.3	2.0
M87-642	1.4	1.4	1.2	1.1	1.8	2.0	2.0	1.3	2.3
M87-1621 (SCN)	1.2	1.4	1.1	1.2	1.0	1.5	2.0	1.3	1.0
M88-1	1.5	1.4	1.1	1.2	1.8	2.0	2.0	1.7	1.7
M88-77	1.3	1.4	1.1	1.1	1.3	1.5	2.0	1.0	1.3
M88-207	1.7	1.8	1.2	1.2	2.3	2.0	2.5	1.3	1.7
M88-208	1.7	1.6	1.3	1.2	2.0	3.0	2.5	1.3	2.0
M89-1612	1.4	1.4	1.1	1.0	1.3	2.0	2.5	1.0	1.7
M89-1635	1.5	1.8	1.3	1.3	1.7	2.5	3.0	1.3	1.7
M89-1641	2.1	1.6	1.3	1.1	2.2	3.5	4.0	3.0	2.0
M89-1644	2.0	1.5	1.6	1.3	3.2	3.0	3.0	2.7	2.3
ORC9004	1.5	1.5	1.3	1.1	2.2	2.0	2.0	1.3	1.3
ORC9006	1.1	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.7

UNIFORM TEST I, 1993

LODGING (score)

Strain	David City NE	Ord NE	Inwood Ont.	London Ont.	State College PA	Brook-ings SD	Water-town SD	Arling-ton WI
Archer	1.0	1.0	1.0	1.3	1.0	1.0	1.0	2.8
Lambert (O)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.7
Parker (I)	1.0	1.0	1.0	1.4	1.0	1.0	2.0	3.8
Sturdy (L)	1.0	1.3	1.0	1.3	1.0	2.0	1.0	2.7
Marcus	1.0	1.0	1.0	1.4	1.0	1.0	2.0	2.8
A Marcus BC	1.0	1.0	1.0	1.4	1.0	2.0	1.0	2.8
A91-501002	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.8
A91-501023	1.0	1.0	1.0	1.9	1.0	2.0	1.0	3.3
A91-607023	1.0	1.0	1.0	1.5	1.0	2.0	2.0	2.8
A91-607052	1.0	1.0	1.0	1.5	1.0	2.0	1.0	2.7
AC90-115043	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.8
M86-1322	1.0	1.0	1.0	1.8	1.0	1.0	1.0	2.8
M87-642	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
M87-1621 (SCN)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5
M88-1	1.0	1.0	1.0	1.0	1.0	2.0	1.0	3.3
M88-77	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.2
M88-207	1.0	1.0	1.0	1.9	1.0	2.0	2.0	3.5
M88-208	1.0	1.0	1.0	1.5	1.0	1.0	2.0	3.3
M89-1612	1.0	1.0	1.0	1.4	1.0	2.0	1.0	1.8
M89-1635	1.0	1.0	1.0	1.5	1.0	1.0	1.0	2.3
M89-1641	1.0	1.0	1.0	1.8	1.0	3.0	2.0	3.5
M89-1644	1.0	1.0	1.0	1.9	1.0	2.0	2.0	3.5
ORC9004	1.0	1.0	1.0	1.4	1.0	1.0	2.0	2.3
ORC9006	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3

UNIFORM TEST I, 1993

PLANT HEIGHT (inches)

Strain	Mean 16 Tests	Greene IA	Kanawha IA	Pomeroy IA	Lafayette IN	Ingham MI	Saginaw MI	Lamber-ton MN	Waseca MN
Archer	31	33	27	28	37	30	36	33	29
Lambert (0)	23	25	15	21	27	22	35	24	20
Parker (I)	30	31	25	27	34	33	38	33	26
Sturdy (L)	30	33	25	26	32	29	38	33	27
Marcus	27	31	22	25	32	26	34	30	26
A Marcus BC	27	32	24	25	32	26	34	30	25
A91-501002	27	32	25	24	29	26	32	29	26
A91-501023	29	34	28	26	33	30	32	32	28
A91-607023	30	32	30	29	36	33	35	33	27
A91-607052	26	31	23	26	30	27	31	28	27
AC90-115043	27	30	23	26	29	24	34	30	26
M86-1322	27	29	22	23	33	27	32	29	26
M87-642	28	33	26	28	29	30	37	31	29
M87-1621 (SCN)	25	31	22	22	28	24	33	28	24
M88-1	30	30	28	29	37	29	36	33	28
M88-77	28	30	23	25	34	27	38	28	28
M88-207	30	30	23	25	38	32	41	32	27
M88-208	29	31	25	25	35	38	34	32	27
M89-1612	28	31	23	26	33	32	35	30	24
M89-1635	29	31	24	25	34	31	37	30	25
M89-1641	31	30	25	28	36	38	43	31	27
M89-1644	30	33	26	28	33	34	35	32	29
ORC9004	29	34	26	29	36	31	34	31	28
ORC9006	25	27	21	24	25	28	33	24	24

UNIFORM TEST I, 1993

PLANT HEIGHT (inches)

Strain	David City NE	Ord NE	Inwood Ont.	London Ont.	State College PA	Brook-ings SD	Water-town SD	Arling-ton WI
Archer	37	28	27	31	21	29	23	39
Lambert (O)	25	19	21	26	15	20	21	32
Parker (I)	36	24	27	34	19	30	22	39
Sturdy (L)	31	23	24	29	18	29	20	69
Marcus	31	22	23	28	17	25	27	34
A Marcus BC	31	24	25	30	17	28	22	33
A91-501002	28	26	22	26	14	30	29	36
A91-501023	31	27	23	30	19	34	25	39
A91-607023	33	27	25	30	19	34	25	38
A91-607052	29	23	23	26	16	27	22	34
AC90-115043	31	23	20	26	16	31	23	37
M86-1322	31	26	25	28	18	27	22	40
M87-642	26	22	23	31	19	32	23	32
M87-1621 (SCN)	28	22	21	27	17	26	20	32
M88-1	31	24	26	31	18	33	27	41
M88-77	31	24	24	28	20	31	23	35
M88-207	33	23	23	34	20	30	26	39
M88-208	31	22	25	34	20	30	24	38
M89-1612	33	22	25	31	19	29	22	36
M89-1635	34	26	27	32	22	26	23	36
M89-1641	34	24	28	33	18	32	25	38
M89-1644	36	26	28	34	21	28	26	38
ORC9004	31	24	24	30	20	30	25	37
ORC9006	31	24	24	28	19	27	21	27

UNIFORM TEST I, 1993

SEED QUALITY (score)

Strain	Mean 16 Tests	Greene IA	Kanawha IA	Pomeroy IA	Lafayette IN	Ingham MI	Saginaw MI	Lamber-ton MN	Waseca MN
Archer	1.5	1.5	1.0	1.0	1.0	1.5	1.5	1.3	2.0
Lambert (0)	1.6	1.0	1.0	1.0	1.0	2.0	2.0	1.3	1.5
Parker (I)	1.7	1.5	1.5	1.0	1.0	1.0	1.0	3.0	3.0
Sturdy (L)	1.7	1.0	1.5	1.0	1.0	1.0	1.5	3.0	2.5
Marcus	1.9	1.5	1.0	1.5	2.0	1.0	1.0	2.7	1.7
A Marcus BC	1.9	1.5	1.5	1.5	2.0	1.0	1.0	3.0	2.7
A91-501002	1.6	1.0	1.0	1.0	1.0	2.0	2.0	2.0	1.5
A91-501023	1.8	2.0	2.0	1.5	1.0	1.0	1.0	2.7	3.5
A91-607023	1.7	1.5	2.0	1.5	1.0	1.0	1.0	2.7	3.5
A91-607052	1.8	2.0	1.5	1.5	1.0	1.0	1.0	2.3	2.5
AC90-115043	1.7	1.5	1.5	1.0	1.0	1.0	1.0	2.0	2.0
M86-1322	1.7	1.0	1.0	1.0	1.0	1.0	1.0	1.7	1.7
M87-642	1.5	1.5	1.0	1.0	1.0	1.0	1.0	2.0	1.7
M87-1621 (SCN)	1.6	1.0	1.0	1.0	1.0	1.0	1.0	1.7	1.7
M88-1	1.5	1.0	1.0	1.0	1.0	1.0	1.5	1.7	1.5
M88-77	1.5	1.0	1.0	1.0	1.0	1.5	1.0	1.3	1.7
M88-207	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.3	2.0
M88-208	1.4	1.0	1.0	1.5	1.0	1.0	1.0	1.7	1.7
M89-1612	1.5	1.0	1.0	1.0	2.0	1.0	1.0	1.3	1.7
M89-1635	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.7	1.7
M89-1641	1.4	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.5
M89-1644	1.6	1.5	1.5	1.0	1.0	1.0	1.0	1.7	2.0
ORC9004	1.9	1.5	1.5	1.5	1.0	1.0	1.0	2.0	3.5
ORC9006	1.6	1.5	1.0	1.5	1.0	1.5	1.0	1.7	1.7

UNIFORM TEST I, 1993

SEED QUALITY (score)

Strain	David City NE	Ord NE	Inwood Ont.	London Ont.	State College PA	Brook-ings SD	Water-town SD	Arling-ton WI
Archer	1.0	1.3	1.7	2.0	1.0	3.0	2.0	1.0
Lambert (0)	1.0	2.0	2.5	2.0	1.5	2.0	2.0	1.0
Parker (I)	1.0	1.3	2.0	1.5	1.5	3.0	2.0	2.0
Sturdy (L)	1.0	1.3	1.7	2.5	2.0	2.0	3.0	1.0
Marcus	1.7	1.3	3.0	2.5	2.0	2.0	3.0	2.0
A Marcus BC	1.3	1.0	2.7	2.0	2.5	2.0	3.0	2.0
A91-501002	1.0	1.0	2.0	2.0	3.0	2.0	2.0	1.0
A91-501023	1.0	2.0	1.7	2.0	1.5	1.0	3.0	2.0
A91-607023	1.0	1.3	1.3	2.5	3.0	1.0	2.0	1.0
A91-607052	1.0	2.0	1.0	2.0	3.5	2.0	3.0	1.0
AC90-115043	1.0	1.0	2.3	1.5	2.5	3.0	3.0	2.0
M86-1322	1.0	1.7	2.3	2.5	3.0	2.0	4.0	1.0
M87-642	1.0	1.7	1.3	2.0	1.5	3.0	3.0	1.0
M87-1621 (SCN)	1.3	1.7	1.7	2.0	2.0	3.0	4.0	1.0
M88-1	1.0	1.0	2.7	1.5	1.5	2.0	3.0	1.0
M88-77	1.3	2.0	2.0	1.5	2.0	2.0	2.0	1.0
M88-207	1.0	1.3	1.7	1.5	1.5	2.0	2.0	1.0
M88-208	1.3	1.3	2.3	1.5	1.0	2.0	2.0	1.0
M89-1612	1.0	1.0	2.7	2.5	1.0	2.0	2.0	1.0
M89-1635	1.0	1.0	1.3	2.0	2.0	3.0	3.0	1.0
M89-1641	1.0	1.7	1.0	2.0	1.5	2.0	3.0	1.0
M89-1644	1.3	1.7	1.3	2.0	1.5	2.0	4.0	1.0
ORC9004	1.3	2.0	2.0	2.0	2.5	2.0	4.0	1.0
ORC9006	1.0	1.3	1.3	2.0	2.0	3.0	3.0	1.0

UNIFORM TEST I, 1993

SEED SIZE (g/100)

Strain	Mean 15 Tests	Greene IA	Kanawha IA	Pomeroy IA	Lafayette IN	Ingham MI	Saginaw MI	Lamber-ton MN	Waseca MN
Archer	15.6	14.6	14.5	15.5	17.2	18.7	17.1	15.2	13.7
Lambert (0)	16.3	15.4	15.8	18.1	15.7	17.3	18.4	16.5	14.9
Parker (I)	17.2	16.2	16.2	18.5	16.8	18.2	19.1	17.6	16.2
Sturdy (L)	17.0	16.3	15.3	16.6	17.8	20.8	19.8	16.9	15.4
Marcus	15.6	15.4	14.8	15.7	17.3	17.9	17.0	15.9	14.2
A Marcus BC	16.4	16.3	15.3	16.2	16.5	18.7	18.2	16.3	14.9
A91-501002	17.9	17.4	17.7	19.5	17.8	20.2	20.0	18.5	16.9
A91-501023	16.1	16.9	15.1	16.3	18.6	18.9	18.0	16.3	14.8
A91-607023	15.2	14.7	13.6	14.4	17.7	17.8	17.7	15.3	14.0
A91-607052	16.0	15.4	14.7	15.0	17.2	19.8	18.9	15.7	14.5
AC90-115043	16.6	15.7	15.1	17.5	15.9	18.8	17.9	17.4	15.3
M86-1322	13.9	11.7	10.4	12.5	12.4	14.0	14.1	12.0	10.1
M87-642	15.7	16.1	14.2	16.3	17.6	18.3	18.5	16.0	14.5
M87-1621 (SCN)	16.7	16.5	15.7	17.7	17.0	19.6	19.5	16.5	14.9
M88-1	16.2	15.3	13.9	15.7	17.0	18.5	18.5	15.3	14.5
M88-77	17.8	16.4	16.1	17.6	17.6	20.2	19.7	17.9	16.8
M88-207	15.4	13.7	14.2	15.8	15.9	16.0	17.4	15.9	13.4
M88-208	15.2	14.0	14.1	15.3	14.7	17.4	16.6	15.5	14.2
M89-1612	14.6	13.0	13.3	14.0	15.3	15.5	15.9	14.6	13.5
M89-1635	13.6	12.9	12.6	13.9	13.8	14.9	14.9	13.6	12.0
M89-1641	14.2	12.4	12.9	14.0	16.6	15.5	17.2	14.2	12.2
M89-1644	13.2	11.3	11.6	12.3	13.8	16.2	15.5	13.2	12.3
ORC9004	18.1	18.4	16.6	17.3	18.8	21.4	20.1	18.0	16.4
ORC9006	17.5	16.0	15.2	17.0	16.9	20.6	22.3	17.6	16.3

UNIFORM TEST I, 1993

SEED SIZE (g/100)

Strain	David City NE	Ord NE	Inwood Ont.	London Ont.	State College PA	Brook-ings SD	Water-town SD	Arling-ton WI
Archer	16.9	17.3		16.0	19.6	13.0	12.0	12.9
Lambert (0)	17.1	18.3		15.1	18.5	14.0	15.0	14.3
Parker (I)	18.3	18.7		16.7	21.9	15.0	15.0	13.9
Sturdy (L)	17.9	15.6		18.6	20.6	14.0	14.0	15.5
Marcus	16.6	17.3		15.8	16.4	12.0	13.0	14.8
A Marcus BC	17.6	18.3		15.9	17.7	15.0	14.0	14.5
A91-501002	18.9	19.1		16.6	18.6	15.0	16.0	15.7
A91-501023	17.0	17.8		17.0	15.7	10.0	13.0	15.5
A91-607023	16.5	17.3		17.0	15.8	10.0	13.0	13.8
A91-607052	16.9	17.4		18.3	16.3	13.0	12.0	14.8
AC90-115043	16.8	17.7		17.3	20.3	15.0	13.0	15.1
M86-1322	17.9	18.3		13.3	19.7	15.0	13.0	13.9
M87-642	12.7	15.8		16.7	18.3	15.0	15.0	10.2
M87-1621 (SCN)	18.1	18.1		17.2	22.2	11.0	11.0	15.4
M88-1	16.8	18.2		17.0	23.0	12.0	13.0	14.2
M88-77	18.6	19.5		18.4	22.5	16.0	15.0	15.3
M88-207	16.9	17.5		15.6	18.1	13.0	14.0	13.6
M88-208	16.8	16.9		14.6	17.8	13.0	13.0	13.4
M89-1612	15.3	16.9		15.3	17.3	13.0	13.0	13.5
M89-1635	14.7	14.3		12.9	17.3	12.0	12.0	12.8
M89-1641	15.2	14.9		15.2	18.3	10.0	12.0	12.2
M89-1644	13.5	13.5		13.6	16.7	10.0	12.0	11.8
ORC9004	18.6	19.4		18.5	21.0	15.0	15.0	17.4
ORC9006	17.8	17.7		19.0	17.9	17.0	15.0	16.4

UNIFORM TEST I, 1993

PROTEIN (%)

Strain	Mean 5 Tests	Pomeroy IA	Ingham MI	London Ont.	Brookings SD	Arlington WI
Archer	39.4	40.2	40.2	38.3	38.5	39.8
Lambert (0)	40.9	41.6	43.0	40.2	37.6	42.0
Parker (I)	40.3	41.3	40.3	39.3	40.3	40.3
Sturdy (L)	39.7	39.7	40.6	39.6	37.3	41.4
Marcus	39.8	41.2	40.4	38.5	38.6	40.5
A Marcus BC	40.3	40.9	42.2	38.3	39.5	40.8
A91-501002	40.0	40.8	39.2	40.7	39.0	40.5
A91-501023	40.0	41.0	39.3	39.2	39.5	40.9
A91-607023	39.3	39.5	42.3	38.8	36.0	40.1
A91-607052	38.7	38.3	40.5	38.5	37.2	39.1
AC90-115043	39.9	40.8	39.9	39.6	37.8	41.3
M86-1322	39.8	39.1	40.9	39.4	39.0	40.6
M87-642	40.1	40.7	42.1	38.1	38.8	40.8
M87-1621 (SCN)	41.2	42.3	40.5	40.6	40.4	42.2
M88-1	40.3	40.9	40.6	39.1	39.3	41.6
M88-77	39.5	40.1	39.2	39.5	38.4	40.5
M88-207	40.0	41.2	41.2	39.0	38.1	40.4
M88-208	39.9	41.0	40.3	39.1	38.6	40.7
M89-1612	40.5	40.4	41.8	39.7	38.5	42.1
M89-1635	40.4	41.8	39.9	39.9	38.3	42.0
M89-1641	40.0	40.8	40.8	39.2	38.3	40.7
M89-1644	39.6	39.1	41.5	38.7	38.4	40.2
ORC9004	39.2	38.8	40.2	38.1	39.5	39.5
ORC9006	40.2	41.5	40.5	41.5	36.3	41.0

UNIFORM TEST I, 1993

OIL (%)

Strain	Mean 5 Tests	Pomeroy IA	Ingham MI	London Ont.	Brookings SD	Arlington WI
Archer	19.9	20.1	19.4	21.1	19.7	19.1
Lambert (O)	20.2	20.5	19.5	21.5	19.4	19.9
Parker (I)	20.1	19.9	20.2	21.1	19.6	19.7
Sturdy (L)	19.7	19.6	19.3	21.6	18.9	19.0
Marcus	20.2	20.5	20.1	21.1	19.8	19.4
A Marcus BC	19.8	20.0	18.4	21.9	19.1	19.5
A91-501002	20.7	21.1	21.6	20.8	20.0	19.8
A91-501023	20.1	19.4	20.4	21.1	19.3	20.1
A91-607023	19.8	19.9	19.5	20.9	19.0	19.5
A91-607052	20.6	20.4	20.8	21.5	19.9	20.3
AC90-115043	20.1	19.8	19.9	21.1	20.1	19.5
M86-1322	20.0	20.7	19.3	20.9	20.0	18.9
M87-642	19.6	19.6	18.3	21.4	20.0	18.8
M87-1621 (SCN)	20.0	19.8	19.7	21.2	20.1	19.1
M88-1	19.5	19.4	19.8	20.6	18.9	18.8
M88-77	20.4	20.4	20.6	21.2	19.5	20.2
M88-207	20.0	20.0	20.1	21.0	18.1	20.9
M88-208	20.3	20.2	19.5	21.1	20.8	19.7
M89-1612	19.4	19.6	18.5	20.7	19.6	18.4
M89-1635	19.8	19.7	19.3	20.8	19.8	19.4
M89-1641	19.3	18.8	19.9	20.0	19.6	18.0
M89-1644	20.0	19.4	20.9	20.9	20.1	18.9
ORC9004	20.4	20.3	20.8	21.2	20.0	19.6
ORC9006	20.3	20.2	20.8	20.4	20.2	19.9

PRELIMINARY TEST I, 1993

Strain	Parentage	Generation Composited	Unique Traits
Archer (BSR)	Williams 82 and PRX54-59 x BSR 101	BC4 F3	Rps1-k, Rps6
Lambert (O)	M75-274 x M76-151	F5	Rps1
Parker (I)	A79-136012 x Dawson	F5	Rps1
Sturdy (L)	M70-127 x Century	F5	
A92-525014	IA2008 x Kenwood	F5	BSR resis.
A92-525019	Asgrow A3205 x LN86-1947	F5	BSR resis.
A92-527015	Dairyland DSR 252 x Kenwood	F5	
A92-527030	Northrup King S23-03 x Asgrow A3205	F5	
A92-527031	Dairyland DSR 252 x Northrup King S23-03	F5	
A92-528032	Kenwood x Northrup King S23-12	F5	
A92-532008	Asgrow A2187 x (A87-186011 x Dairyland DSR 252)	F5	Chlor resis.
A92-532029	Asgrow A2234 x (A87-186035 x Dairyland DSR 284)	F5	Chlor resis.
A93-532030	Asgrow A3127 x (A87-186011 x Asgrow A2234)	F5	Chlor resis.
A92-535034	Asgrow A2187 x [A87-186011 x (Dairyland DSR 252 x A87-187020)]	F5	Chlor resis.
A92-535059	Asgrow A2187 x [A87-186011 x	F5	Chlor resis.
A92-536031	Sturdy x [A87-186035 x (Dairyland DSR 284 x A87-187020)]	F5	Chlor resis.
A92-537032	Northrup King S23-12 x [A87-186011 x (Asgrow A2234 x A87-187020)]	F5	Chlor resis.
A92-625002	Kenwood x LN86-1947	F5	BSR resis.
E92029	LN81-1029 x Pioneer 9292	F5	
M89-587	M81-564 x M83-16	F5	Het. Rps1
M89-782	J231 x Kato	F4	Rps1
M89-783	J231 x Kato	F4	Rps1
M89-791	J231 x Kato	F4	Rps1
M89-792	J231 x Kato	F4	Rps1
M89-794	J231 x Kato	F4	Rps1
M89-895	M84-492 x Sturdy	F5	Rps1-c, Hm
M89-911	M84-492 x Sturdy	F5	Rps1-c, Hm
M89-936	M84-492 x M74-498	F5	Het. Rps1
M89-1020	M81-27 x Corsoy 79	F5	Rps1-c
M89-1336	Sibley x BSR 101	F5	Rps1
M89-1356	Sibley x M82-772	F5	Rps1
M89-1471	Hack x Ozzie	F5	Rps1
M89-1561	M81-98 x J231	F5	Rps1
M89-1926	M82-408 x Hardin	F5	Rps1
M89-1985	J231 x Kato	F5	Rps1
M89-1986	J231 x Kato	F5	Rps1
M89-1997	J231 x Kato	F5	Rps1
ORC9205	Conrad x RCAT Alliance	F5	
SL89-3343	Simpson x (Amsoy 71 x Hei Ho 3)	F5	
SL91-0497M	M81-27 x KG30	F5	
SL91-1045M	Evans x Leslie	F5	
SL91-1132M	Sibley x M82-559	F5	
SL91-1628M	Hack x Kato	F5	
SL91-1767M	M83-1023 x Sturdy	F5	
SL91-2140N	KG20 x Sibley	F5	

PRELIMINARY TEST I, 1993

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score	
		Ames	Hanska
Archer (BSR)	PGTDYIbI	3.5	3.0
Lambert (0)	PGTSYBfI	3.2	2.5
Parker (I)	WGBDYIbI	4.0	4.0
Sturdy (L)	PGBSYIbI	2.5	3.0
A92-525014	WTBDYBlI	4.0	3.0
A92-525019	PTBDYBlI	4.5	3.5
A92-527015	PTBDYBlI	3.7	4.0
A92-527030	PGBSYBrI	3.2	3.5
A92-527031	PGBSYBfI	3.2	4.0
A92-528032	PTBDYBrI	4.5	5.0
A92-532008	PGBDYYI	2.2	2.0
A92-532029	PTTDYBlI	3.0	3.5
A32-532030	PGBDYYI	2.5	2.0
A92-535034	PGBDYBf+YI	2.5	2.0
A92-535059	PGBDYYI	1.7	3.5
A92-536031	PGBSYBfI	3.5	3.5
A92-537032	PG+TBSYBrI	3.0	4.0
A92-625002	PTBDYBlI	4.2	4.5
E92029	P+WTTDYBlI	4.0	3.5
M89-587	PGBDYYI	3.2	4.0
M89-782	PGBDYIbI	3.5	4.0
M89-783	PTBDYBlI	2.7	4.5
M89-791	PTBDYBlI	3.2	5.0
M89-792	PG+TBDYBl+IbI	2.2	4.5
M89-794	PG+TBDYBl+IbI	2.2	4.5
M89-895	PGBDYBfI	3.5	4.5
M89-911	PGBDYIbI	4.5	4.5
M89-936	WGBDYYI	4.0	4.5
M89-1020	WGBDYYI	3.7	5.0
M89-1336	PGBDYIbI	3.0	3.5
M89-1356	P+WGBDYYI	4.5	3.5
M89-1471	P+WGB+TDYYI	5.0	4.0
M89-1561	WGBDYYI	3.0	4.0
M89-1926	WGBDYYI	3.0	3.5
M89-1985	PGBDYIbI	4.0	5.0
M89-1986	PG+TBDYBl+IbI	3.7	4.0
M89-1997	PGBDYIbI	3.2	4.5
ORC9205	PTTDYBlI	4.2	4.0
SL89-3343	PG+TBSYBrI	4.5	5.0
SL91-0497M	WGBDYYI	3.2	3.5
SL91-1045M	WGB+TDYYI	4.5	4.0
SL91-1132M	WGBDYYI	3.7	4.5
SL91-1628M	WTTSYBlI	3.5	4.5
SL91-1767M	WGBSYBfI	3.5	4.0
SL91-2140N	WG+TBDYYI	3.0	3.0

PRELIMINARY TEST I, 1993

DISEASE DATA

Strain	BSR-Boone Plant n %	BSR-Boone Stem n %	PR Ames Race 4	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %	Seed Germ. %
Archer (BSR)	38.0	12.1	R	R	84	13	58
Lambert (O)	100.0	56.8	S	S	62	6	52
Parker (I)	95.0	84.4	S	S	86	8	68
Sturdy (L)	80.0	64.0	S	S	69	22	51
A92-525014	0.0	0.0	S	S	74	18	54
A92-525019	10.0	0.8	S	S	72	36	50
A92-527015	90.0	59.0	S	S	90	4	54
A92-527030	90.0	82.6	S	S	66	16	80
A92-527031	60.0	45.0	S	S	78	2	64
A92-528032	70.0	37.5	S	S	84	10	64
A92-532008	90.0	87.2	S	S	70	18	42
A92-532029	90.0	60.3	R	R	68	26	36
A32-532030	90.0	85.6	S	S	96	2	58
A92-535034	60.0	46.4	S	S	66	18	60
A92-535059	90.0	62.4	S	S	90	6	38
A92-536031	100.0	88.6	S	S	90	8	72
A92-537032	60.0	31.8	S	S	82	6	78
A92-625002	20.0	2.2	S	S	84	8	60
E92029	100.0	79.5	R	S	86	8	60
M89-587	100.0	80.0	S	S	58	10	76
M89-782	70.0	51.6	S	S	76	6	56
M89-783	100.0	92.9	H	S	80	10	50
M89-791	100.0	96.4	S	S	46	12	52
M89-792	100.0	95.8	S	S	56	8	28
M89-794	90.0	77.8	S	S	46	38	18
M89-895	100.0	87.0	S	H	96	10	36
M89-911	100.0	78.4	S	R	52	16	76
M89-936	100.0	96.9	S	H	42	16	66
M89-1020	60.0	51.8	S	R	48	14	58
M89-1336	70.0	67.3	S	S	78	8	60
M89-1356	70.0	24.6	S	S	78	4	28
M89-1471	100.0	67.2	S	S	72	20	28
M89-1561	100.0	88.2	S	S	88	16	54
M89-1926	100.0	74.8	S	S	88	12	50
M89-1985	90.0	79.0	S	S	90	6	18
M89-1986	100.0	69.9	S	S	60	16	32
M89-1997	100.0	92.7	S	S	92	4	30
ORC9205	100.0	68.0	S	S	58	2	54
SL89-3343	100.0	90.3	S	S	46	32	50
SL91-0497M	100.0	100.0	S	S	38	34	54
SL91-1045M	100.0	90.9	S	S	80	6	64
SL91-1132M	90.0	90.0	S	S	30	30	44
SL91-1628M	100.0	78.2	S	S	72	10	48
SL91-1767M	100.0	100.0	S	S	60	24	52
SL91-2140N	70.0	55.2	S	S	34	28	52

PRELIMINARY TEST I, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 7 bu/a	Rank 7 No.	Maturity 5 Date	Lodging 7 Score	Plant Height 7 In.	Seed Quality 7 Score	Seed Size 7 g/100	Composition Protein 5 %	Oil 5 %
Archer (BSR)	43.3	20	4.6	1.8	31	1.6	14.6	39.4	19.8
Lambert (0)	39.1	41	-7.8	1.9	25	1.4	16.2	40.9	20.2
Parker (I)	43.7	15	09/26*	2.6	31	1.8	16.2	40.0	20.1
Sturdy (L)	45.3	6	4.0	2.0	30	1.8	15.9	40.0	20.0
A92-525014	46.1	2	1.8	2.0	31	1.6	15.0	39.6	20.2
A92-525019	44.4	7	6.0	1.8	28	1.5	15.4	40.6	19.4
A92-527015	44.2	10	5.4	1.9	31	1.9	14.7	38.9	20.7
A92-527030	43.7	15	1.2	1.6	28	1.5	14.4	40.1	20.2
A92-527031	44.4	7	3.0	1.7	29	1.4	14.4	41.6	19.0
A92-528032	44.0	14	4.0	1.7	28	1.6	15.6	40.0	20.2
A92-532008	43.4	19	3.4	1.5	30	1.4	16.3	40.9	19.9
A92-532029	45.5	5	4.8	1.8	30	1.7	16.5	39.6	19.7
A32-532030	43.3	20	3.2	1.8	31	1.5	13.6	41.2	19.1
A92-535034	41.2	34	4.6	1.5	28	1.5	14.9	39.2	19.9
A92-535059	44.1	13	3.8	1.5	30	1.4	16.7	39.3	20.2
A92-536031	45.7	3	6.6	2.0	28	1.5	13.9	39.2	20.6
A92-537032	43.3	20	4.2	1.3	27	1.4	14.4	39.6	20.1
A92-625002	45.6	4	4.2	1.8	27	1.7	14.1	40.6	19.5
E92029	42.0	30	5.4	1.7	28	1.6	14.3	40.5	19.6
M89-587	39.4	39	2.0	1.9	29	1.4	12.7	39.7	20.1
M89-782	42.4	29	3.2	1.6	28	1.3	18.8	40.1	19.6
M89-783	44.2	10	1.2	1.6	29	1.8	18.4	39.9	20.3
M89-791	42.8	26	1.2	1.7	30	1.7	17.9	39.9	19.9
M89-792	43.6	17	-0.6	1.9	30	1.6	18.4	40.4	19.9
M89-794	41.9	31	2.8	1.7	31	1.6	16.5	40.3	20.1
M89-895	44.4	7	4.8	1.7	30	1.5	18.8	40.3	20.0
M89-911	42.5	28	5.2	1.6	30	1.6	14.9	41.1	19.6
M89-936	44.2	10	-2.6	1.4	29	1.4	16.7	40.8	20.0
M89-1020	38.5	43	-7.4	1.5	26	1.4	17.0	40.5	20.5
M89-1336	43.5	18	3.2	1.8	27	1.6	15.8	40.2	20.0
M89-1356	36.6	44	1.0	1.6	29	1.3	15.7	39.3	20.6
M89-1471	42.9	25	5.0	1.5	28	1.6	15.4	40.2	20.7
M89-1561	41.9	31	2.6	1.8	29	1.6	14.7	39.5	20.4
M89-1926	43.2	23	3.8	2.0	29	1.7	14.1	39.7	20.3
M89-1985	43.1	24	4.0	1.6	31	1.5	16.5	41.0	20.1
M89-1986	39.9	37	3.0	1.9	28	1.6	16.2	40.2	19.7
M89-1997	41.6	33	2.6	1.5	29	1.4	17.6	40.3	20.0
ORC9205	48.5	1	4.6	2.0	33	1.4	15.5	39.8	20.0
SL89-3343	39.8	38	-0.4	1.7	26	1.6	17.8	41.2	19.9
SL91-0497M	36.4	45	-1.8	1.2	25	1.4	16.6	40.3	20.3
SL91-1045M	40.5	35	0.2	1.7	30	1.4	16.0	40.6	19.9
SL91-1132M	39.9	36	-1.6	1.4	25	1.5	18.4	40.6	19.6
SL91-1628M	41.6	27	0.0	1.3	27	1.6	17.9	41.5	20.1
SL91-1767M	48.5	42	1.6	1.4	24	1.6	17.3	40.4	20.3
SL91-2140N	39.8	40	0.8	2.3	29	1.4	16.3	39.5	19.6

* 133.2 Days After Planting

PRELIMINARY TEST I, 1993

YIELD (bu/a)

Strain	Mean 7 Tests	Kanawha IA	Pomeroy IA	Ingham MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Archer (BSR)	43.3	35.9	43.2	51.1	40.9	43.6	31.2	57.1
Lambert (0)	39.1	33.8	33.8	37.0	40.5	35.6	31.0	61.8
Parker (I)	43.7	37.0	48.2	43.9	40.9	40.8	39.1	56.3
Sturdy (L)	45.3	39.1	46.3	40.6	47.8	44.7	40.9	57.9
A92-525014	46.1	39.4	47.8	47.8	43.9	47.0	37.1	59.9
A92-525019	44.4	38.1	47.8	48.2	42.7	41.5	34.0	58.7
A92-527015	44.2	38.5	42.2	52.5	43.0	46.6	31.8	55.1
A92-527030	43.7	36.7	46.4	40.5	48.4	41.1	37.5	55.1
A92-527031	44.4	35.9	43.9	44.3	48.8	43.4	37.0	57.5
A92-528032	44.0	38.3	45.5	43.0	45.9	45.3	33.1	57.1
A92-532008	43.4	37.4	45.8	37.9	42.5	42.8	37.5	60.1
A92-532029	45.5	40.8	46.7	47.0	43.7	46.6	37.4	56.6
A32-532030	43.3	39.8	43.2	43.3	43.8	42.8	33.2	57.1
A92-535034	41.2	37.4	39.3	33.7	40.1	44.9	35.0	58.2
A92-535059	44.1	35.4	44.5	44.7	45.1	43.3	36.4	59.5
A92-536031	45.7	38.9	47.0	47.1	48.7	41.9	38.2	57.8
A92-537032	43.3	38.1	44.5	44.9	43.4	34.0	36.8	61.5
A92-625002	45.6	40.1	47.9	43.6	48.2	47.5	35.2	56.4
E92029	42.0	36.2	46.7	44.8	44.9	41.4	26.3	53.6
M89-587	39.4	31.0	40.9	37.6	38.9	39.6	32.1	55.8
M89-782	42.4	36.3	45.9	37.2	41.6	41.4	35.4	59.1
M89-783	44.2	36.0	43.8	45.6	43.7	44.7	36.5	59.0
M89-791	42.8	37.1	42.9	41.3	44.4	40.6	37.5	55.7
M89-792	43.6	35.9	43.0	47.2	40.4	44.0	38.0	56.6
M89-794	41.9	36.1	38.0	44.4	41.9	45.3	32.5	55.4
M89-895	44.4	39.3	49.1	39.8	45.4	44.5	32.2	60.7
M89-911	42.5	36.1	41.9	42.3	45.3	43.4	32.6	55.9
M89-936	44.2	36.0	45.0	37.6	47.1	42.3	41.3	59.8
M89-1020	38.5	28.5	41.3	34.6	37.1	36.4	35.8	55.6
M89-1336	43.5	37.0	44.0	42.4	45.7	45.1	34.7	55.5
M89-1356	36.6	28.1	41.8	33.7	38.0	37.4	27.8	49.2
M89-1471	42.9	36.0	47.9	37.4	45.3	43.9	31.2	58.5
M89-1561	41.9	36.4	42.1	36.2	45.5	40.9	35.0	57.2
M89-1926	43.2	35.5	43.7	42.4	43.3	46.6	33.0	57.8
M89-1985	43.1	38.2	44.5	39.5	43.6	44.0	33.5	58.3
M89-1986	39.9	32.9	41.7	38.6	40.0	35.9	33.2	56.8
M89-1997	41.6	36.3	42.2	45.2	40.1	43.2	28.0	56.1
ORC9205	48.5	42.8	46.9	52.6	49.7	49.3	36.9	61.0
SL89-3343	39.8	35.2	40.5	40.6	41.8	31.0	31.7	57.9
SL91-0497M	36.4	29.9	36.5	32.8	37.2	35.5	27.1	55.6
SL91-1045M	40.5	33.9	40.5	38.6	43.1	43.1	28.5	55.7
SL91-1132M	40.2	30.9	44.1	33.8	42.4	40.4	31.1	58.9
SL91-1628M	42.7	36.8	43.6	44.1	41.8	43.4	32.4	57.0
SL91-1767M	38.8	33.9	38.8	28.9	37.2	37.7	30.0	65.2
SL91-2140N	39.2	34.5	40.5	32.7	39.6	37.4	35.7	53.8
C.V. (%)		6.0	8.0	13.6	6.1	7.1	8.2	4.3
L.S.D. (5%)		4.3	7.0	11.3	5.3	6.0	4.7	5.0
Row Sp. (In.)		27	27	30	10	10	30	30
Rows/Plot		4	4	4	4	4	4	4
Reps		2	2	2	2	2	2	2

PRELIMINARY TEST I, 1993

YIELD RANK

Strain	Yield Rank	Kanawha IA	Pomeroy IA	Ingham MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Archer (BSR)	20	30	26	3	33	17	36	23
Lambert (0)	41	39	45	37	35	42	39	2
Parker (I)	15	17	2	17	33	33	3	31
Sturdy (L)	6	7	12	25	6	11	2	17
A92-525014	2	5	5	5	17	3	10	7
A92-525019	7	12	5	4	26	28	23	13
A92-527015	10	9	30	2	25	4	34	41
A92-527030	15	20	11	27	4	31	6	41
A92-527031	7	30	22	15	2	18	11	21
A92-528032	14	10	15	20	8	7	27	23
A92-532008	19	14	14	32	27	24	6	6
A92-532029	5	2	9	8	19	4	9	28
A32-532030	20	4	26	19	18	24	25	23
A92-535034	34	14	41	42	37	10	21	16
A92-535059	13	34	17	13	14	21	15	9
A92-536031	3	8	7	7	3	27	4	19
A92-537032	20	12	17	11	22	44	13	3
A92-625002	4	3	3	18	5	2	19	30
E92029	30	24	9	12	15	29	45	44
M89-587	39	41	37	34	41	36	33	34
M89-782	29	22	13	36	32	29	18	10
M89-783	10	27	23	9	19	11	14	11
M89-791	26	16	29	24	16	34	6	35
M89-792	17	30	28	6	36	14	5	28
M89-794	31	25	43	14	29	7	30	40
M89-895	7	6	1	28	11	13	32	5
M89-911	28	25	33	23	12	18	29	33
M89-936	10	27	16	33	7	26	1	8
M89-1020	43	44	36	39	45	40	16	37
M89-1336	18	17	21	21	9	9	22	39
M89-1356	44	45	34	41	42	38	43	45
M89-1471	25	27	3	35	12	16	36	14
M89-1561	31	21	32	38	10	32	20	22
M89-1926	23	33	24	22	23	4	28	19
M89-1985	24	11	17	29	21	14	24	15
M89-1986	37	40	35	31	39	41	25	27
M89-1997	33	22	30	10	37	22	42	32
ORC9205	1	1	8	1	1	1	12	4
SL89-3343	38	35	38	26	30	45	35	17
SL91-0497M	45	43	44	43	43	43	44	37
SL91-1045M	35	37	38	30	24	23	41	35
SL91-1132M	36	42	20	40	28	35	38	12
SL91-1628M	27	19	25	16	30	18	31	26
SL91-1767M	42	37	42	45	43	37	40	1
SL91-2140N	40	36	38	44	40	38	17	43

PRELIMINARY TEST I, 1993

MATURITY (date)

Strain	Mean 5 Tests	Kanawha IA	Pomeroy IA	Ingham MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Archer (BSR)	4.6	6		6	2	2		7
Lambert (0)	-7.8	-7		-7	-9	-14		-2
Parker (I)	09/26	09/25		09/22	09/27	10/03		09/25
Sturdy (L)	4.0	6		0	6	1		7
A92-525014	1.8	4		-3	2	0		6
A92-525019	6.0	8		6	5	2		9
A92-527015	5.4	8		2	6	2		9
A92-527030	1.2	3		1	0	-3		5
A92-527031	3.0	2		3	2	1		7
A92-528032	4.0	6		2	2	1		9
A92-532008	3.4	6		1	2	1		7
A92-532029	4.8	7		6	2	2		7
A32-532030	3.2	5		3	0	1		7
A92-535034	4.6	6		6	2	2		7
A92-535059	3.8	6		2	3	1		7
A92-536031	6.6	8		10	5	1		9
A92-537032	4.2	7		6	0	1		7
A92-625002	4.2	7		2	3	1		8
E92029	5.4	8		5	3	2		9
M89-587	2.0	3		3	0	-1		5
M89-782	3.2	4		3	2	0		7
M89-783	1.2	0		0	2	-1		5
M89-791	1.2	2		-3	2	-1		6
M89-792	-0.6	0		-1	-1	-1		0
M89-794	2.8	4		2	0	1		7
M89-895	4.8	6		5	5	1		7
M89-911	5.2	6		7	5	1		7
M89-936	-2.6	0		-6	-3	-4		0
M89-1020	-7.4	-6		-9	-10	-11		-1
M89-1336	3.2	4		2	3	0		7
M89-1356	1.0	2		1	0	-1		3
M89-1471	5.0	6		5	6	1		7
M89-1561	2.6	2		4	0	0		7
M89-1926	3.8	6		1	2	1		9
M89-1985	4.0	6		3	3	1		7
M89-1986	3.0	4		2	3	-1		7
M89-1997	2.6	4		1	0	1		7
ORC9205	4.6	6		4	3	2		8
SL89-3343	-0.4	1		-1	2	-5		1
SL91-0497M	-1.8	0		-6	0	-4		1
SL91-1045M	0.2	1		-2	2	-5		5
SL91-1132M	-1.6	0		-1	0	-6		-1
SL91-1628M	0.0	2		-1	0	-2		1
SL91-1767M	1.6	2		2	0	-1		5
SL91-2140N	0.8	3		2	0	-2		1
Date Planted	05/16	05/14		05/15	05/19	05/20		05/13
Days to Mature	133.2	134		130	131	136		135

PRELIMINARY TEST I, 1993

LODGING (score)

Strain	Mean 7 Tests	Kanawha IA	Pomeroy IA	Ingham MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Archer (BSR)	1.8	1.3	1.3	2.0	1.0	3.0	1.0	3.0
Lambert (0)	1.9	1.2	1.0	2.0	1.5	2.5	1.0	3.8
Parker (I)	2.6	1.2	1.5	3.0	3.0	3.0	2.0	4.2
Sturdy (L)	2.0	1.3	1.2	1.5	2.5	3.0	2.0	2.8
A92-525014	2.0	1.3	1.5	2.0	1.0	3.0	2.0	3.2
A92-525019	1.8	1.6	1.7	1.5	1.5	3.0	1.0	2.2
A92-527015	1.9	1.5	1.2	2.0	2.0	3.0	1.0	2.5
A92-527030	1.6	1.4	1.5	1.5	1.0	2.5	1.0	2.5
A92-527031	1.7	1.5	1.2	1.5	1.5	3.0	1.0	2.5
A92-528032	1.7	1.3	1.4	1.5	1.0	3.0	1.0	3.0
A92-532008	1.5	1.2	1.3	1.5	1.0	3.0	1.0	1.2
A92-532029	1.8	1.3	1.3	1.5	1.0	3.0	2.0	2.8
A32-532030	1.8	1.2	1.1	2.0	1.0	3.0	1.0	3.0
A92-535034	1.5	1.2	1.1	1.5	1.0	3.0	1.0	1.8
A92-535059	1.5	1.2	1.1	1.5	1.0	3.0	1.0	1.8
A92-536031	2.0	1.6	1.5	1.5	1.0	3.0	1.0	4.2
A92-537032	1.3	1.1	1.0	1.5	1.0	2.0	1.0	1.2
A92-625002	1.8	1.6	1.5	1.5	1.0	3.0	2.0	2.2
E92029	1.7	1.4	1.2	2.0	1.0	3.0	1.0	2.2
M89-587	1.9	1.2	1.1	2.0	1.5	3.0	1.0	3.5
M89-782	1.6	1.3	1.3	1.5	1.5	3.0	1.0	1.5
M89-783	1.6	1.3	1.3	1.5	1.0	3.0	1.0	2.2
M89-791	1.7	1.2	1.2	1.5	1.0	3.0	1.0	3.0
M89-792	1.9	1.4	1.2	2.0	1.0	3.0	2.0	2.8
M89-794	1.7	1.3	1.1	1.5	1.5	3.0	1.0	2.5
M89-895	1.7	1.4	1.5	1.5	1.0	3.0	2.0	1.8
M89-911	1.6	1.3	1.2	1.5	1.5	3.0	1.0	2.0
M89-936	1.4	1.1	1.0	1.5	1.0	2.5	1.0	1.5
M89-1020	1.5	1.0	1.1	1.5	1.0	3.0	1.0	2.0
M89-1336	1.8	1.4	1.3	2.0	1.0	3.0	1.0	3.2
M89-1356	1.6	1.2	1.2	1.5	1.0	3.0	1.0	2.5
M89-1471	1.5	1.2	1.3	1.5	1.0	2.5	1.0	2.2
M89-1561	1.8	1.2	1.2	1.5	1.5	3.0	1.0	3.2
M89-1926	2.0	1.2	1.3	2.0	2.0	3.0	1.0	3.2
M89-1985	1.6	1.3	1.2	1.5	1.0	3.0	1.0	2.2
M89-1986	1.9	1.5	1.2	1.5	1.0	3.0	2.0	2.8
M89-1997	1.5	1.2	1.2	1.5	1.0	3.0	1.0	1.8
ORC9205	2.0	1.4	1.4	2.5	2.0	3.0	1.0	3.0
SL89-3343	1.7	1.4	1.3	2.0	1.0	3.0	1.0	2.2
SL91-0497M	1.2	1.0	1.0	1.5	1.0	2.0	1.0	1.0
SL91-1045M	1.7	1.1	1.2	1.5	1.0	3.0	1.0	3.2
SL91-1132M	1.4	1.2	1.2	1.5	1.0	3.0	1.0	1.2
SL91-1628M	1.3	1.2	1.0	1.0	1.0	2.5	1.0	1.2
SL91-1767M	1.4	1.1	1.1	1.5	1.0	2.5	1.0	1.8
SL91-2140N	2.3	1.2	1.3	3.0	1.0	3.0	2.0	4.5

PRELIMINARY TEST I, 1993

PLANT HEIGHT (inches)

Strain	Mean 7 Tests	Kanawha IA	Pomeroy IA	Ingham MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Archer (BSR)	31	32	29	30	30	31	29	37
Lambert (0)	25	22	22	23	24	24	23	35
Parker (I)	31	28	27	31	31	29	31	39
Sturdy (L)	30	28	28	24	30	29	31	40
A92-525014	31	31	30	29	29	32	24	42
A92-525019	28	24	27	30	28	26	25	34
A92-527015	31	29	30	31	30	31	30	36
A92-527030	28	26	26	26	29	27	24	35
A92-527031	29	24	26	31	29	29	25	36
A92-528032	28	26	26	27	28	29	25	33
A92-532008	30	26	28	31	30	29	28	37
A92-532029	30	26	30	31	29	29	30	36
A32-532030	31	27	29	32	30	32	28	41
A92-535034	28	25	24	23	29	28	30	36
A92-535059	30	28	32	25	32	28	30	35
A92-536031	28	25	28	25	29	25	27	36
A92-537032	27	26	26	25	29	24	23	33
A92-625002	27	25	28	23	28	28	25	32
E92029	28	27	31	28	28	28	23	32
M89-587	29	23	28	27	31	29	26	38
M89-782	28	26	27	27	29	27	27	33
M89-783	29	26	27	30	31	30	26	36
M89-791	30	30	27	29	30	27	29	37
M89-792	30	24	26	30	30	31	29	39
M89-794	31	28	30	30	30	29	29	40
M89-895	30	28	32	28	29	28	30	35
M89-911	30	27	28	28	32	29	25	39
M89-936	29	24	28	28	29	29	29	38
M89-1020	26	20	24	26	26	25	26	33
M89-1336	27	25	25	26	27	27	23	36
M89-1356	29	24	28	26	30	28	28	36
M89-1471	28	26	26	28	30	26	28	34
M89-1561	29	26	26	27	30	27	26	38
M89-1926	29	28	28	30	30	23	25	36
M89-1985	31	31	26	33	29	30	30	38
M89-1986	28	27	24	31	28	25	25	35
M89-1997	29	28	25	30	29	27	26	35
ORC9205	33	32	30	32	35	34	28	43
SL89-3343	26	22	24	25	27	26	27	32
SL91-0497M	25	20	23	25	27	24	22	32
SL91-1045M	30	26	26	26	31	29	27	43
SL91-1132M	25	22	24	20	26	26	23	31
SL91-1628M	27	24	26	27	27	27	24	33
SL91-1767M	24	22	21	22	26	23	21	33
SL91-2140N	29	24	26	31	29	26	32	33

PRELIMINARY TEST I, 1993

SEED QUALITY (score)

Strain	Mean 7 Tests	Kanawha IA	Pomeroy IA	Ingham MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Archer (BSR)	1.6	1.0	1.0	2.0	2.0	2.0	2.0	1.0
Lambert (0)	1.4	1.0	1.0	1.5	1.5	1.5	2.0	1.0
Parker (I)	1.8	1.5	1.0	1.0	2.5	2.5	2.0	2.0
Sturdy (L)	1.8	1.5	1.5	1.0	2.5	2.0	2.0	2.0
A92-525014	1.6	1.0	1.5	1.0	1.5	2.0	2.0	2.0
A92-525019	1.5	1.5	1.0	1.0	1.5	1.5	2.0	2.0
A92-527015	1.9	2.0	1.5	1.0	3.0	1.5	2.0	2.0
A92-527030	1.5	1.5	1.0	1.0	1.5	1.5	2.0	2.0
A92-527031	1.4	1.0	1.0	1.0	1.5	1.5	2.0	2.0
A92-528032	1.6	1.0	1.0	1.0	2.0	2.0	2.0	2.0
A92-532008	1.4	1.0	1.0	1.0	2.0	1.5	2.0	1.0
A92-532029	1.7	1.5	1.0	1.0	1.5	2.0	3.0	2.0
A32-532030	1.5	1.0	1.0	1.0	2.5	2.0	2.0	1.0
A92-535034	1.5	1.0	1.0	1.0	2.5	2.0	2.0	1.0
A92-535059	1.4	1.0	1.0	1.0	2.0	2.0	2.0	1.0
A92-536031	1.5	1.0	1.0	1.0	1.5	2.0	2.0	2.0
A92-537032	1.4	1.0	1.0	1.0	2.0	2.0	2.0	1.0
A92-625002	1.7	1.5	1.0	1.0	2.5	3.0	2.0	1.0
E92029	1.6	1.0	1.0	1.0	2.5	2.0	2.0	2.0
M89-587	1.4	1.0	1.0	1.0	2.0	2.0	2.0	1.0
M89-782	1.3	1.0	1.0	1.0	1.5	1.5	2.0	1.0
M89-783	1.8	1.0	1.5	1.0	2.5	2.5	2.0	2.0
M89-791	1.7	1.5	1.0	1.0	2.5	2.0	2.0	2.0
M89-792	1.6	1.0	1.0	1.0	2.0	2.0	2.0	2.0
M89-794	1.6	1.0	1.0	1.0	2.0	2.5	2.0	2.0
M89-895	1.5	1.0	1.0	1.0	2.5	2.0	2.0	1.0
M89-911	1.6	1.5	1.0	1.0	3.0	2.0	2.0	1.0
M89-936	1.4	1.0	1.0	1.0	2.0	1.5	2.0	1.0
M89-1020	1.4	1.0	1.0	1.5	1.5	2.0	2.0	1.0
M89-1336	1.6	1.0	1.0	1.0	2.0	2.0	3.0	1.0
M89-1356	1.3	1.0	1.0	1.0	1.5	1.5	2.0	1.0
M89-1471	1.6	1.0	1.0	1.0	2.0	2.0	2.0	2.0
M89-1561	1.6	1.0	1.0	1.0	1.5	1.5	3.0	2.0
M89-1926	1.7	1.5	1.0	1.0	2.0	1.5	3.0	2.0
M89-1985	1.5	1.0	1.0	1.0	2.5	2.0	2.0	1.0
M89-1986	1.6	1.5	1.0	1.0	2.0	2.0	2.0	2.0
M89-1997	1.4	1.0	1.0	1.5	2.0	1.5	2.0	1.0
ORC9205	1.4	1.0	1.0	1.0	2.0	1.5	2.0	1.0
SL89-3343	1.6	1.0	1.0	1.0	2.5	1.5	2.0	2.0
SL91-0497M	1.4	1.0	1.0	1.0	2.0	1.5	2.0	1.0
SL91-1045M	1.4	1.0	1.0	1.0	1.5	2.0	2.0	1.0
SL91-1132M	1.5	1.0	1.0	1.0	2.0	1.5	3.0	1.0
SL91-1628M	1.6	1.0	1.0	1.0	2.0	2.0	2.0	2.0
SL91-1767M	1.6	1.0	1.0	1.0	2.0	2.0	3.0	1.0
SL91-2140N	1.4	1.0	1.0	1.0	1.5	2.0	2.0	1.0

PRELIMINARY TEST I, 1993

SEED SIZE (g/100)

Strain	Mean 7 Tests	Kanawha IA	Pomeroy IA	Ingham MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Archer (BSR)	14.6	13.6	16.6	17.6	14.5	13.4	13.0	13.3
Lambert (0)	16.2	16.0	18.7	16.4	16.5	15.3	16.0	14.8
Parker (I)	16.2	15.9	18.6	17.2	16.2	16.2	15.0	14.4
Sturdy (L)	15.9	14.9	17.7	17.0	16.9	15.6	14.0	15.3
A92-525014	15.0	13.7	16.0	18.6	14.6	14.7	13.0	14.4
A92-525019	15.4	14.3	16.7	19.6	14.7	14.5	13.0	15.2
A92-527015	14.7	13.4	15.2	17.3	14.4	14.2	13.0	15.2
A92-527030	14.4	13.6	16.0	15.3	15.5	13.9	13.0	13.8
A92-527031	14.4	14.1	16.1	15.7	15.4	13.9	13.0	12.9
A92-528032	15.6	14.8	16.8	18.4	14.8	15.7	13.0	15.6
A92-532008	16.3	15.3	18.2	17.9	16.7	15.5	14.0	16.6
A92-532029	16.5	15.8	17.8	18.7	16.6	16.8	14.0	15.9
A32-532030	13.6	13.6	14.4	15.5	13.0	13.4	12.0	13.2
A92-535034	14.9	14.6	16.8	15.8	14.5	14.7	13.0	14.9
A92-535059	16.7	16.5	18.1	19.1	16.7	16.0	14.0	16.3
A92-536031	13.9	13.4	15.0	16.4	13.0	13.8	12.0	13.8
A92-537032	14.4	13.9	15.5	16.2	14.2	14.0	12.0	14.7
A92-625002	14.1	13.7	14.8	16.5	13.4	13.7	12.0	14.9
E92029	14.3	14.1	15.5	16.8	14.2	13.9	12.0	13.6
M89-587	12.7	12.5	13.7	14.5	12.6	11.9	12.0	11.8
M89-782	18.8	17.8	20.4	20.3	18.7	18.2	17.0	19.0
M89-783	18.4	17.1	20.5	21.5	18.2	18.2	16.0	17.1
M89-791	17.9	16.5	20.4	20.0	18.6	17.3	16.0	16.8
M89-792	18.4	17.5	20.1	21.7	18.6	17.2	17.0	16.7
M89-794	16.5	14.9	18.3	18.6	16.0	15.8	16.0	15.9
M89-895	18.8	18.1	20.2	20.6	19.1	18.0	18.0	17.8
M89-911	14.9	13.6	15.6	16.8	16.4	14.2	13.0	14.9
M89-936	16.7	16.1	18.2	17.4	17.4	16.0	16.0	15.6
M89-1020	17.0	17.0	19.4	17.7	17.0	16.4	16.0	15.4
M89-1336	15.8	15.7	18.0	17.5	15.7	14.9	14.0	15.0
M89-1356	15.7	14.3	17.6	18.6	15.6	15.5	14.0	14.5
M89-1471	15.4	14.4	17.7	17.5	16.0	14.6	13.0	14.7
M89-1561	14.7	13.7	16.6	17.0	15.1	13.9	13.0	13.3
M89-1926	14.1	13.6	15.9	14.2	15.0	13.7	13.0	13.1
M89-1985	16.5	15.3	18.3	19.4	17.2	15.8	14.0	15.3
M89-1986	16.2	14.9	19.1	18.5	16.2	15.5	14.0	15.0
M89-1997	17.6	16.4	20.6	20.2	17.5	17.1	15.0	16.6
ORC9205	15.5	15.1	16.3	17.9	16.0	14.5	13.0	15.5
SL89-3343	17.8	17.1	20.6	18.0	18.2	17.0	16.0	17.4
SL91-0497M	16.6	17.0	18.4	16.8	17.9	16.4	14.0	15.8
SL91-1045M	16.0	14.9	18.4	19.0	16.5	14.7	14.0	14.6
SL91-1132M	18.4	17.7	21.6	19.2	18.9	17.4	16.0	17.8
SL91-1628M	17.9	17.0	20.2	20.6	18.5	16.9	15.0	17.0
SL91-1767M	17.3	17.6	18.1	17.1	18.4	17.2	16.0	16.5
SL91-2140N	16.3	15.6	18.4	18.7	16.0	15.8	14.0	15.4

PRELIMINARY TEST I, 1993

PROTEIN (%)

Strain	Mean 5 Tests	Pomeroy IA	Lamberton MN	Ingham MI	Brookings SD	Arlington WI
Archer (BSR)	39.4	39.7	37.7	41.0	38.7	39.9
Lambert (O)	40.9	42.5	39.2	40.7	40.0	41.9
Parker (I)	40.0	40.4	39.0	43.6	37.4	39.8
Sturdy (L)	40.0	40.7	38.2	41.8	38.7	40.7
A92-525014	39.6	40.7	37.3	42.4	38.5	39.0
A92-525019	40.6	41.8	39.3	40.7	38.8	42.3
A92-527015	38.9	38.4	36.8	41.8	38.9	38.6
A92-527030	40.1	41.5	39.1	40.9	39.0	39.8
A92-527031	41.6	43.7	41.6	40.2	38.4	43.9
A92-528032	40.0	41.0	38.2	38.9	41.0	41.0
A92-532008	40.9	41.9	39.2	40.5		42.1
A92-532029	39.6	41.5	37.3	40.6	37.3	41.1
A32-532030	41.2	42.5	40.3	40.8	40.3	42.2
A92-535034	39.2	40.5	37.8	40.3	37.0	40.6
A92-535059	39.3	39.3	37.8	41.3	38.3	39.6
A92-536031	39.2	38.8	36.1	41.3	40.2	39.4
A92-537032	39.6	40.8	38.5	40.5	37.5	40.8
A92-625002	40.6	40.5	39.0	42.4	40.3	40.9
E92029	40.5	41.7	39.8	41.6	37.8	41.4
M89-587	39.7	40.4	38.9	40.1	39.0	40.0
M89-782	40.1	42.1	39.0	39.4	38.8	41.4
M89-783	39.9	42.0	40.6	40.0	35.5	41.5
M89-791	39.9	41.3	39.1	42.0	36.5	40.7
M89-792	40.4	41.7	40.7	40.2	37.3	42.0
M89-794	40.3	41.5	39.0	40.4	39.0	41.6
M89-895	40.3	41.3	39.8	40.4	39.0	41.1
M89-911	41.1	42.2	41.0	40.3	38.6	43.4
M89-936	40.8	41.5	40.2	41.7	39.8	40.9
M89-1020	40.5	41.7	39.9	40.3	39.0	41.7
M89-1336	40.2	41.0	40.3	40.4	39.3	40.0
M89-1356	39.3	41.6	39.1	38.6	36.0	41.0
M89-1471	40.2	41.3	39.5	41.4	38.3	40.6
M89-1561	39.5	40.9	37.7	40.6	38.0	40.2
M89-1926	39.7	40.1	39.5	39.8	39.2	39.8
M89-1985	41.0	41.8	39.9	41.5	40.4	41.3
M89-1986	40.2	42.1	39.4	41.3	36.6	41.5
M89-1997	40.3	41.5	38.6	41.0	39.3	41.0
ORC9205	39.8	41.3	40.0	39.8	37.2	40.5
SL89-3343	41.2	42.4	40.5	41.1	41.0	40.8
SL91-0497M	40.3	42.8	39.5	41.0	36.4	41.7
SL91-1045M	40.6	40.8	40.9	41.3	38.5	41.3
SL91-1132M	41.5	43.2	40.8	42.9	37.8	42.8
SL91-1628M	40.4	41.9	37.9	40.7	39.5	41.9
SL91-1767M	39.5	40.2	38.1	39.2	39.3	40.5
SL91-2140N	40.6	41.0	41.8	42.1	37.6	40.5

PRELIMINARY TEST I, 1993

OIL (%)

Strain	Mean 5 Tests	Pomeroy IA	Lamberton MN	Ingham MI	Brookings SD	Arlington WI
Archer (BSR)	19.8	20.3	20.4	19.8	19.3	19.3
Lambert (0)	20.2	20.2	21.5	20.6	18.6	20.1
Parker (I)	20.1	21.5	20.4	18.4	20.6	19.4
Sturdy (L)	20.0	20.7	20.5	19.6	20.1	19.2
A92-525014	20.2	20.6	20.5	20.5	19.6	20.0
A92-525019	19.4	19.1	19.5	19.4	20.3	18.5
A92-527015	20.7	21.1	21.8	20.3	19.7	20.8
A92-527030	20.2	20.0	20.7	20.5	19.7	19.9
A92-527031	19.0	18.9	19.4	19.6	19.7	17.4
A92-528032	20.2	20.2	21.5	19.9	19.4	20.1
A92-532008	19.9	20.0	20.2	20.2		19.1
A92-532029	19.7	19.5	20.7	19.3	19.6	19.4
A32-532030	19.1	18.6	18.8	20.2	19.3	18.4
A92-535034	19.9	19.9	20.2	20.1	19.5	19.6
A92-535059	20.2	20.7	20.9	19.0	20.0	20.5
A92-536031	20.6	20.9	22.2	20.1	19.8	19.9
A92-537032	20.1	19.9	20.5	20.5	19.7	19.7
A92-625002	19.5	19.9	20.1	18.8	20.0	18.9
E92029	19.6	18.9	19.3	20.0	20.9	18.7
M89-587	20.1	20.2	20.0	20.3	20.4	19.5
M89-782	19.6	19.8	20.5	18.9	19.5	19.5
M89-783	20.3	20.1	19.9	20.2	21.6	19.6
M89-791	19.9	19.7	20.4	20.2	19.9	19.1
M89-792	19.9	19.6	19.6	20.9	20.9	18.6
M89-794	20.1	20.0	20.0	20.5	20.5	19.3
M89-895	20.0	20.2	20.5	20.4	19.7	19.3
M89-911	19.6	19.2	19.5	20.5	20.4	18.2
M89-936	20.0	20.0	20.9	19.5	19.4	20.0
M89-1020	20.5	20.8	21.5	20.5	19.2	20.3
M89-1336	20.0	20.0	20.2	19.8	20.0	19.9
M89-1356	20.6	20.4	20.1	21.1	21.4	20.1
M89-1471	20.7	20.1	21.1	19.9	20.6	21.6
M89-1561	20.4	20.3	21.0	20.2	20.6	19.9
M89-1926	20.3	20.2	21.0	20.3	20.7	19.5
M89-1985	20.1	20.4	19.6	20.6	20.4	19.6
M89-1986	19.7	19.4	20.7	18.6	20.4	19.3
M89-1997	20.0	19.7	20.2	20.4	21.0	18.9
ORC9205	20.0	19.1	20.7	19.9	20.7	19.6
SL89-3343	19.9	19.5	20.6	20.0	19.1	20.1
SL91-0497M	20.3	20.5	20.7	19.4	21.0	20.1
SL91-1045M	19.9	20.5	20.0	19.5	19.6	20.0
SL91-1132M	19.6	19.6	20.0	18.0	21.1	19.2
SL91-1628M	20.1	20.4	21.3	19.4	19.9	19.5
SL91-1767M	20.3	20.8	19.7	20.5	20.1	20.2
SL91-2140N	19.6	19.1	19.5	20.4	20.6	18.3

UNIFORM TEST II, 1993

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
IA2007 (L)	Pride B152 x A80-244003	4	F5	
IA2008 (BSR)	BSR 101 x A80-344003	UTII	F5	BSR resis.
Kenwood (II)	Elgin x Asgrow A1937	6	F5	
A Kenwood BC	Kenwood^4 x Elgin 87	1	BC4 F4	Rps1-k
Sturdy (I)	M70-127 x Century	7	F5	
Conrad	Asgrow A3127 x Tri-Valley Charger	-	F4	
A Conrad BC	(Conrad x Elgin 87) x (Conrad x Preston BC-11-8)	-	BC4 F3	Rps1-k,Rps6
A91-501055	Elgin 87 x Marcus	PTIIA	F5	
A91-607024	Asgrow A3205 x Diaryland DSR 304	PTIIA	F5	
A91-607032	Asgrow A3205 x Kenwood	PTIIA	F5	
A91-607053	Elgin 87 x Conrad	PTIIA	F5	
AM90-211003	Chamberlain x Conrad	1	F5	BSR Resis.
E91031	E8410 x Conrad	PTIIA	F4	
HM 9143	Hack x HM8572	PTIIA	F5	
HM9145	Hack x HM8472	PTIIA	F5	
HS88-4905	Conrad x Hayes	2	F5	Rps1-k
ORC 9008	Elgin x Asgrow A3127	1	F5	
ORC 9108	Hack x Asgrow A3127	PTIIB	F5	
U91-2104	NK S1346 x Asgrow A3427	PTIIB	F4	
U91-2316	Kenwood x HC84-553-1	PTIIB	F4	
U91-2519	A86-204022 x HC84-553-1	PTIIB	F4	
U91-2527	Sturdy x A86-204022	PTIIB	F4	
U91-2722	NK S23-03 x A86-204022	PTIIB	F4	

* Number of years in test or name of 1992 test.

+ SG1/NS/84-RM$_3$/MS x 32 Elite high yielding lines, see Crop Sci 25:717-718

UNIFORM TEST II, 1993

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Chlorosis Score Hanska	Emerg. Score Ames
IA2007 (L)	PTBIYBrI	4.3	4.5	1
IA2008 (BSR)	WGTSYBfI	4.3	3.5	1
Kenwood (II)	PTBDYBlI	4.1	5.0	2
A Kenwood BC	PTBDYBlI	4.3	5.0	4
Sturdy (I)	PGBSYIbI	3.3	3.0	5
Conrad	PTTDYBrI	3.7	4.5	1
AConradBC	PTTDYBrI	4.7	5.0	2
A91-501055	PTBDYBrI	4.5	5.0	5
A91-607024	PG+TBSYBlI	4.2	4.5	3
A91-607032	PTBSYBrI	4.8	4.5	2
A91-607053	PTB+TSYBlI	4.1	4.5	2
AM90-211003	PTBSYBlI	4.2	4.5	3
E91031	PTTDYBlI	4.5	4.5	4
HM9143	PTTDYBrI	4.5	4.0	1
HM9145	PTTDYBrI	4.8	4.5	2
HS88-4905	PGBDYBfI	4.8	4.5	4
ORC9008	PTTDYBlI	4.0	5.0	4
ORC9108	WTTSYBlI	4.6	5.0	3
U91-2104	PGTDYGrI	3.1	4.0	2
U91-2316	PTBIYBlI	3.6	5.0	5
U91-2519	PTBSYBlI	3.7	4.5	5
U91-2527	PGBDYIbI	2.7	3.5	5
U91-2722	PGBSYIbI	3.1	3.0	5

UNIFORM TEST II, 1993

DISEASE DATA

Strain	BSR-Boone Plant n %	BSR-Boone Stem n %	Root Rot Wooster Race 25	PR Ames Race 4	PR Laf. Race 7	PS Lafayette a %	PSB Lafayette n %	Seed Germ. %
IA2007 (L)	100.0	79.2	3.3	S	R	64	10	74
IA2008 (BSR)	30.0	7.1	4.3	S	S	82	14	60
Kenwood (II)	100.0	85.8	4.3	S	S	82	6	58
A Kenwood BC	100.0	74.3	4.0	R	R	72	6	46
Sturdy (I)	100.0	98.0	4.0	S	S	56	14	48
Conrad	100.0	75.6	3.8	S	S	88	4	62
AConradBC	100.0	72.3	1.0	R	R	80	6	86
A91-501055	100.0	97.3	3.7	S	S	98	6	44
A91-607024	100.0	75.7	4.0	S	S	74	6	80
A91-607032	80.0	62.4	4.2	S	S	72	0	98
A91-607053	100.0	89.6	4.0	R	R	92	0	72
AM90-211003	40.0	15.7	4.2	S	S	92	2	68
E91031	100.0	95.7	3.8	S	S	64	12	48
HM9143	100.0	76.6	3.7	S	S	92	0	94
HM9145	90.0	69.8	3.8	S	S	88	2	82
HS88-4905	100.0	95.0	4.3	R	R	88	12	60
ORC9008	90.0	72.6	4.5	S	S	72	0	98
ORC9108	100.0	71.1	4.2	S	S	82	4	92
U91-2104	100.0	84.6	4.7	S	S	34	6	96
U91-2316	90.0	77.5	5.0	S	S	84	6	84
U91-2519	100.0	68.8	4.8	H	S	78	24	64
U91-2527	100.0	88.8	4.2	S	S	40	58	18
U91-2722	100.0	93.3	4.0	S	S	78	20	70

UNIFORM TEST II, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 21 bu/a	Rank 21 No.	Maturity 18 Date	Lodging 22 Score	Plant Height 22 In.	Seed Quality 22 Score	Seed Size 21 g/100	Composition Protein 5 %	 Oil 5 %
IA2007 (L)	50.0	9	3.0	1.4	31	1.5	17.3	39.5	21.6
IA2008 (BSR)	47.1	22	-1.1	1.8	32	1.3	14.0	38.9	21.3
Kenwood (II)	51.3	2	09/24*	1.8	32	1.7	14.8	39.5	21.5
A Kenwood BC	51.4	1	0.4	1.6	32	1.5	15.0	40.1	21.3
Sturdy (I)	47.6	19	-1.7	1.6	30	1.6	17.8	40.0	21.5
Conrad	47.2	20	1.6	1.7	32	1.5	15.5	39.7	21.3
AConradBC	49.8	13	1.0	1.5	31	1.4	16.2	40.0	21.6
A91-501055	48.5	17	-1.0	1.6	28	1.8	18.0	39.6	21.7
A91-607024	51.0	3	3.8	1.6	34	1.4	14.3	40.4	20.8
A91-607032	50.1	7	2.6	1.5	29	1.4	14.4	41.6	20.1
A91-607053	48.8	15	2.2	1.6	29	1.5	16.6	41.4	21.1
AM90-211003	50.1	7	2.1	1.8	31	1.5	18.6	40.5	20.9
E91031	43.8	23	1.8	1.6	30	1.6	14.6	39.0	21.6
HM9143	47.7	18	1.2	1.6	31	1.4	15.2	39.2	21.6
HM9145	47.2	20	1.8	1.7	31	1.4	15.1	39.7	21.3
HS88-4905	48.9	14	-0.3	1.6	32	1.5	16.5	39.2	22.0
ORC9008	49.9	11	2.6	1.3	31	1.3	16.4	40.2	21.3
ORC9108	50.6	5	3.8	1.6	33	1.4	14.5	41.0	20.6
U91-2104	48.8	15	3.3	1.8	32	1.4	14.1	39.0	21.5
U91-2316	49.9	11	3.3	1.6	32	1.5	14.9	40.0	21.0
U91-2519	50.4	6	3.6	1.6	31	1.3	16.3	40.3	21.7
U91-2527	51.0	3	1.1	1.5	31	1.6	16.6	40.0	21.7
U91-2722	50.0	9	1.3	1.8	33	1.4	14.2	41.4	20.8

* 126.7 Days After Planting

UNIFORM TEST II, 1993

1992-1993 2-YEAR MEAN

No. of Tests Strain	Yield 45 bu/a	Rank 45 No.	Maturity 39 Date	Lodging 47 Score	Plant Height 47 In.	Seed Quality 45 Score	Seed Size 45 g/100	Composition Protein 9 %	Oil 9 %
IA2007 (L)	51.6	2	4.6	2.5	33	1.7	17.8	39.5	21.1
Kenwood (II)	51.2	3	09/22.5*	2.0	34	1.8	15.8	39.9	20.9
A Kenwood BC	51.2	3	0.3	1.9	33	1.7	16.2	40.4	20.8
Sturdy (L)	48.0	7	-1.0	1.9	32	1.8	18.3	40.6	20.8
AM90-211003	51.9	1	3.5	2.1	33	1.7	19.6	40.8	20.5
HS88-4905	48.7	6	-0.4	1.6	33	1.6	17.1	39.5	21.4
ORC9008	50.4	5	2.4	1.4	33	1.5	17.3	40.4	20.8

* 129.3 Days After Planting

1991-1993 3-YEAR MEAN

No. of Tests Strain									
	69	69	62	70	70	68	69	15	15
IA2007 (L)	50.9	1	4.1	1.7	34	1.8	17.8	39.0	21.3
Kenwood (II)	50.4	2	09/19.3*	1.9	34	1.9	15.7	39.1	21.2
Sturdy (L)	47.1	4	-2.0	1.8	32	1.9	18.2	40.3	20.9
HS88-4905	48.2	3	-1.3	1.5	33	1.8	17.2	39.1	21.5

*126.2 Days After Planting

UNIFORM TEST II, 1993

YIELD (bu/a)

Strain	Mean 21 Tests	Ames IA	Grand Junction IA	Key-stone IA	Dekalb IL	Dwight IL	Urbana IL
IA2007 (L)	50.0	43.1	46.6	47.4	55.2	57.8	67.7
IA2008 (BSR)	47.1	41.7	41.3	45.4	56.5	49.5	57.4
Kenwood (II)	51.3	49.3	48.1	49.0	60.5	53.6	73.0
A Kenwood BC	51.4	47.9	49.9	52.2	58.1	52.7	71.0
Sturdy (I)	47.6	48.7	33.9	49.5	56.9	53.2	59.1
Conrad	47.2	44.7	42.9	46.2	50.6	56.3	72.1
AConradBC	49.8	45.1	44.1	49.4	56.5	55.9	72.4
A91-501055	48.5	50.8	42.3	51.3	52.0	47.0	66.1
A91-607024	51.0	46.6	48.0	45.1	60.2	55.3	77.9
A91-607032	50.1	49.2	45.4	48.2	54.9	56.0	72.1
A91-607053	48.8	45.5	46.4	49.7	50.7	58.9	70.0
AM90-211003	50.1	47.9	44.2	50.0	60.8	55.6	73.6
E91031	43.8	46.3	41.6	41.7	56.1	45.8	64.1
HM9143	47.7	43.8	46.1	44.1	54.3	53.2	74.3
HM9145	47.2	43.6	40.3	46.8	55.9	51.9	68.6
HS88-4905	48.9	45.0	42.0	48.2	58.0	52.3	67.9
ORC9008	49.9	45.9	47.3	44.9	62.1	49.4	73.5
ORC9108	50.6	46.2	44.8	48.5	62.0	52.9	73.6
U91-2104	48.8	45.1	44.7	48.8	59.4	55.0	68.5
U91-2316	49.9	43.5	44.5	46.5	63.9	52.3	66.5
U91-2519	50.4	43.9	44.3	47.8	63.4	49.9	71.7
U91-2527	51.0	50.4	47.1	53.6	58.1	53.5	68.5
U91-2722	50.0	47.2	41.4	49.0	64.1	57.1	76.2
C.V. (%)		4.4	8.8	7.6	7.3	14.0	6.4
L.S.D. (5%)		3.3	6.3	6.0	6.9	ns	7.2
Row Sp. (In.)		27	27	27	30	30	30
Rows/Plot		4	4	4	4	4	4
Reps		3	3	3	3	3	3

UNIFORM TEST II, 1993

YIELD (bu/a)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham MI	Lanawee MI	Lamber-ton MN	Waseca MN	David City NE	Hart-ington NE	Ord NE
IA2007 (L)	50.5	71.8	52.0	56.0	49.5	43.0	52.0	42.5	43.6
IA2008 (BSR)	41.9	61.9	52.3	48.7	60.8	46.0	52.9	39.6	45.4
Kenwood (II)	50.2	73.4	50.3	57.8	55.2	49.3	56.9	46.1	40.7
A Kenwood BC	53.9	73.1	51.9	48.5	58.8	54.8	51.0	39.1	52.4
Sturdy (I)	38.7	61.4	49.8	51.2	57.2	50.2	49.9	42.9	46.2
Conrad	40.0	65.9	48.4	45.2	58.8	44.1	51.0	43.9	30.1
AConradBC	47.6	73.3	52.3	54.1	55.2	49.2	51.8	41.9	39.6
A91-501055	43.6	68.5	49.7	49.7	55.7	51.9	54.8	46.5	38.1
A91-607024	48.3	77.8	51.9	56.9	52.2	46.4	51.1	44.7	44.9
A91-607032	37.2	75.2	52.1	51.5	56.7	47.6	52.8	43.8	44.1
A91-607053	46.3	66.5	51.5	47.9	54.8	50.3	51.4	41.7	39.9
AM90-211003	48.7	71.2	59.3	55.5	52.9	49.2	50.5	39.6	32.6
E91031	33.1	63.5	49.9	42.0	50.1	38.1	47.2	39.6	27.6
HM9143	41.7	70.0	50.8	52.6	53.6	45.7	48.3	45.5	24.0
HM9145	40.1	70.2	48.9	52.6	53.6	49.3	52.1	44.4	36.0
HS88-4905	44.9	64.0	50.0	52.5	53.7	49.7	53.3	46.3	35.2
ORC9008	46.2	77.8	49.0	54.5	53.3	46.9	47.6	39.9	43.9
ORC9108	57.4	75.6	48.4	52.1	49.5	44.8	50.3	48.6	45.9
U91-2104	46.4	79.4	51.5	59.2	49.9	41.0	51.3	39.8	38.2
U91-2316	49.2	68.6	50.1	48.4	57.8	45.6	54.9	43.6	47.5
U91-2519	51.3	68.4	50.6	55.8	53.2	48.2	50.8	42.2	49.5
U91-2527	40.7	74.8	45.8	58.4	54.0	48.8	54.9	46.7	52.6
U91-2722	41.4	69.4	47.8	53.2	55.9	51.1	49.2	42.8	45.9
C.V. (%)	14.0	7.0	5.0	7.0	7.0	9.5	6.4	8.6	18.8
L.S.D. (5%)	10.5	8.2	5.3	7.6	6.3	7.4	6.7	7.5	15.5
Row Sp. (In.)	26	24	30	30	10	10	30	30	30
Rows/Plot	4	4	4	4	10	10	4	4	4
Reps	3	3	3	3	3	3	3	3	3

UNIFORM TEST II, 1993

YIELD (bu/a)

Strain	Adel-phia* NJ	Hoyt-ville OH	Ridge-town Ont.	Woods-lee Ont.	State College PA	Brook-ings SD	Arling-ton WI
IA2007 (L)	31.8	43.1	59.7	50.1	26.8	33.2	58.9
IA2008 (BSR)	40.5	36.4	50.2	45.8	25.4	33.5	57.2
Kenwood (II)	28.6	37.0	54.9	51.3	24.0	35.7	61.8
A Kenwood BC	38.1	43.4	54.0	49.6	21.7	32.2	63.7
Sturdy (I)	38.3	33.1	54.7	45.1	21.9	36.3	58.8
Conrad	45.9	39.8	51.0	48.7	25.1	34.5	52.7
AConradBC	41.7	39.9	51.5	47.3	30.9	34.6	54.0
A91-501055	32.5	32.9	55.3	47.5	21.8	32.9	60.2
A91-607024	45.8	42.7	52.0	48.7	33.2	28.6	58.8
A91-607032	40.5	44.1	53.0	52.8	26.9	32.9	55.9
A91-607053	36.7	38.2	53.0	49.6	27.2	30.2	55.6
AM90-211003	41.5	37.7	51.3	49.6	32.0	33.9	56.0
E91031	36.1	36.3	49.0	46.5	25.7	23.0	51.9
HM9143	35.8	40.4	51.1	45.4	30.1	28.2	58.3
HM9145	38.6	38.2	44.8	46.3	24.4	28.2	55.8
HS88-4905	38.1	40.6	53.9	49.9	25.3	36.7	56.6
ORC9008	40.9	37.5	54.6	45.8	28.9	38.4	60.7
ORC9108	38.1	38.4	51.9	46.5	33.9	31.6	59.6
U91-2104	31.4	37.5	50.2	47.4	24.1	27.3	59.7
U91-2316	43.4	40.7	52.1	50.3	31.9	32.2	58.3
U91-2519	42.1	40.1	58.5	50.5	31.8	29.3	56.9
U91-2527	42.9	39.8	56.8	48.9	24.4	29.8	62.5
U91-2722	46.5	36.0	52.9	48.6	25.4	33.6	60.8
C.V. (%)	24.0	9.7	6.8	6.7	12.3	8.8	5.4
L.S.D. (5%)	15.5	6.2	5.9	ns	5.5	3.9	5.2
Row Sp. (In.)	30	30	24	24	30	30	30
Rows/Plot	4	4	4	4	4	4	4
Reps	3	3	3	3	3	3	3

* Data not included in the mean.

UNIFORM TEST II, 1993

YIELD RANK

Strain	Yield Rank	Ames IA	Grand Junction IA	Key-stone IA	DeKalb IL	Dwight IL	Urbana IL
IA2007 (L)	9	22	6	15	18	2	18
IA2008 (BSR)	22	23	21	19	14	20	23
Kenwood (II)	2	3	2	8	7	10	7
A Kenwood BC	1	6	1	2	10	15	12
Sturdy (I)	19	5	23	6	13	12	22
Conrad	20	17	16	18	23	4	9
AConradBC	13	14	15	7	14	6	8
A91-501055	17	1	17	3	21	22	20
A91-607024	3	9	3	20	8	8	1
A91-607032	7	4	9	12	19	5	9
A91-607053	15	13	7	5	22	1	13
AM90-211003	7	6	14	4	6	7	4
E91031	23	10	19	23	16	23	21
HM9143	18	19	8	22	20	12	3
HM9145	20	20	22	16	17	18	14
HS88-4905	14	16	18	12	12	16	17
ORC9008	11	12	4	21	4	21	6
ORC9108	5	11	10	11	5	14	4
U91-2104	15	14	11	10	9	9	15
U91-2316	11	21	12	17	2	16	19
U91-2519	6	18	13	14	3	19	11
U91-2527	3	2	5	1	10	11	15
U91-2722	9	8	20	8	1	3	2

UNIFORM TEST II, 1993

YIELD RANK

Strain	Bluff-ton IN	Lafay-ette IN	Ingham MI	Lanawee MI	Lamber-ton MN	Waseca MN	David City NE	Hart-ington NE	Ord NE
IA2007 (L)	4	10	5	5	22	21	9	14	12
IA2008 (BSR)	15	22	2	18	1	16	6	21	8
Kenwood (II)	5	7	12	3	9	7	1	5	13
A Kenwood BC	2	9	7	19	2	1	14	23	2
Sturdy (I)	21	23	16	16	5	5	19	12	5
Conrad	20	19	20	22	2	20	14	9	21
AConradBC	9	8	3	9	9	9	10	16	15
A91-501055	14	16	17	17	8	2	4	3	17
A91-607024	8	3	6	4	19	15	13	7	9
A91-607032	22	5	4	15	6	13	7	10	10
A91-607053	11	18	9	21	11	4	11	17	14
AM90-211003	7	11	1	7	18	9	17	22	20
E91031	23	21	15	23	20	23	23	20	22
HM9143	16	13	10	11	14	17	21	6	23
HM9145	19	12	19	11	14	7	8	8	18
HS88-4905	13	20	14	13	13	6	5	4	19
ORC9008	12	2	18	8	16	14	22	18	11
ORC9108	1	4	21	14	22	19	18	1	7
U91-2104	10	1	8	1	21	22	12	19	16
U91-2316	6	15	13	20	4	18	3	11	4
U91-2519	3	17	11	6	17	12	16	15	3
U91-2527	18	6	23	2	12	11	2	2	1
U91-2722	17	14	22	10	7	3	20	13	6

UNIFORM TEST II, 1993

YIELD RANK

Strain	Adel-phia NJ	Hoyt-ville OH	Ridge-town Ont.	Woods-lee Ont.	State College PA	Brook-ings SD	Arling-ton WI
IA2007 (L)	21	3	1	5	11	10	9
IA2008 (BSR)	10	19	20	20	13	9	14
Kenwood (II)	23	18	5	2	20	4	3
A Kenwood BC	14	2	8	7	23	13	1
Sturdy (I)	13	22	6	23	21	3	10
Conrad	2	10	19	11	16	6	22
AConradBC	7	9	16	16	6	5	21
A91-501055	20	23	4	14	22	12	6
A91-607024	3	4	14	11	2	19	10
A91-607032	10	1	10	1	10	11	18
A91-607053	17	13	10	7	9	16	20
AM90-211003	8	15	17	7	3	7	17
E91031	18	20	22	17	12	23	23
HM9143	19	7	18	22	7	20	12
HM9145	12	13	23	19	17	20	19
HS88-4905	14	6	9	6	15	2	16
ORC9008	9	16	7	20	8	1	5
ORC9108	14	12	15	17	1	15	8
U91-2104	22	16	20	15	19	22	7
U91-2316	4	5	13	4	4	13	12
U91-2519	6	8	2	3	5	18	15
U91-2527	5	10	3	10	17	17	2
U91-2722	1	21	12	13	14	8	4

UNIFORM TEST II, 1993

MATURITY (date)

Strain	Mean 18 Tests	Ames IA	Grand Junction IA	Key-stone IA	Dèkalb IL	Dwight IL	Urbana IL
IA2007 (L)	3.0	4			6	1	5
IA2008 (BSR)	-1.1	-3			0	-8	-2
Kenwood (II)	09/24	09/26			09/29	09/23	09/19
A Kenwood BC	0.4	1			1	-2	0
Sturdy (I)	-1.7	-1			-1	-9	-4
Conrad	1.6	4			3	0	0
AConradBC	1.0	3			2	0	0
A91-501055	-1.0	-1			-1	-4	-2
A91-607024	3.8	6			5	4	5
A91-607032	2.6	5			3	0	2
A91-607053	2.2	3			1	0	4
AM90-211003	2.1	5			3	0	4
E91031	1.8	2			0	-3	1
HM9143	1.2	4			3	-3	-1
HM9145	1.8	5			3	-4	1
HS88-4905	-0.3	1			1	-5	-1
ORC9008	2.6	3			3	-2	0
ORC9108	3.8	6			4	3	5
U91-2104	3.3	3			5	2	6
U91-2316	3.3	3			3	2	5
U91-2519	3.6	3			3	2	6
U91-2527	1.1	3			4	-4	-2
U91-2722	1.3	3			2	0	0
Date Planted	05/21	05/26			05/11	05/18	05/14
Days to Mature	126.7	123			141	128	128

UNIFORM TEST II, 1993

MATURITY (date)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham MI	Lanawee MI	Lamber-ton MN	Waseca MN	David City NE	Hart-ington NE	Ord NE
IA2007 (L)	0	3	7	10	2	2	-1		2
IA2008 (BSR)	3	-3	0	3	-2	-1	-4		0
Kenwood (II)	09/17	09/13	09/28	09/23	10/04	10/03	09/30		09/27
A Kenwood BC	3	-1	1	2	0	1	-1		1
Sturdy (I)	0	-5	-1	0	-1	0	-1		0
Conrad	2	1	2	2	-1	1	-2		1
AConradBC	2	0	1	1	0	0	-2		0
A91-501055	0	-3	-1	-1	-2	-1	-2		0
A91-607024	2	6	3	9	2	2	-1		2
A91-607032	2	3	3	4	2	1	-1		2
A91-607053	2	3	2	5	2	1	-2		1
AM90-211003	3	3	3	2	1	1	-2		1
E91031	3	2	2	4	1	0	-2		1
HM9143	1	1	2	1	0	1	-2		1
HM9145	3	2	3	5	1	1	-1		1
HS88-4905	0	-3	0	-2	-2	1	-1		1
ORC9008	4	3	2	8	0	0	-1		2
ORC9108	4	6	4	7	2	2	-1		2
U91-2104	3	8	8	6	1	2	-2		1
U91-2316	4	6	3	7	2	0	-1		0
U91-2519	3	7	5	7	2	1	-2		1
U91-2527	0	0	3	4	1	1	-2		1
U91-2722	1	4	0	2	1	0	-1		1
Date Planted	05/17	05/12	05/15	05/17	05/19	05/20	06/08		05/25
Days to Mature	123	124	136	129	138	136	114		125

UNIFORM TEST II, 1993

MATURITY (date)

Strain	Adel-phia NJ	Hoyt-ville OH	Ridge-town Ont.	Woods-lee Ont.	State College PA	Brook-ings SD	Arling-ton WI
IA2007 (L)	2	0	4	6	2		1
IA2008 (BSR)	-1	-1	2	-2	0		0
Kenwood (II)	09/17	09/20	09/27	09/26	09/23		10/03
A Kenwood BC	-1	0	-1	1	2		1
Sturdy (I)	-2	-2	-3	-4	3		0
Conrad	2	1	4	2	5		1
AConradBC	2	1	3	-1	5		1
A91-501055	0	1	0	-3	1		1
A91-607024	5	1	4	8	3		2
A91-607032	5	2	4	7	1		1
A91-607053	2	2	3	6	4		1
AM90-211003	3	2	4	0	3		2
E91031	3	1	5	6	5		1
HM9143	3	0	4	3	3		0
HM9145	0	2	5	1	4		0
HS88-4905	1	1	2	-1	1		0
ORC9008	6	2	4	6	5		1
ORC9108	4	3	5	8	4		1
U91-2104	4	1	3	6	1		1
U91-2316	3	2	4	9	7		1
U91-2519	5	3	5	8	4		1
U91-2527	4	1	3	1	1		1
U91-2722	4	1	1	1	4		0
Date Planted	06/07	05/19	06/03	05/26	05/18		05/13
Days to Mature	102	124	116	123	128		143

UNIFORM TEST II, 1993

LODGING (score)

Strain	Mean 22 Tests	Ames IA	Grand Junction IA	Key-stone IA	Dekalb IL	Dwight IL	Urbana IL
IA2007 (L)	1.4	1.6	1.4	1.2	1.3	1.3	1.0
IA2008 (BSR)	1.8	2.1	1.6	1.9	2.0	2.5	2.7
Kenwood (II)	1.8	1.6	1.7	1.3	2.3	2.0	2.0
A Kenwood BC	1.6	1.6	1.8	1.3	2.3	1.3	1.0
Sturdy (I)	1.6	1.3	1.1	1.5	2.0	1.7	2.0
Conrad	1.7	1.8	1.4	1.2	2.0	1.5	1.0
AConradBC	1.5	1.6	1.5	1.3	2.0	1.3	1.0
A91-501055	1.6	1.4	1.6	1.3	2.0	1.2	1.0
A91-607024	1.6	1.5	1.5	1.3	1.3	1.7	2.0
A91-607032	1.5	1.3	1.8	1.1	2.0	1.2	1.0
A91-607053	1.6	1.5	1.5	1.1	1.7	1.2	1.3
AM90-211003	1.8	1.9	1.8	1.7	1.3	1.7	2.0
E91031	1.6	1.5	1.5	1.1	1.7	1.2	1.3
HM9143	1.6	1.7	1.2	1.2	2.0	1.3	1.0
HM9145	1.7	1.8	1.3	1.4	2.0	1.8	1.3
HS88-4905	1.6	1.5	1.5	1.4	2.0	1.8	1.3
ORC9008	1.3	1.4	1.3	1.1	1.3	1.0	1.0
ORC9108	1.6	1.5	1.5	1.5	1.3	1.5	1.7
U91-2104	1.8	1.9	1.5	1.1	2.0	2.0	1.7
U91-2316	1.6	1.5	1.4	1.4	1.7	2.0	1.0
U91-2519	1.6	1.6	1.4	1.4	1.7	1.3	2.3
U91-2527	1.5	1.5	1.5	1.6	1.0	1.3	2.0
U91-2722	1.8	2.4	1.8	1.8	2.0	2.2	2.7

UNIFORM TEST II, 1993

LODGING (score)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham MI	Lanawee MI	Lamber-ton MN	Waseca MN	David City NE	Hart-ington NE	Ord NE
IA2007 (L)	1.0	1.2	1.5	2.0	1.0	3.0	1.0	1.0	2.0
IA2008 (BSR)	1.0	2.7	1.5	3.0	1.7	3.0	1.0	1.0	1.0
Kenwood (II)	1.0	2.3	2.5	3.0	1.0	3.0	1.0	1.0	2.0
A Kenwood BC	1.0	2.8	2.5	2.5	1.0	3.0	1.0	1.0	1.3
Sturdy (I)	1.0	1.7	2.0	2.0	1.0	3.0	1.0	1.0	1.3
Conrad	1.0	2.2	2.0	3.0	1.0	3.0	1.0	1.0	3.0
AConradBC	1.0	2.3	2.0	2.0	1.0	3.0	1.0	1.0	1.7
A91-501055	1.0	2.5	2.0	2.0	1.0	3.0	1.0	1.0	1.0
A91-607024	1.0	2.5	2.0	2.0	1.3	3.0	1.0	1.0	2.0
A91-607032	1.0	1.7	1.5	2.0	1.0	3.0	1.0	1.0	2.0
A91-607053	1.0	3.5	2.5	2.5	1.0	3.0	1.0	1.0	1.0
AM90-211003	1.0	2.3	2.0	3.0	1.0	3.0	1.0	1.0	1.3
E91031	1.0	1.8	2.0	2.5	1.0	3.0	1.0	1.0	2.7
HM9143	1.0	2.5	2.0	3.0	1.0	3.0	1.0	1.0	2.7
HM9145	1.2	2.3	2.0	3.0	1.0	3.0	1.0	1.0	2.3
HS88-4905	1.0	2.2	2.0	2.0	1.0	3.0	1.0	1.0	1.7
ORC9008	1.0	1.3	1.5	1.5	1.0	3.0	1.0	1.0	1.3
ORC9108	1.0	2.2	1.5	3.0	1.0	3.0	1.0	1.0	1.0
U91-2104	1.0	2.8	3.0	3.0	1.0	3.0	1.0	1.0	2.0
U91-2316	1.0	2.5	2.0	3.0	1.0	3.0	1.0	1.0	1.0
U91-2519	1.2	1.7	2.0	2.0	1.0	3.0	1.0	1.0	1.7
U91-2527	1.0	1.8	1.5	2.0	1.0	3.0	1.0	1.0	1.3
U91-2722	1.0	2.5	2.5	3.0	1.0	3.0	1.0	1.0	1.3

UNIFORM TEST II, 1993

LODGING (score)

Strain	Adel-phia NJ	Hoyt-ville OH	Ridge-town Ont.	Woods-lee Ont.	State College PA	Brook-ings SD	Arling-ton WI
IA2007 (L)	1.7	1.1	1.0	1.0	1.0	1.0	2.3
IA2008 (BSR)	1.0	1.4	1.0	1.0	1.0	1.0	3.5
Kenwood (II)	2.3	1.3	1.2	1.0	1.0	2.0	3.0
A Kenwood BC	2.3	1.3	1.3	1.0	1.0	1.0	2.8
Sturdy (I)	1.7	1.2	1.2	1.0	1.0	2.0	2.5
Conrad	1.7	1.3	1.2	1.0	1.0	1.0	3.3
AConradBC	1.3	1.3	1.4	1.0	1.0	1.0	3.0
A91-501055	2.7	1.3	1.2	1.0	1.0	2.0	2.3
A91-607024	1.3	1.4	1.9	1.0	1.0	1.0	2.7
A91-607032	2.0	1.4	1.5	1.0	1.0	1.0	2.5
A91-607053	1.7	1.3	1.0	1.0	1.0	1.0	3.0
AM90-211003	2.3	1.4	1.9	1.0	1.0	2.0	3.0
E91031	1.7	1.3	1.4	1.0	1.0	2.0	2.2
HM9143	2.3	1.2	1.0	1.0	1.0	1.0	2.8
HM9145	2.0	1.3	1.8	1.0	1.0	1.0	3.3
HS88-4905	2.0	1.2	1.0	1.0	1.0	1.0	2.7
ORC9008	2.0	1.2	1.0	1.0	1.0	1.0	1.2
ORC9108	2.7	1.4	1.2	1.0	1.0	1.0	2.7
U91-2104	2.3	1.3	1.4	1.0	1.0	1.0	3.2
U91-2316	1.7	1.2	1.1	1.0	1.0	2.0	2.5
U91-2519	2.3	1.2	1.0	1.0	1.0	1.0	3.2
U91-2527	2.0	1.3	1.0	1.0	1.0	1.0	2.8
U91-2722	1.7	1.3	1.0	1.0	1.0	2.0	3.2

UNIFORM TEST II, 1993

PLANT HEIGHT (inches)

Strain	Mean 22 Tests	Ames IA	Grand Junction IA	Key-stone IA	Dekalb IL	Dwight IL	Urbana IL
IA2007 (L)	31	35	28	32	34	33	36
IA2008 (BSR)	32	38	25	38	36	34	29
Kenwood (II)	32	39	30	36	32	35	37
A Kenwood BC	32	38	33	38	35	33	37
Sturdy (I)	30	36	21	35	32	34	34
Conrad	32	38	28	37	34	35	38
AConradBC	31	34	29	34	34	34	38
A91-501055	28	34	25	32	32	28	33
A91-607024	34	38	31	38	38	36	38
A91-607032	29	33	28	35	32	29	33
A91-607053	29	33	27	33	30	32	33
AM90-211003	31	36	30	38	35	35	35
E91031	30	37	26	35	33	33	35
HM9143	31	36	26	36	34	33	38
HM9145	31	36	29	36	36	35	38
HS88-4905	32	36	26	35	34	38	38
ORC9008	31	37	28	33	32	35	37
ORC9108	33	37	28	37	38	38	39
U91-2104	32	36	30	36	36	38	37
U91-2316	32	36	30	39	35	35	38
U91-2519	31	35	28	35	35	32	37
U91-2527	31	36	25	37	34	34	34
U91-2722	33	38	30	38	38	35	41

UNIFORM TEST II, 1993

PLANT HEIGHT (inches)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham MI	Lanawee MI	Lamber-ton MN	Waseca MN	David City NE	Hart-ington NE	Ord NE
IA2007 (L)	28	35	29	38	33	30	33	29	30
IA2008 (BSR)	27	37	36	37	35	29	37	36	32
Kenwood (II)	29	35	35	37	33	28	35	33	29
A Kenwood BC	29	33	34	30	33	31	35	32	31
Sturdy (I)	27	33	33	34	33	30	30	32	31
Conrad	26	36	32	32	34	31	32	31	28
AConradBC	29	34	33	31	32	31	34	29	31
A91-501055	24	31	31	32	30	26	30	29	28
A91-607024	28	36	37	36	33	34	36	38	31
A91-607032	23	32	29	30	29	29	32	28	30
A91-607053	26	33	27	28	30	28	30	28	28
AM90-211003	27	34	32	32	32	32	32	31	29
E91031	27	36	31	32	31	28	32	30	26
HM9143	27	36	33	33	33	31	32	33	27
HM9145	27	35	31	32	33	32	34	33	28
HS88-4905	30	36	32	33	31	31	36	34	30
ORC9008	26	35	30	34	32	29	33	31	31
ORC9108	31	38	33	36	32	31	35	35	33
U91-2104	30	36	35	37	32	30	35	32	32
U91-2316	27	36	33	34	33	31	33	33	32
U91-2519	27	34	34	29	31	32	32	31	32
U91-2527	26	35	30	32	32	31	33	37	33
U91-2722	27	36	36	33	34	32	34	35	35

UNIFORM TEST II, 1993

PLANT HEIGHT (inches)

Strain	Adel-phia NJ	Hoyt-ville OH	Ridge-town Ont.	Woods-lee Ont.	State College PA	Brook-ings SD	Arling-ton WI
IA2007 (L)	25	22	32	29	18	30	36
IA2008 (BSR)	29	22	36	30	18	29	37
Kenwood (II)	29	23	32	29	19	28	38
A Kenwood BC	27	22	33	29	19	29	37
Sturdy (I)	27	19	32	26	17	32	37
Conrad	28	25	32	30	21	32	33
AConradBC	26	25	30	27	20	28	35
A91-501055	25	18	29	27	18	28	35
A91-607024	31	24	36	31	24	31	41
A91-607032	26	21	29	27	19	28	35
A91-607053	25	21	30	26	19	28	34
AM90-211003	27	22	32	27	20	30	36
E91031	28	21	32	30	20	27	34
HM9143	27	24	30	30	22	30	37
HM9145	26	23	31	29	20	29	35
HS88-4905	29	23	34	30	18	30	38
ORC9008	30	22	31	28	20	30	36
ORC9108	31	24	35	29	21	33	38
U91-2104	31	22	34	30	19	23	37
U91-2316	28	23	32	30	20	31	38
U91-2519	27	21	30	29	19	30	36
U91-2527	29	21	33	29	17	28	37
U91-2722	31	22	35	30	19	32	37

UNIFORM TEST II, 1993

SEED QUALITY (score)

Strain	Mean 22 Tests	Ames IA	Grand Junction IA	Key-stone IA	Dekalb IL	Dwight IL	Urbana IL
IA2007 (L)	1.5	1.0	1.0	1.5	1.5	1.4	1.5
IA2008 (BSR)	1.3	1.0	1.0	1.0	1.5	1.5	1.5
Kenwood (II)	1.7	1.5	1.5	1.5	1.7	1.7	2.2
A Kenwood BC	1.5	1.5	1.5	1.5	1.7	1.5	1.5
Sturdy (I)	1.6	1.0	1.5	1.0	1.7	1.5	1.5
Conrad	1.5	1.5	1.0	1.5	1.8	1.5	1.5
AConradBC	1.4	1.0	1.5	1.0	1.5	1.5	1.5
A91-501055	1.8	1.0	1.0	1.0	1.5	1.5	1.8
A91-607024	1.4	1.0	1.5	1.0	1.5	1.5	1.5
A91-607032	1.4	1.5	1.5	1.5	1.5	1.5	1.4
A91-607053	1.5	1.5	1.5	1.0	1.5	1.5	1.5
AM90-211003	1.5	1.0	1.0	1.0	1.7	1.5	1.5
E91031	1.6	1.5	1.5	1.0	1.5	1.5	1.5
HM9143	1.4	1.0	1.0	1.0	1.8	1.5	1.5
HM9145	1.4	1.5	1.0	1.5	1.5	1.5	1.4
HS88-4905	1.5	1.0	1.5	1.0	1.7	1.7	1.7
ORC9008	1.3	1.0	1.5	1.0	1.5	1.5	1.7
ORC9108	1.4	1.0	1.5	1.5	1.5	1.5	1.4
U91-2104	1.4	1.5	1.0	1.0	1.5	1.5	1.5
U91-2316	1.5	1.5	1.5	1.5	1.5	1.5	1.5
U91-2519	1.3	1.0	1.0	1.0	1.3	1.5	1.5
U91-2527	1.6	1.0	1.0	2.0	1.7	1.5	1.8
U91-2722	1.4	1.0	1.5	1.0	1.5	1.5	1.5

UNIFORM TEST II, 1993

SEED QUALITY (score)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham MI	Lanawee MI	Lamber-ton MN	Waseca MN	David City NE	Hart-ington NE	Ord NE
IA2007 (L)	1.0	1.0	1.0	1.0	2.0	3.0	1.3	1.0	1.3
IA2008 (BSR)	1.0	1.0	1.5	1.0	1.0	1.3	1.0	1.0	1.0
Kenwood (II)	2.0	2.0	1.0	1.5	2.0	3.0	1.0	1.3	1.7
A Kenwood BC	1.0	2.0	1.0	1.0	2.0	2.7	1.0	1.0	1.3
Sturdy (I)	2.0	1.0	1.0	1.5	2.0	2.3	1.7	1.0	1.3
Conrad	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.3
AConradBC	1.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0	1.0
A91-501055	4.0	2.0	1.0	2.0	2.0	2.3	2.0	1.0	1.3
A91-607024	1.0	1.0	1.5	1.0	2.0	2.3	1.0	1.0	1.3
A91-607032	1.0	1.0	1.0	1.0	2.0	2.0	1.3	1.0	1.0
A91-607053	1.0	1.0	1.0	1.0	2.0	3.0	1.3	1.7	1.3
AM90-211003	2.0	1.0	1.0	1.0	2.0	2.3	1.3	1.0	1.7
E91031	2.0	2.0	1.0	1.5	2.3	2.7	1.7	1.3	1.7
HM9143	1.0	1.0	1.0	1.0	1.0	1.7	1.0	1.0	1.3
HM9145	1.0	1.0	1.0	1.0	1.0	2.3	1.0	1.0	1.0
HS88-4905	1.0	2.0	1.5	1.0	1.3	1.7	1.7	1.0	1.0
ORC9008	1.0	1.0	1.0	1.0	1.3	2.0	1.0	1.3	1.3
ORC9108	1.0	1.0	1.0	1.0	2.0	2.3	1.0	1.0	1.3
U91-2104	1.0	1.0	1.0	1.0	1.3	1.7	1.0	1.0	1.7
U91-2316	2.0	1.0	1.0	1.0	2.0	3.0	1.0	1.0	1.0
U91-2519	1.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0	1.0
U91-2527	3.0	2.0	1.0	1.0	2.0	1.7	1.3	1.0	1.0
U91-2722	1.0	2.0	1.0	1.5	1.7	1.7	1.0	1.0	1.3

UNIFORM TEST II, 1993

SEED QUALITY (score)

Strain	Adel-phia NJ	Hoyt-ville OH	Ridge-town Ont.	Woods-lee Ont.	State College PA	Brook-ings SD	Arling-ton WI
IA2007 (L)	2.0	2.0	1.0	1.0	2.5	2.0	1.0
IA2008 (BSR)	2.0	1.0	1.0	1.0	3.0	2.0	1.0
Kenwood (II)	1.7	1.5	1.0	1.0	3.0	2.0	1.0
A Kenwood BC	2.0	1.3	1.0	1.0	3.0	2.0	1.0
Sturdy (I)	2.0	1.3	1.0	1.3	3.0	3.0	1.0
Conrad	1.0	1.2	1.7	1.7	4.0	2.0	2.0
AConradBC	1.0	1.2	1.3	1.3	2.0	2.0	2.0
A91-501055	2.0	2.0	1.0	2.3	3.5	3.0	1.0
A91-607024	1.3	1.0	1.0	1.0	2.5	2.0	2.0
A91-607032	1.3	1.2	1.0	1.3	2.5	3.0	1.0
A91-607053	1.3	1.3	1.0	1.3	2.5	2.0	1.0
AM90-211003	1.7	1.3	1.0	1.7	2.5	2.0	2.0
E91031	1.0	1.3	1.0	1.0	2.5	3.0	1.0
HM9143	1.0	1.2	1.3	1.3	3.5	3.0	2.0
HM9145	1.0	1.0	1.7	1.3	3.5	2.0	2.0
HS88-4905	2.0	1.2	1.0	1.3	3.0	2.0	1.0
ORC9008	1.0	1.4	1.3	1.7	2.0	2.0	1.0
ORC9108	1.0	1.2	1.0	2.0	2.5	2.0	1.0
U91-2104	1.0	1.2	1.0	1.0	4.0	2.0	1.0
U91-2316	1.0	1.3	1.0	1.0	2.0	3.0	1.0
U91-2519	2.0	1.0	1.0	1.3	2.5	2.0	1.0
U91-2527	1.3	1.2	1.0	1.7	2.5	3.0	1.0
U91-2722	1.3	1.0	1.0	1.3	2.0	2.0	2.0

UNIFORM TEST II, 1993

SEED SIZE (g/100)

Strain	Mean 21 Tests	Ames IA	Grand Junction IA	Key-stone IA	Dekalb IL	Dwight IL	Urbana IL
IA2007 (L)	17.3	16.3	15.2	17.8	20.3	19.9	18.9
IA2008 (BSR)	14.0	13.1	11.9	13.9	15.6	15.1	16.3
Kenwood (II)	14.8	15.5	12.7	15.5	17.4	16.6	16.7
A Kenwood BC	15.0	15.6	13.5	16.4	17.5	16.6	16.3
Sturdy (I)	17.8	17.9	15.8	18.7	20.6	17.7	19.3
Conrad	15.5	15.9	14.0	16.7	18.3	16.7	17.5
AConradBC	16.2	17.2	14.9	18.1	17.9	17.1	17.9
A91-501055	18.0	19.0	16.7	19.5	21.0	18.8	21.8
A91-607024	14.3	13.9	12.7	14.0	17.0	14.4	16.1
A91-607032	14.4	13.9	12.6	15.5	16.7	15.9	16.7
A91-607053	16.6	17.0	14.5	18.5	19.6	18.2	18.8
AM90-211003	18.6	18.3	15.7	20.0	21.7	18.2	20.7
E91031	14.6	14.1	13.4	15.0	17.0	13.7	16.1
HM9143	15.2	15.0	12.6	16.3	17.7	14.5	17.6
HM9145	15.1	14.8	12.2	16.8	18.2	13.6	17.5
HS88-4905	16.5	15.8	14.0	17.0	18.9	16.0	19.1
ORC9008	16.4	15.5	13.9	16.3	19.0	17.4	19.5
ORC9108	14.5	13.3	11.5	14.4	15.9	14.8	16.0
U91-2104	14.1	13.3	11.5	14.6	17.1	15.0	16.2
U91-2316	14.9	14.4	12.4	16.0	16.9	16.3	17.5
U91-2519	16.3	16.1	14.5	16.8	19.1	17.4	19.1
U91-2527	16.6	16.7	14.5	17.2	18.4	17.4	19.0
U91-2722	14.2	14.0	12.1	14.7	16.2	15.1	15.8

UNIFORM TEST II, 1993

SEED SIZE (g/100)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham MI	Lanawee MI	Lamber-ton MN	Waseca MN	David City NE	Hart-ington NE	Ord NE
IA2007 (L)	17.6	19.3	17.9	18.3	14.1	14.2	17.1	16.3	16.3
IA2008 (BSR)	15.0	15.9	14.9	14.1	11.3	11.2	14.8	13.9	15.8
Kenwood (II)	16.3	15.4	15.8	14.5	12.7	12.9	15.0	15.1	15.9
A Kenwood BC	16.4	15.5	16.2	14.4	13.5	13.0	15.3	14.3	16.2
Sturdy (I)	19.7	17.9	19.1	18.4	15.6	15.6	18.3	17.3	17.8
Conrad	15.3	16.5	16.3	14.8	13.5	13.3	15.3	14.4	16.2
AConradBC	16.6	17.8	16.9	16.4	14.0	13.6	16.5	15.0	15.7
A91-501055	19.1	18.5	18.6	18.6	15.1	15.4	18.8	17.2	17.9
A91-607024	15.6	16.0	14.0	13.8	12.2	11.2	13.9	14.3	14.2
A91-607032	15.2	16.4	15.0	13.9	12.2	12.4	13.6	13.9	15.5
A91-607053	17.0	18.3	18.1	16.6	14.0	15.0	17.1	15.2	16.5
AM90-211003	20.3	20.8	21.3	18.4	15.5	15.9	18.2	17.0	19.7
E91031	15.4	15.4	15.4	14.3	13.2	12.7	15.1	13.8	15.6
HM9143	16.0	16.8	15.8	15.0	13.4	12.5	15.2	14.6	15.4
HM9145	15.5	16.5	15.3	14.9	13.4	12.6	15.2	14.6	16.9
HS88-4905	17.9	17.9	17.1	16.3	15.0	14.6	16.8	15.1	16.3
ORC9008	17.7	18.6	18.1	16.5	13.3	13.8	15.9	16.4	16.6
ORC9108	16.6	17.1	15.2	15.0	12.5	12.3	14.5	15.0	14.8
U91-2104	15.8	15.8	15.5	14.2	11.7	11.2	14.1	12.6	14.8
U91-2316	16.3	15.8	14.6	14.6	13.2	12.9	15.4	14.1	15.5
U91-2519	18.1	18.0	15.9	16.2	13.7	14.4	15.6	15.2	17.0
U91-2527	18.8	17.9	16.7	17.4	14.6	13.6	16.6	16.0	16.9
U91-2722	14.8	15.6	14.9	14.4	12.5	11.8	14.4	13.7	15.0

UNIFORM TEST II, 1993

SEED SIZE (g/100)

Strain	Adel-phia NJ	Hoyt-ville OH	Ridge-town Ont.	Woods-lee Ont.	State College PA	Brook-ings SD	Arling-ton WI
IA2007 (L)	18.0	17.3		19.5	20.4	12.0	15.8
IA2008 (BSR)	15.7	13.1		14.8	15.9	11.0	11.7
Kenwood (II)	14.3	13.9		15.3	14.0	11.0	13.6
A Kenwood BC	14.7	13.2		15.6	14.2	11.0	14.6
Sturdy (I)	19.0	17.2		18.4	20.5	14.0	15.3
Conrad	17.0	14.9		17.5	15.2	12.0	13.9
AConradBC	17.3	16.0		18.0	17.6	12.0	14.5
A91-501055	18.0	17.3		18.3	17.9	14.0	15.8
A91-607024	16.0	14.8		16.9	16.7	10.0	12.6
A91-607032	15.3	14.1		16.0	14.9	10.0	13.6
A91-607053	17.3	15.4		18.3	15.9	12.0	15.1
AM90-211003	21.3	18.1		20.8	18.8	13.0	16.9
E91031	14.3	14.2		15.8	17.4	12.0	13.0
HM9143	15.7	14.2		17.3	17.7	11.0	14.7
HM9145	16.0	14.4		17.7	16.0	11.0	14.0
HS88-4905	18.0	15.5		17.8	19.2	13.0	14.6
ORC9008	17.0	15.8		17.4	18.1	14.0	14.6
ORC9108	15.3	14.7		16.1	16.2	10.0	13.8
U91-2104	15.0	14.2		15.6	15.2	10.0	13.4
U91-2316	15.7	14.2		15.7	15.9	11.0	13.6
U91-2519	17.7	16.3		19.0	16.3	11.0	14.8
U91-2527	17.7	15.2		17.1	20.5	12.0	15.0
U91-2722	15.7	13.5		15.9	15.7	11.0	12.2

UNIFORM TEST II, 1993

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Mead NE	Hoytville OH
IA2007 (L)	39.5	41.3	40.0	41.2	37.9	37.2
IA2008 (BSR)	38.9	41.2	40.2	38.3	37.8	37.2
Kenwood (II)	39.5	42.1	40.5	39.3	38.4	37.4
A Kenwood BC	40.1	42.4	40.2	39.2	40.0	38.5
Sturdy (I)	40.0	41.0	40.5	40.2	39.3	39.1
Conrad	39.7	42.1	40.3	39.8	38.5	38.0
AConradBC	40.0	41.4	40.0	41.3	38.6	38.8
A91-501055	39.6	41.9	40.8	38.2	38.2	38.9
A91-607024	40.4	41.3	40.9	41.6	39.7	38.5
A91-607032	41.6	43.7	41.6	41.6	40.6	40.7
A91-607053	41.4	43.1	41.5	41.7	40.9	39.6
AM90-211003	40.5	41.8	40.7	41.5	39.3	39.2
E91031	39.0	39.8	39.9	39.9	38.6	37.0
HM9143	39.2	41.0	39.9	40.1	37.1	38.1
HM9145	39.7	41.4	40.1	40.5	38.4	38.0
HS88-4905	39.2	41.0	41.0	39.5	37.9	36.8
ORC9008	40.2	41.5	41.0	40.4	39.4	38.5
ORC9108	41.0	42.3	41.3	42.6	39.4	39.6
U91-2104	39.0	40.0	41.0	39.3	38.7	36.1
U91-2316	40.0	41.0	41.3	40.0	38.9	38.9
U91-2519	40.3	41.0	41.8	40.6	39.1	39.1
U91-2527	40.0	42.0	41.1	40.5	39.0	37.4
U91-2722	41.4	44.3	42.1	41.8	39.7	39.1

UNIFORM TEST II, 1993

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Mead NE	Hoytville OH
IA2007 (L)	21.6	20.0	22.4	21.9	21.6	22.0
IA2008 (BSR)	21.3	20.5	22.0	22.4	20.6	21.1
Kenwood (II)	21.5	19.4	22.3	22.4	21.0	22.3
A Kenwood BC	21.3	19.3	22.3	22.2	20.6	22.0
Sturdy (I)	21.5	20.9	22.3	22.1	21.1	21.2
Conrad	21.3	19.2	22.1	22.2	21.3	21.6
AConradBC	21.6	20.0	22.3	21.6	22.0	21.9
A91-501055	21.7	19.7	22.2	23.0	21.9	21.5
A91-607024	20.8	19.3	22.1	21.0	20.4	21.3
A91-607032	20.1	17.9	21.4	21.4	19.5	20.2
A91-607053	21.1	19.3	22.2	21.7	20.5	22.0
AM90-211003	20.9	19.4	22.4	21.0	20.1	21.4
E91031	21.6	20.4	22.3	21.9	21.4	22.2
HM9143	21.6	19.8	23.0	22.2	21.2	22.0
HM9145	21.3	19.3	22.8	21.9	21.1	21.2
HS88-4905	22.0	20.5	22.2	22.7	21.4	23.4
ORC9008	21.3	19.3	22.1	22.4	20.9	21.6
ORC9108	20.6	18.6	21.5	21.5	20.4	20.8
U91-2104	21.5	20.1	21.6	22.1	21.1	22.4
U91-2316	21.0	19.4	22.0	22.0	20.5	21.1
U91-2519	21.7	20.7	22.5	22.4	20.9	21.8
U91-2527	21.7	20.1	22.1	22.1	21.6	22.6
U91-2722	20.8	18.0	21.7	21.6	20.7	22.0

PRELIMINARY TEST IIA, 1993

Strain	Parentage	Generation Composited	Unique Traits
IA2007 (L)	Pride B152 x A80-244003	F5	
IA2008 (BSR)	BSR 101 x A80-344003	F5	BSR resis.
Kenwood (II)	Elgin x Asgrow A1937	F5	
Sturdy (I)	M70-127 x Century	F5	
A92-525034	Northrup King S23-03 x IA2008	F5	BSR resis.
A92-528006	Kenwood x Northrup King S23-03	F5	
A92-625016	Northrup King S23-03 x IA2008	F5	BSR resis.
A92-627008	Dairyland DSR 252 x Kenwood	F5	
A92-627030	Kenwood x Asgrow A3205	F5	
A92-627047	Dairyland DSR 304 x Kenwood	F5	
A92-627049	Dairyland DSR 304 x Kenwood	F5	
A92-634056	Kenwood x Northrup King S23-03	F5	
A92-727025	Dairyland DSR 304 x Kenwood	F5	
A92-731033	Asgrow A3205 x Northrop King S42-30	F5	
U92-2212	UX106 x Northrup King S23-03	F5	
U92-2219	UX110 x Northrup King S23-03	F5	
U92-2227	UX110 x Asgrow A3427	F5	
U92-2232	UX106 x Northrup King S23-03	F5	
U92-2233	UX110 x Northrup King S23-03	F5	
U92-2234	UX106 x Northrup King S23-03	F5	
U92-2309	UX110 x Northrup King S23-03	F5	
U92-2310	UX106 x Northrup King S23-03	F5	
U92-2420	UX110 x Northrup King S23-03	F5	
U92-2426	UX110 x Northrup King S23-03	F5	
U92-2523	UX110 x Northrup King S23-03	F5	
U92-2606	UX110 x Northrup King S23-03	F5	
U92-2607	UX110 x Northrup King S23-03	F5	
U92-2634	UX110 x Northrup King S23-03	F5	
U92-2636	UX110 x Northrup King S23-03	F5	

PRELIMINARY TEST IIA, 1993

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	BSR - Boone Plant n %	BSR - Boone Stem n %
IA2007 (L)	PTBIYBrI	2.7	100.0	81.0
IA2008 (BSR)	WGTSYBfI	3.2	30.0	10.2
Kenwood (II)	PTBDYBlI	5.0	100.0	83.4
Sturdy (I)	PGBSYIbI	2.5	100.0	92.0
A92-525034	PGTSYIbI	3.0	70.0	46.8
A92-528006	PGBSYIbI	2.7	100.0	90.2
A92-625016	PGB+TDYBfI	3.2	20.0	9.4
A92-627008	PTBDYBlI	4.0	100.0	82.2
A92-627030	PTBDYBrI	4.2	90.0	67.4
A92-627047	WGBDYBlI	4.0	90.0	73.8
A92-627049	WTBIYBlI	3.2	90.0	63.3
A92-634056	WTTDYBrI	3.5	100.0	100.0
A92-727025	WGBDYBlI	3.5	90.0	61.2
A92-731033	PTBDYBlI	3.0	50.0	33.4
U92-2212	PTBDYBlI	3.5	100.0	86.2
U92-2219	PGBSYBfI	3.0	90.0	76.0
U92-2227	PGBSYBfI	2.7	100.0	83.6
U92-2232	PGTDYBfI	3.7	100.0	84.9
U92-2233	PGBSYBfI	2.7	100.0	95.6
U92-2234	PGBDYBfI	3.0	100.0	88.7
U92-2309	PGBSYBfI	2.5	100.0	89.4
U92-2310	PGBDYIBI	2.7	100.0	99.2
U92-2420	PGBDYBfI	3.5	100.0	95.1
U92-2426	PGBDYBfI	3.0	100.0	98.7
U92-2523	PGBSYBfI	3.2	100.0	89.6
U92-2606	PGBSYBfI	2.5	100.0	92.1
U92-2607	PGBSYBfI	3.0	100.0	96.0
U92-2634	PGBSYBfI	2.5	100.0	93.8
U92-2636	PGBDYBfI	3.0	100.0	97.7

PRELIMINARY TEST IIA, 1993

DISEASE DATA

Strain	Root Rot Wooster Race 25	PR Ames Race 4	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %	Seed Germ. %
IA2007 (L)	4.2	S	R	64	10	74
IA2008 (BSR)	4.8	S	S	82	14	60
Kenwood (II)	4.5	S	S	96	2	58
Sturdy (I)	4.0	S	S	69	22	51
A92-525034	4.7	S	S	44	2	80
A92-528006	4.2	S	S	78	10	40
A92-625016	4.0	S	S	66	2	92
A92-627008	4.2	S	S	86	2	88
A92-627030	4.3	S	S	84	8	64
A92-627047	4.7	S	S	80	4	70
A92-627049	4.2	S	S	90	10	94
A92-634056	4.3	S	S	94	16	36
A92-727025	4.7	S	S	78	6	88
A92-731033	4.8	S	S	72	8	78
U92-2212	4.8	R	R	28	38	36
U92-2219	5.0	S	S	38	24	48
U92-2227	4.7	S	S	58	12	76
U92-2232	4.5	S	S	54	40	50
U92-2233	4.2	S	S	86	20	62
U92-2234	4.7	R	R	64	32	58
U92-2309	4.0	S	S	76	10	72
U92-2310	3.5	H	S	72	12	52
U92-2420	3.8	S	S	42	10	64
U92-2426	4.0	S	S	86	10	76
U92-2523	3.8	S	S	84	0	86
U92-2606	4.2	S	S	74	10	76
U92-2607	5.0	S	S	60	6	72
U92-2634	4.7	S	S	80	0	92
U92-2636	4.2	S	S	68	8	94

PRELIMINARY TEST IIA, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 12 bu/a	Rank 12 No.	Maturity 10 Date	Lodging 12 Score	Plant Height 12 In.	Seed Quality 12 Score	Seed Size 11 g/100	Composition Protein 5 %	 Oil 5 %
IA2007 (L)	52.7	2	3.3	1.3	33	1.4	17.4	39.7	21.5
IA2008 (BSR)	51.3	7	-0.7	1.8	34	1.4	13.8	38.9	21.1
Kenwood (II)	52.4	3	09/24*	1.7	32	1.6	14.9	39.4	21.3
Sturdy (I)	50.2	17	-1.8	1.5	31	1.3	18.2	40.0	21.4
A92-525034	51.3	7	0.5	1.9	34	1.2	15.2	39.8	20.5
A92-528006	50.8	14	-1.0	2.0	34	1.6	15.6	40.5	20.7
A92-625016	49.9	21	1.2	2.0	36	1.4	15.4	40.3	21.2
A92-627008	51.4	6	3.2	1.9	31	1.2	15.2	38.1	22.7
A92-627030	54.2	1	3.1	1.6	33	1.5	15.6	40.7	21.3
A92-627047	51.2	10	6.4	1.5	34	1.2	16.9	39.6	21.3
A92-627049	52.1	4	3.3	1.7	33	1.4	14.4	39.3	21.1
A92-634056	48.8	27	-2.2	1.5	29	1.5	16.6	40.4	21.8
A92-727025	50.9	13	6.2	1.9	34	1.4	15.6	41.0	20.7
A92-731033	51.5	5	7.2	1.5	31	1.4	13.8	41.4	20.4
U92-2212	51.3	7	0.0	1.5	30	1.7	17.6	40.8	21.2
U92-2219	50.0	18	0.7	2.4	37	1.4	15.1	40.9	20.7
U92-2227	48.6	28	2.0	1.7	32	1.4	14.5	41.8	20.1
U92-2232	49.5	22	-0.7	1.7	31	1.2	17.1	41.0	21.2
U92-2233	50.6	15	3.2	2.1	32	1.3	15.4	41.5	19.9
U92-2234	49.2	25	-0.6	1.8	30	1.5	16.1	40.7	21.3
U92-2309	50.0	18	1.4	2.5	36	1.4	16.4	42.6	20.8
U92-2310	49.3	23	-2.0	1.7	33	1.6	17.9	40.4	21.3
U92-2420	50.0	18	-0.6	1.6	33	1.2	15.7	41.7	20.3
U92-2426	51.2	10	1.7	1.4	30	1.4	16.7	41.5	20.7
U92-2523	50.3	16	3.5	2.3	39	1.3	15.1	40.8	20.7
U92-2606	51.1	12	1.8	1.7	32	1.3	16.6	41.9	20.0
U92-2607	49.3	23	2.9	2.1	33	1.3	13.9	40.7	20.6
U92-2634	46.9	29	0.4	2.0	32	1.1	14.7	43.2	19.2
U92-2636	49.2	25	1.5	2.4	36	1.3	14.2	41.3	20.6

* 123.0 Days After Planting

PRELIMINARY TEST IIA, 1993

YIELD (bu/a)

Strain	Mean 12 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	52.7	44.5	45.5	69.4	66.4	60.0
IA2008 (BSR)	51.3	42.8	44.4	68.7	54.9	58.0
Kenwood (II)	52.4	48.8	53.8	69.9	70.9	53.3
Sturdy (I)	50.2	51.2	50.0	60.1	57.8	49.8
A92-525034	51.3	43.4	50.1	63.1	64.7	53.8
A92-528006	50.8	49.1	44.0	65.9	67.1	52.5
A92-625016	49.9	40.7	44.6	69.7	60.4	54.4
A92-627008	51.4	48.2	43.4	72.5	71.3	51.7
A92-627030	54.2	47.9	50.4	72.2	64.5	55.2
A92-627047	51.2	44.8	47.8	70.5	71.7	55.2
A92-627049	52.1	45.2	48.0	77.6	66.7	41.8
A92-634056	48.8	49.8	45.7	58.7	62.0	48.5
A92-727025	50.9	46.3	44.6	72.1	68.8	57.9
A92-731033	51.5	48.0	44.9	74.6	64.5	55.8
U92-2212	51.3	46.6	52.4	65.7	55.2	49.9
U92-2219	50.0	40.8	47.0	64.6	55.4	52.8
U92-2227	48.6	43.6	43.6	63.5	58.5	51.5
U92-2232	49.5	45.1	45.5	64.3	59.1	51.2
U92-2233	50.6	45.0	47.8	68.2	58.7	51.5
U92-2234	49.2	46.2	50.0	67.4	48.7	44.3
U92-2309	50.0	46.2	47.6	69.2	61.3	48.4
U92-2310	49.3	45.3	49.4	62.5	52.0	49.1
U92-2420	50.0	48.6	47.8	70.3	55.2	43.4
U92-2426	51.2	46.8	52.9	69.8	59.7	47.4
U92-2523	50.3	41.4	47.6	73.7	67.1	56.1
U92-2606	51.1	43.5	51.3	67.4	56.6	51.2
U92-2607	49.3	45.4	45.1	62.1	57.5	49.8
U92-2634	46.9	42.1	43.9	62.8	54.5	48.0
U92-2636	49.2	41.7	45.6	60.4	65.4	45.2
C.V. (%)		5.2	5.2	6.3	5.5	8.2
L.S.D. (5%)		4.7	4.9	8.7	6.8	8.6
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIA, 1993

YIELD (bu/a)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	51.5	44.9	51.4	44.1	58.9	35.7	59.8
IA2008 (BSR)	56.8	48.2	49.7	38.1	59.6	37.5	56.8
Kenwood (II)	55.8	49.4	46.4	34.4	48.8	39.0	58.3
Sturdy (I)	52.5	50.1	45.0	38.1	51.6	36.4	60.0
A92-525034	52.1	44.9	51.1	39.5	54.9	40.2	58.0
A92-528006	53.8	49.2	37.2	42.0	46.4	42.2	60.7
A92-625016	52.1	47.6	54.3	38.1	49.7	39.2	47.7
A92-627008	53.5	46.2	48.3	40.9	46.0	38.6	55.7
A92-627030	52.1	47.8	58.4	44.5	54.0	43.3	59.8
A92-627047	50.7	46.1	55.8	36.9	51.5	31.9	50.9
A92-627049	54.4	48.2	52.2	44.2	49.4	38.9	58.3
A92-634056	54.6	47.0	43.7	28.8	49.2	36.1	60.9
A92-727025	51.2	44.0	45.0	47.5	42.4	37.1	54.4
A92-731033	51.8	47.4	54.2	49.4	49.6	29.2	48.2
U92-2212	53.5	47.8	46.5	44.8	53.8	40.1	59.2
U92-2219	51.6	47.7	53.3	38.7	54.3	39.3	54.4
U92-2227	51.3	44.3	56.1	36.0	51.0	31.6	52.0
U92-2232	43.0	46.2	52.8	38.9	54.1	31.6	62.3
U92-2233	51.9	45.7	54.0	39.9	48.9	38.4	56.9
U92-2234	52.5	43.8	55.1	38.8	48.0	36.4	59.6
U92-2309	51.5	45.3	44.9	44.6	44.9	39.4	56.1
U92-2310	51.6	47.0	46.6	39.4	55.4	37.2	55.5
U92-2420	52.8	47.6	50.3	38.0	55.2	35.6	54.7
U92-2426	49.2	49.1	56.6	38.5	48.2	38.8	57.0
U92-2523	47.1	45.3	49.4	38.4	49.6	38.7	49.7
U92-2606	51.3	48.4	60.1	34.2	53.4	39.3	56.8
U92-2607	52.6	44.6	55.6	35.7	52.8	37.5	52.7
U92-2634	48.7	46.8	45.3	32.4	48.0	37.2	52.5
U92-2636	51.6	44.6	55.6	44.4	47.3	35.5	53.6
C.V. (%)	7.9	5.6	13.1	10.7	6.5	10.6	4.9
L.S.D. (5%)	11.8	7.6	13.7	8.5	6.9	6.9	5.6
Row Sp. (In.)	30	30	30	30	24	30	30
Rows/Plot	4	4	4	4	4	4	4
Reps	2	2	2	2	2	2	2

PRELIMINARY TEST IIA, 1993

YIELD RANK

Strain	Mean 12 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	2	20	19	12	8	1
IA2008 (BSR)	7	24	25	14	26	2
Kenwood (II)	3	4	1	9	3	10
Sturdy (I)	17	1	7	28	20	19
A92-525034	7	23	6	23	10	9
A92-528006	14	3	26	18	5	12
A92-625016	21	29	23	11	15	8
A92-627008	6	6	29	4	2	13
A92-627030	1	8	5	5	11	6
A92-627047	10	19	11	7	1	6
A92-627049	4	16	10	1	7	29
A92-634056	27	2	17	29	13	22
A92-727025	13	11	23	6	4	3
A92-731033	5	7	22	2	11	5
U92-2212	7	10	3	19	24	18
U92-2219	18	28	16	20	23	11
U92-2227	28	21	28	22	19	14
U92-2232	22	17	19	21	17	16
U92-2233	15	18	11	15	18	14
U92-2234	25	12	7	16	29	27
U92-2309	18	12	14	13	14	23
U92-2310	23	15	9	25	28	21
U92-2420	18	5	11	8	24	28
U92-2426	10	9	2	10	16	25
U92-2523	16	27	14	3	5	4
U92-2606	12	22	4	16	22	17
U92-2607	23	14	21	26	21	20
U92-2634	29	25	27	24	27	24
U92-2636	25	26	18	27	9	26

PRELIMINARY TEST IIA, 1993

YIELD RANK

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	20	23	15	8	2	23	5
IA2008 (BSR)	1	6	18	19	1	15	14
Kenwood (II)	2	2	23	26	21	9	9
Sturdy (I)	10	1	25	19	12	20	4
A92-525034	13	23	16	12	5	3	11
A92-528006	5	3	29	9	26	2	3
A92-625016	12	11	9	19	15	8	29
A92-627008	7	17	20	10	27	13	17
A92-627030	13	9	2	5	8	1	5
A92-627047	25	19	5	23	13	26	26
A92-627049	4	7	14	7	18	10	9
A92-634056	3	14	28	29	19	22	2
A92-727025	24	28	25	2	29	19	20
A92-731033	16	13	10	1	16	29	28
U92-2212	6	8	22	3	9	4	8
U92-2219	17	10	12	16	6	6	20
U92-2227	22	27	4	24	14	27	25
U92-2232	29	17	13	14	7	27	1
U92-2233	15	20	11	11	20	14	13
U92-2234	10	29	8	15	23	20	7
U92-2309	21	21	27	4	28	5	16
U92-2310	17	14	21	13	3	17	18
U92-2420	8	11	17	22	4	24	19
U92-2426	26	4	3	17	22	11	12
U92-2523	28	21	19	18	16	12	27
U92-2606	22	5	1	27	10	6	15
U92-2607	9	25	6	25	11	15	23
U92-2634	27	16	24	28	23	17	24
U92-2636	17	25	6	6	25	25	22

PRELIMINARY TEST IIA, 1993

MATURITY (date)

Strain	Mean 10 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	3.3	2		3	3	9
IA2008 (BSR)	-0.7	-3		-3	-3	4
Kenwood (II)	09/24	09/27		09/19	09/13	09/27
Sturdy (I)	-1.8	-4		-6	-4	1
A92-525034	0.5	0		-3	-2	3
A92-528006	-1.0	-2		-3	2	1
A92-625016	1.2	1		-1	2	5
A92-627008	3.2	3		5	4	3
A92-627030	3.1	4		0	4	4
A92-627047	6.4	6		7	10	9
A92-627049	3.3	4		2	5	5
A92-634056	-2.2	-4		-3	-3	-2
A92-727025	6.2	6		6	11	8
A92-731033	7.2	7		7	10	8
U92-2212	0.0	-1		-4	-2	0
U92-2219	0.7	0		-4	-1	4
U92-2227	2.0	4		-1	2	5
U92-2232	-0.7	-1		-4	-2	1
U92-2233	3.2	4		1	4	6
U92-2234	-0.6	-3		-3	-1	-2
U92-2309	1.4	0		-2	2	2
U92-2310	-2.0	-4		-5	-5	3
U92-2420	-0.6	-1		-2	-1	0
U92-2426	1.7	2		1	2	3
U92-2523	3.5	4		3	5	6
U92-2606	1.8	2		1	4	4
U92-2607	2.9	4		3	3	6
U92-2634	0.4	0		-3	1	4
U92-2636	1.5	2		-2	2	2
Date Planted	05/24	05/26		05/14	05/12	05/15
Days to Mature	123:0	124		128	124	135

PRELIMINARY TEST IIA, 1993

MATURITY (date)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	1	3	3	1	5		3
IA2008 (BSR)	-1	-3	2	-1	2		-1
Kenwood (II)	09/29	10/06	09/18	09/21	09/26		10/03
Sturdy (I)	-1	-4	1	0	0		-1
A92-525034	0	1	2	0	5		-1
A92-528006	-1	-2	0	-4	-2		-1
A92-625016	0	-1	1	0	4		1
A92-627008	1	-1	6	4	6		1
A92-627030	1	3	5	4	5		1
A92-627047	5	0	10	8	6		3
A92-627049	1	3	5	3	4		1
A92-634056	-5	-3	2	-1	-3		0
A92-727025	4	4	8	6	6		3
A92-731033	5	3	12	7	10		3
U92-2212	0	1	4	0	1		1
U92-2219	-1	0	4	-1	4		2
U92-2227	0	1	4	0	4		1
U92-2232	-1	-1	3	-4	3		-1
U92-2233	0	2	8	1	5		1
U92-2234	-1	-1	3	-1	2		1
U92-2309	-1	2	5	-1	6		1
U92-2310	-1	-5	2	-4	-1		0
U92-2420	-1	-1	3	-2	-1		0
U92-2426	-1	-1	5	2	4		0
U92-2523	2	2	7	0	4		2
U92-2606	0	1	4	1	2		-1
U92-2607	0	1	5	2	4		1
U92-2634	-1	-2	4	0	2		-1
U92-2636	0	2	5	1	2		1
Date Planted	06/08	06/09	06/07	05/19	06/02		05/13
Days to Mature	113	119	103	125	116		143

PRELIMINARY TEST IIA, 1993

LODGING (score)

Strain	Mean 12 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	1.3	1.3	1.4	1.0	1.3	1.5
IA2008 (BSR)	1.8	2.1	1.9	3.0	2.3	2.0
Kenwood (II)	1.7	1.7	1.6	1.0	2.5	2.0
Sturdy (I)	1.5	1.4	1.8	1.5	1.5	2.0
A92-525034	1.9	1.9	2.3	3.0	2.0	2.0
A92-528006	2.0	1.8	1.7	2.0	3.0	2.5
A92-625016	2.0	2.1	2.0	2.0	2.3	2.0
A92-627008	1.9	1.6	1.5	2.0	2.3	2.0
A92-627030	1.6	1.4	1.3	1.0	2.0	2.0
A92-627047	1.5	1.4	1.5	1.0	1.5	2.0
A92-627049	1.7	1.6	1.8	1.0	2.3	2.0
A92-634056	1.5	1.4	1.5	1.0	1.5	2.0
A92-727025	1.9	1.8	1.6	1.5	2.5	2.5
A92-731033	1.5	1.5	1.4	1.0	1.5	2.0
U92-2212	1.5	1.4	1.5	1.5	1.5	1.5
U92-2219	2.4	2.0	2.8	4.0	3.0	2.5
U92-2227	1.7	1.5	1.7	2.0	1.5	1.5
U92-2232	1.7	1.6	1.6	2.0	2.3	1.5
U92-2233	2.1	2.0	1.8	2.5	2.8	2.5
U92-2234	1.8	1.6	1.6	2.5	2.0	1.5
U92-2309	2.5	2.1	2.3	3.5	3.3	3.0
U92-2310	1.7	1.5	1.8	2.0	1.8	2.0
U92-2420	1.6	1.3	1.6	2.0	2.3	2.0
U92-2426	1.4	1.4	1.3	1.0	1.5	1.5
U92-2523	2.3	2.3	2.6	3.5	2.5	2.5
U92-2606	1.7	1.6	1.7	1.5	2.5	1.5
U92-2607	2.1	1.8	1.8	3.0	2.5	2.0
U92-2634	2.0	1.8	1.5	2.0	3.3	3.0
U92-2636	2.4	2.1	2.8	3.0	3.0	3.0

PRELIMINARY TEST IIA, 1993

LODGING (score)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	1.0	1.0	1.0	1.2	1.3	1.0	2.2
IA2008 (BSR)	1.0	1.0	2.5	1.3	1.1	1.0	2.3
Kenwood (II)	1.0	1.0	2.5	1.3	1.2	1.0	3.0
Sturdy (I)	1.0	1.0	1.0	1.2	1.3	1.0	2.8
A92-525034	1.0	1.0	2.0	1.3	1.2	1.0	3.8
A92-528006	1.0	1.0	2.5	1.4	2.4	1.0	4.0
A92-625016	1.0	1.0	2.5	1.4	2.6	1.0	3.5
A92-627008	1.0	1.0	4.0	1.5	2.6	1.0	2.5
A92-627030	1.0	1.0	3.5	1.3	1.3	1.0	2.0
A92-627047	1.0	1.0	3.5	1.3	1.1	1.0	2.0
A92-627049	1.0	1.0	3.0	1.3	1.8	1.0	2.2
A92-634056	1.0	1.0	2.5	1.3	1.2	1.0	2.5
A92-727025	1.0	1.0	3.5	1.4	2.1	1.0	2.8
A92-731033	1.0	1.0	2.5	1.5	1.7	1.0	1.8
U92-2212	1.0	1.0	2.5	1.3	1.0	1.0	2.2
U92-2219	1.0	1.0	4.0	1.1	1.4	1.0	4.5
U92-2227	1.0	1.0	3.5	1.2	1.8	1.0	3.0
U92-2232	1.0	1.0	3.5	1.3	1.6	1.0	2.2
U92-2233	1.0	1.0	4.0	1.3	1.8	1.0	3.5
U92-2234	1.0	1.0	3.5	1.2	2.1	1.0	2.8
U92-2309	1.0	1.0	4.0	1.3	3.1	1.0	4.0
U92-2310	1.0	1.0	3.0	1.3	1.5	1.0	3.0
U92-2420	1.0	1.0	2.5	1.2	1.0	1.0	2.5
U92-2426	1.0	1.0	2.0	1.2	1.3	1.0	2.8
U92-2523	1.0	1.0	3.5	1.3	2.3	1.0	4.0
U92-2606	1.0	1.0	3.0	1.3	1.5	1.0	2.2
U92-2607	1.0	1.0	4.0	1.2	1.9	1.0	3.5
U92-2634	1.0	1.0	2.5	1.2	2.1	1.0	3.0
U92-2636	1.0	1.0	5.0	1.4	1.7	1.0	4.0

PRELIMINARY TEST IIA, 1993

PLANT HEIGHT (inches)

Strain	Mean 12 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	33	34	42	34	32	35
IA2008 (BSR)	34	36	40	37	34	38
Kenwood (II)	32	36	38	38	34	31
Sturdy (I)	31	34	36	36	30	34
A92-525034	34	37	39	41	29	32
A92-528006	34	36	41	37	32	35
A92-625016	36	38	42	41	35	39
A92-627008	31	34	40	35	32	31
A92-627030	33	35	36	38	34	36
A92-627047	34	37	40	37	32	36
A92-627049	33	35	39	37	34	31
A92-634056	29	33	36	34	30	27
A92-727025	34	38	40	38	37	33
A92-731033	31	34	37	33	30	32
U92-2212	30	34	37	39	28	26
U92-2219	37	38	36	39	37	42
U92-2227	32	35	38	36	31	34
U92-2232	31	36	36	37	33	31
U92-2233	32	36	38	39	32	31
U92-2234	30	34	37	35	34	26
U92-2309	36	38	43	44	40	33
U92-2310	33	34	40	37	31	34
U92-2420	33	38	39	41	33	33
U92-2426	30	34	38	36	29	27
U92-2523	39	40	44	44	43	37
U92-2606	32	36	38	35	35	33
U92-2607	33	36	38	35	34	32
U92-2634	32	34	38	36	32	33
U92-2636	36	38	42	37	37	39

PRELIMINARY TEST IIA, 1993

PLANT HEIGHT (inches)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	34	31	29	24	37	23	39
IA2008 (BSR)	36	36	32	25	38	21	36
Kenwood (II)	35	32	29	24	30	24	36
Sturdy (I)	34	32	24	21	33	20	40
A92-525034	39	38	30	24	35	22	41
A92-528006	38	36	28	25	36	24	39
A92-625016	35	37	32	24	37	26	42
A92-627008	31	31	26	23	33	20	34
A92-627030	34	32	29	24	34	26	37
A92-627047	36	36	30	27	33	27	40
A92-627049	36	37	29	23	33	23	38
A92-634056	31	32	24	20	32	19	33
A92-727025	37	33	29	26	33	26	37
A92-731033	30	30	26	24	31	25	35
U92-2212	34	29	26	22	30	23	34
U92-2219	38	40	35	26	42	28	40
U92-2227	30	35	28	22	33	26	39
U92-2232	30	32	27	22	34	19	38
U92-2233	34	31	30	23	33	22	39
U92-2234	32	30	28	21	32	17	36
U92-2309	38	36	32	26	38	25	37
U92-2310	33	34	28	24	35	22	39
U92-2420	38	36	30	23	32	20	36
U92-2426	31	33	28	21	30	21	37
U92-2523	39	39	35	27	40	33	43
U92-2606	37	32	30	20	35	21	37
U92-2607	35	37	32	22	35	26	36
U92-2634	33	33	29	22	32	23	37
U92-2636	40	39	37	26	38	26	38

PRELIMINARY TEST IIA, 1993

SEED QUALITY (score)

Strain	Mean 12 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	1.4	1.0	2.0	1.5	2.0	1.0
IA2008 (BSR)	1.4	1.0	1.5	1.8	1.0	2.0
Kenwood (II)	1.6	1.5	1.5	2.0	2.0	1.0
Sturdy (I)	1.3	1.0	1.0	1.8	1.0	1.0
A92-525034	1.2	1.0	1.0	1.5	1.0	1.0
A92-528006	1.6	1.0	1.5	2.0	2.0	1.5
A92-625016	1.4	1.5	1.0	1.8	2.0	1.0
A92-627008	1.2	1.5	1.5	1.5	1.0	1.0
A92-627030	1.5	1.5	1.0	1.8	2.0	1.0
A92-627047	1.2	1.5	1.0	1.5	1.0	1.0
A92-627049	1.4	1.5	1.5	2.0	2.0	1.0
A92-634056	1.5	1.0	1.5	2.5	2.0	1.0
A92-727025	1.4	1.5	2.0	1.5	1.0	1.0
A92-731033	1.4	1.5	3.5	1.5	1.0	1.0
U92-2212	1.7	1.5	1.5	1.8	1.0	1.0
U92-2219	1.4	1.0	1.0	2.3	1.0	1.5
U92-2227	1.4	1.0	1.5	1.5	1.0	1.5
U92-2232	1.2	1.0	1.0	1.8	1.0	1.0
U92-2233	1.3	1.0	1.5	1.5	1.0	1.5
U92-2234	1.5	1.0	1.0	1.5	2.0	1.0
U92-2309	1.4	1.0	1.5	1.8	2.0	1.0
U92-2310	1.6	1.0	2.0	2.3	2.0	1.0
U92-2420	1.2	1.0	1.0	1.5	1.0	1.0
U92-2426	1.4	1.0	1.5	1.5	2.0	1.5
U92-2523	1.3	1.5	1.5	1.5	1.0	1.0
U92-2606	1.3	1.0	1.0	1.5	1.0	1.5
U92-2607	1.3	1.5	1.5	1.8	1.0	1.0
U92-2634	1.1	1.0	1.0	1.5	1.0	1.0
U92-2636	1.3	1.0	1.0	1.8	2.0	1.0

PRELIMINARY TEST IIA, 1993

SEED QUALITY (score)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	1.0	1.0	2.0	1.4	1.0	2.0	1.0
IA2008 (BSR)	1.0	1.5	1.5	1.3	1.5	2.0	1.0
Kenwood (II)	1.0	1.0	1.5	1.4	1.0	3.0	2.0
Sturdy (I)	2.0	1.0	1.5	1.2	1.0	2.0	1.0
A92-525034	1.0	1.0	1.5	1.1	1.0	2.0	1.0
A92-528006	1.0	2.0	1.5	1.2	1.0	2.0	2.0
A92-625016	1.0	1.0	2.0	1.3	1.5	2.0	1.0
A92-627008	1.0	1.0	1.0	1.2	1.0	2.0	1.0
A92-627030	1.0	1.0	2.5	1.2	1.5	2.0	2.0
A92-627047	1.0	1.0	1.0	1.2	1.0	2.0	1.0
A92-627049	1.0	1.0	1.0	1.3	1.0	2.0	2.0
A92-634056	1.0	1.0	2.0	1.2	1.0	2.0	2.0
A92-727025	1.0	1.5	1.0	1.0	1.0	3.0	1.0
A92-731033	1.0	1.0	1.0	1.0	1.0	2.0	1.0
U92-2212	2.0	2.0	1.5	1.2	1.5	3.0	2.0
U92-2219	1.0	1.5	1.0	1.1	1.0	2.0	2.0
U92-2227	1.0	1.0	1.0	1.2	1.0	3.0	2.0
U92-2232	1.0	1.0	1.0	1.2	1.5	2.0	1.0
U92-2233	1.0	1.0	1.5	1.3	1.0	2.0	1.0
U92-2234	1.0	1.0	2.0	1.2	2.0	2.0	2.0
U92-2309	1.0	1.0	1.0	1.0	1.0	2.0	2.0
U92-2310	1.0	1.5	2.5	1.2	1.0	2.0	2.0
U92-2420	1.0	1.0	1.0	1.2	1.0	2.0	2.0
U92-2426	1.0	1.0	1.5	1.3	1.0	3.0	1.0
U92-2523	1.0	1.0	1.0	1.2	2.0	2.0	1.0
U92-2606	1.0	1.0	1.5	1.3	1.5	2.0	1.0
U92-2607	1.0	1.0	1.0	1.2	1.0	2.0	2.0
U92-2634	1.0	1.0	1.0	1.2	1.0	2.0	1.0
U92-2636	1.0	1.0	1.0	1.2	1.0	2.0	2.0

PRELIMINARY TEST IIA, 1993

SEED SIZE (g\100)

Strain	Mean 11 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	17.4	15.5	17.8	19.8	19.7	19.3
IA2008 (BSR)	13.8	11.7	13.4	16.0	13.5	15.0
Kenwood (II)	14.9	14.5	16.7	16.9	15.7	16.1
Sturdy (I)	18.2	18.3	19.2	20.7	17.3	20.0
A92-525034	15.2	13.3	15.9	17.4	15.9	17.1
A92-528006	15.6	15.0	16.4	17.7	16.1	16.5
A92-625016	15.4	13.5	16.6	18.3	15.8	17.2
A92-627008	15.2	14.4	16.2	17.4	16.1	15.7
A92-627030	15.6	14.9	16.8	18.4	16.1	16.5
A92-627047	16.9	15.4	18.3	19.7	17.7	18.2
A92-627049	14.4	13.5	15.8	17.5	14.2	14.5
A92-634056	16.6	16.5	17.1	18.4	16.3	16.1
A92-727025	15.6	15.7	17.1	17.4	16.8	17.2
A92-731033	13.8	13.3	15.0	15.7	14.0	14.5
U92-2212	17.6	16.8	19.6	19.6	16.1	20.5
U92-2219	15.1	13.2	14.8	16.8	15.8	16.1
U92-2227	14.5	13.0	15.4	16.1	13.6	17.1
U92-2232	17.1	15.0	17.9	19.8	18.0	18.1
U92-2233	15.4	14.9	16.1	18.3	15.2	16.0
U92-2234	16.1	15.8	17.2	18.8	15.8	17.3
U92-2309	16.4	16.0	16.2	19.5	17.0	17.4
U92-2310	17.9	17.2	18.9	20.0	17.7	18.9
U92-2420	15.7	14.7	16.2	17.9	16.6	16.0
U92-2426	16.7	15.1	17.7	18.9	16.9	18.2
U92-2523	15.1	13.8	16.2	17.2	16.1	16.9
U92-2606	16.6	14.9	18.0	18.9	16.8	18.8
U92-2607	13.9	13.3	14.3	16.1	14.0	14.0
U92-2634	14.7	13.7	15.1	17.5	15.2	14.5
U92-2636	14.2	12.9	14.6	16.6	14.4	14.6

PRELIMINARY TEST IIA, 1993

SEED SIZE (g\100)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	16.1	17.6	19.0	17.5		13.0	15.7
IA2008 (BSR)	14.6	15.1	15.5	13.9		12.0	10.7
Kenwood (II)	15.6	14.3	15.0	14.6		12.0	12.9
Sturdy (I)	17.6	18.0	20.0	18.1		16.0	15.2
A92-525034	15.4	15.6	16.5	14.6		13.0	12.8
A92-528006	16.2	16.4	16.0	14.1		14.0	13.6
A92-625016	15.0	16.0	17.5	14.8		12.0	13.1
A92-627008	14.8	13.5	16.5	15.1		14.0	13.4
A92-627030	15.2	15.5	17.0	14.9		12.0	14.6
A92-627047	16.0	16.3	20.0	16.7		14.0	13.9
A92-627049	13.8	13.9	16.5	13.8		12.0	12.6
A92-634056	18.2	16.5	19.0	16.8		14.0	13.8
A92-727025	14.3	14.0	17.5	15.6		13.0	12.7
A92-731033	12.8	13.5	15.5	13.5		12.0	11.7
U92-2212	17.9	16.6	18.5	17.2		15.0	15.4
U92-2219	14.7	16.4	18.0	15.0		13.0	12.6
U92-2227	13.8	14.1	18.5	14.9		11.0	11.8
U92-2232	16.0	16.9	21.0	17.4		13.0	14.9
U92-2233	14.8	15.5	18.5	14.6		12.0	13.5
U92-2234	16.6	15.1	18.0	15.4		13.0	13.7
U92-2309	15.8	16.9	18.5	16.1		13.0	14.0
U92-2310	17.9	17.7	20.0	17.2		16.0	14.9
U92-2420	15.4	16.8	18.0	15.8		13.0	12.6
U92-2426	16.2	16.6	20.0	16.5		14.0	13.6
U92-2523	14.4	15.7	17.5	14.3		12.0	12.1
U92-2606	16.2	17.4	19.0	16.5		12.0	13.9
U92-2607	12.6	14.2	16.5	14.6		11.0	12.0
U92-2634	14.8	16.0	16.5	13.9		12.0	12.2
U92-2636	14.2	15.3	16.5	13.9		11.0	11.8

PRELIMINARY TEST IIA, 1993

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Mead NE	Hoytville OH
IA2007 (L)	39.7	40.7	41.5	40.3	38.1	38.0
IA2008 (BSR)	38.9	41.8	40.5	36.3	38.1	37.6
Kenwood (II)	39.4	41.3	40.3	39.1	39.0	37.3
Sturdy (I)	40.0	41.1	40.8	39.5	40.0	38.8
A92-525034	39.8	41.4	40.8	39.6	38.7	38.7
A92-528006	40.5	42.8	41.3	39.7	39.6	39.3
A92-625016	40.3	43.0	42.5	40.1	40.2	35.8
A92-627008	38.1	39.9	38.5	37.6	36.8	37.8
A92-627030	40.7	42.9	41.6	39.5	40.3	39.0
A92-627047	39.6	40.9	41.0	39.4	39.6	37.0
A92-627049	39.3	40.6	40.9	39.3	38.2	37.5
A92-634056	40.4	42.0	42.7	38.5	39.1	39.5
A92-727025	41.0	40.9	42.5	41.4	40.2	40.0
A92-731033	41.4	42.3	41.6	40.0	41.6	41.3
U92-2212	40.8	42.3	42.4	39.4	41.0	39.1
U92-2219	40.9	42.8	42.6	41.0	39.6	38.6
U92-2227	41.8	43.1	43.7	41.1	40.6	40.4
U92-2232	41.0	41.8	42.0	41.3	40.4	39.6
U92-2233	41.5	43.5	43.3	41.0	40.8	39.1
U92-2234	40.7	41.7	42.6	40.7	40.0	38.7
U92-2309	42.6	44.1	44.2	42.9	41.4	40.5
U92-2310	40.4	42.0	42.1	39.9	39.3	38.8
U92-2420	41.7	42.4	43.1	41.4	41.1	40.5
U92-2426	41.5	43.3	42.4	41.0	40.9	39.7
U92-2523	40.8	43.2	42.5	39.5	39.5	39.1
U92-2606	41.9	43.7	43.7	41.3	41.2	39.4
U92-2607	40.7	42.8	42.3	39.0	38.8	40.5
U92-2634	43.2	45.7	45.2	43.0	41.4	40.6
U92-2636	41.3	43.4	42.6	39.3	40.6	40.6

PRELIMINARY TEST IIA, 1993

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Mead NE	Hoytville OH
IA2007 (L)	21.5	19.9	22.1	22.2	21.1	22.1
IA2008 (BSR)	21.1	18.4	21.9	23.1	20.7	21.5
Kenwood (II)	21.3	19.5	22.4	22.7	20.7	21.2
Sturdy (I)	21.4	19.6	22.5	22.3	20.8	21.9
A92-525034	20.5	18.5	21.6	21.8	20.3	20.5
A92-528006	20.7	19.0	21.5	22.0	20.0	21.0
A92-625016	21.2	18.5	21.2	22.1	20.0	24.1
A92-627008	22.7	20.6	24.3	24.1	22.4	22.3
A92-627030	21.3	18.9	22.4	23.3	20.5	21.5
A92-627047	21.3	19.9	22.2	22.2	20.0	22.3
A92-627049	21.1	19.4	21.7	21.7	20.9	21.9
A92-634056	21.8	20.0	22.2	23.1	21.7	21.9
A92-727025	20.7	18.2	21.4	21.3	20.6	22.1
A92-731033	20.4	19.1	21.4	22.0	19.0	20.6
U92-2212	21.2	19.5	21.5	22.2	20.6	22.1
U92-2219	20.7	18.5	21.1	21.3	20.6	22.0
U92-2227	20.1	18.8	20.2	21.0	19.5	21.0
U92-2232	21.2	19.2	22.0	21.9	20.6	22.1
U92-2233	19.9	18.0	20.3	21.3	19.1	20.7
U92-2234	21.3	20.0	21.9	21.5	21.0	22.3
U92-2309	20.8	19.0	21.0	21.7	20.4	21.9
U92-2310	21.3	19.7	22.2	21.9	21.0	21.9
U92-2420	20.3	19.4	20.9	21.1	19.6	20.6
U92-2426	20.7	18.8	21.6	21.6	20.2	21.1
U92-2523	20.7	18.4	21.1	22.3	20.2	21.5
U92-2606	20.0	18.0	20.4	20.8	19.2	21.4
U92-2607	20.6	18.4	21.4	22.1	20.4	20.5
U92-2634	19.2	17.0	19.4	20.1	19.3	20.4
U92-2636	20.6	18.7	21.4	22.4	20.0	20.4

PRELIMINARY TEST IIB, 1993

Strain	Parentage	Generation Composited	Unique Traits
IA2007 (L)	Pride B152 x A80-244003	F5	
Kenwood (II)	Elgin x Asgrow A1937	F5	
Sturdy (I)	M70-127 x Century	F5	
C1867	CX1038-63 x HC84-553-1	F5	
E92001	A85-195013 x A85-293032	F5	
E92009	A85-192034 x A85-293032	F5	
E92067	BSR 101 x E85100	F5	
E92072	BSR 101 x E85100	F5	
HF91-055	C1678 x Conrad	F5	
HF91-070	HM8473 x Elgin BC	F5	
HF91-078	HM8473 x Elgin BC	F5	
HF91-121	Asgrow A1895 x Elgin BC	F5	
HS91-4427	HS84-6224 x Conrad	F5	
HS91-4476	Conrad x Northrup King S23-03	F5	
HS91-4525	HM8778 x Asgrow A3733	F5	Rps
HS91-4528	HM8778 x Asgrow A3733	F5	Rps
LN90-323	Asgrow A2943 x A81-155014	F5	
LN90-366	Asgrow A2943 x A81-155014	F5	
LN90-738	Sherman x A83-271027	F5	
LN90-1587	A83-271027 x C1655	F5	Rps1-a
LN90-2275	LNX8401 x LN82-4858	F5	Rps1-k
LN90-3338	LN84-3897 x Resnik	F5	Rps1-k
LN90-4366	LN86-4668 x Resnik	F5	Rps1-k
ORC9208	K0368-1-3-1 x Asgrow A3127	F5	
SL91-1012M	L1L3-4-4 x Glenwood	F5	
SL91-1252N	PI 423.708B x Pioneer 0877	F5	
SL91-1657N	Pioneer 9061 x PI 238.924	F5	
SL91-1736M	Parker x Glenwood	F5	

PRELIMINARY TEST IIB, 1993

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	BSR - Boone Plant n %	BSR - Boone Stem n %
IA2007 (L)	PTBIYBrI	4.2	100.0	98.6
Kenwood (II)	PTBDYBlI	3.0	100.0	87.0
Sturdy (I)	PGBSYIbI	3.2	100.0	94.3
C1867	PTTSYBlI	4.2	90.0	67.9
E92001	PTBDYBrI	4.2	60.0	17.4
E92009	WTBDYBlI	3.7	50.0	17.3
E92067	PGTSYIbI	4.2	70.0	30.6
E92072	PTTDYBlI	4.0	80.0	38.5
HF91-055	PTTIYBlI	5.0	90.0	81.6
HF91-070	PTBDYBlI	4.2	100.0	86.6
HF91-078	PTBDYBlI	4.2	100.0	76.2
HF91-121	PTBDYBlI	5.0	100.0	97.0
HS91-4427	PTBDYBlI	4.0	100.0	96.9
HS91-4476	PGTDYBfI	3.5	100.0	92.6
HS91-4525	PGB+TDYIbI	3.5	40.0	12.0
HS91-4528	PGBDYIbI	3.2	100.0	92.0
LN90-323	PTBDYBlI	3.5	100.0	94.7
LN90-366	PGTDYIbI	4.0	100.0	94.9
LN90-738	WGBDYBfI	2.5	100.0	95.9
LN90-1587	PTBSYBlI	3.7	100.0	90.3
LN90-2275	WTTSYBlI	3.7	100.0	84.7
LN90-3338	PTTSYBlI	4.2	100.0	86.9
LN90-4366	WTTDYBlI	3.5	90.0	79.9
ORC9208	PTBDYBlSD	3.5	40.0	14.8
SL91-1012M	PGBDYIbI	2.7	90.0	70.8
SL91-1252N	PTBDYBlI	4.0	100.0	81.2
SL91-1657N	PTBDYBlI	3.2	80.0	74.4
SL91-1736M	PGBDYBfI	3.7	100.0	82.1

PRELIMINARY TEST IIB, 1993

DISEASE DATA

Strain	Root Rot Wooster Race 25	PR Ames Race 4	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %	Seed Germ. %
IA2007 (L)	3.8	S	R	64	10	74
Kenwood (II)	4.2	S	S	98	8	90
Sturdy (I)	4.0	S	S	69	22	51
C1867	4.3	R	R	92	0	92
E92001	4.0	S	S	98	2	90
E92009	4.3	S	S	94	2	60
E92067	3.8	S	S	88	14	44
E92072	3.5	S	R	98	2	50
HF91-055	4.0	S	S	96	10	60
HF91-070	4.2	H	R	88	18	82
HF91-078	4.3	H	H	76	14	80
HF91-121	3.0	R	R	88	6	92
HS91-4427	1.7	R	S	90	10	64
HS91-4476	3.7	S	S	82	14	54
HS91-4525	2.3	R	S	98	4	96
HS91-4528	4.2	S	S	78	2	92
LN90-323	4.7	S	S	68	0	92
LN90-366	3.8	S	H	70	0	100
LN90-738	4.2	S	S	78	2	96
LN90-1587	3.0	S	S	54	6	92
LN90-2275	4.7	R	R	82	2	92
LN90-3338	4.7	R	R	96	4	86
LN90-4366	3.8	R	R	52	8	64
ORC9208	3.5	S	S	24	18	76
SL91-1012M	3.7	S	S	84	16	66
SL91-1252N	3.8	S	S	96	4	64
SL91-1657N	4.0	S	S	82	6	58
SL91-1736M	6.2	S	S	92	4	70

PRELIMINARY TEST IIB, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 11 bu/a	Rank 11 No.	Maturity 11 Date	Lodging 12 Score	Plant Height 12 In.	Seed Quality 12 Score	Seed Size 11 g/100	Composition Protein 5 %	 Oil 5 %
IA2007 (L)	52.5	6	3.8	1.4	31	1.4	17.3	39.7	21.5
Kenwood (II)	54.1	2	09/24*	1.8	33	1.7	15.2	39.7	21.3
Sturdy (I)	49.2	18	-0.8	1.5	30	1.4	17.9	40.2	21.3
C1867	43.3	28	4.3	1.5	32	1.4	17.8	47.0	17.8
E92001	46.2	25	4.6	1.4	32	1.3	16.0	40.4	20.7
E92009	46.9	24	2.1	1.4	29	1.3	19.3	41.5	21.0
E92067	45.7	27	1.9	1.5	31	1.3	18.1	40.5	20.7
E92072	47.0	23	0.6	1.8	32	1.4	16.3	41.1	20.2
HF91-055	52.9	3	1.7	2.2	33	1.4	17.3	39.7	22.2
HF91-070	50.8	10	4.1	1.8	32	1.3	16.1	40.4	20.7
HF91-078	52.9	3	3.9	1.8	32	1.5	16.2	40.1	21.1
HF91-121	49.9	16	4.2	2.0	35	1.3	16.5	40.4	20.5
HS91-4427	50.5	12	1.0	1.8	34	1.3	14.7	39.7	20.8
HS91-4476	50.5	12	4.2	2.3	35	1.5	15.8	41.2	20.3
HS91-4525	50.4	15	5.0	1.4	33	1.3	18.2	41.1	21.1
HS91-4528	50.6	11	2.6	1.2	32	1.3	19.1	41.0	21.6
LN90-323	50.5	12	2.6	1.6	34	1.3	19.3	40.5	21.1
LN90-366	47.7	21	2.8	1.8	35	1.2	15.8	40.9	21.2
LN90-738	51.4	9	5.2	1.8	31	1.4	16.3	42.0	20.8
LN90-1587	48.7	20	5.4	1.7	33	1.2	16.9	41.9	20.6
LN90-2275	49.8	17	7.0	1.2	32	1.3	18.6	41.2	20.1
LN90-3338	51.9	8	3.5	1.3	32	1.3	14.9	41.2	20.6
LN90-4366	54.7	1	4.2	1.5	33	1.3	16.1	40.8	20.7
ORC9208	46.1	26	2.4	1.4	29	1.3	13.0	39.0	21.3
SL91-1012M	47.3	22	-0.9	2.0	33	1.2	15.7	41.3	21.0
SL91-1252N	52.3	7	0.8	2.0	33	1.6	15.4	39.9	21.2
SL91-1657N	52.7	5	0.5	1.9	32	1.5	15.1	39.7	21.3
SL91-1736M	48.9	19	-2.5	1.4	27	1.5	17.7	40.1	21.1

* 123.0 Days After Planting

PRELIMINARY TEST IIB, 1993

YIELD (bu/a)

Strain	Mean 11 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	52.5	43.9	49.9	72.2	68.6	54.3
Kenwood (II)	54.1	48.6	44.0	77.8	70.4	56.0
Sturdy (I)	49.2	48.3	50.0	62.7	54.2	48.3
C1867	43.3	34.4	39.9	56.2	60.5	45.6
E92001	46.2	44.7	48.9	70.1	55.2	55.5
E92009	46.9	47.2	45.3	75.7	62.2	48.6
E92067	45.7	42.4	48.5	65.3	58.9	52.2
E92072	47.0	42.0	44.0	66.3	59.2	48.8
HF91-055	52.9	44.7	53.3	69.5	68.2	52.1
HF91-070	50.8	43.6	47.1	70.4	72.0	56.0
HF91-078	52.9	45.1	49.1	75.1	72.3	58.9
HF91-121	49.9	41.3	44.9	68.0	67.6	53.5
HS91-4427	50.5	47.3	45.5	74.1	57.3	49.9
HS91-4476	50.5	46.9	46.1	77.6	60.7	55.6
HS91-4525	50.4	42.6	45.6	65.3	68.2	55.6
HS91-4528	50.6	46.6	50.4	68.6	63.8	52.5
LN90-323	50.5	45.6	49.3	71.5	66.6	55.6
LN90-366	47.7	39.8	44.7	67.0	63.2	51.2
LN90-738	51.4	44.7	46.5	68.5	70.1	54.5
LN90-1587	48.7	39.6	43.9	61.6	64.6	45.4
LN90-2275	49.8	44.6	49.0	68.3	58.0	51.0
LN90-3338	51.9	45.5	49.4	73.3	64.6	52.7
LN90-4366	54.7	48.0	47.8	81.5	67.1	57.3
ORC9208	46.1	46.2	45.2	69.0	27.6	57.3
SL91-1012M	47.3	42.0	46.3	63.8	53.2	48.6
SL91-1252N	52.3	44.8	47.6	73.4	67.0	54.9
SL91-1657N	52.7	45.9	48.4	74.6	71.1	50.0
SL91-1736M	48.9	49.0	53.8	65.0	47.1	53.8
C.V. (%)		5.1	5.5	5.7	6.5	5.4
L.S.D. (5%)		4.5	5.2	8.2	8.3	5.9
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIB, 1993

YIELD (bu/a)

Strain	David City NE	Harting-ton NE	Adelphia* NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	49.7	45.2	48.8	38.3	59.6	37.9	57.5
Kenwood (II)	56.7	48.1	41.0	37.3	59.6	40.4	56.0
Sturdy (I)	54.1	44.5	31.6	37.6	57.7	24.4	59.5
C1867	41.1	34.0	36.4	37.3	45.3	31.9	50.0
E92001	49.1	40.4	37.5	20.6	52.6	25.2	46.0
E92009	46.2	43.8	42.1	26.4	46.5	29.2	44.8
E92067	45.4	42.3	34.6	33.4	52.7	12.7	49.3
E92072	47.8	41.6	36.9	38.0	52.1	26.3	50.7
HF91-055	50.7	50.3	42.4	39.7	53.7	42.5	57.6
HF91-070	48.8	42.8	45.3	49.4	43.4	34.0	51.2
HF91-078	52.8	42.2	44.0	48.2	46.7	36.4	55.0
HF91-121	53.1	45.8	44.1	43.5	48.5	33.5	48.7
HS91-4427	49.0	45.8	40.8	36.8	49.1	42.8	57.4
HS91-4476	55.2	44.0	45.3	45.4	43.9	38.5	41.3
HS91-4525	52.0	44.1	51.8	49.0	48.5	32.6	50.4
HS91-4528	56.5	43.8	48.6	32.5	49.5	34.7	58.2
LN90-323	46.9	46.8	53.0	38.4	45.6	33.9	55.4
LN90-366	50.4	41.5	37.0	40.7	43.1	37.2	45.5
LN90-738	54.9	45.4	49.1	40.4	47.6	39.5	53.2
LN90-1587	51.1	44.8	50.7	45.2	49.3	39.6	50.2
LN90-2275	50.3	42.8	52.3	39.4	50.4	40.0	53.8
LN90-3338	47.5	45.1	50.8	46.1	50.0	40.5	55.7
LN90-4366	53.8	45.6	50.5	44.7	53.1	41.1	61.2
ORC9208	49.7	42.0	45.0	39.3	46.4	34.6	50.2
SL91-1012M	48.8	45.0	42.8	42.1	44.7	42.2	43.8
SL91-1252N	53.6	48.9	40.2	40.1	54.9	34.7	55.7
SL91-1657N	54.4	49.3	37.8	39.2	53.6	34.9	58.6
SL91-1736M	48.9	48.7	36.2	34.0	52.1	30.1	54.9
C.V. (%)	6.8	6.6	15.2	10.7	7.5	12.2	7.7
L.S.D. (5%)	10.0	8.5	13.6	8.5	8.0	7.2	8.3
Row Sp. (In.)	30	30	30	30	24	30	30
Rows/Plot	4	4	4	4	4	4	4
Reps	2	2	2	2	2	2	2

* Data not included in the mean.

PRELIMINARY TEST IIB, 1993

YIELD RANK

Strain	Yield Rank	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	6	19	5	11	6	13
Kenwood (II)	2	2	26	2	4	5
Sturdy (I)	18	3	4	27	26	27
C1867	28	29	29	29	20	28
E92001	25	15	10	14	25	10
E92009	24	6	22	4	18	26
E92067	27	23	11	24	22	18
E92072	23	24	26	22	21	24
HF91-055	3	15	2	15	7	19
HF91-070	10	20	16	13	2	6
HF91-078	3	13	8	5	1	2
HF91-121	16	26	24	20	9	15
HS91-4427	12	5	21	7	24	23
HS91-4476	12	7	19	3	19	7
HS91-4525	15	22	20	23	7	7
HS91-4528	11	8	3	17	16	17
LN90-323	12	11	7	12	12	7
LN90-366	21	27	25	21	17	20
LN90-738	9	15	17	18	5	12
LN90-1587	20	28	28	28	14	29
LN90-2275	17	18	9	19	23	21
LN90-3338	8	12	6	10	14	16
LN90-4366	1	4	14	1	10	3
ORC9208	26	9	23	16	29	3
SL91-1012M	22	24	18	26	27	25
SL91-1252N	7	14	15	9	11	11
SL91-1657N	5	10	12	6	3	22
SL91-1736M	19	1	1	25	28	14

PRELIMINARY TEST IIB, 1993

YIELD RANK

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	17	11	8	18	1	11	6
Kenwood (II)	1	5	19	21	1	6	8
Sturdy (I)	6	15	29	20	4	28	2
C1867	29	29	26	21	25	23	21
E92001	19	27	23	29	10	27	25
E92009	27	18	18	28	22	25	27
E92067	28	22	28	26	9	29	22
E92072	24	25	25	19	12	26	17
HF91-055	14	1	17	13	6	2	5
HF91-070	22	20	10	1	28	19	16
HF91-078	11	23	14	3	21	13	12
HF91-121	10	7	13	8	18	21	23
HS91-4427	20	7	20	23	17	1	7
HS91-4476	3	17	10	5	27	10	29
HS91-4525	12	16	3	2	18	22	18
HS91-4528	2	18	9	27	15	16	4
LN90-323	26	6	1	17	24	20	11
LN90-366	15	26	24	10	29	12	26
LN90-738	4	10	7	11	20	9	15
LN90-1587	13	14	5	6	16	8	19
LN90-2275	16	20	2	14	13	7	14
LN90-3338	25	12	4	4	14	5	9
LN90-4366	7	9	6	7	8	4	1
ORC9208	18	24	12	15	23	18	20
SL91-1012M	22	13	16	9	26	3	28
SL91-1252N	8	3	21	12	5	16	9
SL91-1657N	5	2	22	16	7	15	3
SL91-1736M	21	4	27	25	11	24	13

PRELIMINARY TEST IIB, 1993

MATURITY (date)

Strain	Mean 10 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	3.8	2		5	4	7
Kenwood (II)	09/24	09/27		09/18	09/13	09/30
Sturdy (I)	-0.8	-2		-4	-3	-1
C1867	4.3	4		5	7	6
E92001	4.6	3		4	7	5
E92009	2.1	0		4	5	2
E92067	1.9	4		-2	0	2
E92072	0.6	1		-2	-1	-1
HF91-055	1.7	2		5	3	0
HF91-070	4.1	4		3	6	3
HF91-078	3.9	3		2	5	3
HF91-121	4.2	5		4	6	2
HS91-4427	1.0	2		2	3	0
HS91-4476	4.2	6		3	6	3
HS91-4525	5.0	4		6	7	5
HS91-4528	2.6	0		5	2	1
LN90-323	2.6	2		2	4	1
LN90-366	2.8	5		0	3	3
LN90-738	5.2	6		8	10	6
LN90-1587	5.4	4		6	6	8
LN90-2275	7.0	6		5	8	8
LN90-3338	3.5	5		3	7	2
LN90-4366	4.2	4		6	6	4
ORC9208	2.4	2		-1	-2	3
SL91-1012M	-0.9	0		-3	-3	-1
SL91-1252N	0.8	0		0	1	-1
SL91-1657N	0.5	0		0	1	-1
SL91-1736M	-2.5	-5		-3	-4	-3
Date Planted	05/24	05/26		05/14	05/12	05/15
Days to Mature	123.0	124		127	124	138

PRELIMINARY TEST IIB, 1993

MATURITY (date)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	0	6	3	2	7		2
Kenwood (II)	09/29	10/03	09/18	09/21	09/26		10/04
Sturdy (I)	-1	2	2	0	0		-1
C1867	2	6	4	1	6		2
E92001	3	6	6	4	8		0
E92009	0	1	4	1	5		-1
E92067	0	5		0	6		2
E92072	0	3	2	0	4		0
HF91-055	-1	0	3	0	5		0
HF91-070	1	6	5	6	7		0
HF91-078	2	6	6	5	5		2
HF91-121	1	6	8	3	6		1
HS91-4427	0	1	2	0	0		0
HS91-4476	1	6	5	2	8		2
HS91-4525	2	7	7	5	6		1
HS91-4528	0	4	7	2	5		0
LN90-323	0	3	4	2	8		0
LN90-366	1	4	5	1	6		0
LN90-738	1	6	6	3	6		0
LN90-1587	2	6	8	4	10		0
LN90-2275	4	7	11	6	13		2
LN90-3338	1	6	5	0	6		0
LN90-4366	0	5	8	3	6		0
ORC9208	0	4	7	3	7		1
SL91-1012M	-1	-1	3	-2	-1		0
SL91-1252N	0	0	5	1	3		-1
SL91-1657N	0	0	5	0	1		-1
SL91-1736M	-5	-4	3	-2	0		-2
Date Planted	06/08	06/09	06/07	05/19	06/02		05/13
Days to Mature	113	116	103	125	116		144

PRELIMINARY TEST IIB, 1993

LODGING (score)

Strain	Mean 12 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	1.4	1.3	1.0	3.0	1.0	1.5
Kenwood (II)	1.8	1.6	1.3	2.0	2.8	2.0
Sturdy (I)	1.5	1.4	1.6	2.5	1.8	1.5
C1867	1.5	1.6	1.4	2.0	1.5	2.0
E92001	1.4	1.5	1.1	2.0	1.0	1.5
E92009	1.4	1.4	1.2	1.5	1.3	1.5
E92067	1.5	1.6	1.3	1.0	1.8	2.0
E92072	1.8	1.9	1.4	3.5	2.8	1.5
HF91-055	2.2	1.9	1.3	4.0	2.5	3.0
HF91-070	1.8	1.7	1.3	2.0	1.8	2.0
HF91-078	1.8	1.7	1.6	2.0	2.0	2.0
HF91-121	2.0	1.9	1.4	2.0	2.5	2.0
HS91-4427	1.8	1.8	1.8	3.0	2.0	1.5
HS91-4476	2.3	3.0	1.8	3.0	3.5	2.0
HS91-4525	1.4	1.4	1.1	1.5	1.5	1.0
HS91-4528	1.2	1.2	1.0	1.0	1.0	1.0
LN90-323	1.6	1.3	1.3	1.5	1.8	1.5
LN90-366	1.8	1.9	1.2	1.0	2.0	2.5
LN90-738	1.8	1.8	1.2	2.0	2.8	2.0
LN90-1587	1.7	1.7	1.5	2.0	2.0	2.5
LN90-2275	1.2	1.2	1.2	1.0	1.0	1.5
LN90-3338	1.3	1.4	1.2	1.0	1.0	1.5
LN90-4366	1.5	1.3	1.3	2.0	1.5	1.5
ORC9208	1.4	1.4	1.7	1.0	1.0	2.0
SL91-1012M	2.0	1.6	1.8	3.0	2.8	2.0
SL91-1252N	2.0	1.7	1.3	2.5	2.8	2.0
SL91-1657N	1.9	1.6	1.2	2.0	2.5	2.0
SL91-1736M	1.4	1.4	1.0	2.0	1.3	1.5

PRELIMINARY TEST IIB, 1993

LODGING (score)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	1.0	1.0	1.0	1.1	1.0	1.0	2.8
Kenwood (II)	1.0	1.0	2.5	1.4	2.0	1.0	3.2
Sturdy (I)	1.0	1.0	1.5	1.2	1.0	1.0	3.0
C1867	1.0	1.0	1.5	1.1	1.0	1.0	3.0
E92001	1.0	1.0	1.5	1.2	2.0	1.0	2.5
E92009	1.0	1.0	1.5	1.3	1.0	1.0	2.5
E92067	1.0	1.0	2.0	1.4	1.5	1.0	2.5
E92072	1.0	1.0	2.0	1.3	1.0	1.0	3.0
HF91-055	1.0	1.0	4.0	1.3	1.5	1.0	3.5
HF91-070	1.0	1.0	3.0	1.4	2.0	1.0	3.0
HF91-078	1.0	1.0	3.0	1.4	2.0	1.0	3.0
HF91-121	1.0	1.0	3.0	1.4	2.0	1.0	4.2
HS91-4427	1.0	1.0	3.0	1.3	1.0	1.0	3.2
HS91-4476	1.0	1.0	3.0	1.3	3.0	1.0	4.0
HS91-4525	1.0	1.0	2.5	1.3	1.0	1.0	2.5
HS91-4528	1.0	1.0	1.5	1.3	1.0	1.0	2.0
LN90-323	1.0	1.0	3.0	1.3	2.0	1.0	2.5
LN90-366	1.0	1.0	3.0	1.3	2.0	1.0	3.2
LN90-738	1.0	1.0	2.5	1.4	1.0	1.0	3.5
LN90-1587	1.0	1.0	2.5	1.2	1.0	1.0	2.8
LN90-2275	1.0	1.0	1.5	1.2	1.0	1.0	2.0
LN90-3338	1.0	1.0	1.5	1.4	1.0	1.0	2.0
LN90-4366	1.0	1.0	3.0	1.4	1.0	1.0	2.5
ORC9208	1.0	1.0	1.0	1.2	1.5	1.0	3.2
SL91-1012M	1.0	1.0	3.5	1.3	1.5	1.0	4.0
SL91-1252N	1.0	1.0	4.5	1.4	2.0	1.0	3.0
SL91-1657N	1.0	1.0	4.5	1.3	1.0	1.0	3.2
SL91-1736M	1.0	1.0	1.0	1.2	1.0	1.0	3.0

PRELIMINARY TEST IIB, 1993

PLANT HEIGHT (inches)

Strain	Mean 12 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	31	34	34	38	32	32
Kenwood (II)	33	38	38	39	34	37
Sturdy (I)	30	36	35	39	30	30
C1867	32	37	38	40	37	36
E92001	32	36	34	38	32	36
E92009	29	34	32	40	32	28
E92067	31	36	35	41	31	32
E92072	32	37	37	40	33	31
HF91-055	33	38	36	43	36	35
HF91-070	32	34	32	40	32	34
HF91-078	32	36	35	38	32	35
HF91-121	35	38	38	43	36	39
HS91-4427	34	40	38	39	37	33
HS91-4476	35	38	39	44	36	38
HS91-4525	33	36	38	41	35	34
HS91-4528	32	36	34	41	32	31
LN90-323	34	36	40	44	35	40
LN90-366	35	38	39	41	37	39
LN90-738	31	34	33	39	33	33
LN90-1587	33	36	36	40	36	35
LN90-2275	32	35	38	40	35	34
LN90-3338	32	37	36	41	34	33
LN90-4366	33	34	36	41	34	36
ORC9208	29	32	31	34	22	34
SL91-1012M	33	36	36	39	34	32
SL91-1252N	33	36	37	39	34	34
SL91-1657N	32	38	34	38	33	34
SL91-1736M	27	31	28	33	26	28

PRELIMINARY TEST IIB, 1993

PLANT HEIGHT (inches)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	31	31	26	21	36	22	37
Kenwood (II)	32	35	26	24	34	26	36
Sturdy (I)	30	32	23	21	34	19	36
C1867	31	30	23	24	31	19	39
E92001	30	35	25	23	36	24	37
E92009	32	31	24	19	26	23	32
E92067	33	35	22	20	30	19	36
E92072	33	34	26	24	33	23	33
HF91-055	31	34	26	25	33	24	39
HF91-070	35	35	26	24	33	23	37
HF91-078	31	32	26	24	33	23	35
HF91-121	34	35	29	25	35	21	41
HS91-4427	36	35	30	27	34	21	39
HS91-4476	33	35	28	27	38	26	39
HS91-4525	33	32	28	25	33	25	38
HS91-4528	35	32	26	22	34	24	36
LN90-323	30	30	30	24	35	25	37
LN90-366	34	36	28	26	40	27	39
LN90-738	34	30	25	23	30	20	34
LN90-1587	32	32	24	27	33	24	38
LN90-2275	30	31	24	22	28	25	38
LN90-3338	34	33	25	22	30	24	38
LN90-4366	33	33	28	25	33	25	36
ORC9208	31	29	32	22	32	21	33
SL91-1012M	36	36	26	21	34	24	37
SL91-1252N	32	34	30	24	36	22	39
SL91-1657N	34	35	28	22	32	23	34
SL91-1736M	28	30	20	19	29	17	34

PRELIMINARY TEST IIB, 1993

SEED QUALITY (score)

Strain	Mean 12 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	1.4	1.5	1.5	1.8	1.0	1.0
Kenwood (II)	1.7	1.0	1.5	2.5	2.0	1.5
Sturdy (I)	1.4	1.0	1.5	1.8	1.0	1.0
C1867	1.4	1.0	2.0	1.5	1.0	1.0
E92001	1.3	1.5	2.0	1.8	1.0	1.0
E92009	1.3	1.0	1.5	1.8	1.0	1.0
E92067	1.3	1.0	1.5	1.8	1.0	1.0
E92072	1.4	1.0	1.0	1.5	1.0	1.0
HF91-055	1.4	1.5	1.0	1.8	1.0	1.0
HF91-070	1.3	1.0	1.5	1.5	1.0	1.0
HF91-078	1.5	1.5	1.5	1.5	1.0	1.0
HF91-121	1.3	1.5	1.5	1.5	1.0	1.0
HS91-4427	1.3	1.0	1.5	1.5	1.0	1.0
HS91-4476	1.5	1.0	3.0	2.8	1.0	1.0
HS91-4525	1.3	1.0	1.5	1.8	1.0	1.0
HS91-4528	1.3	1.0	2.5	1.8	1.0	1.0
LN90-323	1.3	1.0	1.5	1.5	1.0	1.0
LN90-366	1.2	1.5	1.0	1.5	1.0	1.0
LN90-738	1.4	1.5	1.5	1.5	1.0	1.5
LN90-1587	1.2	1.5	1.5	1.5	1.0	1.0
LN90-2275	1.3	1.0	1.5	1.5	1.0	1.0
LN90-3338	1.3	1.5	1.5	1.5	1.0	1.0
LN90-4366	1.3	1.0	1.5	2.0	1.0	1.0
ORC9208	1.3	1.0	1.0	1.4	1.0	1.0
SL91-1012M	1.2	1.0	1.0	1.5	1.0	1.0
SL91-1252N	1.6	1.5	1.0	2.5	2.0	1.5
SL91-1657N	1.5	1.0	1.0	2.8	2.0	1.0
SL91-1736M	1.5	1.0	1.0	2.5	2.0	1.5

PRELIMINARY TEST IIB, 1993

SEED QUALITY (score)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	1.5	1.0	2.0	1.2	1.0	2.0	1.0
Kenwood (II)	2.0	1.0	2.0	1.3	1.0	2.0	2.0
Sturdy (I)	1.5	1.0	2.0	1.3	1.0	3.0	1.0
C1867	1.0	1.5	1.0	1.2	1.0	2.0	2.0
E92001	1.0	1.5	1.0	1.3	1.0	2.0	1.0
E92009	1.0	1.0	1.5	1.2	1.0	3.0	1.0
E92067	1.0	1.5	2.0	1.2	1.0	2.0	1.0
E92072	1.0	1.0	1.5	1.2	1.0	3.0	2.0
HF91-055	1.0	1.0	1.0	1.2	1.0	3.0	2.0
HF91-070	1.0	1.0	1.0	1.2	1.0	2.0	2.0
HF91-078	1.0	1.0	1.0	1.1	1.0	4.0	2.0
HF91-121	1.0	2.0	1.0	1.2	1.0	2.0	1.0
HS91-4427	1.0	1.0	1.5	1.2	1.0	2.0	2.0
HS91-4476	1.0	1.5	1.0	1.2	1.0	2.0	1.0
HS91-4525	1.0	1.0	1.0	1.1	1.0	3.0	1.0
HS91-4528	1.0	1.5	1.0	1.2	1.0	2.0	1.0
LN90-323	1.0	1.0	1.0	1.1	1.0	2.0	2.0
LN90-366	1.0	1.0	1.0	1.0	1.0	2.0	1.0
LN90-738	1.0	1.0	1.5	1.1	1.0	3.0	1.0
LN90-1587	1.0	1.0	1.0	1.3	1.0	1.0	2.0
LN90-2275	1.0	1.0	1.0	1.2	1.0	3.0	1.0
LN90-3338	1.0	1.5	1.0	1.1	1.0	2.0	1.0
LN90-4366	1.0	1.0	1.0	1.3	1.0	2.0	2.0
ORC9208	1.0	1.5	1.0	1.2	1.0	2.0	2.0
SL91-1012M	1.0	1.0	1.0	1.3	1.0	2.0	1.0
SL91-1252N	1.0	1.0	1.5	1.2	1.5	3.0	2.0
SL91-1657N	1.0	1.0	2.0	1.2	1.0	2.0	2.0
SL91-1736M	1.5	1.5	2.0	1.3	1.0	2.0	1.0

PRELIMINARY TEST IIB, 1993

SEED SIZE (g\100)

Strain	Mean 11 Tests	Ames IA	Keystone IA	Urbana IL	Lafay-ette IN	Ingham MI
IA2007 (L)	17.3	16.4	17.7	19.9	18.9	17.8
Kenwood (II)	15.2	14.7	15.6	17.3	16.6	16.7
Sturdy (I)	17.9	16.1	18.3	21.1	17.6	18.7
C1867	17.8	17.0	18.2	20.4	19.5	18.4
E92001	16.0	14.4	16.2	19.0	17.0	16.3
E92009	19.3	17.8	18.4	23.2	21.3	19.4
E92067	18.1	16.7	18.5	21.3	20.0	18.7
E92072	16.3	15.3	16.0	18.7	18.0	17.1
HF91-055	17.3	17.4	18.5	20.7	19.0	17.0
HF91-070	16.1	15.4	14.9	18.8	16.8	18.2
HF91-078	16.2	16.3	15.8	18.4	17.2	18.5
HF91-121	16.5	17.2	16.3	18.5	18.0	18.0
HS91-4427	14.7	14.6	14.0	17.1	15.8	14.6
HS91-4476	15.8	15.3	15.1	18.4	17.4	16.3
HS91-4525	18.2	16.9	17.3	21.9	19.0	19.3
HS91-4528	19.1	18.4	18.6	23.0	21.0	18.1
LN90-323	19.3	18.5	20.5	22.9	20.3	21.1
LN90-366	15.8	14.4	15.4	18.3	17.5	16.1
LN90-738	16.3	15.5	16.0	20.2	17.2	16.3
LN90-1587	16.9	16.6	19.0	18.9	17.0	16.6
LN90-2275	18.6	17.7	20.0	21.2	19.1	17.6
LN90-3338	14.9	14.0	15.3	17.2	14.8	15.3
LN90-4366	16.1	15.4	17.3	17.4	16.3	16.9
ORC9208	13.0	11.9	12.0	14.5	15.4	13.7
SL91-1012M	15.7	14.4	15.6	17.2	16.3	16.5
SL91-1252N	15.4	14.6	14.8	17.2	16.0	17.2
SL91-1657N	15.1	15.2	13.8	17.5	15.9	15.2
SL91-1736M	17.7	16.8	16.5	18.6	17.5	18.5

PRELIMINARY TEST IIB, 1993

SEED SIZE (g\100)

Strain	David City NE	Harting-ton NE	Adelphia NJ	Hoytville OH	Chat-ham Ont.	Beres-ford SD	Arling-ton WI
IA2007 (L)	17.2	15.7	19.5	16.9		14.0	15.9
Kenwood (II)	15.1	15.3	16.0	14.7		12.0	13.3
Sturdy (I)	18.5	17.1	19.5	18.1		16.0	15.5
C1867	16.9	17.7	18.5	17.0		17.0	15.3
E92001	15.3	14.4	17.0	18.8		14.0	13.7
E92009	19.1	18.8	21.5	20.2		16.0	16.2
E92067	17.4	17.7	18.5	18.9		16.0	15.4
E92072	16.2	15.1	17.5	16.3		14.0	14.9
HF91-055	16.7	16.1	18.0	17.4		15.0	14.9
HF91-070	15.8	16.2	17.0	17.3		13.0	13.9
HF91-078	14.9	14.7	18.5	17.6		13.0	13.8
HF91-121	15.1	14.1	19.5	17.0		13.0	14.9
HS91-4427	14.2	15.4	16.5	15.3		11.0	12.7
HS91-4476	16.2	15.6	18.0	16.2		12.0	13.2
HS91-4525	17.4	17.7	22.5	19.4		14.0	14.7
HS91-4528	19.7	18.2	21.5	19.6		16.0	16.2
LN90-323	17.2	18.0	21.5	20.9		15.0	16.7
LN90-366	16.4	14.8	17.0	18.4		13.0	12.4
LN90-738	16.9	15.8	17.5	17.4		12.0	14.3
LN90-1587	16.5	15.1	21.0	17.7		13.0	14.6
LN90-2275	18.0	17.4	23.0	20.4		15.0	15.6
LN90-3338	14.2	14.1	16.5	17.0		12.0	13.1
LN90-4366	15.3	15.8	17.5	17.0		13.0	14.7
ORC9208	12.3	12.4	15.0	14.7		11.0	10.2
SL91-1012M	16.2	14.8	18.5	17.4		14.0	12.2
SL91-1252N	15.0	15.8	17.0	16.0		12.0	13.4
SL91-1657N	15.2	16.0	16.0	15.6		12.0	13.5
SL91-1736M	17.8	18.4	20.0	19.2		16.0	15.2

PRELIMINARY TEST IIB, 1993

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Mead NE	Hoytville OH
IA2007 (L)	39.7	41.2	40.2	41.0	38.4	37.7
Kenwood (II)	39.7	41.7	40.6	39.5	38.8	37.8
Sturdy (I)	40.2	41.5	40.8	40.4	39.6	38.5
C1867	47.0	48.3	48.5	48.0	44.5	45.8
E92001	40.4	42.7	40.4	40.5	39.3	39.0
E92009	41.5	42.1	42.7	42.0	40.7	39.8
E92067	40.5	41.6	41.5	41.8	39.6	38.1
E92072	41.1	42.0	41.6	42.4	40.5	39.2
HF91-055	39.7	41.6	41.3	39.8	38.0	38.0
HF91-070	40.4	42.5	41.3	40.6	39.7	38.5
HF91-078	40.1	41.4	40.3	40.3	39.6	38.8
HF91-121	40.4	41.6	42.0	39.8	39.4	39.4
HS91-4427	39.7	41.1	41.1	39.9	39.0	37.6
HS91-4476	41.2	43.5	42.2	41.5	39.5	39.2
HS91-4525	41.1	42.1	42.7	41.6	39.8	39.2
HS91-4528	41.0	42.9	41.7	42.5	39.6	38.3
LN90-323	40.5	41.3	41.9	40.3	39.7	39.2
LN90-366	40.9	42.4	41.9	40.8	39.7	39.7
LN90-738	42.0	43.8	43.6	42.2	40.2	40.2
LN90-1587	41.9	43.6	43.8	40.8	41.4	39.9
LN90-2275	41.2	41.1	42.3	41.2	41.2	40.0
LN90-3338	41.2	42.1	42.6	40.7	40.5	40.1
LN90-4366	40.8	41.4	41.4	40.7	40.2	40.5
ORC9208	39.0	40.7	40.6	41.3	36.6	36.0
SL91-1012M	41.3	42.8	41.7	41.6	40.8	39.7
SL91-1252N	39.9	42.2	40.1	40.2	39.1	37.8
SL91-1657N	39.7	41.0	41.1	39.9	39.1	37.2
SL91-1736M	40.1	41.7	40.8	40.5	39.5	38.0

PRELIMINARY TEST IIB, 1993

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Mead NE	Hoytville OH
IA2007 (L)	21.5	20.4	21.7	21.9	21.6	21.9
Kenwood (II)	21.3	19.5	21.9	22.4	20.4	22.4
Sturdy (I)	21.3	19.2	21.9	22.1	21.2	22.3
C1867	17.8	15.5	18.2	18.7	18.0	18.4
E92001	20.7	18.4	21.9	21.5	20.7	21.0
E92009	21.0	20.1	21.1	21.5	20.9	21.6
E92067	20.7	19.7	21.3	20.8	19.9	21.7
E92072	20.2	19.5	21.0	20.5	19.6	20.4
HF91-055	22.2	20.0	22.5	23.4	21.6	23.4
HF91-070	20.7	19.1	21.1	22.1	20.1	21.3
HF91-078	21.1	19.4	22.0	21.9	20.3	21.9
HF91-121	20.5	18.6	21.1	21.7	20.1	20.9
HS91-4427	20.8	20.1	21.2	21.9	20.0	20.8
HS91-4476	20.3	18.2	20.9	21.2	20.0	21.2
HS91-4525	21.1	19.3	21.7	22.2	20.4	21.9
HS91-4528	21.6	19.5	22.3	22.3	21.5	22.6
LN90-323	21.1	19.8	21.5	22.1	20.5	21.5
LN90-366	21.2	19.3	22.4	21.9	20.5	22.0
LN90-738	20.8	18.3	21.5	21.9	20.7	21.6
LN90-1587	20.6	19.1	21.0	22.0	19.4	21.3
LN90-2275	20.1	18.3	21.1	21.0	18.7	21.3
LN90-3338	20.6	19.0	21.3	21.6	20.2	20.9
LN90-4366	20.7	20.0	21.4	21.0	20.6	20.3
ORC9208	21.3	19.2	22.3	21.7	21.8	21.7
SL91-1012M	21.0	19.4	21.6	21.4	20.6	21.8
SL91-1252N	21.2	19.0	22.4	22.2	20.4	21.9
SL91-1657N	21.3	21.0	22.1	22.0	20.2	21.4
SL91-1736M	21.1	19.1	21.5	21.1	21.4	22.4

UNIFORM TEST III, 1993

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Charleston (dtl)	HC74-634RE x HC78-676	4	F5	dtl
Flyer (IV)	Asgrow A3127[4] x Williams 82	7	BC3 F2	Rps1-k
IA2007 (II)	Pride B152 x A80-244003	1	F5	
Resnik (III)	Asgrow A3127[4] x Williams 82	7	BC3 F3	Rps1-k
Thorne	A80-344003 x Asgrow A3127 BC3 F2-1	3	F6	BSR resis.
A91-701007	NK S23-03 x A86-301024	PTIIA	F5	BSR resis.
A91-701035	A86-301024 x Dekalb 226	PTIIIB	F5	BSR resis.
A91-702022	Asgrow A3205 x Dairyland DSR 304	PTIIIB	F5	
C1832	Spencer x Resnik	1	F5	Rps1-k
C1842	(Spencer[2] x Pella 86) x Resnik	UTIV	F5	Rps1-k
HC87-173	HC78-354 x HC78-676	PTIIIB	F5	dtl
HC88-11	Ripley x Essex	PTIVB	F5	dtl
HC88-1021	Sprite 87 x HC74-634RE	PTIIB	F5	dtl
HC89-50	Ripley x Essex	PTIVB	F5	dtl
HC89-62	Ripley x Essex	PTIVB	F5	dtl
HC89-2237	HC80-1944 x Asgrow A3127	PTIVA	F5	DT1
HC89-2241	HC80-1944 x Asgrow A3127	PTIVA	F5	DT1
HM9189	Will x Asgrow A3127	PTIIIB	F5	
HM9194	Will x Asgrow A3127	PTIIIB	F5	
HS90-3449	Resnik x HS84-6276	PTIIIB	F5	
LN88-10534	LN81-1029 x Asgrow A2943	1	F5	Rps?
LN89-295	Sherman x Resnik	PTIIIA	F5	
LN89-764	Sherman x Harper 87	PTIIB	F5	
K1230	Sherman x Asgrow A3427	PTIIIA	F5	
K1232	Elgin x Asgrow A3427	PTIIIA	F5	
SL89-314	HC79-478 x Asgrow A3127 BC	1	?	
SL89-1040	Sherman x Asgrow A3205	PTIIIB	F5	
SL89-1825	Hack x Asgrow A3205	PTIIIB	F5	
U90-2310	U80-64032 x Jacques J822	1	F5	
U91-3133	Agserv 8710 x Asgrow A3427	PTIIIA	F4	
U91-3212	Hamilton x A86-204022	PTIIIA	F4	
U91-3516	Hamilton x Kenwood	PTIIIA	F4	
U91-3607	Hamilton x Kenwood	PTIIIA	F4	
U91-3610	Hamilton x Asgrow A3427	PTIIIA	F4	

* Number of years in test or name of 1992 test.

UNIFORM TEST III, 1993

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score		Emerg. Score	Shattering Score
		Ames	Hanska	Ames	Lubbock
Charleston(dtl)	PTTSYBlD	4.7	4.0	2	3.0
Flyer (IV)	PTTDYBlI	3.7	4.5	1	1.2
IA2007 (II)	PTBIYBrI	4.3	5.0	1	2.0
Resnik (III)	PTTYBlI	4.3	4.5	3	1.7
Thorne (BSR)	WTBYBlI	3.2	3.0	1	2.2
A91-701007	PGBSYIbI	4.7	4.0	5	4.0
A91-701035	PGBSYBfI	4.6	4.5	5	2.7
A91-702022	WTBDYBlI	3.2	4.0	3	2.5
C1832	PTTSYBlI	4.5	5.0	1	2.5
C1842	PTTDYBlI	4.6	5.0	3	1.5
HC87-173 (dtl)	PTTIYBlD	2.7	4.0	1	3.5
HC88-11 (dtl)	PGTDYBfD	4.0	5.0	1	2.0
HC88-1021 (dtl)	P+WTTSYBlD	4.6	5.0	3	3.2
HC89-50 (dtl)	PGTDYBfD	3.8	4.5	1	2.0
HC89-62 (dtl)	PGTDYBfD	4.0	4.5	4	1.5
HC89-2237	PTTDYBlI	4.2	5.0	1	2.5
HC89-2241	PTTDYBlI	4.6	5.0	1	2.5
HM9189	PTTDYBlI	3.8	5.0	1	1.5
HM9194	PTTDYBlI	3.7	4.0	1	1.5
HS90-3449	PTBDYBlI	3.2	4.0	4	2.5
LN88-10534	PGBDYIbI	3.6	5.0	3	2.0
LN89-295	WTBDYBlI	4.7	5.0	1	3.2
LN89-764	PGBSYIbI	3.6	4.5	5	2.6
K1230	PTBIYBlI	4.1	5.0	5	1.7
K1232	PTBSYBlI	3.8	5.0	5	2.0
SL89-314	PTTDYBlI	4.3	5.0	2	1.7
SL89-1040	WTBSYBrI	4.2	4.0	1	3.0
SL89-1825	P+WGTSYBfI	3.7	5.0	1	2.2
U90-2310	WTTSYBrI	4.3	5.0	1	3.7
U91-3133	P+WTTDYBlI	3.6	5.0	1	2.2
U91-3212	WGTDYBfI	4.0	5.0	1	2.0
U91-3516	WGTIYBfI	4.3	5.0	1	2.2
U91-3607	WGB+TDYBfI	4.7	5.0	1	3.5
U91-3610	PGTDYBfI	3.2	4.0	1	2.5

UNIFORM TEST III, 1993

DISEASE DATA

Strain	Stem Canker Ullin %	BSR-Boone Plant n %	BSR-Boone Stem n %	Root Rot Wooster Race 25	PR Ames Race 4	PR Laf. Race 7	PS Laf. a %	PSB Vincennes n %	Seed Germ. %
Charleston(dtl)	0.0	40.0	15.6	4.7	S	S	28	4	88
Flyer (IV)	0.0	100.0	69.2	4.7	R	R	50	26	56
IA2007 (II)	0.7	90.0	80.6	4.0	S	R	64	30	26
Resnik (III)	0.3	100.0	81.0	4.7	R	R	20	22	62
Thorne (BSR)	0.0	45.0	17.5	4.3	S	R	24	6	60
A91-701007	1.0	50.0	23.3	3.3	S	S	16	26	46
A91-701035	0.0	60.0	23.0	3.7	S	S	14	4	84
A91-702022	1.3	80.0	74.2	5.2	S	S	18	18	62
C1832	0.0	100.0	68.6	4.2	H	R	32	30	56
C1842	1.0	90.0	60.1	4.7	R	R	26	12	74
HC87-173 (dtl)	4.3	60.0	26.7	5.8	S	S	12	8	88
HC88-11 (dtl)	0.3	90.0	56.9	2.8	S	S	42	18	70
HC88-1021 (dtl)	0.0	60.0	44.8	4.5	H	H	4	20	80
HC89-50 (dtl)	3.7	100.0	92.9	3.3	S	S	8	8	60
HC89-62 (dtl)	1.0	90.0	76.1	2.7	H	S	2	12	82
HC89-2237	0.3	100.0	79.2	5.0	R	S	28	10	66
HC89-2241	0.7	100.0	90.4	5.7	S	S	20	14	72
HM9189	0.0	90.0	70.6	4.2	S	R	12	14	72
HM9194	0.0	100.0	69.2	4.7	S	R	12	10	86
HS90-3449	2.0	70.0	41.1	6.7	H	R	12	24	54
LN88-10534	0.0	80.0	36.4	3.3	S	S	24	12	78
LN89-295	0.3	80.0	49.4	3.2	S	S	54	14	74
LN89-764	1.3	70.0	41.7	4.7	R	H	26	20	64
K1230	0.0	100.0	68.8	4.2	S	S	50	20	80
K1232	0.7	90.0	67.4	4.2	S	S	36	23	50
SL89-314	0.0	90.0	58.1	3.5	H	R	62	14	62
SL89-1040	3.7	70.0	44.3	5.3	S	S	28	20	34
SL89-1825	6.7	70.0	33.5	3.3	S	S	58	44	36
U90-2310	0.0	60.0	30.7	3.7	S	S	18	20	52
U91-3133	2.7	70.0	52.5	5.7	S	R	38	18	72
U91-3212	1.7	70.0	39.3	4.3	S	S	70	36	30
U91-3516	0.3	40.0	9.3	4.0	S	S	80	28	52
U91-3607	0.0	80.0	50.0	4.0	S	S	68	18	40
U91-3610	0.0	50.0	24.1	5.5	S	H	74	26	76

UNIFORM TEST III, 1993

SDS DATA

Strain	I %	S score	R6Date	Ridgway R6DI	R6DS	R6DX	DX Rank
Charleston(dtl)	7.0	2.7	91	24	1.1	3.0	23
Flyer (IV)	13.7	3.3	92	25	1.2	3.5	24
IA2007 (II)	1.0	1.0	89	3	1.2	1.2	14
Resnik (III)	28.3	4.0	92	19	1.1	2.3	19
Thorne (BSR)	30.0	4.0	92	15	1.2	2.8	20
A91-701007	1.0	1.0	93	22	1.5	4.3	29
A91-701035	26.7	4.0	93	88	2.8	2.7	36
A91-702022	33.7	3.7	91	5	1.1	1.3	15
C1832	23.3	4.0	93	40	1.2	5.4	30
C1842	10.3	2.7	93	53	1.6	9.5	34
HC87-173 (dtl)	4.0	1.3	91	9	1.0	1.0	11
HC88-11 (dtl)	1.0	1.0	91	-1	1.0	-0.8	1
HC88-1021 (dtl)	7.0	2.3	91	15	1.1	1.8	16
HC89-50 (dtl)	1.0	1.0	90	0	1.0	0.1	4
HC89-62 (dtl)	4.0	1.3	90	1	1.0	-0.1	2
HC89-2237	4.0	1.7	92	8	1.0	1.0	12
HC89-2241	1.0	1.0	92	0	1.0	0.1	5
HM9189	15.0	2.7	92	8	1.0	0.8	9
HM9194	21.7	3.7	93	19	1.2	2.9	22
HS90-3449	2.3	1.7	92	25	1.1	2.8	21
LN88-10534	35.0	4.0	93	25	1.3	4.1	28
LN89-295	7.3	1.7	94	18	1.0	2.1	18
LN89-764	20.3	3.0	92	28	1.2	4.0	27
K1230	4.0	1.7	92	9	1.0	1.1	13
K1232	36.7	4.3	94	36	1.5	6.4	31
SL89-314	23.7	3.0	93	31	1.2	3.9	26
SL89-1040	30.0	4.0	92	26	1.3	3.5	25
SL89-1825	50.0	5.3	92	50	1.4	8.0	32
U90-2310	1.0	1.0	91	8	1.2	0.9	10
U91-3133	33.3	4.0	92	15	1.1	1.9	17
U91-3212	3.7	2.0	91	2	1.0	0.2	6
U91-3516	5.3	2.3	91	4	1.0	0.5	8
U91-3607	4.0	1.7	91	2	1.0	0.4	7
U91-3610	1.0	1.0	91	7	1.1	0.0	3

UNIFORM TEST III, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 24 bu/a	Rank 24 No.	Maturity 20 Date	Lodging 24 Score	Plant Height 24 In.	Seed Quality 23 Score	Seed Size 23 g/100	Composition Protein 5 %	 Oil 5 %
Charleston(dtl)	49.1	14	4.8	1.6	23	1.6	14.5	41.9	20.2
Flyer (IV)	48.8	19	5.7	1.5	32	1.6	13.5	42.2	20.4
IA2007 (II)	43.9	34	-4.5	1.3	28	2.1	16.8	39.9	22.1
Resnik (III)	48.5	21	09/22*	1.4	30	1.6	14.4	41.4	21.2
Thorne (BSR)	49.0	16	1.9	1.6	30	1.8	16.4	41.9	21.3
A91-701007	49.6	10	-0.4	1.4	32	1.8	15.5	40.5	21.1
A91-701035	48.9	18	1.9	1.2	26	1.7	17.1	40.9	20.5
A91-702022	48.3	24	2.3	1.6	31	1.9	14.5	40.7	21.2
C1832	50.1	3	3.3	1.6	32	1.8	14.5	41.3	20.8
C1842	49.4	13	5.4	1.4	33	1.7	16.4	40.8	21.3
HC87-173 (dtl)	48.3	24	5.6	1.3	23	1.6	13.7	41.2	21.0
HC88-11 (dtl)	49.1	14	3.4	1.8	26	1.8	14.4	38.3	22.1
HC88-1021 (dtl)	45.5	33	3.6	1.4	24	1.6	16.2	40.7	21.8
HC89-50 (dtl)	47.1	29	2.3	1.7	24	1.7	14.4	38.1	22.2
HC89-62 (dtl)	47.1	29	3.7	1.4	24	1.8	15.6	38.9	22.5
HC89-2237	48.2	26	4.8	1.7	34	1.6	14.1	43.0	19.5
HC89-2241	47.7	28	5.4	1.8	34	1.6	13.6	42.9	19.8
HM9189	50.0	5	2.6	1.4	30	1.6	14.1	41.8	20.9
HM9194	48.6	20	4.6	1.5	32	1.5	13.0	41.8	20.6
HS90-3449	49.6	10	1.6	1.6	32	1.6	17.0	41.1	21.0
LN88-10534	49.8	8	0.5	1.5	32	1.6	14.8	40.9	21.3
LN89-295	52.2	1	4.8	1.6	31	1.6	16.4	40.9	20.8
LN89-764	49.7	9	0.8	1.2	29	1.5	16.5	40.8	21.1
K1230	49.9	6	4.2	1.8	31	1.8	15.4	41.2	21.3
K1232	48.2	26	9.0	1.8	33	1.7	13.9	38.6	21.0
SL89-314	48.4	23	5.0	1.7	34	1.7	13.6	41.6	20.9
SL89-1040	46.9	31	5.0	1.9	31	2.0	15.3	41.6	20.9
SL89-1825	46.3	32	4.4	1.6	32	1.8	12.9	40.7	20.8
U90-2310	48.5	21	0.6	2.0	32	2.0	17.2	38.6	23.0
U91-3133	49.0	16	3.8	1.9	32	1.5	14.3	41.4	21.5
U91-3212	49.6	10	3.2	2.0	32	1.9	15.4	40.9	21.5
U91-3516	49.9	6	5.4	1.8	32	1.7	16.7	41.4	21.7
U91-3607	51.4	2	4.6	1.6	32	2.0	16.0	41.0	21.9
U91-3610	50.1	3	4.6	1.7	32	1.8	15.4	41.0	21.8

* 122.8 Days After Planting

UNIFORM TEST III, 1993

1992-1993 2-YEAR MEAN

No. of Tests Strain	Yield 46 bu/a	Rank 46 No.	Maturity 39 Date	Lodging 49 Score	Plant Height 49 In.	Seed Quality 46 Score	Seed Size 45 g/100	Composition Protein 9 %	Oil 9 %
Charleston (dtl)	51.5	7	4.8	1.5	24	1.6	15.1	41.5	19.8
Flyer (IV)	51.9	4	6.6	1.4	33	1.6	14.5	41.7	20.4
IA2007 (II)	47.6	9	-3.7	1.3	30	2.2	17.1	40.0	21.4
Resnik (III)	50.6	8	09/20.5*	1.3	31	1.6	15.0	41.6	20.6
Thorne (HM88990)	51.8	5	3.1	1.5	31	1.8	16.9	41.9	20.9
C1832	53.2	1	4.2	1.6	33	1.8	15.3	41.3	20.3
LN88-10534	52.5	2	0.2	1.4	33	1.8	15.1	41.3	20.6
SL89-314	52.5	2	5.2	1.7	35	1.7	14.6	41.4	20.7
U90-2310	51.6	6	0.1	2.0	33	2.2	17.6	39.0	22.4

* 126.2 Days After Planting

1990-1993 4-YEAR MEAN

No. of Tests Strain	Yield 98 bu/a	Rank 98 No.	Maturity 78 Date	Lodging 100 Score	Plant Height 101 In.	Seed Quality 96 Score	Seed Size 92 g/100	Composition Protein 19 %	Oil 19 %
Charleston (dtl)	49.6	4	3.4	1.5	23	1.6	15.4	41.1	20.4
Flyer (IV)	51.5	1	5.7	1.4	33	1.7	14.6	41.6	20.7
Resnik (III)	50.5	3	09/19.8*	1.3	31	1.7	15.2	41.5	20.8
Thorne (HM88990)	51.2	2	2.4	1.5	31	1.9	17.1	41.5	21.0

* 123.8 Days After Planting

UNIFORM TEST III, 1993

YIELD (bu/a)

Strain	Mean 24 Tests	George-town* DE	Fair field IA	Gris-wold IA	Stuart IA	Newton IL	Ridg-way IL
Charleston(dtl)	49.1	8.4	49.5	43.9	39.0	61.2	51.0
Flyer (IV)	48.8	9.7	50.7	41.4	33.6	56.2	45.9
IA2007 (II)	43.9	2.9	46.9	43.5	31.5	53.3	45.6
Resnik (III)	48.5	1.3	51.3	40.9	38.7	56.3	51.7
Thorne (BSR)	49.0	3.1	47.9	39.1	39.3	59.1	40.6
A91-701007	49.6	6.0	48.9	46.5	43.2	65.2	42.5
A91-701035	48.9	9.3	54.3	46.6	39.7	57.5	44.4
A91-702022	48.3	5.1	45.1	43.5	38.8	50.9	44.7
C1832	50.1	3.4	56.7	47.0	43.4	53.2	39.5
C1842	49.4	11.0	53.0	42.5	41.2	59.8	50.9
HC87-173 (dtl)	48.3	12.3	50.7	41.6	38.4	45.2	49.8
HC88-11 (dtl)	49.1	9.9	47.7	42.2	40.4	53.0	60.9
HC88-1021 (dtl)	45.5	7.8	46.5	40.7	39.2	49.4	45.9
HC89-50 (dtl)	47.1	7.3	47.4	37.7	33.5	53.8	49.9
HC89-62 (dtl)	47.1	4.2	43.5	40.4	39.2	50.5	52.2
HC89-2237	48.2	5.6	46.0	42.0	35.8	58.4	47.5
HC89-2241	47.7	3.5	45.2	40.7	35.9	58.3	52.8
HM9189	50.0	1.1	49.6	41.5	39.2	51.7	49.1
HM9194	48.6	3.4	48.8	39.5	30.3	57.0	48.1
HS90-3449	49.6	7.2	47.0	42.9	39.9	49.6	53.7
LN88-10534	49.8	3.9	47.8	42.3	40.9	58.6	48.0
LN89-295	52.2	2.4	49.9	47.4	40.3	56.0	51.1
LN89-764	49.7	3.4	49.0	44.3	41.2	52.7	43.8
K1230	49.9	3.1	48.4	47.9	40.0	54.3	51.7
K1232	48.2	3.3	50.0	39.8	36.7	49.8	40.3
SL89-314	48.4	9.4	45.6	42.2	36.1	53.2	46.2
SL89-1040	46.9	2.5	47.7	40.6	38.2	55.2	44.9
SL89-1825	46.3	5.8	47.1	39.6	37.8	55.8	46.4
U90-2310	48.5	3.6	50.5	41.9	41.1	57.1	49.8
U91-3133	49.0	10.0	51.5	40.5	39.7	57.1	39.1
U91-3212	49.6	7.1	47.6	45.6	39.7	58.8	55.5
U91-3516	49.9	9.1	51.6	45.4	40.3	59.0	53.0
U91-3607	51.4	7.4	53.1	44.4	42.8	60.2	54.2
U91-3610	50.1	8.2	50.0	44.3	39.8	59.5	56.8
C.V. (%)		39.3	5.8	4.9	5.5	11.1	10.1
L.S.D. (5%)		3.8	4.6	3.5	3.5	10.1	8.0
Row Sp. (in.)		15	27	27	27	30	30
Rows/Plot		5	4	4	4	4	4
Reps		3	3	3	3	3	3

* Data not included in the mean.

UNIFORM TEST III, 1993

YIELD (bu/a)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Charleston(dtl)	60.7	43.8	60.6	58.4	56.1	26.1	34.1	48.2
Flyer (IV)	58.4	53.9	65.9	44.2	57.6	28.6	40.1	41.4
IA2007 (II)	55.3	48.5	61.7	44.1	44.8	15.0	25.3	38.1
Resnik (III)	57.7	49.2	71.2	45.5	53.2	23.5	35.3	51.5
Thorne (BSR)	63.8	46.3	70.3	56.2	52.2	25.1	39.8	44.8
A91-701007	70.2	49.1	72.7	44.6	58.1	19.8	39.6	40.8
A91-701035	66.3	44.4	68.9	50.1	59.7	13.8	32.6	54.7
A91-702022	61.3	56.5	70.7	45.6	56.2	19.0	46.6	54.3
C1832	66.7	51.5	77.7	50.0	59.9	25.3	40.7	41.6
C1842	60.8	50.4	67.7	47.7	51.1	28.8	41.6	50.9
HC87-173 (dtl)	58.6	51.1	59.8	56.5	53.1	23.2	30.3	54.3
HC88-11 (dtl)	56.8	56.6	67.6	40.1	52.5	28.0	38.4	49.6
HC88-1021 (dtl)	48.8	47.3	57.5	49.2	51.4	25.2	27.3	41.2
HC89-50 (dtl)	55.1	45.0	61.5	44.0	53.0	26.4	30.3	50.7
HC89-62 (dtl)	51.6	46.9	55.1	47.4	46.5	24.8	37.0	50.6
HC89-2237	59.2	49.4	65.7	48.5	55.6	28.6	47.0	48.0
HC89-2241	56.4	54.1	71.9	46.8	48.6	29.4	39.8	45.4
HM9189	63.6	51.0	66.5	56.8	60.4	24.3	37.5	49.1
HM9194	58.0	47.6	66.2	49.0	56.7	27.8	30.7	51.7
HS90-3449	62.0	54.4	67.2	55.9	55.2	22.4	46.4	48.7
LN88-10534	62.5	36.6	66.4	43.2	50.9	23.5	45.0	50.3
LN89-295	60.9	60.2	72.9	54.2	62.2	24.3	42.9	50.3
LN89-764	57.6	53.9	64.2	50.6	59.1	22.3	43.8	47.4
K1230	60.0	46.2	69.6	53.6	58.8	24.3	38.6	46.8
K1232	55.0	42.9	69.8	51.4	54.7	23.1	49.1	41.2
SL89-314	53.5	50.1	65.0	43.6	53.6	29.1	38.9	56.9
SL89-1040	57.5	36.7	58.2	46.6	50.7	23.4	39.3	53.2
SL89-1825	60.7	40.2	66.2	50.0	58.4	16.5	34.7	44.2
U90-2310	58.2	46.7	71.9	47.8	54.8	22.8	38.1	53.1
U91-3133	57.1	57.8	70.4	52.9	52.1	25.3	38.1	46.6
U91-3212	53.7	44.0	72.6	45.1	51.1	20.2	43.9	48.2
U91-3516	56.0	53.1	69.0	45.3	63.1	24.3	42.6	49.4
U91-3607	63.2	53.7	67.8	49.4	63.6	19.2	47.7	45.2
U91-3610	60.4	50.0	72.3	46.1	51.9	22.0	35.4	49.3
C.V. (%)	8.9	14.2	7.3	12.3	7.8	6.1	15.0	12.6
L.S.D. (5%)	8.6	11.4	8.1	9.8	7.1	7.1	9.8	6.4
Row Sp. (in.)	30	26	24	26	30	30	30	30
Rows/Plot	4	4	4	4	4	4	4	4
Reps	3	3	3	3	3	3	3	3

UNIFORM TEST III, 1993

YIELD (bu/a)

Strain	Queens-town MD	Colum-bia MO	David City NE	Falls City NE	Tekamah NE	Adel-phia NJ
Charleston(dtl)	48.5	35.3	43.1	46.3	54.5	60.0
Flyer (IV)	46.1	42.1	47.1	45.4	48.2	47.8
IA2007 (II)	44.9	23.9	51.1	29.8	52.3	49.6
Resnik (III)	44.0	40.6	51.1	45.2	50.9	49.0
Thorne (BSR)	45.6	46.8	45.6	51.6	51.1	54.3
A91-701007	51.0	35.9	49.5	46.8	61.0	45.0
A91-701035	44.6	34.0	45.6	48.1	55.0	49.9
A91-702022	42.9	48.4	45.9	42.7	52.0	44.6
C1832	46.9	45.4	50.3	44.5	52.6	47.3
C1842	47.1	36.1	51.2	39.9	48.9	50.9
HC87-173 (dtl)	45.9	38.1	47.4	42.5	50.6	54.4
HC88-11 (dtl)	49.5	40.8	46.6	40.9	55.3	43.8
HC88-1021 (dtl)	43.1	37.1	45.9	43.4	53.7	40.5
HC89-50 (dtl)	50.4	44.8	45.5	44.9	54.0	39.7
HC89-62 (dtl)	46.3	34.7	44.8	41.8	55.1	51.7
HC89-2237	46.9	49.7	41.3	47.2	48.3	44.2
HC89-2241	46.8	51.0	39.2	47.3	50.3	36.4
HM9189	45.3	37.4	49.3	49.3	53.0	46.1
HM9194	53.0	46.1	48.2	48.1	51.2	43.1
HS90-3449	49.6	29.9	51.0	48.2	56.0	48.4
LN88-10534	51.2	49.7	48.0	43.7	54.6	50.7
LN89-295	53.2	58.0	51.6	47.0	51.9	48.2
LN89-764	45.3	46.9	46.6	50.0	54.4	45.9
K1230	41.3	39.2	44.6	50.0	55.9	45.7
K1232	50.7	55.9	43.5	46.8	45.6	46.5
SL89-314	46.8	42.3	47.6	39.9	49.8	43.5
SL89-1040	45.1	38.2	46.5	47.2	48.6	43.6
SL89-1825	45.0	30.9	43.4	46.8	51.9	45.3
U90-2310	48.2	44.2	45.5	45.0	56.3	46.2
U91-3133	46.9	48.8	46.9	45.9	51.0	43.6
U91-3212	45.2	45.3	49.9	55.7	55.7	46.5
U91-3516	48.2	37.5	46.4	50.2	50.4	44.9
U91-3607	45.7	46.9	49.7	49.2	52.3	47.3
U91-3610	43.6	47.9	50.6	50.6	54.4	42.7
C.V. (%)	9.0	9.7	5.0	9.2	6.9	10.2
L.S.D. (5%)	ns	8.4	4.7	8.5	7.2	7.9
Row Sp. (in.)	30	30	30	30	30	30
Rows/Plot	4	4	4	4	4	4
Reps	3	2	3	3	3	3

UNIFORM TEST III, 1993

YIELD (bu/a)

Strain	Hoyt-ville OH	Mt. Orab OH	So. Charl-eston OH	Landis-ville PA	Elk Point SD
Charleston(dtl)	46.9	48.0	68.8	41.0	53.5
Flyer (IV)	49.7	47.7	78.7	47.2	52.6
IA2007 (II)	45.8	40.7	70.7	35.7	54.9
Resnik (III)	47.8	53.6	72.0	33.7	50.3
Thorne (BSR)	44.3	41.6	80.5	39.2	51.7
A91-701007	42.9	48.1	72.0	40.5	56.5
A91-701035	42.0	45.2	79.2	42.5	55.0
A91-702022	40.5	41.7	75.5	36.9	54.9
C1832	47.4	44.3	77.2	41.1	52.7
C1842	46.6	50.0	77.6	39.1	52.3
HC87-173 (dtl)	44.9	52.3	69.2	44.5	56.0
HC88-11 (dtl)	47.3	53.5	68.4	44.8	52.6
HC88-1021 (dtl)	45.2	52.6	66.9	38.8	54.6
HC89-50 (dtl)	48.7	57.0	68.5	42.4	47.0
HC89-62 (dtl)	43.6	56.9	74.7	42.1	52.6
HC89-2237	40.2	43.6	72.3	41.9	48.9
HC89-2241	43.3	38.1	70.9	47.9	48.4
HM9189	49.5	52.0	80.2	44.9	53.6
HM9194	47.1	47.7	73.2	44.6	51.7
HS90-3449	40.0	48.1	73.4	46.9	53.7
LN88-10534	46.3	51.2	74.9	47.6	60.1
LN89-295	45.9	42.8	79.4	46.7	54.6
LN89-764	45.3	46.0	75.3	48.3	57.8
K1230	49.2	45.4	78.4	49.0	58.0
K1232	43.7	41.0	72.7	59.0	47.0
SL89-314	48.2	50.1	75.1	55.3	49.6
SL89-1040	43.8	42.2	74.4	53.0	50.8
SL89-1825	40.0	41.4	78.5	39.5	51.4
U90-2310	44.4	40.8	66.1	33.7	60.5
U91-3133	46.9	45.9	78.0	41.5	51.2
U91-3212	48.3	45.3	69.9	44.0	57.5
U91-3516	42.0	48.0	71.8	47.8	57.6
U91-3607	47.2	46.6	74.1	50.7	58.5
U91-3610	45.4	47.0	76.5	49.7	55.0
C.V. (%)	8.9	13.0	6.3	19.6	4.7
L.S.D. (5%)	6.6	11.0	7.6	ns	3.4
Row Sp. (in.)	30	15	7.5	24	30
Rows/Plot	4	6	8	4	4
Reps	3	3	3	3	3

UNIFORM TEST III, 1993

YIELD RANK

Strain	Yield Rank	George-town DE	Fair-field IA	Gris-wold IA	Stuart IA	Newton IL	Ridg-way IL
Charleston(dtl)	14	9	15	11	21	2	12
Flyer (IV)	19	5	8	23	31	17	23
IA2007 (II)	34	30	28	12	33	23	25
Resnik (III)	21	33	7	24	23	16	9
Thorne (BSR)	16	29	20	33	17	6	31
A91-701007	10	16	17	5	2	1	30
A91-701035	18	7	2	4	14	12	28
A91-702022	24	19	33	12	22	29	27
C1832	3	24	1	3	1	24	33
C1842	13	2	4	15	4	4	13
HC87-173 (dtl)	24	1	8	21	24	34	15
HC88-11 (dtl)	14	4	22	17	8	26	1
HC88-1021 (dtl)	33	11	29	25	18	33	23
HC89-50 (dtl)	29	13	25	34	32	22	14
HC89-62 (dtl)	29	20	34	29	18	30	8
HC89-2237	26	18	30	19	30	10	20
HC89-2241	28	23	32	25	29	11	7
HM9189	5	34	14	22	18	28	17
HM9194	20	25	18	32	34	15	18
HS90-3449	10	14	27	14	12	32	5
LN88-10534	8	21	21	16	7	9	19
LN89-295	1	32	13	2	9	18	11
LN89-764	9	25	16	9	4	27	29
K1230	6	28	19	1	11	21	9
K1232	26	27	11	30	27	31	32
SL89-314	23	6	31	17	28	24	22
SL89-1040	31	27	22	27	25	20	26
SL89-1825	32	17	26	31	26	19	21
U90-2310	21	22	10	20	6	13	15
U91-3133	16	3	6	28	14	13	34
U91-3212	10	15	24	6	14	8	3
U91-3516	6	8	5	7	9	7	6
U91-3607	2	12	3	8	3	3	4
U91-3610	3	10	11	9	13	5	2

UNIFORM TEST III, 1993

YIELD RANK

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Charleston(dtl)	12	30	30	1	14	9	28	19
Flyer (IV)	18	7	24	29	11	4	13	30
IA2007 (II)	28	20	28	30	34	33	34	34
Resnik (III)	21	18	8	25	20	19	26	8
Thorne (BSR)	4	25	11	4	24	13	15	27
A91-701007	1	19	3	28	10	29	16	33
A91-701035	3	28	15	11	6	34	29	2
A91-702022	9	4	9	24	13	31	4	3
C1832	2	11	1	12	5	10	12	29
C1842	11	14	17	19	28	3	11	9
HC87-173 (dtl)	17	12	31	3	21	22	31	3
HC88-11 (dtl)	25	3	18	34	23	6	20	14
HC88-1021 (dtl)	34	22	33	15	27	12	33	31
HC89-50 (dtl)	29	27	29	31	22	8	31	10
HC89-62 (dtl)	33	23	34	20	33	14	24	11
HC89-2237	16	17	25	17	15	4	3	21
HC89-2241	26	6	6	21	32	1	14	25
HM9189	5	13	20	2	4	15	23	17
HM9194	20	21	22	16	12	7	30	7
HS90-3449	8	5	19	5	16	25	5	18
LN88-10534	7	34	21	33	30	19	6	12
LN89-295	10	1	2	6	3	15	9	12
LN89-764	22	7	27	10	7	26	8	22
K1230	15	26	13	7	8	15	19	23
K1232	30	31	12	9	18	23	1	31
SL89-314	32	15	26	32	19	2	18	1
SL89-1040	23	33	32	22	21	21	17	5
SL89-1825	12	32	22	12	9	32	27	28
U90-2310	19	24	6	18	17	24	21	6
U91-3133	24	2	10	8	25	10	21	24
U91-3212	31	29	4	27	28	28	7	19
U91-3516	27	10	14	26	2	15	10	15
U91-3607	6	9	16	14	1	30	2	26
U91-3610	14	16	5	23	26	27	25	16

UNIFORM TEST III, 1993

YIELD RANK

Strain	Queens-town MD	Colum-bia MO	David City NE	Falls City NE	Tekamah NE	Adel-phia NJ
Charleston(dtl)	9	29	32	19	10	1
Flyer (IV)	19	18	16	21	33	12
IA2007 (II)	28	34	3	34	18	8
Resnik (III)	30	20	3	22	25	9
Thorne (BSR)	22	11	24	2	23	3
A91-701007	4	28	10	16	1	22
A91-701035	29	31	24	10	8	7
A91-702022	33	7	22	28	19	24
C1832	13	13	7	25	16	13
C1842	12	27	2	32	30	5
HC87-173 (dtl)	20	23	15	29	26	2
HC88-11 (dtl)	8	19	18	31	6	26
HC88-1021 (dtl)	32	26	23	27	14	32
HC89-50 (dtl)	6	15	26	24	13	33
HC89-62 (dtl)	18	30	28	30	7	4
HC89-2237	13	4	33	14	32	25
HC89-2241	16	3	34	12	28	34
HM9189	23	25	11	7	15	18
HM9194	2	12	12	11	22	30
HS90-3449	7	33	5	9	3	10
LN88-10534	3	4	13	26	9	6
LN89-295	1	1	1	15	20	11
LN89-764	23	9	18	5	11	19
K1230	34	21	29	5	4	20
K1232	5	2	30	16	34	15
SL89-314	16	17	14	33	29	29
SL89-1040	26	22	20	13	31	27
SL89-1825	27	32	31	16	20	21
U90-2310	10	16	27	23	2	17
U91-3133	13	6	17	20	24	27
U91-3212	25	14	8	1	5	15
U91-3516	10	24	21	4	27	23
U91-3607	21	9	9	8	17	13
U91-3610	31	8	6	3	11	31

UNIFORM TEST III, 1993

YIELD RANK

Strain	Hoyt-ville OH	Mt. Orab OH	So. Charl-eston OH	Landis-ville PA	Elk Point SD
Charleston(dtl)	12	13	30	25	18
Flyer (IV)	1	15	5	11	20
IA2007 (II)	17	33	27	32	12
Resnik (III)	7	3	23	33	29
Thorne (BSR)	23	29	1	28	24
A91-701007	28	11	24	26	8
A91-701035	29	23	4	19	10
A91-702022	31	28	12	31	12
C1832	8	24	10	24	19
C1842	14	10	9	29	23
HC87-173 (dtl)	21	6	29	17	9
HC88-11 (dtl)	9	4	32	15	20
HC88-1021 (dtl)	20	5	33	30	15
HC89-50 (dtl)	4	1	31	20	33
HC89-62 (dtl)	26	2	16	21	20
HC89-2237	32	25	22	22	31
HC89-2241	27	34	26	8	32
HM9189	2	7	2	14	17
HM9194	11	15	20	16	25
HS90-3449	33	11	19	12	16
LN88-10534	15	8	15	10	2
LN89-295	16	26	3	13	14
LN89-764	19	19	13	7	5
K1230	3	21	7	6	4
K1232	25	31	21	1	33
SL89-314	6	9	14	2	30
SL89-1040	24	27	17	3	28
SL89-1825	33	30	6	27	26
U90-2310	22	32	34	33	1
U91-3133	12	20	8	23	27
U91-3212	5	22	28	18	7
U91-3516	29	13	25	9	6
U91-3607	10	18	18	4	3
U91-3610	18	17	11	5	10

UNIFORM TEST III, 1993

MATURITY (date)

Strain	Mean 20 Tests	George-town DE	Fair field IA	Gris-wold IA	Stuart IA	Newton IL	Ridg-way IL
Charleston(dtl)	4.8		3	3		6	3
Flyer (IV)	5.7		5	4		5	4
IA2007 (II)	-4.5		-5	-5		-7	-8
Resnik (III)	09/22		09/26	10/05		09/17	09/09
Thorne (BSR)	1.9		1	2		2	1
A91-701007	-0.4		-1	-1		-1	-3
A91-701035	1.9		2	-1		1	0
A91-702022	2.3		1	1		1	1
C1832	3.3		2	2		4	3
C1842	5.4		4	3		5	7
HC87-173 (dtl)	5.6		3	4		1	6
HC88-11 (dtl)	3.4		2	0		-2	2
HC88-1021 (dtl)	3.6		2	2		0	5
HC89-50 (dtl)	2.3		3	3		-2	0
HC89-62 (dtl)	3.7		2	2		-1	4
HC89-2237	4.8		4	2		5	6
HC89-2241	5.4		5	4		6	8
HM9189	2.6		2	2		0	3
HM9194	4.6		4	3		4	4
HS90-3449	1.6		-1	0		0	4
LN88-10534	0.5		0	-1		-1	0
LN89-295	4.8		3	3		8	8
LN89-764	0.8		0	-3		0	4
K1230	4.2		3	2		4	8
K1232	9.0		7	5		13	11
SL89-314	5.0		5	4		6	8
SL89-1040	5.0		4	3		6	4
SL89-1825	4.4		3	1		4	4
U90-2310	0.6		0	-2		0	2
U91-3133	3.8		1	2		4	3
U91-3212	3.2		2	3		-2	6
U91-3516	5.4		4	2		6	8
U91-3607	4.6		2	2		6	3
U91-3610	4.6		5	1		4	7
Date Planted	05/22		05/20	06/10		05/21	05/26
Days to Mature	122.8		129	117		119	106

UNIFORM TEST III, 1993

MATURITY (date)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Charleston(dtl)	9	3	8	13	7		2	8
Flyer (IV)	7	7	10	7	7		5	8
IA2007 (II)	-6	0	-5	1	-5		-6	-7
Resnik (III)	09/25	09/22	09/22	09/20	09/18		09/22	09/12
Thorne (BSR)	2	3	3	11	3		2	2
A91-701007	0	1	1	5	3		1	-2
A91-701035	2	4	2	4	5		0	7
A91-702022	3	5	2	11	3		3	1
C1832	6	3	9	7	5		4	4
C1842	7	4	10	8	8		5	8
HC87-173 (dtl)	10	7	11	12	6		3	8
HC88-11 (dtl)	0	7	5	9	5		-1	10
HC88-1021 (dtl)	6	4	7	5	6		0	8
HC89-50 (dtl)	0	5	3	3	0		0	4
HC89-62 (dtl)	0	6	4	7	6		0	8
HC89-2237	6	7	10	8	5		5	7
HC89-2241	6	9	10	7	6		5	7
HM9189	3	2	4	6	2		2	7
HM9194	5	6	7	4	5		3	7
HS90-3449	2	1	2	6	4		3	3
LN88-10534	1	1	0	5	-3		0	4
LN89-295	7	8	9	9	7		4	8
LN89-764	1	1	1	1	2		1	2
K1230	4	5	5	8	10		4	8
K1232	10	11	11	9	14		12	9
SL89-314	6	6	10	7	6		4	8
SL89-1040	6	5	9	10	8		3	8
SL89-1825	8	5	9	9	8		1	8
U90-2310	2	2	-1	11	5		1	5
U91-3133	4	6	6	14	6		4	8
U91-3212	0	5	5	10	7		2	8
U91-3516	4	9	9	8	10		8	8
U91-3607	6	7	6	8	9		6	5
U91-3610	6	7	8	5	7		2	8
Date Planted	05/14	05/17	05/12	05/27	05/21		05/17	05/21
Days to Mature	134	128	133	116	120		128	114

UNIFORM TEST III, 1993

MATURITY (date)

Strain	Queens-town MD	Colum-bia MO	David City NE	Falls City NE	Tekamah NE	Adel-phia NJ
Charleston(dtl)	-1	3	5		4	6
Flyer (IV)	0	3	5		4	5
IA2007 (II)	-3	-3	-2		-6	-2
Resnik (III)	09/28	09/20	10/03		10/02	09/25
Thorne (BSR)	-1	1	0		1	0
A91-701007	-2	1	1		0	1
A91-701035	-2	2	1		3	2
A91-702022	1	0	0		1	4
C1832	0	1	2		2	3
C1842	1	3	4		3	7
HC87-173 (dtl)	-1	3	6		4	8
HC88-11 (dtl)	1	2	4		2	8
HC88-1021 (dtl)	-2	4	3		4	5
HC89-50 (dtl)	-1	2	4		5	5
HC89-62 (dtl)	-1	2	4		2	8
HC89-2237	-2	2	4		4	6
HC89-2241	-3	3	5		4	4
HM9189	-1	2	2		2	3
HM9194	-1	3	4		3	6
HS90-3449	0	1	0		0	2
LN88-10534	-1	1	0		-1	1
LN89-295	0	3	1		0	3
LN89-764	-3	2	1		3	0
K1230	-1	2	2		2	2
K1232	-1	6	6		5	7
SL89-314	-3	3	5		3	5
SL89-1040	-1	3	3		3	5
SL89-1825	-1	1	5		3	5
U90-2310	0	1	-1		0	2
U91-3133	-1	2	1		2	1
U91-3212	1	3	3		1	3
U91-3516	2	3	5		4	3
U91-3607	1	3	2		3	4
U91-3610	1	3	4		3	5
Date Planted	05/25	05/27	06/08		05/20	06/07
Days to Mature	126	116	117		135	110

UNIFORM TEST III, 1993

MATURITY (date)

Strain	Hoyt-ville OH	Mt. Orab OH	So. Charl-eston OH	Landis-ville PA	Elk Point SD
Charleston(dtl)	1	6	3	4	
Flyer (IV)	6	8	6	7	
IA2007 (II)	-6	-5	-3	-7	
Resnik (III)	09/27	09/08	09/15	09/27	
Thorne (BSR)	-2	3	3	0	
A91-701007	-2	-2	0	-7	
A91-701035	3	4	1	-3	
A91-702022	0	4	1	2	
C1832	0	5	1	2	
C1842	3	5	3	9	
HC87-173 (dtl)	3	7	3	7	
HC88-11 (dtl)	0	2	5	7	
HC88-1021 (dtl)	1	5	2	4	
HC89-50 (dtl)	4	4	2	2	
HC89-62 (dtl)	6	4	3	7	
HC89-2237	3	5	5	4	
HC89-2241	4	5	6	7	
HM9189	1	4	2	4	
HM9194	7	6	5	7	
HS90-3449	-1	5	0	0	
LN88-10534	-1	4	1	0	
LN89-295	2	6	3	4	
LN89-764	2	0	0	0	
K1230	2	5	2	7	
K1232	9	12	13	11	
SL89-314	1	6	2	7	
SL89-1040	5	5	4	7	
SL89-1825	2	5	7	0	
U90-2310	-2	-5	-2	-7	
U91-3133	1	5	5	2	
U91-3212	2	0	1	4	
U91-3516	2	2	2	9	
U91-3607	3	4	5	7	
U91-3610	2	2	2	9	
Date Planted	05/19	05/07	05/07	05/24	
Days to Mature	131	124	131	126	

UNIFORM TEST III, 1993

LODGING (score)

Strain	Mean 25 Tests	George-town DE	Fair field IA	Gris-wold IA	Stuart IA	Newton IL	Ridg-way IL
Charleston(dtl)	1.6	1.0	1.5	2.1	2.6	1.0	1.0
Flyer (IV)	1.5	1.0	1.2	1.5	1.9	1.5	1.3
IA2007 (II)	1.3	1.0	1.2	2.1	1.2	1.0	1.0
Resnik (III)	1.4	1.0	1.2	1.7	1.5	1.2	1.2
Thorne (BSR)	1.6	1.0	1.5	1.8	1.8	1.5	1.8
A91-701007	1.4	1.0	1.2	2.0	1.7	1.2	1.5
A91-701035	1.2	1.0	1.2	1.5	1.4	1.0	1.2
A91-702022	1.6	1.0	1.1	2.0	1.8	1.2	1.2
C1832	1.6	1.0	1.3	1.5	2.0	1.5	1.7
C1842	1.4	1.0	1.2	1.6	2.1	1.2	1.5
HC87-173 (dtl)	1.3	1.0	1.3	1.9	2.3	1.0	1.0
HC88-11 (dtl)	1.8	1.0	1.2	3.1	2.2	1.0	1.0
HC88-1021 (dtl)	1.4	1.0	1.3	2.2	2.5	1.0	1.0
HC89-50 (dtl)	1.7	1.0	1.3	2.7	2.3	1.0	1.0
HC89-62 (dtl)	1.4	1.0	1.2	2.3	1.8	1.0	1.0
HC89-2237	1.7	1.0	1.1	1.7	1.8	1.5	1.3
HC89-2241	1.8	1.0	1.5	1.6	2.1	1.2	1.3
HM9189	1.4	1.0	1.1	1.6	1.5	1.0	1.0
HM9194	1.5	1.0	1.4	1.5	1.7	1.5	1.7
HS90-3449	1.6	1.0	1.2	2.0	1.8	1.2	1.7
LN88-10534	1.5	1.0	1.1	1.7	1.7	1.5	1.5
LN89-295	1.6	1.0	1.3	1.5	1.8	1.3	1.5
LN89-764	1.2	1.0	1.1	1.6	1.5	1.0	1.0
K1230	1.8	1.0	1.1	2.1	1.9	1.3	1.5
K1232	1.8	1.0	1.3	1.6	1.6	1.3	1.7
SL89-314	1.7	1.0	1.4	1.8	1.7	1.5	1.7
SL89-1040	1.9	1.0	1.5	2.3	2.1	1.5	1.5
SL89-1825	1.6	1.0	1.5	1.9	1.5	1.7	1.5
U90-2310	2.0	1.0	1.6	3.6	2.1	1.7	1.8
U91-3133	1.9	1.0	1.4	2.4	2.0	1.7	1.8
U91-3212	2.0	1.0	1.7	2.0	1.6	1.7	1.7
U91-3516	1.8	1.0	1.4	2.4	1.5	1.3	1.8
U91-3607	1.6	1.0	1.3	1.9	1.5	1.5	1.3
U91-3610	1.7	1.0	1.4	2.1	1.7	1.5	1.7

UNIFORM TEST III, 1993

LODGING (score)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Charleston(dtl)	1.0	1.2	1.0	3.2	2.0	1.0	1.0	1.7
Flyer (IV)	1.7	1.0	1.7	2.3	2.0	1.0	1.0	1.7
IA2007 (II)	1.0	1.0	1.5	2.2	2.0	1.0	1.0	1.2
Resnik (III)	1.0	1.0	1.5	2.0	2.0	1.0	1.0	1.5
Thorne (BSR)	1.3	1.0	1.8	3.7	2.0	1.0	1.0	1.7
A91-701007	1.0	1.0	2.3	2.2	2.0	1.0	1.0	1.3
A91-701035	1.0	1.0	1.2	1.2	2.0	1.0	1.0	1.5
A91-702022	1.3	1.0	2.5	4.0	3.0	1.0	1.0	1.5
C1832	1.7	1.0	2.2	2.8	3.0	1.0	1.0	2.0
C1842	1.3	1.2	1.7	1.7	3.0	1.0	1.0	1.8
HC87-173 (dtl)	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.8
HC88-11 (dtl)	1.0	1.5	1.2	1.0	4.0	1.0	1.0	2.8
HC88-1021 (dtl)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.8
HC89-50 (dtl)	1.0	1.2	1.0	1.0	4.0	1.0	1.0	2.2
HC89-62 (dtl)	1.0	1.0	1.0	1.0	3.0	1.0	1.0	1.7
HC89-2237	1.3	1.3	2.2	3.0	3.0	1.0	1.0	1.7
HC89-2241	1.3	1.5	2.5	1.8	3.0	1.0	1.0	2.7
HM9189	1.3	1.0	1.2	2.8	2.0	1.0	1.0	1.5
HM9194	1.7	1.2	1.7	1.5	2.0	1.0	1.0	1.5
HS90-3449	1.3	1.2	2.0	1.8	2.0	1.0	1.0	2.0
LN88-10534	1.0	1.0	2.2	1.8	2.0	1.0	1.0	1.7
LN89-295	1.3	1.0	1.8	3.0	2.0	1.0	1.0	1.7
LN89-764	1.0	1.2	1.3	1.0	2.0	1.0	1.0	1.5
K1230	1.7	1.2	2.5	4.2	3.0	1.0	1.0	2.3
K1232	1.7	1.0	2.7	3.2	3.0	1.0	1.0	2.8
SL89-314	1.7	1.3	2.2	3.2	3.0	1.0	1.0	2.0
SL89-1040	1.7	1.2	3.3	3.8	3.0	1.0	1.0	1.8
SL89-1825	1.7	1.0	1.8	3.2	1.0	1.0	1.0	2.3
U90-2310	2.0	1.5	3.0	4.2	3.0	1.0	1.0	1.7
U91-3133	2.0	1.3	2.2	4.3	3.0	1.0	1.0	2.0
U91-3212	2.7	1.2	3.2	3.2	3.0	1.0	1.0	2.5
U91-3516	2.0	1.3	2.3	2.0	3.0	1.0	1.0	1.8
U91-3607	1.0	1.0	2.3	2.3	3.0	1.0	1.0	2.2
U91-3610	2.0	1.3	3.0	1.3	2.0	1.0	1.0	1.7

UNIFORM TEST III, 1993

LODGING (score)

Strain	Queens-town MD	Colum-bia MO	David City NE	Falls City NE	Tekamah NE	Adel-phia NJ
Charleston(dtl)	1.8	1.5	1.0	1.0	3.0	2.0
Flyer (IV)	1.8	2.0	1.0	1.0	2.7	2.0
IA2007 (II)	1.2	1.3	1.0	1.0	2.7	1.0
Resnik (III)	2.0	2.0	1.0	1.0	2.7	1.7
Thorne (BSR)	1.5	1.8	1.0	1.0	2.3	3.3
A91-701007	1.7	1.3	1.0	1.0	3.0	1.3
A91-701035	1.0	1.3	1.0	1.0	2.0	1.0
A91-702022	1.7	2.3	1.0	1.0	2.3	1.3
C1832	1.3	2.2	1.0	1.0	2.3	2.7
C1842	1.2	1.8	1.0	1.0	2.7	1.0
HC87-173 (dtl)	1.3	1.0	1.0	1.0	3.0	1.7
HC88-11 (dtl)	2.8	1.0	1.0	1.0	3.0	3.7
HC88-1021 (dtl)	2.3	1.0	1.0	1.0	2.7	1.3
HC89-50 (dtl)	2.0	1.0	1.0	1.0	3.3	3.0
HC89-62 (dtl)	1.3	1.0	1.0	1.0	2.3	2.3
HC89-2237	2.5	2.3	1.0	1.0	2.3	3.7
HC89-2241	2.7	2.3	1.0	1.0	3.0	3.0
HM9189	1.5	2.1	1.0	1.0	2.3	2.7
HM9194	1.7	2.0	1.0	1.0	2.7	1.7
HS90-3449	1.8	2.3	1.0	1.0	2.7	3.0
LN88-10534	2.0	2.0	1.0	1.0	3.0	2.0
LN89-295	2.2	1.9	1.0	1.0	2.3	3.3
LN89-764	1.2	1.3	1.0	1.0	2.7	1.0
K1230	2.2	2.0	1.0	1.0	2.7	2.3
K1232	2.0	2.3	1.0	1.0	2.7	2.0
SL89-314	2.2	2.2	1.0	1.0	3.0	2.0
SL89-1040	2.0	2.0	1.0	1.0	2.7	2.0
SL89-1825	1.7	1.6	1.0	1.0	3.0	2.3
U90-2310	2.3	2.7	1.0	1.0	3.0	3.3
U91-3133	1.7	2.5	1.0	1.0	2.7	3.0
U91-3212	2.0	2.2	1.0	1.0	4.0	3.7
U91-3516	2.2	2.2	1.0	1.0	3.0	3.7
U91-3607	2.2	1.9	1.0	1.0	2.7	1.7
U91-3610	2.0	2.3	1.0	1.0	2.7	3.3

UNIFORM TEST III, 1993

LODGING (score)

Strain	Hoyt-ville OH	Mt. Orab OH	So. Charl-eston OH	Landis-ville PA	Elk Point SD
Charleston(dtl)	1.4	1.1	2.3	2.0	1.0
Flyer (IV)	1.2	1.4	1.3	2.0	1.0
IA2007 (II)	1.0	1.4	1.5	1.0	1.0
Resnik (III)	1.2	1.0	1.0	1.3	1.0
Thorne (BSR)	1.1	1.4	1.5	2.0	1.0
A91-701007	1.2	1.5	1.3	1.0	1.0
A91-701035	1.2	1.1	1.0	1.0	1.0
A91-702022	1.2	1.6	1.5	1.7	1.0
C1832	1.2	1.8	1.5	1.3	1.0
C1842	1.0	1.2	1.2	1.0	1.0
HC87-173 (dtl)	1.2	1.0	1.3	1.7	1.0
HC88-11 (dtl)	1.3	1.7	3.5	2.3	1.0
HC88-1021 (dtl)	1.2	1.3	1.7	1.3	1.0
HC89-50 (dtl)	1.3	1.7	3.0	1.7	1.0
HC89-62 (dtl)	1.1	1.4	1.3	1.3	1.0
HC89-2237	1.2	1.9	1.5	1.7	1.0
HC89-2241	1.3	1.8	1.3	2.3	1.0
HM9189	1.2	1.2	1.3	1.7	1.0
HM9194	1.3	1.3	1.5	2.0	1.0
HS90-3449	1.3	1.9	1.3	2.0	1.0
LN88-10534	1.3	2.0	1.5	1.7	1.0
LN89-295	1.2	1.4	1.0	2.0	1.0
LN89-764	1.2	1.2	1.3	1.0	1.0
K1230	1.2	2.8	1.7	2.3	1.0
K1232	1.2	1.5	1.7	2.7	1.0
SL89-314	1.2	1.8	1.5	2.3	1.0
SL89-1040	1.2	2.8	1.8	2.7	1.0
SL89-1825	1.2	1.5	1.7	1.7	1.0
U90-2310	1.2	2.1	2.0	2.0	1.0
U91-3133	1.2	1.9	2.2	2.0	1.0
U91-3212	1.2	2.0	2.2	1.3	1.0
U91-3516	1.2	1.8	2.7	2.0	1.0
U91-3607	1.2	2.2	1.3	2.7	1.0
U91-3610	1.2	1.3	1.5	2.7	1.0

UNIFORM TEST III, 1993

PLANT HEIGHT (inches)

Strain	Mean 25 Tests	George-town DE	Fair field IA	Gris-wold IA	Stuart IA	Newton IL	Ridg-way IL
Charleston(dtl)	23	12	28	29	24	22	23
Flyer (IV)	32	12	36	36	31	36	38
IA2007 (II)	28	11	34	34	23	31	27
Resnik (III)	30	14	35	35	28	35	35
Thorne (BSR)	30	12	35	35	29	35	35
A91-701007	32	13	33	37	29	37	39
A91-701035	26	9	32	34	25	30	29
A91-702022	31	11	32	34	30	34	35
C1832	32	16	35	36	30	35	36
C1842	33	13	38	36	33	36	39
HC87-173 (dtl)	23	15	25	31	25	22	22
HC88-11 (dtl)	26	15	28	29	28	23	24
HC88-1021 (dtl)	24	13	28	29	27	21	22
HC89-50 (dtl)	24	14	27	25	24	22	19
HC89-62 (dtl)	24	13	24	24	25	21	19
HC89-2237	34	16	34	37	29	40	37
HC89-2241	34	15	36	36	31	38	37
HM9189	30	13	34	35	28	30	34
HM9194	32	13	38	36	28	36	38
HS90-3449	32	13	34	35	30	36	38
LN88-10534	32	12	35	35	29	38	37
LN89-295	31	12	32	34	27	35	38
LN89-764	29	12	32	34	26	32	36
K1230	31	14	32	34	30	36	35
K1232	33	12	38	36	29	38	39
SL89-314	34	13	34	37	30	36	37
SL89-1040	31	15	34	34	31	36	36
SL89-1825	32	12	36	37	28	39	36
U90-2310	32	14	35	33	27	37	38
U91-3133	32	10	35	35	32	36	37
U91-3212	32	13	37	32	30	37	39
U91-3516	32	14	35	35	28	38	35
U91-3607	32	13	39	34	27	38	38
U91-3610	32	15	36	36	29	38	37

UNIFORM TEST III, 1993

PLANT HEIGHT (inches)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Charleston(dtl)	27	24	23	29	25	19	20	25
Flyer (IV)	39	34	34	34	39	23	31	30
IA2007 (II)	37	26	32	37	32	15	26	24
Resnik (III)	37	28	34	39	34	23	26	28
Thorne (BSR)	38	26	35	37	38	20	28	24
A91-701007	42	27	36	40	36	21	30	26
A91-701035	35	22	33	34	23	18	24	22
A91-702022	38	30	36	45	36	21	25	28
C1832	40	29	37	42	37	21	27	28
C1842	42	29	38	38	38	24	29	28
HC87-173 (dtl)	26	23	21	27	25	19	19	25
HC88-11 (dtl)	26	26	26	34	30	20	19	28
HC88-1021 (dtl)	25	22	21	28	25	20	17	26
HC89-50 (dtl)	27	26	25	28	29	19	18	25
HC89-62 (dtl)	27	23	24	26	28	17	19	25
HC89-2237	41	30	35	41	38	26	30	34
HC89-2241	42	31	36	38	40	26	31	32
HM9189	39	29	33	41	34	23	28	28
HM9194	38	30	35	37	37	22	27	31
HS90-3449	41	32	35	39	37	23	29	31
LN88-10534	41	26	35	37	40	22	30	31
LN89-295	39	29	34	41	39	20	28	27
LN89-764	38	27	32	38	34	19	27	25
K1230	38	26	36	43	38	21	27	30
K1232	44	29	38	40	40	21	33	31
SL89-314	38	31	37	43	39	22	32	34
SL89-1040	38	24	32	38	36	22	25	28
SL89-1825	41	27	34	43	40	20	30	34
U90-2310	40	26	39	40	37	23	28	31
U91-3133	39	31	34	43	36	23	37	28
U91-3212	42	26	38	35	38	21	31	30
U91-3516	43	28	34	35	38	22	31	30
U91-3607	39	30	35	37	40	21	28	29
U91-3610	41	29	37	37	38	22	28	32

UNIFORM TEST III, 1993

PLANT HEIGHT (inches)

Strain	Queens-town MD	Colum-bia MO	David City NE	Falls City NE	Tekamah NE	Adel-phia NJ
Charleston(dtl)	18	21	25	21	29	22
Flyer (IV)	22	27	35	30	39	32
IA2007 (II)	20	19	30	26	37	27
Resnik (III)	22	27	33	29	37	31
Thorne (BSR)	22	24	34	31	40	31
A91-701007	24	26	34	32	38	32
A91-701035	17	21	27	25	37	27
A91-702022	24	28	31	28	40	31
C1832	22	30	34	32	38	32
C1842	23	29	35	32	43	33
HC87-173 (dtl)	18	14	27	18	28	22
HC88-11 (dtl)	22	18	32	22	33	29
HC88-1021 (dtl)	19	19	29	24	30	27
HC89-50 (dtl)	18	20	29	24	31	26
HC89-62 (dtl)	17	16	29	23	33	25
HC89-2237	29	31	36	33	39	34
HC89-2241	29	31	36	37	41	32
HM9189	22	24	32	28	39	31
HM9194	25	29	35	31	39	32
HS90-3449	26	25	35	31	40	32
LN88-10534	26	26	34	30	42	35
LN89-295	25	29	29	30	39	28
LN89-764	21	23	32	32	39	26
K1230	22	25	29	33	36	30
K1232	28	30	36	34	42	35
SL89-314	28	28	37	36	43	34
SL89-1040	23	28	34	32	37	29
SL89-1825	26	23	36	31	39	33
U90-2310	26	32	32	32	41	31
U91-3133	24	29	34	29	39	30
U91-3212	25	31	36	32	38	31
U91-3516	25	27	33	32	41	30
U91-3607	25	26	34	32	42	31
U91-3610	23	27	37	33	39	33

UNIFORM TEST III, 1993

PLANT HEIGHT (inches)

Strain	Hoyt-ville OH	Mt. Orab OH	So. Charl-eston OH	Landis-ville PA	Elk Point SD
Charleston(dtl)	22	23	26	20	29
Flyer (IV)	29	34	40	26	37
IA2007 (II)	24	32	37	22	30
Resnik (III)	26	33	37	23	30
Thorne (BSR)	25	29	37	24	32
A91-701007	26	34	39	23	39
A91-701035	21	25	33	19	26
A91-702022	26	31	38	23	36
C1832	27	33	37	21	35
C1842	27	33	40	23	38
HC87-173 (dtl)	20	23	26	20	30
HC88-11 (dtl)	26	33	30	24	34
HC88-1021 (dtl)	24	27	28	20	35
HC89-50 (dtl)	27	28	30	20	31
HC89-62 (dtl)	24	30	29	20	31
HC89-2237	28	36	41	26	40
HC89-2241	30	33	37	28	41
HM9189	26	32	36	22	36
HM9194	27	31	37	27	35
HS90-3449	26	34	38	25	34
LN88-10534	24	34	40	26	37
LN89-295	26	33	37	23	37
LN89-764	23	27	34	20	31
K1230	27	36	37	27	36
K1232	27	33	41	28	35
SL89-314	28	36	39	32	39
SL89-1040	24	35	38	28	38
SL89-1825	26	37	39	23	36
U90-2310	26	36	37	23	36
U91-3133	27	31	34	23	34
U91-3212	26	35	37	25	39
U91-3516	27	34	38	28	37
U91-3607	26	33	38	25	36
U91-3610	28	32	41	26	37

UNIFORM TEST III, 1993

SEED QUALITY (score)

Strain	Mean 23 Tests	George-town DE	Fair field IA	Gris-wold IA	Stuart IA	Newton IL	Ridg-way IL
Charleston(dtl)	1.6		1.5	1.0	2.5	1.5	2.2
Flyer (IV)	1.6		1.0	1.0	2.0	1.7	3.0
IA2007 (II)	2.1		1.5	1.0	1.5	2.3	3.7
Resnik (III)	1.6		1.0	1.0	1.0	1.5	2.2
Thorne (BSR)	1.8		1.0	1.0	1.0	1.8	3.0
A91-701007	1.8		2.0	1.0	1.0	2.0	3.3
A91-701035	1.7		1.0	1.0	1.0	1.8	2.7
A91-702022	1.9		1.0	1.0	1.5	1.7	3.3
C1832	1.8		1.0	1.0	1.0	1.5	3.2
C1842	1.7		2.0	1.0	2.0	1.5	3.0
HC87-173 (dtl)	1.6		1.5	1.5	1.5	1.5	2.3
HC88-11 (dtl)	1.8		2.0	1.0	1.0	2.0	2.0
HC88-1021 (dtl)	1.6		1.5	1.0	2.0	2.0	2.5
HC89-50 (dtl)	1.7		1.0	1.0	1.0	1.5	2.7
HC89-62 (dtl)	1.8		1.5	1.0	1.5	2.0	2.2
HC89-2237	1.6		1.0	1.0	1.5	1.5	3.0
HC89-2241	1.6		1.5	1.0	1.5	2.2	2.8
HM9189	1.6		1.0	1.0	1.5	1.7	2.7
HM9194	1.5		1.0	1.0	1.5	1.5	2.7
HS90-3449	1.6		1.0	1.0	1.0	1.7	2.8
LN88-10534	1.6		1.0	1.0	1.0	1.8	2.7
LN89-295	1.6		1.0	1.0	1.0	1.7	2.5
LN89-764	1.5		1.5	1.0	1.0	2.0	2.7
K1230	1.8		1.5	1.0	1.5	1.5	2.5
K1232	1.7		2.0	1.0	1.5	1.7	3.2
SL89-314	1.7		1.5	1.0	1.0	1.5	3.0
SL89-1040	2.0		2.0	1.0	1.5	1.8	2.8
SL89-1825	1.8		1.5	1.0	1.0	1.8	2.5
U90-2310	2.0		2.0	1.0	1.0	2.2	2.5
U91-3133	1.5		1.0	1.0	1.0	1.7	2.7
U91-3212	1.9		1.0	1.0	1.0	2.0	2.3
U91-3516	1.7		1.0	1.0	1.0	1.7	2.2
U91-3607	2.0		1.5	1.0	1.0	1.8	2.5
U91-3610	1.8		1.0	1.0	1.5	1.8	2.3

UNIFORM TEST III, 1993

SEED QUALITY (score)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Charleston(dtl)	1.5	1.0	1.0	1.0	2.0		2.0	2.0
Flyer (IV)	1.5	1.0	1.0	2.0	2.0		1.0	2.0
IA2007 (II)	2.0	1.0	1.0	3.0	3.0		3.0	2.0
Resnik (III)	1.7	1.0	1.0	1.0	2.0		2.0	2.0
Thorne (BSR)	1.5	1.0	1.0	2.0	3.0		2.0	2.0
A91-701007	1.5	1.0	1.0	1.0	2.0		4.0	3.0
A91-701035	1.5	1.0	1.0	2.0	2.0		3.0	2.0
A91-702022	1.5	1.0	1.0	3.0	2.0		3.0	2.0
C1832	1.5	1.0	1.0	2.0	2.0		2.0	2.0
C1842	1.8	1.0	1.0	2.0	2.0		2.0	1.0
HC87-173 (dtl)	1.5	1.0	1.0	2.0	2.0		2.0	1.0
HC88-11 (dtl)	1.8	1.0	1.0	3.0	3.0		2.0	2.0
HC88-1021 (dtl)	1.4	1.0	1.0	1.0	2.0		3.0	1.0
HC89-50 (dtl)	1.4	1.0	1.0	2.0	3.0		3.0	2.0
HC89-62 (dtl)	1.5	1.0	1.0	2.0	3.0		3.0	2.0
HC89-2237	1.5	1.0	1.0	2.0	2.0		2.0	1.0
HC89-2241	1.5	1.0	1.0	1.0	2.0		1.0	2.0
HM9189	1.5	1.0	1.0	1.0	2.0		2.0	2.0
HM9194	1.7	1.0	1.0	1.0	2.0		1.0	2.0
HS90-3449	1.7	1.0	1.0	2.0	2.0		2.0	1.0
LN88-10534	1.2	1.0	1.0	2.0	2.0		2.0	2.0
LN89-295	1.7	1.0	1.0	2.0	2.0		2.0	2.0
LN89-764	1.5	1.0	1.0	1.0	2.0		2.0	1.0
K1230	1.8	1.0	1.0	3.0	2.0		2.0	2.0
K1232	1.5	1.0	1.0	2.0	2.0		2.0	2.0
SL89-314	2.0	1.0	1.0	2.0	2.0		2.0	2.0
SL89-1040	2.3	1.0	1.0	3.0	2.0		3.0	2.0
SL89-1825	2.0	1.0	1.0	3.0	3.0		2.0	2.0
U90-2310	2.3	1.0	1.0	3.0	3.0		4.0	2.0
U91-3133	1.5	1.0	1.0	2.0	2.0		2.0	2.0
U91-3212	2.5	1.0	1.0	4.0	3.0		3.0	2.0
U91-3516	2.2	2.0	1.0	3.0	2.0		2.0	2.0
U91-3607	2.0	2.0	1.0	3.0	3.0		3.0	2.0
U91-3610	2.0	2.0	1.0	3.0	2.0		2.0	2.0

UNIFORM TEST III, 1993

SEED QUALITY (score)

Strain	Queens-town MD	Colum-bia MO	David City NE	Falls City NE	Tekamah NE	Adel-phia NJ
Charleston(dtl)	2.2	3.0	1.0	1.7	1.0	1.0
Flyer (IV)	1.3	3.0	1.0	1.0	1.0	1.0
IA2007 (II)	4.0	3.0	1.3	2.0	1.0	2.7
Resnik (III)	2.0	2.0	1.0	1.3	1.3	1.0
Thorne (BSR)	3.0	3.0	1.0	1.0	1.0	1.7
A91-701007	2.8	2.0	1.0	1.3	1.0	1.0
A91-701035	3.5	1.0	1.0	1.3	1.0	1.3
A91-702022	3.2	3.0	1.3	1.3	1.0	1.7
C1832	3.2	3.0	1.0	1.3	1.0	1.3
C1842	2.8	2.0	1.0	1.0	1.3	1.0
HC87-173 (dtl)	3.0	2.0	1.0	1.3	1.0	1.3
HC88-11 (dtl)	2.7	3.0	1.0	1.3	1.0	1.0
HC88-1021 (dtl)	2.2	2.0	1.0	1.0	1.0	1.7
HC89-50 (dtl)	2.5	2.0	1.0	1.0	1.0	1.0
HC89-62 (dtl)	2.0	2.0	1.0	1.3	1.0	2.3
HC89-2237	1.8	2.0	1.0	1.0	1.0	1.7
HC89-2241	1.7	3.0	1.0	1.3	1.0	1.3
HM9189	1.8	3.0	1.0	1.0	1.0	1.0
HM9194	1.7	2.0	1.0	1.3	1.0	1.0
HS90-3449	1.5	3.0	1.3	1.0	1.0	1.3
LN88-10534	2.0	2.0	1.0	1.0	1.0	1.0
LN89-295	1.7	2.0	1.0	1.0	1.0	1.0
LN89-764	2.0	1.0	1.0	1.0	1.0	1.3
K1230	3.2	2.0	1.0	1.3	1.0	1.3
K1232	2.3	2.0	1.3	1.0	1.0	1.7
SL89-314	2.7	2.0	1.0	1.0	1.0	1.0
SL89-1040	3.7	4.0	1.0	1.0	1.0	1.0
SL89-1825	3.0	3.0	1.0	1.0	1.0	1.0
U90-2310	2.8	2.0	1.0	1.3	1.0	2.3
U91-3133	1.7	2.0	1.0	1.0	1.0	1.0
U91-3212	3.2	2.0	1.0	1.3	1.0	1.3
U91-3516	2.2	2.0	1.0	1.7	1.0	1.0
U91-3607	3.5	3.0	1.0	1.3	1.0	1.3
U91-3610	2.2	3.0	1.0	1.0	1.0	1.0

UNIFORM TEST III, 1993

SEED QUALITY (score)

Strain	Hoyt-ville OH	Mt. Orab OH	So. Charl-eston OH	Landis-ville PA	Elk Point SD
Charleston(dtl)	1.0	1.3	2.0	2.0	2.0
Flyer (IV)	1.2	1.2	2.2	2.5	3.0
IA2007 (II)	1.4	1.4	2.2	1.5	2.0
Resnik (III)	1.2	1.1	2.1	2.5	3.0
Thorne (BSR)	1.2	1.1	2.5	2.0	3.0
A91-701007	1.2	1.3	2.1	2.0	2.0
A91-701035	1.2	1.4	2.0	3.0	2.0
A91-702022	1.3	1.3	2.3	2.5	2.0
C1832	1.3	1.3	2.3	2.5	3.0
C1842	1.2	1.5	2.3	2.5	2.0
HC87-173 (dtl)	1.2	1.6	2.1	2.5	2.0
HC88-11 (dtl)	1.2	1.4	2.3	3.0	2.0
HC88-1021 (dtl)	1.2	1.4	2.0	2.5	2.0
HC89-50 (dtl)	1.0	1.6	2.3	2.0	3.0
HC89-62 (dtl)	1.3	1.6	2.1	2.5	2.0
HC89-2237	1.4	1.1	2.2	2.0	2.0
HC89-2241	1.2	1.2	2.3	2.0	2.0
HM9189	1.2	1.2	2.1	2.0	2.0
HM9194	1.2	1.0	2.1	2.0	2.0
HS90-3449	1.3	1.4	2.4	2.5	2.0
LN88-10534	1.3	1.4	2.3	2.0	2.0
LN89-295	1.2	1.4	2.3	3.0	2.0
LN89-764	1.2	1.1	2.4	2.5	2.0
K1230	1.2	1.6	2.3	3.0	2.0
K1232	1.2	1.4	3.2	2.0	2.0
SL89-314	1.3	1.5	2.2	2.0	3.0
SL89-1040	1.2	1.7	2.4	2.5	2.0
SL89-1825	1.2	1.3	2.3	2.0	2.0
U90-2310	1.3	1.4	2.8	2.0	2.0
U91-3133	1.4	1.1	2.5	2.0	2.0
U91-3212	1.4	1.7	2.0	2.5	3.0
U91-3516	1.2	1.1	1.8	3.0	2.0
U91-3607	1.3	1.6	2.4	2.5	3.0
U91-3610	1.3	1.4	2.0	3.0	2.0

UNIFORM TEST III, 1993

SEED SIZE (g/100)

Strain	Mean 23 Tests	George-town DE	Fair field IA	Gris-wold IA	Stuart IA	Newton IL	Ridg-way IL
Charleston(dtl)	14.5		14.8	11.7	11.5	15.0	10.9
Flyer (IV)	13.5		13.0	11.4	11.0	13.5	9.5
IA2007 (II)	16.8		17.3	15.0	13.3	16.7	12.9
Resnik (III)	14.4		14.5	12.4	11.8	14.1	11.0
Thorne (BSR)	16.4		16.3	12.7	12.5	16.9	11.1
A91-701007	15.5		14.1	12.3	11.8	14.2	11.3
A91-701035	17.1		16.4	13.3	12.9	16.7	11.8
A91-702022	14.5		13.4	12.2	11.2	13.4	10.1
C1832	14.5		14.1	11.8	11.6	13.7	9.8
C1842	16.4		15.6	13.1	12.6	15.7	11.2
HC87-173 (dtl)	13.7		13.8	11.2	11.5	13.2	10.0
HC88-11 (dtl)	14.4		13.9	11.4	11.8	14.2	12.5
HC88-1021 (dtl)	16.2		16.7	13.0	13.2	15.1	11.8
HC89-50 (dtl)	14.4		12.8	11.8	12.6	14.1	11.5
HC89-62 (dtl)	15.6		14.6	12.4	12.6	15.3	12.1
HC89-2237	14.1		12.1	12.1	11.0	15.4	11.0
HC89-2241	13.6		12.5	12.0	10.8	15.3	11.3
HM9189	14.1		13.3	11.6	11.6	13.0	11.1
HM9194	13.0		11.9	10.7	10.4	13.1	9.8
HS90-3449	17.0		16.1	14.2	13.4	16.4	12.2
LN88-10534	14.8		13.1	12.3	12.1	14.5	11.0
LN89-295	16.4		16.0	14.1	14.5	16.8	12.5
LN89-764	16.5		15.6	13.0	13.1	16.4	11.8
K1230	15.4		15.0	14.4	13.4	15.0	11.3
K1232	13.9		13.2	11.9	12.5	14.5	11.3
SL89-314	13.6		12.5	11.4	11.2	13.5	10.2
SL89-1040	15.3		13.6	12.7	12.0	15.2	10.8
SL89-1825	12.9		10.9	10.7	10.9	12.9	9.7
U90-2310	17.2		16.4	14.1	14.2	17.3	13.6
U91-3133	14.3		13.1	12.0	12.4	14.5	10.1
U91-3212	15.4		15.0	12.2	11.9	16.4	12.5
U91-3516	16.7		16.6	13.7	12.7	17.1	11.8
U91-3607	16.0		16.3	12.9	12.5	16.3	11.6
U91-3610	15.4		14.9	13.0	12.3	16.7	12.0

UNIFORM TEST III, 1993

SEED SIZE (g/100)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Charleston(dtl)	15.7	15.0	15.7	17.1	14.8		13.7	14.7
Flyer (IV)	15.7	15.4	14.3	14.3	13.3		13.1	14.1
IA2007 (II)	18.7	18.5	18.3	20.1	16.0		14.3	16.6
Resnik (III)	16.2	15.0	15.3	15.5	14.8		14.1	14.5
Thorne (BSR)	18.8	18.3	17.6	19.9	17.0		16.7	17.0
A91-701007	17.7	17.0	17.4	17.9	15.5		17.1	16.8
A91-701035	18.3	18.5	16.8	19.5	18.1		16.0	21.1
A91-702022	15.4	15.8	14.6	17.9	15.2		15.0	16.1
C1832	15.9	16.2	15.6	16.0	15.4		14.6	16.6
C1842	18.2	18.4	17.1	17.6	16.8		15.9	18.6
HC87-173 (dtl)	14.6	15.1	14.5	15.3	13.0		13.1	15.9
HC88-11 (dtl)	15.8	15.1	16.6	17.0	14.4		14.0	17.1
HC88-1021 (dtl)	17.1	17.8	16.9	18.5	15.7		15.2	20.0
HC89-50 (dtl)	15.3	14.7	15.1	18.2	15.0		15.8	16.1
HC89-62 (dtl)	17.0	16.2	17.2	19.5	16.5		15.5	18.7
HC89-2237	16.7	15.9	14.2	17.2	14.8		15.3	15.3
HC89-2241	14.7	15.5	14.3	15.2	14.1		14.1	13.6
HM9189	15.9	14.7	14.4	16.2	14.2		14.4	14.7
HM9194	15.9	14.0	14.1	14.0	13.5		11.4	13.7
HS90-3449	18.5	18.1	17.7	19.4	16.9		17.9	18.7
LN88-10534	15.6	15.7	15.5	16.1	13.7		15.4	18.9
LN89-295	18.1	18.0	17.9	17.6	16.9		16.1	18.3
LN89-764	18.1	17.8	16.2	17.6	16.7		16.1	20.3
K1230	17.4	16.6	16.0	17.8	16.6		13.9	17.6
K1232	15.5	14.4	15.3	15.1	13.8		14.0	14.9
SL89-314	14.9	14.6	13.8	14.9	14.1		13.0	15.4
SL89-1040	16.5	16.5	15.3	18.3	14.9		15.4	17.7
SL89-1825	14.4	13.6	13.6	14.8	13.4		12.5	15.2
U90-2310	18.5	18.0	18.0	19.5	19.8		18.3	20.9
U91-3133	16.3	15.9	15.0	15.4	14.5		13.9	15.4
U91-3212	14.8	17.1	17.4	16.7	16.7		15.6	19.7
U91-3516	16.4	18.7	16.3	17.4	17.6		16.8	21.1
U91-3607	16.2	17.1	16.4	17.4	17.7		16.2	17.9
U91-3610	17.0	16.1	15.5	15.7	15.8		15.7	20.0

UNIFORM TEST III, 1993

SEED SIZE (g/100)

Strain	Queens-town MD	Colum-bia MO	David City NE	Falls City NE	Tekamah NE	Adel-phia NJ
Charleston(dtl)	15.6	16.0	13.1	13.3	14.1	16.3
Flyer (IV)	15.3	11.3	12.7	13.2	13.9	14.7
IA2007 (II)	21.3	17.3	16.8	15.2	16.5	20.0
Resnik (III)	17.6	14.0	13.8	14.6	15.3	15.7
Thorne (BSR)	19.9	16.0	14.7	15.9	16.9	19.3
A91-701007	21.6	17.3	14.6	14.6	15.9	15.0
A91-701035	21.4	16.6	15.0	16.0	22.7	18.0
A91-702022	18.5	15.0	13.2	14.1	14.4	15.3
C1832	17.1	14.6	13.8	14.7	14.9	15.3
C1842	18.6	15.3	15.4	15.7	16.7	18.0
HC87-173 (dtl)	15.7	14.0	13.0	13.6	13.1	16.0
HC88-11 (dtl)	16.4	14.3	12.2	13.4	14.0	15.7
HC88-1021 (dtl)	17.2	18.3	14.6	15.1	16.1	16.3
HC89-50 (dtl)	18.8	15.6	12.0	13.1	14.6	13.0
HC89-62 (dtl)	18.6	15.6	13.1	14.7	15.8	17.0
HC89-2237	16.2	14.0	12.2	13.7	13.9	14.7
HC89-2241	14.3	14.6	11.9	14.1	14.6	13.7
HM9189	15.7	13.6	13.5	15.2	14.4	15.3
HM9194	13.9	12.0	12.4	12.8	13.4	13.7
HS90-3449	22.3	15.6	16.5	16.5	18.2	18.3
LN88-10534	19.3	15.0	14.9	14.1	14.8	15.3
LN89-295	18.8	16.0	14.9	15.6	16.7	17.3
LN89-764	20.9	17.0	15.3	16.0	17.5	17.3
K1230	16.2	14.0	14.2	14.9	16.6	16.7
K1232	14.3	13.0	13.3	13.1	14.7	14.3
SL89-314	15.6	13.0	12.9	13.3	13.5	14.3
SL89-1040	17.5	15.6	13.6	14.6	14.9	16.3
SL89-1825	15.3	12.0	12.6	12.6	13.6	13.0
U90-2310	21.3	17.6	16.0	16.2	17.8	17.7
U91-3133	16.9	14.0	13.8	14.2	13.9	14.7
U91-3212	19.0	14.6	14.5	15.3	15.0	16.3
U91-3516	20.2	17.6	16.3	16.0	17.6	17.7
U91-3607	18.3	16.0	15.7	15.4	17.0	17.0
U91-3610	16.8	14.6	14.7	15.1	16.1	15.7

UNIFORM TEST III, 1993

SEED SIZE (g/100)

Strain	Hoyt-ville OH	Mt. Orab OH	So. Charl-eston OH	Landis-ville PA	Elk Point SD
Charleston(dtl)	14.9	14.6	14.9	15.5	14.0
Flyer (IV)	14.9	13.1	15.1	15.2	12.0
IA2007 (II)	17.3	14.1	16.8	16.9	16.0
Resnik (III)	14.6	13.5	15.5	14.4	13.0
Thorne (BSR)	16.5	15.5	17.9	16.9	14.0
A91-701007	14.9	14.5	16.4	15.5	14.0
A91-701035	17.2	15.9	17.7	17.8	15.0
A91-702022	15.1	12.6	14.7	16.2	13.0
C1832	14.4	14.0	15.3	15.2	13.0
C1842	16.9	16.8	17.6	19.3	15.0
HC87-173 (dtl)	13.5	14.7	13.3	15.9	12.0
HC88-11 (dtl)	13.9	14.3	14.1	15.8	13.0
HC88-1021 (dtl)	17.0	16.3	16.2	18.9	16.0
HC89-50 (dtl)	14.2	15.0	14.2	14.6	12.0
HC89-62 (dtl)	14.8	16.2	16.2	16.6	13.0
HC89-2237	13.5	13.5	14.7	15.9	12.0
HC89-2241	12.9	13.2	14.5	15.5	11.0
HM9189	14.2	13.4	15.0	16.6	13.0
HM9194	13.1	13.2	14.2	15.9	12.0
HS90-3449	16.9	16.9	17.6	18.0	15.0
LN88-10534	15.2	14.8	15.9	15.8	12.0
LN89-295	16.1	15.5	17.6	18.5	14.0
LN89-764	16.7	15.2	16.9	19.0	14.0
K1230	15.1	14.4	15.8	18.0	14.0
K1232	13.7	13.8	15.2	17.0	11.0
SL89-314	14.4	14.4	15.0	16.0	11.0
SL89-1040	16.5	15.4	16.7	18.5	13.0
SL89-1825	12.9	12.9	13.9	13.6	11.0
U90-2310	17.1	15.2	15.6	14.6	17.0
U91-3133	14.0	13.4	14.7	17.0	13.0
U91-3212	15.8	14.4	14.8	15.1	14.0
U91-3516	17.6	14.7	16.5	18.0	16.0
U91-3607	16.0	14.7	16.2	17.3	15.0
U91-3610	14.9	14.1	16.0	17.1	15.0

UNIFORM TEST III, 1993

PROTEIN (%)

Strain	Mean 5 Tests	Fairfield IA	Urbana IL	Lafayette IN	Manhattan KS	Hoytville OH
Charleston(dtl)	41.9	42.3	43.6	42.0	41.2	40.3
Flyer (IV)	42.2	43.3	43.6	42.3	41.2	40.6
IA2007 (II)	39.9	40.4	42.1	39.8	39.9	37.3
Resnik (III)	41.4	42.8	42.3	41.4	40.3	40.4
Thorne (BSR)	41.9	43.1	43.7	41.9	40.8	40.2
A91-701007	40.5	40.8	42.2	41.6	39.4	38.6
A91-701035	40.9	41.0	42.1	41.3	40.8	39.5
A91-702022	40.7	42.1	41.8	40.3	40.8	38.7
C1832	41.3	42.1	43.0	41.7	40.0	39.7
C1842	40.8	41.4	42.2	41.0	40.4	39.2
HC87-173 (dtl)	41.2	42.4	42.9	40.9	40.0	39.9
HC88-11 (dtl)	38.3	39.5	39.5	38.8	37.3	36.5
HC88-1021 (dtl)	40.7	41.3	42.8	41.0	39.3	39.0
HC89-50 (dtl)	38.1	38.7	39.1	38.0	37.6	37.0
HC89-62 (dtl)	38.9	39.3	40.5	38.8	38.9	36.8
HC89-2237	43.0	43.2	44.2	43.0	43.0	41.6
HC89-2241	42.9	43.5	43.6	43.3	43.0	40.9
HM9189	41.8	42.5	43.6	41.3	40.9	40.7
HM9194	41.8	42.5	43.7	42.2	40.1	40.7
HS90-3449	41.1	42.1	41.7	41.0	41.1	39.4
LN88-10534	40.9	42.0	42.3	41.1	40.3	38.9
LN89-295	40.9	41.4	41.9	41.3	40.7	39.3
LN89-764	40.8	41.8	42.1	41.5	39.6	38.8
K1230	41.2	41.5	43.0	41.5	41.2	38.8
K1232	38.6	38.8	41.0	40.0	37.4	35.6
SL89-314	41.6	42.1	41.2	41.9	42.0	40.7
SL89-1040	41.6	41.3	44.4	42.8	40.6	38.9
SL89-1825	40.7	42.1	42.0	41.3	41.1	37.0
U90-2310	38.6	38.8	39.4	38.3	38.5	37.9
U91-3133	41.4	41.7	43.5	41.0	41.4	39.3
U91-3212	40.9	41.8	42.5	41.4	40.3	38.3
U91-3516	41.4	41.5	43.5	41.0	41.6	39.6
U91-3607	41.0	42.2	42.3	40.8	41.2	38.7
U91-3610	41.0	41.0	42.2	41.2	40.8	39.7

UNIFORM TEST III, 1993

OIL (%)

Strain	Mean 5 Tests	Fairfield IA	Urbana IL	Lafayette IN	Manhattan KS	Hoytville OH
Charleston(dtl)	20.2	19.7	19.5	19.9	21.9	19.8
Flyer (IV)	20.4	18.9	20.3	20.5	21.7	20.7
IA2007 (II)	22.1	21.2	22.0	21.7	23.5	22.0
Resnik (III)	21.2	20.3	21.4	21.0	22.4	21.0
Thorne (BSR)	21.3	20.5	20.8	21.3	22.5	21.2
A91-701007	21.1	19.8	21.0	20.8	23.1	20.9
A91-701035	20.5	19.6	20.5	20.4	21.3	20.7
A91-702022	21.2	19.9	21.9	21.5	21.6	21.1
C1832	20.8	19.7	20.9	20.7	21.9	20.8
C1842	21.3	20.3	21.1	21.0	22.5	21.7
HC87-173 (dtl)	21.0	19.9	20.5	20.8	22.8	20.8
HC88-11 (dtl)	22.1	20.5	22.6	22.1	24.1	21.1
HC88-1021 (dtl)	21.8	20.7	21.1	21.7	23.9	21.7
HC89-50 (dtl)	22.2	20.7	22.4	22.5	23.9	21.4
HC89-62 (dtl)	22.5	21.5	22.3	22.7	23.7	22.1
HC89-2237	19.5	18.1	19.7	19.4	20.6	19.6
HC89-2241	19.8	18.3	20.4	19.7	20.8	19.8
HM9189	20.9	19.9	20.7	21.0	22.1	20.8
HM9194	20.6	19.2	20.4	20.3	22.6	20.5
HS90-3449	21.0	19.6	21.6	21.4	22.2	20.1
LN88-10534	21.3	20.1	21.1	21.4	22.4	21.4
LN89-295	20.8	19.2	21.4	20.8	22.0	20.7
LN89-764	21.1	19.7	21.0	20.6	23.3	21.1
K1230	21.3	20.1	20.7	21.3	22.6	21.8
K1232	21.0	19.5	20.4	21.3	22.6	21.4
SL89-314	20.9	19.2	22.1	20.9	21.4	20.9
SL89-1040	20.9	20.6	20.3	20.7	22.2	20.8
SL89-1825	20.8	18.6	21.1	21.4	21.9	21.0
U90-2310	23.0	21.7	23.3	23.4	24.0	22.8
U91-3133	21.5	20.3	21.0	22.2	22.3	21.5
U91-3212	21.5	20.1	21.3	21.7	23.0	21.4
U91-3516	21.7	21.2	21.0	21.7	23.0	21.8
U91-3607	21.9	20.6	21.4	22.4	23.1	22.2
U91-3610	21.8	21.8	21.8	21.7	22.6	21.1

PRELIMINARY TEST IIIA, 1993

Strain	Parentage	Generation Composited	Unique Traits
Flyer (IV)	Asgrow A3127[4] x Williams 82	BC3 F2	Rps1-k
IA2007 (L)	Pride B152 x A80-244003	F5	
Resnik (III)	Asgrow A3127[4] x Williams 82	BC3 F3	Rps1-k
C1866	A84-284033 x Resnik	F5	
C1868	A86-301024 x CX1022-90	F5	
C1870	A86-301024 x CX1022-90	F5	
C1871	A86-301024 x CX1022-90	F5	
C1872	A86-301024 x C1717	F5	
C1873	A86-301024 x C1717	F5	
C1874	A86-301024 x C1717	F5	
C1875	A86-301024 x Resnik	F4	
C1876	A86-301024 x HC84-553-1	F4	
HF91-138	GR8836 x Harper 87	F5	Rps1-k
HF91-385	Asgrow A1895 x A84-382002	F5	
HS89-3078	GR8936 x Asgrow A2943	F5	
HS89-6088	GR8936 x Asgrow A2943	F5	Rps1-k
HS90-3513	LS301 x HS84-6247	F5	Rps
HS90-3515	LS301 x HS84-6247	F5	Rps
HS90-3677	HM8580 x GR8936	F5	Rps1-k
HS91-4523	HM8778 x Asgrow A3733	F5	Rps
HS91-4621	GR8936 x (HM8580 x GR8936)	F5	Rps1-k
HS91-4624	GR8936 x (HM8580 x GR8936)	F5	Rps1-k
LN89-334	Sherman x Resnik	F5	Rps1-k
LN89-344	Sherman x Resnik	F5	Rps1-k
LN89-3619	Hobbit 87 x Asgrow A3205	F5	Rps1-k
LN89-4079	Hobbit 87 x Pioneer 9292	F5	Rps1-k
LN90-608	Sherman x LN82-4858	F5	Rps1-k
LN90-728	Sherman x A83-271027	F5	
LN90-745	Sherman x A83-271027	F5	
LN90-3028	LN84-452 x Chamberlain	F5	Rps1-a
LN90-3336	LN84-3897 x Resnik	F5	Rps1-k,hm(het)
LN90-3382	LN84-3897 x Resnik	F5	
Md90-5761	Morgan x Resnik	F5	
SL88-9529	Sherman x Asgrow A2943	F5	
SL89-203	Sherman x Resnik	F5	
SL89-336	Harper x Asgrow A3127 BC	F5	
SL89-534	Sherman x Harper 87	F5	
SL89-1268	Sherman x Asgrow A3205	F5	
SL89-3560	Hutcheson x Asgrow A2943	F5	
SL90-343	Asgrow A2943 x A81-155014	F5	

PRELIMINARY TEST IIIA, 1993

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	BSR-Boone Plant n %	BSR-Boone Stem n %
Flyer (IV)	PTTDYBlI	4.7	100.0	59.0
IA2007 (II)	PTBIYBrI	3.5	80.0	20.7
Resnik (III)	PTTYBlI	3.5	70.0	29.4
C1866	WGTDYBfI	3.5	60.0	14.3
C1868	PGBSYIbI	4.2	30.0	8.0
C1870	PGBSYIbI	4.2	20.0	3.5
C1871	PG+TBSYIB+BlI	3.7	20.0	3.8
C1872	PGBSYIbI	3.5	40.0	15.8
C1873	PGBDYBlI	2.7	30.0	6.2
C1874	PGBSYIbI	3.7	10.0	1.6
C1875	PTTDYBlI	4.2	0.0	0.0
C1876	PGTIYGrI	5.0	30.0	8.5
HF91-138	PTTDYBfI	3.7	60.0	16.6
HF91-385	PTBDYBlI	4.0	70.0	24.4
HS89-3078	P+WGTDYGrI	4.7	30.0	4.3
HS89-6088	P+WTBDYBlI	3.7	60.0	18.8
HS90-3513	PGBDYGrI	4.2	70.0	14.5
HS90-3515	PGBDYGrI	3.5	80.0	27.2
HS90-3677	PTTDYBlI	4.0	80.0	24.9
HS91-4523	PGBDYIbI	3.7	20.0	3.3
HS91-4621	P+WTTDYBlI	3.5	70.0	30.3
HS91-4624	WTBDYBlI	3.7	60.0	14.0
LN89-334	WGBDYBfI	3.0	40.0	15.4
LN89-344	PTTSYBl+BrI	3.2	70.0	24.6
LN89-3619	PTBSYBlI	3.0	70.0	30.0
LN89-4079	PTTDYBlI	3.7	70.0	47.6
LN90-608	PGBSYBfI	3.2	60.0	22.2
LN90-728	WTBSYBl+BrI	3.7	70.0	16.6
LN90-745	WGBDYBfI	3.7	20.0	3.3
LN90-3028	WTTDYBlI	4.5	10.0	1.8
LN90-3336	WTTDYBlI	4.2	70.0	24.8
LN90-3382	WTTSYBlI	3.5	50.0	22.2
Md90-5761	PTTDYBlI	4.2	50.0	22.7
SL88-9529	WGTDYBfI	4.5	90.0	61.3
SL89-203	WGTDYBfI	4.5	70.0	38.8
SL89-336	PTBDYBlI	4.5	60.0	8.4
SL89-534	WTBSYBlI	4.5	90.0	28.1
SL89-1268	P+WTBDYBfI	5.0	90.0	42.4
SL89-3560	P+WGTSYBlI	4.0	50.0	24.6
SL90-343	PGBDYIbI	4.7	30.0	9.9

PRELIMINARY TEST IIIA, 1993

DISEASE DATA

Strain	Root Rot Wooster Race 25	PR Ames Race 4	PR Lafayette Race 7	PS Lafayette a %	PSB Seed Lafayette n %	Germ. %
Flyer (IV)	4.8	R	R	52	4	94
IA2007 (II)	4.2	S	R	64	10	74
Resnik (III)	4.7	R	R	48	2	94
C1866	4.5	R	R	60	12	82
C1868	4.8	S	S	74	0	90
C1870	4.0	S	S	70	8	90
C1871	3.8	S	S	52	6	88
C1872	3.5	S	H	60	6	88
C1873	3.8	S	S	22	28	68
C1874	4.0	S	S	70	4	88
C1875	3.5	R	R	54	2	94
C1876	4.5	S	S	28	4	90
HF91-138	3.8	R	R	68	4	86
HF91-385	4.2	S	S	26	4	92
HS89-3078	4.2	H	H	94	4	80
HS89-6088	4.2	R	H	88	0	84
HS90-3513	1.7	R	S	46	8	64
HS90-3515	2.0	R	S	56	5	88
HS90-3677	4.7	S	R	50	8	78
HS91-4523	1.3	R	S	74	2	94
HS91-4621	4.3	S	R	78	4	94
HS91-4624	3.8	R	R	30	2	96
LN89-334	4.2	H	R	76	0	80
LN89-344	3.3	R	R	72	2	98
LN89-3619	4.8	H	R	14	12	86
LN89-4079	3.8	R	R	86	0	98
LN90-608	4.2	H	H	80	8	88
LN90-728	3.7	S	S	38	4	88
LN90-745	3.8	S	S	76	0	98
LN90-3028	2.7	S	R	68	2	92
LN90-3336	4.5	R	R	64	2	92
LN90-3382	4.3	S	S	82	2	90
Md90-5761	4.5	S	S	36	8	90
SL88-9529	4.0	S	S	72	6	82
SL89-203	3.8	H	R	96	2	76
SL89-336	4.7	H	H	46	4	90
SL89-534	4.7	S	S	68	4	88
SL89-1268	4.5	S	S	90	0	98
SL89-3560	4.0	S	S	80	2	84
SL90-343	3.8	S	S	70	8	82

PRELIMINARY TEST IIIA, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 9 bu/a	Rank 9 No.	Maturity 8 Date	Lodging 9 Score	Plant Height 9 In.	Seed Quality 9 Score	Seed Size 8 g/100	Composition Protein 4 %	Oil 4 %
Flyer (IV)	53.9	15	6.6	1.6	35	1.6	13.4	42.1	20.3
IA2007 (II)	49.0	40	-4.8	1.5	30	2.0	16.8	39.9	21.8
Resnik (III)	52.2	28	09/24*	1.5	33	1.5	14.6	42.1	20.8
C1866	53.4	20	6.0	1.9	40	1.6	13.6	41.1	21.0
C1868	51.0	35	2.8	1.7	33	1.6	15.1	41.2	20.0
C1870	55.1	10	3.8	1.7	37	1.5	17.0	41.2	20.3
C1871	52.9	25	4.0	1.8	36	1.6	16.2	40.4	20.3
C1872	53.4	20	5.1	2.2	36	1.4	14.9	41.1	20.5
C1873	51.9	30	5.8	2.1	37	1.3	14.2	40.5	20.0
C1874	49.7	38	6.1	1.9	36	1.5	13.5	40.6	20.1
C1875	56.0	6	-1.0	1.5	32	1.4	14.9	41.1	21.0
C1876	55.0	12	8.1	2.1	37	1.6	13.3	40.0	19.7
HF91-138	51.3	33	1.1	1.9	33	1.5	14.1	41.9	20.3
HF91-385	52.9	25	2.3	2.1	35	1.6	14.4	42.2	20.2
HS89-3078	53.3	24	1.0	1.7	33	1.4	16.5	43.3	20.8
HS89-6088	53.7	16	0.9	1.9	35	1.4	16.1	43.5	20.3
HS90-3513	50.2	37	1.8	2.3	34	1.8	23.7	41.8	21.4
HS90-3515	52.0	29	1.3	2.2	34	1.9	21.7	41.4	21.1
HS90-3677	54.6	14	1.9	1.6	34	1.5	14.9	41.9	20.7
HS91-4523	56.8	4	1.3	1.6	34	1.5	17.8	41.3	21.7
HS91-4621	57.3	2	1.5	1.6	33	1.4	15.0	41.8	21.0
HS91-4624	52.4	27	0.4	1.8	34	1.4	15.7	43.0	20.5
LN89-334	57.4	1	3.5	1.9	34	1.6	13.7	42.1	20.3
LN89-344	55.2	9	3.3	2.0	35	1.7	14.2	41.1	20.8
LN89-3619	56.9	3	4.0	2.1	35	1.4	15.6	41.7	21.2
LN89-4079	55.4	7	5.6	1.5	34	1.5	18.3	41.1	21.3
LN90-608	53.7	18	5.0	1.9	37	1.6	15.2	39.9	21.2
LN90-728	56.8	4	1.0	1.9	34	1.7	15.4	42.7	20.2
LN90-745	55.3	8	1.0	1.7	33	1.4	15.1	40.6	21.9
LN90-3028	51.6	31	3.6	2.2	38	1.6	17.1	40.4	20.9
LN90-3336	55.0	12	4.1	2.0	36	1.4	13.6	41.2	20.2
LN90-3382	53.4	20	4.5	1.6	32	1.5	14.5	40.4	21.0
Md90-5761	53.7	16	6.8	1.8	36	1.6	13.7	41.9	20.4
SL88-9529	49.3	39	7.8	1.8	35	1.5	13.5	41.7	19.7
SL89-203	55.1	10	3.9	1.7	33	1.5	14.4	40.9	21.1
SL89-336	53.4	20	5.6	1.9	34	1.4	14.9	40.3	20.6
SL89-534	50.5	36	5.0	1.5	31	1.5	15.6	40.9	20.7
SL89-1268	53.6	19	7.0	1.9	34	1.7	14.8	41.4	20.1
SL89-3560	51.2	34	9.1	1.6	35	1.5	14.1	41.2	20.7
SL90-343	51.6	31	-1.4	1.6	33	1.4	16.1	39.5	21.4

* 127.9 Days After Planting

PRELIMINARY TEST IIIA, 1993

YIELD (bu/a)

Strain	Mean 9 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	53.9	50.5	32.5	63.9	64.6
IA2007 (II)	49.0	38.7	30.7	63.7	61.3
Resnik (III)	52.2	45.9	35.5	58.4	66.5
C1866	53.4	47.0	34.4	62.1	65.0
C1868	51.0	49.1	37.3	62.8	59.4
C1870	55.1	47.3	42.8	62.0	65.1
C1871	52.9	50.2	37.9	64.4	69.3
C1872	53.4	46.3	38.4	65.6	62.4
C1873	51.9	46.4	32.8	61.2	65.3
C1874	49.7	44.0	32.8	67.7	74.2
C1875	56.0	49.4	37.2	74.1	65.5
C1876	55.0	47.0	34.5	66.0	63.8
HF91-138	51.3	46.1	35.4	64.7	66.5
HF91-385	52.9	47.7	30.0	62.1	66.6
HS89-3078	53.3	47.3	34.6	64.5	65.3
HS89-6088	53.7	51.2	38.0	60.2	69.3
HS90-3513	50.2	48.8	36.2	52.9	63.5
HS90-3515	52.0	50.2	36.2	61.1	64.3
HS90-3677	54.6	46.1	37.2	65.6	71.5
HS91-4523	56.8	51.8	37.1	65.4	71.2
HS91-4621	57.3	49.4	38.5	70.8	69.6
HS91-4624	52.4	46.2	37.3	62.8	62.8
LN89-334	57.4	52.2	39.2	66.0	71.0
LN89-344	55.2	44.9	39.1	65.3	70.6
LN89-3619	56.9	50.8	35.0	63.5	72.6
LN89-4079	55.4	50.0	34.9	65.9	72.6
LN90-608	53.7	50.5	39.3	58.5	69.7
LN90-728	56.8	52.1	39.6	70.9	77.9
LN90-745	55.3	52.9	37.4	65.2	71.1
LN90-3028	51.6	39.4	32.0	64.3	60.6
LN90-3336	55.0	49.1	37.9	69.8	64.6
LN90-3382	53.4	48.1	38.3	68.2	60.4
Md90-5761	53.7	45.3	31.7	73.0	65.7
SL88-9529	49.3	47.9	32.3	63.3	64.5
SL89-203	55.1	48.7	42.0	61.4	70.0
SL89-336	53.4	50.0	30.0	64.4	64.4
SL89-534	50.5	43.8	33.4	60.0	64.3
SL89-1268	53.6	48.9	33.2	63.8	71.2
SL89-3560	51.2	49.3	34.4	66.8	66.2
SL90-343	51.6	44.1	33.7	61.8	69.3
C.V. (%)		6.6	7.4	6.6	7.7
L.S.D. (5%)		6.3	5.3	8.7	10.5
Row Sp. (In.)		27	27	30	24
Rows/Plot		4	4	4	4
Reps		2	2	2	2

PRELIMINARY TEST IIIA, 1993

YIELD (bu/a)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	53.2	46.2	45.0	45.1	84.5
IA2007 (II)	38.8	48.6	47.4	39.2	72.7
Resnik (III)	39.8	51.1	52.4	42.7	77.8
C1866	59.0	46.1	44.6	39.8	82.7
C1868	51.2	41.8	50.8	38.8	67.8
C1870	64.1	47.5	51.5	41.8	73.5
C1871	52.9	46.3	50.4	40.8	63.5
C1872	64.4	40.6	54.7	40.3	68.1
C1873	55.4	44.4	52.9	37.5	71.4
C1874	50.7	33.6	54.6	34.6	55.2
C1875	54.7	44.9	54.0	40.9	83.2
C1876	70.6	40.2	51.3	45.2	76.7
HF91-138	51.5	40.7	48.4	41.9	66.8
HF91-385	58.3	49.8	50.5	42.0	69.3
HS89-3078	51.0	47.3	54.2	37.7	77.8
HS89-6088	50.0	47.7	50.1	39.9	77.2
HS90-3513	55.8	42.3	46.1	41.0	64.8
HS90-3515	52.8	45.4	54.9	43.4	59.4
HS90-3677	60.1	45.4	53.8	43.0	68.4
HS91-4523	63.3	49.3	54.8	40.7	77.2
HS91-4621	56.4	50.3	57.0	42.2	81.2
HS91-4624	46.9	45.2	52.5	43.5	74.2
LN89-334	57.8	49.8	51.8	45.9	82.7
LN89-344	64.9	48.7	52.4	35.4	75.9
LN89-3619	62.2	48.1	56.9	46.3	77.0
LN89-4079	55.6	46.3	52.3	43.2	77.5
LN90-608	58.1	42.5	47.7	40.2	76.8
LN90-728	59.5	44.8	54.4	47.2	64.5
LN90-745	64.0	44.8	53.5	40.6	68.6
LN90-3028	58.4	43.4	48.1	43.0	75.6
LN90-3336	55.8	44.0	52.9	44.8	75.7
LN90-3382	60.1	46.5	50.7	40.3	68.2
Md90-5761	54.2	44.6	54.4	40.2	74.3
SL88-9529	40.8	37.0	50.4	33.8	73.3
SL89-203	52.4	50.3	50.8	42.2	77.8
SL89-336	56.8	43.8	50.6	42.9	77.4
SL89-534	60.5	34.9	52.7	33.1	71.8
SL89-1268	50.9	42.2	52.8	41.3	78.3
SL89-3560	44.7	41.6	45.9	32.0	79.9
SL90-343	52.0	45.8	52.6	38.2	67.0
C.V. (%)	10.8	5.3	7.0	8.0	7.1
L.S.D. (5%)	12.1	6.8	10.4	6.5	10.6
Row Sp. (In.)	30	30	30	30	7.5
Rows/Plot	4	4	4	4	8
Reps	2	2	2	2	2

PRELIMINARY TEST IIIA, 1993

YIELD RANK

Strain	Yield Rank	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	15	7	34	22	27
IA2007 (II)	40	40	38	24	37
Resnik (III)	28	33	21	39	18
C1866	20	26	27	29	26
C1868	35	16	14	27	40
C1870	10	24	1	31	25
C1871	25	9	11	19	14
C1872	20	29	8	12	36
C1873	30	28	32	34	23
C1874	38	37	32	7	2
C1875	6	13	16	1	22
C1876	12	26	26	9	33
HF91-138	33	31	22	17	18
HF91-385	25	23	39	29	17
HS89-3078	24	24	25	18	23
HS89-6088	16	5	10	36	14
HS90-3513	37	19	19	40	34
HS90-3515	29	9	19	35	31
HS90-3677	14	31	16	12	5
HS91-4523	4	4	18	14	6
HS91-4621	2	13	7	4	13
HS91-4624	27	30	14	27	35
LN89-334	1	2	5	9	9
LN89-344	9	35	6	15	10
LN89-3619	3	6	23	25	3
LN89-4079	7	11	24	11	3
LN90-608	18	7	4	38	12
LN90-728	4	3	3	3	1
LN90-745	8	1	13	16	8
LN90-3028	31	39	36	21	38
LN90-3336	12	16	11	5	27
LN90-3382	20	21	9	6	39
Md90-5761	16	34	37	2	21
SL88-9529	39	22	35	26	29
SL89-203	10	20	2	33	11
SL89-336	20	11	39	19	30
SL89-534	36	38	30	37	31
SL89-1268	19	18	31	23	6
SL89-3560	34	15	27	8	20
SL90-343	31	36	29	32	14

PRELIMINARY TEST IIIA, 1993

YIELD RANK

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	25	16	39	5	1
IA2007 (II)	40	8	36	31	25
Resnik (III)	39	1	19	13	8
C1866	12	17	40	30	3
C1868	31	33	25	32	33
C1870	4	11	23	18	23
C1871	26	14	30	22	38
C1872	3	36	5	25	32
C1873	22	26	13	35	27
C1874	34	40	6	37	40
C1875	23	22	10	21	2
C1876	1	37	24	4	17
HF91-138	30	35	33	17	35
HF91-385	14	5	29	16	28
HS89-3078	32	12	9	34	8
HS89-6088	35	10	32	29	12
HS90-3513	19	31	37	20	36
HS90-3515	27	19	3	8	39
HS90-3677	9	19	11	10	30
HS91-4523	6	6	4	23	12
HS91-4621	18	2	1	14	5
HS91-4624	36	21	18	7	22
LN89-334	16	4	22	3	3
LN89-344	2	7	19	36	18
LN89-3619	7	9	2	2	15
LN89-4079	21	14	21	9	11
LN90-608	15	30	35	27	16
LN90-728	11	23	7	1	37
LN90-745	5	23	12	24	29
LN90-3028	13	29	34	10	20
LN90-3336	19	27	13	6	19
LN90-3382	9	13	27	25	31
Md90-5761	24	25	8	27	21
SL88-9529	38	38	31	38	24
SL89-203	28	2	25	14	8
SL89-336	17	28	28	12	14
SL89-534	8	39	16	39	26
SL89-1268	33	32	15	19	7
SL89-3560	37	34	38	40	6
SL90-343	29	18	17	33	34

PRELIMINARY TEST IIIA, 1993

MATURITY (date)

Strain	Mean 8 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	6.6	5		8	10
IA2007 (II)	-4.8	-6		-5	-5
Resnik (III)	09/24	09/26		09/24	09/22
C1866	6.0	5		11	8
C1868	2.8	3		6	5
C1870	3.8	5		8	7
C1871	4.0	4		8	8
C1872	5.1	4		12	8
C1873	5.8	6		10	7
C1874	6.1	6		12	8
C1875	-1.0	0		0	-2
C1876	8.1	7		12	10
HF91-138	1.1	0		6	1
HF91-385	2.3	4		0	6
HS89-3078	1.0	0		1	1
HS89-6088	0.9	0		4	3
HS90-3513	1.8	0		5	4
HS90-3515	1.3	0		3	4
HS90-3677	1.9	2		0	4
HS91-4523	1.3	0		3	2
HS91-4621	1.5	2		3	3
HS91-4624	0.4	1		0	2
LN89-334	3.5	2		6	6
LN89-344	3.3	1		6	7
LN89-3619	4.0	2		8	6
LN89-4079	5.6	4		10	10
LN90-608	5.0	5		8	8
LN90-728	1.0	0		5	4
LN90-745	1.0	0		2	3
LN90-3028	3.6	2		8	4
LN90-3336	4.1	4		6	6
LN90-3382	4.5	2		8	8
Md90-5761	6.8	6		11	11
SL88-9529	7.8	6		11	10
SL89-203	3.9	4		6	5
SL89-336	5.6	5		8	7
SL89-534	5.0	5		6	9
SL89-1268	7.0	7		9	11
SL89-3560	9.1	7		12	13
SL90-343	-1.4	-2		-2	-1
Date Planted	05/19	05/20		05/14	05/12
Days to Mature	127.9	129		133	133

PRELIMINARY TEST IIIA, 1993

MATURITY (date)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	2	3	4	7	14
IA2007 (II)	-8	-2	-5	-5	-2
Resnik (III)	09/20	10/03	09/29	09/27	09/16
C1866	3	3	3	0	15
C1868	1	0	4	0	3
C1870	2	1	4	-1	4
C1871	3	1	3	0	5
C1872	4	1	5	1	6
C1873	4	3	7	4	5
C1874	3	3	6	6	5
C1875	-2	-2	0	-2	0
C1876	5	3	7	10	11
HF91-138	-1	1	2	0	0
HF91-385	2	-1	0	4	3
HS89-3078	1	1	2	1	1
HS89-6088	2	0	-1	-3	2
HS90-3513	2	0	1	-2	4
HS90-3515	2	0	0	-1	2
HS90-3677	2	1	1	2	3
HS91-4523	2	0	1	-1	3
HS91-4621	1	1	1	0	1
HS91-4624	1	0	0	-2	1
LN89-334	3	3	3	1	4
LN89-344	3	1	3	1	4
LN89-3619	3	0	3	5	5
LN89-4079	5	3	3	5	5
LN90-608	3	4	4	3	5
LN90-728	1	-1	0	-2	1
LN90-745	1	0	1	0	1
LN90-3028	1	4	3	2	5
LN90-3336	2	4	2	3	6
LN90-3382	5	1	0	2	10
Md90-5761	5	4	5	5	7
SL88-9529	4	3	6	7	15
SL89-203	3	4	3	1	5
SL89-336	5	3	4	7	6
SL89-534	4	2	3	6	5
SL89-1268	4	5	4	5	11
SL89-3560	3	4	6	10	18
SL90-343	0	-1	-5	-1	1
Date Planted	05/27	06/08	05/20	05/19	05/07
Days to Mature	116	117	132	131	132

PRELIMINARY TEST IIIA, 1993

LODGING (score)

Strain	Mean 9 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	1.6	1.2	1.5	2.0	1.5
IA2007 (II)	1.5	1.0	1.0	1.5	1.3
Resnik (III)	1.5	1.3	1.5	1.0	1.5
C1866	1.9	1.4	1.5	2.0	2.0
C1868	1.7	1.2	1.4	2.0	1.8
C1870	1.7	1.1	1.5	2.0	2.0
C1871	1.8	1.3	1.8	2.0	2.3
C1872	2.2	1.3	1.7	3.0	2.5
C1873	2.1	1.9	1.6	2.5	2.0
C1874	1.9	1.8	1.3	2.0	2.5
C1875	1.5	1.0	1.6	1.0	1.3
C1876	2.1	1.5	1.8	2.5	2.5
HF91-138	1.9	1.0	1.4	3.0	2.3
HF91-385	2.1	1.4	1.9	1.0	2.8
HS89-3078	1.7	1.1	1.5	1.5	2.0
HS89-6088	1.9	1.3	1.7	2.0	2.0
HS90-3513	2.3	1.4	1.9	3.5	3.0
HS90-3515	2.2	1.3	1.7	3.5	3.0
HS90-3677	1.6	1.2	1.4	1.0	2.3
HS91-4523	1.6	1.1	1.4	1.5	2.0
HS91-4621	1.6	1.2	1.4	1.5	2.0
HS91-4624	1.8	1.5	1.7	2.0	1.8
LN89-334	1.9	1.2	1.7	2.0	2.0
LN89-344	2.0	1.3	1.7	2.0	3.0
LN89-3619	2.1	1.4	1.9	2.5	3.0
LN89-4079	1.5	1.0	1.5	1.0	2.0
LN90-608	1.9	1.4	1.8	2.0	2.5
LN90-728	1.9	1.2	1.5	2.0	2.8
LN90-745	1.7	1.1	1.1	1.5	2.3
LN90-3028	2.2	1.5	2.2	2.0	2.5
LN90-3336	2.0	1.2	1.6	2.5	2.0
LN90-3382	1.6	1.0	1.3	2.0	1.3
Md90-5761	1.8	1.1	1.5	2.0	2.3
SL88-9529	1.8	1.2	1.7	2.0	2.0
SL89-203	1.7	1.2	1.6	2.0	2.0
SL89-336	1.9	1.3	1.7	2.5	2.0
SL89-534	1.5	1.1	1.5	1.0	1.5
SL89-1268	1.9	1.3	1.6	2.0	2.5
SL89-3560	1.6	1.2	1.3	1.5	1.3
SL90-343	1.6	1.0	1.4	1.0	2.3

PRELIMINARY TEST IIIA, 1993

LODGING (score)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	2.3	1.0	2.5	1.2	1.5
IA2007 (II)	2.3	1.0	3.0	1.1	1.5
Resnik (III)	2.3	1.0	2.5	1.2	1.3
C1866	3.0	1.0	3.0	1.2	2.3
C1868	2.8	1.0	2.5	1.2	1.8
C1870	2.5	1.0	3.0	1.1	1.3
C1871	2.3	1.0	3.0	1.0	1.8
C1872	3.3	1.0	3.0	1.1	3.0
C1873	2.9	1.0	3.0	1.1	2.5
C1874	2.8	1.0	3.0	1.1	1.8
C1875	2.8	1.0	2.5	1.2	1.5
C1876	3.3	1.0	3.0	1.2	2.5
HF91-138	2.9	1.0	3.0	1.2	1.3
HF91-385	3.3	1.0	3.0	1.2	3.3
HS89-3078	2.5	1.0	3.0	1.2	1.5
HS89-6088	2.8	1.0	3.0	1.2	2.0
HS90-3513	2.8	1.0	3.5	1.2	2.3
HS90-3515	2.5	1.0	3.0	1.2	3.0
HS90-3677	2.3	1.0	3.0	1.2	1.0
HS91-4523	2.4	1.0	3.0	1.1	1.0
HS91-4621	2.8	1.0	2.5	1.1	1.3
HS91-4624	2.5	1.0	3.0	1.1	1.8
LN89-334	3.3	1.0	3.0	1.2	1.3
LN89-344	3.3	1.0	3.0	1.2	1.8
LN89-3619	3.3	1.0	3.0	1.2	2.0
LN89-4079	2.0	1.0	2.5	1.1	1.5
LN90-608	2.8	1.0	2.5	1.1	2.0
LN90-728	3.3	1.0	3.0	1.2	1.0
LN90-745	3.0	1.0	3.0	1.2	1.3
LN90-3028	3.3	1.0	3.0	1.2	2.8
LN90-3336	3.0	1.0	3.0	1.2	2.5
LN90-3382	2.8	1.0	2.5	1.1	1.3
Md90-5761	2.8	1.0	3.0	1.2	1.3
SL88-9529	2.5	1.0	2.5	1.4	2.0
SL89-203	2.8	1.0	2.5	1.2	1.0
SL89-336	2.9	1.0	3.0	1.3	1.8
SL89-534	2.3	1.0	2.5	1.2	1.3
SL89-1268	2.5	1.0	3.0	1.2	1.8
SL89-3560	2.0	1.0	3.0	1.3	1.5
SL90-343	2.8	1.0	3.0	1.2	1.0

PRELIMINARY TEST IIIA, 1993

PLANT HEIGHT (inches)

Strain	Mean 9 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	35	35	26	43	34
IA2007 (II)	30	25	22	38	29
Resnik (III)	33	34	28	39	31
C1866	40	38	31	51	39
C1868	33	34	26	40	30
C1870	37	35	28	47	41
C1871	36	36	31	45	34
C1872	36	35	28	45	37
C1873	37	44	28	47	39
C1874	36	39	26	40	41
C1875	32	30	25	40	32
C1876	37	38	32	45	36
HF91-138	33	29	28	40	31
HF91-385	35	35	26	40	37
HS89-3078	33	30	26	40	32
HS89-6088	35	33	31	43	36
HS90-3513	34	34	26	42	36
HS90-3515	34	32	25	41	34
HS90-3677	34	32	29	41	34
HS91-4523	34	34	28	44	36
HS91-4621	33	32	28	38	32
HS91-4624	34	32	29	40	33
LN89-334	34	35	28	40	33
LN89-344	35	34	27	43	36
LN89-3619	35	33	30	42	36
LN89-4079	34	32	28	40	35
LN90-608	37	34	32	49	39
LN90-728	34	31	26	40	36
LN90-745	33	32	23	40	37
LN90-3028	38	36	32	46	39
LN90-3336	36	34	28	44	33
LN90-3382	32	28	25	41	32
Md90-5761	36	34	28	45	35
SL88-9529	35	36	26	46	35
SL89-203	33	29	28	42	34
SL89-336	34	35	28	42	35
SL89-534	31	29	22	35	30
SL89-1268	34	30	25	41	34
SL89-3560	35	38	29	44	35
SL90-343	33	30	25	37	35

PRELIMINARY TEST IIIA, 1993

PLANT HEIGHT (inches)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	37	34	42	26	36
IA2007 (II)	28	36	39	23	33
Resnik (III)	30	34	39	26	38
C1866	42	34	49	31	46
C1868	33	37	39	22	36
C1870	36	35	45	25	41
C1871	32	36	44	24	38
C1872	34	36	45	26	42
C1873	38	32	48	26	34
C1874	34	34	46	26	34
C1875	32	31	38	23	33
C1876	40	36	45	26	38
HF91-138	33	34	42	24	33
HF91-385	36	33	37	27	40
HS89-3078	33	31	43	23	37
HS89-6088	36	35	35	24	40
HS90-3513	36	34	37	26	35
HS90-3515	32	40	43	24	34
HS90-3677	35	39	38	26	33
HS91-4523	35	30	38	27	38
HS91-4621	35	32	40	25	36
HS91-4624	29	35	38	27	41
LN89-334	34	36	38	24	37
LN89-344	38	34	37	27	39
LN89-3619	38	32	41	26	35
LN89-4079	34	32	39	26	36
LN90-608	37	34	41	28	42
LN90-728	37	36	41	27	28
LN90-745	37	33	40	22	33
LN90-3028	46	30	39	29	41
LN90-3336	37	37	40	27	41
LN90-3382	35	35	40	23	32
Md90-5761	37	34	43	28	39
SL88-9529	30	33	43	25	38
SL89-203	35	32	37	24	36
SL89-336	34	30	43	26	37
SL89-534	36	36	37	22	35
SL89-1268	33	32	43	26	41
SL89-3560	34	31	39	27	40
SL90-343	35	33	38	26	36

PRELIMINARY TEST IIIA, 1993

SEED QUALITY (score)

Strain	Mean 9 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	1.6	1.5	2.0	1.5	1.0
IA2007 (II)	2.0	1.5	1.5	2.0	2.0
Resnik (III)	1.5	1.5	1.0	1.8	1.0
C1866	1.6	2.5	1.5	1.5	1.0
C1868	1.6	2.0	1.5	1.5	1.0
C1870	1.5	1.5	1.5	1.5	1.0
C1871	1.6	2.0	1.5	1.8	1.0
C1872	1.4	1.5	1.0	1.5	1.0
C1873	1.3	1.0	1.0	1.5	1.0
C1874	1.5	1.5	1.5	1.5	1.0
C1875	1.4	1.0	1.0	1.5	1.0
C1876	1.6	2.5	2.5	1.5	1.0
HF91-138	1.5	1.5	1.0	1.5	1.0
HF91-385	1.6	1.5	1.5	1.5	1.0
HS89-3078	1.4	1.0	1.0	1.5	1.0
HS89-6088	1.4	1.0	1.0	1.5	1.0
HS90-3513	1.8	1.5	1.5	1.8	1.0
HS90-3515	1.9	1.5	1.5	1.5	2.0
HS90-3677	1.5	1.5	1.5	1.5	1.0
HS91-4523	1.5	1.0	1.0	2.0	1.0
HS91-4621	1.4	1.0	1.0	1.5	1.0
HS91-4624	1.4	1.0	1.0	1.5	1.0
LN89-334	1.6	1.5	1.5	1.8	1.0
LN89-344	1.7	2.0	2.0	1.5	1.0
LN89-3619	1.4	1.5	1.5	1.4	1.0
LN89-4079	1.5	1.0	1.5	1.5	1.0
LN90-608	1.6	1.5	1.5	1.8	1.0
LN90-728	1.7	2.0	1.0	1.5	1.0
LN90-745	1.4	1.0	1.0	1.8	1.0
LN90-3028	1.6	1.5	1.5	1.5	1.0
LN90-3336	1.4	1.0	1.0	1.8	1.0
LN90-3382	1.5	1.0	1.0	1.5	1.0
Md90-5761	1.6	1.5	2.5	1.8	1.0
SL88-9529	1.5	1.0	1.5	1.8	1.0
SL89-203	1.5	1.5	1.5	1.8	1.0
SL89-336	1.4	1.5	1.5	1.5	1.0
SL89-534	1.5	1.5	1.5	1.5	1.0
SL89-1268	1.7	1.5	1.5	1.5	1.0
SL89-3560	1.5	1.5	1.5	1.8	1.0
SL90-343	1.4	1.0	1.0	1.5	1.0

PRELIMINARY TEST IIIA, 1993

SEED QUALITY (score)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	3.0	1.0	1.0	1.1	2.0
IA2007 (II)	5.0	1.5	1.0	1.2	2.3
Resnik (III)	3.0	1.0	1.0	1.2	1.8
C1866	3.0	1.0	1.0	1.2	1.8
C1868	3.0	1.0	1.0	1.2	2.5
C1870	2.5	1.0	1.0	1.3	2.5
C1871	3.0	1.0	1.0	1.3	2.0
C1872	2.5	1.0	1.0	1.0	2.3
C1873	2.0	1.0	1.0	1.2	1.8
C1874	3.0	1.0	1.0	1.2	2.0
C1875	3.0	1.0	1.0	1.2	1.5
C1876	2.5	1.0	1.0	1.2	1.5
HF91-138	2.5	1.0	1.0	1.3	2.3
HF91-385	3.0	1.0	1.0	1.1	2.5
HS89-3078	3.5	1.0	1.0	1.3	1.3
HS89-6088	2.5	1.0	1.0	1.2	2.0
HS90-3513	3.0	2.0	1.0	1.3	3.0
HS90-3515	3.0	1.0	2.0	1.3	3.0
HS90-3677	2.5	1.0	1.0	1.2	2.0
HS91-4523	2.5	1.0	1.0	1.2	2.5
HS91-4621	3.0	1.0	1.0	1.3	2.0
HS91-4624	2.5	1.0	1.0	1.3	2.0
LN89-334	3.5	1.0	1.0	1.2	1.5
LN89-344	3.0	1.0	1.0	1.2	2.5
LN89-3619	2.0	1.0	1.0	1.2	2.0
LN89-4079	3.0	1.0	1.0	1.3	2.0
LN90-608	3.0	1.0	1.0	1.2	2.0
LN90-728	4.5	1.0	1.0	1.3	2.0
LN90-745	3.0	1.0	1.0	1.3	1.8
LN90-3028	3.5	1.0	1.0	1.4	1.8
LN90-3336	3.0	1.0	1.0	1.2	1.3
LN90-3382	3.5	1.0	1.0	1.2	2.3
Md90-5761	3.0	1.0	1.0	1.2	1.8
SL88-9529	3.0	1.0	1.0	1.3	2.0
SL89-203	3.0	1.0	1.0	1.0	1.8
SL89-336	2.0	1.0	1.0	1.3	1.8
SL89-534	2.5	1.0	1.0	1.2	2.3
SL89-1268	4.0	1.0	1.0	1.3	2.8
SL89-3560	2.5	1.0	1.0	1.2	2.0
SL90-343	2.5	1.0	1.0	1.2	2.0

PRELIMINARY TEST IIIA, 1993

SEED SIZE (g/100)

Strain	Mean 8 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	13.4	12.1	11.4	14.7	14.0
IA2007 (II)	16.8	15.7	13.5	18.1	18.6
Resnik (III)	14.6	13.9	12.5	15.9	15.6
C1866	13.6	12.7	11.2	14.9	14.1
C1868	15.1	13.4	12.9	16.5	16.1
C1870	17.0	14.4	13.3	18.2	19.6
C1871	16.2	15.0	13.0	17.7	18.8
C1872	14.9	12.7	12.1	15.9	15.6
C1873	14.2	13.5	11.7	15.6	14.9
C1874	13.5	12.4	10.7	15.0	15.2
C1875	14.9	13.6	11.7	16.4	15.9
C1876	13.3	11.6	11.1	14.0	14.1
HF91-138	14.1	12.5	11.8	15.2	14.9
HF91-385	14.4	13.6	11.6	15.0	16.1
HS89-3078	16.5	16.3	13.8	18.9	16.9
HS89-6088	16.1	16.0	13.6	17.2	17.7
HS90-3513	23.7	22.3	20.0	26.3	24.4
HS90-3515	21.7	20.8	17.5	23.7	22.6
HS90-3677	14.9	13.9	12.6	15.5	16.2
HS91-4523	17.8	17.1	13.9	20.6	19.0
HS91-4621	15.0	14.0	12.3	17.0	15.7
HS91-4624	15.7	14.4	12.5	16.7	16.3
LN89-334	13.7	12.0	11.7	15.4	14.1
LN89-344	14.2	13.1	12.4	14.3	14.9
LN89-3619	15.6	13.7	11.6	15.8	15.8
LN89-4079	18.3	16.7	14.5	19.9	20.5
LN90-608	15.2	13.5	12.8	16.0	16.7
LN90-728	15.4	14.5	12.5	17.0	17.5
LN90-745	15.1	13.7	12.5	16.9	16.4
LN90-3028	17.1	15.3	14.1	18.2	17.5
LN90-3336	13.6	12.3	10.9	13.8	14.8
LN90-3382	14.5	13.4	11.7	15.6	16.1
Md90-5761	13.7	11.9	11.3	15.1	15.5
SL88-9529	13.5	11.8	11.1	15.3	14.5
SL89-203	14.4	12.2	13.0	15.3	16.7
SL89-336	14.9	13.4	11.6	15.9	16.1
SL89-534	15.6	13.8	12.9	17.1	17.2
SL89-1268	14.8	13.0	11.5	16.1	16.0
SL89-3560	14.1	12.1	11.7	14.3	16.1
SL90-343	16.1	14.6	13.8	17.0	18.5

PRELIMINARY TEST IIIA, 1993

SEED SIZE (g/100)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)		12.5	13.9	14.0	14.9
IA2007 (II)		16.8	17.0	17.0	17.6
Resnik (III)		14.1	15.1	14.3	15.4
C1866		12.4	13.8	14.2	15.6
C1868		13.9	15.3	16.5	15.8
C1870		16.5	17.5	17.1	19.1
C1871		15.6	16.7	16.3	16.8
C1872		14.3	16.4	15.6	16.7
C1873		13.7	14.9	14.5	15.1
C1874		12.0	13.7	14.6	14.3
C1875		13.9	16.2	14.8	16.3
C1876		12.1	13.8	14.1	15.7
HF91-138		13.7	15.9	14.4	14.2
HF91-385		13.3	14.6	14.7	16.6
HS89-3078		16.8	17.8	12.2	19.3
HS89-6088		15.2	15.9	15.2	17.6
HS90-3513		22.7	25.4	22.9	25.5
HS90-3515		20.1	24.2	21.1	23.9
HS90-3677		14.4	15.7	15.7	15.2
HS91-4523		16.9	19.4	17.0	18.3
HS91-4621		14.7	16.3	14.8	15.0
HS91-4624		15.9	16.5	16.3	17.0
LN89-334		13.3	14.7	13.9	14.6
LN89-344		14.1	14.7	13.8	15.9
LN89-3619		13.4	23.1	15.7	15.5
LN89-4079		16.9	20.1	18.0	19.5
LN90-608		14.1	16.5	14.6	17.5
LN90-728		15.2	16.8	15.2	14.4
LN90-745		14.2	16.1	14.0	16.7
LN90-3028		16.3	18.7	18.1	18.8
LN90-3336		13.1	13.8	14.7	15.7
LN90-3382		13.7	15.2	14.7	15.9
Md90-5761		13.0	15.0	13.5	14.4
SL88-9529		12.2	15.0	13.1	15.0
SL89-203		13.8	14.4	13.6	16.5
SL89-336		13.5	15.6	16.0	17.3
SL89-534		13.7	16.8	16.3	16.9
SL89-1268		13.8	15.6	15.1	16.9
SL89-3560		13.0	14.2	14.6	16.6
SL90-343		16.3	16.7	15.6	15.9

PRELIMINARY TEST IIIA, 1993

PROTEIN (%)

Strain	Mean 4 Tests	Fairfield IA	Urbana IL	Lafayette IN	Hoytville OH
Flyer (IV)	42.1	42.5	43.2	42.3	40.2
IA2007 (II)	39.9	40.3	42.2	39.5	37.6
Resnik (III)	42.1	43.4	43.5	40.9	40.6
C1866	41.1	42.5	42.5	40.8	38.6
C1868	41.2	42.5	42.1	40.8	39.2
C1870	41.2	41.7	43.2	41.8	38.1
C1871	40.4	41.4	41.1	40.7	38.2
C1872	41.1	42.3	42.3	40.6	39.3
C1873	40.5	41.4	42.1	39.9	38.5
C1874	40.6	41.6	41.9	41.2	37.8
C1875	41.1	42.6	41.3	40.8	39.8
C1876	40.0	41.0	40.1	40.7	38.1
HF91-138	41.9	43.5	42.2	42.0	39.9
HF91-385	42.2	42.8	42.5	42.0	41.3
HS89-3078	43.3	43.8	43.6	43.2	42.5
HS89-6088	43.5	44.7	44.7	43.5	41.2
HS90-3513	41.8	41.0	43.7	41.7	40.7
HS90-3515	41.4	41.7	42.8	41.0	40.2
HS90-3677	41.9	42.7	43.0	41.3	40.7
HS91-4523	41.3	42.8	41.9	41.0	39.6
HS91-4621	41.8	42.2	43.1	40.9	41.1
HS91-4624	43.0	43.8	44.2	43.2	40.8
LN89-334	42.1	42.6	43.8	41.4	40.6
LN89-344	41.1	41.7	42.5	41.6	38.5
LN89-3619	41.7	41.9	43.4	41.0	40.3
LN89-4079	41.1	41.9	41.6	41.5	39.3
LN90-608	39.9	40.8	41.5	40.3	37.0
LN90-728	42.7	43.2	44.0	42.9	40.6
LN90-745	40.6	40.8	42.5	40.6	38.4
LN90-3028	40.4	41.5	40.8	40.1	39.1
LN90-3336	41.2	42.2	41.2	41.1	40.2
LN90-3382	40.4	41.1	42.3	40.2	38.1
Md90-5761	41.9	42.4	42.5	42.8	40.0
SL88-9529	41.7	42.2	43.6	42.0	38.9
SL89-203	40.9	42.1	41.7	41.1	38.6
SL89-336	40.3	40.8	41.3	40.2	39.0
SL89-534	40.9	41.5	42.0	41.6	38.3
SL89-1268	41.4	41.7	42.5	42.2	39.1
SL89-3560	41.2	41.3	42.0	41.7	39.9
SL90-343	39.5	40.2	40.2	40.1	37.5

PRELIMINARY TEST IIIA, 1993

OIL (%)

Strain	Mean 4 Tests	Fairfield IA	Urbana IL	Lafayette IN	Hoytville OH
Flyer (IV)	20.3	19.2	20.5	20.6	20.9
IA2007 (II)	21.8	20.9	21.5	22.3	22.3
Resnik (III)	20.8	19.7	21.1	21.5	20.9
C1866	21.0	19.5	21.2	21.8	21.6
C1868	20.0	18.4	20.3	20.9	20.4
C1870	20.3	18.8	20.1	21.2	21.0
C1871	20.3	19.3	20.4	20.8	20.8
C1872	20.5	18.9	20.7	21.3	21.2
C1873	20.0	18.9	19.9	21.1	20.2
C1874	20.1	18.0	20.6	20.9	21.0
C1875	21.0	19.5	21.7	21.8	20.8
C1876	19.7	17.7	20.0	20.3	20.8
HF91-138	20.3	17.8	21.2	21.0	20.9
HF91-385	20.2	19.5	20.5	21.1	19.9
HS89-3078	20.8	19.9	21.4	20.9	20.8
HS89-6088	20.3	19.2	20.4	20.4	21.2
HS90-3513	21.4	22.4	20.9	21.9	20.5
HS90-3515	21.1	20.3	21.4	21.6	21.0
HS90-3677	20.7	19.3	21.1	21.2	21.1
HS91-4523	21.7	20.4	22.3	22.3	21.7
HS91-4621	21.0	19.9	21.1	22.0	20.9
HS91-4624	20.5	18.8	20.9	20.4	22.0
LN89-334	20.3	19.5	20.4	20.8	20.5
LN89-344	20.8	19.9	20.9	21.6	20.8
LN89-3619	21.2	20.4	21.3	21.7	21.5
LN89-4079	21.3	20.0	21.8	21.6	21.6
LN90-608	21.2	20.3	21.2	21.6	21.5
LN90-728	20.2	18.9	20.3	20.9	20.6
LN90-745	21.9	21.1	22.2	22.6	21.8
LN90-3028	20.9	19.9	21.4	21.5	20.6
LN90-3336	20.2	18.6	21.5	20.9	19.9
LN90-3382	21.0	20.2	20.5	21.9	21.5
Md90-5761	20.4	19.3	20.9	20.6	20.6
SL88-9529	19.7	18.4	19.9	20.0	20.5
SL89-203	21.1	19.3	21.8	21.8	21.6
SL89-336	20.6	19.2	21.2	21.1	21.0
SL89-534	20.7	19.7	20.6	20.9	21.5
SL89-1268	20.1	18.6	20.4	20.6	20.9
SL89-3560	20.7	19.7	21.2	21.0	21.0
SL90-343	21.4	20.1	22.0	21.8	21.8

PRELIMINARY TEST IIIB, 1993

Strain	Parentage	Generation Composited	Unique Traits
Flyer (IV)	Asgrow A3127[4] x Williams 82	BC3 F2	Rps1-k
IA2007 (L)	Pride B152 x A80-244003	F5	
Resnik (III)	Asgrow A3127[4] x Williams 82	BC3 F3	Rps1-k
A92-627035	Dairyland DSR 252 x Kenwood	F5	
A92-627056	Dairyland DSR 252 x Northrup King S23-03	F5	
A92-632035	Dairyland DSR 304 x Northrup King S23-12	F5	
A92-633051	Asgrow A2234 x Dairyland DSR 304	F5	
A92-633054	Northrup King S23-03 x Asgrow A3205	F5	
A92-634055	AP6 Population	F5	
A92-725035	LN86-1947 x Dairyland DSR 304	F5	BSR resis.
A92-727016	Kenwood x Asgrow A3205	F5	
A92-727017	Kenwood x Asgrow A3205	F5	
A92-727026	Dairyland DSR 304 x Kenwood	F5	
E92039	E84150 x E85166	F5	
E92077	Asgrow A2943 x E85110	F5	
K1251	HC83-4532 x Spencer	F5	
K1252	Stafford x Elgin	F5	
K1253	Selections from Random Mating Population	F5	
K1254	HC83-4532 x Dekalb CX415	F5	
CX1255	K1126 x Dekalb CX415	F5	
U92-3135	UX110 x Asgrow A3427	F5	
U92-3209	UX110 x Asgrow A3427	F5	
U92-3229	UX110 x Asgrow A3427	F5	
U92-3314	UX114 x Northrup King S23-03	F5	
U92-3319	UX113 x Asgrow A3427	F5	
U92-3325	UX114 x Northrup King S23-03	F5	
U92-3326	UX111 x Asgrow A3427	F5	
U92-3511	UX110 x Asgrow A3427	F5	
U92-3602	UX112 x Asgrow A3427	F5	
U92-3604	UX110 x Asgrow A3427	F5	
Charleston (dtl)	HC74-634RE x HC78-676	F5	dtl
HC85-282	HC78-353 x Sprite	F5	dtl
HC85-1163	HC78-676 x HW74-3400	F5	dtl
HC89-84PR	HC78-350[6] x Gnome 85	BC5 F3	dtl, Rps1-k
HC85-185	HC80-1946 x Asgrow A3127	F5	dtl
HC89-868	HC78-676BC x HC74-634RE	F5	dtl
HC89-1385	HC78-676BC x Pella	F5	dtl
HC89-1386	HC78-676BC x Pella	F5	dtl
HC89-1391	HC78-676BC x Pella	F5	dtl
HC89-1661	Pershing x Sprite 87	F5	dtl

PRELIMINARY TEST IIIB, 1993

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	BSR-Boone Plant n %	BSR-Boone Stem n %
Flyer (IV)	PTTDYBlI	4.0	90.0	43.8
IA2007 (II)	PTBIYBrI	4.5	90.0	41.9
Resnik (III)	PTTYBlI	3.5	80.0	67.5
A92-627035	PTBDYBlI	4.0	70.0	34.6
A92-627056	PG+TBSYIb+BlI	3.5	70.0	33.4
A92-632035	WTBDYBlI	3.5	90.0	44.9
A92-633051	WTTDYBlI	3.7	80.0	37.3
A92-633054	PTBDYBlI	4.2	30.0	8.3
A92-634055	WTBDYBlI	4.5	80.0	64.8
A92-725035	P+WTBIYBlI	3.2	0.0	0.0
A92-727016	PTBDYBlI	4.0	80.0	43.8
A92-727017	PTBDYBlI	3.7	50.0	23.7
A92-727026	WTBDYBlI	3.7	80.0	42.1
E92039	WTBSYBlI	4.0	100.0	76.0
E92077	WGTDYBfI	4.7	60.0	40.8
K1251	WTTDYBrI	3.2	90.0	63.2
K1252	WTTDYBlI	4.5	90.0	50.5
K1253	PTTDYBlI	4.2	80.0	43.0
K1254	WTTDYBlI	3.2	90.0	57.3
K1255	WTTDYBlI	4.2	90.0	52.9
U92-3135	PGTDYIbI	3.2	100.0	75.2
U92-3209	PTTDYBrI	4.0	70.0	34.4
U92-3229	PTTDYBlI	4.7	70.0	46.2
U92-3314	PGBDYBfI	3.0	40.0	19.8
U92-3319	PTTDYBlI	3.2	90.0	43.5
U92-3325	PGBDYIbI	3.2	60.0	28.2
U92-3326	PGTDYGrI	3.5	70.0	50.9
U92-3511	PTTDYBrI	3.2	60.0	25.0
U92-3602	PTTDYBl+BrI	3.5	40.0	7.2
U92-3604	PGTDYIbI	4.0	90.0	48.5
Charleston (dtl)	PTTSYBlD	4.0	50.0	34.9
HC85-282	WTTSYBlD	3.0	100.0	90.9
HC85-1163	PTBSYBrD	5.0	90.0	90.0
HC89-84PR	PTTDYBlD	2.2	10.0	5.4
HC89-185	PTTDYBlD	4.0	10.0	5.4
HC89-868	PTBSYBrD	4.0	40.0	31.0
HC89-1385	WTTSYBlD	3.5	70.0	49.0
HC89-1386	P+WTTSYBlD	3.0	10.0	6.4
HC89-1391	PTTSYBrD	3.2	40.0	27.5
HC89-1661	WTTSYBlD	2.7	80.0	50.4

PRELIMINARY TEST IIIB, 1993

DISEASE DATA

Strain	Root Rot Wooster Race 25	PR Ames Race 4	PR Lafayette Race 7	PS Lafayette a %	PSB Seed Lafayette n %	PSB Seed Lafayette Germ. %
Flyer (IV)	4.5	R	R	52	4	94
IA2007 (II)	3.7	S	R	64	10	74
Resnik (III)	4.3	R	R	48	2	94
A92-627035	4.0	S	S	68	0	92
A92-627056	4.3	S	S	76	6	84
A92-632035	5.3	S	S	40	0	98
A92-633051	3.8	S	S	38	4	80
A92-633054	4.5	S	S	68	12	80
A92-634055	3.8	S	S	72	6	90
A92-725035	4.8	S	S	60	2	98
A92-727016	4.2	S	S	84	0	88
A92-727017	4.0	S	S	84	4	88
A92-727026	5.0	S	S	72	6	80
E92039	1.8	R	S	78	10	74
E92077	4.0	S	S	72	2	80
K1251	3.7	S	S	44	6	90
K1252	4.0	S	R	76	0	94
K1253	4.7	S	S	36	0	84
K1254	4.3	S	R	72	0	94
K1255	4.7	S	S	90	0	96
U92-3135	4.0	S	R	84	2	94
U92-3209	4.0	S	S	48	4	94
U92-3229	4.3	S	S	22	4	90
U92-3314	4.5	S	S	6	10	92
U92-3319	5.7	S	H	60	8	80
U92-3325	6.3	S	S	50	16	70
U92-3326	6.2	S	R	66	6	82
U92-3511	4.7	S	R	48	12	86
U92-3602	4.5	S	R	66	4	82
U92-3604	3.8	S	R	64	4	94
Charleston (dtl)	4.7	S	S	28	2	88
HC85-282	4.5	S	S	18	4	86
HC85-1163	4.7	S	S	30	24	48
HC89-84PR	5.3	R	R	38	6	84
HC89-185	5.0	S	S	30	6	84
HC89-868	5.3	S	S	44	2	66
HC89-1385	3.8	S	S	68	0	88
HC89-1386	4.2	S	S	86	2	90
HC89-1391	4.7	R	H	70	6	92
HC89-1661	4.0	R	R	12	12	86

PRELIMINARY TEST IIIB, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 8 bu/a	Rank No.	Maturity 8 Date	Lodging 9 Score	Plant Height 9 In.	Seed Quality 9 Score	Seed Size 8 g/100	Composition Protein 4 %	 Oil 4 %
Flyer (IV)	55.6	4	5.8	1.7	35	1.4	13.5	42.5	20.2
IA2007 (II)	50.3	25	-4.6	1.4	28	1.7	16.5	40.2	21.7
Resnik (III)	54.4	8	09/25*	1.6	33	1.5	14.4	42.0	20.8
A92-627035	55.7	3	2.8	2.0	33	1.6	14.8	40.1	21.9
A92-627056	52.3	18	-0.4	2.0	35	1.8	14.1	41.1	20.8
A92-632035	56.0	2	2.9	2.0	34	1.4	14.5	41.9	20.4
A92-633051	50.0	27	1.1	1.6	33	1.6	14.6	39.8	21.1
A92-633054	53.5	11	-0.4	1.6	31	1.6	14.8	41.7	20.2
A92-634055	52.8	15	-1.0	1.9	33	1.6	13.4	41.4	20.6
A92-725035	54.5	7	6.6	2.0	36	1.5	14.0	41.1	19.9
A92-727016	54.1	9	8.0	1.9	35	1.7	14.1	41.3	19.7
A92-727017	56.6	1	3.5	1.9	34	1.6	14.1	41.2	20.1
A92-727026	52.8	15	8.6	2.0	35	1.8	14.1	40.5	20.2
E92039	48.2	33	-2.9	1.6	32	1.5	17.9	40.3	22.0
E92077	48.7	31	5.0	1.5	32	1.3	14.9	41.9	20.3
K1251	52.0	20	6.4	1.7	35	1.5	16.9	43.2	20.2
K1252	51.4	22	9.4	2.0	40	1.7	14.2	41.2	19.5
K1253	47.8	36	8.8	1.9	36	1.6	15.0	40.8	20.9
K1254	55.1	5	7.6	1.8	36	1.5	13.7	41.0	20.6
K1255	52.1	19	8.4	1.8	36	1.7	13.3	40.7	20.7
U92-3135	49.7	28	7.8	1.9	31	1.5	12.7	40.7	20.4
U92-3209	51.1	23	-0.3	2.2	33	1.4	13.6	41.7	21.0
U92-3229	47.9	35	3.8	1.8	31	1.6	13.0	41.6	19.6
U92-3314	48.5	32	2.4	2.2	35	1.6	12.5	46.4	16.8
U92-3319	53.3	12	6.4	1.7	31	1.4	15.8	41.1	20.8
U92-3325	45.7	39	7.6	2.4	35	1.9	15.0	43.5	19.7
U92-3326	49.4	30	3.0	1.4	27	1.5	14.8	40.2	20.7
U92-3511	52.5	17	4.0	2.2	34	1.6	13.1	41.6	19.8
U92-3602	53.6	10	6.0	2.4	35	1.5	15.4	42.7	19.2
U92-3604	54.8	6	1.8	1.8	31	1.4	13.7	43.1	20.4
Charleston (dtl)	53.0	13	4.9	1.6	25	1.8	14.1	41.7	19.9
HC85-282	49.7	28	8.3	1.3	23	1.7	15.5	41.4	20.6
HC85-1163	50.1	26	3.1	1.7	25	1.5	14.8	41.5	21.0
HC89-84PR	44.9	40	8.6	1.3	23	1.6	14.9	42.6	20.9
HC89-185	47.8	36	5.9	1.1	25	1.6	12.2	42.2	19.7
HC89-868	47.4	38	3.3	1.5	24	1.6	14.2	41.1	20.6
HC89-1385	52.9	14	6.9	1.6	27	1.4	15.8	41.3	20.8
HC89-1386	50.7	24	5.9	1.5	25	1.5	15.4	41.8	20.3
HC89-1391	48.0	34	5.4	1.6	24	1.5	15.1	41.3	21.0
HC89-1661	51.8	21	2.0	1.4	25	1.6	13.1	40.7	20.3

* 128.3 Days After Planting

PRELIMINARY TEST IIIB, 1993

YIELD (bu/a)

Strain	Mean 8 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	55.6	48.7	36.9	68.4	73.3
IA2007 (II)	50.3	39.3	33.6	68.0	63.9
Resnik (III)	54.4	49.1	37.0	64.4	67.9
A92-627035	55.7	50.9	40.4	65.4	76.2
A92-627056	52.3	51.0	29.8	64.0	72.4
A92-632035	56.0	50.0	39.7	67.4	75.1
A92-633051	50.0	44.6	33.7	61.8	64.2
A92-633054	53.5	50.7	36.0	67.8	74.6
A92-634055	52.8	47.3	36.4	63.4	66.6
A92-725035	54.5	51.9	34.4	67.9	73.3
A92-727016	54.1	44.6	29.0	69.5	77.1
A92-727017	56.6	53.1	39.1	67.2	71.5
A92-727026	52.8	46.4	34.8	67.6	76.0
E92039	48.2	40.9	37.9	59.6	63.5
E92077	48.7	40.2	34.3	63.7	57.4
K1251	52.0	49.1	35.0	64.1	69.9
K1252	51.4	44.8	29.0	64.4	66.1
K1253	47.8	43.5	32.2	67.0	66.5
K1254	55.1	53.1	35.8	64.3	71.3
K1255	52.1	48.4	32.2	59.2	69.0
U92-3135	49.7	42.9	34.6	63.5	54.9
U92-3209	51.1	46.0	39.5	65.0	71.5
U92-3229	47.9	44.7	32.9	61.9	56.4
U92-3314	48.5	47.7	36.1	58.3	53.8
U92-3319	53.3	53.5	34.9	58.0	72.0
U92-3325	45.7	42.0	33.2	58.1	59.2
U92-3326	49.4	40.7	35.0	61.5	60.9
U92-3511	52.5	50.2	34.4	64.0	64.3
U92-3602	53.6	50.1	37.1	60.1	67.0
U92-3604	54.8	47.0	37.3	64.4	68.1
Charleston (dtl)	53.0	44.4	36.4	72.3	60.9
HC85-282	49.7	44.3	37.8	59.3	47.8
HC85-1163	50.1	46.3	35.1	59.7	61.3
HC89-84PR	44.9	39.7	31.2	59.5	36.8
HC89-185	47.8	44.4	37.1	61.4	48.9
HC89-868	47.4	41.4	30.0	74.6	65.2
HC89-1385	52.9	49.4	37.5	67.6	68.3
HC89-1386	50.7	44.6	34.4	67.8	61.7
HC89-1391	48.0	45.7	34.4	68.3	41.1
HC89-1661	51.8	49.1	37.8	64.9	43.3
C.V. (%)		5.8	8.0	6.1	9.7
L.S.D. (5%)		5.4	5.6	8.0	12.6
Row Sp. (In.)		27	27	30	24
Rows/Plot		4	4	4	4
Reps		2	2	2	2

PRELIMINARY TEST IIIB, 1993

YIELD (bu/a)

Strain	Columbia* MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	51.9	43.5	50.3	45.9	77.7
IA2007 (II)	33.7	51.9	53.4	39.4	69.8
Resnik (III)	49.0	49.8	56.0	45.0	71.8
A92-627035	56.9	50.9	51.3	40.4	69.1
A92-627056	42.1	50.3	54.6	40.4	65.9
A92-632035	55.1	49.5	55.1	38.8	73.4
A92-633051	38.2	48.8	49.0	40.5	68.8
A92-633054	44.0	49.9	53.5	39.3	65.8
A92-634055	54.3	47.7	56.1	39.9	63.7
A92-725035	50.6	44.8	57.1	44.6	66.3
A92-727016	47.1	44.8	54.0	44.3	76.1
A92-727017	60.6	49.2	54.1	40.0	74.2
A92-727026	54.4	47.0	50.4	31.8	67.1
E92039	38.3	45.0	43.0	36.4	69.1
E92077	34.5	47.5	57.9	33.2	69.4
K1251	52.9	46.2	51.7	39.5	60.0
K1252	52.6	43.0	44.8	43.9	74.2
K1253	44.3	44.8	41.7	33.0	57.4
K1254	58.5	48.3	47.9	47.5	69.6
K1255	55.9	45.3	48.5	39.5	71.2
U92-3135	51.5	43.4	46.0	39.1	71.5
U92-3209	47.8	47.5	47.9	34.4	60.4
U92-3229	41.8	46.4	55.2	36.7	55.4
U92-3314	43.3	43.4	49.2	41.4	63.4
U92-3319	49.3	43.5	55.2	38.6	74.5
U92-3325	38.5	42.4	50.0	33.4	54.2
U92-3326	35.5	46.4	54.9	40.2	69.4
U92-3511	49.7	48.0	54.9	40.3	66.4
U92-3602	57.5	46.3	49.3	41.2	74.2
U92-3604	59.1	49.5	58.0	38.7	71.3
Charleston (dtl)	48.9	48.0	56.7	44.9	64.7
HC85-282	46.5	46.1	50.4	47.2	68.3
HC85-1163	51.6	47.1	51.4	39.8	58.9
HC89-84PR	32.6	43.0	47.1	42.2	71.7
HC89-185	35.6	43.1	44.7	42.8	72.3
HC89-868	17.9	48.6	50.0	32.3	66.2
HC89-1385	41.9	48.3	51.1	45.4	66.4
HC89-1386	41.9	46.3	50.2	45.7	63.6
HC89-1391	30.1	45.2	55.3	41.9	70.2
HC89-1661	45.5	45.9	51.1	49.5	79.0
C.V. (%)	16.1	4.8	7.5	8.0	6.1
L.S.D. (5%)	15.3	6.4	11.0	6.5	8.4
Row Sp. (In.)	30	30	30	30	7.5
Rows/Plot	4	4	4	4	8
Reps	2	2	2	2	2

* Data not included in the mean.

PRELIMINARY TEST IIIB, 1993

YIELD RANK

Strain	Yield Rank	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	4	15	13	4	6
IA2007 (II)	25	40	31	6	25
Resnik (III)	8	12	12	18	17
A92-627035	3	6	1	15	2
A92-627056	18	5	38	23	8
A92-632035	2	10	2	12	4
A92-633051	27	26	30	29	24
A92-633054	11	7	17	8	5
A92-634055	15	18	14	27	19
A92-725035	7	4	25	7	6
A92-727016	9	26	39	3	1
A92-727017	1	2	4	13	10
A92-727026	15	20	23	10	3
E92039	33	36	5	34	26
E92077	31	38	29	25	32
K1251	20	12	20	22	13
K1252	22	24	39	18	21
K1253	36	32	34	14	20
K1254	5	2	18	21	12
K1255	19	16	34	37	14
U92-3135	28	33	24	26	34
U92-3209	23	22	3	16	10
U92-3229	35	25	33	28	33
U92-3314	32	17	16	38	35
U92-3319	12	1	22	40	9
U92-3325	39	34	32	39	31
U92-3326	30	37	20	30	29
U92-3511	17	8	25	23	23
U92-3602	10	9	10	32	18
U92-3604	6	19	9	18	16
Charleston (dtl)	13	29	14	2	29
HC85-282	28	31	6	36	37
HC85-1163	26	21	19	33	28
HC89-84PR	40	39	36	35	40
HC89-185	36	29	10	31	36
HC89-868	38	35	37	1	22
HC89-1385	14	11	8	10	15
HC89-1386	24	26	25	8	27
HC89-1391	34	23	25	5	39
HC89-1661	21	12	6	17	38

PRELIMINARY TEST IIIB, 1993

YIELD RANK

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	12	33	25	4	2
IA2007 (II)	37	1	17	27	16
Resnik (III)	18	5	6	7	10
A92-627035	5	2	20	18	20
A92-627056	27	3	13	18	29
A92-632035	7	7	10	30	8
A92-633051	33	9	31	17	22
A92-633054	25	4	16	28	30
A92-634055	9	15	5	23	32
A92-725035	15	30	3	9	27
A92-727016	21	30	15	10	3
A92-727017	1	8	14	22	5
A92-727026	8	19	23	40	24
E92039	32	29	39	34	20
E92077	36	16	2	37	18
K1251	10	24	18	25	36
K1252	11	38	37	11	5
K1253	24	30	40	38	38
K1254	3	11	33	2	17
K1255	6	27	32	25	14
U92-3135	14	35	36	29	12
U92-3209	20	16	33	35	35
U92-3229	30	20	8	33	39
U92-3314	26	36	30	15	34
U92-3319	17	33	8	32	4
U92-3325	31	40	28	36	40
U92-3326	35	20	11	21	18
U92-3511	16	13	11	20	25
U92-3602	4	22	29	16	5
U92-3604	2	6	1	31	13
Charleston (dtl)	19	13	4	8	31
HC85-282	22	25	23	3	23
HC85-1163	13	18	19	24	37
HC89-84PR	38	38	35	13	11
HC89-185	34	37	38	12	9
HC89-868	40	10	27	39	28
HC89-1385	28	11	21	6	25
HC89-1386	28	22	26	5	33
HC89-1391	39	28	7	14	15
HC89-1661	23	26	21	1	1

PRELIMINARY TEST IIIB, 1993

MATURITY (date)

Strain	Mean 8 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	5.8	5		9	8
IA2007 (II)	-4.6	-5		-3	-6
Resnik (III)	09/25	09/26		09/25	09/23
A92-627035	2.8	0		9	4
A92-627056	-0.4	-1		2	0
A92-632035	2.9	4		5	3
A92-633051	1.1	2		-1	0
A92-633054	-0.4	0		-2	-2
A92-634055	-1.0	0		-1	-1
A92-725035	6.6	6		10	9
A92-727016	8.0	6		10	11
A92-727017	3.5	2		5	6
A92-727026	8.6	7		12	10
E92039	-2.9	-2		-4	-4
E92077	5.0	4		6	2
K1251	6.4	5		9	10
K1252	9.4	8		12	11
K1253	8.8	6		11	10
K1254	7.6	6		11	10
K1255	8.4	6		11	11
U92-3135	7.8	8		11	10
U92-3209	-0.3	0		-1	-1
U92-3229	3.8	4		8	5
U92-3314	2.4	2		5	4
U92-3319	6.4	6		8	9
U92-3325	7.6	4		11	11
U92-3326	3.0	4		4	4
U92-3511	4.0	5		8	6
U92-3602	6.0	4		10	9
U92-3604	1.8	2		5	3
Charleston (dtl)	4.9	4		11	7
HC85-282	8.3	6		12	10
HC85-1163	3.1	0		5	6
HC89-84PR	8.6	7		12	11
HC89-185	5.9	4		10	8
HC89-868	3.3	2		9	4
HC89-1385	6.9	7		11	9
HC89-1386	5.9	6		11	8
HC89-1391	5.4	4		10	8
HC89-1661	2.0	0		2	3
Date Planted	05/19	05/20		05/14	05/12
Days to Mature	128.3	129		134	134

PRELIMINARY TEST IIIB, 1993

MATURITY (date)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	3	6	4	5	6
IA2007 (II)	-6	-2	-7	-6	-2
Resnik (III)	09/21	10/03	09/29	09/27	09/16
A92-627035	4	2	3	-1	1
A92-627056	2	-1	1	-4	-2
A92-632035	1	1	2	2	5
A92-633051	1	3	2	0	2
A92-633054	3	0	1	-3	0
A92-634055	-3	1	0	-4	0
A92-725035	6	7	4	5	6
A92-727016	6	7	5	7	12
A92-727017	1	4	3	2	5
A92-727026	5	7	7	5	16
E92039	-4	-1	-5	-3	0
E92077	2	6	3	7	10
K1251	6	4	4	5	8
K1252	7	7	6	7	17
K1253	7	8	5	8	15
K1254	7	6	4	6	11
K1255	6	6	4	9	14
U92-3135	8	7	5	6	7
U92-3209	3	0	1	-4	0
U92-3229	1	5	4	2	1
U92-3314	0	4	3	-3	4
U92-3319	7	6	4	6	5
U92-3325	3	6	5	5	16
U92-3326	3	5	2	0	2
U92-3511	6	5	3	-1	0
U92-3602	5	5	4	3	8
U92-3604	1	0	3	-2	2
Charleston (dtl)	6	6	4	0	1
HC85-282	9	6	6	2	15
HC85-1163	7	3	3	-1	2
HC89-84PR	6	7	7	6	13
HC89-185	6	6	4	3	6
HC89-868	2	6	5	0	-2
HC89-1385	7	6	4	6	5
HC89-1386	8	7	2	0	5
HC89-1391	6	6	3	2	4
HC89-1661	3	4	3	0	1
Date Planted	05/27	06/08	05/20	05/19	05/07
Days to Mature	117	117	132	131	132

PRELIMINARY TEST IIIB, 1993

LODGING (score)

Strain	Mean 9 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	1.7	1.2	1.7	1.5	2.0
IA2007 (II)	1.4	1.0	1.2	1.0	1.3
Resnik (III)	1.6	1.1	1.6	1.5	1.8
A92-627035	2.0	1.4	1.7	2.0	2.3
A92-627056	2.0	1.2	1.3	2.0	3.0
A92-632035	2.0	1.2	1.8	2.5	2.8
A92-633051	1.6	1.1	1.7	1.0	1.8
A92-633054	1.6	1.2	1.6	1.0	2.5
A92-634055	1.9	1.1	1.4	2.0	1.5
A92-725035	2.0	1.3	1.8	2.0	2.5
A92-727016	1.9	1.2	1.8	2.0	2.5
A92-727017	1.9	1.3	1.9	2.0	2.3
A92-727026	2.0	1.3	1.8	2.0	2.8
E92039	1.6	1.1	1.8	1.0	1.8
E92077	1.5	1.2	1.3	1.0	1.8
K1251	1.7	1.5	1.4	1.5	2.0
K1252	2.0	1.3	2.0	2.0	2.0
K1253	1.9	1.3	1.6	2.0	2.5
K1254	1.8	1.3	1.8	1.5	2.3
K1255	1.8	1.3	1.6	1.5	2.3
U92-3135	1.9	1.1	1.6	2.0	2.0
U92-3209	2.2	1.2	1.7	3.0	3.0
U92-3229	1.8	1.2	1.6	1.5	2.3
U92-3314	2.2	1.3	1.6	2.5	3.3
U92-3319	1.7	1.2	1.5	1.5	2.5
U92-3325	2.4	1.6	2.0	3.5	3.0
U92-3326	1.4	1.2	1.3	1.0	1.5
U92-3511	2.2	1.3	1.6	3.0	3.0
U92-3602	2.4	1.4	2.0	2.5	3.5
U92-3604	1.8	1.2	1.5	1.5	2.5
Charleston (dtl)	1.6	1.3	2.3	1.0	1.0
HC85-282	1.3	1.3	1.8	1.0	1.0
HC85-1163	1.7	1.3	1.9	1.0	1.0
HC89-84PR	1.3	1.2	1.8	1.0	1.0
HC89-185	1.1	1.1	1.2	1.0	1.0
HC89-868	1.5	1.3	2.1	1.0	1.0
HC89-1385	1.6	1.3	1.8	1.0	1.0
HC89-1386	1.5	1.3	1.9	1.0	1.0
HC89-1391	1.6	1.3	2.0	1.0	1.0
HC89-1661	1.4	1.2	1.7	1.0	1.0

PRELIMINARY TEST IIIB, 1993

LODGING (score)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	2.3	1.0	3.0	1.3	1.5
IA2007 (II)	1.8	1.0	3.0	1.0	1.5
Resnik (III)	2.0	1.0	3.0	1.2	1.5
A92-627035	3.0	1.0	3.0	1.2	2.0
A92-627056	3.3	1.0	3.0	1.2	1.8
A92-632035	2.5	1.0	3.0	1.2	2.0
A92-633051	1.9	1.0	3.0	1.2	1.5
A92-633054	2.0	1.0	3.0	1.1	1.3
A92-634055	3.3	1.0	3.0	1.3	2.3
A92-725035	2.8	1.0	3.0	1.2	2.0
A92-727016	2.8	1.0	3.0	1.3	1.8
A92-727017	2.5	1.0	3.0	1.3	2.0
A92-727026	2.9	1.0	3.0	1.3	2.3
E92039	1.9	1.0	3.0	1.2	1.5
E92077	2.0	1.0	3.0	1.2	1.3
K1251	2.3	1.0	3.0	1.2	1.5
K1252	3.3	1.0	3.0	1.3	2.5
K1253	3.0	1.0	3.0	1.2	1.5
K1254	2.8	1.0	3.0	1.2	1.3
K1255	3.0	1.0	3.0	1.3	1.3
U92-3135	2.3	1.0	3.0	1.2	3.0
U92-3209	2.0	1.0	3.0	1.2	3.3
U92-3229	2.3	1.0	3.0	1.1	2.0
U92-3314	2.8	1.0	3.0	1.2	3.5
U92-3319	1.9	1.0	3.0	1.1	1.5
U92-3325	2.3	1.0	3.0	1.3	4.3
U92-3326	1.7	1.0	2.0	1.1	1.5
U92-3511	2.3	1.0	3.0	1.2	3.3
U92-3602	3.0	1.0	4.0	1.2	2.8
U92-3604	2.5	1.0	3.0	1.2	2.0
Charleston (dtl)	1.9	1.0	2.5	1.2	2.5
HC85-282	1.0	1.0	2.5	1.0	1.3
HC85-1163	1.5	1.0	3.0	1.2	3.8
HC89-84PR	1.0	1.0	2.5	1.0	1.3
HC89-185	1.0	1.0	1.5	1.1	1.0
HC89-868	1.0	1.0	2.5	1.2	2.8
HC89-1385	1.7	1.0	3.0	1.2	2.8
HC89-1386	1.7	1.0	3.0	1.2	1.3
HC89-1391	1.3	1.0	3.0	1.2	2.8
HC89-1661	1.3	1.0	2.5	1.0	1.5

PRELIMINARY TEST IIIB, 1993

PLANT HEIGHT (inches)

Strain	Mean 9 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	35	34	30	41	34
IA2007 (II)	28	26	22	35	30
Resnik (III)	33	32	28	40	33
A92-627035	33	30	28	39	33
A92-627056	35	33	24	44	36
A92-632035	34	30	28	41	35
A92-633051	33	29	28	40	31
A92-633054	31	34	26	41	36
A92-634055	33	30	24	43	31
A92-725035	36	36	30	44	39
A92-727016	35	32	28	38	39
A92-727017	34	32	29	40	34
A92-727026	35	34	28	44	39
E92039	32	28	28	39	35
E92077	32	26	23	38	34
K1251	35	36	28	45	38
K1252	40	36	32	52	41
K1253	36	36	30	46	38
K1254	36	35	30	44	39
K1255	36	36	30	42	39
U92-3135	31	26	27	31	34
U92-3209	33	30	28	38	38
U92-3229	31	27	26	37	33
U92-3314	35	32	28	41	34
U92-3319	31	32	24	41	32
U92-3325	35	34	32	44	36
U92-3326	27	24	22	33	28
U92-3511	34	32	26	43	35
U92-3602	35	34	29	44	36
U92-3604	31	27	26	39	31
Charleston (dtl)	25	25	22	28	21
HC85-282	23	24	24	27	19
HC85-1163	25	26	24	27	24
HC89-84PR	23	23	20	27	20
HC89-185	25	24	24	28	21
HC89-868	24	26	22	30	20
HC89-1385	27	26	26	29	26
HC89-1386	25	26	24	28	22
HC89-1391	24	24	24	25	17
HC89-1661	25	24	24	26	19

PRELIMINARY TEST IIIB, 1993

PLANT HEIGHT (inches)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	34	33	36	28	41
IA2007 (II)	19	32	33	24	34
Resnik (III)	28	33	39	26	38
A92-627035	30	32	45	23	34
A92-627056	33	37	43	25	37
A92-632035	34	36	40	25	38
A92-633051	26	36	41	24	39
A92-633054	24	31	35	22	32
A92-634055	31	36	39	25	38
A92-725035	32	37	41	28	40
A92-727016	32	38	43	26	41
A92-727017	33	35	44	24	38
A92-727026	34	39	37	26	38
E92039	24	37	38	23	33
E92077	28	35	43	23	36
K1251	33	36	42	26	32
K1252	40	42	43	31	45
K1253	34	40	41	28	35
K1254	34	36	43	26	36
K1255	37	41	34	27	36
U92-3135	27	35	40	22	38
U92-3209	30	36	37	23	38
U92-3229	28	34	39	22	30
U92-3314	31	40	41	27	39
U92-3319	23	33	41	23	34
U92-3325	30	40	37	28	38
U92-3326	20	30	32	22	31
U92-3511	28	37	48	24	33
U92-3602	34	35	37	27	37
U92-3604	30	32	39	21	36
Charleston (dtl)	21	28	35	21	28
HC85-282	18	27	26	20	26
HC85-1163	24	28	28	20	28
HC89-84PR	17	27	27	20	23
HC89-185	17	29	32	22	29
HC89-868	18	28	28	18	28
HC89-1385	21	30	37	22	30
HC89-1386	20	27	31	23	26
HC89-1391	18	27	36	21	27
HC89-1661	18	29	31	22	28

PRELIMINARY TEST IIIB, 1993

SEED QUALITY (score)

Strain	Mean 9 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	1.4	1.0	2.0	1.5	1.0
IA2007 (II)	1.7	1.0	1.5	1.5	2.0
Resnik (III)	1.5	1.0	1.0	1.8	1.0
A92-627035	1.6	1.0	1.5	1.5	1.0
A92-627056	1.8	1.5	2.0	2.5	1.0
A92-632035	1.4	1.0	1.0	2.0	1.0
A92-633051	1.6	1.0	1.5	1.8	1.0
A92-633054	1.6	1.0	2.0	1.5	2.0
A92-634055	1.6	1.0	1.5	2.3	1.0
A92-725035	1.5	1.5	1.5	1.5	1.0
A92-727016	1.7	1.5	2.0	1.5	1.0
A92-727017	1.6	1.0	1.5	2.0	1.0
A92-727026	1.8	1.0	1.5	1.5	1.0
E92039	1.5	1.0	1.0	1.5	1.0
E92077	1.3	1.0	1.0	2.3	1.0
K1251	1.5	1.0	1.5	1.5	1.0
K1252	1.7	1.5	2.5	2.0	1.0
K1253	1.6	1.0	2.0	1.8	1.0
K1254	1.5	1.0	2.5	1.5	1.0
K1255	1.7	1.5	2.0	2.0	1.0
U92-3135	1.5	1.5	2.0	1.5	1.0
U92-3209	1.4	1.0	1.5	1.5	1.0
U92-3229	1.6	1.5	2.5	1.8	1.0
U92-3314	1.6	1.5	1.5	2.3	1.0
U92-3319	1.4	1.0	2.0	1.8	1.0
U92-3325	1.9	1.5	1.5	2.5	2.0
U92-3326	1.5	1.0	1.0	2.0	1.0
U92-3511	1.6	1.0	1.5	2.5	1.0
U92-3602	1.5	1.0	1.5	2.3	1.0
U92-3604	1.4	1.0	1.0	1.8	1.0
Charleston (dtl)	1.8	2.0	3.0	1.5	1.0
HC85-282	1.7	2.0	3.0	1.5	1.0
HC85-1163	1.5	1.0	1.5	1.8	1.0
HC89-84PR	1.6	2.0	2.0	1.5	1.0
HC89-185	1.6	2.0	2.5	1.5	1.0
HC89-868	1.6	1.5	1.5	1.5	1.0
HC89-1385	1.4	1.0	2.0	1.8	1.0
HC89-1386	1.5	1.5	2.0	1.5	1.0
HC89-1391	1.5	1.0	2.0	1.5	1.0
HC89-1661	1.6	1.5	2.0	1.8	1.0

PRELIMINARY TEST IIIB, 1993

SEED QUALITY (score)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)	1.5	1.0	1.0	1.2	2.2
IA2007 (II)	4.0	1.0	1.0	1.2	2.3
Resnik (III)	3.0	1.0	1.0	1.3	2.0
A92-627035	4.0	1.0	1.0	1.3	2.5
A92-627056	3.5	1.0	1.0	1.1	2.3
A92-632035	2.5	1.0	1.0	1.0	2.4
A92-633051	3.5	1.0	1.0	1.2	2.2
A92-633054	2.5	1.0	1.0	1.1	2.2
A92-634055	3.0	1.0	1.0	1.2	2.3
A92-725035	2.5	1.5	1.0	1.0	2.4
A92-727016	3.0	1.5	1.0	1.2	2.2
A92-727017	3.0	1.0	1.0	1.3	2.5
A92-727026	3.5	1.5	1.0	1.2	4.0
E92039	3.0	1.0	1.0	1.4	2.3
E92077	2.5	1.0	1.0	1.3	1.0
K1251	2.5	1.0	1.0	1.0	2.6
K1252	3.0	1.5	1.0	1.2	1.8
K1253	2.5	1.0	1.0	1.2	2.6
K1254	2.0	1.0	1.0	1.0	2.3
K1255	3.5	1.0	1.0	1.2	2.5
U92-3135	2.5	1.0	1.0	1.2	1.7
U92-3209	2.5	1.0	1.0	1.1	1.8
U92-3229	2.5	1.0	1.0	1.3	1.5
U92-3314	3.5	1.0	1.0	1.2	1.8
U92-3319	2.0	1.0	1.0	1.2	2.0
U92-3325	4.0	1.0	1.0	1.3	2.3
U92-3326	3.5	1.0	1.0	1.1	2.0
U92-3511	3.0	1.0	1.0	1.3	1.7
U92-3602	2.5	1.0	1.0	1.2	2.2
U92-3604	3.0	1.0	1.0	1.2	1.8
Charleston (dtl)	3.0	1.0	1.0	1.2	2.5
HC85-282	2.0	1.5	1.0	1.2	2.2
HC85-1163	3.0	1.0	1.0	1.0	2.4
HC89-84PR	3.0	1.0	1.0	1.2	2.0
HC89-185	2.0	1.0	1.0	1.2	2.0
HC89-868	2.5	1.0	1.0	1.3	3.0
HC89-1385	1.5	1.0	1.0	1.3	2.2
HC89-1386	2.0	1.0	1.0	1.0	2.3
HC89-1391	2.5	1.0	1.0	1.3	2.6
HC89-1661	2.5	1.0	1.0	1.2	2.0

PRELIMINARY TEST IIIB, 1993

SEED SIZE (g/100)

Strain	Mean 8 Tests	Fair-field IA	Stuart IA	Urbana IL	Lafay-ette IN
Flyer (IV)	13.5	12.5	11.2	14.8	14.9
IA2007 (II)	16.5	17.1	13.6	18.5	19.1
Resnik (III)	14.4	14.0	11.6	15.6	15.6
A92-627035	14.8	14.6	12.3	15.0	17.6
A92-627056	14.1	13.6	12.1	15.4	14.6
A92-632035	14.5	13.6	11.9	14.9	16.8
A92-633051	14.6	13.5	11.8	14.9	15.5
A92-633054	14.8	11.9	10.2	17.3	14.4
A92-634055	13.4	15.1	11.9	12.9	17.3
A92-725035	14.0	13.0	11.0	15.9	15.7
A92-727016	14.1	12.6	11.9	14.6	14.9
A92-727017	14.1	13.4	12.0	15.5	15.3
A92-727026	14.1	13.4	11.8	15.1	15.9
E92039	17.9	16.8	14.3	19.9	19.1
E92077	14.9	13.2	12.1	16.1	16.2
K1251	16.9	16.0	13.2	18.5	18.9
K1252	14.2	12.5	10.5	16.9	16.3
K1253	15.0	14.3	12.1	17.5	16.7
K1254	13.7	13.1	11.7	14.6	15.5
K1255	13.3	12.6	10.7	15.2	14.3
U92-3135	12.7	10.7	11.2	13.7	14.0
U92-3209	13.6	13.5	11.9	14.8	14.5
U92-3229	13.0	11.8	11.0	13.6	14.1
U92-3314	12.5	11.3	10.2	13.3	13.2
U92-3319	15.8	15.6	13.1	17.6	17.7
U92-3325	15.0	13.1	12.2	15.5	16.1
U92-3326	14.8	13.6	12.8	15.5	15.8
U92-3511	13.1	12.2	10.9	14.4	14.4
U92-3602	15.4	14.8	12.7	16.9	17.1
U92-3604	13.7	11.9	11.7	14.9	14.8
Charleston (dtl)	14.1	13.7	11.4	16.0	14.9
HC85-282	15.5	15.1	12.8	16.9	16.6
HC85-1163	14.8	14.7	12.1	15.9	16.6
HC89-84PR	14.9	13.8	11.9	15.8	16.8
HC89-185	12.2	11.6	10.3	13.3	13.8
HC89-868	14.2	14.0	11.3	16.0	15.1
HC89-1385	15.8	15.1	13.2	18.3	17.4
HC89-1386	15.4	15.0	12.9	17.5	17.4
HC89-1391	15.1	14.5	12.9	16.6	16.9
HC89-1661	13.1	12.5	10.7	14.0	16.2

PRELIMINARY TEST IIIB, 1993

SEED SIZE (g/100)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Flyer (IV)		12.8	13.5	13.1	14.8
IA2007 (II)		16.3	17.6	12.3	17.4
Resnik (III)		13.7	15.4	14.3	14.8
A92-627035		14.0	16.5	13.9	14.5
A92-627056		14.1	14.3	14.7	13.8
A92-632035		14.4	14.9	14.6	14.6
A92-633051		14.9	14.8	15.8	15.4
A92-633054		14.9	17.6	16.1	16.2
A92-634055		12.2	12.9	12.7	12.4
A92-725035		12.8	13.9	14.6	14.7
A92-727016		13.6	14.9	14.3	15.9
A92-727017		12.9	14.9	14.3	14.7
A92-727026		13.4	14.8	14.2	14.5
E92039		17.3	18.7	18.8	17.9
E92077		14.4	14.9	15.1	16.9
K1251		15.3	17.3	17.2	18.4
K1252		13.6	14.0	13.8	16.1
K1253		13.9	15.4	16.1	14.3
K1254		13.2	13.8	14.3	13.7
K1255		12.8	14.0	13.1	13.7
U92-3135		12.1	13.1	13.1	13.9
U92-3209		13.3	14.4	13.0	13.1
U92-3229		12.7	13.9	13.3	13.9
U92-3314		12.1	13.3	12.9	13.8
U92-3319		14.6	16.6	15.5	15.9
U92-3325		14.8	16.8	15.0	16.6
U92-3326		14.7	15.8	14.8	15.2
U92-3511		11.8	13.9	13.4	13.4
U92-3602		14.8	16.3	14.2	16.4
U92-3604		13.5	14.7	13.1	15.1
Charleston (dtl)		12.9	14.9	14.4	14.3
HC85-282		14.4	15.7	15.4	17.0
HC85-1163		14.1	15.4	14.6	15.2
HC89-84PR		13.9	15.0	14.9	16.9
HC89-185		10.9	11.9	13.3	12.6
HC89-868		13.8	14.7	14.7	13.6
HC89-1385		14.4	15.5	16.6	16.1
HC89-1386		14.0	15.1	15.4	15.6
HC89-1391		13.4	14.4	16.1	16.3
HC89-1661		12.2	13.1	12.7	13.3

PRELIMINARY TEST IIIB, 1993

PROTEIN (%)

Strain	Mean 4 Tests	Fairfield IA	Urbana IL	Lafayette IN	Hoytville OH
Flyer (IV)	42.5	43.0	43.7	42.4	41.0
IA2007 (II)	40.2	41.1	41.0	40.6	38.0
Resnik (III)	42.0	43.0	42.5	42.5	40.1
A92-627035	40.1	41.1	41.4	40.9	36.8
A92-627056	41.1	42.3	44.0	40.2	37.9
A92-632035	41.9	42.6	43.7	42.2	39.1
A92-633051	39.8	41.9	40.7	39.5	37.1
A92-633054	41.7	41.5	43.0	40.9	41.4
A92-634055	41.4	44.1	41.0	42.7	37.7
A92-725035	41.1	41.7	43.4	41.0	38.2
A92-727016	41.3	42.0	42.3	41.7	39.0
A92-727017	41.2	41.9	42.7	41.4	38.7
A92-727026	40.5	40.9	42.0	41.3	37.8
E92039	40.3	40.6	41.4	40.2	38.8
E92077	41.9	43.0	43.1	42.4	39.0
K1251	43.2	43.9	44.6	42.8	41.3
K1252	41.2	41.3	41.5	42.0	39.8
K1253	40.8	42.0	41.4	41.3	38.5
K1254	41.0	41.3	41.7	41.8	39.0
K1255	40.7	41.7	41.5	41.0	38.5
U92-3135	40.7	41.1	42.3	41.5	37.9
U92-3209	41.7	43.8	41.2	42.0	39.8
U92-3229	41.6	42.5	42.2	42.0	39.6
U92-3314	46.4	48.1	48.2	46.6	42.8
U92-3319	41.1	41.7	42.3	41.0	39.5
U92-3325	43.5	44.7	44.9	43.5	41.0
U92-3326	40.2	41.1	40.8	40.4	38.5
U92-3511	41.6	42.3	43.0	40.8	40.1
U92-3602	42.7	42.9	44.2	43.0	40.6
U92-3604	43.1	44.5	44.0	43.2	40.5
Charleston (dtl)	41.7	41.8	42.3	41.8	40.8
HC85-282	41.4	41.9	42.0	42.3	39.5
HC85-1163	41.5	43.3	41.4	41.7	39.7
HC89-84PR	42.6	42.5	43.2	42.6	42.2
HC89-185	42.2	43.5	42.6	42.3	40.3
HC89-868	41.1	42.3	41.7	41.1	39.2
HC89-1385	41.3	41.8	42.1	41.6	39.5
HC89-1386	41.8	43.0	42.1	42.1	40.0
HC89-1391	41.3	42.2	41.7	41.7	39.5
HC89-1661	40.7	41.5	40.8	41.0	39.6

PRELIMINARY TEST IIIB, 1993

OIL (%)

Strain	Mean 4 Tests	Fairfield IA	Urbana IL	Lafayette IN	Hoytville OH
Flyer (IV)	20.2	19.6	20.0	20.9	20.2
IA2007 (II)	21.7	21.1	21.9	21.7	21.9
Resnik (III)	20.8	19.8	21.5	21.0	20.8
A92-627035	21.9	21.1	21.7	22.3	22.4
A92-627056	20.8	20.1	19.9	21.7	21.5
A92-632035	20.4	19.2	20.5	21.1	20.6
A92-633051	21.1	19.2	21.6	21.6	21.9
A92-633054	20.2	19.4	20.4	21.7	19.2
A92-634055	20.6	18.7	22.2	20.2	21.1
A92-725035	19.9	18.4	18.8	21.7	20.6
A92-727016	19.7	18.2	20.2	19.8	20.5
A92-727017	20.1	18.8	20.1	20.7	20.7
A92-727026	20.2	18.9	20.0	20.6	21.1
E92039	22.0	21.2	22.1	22.7	22.0
E92077	20.3	18.9	20.2	20.7	21.5
K1251	20.2	19.2	20.0	20.9	20.8
K1252	19.5	18.1	19.8	20.2	19.8
K1253	20.9	19.5	21.3	20.7	21.9
K1254	20.6	19.1	21.0	21.3	20.9
K1255	20.7	18.7	20.3	22.9	20.7
U92-3135	20.4	19.1	20.0	21.1	21.5
U92-3209	21.0	19.6	22.0	21.4	20.9
U92-3229	19.6	18.1	20.0	20.4	19.9
U92-3314	16.8	14.9	15.9	17.8	18.7
U92-3319	20.8	19.8	20.4	21.7	21.2
U92-3325	19.7	18.2	20.0	20.4	20.0
U92-3326	20.7	19.5	20.7	21.7	20.7
U92-3511	19.8	18.5	19.9	20.5	20.4
U92-3602	19.2	19.1	18.4	19.4	20.0
U92-3604	20.4	19.0	20.4	20.7	21.5
Charleston (dtl)	19.9	19.4	19.8	20.3	20.2
HC85-282	20.6	19.9	20.7	21.0	20.7
HC85-1163	21.0	19.7	21.6	21.1	21.4
HC89-84PR	20.9	20.4	21.3	21.3	20.5
HC89-185	19.7	18.4	20.0	20.0	20.5
HC89-868	20.6	19.6	20.6	20.7	21.3
HC89-1385	20.8	19.9	21.2	20.9	21.2
HC89-1386	20.3	19.2	21.0	20.7	20.4
HC89-1391	21.0	19.8	21.5	21.4	21.3
HC89-1661	20.3	19.6	20.9	20.5	20.1

UNIFORM TEST IV, 1993

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Delsoy 4210 (SCN)	(Williams x PI 88.788) x (Union x Douglas)	5	F6	SCN 3,4
Flyer (E)	Asgrow A3127[4] x Williams 82	6	BC3 F2	Rps1-k
Ripley (dt_1)	Hodgson x V68-1034	1	F5	dt1
Spencer (IV)	A75-305022 x Century	8	F5	
HC85-2176	Sprite x L77-1836	PTIVB	F5	dt1
HC86-3403	HC78-279 x Asgrow A3127	2	F5	Dt1
HC88-4257	SB27 x Asgrow A3127	PTIVA	F5	Dt1
HC89-2170	HC80-1946 x Asgrow A3127	PTIVA	F5	Dt1
HC89-2207	HC80-1944 x Asgrow A3127	PTIVA	F5	Dt1
HM9196	Will x Asgrow A3127	PTIIIB	F5	
HM9197	HW8372 x HM8477	PTIIIB	F5	
HS89-5467	HS84-6276 x Conrad	1	F5	
K1191 (L)	Sherman x Toano	2	F5	
K1213	Hutcheson x Asgrow A3427	1	F5	
K1226	Asgrow A3427 x Asgrow A3966	PTIIIA	F5	
K1231	Elgin x Asgrow A3427	PTIIIA	F5	
K1233	Hutcheson x Asgrow A3427	PTIVB	F5	
K1235	Hutcheson x Asgrow A3427	PTIVB	F5	
K1236	Asgrow A3427 x Ripley	PTIVB	F5	
K1237	Hutcheson x Asgrow A3966	PTIVB	F5	
Ky88-1195	Dekalb Pfizer CX415 x FFR561	1	F5	
Ky88-5037	Asgrow A4595 x Dekalb Pfizer CX445	1	F5	
LN88-9883	Sherman x Asgrow A2943	PTIIIA	F5	
LN89-1179	Sherman x Asgrow A3205	PTIVA	F5	
LN89-2546	Hobbit 87 x Resnik	PTIVA	F5	Rps1-k
LN89-3615	Hobbit 87 x Asgrow A3205	PTIVA	F5	Rps1-k
LS86-1922	Pyramid x LS78-W124-1	2	F6	SCN 3,14
LS87-1123	Fayette x Pyramid	1	F6	SCN Res.
LS87-1311	Fayette x Pyramid	2	F5	SCN 3
Md88-5241	Spencer x Delsoy 4900	1	F5	

* Number of years in test or name of 1992 test.

UNIFORM TEST IV, 1993

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Hanska	Shatt. Score Lubb-ock	Emerg. Score. Ames	Root Rot Wooster Race 25	PR Laf. Race 7	PS Laf. a %	PSB Vincennes n %	Seed Germ. %
Delsoy 4210	WTTSYBlI	3.0	1.7	1	3.8	H	50	30	50
Flyer (E)	PTTDYBlI	4.5	2.5	1	4.8	R	52	15	76
Ripley (dtl)	PGTSYBfD	4.5	2.5	1	2.0	S	4	16	66
Spencer (IV)	WTBDYBrI	3.5	2.2	5	4.0	S	40	28	44
HC85-2176 (dtl)	PTTSYBlD	3.5	3.5	5	5.2	R	10	46	44
HC86-3403	PTTDYBlI	3.5	3.0	1	4.8	S	20	18	38
HC88-4257	PTBSYBlI	5.0	2.5	5	4.7	S	30	38	42
HC89-2170	PTTDYBlI	5.0	2.2	2	3.3	S	6	30	52
HC89-2207	PTTDYBlI	5.0	2.2	1	5.0	S	4	28	63
HM9196	PTTDYBlI	4.0	1.0	1	4.3	R	36	20	66
HM9197	PTTDYBlI	5.0	1.5	1	4.3	R	32	16	66
HS89-5467	PTTDYBrI	5.0	2.5	2	3.5	S	22	26	60
K1191 (L)	WGBDYBfI	5.0	2.5	4	4.5	S	10	28	54
K1213	PTTDYBlI	4.0	1.7	1	3.7	S	26	24	54
K1226	PTTDYBlI	3.5	1.7	3	4.7	S	38	38	38
K1231	PTBDYBlI	4.5	1.5	5	4.3	R	28	20	68
K1233	WTTDYBl+BrI	3.5	1.5	3	5.2	S	22	34	42
K1235	WTTDYBfI	5.0	2.2	5	3.0	S	16	20	60
K1236	PTTDYBlI	4.0	3.0	5	3.5	S	28	26	64
K1237	PTTDYBlI	4.0	2.0	3	3.3	S	40	28	60
Ky88-1195	WTTDYBlI	2.5	2.5	1	3.2	S	32	30	44
Ky88-5037	WTTDYBlI	4.5	2.0	1	3.8	R	30	24	54
LN88-9883	WGBDYBfI	5.0	2.5	1	3.8	S	58	16	74
LN89-1179	WGBSYBfI	4.0	2.2	5	4.7	S	42	26	70
LN89-2546	PTTSYBlI	4.0	2.0	1	5.0	R	33	26	68
LN89-3615	P+WTTSYBrI	5.0	1.7	1	4.3	R	2	16	54
LS86-1922	PTTSYBlI	4.5	2.7	2	4.3	S	2	44	44
LS87-1123	WTTDYBlI	4.5	2.5	1	4.2	S	2	32	44
LS87-1311	P+WTTSYBlI	4.0	2.5	4	4.0	S	3	28	62
Md88-5241	PTTSYBlI	5.0	2.5	5	4.3	S	40	42	34

UNIFORM TEST IV, 1993

SDS DATA

Strain	I %	S score	R6Date	Ridgway R6DI	R6DS	R6DX	DX Rank
Delsoy 4210	63.3	5.7	96	43	1.7	10.1	26
Flyer (E)	30.0	4.0	90	11	1.2	1.7	10
Ripley (dtl)	1.0	1.0	89	0	1.0	0.0	2
Spencer (IV)	68.0	7.7	92	75	3.4	28.0	35
HC85-2176 (dtl)	27.0	2.3	90	0	1.0	0.1	3
HC86-3403	53.3	4.3	89	12	1.2	1.5	9
HC88-4257	80.0	7.0	89	57	2.0	15.6	32
HC89-2170	63.3	5.3	92	21	1.2	3.3	16
HC89-2207	73.3	6.0	93	19	1.2	2.6	13
HM9196	63.3	6.3	89	9	1.2	1.2	7
HM9197	33.3	4.3	90	10	1.5	2.1	12
HS89-5467	43.3	5.0	90	40	2.2	10.7	27
K1191 (L)	4.0	1.7	95	3	1.0	0.4	4
K1213	71.7	6.7	94	69	2.0	15.0	31
K1226	28.3	3.7	92	9	1.3	1.3	8
K1231	25.0	4.0	93	17	1.6	3.8	20
K1233	50.0	5.3	89	20	1.4	3.4	17
K1235	33.3	4.7	96	28	1.4	4.2	22
K1236	23.3	3.7	94	3	1.0	0.4	5
K1237	23.3	3.3	90	22	1.2	3.1	15
Ky88-1195	23.7	3.0	93	14	1.7	1.7	11
Ky88-5037	38.3	4.3	96	58	1.3	8.8	25
LN88-9883	46.7	5.7	93	22	1.5	3.5	18
LN89-1179	40.0	4.3	92	25	1.5	4.4	23
LN89-2546	56.7	6.0	91	53	2.2	13.7	28
LN89-3615	43.3	5.3	92	60	2.1	14.3	29
LS86-1922	73.3	7.0	96	68	2.4	19.7	33
LS87-1123	53.3	5.7	97	55	2.1	14.8	30
LS87-1311	60.0	6.0	96	89	2.6	25.8	34
Md88-5241	27.0	3.3	92	39	1.6	7.3	24

UNIFORM TEST IV, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 13 bu/a	Rank 13 No.	Maturity 15 Date	Lodging 17 Score	Plant Height 17 In.	Seed Quality 15 Score	Seed Size 14 g/100	Composition Protein 4 %	Oil 4 %
Delsoy 4210	49.8	27	0.0	2.1	38	1.8	15.9	42.2	21.1
Flyer (E)	52.6	10	-5.4	1.3	33	1.5	13.5	42.8	21.0
Ripley (dtl)	49.6	28	-5.5	1.2	23	1.5	12.5	40.1	21.7
Spencer (IV)	50.6	24	09/29*	1.4	34	2.3	16.6	42.9	21.1
HC85-2176 (dtl)	48.2	30	-3.6	1.1	20	1.8	17.1	43.3	20.7
HC86-3403	50.5	25	-2.1	1.5	33	1.9	15.6	43.6	21.3
HC88-4257	49.1	29	-4.0	1.7	36	1.9	13.9	42.4	21.2
HC89-2170	57.2	1	-1.1	1.8	36	1.7	13.6	42.8	21.0
HC89-2207	51.1	20	-3.1	1.6	36	1.7	12.1	42.2	21.4
HM9196	52.0	14	-5.1	1.5	31	1.6	13.7	42.2	21.5
HM9197	51.2	18	-3.9	1.4	31	1.6	14.3	44.0	20.9
HS89-5467	50.8	22	-4.7	1.4	32	2.0	14.3	39.8	21.4
K1191 (L)	52.0	14	3.9	1.6	33	1.5	15.7	41.6	20.7
K1213	52.6	10	0.1	1.9	35	1.7	14.1	43.4	20.5
K1226	50.9	21	-4.0	1.7	35	1.8	14.3	41.5	21.7
K1231	53.5	5	-2.7	1.8	32	1.8	16.1	41.5	21.4
K1233	52.7	7	-1.5	1.6	34	2.2	15.4	42.0	21.9
K1235	52.5	12	5.1	1.8	33	1.9	15.2	41.8	21.2
K1236	52.8	6	-1.7	1.3	33	1.7	13.9	41.0	21.5
K1237	52.2	13	1.3	1.8	34	1.9	16.8	42.2	21.2
Ky88-1195	51.6	17	2.1	1.5	36	1.6	14.6	42.7	21.0
Ky88-5037	55.0	2	4.3	2.3	38	1.7	14.4	41.0	20.9
LN88-9883	52.7	7	-5.3	1.6	34	1.8	13.6	42.1	21.2
LN89-1179	54.7	3	-1.5	1.6	32	1.8	14.3	42.1	20.9
LN89-2546	52.7	7	-2.7	1.3	32	1.7	14.6	41.8	21.5
LN89-3615	53.7	4	1.1	1.7	32	1.7	13.9	41.5	21.7
LS86-1922	51.2	18	3.1	2.5	40	1.9	13.9	40.3	20.5
LS87-1123	50.3	26	2.7	2.5	41	1.8	13.9	40.6	20.9
LS87-1311	50.7	23	1.5	1.8	37	1.7	14.1	40.1	21.5
Md88-5241	51.8	16	-0.9	1.6	33	2.0	16.4	43.2	21.0

* 130.5 Days After Planting

UNIFORM TEST IV, 1993

1992-1993 2-YEAR MEAN

No. of Tests Strain	Yield 33 bu/a	Rank 33 No.	Maturity 32 Date	Lodging 37 Score	Plant Height 37 In.	Seed Quality 35 Score	Seed Size 33 g/100	Composition Protein 9 %	Composition Oil 9 %
Delsoy 4210	51.4	10	1.8	2.3	39	2.0	16.9	42.0	20.9
Flyer (E)	52.4	8	-4.1	1.3	33	1.6	14.1	42.3	20.8
Ripley (dtl)	49.9	14	-2.6	1.3	25	1.5	13.1	39.7	21.3
Spencer (IV)	51.6	9	09/26.5*	1.4	35	2.2	17.2	42.2	21.0
HC86-3403	52.7	7	-1.2	1.5	34	1.9	16.2	43.2	21.1
HC89-5467	53.2	5	-3.5	1.5	33	2.0	14.9	39.1	21.1
K1191 (L)	54.1	2	5.5	1.7	34	1.7	16.3	41.7	20.6
K1213	53.5	4	0.6	1.8	36	1.7	14.7	42.5	20.4
Ky88-1195	53.7	3	2.9	1.5	37	1.7	15.5	42.7	20.7
Ky88-5037	56.0	1	5.7	2.3	39	1.8	14.8	40.8	20.7
LS86-1922	50.7	12	5.0	3.1	41	1.9	14.5	40.1	20.4
LS87-1123	51.3	11	4.6	2.6	41	1.8	14.5	40.5	20.7
LS87-1311	50.7	12	2.2	1.8	38	1.8	14.6	40.0	21.1
Md88-5241	52.8	6	0.3	1.6	34	2.1	17.0	43.3	20.5

* 128.6 Days After Planting

1991-1993 3-YEAR MEAN

No. of Tests Strain	Yield 51 bu/a	Rank 51 No.	Maturity 47 Date	Lodging 55 Score	Plant Height 55 In.	Seed Quality 51 Score	Seed Size 50 g/100	Composition Protein 14 %	Composition Oil 14 %
Delsoy 4210	48.5	7	2.3	2.2	39	2.0	17.1	41.7	21.2
Flyer (E)	50.9	2	-4.3	1.4	32	1.6	14.2	41.9	20.9
Spencer (IV)	50.6	4	09/25.0*	1.4	35	2.2	17.5	41.6	21.2
HC86-3403	50.9	2	-1.2	1.4	34	1.9	16.3	43.0	21.2
K1191 (L)	53.5	1	6.0	1.7	35	1.8	16.6	41.1	20.9
LS86-1922	49.8	5	4.5	2.6	42	1.9	14.8	39.8	20.7
LS87-1311	49.7	6	2.0	1.7	38	1.7	14.8	39.5	21.4

* 130.3 Days After Planting

UNIFORM TEST IV, 1993

YIELD (bu/a)

Strain	Mean 13 Tests	George-town* DE	Newton IL	Ridg-way* IL	Ullin IL	Urbana IL	Lafay-ette IN
Delsoy 4210	49.8	11.1	59.0	24.4	41.4	58.9	61.1
Flyer (E)	52.6	9.4	54.8	42.2	39.4	69.6	73.7
Ripley (dtl)	49.6	16.2	51.9	42.9	42.7	61.0	62.4
Spencer (IV)	50.6	10.6	53.2	23.5	42.5	63.7	74.7
HC85-2176 (dtl)	48.2	13.0	53.6	36.7	44.3	63.5	63.9
HC86-3403	50.5	10.5	50.3	41.1	39.5	63.8	70.1
HC88-4257	49.1	10.2	59.6	27.7	36.1	54.4	65.3
HC89-2170	57.2	18.4	63.7	45.3	40.6	65.9	76.4
HC89-2207	51.1	13.0	61.4	32.9	43.8	58.8	65.2
HM9196	52.0	10.4	56.4	35.2	35.8	69.8	74.6
HM9197	51.2	11.5	59.4	42.8	36.4	68.7	76.0
HS89-5467	50.8	11.8	61.6	46.2	41.7	66.2	69.1
K1191 (L)	52.0	11.3	56.5	45.0	39.9	60.9	64.1
K1213	52.6	10.2	53.0	35.5	43.7	67.3	72.3
K1226	50.9	11.3	55.2	40.9	40.6	65.4	73.6
K1231	53.5	11.4	55.4	41.8	46.1	65.3	68.3
K1233	52.7	11.1	57.6	43.9	41.4	70.0	69.2
K1235	52.5	12.9	57.4	46.7	43.9	60.1	69.1
K1236	52.8	12.1	59.2	42.6	44.9	65.6	69.0
K1237	52.2	10.1	57.2	50.6	44.7	65.3	68.8
Ky88-1195	51.6	15.0	51.5	33.9	39.1	63.9	65.9
Ky88-5037	55.0	10.1	54.6	36.9	42.8	66.4	67.7
LN88-9883	52.7	10.7	52.4	46.4	42.5	64.1	75.8
LN89-1179	54.7	10.1	52.5	36.9	45.1	69.0	66.2
LN89-2546	52.7	11.0	54.9	32.2	42.1	63.7	75.9
LN89-3615	53.7	10.2	53.9	37.4	41.0	70.0	73.9
LS86-1922	51.2	16.6	56.5	34.2	45.7	62.2	65.6
LS87-1123	50.3	18.5	55.8	34.2	46.7	52.5	66.3
LS87-1311	50.7	18.8	62.2	36.2	44.7	57.4	62.3
Md88-5241	51.8	12.0	55.1	38.9	42.3	63.4	70.8
C.V. (%)		39.3	9.5	17.7	9.7	5.7	7.4
L.S.D. (5%)		3.8	ns	11.2	6.7	6.0	8.4
Row Sp. (In.)		15	30	30	30	30	24
Rows/Plot		5	4	4	4	4	4
Reps		3	3	3	30	3	3

* Data not included in the mean.

UNIFORM TEST IV, 1993

YIELD (bu/a)

Strain	Vince-nnes IN	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO
Delsoy 4210	64.3	29.0	43.1	42.0	46.8	50.2
Flyer (E)	43.8	30.3	62.7	47.3	46.7	52.9
Ripley (dtl)	52.1	29.7	48.1	46.8	42.5	52.5
Spencer (IV)	49.9	30.3	49.6	45.0	47.4	46.1
HC85-2176 (dtl)	51.5	31.6	35.5	52.4	40.5	39.1
HC86-3403	48.8	29.7	53.8	48.3	44.4	42.1
HC88-4257	47.2	27.8	54.0	48.8	48.6	45.2
HC89-2170	59.1	34.0	59.8	51.5	50.4	65.9
HC89-2207	41.4	30.1	59.9	50.2	50.0	54.9
HM9196	50.6	32.3	55.0	44.7	44.9	53.7
HM9197	48.7	29.9	55.9	43.7	39.4	46.4
HS89-5467	44.4	30.2	54.2	54.6	44.4	46.6
K1191 (L)	59.3	33.2	54.4	47.7	43.4	50.9
K1213	53.9	34.2	49.0	47.0	45.9	52.8
K1226	45.8	28.4	53.9	48.9	44.2	51.6
K1231	54.1	32.6	53.3	45.4	39.0	59.9
K1233	56.9	32.8	49.3	37.9	44.0	51.2
K1235	45.2	34.6	50.9	46.2	46.4	61.0
K1236	53.0	30.0	54.8	49.5	49.7	52.6
K1237	47.3	32.8	50.6	40.9	43.1	56.0
Ky88-1195	53.2	31.9	50.3	47.1	48.2	60.1
Ky88-5037	58.2	33.4	55.1	52.3	47.3	57.8
LN88-9883	47.9	33.3	57.4	49.0	46.7	49.8
LN89-1179	54.9	36.7	60.3	53.7	49.6	57.7
LN89-2546	51.2	31.4	55.2	51.6	44.8	46.9
LN89-3615	51.1	34.0	52.5	51.5	48.9	57.5
LS86-1922	65.1	30.3	44.6	44.4	44.6	58.5
LS87-1123	66.1	30.5	42.9	47.6	42.6	52.8
LS87-1311	62.5	29.8	53.2	42.1	38.5	52.6
Md88-5241	56.1	27.4	56.7	46.6	42.6	58.5
C.V. (%)	12.9	5.7	10.0	13.9	9.6	11.8
L.S.D. (5%)	11.1	3.0	8.9	7.0	7.1	10.2
Row Sp. (In.)	26	30	30	30	30	30
Rows/Plot	4	4	4	4	4	4
Reps	3	3	3	3	3	3

UNIFORM TEST IV, 1993

YIELD (bu/a)

Strain	Portage ville MO	Adel-phia* NJ	Mt. Orab OH	South Charleston OH	Landis-ville* PA
Delsoy 4210	54.1	39.9	38.3	59.2	35.7
Flyer (E)	44.5	31.0	45.1	72.9	32.2
Ripley (dtl)	37.9	38.1	52.0	65.2	34.7
Spencer (IV)	48.5	41.8	40.6	66.3	27.9
HC85-2176 (dtl)	37.9	42.5	47.2	65.8	23.6
HC86-3403	52.3	42.0	43.2	70.2	34.1
HC88-4257	45.4	34.9	46.0	60.3	31.9
HC89-2170	52.6	36.1	47.0	77.2	42.1
HC89-2207	44.0	34.8	42.7	62.1	41.6
HM9196	41.3	37.5	51.3	66.0	25.8
HM9197	47.5	35.1	42.5	71.5	32.6
HS89-5467	45.7	39.8	35.6	66.1	34.7
K1191 (L)	52.9	39.0	48.7	64.4	51.1
K1213	46.8	37.7	49.2	68.5	41.0
K1226	40.3	35.7	44.2	69.9	29.2
K1231	53.2	41.5	44.7	78.7	39.6
K1233	55.6	37.8	46.9	72.0	40.4
K1235	52.5	37.4	42.4	72.6	44.7
K1236	49.7	41.0	42.5	65.5	41.7
K1237	50.6	36.3	48.2	72.7	40.0
Ky88-1195	44.7	34.3	48.1	66.5	45.3
Ky88-5037	57.5	34.9	45.3	77.1	52.3
LN88-9883	46.0	37.3	46.6	74.0	39.4
LN89-1179	53.9	36.0	42.1	68.8	40.5
LN89-2546	50.3	39.2	46.4	71.3	39.5
LN89-3615	47.9	41.3	49.0	67.1	39.8
LS86-1922	51.8	38.7	40.7	55.9	43.4
LS87-1123	48.4	35.3	44.1	57.9	40.9
LS87-1311	53.4	38.8	41.3	58.8	37.6
Md88-5241	46.0	37.4	48.2	59.9	33.0
C.V. (%)	6.8	17.0	11.5	7.7	20.2
L.S.D. (5%)	5.4	10.4	ns	8.5	12.5
Row Sp. (In.)	30	30	15	7.5	24
Rows/Plot	4	4	6	8	4
Reps	3	3	3	3	3

* Data not included in the mean.

UNIFORM TEST IV, 1993

YIELD RANK

Strain	Yield Rank	George-town DE	Newton IL	Ridg-way IL	Ullin IL	Urbana IL	Lafay-ette IN
Delsoy 4210	27	17	8	29	18	26	30
Flyer (E)	10	30	20	11	25	4	8
Ripley (dtl)	28	5	28	8	13	23	28
Spencer (IV)	24	21	24	30	15	18	5
HC85-2176 (dtl)	30	7	23	19	8	20	27
HC86-3403	25	22	30	13	26	17	12
HC88-4257	29	24	5	28	29	29	24
HC89-2170	1	3	1	5	23	10	1
HC89-2207	20	7	4	26	10	27	25
HM9196	14	23	14	22	30	3	6
HM9197	18	13	6	9	28	6	2
HS89-5467	22	12	3	4	19	9	14
K1191 (L)	14	15	12	6	24	24	26
K1213	10	24	25	21	11	7	10
K1226	21	15	17	14	22	12	9
K1231	5	14	16	12	2	13	18
K1233	7	17	9	7	20	1	13
K1235	12	9	10	2	9	25	14
K1236	6	10	7	10	5	11	16
K1237	13	27	11	1	6	13	17
Ky88-1195	17	6	29	25	27	16	22
Ky88-5037	2	27	21	17	12	8	19
LN88-9883	7	20	27	3	14	15	4
LN89-1179	3	27	26	17	4	5	21
LN89-2546	7	19	19	27	17	18	3
LN89-3615	4	24	22	16	21	1	7
LS86-1922	18	4	12	23	3	22	23
LS87-1123	26	2	15	23	1	30	20
LS87-1311	23	1	2	20	7	28	29
Md88-5241	16	11	18	15	16	21	11

UNIFORM TEST IV, 1993

YIELD RANK

Strain	Vince-nnes IN	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO
Delsoy 4210	3	27	28	28	10	22
Flyer (E)	29	17	1	16	11	13
Ripley (dtl)	15	25	26	19	26	18
Spencer (IV)	20	17	23	23	8	27
HC85-2176 (dtl)	16	14	30	3	27	30
HC86-3403	21	26	16	13	18	29
HC88-4257	25	29	14	12	6	28
HC89-2170	6	4	4	6	1	1
HC89-2207	30	21	3	8	2	11
HM9196	19	12	10	24	15	12
HM9197	22	23	7	26	28	26
HS89-5467	28	20	13	1	18	25
K1191 (L)	5	8	12	14	22	21
K1213	12	3	25	18	14	15
K1226	26	28	15	11	20	19
K1231	11	11	17	22	29	4
K1233	8	9	24	30	21	20
K1235	27	2	20	21	13	2
K1236	14	22	11	9	3	17
K1237	24	9	21	29	23	10
Ky88-1195	13	13	22	17	7	3
Ky88-5037	7	4	9	4	9	7
LN88-9883	23	7	5	10	11	23
LN89-1179	10	1	2	2	4	8
LN89-2546	17	15	8	5	16	24
LN89-3615	18	4	19	7	5	9
LS86-1922	2	17	27	25	17	6
LS87-1123	1	16	29	15	24	14
LS87-1311	4	24	18	27	30	16
Md88-5241	9	30	6	20	24	5

UNIFORM TEST IV, 1993

YIELD RANK

Strain	Portage ville MO	Adel- phia NJ	Mt. Orab OH	South Charleston OH	Landis- ville PA
Delsoy 4210	3	7	29	27	19
Flyer (E)	25	10	16	5	25
Ripley (dtl)	29	14	1	22	20
Spencer (IV)	15	3	28	17	28
HC85-2176 (dtl)	29	1	9	20	30
HC86-3403	10	2	20	11	22
HC88-4257	23	27	14	25	26
HC89-2170	8	22	10	2	6
HC89-2207	26	29	21	24	8
HM9196	27	17	2	19	29
HM9197	18	26	22	9	24
HS89-5467	22	8	30	18	20
K1191 (L)	7	10	5	23	2
K1213	19	16	3	14	9
K1226	28	24	18	12	27
K1231	6	4	17	1	15
K1233	2	15	11	8	12
K1235	9	18	24	7	4
K1236	14	6	22	21	7
K1237	12	21	6	6	13
Ky88-1195	24	30	8	16	3
Ky88-5037	1	27	15	3	1
LN88-9883	20	20	12	4	17
LN89-1179	4	23	25	13	11
LN89-2546	13	9	13	10	16
LN89-3615	17	5	4	15	14
LS86-1922	11	13	27	30	5
LS87-1123	16	25	19	29	10
LS87-1311	5	12	26	28	18
Md88-5241	20	18	6	26	23

UNIFORM TEST IV, 1993

MATURITY (date)

Strain	Mean 15 Tests	George-town DE	Newton IL	Ridg-way IL	Ullin IL	Urbana IL	Lafay-ette IN
Delsoy 4210	0.0		-2	1	3	1	-1
Flyer (E)	-5.4		-10	0	-1	-2	-3
Ripley (dtl)	-5.5		-15	0	-2	-3	-4
Spencer (IV)	09/29		10/03	09/13	09/29	10/07	10/04
HC85-2176 (dtl)	-3.6		-9	3	-1	-1	-1
HC86-3403	-2.1		-8	4	0	2	1
HC88-4257	-4.0		-9	-1	-1	-2	-3
HC89-2170	-1.1		-1	4	0	3	2
HC89-2207	-3.1		-5	0	-1	2	0
HM9196	-5.1		-8	-2	-2	0	-4
HM9197	-3.9		-7	0	-1	0	-1
HS89-5467	-4.7		-9	2	-2	-1	-3
K1191 (L)	3.9		5	12	2	6	2
K1213	0.1		-2	4	2	3	1
K1226	-4.0		-8	2	-2	0	-3
K1231	-2.7		-7	2	1	0	-2
K1233	-1.5		-7	5	-1	2	1
K1235	5.1		2	14	5	7	3
K1236	-1.7		-4	2	2	2	-1
K1237	1.3		2	8	2	6	2
Ky88-1195	2.1		1	8	1	5	3
Ky88-5037	4.3		5	11	3	6	3
LN88-9883	-5.3		-13	1	-2	-1	-4
LN89-1179	-1.5		-6	1	1	1	-1
LN89-2546	-2.7		-8	0	0	1	0
LN89-3615	1.1		2	5	2	4	2
LS86-1922	3.1		5	8	3	5	2
LS87-1123	2.7		5	8	4	3	2
LS87-1311	1.5		2	4	1	2	2
Md88-5241	-0.9		-2	7	2	3	1
Date Planted	05/22		05/21	05/26	06/19	05/14	05/12
Days to Mature	130.5		135	110	102	146	145

UNIFORM TEST IV, 1993

MATURITY (date)

Strain	Vince-nnes IN	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO
Delsoy 4210	0		4	-2	-4	-2
Flyer (E)	-8		-3	-10	-8	-7
Ripley (dtl)	-8		-6	-9	-5	-5
Spencer (IV)	10/04		10/04	09/30	10/01	09/30
HC85-2176 (dtl)	-7		-2	-7	-7	-4
HC86-3403	-4		-2	-6	-3	-7
HC88-4257	-6		-2	-8	-6	-4
HC89-2170	-5		2	-10	-6	-1
HC89-2207	-8		-1	-10	-6	-5
HM9196	-8		-1	-10	-4	-8
HM9197	-4		-2	-8	-6	-6
HS89-5467	-7		-2	-10	-6	-6
K1191 (L)	4		6	-1	-5	4
K1213	-4		4	-4	-4	-3
K1226	-5		-2	-10	-4	-8
K1231	-4		0	-10	-2	-5
K1233	-5		-2	-7	-3	-7
K1235	5		7	0	0	5
K1236	-6		2	-7	-2	-6
K1237	0		1	-4	-3	-2
Ky88-1195	2		7	-1	-3	0
Ky88-5037	5		6	0	-2	5
LN88-9883	-7		-6	-10	-6	-7
LN89-1179	-4		3	-3	-4	-2
LN89-2546	-7		0	-8	-5	-4
LN89-3615	-2		-5	-4	-3	3
LS86-1922	3		5	0	-3	5
LS87-1123	1		5	0	-3	3
LS87-1311	1		6	-2	-3	3
Md88-5241	-6		1	-6	-3	-1
Date Planted	05/27		05/17	05/21	05/25	05/27
Days to Mature	130		140	132	129	126

UNIFORM TEST IV, 1993

MATURITY (date)

Strain	Portage ville MO	Adel- phia NJ	Mt. Orab OH	South Charleston OH	Landis- ville PA
Delsoy 4210	-1	1	-3	2	3
Flyer (E)	-5	-3	-8	-9	-4
Ripley (dtl)	-10	-1	-7	-7	0
Spencer (IV)	09/24	10/04	09/24	09/30	10/01
HC85-2176 (dtl)	-4	2	-4	-10	-2
HC86-3403	-2	1	-4	-8	5
HC88-4257	-5	2	-4	-7	-4
HC89-2170	-4	1	-3	2	0
HC89-2207	-7	1	-4	-1	-2
HM9196	-6	-2	-7	-10	-4
HM9197	-5	0	-8	-9	-2
HS89-5467	-3	-3	-9	-9	-2
K1191 (L)	2	0	3	8	10
K1213	-3	2	-1	1	5
K1226	-6	1	-6	-9	0
K1231	-2	-2	-4	-8	3
K1233	-2	2	-2	0	3
K1235	8	2	5	6	7
K1236	-3	0	-2	-6	3
K1237	-1	-2	2	4	5
Ky88-1195	0	0	-1	0	10
Ky88-5037	3	-1	3	5	12
LN88-9883	-5	-1	-10	-9	0
LN89-1179	-2	-2	-4	-6	5
LN89-2546	-2	-1	-6	-8	7
LN89-3615	0	2	-2	1	12
LS86-1922	0	1	1	4	7
LS87-1123	-1	1	1	4	7
LS87-1311	-1	3	0	0	5
Md88-5241	-3	1	-4	-7	3
Date Planted	05/20	06/07	05/07	05/07	05/21
Days to Mature	127	119	140	146	133

UNIFORM TEST IV, 1993

LODGING (score)

Strain	Mean 17 Tests	George-town DE	Newton IL	Ridg-way IL	Ullin IL	Urbana IL	Lafay-ette IN
Delsoy 4210	2.1	1.0	1.5	2.0	1.0	2.0	3.3
Flyer (E)	1.3	1.0	1.3	1.2	1.0	1.3	1.8
Ripley (dtl)	1.2	1.0	1.0	1.0	1.0	1.0	1.3
Spencer (IV)	1.4	1.0	1.2	1.3	1.0	1.7	1.8
HC85-2176 (dtl)	1.1	1.0	1.0	1.0	1.0	1.0	1.0
HC86-3403	1.5	1.0	1.5	1.5	1.0	1.3	1.8
HC88-4257	1.7	1.0	1.5	1.8	1.1	1.3	2.2
HC89-2170	1.8	1.0	1.3	1.5	1.0	2.3	2.0
HC89-2207	1.6	1.0	1.0	1.5	1.0	2.0	1.8
HM9196	1.5	1.0	1.3	1.0	1.0	1.3	1.8
HM9197	1.4	1.0	1.0	1.2	1.0	1.7	2.2
HS89-5467	1.4	1.0	1.3	1.3	1.0	1.7	1.8
K1191 (L)	1.6	1.0	1.0	1.3	1.0	2.3	2.0
K1213	1.9	1.0	1.8	1.7	1.0	2.3	2.8
K1226	1.7	1.0	1.3	1.7	1.0	2.0	1.8
K1231	1.8	1.0	1.5	1.5	1.2	2.0	2.3
K1233	1.6	1.0	1.0	1.5	1.1	2.0	2.2
K1235	1.8	1.0	2.0	1.3	1.0	3.3	3.0
K1236	1.3	1.0	1.0	1.3	1.0	1.0	1.0
K1237	1.8	1.0	2.2	1.3	1.0	3.0	2.7
Ky88-1195	1.5	1.0	1.0	1.0	1.0	1.7	1.5
Ky88-5037	2.3	1.0	1.7	2.0	1.0	3.0	3.0
LN88-9883	1.6	1.0	1.5	1.8	1.0	1.3	2.5
LN89-1179	1.6	1.0	1.2	1.7	1.0	1.0	2.2
LN89-2546	1.3	1.0	1.0	1.0	1.0	1.0	1.3
LN89-3615	1.7	1.0	1.5	1.7	1.0	2.7	2.3
LS86-1922	2.5	1.0	2.0	2.2	1.5	3.7	3.5
LS87-1123	2.5	1.0	2.0	2.0	1.5	3.3	3.3
LS87-1311	1.8	1.0	1.2	1.8	1.0	2.0	2.2
Md88-5241	1.6	1.0	1.2	1.2	1.0	2.0	2.0

UNIFORM TEST IV, 1993

LODGING (score)

Strain	Vince-nnes IN	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO
Delsoy 4210	2.3	1.0	3.0	3.7	2.2	2.7
Flyer (E)	1.2	1.0	1.0	1.7	1.0	1.7
Ripley (dtl)	1.0	1.0	1.0	1.8	1.0	1.0
Spencer (IV)	1.3	1.0	2.0	1.7	1.0	1.8
HC85-2176 (dtl)	1.0	1.0	1.0	1.7	1.0	1.0
HC86-3403	1.3	1.0	2.0	1.8	1.3	1.7
HC88-4257	1.8	1.0	2.0	2.5	1.7	2.2
HC89-2170	2.0	2.0	2.0	2.5	1.3	2.8
HC89-2207	1.0	1.0	2.0	2.0	1.8	2.5
HM9196	1.7	1.0	1.0	2.7	1.3	2.1
HM9197	1.7	1.0	1.0	1.8	1.0	2.2
HS89-5467	1.0	1.0	2.0	1.5	1.2	2.0
K1191 (L)	1.5	1.0	2.0	2.0	1.3	2.3
K1213	2.0	1.0	2.0	2.5	1.8	2.9
K1226	2.0	1.0	2.0	2.3	1.7	2.5
K1231	2.3	1.0	2.0	2.3	1.0	3.0
K1233	2.0	1.0	2.0	2.6	1.0	2.2
K1235	1.2	1.0	2.0	2.0	1.3	2.7
K1236	1.0	1.0	2.0	1.7	1.2	1.8
K1237	1.7	1.0	2.0	1.8	1.0	2.3
Ky88-1195	1.3	1.0	2.0	2.3	1.3	2.5
Ky88-5037	2.5	1.0	3.0	2.6	2.0	3.2
LN88-9883	1.8	1.0	2.0	2.2	1.2	2.0
LN89-1179	1.7	1.0	2.0	1.7	2.0	2.0
LN89-2546	1.3	1.0	1.0	1.8	1.0	1.8
LN89-3615	1.3	1.0	3.0	1.8	1.3	2.7
LS86-1922	3.2	1.0	3.0	3.3	2.5	3.5
LS87-1123	2.2	2.0	3.0	3.3	2.2	3.3
LS87-1311	1.7	1.0	3.0	3.3	1.0	2.2
Md88-5241	1.7	1.0	3.0	2.0	1.0	2.5

UNIFORM TEST IV, 1993

LODGING (score)

Strain	Portage ville MO	Adel- phia NJ	Mt. Orab OH	South Charleston OH	Landis- ville PA
Delsoy 4210	1.5	2.7	1.3	3.3	2.0
Flyer (E)	1.0	2.3	1.1	1.3	1.0
Ripley (dtl)	1.0	2.7	1.1	2.2	1.0
Spencer (IV)	1.0	3.0	1.1	1.5	1.0
HC85-2176 (dtl)	1.0	2.0	1.0	1.3	1.0
HC86-3403	1.5	2.0	1.0	1.5	2.0
HC88-4257	1.0	3.3	1.2	1.8	2.0
HC89-2170	1.5	2.0	1.2	2.0	3.0
HC89-2207	1.0	2.3	1.1	1.7	2.0
HM9196	1.0	2.3	1.0	1.3	2.0
HM9197	1.0	3.0	1.0	1.3	1.0
HS89-5467	1.0	2.0	1.1	2.0	1.0
K1191 (L)	1.0	2.0	1.2	2.0	2.0
K1213	1.0	3.0	1.2	1.8	2.0
K1226	1.0	3.3	1.1	1.8	2.0
K1231	1.0	2.7	1.0	2.2	2.0
K1233	1.0	2.3	1.2	1.7	2.0
K1235	1.0	2.7	1.3	2.5	2.0
K1236	1.0	2.7	1.1	1.0	1.0
K1237	1.0	3.0	1.3	1.8	3.0
Ky88-1195	1.0	2.7	1.1	1.5	2.0
Ky88-5037	1.0	3.7	1.6	3.3	3.0
LN88-9883	1.0	2.3	1.2	1.7	2.0
LN89-1179	1.0	2.7	1.0	1.3	2.0
LN89-2546	1.0	2.0	1.1	1.2	2.0
LN89-3615	1.0	1.7	1.2	1.5	2.0
LS86-1922	1.5	2.7	1.8	3.3	3.0
LS87-1123	1.5	3.7	2.0	3.3	3.0
LS87-1311	1.0	3.3	1.2	1.5	2.0
Md88-5241	1.0	2.7	1.1	1.5	2.0

UNIFORM TEST IV, 1993

PLANT HEIGHT (inches)

Strain	Mean 17 Tests	George-town DE	Newton IL	Ridg-way IL	Ull'in IL	Urbana IL	Lafay-ette IN
Delsoy 4210	38	15	45	43	37	54	42
Flyer (E)	33	14	35	40	31	43	39
Ripley (dtl)	23	15	22	21	18	29	25
Spencer (IV)	34	18	38	40	31	48	42
HC85-2176 (dtl)	20	15	21	19	19	24	21
HC86-3403	33	17	35	41	31	44	39
HC88-4257	36	14	43	42	32	50	43
HC89-2170	36	18	44	43	31	50	43
HC89-2207	36	17	43	42	34	51	43
HM9196	31	16	34	36	27	42	38
HM9197	31	14	35	37	31	44	38
HS89-5467	32	17	39	39	28	46	41
K1191 (L)	33	16	37	38	27	49	39
K1213	35	15	39	39	34	46	42
K1226	35	17	40	41	32	46	40
K1231	32	14	35	37	31	41	38
K1233	34	16	39	40	29	47	39
K1235	33	14	39	38	29	50	40
K1236	33	14	37	36	30	45	40
K1237	34	14	38	40	31	44	40
Ky88-1195	36	16	41	37	31	53	43
Ky88-5037	38	17	43	43	33	51	42
LN88-9883	34	15	39	41	29	44	40
LN89-1179	32	16	35	42	31	43	38
LN89-2546	32	15	36	36	28	46	39
LN89-3615	32	16	35	39	28	44	40
LS86-1922	40	19	44	44	39	50	52
LS87-1123	41	19	47	45	39	53	46
LS87-1311	37	16	44	43	33	50	43
Md88-5241	33	15	39	38	30	46	41

UNIFORM TEST IV, 1993

PLANT HEIGHT (inches)

Strain	Vince-nnes IN	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO
Delsoy 4210	45	35	43	38	33	36
Flyer (E)	36	28	39	31	26	31
Ripley (dtl)	25	19	22	27	18	20
Spencer (IV)	35	29	43	35	28	27
HC85-2176 (dtl)	20	18	21	22	14	17
HC86-3403	38	28	39	35	26	25
HC88-4257	40	33	43	38	30	28
HC89-2170	41	32	41	35	31	36
HC89-2207	38	31	42	37	33	32
HM9196	36	29	37	32	26	29
HM9197	34	27	40	28	25	30
HS89-5467	33	29	40	31	25	26
K1191 (L)	37	28	41	34	29	26
K1213	38	29	42	35	29	32
K1226	41	30	43	37	27	30
K1231	36	28	39	35	24	33
K1233	40	23	41	33	27	36
K1235	32	26	37	34	27	30
K1236	37	30	41	31	24	31
K1237	37	26	42	35	29	35
Ky88-1195	41	30	44	36	30	36
Ky88-5037	46	32	43	41	31	36
LN88-9883	36	28	44	32	28	34
LN89-1179	36	31	38	31	25	29
LN89-2546	34	29	42	30	26	27
LN89-3615	36	28	39	27	30	33
LS86-1922	51	36	43	45	35	39
LS87-1123	48	35	45	42	36	39
LS87-1311	45	31	46	37	28	35
Md88-5241	38	29	42	33	24	33

UNIFORM TEST IV, 1993

PLANT HEIGHT (inches)

Strain	Portage ville MO	Adel- phia NJ	Mt. Orab OH	South Charleston OH	Landis- ville PA
Delsoy 4210	41	35	37	39	27
Flyer (E)	29	35	35	39	22
Ripley (dtl)	13	33	30	33	18
Spencer (IV)	30	40	33	43	23
HC85-2176 (dtl)	12	28	22	24	15
HC86-3403	31	36	33	40	27
HC88-4257	30	40	37	42	22
HC89-2170	34	34	34	43	27
HC89-2207	31	35	35	42	30
HM9196	26	28	34	37	21
HM9197	21	34	30	37	22
HS89-5467	31	35	28	39	23
K1191 (L)	32	34	32	41	26
K1213	33	38	33	42	25
K1226	29	42	36	42	23
K1231	31	33	31	37	24
K1233	30	37	36	40	23
K1235	29	36	32	40	25
K1236	32	37	33	40	23
K1237	32	33	38	39	25
Ky88-1195	30	36	38	42	28
Ky88-5037	31	34	39	45	31
LN88-9883	31	33	33	40	26
LN89-1179	28	35	30	37	23
LN89-2546	31	30	32	38	21
LN89-3615	31	34	31	38	23
LS86-1922	40	36	43	38	32
LS87-1123	46	34	41	45	31
LS87-1311	33	35	35	42	29
Md88-5241	32	28	37	38	23

UNIFORM TEST IV, 1993

SEED QUALITY (score)

Strain	Mean 15 Tests	George-town DE	Newton IL	Ridg-way IL	Ullin IL	Urbana IL	Lafay-ette IN
Delsoy 4210	1.8		1.8	3.2	1.0	1.5	1.0
Flyer (E)	1.5		1.5	2.7	1.0	1.5	1.0
Ripley (dtl)	1.5		1.5	2.3	1.0	1.5	1.0
Spencer (IV)	2.3		1.5	3.2	2.0	1.5	1.0
HC85-2176 (dtl)	1.8		1.5	2.3	1.0	1.7	1.0
HC86-3403	1.9		1.5	2.5	2.0	1.7	1.0
HC88-4257	1.9		1.7	3.5	1.0	1.5	1.0
HC89-2170	1.7		1.8	3.2	1.0	1.5	1.0
HC89-2207	1.7		1.5	3.3	1.0	1.5	1.0
HM9196	1.6		1.5	3.0	1.0	1.5	1.0
HM9197	1.6		1.7	2.7	1.0	1.5	1.0
HS89-5467	2.0		1.7	3.2	2.0	1.5	1.0
K1191 (L)	1.5		1.7	2.2	1.0	1.5	1.0
K1213	1.7		2.0	2.7	1.0	1.5	1.0
K1226	1.8		1.5	3.0	1.0	1.5	1.0
K1231	1.8		1.7	2.8	1.0	1.5	1.0
K1233	2.2		1.8	3.0	2.0	1.7	1.0
K1235	1.9		1.5	3.0	1.0	2.0	1.0
K1236	1.7		1.5	3.0	1.0	1.7	1.0
K1237	1.9		1.7	2.2	1.0	1.5	1.0
Ky88-1195	1.6		1.5	3.0	1.0	1.5	1.0
Ky88-5037	1.7		1.5	2.5	1.0	1.5	1.0
LN88-9883	1.8		1.7	2.3	1.0	1.5	1.0
LN89-1179	1.8		1.7	2.8	2.0	1.5	1.0
LN89-2546	1.7		1.5	3.2	1.0	1.5	1.0
LN89-3615	1.7		1.8	3.3	1.0	1.5	1.0
LS86-1922	1.9		2.0	3.2	1.0	1.7	1.0
LS87-1123	1.8		2.0	3.3	1.0	1.8	1.0
LS87-1311	1.7		1.5	3.0	1.0	1.5	1.0
Md88-5241	2.0		1.7	2.5	2.0	1.5	1.0

UNIFORM TEST IV, 1993

SEED QUALITY (score)

Strain	Vince-nnes IN	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO
Delsoy 4210	2.0		2.0	2.0	1.3	2.0
Flyer (E)	1.0		1.0	1.0	1.7	2.3
Ripley (dtl)	1.0		1.0	2.0	1.7	2.0
Spencer (IV)	3.0		2.0	2.0	3.3	3.3
HC85-2176 (dtl)	1.0		2.0	2.0	1.5	2.0
HC86-3403	2.0		2.0	2.0	2.0	2.3
HC88-4257	2.0		2.0	1.0	2.2	3.0
HC89-2170	1.0		2.0	2.0	1.7	2.0
HC89-2207	1.0		2.0	2.0	1.7	2.0
HM9196	1.0		1.0	2.0	1.8	2.0
HM9197	1.0		1.0	1.0	1.3	2.7
HS89-5467	3.0		2.0	2.0	1.8	2.7
K1191 (L)	1.0		1.0	1.0	1.3	2.0
K1213	2.0		2.0	2.0	1.0	2.7
K1226	2.0		2.0	1.0	2.3	2.7
K1231	2.0		2.0	1.0	2.2	2.3
K1233	3.0		2.0	2.0	2.5	3.7
K1235	2.0		2.0	2.0	1.8	2.3
K1236	2.0		2.0	2.0	1.3	2.3
K1237	3.0		2.0	2.0	2.2	2.7
Ky88-1195	2.0		2.0	1.0	1.3	2.0
Ky88-5037	2.0		2.0	2.0	1.3	2.3
LN88-9883	2.0		1.0	2.0	2.8	3.0
LN89-1179	3.0		1.0	1.0	1.8	2.7
LN89-2546	2.0		2.0	2.0	1.5	2.3
LN89-3615	2.0		2.0	1.0	1.8	2.3
LS86-1922	2.0		2.0	2.0	1.3	2.7
LS87-1123	2.0		2.0	2.0	1.5	2.3
LS87-1311	1.0		2.0	2.0	1.7	2.0
Md88-5241	3.0		2.0	2.0	2.5	2.3

UNIFORM TEST IV, 1993

SEED QUALITY (score)

Strain	Portage ville MO	Adel- phia NJ	Mt. Orab OH	South Charleston OH	Landis- ville PA
Delsoy 4210	2.0	1.7	1.4	2.2	2.5
Flyer (E)	1.5	1.3	1.3	1.8	2.5
Ripley (dtl)	1.5	1.0	1.0	1.5	2.0
Spencer (IV)	2.0	1.3	1.7	2.2	4.0
HC85-2176 (dtl)	1.5	2.0	1.6	2.3	3.0
HC86-3403	1.5	1.7	1.3	2.4	3.0
HC88-4257	2.0	1.3	1.4	2.4	2.5
HC89-2170	1.5	1.3	1.0	2.2	2.5
HC89-2207	1.5	1.3	1.1	2.0	2.5
HM9196	1.5	1.0	1.3	2.0	3.0
HM9197	1.5	1.7	1.3	1.8	2.5
HS89-5467	1.5	1.0	1.5	2.0	2.5
K1191 (L)	1.5	1.3	1.3	2.4	2.0
K1213	1.5	1.7	1.1	1.8	2.0
K1226	2.0	1.3	1.4	2.0	3.0
K1231	2.0	1.3	1.4	2.0	2.5
K1233	2.5	1.0	1.9	2.0	3.0
K1235	2.0	1.7	1.5	2.3	2.5
K1236	1.5	1.0	1.2	2.0	2.5
K1237	2.0	1.3	1.4	2.2	2.5
Ky88-1195	1.5	1.3	1.3	1.5	2.0
Ky88-5037	1.5	1.3	1.3	1.8	2.0
LN88-9883	1.5	1.3	1.1	1.8	3.0
LN89-1179	1.5	1.0	1.4	2.0	3.0
LN89-2546	1.5	1.0	1.1	1.8	2.5
LN89-3615	1.5	2.0	1.2	1.8	2.0
LS86-1922	2.0	1.7	1.3	2.2	2.5
LS87-1123	1.5	1.3	1.1	2.0	2.0
LS87-1311	1.5	1.7	1.0	1.5	2.5
Md88-5241	1.5	1.3	1.5	2.2	2.5

UNIFORM TEST IV, 1993

SEED SIZE (g/100)

Strain	Mean 14 Tests	George-town DE	Newton IL	Ridg-way IL	Ullin IL	Urbana IL	Lafay-ette IN
Delsoy 4210	15.9		15.5	11.7	13.9	17.7	15.3
Flyer (E)	13.5		13.2	9.7	11.3	16.6	15.1
Ripley (dtl)	12.5		11.8	10.4	11.2	13.7	11.5
Spencer (IV)	16.6		15.5	11.3	14.1	18.6	18.5
HC85-2176 (dtl)	17.1		16.8	13.2	14.1	21.3	17.4
HC86-3403	15.6		14.3	11.4	12.9	19.6	16.7
HC88-4257	13.9		14.4	10.0	11.0	16.7	13.7
HC89-2170	13.6		13.4	10.8	11.1	16.0	14.2
HC89-2207	12.1		11.9	9.2	10.1	13.9	12.9
HM9196	13.7		13.5	9.6	11.4	17.7	14.9
HM9197	14.3		14.3	10.4	11.7	18.7	16.1
HS89-5467	14.3		13.3	10.9	12.2	16.0	15.2
K1191 (L)	15.7		15.1	11.1	12.8	17.1	15.5
K1213	14.1		13.3	10.4	11.8	16.3	15.2
K1226	14.3		14.9	10.4	14.2	17.3	15.3
K1231	16.1		17.2	11.2	12.3	20.6	17.0
K1233	15.4		14.8	11.3	13.3	19.0	15.0
K1235	15.2		15.2	11.8	11.9	16.3	15.7
K1236	13.9		12.5	10.2	14.5	14.8	13.2
K1237	16.8		17.5	12.8	12.4	19.5	18.9
Ky88-1195	14.6		13.5	10.4	12.4	16.2	14.4
Ky88-5037	14.4		13.4	10.6	13.8	15.2	13.8
LN88-9883	13.6		12.8	10.7	11.3	16.7	15.1
LN89-1179	14.3		13.6	10.5	12.9	17.4	14.8
LN89-2546	14.6		14.0	10.6	12.2	16.7	16.4
LN89-3615	13.9		13.8	10.3	11.3	15.9	14.9
LS86-1922	13.9		13.2	11.4	12.8	14.2	13.2
LS87-1123	13.9		13.8	10.9	12.7	14.2	13.6
LS87-1311	14.1		13.7	11.6	12.4	15.3	14.1
Md88-5241	16.4		16.3	12.1	13.7	19.7	16.8

UNIFORM TEST IV, 1993

SEED SIZE (g/100)

Strain	Vince-nnes IN	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO
Delsoy 4210	16.9			16.6	14.9	15.0
Flyer (E)	13.5			14.0	12.5	14.0
Ripley (dtl)	13.2			12.4	13.3	13.0
Spencer (IV)	17.9			16.7	17.0	15.0
HC85-2176 (dtl)	18.1			18.7	15.9	17.3
HC86-3403	16.8			15.1	16.6	14.0
HC88-4257	14.3			13.4	14.4	13.6
HC89-2170	13.9			13.6	13.8	13.0
HC89-2207	11.3			12.1	12.2	11.3
HM9196	13.9			13.3	13.2	14.3
HM9197	15.6			14.0	11.8	14.6
HS89-5467	14.3			15.5	14.3	14.0
K1191 (L)	16.4			15.9	13.3	16.0
K1213	14.2			13.2	13.5	13.6
K1226	15.0			13.7	13.9	13.6
K1231	16.9			16.6	14.0	16.6
K1233	16.8			13.6	15.1	15.0
K1235	15.7			14.5	13.6	14.0
K1236	14.3			14.0	14.0	14.0
K1237	17.5			15.7	14.8	18.3
Ky88-1195	15.4			14.1	14.4	14.3
Ky88-5037	14.3			13.7	13.5	13.0
LN88-9883	13.5			13.1	11.9	13.6
LN89-1179	13.7			14.8	14.0	14.0
LN89-2546	14.8			15.5	13.1	14.3
LN89-3615	13.4			15.1	14.2	13.0
LS86-1922	15.2			14.2	13.6	14.6
LS87-1123	15.0			13.4	13.0	13.6
LS87-1311	14.8			13.3	13.5	13.0
Md88-5241	16.8			16.8	16.0	16.0

UNIFORM TEST IV, 1993

SEED SIZE (g/100)

Strain	Portage ville MO	Adel- phia NJ	Mt. Orab OH	South Charleston OH	Landis- ville PA
Delsoy 4210	16.0	15.7	17.5	17.3	18.9
Flyer (E)	13.3	14.3	13.6	14.0	13.2
Ripley (dtl)	12.2	13.3	14.1	12.2	12.4
Spencer (IV)	17.1	18.0	19.0	17.4	16.6
HC85-2176 (dtl)	16.5	18.0	17.7	17.4	17.1
HC86-3403	15.6	14.7	16.6	16.5	17.7
HC88-4257	14.5	14.0	16.1	14.6	14.3
HC89-2170	13.2	15.7	14.5	14.7	12.7
HC89-2207	10.5	14.3	13.0	13.2	13.1
HM9196	13.5	15.3	14.9	13.9	12.0
HM9197	14.0	15.0	15.3	15.5	13.6
HS89-5467	14.8	15.0	14.5	14.5	15.5
K1191 (L)	15.4	15.7	19.0	17.7	19.4
K1213	12.4	15.7	16.7	15.4	16.0
K1226	13.0	15.3	15.3	14.7	13.3
K1231	13.8	15.3	17.9	18.0	18.5
K1233	16.0	16.3	17.3	16.7	15.8
K1235	15.0	15.7	17.0	17.7	18.3
K1236	13.4	15.7	15.2	14.0	15.3
K1237	16.1	15.7	18.4	18.9	18.0
Ky88-1195	14.3	15.0	16.5	15.5	17.5
Ky88-5037	17.8	15.3	15.8	14.7	16.8
LN88-9883	13.0	14.0	14.8	14.5	14.7
LN89-1179	13.9	15.0	15.1	14.9	16.1
LN89-2546	14.1	14.7	15.0	15.5	17.1
LN89-3615	14.3	14.3	14.7	13.5	16.5
LS86-1922	13.3	14.0	15.2	14.8	15.4
LS87-1123	13.3	13.7	16.4	15.2	16.3
LS87-1311	13.7	15.3	16.0	14.7	16.4
Md88-5241	15.5	17.0	19.1	17.1	16.7

UNIFORM TEST IV, 1993

PROTEIN (%)

Strain	Mean 4 Tests	Urbana IL	Lafayette IN	Manhattan KS	Mt. Orab OH
Delsoy 4210	42.2	40.8	43.5	41.7	42.6
Flyer (E)	42.8	42.0	44.1	42.2	42.8
Ripley (dtl)	40.1	38.5	41.1	39.5	41.3
Spencer (IV)	42.9	41.5	44.9	41.2	43.8
HC85-2176 (dtl)	43.3	42.3	44.1	42.4	44.2
HC86-3403	43.6	42.9	45.1	44.3	42.1
HC88-4257	42.4	41.7	43.1	41.5	43.3
HC89-2170	42.8	41.6	43.2	42.8	43.7
HC89-2207	42.2	42.1	42.5	41.0	43.3
HM9196	42.2	41.2	43.1	41.6	42.9
HM9197	44.0	42.9	45.5	43.0	44.4
HS89-5467	39.8	39.5	40.9	39.0	39.8
K1191 (L)	41.6	40.6	43.0	40.5	42.1
K1213	43.4	42.0	45.0	42.5	44.0
K1226	41.5	40.9	43.0	40.0	42.0
K1231	41.5	41.5	42.6	40.6	41.2
K1233	42.0	41.2	43.7	41.1	42.1
K1235	41.8	40.4	43.2	40.8	42.6
K1236	41.0	40.6	41.7	41.1	40.7
K1237	42.2	40.5	43.7	41.9	42.6
Ky88-1195	42.7	41.8	43.2	42.6	43.1
Ky88-5037	41.0	39.6	42.4	40.7	41.1
LN88-9883	42.1	41.7	44.1	41.0	41.6
LN89-1179	42.1	42.3	42.2	41.4	42.3
LN89-2546	41.8	40.5	42.8	40.9	43.1
LN89-3615	41.5	39.6	43.6	41.2	41.6
LS86-1922	40.3	38.8	41.5	40.8	39.9
LS87-1123	40.6	38.6	41.1	40.5	42.0
LS87-1311	40.1	39.5	41.7	40.2	38.8
Md88-5241	43.2	43.2	43.8	42.8	42.9

UNIFORM TEST IV, 1993

OIL (%)

Strain	Mean 4 Tests	Urbana IL	Lafayette IN	Manhattan KS	Mt. Orab OH
Delsoy 4210	21.1	21.4	20.6	21.0	21.2
Flyer (E)	21.0	21.4	20.4	21.1	21.2
Ripley (dtl)	21.7	22.0	21.0	22.8	20.9
Spencer (IV)	21.1	21.6	20.4	21.3	21.0
HC85-2176 (dtl)	20.7	21.0	20.5	21.3	19.8
HC86-3403	21.3	21.5	20.6	20.9	22.0
HC88-4257	21.2	21.4	20.9	22.0	20.5
HC89-2170	21.0	21.7	20.5	20.5	21.1
HC89-2207	21.4	21.4	21.2	21.6	21.3
HM9196	21.5	22.4	20.9	21.7	20.9
HM9197	20.9	21.2	19.9	21.3	21.1
HS89-5467	21.4	21.8	20.8	21.0	21.8
K1191 (L)	20.7	21.3	20.3	20.7	20.5
K1213	20.5	21.6	19.5	20.6	20.4
K1226	21.7	22.1	20.9	22.0	21.6
K1231	21.4	21.7	21.1	21.7	21.2
K1233	21.9	22.1	21.1	22.3	21.9
K1235	21.2	21.9	20.4	21.4	21.1
K1236	21.5	22.0	21.1	21.2	21.6
K1237	21.2	22.3	20.8	20.9	20.7
Ky88-1195	21.0	21.3	20.9	20.5	21.3
Ky88-5037	20.9	21.4	20.1	20.8	21.1
LN88-9883	21.2	21.0	20.2	21.9	21.7
LN89-1179	20.9	20.7	20.6	21.3	20.8
LN89-2546	21.5	22.2	20.9	21.8	21.1
LN89-3615	21.7	22.5	20.6	21.8	22.0
LS86-1922	20.5	20.4	20.1	20.6	21.0
LS87-1123	20.9	21.5	20.4	21.1	20.5
LS87-1311	21.5	22.0	20.7	21.0	22.1
Md88-5241	21.0	20.9	20.6	21.2	21.4

PRELIMINARY TEST IVA, 1993

Strain	Parentage	Generation Composited	Unique Traits
Flyer (E)	Asgrow A3127[4] x Williams 82	BC3 F2	Rps1-k
Spencer (IV)	A75-305022 x Century	F5	
K1191 (L)	Sherman x Toano	F5	
HC85-5148	Pella x Gnome	F5	Dt1
HC85-5154	Pella x Gnome	F5	Dt1
HC88-4090	HC80-1946 x Asgrow A3127	F5	Dt1
HC89-2165	HC80-1946 x Asgrow A3127	F5	Dt1
HC89-2232	HC80-1944 x Asgrow A3127	F5	Dt1
HC89-2233	HC80-1944 x Asgrow A3127	F5	Dt1
K1256	HC83-4532 x Spencer	F5	
K1257	Sherman x Toana	F5	
K1258	K1106 x Dekalb Pfizer CX415	F5	
K1259	K1133 x Spencer	F5	
K1260	K1133 x Spencer	F5	
K1261	K1133 x Spencer	F5	
K1262	Spencer x Dekalb Pfizer CX415	F5	
K1263	K1106 x Chamberlain	F5	
K1264	K1106 x Chamberlain	F5	
K1265	Spencer x Chamberlain	F5	
K1266	Spencer x K1106	F5	
LN90-510	Sherman x C1655	F5	
LN90-3216	LN84-452 x Asgrow A3733	F5	
LN90-3218	LN84-452 x Asgrow A3733	F5	
LN90-3314	LN84-452 x Asgrow A3733	F5	
LN90-4057	Burlison x Resnik	F5	
LN90-4129	Burlison x Asgrow A3733	F5	hm (het)
LN90-4139	Burlison x Asgrow A3733	F5	hm
LS89-1138	LS80-6521 x Fayette	F6	SCN 3,14
LS89-1223	LS80-6521 x Fayette	F6	SCN 3,14
LS89-1322	LS80-6521 x Fayette	F6	SCN 3,14
LS90-3204	Fayette x Pyramid	F6	SCN 3,14
Md90-5213	Avery x Resnik	F5	
Md90-5762	Morgan x Resnik	F5	
SL90-825	LN81-1029 x C1655	F5	
SO89-24	DeltaPine 506 x Americana Rebel	F5	

PRELIMINARY TEST IVA, 1993

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Root Rot Wooster Race 25	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %	Seed Germ. %
Flyer (E)	PTTDYBlI	4.7	R	54	4	94
Spencer (IV)	WTBDYBrI	4.2	S	40	6	82
K1191 (L)	WGBDYBfI	4.5	S	62	2	88
HC85-5148	PTTDYBlI	4.3	S	72	4	86
HC85-5154	PTTDYBlI	4.7	S	40	6	86
HC88-4090	PTTDYBlI	4.8	S	70	8	88
HC89-2165	PTTDYBlI	4.2	S	44	0	98
HC89-2232	PTTDYBlI	4.8	S	86	0	92
HC89-2233	PTTDYBlI	5.0	S	78	8	78
K1256	WTBDYBrI	4.3	S	66	0	92
K1257	PGBDYBfI	6.3	S	76	0	88
K1258	WTTDYBlI	4.8	R	74	14	86
K1259	PTTDYLbrI	3.8	S	28	2	98
K1260	PTTDYLbrI	5.2	S	16	2	96
K1261	P+WTTDYLbrI	3.7	H	16	0	96
K1262	WTBDYLbrI	4.7	R	44	2	86
K1263	PTTDYBlI	4.2	S	60	4	90
K1264	P+WG+TBSYBlI	4.2	S	56	6	84
K1265	WTBDYBlI	4.2	S	84	6	94
K1266	WTBDYLbrI	3.5	S	60	4	92
LN90-510	PGTSYIbI	4.3	S	44	4	82
LN90-3216	WTTDYBlI	7.0	S	24	4	86
LN90-3218	WTTDYBrI	5.0	S	84	2	86
LN90-3314	PTTDYBrI	6.2	S	38	4	82
LN90-4057	P+WTTDYBlI	1.3	R	60	6	88
LN90-4129	PTTDYBlI	4.7	R	78	0	90
LN90-4139	PTTDYBlI	5.5	H	64	4	76
LS89-1138	PTTSYBlI	4.8	S	4	2	94
LS89-1223	PTTSYBlI	5.0	S	4	2	94
LS89-1322	PTTSYBlI	4.8	S	8	4	92
LS90-3204	WGTSYBfI	4.2	S	26	4	90
Md90-5213	WTTDYBlI	4.5	S	16	0	90
Md90-5762	PTTDYBlI	4.5	S	52	2	96
SL90-825	PGBSYIbI	4.5	S	40	2	92
SO89-24	PTTIYBlI	4.3	H	12	2	94

PRELIMINARY TEST IVA, 1993

REGIONAL SUMMARY

No. of Tests Strain	Yield 7 bu/a	Rank 7 No.	Maturity 7 Date	Lodging 7 Score	Plant Height 7 In.	Seed Quality 7 Score	Seed Size 6 g/100	Composition Protein 4 %	Oil 4 %
Flyer (E)	53.5	6	-4.7	1.6	35	1.8	14.4	42.3	21.2
Spencer (IV)	49.4	29	09/30*	1.5	36	2.6	17.8	42.6	21.0
K1191 (L)	53.2	7	4.7	2.0	37	1.6	17.3	41.6	20.6
HC85-5148	51.8	17	-5.4	2.0	41	2.0	19.4	41.5	22.5
HC85-5154	50.3	24	-5.0	1.8	37	1.9	19.0	41.9	22.2
HC88-4090	52.1	15	-1.7	2.4	43	2.2	16.2	42.3	21.8
HC89-2165	53.9	5	-0.3	2.4	42	1.9	13.7	42.1	21.1
HC89-2232	53.0	9	-5.4	1.8	36	2.1	14.7	42.9	20.4
HC89-2233	50.8	21	-4.7	1.9	35	1.8	15.0	42.5	20.8
K1256	53.1	8	1.3	1.6	33	2.5	19.3	42.3	21.2
K1257	51.5	18	3.1	2.8	38	1.9	16.3	42.8	20.3
K1258	52.2	14	-2.4	1.7	34	2.1	18.3	41.5	21.4
K1259	51.5	19	1.7	1.9	37	1.8	16.0	40.8	21.6
K1260	52.5	13	2.0	2.1	39	1.9	15.1	40.3	21.3
K1261	54.1	4	4.7	1.7	38	2.0	18.4	41.4	21.6
K1262	55.1	1	2.1	1.8	38	1.9	17.1	42.2	20.8
K1263	50.6	22	0.3	2.1	37	1.8	15.7	40.8	21.2
K1264	49.5	27	-0.1	2.3	39	1.6	15.6	41.7	20.3
K1265	47.6	32	-1.3	1.4	34	2.3	19.8	40.5	21.4
K1266	50.0	26	2.7	1.8	36	2.4	16.7	41.9	20.3
LN90-510	49.5	28	-4.3	1.8	33	1.8	16.4	40.4	21.8
LN90-3216	54.1	3	-6.1	1.7	35	1.8	15.9	43.2	21.0
LN90-3218	51.9	16	-4.1	1.6	38	2.0	14.8	41.8	20.8
LN90-3314	50.6	23	-6.9	1.3	34	1.8	15.0	40.2	21.9
LN90-4057	52.8	10	-1.7	1.5	37	1.8	16.2	43.2	19.7
LN90-4129	54.5	2	0.3	1.9	32	2.2	21.5	43.4	20.6
LN90-4139	52.6	12	1.9	2.2	35	2.3	17.6	42.6	20.9
LS89-1138	47.1	34	3.1	2.6	39	1.7	14.9	41.1	21.2
LS89-1223	48.1	31	2.6	2.8	40	1.5	15.1	40.5	21.4
LS89-1322	46.7	35	3.4	2.6	40	1.6	15.3	41.3	21.3
LS90-3204	47.3	33	3.4	2.6	43	1.9	13.5	42.1	20.2
Md90-5213	50.1	25	2.4	2.3	38	1.9	15.2	39.2	21.3
Md90-5762	52.7	11	-4.6	1.5	34	1.7	16.0	43.5	20.8
SL90-825	51.1	20	-2.1	1.9	36	2.1	16.3	41.3	21.9
SO89-24	48.3	30	-1.1	2.2	36	1.9	14.3	41.0	20.8

* 134.9 Days After Planting

PRELIMINARY TEST IVA, 1993

YIELD (bu/a)

Strain	Mean 7 Tests	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	53.5	62.6	47.8	54.3	27.9	52.0	50.0	80.2
Spencer (IV)	49.4	61.3	53.0	57.2	29.4	40.0	42.0	62.9
K1191 (L)	53.2	58.2	63.1	43.3	44.8	48.7	42.4	72.2
HC85-5148	51.8	64.6	55.2	48.2	45.9	45.0	36.2	67.4
HC85-5154	50.3	60.3	50.2	46.3	38.9	44.7	42.5	69.0
HC88-4090	52.1	61.8	57.6	54.0	29.9	53.2	44.2	64.2
HC89-2165	53.9	60.0	52.9	54.6	43.8	56.8	40.7	68.3
HC89-2232	53.0	69.0	56.9	54.6	30.4	42.6	44.2	73.4
HC89-2233	50.8	67.0	43.2	58.1	32.2	42.4	44.5	68.4
K1256	53.1	63.4	52.3	57.7	37.5	49.5	40.3	71.0
K1257	51.5	57.6	59.5	45.0	29.9	56.8	43.2	68.7
K1258	52.2	66.6	59.2	50.2	30.7	51.8	38.7	68.1
K1259	51.5	57.7	51.5	46.8	43.8	56.8	35.4	68.4
K1260	52.5	56.9	55.0	54.8	37.9	49.7	44.4	68.8
K1261	54.1	56.9	57.8	53.1	40.5	57.4	48.1	65.1
K1262	55.1	68.1	54.8	58.1	43.5	49.5	36.6	75.1
K1263	50.6	63.4	52.0	46.5	37.6	51.0	41.7	62.0
K1264	49.5	55.5	50.2	44.8	38.9	53.1	38.7	65.2
K1265	47.6	59.6	44.5	57.5	34.4	34.4	35.7	67.2
K1266	50.0	58.7	50.4	50.1	40.8	47.3	42.0	60.4
LN90-510	49.5	54.4	36.2	50.6	38.9	58.6	42.2	65.4
LN90-3216	54.1	64.2	61.6	51.9	39.4	48.2	44.4	69.3
LN90-3218	51.9	63.2	51.6	46.4	35.3	52.0	43.4	71.2
LN90-3314	50.6	62.1	49.9	47.6	35.8	55.8	37.8	64.9
LN90-4057	52.8	59.8	48.4	53.0	36.1	52.8	44.3	75.5
LN90-4129	54.5	58.7	57.8	57.1	38.3	49.4	44.4	75.8
LN90-4139	52.6	53.2	52.1	42.9	40.6	52.4	51.3	75.9
LS89-1138	47.1	52.8	57.8	42.4	33.1	48.1	36.7	59.0
LS89-1223	48.1	52.6	57.5	43.6	32.8	47.8	39.1	63.6
LS89-1322	46.7	55.4	56.5	41.4	30.3	51.7	36.2	55.6
LS90-3204	47.3	53.8	56.1	46.7	28.4	47.1	40.9	58.1
Md90-5213	50.1	55.3	56.0	36.0	38.3	56.2	41.0	67.9
Md90-5762	52.7	57.7	60.1	54.6	34.8	52.8	43.3	65.4
SL90-825	51.1	64.6	53.5	42.2	36.9	54.4	41.5	64.8
SO89-24	48.3	51.4	50.4	48.1	33.1	42.5	47.9	64.8
C.V. (%)		6.2	14.9	7.3	13.9	14.9	8.7	7.0
L.S.D. (5%)		7.6	16.3	4.7	10.2	15.4	7.5	9.6
Row Sp. (In.)		30	26	30	30	30	15	7.5
Rows/Plot		4	4	4	4	4	6	8
Reps		2	2	2	2	2	2	2

PRELIMINARY TEST IVA, 1993

YIELD RANK

Strain	Yield Rank	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	6	11	32	11	35	14	2	1
Spencer (IV)	29	14	19	5	33	34	18	30
K1191 (L)	7	21	1	30	2	23	16	7
HC85-5148	17	5	15	19	1	29	32	19
HC85-5154	24	15	28	26	12	30	15	11
HC88-4090	15	13	9	12	31	9	10	28
HC89-2165	5	16	20	8	3	3	24	16
HC89-2232	9	1	11	10	29	31	10	6
HC89-2233	21	3	34	1	27	33	5	14
K1256	8	8	21	3	17	21	25	9
K1257	18	24	4	27	31	3	14	13
K1258	14	4	5	17	28	16	27	17
K1259	19	22	25	22	3	3	35	14
K1260	13	25	16	7	15	19	6	12
K1261	4	25	6	13	8	2	3	24
K1262	1	2	17	1	5	20	31	5
K1263	22	8	23	24	16	18	20	31
K1264	27	27	28	28	10	10	27	23
K1265	32	18	33	4	23	35	34	20
K1266	26	19	26	18	6	27	18	32
LN90-510	28	30	35	16	10	1	17	21
LN90-3216	3	7	2	15	9	24	6	10
LN90-3218	16	10	24	25	21	14	12	8
LN90-3314	23	12	30	21	20	7	29	25
LN90-4057	10	17	31	14	19	11	9	4
LN90-4129	2	19	6	6	13	22	6	3
LN90-4139	12	32	22	31	7	13	1	2
LS89-1138	34	33	6	32	24	25	30	33
LS89-1223	31	34	10	29	26	26	26	29
LS89-1322	35	28	12	34	30	17	32	35
LS90-3204	33	31	13	23	33	28	23	34
Md90-5213	25	29	14	35	13	6	22	18
Md90-5762	11	22	3	8	22	11	13	21
SL90-825	20	5	18	33	18	8	21	26
SO89-24	30	35	26	20	24	32	4	26

PRELIMINARY TEST IVA, 1993

MATURITY (date)

Strain	Mean 7 Tests	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	-4.7	-3	2	-5	-7	-6	-5	-9
Spencer (IV)	09/30	10/08	09/28	10/04	10/01	10/01	09/22	09/30
K1191 (L)	4.7	6	8	4	-1	4	4	8
HC85-5148	-5.4	-1	2	-11	-7	-4	-8	-9
HC85-5154	-5.0	-1	0	-7	-5	-6	-7	-9
HC88-4090	-1.7	1	3	-2	-5	-5	-4	0
HC89-2165	-0.3	2	4	0	-9	-3	2	2
HC89-2232	-5.4	-1	1	-5	-10	-7	-8	-8
HC89-2233	-4.7	0	0	-2	-10	-6	-6	-9
K1256	1.3	3	2	2	1	4	-1	-2
K1257	3.1	5	9	4	-4	0	3	5
K1258	-2.4	0	1	-2	-6	-5	-3	-2
K1259	1.7	4	5	0	-3	2	1	3
K1260	2.0	6	2	4	-1	-1	1	3
K1261	4.7	6	9	4	-1	4	5	6
K1262	2.1	4	4	0	-1	4	2	2
K1263	0.3	2	4	0	-3	1	1	-3
K1264	-0.1	2	3	0	-6	-3	1	2
K1265	-1.3	0	3	-2	-1	-5	-3	-1
K1266	2.7	4	5	4	-1	2	1	4
LN90-510	-4.3	-1	0	0	-6	-6	-8	-9
LN90-3216	-6.1	0	-1	-11	-13	-4	-6	-8
LN90-3218	-4.1	1	1	-7	-11	-5	-3	-5
LN90-3314	-6.9	0	0	-11	-12	-8	-8	-9
LN90-4057	-1.7	2	1	-2	-6	-5	-2	0
LN90-4129	0.3	2	5	-4	-4	6	-1	-2
LN90-4139	1.9	5	4	-2	-4	4	2	4
LS89-1138	3.1	5	10	4	-7	4	3	3
LS89-1223	2.6	4	9	2	-6	4	2	3
LS89-1322	3.4	4	10	4	-4	2	3	5
LS90-3204	3.4	5	10	4	-7	4	3	5
Md90-5213	2.4	6	7	2	-6	4	2	2
Md90-5762	-4.6	0	3	-7	-9	-7	-4	-8
SL90-825	-2.1	0	2	-5	-4	4	-5	-7
SO89-24	-1.1	2	1	-2	-8	-6	2	3
Date Planted	05/18	05/14	05/27	05/24	05/25	05/27	05/07	05/07
Days to Mature	134.9	147	124	133	129	127	138	146

PRELIMINARY TEST IVA, 1993

LODGING (score)

Strain	Mean 7 Tests	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	1.6	1.5	1.8	1.5	2.0	1.8	1.0	1.5
Spencer (IV)	1.5	2.0	1.5	1.5	1.5	1.8	1.0	1.3
K1191 (L)	2.0	2.0	1.8	3.5	2.3	1.8	1.2	1.5
HC85-5148	2.0	2.0	1.8	2.8	2.0	1.8	1.1	2.5
HC85-5154	1.8	2.0	1.5	3.0	1.5	1.5	1.0	1.8
HC88-4090	2.4	2.5	1.8	3.5	2.8	2.8	1.4	2.3
HC89-2165	2.4	3.0	2.3	3.0	2.5	2.8	1.3	2.0
HC89-2232	1.8	2.0	1.8	2.0	2.0	1.9	1.0	1.8
HC89-2233	1.9	2.0	1.5	3.0	2.5	2.0	1.0	1.5
K1256	1.6	2.5	1.3	1.5	1.5	1.8	1.0	1.5
K1257	2.8	4.0	2.5	4.5	2.0	2.8	1.0	2.8
K1258	1.7	2.0	1.8	1.8	1.5	2.0	1.0	1.8
K1259	1.9	3.5	1.8	1.8	1.3	2.3	1.0	1.5
K1260	2.1	3.0	1.3	3.5	1.5	2.7	1.0	1.8
K1261	1.7	2.0	1.5	1.8	1.5	1.9	1.0	2.0
K1262	1.8	2.0	2.0	1.8	1.8	2.3	1.0	1.5
K1263	2.1	2.0	2.0	2.8	2.0	2.5	1.2	2.0
K1264	2.3	2.5	2.0	3.8	2.0	2.8	1.3	2.0
K1265	1.4	2.0	1.0	1.8	1.0	1.8	1.0	1.5
K1266	1.8	2.0	2.0	3.0	1.5	1.9	1.0	1.3
LN90-510	1.8	2.0	2.8	1.5	1.5	2.0	1.1	1.5
LN90-3216	1.7	2.0	1.5	1.8	1.5	2.3	1.1	1.5
LN90-3218	1.6	2.0	1.5	1.8	1.3	1.9	1.2	1.8
LN90-3314	1.3	1.0	1.3	1.5	1.3	1.8	1.0	1.3
LN90-4057	1.5	2.0	1.0	1.5	1.0	1.9	1.0	2.0
LN90-4129	1.9	2.0	2.8	1.5	2.0	2.2	1.0	1.8
LN90-4139	2.2	3.0	2.0	2.3	2.0	2.5	1.3	2.0
LS89-1138	2.6	2.5	2.5	4.0	3.0	3.0	1.6	1.8
LS89-1223	2.8	2.5	2.8	4.0	3.0	3.5	1.5	2.0
LS89-1322	2.6	2.0	3.0	4.0	2.5	3.1	1.2	2.3
LS90-3204	2.6	3.0	2.3	3.5	2.8	3.5	1.3	2.0
Md90-5213	2.3	3.0	2.3	3.8	1.5	3.0	1.0	1.8
Md90-5762	1.5	2.0	1.8	1.5	1.0	1.7	1.0	1.5
SL90-825	1.9	2.0	1.8	2.3	1.0	3.0	1.1	1.8
SO89-24	2.2	3.0	1.5	3.3	1.5	1.4	1.3	3.3

PRELIMINARY TEST IVA, 1993

PLANT HEIGHT (inches)

Strain	Mean 7 Tests	Urbana IL	Vincennes IN	Lexington KY	Queenstown MD	Columbia MO	MT. Orab OH	S.Charleston OH
Flyer (E)	35	45	39	33	26	32	31	41
Spencer (IV)	36	49	41	38	26	25	32	40
K1191 (L)	37	47	41	39	31	28	33	41
HC85-5148	41	53	42	40	34	32	38	45
HC85-5154	37	46	40	37	27	33	31	42
HC88-4090	43	51	46	46	30	38	42	46
HC89-2165	42	53	46	40	34	36	38	44
HC89-2232	36	46	42	34	31	29	33	39
HC89-2233	35	42	40	37	29	29	31	40
K1256	33	42	35	34	25	28	31	38
K1257	38	48	43	39	31	32	33	39
K1258	34	44	37	32	20	32	31	42
K1259	37	50	40	38	26	30	34	40
K1260	39	54	41	44	31	31	32	43
K1261	38	50	41	38	25	36	38	40
K1262	38	53	44	34	28	31	32	46
K1263	37	48	41	39	29	31	35	37
K1264	39	51	43	42	29	36	33	40
K1265	34	49	35	37	24	29	30	37
K1266	36	49	41	42	28	29	31	35
LN90-510	33	42	35	34	26	31	30	35
LN90-3216	35	45	34	35	24	30	34	40
LN90-3218	38	51	40	36	26	32	36	42
LN90-3314	34	45	38	32	25	30	32	38
LN90-4057	37	48	37	38	25	29	34	45
LN90-4129	32	42	35	31	27	25	31	36
LN90-4139	35	45	39	32	26	30	34	40
LS89-1138	39	48	42	43	34	32	36	37
LS89-1223	40	50	47	42	34	36	38	36
LS89-1322	40	50	47	42	30	36	36	38
LS90-3204	43	52	48	44	34	39	39	42
Md90-5213	38	46	43	42	28	33	32	39
Md90-5762	34	46	39	31	24	30	30	40
SL90-825	36	49	36	36	22	32	33	42
SO89-24	36	50	40	38	28	26	33	37

PRELIMINARY TEST IVA, 1993

SEED QUALITY (score)

Strain	Mean 7 Tests	IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	1.8	1.5	2.0	2.0	1.5	3.0	1.0	1.3
Spencer (IV)	2.6	1.8	3.0	2.0	5.0	2.5	1.7	2.0
K1191 (L)	1.6	1.5	1.0	2.0	1.5	1.5	1.5	2.0
HC85-5148	2.0	1.5	3.0	1.0	1.5	3.0	1.5	2.3
HC85-5154	1.9	1.8	2.0	2.0	2.0	2.5	1.4	1.8
HC88-4090	2.2	1.8	3.0	2.0	2.0	3.0	1.4	2.5
HC89-2165	1.9	1.5	2.0	2.0	1.8	2.5	1.4	1.8
HC89-2232	2.1	1.5	2.0	2.0	1.5	2.5	1.4	3.8
HC89-2233	1.8	1.5	2.0	2.0	1.8	2.0	1.3	2.3
K1256	2.5	1.8	3.0	2.0	4.8	2.0	1.7	2.3
K1257	1.9	1.5	3.0	1.0	1.8	2.5	1.5	1.8
K1258	2.1	1.8	2.0	1.0	2.3	3.5	1.6	2.5
K1259	1.8	1.5	2.0	1.0	2.0	2.5	1.9	1.8
K1260	1.9	1.5	2.0	2.0	2.5	2.5	1.1	2.0
K1261	2.0	1.8	2.0	2.0	2.8	1.5	1.6	2.0
K1262	1.9	1.5	2.0	2.0	2.8	2.0	1.5	1.5
K1263	1.8	1.8	2.0	1.0	1.5	3.0	1.5	2.0
K1264	1.6	1.8	1.0	1.0	1.5	3.0	1.3	1.8
K1265	2.3	1.5	2.0	1.0	5.0	2.0	2.0	2.8
K1266	2.4	1.8	2.0	2.0	3.5	3.0	1.9	2.5
LN90-510	1.8	1.5	2.0	2.0	1.5	2.5	1.3	1.8
LN90-3216	1.8	1.5	2.0	2.0	1.5	2.5	1.5	1.5
LN90-3218	2.0	1.5	2.0	2.0	1.5	3.0	1.7	2.0
LN90-3314	1.8	1.8	2.0	2.0	1.5	2.5	1.5	1.5
LN90-4057	1.8	1.5	2.0	2.0	2.0	2.5	1.3	1.3
LN90-4129	2.2	1.5	2.0	2.0	3.0	2.5	1.9	2.3
LN90-4139	2.3	1.8	2.0	2.0	3.3	3.0	1.8	2.3
LS89-1138	1.7	1.5	1.0	2.0	1.5	2.5	1.1	2.0
LS89-1223	1.5	1.8	2.0	1.0	1.3	2.0	1.1	1.5
LS89-1322	1.6	1.5	1.0	2.0	1.3	2.0	1.4	1.8
LS90-3204	1.9	1.8	2.0	2.0	2.0	2.5	1.3	1.5
Md90-5213	1.9	1.8	1.0	2.0	2.0	2.5	2.1	2.0
Md90-5762	1.7	1.5	2.0	2.0	1.3	2.5	1.3	1.5
SL90-825	2.1	1.5	2.0	2.0	3.8	2.0	1.6	1.8
SO89-24	1.9	1.8	2.0	1.0	2.3	3.0	1.6	1.5

PRELIMINARY TEST IVA, 1993

SEED SIZE (g/100)

Strain	Mean 6 Tests	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	14.4	17.0	13.0	15.2	11.5		14.2	15.3
Spencer (IV)	17.8	18.9	17.5	18.7	15.1		18.3	18.2
K1191 (L)	17.3	16.2	16.2	17.6	17.9		18.2	17.5
HC85-5148	19.4	20.0	18.9	19.3	19.5		18.5	19.9
HC85-5154	19.0	18.8	20.0	18.1	18.8		18.3	20.1
HC88-4090	16.2	17.8	15.9	17.8	13.1		16.3	16.1
HC89-2165	13.7	13.6	12.9	14.2	13.1		14.7	13.5
HC89-2232	14.7	17.3	14.6	15.5	12.6		14.5	13.8
HC89-2233	15.0	17.0	14.9	16.5	12.6		14.3	14.6
K1256	19.3	20.2	18.7	20.0	19.0		18.9	18.7
K1257	16.3	17.0	17.7	15.8	13.9		17.3	15.8
K1258	18.3	20.8	18.3	18.3	16.6		17.8	17.9
K1259	16.0	16.5	14.4	16.6	15.8		16.4	16.1
K1260	15.1	16.5	14.3	15.0	13.7		16.0	15.0
K1261	18.4	19.4	18.4	17.6	16.2		19.6	19.0
K1262	17.1	20.1	15.8	17.4	15.6		16.6	17.1
K1263	15.7	16.0	16.5	16.0	14.9		15.7	15.2
K1264	15.6	16.4	16.1	15.6	14.5		16.5	14.3
K1265	19.8	20.1	19.0	21.2	18.6		19.7	20.0
K1266	16.7	17.2	16.9	16.7	15.4		17.6	16.3
LN90-510	16.4	18.8	16.6	16.6	14.6		15.7	16.2
LN90-3216	15.9	18.8	15.7	14.8	14.5		15.7	15.8
LN90-3218	14.8	17.6	14.1	13.6	13.0		15.8	14.8
LN90-3314	15.0	17.0	14.7	14.3	14.0		15.3	14.9
LN90-4057	16.2	18.3	15.2	15.1	14.1		17.3	17.3
LN90-4129	21.5	24.8	21.9	21.0	18.0		21.8	21.2
LN90-4139	17.6	19.7	17.2	17.3	15.1		17.9	18.3
LS89-1138	14.9	14.6	16.0	16.1	12.0		16.2	14.3
LS89-1223	15.1	14.8	16.0	16.1	12.1		16.9	14.7
LS89-1322	15.3	15.5	15.8	16.0	11.8		17.0	15.4
LS90-3204	13.5	14.1	13.6	13.7	10.4		15.4	13.9
Md90-5213	15.2	16.9	14.9	15.0	12.1		16.0	16.3
Md90-5762	16.0	18.5	16.4	15.5	12.8		15.9	16.6
SL90-825	16.3	16.8	17.1	16.1	14.3		17.5	15.8
SO89-24	14.3	15.8	13.8	14.7	11.7		14.8	14.9

PRELIMINARY TEST IVA, 1993

PROTEIN (%)

Strain	Mean 4 Tests	Urbana IL	Vincennes IN	Lexington KY	Mt. Orab OH
Flyer (E)	42.3	43.0	43.9	39.5	42.6
Spencer (IV)	42.6	42.2	44.5	41.7	41.8
K1191 (L)	41.6	40.6	43.1	40.8	41.8
HC85-5148	41.5	40.3	43.1	40.8	41.6
HC85-5154	41.9	40.2	43.7	41.2	42.5
HC88-4090	42.3	41.2	45.4	40.3	42.2
HC89-2165	42.1	41.4	43.7	41.6	41.5
HC89-2232	42.9	42.4	43.9	42.5	42.8
HC89-2233	42.5	42.1	44.0	42.1	41.7
K1256	42.3	41.3	44.4	40.7	42.8
K1257	42.8	42.2	45.0	39.7	44.1
K1258	41.5	41.3	42.1	40.0	42.5
K1259	40.8	40.4	42.5	39.0	41.3
K1260	40.3	39.3	41.4	39.5	41.0
K1261	41.4	41.3	42.3	39.9	42.3
K1262	42.2	42.3	43.7	39.8	43.0
K1263	40.8	39.8	43.2	38.2	41.8
K1264	41.7	40.3	43.1	41.4	42.0
K1265	40.5	40.8	41.8	38.5	40.7
K1266	41.9	40.8	43.8	40.8	42.0
LN90-510	40.4	41.4	41.8	39.2	39.3
LN90-3216	43.2	43.0	45.4	41.3	43.0
LN90-3218	41.8	41.7	43.9	39.7	42.0
LN90-3314	40.2	41.2	42.4	36.7	40.3
LN90-4057	43.2	42.2	43.8	43.0	43.6
LN90-4129	43.4	43.3	44.7	42.2	43.2
LN90-4139	42.6	42.6	44.9	40.9	42.0
LS89-1138	41.1	38.8	43.3	41.5	40.8
LS89-1223	40.5	39.5	43.6	37.8	40.9
LS89-1322	41.3	40.5	43.1	40.2	41.3
LS90-3204	42.1	41.7	43.9	40.9	41.8
Md90-5213	39.2	39.5	40.2	37.0	39.9
Md90-5762	43.5	43.1	45.6	41.6	43.5
SL90-825	41.3	41.3	43.2	40.0	40.8
SO89-24	41.0	40.1	42.2	39.6	42.0

PRELIMINARY TEST IVA, 1993

OIL (%)

Strain	Mean 4 Tests	Urbana IL	Vincennes IN	Lexington KY	Mt. Orab OH
Flyer (E)	21.2	21.2	20.4	21.7	21.3
Spencer (IV)	21.0	21.1	20.7	20.6	21.6
K1191 (L)	20.6	21.0	20.2	20.2	20.9
HC85-5148	22.5	22.8	21.9	22.2	22.9
HC85-5154	22.2	23.0	21.6	22.0	22.1
HC88-4090	21.8	22.6	20.7	22.0	21.9
HC89-2165	21.1	21.4	20.5	21.0	21.5
HC89-2232	20.4	21.1	19.7	20.0	20.6
HC89-2233	20.8	21.0	20.4	20.6	21.1
K1256	21.2	21.4	20.4	21.3	21.6
K1257	20.3	20.5	19.9	20.9	19.8
K1258	21.4	22.1	21.0	21.1	21.2
K1259	21.6	22.2	20.9	21.4	21.7
K1260	21.3	22.5	20.8	20.2	21.6
K1261	21.6	21.5	21.2	21.4	22.1
K1262	20.8	21.2	19.9	20.6	21.3
K1263	21.2	22.4	20.4	21.0	21.1
K1264	20.3	21.1	20.0	19.5	20.5
K1265	21.4	21.9	20.9	21.1	21.5
K1266	20.3	21.6	19.0	20.0	20.6
LN90-510	21.8	21.5	21.5	21.2	23.1
LN90-3216	21.0	21.2	20.2	21.1	21.4
LN90-3218	20.8	21.6	19.3	21.2	20.9
LN90-3314	21.9	21.9	21.0	22.8	21.8
LN90-4057	19.7	20.3	19.8	18.7	20.0
LN90-4129	20.6	21.0	20.2	20.7	20.4
LN90-4139	20.9	21.1	20.0	21.2	21.2
LS89-1138	21.2	21.6	20.5	20.8	21.8
LS89-1223	21.4	21.3	20.1	22.1	22.1
LS89-1322	21.3	21.5	20.4	21.1	22.0
LS90-3204	20.2	19.9	19.9	19.7	21.1
Md90-5213	21.3	21.4	20.9	21.4	21.5
Md90-5762	20.8	21.4	19.5	21.2	21.1
SL90-825	21.9	22.3	21.4	21.5	22.2
SO89-24	20.8	21.6	20.0	20.7	20.8

PRELIMINARY TEST IVB, 1993

Strain	Parentage	Generation Composited	Unique Traits
Flyer (E)	Asgrow A3127[4] x Williams 82	BC3 F2	Rps1-k
Spencer (IV)	A75-305022 x Century	F5	
K1191 (L)	Sherman x Toano	F5	
Cutler 71	Cutler[4] Rps1 x SL5	BC3 F3	
C1869	A86-301024 x CX1022-90	F5	
C1877	Cutler 71 x CX1038-14	F5	
C1878	Cutler 71 x CX1038-14	F5	
C1879	Cutler 71 x CX1038-14	F5	
C1880	Cutler 71 x CX1038-14	F5	
C1881	Cutler 71 x CX1038-14	F5	
C1882	Cutler 71 x CX1038-14	F5	
C1883	Cutler 71 x CX1038-14	F5	
C1884	Cutler 71 x CX1038-14	F5	
C1885	Cutler 71 x CX1038-14	F5	
HS91-4825	Burlison x A86-301024	F5	Rps1-b
HS91-4830	Burlison x A86-301024	F5	Rps1-b
HS91-4836	GR8936 x (HM8580 x GR8936)	F5	Rps1-k
Ky90-1208	Asgrow A3935 x Hutcheson	F5	
Ky90-1238	Asgrow A3935 x Hutcheson	F5	
Ky90-2713	Spencer x Hutcheson	F5	
Ripley (dt1)	Hodgson x V68-1034	F5	dt1
HC85-6723B	L74D-634RE x HC78-676	F5	dt1
HC87-226	HC78-291 x IX91-15	F5	dt1
HC87-2154	Pixie x Essex	F5	dt1
HC87-3299	Coker 237 x Asgrow A3127	F5	dt1
HC88-727	HC80-1944 x Gnome 85	F5	dt1
HC88-1284	HC80-1946 x Asgrow A3127	F5	dt1
HC89-39PR	HC78-352[6] x Elf BC	BC5 F3	dt1, Rps1-k
HC89-41PR	HC78-352[6] x Elf BC	BC5 F3	dt1, Rps1-k
HC89-50PR	HC78-352[6] x Elf BC	BC5 F3	dt1, Rps1-k
HC89-314	Hobbit 87 x HC80-1944	F5	dt1
HC89-1316	Hobbit 87 x HC74-634RE	F5	dt1
HC89-1418	Hobbit 87 x HC74-634RE	F5	dt1
HC89-1419	Hobbit 87 x HC74-634RE	F5	dt1

PRELIMINARY TEST IVB, 1993

DESCRIPTIVE DATA

Strain	Descriptive Code	Root Rot Wooster Race 25	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %	Seed Germ. %
Flyer (E)	PTTDYBlI	4.8	R	54	4	94
Spencer (IV)	WTBDYBrI	4.0	S	40	6	82
K1191 (L)	WGBDYBfI	4.5	S	62	2	88
Cutler 71	PTBSYBlI	4.2	S	nd	nd	nd
C1869	PTBSYBlI	3.3	H	32	2	92
C1877	PTBSYBlI	4.3	S	66	2	86
C1878	PTBSYBlI	4.2	S	62	2	90
C1879	PTBSYBlI	4.2	S	50	8	82
C1880	PTBSYBlI	4.2	S	56	10	86
C1881	PTBSYBlI	4.3	S	52	4	90
C1882	PTBSYBlI	4.3	S	70	8	90
C1883	PTBSYBlI	4.0	S	44	6	80
C1884	PTBSYBlI	4.3	S	58	12	82
C1885	PTBSYBlI	4.2	S	54	6	84
HS91-4825	P+WG+TTSYBl+IbI	3.8	R	54	2	74
HS91-4830	PTBSYBlI	4.5	R	58	8	86
HS91-4836	WTBDYBlI	3.8	R	46	4	84
Ky90-1208	WTTDYBrI	2.3	S	84	0	84
Ky90-1238	WTBDYBlI	2.5	S	6	4	96
Ky90-2713	WTBDYBrI	4.2	S	40	4	92
Ripley (dtl)	PGTSYBfD	2.0	S	2	14	86
HC85-6723B	WTBDYBlD	4.7	S	34	10	80
HC87-226	WTTDYBlD	4.8	S	10	4	74
HC87-2154	PTTSYBlD	6.3	S	58	2	90
HC87-3299	PTTDYBlD	5.7	S	28	4	96
HC88-727	PTTDYBlD	6.3	H	50	2	92
HC88-1284	PTTDYBlD	3.8	S	30	10	76
HC89-39PR	PTTDYBlD	5.2	R	94	4	90
HC89-41PR	PTTDYBlD	6.7	R	58	2	92
HC89-50PR	PTTDYBlD	6.0	R	42	2	96
HC89-314	WTTDYBlD	4.0	R	28	10	88
HC89-1316	WTTSYBlD	4.7	S	16	6	92
HC89-1418	WTTSYBlD	4.7	H	20	15	82
HC89-1419	WTTSYBlD	5.3	S	48	10	82

nd Data not available

PRELIMINARY TEST IVB, 1993

REGIONAL SUMMARY

Strain	Yield 7 bu/a	Rank 7 No.	Maturity 7 Date	Lodging 7 Score	Plant Height 7 In.	Seed Quality 7 Score	Seed Size 6 g/100	Composition Protein 4 %	Oil 4 %
No. of Tests									
Flyer (E)	50.3	9	-6.7	1.5	33	1.7	14.8	42.8	20.7
Spencer (IV)	49.9	11	09/30*	1.4	35	2.4	18.4	43.2	20.8
K1191 (L)	51.8	2	2.3	1.5	33	1.7	16.9	42.3	20.3
Cutler 71	45.1	24	-7.3	2.2	38	2.0	17.7	42.7	20.4
C1869	48.3	16	-7.0	1.5	32	2.2	18.1	42.3	20.7
C1877	43.6	27	-5.6	1.9	38	2.0	18.9	44.7	19.9
C1878	45.7	21	-4.1	2.0	42	2.1	17.7	44.3	19.9
C1879	45.4	22	-6.3	2.0	40	2.3	17.7	44.7	19.4
C1880	42.5	32	-6.4	1.9	40	2.5	17.0	46.2	18.5
C1881	43.1	29	-6.3	2.0	42	2.0	16.4	47.8	17.7
C1882	42.8	30	-7.1	2.0	41	2.0	17.2	48.2	17.5
C1883	42.2	34	-7.3	1.9	40	1.8	17.1	48.0	17.2
C1884	42.8	30	-6.6	2.0	41	2.3	17.5	47.9	17.4
C1885	42.5	32	-6.7	2.0	44	2.0	16.4	47.2	18.1
HS91-4825	51.5	5	-4.6	1.3	30	2.1	17.5	43.5	19.3
HS91-4830	49.3	13	-5.7	1.9	34	1.9	16.5	42.1	19.7
HS91-4836	51.0	7	-5.0	1.4	34	2.2	17.7	44.0	20.1
Ky90-1208	53.5	1	-1.6	2.0	36	2.0	15.6	42.9	21.2
Ky90-1238	50.5	8	3.3	2.1	37	1.8	17.0	42.9	20.3
Ky90-2713	51.8	2	1.3	2.0	42	2.2	18.3	41.8	20.6
Ripley (dtl)	51.5	5	-5.0	1.4	24	1.1	13.4	40.4	21.0
HC85-6723B	47.6	19	-3.9	1.3	24	2.3	17.7	43.8	20.3
HC87-226	47.5	20	-0.3	1.2	24	1.8	17.3	41.6	20.6
HC87-2154	49.0	14	-2.1	1.1	22	1.9	14.0	43.0	20.5
HC87-3299	48.0	18	-2.3	1.2	22	1.7	16.5	42.8	21.2
HC88-727	43.3	28	-7.1	1.3	23	1.6	15.0	43.8	20.0
HC88-1284	49.6	12	-6.6	1.1	23	1.6	14.7	43.1	20.3
HC89-39PR	48.8	15	-4.6	1.3	21	1.7	16.1	42.8	21.4
HC89-41PR	48.1	17	-4.7	1.3	21	1.9	16.4	42.9	21.4
HC89-50PR	44.3	25	-4.3	1.3	19	1.7	16.6	43.1	21.4
HC89-314	51.7	4	-6.1	1.3	24	1.8	17.2	45.1	19.3
HC89-1316	45.4	22	-8.6	1.3	22	1.9	16.3	43.7	20.8
HC89-1418	44.2	26	-7.6	1.0	21	1.8	17.8	42.7	21.1
HC89-1419	49.9	10	-6.6	1.5	24	1.6	17.2	43.3	20.8

* 134.7 Days After Planting

PRELIMINARY TEST IVB, 1993

YIELD (bu/a)

Strain	Mean 7 Tests	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	50.3	65.6	45.9	48.1	45.1	38.6	42.3	66.6
Spencer (IV)	49.9	63.2	49.7	43.5	37.1	36.2	49.8	69.7
K1191 (L)	51.8	62.8	50.6	47.1	43.9	47.9	43.4	66.7
Cutler 71	45.1	54.1	43.5	47.0	32.2	45.0	36.7	56.9
C1869	48.3	61.0	40.0	45.6	33.7	50.6	44.7	62.2
C1877	43.6	52.0	38.1	43.9	41.2	40.8	36.9	52.6
C1878	45.7	52.9	42.7	40.7	40.2	39.8	37.8	65.5
C1879	45.4	55.8	40.4	42.6	38.0	44.5	40.2	56.3
C1880	42.5	50.6	40.4	39.3	36.2	41.6	35.7	53.5
C1881	43.1	49.0	41.2	44.5	34.5	42.2	32.0	58.3
C1882	42.8	50.7	41.3	44.0	38.6	36.2	31.9	57.1
C1883	42.2	53.0	34.0	41.6	33.7	42.8	37.9	52.3
C1884	42.8	49.2	30.2	34.9	42.6	39.0	41.2	62.7
C1885	42.5	51.3	28.4	34.6	42.1	40.6	41.1	59.3
HS91-4825	51.5	70.1	39.9	49.3	47.7	39.1	48.3	66.2
HS91-4830	49.3	68.2	46.1	40.2	39.2	44.4	42.1	64.6
HS91-4836	51.0	69.1	50.6	45.3	33.0	50.1	41.7	66.9
Ky90-1208	53.5	68.5	42.7	41.8	44.8	57.1	49.2	70.3
Ky90-1238	50.5	69.1	44.9	34.0	48.7	48.2	39.6	69.2
Ky90-2713	51.8	65.2	37.4	56.3	49.0	38.3	40.8	75.5
Ripley (dtl)	51.5	64.1	32.8	51.2	45.4	43.8	54.5	68.9
HC85-6723B	47.6	71.8	27.7	44.6	36.9	37.0	40.4	75.1
HC87-226	47.5	62.6	45.1	44.1	36.2	42.1	43.5	59.0
HC87-2154	49.0	69.6	40.9	47.8	32.9	32.0	49.2	70.3
HC87-3299	48.0	59.3	28.6	50.1	40.0	40.6	53.3	64.2
HC88-727	43.3	60.9	25.2	53.0	33.2	14.4	54.7	61.4
HC88-1284	49.6	66.9	35.9	47.0	38.0	34.2	55.3	70.0
HC89-39PR	48.8	62.9	34.7	44.7	43.8	40.2	45.7	69.3
HC89-41PR	48.1	66.0	46.7	49.2	35.1	29.9	43.0	66.8
HC89-50PR	44.3	60.8	25.8	51.3	34.9	25.7	40.6	70.7
HC89-314	51.7	71.2	41.3	52.5	41.3	41.5	45.9	67.9
HC89-1316	45.4	67.4	36.4	46.8	38.1	37.5	34.3	57.2
HC89-1418	44.2	65.4	26.6	39.8	38.7	39.8	35.9	63.3
HC89-1419	49.9	68.1	42.4	53.4	42.4	36.6	40.6	65.9
C.V. (%)		5.8	17.8	11.0	13.7	10.4	14.2	6.6
L.S.D. (5%)		7.2	14.1	6.6	ns	8.6	12.5	8.6
Row Sp. (In.)		30	26	30	30	30	15	7.5
Rows/Plot		4	4	4	4	4	6	8
Reps		2	2	2	2	2	2	2

PRELIMINARY TEST IVB, 1993

YIELD RANK

Strain	Yield Rank	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	9	13	6	11	5	23	15	15
Spencer (IV)	11	17	3	25	22	29	5	7
K1191 (L)	2	19	2	13	7	5	13	14
Cutler 71	24	26	9	14	34	6	29	30
C1869	16	21	19	17	29	2	11	23
C1877	27	29	21	24	13	15	28	33
C1878	21	28	10	29	14	20	27	18
C1879	22	25	17	26	20	7	24	31
C1880	32	32	17	31	24	13	31	32
C1881	29	34	15	21	28	11	33	27
C1882	30	31	13	23	18	28	34	29
C1883	34	27	26	28	29	10	26	34
C1884	30	33	28	32	9	22	18	22
C1885	32	30	30	33	11	16	19	25
HS91-4825	5	3	20	9	3	21	8	16
HS91-4830	13	8	5	7	16	8	16	19
HS91-4836	7	5	1	18	32	3	17	12
Ky90-1208	1	7	10	27	6	1	6	4
Ky90-1238	8	5	8	34	2	4	25	9
Ky90-2713	2	15	22	1	1	24	20	1
Ripley (dtl)	5	16	27	6	4	9	3	10
HC85-6723B	19	1	31	20	23	26	23	2
HC87-226	20	20	7	22	24	12	12	26
HC87-2154	14	4	16	12	33	31	6	4
HC87-3299	18	24	29	8	15	16	4	20
HC88-727	28	22	34	3	31	34	2	24
HC88-1284	12	11	24	14	20	30	1	6
HC89-39PR	15	18	25	19	8	18	10	8
HC89-41PR	17	12	4	10	26	32	14	13
HC89-50PR	25	23	33	5	27	33	21	3
HC89-314	4	2	13	4	12	14	9	11
HC89-1316	22	10	23	16	19	25	32	28
HC89-1418	26	14	32	30	17	19	30	21
HC89-1419	10	9	12	2	10	27	21	17

PRELIMINARY TEST IVB, 1993

MATURITY (date)

Strain	Mean 7 Tests	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	-6.7	-1	-7	-11	-6	-3	-9	-10
Spencer (IV)	09/30	10/07	09/28	10/02	09/28	09/30	09/24	10/01
K1191 (L)	2.3	7	0	-5	0	5	3	6
Cutler 71	-7.3	-3	-7	-12	-4	-5	-10	-10
C1869	-7.0	-2	-8	-14	-2	-5	-10	-8
C1877	-5.6	-3	-7	-11	-1	-1	-7	-9
C1878	-4.1	-3	-6	-11	-1	0	-7	-1
C1879	-6.3	-3	-7	-11	-3	-3	-8	-9
C1880	-6.4	-3	-9	-9	-4	-1	-9	-10
C1881	-6.3	-3	-10	-11	-2	-2	-8	-8
C1882	-7.1	-3	-9	-12	0	-4	-11	-11
C1883	-7.3	-3	-9	-12	-4	-2	-11	-10
C1884	-6.6	-3	-7	-12	-1	-3	-11	-9
C1885	-6.7	-3	-9	-12	-1	-4	-9	-9
HS91-4825	-4.6	1	-2	-12	-3	-2	-6	-8
HS91-4830	-5.7	-1	-6	-11	-4	-2	-7	-9
HS91-4836	-5.0	0	-6	-12	-3	-6	-6	-2
Ky90-1208	-1.6	3	-1	-9	-2	0	-3	1
Ky90-1238	3.3	7	1	0	1	5	4	5
Ky90-2713	1.3	3	-3	-2	1	5	2	3
Ripley (dtl)	-5.0	-3	-7	-9	-4	0	-7	-5
HC85-6723B	-3.9	0	-10	0	2	-3	-11	-5
HC87-226	-0.3	2	-4	-4	-4	5	2	1
HC87-2154	-2.1	2	-6	-7	-2	-1	-1	0
HC87-3299	-2.3	2	-5	-5	-1	1	-1	-7
HC88-727	-7.1	1	-10	-11	-9	-5	-6	-10
HC88-1284	-6.6	1	-9	-14	-8	-4	-8	-4
HC89-39PR	-4.6	1	-6	-7	-3	-2	-7	-8
HC89-41PR	-4.7	1	-6	-7	-2	-4	-7	-8
HC89-50PR	-4.3	1	-8	-5	-1	-5	-6	-6
HC89-314	-6.1	1	-8	-9	-6	-2	-9	-10
HC89-1316	-8.6	0	-12	-12	-1	-8	-11	-16
HC89-1418	-7.6	1	-8	-14	-3	-5	-10	-14
HC89-1419	-6.6	1	-7	-9	-2	-7	-11	-11
Date Planted	05/18	05/14	05/27	05/21	05/25	05/27	05/07	05/07
Days to Mature	134.7	146	124	134	126	126	140	147

PRELIMINARY TEST IVB, 1993

LODGING (score)

Strain	Mean 7 Tests	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	1.5	1.5	1.3	2.0	1.5	1.9	1.1	1.3
Spencer (IV)	1.4	1.5	1.3	1.5	1.5	1.7	1.1	1.5
K1191 (L)	1.5	2.0	1.0	1.8	1.5	1.9	1.0	1.3
Cutler 71	2.2	2.0	1.3	3.5	2.0	2.3	1.3	3.0
C1869	1.5	2.5	1.0	1.5	1.0	1.7	1.3	1.8
C1877	1.9	2.0	1.3	2.8	2.0	2.3	1.2	1.8
C1878	2.0	2.0	1.5	2.3	2.0	2.5	1.2	2.8
C1879	2.0	2.0	1.8	2.2	2.0	2.5	1.3	2.5
C1880	1.9	2.0	1.5	2.5	2.0	2.0	1.3	2.3
C1881	2.0	1.5	1.3	2.8	2.0	2.5	1.2	2.8
C1882	2.0	2.0	1.3	3.3	2.0	2.0	1.2	2.5
C1883	1.9	2.0	1.3	2.0	1.5	2.3	1.4	2.5
C1884	2.0	2.0	1.3	2.3	2.0	2.5	1.3	2.8
C1885	2.0	2.0	1.5	3.0	2.0	2.7	1.3	1.8
HS91-4825	1.3	1.5	1.0	1.5	1.5	1.5	1.1	1.3
HS91-4830	1.9	2.5	1.3	2.0	1.0	1.9	1.2	3.3
HS91-4836	1.4	1.5	1.3	1.5	1.0	1.7	1.2	1.8
Ky90-1208	2.0	1.5	1.3	2.0	2.3	2.3	1.3	3.0
Ky90-1238	2.1	2.5	1.3	2.0	2.0	2.5	1.9	2.3
Ky90-2713	2.0	1.5	2.0	2.3	2.0	2.3	1.4	2.5
Ripley (dtl)	1.4	1.0	1.0	2.8	1.0	1.0	1.1	1.8
HC85-6723B	1.3	1.0	1.0	2.5	1.3	1.0	1.1	1.3
HC87-226	1.2	1.0	1.0	1.8	1.0	1.0	1.0	1.3
HC87-2154	1.1	1.0	1.0	1.5	1.0	1.0	1.0	1.0
HC87-3299	1.2	1.0	1.0	2.3	1.0	1.0	1.0	1.3
HC88-727	1.3	1.0	1.0	2.0	1.5	1.3	1.0	1.5
HC88-1284	1.1	1.0	1.0	1.5	1.5	1.0	1.0	1.0
HC89-39PR	1.3	1.0	1.0	1.5	2.0	1.0	1.0	1.8
HC89-41PR	1.3	1.0	1.0	1.5	2.0	1.0	1.0	1.5
HC89-50PR	1.3	1.0	1.0	1.8	2.0	1.0	1.0	1.0
HC89-314	1.3	1.0	1.0	1.8	1.5	1.0	1.0	1.5
HC89-1316	1.3	1.0	1.3	1.8	1.3	1.0	1.0	1.5
HC89-1418	1.0	1.0	1.0	1.3	1.0	1.0	1.0	1.0
HC89-1419	1.5	1.0	1.0	3.0	2.0	1.0	1.0	1.8

PRELIMINARY TEST IVB, 1993

PLANT HEIGHT (inches)

Strain	Mean 7 Tests	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	33	44	34	32	27	26	30	36
Spencer (IV)	35	47	39	28	26	29	32	41
K1191 (L)	33	46	33	28	28	23	32	38
Cutler 71	38	48	37	37	31	33	43	40
C1869	32	44	33	27	23	28	34	36
C1877	38	51	40	40	30	31	34	42
C1878	42	55	44	38	35	31	41	47
C1879	40	54	41	38	32	34	40	44
C1880	40	54	37	38	31	28	45	46
C1881	42	56	40	41	36	34	40	48
C1882	41	55	41	40	31	34	41	45
C1883	40	53	42	35	29	34	40	45
C1884	41	54	36	38	34	34	45	46
C1885	44	56	44	41	37	36	45	49
HS91-4825	30	43	30	27	23	21	31	38
HS91-4830	34	45	32	33	25	24	34	42
HS91-4836	34	46	31	30	25	27	33	44
Ky90-1208	36	48	31	36	29	27	37	43
Ky90-1238	37	50	36	34	30	30	36	43
Ky90-2713	42	54	45	40	36	32	37	49
Ripley (dtl)	24	29	20	25	20	16	27	31
HC85-6723B	24	30	18	26	22	18	27	29
HC87-226	24	31	23	26	19	16	25	28
HC87-2154	22	27	21	24	19	15	22	28
HC87-3299	22	28	18	23	19	17	22	27
HC88-727	23	28	20	23	20	17	25	28
HC88-1284	23	30	18	23	19	15	26	28
HC89-39PR	21	25	18	22	18	17	20	27
HC89-41PR	21	26	19	24	19	15	20	25
HC89-50PR	19	26	15	24	17	14	19	21
HC89-314	24	29	22	24	20	19	26	30
HC89-1316	22	26	18	24	20	18	22	28
HC89-1418	21	28	18	20	18	16	19	26
HC89-1419	24	29	22	28	19	18	21	30

PRELIMINARY TEST IVB, 1993

SEED QUALITY (score)

Strain	Mean 7 Tests	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	1.7	1.5	2.0	2.0	1.0	2.5	1.1	2.0
Spencer (IV)	2.4	1.5	3.0	3.0	2.5	3.0	1.8	2.3
K1191 (L)	1.7	1.5	1.0	2.0	1.8	2.0	1.3	2.0
Cutler 71	2.0	1.5	1.0	2.0	3.3	2.5	1.6	2.3
C1869	2.2	1.5	2.0	2.0	3.0	3.0	1.4	2.3
C1877	2.0	1.5	2.0	2.0	1.5	3.0	1.5	2.3
C1878	2.1	1.5	2.0	2.0	1.8	3.0	2.3	2.3
C1879	2.3	3.0	2.0	2.0	1.8	3.0	1.6	2.5
C1880	2.5	3.0	2.0	2.0	3.0	3.0	1.8	3.0
C1881	2.0	1.5	2.0	3.0	1.5	2.5	1.4	2.0
C1882	2.0	1.5	2.0	2.0	2.0	3.0	1.4	1.8
C1883	1.8	1.5	2.0	2.0	1.8	2.0	1.4	2.0
C1884	2.3	1.5	3.0	2.0	2.0	3.0	2.0	2.3
C1885	2.0	1.5	2.0	2.0	1.5	4.0	1.5	1.5
HS91-4825	2.1	1.8	3.0	2.0	1.8	2.5	1.4	2.3
HS91-4830	1.9	1.5	2.0	1.0	2.3	3.5	1.0	1.8
HS91-4836	2.2	1.5	2.0	3.0	2.0	2.5	1.9	2.8
Ky90-1208	2.0	1.5	3.0	2.0	1.3	3.0	1.4	1.8
Ky90-1238	1.8	1.5	2.0	2.0	1.3	2.5	1.4	2.0
Ky90-2713	2.2	1.5	3.0	2.0	1.5	3.5	1.9	1.8
Ripley (dtl)	1.1	1.5	1.0	1.0	1.5	1.0	1.0	1.0
HC85-6723B	2.3	1.5	2.0	3.0	2.8	3.5	1.4	2.0
HC87-226	1.8	1.5	2.0	2.0	1.8	2.0	1.1	2.0
HC87-2154	1.9	1.5	3.0	2.0	1.8	2.0	1.1	1.8
HC87-3299	1.7	1.5	2.0	2.0	1.5	2.0	1.3	1.8
HC88-727	1.6	1.5	1.0	2.0	1.3	2.5	1.3	1.5
HC88-1284	1.6	1.5	1.0	2.0	1.8	2.5	1.1	1.5
HC89-39PR	1.7	1.5	1.0	2.0	2.3	2.0	1.6	1.8
HC89-41PR	1.9	1.5	2.0	2.0	1.8	2.5	1.5	2.0
HC89-50PR	1.7	1.5	1.0	2.0	1.5	2.5	1.4	1.8
HC89-314	1.8	1.5	2.0	2.0	1.5	2.5	1.1	2.0
HC89-1316	1.9	1.5	1.0	3.0	1.8	3.0	1.3	2.0
HC89-1418	1.8	1.5	2.0	2.0	1.5	2.5	1.1	1.8
HC89-1419	1.6	1.5	1.0	2.0	1.5	2.0	1.0	2.0

PRELIMINARY TEST IVB, 1993

SEED SIZE (g/100)

Strain	Mean 6 Tests	Urbana IL	Vin-cennes IN	Lexing ton KY	Queens town MD	Colum-bia MO	MT. Orab OH	S.Charle ston OH
Flyer (E)	14.8	16.9	12.9	14.4	16.5		14.2	14.1
Spencer (IV)	18.4	19.4	17.7	20.5	17.0		19.0	16.5
K1191 (L)	16.9	17.2	15.4	17.2	15.5		19.0	17.2
Cutler 71	17.7	17.2	15.3	20.1	18.7		17.8	17.0
C1869	18.1	17.9	16.7	19.9	20.4		17.2	16.3
C1877	18.9	19.3	17.2	19.8	19.2		20.0	17.7
C1878	17.7	16.7	16.6	18.4	17.9		19.1	17.3
C1879	17.7	17.7	16.6	19.1	16.6		18.5	17.4
C1880	17.0	17.2	15.6	18.2	16.3		18.4	16.1
C1881	16.4	15.9	15.1	17.0	16.8		17.6	16.1
C1882	17.2	16.4	16.4	17.9	18.5		17.7	16.4
C1883	17.1	16.6	16.2	17.4	18.1		17.4	16.7
C1884	17.5	16.1	16.5	18.4	19.3		18.0	16.7
C1885	16.4	15.9	16.2	17.1	16.0		17.7	15.6
HS91-4825	17.5	19.3	17.2	17.3	17.9		16.5	16.9
HS91-4830	16.5	19.0	15.6	16.7	16.6		15.0	16.1
HS91-4836	17.7	19.4	16.9	20.2	16.1		16.2	17.1
Ky90-1208	15.6	16.7	14.6	16.2	16.5		15.4	14.1
Ky90-1238	17.0	17.7	17.7	16.7	15.7		17.9	16.3
Ky90-2713	18.3	18.3	17.3	17.9	19.8		17.6	18.9
Ripley (dtl)	13.4	13.5	12.9	14.6	14.2		13.4	11.9
HC85-6723B	17.7	19.9	17.0	20.0	17.0		15.3	16.9
HC87-226	17.3	19.9	17.4	18.1	15.0		16.2	17.0
HC87-2154	14.0	14.6	14.2	14.4	13.8		13.3	13.4
HC87-3299	16.5	17.0	15.7	18.4	16.0		15.9	15.9
HC88-727	15.0	16.0	13.7	18.1	12.7		15.2	14.3
HC88-1284	14.7	15.5	14.3	15.6	13.3		14.4	15.2
HC89-39PR	16.1	17.8	14.7	17.8	15.6		14.7	15.9
HC89-41PR	16.4	18.8	15.2	18.5	15.0		14.8	16.3
HC89-50PR	16.6	18.8	15.7	18.4	15.3		15.2	16.2
HC89-314	17.2	18.9	16.7	20.1	14.9		15.6	16.8
HC89-1316	16.3	17.8	15.3	21.3	14.9		14.6	14.1
HC89-1418	17.8	20.1	17.9	21.7	16.3		15.5	15.4
HC89-1419	17.2	18.6	16.7	20.9	16.5		14.5	16.1

PRELIMINARY TEST IVB, 1993

PROTEIN (%)

Strain	Mean 4 Tests	Urbana IL	Vincennes IN	Lexington KY	Mt. Orab OH
Flyer (E)	42.8	41.8	44.9	42.3	42.3
Spencer (IV)	43.2	42.0	44.4	43.8	42.4
K1191 (L)	42.3	41.1	42.7	42.8	42.6
Cutler 71	42.7	41.3	44.0	43.6	42.0
C1869	42.3	40.6	42.9	43.5	42.0
C1877	44.7	42.9	45.5	46.0	44.5
C1878	44.3	42.0	45.6	46.1	43.5
C1879	44.7	42.0	46.0	45.4	45.2
C1880	46.2	43.5	46.9	48.0	46.2
C1881	47.8	44.7	49.8	49.9	46.9
C1882	48.2	44.6	50.5	49.1	48.6
C1883	48.0	45.9	48.6	48.7	48.6
C1884	47.9	45.0	50.1	49.1	47.3
C1885	47.2	44.3	47.5	48.5	48.4
HS91-4825	43.5	43.0	44.2	43.0	43.6
HS91-4830	42.1	41.6	43.8	41.3	41.6
HS91-4836	44.0	42.6	45.1	44.6	43.6
Ky90-1208	42.9	42.1	44.1	43.1	42.1
Ky90-1238	42.9	40.7	43.6	43.7	43.6
Ky90-2713	41.8	40.4	43.3	42.1	41.3
Ripley (dtl)	40.4	38.5	42.9	40.7	39.6
HC85-6723B	43.8	41.5	45.1	44.8	43.7
HC87-226	41.6	40.3	42.3	42.0	41.7
HC87-2154	43.0	40.5	44.6	42.9	44.0
HC87-3299	42.8	41.0	44.0	42.7	43.6
HC88-727	43.8	42.4	45.3	42.8	44.8
HC88-1284	43.1	41.8	45.2	42.9	42.5
HC89-39PR	42.8	40.8	44.0	43.0	43.5
HC89-41PR	42.9	41.2	44.1	42.7	43.6
HC89-50PR	43.1	40.9	44.3	43.3	44.0
HC89-314	45.1	42.9	45.0	46.7	45.8
HC89-1316	43.7	41.4	43.8	45.3	44.3
HC89-1418	42.7	41.1	43.2	43.0	43.4
HC89-1419	43.3	41.8	44.7	43.3	43.5

PRELIMINARY TEST IVB, 1993

OIL (%)

Strain	Mean 4 Tests	Urbana IL	Vincennes IN	Lexington KY	Mt. Orab OH
Flyer (E)	20.7	21.5	19.4	20.9	21.0
Spencer (IV)	20.8	21.5	20.1	20.6	21.0
K1191 (L)	20.3	21.1	19.7	19.9	20.5
Cutler 71	20.4	21.0	19.2	20.3	21.2
C1869	20.7	21.4	19.9	20.4	21.1
C1877	19.9	20.5	19.4	19.1	20.7
C1878	19.9	20.4	19.0	19.3	20.9
C1879	19.4	20.7	18.4	19.0	19.3
C1880	18.5	19.4	17.5	18.0	19.0
C1881	17.7	19.3	16.0	16.9	18.6
C1882	17.5	19.4	16.0	17.2	17.5
C1883	17.2	17.4	16.7	17.0	17.6
C1884	17.4	18.5	16.3	16.9	17.9
C1885	18.1	19.3	17.9	17.6	17.4
HS91-4825	19.3	19.3	19.0	19.6	19.4
HS91-4830	19.7	20.0	18.5	19.9	20.4
HS91-4836	20.1	20.5	19.6	19.9	20.5
Ky90-1208	21.2	21.4	20.3	21.0	21.9
Ky90-1238	20.3	21.3	20.0	19.7	20.2
Ky90-2713	20.6	21.2	20.1	20.2	21.0
Ripley (dtl)	21.0	21.8	19.9	21.1	21.1
HC85-6723B	20.3	21.1	19.6	20.4	20.2
HC87-226	20.6	21.0	20.4	20.5	20.5
HC87-2154	20.5	21.1	19.7	21.0	20.0
HC87-3299	21.2	22.0	20.7	21.4	20.8
HC88-727	20.0	20.1	18.8	21.2	19.8
HC88-1284	20.3	20.7	19.4	20.5	20.4
HC89-39PR	21.4	22.1	20.5	22.0	21.1
HC89-41PR	21.4	22.3	20.4	21.8	20.9
HC89-50PR	21.4	22.1	20.4	22.1	20.8
HC89-314	19.3	20.0	19.4	19.4	18.4
HC89-1316	20.8	21.9	20.7	20.6	19.8
HC89-1418	21.1	21.5	20.9	21.2	20.6
HC89-1419	20.8	21.3	19.9	21.1	20.7