THE UNIFORM SOYBEAN TESTS

NORTHERN STATES

1991

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INTRODUCTION

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

A test is established for each of ten maturity groups. Uniform Test 00 includes maturity Group 00 strains 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 states 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 Statements or data in the report, therefore, should not be published unless permission has been obtained previously by those concerned.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 enrty must be contacted prior to the use of any entry as a recurrent parent in backcrossing or in any breeding or genetic studies.

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, 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.
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) "tie" variety are given on the maturity table for each test. Current reference and tie varieties and the maturity group limits relative to the reference varieties are:

Group	Reference	Range	Early Tie	Late Tie
00	McCall	-7 to +5		Clay (0)
0	Glenwood	-5 to +3	McCall (00)	M84-916 (I)
I	M84-916	-4 to +4	Glenwood (0)	Sturdy (L)
II	Kenwood	-4 to +4	Sturdy (I)	Burlison (L)
III	Resnik	-4 to +4	Burlison (II)	Flyer (IV)
IV	Spencer	-4 to +7	Flyer (E)	Spry (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 infrared reflectance.

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 ≥ 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*
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.

HYDROPONIC SENCOR TOLERANCE

Metribuzin tolerance tests were conducted by the Mobay Corporation. 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.**

PROCEDURE FOR TESTING AND RELEASE OF STRAINS

This policy on testing and release of soybean strains evaluated in the Uniform Soybean Tests, Northern States, 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 States, for strains in maturity groups 00 to IV, and those in the Southern States, for strains in maturity groups V to VIII. Group IV maturity strains are divided into a IV N test for the northern states and a IV S test for the southern states.

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. P.A. Miller, USDA, ARS, National Program Leader, Fiber, Oil & Tobacco, Room 207, Bldg. 005, BARC-West, Beltsville, MD 20705 (Ph. 301-504-6725). 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 1991

Variety	Exp. Desig.	Uniform Test Evaluations
Bert	M83-899	PT I 1987, UT I 1988-1990
Corsica	Md85-5443	PT IVB 1988, UT IV 1989-1991
Delsoy 4210	S85-1084	PT IV 1987, UT IV 1988-1991, SCN IV 1988-1991
Dunbar	U85-74089	PT IIIA 1988, UT III 1989-1990
Erie	HM8735	PT IIB 1988, UT II 1989-1990
Hardin 91	A Hardin BC (k)	UT II 1990-1991
IA2007	A87-297015	PT IIA 1988, UT II 1989-1991
IA2008	A87-196014	PT I 1988, UT II 1989-1991
Leslie	M83-108	PT I 1987, UT I 1988-1990
Nile	LS83-5616	PT IVB 1988, UT IV 1989-1990, SCN IV 1988-1991
RCAT Angora	ORC 8801	PT IIA 1989, UT II 1990
Spry	L83-3804	PT IV 1987, UT IV 1988-1991

Variety	Release Date	Releasing States	Found. Seed Production
Bert	February 15, 1991	MN, SD	1990
Corsica	August 1, 1991	IN, KS, KY, MD, MO, NE	1991
Delsoy 4210	April 29, 1991	IN, KS, IL, MO	1991
Dunbar	August 15, 1991	NE	1991
Erie	September, 1991	OH	1991
Hardin 91	August, 1991	MI, MN, WI	1991
IA2007	August, 1991	IA, IL, OH	1991
IA2008	August, 1991	IA, IL, MN	1991
Leslie	February 15, 1991	MN, SD	1990
Nile	December, 1991	IL	1991
RCAT Angora	April 15, 1991	Ontario	1991
Spry	August, 1991	IL	1991

1991 DISEASE, SHATTERING, AND DESCRIPTIVE DATA

Location		Tests Conducted By:	Tests	U.T.	P.T.
IA	Ames	J. Dunleavy	BTS	I-III	
	Ames	W. R. Fehr	Iron Chlorosis	00-II	I-III
	Ames	W. R. Fehr	Emergence	00,II,IV	
	Boone	R. Ruff	BSR	I-III	I-III
	Ames	R. Ruff	PR_4	I-IV	I-IV
	Humboldt	W. R. Fehr	Emergence	I	
	Humboldt	W. R. Fehr	Iron Chlorosis	I	
	Winterset	W. R. Fehr	Emergence	III	
	Winterset	W. R. Fehr	Iron Chlorosis	III	
IL	Urbana	C. D. Nickell	PM	IV	
	Urbana	C. D. Nickell	PR Innoc. Race 1	00-IV	I-IV
IN	Lafayette	T. S. Abney & T. L. Richards	PS, PSB, SMV	I-IV	I-IV
	Lafayette	T. S. Abney & T. L. Richards	Germination		I-IV
KS	Manhattan	W. T. Schapaugh, Jr.	Shattering	00-IV	I-IV
MN	Lamberton	J. H. Orf	Iron Chlorosis	00-II	I
OH	Custer		PR Tolerence	II-IV	II-IV
Ont.	Ottawa	H. D. Voldeng & R.Guillemente	Shattering	00	
TX	Lubbock	R. D. Brigham	Shattering	IV	

UNIFORM TEST LOCATIONS - 1991

	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[1]				X[1]		
	Arcadia	W.R. Fehr				X						
	Humboldt	W.R. Fehr			X				X			
	Greene	W.R. Fehr			X							
	Marshalltown	W.R. Fehr				X				X		
	Royal	W.R. Fehr			X[1]				X[1]			
	Fairfield	W.R. Fehr					X				X	
	Tingley	W.R. Fehr					X					
	Winterset	W.R. Fehr					X[1]				X[1]	
IL	Belleville	M. Schmidt						X				X
	Cora	M. Schmidt						X				
	Dekalb	C.D. Nickell				X						
	Gibson City	C.D. Nickell				X						
	Ridgway	C.D. Nickell					X					
	Urbana	C.D. Nickell				X[1]	X[1]	X[1]		X[1]	X[1]	X[1]
IN	Bluffton	J.R. Wilcox				X	X					
	Lafayette	J.R. Wilcox			X	X	X[1]	X		X[1]	X[1]	
	Vincennes	J.R. Wilcox					X	X[1]				X[1]
KS	Manhattan	W.T. Schapaugh					X[1]	X[1]			X[1]	X[1]
	Topeka	W.T. Schapaugh					X	X				
	Powhattan	W.T. Schapaugh					X					
	Ottawa	W.T. Schapaugh						X				
KY	Lexington	T. Pfeiffer					X	X				X
MD	Queenstown	W.J. Kenworthy & P.B. Creegan					X	X				X[1]
MI	Ingham	J. F. Boyce			X[1]	X			X[1]	X[1]		
	Lenawee	J. F. Boyce				X						
	Saginaw	J. F. Boyce			X							
MN	Lamberton	J.H. Orf			X[1]	X			X[1]			
	Moorhead	J.H. Orf	X[1]	X								
	Morris	J.H. Orf		X[1]								
	Rosemount	J.H. Orf		X[1]								
	Shelly	J.H. Orf	X[1]									
	Waseca	J.H. Orf			X	X			X			
MO	Columbia	P. Owen					X				X	X
	Portageville	S.C. Anand						X[1]				X
	Spickard	Phil Owen				X				X		

UNIFORM TEST LOCATIONS - 1991

Location		Tests Conducted By:	Uniform Tests 00	0	I	II	III	IV	Preliminary Tests I	II	III	IV
NE	David City	L. Korte				X[1]	X			X	X	
	Falls City	&G. Graef						X				
	Lincoln	L. Korte					X				X	
	Oconto	&G. Graef			X	X				X		
	O'Neill	L. Korte				X				X		
	Tekamah	&G. Graef					X				X	
NJ	Adelphia	J.R. Justin				X	X	X		X		
ND	Casselton	T. Helms	X[1]	X[1]								
OH	Hoytville	B.A. McBlain				X[1]	X[1]			X[1]	X[1]	
	Mt. Orab	S. St. Martin					X	X[1]				X[1]
	S. Charleston	R.L. Cooper					X	X			X	X
	Wooster	B.A. McBlain				X	X					
ONT	Elora	P. Gostovic	X[1]									
	Inwood	G.R. Ablett			X							
	London	P. Gostovic			X[1]							
	Woodslee	R.I. Buzzell				X						
	Ottawa	H.D. Voldeng	X	X								
	Ridgetown	G.R. Ablett				X[1]				X		
	Woodstock	P. Gostovic		X[1]								
PA	Landisville	J.O. Yocum					X	X				
TX	Lubbock	R.D. Brigham						X				
SD	Brookings	J.J. Bonneman			X[1]	X			X[1]			
	Centerville	J.J. Bonneman				X				X		
	Elk Point	J.J. Bonneman					X					
	Wilmot	J.J. Bonneman		X	X							
WI	Arlington	E.T. Gritton			X	X			X[1]	X		
	Ashland	E.T. Gritton	X[1]									
	Spooner	E.T. Gritton		X[1]								
X	Location with Agronomic Data		6	7	14	24	25	18	7	14	11	10
X[1]	Location With Seed Compostion Data		5	5	5	5	5	5	5	5	5	5

IDENTIFICATION OF PARENT STRAINS, 1991

Strain	Parentage
A8	A75-332035 x Century
A55-5629-4	Roanoke x Hawkeye
A72-507	Amsoy x Wayne
A74-204034	M62-263 x Amsoy 71
A75-105021	Corsoy(2) x L65-1342 or Anoka x Mack
A75-204018	IVR Ex4731 x Wirth
A75-305022	Wye x (Amsoy x Wayne)
A75-332035	L15 x AP68-1016
A76-103002	AP6
A76-202015	AP6
A76-304020	(Beeson x AP68-1016) x (L15 x Calland)
A77-211021	Beeson x A72-507
A78-121014	Pride B216 x Hodgson
A79-136012	Pride B216 x Land O' Lakes 4102
A80-244003	Northrup King S1492 x Pella
A80-244036	A74-204034 x Cumberland
A80-344003	A75-332035 x Century
A81-144015	Unknown
A81-151026	A75-204018 x Century
A81-155014	A76-202015 x A76-304020
A82-161034	A76-103002 x A77-211021
A82-267015	AP6MTW 2YT (F4) C2
A83-271027	Northrup King S1492 x Asgrow A3127
A86-152032	AP9Fe(S1)C7 Rec. sel. population for Fe chlorosis
Agripro 25	Beeson x Calland
Agripro AP2190	Unknown
AP6	40 lines intermated (Crop Sci.15:739, 1975)
AP68-1016	Clark (5) x PI 84.946-2
Asgrow A1564	Hark x C1453
Asgrow A1937	Hodgson 78 x Wayne
Asgrow A2440	Corsoy x PI 28.089
Asgrow A2943	Asgrow A1564 x Asgrow A3127
Asgrow A3127	Williams x Essex
Asgrow A3427	Unknown
Asgrow A3659	Williams x Essex
Asgrow A4595	Douglas x Asgrow A3127
BD22115-13	(Amsoy x Portage)F1 x (Holmberg) 840-7-3
BK 22-1-3	Unknown
C1079	Lincoln x Ogden
C1253	Blackhawk x Harosoy
C1266R	Harosoy x C1079
C1453	C1266R x C1253
C1528	Calland x L63-1397
C1623	Harcor x L69U37-17-5
C1626	Century x Hodgson
C1627	Century x Hodgson
C1629	Century x Hodgson
C1640	Century M2 fan (low 18:3)
C1651	A75-305022 x Century
C1655	Hobbit x Century
C1678	Hobbit x Lakota
C1696	Hobbit x Amsoy 71 dt

IDENTIFICATION OF PARENT STRAINS, 1991

Strain	Parentage
Coker 237	Hutton x N63-858
CX954-38-1	PI 80.837 x Wells II
D49-2491	S100 x CNS; Lee sib
D49-2525	S100 x CNS
D51-4877	Roanoke x N45-745
D53-354	D49-2525 x L6-5679
D55-4166	Ogden x Biloxi
D58-3358	Jackson (4) x D49-2491
D59-9289	D51-4877 x D55-4166
D63-6100	Hill(4) x PI 171.442
D66-12392	D63-6100 x Dyer
D68-18	Dyer x Bragg
D77-5169	Unknwon
Dekalb Pfizer CX415	Unknown
DSR-171 (Dairyland Seed Co.)	Wayne x Hark
Elf BC	Elf (6) x Williams 82
FFR561	Essex x Experimental selection
GL2634	Unknown
GR8936	Asgrow A3127 x L24A
H1285	Unknown
HC74-634RE	Williams x Ransom
HC74-3400	Williams x Ransom
HC78-279	L72U-2567 x Essex
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
HC79-478	L70T-543G x L74D-619
HC80-585	HC74-3400 x Sprite
HS84-6276	Harper (3) x Williams 82
HW8130	Pella x A75-105021
HW8221	A76-202015 x (Tracy x Williams)
IVR Ex4731	Amsoy x Wayne
J74-5	Forrest x (D68-18 x PI 88.788)
Jacques J231	(Hodgson x Calland) x Corsoy
Jacques J822	Unknown
K74-113-76-486	Tracy x Pomona
K1047	Tracy x Bonus
KA555	Evans x M57-69
KG 60	Pride B216 x BK 22-1-3
L6-5679	Lincoln x Richland
L15	Wayne(6) x Clark 63; Rps1 isoline
L24A	Williams (7) x Kingwa
L61-2193	Sioux x Harosoy
L61-2196	Sioux x Harosoy
L62-535	Harosoy(6) dt1 x T145
L62-1926	Clark(6) x PI 86.024; e2 isoline
L63-1397	Harosoy(6) Dt2 x PI 80.837
L65-1342	Wayne(2) x L62-1926 (Clark-e2)

IDENTIFICATION OF PARENT STRAINS, 1991

Strain	Parentage
L66-531	[Clark(6) x PI 86.024] x [Clark(6) X T175]; dtl, E1, t, e2 isoline
L66-1322	(Sel. from Hawkeye X Lee) x (Sel. from Hawkeye x Lee)
L68-0376	Clark(2) x PI 84.946-2
L69-202	L61-2193 x L61-2196
L69L-3	L66-531 x L62-535
L69U37-17-5	Calland x Corsoy
L69U40-16-4	Calland x Amsoy
L70-2283	Chippewa x Custer
L70T-543G	L15 x Amsoy 71
L71-3628	L66-1322 x L62-535
L72U-2567	Williams x Ransom
L73-4124	D66-12392 x L69L-3
L74D-619	Williams x Ransom
L75-8020	Williams x L70-2283
L77-443	Union x L75-8020
L77-756	Beeson x Cloud
L77-808	Williams x PI 87.631-1
L77-906	Williams x PI 209.332
L77-1836	Williams(7) Rps1-b x Harrel
L78-4094	Beeson x L68-0376
L78-8694	L71-3628 x Elf
L78L-449	L73-4124 x Essex
L80-4323	Williams(2) x PI 88.788
L80-4349	Williams (2) x PI 88.788
Land O Lakes Max	[Wayne x (Clark x Adams)] x Cutler
Land O Lakes 4102	(Mack x [Wayne x (Clark a Adams)]) x Cutler
LN78-257	Union x C1528
LN80-7532	Century x A76-304020
LN80-7579	Century x A76-304020
LN80-9729	Hardin x A76-304020
LN80-10398	Century x Land O Lakes 'Max'
LN80-10508	Century x Land O Lakes 'Max'
LN81-1029	(Tracy x Bonus) x Pella
LNX8132	(Hack x A78-121014)F1
LS78-W124-1	Franklin x J74-5
LS79-220	Forrest x V71-80
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
M57-69	M10 x PI 180.501
M59-120	M54-240 x M54-139
M60-402	Blackhawk x Harosoy
M60-406	Blackhawk x Harosoy
M61-224	Merit x Harosoy
M62-263	Grant x M319W
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

IDENTIFICATION OF PARENT STRAINS, 1991

Strain	Parentage
M65-207	Clay x Hark
M67-141	Corsoy x Wayne
M68-49	Evans x M59-120
M68-303	M60-406 x Beeson
M69-20	Merit x Clay
M69-45	M63-158(Bf) x Provar
M69-247	M60-402 (2) x N.L. Wayne
M70-127	Evans x M63-217Y
M70-187	Merit x SS65-5702
M70-271	Merit x M64-3
M70-447	Provar x M53-43
M71-135	Evans x M62-263
M71-148	Clay x Evans
M72-3	Evans x Hodgson
M73-62	M61-224 x Nagyszemi Feher
M74-349	M68-49 x M65-207
M74-498	Peterson PX20 x [Hodgson(4) Rps1 x Merit]
M75-2	Hodgson x [M67-141 x (Chippewa x Higan)]
M75-89	Corsoy x M68-303
M75-274	Evans x L70T-543G
M75-314	M69-247 x KA555
M76-55	M69-20 x McCall
M76-151	M70-271 x Hodgson 78
M76-349	L69-202 x M69-45
M77-210	M71-135 x Simpson
M77-218	M71-135 x Asgrow A2440
M81-610	Dawson x M70-447
M81-618	Evans x Kirin 8
M81-621	Seed from double embryo (Unknown parentage)
M82-1038	PI 391.589A x Corsoy 79
M319W	Lincoln x Hawkeye
Md77-5675	V68-1171 x Columbus
Md-Mbb80-79	Beeson (2) x PI 171.451
N45-745	Ogden x CNS
N63-858	D58-3358 x D59-9289
Northrup King S23-03	~~Unknown~~ Pride B216 x Hodgson
Northrup King S1346	A55-5629-4 x PI 257.435
Northrup King S1492	Corsoy x Wayne
Northrup King S4230	~~Unknwon~~ Essex x Agripro 35
P6122	Harosoy x Capital
Peterson 85	Provar x (Amsoy x PI 248.404; Novosudska Bela)
Peterson PX20	Blend 50% Wells : 50% P6122
Pioneer P9271	(Corsoy x Magna) a Williams
PMGTC4	Cycle 4 recurrent selection, See Crop Sci.24:213, 1974
Pride B152	Northrup King S1346(6) x Mack
Pride B216	Corsoy x Wayne
Pride B236	Northrup King S1346 x Agripro 25
Pridesoy II	Unknown
PRX58-35	PI 86.972-1 x Altona
PRX305-146	Winchester x PRX58-35
Rupp Seeds RS240p	Unknown

IDENTIFICATION OF PARENT STRAINS, 1991

Strain	Parentage
S56A	Unknown
S79-4296	Bedford x Crawford
SG1/BC/86-E1	SG1/NS/84-RM3/MS x 32 high yielding lines
SG1/BC/86-E2	SG1/BC/86-E1 x 50 high yielding lines
SS65-5702	Clark x [Scott(2) x Peking]
T145	Unknown
T175	Unknown
Thompson 7803	Unknown
U80-64032	L69U37-17-5 x Nebsoy
U80-65127	(L15 x Amsoy 71) x Hodgson
U83-63042	Nebsoy x Beeson
V63-76	Hill x D53-354
V68-1171	PI 80.837 x V63-76
78-815	PI 88.788 x Hill
840-7-3	from Sven A. Holmberg, Sweden

1991 HYDROPONICS SENCOR VARIETAL TOLERANCE RESULTS
USDA PLANT BREEDING VARIETIES

Above Normal Tolerance	Normal Tolerance			Sensitive
ESSEX*	HC-1848	K1164	OT90-19	MAPLE RIDGE
A3659*	K1183	K1180	OT90-9	BURLISON
FLYER	ND87-2280	LN86-1167	S86-4496	M87-947
RESNIK	OT87-7	M85-610	U892213	M87-948
K1191	WILLIAMS 82*	M86-1973	CORSOY*	H1265*
M86-1410	HC84-4850	M87-1569	HC85-618	COKER156*
HC86-3403	HS88-4908	M87-950	HM8890	
MD85-5443	K1190	U892317	LS87-2154	
U86-62062	M87-1429	U892431	M84-456	
U893018	ORC 8905	M84-748	M87-180	
UNION*	U893032	TRACY-M*	M87-5	
BELL	C1813	HC87-3329	M87-731	
HC86-4367	HC87-3212	HC87-5844	S86-2209	
JACK	HS88-4906	LS87-1311	S86-4499	
L83-3408	LN86-3357	AM89-244028	HC85-6577	
L84-6089	LN87-1065	C1802	LN85-6800	
M87-1433	LN87-1744	DELSOY 4210	LN86-983	
ND87-2263	U8763041	HC85-603	M87-1621	
SPENCER	U892035	HC85-604	A87-196014	
	C1758	HC85-606	CLAY	
	C1803	HC85-607	HARDIN	
	C1804	HC85-6724	M85-1112	
	HC85-2206	HC86-4384	M85-647	
	HS88-4905	HC86-554	M86-356	
	HS88-4909	M86-1322	M86-571	
	K1185	A87-297015	M87-1247	
	KENWOOD	AC89-145021	M87-1329	
	OT90-7	AMSOY 71*	M87-346	
	STURDY	C1787	M87-736	
	A HARDIN BC K	LS86-1922	M87-1038	
	AM89-144003	LS87-1257	M87-1071	
	AM89-144026	LS87-1615	M87-1088	
	AM89-144029	M84-916	M87-1090	
	AM89-144036	M87-231	M87-1765	
	BRAGG*	M87-330	M87-917	
	C1796	M87-987	GLENWOOD	
	E88550	MCCALL		
	HC85-161	MD86-5324		
		ORC 9002		

* Marker Varieties
11/20/91

UNIFORM TEST 00, 1991

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Clay (0)	Renville x Capital	14	F5	
Maple Ridge	Fiskeby III x Evans	11	F5	
McCall (00)	(Acme x Chippewa) x Hark	17	F5	
M84-456	Simpson x M71-148	3	F5	Rps1
M87-330	M76-55 x Ozzie	-	F5	Rps1
M87-731	McCall x Altona	-	F4	Rps6
M87-736	McCall x Altona	-	F4	Rps6
M87-950	Chico x PI 437.296	-	F5	Rps1
ND87-2263	McCall x PI 470.930	-	F5	
ND87-2280	McCall x PI 470.930	-	F5	
OT87-7	(Maple Presto x Williams) x Weber	3	F5	
OT90-7	[PI 196.529 x Harosoy e3^4] x McCall	-	F5	
OT90-9	(Thompson 7803 x BD22115-13) x McCall	-	F5	
OT90-19	Maple Presto^7 x Raiden	-	?	

* Number of years in test or name of 1990 test.

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score		Emerg. Score	Shattering Score		PR
		Ames	Lamberton	Ames	Manhattan	Ottawa	Urbana Race 1
Clay (0)	PGBIYYI	1.8	2.0	2	3	1.0	R
Maple Ridge	PTBIYYI	2.6	1.8	5	3	2.3	S
McCall (00)	PGBDYYI	2.0	2.5	1	2	1.8	R
M84-456	PGBDYBfI	2.1	1.8	4	3	1.0	S
M87-330	WGBDYYI	1.9	1.5	4	3	1.0	H
M87-731	PTBDYBr+YI	2.8	3.0	1	2	1.3	R
M87-736	PGBDYBfI	2.6	3.0	2	3	1.2	R
M87-950	PGTDYBfI	2.4	2.0	1	3	1.5	R
ND87-2263	PGBDYYI	2.6	2.8	3	2	2.3	R
ND87-2280	PGBDYYI	2.2	2.0	3	3	3.2	R
OT87-7	WTBDYBrI	2.0	1.5	4	2	1.0	R
OT90-7	PGBDYYI	2.4	2.5	1	3	2.0	R
OT90-9	PGBDYBfI	2.2	2.3	1	2	2.0	R
OT90-19	PGBDYYI	2.5	2.8	3	4	4.4	R

UNIFORM TEST 00, 1991

REGIONAL SUMMARY

No. of Tests Strain	Yield 6 bu/a	Rank 6 No.	Maturity 5 Date	Lodging 6 Score	Plant Height 6 In	Seed Quality 6 Score	Seed Size 6 g/100	Composition Protein 5 %	Oil 5 %
Clay (0)	31.8	5	5.6	1.7	25	2.1	15.2	40.5	20.7
Maple Ridge	24.3	12	-2.4	1.0	19	1.9	14.9	39.8	19.1
McCall (00)	30.6	8	08/30*	1.4	23	2.0	14.3	38.6	20.0
M84-456	33.2	1	6.0	1.6	26	2.1	13.5	40.1	20.3
M87-330	32.2	4	8.0	1.7	28	2.1	14.5	40.6	19.9
M87-731	33.0	2	4.2	1.8	25	2.1	15.1	40.0	19.5
M87-736	29.9	9	4.0	1.6	24	2.5	15.0	39.4	19.6
M87-950	24.1	13	-0.6	1.8	23	1.9	8.8	42.3	16.7
ND87-2263	26.1	11	-4.4	1.3	22	1.8	14.2	39.1	19.4
ND87-2280	26.5	10	-2.4	1.7	23	2.1	14.3	39.0	19.4
OT87-7	31.4	6	-1.3	1.3	22	2.0	13.7	37.6	21.8
OT90-7	32.9	3	-0.8	1.5	24	1.9	14.7	39.3	20.1
OT90-9	30.7	7	-3.0	1.4	22	1.7	15.3	38.7	19.6
OT90-19	22.3	14	-6.2	1.0	18	2.1	13.6	38.2	20.5

* 100.4 Days After Planting

UNIFORM TEST 00, 1991

1988-1991, 4-YEAR MEAN

Strain No. of Tests	Yield 28 bu/a	Rank 28 No.	Maturity 24 Date	Lodging 29 Score	Plant Height 29 In	Seed Quality 28 Score	Seed Size 28 g/100	Composition Protein 18 %	Oil 18 %
Clay (0)	26.9	4	7.8	1.4	22	2.0	14.9	40.6	20.7
Maple Ridge	23.3	5	-6.5	1.2	19	2.4	13.8	40.7	19.0
McCall (00)	27.3	3	9/2.7*	1.3	22	2.4	14.0	39.7	20.0
M84-456	27.4	2	7.0	1.3	23	2.3	13.1	41.1	20.4
OT87-7	28.4	1	-0.3	1.2	20	2.2	13.5	38.7	22.0

* 108.9 Days After Planting

UNIFORM TEST 00, 1991

YIELD (bu/a)

Strain	Mean 6 Tests	Moor-head MN	Shelly MN	Cassel-ton ND	Elora Ont.	Ottawa Ont.	Ashland WI
Clay (0)	31.8	41.5	29.3	33.5	39.4	14.8	32.5
Maple Ridge	24.3	34.9	24.8	26.6	34.2	6.7	18.3
McCall (00)	30.6	39.5	30.9	25.9	43.1	11.2	32.8
M84-456	33.2	48.9	30.9	33.0	39.3	11.7	35.6
M87-330	32.2	40.0	28.4	34.6	46.5	9.6	34.3
M87-731	33.0	39.9	29.0	29.9	50.2	12.1	36.6
M87-736	29.9	39.9	24.4	28.4	44.1	13.5	29.1
M87-950	24.1	35.8	24.0	23.1	24.1	9.0	28.4
ND87-2263	26.1	36.2	26.3	25.2	35.8	8.2	24.6
ND87-2280	26.5	39.6	25.6	24.0	32.1	6.9	31.0
OT87-7	31.4	46.3	28.8	31.3	44.4	8.0	29.3
OT90-7	32.9	42.7	29.6	31.3	46.0	13.9	33.8
OT90-9	30.7	41.9	29.6	26.7	44.5	11.3	30.1
OT90-19	22.3	39.6	25.1	20.2	27.5	3.2	18.2
C.V. (%)		9.0	7.1	13.3	6.8	15.4	17.4
L.S.D. (5%)		6.1	4.4	6.0	3.8	2.2	8.3
Row Sp. (in.)		10	10	30	14.8	16	24
Rows/Plot		8	8	4	4	4	4
Reps		3	3	3	4	4	3

UNIFORM TEST 00, 1991

YIELD RANK

Strain	Yield Rank	Moor-head MN	Shelly MN	Cassel-ton ND	Elora Ont.	Ottawa Ont.	Ashland WI
Clay (0)	5	5	5	2	8	1	6
Maple Ridge	12	14	12	9	11	13	13
McCall (00)	8	11	1	10	7	7	5
M84-456	1	1	1	3	9	5	2
M87-330	4	6	8	1	2	8	3
M87-731	2	7	6	6	1	4	1
M87-736	9	7	13	7	6	3	10
M87-950	13	13	14	13	14	9	11
ND87-2263	11	12	9	11	10	10	12
ND87-2280	10	9	10	12	12	12	7
OT87-7	6	2	7	4	5	11	9
OT90-7	3	3	3	4	3	2	4
OT90-9	7	4	3	8	4	6	8
OT90-19	14	9	11	14	13	14	14

MATURITY (date)

Strain	Mean 5 Tests					
Clay (0)	5.6	10	3	5	5	5
Maple Ridge	-2.4	-2	-2	-5	-1	-2
McCall (00)	08/30	08/24	08/24	08/20	09/13	09/07
M84-456	6.0	11	5	7	2	5
M87-330	8.0	13	8	10	4	5
M87-731	4.2	9	5	4	1	2
M87-736	4.0	2	5	1	6	6
M87-950	-0.6	1	0	2	-5	-1
ND87-2263	-4.4	-2	-2	-9	-4	-5
ND87-2280	-2.4	-2	-1	-2	-6	-1
OT87-7	-1.3	1	-2	0	-4	1
OT90-7	-0.8	-1	-2	0	-2	1
OT90-9	-3.0	-1	-2	-8	-3	-1
OT90-19	-6.2	-2	-2	-9	-10	-8
Date Planted	05/21	05/16	05/16	05/14	06/03	05/28
Days to Mature	100.4	100	100	98	102	102

UNIFORM TEST 00, 1991

LODGING (score)

Strain	Mean 6 Tests	Moor-head MN	Shelly MN	Cassel-ton ND	Elora Ont.	Ottawa Ont.	Ashland WI
Clay (0)	1.7	2.0	1.0	1.0	1.1	1.0	4.0
Maple Ridge	1.0	1.0	1.0	1.0	1.0	1.0	1.0
McCall (00)	1.4	1.7	1.0	1.0	1.1	1.0	2.3
M84-456	1.6	2.7	1.0	1.0	1.0	1.0	3.0
M87-330	1.7	3.0	1.0	1.0	1.3	1.0	3.0
M87-731	1.8	4.0	1.0	1.0	1.0	1.0	2.7
M87-736	1.6	2.3	1.0	1.0	1.4	1.0	2.7
M87-950	1.8	3.0	1.0	1.0	1.3	1.0	3.7
ND87-2263	1.3	1.0	1.0	1.0	1.0	1.0	3.0
ND87-2280	1.7	2.0	1.0	1.0	1.3	1.0	3.7
OT87-7	1.3	1.3	1.0	1.0	1.0	1.0	2.7
OT90-7	1.5	1.7	1.0	1.0	1.0	1.0	3.0
OT90-9	1.4	2.0	1.0	1.0	1.0	1.0	2.3
OT90-19	1.0	1.0	1.0	1.0	1.0	1.0	1.0

PLANT HEIGHT (inches)

Strain	Mean 6 Tests						
Clay (0)	25	34	24	27	26	12	25
Maple Ridge	19	28	17	21	22	9	17
McCall (00)	23	35	20	25	26	11	21
M84-456	26	40	23	29	26	11	29
M87-330	28	39	24	32	30	10	31
M87-731	25	36	23	27	27	10	28
M87-736	24	36	21	25	27	12	25
M87-950	23	34	21	24	23	9	25
ND87-2263	22	33	21	24	24	11	21
ND87-2280	23	35	21	24	23	11	26
OT87-7	22	33	19	24	26	8	23
OT90-7	24	37	20	25	28	11	25
OT90-9	22	32	20	24	24	11	21
OT90-19	18	28	15	18	21	9	18

UNIFORM TEST 00, 1991

SEED QUALITY (score)

Strain	Mean 6 Tests	Moor-head MN	Shelly MN	Cassel-ton ND	Elora Ont.	Ottawa Ont.	Ashland WI
Clay (0)	2.1	2.7	2.3	2.0	1.5	2.0	2.0
Maple Ridge	1.9	2.3	3.0	1.5	1.5	2.0	1.0
McCall (00)	2.0	2.7	3.0	1.5	1.5	2.0	1.0
M84-456	2.1	2.3	2.7	2.0	1.5	2.0	2.0
M87-330	2.1	3.0	2.7	1.3	1.5	2.0	2.0
M87-731	2.1	2.7	2.3	2.0	1.5	2.0	2.0
M87-736	2.5	3.0	2.7	3.0	1.5	2.0	3.0
M87-950	1.9	2.0	2.3	1.5	1.5	2.0	2.0
ND87-2263	1.8	2.3	2.3	1.0	2.0	2.0	1.0
ND87-2280	2.1	2.7	3.3	2.0	1.5	2.0	1.0
OT87-7	2.0	2.0	2.7	1.5	1.5	2.0	2.0
OT90-7	1.9	3.0	2.3	1.5	1.5	2.0	1.0
OT90-9	1.7	2.7	2.0	1.0	1.5	2.0	1.0
OT90-19	2.1	3.0	3.0	1.5	2.0	2.0	1.0

SEED SIZE (g/100)

Strain	Mean 6 Tests						
Clay (0)	15.2	15.1	14.0	13.7	18.5	14.7	15.3
Maple Ridge	14.9	12.3	12.8	15.3	17.9	15.3	15.5
McCall (00)	14.3	12.4	12.8	12.2	18.5	15.5	14.6
M84-456	13.5	13.1	12.9	12.2	15.2	14.1	13.3
M87-330	14.5	13.1	13.3	14.0	17.4	15.6	13.5
M87-731	15.1	13.7	13.2	12.9	18.3	17.6	14.7
M87-736	15.0	13.5	13.5	14.2	19.8	15.2	13.8
M87-950	8.8	7.5	6.9	7.8	11.0	9.4	10.1
ND87-2263	14.2	12.1	11.9	13.8	16.7	14.8	15.9
ND87-2280	14.3	12.1	13.2	13.2	17.2	15.3	14.9
OT87-7	13.7	12.4	11.9	13.2	15.7	15.1	13.7
OT90-7	14.7	12.9	12.7	14.1	18.8	14.7	14.9
OT90-9	15.3	13.3	13.6	14.2	19.8	16.9	14.0
OT90-19	13.6	12.9	13.1	14.2	---	14.3	13.4

UNIFORM TEST 00, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Moorehead MN	Shelly MN	Casselton ND	Elora Ont.	Ashland WI
Clay (0)	40.5	39.5	36.5	40.5	43.1	43.0
Maple Ridge	39.8	38.8	37.3	40.8	41.6	40.6
McCall (00)	38.6	37.0	34.9	39.7	42.0	39.3
M84-456	40.1	40.6	37.2	40.5	42.2	39.8
M87-330	40.6	41.5	36.2	40.0	43.6	41.8
M87-731	40.0	40.0	36.7	40.2	43.3	39.9
M87-736	39.4	39.5	34.4	40.0	43.1	40.2
M87-950	42.3	40.0	38.5	42.5	46.4	44.3
ND87-2263	39.1	36.3	36.2	40.5	41.7	40.9
ND87-2280	39.0	38.2	35.1	40.1	41.4	40.4
OT87-7	37.6	38.0	34.0	38.7	38.7	38.8
OT90-7	39.3	38.7	35.7	39.9	41.9	40.3
OT90-9	38.7	38.2	36.0	39.2	41.0	39.0
OT90-19	38.2	36.9	38.0	38.9	38.4	39.0

OIL (%)

Strain	Mean 5 Tests					
Clay (0)	20.7	21.1	22.7	21.5	18.7	19.7
Maple Ridge	19.1	18.4	20.0	20.0	19.0	18.0
McCall (00)	20.0	19.7	22.2	19.5	19.3	19.4
M84-456	20.3	20.3	22.6	20.8	19.4	18.5
M87-330	19.9	19.9	22.3	20.9	18.0	18.3
M87-731	19.5	18.9	20.7	19.9	18.9	19.2
M87-736	19.6	19.4	21.9	19.4	19.1	18.4
M87-950	16.7	16.9	17.9	17.4	15.9	15.6
ND87-2263	19.4	20.1	19.9	20.1	19.1	18.0
ND87-2280	19.4	19.6	21.8	20.0	17.9	17.9
OT87-7	21.8	21.2	23.1	21.7	21.4	21.4
OT90-7	20.1	20.0	21.7	20.6	19.1	19.1
OT90-9	19.6	19.4	20.8	19.7	19.4	18.9
OT90-19	20.5	20.8	20.5	21.4	19.3	20.4

UNIFORM TEST O, 1991

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Glenwood (O)	Evans x Peterson 85	6	F5	
McCall (OO)	(Acme x Chippewa) x Hawk	11	F5	
M84-916 (I)	A79-136012 x Dawson	UTI	F5	Rps1
M84-748	M75-274 x M76-151	3	F5	Rps1
M85-1112	M74-349 x M77-210	2	F5	Rps1
M86-356	M81-610 x M76-349	1	F5	
M86-571	Ozzie x A80-244003	1	F5	Rps1 Het.
M87-5	Evans x Asgrow A1937	-	F5	Rps1
M87-180	Sibley x Hack	-	F5	Rps1
M87-231	A82-161034 x Dawson	-	F5	Rps1
M87-346	M76-55 x Simpson	-	F5	Rps1
M87-917	M75-314 x Chico	-	F5	Rps1
M87-947	Chico x PI 437.267	-	F5	Rps1
M87-948	Chico x PI 437.296	-	F5	Rps1
M87-987	Evans x PI 437.296	-	F5	Rps1
M87-1038	Simpson x PI 258.385	-	F5	Rps1
M87-1071	M77-218 x PI 445.799	-	F5	Rps1
M87-1088	Evans x Ozzie	-	F5	Rps1
M87-1090	Evans x Ozzie	-	F5	Rps1
M87-1247	M81-621 x M73-62	-	F5	Rps1
M87-1329	M73-62 x Dassel	-	F5	Rps6
M87-1429	M81-618 x M82-1038	-	F5	Rps1
M87-1433	M81-618 x M82-1038	-	F5	Rps1
M87-1569	M70-187 x L77-808	-	F5	Rps1 Het.
M87-1765	Simpsom x C1640	-	F5	Rps1
ORC 9002	A81-151026 x Elgin	-	F5	

* Number of years in test or name of 1990 test.

UNIFORM TEST 0, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Lamberton	PR Urbana Race 1	Shattering Score Manhattan
McCall (00)	PGBDYYI	2.5	S	2
M84-916 (I)	WGBDYBfI	2.0	R	1
M84-748	PGBSYBfI	1.8	R	2
M85-1112	PGBDYYI	2.3	R	2
M86-356	PGBDYYI	2.5	S	2
M86-571	PTTDYBlI	2.3	R	1
M87-5	P+WGBDYBfI	2.8	R	1
M87-180	WGTSYBfI	2.5	R	1
M87-231	P+WGBDYHI	2.0	R	2
M87-346	PGBDYBfI	1.0	R	1
M87-917	WGBSYBfI	2.3	R	3
M87-947	WGBSYBfI	2.5	R	3
M87-948	WGBSYBfI	2.3	R	3
M87-987	WTTIYYI	2.5	H	2
M87-1038	PGBDYBfI	2.0	R	2
M87-1071	P+WGBDYGrI	2.5	R	2
M87-1088	WGBDYYI	1.8	R	1
M87-1090	PGBDYGrI	2.3	R	1
M87-1247	PGBDYIbI	2.5	S	1
M87-1329	WGTDYYI	2.3	S	1
M87-1429	WGBSYYI	2.0	R	3
M87-1433	PGBSYBf+YI	2.5	R	2
M87-1569	PTTDYBlI	2.0	R	3
M87-1765	PGBDYIbI	2.3	R	1
ORC 9002	PTBDYBrI	2.5	S	2

UNIFORM TEST 0, 1991

REGIONAL SUMMARY

No. of Tests / Strain	Yield 7 bu/a	Rank 7 No.	Maturity 6 Date	Lodging 6 Score	Plant Height 7 In.	Seed Quality 7 Score	Seed Size 7 g/100	Composition Protein 5 %	Oil 5 %
Glenwood (0)	39.7	15	09/07*	1.1	28	2.5	17.0	40.5	19.7
McCall (00)	31.4	25	-10.3	1.3	26	1.8	15.1	38.3	19.8
M84-916 (I)	45.6	1	11.3	2.5	36	1.7	17.8	40.5	19.8
M84-748	45.4	2	1.2	1.2	30	1.8	16.4	40.9	20.4
M85-1112	43.6	5	3.5	1.2	29	1.7	17.7	39.5	20.7
M86-356	39.5	16	2.0	1.1	30	1.8	14.9	44.3	18.0
M86-571	42.9	6	2.8	1.2	30	2.0	16.0	41.1	18.9
M87-5	40.7	13	3.3	1.3	33	2.0	14.5	40.3	20.3
M87-180	44.1	4	6.8	1.2	29	1.7	16.5	41.1	20.3
M87-231	42.7	7	4.3	1.6	31	2.0	15.9	40.6	20.1
M87-346	40.9	12	0.7	1.2	29	1.8	15.4	40.4	20.0
M87-917	35.8	20	-1.0	1.2	30	1.8	14.8	40.6	20.1
M87-947	27.8	26	-3.5	2.4	26	1.6	8.8	40.6	16.5
M87-948	32.5	24	0.7	1.5	24	1.8	9.5	40.8	18.2
M87-987	32.8	23	2.8	2.7	29	2.1	11.9	42.3	17.5
M87-1038	36.8	18	-1.8	1.3	30	1.9	15.0	38.6	20.1
M87-1071	41.7	10	1.2	1.7	31	2.0	17.0	39.6	19.2
M87-1088	38.3	17	-1.0	1.1	27	2.1	14.5	39.8	20.0
M87-1090	40.4	14	-0.8	1.2	30	2.0	15.5	40.3	20.2
M87-1247	41.0	11	0.0	1.2	27	2.0	16.8	40.7	19.7
M87-1329	42.2	8	3.8	1.2	29	1.5	15.9	39.7	20.9
M87-1429	33.6	22	-0.8	1.7	31	2.5	17.1	40.5	20.0
M87-1433	34.9	21	-1.5	1.7	31	2.3	16.0	39.3	20.6
M87-1569	36.2	19	3.7	1.3	32	1.7	14.8	39.5	18.1
M87-1765	41.9	9	5.8	1.6	31	1.8	16.6	41.1	20.6
ORC 9002	44.5	3	2.5	1.1	27	1.7	17.1	40.0	19.8

* 110.7 Days After Planting

UNIFORM TEST 0, 1991

1990-1991 2-YEAR MEAN

No. of Tests / Strain	Yield 14 bu/a	Rank 14 No.	Maturity 13 Date	Lodging 13 Score	Plant Height 14 In.	Seed Quality 14 Score	Seed Size 14 g/100	Composition Protein 10 %	Composition Oil 10 %
Glenwood (0)	38.8	4	9/14.5*	1.5	29	2.5	16.8	40.6	20.0
McCall (00)	32.1	6	-12.2	1.4	27	2.0	14.9	38.9	19.9
M84-748	43.7	1	1.1	1.5	31	2.0	16.4	40.6	20.7
M85-1112	41.6	3	3.3	1.5	30	2.2	17.4	39.3	21.0
M86-356	38.5	5	2.5	1.4	31	2.1	14.9	43.6	18.4
M86-571	41.9	2	3.3	1.5	31	2.2	16.3	41.0	19.4

* 116.8 Days After Planting

1989-1991 3-YEAR MEAN

No. of Tests / Strain	23	23	19	22	23	22	23	13	13
Glenwood (0)	36.3	3	9/16.0*	1.3	27	2.3	17.0	40.8	19.8
McCall (00)	30.7	4	-12.5	1.4	25	2.1	15.0	39.6	19.7
M84-748	42.3	1	1.3	1.5	29	2.0	16.5	41.0	20.5
M85-1112	40.7	2	3.6	1.3	28	2.2	17.6	39.4	20.9

* 118.8 Days After Planting

1988-1991 4-YEAR MEAN

No. of Tests / Strain	32	32	28	31	32	31	32	18	18
Glenwood (0)	34.5	2	9/15.7*	1.4	27	2.3	16.9	41.0	20.1
McCall (00)	28.4	3	-12.4	1.4	25	2.3	14.9	40.0	19.9
M84-748	39.7	1	1.4	1.4	29	2.1	16.3	40.9	20.6

* 118.4 Days After Planting

UNIFORM TEST 0, 1991

YIELD (bu/a)

Strain	Mean 7 Tests	Morris MN	Rose-mount MN	Cassel-ton ND	Ottawa Ont.	Wood-stock Ont.	Wil-mot SD	Spooner WI
Glenwood (0)	39.7	44.4	45.6	32.9	11.7	56.5	56.5	30.3
McCall (00)	31.4	31.3	40.3	27.5	11.7	44.2	40.7	24.0
M84-916 (I)	45.6	65.3	42.4	30.3	20.8	60.0	59.1	41.3
M84-748	45.4	52.9	50.1	35.5	15.4	65.7	61.8	36.3
M85-1112	43.6	48.1	51.6	33.0	16.3	62.4	60.7	33.0
M86-356	39.5	47.0	42.6	31.3	16.6	51.3	54.7	33.2
M86-571	42.9	55.8	43.6	32.2	18.0	58.0	59.8	32.7
M87-5	40.7	58.3	41.1	32.2	15.3	56.5	56.0	25.6
M87-180	44.1	68.8	45.2	29.1	17.5	54.8	59.0	34.3
M87-231	42.7	57.0	43.0	36.6	14.9	57.9	57.4	31.8
M87-346	40.9	57.7	49.2	27.4	15.6	55.2	55.2	26.0
M87-917	35.8	33.0	41.6	29.4	15.4	56.8	52.1	22.5
M87-947	27.8	28.7	26.9	28.4	11.0	45.1	41.9	12.4
M87-948	32.5	28.0	34.0	30.8	14.0	49.8	54.2	16.7
M87-987	32.8	34.6	32.8	28.0	11.6	45.8	46.4	30.6
M87-1038	36.8	46.2	43.9	31.4	15.9	46.3	48.1	25.5
M87-1071	41.7	55.3	49.9	34.3	14.8	48.4	54.4	34.9
M87-1088	38.3	38.9	44.9	30.0	11.1	52.3	57.5	33.2
M87-1090	40.4	50.4	42.6	34.9	14.9	55.7	54.9	29.1
M87-1247	41.0	54.7	46.5	30.3	16.1	51.2	58.3	30.1
M87-1329	42.2	55.7	44.1	30.1	15.7	55.9	59.0	35.1
M87-1429	33.6	29.4	43.1	29.7	11.7	47.3	44.9	28.8
M87-1433	34.9	24.9	43.1	27.9	14.4	56.5	50.0	27.2
M87-1569	36.2	47.7	35.7	29.9	15.7	43.9	48.3	31.9
M87-1765	41.9	54.9	44.6	34.5	15.2	54.0	56.2	33.6
ORC 9002	44.5	61.8	49.7	28.6	18.8	59.0	57.6	35.7
C.V. (%)		14.5	9.4	11.1	15.3	8.0	5.0	12.8
L.S.D. (5%)		11.1	6.6	5.5	3.2	6.1	4.4	6.3
Row Sp. (In.)		10	10	30	16	14.8	30	36
Rows/Plot		10	10	4	4	4	4	4
Reps		3	3	3	4	4	3	3

UNIFORM TEST 0, 1991

YIELD RANK

Strain	Yield Rank	Morris MN	Rose-mount MN	Cassel-ton ND	Ottawa Ont.	Wood-stock Ont.	Wil-mot SD	Spooner WI
Glenwood (0)	15	18	7	7	21	9	11	15
McCall (00)	25	22	22	25	21	25	26	23
M84-916 (I)	1	2	19	13	1	3	4	1
M84-748	2	12	2	2	12	1	1	2
M85-1112	5	14	1	6	6	2	2	10
M86-356	16	16	17	11	5	17	16	8
M86-571	6	7	13	8	3	5	3	11
M87-5	13	4	21	8	14	9	13	21
M87-180	4	1	8	20	4	14	5	6
M87-231	7	6	16	1	16	6	10	13
M87-346	12	5	5	26	11	13	14	20
M87-917	20	21	20	19	12	7	19	24
M87-947	26	24	26	22	26	24	25	26
M87-948	24	25	24	12	20	19	18	25
M87-987	23	20	25	23	24	23	23	14
M87-1038	18	17	12	10	8	22	22	22
M87-1071	10	9	3	5	18	20	17	5
M87-1088	17	19	9	16	25	16	9	8
M87-1090	14	13	17	3	16	12	15	17
M87-1247	11	11	6	13	7	18	7	16
M87-1329	8	8	11	15	9	11	5	4
M87-1429	22	23	14	18	21	21	24	18
M87-1433	21	26	14	24	19	8	20	19
M87-1569	19	15	23	17	9	26	21	12
M87-1765	9	10	10	4	15	15	12	7
ORC 9002	3	3	4	21	2	4	8	3

UNIFORM TEST 0, 1991

MATURITY (date)

Strain	Mean 6 Tests	Morris MN	Rose-mount MN	Cassel-ton ND	Ottawa Ont.	Wood-stock Ont.	Wil-mot SD	Spooner WI
Glenwood (0)	09/07	09/02	09/03	09/02	09/21	09/06	09/09	
McCall (00)	-10.3	-9	-10	-11	-10	-10	-12	
M84-916 (I)	11.3	11	10	16	12	4	15	
M84-748	1.2	4	0	0	0	0	3	
M85-1112	3.5	5	2	2	7	2	3	
M86-356	2.0	7	1	2	-3	1	4	
M86-571	2.8	6	2	1	0	2	6	
M87-5	3.3	5	5	4	0	2	4	
M87-180	6.8	8	10	6	8	3	6	
M87-231	4.3	7	6	7	-2	3	5	
M87-346	0.7	4	0	0	-2	-1	3	
M87-917	-1.0	-3	0	-1	1	-2	-1	
M87-947	-3.5	-9	-3	-4	-1	-2	-2	
M87-948	0.7	1	-1	1	1	0	2	
M87-987	2.8	4	3	6	0	0	4	
M87-1038	-1.8	-1	-3	-1	-3	-2	-1	
M87-1071	1.2	4	3	2	-2	-2	2	
M87-1088	-1.0	-1	-3	-3	1	-1	1	
M87-1090	-0.8	1	-3	0	-2	-1	0	
M87-1247	0.0	5	-1	1	-5	-2	2	
M87-1329	3.8	7	4	2	4	2	4	
M87-1429	-0.8	4	-6	-4	5	-2	-2	
M87-1433	-1.5	-1	-2	-4	2	-3	-1	
M87-1569	3.7	6	3	7	3	0	3	
M87-1765	5.8	7	5	10	3	4	6	
ORC 9002	2.5	6	1	4	-1	1	4	
Date Planted	05/19	05/10	05/21	05/14	05/28	05/23	05/21	
Days to Mature	110.7	115	105	111	116	106	111	

UNIFORM TEST 0, 1991

LODGING (score)

Strain	Mean 6 Tests	Morris MN	Rose-mount MN	Cassel-ton ND	Ottawa Ont.	Wood-stock Ont.	Wil-mot SD	Spooner WI
Glenwood (0)	1.1	1.0	1.7	1.0	1.0	1.1	1.0	
McCall (00)	1.3	1.0	3.0	1.0	1.0	1.0	1.0	
M84-916 (I)	2.5	2.7	2.7	1.7	1.0	2.8	4.3	
M84-748	1.2	1.0	2.0	1.0	1.0	1.4	1.0	
M85-1112	1.2	1.0	1.7	1.0	1.0	1.1	1.3	
M86-356	1.1	1.0	1.7	1.0	1.0	1.0	1.0	
M86-571	1.2	1.0	1.7	1.0	1.0	1.0	1.3	
M87-5	1.3	1.0	2.0	1.0	1.0	1.6	1.3	
M87-180	1.2	1.0	2.0	1.0	1.0	1.0	1.0	
M87-231	1.6	1.7	2.7	1.0	1.0	1.6	1.7	
M87-346	1.2	1.0	2.0	1.0	1.0	1.0	1.3	
M87-917	1.2	1.0	2.0	1.0	1.0	1.4	1.0	
M87-947	2.4	2.0	4.0	1.0	1.0	3.1	3.0	
M87-948	1.5	1.0	2.0	1.0	1.0	2.4	1.7	
M87-987	2.7	2.0	4.0	1.7	1.0	2.9	4.7	
M87-1038	1.3	1.0	2.3	1.0	1.0	1.4	1.3	
M87-1071	1.7	1.3	2.7	2.0	1.0	1.8	1.3	
M87-1088	1.1	1.0	1.7	1.0	1.0	1.0	1.0	
M87-1090	1.2	1.0	2.0	1.0	1.0	1.4	1.0	
M87-1247	1.2	1.3	2.0	1.0	1.0	1.1	1.0	
M87-1329	1.2	1.0	2.0	1.0	1.0	1.1	1.0	
M87-1429	1.7	1.0	2.7	1.0	1.0	1.5	2.7	
M87-1433	1.7	2.0	2.7	1.0	1.0	1.8	1.7	
M87-1569	1.3	1.0	2.0	1.0	1.0	1.4	1.3	
M87-1765	1.6	1.0	2.0	1.0	1.0	2.6	1.7	
ORC 9002	1.1	1.0	1.7	1.0	1.0	1.0	1.0	

UNIFORM TEST O, 1991

PLANT HEIGHT (inches)

Strain	Mean 7 Tests	Morris MN	Rose-mount MN	Cassel-ton ND	Ottawa Ont.	Wood-stock Ont.	Wil-mot SD	Spooner WI
Glenwood (0)	28	24	33	30	9	29	39	29
McCall (00)	26	18	33	26	11	31	33	27
M84-916 (I)	36	34	44	37	14	37	48	36
M84-748	30	25	38	33	11	33	43	30
M85-1112	29	26	37	30	11	31	42	25
M86-356	30	24	36	32	12	31	43	29
M86-571	30	29	37	31	11	31	42	28
M87-5	33	31	40	36	13	35	46	30
M87-180	29	25	38	30	10	31	43	29
M87-231	31	28	37	34	10	35	43	33
M87-346	29	26	35	31	11	31	42	26
M87-917	30	23	37	33	12	35	41	28
M87-947	26	19	32	30	9	31	34	24
M87-948	24	17	28	27	11	29	32	22
M87-987	29	24	34	30	11	30	42	29
M87-1038	30	27	38	33	11	31	40	29
M87-1071	31	26	38	33	10	34	42	31
M87-1088	27	22	32	28	9	29	38	28
M87-1090	30	28	36	32	10	32	41	30
M87-1247	27	27	33	28	11	28	37	25
M87-1329	29	27	38	32	11	32	39	27
M87-1429	31	27	36	33	9	32	45	32
M87-1433	31	24	37	36	13	34	39	31
M87-1569	32	27	40	34	11	34	46	33
M87-1765	31	26	40	32	11	33	43	29
ORC 9002	27	27	32	28	11	25	37	26

UNIFORM TEST 0, 1991

SEED QUALITY (score)

Strain	Mean 7 Tests	Morris MN	Rose-mount MN	Cassel-ton ND	Ottawa Ont.	Wood-stock Ont.	Wil-mot SD	Spooner WI
Glenwood (0)	2.5	2.7	3.0	3.0	2.0	1.5	2.0	3.0
McCall (00)	1.8	1.7	2.7	1.5	2.5	1.5	2.0	1.0
M84-916 (I)	1.7	1.3	2.3	2.0	2.0	1.5	2.0	1.0
M84-748	1.8	2.3	2.0	1.5	2.0	1.5	2.0	1.0
M85-1112	1.7	2.3	2.3	1.5	2.0	1.0	2.0	1.0
M86-356	1.8	2.0	2.3	2.0	2.0	1.5	2.0	1.0
M86-571	2.0	2.3	2.7	2.0	1.5	1.5	3.0	1.0
M87-5	2.0	2.0	2.7	2.5	2.0	1.5	2.0	1.0
M87-180	1.7	1.3	2.3	1.5	2.0	1.5	2.0	1.0
M87-231	2.0	2.0	2.3	2.5	2.0	2.0	2.0	1.0
M87-346	1.8	2.3	1.7	2.0	2.0	1.5	2.0	1.0
M87-917	1.8	2.0	1.7	1.5	2.0	1.5	2.0	2.0
M87-947	1.6	1.3	1.7	1.5	2.0	1.0	3.0	1.0
M87-948	1.8	1.7	1.7	1.5	2.0	1.5	3.0	1.0
M87-987	2.1	2.0	2.0	2.0	2.0	2.0	3.0	2.0
M87-1038	1.9	2.3	1.7	2.5	2.0	1.5	2.0	1.0
M87-1071	2.0	3.0	3.0	1.5	2.0	1.5	2.0	1.0
M87-1088	2.1	3.0	2.7	2.5	2.0	1.5	2.0	1.0
M87-1090	2.0	2.7	2.0	1.5	2.0	2.5	2.0	1.0
M87-1247	2.0	2.7	1.3	2.0	2.0	3.0	2.0	1.0
M87-1329	1.5	1.7	2.0	1.2	2.0	1.5	1.0	1.0
M87-1429	2.5	3.0	2.7	4.0	2.0	3.0	2.0	1.0
M87-1433	2.3	2.7	2.0	3.5	2.0	2.0	2.0	2.0
M87-1569	1.7	2.0	1.3	2.0	2.0	1.5	2.0	1.0
M87-1765	1.8	1.7	2.7	1.2	2.0	2.0	2.0	1.0
ORC 9002	1.7	2.0	2.3	2.0	1.8	1.5	1.0	1.0

UNIFORM TEST 0, 1991

SEED SIZE (g/100)

Strain	Mean 7 Tests	Morris MN	Rose-mount MN	Cassel-ton ND	Ottawa Ont.	Wood-stock Ont.	Wil-mot SD	Spooner WI
Glenwood (0)	17.0	16.4	16.2	15.2	15.8	20.9	19.0	15.8
McCall (00)	15.1	12.6	14.5	13.0	15.3	17.7	16.0	16.3
M84-916 (I)	17.8	18.9	16.8	14.2	16.3	20.4	19.4	18.4
M84-748	16.4	15.8	15.4	13.2	15.5	20.3	18.6	16.2
M85-1112	17.7	16.1	16.9	15.1	16.4	22.1	21.1	16.3
M86-356	14.9	14.2	14.6	12.8	12.8	17.7	17.3	14.7
M86-571	16.0	15.2	14.8	12.8	14.6	19.4	18.9	16.4
M87-5	14.5	13.6	13.9	11.7	13.5	17.3	16.4	15.2
M87-180	16.5	16.1	15.7	15.4	14.9	20.1	18.3	15.3
M87-231	15.9	16.3	14.5	13.8	14.0	19.2	17.4	16.2
M87-346	15.4	14.4	14.9	11.9	14.6	18.7	17.7	15.5
M87-917	14.8	13.6	15.6	12.2	14.5	17.3	16.0	14.6
M87-947	8.8	7.4	8.0	6.4	8.1	9.8	10.5	11.1
M87-948	9.5	8.4	8.6	8.2	8.9	10.4	11.0	11.3
M87-987	11.9	10.8	11.6	10.1	11.0	12.8	14.4	12.6
M87-1038	15.0	14.3	14.5	12.6	14.8	16.9	17.5	14.6
M87-1071	17.0	16.1	17.5	15.4	15.8	19.7	19.3	15.4
M87-1088	14.5	13.5	13.7	11.6	13.8	17.9	16.6	14.6
M87-1090	15.5	15.4	15.2	13.9	13.9	18.2	17.6	14.0
M87-1247	16.8	16.7	15.9	14.0	15.9	20.3	19.1	16.0
M87-1329	15.9	14.9	15.9	13.3	14.5	18.9	17.9	15.6
M87-1429	17.1	16.2	16.4	15.0	15.8	18.4	19.8	17.9
M87-1433	16.0	14.1	16.0	13.2	15.0	18.5	17.7	17.2
M87-1569	14.8	14.8	14.1	12.8	13.3	15.7	18.0	14.8
M87-1765	16.6	15.7	15.5	13.6	16.9	19.8	18.4	16.4
ORC 9002	17.1	17.0	14.8	13.5	15.7	21.0	18.5	18.9

UNIFORM TEST 0, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Morris MN	Rosemount MN	Casselton ND	Woodstock Ont.	Spooner WI
Glenwood (0)	40.5	39.7	39.5	39.9	43.0	40.2
McCall (00)	38.3	37.5	36.0	39.2	40.7	38.0
M84-916 (I)	40.5	39.4	42.0	40.3	41.6	39.3
M84-748	40.9	40.7	40.0	40.0	43.6	40.0
M85-1112	39.5	38.5	37.8	40.0	42.1	38.9
M86-356	44.3	43.4	43.3	43.9	46.8	43.9
M86-571	41.1	39.9	41.3	41.0	43.7	39.8
M87-5	40.3	39.5	40.9	39.4	42.7	38.8
M87-180	41.1	40.5	41.2	42.2	42.1	39.3
M87-231	40.6	39.4	40.6	40.0	42.9	39.9
M87-346	40.4	39.4	40.1	40.9	43.2	38.5
M87-917	40.6	40.1	39.1	39.9	42.7	41.0
M87-947	40.6	38.2	38.8	41.2	43.7	41.0
M87-948	40.8	39.8	40.2	40.6	43.5	39.9
M87-987	42.3	42.9	40.5	41.8	45.4	41.0
M87-1038	38.6	38.6	36.9	38.7	40.7	38.2
M87-1071	39.6	39.4	39.5	40.6	41.9	36.4
M87-1088	39.8	40.5	38.2	40.3	42.2	38.0
M87-1090	40.3	39.6	39.4	40.0	42.7	40.0
M87-1247	40.7	40.8	38.8	41.0	43.6	39.3
M87-1329	39.7	39.3	39.4	39.5	41.5	39.0
M87-1429	40.5	40.7	39.3	40.6	42.4	39.6
M87-1433	39.3	39.6	37.7	40.1	40.1	39.0
M87-1569	39.5	39.5	38.6	40.8	39.8	38.6
M87-1765	41.1	40.9	41.1	40.5	43.6	39.2
ORC 9002	40.0	38.6	39.7	41.3	42.3	38.1

UNIFORM TEST 0, 1991

OIL (%)

Strain	Mean 5 Tests	Morris MN	Rosemount MN	Casselton ND	Woodstock Ont.	Spooner WI
Glenwood (0)	19.7	19.8	20.0	20.9	18.8	19.1
McCall (00)	19.8	20.1	20.6	19.9	18.7	19.7
M84-916 (I)	19.8	21.1	18.5	20.3	19.7	19.6
M84-748	20.4	20.9	20.4	21.3	19.2	20.1
M85-1112	20.7	21.7	20.4	20.9	20.3	20.2
M86-356	18.0	18.4	18.3	18.6	17.1	17.7
M86-571	18.9	19.4	18.4	18.6	19.0	19.3
M87-5	20.3	20.8	19.4	21.1	19.5	20.8
M87-180	20.3	21.1	20.3	20.7	20.0	19.6
M87-231	20.1	21.1	19.3	20.8	19.3	20.2
M87-346	20.0	20.8	19.7	19.7	19.0	20.9
M87-917	20.1	20.1	20.6	21.1	19.9	18.9
M87-947	16.5	17.1	16.7	16.7	15.7	16.5
M87-948	18.2	18.9	17.7	19.3	17.2	18.1
M87-987	17.5	16.8	17.5	18.2	16.7	18.1
M87-1038	20.1	20.6	19.9	20.4	19.6	20.0
M87-1071	19.2	20.0	17.9	20.3	17.5	20.2
M87-1088	20.0	19.6	19.8	20.3	19.4	20.7
M87-1090	20.2	20.9	19.5	20.9	19.5	20.4
M87-1247	19.7	20.2	20.2	20.0	17.9	20.4
M87-1329	20.9	21.6	20.1	21.5	20.4	20.9
M87-1429	20.0	20.2	19.7	20.6	19.1	20.4
M87-1433	20.6	20.9	20.2	20.4	20.4	20.9
M87-1569	18.1	18.7	17.8	18.1	17.4	18.4
M87-1765	20.6	21.2	20.1	21.3	19.9	20.5
ORC 9002	19.8	21.0	19.0	19.1	19.4	20.3

UNIFORM TEST I, 1991

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Bell (SCN)	Fayette x LN80-10398	2	F5	SCN 3,4
Glenwood (0)	Evans x Peterson 85	2	F5	
Hardin	Corsoy[3] x Cutler 71	1	F5	
Sturdy (L)	M70-127 x Century	4	F5	
M84-916 (I)	A79-136012 x Dawson	2	F5	Rps1
A Hardin BC (k)	Hardin[5] x Willaims 82	1	BC4 F4	Rps1-k
AC89-145021	BSR 101[2] x A81-144015	1	F5	Fe. Chlor. Resis.
AM89-144003	BSR 101 x Asgrow A1937	1	F5	BSR Resis.
AM89-144026	Jacques J231 x A8	1	F5	BSR Resis.
AM89-144029	A82-161034 x BSR 101	1	F5	BSR Resis.
AM89-144036	A82-161034 x BSR 101	1	F5	BSR Resis.
E88550	GL 2634 x Asgrow A1937	1	F3	
M85-610	Fayette x McCall	2	F5	SCN 3
M86-1322	M75-2 x L77-906	1	F5	SCN 3
M86-1410	M72-3 x L77-756	1	F5	SCN 3
M87-1621	Ozzie x Fayette	SCN I	F8	Rps1 SCN 3

* Number of years in test or name of 1990 test.

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Emerg. Score Humboldt	BSR-Boone Plant n %	BSR-Boone Stem n %	PR Urbana Race 1	PR Ames Race 4	Chlorosis Score Lamberton	Chlorosis Score Humboldt	PS Lafayette a %	PSB n %	SMV a Score	Shatter-Score Manhattan
Bell (SCN)	PTTIYBlI	5	50	24.2	S	S	1.8	1.9	10	2	4e	2
Glenwood (0)	PGBDYIbI	2	80	49.8	R	S	1.3	2.0	27	1	3e	1
Hardin	PGBDYYI	3	100	67.0	R	S	2.3	2.4	20	6	5e	2
Sturdy (L)	PGBIYIbI	5	100	53.2	R	S	1.8	2.0	16	9	4e	2
M84-916 (I)	WGBDYBfI	5	60	26.9	R	S	2.0	2.4	30	0	3e	1
A Hardin BC	PGBDYYI	1	100	61.4	R	R	2.8	3.0	23	6	4e	1
AC89-145021	PGB+TDYIbI	2	60	22.7	R	S	1.5	1.8	13	2	3e	1
AM89-144003	PGTDYIbI	2	50	21.3	R	S	2.3	2.0	38	4	2e	2
AM89-144026	WGBDYBfI	1	90	49.9	R	S	2.0	1.8	37	0	1	1
AM89-144029	PGTDYIbI	5	70	28.9	R	S	2.0	2.5	51	4	3e	2
AM89-144036	PGBDYIbI	5	70	29.6	R	S	2.0	2.5	45	0	1	2
E88550	P+WGBDYBfI	5	80	68.8	R	H	3.3	3.1	60	10	1	2
M85-610	PTTIYYI	1	10	0.5	S	S	1.8	1.9	9	6	5e	1
M86-1322	WGTDYBfI	1	40	7.2	R	S	2.3	2.6	37	0	1	2
M86-1410	PGBDYIbI	4	100	84.2	R	S	1.8	1.9	25	4	3e	1
M87-1621	WTBDYBlI	3	10	6.7	R	S	2.5	1.9	18	20	5e	1

UNIFORM TEST I, 1991

REGIONAL SUMMARY

No. of Tests Strain	Yield 14 bu/a	Rank 14 No.	Maturity 11 Date	Lodging 14 Score	Plant Height 14 In.	Seed Quality 12 Score	Seed Size 14 g/100	Composition Protein 5 %	 Oil 5 %
Bell (SCN)	49.7	10	3.9	2.6	36	1.6	19.7	42.3	20.5
Glenwood (0)	42.5	16	-9.3	1.6	28	2.3	17.7	40.6	20.5
Hardin	51.5	7	1.4	2.6	38	1.7	16.0	40.4	21.1
Sturdy (L)	53.2	3	3.7	2.1	37	1.7	19.3	40.8	20.4
M84-916 (I)	56.3	1	09/13*	2.6	39	1.7	18.9	40.1	21.0
A Hardin BC (k)	54.2	2	2.3	2.5	40	1.8	16.0	41.2	20.8
AC89-145021	49.2	11	1.0	2.0	37	1.8	17.6	43.5	18.5
AM89-144003	51.0	8	0.5	2.1	36	1.6	16.3	40.3	20.4
AM89-144026	50.0	9	4.1	1.5	35	1.7	18.8	40.7	20.7
AM89-144029	49.0	12	2.6	1.9	37	1.8	17.3	39.3	21.2
AM89-144036	51.8	6	2.2	1.8	34	1.8	17.6	39.9	20.9
E88550	53.0	4	2.6	2.3	38	1.8	18.2	40.9	20.3
M85-610	46.1	15	-0.5	2.7	38	1.9	15.0	42.9	19.0
M86-1322	47.7	13	-0.7	2.5	35	2.1	14.1	40.0	21.7
M86-1410	46.8	14	1.5	2.2	33	2.0	16.9	42.9	18.0
M87-1621	52.5	5	0.0	2.1	35	2.0	19.2	41.9	21.1

* 118.8 Days After Planting

UNIFORM TEST I, 1991

1990-1991 2-YEAR MEAN

No. of Tests Strain	Yield 28 bu/a	Rank 28 No.	Maturity 22 Date	Lodging 28 Score	Plant Height 28 In.	Seed Quality 24 Score	Seed Size 28 g/100	Composition Protein 10 %	Composition Oil 10 %
Bell (SCN)	48.1	4	4.6	2.4	35	1.7	19.4	42.1	20.6
Glenwood (0)	42.6	8	-8.8	1.6	29	2.4	17.5	40.6	20.6
Sturdy (L)	53.5	2	4.9	2.0	37	2.0	19.1	40.5	20.7
M84-916 (I)	54.7	1	9/16.5*	2.5	38	2.0	18.6	40.1	21.1
A Hardin BC (k)	51.5	3	3.1	2.4	38	2.0	16.1	40.8	20.8
M85-610	46.2	7	-0.8	2.7	37	2.1	14.8	42.0	19.6
M86-1322	46.4	6	-1.1	2.4	34	2.3	14.1	39.9	21.7
M86-1410	46.9	5	2.2	2.1	33	2.0	16.9	42.6	18.2

* 121.6 Days After Planting

1989-1991 3-YEAR MEAN

No. of Tests Strain	44	44	34	44	44	38	43	13	13
Glenwood (0)	40.3	4	-8.4	1.4	28	2.2	17.6	40.6	20.5
Sturdy (L)	51.1	2	5.0	1.8	36	1.9	18.7	40.2	20.7
M84-916 (I)	52.1	1	9/18.1*	2.2	38	1.9	18.2	39.7	21.3
M85-610	44.2	3	-1.4	2.4	36	2.0	14.5	41.8	19.8

* 122.9 Days After Planting

UNIFORM TEST I, 1991

YIELD (bu/a)

Strain	Mean 14 Tests	Greene IA	Humboldt IA	Royal IA	Lafayette IN	Ingham County MI	Saginaw County MI
Bell (SCN)	49.7	47.1	44.2	46.0	35.2	63.3	63.2
Glenwood (0)	42.5	47.9	49.8	36.5	22.0	49.9	48.9
Hardin	51.5	54.9	52.8	47.8	23.3	62.4	65.6
Sturdy (L)	53.2	59.1	52.9	52.5	25.2	68.4	66.7
M84-916 (I)	56.3	60.5	50.7	57.5	26.1	67.9	66.1
A Hardin BC (k)	54.2	57.0	50.6	49.6	21.8	66.2	61.3
AC89-145021	49.2	49.7	45.0	47.1	30.9	63.2	63.1
AM89-144003	51.0	53.8	53.0	49.7	29.8	64.5	61.3
AM89-144026	50.0	49.7	48.1	50.2	26.3	57.8	68.3
AM89-144029	49.0	51.3	48.5	48.5	24.9	57.6	61.3
AM89-144036	51.8	52.7	50.7	56.2	22.5	70.5	64.4
E88550	53.0	53.7	44.4	52.5	28.6	67.7	59.5
M85-610	46.1	47.9	42.2	44.0	25.5	51.4	56.3
M86-1322	47.7	48.2	45.5	42.5	21.7	61.0	57.0
M86-1410	46.8	46.9	45.9	43.7	25.6	56.1	51.2
M87-1621	52.5	58.3	51.9	47.9	22.6	71.3	65.6
C.V. (%)		8.8	6.2	6.4	18.1	9.6	4.8
L.S.D. (5%)		7.6	4.9	5.1	7.8	12.2	5.9
Row Sp. (In.)		27	27	27	24	30	30
Rows/Plot		4	4	4	4	4	4
Reps		3	3	3	3	2	2

UNIFORM TEST I, 1991

YIELD (bu/a)

Strain	Lamber-ton MN	Waseca MN	Oconto NE	London Ont.	Inwood Ont.	Brook-ings SD	Wilmot SD	Arling-ton WI
Bell (SCN)	60.1	51.3	41.6	47.8	43.2	48.4	54.4	50.2
Glenwood (0)	50.2	37.2	46.3	35.9	23.9	48.3	56.0	42.3
Hardin	70.3	55.0	52.3	44.6	32.1	53.5	57.8	48.5
Sturdy (L)	58.6	56.9	52.6	51.7	44.4	52.0	57.9	45.8
M84-916 (I)	64.6	63.7	58.3	56.7	45.5	57.1	56.3	56.8
A Hardin BC (k)	65.6	67.2	53.5	54.3	46.7	56.7	58.9	48.7
AC89-145021	56.1	52.7	42.3	49.7	45.3	48.0	46.4	49.6
AM89-144003	53.7	60.3	49.0	50.3	42.3	51.7	50.9	43.3
AM89-144026	58.0	52.2	47.0	49.9	35.8	48.4	53.4	55.3
AM89-144029	57.8	51.3	48.7	44.1	42.1	49.5	49.5	51.2
AM89-144036	58.5	54.9	49.6	47.4	38.7	53.2	51.4	53.8
E88550	59.5	63.3	49.4	57.8	54.2	49.5	51.3	50.2
M85-610	53.3	51.9	42.0	51.7	35.7	48.9	47.7	47.1
M86-1322	56.5	50.8	47.9	49.4	44.3	49.2	51.3	41.8
M86-1410	53.8	51.5	52.2	46.5	39.1	45.4	51.6	45.8
M87-1621	58.0	59.2	47.1	50.0	46.4	52.2	56.4	47.8
C.V. (%)	8.9	8.0	12.9	7.2	7.9	4.2	5.8	8.1
L.S.D. (5%)	8.6	7.4	10.4	5.1	5.5	3.5	5.1	6.5
Row Sp. (In.)	10	10	30	14.8	24	30	30	30
Rows/Plot	10	10	4	4	4	4	4	4
Reps	3	3	3	4	3	3	3	3

UNIFORM TEST I, 1991

YIELD RANK

Strain	Yield Rank	Greene IA	Hum-boldt IA	Royal IA	Lafayette IN	Ingham County MI	Saginaw County MI
Bell (SCN)	10	15	15	12	1	8	7
Glenwood (0)	16	13	8	16	14	16	16
Hardin	7	5	3	10	11	10	4
Sturdy (L)	3	2	2	3	9	3	2
M84-916 (I)	1	1	5	1	6	4	3
A Hardin BC (k)	2	4	7	7	15	6	9
AC89-145021	11	10	13	11	2	9	8
AM89-144003	8	6	1	6	3	7	9
AM89-144026	9	10	10	5	5	12	1
AM89-144029	12	9	9	8	10	13	9
AM89-144036	6	8	5	2	13	2	6
E88550	4	7	14	3	4	5	12
M85-610	15	13	16	13	8	15	14
M86-1322	13	12	12	15	16	11	13
M86-1410	14	16	11	14	7	14	15
M87-1621	5	3	4	9	12	1	4

MATURITY (date)

Strain	Mean 11 Tests				
Bell (SCN)	3.9	4	9	3	3
Glenwood (0)	-9.3	-10	-4	-5	-5
Hardin	1.4	-1	-1	4	2
Sturdy (L)	3.7	3	3	5	5
M84-916 (I)	09/13	09/15	08/14	09/13	09/12
A Hardin BC (k)	2.3	0	1	5	2
AC89-145021	1.0	0	5	-3	2
AM89-144003	0.5	1	3	-1	0
AM89-144026	4.1	3	8	4	6
AM89-144029	2.6	3	3	4	3
AM89-144036	2.2	4	0	-1	2
E88550	2.6	2	4	2	3
M85-610	-0.5	0	5	-2	-2
M86-1322	-0.7	-5	2	-2	2
M86-1410	1.5	-3	1	3	1
M87-1621	0.0	-2	0	-1	1
Date Planted	05/18	05/23	05/11	05/11	05/18
Days to Mature	118.8	115	95	125	117

UNIFORM TEST I, 1991

YIELD RANK

Strain	Lamber-ton MN	Waseca MN	Oconto NE	London Ont.	Inwood Ont.	Brook-ings SD	Wilmot SD	Arling-ton WI
Bell (SCN)	4	13	16	11	8	12	7	5
Glenwood (0)	16	16	13	16	16	14	6	15
Hardin	1	7	4	14	15	3	3	9
Sturdy (L)	6	6	3	4	6	6	2	12
M84-916 (I)	3	2	1	2	4	1	5	1
A Hardin BC (k)	2	1	2	3	2	2	1	8
AC89-145021	12	9	14	9	5	15	16	7
AM89-144003	14	4	8	6	9	7	13	14
AM89-144026	8	10	12	8	13	12	8	2
AM89-144029	10	13	9	15	10	8	14	4
AM89-144036	7	8	6	12	12	4	10	3
E88550	5	3	7	1	1	8	11	5
M85-610	15	11	15	4	14	11	15	11
M86-1322	11	15	10	10	7	10	11	16
M86-1410	13	12	5	13	11	16	9	12
M87-1621	8	5	11	7	3	5	4	10

MATURITY (date)

Strain							
Bell (SCN)	7	2	3	3	3	4	2
Glenwood (0)	-8	-13	-6	-6	-15	-17	-13
Hardin	3	0	1	0	2	1	4
Sturdy (L)	4	1	2	3	5	5	5
M84-916 (I)	09/20	09/17	09/04	09/23	09/22	09/27	09/16
A Hardin BC (k)	4	4	1	-1	3	1	5
AC89-145021	1	-2	2	0	3	1	2
AM89-144003	1	-1	0	0	2	2	-1
AM89-144026	4	1	3	4	4	4	4
AM89-144029	6	-1	2	2	3	4	0
AM89-144036	3	4	1	0	5	6	0
E88550	4	2	2	0	3	2	5
M85-610	-1	-1	0	1	1	-2	-5
M86-1322	-3	-2	2	1	-1	0	-2
M86-1410	2	2	1	-2	3	1	7
M87-1621	0	-1	2	0	1	-1	1
Date Planted	05/23	05/14	05/16	05/23	05/16	05/21	05/22
Days to Mature	120	126	111	123	129	129	117

UNIFORM TEST I, 1991

LODGING (score)

Strain	Mean 14 Tests	Greene IA	Hum-boldt IA	Royal IA	Lafayette IN	Ingham County MI	Saginaw County MI
Bell (SCN)	2.6	3.9	3.3	2.4	1.2	3.0	2.0
Glenwood (0)	1.6	4.2	2.1	1.6	1.0	2.5	1.0
Hardin	2.6	3.4	3.1	2.6	1.0	4.0	2.0
Sturdy (L)	2.1	3.1	3.0	2.5	1.0	2.5	2.0
M84-916 (I)	2.6	4.2	3.6	3.2	1.0	4.0	2.0
A Hardin BC (k)	2.5	4.3	3.3	2.7	1.0	3.5	2.0
AC89-145021	2.0	4.0	2.8	2.0	1.0	2.5	1.0
AM89-144003	2.1	3.0	2.9	1.8	1.2	3.0	2.0
AM89-144026	1.5	2.0	1.7	1.7	1.0	2.0	1.0
AM89-144029	1.9	2.4	2.3	2.1	1.0	2.5	2.0
AM89-144036	1.8	3.5	2.4	1.9	1.0	3.0	1.5
E88550	2.3	3.5	3.0	2.7	1.0	3.0	2.0
M85-610	2.7	4.9	3.9	3.4	1.3	3.5	2.5
M86-1322	2.5	3.6	3.8	2.3	1.0	4.0	3.0
M86-1410	2.2	3.4	2.3	2.2	1.0	3.5	3.0
M87-1621	2.1	4.4	3.3	2.3	1.0	3.0	2.0

PLANT HEIGHT (inches)

Strain	Mean 14 Tests						
Bell (SCN)	36	40	38	35	28	36	37
Glenwood (0)	28	34	33	24	20	32	29
Hardin	38	39	44	34	25	39	44
Sturdy (L)	37	38	40	33	27	38	43
M84-916 (I)	39	38	41	36	31	41	43
A Hardin BC (k)	40	40	44	36	29	49	45
AC89-145021	37	38	39	37	27	42	40
AM89-144003	36	37	38	34	29	41	44
AM89-144026	35	38	36	33	26	35	40
AM89-144029	37	37	40	39	28	41	41
AM89-144036	34	39	40	35	22	38	34
E88550	38	38	42	33	32	45	43
M85-610	38	42	38	34	31	38	43
M86-1322	35	35	35	29	29	39	40
M86-1410	33	33	35	31	26	35	38
M87-1621	35	37	40	32	26	39	42

UNIFORM TEST I, 1991

LODGING (score)

Strain	Lamber-ton MN	Waseca MN	Oconto NE	London Ont.	Inwood Ont.	Brook-ings SD	Wilmot SD	Arling-ton WI
Bell (SCN)	3.3	3.7	2.0	1.3	1.0	3.0	4.0	2.2
Glenwood (0)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.3
Hardin	3.0	2.7	3.0	1.3	1.0	2.7	2.7	3.3
Sturdy (L)	1.3	2.3	2.7	1.0	1.0	2.7	3.0	1.8
M84-916 (I)	3.0	3.0	2.3	1.5	1.0	2.0	3.7	2.5
A Hardin BC (k)	2.3	3.0	3.3	1.3	1.0	2.3	3.3	2.3
AC89-145021	3.0	2.3	1.7	1.1	1.0	1.3	3.0	1.7
AM89-144003	2.3	3.0	1.7	1.0	1.0	1.7	3.0	2.0
AM89-144026	1.0	2.0	1.3	1.1	1.0	1.0	2.7	1.0
AM89-144029	2.0	2.3	1.3	1.1	1.0	1.3	3.7	1.2
AM89-144036	1.3	2.7	1.3	1.0	1.0	1.0	3.0	1.2
E88550	2.7	2.7	2.3	1.1	1.0	2.3	2.7	2.2
M85-610	2.7	3.0	3.0	1.4	1.0	2.3	3.0	2.5
M86-1322	2.7	2.3	1.0	1.8	1.0	2.0	2.7	4.0
M86-1410	2.3	3.0	1.3	1.0	1.0	1.7	2.7	2.0
M87-1621	2.3	2.3	2.0	1.0	1.0	1.3	2.0	1.8

PLANT HEIGHT (inches)

Strain								
Bell (SCN)	37	41	34	31	24	34	46	37
Glenwood (0)	29	24	31	21	16	30	40	34
Hardin	38	41	43	35	22	40	49	44
Sturdy (L)	38	39	39	31	23	41	45	38
M84-916 (I)	39	41	39	36	27	41	52	41
A Hardin BC (k)	38	43	39	34	26	41	49	43
AC89-145021	38	38	36	30	25	37	47	40
AM89-144003	36	38	37	29	22	35	46	36
AM89-144026	37	38	38	28	21	38	45	37
AM89-144029	38	37	37	29	22	37	48	39
AM89-144036	37	35	38	26	19	36	47	36
E88550	37	39	40	33	26	36	44	42
M85-610	38	38	39	36	28	37	48	40
M86-1322	34	35	33	36	25	32	44	38
M86-1410	34	37	34	28	23	34	45	33
M87-1621	35	36	34	31	23	32	43	35

UNIFORM TEST I, 1991

SEED QUALITY (score)

Strain	Mean 12 Tests	Greene IA	Hum-boldt IA	Royal IA	Lafayette IN	Ingham County MI	Saginaw County MI
Bell (SCN)	1.6	1.1	1.5	3.2	1.5		
Glenwood (0)	2.3	4.5	4.4	2.0	1.5		
Hardin	1.7	1.4	1.4	1.6	2.0		
Sturdy (L)	1.7	1.3	1.3	2.3	1.5		
M84-916 (I)	1.7	1.2	1.5	1.4	3.0		
A Hardin BC (k)	1.8	1.2	1.8	2.3	2.0		
AC89-145021	1.8	1.4	1.7	2.0	1.5		
AM89-144003	1.6	1.2	1.4	1.8	1.5		
AM89-144026	1.7	1.4	1.6	1.8	1.5		
AM89-144029	1.8	1.6	1.7	1.9	1.5		
AM89-144036	1.8	1.6	1.4	2.2	2.0		
E88550	1.8	1.5	1.2	2.1	2.0		
M85-610	1.9	1.7	2.0	2.0	1.0		
M86-1322	2.1	2.4	3.0	2.3	1.5		
M86-1410	2.0	2.2	1.9	1.8	1.0		
M87-1621	2.0	1.3	1.4	2.7	3.5		

SEED SIZE (g/100)

Strain	Mean 14 Tests						
Bell (SCN)	19.7	20.0	19.3	17.9	17.4	21.6	22.0
Glenwood (0)	17.7	18.6	18.0	16.7	14.4	18.8	19.5
Hardin	16.0	17.8	16.4	15.0	11.1	18.9	19.1
Sturdy (L)	19.3	21.7	19.4	17.6	11.5	21.5	22.4
M84-916 (I)	18.9	21.0	19.6	17.6	12.3	22.0	21.3
A Hardin BC (k)	16.0	16.8	15.4	14.7	11.1	19.0	17.8
AC89-145021	17.6	18.6	17.5	15.8	13.4	20.3	19.0
AM89-144003	16.3	17.6	17.0	15.2	12.1	18.4	17.9
AM89-144026	18.8	19.0	18.4	17.7	14.7	22.0	20.5
AM89-144029	17.3	18.4	17.5	16.4	11.7	19.6	19.1
AM89-144036	17.6	18.8	17.3	16.6	11.9	20.8	19.4
E88550	18.2	19.7	18.9	17.0	12.4	20.4	19.4
M85-610	15.0	16.6	15.0	13.6	11.1	16.3	17.0
M86-1322	14.1	16.2	14.4	12.4	9.0	16.6	15.9
M86-1410	16.9	18.6	18.0	16.1	10.9	18.7	18.4
M87-1621	19.2	22.8	20.8	17.5	12.5	22.7	21.0

UNIFORM TEST I, 1991

SEED QUALITY (score)

Strain	Lamber-ton MN	Waseca MN	Oconto NE	London Ont.	Inwood Ont.	Brook-ings SD	Wilmot SD	Arling-ton WI
Bell (SCN)	2.3	1.7	1.3	1.5	1.0	2.0	1.0	1.0
Glenwood (0)	2.0	2.3	1.0	2.5	1.0	2.0	2.0	2.0
Hardin	3.3	1.7	1.0	1.5	1.0	2.0	2.0	2.0
Sturdy (L)	2.7	1.7	1.0	2.0	1.0	2.0	2.0	1.0
M84-916 (I)	2.7	1.3	1.0	2.0	1.0	2.0	1.0	2.0
A Hardin BC (k)	3.0	2.3	1.3	2.0	1.0	2.0	2.0	1.0
AC89-145021	3.0	1.7	2.3	2.5	1.0	2.0	2.0	1.0
AM89-144003	2.7	1.3	1.7	1.5	1.0	2.0	2.0	1.0
AM89-144026	3.0	1.7	1.7	1.0	1.0	2.0	2.0	2.0
AM89-144029	3.3	1.3	2.3	1.5	1.0	3.0	2.0	1.0
AM89-144036	3.0	1.7	1.7	2.0	1.0	2.0	2.0	1.0
E88550	3.3	2.3	1.7	1.0	1.0	2.0	2.0	1.0
M85-610	3.3	2.0	1.7	1.0	1.0	3.0	2.0	2.0
M86-1322	3.3	2.3	1.0	1.5	1.0	3.0	2.0	2.0
M86-1410	3.7	2.7	1.0	2.0	1.0	2.0	3.0	2.0
M87-1621	3.7	2.0	1.7	2.0	1.0	2.0	1.0	2.0

SEED SIZE (g/100)

Strain								
Bell (SCN)	20.4	18.8	17.3	20.4	18.9	20.7	21.3	19.6
Glenwood (0)	16.7	17.1	17.4	18.2	17.3	19.1	19.3	17.2
Hardin	15.6	14.7	15.8	15.3	15.2	16.9	16.5	15.9
Sturdy (L)	18.5	17.4	19.1	22.1	20.4	19.6	20.1	19.4
M84-916 (I)	18.5	17.9	18.5	20.2	18.8	18.8	20.1	18.3
A Hardin BC (k)	16.8	15.9	15.1	16.6	15.4	16.9	17.0	15.9
AC89-145021	15.9	16.0	15.3	20.5	17.8	18.9	18.5	18.5
AM89-144003	16.5	14.9	14.7	16.2	15.6	17.3	17.7	16.4
AM89-144026	17.2	17.6	15.8	20.9	21.4	19.2	19.8	18.7
AM89-144029	16.8	14.7	15.7	18.3	16.3	19.6	20.0	18.4
AM89-144036	17.6	16.9	16.0	18.0	16.7	19.7	19.2	17.2
E88550	17.4	17.4	17.0	20.0	17.7	20.3	19.0	18.4
M85-610	14.7	12.8	13.9	16.6	14.9	15.9	16.3	15.1
M86-1322	13.6	11.8	13.6	14.4	14.0	15.3	17.0	13.5
M86-1410	15.5	15.8	15.6	17.9	16.5	18.5	18.5	18.0
M87-1621	18.9	16.9	17.3	20.1	19.8	19.4	19.8	19.6

UNIFORM TEST I, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Royal IA	Ingham Co. MI	Lamber-ton MN	London Ont.	Brookings SD
Bell (SCN)	42.3	43.2	42.0	42.4	41.1	42.8
Glenwood (0)	40.6	40.8	40.5	39.6	40.1	41.9
Hardin	40.4	40.1	40.8	40.5	39.0	41.4
Sturdy (L)	40.8	40.5	41.3	41.7	39.5	41.0
M84-916 (I)	40.1	39.2	40.7	40.5	39.1	40.8
A Hardin BC (k)	41.2	41.3	41.8	40.4	40.3	42.2
AC89-145021	43.5	42.5	43.5	44.3	43.5	43.6
AM89-144003	40.3	39.6	40.0	41.5	38.9	41.3
AM89-144026	40.7	40.5	40.6	41.5	39.7	41.0
AM89-144029	39.3	39.3	39.2	40.0	38.1	39.7
AM89-144036	39.9	40.3	40.9	39.8	38.8	39.7
E88550	40.9	39.9	40.6	42.5	40.0	41.7
M85-610	42.9	42.1	43.1	43.1	42.2	43.9
M86-1322	40.0	39.3	40.5	40.8	38.1	41.4
M86-1410	42.9	42.2	42.3	44.3	41.7	44.0
M87-1621	41.9	41.4	42.3	42.7	40.5	42.5

OIL (%)

Strain	Mean 5 Tests					
Bell (SCN)	20.5	20.2	20.5	20.3	21.1	20.5
Glenwood (0)	20.5	19.9	20.3	20.7	21.0	20.4
Hardin	21.1	21.3	20.9	20.5	21.7	21.1
Sturdy (L)	20.4	20.9	20.1	19.3	20.9	20.8
M84-916 (I)	21.0	21.4	20.4	20.6	21.6	21.1
A Hardin BC (k)	20.8	20.6	20.6	20.9	21.0	20.9
AC89-145021	18.5	18.6	18.6	17.4	18.9	18.9
AM89-144003	20.4	20.7	20.4	19.6	20.7	20.7
AM89-144026	20.7	20.9	20.5	20.2	21.2	20.5
AM89-144029	21.2	21.1	21.1	20.0	22.4	21.4
AM89-144036	20.9	21.0	20.0	20.5	21.4	21.7
E88550	20.3	20.4	20.7	19.4	20.8	20.4
M85-610	19.0	19.2	18.9	18.2	19.9	18.6
M86-1322	21.7	22.1	21.0	21.0	22.6	21.7
M86-1410	18.0	18.4	18.8	17.0	18.1	17.5
M87-1621	21.1	21.7	20.6	20.6	21.4	21.0

PRELIMINARY TEST I, 1991

Strain	Parentage	Generation Composited	Unique Traits
Glenwood (0)	Evans x Peterson 85	F5	
Sturdy (L)	M70-127 x Century	F5	
M84-916 (I)	A79-136012 x Dawson	F5	Rps1
AC90-115017	(NK S23-03 x A86-152032) x Sturdy	F5	Fe Chlor. Res.
AC90-115022	(NK S23-03 x A86-152032) x Sturdy	F5	Fe Chlor. Res.
AC90-115026	(NK S23-03 x A86-152032) x Sturdy	F5	Fe Chlor. Res.
AC90-115043	(NK S23-03 x A86-152032) x Sturdy	F5	Fe Chlor. Res.
AM89-144001	BSR 101 x Asgrow A1937	F5	
AM90-111010	AgriPro AP2190 x Chamberlain	F5	BSR Res.
AM90-111022	AgriPro AP2190 x Asgrow A3427	F5	
AM90-112003	AgriPro AP2190 x Asgrow A3427	F5	
AM90-112017	Asgrow A3427 x Pride B236	F5	
E88080	C1629 x LN80-7579	F3	
E90029	DSR-171 x Pride B216	F3	
LL89-60	Williams^{2} X PI 416.997	F5	BS Tol.
M87-22	Evans x Asgrow A1937	F5	Rps1
M87-135	Sibley x Hack	F5	Rps1
M87-159	Sibley x Hack	F5	Rps1
M87-160	Sibley x Hack	F5	Rps1
M87-170	Sibley x Hack	F5	Rps1
M87-227	A82-161034 x Dawson	F5	Rps1
M87-642	Sibley x BSR 101	F4	Rps1
M87-1703	Ozzie x C1640	F5	Rps1
ORC 9004	Elgin x A81-155014	F5	
ORC 9006	KG 60 x Asgrow A2943	F5	

PRELIMINARY TEST I, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	BSR-Boone Plant n %	BSR-Boone Stem n %	PR Urbana Race 1	PR Ames Race 4	Chloro. Score Lamberton	Germ. Lafayette %	PS PSB SMV Lafayette a %	PS PSB SMV Lafayette n %	PS PSB SMV Lafayette a Score	Shatter Score Manhattan
Glenwood (0)	PGBDYIbI	100	87.8	R	S	1.3	54	27	1	3e	1
Sturdy (L)	PGBIYIbI	100	81.6	R	S	1.8	58	16	9	4e	2
M84-916 (I)	WGBDYBfI	100	61.2	R	S	2.0	58	30	0	3e	1
AC90-115017	PGBDYIbI	100	71.3	R	R	1.3	56	14	2	5e	1
AC90-115022	PGTIYIbI	90	59.2	R	H	2.0	46	11	6	5e	1
AC90-115026	PGTDYIbI	90	59.6	S	H	2.0	58	36	2	4e	1
AC90-115043	PGBDYBfI	80	36.7	R	R	1.8	68	23	14	4e	1
AM89-144001	PGBDYIbI	60	16.6	R	S	2.3	50	39	6	1	1
AM90-111010	P+WTTDYB1	100	28.5	R	S	2.8	36	31	4	5e	2
AM90-111022	PGBIYBfI	100	85.3	S	S	1.8	76	33	4	5e	1
AM90-112003	PTBDYB1I	100	50.0	R	S	2.8	36	29	16	5e	1
AM90-112017	PTBDYB1I	100	42.9	R	S	2.0	10	39	4	5m	1
E88080	PG+TBDYB1	90	14.2	R	S	2.8	44	34	4	4e	2
E90029	WGBDYBfI	100	65.6	S	S	3.3	46	38	4	5e	2
LL89-60	PTBDYBrI	100	66.1	S	S	3.5	30	44	4	1	1
M87-22	WTTDYB1I	100	66.8	S	S	2.5	80	21	0	4e	2
M87-135	WGTDYYI	100	71.1	R	S	2.3	66	16	10	5e	1
M87-159	WGTDYBfI	100	86.3	R	S	1.3	27	27	8	4e	1
M87-160	WGTIYYI	100	89.5	R	S	2.8	68	11	2	5e	1
M87-170	WGTDYBfI	100	81.4	R	S	2.5	78	20	4	4m	1
M87-227	WGBDYYI	100	69.2	R	S	1.8	54	24	12	5e	1
M87-642	PGBDYGrI	40	11.6	R	S	2.3	56	37	2	5s	2
M87-1703	PTBDYBrI	90	74.0	R	S	2.5	92	38	0	1	1
ORC 9004	PTBDYB1I	90	66.5	R	S	3.3	60	38	12	5s	1
ORC 9006	PTBDYYI	60	37.9	S	R	2.5	60	17	10	5s	2

PRELIMINARY TEST I, 1991

REGIONAL SUMMARY

No. of Tests Strain	Yield 7 bu/a	Rank 7 No.	Maturity 6 Date	Lodging 7 Score	Plant Height 7 In.	Seed Quality 6 Score	Seed Size 7 g/100	Composition Protein 5 %	 Oil 5 %
Glenwood (0)	47.0	24	-11.3	2.0	30	2.5	17.3	40.7	20.5
Sturdy (L)	55.2	6	4.3	2.3	39	1.9	19.6	41.0	20.2
M84-916 (I)	57.3	2	09/17*	3.0	39	1.9	19.0	40.8	20.6
AC90-115017	52.5	17	1.8	2.8	40	2.5	19.4	41.8	19.6
AC90-115022	53.2	14	2.3	2.5	37	2.3	18.0	41.6	19.7
AC90-115026	52.4	18	4.7	3.0	41	2.2	20.4	42.1	19.5
AC90-115043	57.3	2	0.7	1.9	36	1.9	18.5	41.0	20.4
AM89-144001	52.2	19	3.3	2.3	40	2.1	17.4	39.8	20.6
AM90-111010	53.1	15	1.8	2.8	38	1.9	19.8	41.2	19.7
AM90-111022	55.9	5	6.3	2.8	41	1.9	18.1	42.1	20.0
AM90-112003	53.7	11	-0.5	2.7	38	1.7	18.5	43.2	19.3
AM90-112017	56.7	4	0.8	2.5	40	1.8	22.5	39.6	20.5
E88080	53.5	12	6.0	2.3	41	1.8	21.8	41.8	20.0
E90029	51.7	21	6.2	3.5	43	2.3	16.3	40.7	21.0
LL89-60	46.3	25	4.2	2.6	41	2.6	22.9	42.1	19.9
M87-22	53.1	15	2.0	2.1	38	1.9	17.5	42.5	20.2
M87-135	51.9	20	2.5	1.6	37	1.9	19.2	41.9	20.5
M87-159	50.7	23	1.7	2.2	38	1.8	19.6	42.8	19.5
M87-160	53.8	10	1.0	1.7	35	2.0	17.8	41.4	20.4
M87-170	54.2	8	1.3	2.4	39	1.8	19.5	41.4	20.7
M87-227	53.4	13	-3.0	2.4	37	1.8	16.4	40.7	20.5
M87-642	53.9	9	1.7	2.5	39	2.0	19.0	40.9	20.3
M87-1703	51.6	22	1.3	2.1	37	1.9	19.2	42.0	20.3
ORC 9004	57.7	1	3.0	2.1	39	2.3	20.6	40.1	20.5
ORC 9006	54.3	7	-0.2	1.7	34	2.2	18.5	42.1	20.3

* 122.7 Days After Planting

PRELIMINARY TEST I, 1991

YIELD (bu/a)

Strain	Mean 7 Tests	Humboldt IA	Royal IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	47.0	47.0	38.5	55.1	49.6	44.8	45.6	48.4
Sturdy (L)	55.2	49.8	51.9	67.4	48.9	63.4	51.7	53.0
M84-916 (I)	57.3	50.5	53.6	69.4	51.9	62.9	58.9	53.8
AC90-115017	52.5	49.1	49.1	66.3	46.7	61.9	51.8	42.6
AC90-115022	53.2	53.5	48.7	66.6	47.1	55.9	53.2	47.3
AC90-115026	52.4	48.9	50.7	66.8	48.5	59.7	48.5	43.8
AC90-115043	57.3	52.2	52.9	71.9	51.6	62.7	56.7	53.0
AM89-144001	52.2	47.7	50.4	65.0	43.1	63.1	47.2	48.8
AM90-111010	53.1	48.2	50.0	65.1	48.6	62.1	51.3	46.4
AM90-111022	55.9	47.6	53.3	71.8	49.1	65.8	54.3	49.2
AM90-112003	53.7	50.4	50.0	61.1	49.5	63.5	48.5	52.7
AM90-112017	56.7	52.0	52.0	70.3	53.7	66.1	50.6	52.1
E88080	53.5	47.8	48.9	67.3	45.5	63.0	49.6	52.1
E90029	51.7	43.6	49.0	66.2	46.0	61.2	49.1	46.6
LL89-60	46.3	34.7	45.6	62.2	42.0	54.0	41.0	44.9
M87-22	53.1	46.5	53.9	58.9	51.1	61.2	50.1	50.3
M87-135	51.9	46.8	45.9	66.6	44.2	61.2	50.2	48.5
M87-159	50.7	45.5	49.2	67.5	45.8	52.6	51.7	42.7
M87-160	53.8	49.6	48.7	62.9	48.4	62.7	54.7	49.9
M87-170	54.2	51.8	50.1	64.9	48.8	62.6	51.8	49.4
M87-227	53.4	48.6	43.7	72.1	50.1	54.7	56.2	48.4
M87-642	53.9	48.6	51.3	73.1	44.7	59.2	50.9	49.7
M87-1703	51.6	45.2	43.7	72.0	47.3	60.5	48.7	44.1
ORC 9004	57.7	56.4	52.9	70.8	48.7	68.5	54.0	52.6
ORC 9006	54.3	49.8	46.6	73.5	53.4	55.9	50.5	50.1
C.V. (%)		6.3	5.4	5.9	6.3	7.3	4.3	7.4
L.S.D. (5%)		6.1	5.3	7.9	6.2	9.1	4.5	7.5
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, 1991

YIELD RANK

Strain	Yield Rank	Humboldt IA	Royal IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	24	19	25	25	7	25	24	16
Sturdy (L)	6	8	7	11	10	5	10	2
M84-916 (I)	2	6	2	9	3	8	1	1
AC90-115017	17	11	15	16	18	13	8	25
AC90-115022	14	2	18	14	17	20	7	18
AC90-115026	18	12	9	13	14	18	21	23
AC90-115043	2	3	4	5	4	9	2	2
AM89-144001	19	17	10	19	24	6	23	14
AM90-111010	15	15	12	18	13	12	12	20
AM90-111022	5	18	3	6	9	3	5	13
AM90-112003	11	7	12	23	8	4	21	4
AM90-112017	4	4	6	8	1	2	14	6
E88080	12	16	17	12	21	7	18	6
E90029	21	24	16	17	19	14	19	19
LL89-60	25	25	22	22	25	23	25	21
M87-22	15	21	1	24	5	14	17	8
M87-135	20	20	21	14	23	14	16	15
M87-159	23	22	14	10	20	24	10	24
M87-160	10	10	18	21	15	9	4	10
M87-170	8	5	11	20	11	11	8	12
M87-227	13	13	23	3	6	22	3	16
M87-642	9	13	8	2	22	19	13	11
M87-1703	22	23	23	4	16	17	20	22
ORC 9004	1	1	4	7	12	1	6	5
ORC 9006	7	8	20	1	2	20	15	9

PRELIMINARY TEST I, 1991

MATURITY (date)

Strain	Mean 6 Tests	Humboldt IA	Royal IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	-11.3		-8	-4	-8	-20	-17	-11
Sturdy (L)	4.3		4	7	3	2	3	7
M84-916 (I)	09/17		09/13	09/13	09/22	09/18	09/24	09/17
AC90-115017	1.8		2	4	0	0	0	5
AC90-115022	2.3		3	3	0	2	2	4
AC90-115026	4.7		6	6	2	1	3	10
AC90-115043	0.7		0	3	-1	-1	0	3
AM89-144001	3.3		4	5	1	1	2	7
AM90-111010	1.8		5	0	-1	1	0	6
AM90-111022	6.3		10	9	6	3	4	6
AM90-112003	-0.5		2	2	-3	-1	-1	-2
AM90-112017	0.8		2	4	-2	0	0	1
E88080	6.0		8	7	3	5	4	9
E90029	6.2		10	6	6	5	4	6
LL89-60	4.2		5	5	5	2	1	7
M87-22	2.0		6	1	4	1	0	0
M87-135	2.5		1	5	1	0	1	7
M87-159	1.7		6	3	0	-6	0	7
M87-160	1.0		4	0	-1	2	1	0
M87-170	1.3		3	5	0	0	-1	1
M87-227	-3.0		-6	5	-1	-7	-4	-5
M87-642	1.7		2	0	3	-2	1	6
M87-1703	1.3		-2	-1	3	4	2	2
ORC 9004	3.0		7	6	3	2	-1	1
ORC 9006	-0.2		2	8	-1	-7	-1	-2
Date Planted	05/18		05/23	05/11	05/23	05/14	05/16	05/22
Days To Mature	122.7		113	125	122	127	131	118

PRELIMINARY TEST I, 1991

LODGING (score)

Strain	Mean 7 Tests	Humboldt IA	Royal IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	2.0	2.3	1.5	3.5	1.5	1.0	1.0	3.5
Sturdy (L)	2.3	3.0	2.3	2.5	1.0	2.5	2.5	2.3
M84-916 (I)	3.0	3.6	2.8	4.0	2.5	3.0	2.5	2.5
AC90-115017	2.8	3.4	2.5	4.0	2.0	2.5	2.5	2.5
AC90-115022	2.5	2.9	2.3	3.5	1.5	3.0	3.0	1.5
AC90-115026	3.0	3.7	2.5	3.5	2.0	3.0	3.5	2.5
AC90-115043	1.9	2.8	1.7	3.0	1.5	2.0	1.0	1.3
AM89-144001	2.3	3.1	2.0	2.5	2.0	2.5	2.0	2.0
AM90-111010	2.8	3.6	2.8	4.0	2.0	3.0	2.0	2.3
AM90-111022	2.8	2.3	2.8	2.5	3.0	3.5	3.0	2.3
AM90-112003	2.7	3.3	2.9	3.0	3.0	3.0	2.0	1.8
AM90-112017	2.5	3.2	2.5	3.0	2.5	3.0	2.0	1.5
E88080	2.3	1.6	2.5	3.0	2.0	3.0	2.0	2.0
E90029	3.5	4.0	3.4	2.5	3.0	4.5	4.0	3.3
LL89-60	2.6	2.2	2.5	1.5	3.0	3.0	3.0	3.3
M87-22	2.1	1.5	1.9	4.0	1.5	2.5	1.5	2.0
M87-135	1.6	2.5	1.5	2.0	1.0	1.5	1.0	1.5
M87-159	2.2	2.8	1.8	2.5	2.0	2.5	2.0	2.0
M87-160	1.7	2.1	1.6	3.5	1.0	1.5	1.5	1.0
M87-170	2.4	3.1	1.9	3.5	2.0	3.0	1.0	2.0
M87-227	2.4	3.0	1.8	2.0	3.0	3.0	1.0	3.0
M87-642	2.5	3.3	2.1	2.5	1.5	3.0	2.5	2.5
M87-1703	2.1	3.4	2.3	1.5	1.5	2.0	1.5	2.5
ORC 9004	2.1	2.4	2.8	2.5	2.0	2.5	1.0	1.8
ORC 9006	1.7	1.6	1.6	4.0	1.5	1.0	1.0	1.5

PRELIMINARY TEST I, 1991

PLANT HEIGHT (inches)

Strain	Mean 7 Tests	Humboldt IA	Royal IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	30	32	26	32	29	27	28	35
Sturdy (L)	39	39	34	41	38	38	41	43
M84-916 (I)	39	38	35	41	38	41	42	41
AC90-115017	40	42	36	50	39	39	39	38
AC90-115022	37	38	36	36	33	40	35	39
AC90-115026	41	41	37	47	40	41	38	41
AC90-115043	36	38	31	39	38	37	36	36
AM89-144001	40	38	34	45	39	40	39	43
AM90-111010	38	37	34	39	38	42	35	41
AM90-111022	41	40	38	46	44	40	40	39
AM90-112003	38	36	32	40	40	40	36	40
AM90-112017	40	40	38	43	40	42	37	40
E88080	41	44	38	47	39	42	41	39
E90029	43	45	38	38	48	41	43	45
LL89-60	41	42	38	38	42	46	40	42
M87-22	38	38	34	39	40	40	37	38
M87-135	37	42	30	42	36	37	32	38
M87-159	38	42	33	40	38	35	36	40
M87-160	35	36	29	41	36	37	31	38
M87-170	39	42	34	42	39	39	37	40
M87-227	37	36	24	45	39	39	38	40
M87-642	39	39	35	39	41	41	38	40
M87-1703	37	36	30	34	40	40	41	37
ORC 9004	39	38	37	44	39	40	36	37
ORC 9006	34	38	28	51	29	32	29	33

PRELIMINARY TEST I, 1991

SEED QUALITY (score)

Strain	Mean 6 Tests	Humboldt IA	Royal IA	Ingham County MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	2.5	4.4	1.3		3.0	2.0	2.0	2.0
Sturdy (L)	1.9	1.4	1.8		3.0	2.0	2.0	1.0
M84-916 (I)	1.9	1.3	1.8		3.0	2.0	2.0	1.0
AC90-115017	2.5	1.7	2.5		3.5	2.0	3.0	2.0
AC90-115022	2.3	1.5	2.5		3.5	2.0	2.0	2.0
AC90-115026	2.2	1.9	2.0		3.5	2.0	2.0	2.0
AC90-115043	1.9	1.8	1.5		2.5	1.5	2.0	2.0
AM89-144001	2.1	1.7	2.0		3.0	2.0	2.0	2.0
AM90-111010	1.9	1.6	1.2		3.0	1.5	2.0	2.0
AM90-111022	1.9	1.4	1.4		2.5	2.0	2.0	2.0
AM90-112003	1.7	1.4	1.5		2.5	2.0	2.0	1.0
AM90-112017	1.8	1.2	1.6		3.0	2.0	2.0	1.0
E88080	1.8	1.3	1.4		3.0	2.0	2.0	1.0
E90029	2.3	1.7	2.5		3.0	2.5	2.0	2.0
LL89-60	2.6	2.0	2.3		3.0	2.5	4.0	2.0
M87-22	1.9	1.8	1.3		3.0	1.5	2.0	2.0
M87-135	1.9	1.6	2.1		3.0	1.5	2.0	1.0
M87-159	1.8	1.7	1.2		3.0	2.0	2.0	1.0
M87-160	2.0	1.4	2.0		3.0	1.5	2.0	2.0
M87-170	1.8	1.3	2.3		2.5	1.5	2.0	1.0
M87-227	1.8	1.9	1.2		3.0	1.5	2.0	1.0
M87-642	2.0	1.7	1.4		3.5	1.5	2.0	2.0
M87-1703	1.9	1.8	1.3		2.5	1.5	2.0	2.0
ORC 9004	2.3	2.2	2.2		4.0	1.5	2.0	2.0
ORC 9006	2.2	1.7	1.7		3.0	1.5	3.0	2.0

PRELIMINARY TEST I, 1991

SEED SIZE (g/100)

Strain	Mean 7 Tests	Humboldt IA	Royal IA	Ingham Co. MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	17.3	18.3	16.6	19.0	15.2	15.7	18.5	17.8
Sturdy (L)	19.6	19.9	17.9	21.5	17.3	19.2	20.8	20.4
M84-916 (I)	19.0	19.7	16.9	21.3	17.4	18.8	19.8	19.1
AC90-115017	19.4	20.3	17.5	21.3	17.9	18.8	20.4	19.8
AC90-115022	18.0	17.7	16.1	20.3	16.3	16.7	20.0	18.6
AC90-115026	20.4	20.2	18.4	22.0	19.6	19.7	21.3	21.9
AC90-115043	18.5	18.3	16.6	21.0	18.3	16.8	19.6	18.7
AM89-144001	17.4	17.8	15.3	19.8	15.9	17.2	17.9	17.9
AM90-111010	19.8	19.3	18.5	21.2	18.7	19.3	21.1	20.8
AM90-111022	18.1	17.0	16.6	20.8	18.0	17.7	19.0	17.3
AM90-112003	18.5	18.6	16.4	19.7	19.0	18.3	18.8	18.7
AM90-112017	22.5	23.2	20.5	25.5	21.3	21.4	22.8	23.0
E88080	21.8	20.0	19.0	29.7	19.1	20.7	21.7	22.2
E90029	16.3	15.4	15.2	19.4	15.2	15.0	17.3	16.3
LL89-60	22.9	22.6	23.0	20.9	25.3	23.1	20.1	25.6
M87-22	17.5	16.4	15.8	21.6	16.4	17.9	17.5	16.6
M87-135	19.2	19.9	17.6	20.3	18.3	17.8	20.7	19.8
M87-159	19.6	19.6	17.8	22.5	19.7	17.5	19.7	20.3
M87-160	17.8	18.1	16.4	19.5	16.4	17.1	19.3	17.6
M87-170	19.5	20.0	18.0	22.6	18.8	19.7	18.7	19.0
M87-227	16.4	16.1	14.0	21.7	16.5	14.7	16.1	15.4
M87-642	19.0	18.8	16.8	23.2	17.3	16.7	19.6	20.9
M87-1703	19.2	19.5	16.8	20.8	18.6	18.1	20.6	20.1
ORC 9004	20.6	21.0	19.2	23.6	19.6	20.0	20.7	20.0
ORC 9006	18.5	21.0	16.8	18.8	17.0	16.8	19.8	19.2

PRELIMINARY TEST I, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Royal IA	Ingham Co. MI	Lamberton MN	Brookings SD	Arlington WI
Glenwood (0)	40.7	40.5	40.9	40.0	41.5	40.5
Sturdy (L)	41.0	40.3	41.5	40.8	41.6	40.8
M84-916 (I)	40.8	39.9	40.4	41.3	43.1	39.2
AC90-115017	41.8	41.6	42.3	42.0	41.0	42.3
AC90-115022	41.6	40.2	41.9	41.4	43.6	40.7
AC90-115026	42.1	41.7	42.7	42.7	41.2	42.4
AC90-115043	41.0	40.3	41.0	41.2	41.8	40.8
AM89-144001	39.8	38.5	40.1	40.3	40.5	39.5
AM90-111010	41.2	40.4	41.5	41.1	42.1	40.8
AM90-111022	42.1	41.0	44.0	41.9	41.8	41.8
AM90-112003	43.2	42.5	43.7	43.7	43.8	42.4
AM90-112017	39.6	38.7	40.3	39.7	41.0	38.3
E88080	41.8	41.1	43.3	41.7	41.6	41.5
E90029	40.7	40.0	41.7	40.3	41.4	40.0
LL89-60	42.1	41.5	41.6	41.9	42.5	42.8
M87-22	42.5	41.7	44.0	42.1	42.4	42.5
M87-135	41.9	41.9	42.3	42.1	41.5	41.6
M87-159	42.8	40.8	42.0	43.9	45.6	41.8
M87-160	41.4	40.4	40.8	42.6	42.6	40.8
M87-170	41.4	41.5	41.2	41.7	42.0	40.5
M87-227	40.7	40.1	41.7	41.1	41.1	39.5
M87-642	40.9	40.5	39.9	42.2	40.9	41.0
M87-1703	42.0	40.9	42.5	42.1	41.5	43.0
ORC 9004	40.1	38.0	43.3	40.2	40.7	38.5
ORC 9006	42.1	42.4	42.3	42.5	42.8	40.7

PRELIMINARY TEST I, 1991

OIL (%)

Strain	Mean 5 Tests	Royal IA	Ingham Co. MI	Lamberton MN	Brookings SD	Arlington WI
Glenwood (0)	20.5	20.4	21.2	20.5	20.5	20.1
Sturdy (L)	20.2	20.9	20.1	20.3	20.5	19.3
M84-916 (I)	20.6	21.7	20.9	20.2	19.3	20.8
AC90-115017	19.6	19.9	19.7	19.5	20.7	18.1
AC90-115022	19.7	20.9	19.7	19.6	18.9	19.4
AC90-115026	19.5	19.8	19.3	19.3	20.5	18.6
AC90-115043	20.4	20.9	20.2	20.4	20.6	19.8
AM89-144001	20.6	21.4	20.5	20.1	20.6	20.4
AM90-111010	19.7	20.2	19.4	19.9	19.6	19.2
AM90-111022	20.0	20.1	19.5	19.8	20.6	20.0
AM90-112003	19.3	20.0	19.0	19.2	19.5	18.9
AM90-112017	20.5	21.1	20.7	20.5	20.0	20.3
E88080	20.0	20.4	19.2	19.8	20.9	19.8
E90029	21.0	21.2	21.0	20.8	21.2	20.9
LL89-60	19.9	20.1	20.8	19.9	20.1	18.7
M87-22	20.2	20.8	19.3	20.5	20.9	19.6
M87-135	20.5	20.8	20.3	20.7	21.1	19.5
M87-159	19.5	20.6	21.0	18.5	18.1	19.3
M87-160	20.4	21.2	20.6	20.1	20.4	19.5
M87-170	20.7	21.0	20.6	20.2	21.3	20.6
M87-227	20.5	21.0	20.5	20.4	20.7	19.9
M87-642	20.3	20.6	20.7	19.5	21.0	19.9
M87-1703	20.3	22.1	20.3	20.1	20.6	18.6
ORC 9004	20.5	21.4	19.4	20.6	20.6	20.4
ORC 9006	20.3	20.4	20.7	19.8	20.4	20.3

UNIFORM TEST II, 1991

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Burlison (L)	K74-113-76-486 x Century	4	F5	Rps1-b, Rps6
Jack (SCN)	Fayette x Hardin	2	F4	SCN 3, 4
Kenwood (II)	Elgin x Asgrow A1937	4	F5	
Sturdy (I)	M70-127 x Century	5	F5	
A87-196014	BSR 101 x A80-344003	2	F5	BSR Resis.
A87-297015	Pride B152 x A80-244003	2	F5	
C1787	C1627 x C1623	PTIIB	F5	
C1796	C1627 x A81-151026	PTIIB	F5	
HS88-4905	Conrad x Hayes	PTIIA	F5	Rps1-k
HS88-4906	Conrad x Hayes	PTIIA	F5	Rps1-k
HS88-4909	Conrad x Hayes	PTIIA	F5	Rps1-k
LN85-6800	LNX8132 x LN80-7532	1	F5	Rps1, BSR Resis.
LN86-1167	Hack x A80-244036	PTIIA	F5	Rps1-a
M85-647	Ozzie x Fayette	1	F4	Rps1, SCN 3, 4
M86-1973	L77-906 x M75-89	1	F4	SCN 3
ORC 8905	Pride B152 x Jewel	PTIIB	F5	
U8763041	Sherman x Harper	1	F5	
U892035	$SG_1/BC/85\text{-}E_1$+	PTIIB	F5	dtl
U892213	BSR 101 X C1626	PTIIB	F5	
U892317	BSR 101 x Century 84	PTIIB	F5	
U892431	$SG_1/BC/85\text{-}E_1$+	PTIIB	F5	dtl

* Number of years in test or name of 1990 test.

+$SG1/NS/84\text{-}RM_3/MS$ x 32 Elite High Yielding Lines.
See CROP SCI. 25:717-718

UNIFORM TEST II, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	BSR-Boone Plant n %	BSR-Boone Stem n %	PR Custer Phyto. Tol.	PR Urbana Race 1	PR Ames Race 4	Chlorosis Score Lamberton	Chlorosis Score Ames	PS PSB SMV Lafayette a %	PS PSB SMV Lafayette n %	PS PSB SMV Lafayette a Score	Shatter Score Manhattan
Burlison (L)	WTTIYBlI	100	70.0	3.8	R	R	2.0	1.9	52	6	4e	1
Jack (SCN)	WGBDYYI	60	7.3	5.3	S	S	1.8	2.0	62	12	4e	2
Kenwood (II)	PTBIYBlI	90	49.5	6.3	S	S	2.5	2.8	45	4	3e	1
Sturdy (I)	PGBIYIbI	100	87.1	5.8	R	S	1.8	1.8	16	9	4e	1
A87-196014	WGTIYBfI	40	7.0	4.5	R	S	2.0	2.6	36	4	4m	3
A87-297015	PTBDYBfI	100	66.9	3.6	R	S	3.0	3.0	45	2	3e	1
C1787	PGBDYIbI	100	78.4	5.1	S	S	2.5	2.4	52	2	2m	2
C1796	PGBDYBfI	100	86.5	4.6	S	S	1.5	2.5	47	2	2e	2
HS88-4905	PGBDYBfI	100	81.8	5.0	H	H	3.3	2.4	38	2	3e	2
HS88-4906	PGBDYBfI	100	81.0	4.6	R	R	3.5	2.4	55	4	2e	1
HS88-4909	PGBIYBfI	90	80.6	4.7	R	R	3.3	2.9	48	2	3e	2
LN85-6800	PGTDYIbI	100	40.6	4.4	R	S	3.0	3.1	53	0	2e	1
LN86-1167	WGTSYBfI	100	75.5	5.3	R	S	3.0	2.8	45	10	3e	1
M85-647	WGTDYYI	30	12.5	5.5	S	S	2.3	2.2	29	14	5m	1
M86-1973	PGBDYBfI	80	78.0	5.2	R	S	2.3	2.8	54	0	2e	1
ORC 8905	PGBIYYI	100	77.8	4.4	S	S	3.0	2.6	14	8	1	1
U8763041	WGBDYBfI	80	66.8	7.0	S	S	2.5	3.5	40	6	4e	1
U892035	WGBIYBfI	100	81.2	4.5	H	S	2.0	3.2	35	10	2e	1
U892213	PTBIYBlI	50	28.0	7.4	R	S	2.3	2.6	23	4	2m	2
U892317	PTTDYBlI	90	33.9	8.8	R	H	2.3	2.6	44	6	4m	2
U892431	PTTDYBr+BlI	100	44.5	6.0	S	S	3.3	2.9	22	4	3m	1

UNIFORM TEST II, 1991

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 22 Score	Seed Size 24 g/100	Composition Protein 5 %	 Oil 5 %
Burlison (L)	48.3	9	2.6	1.5	32	1.9	18.1	42.6	19.5
Jack (SCN)	49.5	4	5.9	2.3	41	2.2	14.1	39.4	21.3
Kenwood (II)	49.5	4	09/13*	1.9	34	2.0	15.4	37.4	21.8
Sturdy (I)	45.5	17	-4.2	1.6	32	2.2	18.1	39.6	21.1
A87-196014	46.8	15	-2.6	1.9	35	2.1	15.3	37.5	21.0
A87-297015	50.3	2	3.0	1.5	34	2.1	17.9	38.2	21.5
C1787	48.8	6	-0.2	1.8	35	2.1	17.7	39.1	21.4
C1796	48.1	10	0.2	1.6	35	1.9	16.3	38.6	21.1
HS88-4905	48.4	8	-3.1	1.5	34	2.0	17.5	38.2	21.8
HS88-4906	50.6	1	1.6	2.0	35	2.0	17.3	37.8	21.9
HS88-4909	49.9	3	-0.3	1.6	36	2.1	18.4	38.3	21.7
LN85-6800	47.3	14	1.4	1.6	35	2.1	15.7	39.4	21.6
LN86-1167	47.9	11	4.5	1.5	33	2.2	17.4	38.7	21.5
M85-647	42.8	21	-4.2	2.2	30	2.1	15.2	40.2	21.9
M86-1973	46.2	16	-1.8	1.6	30	2.3	17.5	38.5	20.9
ORC 8905	48.5	7	0.7	1.7	33	2.1	17.1	39.1	21.5
U8763041	47.5	13	-2.9	1.4	31	1.7	17.1	39.2	21.7
U892035	47.7	12	3.8	1.2	26	1.8	18.5	40.4	20.9
U892213	43.8	20	1.1	1.5	35	1.9	19.2	40.6	20.5
U892317	45.1	19	2.0	1.5	33	2.0	17.1	40.7	20.6
U892431	45.5	17	2.0	2.0	40	1.8	16.0	38.8	21.2

* 120.1 Days After Planting

UNIFORM TEST II, 1991

1990-1991 2-YEAR MEAN

No. of Tests Strain	Yield 46 bu/a	Rank 46 No.	Maturity 38 Date	Lodging 46 Score	Plant Height 46 In.	Seed Quality 42 Score	Seed Size 46 g/100	Composition Protein 10 %	 Oil 10 %
Burlison (L)	51.1	5	3.4	1.7	33	1.8	18.9	42.7	19.7
Jack (SCN)	52.3	3	5.6	2.4	40	2.2	15.0	40.0	21.4
Kenwood (II)	52.7	2	9/18.0*	2.0	35	2.1	16.0	38.4	21.7
Sturdy (I)	49.0	8	-3.2	1.8	33	2.2	18.2	40.1	21.2
A87-196014	51.5	4	-2.3	2.1	35	2.0	15.4	38.1	21.3
A87-297015	52.9	1	3.5	1.7	35	2.1	18.3	39.3	21.6
LN85-6800	50.9	6	2.2	1.7	36	2.1	16.3	39.7	21.7
M85-647	46.3	10	-3.3	2.4	31	2.0	15.5	40.6	21.8
M86-1973	48.8	9	-1.3	1.6	31	2.2	17.8	38.8	21.1
U8763041	50.1	7	-2.4	1.6	32	1.8	17.7	40.0	21.6

* 125.3 Days After Planting

1989-1991 3-YEAR MEAN

No. of Tests Strain	68	68	55	68	68	62	68	15	15
Burlison (L)	49.0	4	3.9	1.6	33	1.9	18.6	42.1	19.6
Kenwood (II)	51.4	1	9/20.0*	1.9	35	2.1	15.7	38.0	21.7
Sturdy (I)	48.5	5	-3.3	1.7	33	2.1	18.1	39.5	21.1
A87-196014	49.6	3	-1.8	1.9	34	1.9	15.2	37.8	21.2
A87-297015	51.0	2	3.6	1.6	34	2.1	18.0	38.5	21.4

* 126.1 Days After Planting

UNIFORM TEST II, 1991

YIELD (bu/a)

Strain	Mean 24 Tests	Ames IA	Arcadia IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Burlison (L)	48.3	55.7	51.2	51.0	57.3	43.0	55.7
Jack (SCN)	49.5	55.9	53.4	64.8	46.3	44.8	60.5
Kenwood (II)	49.5	60.4	54.2	60.8	58.0	37.5	29.4
Sturdy (I)	45.5	50.1	52.4	61.2	52.9	34.3	39.0
A87-196014	46.8	55.7	55.9	62.5	46.1	34.2	39.4
A87-297015	50.3	57.2	54.6	61.0	57.8	31.5	63.4
C1787	48.8	58.5	51.3	59.1	53.6	30.2	35.5
C1796	48.1	57.2	53.6	60.2	53.4	39.4	40.4
HS88-4905	48.4	56.6	57.0	65.2	57.9	37.3	47.4
HS88-4906	50.6	60.9	56.1	62.0	59.7	44.8	59.9
HS88-4909	49.9	55.6	54.1	66.8	62.0	35.6	55.1
LN85-6800	47.3	54.5	50.5	65.7	52.9	38.5	43.4
LN86-1167	47.9	59.6	54.1	51.2	59.4	33.9	46.1
M85-647	42.8	50.9	45.1	56.0	31.5	38.7	27.4
M86-1973	46.2	48.3	49.6	62.5	65.8	37.2	32.7
ORC 8905	48.5	58.0	51.6	63.7	63.5	34.8	50.8
U8763041	47.5	53.4	52.6	55.7	59.7	33.2	32.7
U892035	47.7	56.8	52.3	56.3	59.4	32.4	50.2
U892213	43.8	50.9	47.0	55.8	56.2	32.4	46.9
U892317	45.1	52.3	49.8	55.8	56.2	38.6	50.7
U892431	45.5	51.1	49.1	54.9	57.6	40.7	33.8
C.V. (%)		5.6	6.1	8.1	9.8	12.5	15.3
L.S.D. (5%)		5.0	5.2	7.9	8.3	7.6	11.3
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, 1991

YIELD (bu/a)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham Co. MI	Lenawee Co. MI	Lamber-ton MN	Waseca MN	Spick-ard MO	David City NE	Oconto NE	Oneill NE
Burlison (L)	47.7	32.7	70.0	65.2	55.7	48.9	65.2	49.6	33.0	19.5
Jack (SCN)	43.1	29.2	69.3	65.8	59.9	55.1	68.7	52.5	39.9	33.3
Kenwood (II)	38.1	28.0	73.7	67.0	65.9	55.9	71.0	51.7	50.5	30.8
Sturdy (I)	31.7	14.1	74.1	64.2	57.2	49.1	49.0	53.9	47.5	28.7
A87-196014	31.0	13.2	68.0	65.5	64.1	57.5	62.8	55.3	46.8	37.7
A87-297015	48.3	36.7	68.1	71.0	54.8	56.7	66.4	51.8	38.1	35.3
C1787	47.7	24.7	72.7	65.1	56.0	55.6	66.7	57.9	45.2	35.0
C1796	45.7	17.7	73.5	58.3	49.5	58.1	65.4	59.6	42.6	38.4
HS88-4905	32.2	18.0	70.0	52.5	65.5	62.4	55.5	53.9	49.1	38.8
HS88-4906	44.8	28.7	65.9	64.9	67.2	54.9	60.1	52.6	45.1	36.2
HS88-4909	32.2	18.6	69.9	68.9	61.7	60.5	63.3	54.9	46.3	39.4
LN85-6800	40.0	28.1	63.0	65.7	57.6	57.9	74.9	50.0	36.9	28.1
LN86-1167	47.6	31.8	72.0	54.0	57.6	52.8	63.6	51.8	36.8	22.8
M85-647	35.9	23.1	65.3	47.4	60.1	51.9	59.3	47.9	46.1	25.5
M86-1973	19.6	24.6	67.3	63.8	67.2	58.6	58.7	52.8	49.5	25.5
ORC 8905	45.9	28.1	64.4	65.8	57.5	52.4	66.9	53.1	36.0	29.8
U8763041	34.1	26.2	70.2	54.9	63.1	55.9	64.2	57.8	54.7	38.8
U892035	19.2	30.9	77.4	60.8	63.3	56.8	66.9	52.3	47.4	30.5
U892213	37.0	24.2	62.6	65.1	53.6	46.6	58.8	49.4	25.9	31.9
U892317	38.2	22.2	68.1	62.6	51.2	49.4	64.1	44.5	35.6	29.0
U892431	48.3	27.0	61.7	62.3	63.4	57.3	71.6	51.2	31.2	23.4
C.V. (%)	20.1	14.6	5.2	10.5	11.7	7.8	8.5	5.6	13.6	15.2
L.S.D. (5%)	13.1	6.1	7.1	13.2	11.6	7.1	11.4	4.8	9.4	7.7
Row Sp. (In.)	24	24	30	30	10	10	30	30	30	30
Rows/Plot	4	4	4	4	10	10	4	4	4	4
Reps	3	3	2	2	3	3	2	3	3	3

UNIFORM TEST II, 1991

YIELD (bu/a)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Woods-lee Ont.	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Burlison (L)	49.1	47.4	33.6	35.8	56.6	49.0	36.5	48.8
Jack (SCN)	48.9	45.1	28.7	38.3	53.5	46.8	34.1	49.2
Kenwood (II)	44.9	45.3	28.6	39.6	54.8	53.5	37.7	51.2
Sturdy (I)	35.0	37.5	28.2	37.2	51.0	52.2	38.9	53.0
A87-196014	33.3	34.5	29.4	36.1	52.3	49.0	41.8	50.6
A87-297015	52.0	44.9	27.9	41.0	55.5	44.0	38.7	49.7
C1787	41.1	46.1	33.2	40.7	50.1	53.4	42.6	50.0
C1796	45.1	41.4	28.7	40.6	52.4	47.8	36.4	49.0
HS88-4905	44.2	36.7	25.7	35.3	55.5	52.6	39.6	53.3
HS88-4906	45.8	48.7	31.2	36.3	53.2	49.6	37.2	47.7
HS88-4909	46.2	45.4	26.0	42.6	49.3	51.3	43.2	47.9
LN85-6800	46.6	35.5	28.3	37.9	48.4	46.2	31.4	53.9
LN86-1167	48.8	37.8	29.1	40.2	55.9	50.1	38.2	53.4
M85-647	35.7	37.2	25.7	38.4	49.5	47.3	29.2	52.6
M86-1973	35.9	44.2	22.7	34.1	46.2	51.2	37.4	53.8
ORC 8905	48.7	40.0	28.8	37.0	49.0	49.0	36.8	51.2
U8763041	38.4	35.6	24.8	38.4	49.9	51.1	40.2	54.0
U892035	39.6	39.0	22.5	37.6	50.0	51.1	36.7	56.1
U892213	36.2	34.8	24.5	31.7	46.0	44.3	35.5	53.7
U892317	40.6	37.1	23.8	32.2	53.2	44.2	34.3	49.7
U892431	34.6	37.7	25.2	37.4	48.1	40.7	34.9	48.7
C.V. (%)	9.3	9.8	11.6	10.5	5.9	4.7	6.6	7.2
L.S.D. (5%)	6.6	6.6	5.2	ns	5.3	3.8	4.1	6.0
Row Sp. (In.)	30	30	30	24	24	30	30	30
Rows/Plot	4	4	4	4	4	4	4	4
Reps	3	3	3	3	3	3	3	3

UNIFORM TEST II, 1991

YIELD RANK

Strain	Yield Rank	Ames IA	Arcadia IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Burlison (L)	9	11	15	21	12	3	4
Jack (SCN)	4	10	9	4	19	1	2
Kenwood (II)	4	2	5	11	8	9	20
Sturdy (I)	17	20	11	9	17	14	15
A87-196014	15	11	3	6	20	15	14
A87-297015	2	6	4	10	10	20	1
C1787	6	4	14	13	15	21	16
C1796	10	6	8	12	16	5	13
HS88-4905	8	9	1	3	9	10	9
HS88-4906	1	1	2	8	4	1	3
HS88-4909	3	13	6	1	3	12	5
LN85-6800	14	14	16	2	17	8	12
LN86-1167	11	3	6	20	6	16	11
M85-647	21	18	21	15	21	6	21
M86-1973	16	21	18	6	1	11	19
ORC 8905	7	5	13	5	2	13	6
U8763041	13	15	10	18	4	17	18
U892035	12	8	12	14	6	18	8
U892213	20	18	20	16	13	18	10
U892317	19	16	17	16	13	7	7
U892431	17	17	19	19	11	4	17

UNIFORM TEST II, 1991

YIELD RANK

Strain	Bluff-ton IN	Lafay-ette IN	Ingham Co. MI	Lenawee Co. MI	Lamber-ton MN	Waseca MN	Spick-ard MO	David City NE	Oconto NE	Oneill NE
Burlison (L)	3	2	8	7	17	20	10	18	19	21
Jack (SCN)	9	5	11	4	11	13	4	11	13	9
Kenwood (II)	12	9	3	3	3	10	3	15	2	11
Sturdy (I)	18	20	2	12	15	19	21	6	5	15
A87-196014	19	21	14	7	5	6	15	4	7	5
A87-297015	1	1	12	1	18	9	8	13	14	7
C1787	3	12	5	9	16	12	7	2	10	8
C1796	7	19	4	17	21	4	9	1	12	4
HS88-4905	16	18	8	20	4	1	20	6	4	2
HS88-4906	8	6	16	11	1	14	16	10	11	6
HS88-4909	16	17	10	2	9	2	14	5	8	1
LN85-6800	10	7	19	6	12	5	1	17	15	16
LN86-1167	5	3	6	19	12	15	13	14	16	20
M85-647	14	15	17	21	10	17	17	20	9	17
M86-1973	20	13	15	13	1	3	19	9	3	17
ORC 8905	6	7	18	4	14	16	5	8	17	13
U8763041	15	11	7	18	8	10	11	3	1	2
U892035	21	4	1	16	7	8	5	12	6	12
U892213	13	14	20	9	19	21	18	19	21	10
U892317	11	16	12	14	20	18	12	21	18	14
U892431	1	10	21	15	6	7	2	16	20	19

UNIFORM TEST II, 1991

YIELD RANK

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Woods-lee Ont.	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Burlison (L)	2	2	1	17	1	11	14	18
Jack (SCN)	3	6	7	9	6	16	19	16
Kenwood (II)	10	5	9	6	5	1	9	10
Sturdy (I)	19	14	11	13	11	4	6	8
A87-196014	21	21	4	16	10	11	3	12
A87-297015	1	7	12	2	3	20	7	14
C1787	12	3	2	3	12	2	2	13
C1796	9	9	7	4	9	14	15	17
HS88-4905	11	17	14	18	3	3	5	7
HS88-4906	8	1	3	15	7	10	11	21
HS88-4909	7	4	13	1	16	5	1	20
LN85-6800	6	19	10	10	18	17	20	3
LN86-1167	4	12	5	5	2	9	8	6
M85-647	18	15	14	7	15	15	21	9
M86-1973	17	8	20	19	20	6	10	4
ORC 8905	5	10	6	14	17	11	12	10
U8763041	15	18	17	7	14	7	4	2
U892035	14	11	21	11	13	7	13	1
U892213	16	20	18	21	21	18	16	5
U892317	13	16	19	20	7	19	18	14
U892431	20	13	16	12	19	21	17	19

UNIFORM TEST II, 1991

MATURITY (date)

Strain	Mean 20 Tests	Ames IA	Arcadia IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Burlison (L)	2.6	0			1	3	-1
Jack (SCN)	5.9	5			10	8	3
Kenwood (II)	09/13	09/07			09/08	08/28	09/06
Sturdy (I)	-4.2	-4			-4	-6	-7
A87-196014	-2.6	-3			0	-2	-4
A87-297015	3.0	2			5	3	2
C1787	-0.2	-2			-4	-1	0
C1796	0.2	1			3	-2	-3
HS88-4905	-3.1	-2			-1	-4	-7
HS88-4906	1.6	2			6	1	-2
HS88-4909	-0.3	-1			1	-3	-1
LN85-6800	1.4	0			5	-1	-3
LN86-1167	4.5	4			6	9	6
M85-647	-4.2	-2			-4	-3	-7
M86-1973	-1.8	-1			2	-3	-7
ORC 8905	0.7	3			5	-3	-2
U8763041	-2.9	-3			3	-3	-4
U892035	3.8	4			8	7	2
U892213	1.1	0			1	-1	1
U892317	2.0	2			5	1	-3
U892431	2.0	0			7	1	-3
Date Planted	05/16	05/07			05/09	05/10	04/30
Days to Mature	120.1	123			122	110	129

UNIFORM TEST II, 1991

MATURITY (date)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham Co. MI	Lenawee Co. MI	Lamber-ton MN	Waseca MN	Spick-ard MO	David City NE	Oconto NE	Oneill NE
Burlison (L)	-1	7	2	4	1	2	2	6		
Jack (SCN)	-1	9	8	9	5	11	5	5		
Kenwood (II)	09/16	08/26	09/13	09/10	09/30	09/23	08/31	09/25		
Sturdy (I)	-7	-8	-1	-2	-5	-6	-7	0		
A87-196014	-5	-7	-3	1	-5	-2	0	0		
A87-297015	8	5	1	4	1	7	3	3		
C1787	-3	-1	2	1	0	-1	-2	2		
C1796	-2	-4	3	5	1	0	-2	2		
HS88-4905	-6	-3	-4	-4	-2	3	-5	3		
HS88-4906	-2	-2	2	3	4	8	3	6		
HS88-4909	-5	-6	-1	4	3	7	2	4		
LN85-6800	-2	1	0	3	1	-1	2	3		
LN86-1167	1	13	2	2	0	1	5	4		
M85-647	-9	-7	-6	-4	0	-2	-3	-1		
M86-1973	-8	-5	0	4	3	1	-1	3		
ORC 8905	-1	-2	-1	4	4	3	2	3		
U8763041	-5	-1	-6	-1	-10	-1	-2	-4		
U892035	-1	11	4	6	0	4	4	3		
U892213	0	6	-3	4	-1	-1	2	1		
U892317	-2	1	2	5	1	4	2	3		
U892431	-1	3	2	6	1	3	5	4		
Date Planted	05/10	05/11	05/11	05/13	05/23	05/14	05/14	06/10		
Days to Mature	129	107	125	120	130	132	109	107		

UNIFORM TEST II, 1991

MATURITY (date)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Woods-lee Ont.	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Burlison (L)	6	3	0	5	1	4	4	3
Jack (SCN)	12	5	-2	4	6	6	5	F
Kenwood (II)	09/19	09/09	09/06	09/27	09/16	09/29	09/09	09/23
Sturdy (I)	-4	-4	-9	0	-4	0	-7	1
A87-196014	-2	-7	-8	0	-1	0	-3	0
A87-297015	2	1	-1	0	0	5	4	4
C1787	-2	-1	1	1	-2	2	2	4
C1796	-2	0	0	1	-1	2	-1	2
HS88-4905	-3	-6	-10	0	-4	-1	-2	-3
HS88-4906	1	-2	-9	2	0	5	3	3
HS88-4909	0	-5	-9	0	-2	3	0	4
LN85-6800	7	1	-1	1	-1	4	3	5
LN86-1167	8	6	1	6	4	3	4	4
M85-647	-3	-4	-13	-1	-3	-2	-4	-6
M86-1973	-3	-7	-10	1	-3	1	-5	2
ORC 8905	-2	1	-9	4	-2	3	2	2
U8763041	-1	-3	-9	-1	-2	-2	1	-3
U892035	5	4	-1	4	3	1	4	F
U892213	0	1	0	2	1	3	3	3
U892317	2	1	0	2	1	5	3	4
U892431	1	-1	-2	0	1	5	4	4
Date Planted	05/29	05/15	05/08	06/07	05/14	05/16	05/22	05/22
Days to Mature	113	117	121	112	125	136	110	124

UNIFORM TEST II, 1991

LODGING (score)

Strain	Mean 24 Tests	Ames IA	Arcadia IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Burlison (L)	1.5	1.2	1.5	2.7	1.7	1.0	1.0
Jack (SCN)	2.3	2.0	2.2	3.6	3.3	1.7	1.0
Kenwood (II)	1.9	1.5	1.9	3.2	2.7	1.2	1.0
Sturdy (I)	1.6	1.2	1.6	2.9	1.8	1.0	1.0
A87-196014	1.9	1.3	1.9	3.2	2.8	1.0	1.0
A87-297015	1.5	1.1	1.5	2.1	2.2	1.0	1.0
C1787	1.8	1.4	1.7	2.6	2.7	1.0	1.0
C1796	1.6	1.3	1.7	2.5	2.3	1.0	1.0
HS88-4905	1.5	1.2	1.7	3.2	1.5	1.2	1.0
HS88-4906	2.0	1.4	1.9	3.6	3.0	1.0	1.0
HS88-4909	1.6	1.3	1.6	2.8	2.0	1.0	1.0
LN85-6800	1.6	1.1	1.5	2.8	2.5	1.0	1.0
LN86-1167	1.5	1.2	1.5	2.0	1.5	1.0	1.0
M85-647	2.2	1.5	1.8	3.7	4.3	1.2	1.0
M86-1973	1.6	1.4	1.6	3.1	1.3	1.0	1.0
ORC 8905	1.7	1.2	1.5	2.7	1.8	1.0	1.0
U8763041	1.4	1.2	1.6	2.3	1.3	1.0	1.0
U892035	1.2	1.2	1.7	1.6	1.2	1.0	1.0
U892213	1.5	1.3	1.7	2.3	1.8	1.0	1.0
U892317	1.5	1.3	1.6	2.0	1.7	1.0	1.0
U892431	2.0	1.3	1.8	2.7	2.2	1.3	1.2

UNIFORM TEST II, 1991

LODGING (score)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham Co. MI	Lenawee Co. MI	Lamber-ton MN	Waseca MN	Spick-ard MO	David City NE	Oconto NE	Oneill NE
Burlison (L)	1.0	1.0	2.5	2.0	2.0	3.0	1.0	1.0	1.3	1.0
Jack (SCN)	1.5	1.2	3.0	3.0	3.3	4.0	3.5	2.7	1.3	3.0
Kenwood (II)	1.0	1.0	3.0	2.0	3.0	3.0	2.0	1.3	1.7	1.3
Sturdy (I)	1.0	1.0	3.0	3.0	2.0	1.7	1.0	1.3	1.0	1.3
A87-196014	1.0	1.0	3.5	2.0	2.7	3.0	3.0	2.0	2.3	1.3
A87-297015	1.0	1.0	1.5	2.0	1.3	3.0	1.0	1.0	2.7	1.0
C1787	1.2	1.0	3.5	2.5	2.3	3.0	1.5	1.0	2.3	1.0
C1796	1.2	1.0	3.0	2.5	1.7	3.0	1.0	1.0	1.0	2.0
HS88-4905	1.2	1.0	2.0	2.0	1.0	3.0	1.0	1.7	1.7	1.3
HS88-4906	1.2	1.0	3.0	2.5	3.3	3.0	2.0	2.0	2.3	1.3
HS88-4909	1.0	1.0	1.5	2.0	2.0	3.0	1.0	1.3	1.3	1.3
LN85-6800	1.0	1.0	2.0	2.0	2.3	3.0	1.5	1.3	1.7	1.7
LN86-1167	1.0	1.0	3.5	2.5	1.7	3.0	1.0	1.3	2.3	1.3
M85-647	1.0	1.0	3.5	2.5	3.3	3.3	3.0	2.7	2.3	1.3
M86-1973	1.0	1.0	3.0	2.0	2.3	2.3	1.0	1.3	2.3	1.0
ORC 8905	1.0	1.0	3.0	1.5	2.3	3.0	1.5	1.0	2.3	1.3
U8763041	1.0	1.0	2.0	2.0	2.0	2.7	1.0	1.0	1.7	1.0
U892035	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	2.0	1.0
U892213	1.2	1.0	2.5	2.0	1.7	3.0	1.5	1.0	1.3	1.0
U892317	1.0	1.0	2.5	2.0	2.0	3.0	2.0	1.0	2.0	1.0
U892431	1.5	1.5	3.5	2.5	2.3	3.0	2.0	1.7	3.0	1.3

UNIFORM TEST II, 1991

LODGING (score)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Woods-lee Ont.	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Burlison (L)	1.3	1.2	1.3	1.0	1.0	2.0	1.0	2.5
Jack (SCN)	2.7	1.6	1.3	1.0	1.3	3.0	1.0	3.7
Kenwood (II)	2.7	1.4	1.3	1.0	1.4	2.3	1.0	3.0
Sturdy (I)	2.3	1.1	1.0	1.0	1.0	2.0	1.0	2.0
A87-196014	2.3	1.3	1.0	1.0	1.0	3.0	1.0	2.2
A87-297015	1.0	1.6	1.0	1.0	1.0	2.7	1.0	3.2
C1787	2.3	1.4	1.1	1.0	1.0	2.3	1.0	3.2
C1796	2.0	1.2	1.0	1.0	1.0	2.0	1.0	3.0
HS88-4905	2.7	1.3	1.0	1.0	1.0	1.3	1.0	1.7
HS88-4906	2.3	1.4	1.3	1.0	1.0	3.0	1.0	4.2
HS88-4909	2.3	1.2	1.0	1.0	1.0	3.0	1.0	2.8
LN85-6800	1.7	1.2	1.0	1.0	1.0	2.3	1.0	2.5
LN86-1167	1.0	1.0	1.0	1.0	1.0	2.3	1.0	2.0
M85-647	3.7	1.1	1.0	1.0	1.0	4.0	1.3	2.7
M86-1973	1.3	1.2	1.1	1.0	1.0	2.0	1.0	2.0
ORC 8905	2.0	1.1	1.0	1.0	1.0	2.7	1.0	3.0
U8763041	2.7	1.3	1.1	1.0	1.0	1.0	1.0	1.8
U892035	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.2
U892213	1.7	1.2	1.0	1.0	1.0	1.7	1.0	3.0
U892317	1.3	1.1	1.0	1.0	1.0	1.3	1.0	2.0
U892431	3.0	1.5	1.1	1.0	1.3	3.0	1.0	3.2

UNIFORM TEST II, 1991

PLANT HEIGHT (inches)

Strain	Mean 24 Tests	Ames IA	Arcadia IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Burlison (L)	32	32	31	40	35	31	21
Jack (SCN)	41	39	44	46	43	39	30
Kenwood (II)	34	32	35	41	40	32	25
Sturdy (I)	32	27	31	39	35	29	22
A87-196014	35	32	35	42	37	33	25
A87-297015	34	32	35	38	39	28	27
C1787	35	36	33	42	37	30	23
C1796	35	32	34	42	39	32	25
HS88-4905	34	34	37	43	40	32	25
HS88-4906	35	32	36	45	40	34	27
HS88-4909	36	35	37	44	39	31	27
LN85-6800	35	33	35	44	42	32	25
LN86-1167	33	29	33	41	37	26	24
M85-647	30	28	29	38	30	27	20
M86-1973	30	27	29	41	34	25	15
ORC 8905	33	34	33	43	37	28	25
U8763041	31	30	32	40	35	28	20
U892035	26	25	24	36	22	24	16
U892213	35	32	35	44	40	31	26
U892317	33	31	32	42	37	30	25
U892431	40	40	42	46	45	40	27

UNIFORM TEST II, 1991

PLANT HEIGHT (inches)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham Co. MI	Lenawee Co. MI	Lamber-ton MN	Waseca MN	Spick-ard MO	David City NE	Oconto NE	Oneill NE
Burlison (L)	28	28	41	34	38	39	29	42	36	29
Jack (SCN)	33	35	52	47	41	54	45	48	45	42
Kenwood (II)	26	29	46	37	39	43	35	42	36	34
Sturdy (I)	25	25	41	39	37	34	28	41	41	33
A87-196014	25	30	44	40	39	43	35	46	39	38
A87-297015	30	31	41	42	38	42	35	44	38	34
C1787	27	31	47	37	40	42	35	46	46	37
C1796	29	32	45	40	39	44	35	45	42	32
HS88-4905	27	28	41	35	40	45	28	46	38	35
HS88-4906	28	31	46	39	39	45	35	45	40	35
HS88-4909	26	29	46	39	40	48	30	46	41	35
LN85-6800	26	29	44	42	39	41	35	45	39	41
LN86-1167	24	31	40	39	38	40	33	44	42	37
M85-647	26	25	36	31	36	34	29	40	41	27
M86-1973	19	24	40	35	39	38	24	42	38	30
ORC 8905	28	26	46	34	40	44	32	44	39	34
U8763041	26	31	38	31	35	40	31	40	40	28
U892035	17	20	32	24	32	32	20	37	38	27
U892213	27	29	45	41	37	44	36	45	39	34
U892317	24	26	41	41	39	42	33	43	40	31
U892431	34	37	44	49	40	51	42	53	47	44

UNIFORM TEST II, 1991

PLANT HEIGHT (inches)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Woods-lee Ont.	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Burlison (L)	27	27	21	23	31	39	28	38
Jack (SCN)	33	34	23	29	37	46	40	47
Kenwood (II)	28	32	20	26	31	39	31	38
Sturdy (I)	24	22	20	21	28	42	29	43
A87-196014	29	29	23	24	34	46	34	44
A87-297015	28	24	19	25	30	40	30	43
C1787	28	31	24	28	32	41	33	41
C1796	28	28	21	26	31	43	32	42
HS88-4905	30	31	20	23	30	42	32	42
HS88-4906	31	29	22	25	30	41	35	41
HS88-4909	29	30	22	27	30	45	35	41
LN85-6800	32	26	21	25	29	42	29	44
LN86-1167	28	24	18	22	28	37	28	40
M85-647	25	26	19	22	26	33	38	37
M86-1973	22	23	19	20	26	37	25	42
ORC 8905	27	26	19	21	30	41	28	42
U8763041	26	27	18	23	26	34	28	35
U892035	21	21	16	24	24	26	25	37
U892213	28	27	21	24	30	41	32	41
U892317	26	27	18	21	28	39	29	39
U892431	31	36	22	28	41	47	37	46

UNIFORM TEST II, 1991

SEED QUALITY (score)

Strain	Mean 22 Tests	Ames IA	Arcadia IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Burlison (L)	1.9	3.0	4.0	1.8	1.2	1.8	1.8
Jack (SCN)	2.2	2.6	3.4	2.3	1.2	1.5	1.8
Kenwood (II)	2.0	2.4	3.8	2.1	1.2	1.7	1.8
Sturdy (I)	2.2	2.7	2.9	2.3	1.2	1.5	2.3
A87-196014	2.1	2.3	3.2	2.0	1.3	1.8	2.0
A87-297015	2.1	2.7	2.9	1.3	1.2	1.5	2.8
C1787	2.1	2.5	3.1	1.6	1.2	1.5	2.3
C1796	1.9	2.6	2.7	1.7	1.2	1.7	2.2
HS88-4905	2.0	3.0	2.5	1.3	1.2	1.7	2.2
HS88-4906	2.0	2.3	3.2	2.0	1.2	2.0	2.0
HS88-4909	2.1	2.4	2.4	1.8	1.2	2.3	2.3
LN85-6800	2.1	3.0	4.0	1.3	1.2	1.7	1.7
LN86-1167	2.2	3.0	3.6	1.5	1.2	2.2	2.2
M85-647	2.1	2.0	3.9	1.5	1.2	1.7	2.2
M86-1973	2.3	2.4	3.7	2.1	1.2	2.7	3.0
ORC 8905	2.1	2.1	3.1	1.7	1.2	2.0	1.8
U8763041	1.7	2.0	3.2	2.0	1.2	1.5	2.2
U892035	1.8	2.0	3.1	1.3	1.2	1.8	2.8
U892213	1.9	1.9	4.2	1.4	1.2	2.0	2.0
U892317	2.0	3.2	4.0	1.6	1.2	1.5	2.0
U892431	1.8	2.3	3.7	1.3	1.2	1.5	1.7

UNIFORM TEST II, 1991

SEED QUALITY (score)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham Co. MI	Lenawee Co. MI	Lamber-ton MN	Waseca MN	Spick-ard MO	David City NE	Oconto NE	Oneill NE
Burlison (L)	1.0	1.5			2.0	1.7	2.0	1.0	1.7	2.3
Jack (SCN)	1.0	2.0			2.7	2.3	2.0	1.7	2.7	3.0
Kenwood (II)	1.0	1.5			3.0	2.3	2.0	1.0	1.3	2.0
Sturdy (I)	1.0	1.5			3.3	2.3	2.0	1.7	1.7	2.7
A87-196014	1.0	1.0			2.7	2.7	1.5	1.7	2.0	3.0
A87-297015	1.0	1.0			2.3	2.0	2.0	1.3	1.7	3.0
C1787	1.0	1.5			2.7	2.7	2.0	2.0	1.7	3.3
C1796	1.0	1.5			2.7	2.0	1.5	1.0	1.0	2.3
HS88-4905	1.0	1.5			2.3	2.7	2.0	1.7	1.0	2.0
HS88-4906	1.0	1.5			2.3	2.7	2.0	1.0	1.7	2.3
HS88-4909	1.0	2.5			2.3	2.7	2.5	1.0	1.3	2.3
LN85-6800	1.0	1.0			2.3	2.0	1.5	2.0	2.7	3.0
LN86-1167	1.0	2.0			2.3	2.7	1.0	2.0	3.0	3.7
M85-647	1.0	1.5			2.7	3.0	2.0	2.0	1.3	3.0
M86-1973	1.0	1.5			2.0	3.0	2.0	2.0	1.0	2.7
ORC 8905	1.0	3.0			2.7	2.7	2.0	1.3	2.0	3.0
U8763041	1.0	1.0			2.0	2.3	2.0	1.0	1.0	1.0
U892035	1.0	1.5			2.0	2.0	2.0	1.0	1.0	1.7
U892213	1.0	1.5			2.3	2.0	2.0	1.0	2.0	2.0
U892317	1.0	1.5			2.3	2.7	2.0	2.0	2.0	2.7
U892431	1.0	1.0			1.7	2.3	2.0	1.0	2.7	3.0

UNIFORM TEST II, 1991

SEED QUALITY (score)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Woods-lee Ont.	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Burlison (L)	1.3	2.5	1.5	2.3	1.3	2.0	3.0	1.0
Jack (SCN)	1.3	2.1	1.7	3.0	1.0	3.0	3.0	3.0
Kenwood (II)	1.3	3.0	1.9	2.7	1.3	2.0	3.0	2.0
Sturdy (I)	1.3	3.3	2.8	2.7	1.3	3.0	3.0	2.0
A87-196014	1.3	2.7	2.2	2.0	1.7	3.0	3.0	2.0
A87-297015	1.0	2.9	2.3	2.0	1.3	3.0	3.0	3.0
C1787	1.0	3.2	2.7	2.0	1.3	2.0	3.0	2.0
C1796	1.7	2.1	2.1	1.7	1.3	3.0	3.0	2.0
HS88-4905	1.0	2.1	2.5	2.3	1.3	3.0	3.0	2.0
HS88-4906	1.0	2.8	2.0	2.0	1.0	3.0	3.0	2.0
HS88-4909	1.3	2.1	2.1	1.7	1.3	3.0	3.0	3.0
LN85-6800	1.3	1.6	3.6	2.3	1.0	3.0	4.0	2.0
LN86-1167	1.7	2.6	3.2	1.3	1.0	2.0	4.0	2.0
M85-647	1.7	2.7	2.0	2.0	1.0	3.0	3.0	2.0
M86-1973	1.7	2.9	2.6	2.0	1.3	3.0	3.0	3.0
ORC 8905	1.3	1.8	2.1	3.0	1.0	2.0	3.0	3.0
U8763041	1.0	1.7	1.7	1.3	1.0	3.0	3.0	1.0
U892035	1.0	1.6	2.2	1.7	1.0	2.0	3.0	2.0
U892213	1.0	2.0	1.8	2.3	1.0	2.0	4.0	2.0
U892317	1.0	2.8	1.7	1.3	1.0	2.0	3.0	2.0
U892431	1.0	1.7	1.7	1.7	1.0	2.0	3.0	2.0

UNIFORM TEST II, 1991

SEED SIZE (g/100)

Strain	Mean 24 Tests	Ames IA	Arcadia IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Burlison (L)	18.1	17.8	16.2	19.0	17.0	15.4	17.4
Jack (SCN)	14.1	14.6	13.6	14.2	15.2	12.3	13.3
Kenwood (II)	15.4	15.4	13.8	18.4	15.5	13.6	15.7
Sturdy (I)	18.1	18.4	17.1	21.6	17.5	17.0	17.1
A87-196014	15.3	16.6	14.2	16.6	15.7	14.8	15.4
A87-297015	17.9	18.2	16.4	20.7	18.2	16.5	16.9
C1787	17.7	17.1	16.1	21.2	16.4	16.1	16.8
C1796	16.3	17.4	15.0	18.7	15.0	15.9	15.8
HS88-4905	17.5	18.6	16.3	18.9	16.7	16.7	19.7
HS88-4906	17.3	18.9	16.9	18.6	17.9	16.0	18.4
HS88-4909	18.4	20.7	18.6	20.1	18.2	17.6	20.1
LN85-6800	15.7	17.1	14.6	17.0	15.5	14.2	15.4
LN86-1167	17.4	19.2	16.0	17.2	18.0	16.6	17.3
M85-647	15.2	15.7	13.6	18.0	14.7	13.9	14.8
M86-1973	17.5	17.8	16.6	18.4	17.4	17.5	18.8
ORC 8905	17.1	18.5	15.4	18.6	17.2	14.9	16.9
U8763041	17.1	17.3	15.6	18.6	16.2	15.8	16.4
U892035	18.5	19.3	17.2	18.6	20.2	16.6	19.9
U892213	19.2	19.8	16.8	21.4	18.4	16.7	19.4
U892317	17.1	18.8	15.5	18.1	18.4	16.3	15.9
U892431	16.0	15.4	15.2	17.2	17.1	14.0	14.4

UNIFORM TEST II, 1991

SEED SIZE (g/100)

Strain	Bluff-ton IN	Lafay-ette IN	Ingham Co. MI	Lenawee Co. MI	Lamber-ton MN	Waseca MN	Spick-ard MO	David City NE	Oconto NE	Oneill NE
Burlison (L)	17.3	16.5	22.1	20.6	19.9	17.8	19.2	18.5	14.7	16.3
Jack (SCN)	13.3	11.6	17.5	17.0	13.5	14.5	13.5	15.1	11.9	13.8
Kenwood (II)	14.7	11.7	18.8	16.3	17.5	14.5	15.0	17.4	15.1	14.7
Sturdy (I)	17.8	13.8	21.7	19.3	17.7	17.1	16.5	19.3	17.1	16.9
A87-196014	15.6	12.8	18.5	17.6	14.0	13.6	15.6	18.0	12.6	14.7
A87-297015	16.5	15.5	22.8	20.0	17.8	18.4	16.6	18.4	15.1	16.4
C1787	16.7	15.2	21.8	19.0	18.0	15.8	18.0	20.6	16.0	16.5
C1796	15.1	12.6	19.2	17.9	16.3	15.5	15.7	18.8	14.6	16.8
HS88-4905	16.0	15.5	20.0	18.0	17.6	18.0	18.4	18.2	16.0	17.5
HS88-4906	17.6	14.2	21.0	19.5	17.2	17.2	17.7	17.0	15.6	16.3
HS88-4909	17.9	15.5	21.8	20.0	18.9	17.9	19.6	19.4	16.5	16.1
LN85-6800	14.9	12.0	18.5	18.0	16.0	13.6	15.4	17.6	12.0	15.2
LN86-1167	17.0	16.6	24.4	21.9	17.0	11.3	17.4	16.8	13.1	15.7
M85-647	14.0	12.1	18.5	15.9	16.9	13.9	15.6	16.4	14.0	15.2
M86-1973	16.0	14.4	21.5	17.8	18.0	17.2	17.7	19.1	16.4	17.3
ORC 8905	17.0	14.9	20.5	18.8	16.8	15.4	16.8	18.5	15.0	15.7
U8763041	15.5	12.8	21.1	18.9	18.8	17.3	16.2	19.6	17.3	18.5
U892035	18.3	17.3	21.0	21.0	17.8	16.8	17.6	19.5	16.7	17.9
U892213	18.8	16.0	23.3	23.1	20.0	17.9	19.2	21.1	16.0	18.2
U892317	16.1	13.1	20.2	20.3	17.5	17.0	16.5	17.7	12.7	15.7
U892431	15.0	12.4	18.8	19.0	17.3	16.7	16.0	18.1	11.8	15.6

UNIFORM TEST II, 1991

SEED SIZE (g/100)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Woods-lee Ont.	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Burlison (L)	19.3	15.4	16.7	20.0	21.5	20.7	14.4	20.8
Jack (SCN)	15.3	11.2	14.2	15.3	16.3	14.5	11.3	15.0
Kenwood (II)	15.0	12.4	14.0	16.3	16.6	18.4	12.8	16.6
Sturdy (I)	17.7	14.9	16.4	20.6	21.2	20.6	15.6	21.2
A87-196014	14.7	11.1	14.9	15.8	17.9	15.4	14.0	16.0
A87-297015	20.0	14.7	19.1	19.1	19.8	18.0	14.5	19.8
C1787	17.7	14.6	18.3	20.0	20.8	19.4	14.9	18.5
C1796	16.0	13.4	17.8	18.3	18.7	17.0	13.3	16.9
HS88-4905	18.7	14.8	16.3	18.1	18.9	18.3	15.1	17.6
HS88-4906	17.7	14.8	15.9	17.1	20.0	17.6	14.1	18.4
HS88-4909	19.7	16.5	16.5	18.5	20.4	18.1	15.6	17.7
LN85-6800	16.7	12.8	16.4	17.1	18.3	16.9	14.3	18.1
LN86-1167	18.3	15.0	17.9	18.5	20.5	17.4	15.6	18.1
M85-647	14.7	13.2	14.3	16.7	17.2	17.7	12.3	15.8
M86-1973	17.7	15.6	15.5	18.5	18.4	18.0	15.4	18.5
ORC 8905	18.0	13.3	18.4	18.5	20.0	19.5	13.7	18.1
U8763041	16.3	12.4	17.2	17.5	18.8	18.2	14.9	19.1
U892035	18.7	15.7	17.5	18.4	21.5	21.0	14.5	20.3
U892213	19.7	15.9	20.6	21.4	22.2	17.5	15.3	23.0
U892317	17.7	14.6	17.5	19.1	19.6	17.5	15.0	19.8
U892431	15.7	13.4	14.4	17.2	18.0	17.3	14.5	18.4

UNIFORM TEST II, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	David City NE	Hoytville OH	Ridge-town Ont.
Burlison (L)	42.6	44.0	43.8	42.8	39.6	42.6
Jack (SCN)	39.4	40.7	40.7	41.1	35.8	38.8
Kenwood (II)	37.4	39.1	37.2	39.5	34.3	36.8
Sturdy (I)	39.6	40.6	40.3	40.6	37.6	38.7
A87-196014	37.5	38.6	39.5	38.7	33.2	37.4
A87-297015	38.2	39.4	40.3	38.8	35.2	37.5
C1787	39.1	39.9	40.3	40.4	37.2	37.8
C1796	38.6	40.3	39.6	39.9	36.6	36.6
HS88-4905	38.2	39.2	39.0	39.6	36.1	37.0
HS88-4906	37.8	38.7	39.8	38.5	35.0	36.8
HS88-4909	38.3	38.9	40.7	39.2	36.6	35.9
LN85-6800	39.4	40.2	41.1	40.6	35.7	39.5
LN86-1167	38.7	39.6	39.4	39.7	37.1	37.9
M85-647	40.2	41.0	41.8	41.4	37.7	39.1
M86-1973	38.5	39.4	40.8	39.0	36.8	36.5
ORC 8905	39.1	40.1	40.7	40.8	36.0	37.9
U8763041	39.2	40.5	40.6	41.1	34.0	39.6
U892035	40.4	41.0	42.5	40.5	38.4	39.7
U892213	40.6	41.3	42.2	41.1	38.0	40.4
U892317	40.7	42.3	41.3	42.0	37.8	39.9
U892431	38.8	39.5	37.4	39.5	37.2	40.2

UNIFORM TEST II, 1991

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	David City NE	Hoytville OH	Ridge-town Ont.
Burlison (L)	19.5	18.4	19.7	18.8	20.8	19.9
Jack (SCN)	21.3	21.4	21.0	20.1	22.6	21.4
Kenwood (II)	21.8	21.2	22.0	20.6	23.0	22.1
Sturdy (I)	21.1	20.7	21.2	20.2	22.2	21.1
A87-196014	21.0	20.6	20.4	20.5	22.4	20.9
A87-297015	21.5	21.0	21.2	20.4	22.5	22.2
C1787	21.4	20.8	21.5	20.1	22.8	21.9
C1796	21.1	20.5	21.1	19.5	22.4	22.0
HS88-4905	21.8	21.3	22.2	20.2	22.7	22.6
HS88-4906	21.9	21.5	21.5	20.6	23.1	22.7
HS88-4909	21.7	21.2	21.1	20.8	22.9	22.5
LN85-6800	21.6	21.1	21.1	20.8	23.5	21.5
LN86-1167	21.5	21.2	22.1	20.4	22.2	21.4
M85-647	21.9	21.6	21.4	20.7	23.2	22.5
M86-1973	20.9	20.7	20.3	20.9	21.5	21.3
ORC 8905	21.5	21.0	21.7	20.4	22.8	21.4
U8763041	21.7	21.6	21.5	20.3	23.4	21.7
U892035	20.9	21.0	19.9	20.5	21.6	21.3
U892213	20.5	20.6	19.7	19.2	22.2	20.8
U892317	20.6	19.9	20.3	19.4	22.1	21.2
U892431	21.2	20.9	21.7	20.7	22.4	20.3

PRELIMINARY TEST IIA, 1991

Strain	Parentage	Generation Composited	Unique Traits
BSR 201 (BSR)	L69U40-16-4 x A76-304020	F4	BSR Res.
Burlison (L)	K74-113-76-486 x Century	F5	Rps1-b, Rps3
Kenwood (II)	Elgin x Asgrow A1937	F5	
Sturdy (I)	M70-127 x Century	F5	
AC90-115001	(NK S23-03 x A86-152032) x Sturdy	F5	Fe Chlor. Res.
AC90-115011	(NK S23-03 x A86-152032) x Sturdy	F5	Fe Chlor. Res.
AC90-115021	(NK S23-03 x A86-152032) x Sturdy	F5	Fe Chlor. Res.
AC90-115025	(NK S23-03 x A86-152032) x Sturdy	F5	Fe Chlor. Res.
AM90-111004	Chamberlain x Conrad	F5	BSR Res.
AM90-111005	Chamberlain x Conrad	F5	BSR Res.
AM90-111006	Chamberlain x Conrad	F5	BSR Res.
AM90-111009	AgriPro AP2190 x Chamberlain	F5	BSR Res.
AM90-211003	Chamberlain x Conrad	F5	BSR Res.
AM90-211005	Chamberlain x Conrad	F5	BSR Res.
AM90-312002	AgriPro AP2190 x Asgrow A3427	F5	
AM90-312023	Conrad x Asgrow A3427	F5	
HS89-2839	Conrad x Hayes	F5	
HS89-2840	Conrad x Hayes	F5	
HS89-2841	Conrad x Hayes	F5	
LL89-605	Wells II x PI 437.821	F5	BB Tol.
U90-2103	U80-64032 x Jacques J822	F5	
U90-2109	Fremont x Hobbit	F5	
U90-2213	Fremont x LN80-10508	F5	
U90-2223	U80-64032 x H1285	F5	
U90-2310	U80-64032 x Jacques J822	F5	
U90-2317	U80-64032 x HC80-585	F5	
U90-2327	Fremont x LN80-10508	F5	
U90-2434	U80-64032 x Jacques J822	F5	
U90-2435	Logan x M74-498	F5	
U90-2526	Fremont x LN80-10508	F5	
U90-2607	Fremont x S56A	F5	
U90-2610	Fremont x A82-267015	F5	
U90-2711	$SG_1/BC/86\text{-}E_2$	F5	
U90-2734	$SG_1/BC/86\text{-}E_2$	F5	

PRELIMINARY TEST IIA, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Shattering Score Manhattan	BSR-Boone Plant n %	BSR-Boone Stem n %
BSR 201 (BSR)	WGBDYBfI	1	100	60.7
Burlison (L)	WTTIYBlI	1	100	63.7
Kenwood (II)	PTBIYBlI	1	90	53.6
Sturdy (I)	PGBIYIbI	1	90	42.3
AC90-115001	PGBIYIbI	2	60	43.6
AC90-115011	PGTDYIbI	1	100	70.3
AC90-115021	PGBIYBfI	2	30	21.7
AC90-115025	PGBDYIbI		50	10.8
AM90-111004	PTBIYBl+BrI		50	11.7
AM90-111005	PTBIYBlI	3	70	14.8
AM90-111006	PTBDYBrI	2	40	6.8
AM90-111009	PGBDYIbI	1	50	16.1
AM90-211003	PTBIYBlI	2	40	12.6
AM90-211005	PTBDYBrI	2	50	17.9
AM90-312002	PTBDYHI	1	100	53.5
AM90-312023	PTTDYBlI	1	100	57.5
HS89-2839	PGT+BDYBfI	1	100	82.3
HS89-2840	PGBDYBfI	1	100	76.3
HS89-2841	PG+TBDYBf+BlI	1	90	73.2
LL89-605	PGBSYIbI	1	10	7.1
U90-2103	WTTSYBrI	1	100	72.9
U90-2109	WGTSYBfI	1	100	68.8
U90-2213	WTTIYBlI	1	100	61.8
U90-2223	PGBSYBfI	1	100	74.3
U90-2310	WTBDYBrI	2	70	20.5
U90-2317	WGBSYBfI	2	100	74.5
U90-2327	WTTIYBlI	2	100	70.4
U90-2434	WGBSYBfI	1	60	25.5
U90-2435	WGTIYBfI	1	100	51.6
U90-2526	WGT+BDYBfI	1	100	71.4
U90-2607	WGTSYBf+BlI	1	100	64.8
U90-2610	WGBDYYI	2	100	52.7
U90-2711	WTTDYYI	1	100	55.2
U90-2734	P+WGBDYYI	1	100	50.3

PRELIMINARY TEST IIA, 1991

DISEASE DATA

Strain	PR Custer Phyto. Tolerance	PR Urbana Race 1	PR Ames Race 4	Germination Lafayette %	PS Lafayette a %	PSB Lafayette n %	SMV a Score
BSR 201 (BSR)	4.4	R	S	78	42	0	3e
Burlison (L)	4.2	R	R	71	52	6	4e
Kenwood (II)	4.5	S	S	59	45	4	3e
Sturdy (I)	9.0	R	S	58	16	9	4e
AC90-115001	4.8	R	S	58	23	0	5e
AC90-115011	7.8	H	S	68	10	2	5e
AC90-115021	4.8	S	S	70	52	6	5s
AC90-115025	4.2	R	S	66	20	2	5e
AM90-111004	5.4	S	S	76	23	4	3e
AM90-111005	7.4	R	S	84	32	0	5e
AM90-111006	7.5	S	S	78	29	0	3e
AM90-111009	6.0	R	S	64	20	6	3e
AM90-211003	7.4	R	S	80	24	0	3e
AM90-211005	4.8	R	S	82	14	0	5e
AM90-312002	5.4	H	S	62	54	10	5s
AM90-312023	4.0	S	S	88	20	4	5e
HS89-2839	4.1	R	R	66	53	2	2e
HS89-2840	6.0	R	R	62	37	6	1
HS89-2841	5.6	R	H	76	43	0	2e
LL89-605	8.3	R	S	48	21	10	3m
U90-2103	4.5	S	S	88	31	2	5e
U90-2109	5.6	R	S	64	60	2	2m
U90-2213	5.3	S	S	74	47	4	2e
U90-2223	8.5	S	S	72	22	14	3e
U90-2310	3.3	S	S	56	32	18	3e
U90-2317	5.0	R	S	58	63	0	3m
U90-2327	4.4	R	S	76	36	10	5e
U90-2434	5.5	S	S	80	51	4	4m
U90-2435	4.0	S	S	66	28	6	3e
U90-2526	6.3	R	S	54	57	8	3e
U90-2607	4.9	R	S	72	43	4	5e
U90-2610	4.9	S	S	48	42	14	5m
U90-2711	3.9	H	S	52	44	10	5e
U90-2734	4.7	R	S	78	41	6	5s

PRELIMINARY TEST IIA, 1991

REGIONAL SUMMARY

No. of Tests Strain	Yield 13 bu/a	Rank 13 No.	Maturity 11 Date	Lodging 13 Score	Plant Height 13 In.	Seed Quality 12 Score	Seed Size 13 g/100	Composition Protein 5 %	 Oil 5 %
BSR 201 (BSR)	48.0	14	3.0	2.6	35	1.8	16.0	39.5	21.2
Burlison (L)	47.8	15	4.1	1.6	33	1.8	18.0	41.8	20.0
Kenwood (II)	49.9	8	09/10*	1.8	36	1.7	15.1	37.2	21.6
Sturdy (I)	47.2	19	-2.9	1.9	34	2.1	18.4	39.8	21.0
AC90-115001	47.3	18	-0.5	2.2	38	2.1	16.9	40.6	19.8
AC90-115011	43.8	32	-1.9	2.4	35	2.1	19.2	41.1	20.8
AC90-115021	43.9	31	-1.8	1.9	33	2.1	15.8	40.2	20.7
AC90-115025	46.4	22	-0.3	2.3	37	2.2	17.6	41.3	20.2
AM90-111004	51.9	3	2.0	2.0	38	2.0	18.9	39.5	20.9
AM90-111005	48.9	11	2.4	1.7	39	1.8	16.1	39.6	21.3
AM90-111006	46.9	21	0.1	1.7	34	2.0	16.3	39.0	21.0
AM90-111009	47.8	15	-1.2	1.5	35	2.1	18.9	39.6	21.2
AM90-211003	53.4	1	2.5	1.9	34	2.0	19.5	39.8	20.5
AM90-211005	49.8	9	-0.5	1.9	34	1.9	18.2	39.6	20.3
AM90-312002	46.1	24	10.0	2.4	41	2.5	15.7	39.0	21.6
AM90-312023	46.3	23	12.9	1.6	38	2.1	15.4	40.0	21.5
HS89-2839	51.4	5	3.1	1.4	34	1.8	18.4	37.8	22.0
HS89-2840	51.5	4	2.3	1.3	33	1.9	18.4	37.8	21.9
HS89-2841	47.5	17	3.3	1.8	38	1.8	17.8	39.8	21.8
LL89-605	45.3	29	-1.5	1.4	29	2.1	15.1	38.7	21.5
U90-2103	48.6	13	4.0	2.0	38	2.0	15.5	39.4	20.9
U90-2109	45.7	28	8.6	2.0	38	2.0	16.5	39.7	22.2
U90-2213	45.3	29	7.6	2.0	38	1.9	17.6	39.1	21.0
U90-2223	43.0	34	9.9	2.5	41	2.3	12.3	38.2	21.9
U90-2310	52.1	2	9.2	2.1	39	2.0	17.6	38.4	22.6
U90-2317	47.0	20	9.8	2.2	38	2.1	17.0	41.1	20.5
U90-2327	48.9	11	6.5	2.2	40	2.1	17.0	39.7	21.8
U90-2434	50.7	6	6.7	2.0	37	2.2	17.4	38.6	22.2
U90-2435	43.6	33	8.8	2.1	40	2.0	15.8	40.1	21.0
U90-2526	45.8	25	7.7	2.1	38	2.0	18.7	40.1	21.4
U90-2607	49.6	10	4.5	1.7	35	2.0	16.9	38.6	21.4
U90-2610	45.8	25	8.8	2.2	45	2.1	15.3	39.6	21.8
U90-2711	50.4	7	8.0	1.6	36	2.2	15.7	40.0	20.9
U90-2734	45.8	25	7.6	1.8	38	2.5	14.6	38.0	21.7

* 115.9 Days After Planting

PRELIMINARY TEST IIA, 1991

YIELD (bu/a)

Strain	Mean 13 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI	Spick-ard MO
BSR 201 (BSR)	48.0	52.2	59.0	55.3	26.6	59.7	61.4
Burlison (L)	47.8	55.3	54.7	57.9	36.5	67.7	49.5
Kenwood (II)	49.9	61.6	64.1	43.8	29.4	68.1	59.3
Sturdy (I)	47.2	58.0	56.2	37.7	15.7	70.9	57.1
AC90-115001	47.3	60.5	59.1	45.9	23.4	59.8	56.2
AC90-115011	43.8	58.2	58.6	37.5	19.1	57.2	47.3
AC90-115021	43.9	51.0	57.5	32.1	15.2	63.7	53.0
AC90-115025	46.4	49.4	55.6	46.5	22.3	59.2	55.0
AM90-111004	51.9	60.9	63.8	46.3	34.6	66.7	70.0
AM90-111005	48.9	63.4	66.2	47.6	24.5	66.1	63.8
AM90-111006	46.9	60.0	63.2	46.0	26.0	58.7	51.5
AM90-111009	47.8	60.3	59.1	45.0	16.2	61.0	53.8
AM90-211003	53.4	58.9	73.6	51.0	28.6	70.9	65.8
AM90-211005	49.8	64.9	64.2	47.8	24.1	72.6	62.2
AM90-312002	46.1	55.3	51.4	51.5	30.6	64.2	57.6
AM90-312023	46.3	51.0	49.8	61.9	46.1	58.3	54.7
HS89-2839	51.4	61.6	61.3	50.7	24.5	66.1	60.0
HS89-2840	51.5	57.0	57.2	51.7	28.4	64.8	61.6
HS89-2841	47.5	54.0	57.3	51.1	25.5	65.2	59.7
LL89-605	45.3	49.2	62.1	45.8	24.3	67.0	47.5
U90-2103	48.6	62.5	59.7	49.0	34.4	64.2	61.2
U90-2109	45.7	59.0	54.1	47.9	43.2	60.2	61.2
U90-2213	45.3	55.0	45.7	54.1	26.6	63.2	52.9
U90-2223	43.0	52.7	45.6	37.9	26.7	58.6	56.6
U90-2310	52.1	65.9	58.5	59.5	45.4	68.0	61.2
U90-2317	47.0	56.2	53.5	55.1	31.2	65.4	56.9
U90-2327	48.9	52.9	57.8	54.1	31.6	69.1	60.3
U90-2434	50.7	59.3	59.4	57.4	37.4	73.3	53.9
U90-2435	43.6	57.5	58.5	36.7	26.0	63.9	57.3
U90-2526	45.8	55.5	57.0	45.6	23.8	66.1	57.2
U90-2607	49.6	58.0	53.2	53.2	28.6	72.7	56.3
U90-2610	45.8	53.8	54.2	55.1	33.6	65.4	58.6
U90-2711	50.4	58.1	56.5	57.4	38.9	66.3	58.0
U90-2734	45.8	58.1	50.7	41.2	31.0	65.8	60.7
C.V. (%)		5.9	6.5	7.5	14.2	6.4	9.8
L.S.D. (5%)		6.7	7.4	7.4	8.3	8.4	11.6
Row Sp. (In.)		27	27	30	24	30	30
Rows/Plot		4	4	4	4	4	4
Reps		2	2	2	2	2	2

PRELIMINARY TEST IIA, 1991

YIELD (bu/a)

Strain	David City NE	Oneill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
BSR 201 (BSR)	47.8	32.4	31.8	42.4	71.8	37.8	45.6
Burlison (L)	45.1	25.3	38.6	46.6	61.3	36.3	46.1
Kenwood (II)	46.2	37.9	42.8	45.3	70.0	35.6	44.0
Sturdy (I)	49.0	33.7	42.5	38.1	69.0	38.9	47.4
AC90-115001	49.8	29.8	45.6	39.8	68.0	33.5	43.7
AC90-115011	51.0	36.7	28.8	34.1	59.7	39.4	41.4
AC90-115021	53.2	38.3	35.7	37.2	60.0	35.5	38.4
AC90-115025	48.7	40.5	37.1	40.0	66.2	36.5	46.2
AM90-111004	47.5	33.1	41.3	47.1	76.7	40.6	46.4
AM90-111005	47.2	26.0	38.4	42.7	66.2	37.9	45.8
AM90-111006	44.6	31.2	41.1	36.7	70.2	39.3	41.3
AM90-111009	46.1	35.8	44.8	38.9	76.9	40.0	43.7
AM90-211003	46.9	35.4	50.5	46.6	82.1	38.9	45.0
AM90-211005	53.7	32.6	41.7	38.1	71.3	34.3	39.3
AM90-312002	41.2	25.2	47.8	46.0	53.4	32.1	43.2
AM90-312023	42.6	24.8	51.2	42.4	55.8	25.6	37.6
HS89-2839	50.6	38.0	48.7	48.7	70.9	35.3	51.7
HS89-2840	50.2	27.3	54.2	50.8	71.2	40.8	54.4
HS89-2841	49.4	30.2	40.6	43.9	66.5	31.2	42.3
LL89-605	51.1	35.3	38.5	37.5	58.0	31.7	41.4
U90-2103	44.6	27.6	40.5	40.5	64.6	39.1	43.4
U90-2109	44.5	24.8	42.7	37.0	56.1	28.9	34.3
U90-2213	46.9	31.5	43.5	40.5	54.8	30.1	44.3
U90-2223	46.5	23.8	44.9	37.6	53.2	30.6	44.2
U90-2310	47.3	30.9	41.0	53.3	62.2	37.4	47.3
U90-2317	44.0	26.4	42.6	45.3	51.8	36.1	46.3
U90-2327	47.6	31.5	43.9	40.9	71.1	29.8	45.5
U90-2434	53.0	27.8	50.7	43.3	59.8	36.4	47.7
U90-2435	40.4	24.4	49.0	26.1	46.8	32.4	47.8
U90-2526	44.4	26.4	48.6	43.2	54.3	30.8	42.5
U90-2607	49.9	33.1	47.8	40.8	75.0	34.1	42.6
U90-2610	43.5	26.3	44.3	43.7	46.3	28.8	41.6
U90-2711	49.2	33.3	51.7	44.3	60.9	35.1	45.1
U90-2734	42.5	28.3	46.6	35.2	53.0	34.8	47.3
C.V. (%)	7.3	18.0	12.1	9.7	7.0	8.0	10.0
L.S.D. (5%)	7.2	11.3	10.8	8.1	9.0	5.6	8.9
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, 1991

YIELD RANK

Strain	Yield Rank	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI	Spick-ard MO
BSR 201 (BSR)	14	30	13	6	19	29	6
Burlison (L)	15	23	25	3	6	9	32
Kenwood (II)	8	5	4	28	14	7	14
Sturdy (I)	19	17	23	31	33	4	20
AC90-115001	18	8	11	24	29	28	24
AC90-115011	32	14	14	32	31	34	34
AC90-115021	31	31	18	34	34	24	29
AC90-115025	22	33	24	21	30	30	25
AM90-111004	3	7	5	22	7	11	1
AM90-111005	11	3	2	20	24	13	3
AM90-111006	21	10	6	23	21	31	31
AM90-111009	15	9	11	27	32	26	28
AM90-211003	1	13	1	15	15	4	2
AM90-211005	9	2	3	19	27	3	4
AM90-312002	24	23	30	13	13	21	17
AM90-312023	23	31	32	1	1	33	26
HS89-2839	5	5	8	16	24	13	12
HS89-2840	4	20	20	12	17	20	5
HS89-2841	17	26	19	14	23	19	13
LL89-605	29	34	7	25	26	10	33
U90-2103	13	4	9	17	8	21	7
U90-2109	28	12	27	18	3	27	7
U90-2213	29	25	33	10	19	25	30
U90-2223	34	29	34	30	18	32	22
U90-2310	2	1	15	2	2	8	7
U90-2317	20	21	28	8	11	17	21
U90-2327	11	28	17	9	10	6	11
U90-2434	6	11	10	4	5	1	27
U90-2435	33	19	15	33	21	23	18
U90-2526	25	22	21	26	28	13	19
U90-2607	10	17	29	11	15	2	23
U90-2610	25	27	26	7	9	17	15
U90-2711	7	15	22	5	4	12	16
U90-2734	25	15	31	29	12	16	10

PRELIMINARY TEST IIA, 1991

YIELD RANK

Strain	David City NE	Oneill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
BSR 201 (BSR)	14	14	33	16	5	10	12
Burlison (L)	24	29	28	5	19	14	10
Kenwood (II)	22	4	18	8	11	16	19
Sturdy (I)	12	9	21	25	12	7	4
AC90-115001	11	20	12	23	13	23	20
AC90-115011	5	5	34	33	23	4	28
AC90-115021	2	2	32	29	21	17	32
AC90-115025	13	1	31	22	16	12	9
AM90-111004	16	11	23	4	3	2	7
AM90-111005	18	28	30	15	15	9	11
AM90-111006	25	17	24	31	10	5	30
AM90-111009	23	6	14	24	2	3	20
AM90-211003	19	7	5	5	1	7	16
AM90-211005	1	13	22	25	6	21	31
AM90-312002	33	30	9	7	29	25	23
AM90-312023	31	31	3	16	26	34	33
HS89-2839	6	3	7	3	9	18	1
HS89-2840	7	24	1	2	7	1	14
HS89-2841	10	19	26	11	14	27	26
LL89-605	4	8	29	28	24	26	28
U90-2103	25	23	27	20	17	6	22
U90-2109	27	31	19	30	25	32	34
U90-2213	19	15	17	20	27	30	17
U90-2223	21	34	13	27	30	29	18
U90-2310	17	18	25	1	18	11	5
U90-2317	29	25	20	8	32	15	8
U90-2327	15	15	16	18	8	31	13
U90-2434	3	22	4	13	22	13	3
U90-2435	34	33	6	34	33	24	2
U90-2526	28	25	8	14	28	28	25
U90-2607	8	11	9	19	4	22	24
U90-2610	30	27	15	12	34	33	27
U90-2711	11	10	2	10	20	19	15
U90-2734	32	21	11	32	31	20	5

PRELIMINARY TEST IIA, 1991

MATURITY (date)

Strain	Mean 11 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI	Spick-ard MO
BSR 201 (BSR)	3.0	4		0	6	3	-1
Burlison (L)	4.1	0		-1	8	5	1
Kenwood (II)	09/10	09/06		09/04	08/26	09/13	09/03
Sturdy (I)	-2.9	-4		-7	-9	3	-3
AC90-115001	-0.5	-1		-8	-1	5	-1
AC90-115011	-1.9	-3		-10	-3	5	-5
AC90-115021	-1.8	-2		-3	-4	-1	-1
AC90-115025	-0.3	-2		-10	-4	6	0
AM90-111004	2.0	2		-6	1	7	2
AM90-111005	2.4	2		-2	1	7	2
AM90-111006	0.1	0		-5	-1	-2	1
AM90-111009	-1.2	-3		-7	-5	1	-1
AM90-211003	2.5	1		-2	3	6	4
AM90-211005	-0.5	0		-8	-1	1	0
AM90-312002	10.0	9		6	14	14	9
AM90-312023	12.9	14		10	20	13	12
HS89-2839	3.1	2		0	-2	7	2
HS89-2840	2.3	1		-1	0	6	1
HS89-2841	3.3	0		0	2	8	0
LL89-605	-1.5	-2		-5	0	-1	-3
U90-2103	4.0	6		-4	6	6	3
U90-2109	8.6	12		1	13	10	4
U90-2213	7.6	8		3	11	8	4
U90-2223	9.9	12		4	14	15	9
U90-2310	9.2	9		7	14	12	5
U90-2317	9.8	8		8	14	15	6
U90-2327	6.5	4		-1	11	12	1
U90-2434	6.7	8		4	12	10	4
U90-2435	8.8	8		5	13	11	3
U90-2526	7.7	8		3	10	13	3
U90-2607	4.5	5		-1	8	7	2
U90-2610	8.8	10		7	15	13	4
U90-2711	8.0	9		3	13	8	6
U90-2734	7.6	7		4	10	11	2
Date Planted	05/17	05/07		04/30	05/11	05/11	05/14
Days to Mature	115.9	122		127	107	125	112

PRELIMINARY TEST IIA, 1991

MATURITY (date)

Strain	David City NE	Oneill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
BSR 201 (BSR)	3		2	2	1	3	10
Burlison (L)	4		7	2	1	3	15
Kenwood (II)	09/23		09/16	09/09	09/22	09/10	09/12
Sturdy (I)	-1		-1	-5	-7	-7	9
AC90-115001	3		0	-2	1	-1	0
AC90-115011	1		0	-5	-6	-3	8
AC90-115021	-3		-1	-4	-4	-4	7
AC90-115025	1		-1	-5	2	-2	12
AM90-111004	-1		1	-1	5	-2	14
AM90-111005	2		3	-1	6	-4	10
AM90-111006	1		1	-3	5	-6	10
AM90-111009	1		0	-1	-2	-5	9
AM90-211003	0		4	1	5	-3	9
AM90-211005	2		1	-1	1	-5	4
AM90-312002	6		14	5	13	5	15
AM90-312023	8		18	10	14	10	F
HS89-2839	4		6	1	1	1	12
HS89-2840	4		3	-2	1	2	10
HS89-2841	5		4	2	2	2	11
LL89-605	0		-1	-1	-8	-3	7
U90-2103	4		5	-2	7	2	11
U90-2109	5		11	7	11	6	15
U90-2213	6		12	5	8	3	16
U90-2223	6		15	5	12	7	F
U90-2310	5		11	7	13	3	15
U90-2317	6		18	4	16	3	F
U90-2327	6		7	3	9	4	15
U90-2434	4		9	6	7	3	F
U90-2435	9		12	8	6	6	16
U90-2526	8		11	8	9	4	F
U90-2607	3		4	2	6	3	10
U90-2610	4		9	6	15	5	F
U90-2711	6		14	4	11	3	11
U90-2734	5		11	5	10	4	15
Date Planted	06/10		05/29	05/15	05/16	05/22	05/22
Days to Mature	105		110	117	129	111	113

PRELIMINARY TEST IIA, 1991

LODGING (score)

Strain	Mean 13 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI	Spick-ard MO
BSR 201 (BSR)	2.6	1.4	4.0	1.1	1.0	4.0	3.5
Burlison (L)	1.6	1.2	2.2	1.0	1.0	1.0	1.0
Kenwood (II)	1.8	1.5	3.0	1.0	1.0	2.0	1.0
Sturdy (I)	1.9	1.1	2.0	1.0	1.0	3.0	1.0
AC90-115001	2.2	1.3	3.5	1.0	1.0	3.5	2.0
AC90-115011	2.4	1.6	4.0	1.0	1.0	4.0	2.0
AC90-115021	1.9	1.1	2.9	1.0	1.0	2.5	1.0
AC90-115025	2.3	1.4	3.0	1.2	1.0	3.5	1.5
AM90-111004	2.0	1.3	2.8	1.0	1.0	3.0	1.0
AM90-111005	1.7	1.5	3.0	1.0	1.0	2.5	1.0
AM90-111006	1.7	1.3	3.4	1.0	1.0	2.0	1.5
AM90-111009	1.5	1.1	1.9	1.0	1.0	1.5	1.0
AM90-211003	1.9	1.3	3.7	1.0	1.0	3.0	1.0
AM90-211005	1.9	1.3	3.0	1.0	1.0	2.5	1.5
AM90-312002	2.4	2.0	3.8	1.0	1.0	3.0	2.0
AM90-312023	1.6	1.5	2.3	1.0	1.0	1.5	1.0
HS89-2839	1.4	1.1	2.6	1.0	1.0	1.0	1.0
HS89-2840	1.3	1.2	2.1	1.0	1.0	1.0	1.0
HS89-2841	1.8	1.4	2.5	1.0	1.0	2.0	1.0
LL89-605	1.4	1.0	2.3	1.0	1.0	1.0	1.0
U90-2103	2.0	1.8	3.6	1.2	1.0	2.5	2.0
U90-2109	2.0	1.5	3.7	1.0	1.0	2.5	2.0
U90-2213	2.0	1.3	3.3	1.0	1.0	2.0	2.0
U90-2223	2.5	2.1	4.0	1.0	1.0	3.5	3.5
U90-2310	2.1	1.9	3.3	1.0	1.3	3.0	1.0
U90-2317	2.2	1.3	2.9	1.0	1.0	3.0	2.0
U90-2327	2.2	1.3	3.6	1.0	1.0	2.5	2.5
U90-2434	2.0	1.3	3.0	1.0	1.0	2.5	1.5
U90-2435	2.1	1.6	3.4	1.0	1.0	2.0	1.5
U90-2526	2.1	1.3	3.3	1.0	1.0	3.0	2.0
U90-2607	1.7	1.3	2.0	1.0	1.0	2.5	1.0
U90-2610	2.2	1.6	3.6	1.0	1.0	2.5	2.5
U90-2711	1.6	1.4	3.5	1.0	1.0	1.0	1.0
U90-2734	1.8	1.2	3.5	1.0	1.0	2.0	1.0

PRELIMINARY TEST IIA, 1991

LODGING (score)

Strain	David City NE	Oneill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
BSR 201 (BSR)	3.0	4.0	3.0	1.0	3.4	1.0	3.5
Burlison (L)	1.0	1.5	2.5	1.0	2.5	1.0	3.3
Kenwood (II)	1.0	2.5	3.5	1.0	2.0	1.0	2.3
Sturdy (I)	1.5	4.5	3.5	1.0	1.9	1.0	2.3
AC90-115001	2.5	4.5	2.5	1.0	2.7	1.0	2.3
AC90-115011	2.0	4.5	3.0	1.0	3.4	1.0	3.0
AC90-115021	1.0	1.5	3.0	1.0	3.5	1.0	3.8
AC90-115025	2.0	4.0	4.0	1.0	3.1	1.0	2.8
AM90-111004	1.0	3.0	3.0	1.0	3.6	1.0	3.0
AM90-111005	1.0	2.0	2.0	1.0	3.0	1.0	2.5
AM90-111006	1.0	1.0	2.5	1.0	3.2	1.0	2.0
AM90-111009	1.0	4.5	2.0	1.0	1.4	1.0	1.5
AM90-211003	1.0	2.0	3.0	1.0	3.8	1.0	2.0
AM90-211005	1.0	2.0	3.0	1.0	2.9	1.0	3.0
AM90-312002	2.5	3.0	3.0	1.0	4.4	1.0	3.5
AM90-312023	1.0	1.0	1.5	1.0	3.8	1.0	2.8
HS89-2839	1.5	1.0	2.0	1.0	2.0	1.0	1.8
HS89-2840	1.0	1.0	2.0	1.0	2.3	1.0	1.5
HS89-2841	2.0	2.5	3.0	1.0	3.3	1.0	2.3
LL89-605	1.0	2.0	2.5	1.0	1.9	1.0	1.3
U90-2103	1.0	1.5	2.5	1.0	3.9	1.0	3.3
U90-2109	1.0	1.5	2.5	1.0	3.8	1.0	4.0
U90-2213	1.0	1.5	2.5	1.0	4.0	1.0	4.5
U90-2223	1.0	3.0	3.0	1.2	4.3	1.0	4.0
U90-2310	2.0	2.0	2.0	1.0	3.9	1.0	4.0
U90-2317	2.0	3.0	2.5	1.0	4.4	1.0	4.0
U90-2327	1.5	2.5	2.5	1.0	3.9	1.0	4.5
U90-2434	2.0	3.0	2.0	1.0	2.4	1.0	4.3
U90-2435	1.5	3.0	3.5	1.0	4.1	1.0	3.0
U90-2526	1.0	2.5	3.0	1.0	3.3	1.0	4.3
U90-2607	1.0	2.0	2.5	1.0	3.2	1.0	2.0
U90-2610	1.0	2.0	3.0	1.1	4.3	1.0	4.5
U90-2711	1.0	1.0	2.0	1.0	3.3	1.0	2.8
U90-2734	1.0	1.5	2.5	1.0	3.2	1.0	3.5

PRELIMINARY TEST IIA, 1991

PLANT HEIGHT (inches)

Strain	Mean 13 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI	Spick-ard MO
BSR 201 (BSR)	35	30	46	26	29	40	39
Burlison (L)	33	31	40	23	29	36	30
Kenwood (II)	36	34	46	24	36	40	35
Sturdy (I)	34	30	40	20	25	43	32
AC90-115001	38	34	41	28	32	43	36
AC90-115011	35	34	40	24	31	39	35
AC90-115021	33	30	40	18	28	40	31
AC90-115025	37	34	41	25	35	47	37
AM90-111004	38	37	44	27	34	49	34
AM90-111005	39	36	46	27	32	48	40
AM90-111006	34	34	40	27	30	37	34
AM90-111009	35	30	40	23	27	39	31
AM90-211003	34	32	40	27	28	38	34
AM90-211005	34	34	40	26	34	39	34
AM90-312002	41	38	45	32	35	51	41
AM90-312023	38	37	43	31	37	43	38
HS89-2839	34	32	42	26	29	39	33
HS89-2840	33	30	40	23	31	40	33
HS89-2841	38	38	46	26	30	45	39
LL89-605	29	29	39	21	26	25	23
U90-2103	38	35	42	27	36	44	41
U90-2109	38	38	44	30	35	42	39
U90-2213	38	36	44	28	34	40	42
U90-2223	41	44	47	29	36	47	42
U90-2310	39	38	45	30	37	48	39
U90-2317	38	36	44	30	35	42	41
U90-2327	40	34	50	28	36	46	39
U90-2434	37	36	43	27	35	42	35
U90-2435	40	42	47	26	36	41	42
U90-2526	38	34	50	26	32	47	39
U90-2607	35	33	43	28	32	44	36
U90-2610	45	44	49	34	39	50	46
U90-2711	36	34	40	27	34	40	37
U90-2734	38	37	45	28	33	48	39

PRELIMINARY TEST IIA, 1991

PLANT HEIGHT (inches)

Strain	David City NE	Oneill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
BSR 201 (BSR)	43	34	33	26	44	30	41
Burlison (L)	41	35	31	32	39	27	39
Kenwood (II)	41	37	34	29	44	30	38
Sturdy (I)	42	41	35	21	40	27	44
AC90-115001	45	52	38	25	41	30	43
AC90-115011	44	37	33	26	42	29	40
AC90-115021	40	33	32	25	40	29	39
AC90-115025	44	41	35	30	44	29	41
AM90-111004	46	35	36	28	48	30	40
AM90-111005	49	34	40	30	47	32	43
AM90-111006	43	34	36	25	43	28	37
AM90-111009	46	49	37	23	38	27	39
AM90-211003	44	34	34	27	40	27	31
AM90-211005	39	34	36	24	42	28	34
AM90-312002	50	41	38	34	50	33	42
AM90-312023	43	36	38	27	46	30	40
HS89-2839	42	34	34	25	40	25	38
HS89-2840	39	30	35	25	39	30	39
HS89-2841	49	35	40	30	48	32	40
LL89-605	40	32	26	23	33	27	35
U90-2103	45	34	37	31	52	33	39
U90-2109	44	33	36	30	48	34	41
U90-2213	43	36	40	31	48	32	46
U90-2223	52	38	41	30	54	33	41
U90-2310	45	38	35	30	45	30	41
U90-2317	45	41	39	29	49	31	37
U90-2327	52	41	42	28	54	34	42
U90-2434	43	36	36	28	42	30	45
U90-2435	55	42	42	27	46	36	40
U90-2526	49	33	38	32	43	32	43
U90-2607	44	34	30	25	43	28	37
U90-2610	56	40	46	33	55	38	51
U90-2711	42	38	36	28	43	30	35
U90-2734	47	39	36	27	46	33	42

PRELIMINARY TEST IIA, 1991

SEED QUALITY (score)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI	Spick-ard MO
BSR 201 (BSR)	1.8	1.4	3.3	2.0	1.0		2.0
Burlison (L)	1.8	1.1	3.6	2.0	1.0		2.0
Kenwood (II)	1.7	1.4	3.1	1.8	1.0		2.0
Sturdy (I)	2.1	1.1	2.3	2.8	1.5		3.0
AC90-115001	2.1	1.3	3.3	2.5	1.5		2.0
AC90-115011	2.1	1.2	2.7	2.3	2.0		2.0
AC90-115021	2.1	2.0	3.8	2.3	1.0		2.0
AC90-115025	2.2	1.3	3.7	2.0	1.0		2.0
AM90-111004	2.0	1.2	3.6	2.0	1.5		2.0
AM90-111005	1.8	1.2	3.3	2.0	1.0		1.5
AM90-111006	2.0	1.4	2.6	2.3	1.0		2.0
AM90-111009	2.1	1.2	3.0	2.0	2.0		2.0
AM90-211003	2.0	1.6	3.5	1.5	1.5		2.0
AM90-211005	1.9	1.6	3.3	1.8	2.0		2.0
AM90-312002	2.5	1.7	4.3	2.3	1.0		2.0
AM90-312023	2.1	1.5	4.7	1.5	1.0		2.0
HS89-2839	1.8	1.2	2.7	2.0	1.5		2.0
HS89-2840	1.9	1.4	2.7	2.0	1.5		2.0
HS89-2841	1.8	1.4	2.6	2.0	1.5		2.0
LL89-605	2.1	1.2	4.1	1.8	1.5		2.0
U90-2103	2.0	1.6	3.7	1.5	1.0		2.0
U90-2109	2.0	1.1	4.0	2.3	1.0		1.5
U90-2213	1.9	1.1	3.8	1.5	1.0		2.0
U90-2223	2.3	1.2	4.0	1.8	1.0		2.0
U90-2310	2.0	1.6	3.8	1.8	1.0		3.0
U90-2317	2.1	1.8	4.0	2.0	1.0		2.0
U90-2327	2.1	1.2	3.8	1.8	1.0		1.5
U90-2434	2.2	1.6	4.0	2.8	1.5		3.0
U90-2435	2.0	1.4	3.8	1.8	1.5		1.0
U90-2526	2.0	1.1	4.7	1.8	1.5		1.0
U90-2607	2.0	1.2	3.7	1.5	1.0		2.0
U90-2610	2.1	1.1	3.7	2.0	1.0		2.0
U90-2711	2.2	1.5	4.2	2.3	1.0		2.0
U90-2734	2.5	1.6	3.8	2.0	1.5		2.0

PRELIMINARY TEST IIA, 1991

SEED QUALITY (score)

Strain	David City NE	Oneill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
BSR 201 (BSR)	1.5	2.0	1.0	1.8	1.0	3.0	2.0
Burlison (L)	1.5	2.0	1.0	2.1	1.5	3.0	1.0
Kenwood (II)	1.5	1.0	1.0	1.6	1.5	3.0	2.0
Sturdy (I)	2.0	2.0	1.5	2.4	1.0	3.0	2.0
AC90-115001	2.0	2.5	1.0	2.6	1.5	3.0	2.0
AC90-115011	2.5	2.5	1.0	2.5	1.0	3.0	2.0
AC90-115021	2.0	2.5	1.0	2.6	1.5	3.0	2.0
AC90-115025	2.5	1.5	1.0	2.8	2.0	4.0	2.0
AM90-111004	2.0	2.5	1.0	2.2	1.5	3.0	2.0
AM90-111005	1.0	2.5	1.0	2.4	1.0	3.0	2.0
AM90-111006	2.0	2.5	2.0	2.1	1.0	3.0	2.0
AM90-111009	2.0	3.0	1.0	2.8	1.0	3.0	2.0
AM90-211003	2.0	2.0	1.0	2.5	1.0	3.0	2.0
AM90-211005	1.0	2.0	1.0	2.1	1.0	3.0	2.0
AM90-312002	2.0	3.0	1.5	2.2	3.0	5.0	2.0
AM90-312023	1.5	2.5	1.0	1.7	1.5	4.0	2.0
HS89-2839	1.0	1.5	1.0	2.3	1.0	3.0	2.0
HS89-2840	2.0	2.0	1.0	2.3	1.5	2.0	2.0
HS89-2841	1.5	2.0	1.0	1.8	1.0	3.0	2.0
LL89-605	2.5	2.5	1.0	1.8	2.0	3.0	2.0
U90-2103	2.0	2.5	1.0	1.7	1.5	4.0	2.0
U90-2109	1.5	3.5	1.0	2.0	1.0	3.0	2.0
U90-2213	2.0	2.5	1.0	1.8	1.5	3.0	2.0
U90-2223	2.5	3.0	1.0	1.7	2.5	5.0	2.0
U90-2310	1.0	2.5	1.0	2.3	1.0	3.0	2.0
U90-2317	2.0	3.0	1.0	1.6	2.0	3.0	2.0
U90-2327	2.0	2.0	1.0	2.3	1.5	5.0	2.0
U90-2434	1.0	3.0	1.5	2.0	1.0	3.0	2.0
U90-2435	2.0	3.0	1.0	1.9	1.0	3.0	2.0
U90-2526	2.0	3.0	1.0	1.6	1.0	3.0	2.0
U90-2607	1.5	2.5	1.5	1.7	1.0	4.0	2.0
U90-2610	2.0	3.0	1.0	2.0	2.5	3.0	2.0
U90-2711	2.0	2.5	1.0	1.8	1.5	4.0	2.0
U90-2734	3.5	4.0	1.0	2.1	2.0	5.0	2.0

PRELIMINARY TEST IIA, 1991

SEED SIZE (g\100)

Strain	Mean 13 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI	Spick-ard MO
BSR 201 (BSR)	16.0	17.9	16.2	15.2	12.8	19.3	16.4
Burlison (L)	18.0	19.2	17.6	17.1	16.0	20.9	16.6
Kenwood (II)	15.1	17.9	14.8	13.3	11.0	17.4	15.1
Sturdy (I)	18.4	19.6	17.1	17.9	14.1	21.3	18.5
AC90-115001	16.9	18.9	15.6	15.6	13.6	19.8	17.1
AC90-115011	19.2	21.5	19.1	16.8	15.3	22.7	18.8
AC90-115021	15.8	17.4	13.9	14.4	12.2	19.1	15.5
AC90-115025	17.6	19.0	16.0	16.1	13.4	21.0	17.8
AM90-111004	18.9	21.8	18.4	17.0	14.2	21.9	18.4
AM90-111005	16.1	18.6	16.3	13.8	13.2	20.0	15.3
AM90-111006	16.3	18.8	15.0	14.0	12.0	19.8	16.8
AM90-111009	18.9	21.8	19.2	16.0	14.8	23.8	15.4
AM90-211003	19.5	24.0	20.3	16.4	15.7	23.7	18.0
AM90-211005	18.2	21.5	17.9	16.1	12.9	22.4	18.7
AM90-312002	15.7	15.8	15.7	14.4	13.7	19.0	15.2
AM90-312023	15.4	16.8	13.7	15.6	15.0	18.7	14.8
HS89-2839	18.4	20.0	18.0	19.4	15.7	21.1	18.3
HS89-2840	18.4	19.8	20.8	19.0	14.3	22.3	19.1
HS89-2841	17.8	19.5	19.2	18.2	15.4	20.9	17.3
LL89-605	15.1	17.4	15.0	14.3	12.2	18.0	15.9
U90-2103	15.5	17.2	15.6	13.6	12.7	19.4	15.2
U90-2109	16.5	17.8	16.3	16.8	14.2	20.5	15.6
U90-2213	17.6	18.4	16.1	16.1	15.4	21.8	16.8
U90-2223	12.3	12.8	11.5	12.8	10.9	15.0	12.9
U90-2310	17.6	18.0	17.7	18.0	18.5	20.5	18.6
U90-2317	17.0	17.0	17.6	16.8	15.2	20.3	16.9
U90-2327	17.0	18.8	17.2	14.6	14.4	21.1	17.0
U90-2434	17.4	18.8	17.4	16.3	14.6	21.2	16.7
U90-2435	15.8	17.0	15.2	15.5	12.8	19.5	15.8
U90-2526	18.7	20.0	19.0	16.7	15.3	24.3	17.6
U90-2607	16.9	19.1	16.7	14.8	13.9	21.3	15.4
U90-2610	15.3	16.0	16.0	15.0	14.2	18.3	14.7
U90-2711	15.7	16.4	15.1	13.7	13.9	18.2	14.1
U90-2734	14.6	14.9	14.8	15.0	13.2	17.3	15.6

PRELIMINARY TEST IIA, 1991

SEED SIZE (g\100)

Strain	David City NE	Oneill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
BSR 201 (BSR)	18.0	15.6	16.0	13.3	19.0	12.8	15.6
Burlison (L)	17.7	17.0	20.0	15.5	21.6	14.9	20.1
Kenwood (II)	16.0	17.0	16.0	11.8	19.2	12.2	14.6
Sturdy (I)	20.5	19.4	18.5	14.8	21.3	15.9	20.4
AC90-115001	18.1	16.7	17.5	14.8	19.9	15.2	17.1
AC90-115011	22.0	19.0	19.0	15.1	23.1	16.7	20.0
AC90-115021	17.9	17.1	16.5	12.3	19.2	13.1	16.5
AC90-115025	19.8	18.6	17.5	15.3	21.3	14.6	18.3
AM90-111004	20.2	19.0	20.5	15.8	21.7	15.1	21.2
AM90-111005	17.4	16.1	17.0	12.5	18.9	14.1	16.7
AM90-111006	17.4	17.8	16.0	12.5	20.4	14.3	17.3
AM90-111009	19.9	20.4	20.0	16.0	23.1	15.8	19.6
AM90-211003	19.0	19.5	22.0	15.8	21.9	16.4	20.3
AM90-211005	20.7	18.3	18.5	14.5	21.3	15.4	18.5
AM90-312002	15.9	15.6	18.5	13.2	17.1	13.6	16.4
AM90-312023	14.9	14.6	17.0	13.1	16.7	12.4	17.4
HS89-2839	18.2	16.8	22.0	15.8	20.2	14.8	18.6
HS89-2840	17.8	16.3	20.5	15.2	20.7	15.2	17.7
HS89-2841	18.7	17.0	19.0	15.2	19.7	15.2	16.1
LL89-605	15.7	15.1	15.5	13.0	15.7	13.3	15.6
U90-2103	15.8	15.5	16.5	12.6	18.4	12.6	16.0
U90-2109	16.9	12.9	19.5	14.6	18.5	14.0	16.4
U90-2213	17.1	16.0	20.5	15.2	20.4	14.2	20.4
U90-2223	11.6	11.4	14.0	10.3	12.2	11.9	13.2
U90-2310	16.8	14.9	18.5	15.7	19.1	14.1	18.4
U90-2317	16.6	15.0	19.0	15.4	18.0	14.8	18.0
U90-2327	18.2	16.4	17.0	13.4	20.5	13.6	19.0
U90-2434	18.9	16.7	19.0	16.0	19.5	14.4	16.5
U90-2435	13.8	13.5	19.0	14.7	16.9	13.0	18.9
U90-2526	18.6	15.9	21.5	16.4	22.3	14.1	21.0
U90-2607	18.4	16.4	18.5	13.4	20.7	14.1	17.5
U90-2610	15.0	13.7	17.0	12.9	14.7	14.4	16.4
U90-2711	15.4	15.6	16.5	12.4	23.9	12.4	16.4
U90-2734	13.9	12.3	15.5	12.8	15.3	13.0	16.1

PRELIMINARY TEST IIA, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Ingham Co. MI	Hoytville OH
BSR 201 (BSR)	39.5	40.4	41.5	37.2	41.0	37.3
Burlison (L)	41.8	42.3	42.8	39.9	44.7	39.1
Kenwood (II)	37.2	39.5	36.7	35.8	39.5	34.5
Sturdy (I)	39.8	40.9	41.5	39.2	40.8	36.5
AC90-115001	40.6	41.8	41.9	38.7	42.8	37.8
AC90-115011	41.1	41.9	42.0	39.5	43.9	38.2
AC90-115021	40.2	40.9	42.6	38.3	42.1	37.0
AC90-115025	41.3	41.6	44.3	39.2	42.7	38.8
AM90-111004	39.5	40.8	41.2	36.3	41.0	38.1
AM90-111005	39.6	41.2	40.5	37.6	42.1	36.6
AM90-111006	39.0	40.2	40.3	37.8	41.3	35.4
AM90-111009	39.6	41.1	40.4	37.8	40.7	38.0
AM90-211003	39.8	41.4	40.0	39.0	41.0	37.7
AM90-211005	39.6	39.9	40.5	39.1	40.9	37.7
AM90-312002	39.0	40.0	39.5	37.7	40.8	36.8
AM90-312023	40.0	41.4	40.1	39.6	41.0	38.0
HS89-2839	37.8	37.8	40.1	36.9	39.3	34.9
HS89-2840	37.8	38.9	39.0	35.9	39.5	35.5
HS89-2841	39.8	40.2	40.6	37.6	40.0	40.7
LL89-605	38.7	39.6	40.8	37.6	39.7	35.6
U90-2103	39.4	41.2	39.6	37.6	42.3	36.3
U90-2109	39.7	40.5	41.3	36.9	41.7	37.9
U90-2213	39.1	39.8	39.4	36.9	42.3	37.1
U90-2223	38.2	38.9	38.7	38.5	39.3	35.4
U90-2310	38.4	37.2	37.1	36.9	40.2	40.8
U90-2317	41.1	42.5	41.9	39.0	43.6	38.4
U90-2327	39.7	40.8	40.0	38.4	42.3	37.0
U90-2434	38.6	39.1	39.9	36.3	41.5	36.1
U90-2435	40.1	40.5	40.7	38.9	42.0	38.5
U90-2526	40.1	40.2	41.0	38.7	42.0	38.5
U90-2607	38.6	39.9	39.0	37.6	41.2	35.4
U90-2610	39.6	40.4	40.9	38.0	42.0	36.7
U90-2711	40.0	41.9	41.1	38.4	40.9	37.8
U90-2734	38.0	38.1	38.3	36.6	40.5	36.5

PRELIMINARY TEST IIA, 1991

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Ingham Co. MI	Hoytville OH
BSR 201 (BSR)	21.2	20.7	20.4	21.8	20.7	22.2
Burlison (L)	20.0	19.9	20.1	20.6	18.2	21.1
Kenwood (II)	21.6	21.4	22.4	21.0	20.6	22.7
Sturdy (I)	21.0	20.5	20.4	21.4	20.3	22.3
AC90-115001	19.8	19.1	19.4	20.3	19.1	21.1
AC90-115011	20.8	20.1	20.7	21.5	19.8	22.0
AC90-115021	20.7	20.4	20.1	21.0	19.6	22.3
AC90-115025	20.2	19.9	19.5	20.7	19.2	21.7
AM90-111004	20.9	20.9	20.6	21.8	19.8	21.6
AM90-111005	21.3	20.9	21.1	22.4	19.3	22.8
AM90-111006	21.0	21.2	21.0	20.6	20.2	22.2
AM90-111009	21.2	20.6	20.8	21.7	20.9	22.1
AM90-211003	20.5	19.7	20.6	20.4	20.3	21.4
AM90-211005	20.3	20.6	20.2	19.9	19.8	21.1
AM90-312002	21.6	21.4	21.7	21.9	20.3	22.6
AM90-312023	21.5	20.7	22.1	21.5	20.7	22.6
HS89-2839	22.0	21.6	21.9	23.0	20.6	23.1
HS89-2840	21.9	21.5	22.3	23.1	20.1	22.6
HS89-2841	21.8	21.4	21.6	22.6	20.4	22.8
LL89-605	21.5	21.1	21.3	21.7	20.7	22.7
U90-2103	20.9	20.5	21.0	21.7	19.5	21.9
U90-2109	22.2	21.9	21.9	23.4	21.1	22.9
U90-2213	21.0	20.6	21.1	21.4	20.1	22.0
U90-2223	21.9	21.7	21.5	21.8	21.2	23.2
U90-2310	22.6	22.5	22.7	23.3	21.4	22.9
U90-2317	20.5	19.9	20.4	21.4	19.1	21.9
U90-2327	21.8	21.4	21.8	22.2	20.2	23.2
U90-2434	22.2	22.0	22.0	23.5	20.5	23.2
U90-2435	21.0	20.9	21.0	20.8	20.4	22.1
U90-2526	21.4	21.6	21.6	21.3	19.9	22.4
U90-2607	21.4	21.0	21.6	21.5	19.8	23.0
U90-2610	21.8	21.7	21.5	22.3	20.7	22.9
U90-2711	20.9	20.4	20.6	21.5	20.4	21.8
U90-2734	21.7	21.8	22.5	22.0	20.0	22.4

PRELIMINARY TEST IIB, 1991

Strain	Parentage	Generation Composited	Unique Traits
Burlison (L)	K74-113-76-486 x Century	F5	Rps1-b, Rps3
Kenwood (II)	Elgin x Asgrow A1937	F5	
Sturdy (I)	M70-127 x Century	F5	
C1828	C1627 x Williams 82	F5	Rps1-k
C1829	C1651 x C1627	F5	
C1834	C1678 x Resnik	F5	Rps1-k
C1836	C1678 x C1696	F5	
C1840	CX954-38-1 x Elgin 87	F5	Rps1-k
C1848	C1678 x PRX305-146	F5	Rps1-k
E90070	Rupp Seeds RS240P x Elgin	F3	
HM9033	$PMGTC_4$(Cycle 4 Rec. Sel.)	S2	PR Root Res.
HM9035	$PMGTC_4$(Cycle 4 Rec. Sel.)	S2	PR Root Res.
HM9037	HM8130 x Maple Arrow	F5	PR Tol.
HM9038	Ripley x Asgrow A3127 BC_3 F_2-1	F5	Rps1-k?
HM9039	Century 84 x Asgrow A3127	F5	Rps1-k?
LN88-964	L80-4349 x A80-244036	F5	
LN88-1496	BSR 101 x A80-244036	F5	Rps1
LN88-1627	BSR 101 x A80-244036	F5	Rps1
LN88-1674	BSR 101 x A80-244036	F5	Rps1
LN88-1682	BSR 101 x A80-244036	F5	Rps1
LN88-2099	BSR 101 x Preston	F5	
LN88-3196	BSR 101 x Century	F5	Rps1
LN88-3202	BSR 101 x Century	F5	Rps1
LN88-3458	BSR 101 x Century	F5	Rps1
LN88-7722	A82-267015 x Asgrow A2943	F5	Rps1
LN88-8794	Asgrow A2943 x Pioneer P9271	F5	
LN88-9242	Sherman x Chamberlain	F5	
LN88-9709	Sherman x Asgrow A2943	F5	
LN88-9994	LN81-1029 x Chamberlain	F5	Rps?
LN88-11809	BSR 101 x Century 84	F5	Rps?
LN88-11969	BSR 101 x Century 84	F5	Rps?
ORC 9008	Elgin x Asgrow A3127	F5	
ORC 9009	KG 60 x Asgrow A2943	F5	
SL89-3131	Asgrow A2943 x A83-271027	F4	

PRELIMINARY TEST IIB, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Shattering Score Manhattan	BSR-Boone Plant n	BSR-Boone Plant %	BSR-Boone Stem n	BSR-Boone Stem %
Burlison (L)	WTTIYBlI	1	90		57.3	
Kenwood (II)	PTBIYBlI	1	70		24.4	
Sturdy (I)	PGBIYIbI	1	90		66.0	
C1828	PTTSYBlI	2	100		62.3	
C1829	WG+TBDYBf+BlI	2	100		72.4	
C1834	WTTDYBlI	1	60		28.0	
C1836	PTTDYBlD	1	90		76.5	
C1840	PGBDYBfI	1	90		63.5	
C1848	WTTIYBlD	1	100		100.0	
E90070	PGBDYHI	2	80		29.6	
HM9033	PTBIYBlI	1	70		34.9	
HM9035	PTBIYBlI	3	90		70.9	
HM9037	PTBDYBrI	2	90		79.4	
HM9038	PTTDYBrI	1	100		66.1	
HM9039	PTTDYBlI	1	70		47.8	
LN88-964	PTTDYBlI	2	100		32.2	
LN88-1496	PGTDYIbI	1	90		27.9	
LN88-1627	PTTDYBlI	1	30		14.2	
LN88-1674	PTTDYBlI	1	30		4.1	
LN88-1682	PTTDYBlI	1	60		14.6	
LN88-2099	PGBDYIbI	2	100		43.8	
LN88-3196	PGBDYIbI	1	60		16.2	
LN88-3202	PTBDYBlI	4	50		8.8	
LN88-3458	PGBDYIbI	2	90		51.7	
LN88-7722	PGBDYYI	2	90		49.8	
LN88-8794	PTBIYBlI	1	70		30.5	
LN88-9242	PTBIYBrI	3	20		1.9	
LN88-9709	WGBDYBfI	2	80		44.1	
LN88-9994	PGTDYIbI	2	50		20.2	
LN88-11809	PTTDYBlI	1	80		25.1	
LN88-11969	PTBIYBlI	3	40		11.5	
ORC 9008	PTTDYBlI	1	80		49.4	
ORC 9009	PGBDYYI	1	90		60.5	
SL89-3131	PTBDYBlI	2	100		61.7	

PRELIMINARY TEST IIB, 1991

DISEASE DATA

Strain	PR			Germination	PS	PSB	SMV
	Custer Phyto. Tolerance	Urbana Race 1	Ames Race 4	Lafayette	Lafayette		
					a	n	a
				%	%	%	Score
Burlison (L)	4.4	R	R	71	52	6	4e
Kenwood (II)	6.1	S	S	59	45	4	3e
Sturdy (I)	5.3	R	S	58	16	9	4e
C1828	4.5	R	R	50	27	4	2e
C1829	4.0	S	S	42	55	2	4e
C1834	4.4	R	R	66	32	8	3e
C1836	5.1	R	S	78	14	8	5e
C1840	6.0	R	R	52	42	4	5e
C1848	5.9	R	R	92	12	0	5e
E90070	4.0	S	S	62	41	10	4e
HM9033	4.4	R	R	70	33	6	5e
HM9035	4.1	R	S	72	20	0	5e
HM9037	4.1	R	R	62	34	2	4e
HM9038	5.0	R	S	78	13	4	4e
HM9039	4.6	S	S	78	29	4	4e
LN88-964	5.9	S	S	52	12	20	5e
LN88-1496	6.8	R	S	72	22	6	2e
LN88-1627	5.8	R	S	60	32	16	4e
LN88-1674	7.8	R	S	76	14	6	4e
LN88-1682	4.3	R	S	76	19	4	5e
LN88-2099	5.9	H	S	84	59	0	2e
LN88-3196	5.8	R	S	76	35	10	2e
LN88-3202	6.0	R	S	78	54	6	5e
LN88-3458	5.3	R	S	82	44	4	2e
LN88-7722	6.0	R	S	76	16	4	3m
LN88-8794	4.4	S	S	68	33	k0	4e
LN88-9242	3.8	S	S	72	24	2	5e
LN88-9709	8.8	R	S	78	53	4	2m
LN88-9994	8.8	R	S	72	35	10	2m
LN88-11809	4.6	R	S	72	59	0	3e
LN88-11969	5.5	R	R	56	68	0	5e
ORC 9008	4.0	S	S	74	46	4	4e
ORC 9009	4.3	S	S	48	60	8	5e
SL89-3131	4.0	S	S	84	31	0	3e

PRELIMINARY TEST IIB, 1991

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 11 Score	Seed Size 12 g/100	Composition Protein 5 %	 Oil 5 %
Burlison (L)	51.9	8	3.1	1.5	35	2.1	18.0	41.5	20.3
Kenwood (II)	52.5	5	09/10*	1.8	37	1.9	15.2	38.3	21.4
Sturdy (I)	50.3	19	-4.2	1.6	34	2.2	18.3	39.0	21.2
C1828	51.1	11	-0.4	1.7	35	1.8	17.3	38.3	21.5
C1829	49.2	26	3.6	1.5	38	2.5	17.3	40.1	21.1
C1834	52.7	3	1.9	1.3	39	1.8	15.9	39.7	21.3
C1836	50.9	15	2.3	1.3	30	1.8	15.0	38.4	21.4
C1840	51.5	10	0.0	1.2	31	2.3	17.0	38.1	21.3
C1848	47.3	33	4.4	1.1	22	1.6	14.6	40.0	21.1
E90070	51.1	11	4.5	2.0	38	2.2	16.1	37.8	22.1
HM9033	49.3	24	-0.5	1.7	33	2.2	16.2	38.3	21.2
HM9035	47.0	34	-2.2	1.6	35	2.0	18.7	40.5	21.0
HM9037	48.6	30	-3.5	1.5	35	2.0	17.1	40.2	21.0
HM9038	49.3	24	-1.1	1.5	33	1.9	15.0	39.8	20.6
HM9039	50.7	16	-0.1	1.3	33	1.8	17.9	41.8	20.5
LN88-964	50.2	20	4.3	2.1	37	2.3	18.2	38.4	21.8
LN88-1496	52.4	6	2.4	2.2	36	2.2	18.3	38.6	21.5
LN88-1627	51.0	13	1.2	2.1	35	2.1	17.5	38.0	21.3
LN88-1674	51.0	13	4.0	2.3	39	2.1	17.6	37.9	21.5
LN88-1682	52.2	7	1.6	1.9	38	2.1	17.9	38.5	21.6
LN88-2099	49.8	21	2.1	1.7	36	2.2	16.1	37.3	22.2
LN88-3196	48.5	31	4.5	1.4	36	2.4	17.3	40.2	20.5
LN88-3202	49.2	26	3.1	2.1	38	2.3	17.4	38.8	21.0
LN88-3458	49.0	28	2.9	1.5	37	2.3	17.0	38.6	21.2
LN88-7722	51.7	9	5.3	2.1	43	1.9	14.5	40.8	20.8
LN88-8794	50.4	18	1.4	1.3	34	2.0	16.0	39.0	21.6
LN88-9242	52.7	3	6.5	2.1	38	2.0	17.1	39.6	22.0
LN88-9709	53.5	1	3.8	1.3	33	1.8	15.9	40.0	21.4
LN88-9994	50.5	17	2.0	1.3	37	1.8	17.5	39.5	21.0
LN88-11809	49.5	23	3.2	1.3	35	2.1	17.1	40.8	20.4
LN88-11969	48.0	32	-0.2	1.3	36	2.1	16.4	42.2	19.3
ORC 9008	53.3	2	1.6	1.3	35	2.0	16.7	38.8	21.5
ORC 9009	49.7	22	2.2	1.1	34	2.0	16.2	41.3	20.3
SL89-3131	48.8	29	6.2	1.3	37	2.1	13.1	40.2	21.2

* 117.9 Days After Planting

PRELIMINARY TEST IIB, 1991

YIELD (bu/a)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI
Burlison (L)	51.9	54.9	54.7	60.6	40.4	61.0
Kenwood (II)	52.5	57.7	63.4	48.9	26.4	72.9
Sturdy (I)	50.3	56.6	56.6	44.9	15.9	69.1
C1828	51.1	51.5	60.3	57.2	38.3	65.7
C1829	49.2	56.2	55.3	51.2	24.0	63.9
C1834	52.7	58.0	51.3	65.4	30.4	65.0
C1836	50.9	58.9	56.0	52.4	30.4	64.2
C1840	51.5	58.7	55.1	54.4	26.4	63.4
C1848	47.3	50.3	53.9	48.0	24.1	62.7
E90070	51.1	59.7	55.9	47.2	37.7	59.0
HM9033	49.3	58.1	56.7	59.7	21.9	58.9
HM9035	47.0	54.6	57.4	45.3	11.4	60.9
HM9037	48.6	52.6	50.4	42.9	28.1	62.9
HM9038	49.3	56.2	57.2	47.5	31.5	61.3
HM9039	50.7	57.7	55.4	46.5	28.7	66.1
LN88-964	50.2	60.5	52.5	56.3	43.4	66.1
LN88-1496	52.4	56.7	61.1	55.5	36.7	58.0
LN88-1627	51.0	57.7	63.1	49.5	28.8	60.0
LN88-1674	51.0	57.7	52.6	59.2	35.3	60.0
LN88-1682	52.2	57.7	56.9	62.2	36.5	62.9
LN88-2099	49.8	58.1	57.8	46.5	32.3	60.5
LN88-3196	48.5	56.7	55.1	58.3	29.7	64.0
LN88-3202	49.2	56.7	56.7	63.7	23.3	64.1
LN88-3458	49.0	55.0	59.5	49.7	23.0	66.6
LN88-7722	51.7	61.9	53.5	62.2	32.7	68.9
LN88-8794	50.4	58.6	59.7	54.2	27.4	65.2
LN88-9242	52.7	55.9	56.0	62.7	44.9	71.1
LN88-9709	53.5	63.1	53.9	57.7	24.5	69.7
LN88-9994	50.5	57.2	57.8	59.4	40.5	64.3
LN88-11809	49.5	60.7	60.8	51.2	22.0	67.7
LN88-11969	48.0	56.5	55.9	55.1	20.1	60.0
ORC 9008	53.3	59.2	61.7	52.9	34.8	63.8
ORC 9009	49.7	61.0	57.0	42.3	22.3	72.3
SL89-3131	48.8	52.4	58.6	54.7	35.7	63.0
C.V. (%)		5.9	7.1	7.7	20.8	6.7
L.S.D. (5%)		6.7	8.1	8.5	12.6	8.7
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIB, 1991

YIELD (bu/a)

Strain	Spick-ard MO	David City NE	Oconto NE	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	57.3	50.8	36.1	49.3	75.4	38.9	43.3
Kenwood (II)	63.0	48.4	32.6	44.1	84.2	38.5	50.3
Sturdy (I)	55.1	55.2	50.9	39.5	76.2	40.2	43.7
C1828	57.9	50.1	39.1	43.3	75.9	31.1	42.2
C1829	60.8	49.7	31.3	44.2	75.8	36.6	41.4
C1834	59.4	56.8	43.9	51.8	72.1	33.4	44.9
C1836	60.5	52.3	47.9	41.6	71.9	34.7	40.0
C1840	60.1	53.5	56.6	45.1	72.5	34.9	37.6
C1848	52.5	54.4	48.0	43.4	68.0	24.3	37.5
E90070	64.5	48.8	51.3	45.5	62.1	37.5	43.8
HM9033	55.9	50.2	43.8	45.5	67.4	36.1	37.5
HM9035	45.1	50.6	47.0	38.7	72.0	37.6	42.9
HM9037	65.5	51.5	41.7	42.9	68.8	38.6	37.0
HM9038	59.2	48.6	38.5	43.7	74.5	30.5	42.7
HM9039	54.6	50.8	47.0	42.7	81.5	36.3	41.6
LN88-964	60.8	47.4	38.6	29.3	79.7	32.3	35.0
LN88-1496	68.1	52.9	40.6	43.5	80.2	31.7	43.2
LN88-1627	58.7	54.7	39.3	32.0	85.6	36.0	47.1
LN88-1674	58.5	50.9	36.7	42.5	80.4	32.5	45.1
LN88-1682	64.7	45.3	42.3	42.9	80.5	33.1	40.8
LN88-2099	63.4	47.1	41.5	39.7	68.5	36.4	45.9
LN88-3196	58.8	46.8	30.9	32.5	68.4	32.6	48.6
LN88-3202	52.9	47.4	37.0	35.7	78.8	33.3	40.8
LN88-3458	58.4	51.8	29.5	42.7	81.4	34.4	35.5
LN88-7722	63.7	53.9	40.5	45.0	64.9	33.0	39.8
LN88-8794	57.6	52.7	41.7	38.5	73.8	37.8	37.5
LN88-9242	62.2	48.7	42.9	48.1	66.3	36.5	37.4
LN88-9709	58.2	54.4	49.8	47.1	75.4	35.6	52.4
LN88-9994	62.3	50.6	34.5	40.8	68.5	35.9	34.0
LN88-11809	54.5	46.5	36.0	42.1	75.0	33.1	44.2
LN88-11969	51.2	48.1	42.1	40.6	65.1	34.6	46.7
ORC 9008	68.7	51.2	43.6	43.9	74.3	38.9	46.3
ORC 9009	55.2	51.2	46.2	37.7	76.2	33.9	40.5
SL89-3131	63.0	44.1	41.3	41.4	60.8	28.8	41.8
C.V. (%)	9.8	3.5	13.7	9.7	5.5	7.5	15.3
L.S.D. (5%)	11.9	3.6	11.8	8.1	8.2	5.3	4.1
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 IIB, 1991

YIELD RANK

Strain	Yield Rank	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI
Burlison (L)	8	29	27	6	4	26
Kenwood (II)	5	14	1	25	22	1
Sturdy (I)	19	23	18	32	33	5
C1828	11	33	6	12	5	11
C1829	26	25	24	21	26	18
C1834	3	13	33	1	15	13
C1836	15	8	19	20	15	15
C1840	10	9	25	17	22	20
C1848	33	34	28	26	25	24
E90070	11	6	21	28	6	32
HM9033	24	11	16	7	31	33
HM9035	34	30	12	31	34	27
HM9037	30	31	34	33	20	22
HM9038	24	25	13	27	14	25
HM9039	16	14	23	29	19	9
LN88-964	20	5	32	13	2	9
LN88-1496	6	20	4	14	7	34
LN88-1627	13	14	2	24	18	29
LN88-1674	13	14	31	9	10	29
LN88-1682	7	14	15	4	8	22
LN88-2099	21	11	10	29	13	28
LN88-3196	31	20	25	10	17	17
LN88-3202	26	20	16	2	27	16
LN88-3458	28	28	8	23	28	8
LN88-7722	9	2	30	4	12	6
LN88-8794	18	10	7	18	21	12
LN88-9242	3	27	19	3	1	3
LN88-9709	1	1	28	11	24	4
LN88-9994	17	19	10	8	3	14
LN88-11809	23	4	5	21	30	7
LN88-11969	32	24	21	15	32	29
ORC 9008	2	7	3	19	11	19
ORC 9009	22	3	14	34	29	2
SL89-3131	29	32	9	16	9	21

PRELIMINARY TEST IIB, 1991

YIELD RANK

Strain	Spick-ard MO	David City NE	Oconto NE	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	25	16	28	2	14	2	13
Kenwood (II)	8	26	31	10	2	5	2
Sturdy (I)	28	2	3	27	10	1	12
C1828	23	21	23	15	12	31	17
C1829	12	22	32	9	13	9	20
C1834	16	1	10	1	21	22	9
C1836	14	10	6	22	23	18	24
C1840	15	7	1	7	20	17	26
C1848	32	5	5	14	28	34	27
E90070	5	23	2	5	33	8	11
HM9033	26	20	11	5	29	13	27
HM9035	34	19	7	28	22	7	15
HM9037	3	12	16	16	24	4	31
HM9038	17	25	25	12	17	32	16
HM9039	29	16	7	18	3	12	19
LN88-964	12	28	24	34	8	29	33
LN88-1496	2	8	20	13	7	30	14
LN88-1627	19	3	22	33	1	14	4
LN88-1674	20	15	27	20	6	28	8
LN88-1682	4	33	14	16	5	24	21
LN88-2099	7	30	18	26	25	11	7
LN88-3196	18	31	33	32	27	27	3
LN88-3202	31	28	26	31	9	23	21
LN88-3458	21	11	34	18	4	20	32
LN88-7722	6	6	21	8	32	26	25
LN88-8794	24	9	16	29	19	6	27
LN88-9242	11	24	13	3	30	10	30
LN88-9709	22	4	4	4	15	16	1
LN88-9994	10	18	30	24	25	15	34
LN88-11809	30	32	29	21	16	24	10
LN88-11969	33	27	15	25	31	19	5
ORC 9008	1	13	12	11	18	2	6
ORC 9009	27	13	9	30	11	21	23
SL89-3131	8	34	19	23	34	33	18

PRELIMINARY TEST IIB, 1991

MATURITY (date)

Strain	Mean 10 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI
Burlison (L)	3.1	0		1	10	5
Kenwood (II)	09/10	09/07		09/04	08/27	09/13
Sturdy (I)	-4.2	-5		-7	-7	-2
C1828	-0.4	-1		-4	3	4
C1829	3.6	2		5	3	7
C1834	1.9	1		3	10	4
C1836	2.3	4		-1	4	2
C1840	0.0	0		2	2	-4
C1848	4.4	4		2	11	5
E90070	4.5	5		2	12	5
HM9033	-0.5	-1		1	0	0
HM9035	-2.2	-4		-5	-4	0
HM9037	-3.5	-6		-9	-2	2
HM9038	-1.1	-2		-4	3	1
HM9039	-0.1	-2		-4	-2	2
LN88-964	4.3	6		3	15	4
LN88-1496	2.4	0		2	11	5
LN88-1627	1.2	2		0	6	-1
LN88-1674	4.0	3		3	13	3
LN88-1682	1.6	1		2	10	0
LN88-2099	2.1	2		-2	2	6
LN88-3196	4.5	4		2	10	8
LN88-3202	3.1	2		2	6	8
LN88-3458	2.9	5		1	2	8
LN88-7722	5.3	6		3	13	6
LN88-8794	1.4	1		0	4	3
LN88-9242	6.5	7		2	15	9
LN88-9709	3.8	6		2	1	9
LN88-9994	2.0	0		3	8	0
LN88-11809	3.2	3		0	7	7
LN88-11969	-0.2	1		1	-3	-3
ORC 9008	1.6	2		2	0	0
ORC 9009	2.2	2		3	3	4
SL89-3131	6.2	6		5	16	9
Date Planted	05/15	05/07		04/30	05/11	05/11
Days to Mature	117.9	123		127	108	125

PRELIMINARY TEST IIB, 1991

MATURITY (date)

Strain	Spick-ard MO	David City NE	Oconto NE	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	1	5		1	0	4	4
Kenwood (II)	09/03	09/26		09/09	09/22	09/09	09/19
Sturdy (I)	-7	-1		-4	-5	-6	2
C1828	0	2		0	-1	0	-7
C1829	0	4		6	5	4	0
C1834	1	1		1	3	2	-7
C1836	3	1		3	2	1	4
C1840	-1	0		3	-1	1	-2
C1848	5	1		6	5	4	1
E90070	5	3		2	8	4	-1
HM9033	-1	-2		-1	-4	2	1
HM9035	-1	-2		-5	-5	0	4
HM9037	-1	-1		-5	-3	-4	-6
HM9038	-3	1		0	-5	-1	-1
HM9039	0	1		1	-2	0	5
LN88-964	4	3		5	4	4	-5
LN88-1496	1	2		0	-1	3	1
LN88-1627	1	1		2	0	3	-2
LN88-1674	2	2		3	2	4	5
LN88-1682	2	1		1	0	0	-1
LN88-2099	2	1		0	5	1	4
LN88-3196	2	3		3	6	4	3
LN88-3202	1	2		3	3	1	3
LN88-3458	2	2		3	3	4	-1
LN88-7722	3	4		1	13	1	3
LN88-8794	1	2		1	2	1	-1
LN88-9242	6	3		3	6	5	9
LN88-9709	2	3		3	6	3	3
LN88-9994	2	2		4	2	2	-3
LN88-11809	2	3		3	1	2	4
LN88-11969	0	1		-2	0	0	3
ORC 9008	2	1		1	4	3	1
ORC 9009	1	4		2	2	1	0
SL89-3131	3	4		5	8	5	1
Date Planted	05/14	06/10		05/15	05/16	05/22	05/22
Days to Mature	112	108		117	129	110	120

PRELIMINARY TEST IIB, 1991

LODGING (score)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI
Burlison (L)	1.5	1.2	2.4	1.1	1.0	2.0
Kenwood (II)	1.8	1.5	2.6	1.0	1.0	3.0
Sturdy (I)	1.6	1.2	1.9	1.0	1.0	3.0
C1828	1.7	1.2	2.5	1.0	1.0	2.5
C1829	1.5	1.1	2.0	1.0	1.0	1.5
C1834	1.3	1.3	2.0	1.0	1.0	1.5
C1836	1.3	1.1	1.5	1.0	1.0	1.0
C1840	1.2	1.0	2.1	1.0	1.0	1.0
C1848	1.1	1.2	1.2	1.0	1.0	1.0
E90070	2.0	1.4	3.7	1.0	1.0	2.0
HM9033	1.7	1.5	3.2	1.0	1.0	2.0
HM9035	1.6	1.2	2.0	1.0	1.0	1.5
HM9037	1.5	1.1	2.0	1.0	1.0	2.5
HM9038	1.5	1.2	1.7	1.0	1.0	2.0
HM9039	1.3	1.3	2.0	1.0	1.0	1.0
LN88-964	2.1	1.7	3.4	1.0	1.0	2.5
LN88-1496	2.2	1.2	2.9	1.0	1.0	3.0
LN88-1627	2.1	1.2	3.6	1.0	1.0	2.5
LN88-1674	2.3	1.4	3.4	1.0	1.3	3.0
LN88-1682	1.9	1.3	3.3	1.0	1.0	2.5
LN88-2099	1.7	1.2	2.7	1.0	1.0	3.0
LN88-3196	1.4	1.1	1.6	1.0	1.0	2.5
LN88-3202	2.1	1.3	3.0	1.0	1.0	3.0
LN88-3458	1.5	1.1	1.8	1.0	1.0	2.5
LN88-7722	2.1	1.5	3.3	1.0	1.0	2.0
LN88-8794	1.3	1.0	2.0	1.0	1.0	1.5
LN88-9242	2.1	1.3	3.5	1.0	1.0	2.5
LN88-9709	1.3	1.2	2.0	1.0	1.0	1.0
LN88-9994	1.3	1.1	1.8	1.0	1.0	1.0
LN88-11809	1.3	1.1	1.6	1.0	1.0	2.0
LN88-11969	1.3	1.0	1.8	1.0	1.0	1.0
ORC 9008	1.3	1.2	2.0	1.0	1.0	1.0
ORC 9009	1.1	1.0	1.2	1.0	1.0	1.0
SL89-3131	1.3	1.3	1.5	1.0	1.0	2.0

PRELIMINARY TEST IIB, 1991

LODGING (score)

Strain	Spick-ard MO	David City NE	Oconto NE	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	1.0	1.0	1.0	1.0	2.1	1.0	2.8
Kenwood (II)	1.0	1.5	2.5	1.0	2.5	1.0	3.5
Sturdy (I)	1.0	1.5	2.0	1.0	2.5	1.0	1.8
C1828	2.0	1.0	1.5	1.0	3.0	1.0	2.3
C1829	1.0	1.0	1.5	1.0	2.5	1.0	2.8
C1834	1.5	1.0	1.5	1.0	2.0	1.0	1.3
C1836	1.0	1.0	2.0	1.0	1.6	1.0	2.8
C1840	1.0	1.0	1.0	1.0	2.0	1.0	1.0
C1848	1.0	1.0	1.0	1.0	1.0	1.0	1.5
E90070	3.0	2.0	1.5	1.0	4.0	1.0	2.8
HM9033	1.5	1.0	1.0	1.0	3.5	1.0	2.8
HM9035	1.0	1.0	1.5	1.0	3.0	1.0	3.5
HM9037	1.0	2.0	1.0	1.0	3.0	1.0	1.8
HM9038	2.5	1.0	1.5	1.0	2.0	1.0	1.8
HM9039	1.0	1.0	1.0	1.0	2.0	1.0	2.0
LN88-964	2.0	2.0	3.0	1.0	3.4	1.0	3.3
LN88-1496	3.0	2.0	4.0	1.0	3.0	1.0	3.0
LN88-1627	2.0	3.0	3.0	1.0	3.5	1.0	2.5
LN88-1674	2.0	3.0	3.5	1.0	3.5	1.0	3.3
LN88-1682	2.0	2.0	3.0	1.0	3.0	1.0	1.8
LN88-2099	1.5	1.0	1.5	1.0	3.0	1.0	2.0
LN88-3196	1.0	1.0	1.0	1.0	3.0	1.0	1.8
LN88-3202	2.5	2.0	3.0	1.0	3.0	1.0	2.8
LN88-3458	1.0	1.0	3.0	1.0	3.0	1.0	1.0
LN88-7722	3.0	2.0	4.0	1.0	3.5	1.0	1.8
LN88-8794	1.0	1.0	1.0	1.0	3.0	1.0	1.3
LN88-9242	2.5	1.0	2.5	1.0	4.0	1.0	3.3
LN88-9709	1.0	1.0	1.0	1.0	3.0	1.0	1.0
LN88-9994	1.0	1.5	2.5	1.0	2.0	1.0	1.0
LN88-11809	1.5	1.0	1.5	1.0	2.0	1.0	1.3
LN88-11969	1.5	1.0	1.5	1.0	2.1	1.0	1.8
ORC 9008	1.0	1.0	1.0	1.0	2.0	1.0	2.5
ORC 9009	1.0	1.0	1.0	1.0	2.0	1.0	1.0
SL89-3131	1.0	1.0	1.0	1.0	2.5	1.0	1.5

PRELIMINARY TEST IIB, 1991

PLANT HEIGHT (inches)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI
Burlison (L)	35	31	39	26	29	35
Kenwood (II)	37	34	41	27	34	43
Sturdy (I)	34	30	38	25	29	39
C1828	34	31	36	26	32	37
C1829	38	36	43	29	34	42
C1834	39	36	42	32	36	40
C1836	29	28	34	20	25	31
C1840	30	28	37	24	27	32
C1848	22	22	30	18	15	22
E90070	37	36	46	28	33	38
HM9033	33	30	36	29	30	35
HM9035	34	33	37	26	30	38
HM9037	34	33	38	26	28	38
HM9038	33	32	38	25	29	35
HM9039	33	32	37	25	27	38
LN88-964	36	35	42	30	32	40
LN88-1496	36	30	42	27	33	35
LN88-1627	35	34	44	26	32	37
LN88-1674	38	36	42	29	34	43
LN88-1682	37	33	42	30	33	43
LN88-2099	36	32	44	26	32	41
LN88-3196	35	32	42	27	28	41
LN88-3202	38	33	38	32	35	47
LN88-3458	36	33	42	27	30	42
LN88-7722	42	41	46	34	34	50
LN88-8794	34	30	42	27	30	39
LN88-9242	37	35	41	29	35	42
LN88-9709	33	30	40	26	29	33
LN88-9994	36	34	44	29	34	41
LN88-11809	35	33	40	25	30	42
LN88-11969	36	32	42	29	32	41
ORC 9008	35	34	40	26	31	36
ORC 9009	34	33	41	23	30	38
SL89-3131	36	35	42	29	33	43

PRELIMINARY TEST IIB, 1991

PLANT HEIGHT (inches)

Strain	Spick-ard MO	David City NE	Oconto NE	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	34	41	42	28	45	29	38
Kenwood (II)	35	44	43	28	46	32	40
Sturdy (I)	30	40	42	22	47	26	41
C1828	35	44	37	27	44	28	37
C1829	39	50	41	27	47	31	42
C1834	41	47	42	32	48	32	41
C1836	25	37	36	21	35	27	38
C1840	24	40	35	25	38	25	34
C1848	16	28	24	18	27	20	29
E90070	40	42	43	28	50	31	39
HM9033	35	42	35	28	42	26	33
HM9035	31	44	42	26	43	28	40
HM9037	32	46	35	25	49	29	37
HM9038	33	40	35	25	42	26	40
HM9039	29	40	40	27	40	26	38
LN88-964	39	45	41	24	48	28	37
LN88-1496	39	44	44	26	44	30	40
LN88-1627	33	40	40	23	49	30	37
LN88-1674	39	42	43	30	52	32	41
LN88-1682	39	47	46	26	47	28	39
LN88-2099	39	40	42	27	47	29	38
LN88-3196	34	45	41	22	46	30	39
LN88-3202	38	46	42	24	49	32	40
LN88-3458	36	44	43	24	48	29	41
LN88-7722	42	51	52	32	53	34	41
LN88-8794	34	41	40	25	44	27	34
LN88-9242	42	44	41	27	48	32	36
LN88-9709	33	38	38	24	43	27	36
LN88-9994	34	44	39	25	46	30	38
LN88-11809	32	42	41	23	43	31	41
LN88-11969	35	46	41	24	46	29	39
ORC 9008	36	45	40	27	44	28	38
ORC 9009	30	41	41	26	42	29	38
SL89-3131	36	42	42	27	45	28	38

PRELIMINARY TEST IIB, 1991

SEED QUALITY (score)

Strain	Mean 11 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI
Burlison (L)	2.1	3.3	2.7	2.5	1.5	
Kenwood (II)	1.9	3.5	2.6	2.3	1.5	
Sturdy (I)	2.2	3.3	2.4	2.5	2.5	
C1828	1.8	3.5	1.8	2.3	1.5	
C1829	2.5	4.2	2.6	2.8	1.5	
C1834	1.8	3.5	2.0	1.8	1.0	
C1836	1.8	2.7	2.5	1.8	1.0	
C1840	2.3	4.2	2.0	2.8	2.0	
C1848	1.6	2.2	2.0	1.5	1.0	
E90070	2.2	4.0	2.3	2.0	2.5	
HM9033	2.2	3.7	2.1	2.0	1.5	
HM9035	2.0	3.0	1.6	2.3	2.0	
HM9037	2.0	2.7	1.6	2.0	1.5	
HM9038	1.9	3.0	1.6	1.8	1.0	
HM9039	1.8	3.6	1.4	2.3	1.0	
LN88-964	2.3	4.6	1.4	2.3	2.0	
LN88-1496	2.2	3.0	1.5	3.0	1.5	
LN88-1627	2.1	4.3	1.9	2.0	1.5	
LN88-1674	2.1	4.5	1.6	2.3	1.5	
LN88-1682	2.1	4.0	1.4	2.5	1.5	
LN88-2099	2.2	3.8	1.3	2.3	2.0	
LN88-3196	2.4	4.6	1.2	2.3	2.5	
LN88-3202	2.3	4.0	1.2	2.8	1.5	
LN88-3458	2.3	4.3	1.4	2.3	1.5	
LN88-7722	1.9	3.8	1.8	1.8	1.5	
LN88-8794	2.0	4.0	1.7	2.5	1.0	
LN88-9242	2.0	4.5	1.3	2.3	1.5	
LN88-9709	1.8	3.8	1.6	2.0	1.0	
LN88-9994	1.8	3.7	1.2	2.3	1.5	
LN88-11809	2.1	3.7	1.3	2.5	1.5	
LN88-11969	2.1	4.3	1.3	2.8	1.0	
ORC 9008	2.0	4.1	1.5	1.8	1.0	
ORC 9009	2.0	3.8	1.7	2.5	1.0	
SL89-3131	2.1	4.7	1.3	1.8	1.0	

PRELIMINARY TEST IIB, 1991

SEED QUALITY (score)

Strain	Spick-ard MO	David City NE	Oconto NE	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	2.0	1.0	1.5	1.6	1.5	3.0	2.0
Kenwood (II)	2.0	1.0	1.0	1.5	1.0	3.0	2.0
Sturdy (I)	2.5	1.5	1.0	1.8	1.5	3.0	2.0
C1828	2.0	1.0	1.5	1.5	1.0	2.0	2.0
C1829	2.0	2.0	3.0	3.0	1.0	3.0	2.0
C1834	2.0	1.0	1.0	1.5	1.0	3.0	2.0
C1836	2.0	1.0	1.0	2.0	1.0	3.0	2.0
C1840	2.5	2.0	1.5	2.3	1.0	3.0	2.0
C1848	1.5	1.0	1.0	1.8	1.0	3.0	2.0
E90070	2.0	1.5	2.0	2.1	1.0	3.0	2.0
HM9033	1.5	1.5	2.0	2.4	1.0	4.0	2.0
HM9035	2.0	1.0	1.5	2.7	1.0	3.0	2.0
HM9037	2.0	1.5	2.0	2.8	1.0	3.0	2.0
HM9038	2.0	1.5	1.5	2.4	1.0	3.0	2.0
HM9039	2.0	1.0	1.0	2.3	1.0	2.0	2.0
LN88-964	1.5	1.0	3.0	3.1	1.0	3.0	2.0
LN88-1496	2.0	2.0	2.5	3.0	1.0	3.0	2.0
LN88-1627	2.0	1.0	1.0	2.4	1.0	5.0	1.0
LN88-1674	1.5	2.0	3.0	2.0	1.0	3.0	1.0
LN88-1682	1.5	2.5	1.0	2.6	1.0	3.0	2.0
LN88-2099	1.0	2.0	2.5	3.1	1.0	3.0	2.0
LN88-3196	2.0	2.0	3.0	2.9	1.0	3.0	2.0
LN88-3202	2.0	1.0	2.0	2.8	1.5	5.0	2.0
LN88-3458	2.0	2.0	3.0	2.6	1.5	3.0	2.0
LN88-7722	1.5	1.0	2.0	1.9	1.0	3.0	2.0
LN88-8794	2.0	1.0	1.5	2.1	1.0	3.0	2.0
LN88-9242	1.0	1.0	2.0	2.3	1.0	3.0	2.0
LN88-9709	1.0	1.0	1.0	1.8	2.0	3.0	2.0
LN88-9994	2.0	1.0	1.5	1.8	1.0	3.0	1.0
LN88-11809	2.0	1.5	3.0	2.1	1.0	4.0	1.0
LN88-11969	1.5	1.0	2.5	2.0	1.0	4.0	2.0
ORC 9008	1.5	1.0	1.0	1.8	1.0	5.0	2.0
ORC 9009	1.5	1.0	2.0	1.6	1.5	3.0	2.0
SL89-3131	1.5	1.0	2.5	1.6	1.0	5.0	2.0

PRELIMINARY TEST IIB, 1991

SEED SIZE (g\100)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	Ingham County MI
Burlison (L)	18.0	18.5	19.6	16.6	16.0	21.3
Kenwood (II)	15.2	14.2	17.6	14.1	11.3	17.9
Sturdy (I)	18.3	18.6	20.1	17.7	14.2	21.7
C1828	17.3	17.4	20.3	16.0	14.1	20.8
C1829	17.3	16.0	18.8	17.1	14.7	20.2
C1834	15.9	15.2	17.6	15.5	12.9	18.3
C1836	15.0	15.1	16.2	14.5	12.6	17.4
C1840	17.0	16.5	19.0	17.5	12.5	19.9
C1848	14.6	15.8	15.2	13.8	13.0	18.8
E90070	16.1	15.8	17.6	16.3	14.7	19.3
HM9033	16.2	15.4	19.8	14.8	11.5	20.0
HM9035	18.7	18.6	21.6	17.6	11.9	22.5
HM9037	17.1	17.7	17.8	16.4	14.3	19.9
HM9038	15.0	14.2	17.1	14.9	11.3	17.3
HM9039	17.9	17.5	21.3	16.5	15.0	20.7
LN88-964	18.2	17.0	19.8	19.0	18.2	21.3
LN88-1496	18.3	18.6	20.2	18.7	16.7	21.0
LN88-1627	17.5	18.0	19.8	16.2	13.8	20.5
LN88-1674	17.6	17.6	18.8	17.7	17.1	20.7
LN88-1682	17.9	19.4	19.8	17.5	16.1	22.0
LN88-2099	16.1	17.4	18.2	16.1	13.7	19.2
LN88-3196	17.3	16.5	19.5	18.6	15.6	20.4
LN88-3202	17.4	17.7	17.5	17.9	16.0	19.6
LN88-3458	17.0	19.0	18.6	16.5	13.8	20.4
LN88-7722	14.5	15.4	15.0	15.1	14.1	17.6
LN88-8794	16.0	18.4	17.4	16.1	13.0	18.5
LN88-9242	17.1	16.2	19.2	16.2	18.0	20.8
LN88-9709	15.9	15.8	16.8	15.3	11.7	18.3
LN88-9994	17.5	17.4	18.2	17.7	16.9	21.0
LN88-11809	17.1	18.1	18.8	17.1	14.5	20.9
LN88-11969	16.4	18.2	18.4	15.5	12.1	19.1
ORC 9008	16.7	15.8	18.4	16.0	13.6	20.4
ORC 9009	16.2	15.3	18.2	15.1	13.2	19.1
SL89-3131	13.1	12.3	14.2	14.5	12.7	16.3

PRELIMINARY TEST IIB, 1991

SEED SIZE (g\100)

Strain	Spick-ard MO	David City NE	Oconto NE	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	17.1	18.8	14.6	15.7	23.8	14.5	19.5
Kenwood (II)	15.1	16.3	14.1	11.9	22.0	12.4	15.1
Sturdy (I)	17.6	21.3	17.7	13.8	23.7	15.1	18.6
C1828	16.9	18.2	14.5	14.3	23.6	14.2	17.4
C1829	15.9	18.4	13.6	15.8	23.7	14.9	18.5
C1834	15.7	17.3	15.4	13.1	21.5	13.2	14.9
C1836	17.1	16.5	14.5	12.2	18.8	11.6	13.3
C1840	19.0	17.8	17.0	13.9	22.6	13.2	14.5
C1848	15.4	15.5	13.8	12.5	16.8	11.8	12.4
E90070	15.0	16.3	15.3	13.8	20.3	13.5	15.5
HM9033	16.7	17.9	15.1	12.5	21.6	12.9	16.3
HM9035	18.2	21.6	17.9	15.7	24.4	15.1	19.6
HM9037	16.6	19.6	14.4	15.2	22.1	14.5	16.9
HM9038	15.7	15.9	14.6	12.2	19.0	12.4	15.7
HM9039	17.4	20.4	16.7	14.4	21.7	14.8	18.2
LN88-964	17.9	17.8	15.8	15.3	24.7	14.5	17.0
LN88-1496	18.5	18.8	15.9	15.5	23.8	14.2	18.1
LN88-1627	16.8	19.0	15.4	15.1	24.3	13.8	17.2
LN88-1674	16.4	17.8	15.0	14.9	23.0	13.5	18.2
LN88-1682	16.1	18.7	16.9	14.3	22.4	14.9	16.9
LN88-2099	12.9	17.1	13.2	14.0	21.5	14.1	15.8
LN88-3196	16.6	18.8	12.3	15.2	23.0	14.0	17.6
LN88-3202	18.0	18.2	14.6	14.0	23.6	14.4	16.8
LN88-3458	18.4	17.8	13.7	14.2	23.0	14.0	14.5
LN88-7722	13.9	15.0	13.0	12.1	17.5	12.3	13.2
LN88-8794	15.5	16.5	13.5	13.4	21.1	14.0	14.4
LN88-9242	16.3	18.3	16.4	13.9	20.5	14.2	15.4
LN88-9709	14.8	17.4	15.3	13.0	22.1	13.2	17.2
LN88-9994	17.5	18.5	15.3	15.2	22.8	14.2	15.0
LN88-11809	16.5	17.1	13.7	13.8	22.5	14.2	18.3
LN88-11969	16.0	17.7	14.6	14.0	19.4	13.6	17.6
ORC 9008	16.6	17.7	15.8	13.8	21.1	14.6	16.5
ORC 9009	15.4	17.4	13.8	13.7	23.2	14.2	15.8
SL89-3131	14.1	12.3	11.3	11.4	14.2	11.1	12.5

PRELIMINARY TEST IIB, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Ingham Co. MI	Hoytville OH
Burlison (L)	41.5	43.5	43.5	39.9	40.3	40.5
Kenwood (II)	38.3	39.1	38.3	35.4	44.3	34.3
Sturdy (I)	39.0	39.8	40.5	37.8	40.6	36.5
C1828	38.3	39.9	39.8	35.3	41.1	35.4
C1829	40.1	41.7	42.9	37.2	41.6	36.9
C1834	39.7	41.0	40.6	37.6	41.7	37.5
C1836	38.4	39.2	39.5	37.5	40.5	35.3
C1840	38.1	39.8	41.1	34.5	39.7	35.6
C1848	40.0	41.4	42.1	38.3	42.2	36.0
E90070	37.8	39.5	38.1	34.9	40.8	35.5
HM9033	38.3	38.5	38.7	36.0	43.5	34.8
HM9035	40.5	41.6	41.8	40.5	41.8	36.8
HM9037	40.2	41.7	43.3	37.8	40.0	38.0
HM9038	39.8	39.1	42.2	36.6	43.9	37.3
HM9039	41.8	43.1	44.3	41.0	40.1	40.7
LN88-964	38.4	39.5	39.5	38.2	40.4	34.5
LN88-1496	38.6	40.3	40.8	37.5	39.5	35.0
LN88-1627	38.0	39.8	39.2	36.6	39.5	35.0
LN88-1674	37.9	39.7	39.7	37.4	39.1	33.8
LN88-1682	38.5	41.1	40.4	37.0	38.8	35.4
LN88-2099	37.3	38.1	37.9	36.0	40.9	33.5
LN88-3196	40.2	41.3	42.5	37.8	40.9	38.5
LN88-3202	38.8	40.0	39.9	38.4	39.8	36.0
LN88-3458	38.6	40.5	38.3	36.1	41.6	36.3
LN88-7722	40.8	42.5	41.2	40.8	41.0	38.6
LN88-8794	39.0	40.3	39.8	37.2	41.3	36.4
LN88-9242	39.6	40.5	39.8	38.3	40.5	38.8
LN88-9709	40.0	40.1	40.0	38.4	40.7	40.6
LN88-9994	39.5	40.5	40.6	38.0	41.6	36.9
LN88-11809	40.8	41.2	43.7	38.5	42.9	37.6
LN88-11969	42.2	43.7	45.0	41.3	40.6	40.2
ORC 9008	38.8	39.6	39.6	36.1	41.6	37.2
ORC 9009	41.3	42.0	42.6	40.7	41.8	39.5
SL89-3131	40.2	41.6	42.1	38.7	39.6	38.9

PRELIMINARY TEST IIB, 1991

OIL (%)

Strain	Mean 5 Tests	Ames IA	Urbana IL	Lafayette IN	Ingham Co. MI	Hoytville OH
Burlison (L)	20.3	19.4	19.7	20.9	21.0	20.7
Kenwood (II)	21.4	21.4	21.9	21.0	19.0	23.5
Sturdy (I)	21.2	21.1	20.8	21.4	20.4	22.1
C1828	21.5	20.4	21.2	22.9	19.9	23.1
C1829	21.1	20.1	20.1	22.2	20.4	22.6
C1834	21.3	21.0	21.3	22.6	19.6	22.2
C1836	21.4	20.9	21.6	22.1	19.5	22.9
C1840	21.3	20.5	20.4	22.4	20.4	22.6
C1848	21.1	21.1	20.7	21.9	19.9	22.1
E90070	22.1	21.6	22.4	23.3	20.2	23.2
HM9033	21.2	20.8	21.8	21.9	19.6	22.1
HM9035	21.0	20.6	20.6	21.2	19.7	22.7
HM9037	21.0	20.4	19.7	22.1	21.0	21.6
HM9038	20.6	20.9	19.7	21.9	19.1	21.3
HM9039	20.5	20.0	19.7	20.9	21.1	20.6
LN88-964	21.8	20.7	21.4	22.3	21.1	23.7
LN88-1496	21.5	20.9	20.6	22.0	21.4	22.6
LN88-1627	21.3	20.1	21.2	21.4	21.2	22.7
LN88-1674	21.5	20.4	20.9	21.8	20.9	23.4
LN88-1682	21.6	20.7	20.8	22.0	21.7	22.8
LN88-2099	22.2	21.9	22.5	22.2	20.3	24.2
LN88-3196	20.5	19.9	19.9	20.9	19.9	21.8
LN88-3202	21.0	20.1	20.3	20.8	21.0	22.6
LN88-3458	21.2	20.4	21.1	22.1	19.9	22.4
LN88-7722	20.8	19.8	21.3	21.0	20.4	21.7
LN88-8794	21.6	20.7	21.1	22.4	21.3	22.6
LN88-9242	22.0	21.2	22.1	23.1	21.0	22.5
LN88-9709	21.4	20.8	21.9	21.8	20.0	22.7
LN88-9994	21.0	20.6	20.1	21.6	20.5	22.1
LN88-11809	20.4	20.6	19.4	20.8	19.6	21.8
LN88-11969	19.3	19.0	18.1	18.6	20.4	20.4
ORC 9008	21.5	20.9	21.8	22.2	20.2	22.2
ORC 9009	20.3	19.5	20.1	20.4	20.1	21.4
SL89-3131	21.2	20.4	20.9	21.7	21.0	22.0

UNIFORM TEST III, 1991

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Burlison (II)	K74-113-76-486 x Century	2	F5	Rps1-b, Rps3
Flyer (IV)	Asgrow A3127[4] x Williams 82	5	BC3 F2	Rps1-k
Resnik (III)	Asgrow A3127[4] x Williams 82	5	BC3 F3	Rps1-k
AM89-244028	Jacques J231 x BSR 101	PTIIIA	F5	BSR Resis.
C1802	C1651 x C1627	PTIIB	F5	
HC85-603	Sprite x Asgrow A3127	PTIIIB	F5	dt1
HC85-604	Sprite x Asgrow A3127	1	F5	dt1
HC85-606	Sprite x Asgrow A3127	1	F5	dt1
HC85-607	Sprite x Asgrow A3127	1	F5	dt1
HC85-618	Sprite x Asgrow A3127	1	F5	dt1
HC85-6577	HC78-350 x HC78-676	2	F5	dt1
HC85-6724	HC74-634RE x HC78-676	2	F5	dt1
HC86-554	HC74-634RE x HC78-676	PTIIIB	F5	dt1
HC86-4384	Pella x HC74-634RE	PTIIB	F5	dt1
HM8890	A80-344003 x Asgrow A3127 BC_3 F_2-1	1	F6	
HS88-4908	Conrad x Hayes	PTIIA	F5	Rps1-k
LN86-3357	LN78-257 x Asgrow A3127	PTIIIA	F5	Rps1-a
LN87-1065	A8 x Zane	PTIIA	F5	Rps1-a
LN87-1744	Sherman x LN80-9729	PTIIIA	F5	
K1164	Harper x Asgrow A3127	1	F5	
K1180	Sherman x C1623	PTIIIA	F5	
U86-62062	K1047 x Mead	1	F5	dt1
U893018	Hobbit x HC78-676	PTIIIB	F5	dt1
U893032	$SG_1/BC/85\text{-}E_1$[+]	PTIIIB	F5	dt1

* Number of years in test or name of 1990 test.

[+]$SG1/NS/84\text{-}RM_3/MS$ x 32 Elite High Yielding Lines.
See CROP SCI. 25:717-718

UNIFORM TEST III, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	BSR-Boone Plant n %	BSR-Boone Stem n %	PR Custer Phyo. Tol.	PR Urbana Race 1	PR Ames Race 4	Chlor Score Winterset	Emerg Score	PS Lafayette a %	PSB Lafayette n %	SMV Lafayette a Score	Shatter Score Manhattan
Burlison (II)	WTTIYBlI	80	45.1	4.2	R	R	2.1	1	52	6	4e	1
Flyer (IV)	PTTYBlI	100	76.4	3.3	R	H	2.2	1	22	3	5e	1
Resnik (III)	PTTYBlI	100	54.3	3.1	R	R	3.1	1	18	2	5e	1
AM89-244028	PGBDYIbI	90	61.3	5.9	R	S	2.6	5	42	2	2e	1
C1802	WGBDYBfI	100	72.5	4.8	S	S	2.2	5	62	2	4e	3
HC85-603	P+WTTDYBlD	100	90.1	4.2	S	S	3.2	2	7	4	5e	1
HC85-604	P+WTTIYBlD	100	97.5	5.3	S	S	3.6	5	4	4	5e	1
HC85-606	WTTDYBlD	90	77.5	3.5	S	S	3.8	5	11	6	5e	1
HC85-607	PTTIYBlD	90	86.0	5.0	S	S	4.4	1	12	12	3e	1
HC85-618	PTTIYBlD	100	97.8	4.2	S	S	3.5	3	2	0	3e	1
HC85-6577	PTTDYBlD	100	92.8	4.8	R	S	2.4	5	26	0	4e	1
HC85-6724	PTTIYBlD	70	40.0	4.8	S	S	2.6	1	6	0	5e	1
HC86-554	WTTSYBrD	100	80.1	7.5	S	S	2.6	4	4	0	4e	1
HC86-4384	PTTDYBlD	100	96.0	5.6	R	S	2.6	5	7	2	4e	1
HM8890	WTBDYBlI	60	32.0	5.1	R	R	2.2	1	42	0	3e	1
HS88-4908	PGTDYBfI	100	86.9	3.9	R	R	3.2	5	55	2	2e	1
LN86-3357	WGTDYBfI	100	68.8	3.8	R	S	3.1	1	18	0	2e	1
LN87-1065	WGBDYBfI	100	66.2	4.4	R	S	2.9	1	79	2	3e	1
LN87-1744	PGBDYBfI	80	37.8	4.0	S	S	3.1	1	32	4	2m	1
K1164	PTBDYBlI	100	47.6	7.0	S	S	3.8	2	15	4	3e	2
K1180	WGBIYBfI	100	58.7	6.9	S	S	3.4	5	27	6	3e	1
U86-62062	PTTDTBlD	100	97.1	4.6	S	H	2.5	1	39	4	3e	1
U893018	PTTSYBrD	100	78.1	8.3	S	S	3.5	2	13	6	5e	1
U893032	PGTDYBfSD	80	64.7	3.5	S	S	3.2	3	9	10	3m	2

UNIFORM TEST III, 1991

REGIONAL SUMMARY

No. of Tests Strain	Yield 25 bu/a	Rank 25 No.	Maturity 20 Date	Lodging 25 Score	Plant Height 25 In.	Seed Quality 25 Score	Seed Size 24 g/100	Composition Protein 5 %	 Oil 5 %
Burlison (II)	42.2	14	-4.8	1.1	26	1.8	17.0	41.9	20.2
Flyer (IV)	50.0	1	5.2	1.3	33	1.7	14.3	41.0	21.1
Resnik (III)	48.3	2	09/12*	1.2	31	1.7	14.6	40.7	21.2
AM89-244028	42.6	12	-4.2	1.2	31	2.4	17.3	38.3	21.4
C1802	43.5	7	-3.6	1.2	29	2.4	17.3	39.6	21.7
HC85-603	41.3	16	3.3	1.1	19	1.7	15.7	39.8	21.7
HC85-604	38.6	20	3.4	1.1	18	1.6	15.9	39.6	21.5
HC85-606	36.4	21	2.1	1.2	18	1.7	16.1	39.7	21.6
HC85-607	41.2	17	1.4	1.1	19	1.6	16.0	38.4	22.0
HC85-618	42.5	13	2.7	1.2	19	1.6	16.4	39.5	21.8
HC85-6577	41.1	18	3.9	1.2	20	1.9	17.9	40.0	21.4
HC85-6724	41.1	18	0.9	1.2	20	1.6	15.4	39.8	21.0
HC86-554	41.6	15	0.4	1.2	20	1.9	17.2	40.2	21.4
HC86-4384	35.6	23	-1.5	1.1	17	1.9	18.4	40.3	21.4
HM8890	48.1	3	2.3	1.4	30	1.9	16.7	40.1	21.5
HS88-4908	43.2	10	-5.7	1.3	31	2.0	16.9	37.8	22.4
LN86-3357	47.3	4	2.8	1.3	33	1.7	14.5	38.9	21.5
LN87-1065	42.7	11	-2.0	1.3	29	2.1	16.0	39.0	21.8
LN87-1744	44.5	5	4.5	1.5	30	1.8	16.8	41.5	21.3
K1164	44.3	6	1.6	1.3	32	1.7	15.7	40.3	21.4
K1180	43.3	9	5.0	1.5	30	1.8	15.0	39.9	22.0
U86-62062	36.0	22	-0.5	1.1	20	1.7	16.7	42.9	20.8
U893018	34.2	24	2.4	1.2	18	1.8	15.9	39.3	21.7
U893032	43.5	7	-0.1	1.1	25	1.8	18.7	39.9	21.1

* 119.9 Days After Planting

UNIFORM TEST III, 1991

1990-1991 2-YEAR MEAN

No. of Tests Strain	Yield 52 bu/a	Rank 52 No.	Maturity 39 Date	Lodging 51 Score	Plant Height 52 In.	Seed Quality 50 Score	Seed Size 47 g/100	Composition Protein 10 %	 Oil 10 %
Burlison (L)	45.8	9	-3.8	1.3	28	1.9	17.9	42.9	19.8
Flyer (IV)	50.8	1	4.8	1.4	33	1.7	14.7	41.5	21.0
Resnik (III)	50.1	3	9/19.0*	1.3	31	1.7	15.3	41.4	21.0
HC85-604	45.4	10	3.2	1.2	20	1.6	15.9	40.0	21.6
HC85-606	44.5	11	2.5	1.3	20	1.7	16.1	40.2	21.7
HC85-607	46.6	8	2.2	1.2	21	1.7	16.3	39.3	21.8
HC85-618	47.8	5	3.4	1.3	21	1.7	16.6	40.1	21.6
HC85-6577	46.9	7	4.7	1.3	22	1.8	18.1	40.4	21.3
HC85-6724	47.1	6	2.0	1.4	22	1.6	15.7	40.7	20.9
HM8890	50.4	2	1.6	1.5	31	1.9	17.2	41.1	21.2
K1164	48.2	4	1.2	1.4	32	1.9	16.0	41.2	21.2
U86-62062	41.4	12	0.1	1.4	22	1.6	17.3	43.7	20.5

* 121.3 Days After Planting

1989-1991 3-YEAR MEAN

No. of Tests Strain	Yield 73 bu/a	Rank 73 No.	Maturity 54 Date	Lodging 72 Score	Plant Height 73 In.	Seed Quality 70 Score	Seed Size 67 g/100	Composition Protein 13 %	 Oil 13 %
Burlison (L)	46.6	5	-3.7	1.3	29	2.0	17.9	42.2	19.7
Flyer (IV)	51.3	1	4.9	1.4	33	1.8	14.8	41.2	21.0
Resnik (III)	50.5	2	9/21.0*	1.3	32	1.7	15.3	40.6	21.1
HC85-6577	49.0	3	4.7	1.3	22	1.8	18.0	39.9	21.3
HC85-6724	48.9	4	2.2	1.4	23	1.6	15.7	40.4	20.7

* 122.8 Days After Planting

UNIFORM TEST III, 1991

YIELD (bu/a)

Strain	Mean 25 Tests	George-town DE	Fair-field IA	Tingley IA	Winter-set IA	Ridgway IL
Burlison (II)	42.2	35.2	55.9	48.3	54.2	26.2
Flyer (IV)	50.0	51.8	56.0	49.7	51.5	47.1
Resnik (III)	48.3	52.8	58.8	46.6	55.4	40.9
AM89-244028	42.6	37.3	59.1	47.6	53.0	36.1
C1802	43.5	32.0	60.8	45.9	52.3	39.6
HC85-603	41.3	29.1	46.5	50.9	61.2	28.0
HC85-604	38.6	23.9	47.4	49.4	55.7	28.4
HC85-606	36.4	30.7	44.7	50.7	57.2	24.7
HC85-607	41.2	28.5	50.9	52.8	60.8	26.4
HC85-618	42.5	34.5	56.8	50.0	60.2	33.0
HC85-6577	41.1	28.3	42.4	51.0	56.8	32.7
HC85-6724	41.1	23.7	45.6	53.9	56.1	32.2
HC86-554	41.6	31.7	42.7	47.6	56.2	32.3
HC86-4384	35.6	23.8	45.0	44.8	55.5	12.4
HM8890	48.1	56.2	56.7	48.4	55.5	46.0
HS88-4908	43.2	37.8	51.9	56.5	56.8	33.6
LN86-3357	47.3	40.9	56.9	45.8	54.9	42.1
LN87-1065	42.7	44.1	58.7	48.4	56.5	39.5
LN87-1744	44.5	38.5	36.1	46.5	49.2	41.1
K1164	44.3	42.7	51.6	49.0	54.8	36.2
K1180	43.3	34.3	47.4	50.4	54.8	44.1
U86-62062	36.0	33.8	45.2	45.8	57.0	25.0
U893018	34.2	26.2	38.2	41.1	56.9	10.3
U893032	43.5	31.9	53.0	46.9	52.1	37.3
C.V. (%)		17.9	9.9	7.3	5.0	13.1
L.S.D. (5%)		10.4	8.3	5.8	4.6	7.7
Row Sp. (in.)		20	27	27	27	30
Rows/Plot		4	4	4	4	4
Reps		3	3	3	3	3

UNIFORM TEST III, 1991

YIELD (bu/a)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Lexing-ton KY	Man-hattan KS	Pow-hattan KS	Topeka KS
Burlison (II)	49.8	38.7	38.7	12.2	37.8	67.4	18.1	48.4
Flyer (IV)	71.0	47.5	45.8	56.3	49.3	71.9	19.4	77.4
Resnik (III)	65.7	50.8	36.5	45.7	38.3	78.6	22.6	73.4
AM89-244028	42.4	39.4	23.1	10.5	33.3	77.5	15.2	71.8
C1802	27.8	47.4	34.2	18.6	40.1	73.9	19.4	60.9
HC85-603	30.8	31.6	37.9	30.6	47.5	63.9	20.0	49.7
HC85-604	29.5	22.9	30.1	22.5	44.3	62.4	21.3	41.6
HC85-606	20.8	14.8	32.0	16.8	44.4	50.7	19.3	34.1
HC85-607	29.5	31.9	38.6	20.9	42.7	57.0	22.6	53.5
HC85-618	37.7	26.2	41.7	16.7	42.1	68.1	22.9	63.1
HC85-6577	47.6	23.1	39.4	29.1	42.0	57.5	21.3	46.9
HC85-6724	28.6	26.7	28.4	36.5	40.9	60.7	21.0	57.5
HC86-554	36.4	40.4	30.2	28.5	39.0	63.1	20.3	57.1
HC86-4384	42.4	11.4	21.7	24.2	33.1	53.1	21.0	34.3
HM8890	69.1	47.2	35.6	40.7	44.2	68.5	19.7	72.6
HS88-4908	54.9	36.7	32.0	9.4	38.3	80.5	21.7	62.5
LN86-3357	68.3	41.8	39.9	43.3	47.1	74.7	18.7	76.0
LN87-1065	38.1	36.3	24.7	22.9	40.7	70.4	16.1	71.0
LN87-1744	57.6	49.5	36.8	41.0	44.4	73.0	17.4	66.5
K1164	47.9	43.5	37.1	40.1	39.8	68.7	18.1	66.6
K1180	44.9	42.1	35.1	49.9	45.8	71.2	14.9	66.5
U86-62062	33.7	23.2	24.9	12.6	41.1	65.1	21.3	32.5
U893018	29.5	24.5	38.0	15.3	34.9	47.6	19.7	40.9
U893032	57.1	36.0	34.9	28.4	40.0	67.6	19.0	69.0
C.V. (%)	19.9	19.3	14.5	36.6	7.8	8.9	13.1	11.1
L.S.D. (5%)	15.4	11.0	8.1	16.8	3.4	8.1	3.5	8.9
Row Sp. (in.)	30	24	24	24	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, 1991

YIELD (bu/a)

Strain	Queens-town MD	Colum-bia MO	David City NE	Lincoln NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	47.7	35.5	49.5	38.4	47.7	45.9	41.3	48.5
Flyer (IV)	43.6	47.4	41.1	33.0	49.4	54.0	50.1	59.8
Resnik (III)	48.6	47.3	45.3	31.4	51.6	48.1	47.0	43.7
AM89-244028	52.2	34.6	47.2	32.9	48.7	46.7	41.7	43.4
C1802	53.1	38.6	52.4	28.0	51.4	51.2	41.0	34.2
HC85-603	41.7	29.2	54.2	38.6	54.6	46.8	42.7	51.8
HC85-604	41.2	36.0	53.0	37.6	55.6	43.3	41.5	36.6
HC85-606	30.9	34.0	55.1	37.9	55.7	35.5	39.2	48.6
HC85-607	42.9	33.1	54.4	40.1	55.4	44.2	42.7	40.8
HC85-618	41.0	35.9	55.1	34.7	55.5	43.0	44.7	40.9
HC85-6577	47.6	29.5	50.5	37.7	49.7	47.4	36.4	49.1
HC85-6724	45.1	26.3	54.2	34.7	51.6	47.1	44.8	35.4
HC86-554	41.9	29.4	51.7	31.7	54.6	43.8	37.7	41.2
HC86-4384	37.8	28.2	56.9	32.0	56.7	42.7	32.2	36.4
HM8890	50.8	47.2	42.9	34.7	47.5	52.1	41.3	53.0
HS88-4908	51.2	42.3	50.8	27.5	51.1	34.2	43.7	42.3
LN86-3357	50.2	48.1	42.2	31.0	48.4	47.3	44.1	53.6
LN87-1065	51.0	30.4	47.2	33.0	46.8	50.6	36.6	42.7
LN87-1744	48.2	44.9	41.7	32.8	42.6	51.9	43.2	48.9
K1164	47.4	37.1	41.3	35.7	52.8	47.0	38.3	37.1
K1180	47.2	29.7	45.3	34.0	47.2	40.1	33.5	33.3
U86-62062	39.5	31.2	47.7	36.1	50.1	35.8	31.0	28.6
U893018	36.4	17.7	48.9	32.1	51.0	35.9	31.3	25.7
U893032	46.5	43.8	48.6	35.0	46.4	39.6	38.4	46.7
C.V. (%)	8.9	18.1	5.3	13.0	6.0	10.3	8.1	22.3
L.S.D. (5%)	6.6	10.5	4.2	7.2	5.0	7.7	5.4	15.5
Row Sp. (in.)	30	30	30	30	30	30	30	20
Rows/Plot	4	4	4	4	4	4	4	4
Reps	3	3	3	3	3	3	3	3

UNIFORM TEST III, 1991

YIELD (bu/a)

Strain	So. Charleston OH	Wooster OH	Landisville PA	Elk Point SD
Burlison (II)	66.2	32.6	29.7	40.8
Flyer (IV)	73.8	32.9	31.7	38.1
Resnik (III)	66.8	34.2	31.2	47.0
AM89-244028	67.1	34.5	21.1	48.0
C1802	68.5	34.1	32.1	50.1
HC85-603	66.4	25.3	22.2	32.2
HC85-604	58.9	19.1	27.0	36.1
HC85-606	54.3	20.8	23.3	34.9
HC85-607	64.2	23.4	28.7	42.9
HC85-618	67.3	23.0	27.5	40.2
HC85-6577	64.0	30.0	27.2	40.3
HC85-6724	69.2	29.3	31.1	46.7
HC86-554	71.8	28.1	33.9	47.9
HC86-4384	59.2	23.6	23.9	37.0
HM8890	71.0	30.7	25.7	44.4
HS88-4908	64.5	27.7	22.5	50.0
LN86-3357	67.5	34.1	28.6	38.2
LN87-1065	63.2	29.8	24.7	45.2
LN87-1744	67.5	31.2	29.1	34.0
K1164	73.0	27.6	31.1	42.2
K1180	69.6	30.2	27.5	44.1
U86-62062	45.6	21.9	28.7	43.1
U893018	67.7	19.9	28.7	36.9
U893032	67.2	29.4	30.9	41.6
C.V. (%)	7.1	21.4	14.5	9.0
L.S.D. (5%)	7.6	10.0	6.6	6.2
Row Sp. (in.)	7	30	24	30
Rows/Plot	8	4	4	4
Reps	3	3	3	3

UNIFORM TEST III, 1991

YIELD RANK

Strain	Yield Rank	George-town DE	Fair-field IA	Tingley IA	Winter-set IA	Ridgway IL
Burlison (II)	14	10	9	14	19	20
Flyer (IV)	1	3	8	9	23	1
Resnik (III)	2	2	33	18	15	6
AM89-244028	12	9	2	15	20	11
C1802	7	14	1	20	21	7
HC85-603	16	18	16	5	1	18
HC85-604	20	22	14	10	12	17
HC85-606	21	17	20	6	4	22
HC85-607	17	19	13	3	2	19
HC85-618	13	11	6	8	3	13
HC85-6577	18	20	22	4	7	14
HC85-6724	18	24	17	2	11	16
HC86-554	15	16	21	15	10	15
HC86-4384	23	23	19	23	13	23
HM8890	3	1	7	12	13	2
HS88-4908	10	8	11	1	7	12
LN86-3357	4	6	5	21	16	4
LN87-1065	11	4	4	12	9	8
LN87-1744	5	7	24	19	24	5
K1164	6	5	12	11	17	10
K1180	9	12	14	7	17	3
U86-62062	22	13	18	21	5	21
U893018	24	21	23	24	6	24
U893032	7	15	10	17	22	9

UNIFORM TEST III, 1991

YIELD RANK

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Lexing-ton KY	Man-hattan KS	Pow-hattan KS	Topeka KS
Burlison (II)	8	11	5	22	21	14	19	18
Flyer (IV)	1	3	1	1	1	7	14	1
Resnik (III)	4	1	11	3	19	2	3	3
AM89-244028	12	10	23	23	23	3	23	5
C1802	23	4	15	17	15	5	15	13
HC85-603	18	16	8	9	2	16	11	17
HC85-604	19	22	19	15	7	18	7	20
HC85-606	24	23	16	18	5	23	16	23
HC85-607	19	15	6	16	9	21	2	16
HC85-618	15	18	2	19	10	12	1	11
HC85-6577	10	21	4	10	11	20	5	19
HC85-6724	22	17	20	8	13	19	8	14
HC86-554	16	9	18	11	18	17	10	15
HC86-4384	12	24	24	13	24	22	8	22
HM8890	2	5	12	6	8	11	12	4
HS88-4908	7	12	16	24	19	1	4	12
LN86-3357	3	8	3	4	3	4	18	2
LN87-1065	14	13	22	14	14	9	22	6
LN87-1744	5	2	10	5	5	6	21	9
K1164	9	6	9	7	17	10	19	8
K1180	11	7	13	2	4	8	24	10
U86-62062	17	20	21	21	12	15	5	24
U893018	19	19	7	20	22	24	12	21
U893032	6	14	14	12	16	13	17	7

UNIFORM TEST III, 1991

YIELD RANK

Strain	Queens-town MD	Colum-bia MO	David City NE	Lincoln NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	9	12	12	3	19	13	12	8
Flyer (IV)	15	2	24	14	16	1	1	1
Resnik (III)	7	3	18	21	9	6	2	10
AM89-244028	2	13	16	16	17	12	10	11
C1802	1	8	8	23	11	4	14	21
HC85-603	18	21	5	2	6	11	8	4
HC85-604	19	10	7	6	3	16	11	18
HC85-606	24	14	2	4	2	23	15	7
HC85-607	16	15	4	1	5	14	8	16
HC85-618	20	11	2	10	4	17	4	15
HC85-6577	10	19	11	5	15	7	20	5
HC85-6724	14	23	5	10	9	9	3	20
HC86-554	17	20	9	20	6	15	18	14
HC86-4384	22	22	1	19	1	18	22	19
HM8890	5	4	20	10	20	2	12	3
HS88-4908	3	7	10	24	12	24	6	13
LN86-3357	6	1	21	22	18	8	5	2
LN87-1065	4	17	16	3	22	5	19	12
LN87-1744	8	5	22	17	24	3	7	6
K1164	11	9	23	8	8	10	17	17
K1180	12	18	18	13	21	19	21	22
U86-62062	21	16	15	7	14	22	24	23
U893018	23	24	13	18	13	21	23	24
U893032	13	6	14	9	23	30	16	9

UNIFORM TEST III, 1991

YIELD RANK

Strain	So. Charleston OH	Wooster OH	Landisville PA	Elk Point SD
Burlison (II)	16	6	8	14
Flyer (IV)	1	5	3	18
Resnik (III)	14	2	4	5
AM89-244028	13	1	24	3
C1802	7	3	2	1
HC85-603	15	17	23	24
HC85-604	22	24	17	21
HC85-606	23	22	21	22
HC85-607	18	19	10	11
HC85-618	11	20	14	16
HC85-6577	19	10	16	15
HC85-6724	6	13	5	6
HC86-554	3	14	1	4
HC86-4384	21	18	20	19
HM8890	4	8	18	8
HS88-4908	17	15	22	2
LN86-3357	9	3	13	17
LN87-1065	20	11	19	7
LN87-1744	9	7	9	23
K1164	2	16	5	12
K1180	5	9	14	9
U86-62062	24	21	10	10
U893018	8	23	10	20
U893032	12	12	7	13

UNIFORM TEST III, 1991

MATURITY (date)

Strain	Mean 20 Tests	George-town DE	Fair-field IA	Tingley IA	Winter-set IA	Ridgway IL
Burlison (II)	-4.8	-5			-5	-6
Flyer (IV)	5.2	0			7	9
Resnik (III)	09/12	09/20			09/16	08/17
AM89-244028	-4.2	-5			-2	-9
C1802	-3.6	-5			-3	-9
HC85-603	3.3	-3			8	3
HC85-604	3.4	-3			8	4
HC85-606	2.1	-2			7	-1
HC85-607	1.4	-2			7	-1
HC85-618	2.7	-1			9	1
HC85-6577	3.9	2			9	3
HC85-6724	0.9	1			7	-2
HC86-554	0.4	-2			5	-1
HC86-4384	-1.5	-3			1	-3
HM8890	2.3	-1			2	5
HS88-4908	-5.7	-3			-1	-9
LN86-3357	2.8	-2			5	7
LN87-1065	-2.0	-4			-1	-3
LN87-1744	4.5	2			8	5
K1164	1.6	0			2	5
K1180	5.0	-1			7	9
U86-62062	-0.5	-2			2	0
U893018	2.4	0			10	1
U893032	-0.1	-2			0	1
Date Planted	05/15	06/06			05/19	05/02
Days to Mature	119.9	106			120	107

UNIFORM TEST III, 1991

MATURITY (date)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Lexing-ton KY	Man-hattan KS	Pow-hattan KS	Topeka KS
Burlison (II)	-5	-3	-5	-10	-4	-4		-7
Flyer (IV)	3	4	8	8	5	2		8
Resnik (III)	09/13	09/10	09/11	09/02	09/01	09/26		09/12
AM89-244028	-3	-3	-8	-13	-7	0		-4
C1802	1	-2	-1	-12	-9	1		-5
HC85-603	1	3	10	2	0	6		6
HC85-604	2	2	10	3	0	6		14
HC85-606	1	2	10	-2	-1	7		8
HC85-607	1	-1	8	-3	0	5		8
HC85-618	0	2	9	-2	0	5		11
HC85-6577	1	1	8	2	3	6		14
HC85-6724	0	-1	-2	4	-1	2		5
HC86-554	0	-1	1	-2	-2	4		9
HC86-4384	-3	-1	-3	-1	-7	3		3
HM8890	1	0	7	2	3	2		7
HS88-4908	-6	-7	-12	-14	-6	-3		-3
LN86-3357	1	0	8	2	3	3		4
LN87-1065	-3	-3	-3	-4	-3	-2		3
LN87-1744	3	3	7	8	5	2		6
K1164	0	2	6	2	3	0		2
K1180	4	3	15	8	5	4		4
U86-62062	-1	-3	-3	-5	2	2		1
U893018	1	0	9	-1	0	5		11
U893032	-1	-1	2	-1	2	0		3
Date Planted	04/30	05/10	05/11	05/08	05/16	05/29		05/13
Days to Mature	136	123	123	117	108	120		122

UNIFORM TEST III, 1991

MATURITY (date)

Strain	Queens-town MD	Colum-bia MO	David City NE	Lincoln NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	-2	-4	-3			-2	-6	-6
Flyer (IV)	6	7	1			6	4	4
Resnik (III)	09/17	09/06	10/03			09/29	09/17	09/02
AM89-244028	-3	-4	-1			-1	-4	-6
C1802	-3	-2	-1			-2	-1	-7
HC85-603	4	2	1			4	4	1
HC85-604	6	2	0			0	4	-1
HC85-606	2	1	0			1	4	-2
HC85-607	3	1	0			1	3	-4
HC85-618	5	1	0			4	4	-1
HC85-6577	5	2	1			4	2	1
HC85-6724	8	1	0			4	0	-3
HC86-554	1	2	1			1	0	-2
HC86-4384	-1	-1	-2			-3	1	-5
HM8890	0	0	0			4	0	1
HS88-4908	-2	-5	-1			-6	-9	-11
LN86-3357	2	0	2			2	4	1
LN87-1065	-2	-3	-4			-3	-4	-3
LN87-1744	7	7	1			4	2	4
K1164	5	1	-1			1	0	0
K1180	7	6	1			3	5	4
U86-62062	2	1	-1			-1	0	-2
U893018	1	2	1			5	3	-1
U893032	-1	0	0			-4	0	-2
Date Planted	05/30	05/15	06/10			05/29	05/15	05/03
Days to Mature	110	114	115			123	125	122

UNIFORM TEST III, 1991

MATURITY (date)

Strain	So. Charleston OH	Wooster OH	Landisville PA	Elk Point SD
Burlison (II)	-6	-2	-5	-6
Flyer (IV)	11	5	0	5
Resnik (III)	09/05	09/07	09/18	09/24
AM89-244028	-4	0	-5	-1
C1802	-3	0	-4	-5
HC85-603	3	9	0	1
HC85-604	3	6	0	2
HC85-606	1	5	0	1
HC85-607	0	1	0	0
HC85-618	3	2	0	1
HC85-6577	9	2	0	2
HC85-6724	-3	-2	-2	1
HC86-554	-1	0	-4	-1
HC86-4384	-1	3	-4	-2
HM8890	12	3	-2	0
HS88-4908	-7	-1	-2	-5
LN86-3357	7	4	0	2
LN87-1065	6	1	ns	-4
LN87-1744	9	5	-2	3
K1164	0	3	0	0
K1180	11	4	-2	2
U86-62062	0	1	-2	-1
U893018	-4	3	0	2
U893032	-1	5	0	-2
Date Planted	05/02	05/01	05/13	05/23
Days to Mature	126	129	128	124

UNIFORM TEST III, 1991

LODGING (score)

Strain	Mean 25 Tests	George-town DE	Fair-field IA	Tingley IA	Winter-set IA	Ridgway IL
Burlison (II)	1.1	1.0	1.5	1.2	1.2	1.0
Flyer (IV)	1.3	1.0	1.6	1.1	1.2	1.5
Resnik (III)	1.2	1.0	1.7	1.2	1.2	1.0
AM89-244028	1.2	1.0	1.5	1.2	1.1	1.0
C1802	1.2	1.0	1.4	1.2	1.2	1.0
HC85-603	1.1	1.0	1.6	1.1	1.3	1.0
HC85-604	1.1	1.0	1.5	1.1	1.4	1.0
HC85-606	1.2	1.0	1.7	1.2	1.2	1.0
HC85-607	1.1	1.0	1.6	1.2	1.4	1.0
HC85-618	1.2	1.0	1.8	1.1	1.3	1.0
HC85-6577	1.2	1.0	1.7	1.1	1.3	1.0
HC85-6724	1.2	1.0	1.8	1.3	1.4	1.0
HC86-554	1.2	1.0	1.6	1.2	1.4	1.0
HC86-4384	1.1	1.0	1.6	1.1	1.1	1.0
HM8890	1.4	1.0	1.7	1.2	1.4	1.3
HS88-4908	1.3	1.0	1.6	1.3	1.4	1.0
LN86-3357	1.3	1.0	1.7	1.2	1.4	1.3
LN87-1065	1.3	1.0	1.7	1.1	1.2	1.0
LN87-1744	1.5	1.0	1.6	1.2	1.4	1.5
K1164	1.3	1.0	1.7	1.1	1.2	1.5
K1180	1.5	1.0	1.5	1.4	1.4	1.3
U86-62062	1.1	1.0	1.7	1.4	1.3	1.0
U893018	1.2	1.0	1.6	1.3	1.5	1.0
U893032	1.1	1.0	1.6	1.1	1.2	1.0

UNIFORM TEST III, 1991

LODGING (score)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Lexing-ton KY	Man-hattan KS	Pow-hattan KS	Topeka KS
Burlison (II)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Flyer (IV)	1.3	1.0	1.0	1.3	2.0	1.3	1.0	2.0
Resnik (III)	1.5	1.0	1.0	1.2	1.0	1.0	1.0	1.7
AM89-244028	1.0	1.0	1.0	1.0	1.0	1.3	1.0	2.0
C1802	1.0	1.0	1.0	1.0	1.0	1.7	1.0	2.0
HC85-603	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0
HC85-604	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC85-606	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0
HC85-607	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC85-618	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0
HC85-6577	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0
HC85-6724	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0
HC86-554	1.0	1.2	1.0	1.0	2.0	1.0	1.0	1.0
HC86-4384	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HM8890	1.5	1.2	1.0	1.0	2.0	2.0	1.0	3.3
HS88-4908	1.0	1.0	1.0	1.0	2.0	1.7	1.0	1.3
LN86-3357	1.0	1.2	1.0	1.2	2.0	1.3	1.0	2.0
LN87-1065	1.0	1.0	1.0	1.0	1.0	2.3	1.0	3.3
LN87-1744	1.0	1.3	1.0	1.7	1.0	3.0	1.0	3.0
K1164	1.0	1.0	1.0	1.2	2.0	1.7	1.0	1.7
K1180	1.0	1.2	1.0	1.7	2.0	2.7	1.0	2.7
U86-62062	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
U893018	1.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0
U893032	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

UNIFORM TEST III, 1991

LODGING (score)

Strain	Queens-town MD	Colum-bia MO	David City NE	Lincoln NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	1.8	1.0	1.0	1.0	1.0	1.7	1.1	1.2
Flyer (IV)	2.0	1.0	1.0	1.0	1.0	1.3	1.2	1.1
Resnik (III)	2.0	1.0	1.0	1.0	1.0	1.7	1.1	1.1
AM89-244028	2.0	1.0	1.0	1.0	1.3	1.7	1.0	1.1
C1802	1.8	1.0	1.0	1.0	1.3	2.0	1.0	1.1
HC85-603	2.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1
HC85-604	2.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0
HC85-606	2.0	1.0	1.0	1.0	1.0	1.3	1.1	1.1
HC85-607	2.0	1.0	1.0	1.0	1.0	1.7	1.2	1.1
HC85-618	2.0	1.0	1.0	1.0	1.0	1.3	1.1	1.1
HC85-6577	2.0	1.0	1.0	1.0	1.0	1.3	1.1	1.1
HC85-6724	2.0	1.0	1.0	1.0	1.7	1.3	1.2	1.1
HC86-554	2.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1
HC86-4384	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1
HM8890	2.3	1.0	1.0	1.0	1.3	2.3	1.2	1.3
HS88-4908	1.8	1.0	1.0	1.0	1.3	2.0	1.2	1.1
LN86-3357	2.0	1.0	1.0	1.0	1.0	1.3	1.2	1.3
LN87-1065	2.2	1.0	1.0	1.0	2.3	2.0	1.1	1.2
LN87-1744	2.2	1.0	1.3	1.0	2.7	2.0	1.2	1.2
K1164	2.0	1.0	1.0	1.0	1.0	1.3	1.2	1.1
K1180	2.0	1.0	1.0	1.0	2.7	2.0	1.3	1.3
U86-62062	2.0	1.0	1.0	1.0	1.3	1.7	1.0	1.1
U893018	2.0	1.0	1.0	1.0	1.0	1.3	1.0	1.1
U893032	2.0	1.0	1.0	1.0	1.0	1.3	1.1	1.1

UNIFORM TEST III, 1991

LODGING (score)

Strain	So. Charleston OH	Wooster OH	Landisville PA	Elk Point SD
Burlison (II)	1.0	1.1	1.0	1.0
Flyer (IV)	1.0	1.4	1.0	1.0
Resnik (III)	1.0	1.2	1.0	1.0
AM89-244028	1.2	1.1	1.0	1.0
C1802	1.0	1.1	1.0	1.0
HC85-603	1.0	1.3	1.0	1.0
HC85-604	1.0	1.3	1.0	1.0
HC85-606	1.0	1.3	1.0	1.0
HC85-607	1.0	1.2	1.0	1.0
HC85-618	1.0	1.2	1.0	1.0
HC85-6577	1.0	1.4	1.0	1.0
HC85-6724	1.0	1.2	1.0	1.0
HC86-554	1.0	1.2	1.0	1.0
HC86-4384	1.0	1.1	1.0	1.0
HM8890	1.0	1.4	1.0	1.0
HS88-4908	1.2	1.1	1.0	1.3
LN86-3357	1.2	1.4	1.0	1.0
LN87-1065	1.0	1.2	1.0	1.0
LN87-1744	1.5	1.4	1.0	1.7
K1164	1.3	1.4	1.0	1.0
K1180	1.5	1.3	1.0	1.0
U86-62062	1.0	1.2	1.0	1.0
U893018	1.0	1.1	1.0	1.0
U893032	1.0	1.2	1.0	1.0

UNIFORM TEST III, 1991

PLANT HEIGHT (inches)

Strain	Mean 25 Tests	George-town DE	Fair-field IA	Tingley IA	Winter-set IA	Ridgway IL
Burlison (II)	26	18	24	37	33	19
Flyer (IV)	33	28	34	38	38	28
Resnik (III)	31	27	33	35	35	27
AM89-244028	31	24	31	39	36	27
C1802	29	19	32	37	36	25
HC85-603	19	13	18	27	26	14
HC85-604	18	11	17	23	25	12
HC85-606	18	13	17	23	24	12
HC85-607	19	13	18	25	28	14
HC85-618	20	14	20	26	28	13
HC85-6577	20	12	20	26	28	14
HC85-6724	20	11	20	27	27	13
HC86-554	20	14	25	27	29	14
HC86-4384	17	12	16	24	25	10
HM8890	30	26	29	33	35	28
HS88-4908	31	23	32	38	36	26
LN86-3357	33	26	35	39	37	29
LN87-1065	29	25	29	35	36	27
LN87-1744	30	21	32	35	36	26
K1164	32	23	33	38	40	25
K1180	30	23	32	36	37	29
U86-62062	20	15	23	33	31	12
U893018	18	15	18	26	27	11
U893032	25	19	25	35	33	17

UNIFORM TEST III, 1991

PLANT HEIGHT (inches)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Lexing-ton KY	Man-hattan KS	Pow-hattan KS	Topeka KS
Burlison (II)	20	23	28	18	27	30	23	23
Flyer (IV)	31	28	33	33	35	40	25	43
Resnik (III)	26	31	29	29	34	38	25	37
AM89-244028	21	25	28	23	34	40	27	41
C1802	20	26	30	23	28	36	26	36
HC85-603	9	14	18	14	23	23	19	15
HC85-604	11	14	16	13	22	22	19	19
HC85-606	10	12	16	13	22	21	21	19
HC85-607	11	14	17	15	22	21	20	14
HC85-618	11	13	19	16	22	24	22	19
HC85-6577	14	13	16	14	24	24	20	25
HC85-6724	11	15	16	17	24	22	22	16
HC86-554	13	16	16	15	24	23	21	16
HC86-4384	13	11	15	14	21	19	21	13
HM8890	28	25	28	31	33	40	23	40
HS88-4908	27	27	31	19	31	40	27	35
LN86-3357	30	28	31	32	38	46	24	43
LN87-1065	22	24	26	23	32	37	23	39
LN87-1744	25	27	28	30	33	40	24	39
K1164	27	27	32	30	34	40	24	41
K1180	25	26	28	32	34	39	23	42
U86-62062	14	15	18	13	25	22	23	15
U893018	13	14	16	13	19	20	19	14
U893032	19	20	23	15	27	29	24	22

UNIFORM TEST III, 1991

PLANT HEIGHT (inches)

Strain	Queens-town MD	Colum-bia MO	David City NE	Lincoln NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	27	18	39	31	41	26	27	25
Flyer (IV)	35	26	42	33	42	30	32	31
Resnik (III)	30	25	39	30	40	29	31	27
AM89-244028	34	20	45	40	45	32	25	27
C1802	27	22	43	34	46	31	27	20
HC85-603	14	13	27	20	28	22	19	19
HC85-604	13	12	26	20	27	18	18	16
HC85-606	15	13	26	20	27	20	16	15
HC85-607	15	14	27	22	26	21	21	19
HC85-618	13	13	28	22	27	20	18	17
HC85-6577	14	13	28	24	29	21	16	17
HC85-6724	13	12	30	24	29	20	23	15
HC86-554	15	15	29	23	28	22	21	17
HC86-4384	11	11	26	20	27	18	14	15
HM8890	33	24	37	29	39	30	27	29
HS88-4908	32	24	44	34	46	30	30	24
LN86-3357	34	25	44	33	45	31	28	33
LN87-1065	34	20	41	31	41	28	26	25
LN87-1744	32	23	41	31	41	29	28	28
K1164	33	25	43	31	42	29	31	28
K1180	32	21	39	29	39	31	30	25
U86-62062	19	13	32	28	32	19	20	14
U893018	12	12	28	21	26	18	17	16
U893032	22	15	39	31	37	25	24	20

UNIFORM TEST III, 1991

PLANT HEIGHT (inches)

Strain	So. Charleston OH	Wooster OH	Landisville PA	Elk Point SD
Burlison (II)	24	20	22	32
Flyer (IV)	34	22	24	39
Resnik (III)	32	21	24	36
AM89-244028	29	23	23	43
C1802	28	22	24	37
HC85-603	20	16	19	26
HC85-604	18	13	18	24
HC85-606	18	13	18	21
HC85-607	21	17	19	25
HC85-618	22	13	20	27
HC85-6577	20	15	19	28
HC85-6724	21	14	21	27
HC86-554	22	13	21	28
HC86-4384	19	15	18	24
HM8890	30	20	23	37
HS88-4908	30	22	25	38
LN86-3357	33	22	25	43
LN87-1065	30	20	20	35
LN87-1744	30	19	23	35
K1164	34	20	26	34
K1180	32	18	21	37
U86-62062	17	14	18	26
U893018	18	12	20	25
U893032	21	19	20	34

UNIFORM TEST III, 1991

SEED QUALITY (score)

Strain	Mean 25 Tests	George-town DE	Fair-field IA	Tingley IA	Winter-set IA	Ridgway IL
Burlison (II)	1.8	1.0	2.3	1.7	3.2	1.3
Flyer (IV)	1.7	1.0	2.0	1.3	3.2	1.2
Resnik (III)	1.7	1.0	2.5	1.3	3.1	1.2
AM89-244028	2.4	1.0	3.0	1.1	3.8	2.0
C1802	2.4	1.0	3.8	1.6	2.8	1.8
HC85-603	1.7	1.0	2.3	1.8	2.5	1.2
HC85-604	1.6	1.0	2.3	1.4	2.5	1.3
HC85-606	1.7	1.0	2.3	1.2	2.7	1.4
HC85-607	1.6	1.0	2.2	1.6	2.7	1.3
HC85-618	1.6	1.0	2.0	1.4	2.7	1.3
HC85-6577	1.9	1.0	3.5	1.1	2.7	1.8
HC85-6724	1.6	1.0	2.2	1.3	3.5	1.3
HC86-554	1.9	1.0	2.3	1.1	3.0	1.3
HC86-4384	1.9	1.0	2.0	1.5	3.0	1.8
HM8890	1.9	1.0	3.0	1.3	3.0	1.4
HS88-4908	2.0	1.0	3.0	1.3	2.8	1.5
LN86-3357	1.7	1.0	2.5	1.1	2.7	1.3
LN87-1065	2.1	1.0	2.8	1.3	3.1	1.7
LN87-1744	1.8	1.0	2.9	1.1	3.0	1.2
K1164	1.7	1.0	2.2	1.5	3.0	1.4
K1180	1.8	1.0	3.1	1.3	2.9	1.2
U86-62062	1.7	1.0	1.8	1.2	2.8	1.3
U893018	1.8	1.0	2.6	1.2	3.0	1.3
U893032	1.8	1.0	2.7	1.1	2.7	1.5

UNIFORM TEST III, 1991

SEED QUALITY (score)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Lexing-ton KY	Man-hattan KS	Pow-hattan KS	Topeka KS
Burlison (II)	2.3	1.0	1.0	1.5	1.0	2.0	3.0	3.0
Flyer (IV)	1.8	1.0	1.0	1.5	1.0	2.0	3.0	2.0
Resnik (III)	1.8	1.0	1.5	2.0	1.0	2.0	2.0	2.0
AM89-244028	3.2	1.5	2.0	2.0	2.0	2.0	3.0	3.0
C1802	3.3	1.0	1.5	2.0	2.0	3.0	3.0	3.0
HC85-603	1.8	1.0	1.5	1.0	2.0	2.0	2.0	2.0
HC85-604	1.8	1.0	1.5	1.0	1.0	2.0	2.0	2.0
HC85-606	1.7	1.0	1.5	1.0	1.0	2.0	2.0	2.0
HC85-607	2.0	1.0	1.0	1.5	1.0	2.0	2.0	2.0
HC85-618	2.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0
HC85-6577	2.2	1.0	1.5	1.5	2.0	2.0	2.0	2.0
HC85-6724	1.7	1.0	1.5	1.0	1.0	2.0	2.0	2.0
HC86-554	2.3	1.0	1.5	1.5	2.0	3.0	3.0	3.0
HC86-4384	2.3	1.0	1.5	2.0	2.0	2.0	3.0	2.0
HM8890	2.2	1.0	1.5	1.0	1.0	2.0	2.0	3.0
HS88-4908	2.5	1.5	1.5	2.0	2.0	3.0	2.0	3.0
LN86-3357	1.7	1.0	1.0	1.0	1.0	2.0	3.0	2.0
LN87-1065	2.3	1.0	1.5	1.0	2.0	3.0	3.0	3.0
LN87-1744	1.8	1.0	1.5	1.0	1.0	2.0	2.0	2.0
K1164	1.5	1.0	1.0	1.0	1.0	2.0	2.0	2.0
K1180	1.7	1.0	1.5	1.0	1.0	2.0	2.0	3.0
U86-62062	1.8	1.0	1.5	1.0	1.0	2.0	2.0	2.0
U893018	2.3	1.0	1.0	1.5	2.0	2.0	2.0	2.0
U893032	1.8	1.5	1.5	2.0	2.0	2.0	2.0	2.0

UNIFORM TEST III, 1991

SEED QUALITY (score)

Strain	Queens-town MD	Colum-bia MO	David City NE	Lincoln NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	2.2	1.5	1.3	1.0	1.7	1.3	2.1	1.0
Flyer (IV)	1.3	2.0	1.0	1.3	1.0	1.0	1.4	1.0
Resnik (III)	1.3	1.5	1.3	1.0	1.3	1.0	1.3	1.0
AM89-244028	2.5	1.5	2.0	2.7	2.7	2.0	3.4	1.5
C1802	2.5	2.0	2.0	2.3	2.3	2.0	3.1	1.9
HC85-603	1.5	2.0	1.0	1.0	1.3	1.0	1.6	1.0
HC85-604	1.5	1.0	1.0	1.0	1.3	1.0	1.8	1.2
HC85-606	1.8	2.0	1.0	1.0	1.3	1.0	2.1	1.1
HC85-607	1.5	1.5	1.0	1.0	1.0	1.3	1.6	1.0
HC85-618	1.3	1.5	1.0	1.0	1.0	1.0	1.6	1.0
HC85-6577	1.7	2.5	1.0	1.7	1.0	1.7	2.0	1.2
HC85-6724	1.2	2.0	1.0	1.3	1.0	1.0	1.3	1.2
HC86-554	2.2	2.0	1.0	1.0	1.3	1.0	2.0	1.6
HC86-4384	2.2	2.0	1.0	1.3	1.3	1.0	1.8	1.2
HM8890	1.8	2.0	1.7	1.5	1.7	1.0	1.7	1.1
HS88-4908	1.5	2.0	1.0	1.3	1.3	1.0	1.6	1.1
LN86-3357	1.2	2.0	1.7	1.7	1.0	1.0	1.4	1.0
LN87-1065	2.3	2.0	2.0	2.0	2.7	1.7	2.0	1.2
LN87-1744	1.2	2.0	1.7	1.3	1.7	1.3	1.4	1.0
K1164	1.3	2.0	1.0	1.7	2.0	1.0	1.7	1.3
K1180	1.5	2.0	1.3	1.3	1.3	1.0	1.8	1.1
U86-62062	1.8	1.5	1.3	1.0	1.3	1.0	1.9	1.3
U893018	1.3	1.5	1.0	1.0	1.7	1.0	1.7	1.2
U893032	1.8	1.5	1.3	1.3	1.3	1.0	1.6	1.0

UNIFORM TEST III, 1991

SEED QUALITY (score)

Strain	So. Charleston OH	Wooster OH	Landisville PA	Elk Point SD
Burlison (II)	2.0	2.0	2.8	3.0
Flyer (IV)	2.5	1.8	2.7	3.0
Resnik (III)	2.5	1.8	3.2	3.0
AM89-244028	3.5	3.1	2.8	3.0
C1802	2.5	3.3	3.0	3.0
HC85-603	2.0	2.0	3.5	3.0
HC85-604	1.5	2.2	3.0	3.0
HC85-606	1.5	2.5	3.7	3.0
HC85-607	1.5	2.1	3.0	3.0
HC85-618	1.5	2.2	2.8	3.0
HC85-6577	2.5	2.5	3.2	3.0
HC85-6724	1.5	2.1	2.5	3.0
HC86-554	2.0	2.3	2.8	3.0
HC86-4384	2.0	2.1	3.0	3.0
HM8890	3.0	3.1	3.0	3.0
HS88-4908	3.0	3.2	3.2	2.0
LN86-3357	2.5	1.8	3.5	3.0
LN87-1065	2.5	3.4	3.0	2.0
LN87-1744	3.0	2.1	3.0	3.0
K1164	2.0	2.5	3.2	3.0
K1180	3.5	1.8	2.8	2.0
U86-62062	2.0	3.2	3.0	3.0
U893018	2.0	2.8	3.2	3.0
U893032	2.5	2.8	2.7	3.0

UNIFORM TEST III, 1991

SEED SIZE (g/100)

Strain	Mean 24 Tests	George-town DE	Fair field IA	Tingley IA	Winter-set IA	Ridgway IL
Burlison (II)	17.0		19.4	20.8	18.5	14.3
Flyer (IV)	14.3		14.6	15.8	14.6	11.1
Resnik (III)	14.6		16.0	16.2	15.0	11.6
AM89-244028	17.3		20.1	20.0	19.2	15.0
C1802	17.3		20.0	19.2	18.6	14.8
HC85-603	15.7		17.2	17.1	17.2	14.1
HC85-604	15.9		17.5	17.2	16.2	13.7
HC85-606	16.1		16.8	17.2	17.0	14.0
HC85-607	16.0		18.1	17.2	17.4	13.9
HC85-618	16.4		17.7	18.4	17.7	13.9
HC85-6577	17.9		19.5	18.7	18.6	16.9
HC85-6724	15.4		17.0	17.4	15.8	12.8
HC86-554	17.2		18.7	18.4	17.9	14.1
HC86-4384	18.4		20.4	19.5	19.4	16.8
HM8890	16.7		19.4	18.4	17.2	12.3
HS88-4908	16.9		18.3	19.0	17.7	13.3
LN86-3357	14.5		16.1	15.1	14.6	11.7
LN87-1065	16.0		19.6	18.6	18.0	13.3
LN87-1744	16.8		17.9	18.0	17.0	12.0
K1164	15.7		16.7	17.6	16.2	12.4
K1180	15.0		16.8	16.6	16.2	10.8
U86-62062	16.7		18.0	17.4	16.8	15.2
U893018	15.9		16.6	16.6	16.4	15.4
U893032	18.7		20.8	18.8	17.8	15.7

UNIFORM TEST III, 1991

SEED SIZE (g/100)

Strain	Urbana IL	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Lexing-ton KY	Man-hattan KS	Pow-hattan KS	Topeka KS
Burlison (II)	17.2	17.8	17.9	16.1	13.1	17.7	14.3	18.6
Flyer (IV)	14.5	15.4	14.3	12.5	13.0	16.1	12.5	18.3
Resnik (III)	14.9	15.1	14.0	13.8	11.1	16.8	12.3	16.5
AM89-244028	18.5	18.5	15.4	15.4	12.6	18.8	13.9	19.4
C1802	18.4	17.5	17.2	16.4	14.0	19.0	14.9	19.2
HC85-603	16.0	15.9	16.9	15.5	12.7	19.1	13.4	19.2
HC85-604	16.8	15.5	16.9	14.5	13.4	20.0	13.6	20.0
HC85-606	16.8	16.3	16.4	13.9	13.3	20.5	12.4	21.3
HC85-607	16.0	16.5	17.2	13.0	12.8	20.6	14.2	19.6
HC85-618	16.0	16.6	18.1	15.3	13.3	18.4	13.7	19.8
HC85-6577	16.4	19.4	20.2	15.1	15.4	21.3	14.4	21.3
HC85-6724	15.4	16.2	15.1	15.0	13.4	18.4	13.8	17.2
HC86-554	16.5	18.0	17.1	16.8	13.5	20.3	16.0	20.3
HC86-4384	17.7	18.4	16.6	17.6	12.7	25.1	13.6	22.9
HM8890	19.1	18.5	16.1	14.9	13.8	19.4	13.1	19.6
HS88-4908	18.8	16.5	15.3	14.9	13.1	20.3	14.7	20.0
LN86-3357	15.2	13.9	15.5	13.4	12.0	15.5	13.0	17.1
LN87-1065	18.3	16.9	14.5	15.7	13.2	17.7	13.7	20.4
LN87-1744	17.7	17.7	18.3	15.6	14.5	18.5	14.8	20.6
K1164	16.9	16.7	16.3	13.7	12.8	16.8	14.0	16.6
K1180	15.8	16.4	15.3	14.4	13.2	17.3	12.4	17.1
U86-62062	17.0	18.1	17.1	16.1	14.7	19.4	14.9	17.7
U893018	16.2	17.5	17.3	12.9	11.3	19.4	13.5	18.9
U893032	20.6	20.6	19.3	18.8	14.0	21.1	15.0	19.9

UNIFORM TEST III, 1991

SEED SIZE (g/100)

Strain	Queens-town MD	Colum-bia MO	David City NE	Lincoln NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	16.9	15.1	19.1	17.2	19.4	18.0	15.6	17.0
Flyer (IV)	13.5	13.3	14.3	14.0	15.7	16.7	12.8	12.5
Resnik (III)	14.1	13.4	15.8	14.3	16.0	17.0	13.4	13.2
AM89-244028	17.9	16.4	17.8	16.7	18.2	19.3	15.1	16.2
C1802	17.4	16.4	18.0	14.6	17.2	19.0	15.4	15.3
HC85-603	13.7	13.6	15.5	15.5	17.0	16.7	14.1	13.7
HC85-604	15.0	14.0	15.8	15.9	17.2	16.0	15.2	12.5
HC85-606	16.7	14.2	16.3	15.5	16.8	17.3	14.7	13.1
HC85-607	15.0	14.2	16.4	16.4	17.5	16.0	13.9	13.0
HC85-618	15.7	14.6	16.5	15.5	18.4	17.3	15.8	13.5
HC85-6577	17.5	16.1	16.2	18.6	17.7	18.3	15.9	16.7
HC85-6724	14.6	13.8	14.8	14.9	17.3	17.0	13.8	13.8
HC86-554	16.4	15.9	16.8	17.5	19.4	18.7	14.3	15.0
HC86-4384	17.8	15.7	19.5	17.3	21.1	19.0	18.5	15.2
HM8890	16.7	14.0	16.1	15.9	18.5	19.3	15.2	15.2
HS88-4908	17.0	16.6	17.6	15.1	18.5	18.7	16.0	14.8
LN86-3357	13.7	16.2	12.9	15.0	14.9	16.3	13.2	12.6
LN87-1065	16.7	14.1	17.6	15.8	19.0	19.3	15.9	14.5
LN87-1744	16.4	14.5	16.5	17.3	16.9	20.0	15.6	14.9
K1164	14.7	15.3	15.7	15.3	17.1	18.7	14.6	14.3
K1180	13.3	13.8	14.4	15.6	16.4	17.3	14.1	12.0
U86-62062	14.6	15.0	16.9	16.6	17.5	19.0	15.5	14.3
U893018	13.8	14.5	15.5	15.5	16.6	16.3	15.4	13.3
U893032	18.4	17.1	18.8	18.4	19.7	20.0	17.1	17.6

UNIFORM TEST III, 1991

SEED SIZE (g/100)

Strain	So. Charleston OH	Wooster OH	Landisville PA	Elk Point SD
Burlison (II)	17.7	17.7	9.7	18.1
Flyer (IV)	15.3	14.3	13.3	14.6
Resnik (III)	15.4	14.7	15.1	15.0
AM89-244028	19.2	18.6	15.4	18.5
C1802	18.4	19.2	17.7	16.4
HC85-603	15.9	16.1	14.2	15.8
HC85-604	15.9	17.4	15.7	16.2
HC85-606	17.8	17.0	14.4	16.6
HC85-607	16.8	17.0	15.5	16.7
HC85-618	16.6	16.6	16.7	16.8
HC85-6577	20.4	20.7	18.1	17.2
HC85-6724	15.8	15.4	15.0	15.7
HC86-554	18.5	18.1	17.2	17.4
HC86-4384	21.2	19.0	17.7	18.2
HM8890	18.3	17.8	15.3	17.4
HS88-4908	20.2	17.0	16.6	15.9
LN86-3357	15.4	16.5	13.6	14.7
LN87-1065	17.5	17.9	ns	16.7
LN87-1744	16.9	19.2	15.4	17.1
K1164	15.5	17.3	16.1	15.2
K1180	15.8	17.2	13.1	15.8
U86-62062	18.8	19.4	14.9	15.8
U893018	16.5	20.8	15.4	16.5
U893032	20.6	21.3	17.1	19.1

UNIFORM TEST III, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Winter-set IA	Urbana IL	Lafayette IN	Manhattan KS	Hoytville OH
Burlison (II)	41.9	42.5	43.7	41.0	42.3	40.0
Flyer (IV)	41.0	41.5	42.5	40.9	40.0	40.0
Resnik (III)	40.7	41.4	41.9	40.4	40.6	39.1
AM89-244028	38.3	40.2	41.1	35.8	39.0	35.3
C1802	39.6	40.3	41.8	38.3	39.9	37.5
HC85-603	39.8	40.3	40.8	39.2	41.0	37.9
HC85-604	39.6	39.7	41.9	37.9	39.8	38.8
HC85-606	39.7	39.9	40.8	38.4	40.8	38.7
HC85-607	38.4	38.8	40.6	36.6	39.5	36.5
HC85-618	39.5	40.1	40.4	38.1	40.6	38.5
HC85-6577	40.0	40.3	41.9	38.9	41.5	37.5
HC85-6724	39.8	41.5	41.1	38.3	41.6	36.5
HC86-554	40.2	41.5	42.1	38.8	41.3	37.5
HC86-4384	40.3	40.7	42.0	37.8	41.5	39.3
HM8890	40.1	41.8	40.6	39.1	41.7	37.4
HS88-4908	37.8	37.4	42.7	35.7	39.1	34.1
LN86-3357	38.9	39.5	40.1	38.5	39.5	36.8
LN87-1065	39.0	40.3	40.4	36.1	41.3	36.7
LN87-1744	41.5	42.9	43.9	40.7	41.1	38.8
K1164	40.3	41.1	41.1	40.3	39.9	39.1
K1180	39.9	39.2	40.5	38.5	41.0	40.5
U86-62062	42.9	43.4	43.6	42.5	44.4	40.8
U893018	39.3	39.5	40.5	38.0	39.9	38.8
U893032	39.9	40.3	42.0	39.4	40.3	37.3

UNIFORM TEST III, 1991

OIL (%)

Strain	Mean 5 Tests	Winter-set IA	Urbana IL	Lafayette IN	Manhattan KS	Hoytville OH
Burlison (II)	20.2	20.0	19.1	20.6	19.5	21.6
Flyer (IV)	21.1	20.9	20.3	21.8	20.8	21.8
Resnik (III)	21.2	20.9	20.8	21.4	20.8	22.1
AM89-244028	21.4	20.6	19.9	22.9	20.9	22.6
C1802	21.7	21.1	21.1	22.6	20.9	22.7
HC85-603	21.7	21.5	21.1	22.4	20.7	22.7
HC85-604	21.5	21.5	20.2	22.8	21.1	22.1
HC85-606	21.6	21.6	21.4	22.5	20.5	22.1
HC85-607	22.0	21.6	21.5	23.3	20.9	22.6
HC85-618	21.8	21.8	21.2	23.0	20.6	22.5
HC85-6577	21.4	20.8	20.9	22.2	20.7	22.5
HC85-6724	21.0	19.9	20.9	22.4	19.6	22.4
HC86-554	21.4	20.5	20.2	22.8	20.9	22.4
HC86-4384	21.4	20.8	20.5	22.3	21.0	22.4
HM8890	21.5	20.9	21.1	21.9	20.6	23.0
HS88-4908	22.4	22.2	20.5	23.7	21.7	24.0
LN86-3357	21.5	21.3	21.4	21.9	20.5	22.5
LN87-1065	21.8	21.1	21.1	23.4	20.1	23.2
LN87-1744	21.3	20.8	20.7	21.9	21.0	22.3
K1164	21.4	20.9	21.9	21.9	20.7	21.8
K1180	22.0	21.8	21.9	22.4	20.9	23.0
U86-62062	20.8	20.5	20.5	21.2	19.4	22.3
U893018	21.7	21.1	21.6	22.8	21.2	22.0
U893032	21.1	20.5	20.2	21.3	21.2	22.5

PRELIMINARY TEST IIIA, 1991

Strain	Parentage	Generation Composited	Unique Traits
Burlison (II)	K74-113-76-486 x Century	F5	Rps1-b, Rps3
Flyer (IV)	Asgrow A3127[4] x Williams 82	BC3 F2	Rps1-k
Resnik (III)	Asgrow A3127[4] x Williams 82	BC3 F2	Rps1-k
AM90-211032	AgriPro AP2190 x Conrad	F5	
AM90-211033	AgriPro AP2190 x Conrad	F5	
AM90-211034	AgriPro AP2190 x Conrad	F5	
AM90-212021	Pride B236 x Conrad	F5	
AM90-311006	AgriPro AP2190 x Chamberlain	F5	BSR Res.
AM90-311011	Asgrow A3427 x Chamberlain	F5	BSR Res.
AM90-312001	AgriPro AP2190 x Asgrow A3427	F5	
AM90-312003	Northrup King S4230 x AgriPro AP2190	F5	
AM90-312022	Conrad x Asgrow A3427	F5	
HS88-4914	Winchester x A83-271027	F5	
HS89-2943	Winchester x A83-271027	F5	
HS89-2981	GR8936 x Asgrow A2943	F5	
HS89-2983	GR8936 x Asgrow A2943	F5	
HS89-2988	GR8936 x Asgrow A2943	F5	
HS89-3032	Winchester x A83-271027	F5	
HS89-3070	GR8936 x Asgrow A2943	F5	
HS89-5477	Resnik x HS84-6276	F5	
K1200	Sherman x Asgrow A3127	F5	
K1201	Sherman x Asgrow A3127	F5	
K1202	Sherman x Asgrow A3127	F5	
K1203	Sherman x Asgrow A3127	F5	
K1204	Sherman x Morgan	F5	
K1205	Sherman x Asgrow A3127	F5	
K1206	Sherman x Asgrow A3127	F5	
LN88-736	Sibley x Harper	F5	Rps1
LN88-7018	Hack x Pioneer P9271	F5	Rps1
LN88-7756	A82-267015 x Asgrow A2943	F5	Rps1
LN88-8169	HW8221 x Asgrow A2943	F5	Rps1
LN88-8277	HW8221 x Pioneer P9271	F5	Rps1
LN88-9180	Sherman x Chamberlain	F5	
LN88-9838	Sherman x Asgrow A2943	F5	
LN88-9900	LN81-1029 x Chamberlain	F5	Rps?
LN88-10534	LN81-1029 x Asgrow A2943	F5	Rps?
LN88-10884	A83-271027 x Chamberlain	F5	Rps1
LN88-11017	A83-271027 x LN80-10508	F5	Rps1
SL89-314	HC79-478 x Asgrow A3127 BC		
SL89-337	Harper x Asgrow A3127 BC		

PRELIMINARY TEST IIIA, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Shattering Score Manhattan	BSR-Boone Plant n %	BSR-Boone Stem n %
Burlison (II)	WTTIYBlI	2	81	56.0
Flyer (IV)	PTTYBlI	1	80	41.6
Resnik (III)	PTTYBlI	1	60	16.7
AM90-211032	PGBDYIbI	1	90	43.6
AM90-211033	PGBDYBfI	3	100	58.4
AM90-211034	PTTDYBlI	2	80	39.5
AM90-212021	PTTDYGrI	1	100	15.5
AM90-311006	PGBSYIbI	2	70	11.0
AM90-311011	WTTDYBlI	1	60	17.4
AM90-312001	PGBSYIbI	1	100	49.8
AM90-312003	PTBSYBlI	2	90	47.5
AM90-312022	PTTDYBl+BrI	1	80	33.4
HS88-4914	WTTIYBlI	1	80	36.7
HS89-2943	WTTDYBlI	1	90	36.6
HS89-2981	WGBDYBfI	1	100	52.1
HS89-2983	WGBDYBfI	1	100	64.5
HS89-2988	WGBDYBfI	1	100	64.5
HS89-3032	WTTSYBlI	1	90	50.0
HS89-3070	P+WGBDYBf+IbI	2	100	54.0
HS89-5477	PTTSYBlI	1	100	46.4
K1200	PGTTSYBlI	1	100	38.6
K1201	PGBDYBf+IbI	2	100	58.3
K1202	PGBDYBfI	1	100	62.6
K1203	WGBIYBfI	1	100	58.5
K1204	WTBIYBlI	1	100	49.1
K1205	P+WG+TBIYBlI	1	90	40.9
K1206	WTTDYBlI	1	100	47.9
LN88-736	WGBDYIbI	1	100	46.0
LN88-7018	P+WTTDYBlI	1	90	48.1
LN88-7756	PGBDYGrI	1	90	41.0
LN88-8169	PGBIYIbI	1	100	63.1
LN88-8277	WTBSYBlI	2	100	52.8
LN88-9180	PTBSYBlI	2	40	11.9
LN88-9838	WGBDYBfI	1	90	34.9
LN88-9900	WGTIYBfI	2	80	26.7
LN88-10534	PGBDYIbI	1	100	46.8
LN88-10884	PTBDYBlI	3	100	29.5
LN88-11017	WTBDYBlI	1	90	46.2
SL89-314	PTBDYBlI	1	100	69.0
SL89-337	PTBDYBlI	1	100	47.8

PRELIMINARY TEST IIIA, 1991

DISEASE DATA

Strain	PR Custer Phyto. Tolerance	PR Urbana Race 1	PR Ames Race 4	Germination Lafayette %	PS Lafayette a %	PSB Lafayette n %	SMV a Score
Burlison (II)	4.0	R	R	71	52	6	4e
Flyer (IV)	2.7	R	R	88	22	3	5e
Resnik (III)	3.7	R	H	89	18	2	5e
AM90-211032	7.1	R	S	94	26	2	5e
AM90-211033	7.1	S	S	84	58	2	4e
AM90-211034	4.1	R	S	86	51	6	4e
AM90-212021	4.9	S	S	90	44	3	5e
AM90-311006	7.0	R	S	84	41	2	3e
AM90-311011	2.6	R	S	100	40	0	4e
AM90-312001	5.0	R	S	92	17	2	4m
AM90-312003	3.5	R	S	68	24	6	4e
AM90-312022	3.7	S	S	88	21	10	5e
HS88-4914	3.4	R	R	82	22	10	2e
HS89-2943	2.2	H	H	60	22	12	4e
HS89-2981	2.8	R	H	84	45	2	4e
HS89-2983	3.8	R	H	74	74	4	2m
HS89-2988	2.8	R	R	80	75	2	4e
HS89-3032	4.2	R	R	88	22	4	2e
HS89-3070	3.4	S	S	82	52	0	2m
HS89-5477	4.1	R	R	94	32	4	4m
K1200	3.5	R	S	92	34	2	3e
K1201	5.9	S	S	78	13	18	2e
K1202	5.6	S	S	92	44	2	3e
K1203	5.5	S	S	74	15	12	4m
K1204	4.3	S	S	92	10	2	4e
K1205	3.9	S	S	88	19	12	5e
K1206	3.8	S	S	94	12	6	5e
LN88-736	5.9	R	S	60	40	10	3m
LN88-7018	5.3	R	S	66	61	2	3e
LN88-7756	6.5	R	S	74	24	6	5e
LN88-8169	3.5	R	S	88	42	10	2m
LN88-8277	3.6	R	R	86	16	4	3e
LN88-9180	4.1	S	S	84	15	0	3e
LN88-9838	5.3	R	S	92	36	2	3e
LN88-9900	4.5	R	S	98	29	0	1
LN88-10534	4.0	R	S	80	51	0	3e
LN88-10884	2.9	S	S	86	18	2	5e
LN88-11017	4.2	H	S	82	23	2	2m
SL89-314	2.8	R	H	72	40	10	3e
SL89-337	3.9	S	S	94	22	2	3e

PRELIMINARY TEST IIIA, 1991

REGIONAL SUMMARY

No. of Tests Strain	Yield 10 bu/a	Rank 10 No.	Maturity 8 Date	Lodging 10 Score	Plant Height 10 In.	Seed Quality 10 Score	Seed Size 10 g/100	Composition Protein 5 %	 Oil 5 %
Burlison (II)	51.5	33	-5.1	1.1	30	1.9	17.4	42.5	19.9
Flyer (IV)	58.7	3	4.9	1.2	36	1.8	14.7	41.4	21.1
Resnik (III)	58.9	2	09/15*	1.1	33	1.7	15.2	40.6	21.7
AM90-211032	49.1	38	-2.8	1.9	35	2.4	16.7	38.8	21.7
AM90-211033	48.9	39	-1.9	1.1	33	2.2	18.6	39.1	21.7
AM90-211034	53.1	19	-3.9	1.4	35	2.0	18.2	40.2	21.2
AM90-212021	57.5	5	-1.5	1.3	33	2.6	16.4	36.6	22.2
AM90-311006	52.8	22	1.1	1.7	40	2.3	19.0	40.7	21.4
AM90-311011	55.6	11	-0.9	1.4	34	1.6	15.8	39.2	21.7
AM90-312001	52.2	29	3.3	1.6	37	2.2	16.9	41.0	21.7
AM90-312003	53.1	19	3.9	1.6	37	2.2	19.0	40.9	21.8
AM90-312022	53.3	18	-0.6	1.2	35	2.2	15.4	39.9	21.8
HS88-4914	55.5	13	-2.1	1.3	32	1.7	16.9	39.4	21.6
HS89-2943	55.8	10	0.3	1.5	38	1.9	17.2	40.5	21.6
HS89-2981	52.5	26	-1.0	1.4	38	1.9	17.0	42.0	21.6
HS89-2983	52.7	24	-2.5	1.6	38	1.7	15.0	41.3	21.5
HS89-2988	53.9	17	0.4	1.5	42	1.8	15.1	42.1	21.2
HS89-3032	56.3	9	-0.5	1.3	33	1.8	16.9	39.9	21.1
HS89-3070	52.1	30	-3.1	1.6	36	1.7	16.3	40.9	21.9
HS89-5477	57.4	7	-0.8	1.2	33	1.8	15.3	40.6	21.1
K1200	57.7	4	1.0	1.3	35	1.8	15.2	38.7	22.7
K1201	51.0	34	-1.9	1.1	30	1.8	16.8	37.8	23.6
K1202	54.4	16	4.1	1.3	34	1.7	16.7	40.5	22.1
K1203	50.2	36	1.6	1.2	31	2.0	16.5	38.9	22.9
K1204	45.8	40	7.1	1.8	35	1.8	14.7	41.0	21.4
K1205	55.6	11	3.8	1.4	34	1.8	16.4	39.7	22.3
K1206	52.8	22	5.8	1.5	35	2.0	15.3	39.9	21.8
LN88-736	50.8	35	4.1	1.4	33	2.2	19.3	40.6	21.9
LN88-7018	49.4	37	-2.1	1.1	34	2.1	16.7	39.0	21.8
LN88-7756	52.1	30	-1.5	1.5	35	2.8	16.9	39.4	22.1
LN88-8169	52.3	27	2.4	1.2	35	2.2	17.5	41.6	21.2
LN88-8277	52.3	27	1.4	1.1	32	2.4	20.1	39.1	21.5
LN88-9180	52.9	21	-0.6	1.7	36	1.9	16.2	40.7	21.3
LN88-9838	54.6	15	2.3	1.1	34	1.8	17.2	39.6	22.4
LN88-9900	56.9	8	2.3	1.4	36	2.3	16.4	40.0	20.6
LN88-10534	59.5	1	0.3	1.3	36	2.3	16.5	39.9	21.7
LN88-10884	52.7	24	0.1	1.5	39	1.8	17.6	40.6	21.0
LN88-11017	51.8	32	0.6	1.8	37	1.7	16.2	39.8	21.6
SL89-314	57.5	5	3.6	1.4	40	1.9	14.6	40.2	21.7
SL89-337	55.0	14	5.1	1.3	36	1.8	18.0	41.4	20.6

* 122.4 Days After Planting

PRELIMINARY TEST IIIA, 1991

YIELD (bu/a)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	51.5	56.2	49.0	59.9	28.4	66.9
Flyer (IV)	58.7	60.9	53.1	74.9	39.0	81.6
Resnik (III)	58.9	57.6	55.7	75.4	40.9	75.1
AM90-211032	49.1	57.4	50.3	33.0	30.4	72.1
AM90-211033	48.9	55.9	51.6	49.3	35.0	69.0
AM90-211034	53.1	57.3	52.0	51.6	37.2	66.5
AM90-212021	57.5	58.5	54.9	49.4	38.5	78.1
AM90-311006	52.8	57.8	51.0	64.7	35.6	71.7
AM90-311011	55.6	60.1	52.8	72.5	35.7	62.1
AM90-312001	52.2	63.5	49.0	70.4	35.5	67.5
AM90-312003	53.1	61.2	47.5	60.7	39.8	65.7
AM90-312022	53.3	56.0	50.5	54.0	39.2	65.2
HS88-4914	55.5	53.2	54.3	68.2	42.4	67.1
HS89-2943	55.8	59.7	50.2	71.6	35.2	70.4
HS89-2981	52.5	52.8	50.0	68.2	34.6	69.9
HS89-2983	52.7	57.6	49.4	56.9	30.6	75.8
HS89-2988	53.9	59.1	52.1	72.7	37.1	64.4
HS89-3032	56.3	64.0	57.9	71.1	35.2	67.9
HS89-3070	52.1	53.8	57.0	52.0	28.7	73.9
HS89-5477	57.4	65.3	55.3	63.4	39.4	76.1
K1200	57.7	60.3	53.9	70.0	36.6	77.1
K1201	51.0	53.6	53.5	38.2	31.3	74.9
K1202	54.4	56.3	52.2	58.3	40.6	67.7
K1203	50.2	53.2	50.8	43.6	34.9	72.7
K1204	45.8	61.2	51.7	42.4	25.9	62.2
K1205	55.6	60.1	57.0	63.2	43.7	68.7
K1206	52.8	60.7	53.2	54.9	44.8	61.6
LN88-736	50.8	60.2	49.0	52.4	26.0	66.2
LN88-7018	49.4	55.9	51.0	44.9	30.9	75.8
LN88-7756	52.1	63.8	55.1	57.2	41.1	66.8
LN88-8169	52.3	62.4	53.3	56.6	31.6	79.7
LN88-8277	52.3	60.2	47.5	58.3	40.3	76.5
LN88-9180	52.9	56.9	52.7	54.5	41.5	71.4
LN88-9838	54.6	58.8	52.5	48.3	39.3	80.7
LN88-9900	56.9	67.9	51.7	70.0	44.4	72.9
LN88-10534	59.5	67.1	54.8	60.5	42.8	78.0
LN88-10884	52.7	62.0	46.0	66.9	41.6	64.0
LN88-11017	51.8	64.5	47.8	51.9	26.6	78.2
SL89-314	57.5	63.2	48.7	67.1	50.5	72.5
SL89-337	55.0	64.0	57.6	55.5	32.6	73.1
C.V. (%)		6.1	5.9	10.1	13.6	8.7
L.S.D. (5%)		7.2	6.1	12.2	10.2	10.5
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIIA, 1991

YIELD (bu/a)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	47.3	49.5	56.2	44.7	56.6
Flyer (IV)	55.0	40.4	54.6	49.8	77.3
Resnik (III)	53.7	45.9	64.1	46.5	74.5
AM90-211032	46.4	45.1	53.9	29.4	73.1
AM90-211033	32.7	42.5	58.2	31.0	64.2
AM90-211034	57.8	49.7	57.6	38.9	62.1
AM90-212021	63.6	48.8	64.7	45.5	72.6
AM90-311006	45.6	40.2	56.3	42.3	63.2
AM90-311011	54.7	46.0	57.0	47.5	67.2
AM90-312001	48.3	38.0	52.0	40.4	57.6
AM90-312003	55.4	36.8	60.1	36.6	66.9
AM90-312022	60.5	42.9	57.2	37.8	69.5
HS88-4914	54.1	47.6	58.8	43.0	66.0
HS89-2943	57.1	45.0	58.5	42.2	68.3
HS89-2981	49.8	42.6	51.1	42.3	63.3
HS89-2983	50.8	47.1	54.5	42.1	62.3
HS89-2988	46.1	43.2	55.3	44.6	63.9
HS89-3032	56.6	47.3	55.0	42.6	65.2
HS89-3070	47.8	47.6	53.4	42.3	64.0
HS89-5477	51.6	49.7	62.4	44.2	66.1
K1200	56.1	43.3	58.6	50.9	69.7
K1201	47.2	46.5	62.4	37.5	65.3
K1202	40.5	47.7	58.9	41.7	80.2
K1203	49.6	45.3	56.5	34.9	60.3
K1204	54.3	37.2	41.3	23.2	58.4
K1205	47.7	45.1	59.0	42.5	69.2
K1206	56.2	36.6	46.5	46.7	66.3
LN88-736	47.8	48.1	62.0	33.3	63.3
LN88-7018	36.7	44.6	57.9	34.2	61.9
LN88-7756	42.1	43.5	57.7	33.0	60.5
LN88-8169	44.5	43.7	53.8	36.8	60.2
LN88-8277	41.0	45.3	62.8	34.9	56.5
LN88-9180	53.0	43.9	55.8	41.2	57.8
LN88-9838	51.8	50.0	63.0	37.4	64.6
LN88-9900	62.5	38.9	57.5	35.4	67.7
LN88-10534	60.0	49.2	61.4	52.7	68.8
LN88-10884	47.5	42.4	54.2	42.6	59.3
LN88-11017	47.7	43.4	53.6	39.9	64.2
SL89-314	60.1	40.6	55.3	45.5	71.7
SL89-337	58.9	42.9	60.3	36.1	69.0
C.V. (%)	11.1	5.7	6.6	9.8	9.7
L.S.D. (5%)	11.6	5.4	7.6	6.6	12.8
Row Sp. (In.)	30	30	30	30	7
Rows/Plot	4	4	4	4	8
Reps	2	2	2	2	2

PRELIMINARY TEST IIIA, 1991

YIELD RANK

Strain	Yield Rank	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	33	32	33	19	37	30
Flyer (IV)	3	14	15	2	17	1
Resnik (III)	2	26	5	1	10	12
AM90-211032	38	28	29	40	35	19
AM90-211033	39	34	24	34	27	24
AM90-211034	19	29	21	32	19	32
AM90-212021	5	24	8	33	18	5
AM90-311006	22	25	25	14	23	20
AM90-311011	11	19	16	4	22	39
AM90-312001	29	8	33	7	24	29
AM90-312003	19	12	38	17	13	34
AM90-312022	18	33	28	28	16	35
HS88-4914	13	38	10	10	6	28
HS89-2943	10	21	30	5	25	22
HS89-2981	26	40	31	10	29	23
HS89-2983	24	26	32	23	34	10
HS89-2988	17	22	20	3	20	36
HS89-3032	9	5	1	6	25	26
HS89-3070	30	36	3	30	36	14
HS89-5477	7	3	6	15	14	9
K1200	4	16	11	8	21	7
K1201	34	37	12	39	32	13
K1202	16	31	19	20	11	27
K1203	36	38	27	37	28	17
K1204	40	12	22	38	40	38
K1205	11	19	3	16	4	25
K1206	22	15	14	26	2	40
LN88-736	35	17	33	29	39	33
LN88-7018	37	34	25	36	33	10
LN88-7756	30	7	7	22	9	31
LN88-8169	27	10	13	24	31	3
LN88-8277	27	17	38	20	12	8
LN88-9180	21	30	17	27	8	21
LN88-9838	15	23	18	35	15	2
LN88-9900	8	1	22	8	3	16
LN88-10534	1	2	9	18	5	6
LN88-10884	24	11	40	13	7	37
LN88-11017	32	4	37	31	38	4
SL89-314	5	9	36	12	1	18
SL89-337	14	5	2	25	30	15

PRELIMINARY TEST IIIA, 1991

YIELD RANK

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	30	4	25	9	39
Flyer (IV)	13	34	30	3	2
Resnik (III)	17	15	2	6	3
AM90-211032	32	18	33	39	4
AM90-211033	40	31	16	38	22
AM90-211034	7	3	19	25	30
AM90-212021	1	6	1	7	5
AM90-311006	34	35	24	16	28
AM90-311011	14	14	22	4	14
AM90-312001	24	37	37	23	38
AM90-312003	12	39	10	30	15
AM90-312022	3	29	21	26	8
HS88-4914	16	9	13	12	18
HS89-2943	8	20	15	19	12
HS89-2981	22	30	38	16	26
HS89-2983	21	12	31	20	29
HS89-2988	33	27	27	10	25
HS89-3032	9	11	29	13	20
HS89-3070	25	10	36	16	24
HS89-5477	20	2	5	11	17
K1200	11	26	14	2	7
K1201	31	13	5	27	19
K1202	38	8	12	21	1
K1203	23	17	23	33	33
K1204	15	38	40	40	36
K1205	27	18	11	15	9
K1206	10	40	39	5	16
LN88-736	25	7	7	36	26
LN88-7018	39	21	17	35	31
LN88-7756	36	24	18	37	32
LN88-8169	35	23	34	29	34
LN88-8277	37	16	4	33	40
LN88-9180	18	22	26	22	37
LN88-9838	19	1	3	28	21
LN88-9900	2	36	20	32	13
LN88-10534	5	5	8	1	11
LN88-10884	29	32	32	13	35
LN88-11017	27	25	35	24	22
SL89-314	4	33	27	7	6
SL89-337	6	28	9	31	10

PRELIMINARY TEST IIIA, 1991

MATURITY (date)

Strain	Mean 8 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	-5.1		-6	-5	-6	-5
Flyer (IV)	4.9		6	2	8	3
Resnik (III)	09/15		09/17	09/14	09/13	09/26
AM90-211032	-2.8		-2	-6	-8	-1
AM90-211033	-1.9		-3	-1	-4	-1
AM90-211034	-3.9		-4	-5	-10	0
AM90-212021	-1.5		-4	-4	-3	2
AM90-311006	1.1		2	-1	2	5
AM90-311011	-0.9		-2	-3	0	0
AM90-312001	3.3		2	1	5	8
AM90-312003	3.9		6	1	4	6
AM90-312022	-0.6		-1	-3	-1	-1
HS88-4914	-2.1		-2	-5	-2	0
HS89-2943	0.3		-2	0	1	0
HS89-2981	-1.0		0	-3	1	0
HS89-2983	-2.5		-5	-4	-3	0
HS89-2988	0.4		1	0	2	0
HS89-3032	-0.5		1	-2	1	0
HS89-3070	-3.1		-2	-5	-4	-2
HS89-5477	-0.8		0	-4	2	0
K1200	1.0		3	-1	2	2
K1201	-1.9		-2	-1	-1	-1
K1202	4.1		4	3	14	0
K1203	1.6		1	0	7	2
K1204	7.1		6	4	14	4
K1205	3.8		4	2	10	3
K1206	5.8		7	2	13	3
LN88-736	4.1		2	1	5	7
LN88-7018	-2.1		0	-2	-5	-1
LN88-7756	-1.5		-2	-4	-1	3
LN88-8169	2.4		0	2	5	4
LN88-8277	1.4		0	-2	3	0
LN88-9180	-0.6		-1	-4	1	0
LN88-9838	2.3		0	1	5	3
LN88-9900	2.3		0	1	6	3
LN88-10534	0.3		-2	0	4	2
LN88-10884	0.1		-1	1	3	2
LN88-11017	0.6		0	-1	-2	6
SL89-314	3.6		4	-1	10	2
SL89-337	5.1		7	2	10	3
Date Planted	05/16		05/19	04/30	05/11	05/29
Days to Mature	122		121	137	125	120

PRELIMINARY TEST IIIA, 1991

MATURITY (date)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	-4	-3		-4	-8
Flyer (IV)	7	2		4	7
Resnik (III)	09/04	10/01		09/17	09/05
AM90-211032	-1	-3		-2	1
AM90-211033	1	-4		0	-3
AM90-211034	-1	-2		-4	-5
AM90-212021	-1	-2		-1	1
AM90-311006	1	0		-1	1
AM90-311011	0	-1		-1	0
AM90-312001	4	-1		1	6
AM90-312003	4	0		3	7
AM90-312022	1	-2		0	2
HS88-4914	-1	-2		-1	-4
HS89-2943	0	0		0	3
HS89-2981	0	-1		-3	-2
HS89-2983	-1	0		-4	-3
HS89-2988	0	1		-1	0
HS89-3032	-1	-1		-1	-1
HS89-3070	-1	-2		-5	-4
HS89-5477	0	-2		-2	0
K1200	5	-1		0	-2
K1201	-1	-3		-2	-4
K1202	4	-1		3	6
K1203	0	-1		4	0
K1204	9	0		9	11
K1205	7	0		2	2
K1206	6	0		5	10
LN88-736	5	1		6	6
LN88-7018	-1	-1		-2	-5
LN88-7756	-1	0		-6	-1
LN88-8169	3	0		2	3
LN88-8277	6	-1		1	4
LN88-9180	0	-2		2	-1
LN88-9838	0	1		2	6
LN88-9900	2	-2		6	2
LN88-10534	0	-1		-1	0
LN88-10884	2	-4		-2	0
LN88-11017	-1	0		1	2
SL89-314	6	1		1	6
SL89-337	8	0		3	8
Date Planted	05/15	06/10		05/15	05/02
Days to Mature	112	113		125	126

PRELIMINARY TEST IIIA, 1991

LODGING (score)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	1.1	1.6	1.1	1.0	1.0	1.0
Flyer (IV)	1.2	1.7	1.3	1.0	1.0	2.0
Resnik (III)	1.1	1.6	1.2	1.0	1.0	1.0
AM90-211032	1.9	1.6	1.5	1.0	1.0	4.5
AM90-211033	1.1	1.4	1.0	1.0	1.0	1.5
AM90-211034	1.4	1.6	1.3	1.0	1.0	2.5
AM90-212021	1.3	1.5	1.2	1.0	1.0	2.5
AM90-311006	1.7	1.7	2.0	1.0	1.0	3.0
AM90-311011	1.4	1.7	1.2	1.0	1.0	3.0
AM90-312001	1.6	1.9	1.4	1.0	1.0	3.5
AM90-312003	1.6	2.0	1.5	1.0	1.0	3.0
AM90-312022	1.2	1.7	1.3	1.0	1.0	1.5
HS88-4914	1.3	1.7	1.2	1.2	1.0	2.5
HS89-2943	1.5	1.8	1.4	1.0	1.0	2.5
HS89-2981	1.4	1.6	1.4	1.0	1.0	2.0
HS89-2983	1.6	1.7	1.8	1.2	1.0	2.0
HS89-2988	1.5	1.8	1.6	1.0	1.0	2.5
HS89-3032	1.3	1.8	1.2	1.2	1.0	2.0
HS89-3070	1.6	1.7	1.5	1.0	1.0	2.5
HS89-5477	1.2	1.8	1.1	1.0	1.0	2.0
K1200	1.3	1.7	1.4	1.0	1.0	2.0
K1201	1.1	1.7	1.1	1.0	1.0	1.0
K1202	1.3	1.5	1.3	1.0	1.0	2.0
K1203	1.2	1.7	1.2	1.0	1.0	2.0
K1204	1.8	1.8	2.1	1.0	1.0	4.0
K1205	1.4	1.7	1.4	1.0	1.0	2.5
K1206	1.5	1.6	1.4	1.0	1.0	3.0
LN88-736	1.4	1.6	1.2	1.0	1.0	3.0
LN88-7018	1.1	1.5	1.1	1.0	1.0	1.5
LN88-7756	1.5	1.8	1.4	1.0	1.0	4.0
LN88-8169	1.2	1.6	1.1	1.0	1.0	1.5
LN88-8277	1.1	2.3	1.1	1.0	1.0	1.0
LN88-9180	1.7	1.6	1.4	1.0	1.0	3.0
LN88-9838	1.1	1.7	1.2	1.0	1.0	1.0
LN88-9900	1.4	1.6	1.3	1.0	1.0	2.0
LN88-10534	1.3	1.7	1.2	1.0	1.0	2.0
LN88-10884	1.5	1.5	1.6	1.0	1.0	2.5
LN88-11017	1.8	1.9	1.3	1.0	1.0	3.5
SL89-314	1.4	1.7	1.4	1.0	1.0	2.5
SL89-337	1.3	1.9	1.3	1.0	1.0	2.0

PRELIMINARY TEST IIIA, 1991

LODGING (score)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	1.0	1.0	1.0	1.0	1.0
Flyer (IV)	1.0	1.0	1.0	1.0	1.3
Resnik (III)	1.0	1.0	1.0	1.0	1.0
AM90-211032	1.0	1.0	3.0	1.0	3.3
AM90-211033	1.0	1.0	1.5	1.0	1.0
AM90-211034	1.0	1.0	2.0	1.0	1.5
AM90-212021	1.0	1.0	1.5	1.0	1.0
AM90-311006	1.0	1.0	2.5	1.0	2.5
AM90-311011	1.0	1.0	1.5	1.0	1.5
AM90-312001	1.0	1.0	3.0	1.0	1.5
AM90-312003	1.0	2.0	2.0	1.0	1.5
AM90-312022	1.0	1.0	1.5	1.0	1.0
HS88-4914	1.0	1.0	1.5	1.0	1.3
HS89-2943	1.0	1.0	2.0	1.0	1.8
HS89-2981	1.0	1.5	2.0	1.0	1.3
HS89-2983	1.0	2.5	2.0	1.0	1.8
HS89-2988	1.0	1.5	2.0	1.1	1.5
HS89-3032	1.0	1.0	1.5	1.0	1.0
HS89-3070	1.0	1.5	3.0	1.0	1.8
HS89-5477	1.0	1.0	1.0	1.0	1.3
K1200	1.0	1.0	1.5	1.0	1.8
K1201	1.0	1.0	1.0	1.0	1.3
K1202	1.0	1.0	1.0	1.0	2.5
K1203	1.0	1.0	1.0	1.0	1.3
K1204	1.0	1.0	3.5	1.0	2.0
K1205	1.0	1.0	1.5	1.0	1.5
K1206	1.0	1.0	2.5	1.0	1.5
LN88-736	1.0	1.5	2.0	1.0	1.0
LN88-7018	1.0	1.0	1.0	1.0	1.0
LN88-7756	1.0	1.0	2.0	1.0	1.0
LN88-8169	1.0	1.0	1.5	1.0	1.0
LN88-8277	1.0	1.0	1.0	1.0	1.0
LN88-9180	1.0	2.5	3.0	1.0	1.5
LN88-9838	1.0	1.0	1.0	1.0	1.0
LN88-9900	1.0	2.0	2.0	1.0	1.5
LN88-10534	1.0	1.0	1.5	1.0	1.5
LN88-10884	1.0	1.5	2.0	1.0	1.5
LN88-11017	1.0	1.5	2.5	1.0	2.8
SL89-314	1.0	1.0	1.5	1.0	1.8
SL89-337	1.0	1.0	1.5	1.0	1.0

PRELIMINARY TEST IIIA, 1991

PLANT HEIGHT (inches)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	30	27	36	22	28	32
Flyer (IV)	36	36	38	29	33	46
Resnik (III)	33	30	37	29	32	41
AM90-211032	35	33	36	23	34	50
AM90-211033	33	31	36	25	31	42
AM90-211034	35	32	38	26	34	42
AM90-212021	33	30	34	22	31	40
AM90-311006	40	38	42	30	36	52
AM90-311011	34	32	36	29	30	42
AM90-312001	37	38	38	30	34	47
AM90-312003	37	35	40	25	35	48
AM90-312022	35	32	36	26	34	41
HS88-4914	32	26	36	28	28	40
HS89-2943	38	34	40	32	34	49
HS89-2981	38	38	41	33	36	45
HS89-2983	38	38	40	31	34	46
HS89-2988	42	41	42	36	41	54
HS89-3032	33	34	34	26	31	39
HS89-3070	36	36	36	29	32	45
HS89-5477	33	30	36	26	30	42
K1200	35	34	38	32	30	40
K1201	30	26	34	21	28	36
K1202	34	34	38	28	31	44
K1203	31	33	35	22	29	41
K1204	35	37	38	29	32	44
K1205	34	32	36	27	33	41
K1206	35	36	38	26	31	42
LN88-736	33	29	37	24	31	42
LN88-7018	34	34	38	24	31	44
LN88-7756	35	34	38	26	33	45
LN88-8169	35	33	38	30	31	45
LN88-8277	32	28	33	25	32	38
LN88-9180	36	36	38	24	33	48
LN88-9838	34	30	37	26	30	42
LN88-9900	36	32	40	30	33	45
LN88-10534	36	36	38	25	32	48
LN88-10884	39	35	40	32	37	49
LN88-11017	37	35	39	28	34	45
SL89-314	40	38	40	33	37	48
SL89-337	36	38	40	30	34	45

PRELIMINARY TEST IIIA, 1991

PLANT HEIGHT (inches)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	25	40	40	27	23
Flyer (IV)	31	42	42	31	34
Resnik (III)	27	40	40	27	31
AM90-211032	32	42	42	28	33
AM90-211033	21	44	44	26	31
AM90-211034	31	44	44	28	35
AM90-212021	31	42	43	22	31
AM90-311006	35	46	51	31	35
AM90-311011	30	40	44	28	33
AM90-312001	35	42	45	29	34
AM90-312003	30	45	45	29	37
AM90-312022	30	42	43	31	34
HS88-4914	29	40	41	23	31
HS89-2943	34	45	48	30	37
HS89-2981	32	46	50	28	34
HS89-2983	32	45	48	34	35
HS89-2988	36	48	51	35	39
HS89-3032	28	41	40	26	28
HS89-3070	29	43	44	30	36
HS89-5477	30	38	39	26	33
K1200	30	42	42	29	34
K1201	26	35	42	24	29
K1202	26	39	40	26	36
K1203	27	37	37	22	30
K1204	31	41	40	26	34
K1205	27	41	44	28	34
K1206	32	40	43	29	33
LN88-736	27	44	44	25	30
LN88-7018	22	47	46	24	30
LN88-7756	28	45	44	27	34
LN88-8169	24	45	43	28	31
LN88-8277	22	41	42	22	32
LN88-9180	32	42	46	26	30
LN88-9838	28	44	44	26	31
LN88-9900	35	45	44	26	34
LN88-10534	29	46	46	27	33
LN88-10884	32	45	48	33	35
LN88-11017	31	45	48	27	34
SL89-314	35	46	45	34	40
SL89-337	30	40	44	27	33

PRELIMINARY TEST IIIA, 1991

SEED QUALITY (score)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	1.9	2.3	3.0	2.5	1.0	2.0
Flyer (IV)	1.8	2.0	2.8	1.8	1.0	2.0
Resnik (III)	1.7	2.5	2.5	2.0	1.0	2.0
AM90-211032	2.4	3.1	3.0	2.5	1.0	3.0
AM90-211033	2.2	3.2	2.9	2.5	1.0	2.0
AM90-211034	2.0	3.0	2.9	2.0	1.0	2.0
AM90-212021	2.6	3.9	3.0	2.0	1.5	2.0
AM90-311006	2.3	3.9	3.2	2.0	1.5	2.0
AM90-311011	1.6	1.8	2.3	1.5	1.0	2.0
AM90-312001	2.2	3.2	3.3	2.0	1.0	2.0
AM90-312003	2.2	3.1	3.0	2.3	1.5	2.0
AM90-312022	2.2	3.2	3.0	2.0	1.0	2.0
HS88-4914	1.7	2.6	2.4	1.5	1.0	2.0
HS89-2943	1.9	2.3	3.2	2.0	1.0	2.0
HS89-2981	1.9	2.5	2.9	2.0	1.0	2.0
HS89-2983	1.7	1.9	2.6	1.5	1.0	2.0
HS89-2988	1.8	2.8	3.2	1.5	1.5	2.0
HS89-3032	1.8	2.8	2.7	1.8	1.0	2.0
HS89-3070	1.7	2.6	2.7	1.5	1.0	2.0
HS89-5477	1.8	2.6	2.6	1.8	1.5	2.0
K1200	1.8	2.7	2.7	1.8	1.0	2.0
K1201	1.8	2.4	2.6	1.8	1.0	2.0
K1202	1.7	2.6	2.7	1.8	1.5	2.0
K1203	2.0	2.6	2.7	2.3	1.0	3.0
K1204	1.8	2.7	2.5	2.0	1.0	2.0
K1205	1.8	2.7	2.6	2.0	1.0	2.0
K1206	2.0	2.5	2.7	2.0	1.0	2.0
LN88-736	2.2	2.4	3.3	2.3	2.0	2.0
LN88-7018	2.1	2.7	3.3	2.5	1.0	2.0
LN88-7756	2.8	3.8	3.0	2.3	2.0	3.0
LN88-8169	2.2	3.6	3.0	2.8	1.0	2.0
LN88-8277	2.4	3.7	3.1	2.5	2.5	2.0
LN88-9180	1.9	3.0	3.2	1.8	1.0	2.0
LN88-9838	1.8	3.2	2.3	2.0	1.5	2.0
LN88-9900	2.3	3.1	2.4	3.0	1.0	2.0
LN88-10534	2.3	3.8	2.6	2.8	1.5	3.0
LN88-10884	1.8	2.3	2.8	2.3	1.0	2.0
LN88-11017	1.7	2.7	2.8	2.0	1.0	2.0
SL89-314	1.9	2.6	2.8	2.3	1.0	2.0
SL89-337	1.8	2.6	3.0	2.3	1.0	2.0

PRELIMINARY TEST IIIA, 1991

SEED QUALITY (score)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	2.0	1.5	1.5	1.6	1.5
Flyer (IV)	2.0	1.0	2.0	1.4	2.0
Resnik (III)	1.5	1.0	1.5	1.4	2.0
AM90-211032	2.0	2.5	2.0	1.8	3.0
AM90-211033	1.0	2.0	2.0	2.0	3.0
AM90-211034	2.0	1.0	2.0	1.6	2.0
AM90-212021	2.0	3.0	3.5	3.0	2.5
AM90-311006	2.0	2.5	2.0	2.0	2.0
AM90-311011	2.0	1.5	1.0	1.6	1.5
AM90-312001	2.0	1.5	2.0	1.7	3.0
AM90-312003	2.0	2.5	2.0	1.5	2.5
AM90-312022	2.0	1.5	2.0	2.2	3.0
HS88-4914	1.5	1.5	1.5	1.5	1.5
HS89-2943	1.5	1.5	1.5	1.5	2.0
HS89-2981	2.0	1.5	2.0	1.4	1.5
HS89-2983	1.5	1.0	2.0	1.6	1.5
HS89-2988	1.5	1.0	1.5	1.4	1.5
HS89-3032	2.0	1.0	1.5	1.3	1.5
HS89-3070	1.5	1.0	1.5	1.3	1.5
HS89-5477	1.5	1.5	1.0	1.6	1.5
K1200	1.5	1.5	1.0	1.7	2.0
K1201	1.5	2.0	1.5	1.4	1.5
K1202	1.5	1.0	1.5	1.3	1.5
K1203	2.0	1.0	1.5	1.4	2.0
K1204	1.0	2.0	2.0	1.5	1.5
K1205	1.5	1.0	2.0	1.5	2.0
K1206	1.5	2.0	2.0	1.8	2.0
LN88-736	2.0	2.0	1.5	1.8	2.5
LN88-7018	2.0	2.0	1.5	2.0	1.5
LN88-7756	2.0	2.5	3.5	3.1	2.5
LN88-8169	2.0	2.0	1.5	2.0	2.5
LN88-8277	2.0	2.0	1.5	2.6	2.5
LN88-9180	1.0	1.0	2.0	1.8	2.0
LN88-9838	1.5	1.0	1.0	1.6	2.0
LN88-9900	2.0	2.0	2.0	2.1	3.0
LN88-10534	2.0	1.5	2.5	1.5	2.0
LN88-10884	2.0	1.0	2.0	1.3	1.5
LN88-11017	1.0	1.0	1.5	1.6	1.5
SL89-314	1.5	1.0	1.5	1.7	2.5
SL89-337	1.5	1.0	1.0	1.3	2.5

PRELIMINARY TEST IIIA, 1991

SEED SIZE (g/100)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	17.4	18.6	18.2	17.9	17.0	19.0
Flyer (IV)	14.7	15.0	14.3	15.9	14.4	17.5
Resnik (III)	15.2	15.9	15.3	16.0	15.3	17.0
AM90-211032	16.7	18.5	16.0	17.4	16.0	18.7
AM90-211033	18.6	20.6	18.6	21.9	17.8	18.1
AM90-211034	18.2	20.0	17.6	18.7	17.9	20.6
AM90-212021	16.4	18.0	15.7	16.6	15.5	18.4
AM90-311006	19.0	20.0	19.4	20.1	20.3	23.8
AM90-311011	15.8	15.4	15.5	16.0	16.3	18.3
AM90-312001	16.9	18.8	15.6	19.0	17.7	19.8
AM90-312003	19.0	21.0	19.4	19.9	21.0	21.0
AM90-312022	15.4	15.6	16.0	16.6	15.8	12.2
HS88-4914	16.9	18.4	16.8	17.8	17.9	18.6
HS89-2943	17.2	18.2	17.2	18.3	17.8	19.8
HS89-2981	17.0	17.6	17.4	17.6	16.8	21.1
HS89-2983	15.0	16.8	15.2	15.3	14.8	16.7
HS89-2988	15.1	16.1	15.8	15.6	15.2	17.0
HS89-3032	16.9	18.6	16.7	17.2	17.5	19.6
HS89-3070	16.3	17.2	17.0	16.2	16.3	18.2
HS89-5477	15.3	16.2	15.0	15.6	15.7	17.7
K1200	15.2	16.0	14.8	16.9	15.4	17.6
K1201	16.8	17.2	16.2	18.6	16.7	18.4
K1202	16.7	17.5	16.8	18.3	18.2	18.1
K1203	16.5	16.4	15.5	19.9	17.5	19.5
K1204	14.7	15.2	14.5	16.8	15.4	16.9
K1205	16.4	16.8	17.0	17.8	16.5	19.2
K1206	15.3	15.4	15.6	17.0	17.1	18.0
LN88-736	19.3	20.5	18.7	20.9	18.8	22.9
LN88-7018	16.7	18.3	18.6	17.3	16.9	17.3
LN88-7756	16.9	20.1	15.8	18.2	17.2	20.0
LN88-8169	17.5	20.2	16.6	20.5	17.7	19.0
LN88-8277	20.1	21.5	20.9	22.5	20.2	21.8
LN88-9180	16.2	18.0	15.6	16.2	16.4	20.7
LN88-9838	17.2	19.4	16.0	18.7	18.3	19.0
LN88-9900	16.4	17.2	15.4	17.7	17.3	18.6
LN88-10534	16.5	17.7	14.8	16.7	16.8	19.8
LN88-10884	17.6	19.8	17.6	20.1	18.0	19.5
LN88-11017	16.2	16.8	16.2	17.7	17.0	18.9
SL89-314	14.6	14.8	14.6	15.0	15.7	16.3
SL89-337	18.0	19.4	17.3	18.8	18.8	19.9

PRELIMINARY TEST IIIA, 1991

SEED SIZE (g/100)

Strain	Columbia MO	David City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	15.0	18.5	18.4	15.9	15.1
Flyer (IV)	14.1	13.2	15.4	12.9	13.8
Resnik (III)	14.3	15.1	16.2	13.6	13.7
AM90-211032	15.4	15.9	18.2	14.9	16.1
AM90-211033	17.0	16.6	19.7	18.7	17.2
AM90-211034	17.7	17.7	19.1	16.4	16.2
AM90-212021	16.0	16.0	16.5	15.2	16.5
AM90-311006	15.4	16.7	19.8	16.7	17.7
AM90-311011	15.3	15.3	17.2	14.2	14.2
AM90-312001	16.3	13.9	17.4	15.0	15.8
AM90-312003	19.0	16.0	18.2	17.3	17.1
AM90-312022	15.2	14.8	16.9	14.5	16.0
HS88-4914	15.5	16.3	17.8	14.3	15.3
HS89-2943	16.5	15.8	17.6	14.8	15.8
HS89-2981	15.1	16.9	17.4	14.3	15.7
HS89-2983	12.5	16.2	16.7	12.8	13.4
HS89-2988	13.1	15.1	15.8	12.6	14.6
HS89-3032	15.1	16.3	17.6	14.6	15.6
HS89-3070	14.8	16.1	18.0	14.0	15.2
HS89-5477	12.8	14.9	16.9	13.4	14.3
K1200	13.7	13.9	15.5	13.6	14.6
K1201	15.5	15.8	17.8	15.5	15.8
K1202	14.0	15.9	17.9	15.0	15.7
K1203	14.9	15.6	16.7	14.4	14.9
K1204	14.3	12.0	14.3	14.1	13.4
K1205	15.1	16.1	17.4	14.2	13.9
K1206	14.4	13.1	15.2	13.2	14.0
LN88-736	16.3	17.3	20.3	18.4	18.5
LN88-7018	15.3	16.8	16.5	14.7	15.7
LN88-7756	16.4	14.5	16.1	13.6	17.1
LN88-8169	15.4	16.0	16.4	16.8	16.5
LN88-8277	16.3	19.8	20.2	18.3	19.8
LN88-9180	14.1	16.1	16.9	14.3	13.8
LN88-9838	15.7	16.4	17.6	15.6	15.7
LN88-9900	15.5	14.5	16.8	15.2	15.6
LN88-10534	15.4	16.3	17.5	14.2	16.1
LN88-10884	15.3	16.3	18.4	15.2	16.0
LN88-11017	14.4	15.5	16.6	14.3	14.9
SL89-314	14.2	14.3	15.2	12.8	13.0
SL89-337	16.5	16.5	19.2	17.0	16.6

PRELIMINARY TEST IIIA, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Winterset IA	Urbana IL	Lafayette IN	Manhattan KS	Hoytville OH
Burlison (II)	42.5	43.6	44.1	41.5	43.6	39.7
Flyer (IV)	41.4	41.8	42.8	41.2	41.1	40.3
Resnik (III)	40.6	41.5	42.0	39.9	40.7	39.0
AM90-211032	38.8	39.4	40.2	37.0	40.3	37.2
AM90-211033	39.1	39.8	40.7	37.3	39.9	37.6
AM90-211034	40.2	41.0	41.0	38.5	41.9	38.5
AM90-212021	36.6	37.0	36.9	37.1	36.8	35.2
AM90-311006	40.7	41.5	41.5	40.8	41.3	38.6
AM90-311011	39.2	40.3	39.5	37.4	41.3	37.6
AM90-312001	41.0	41.5	42.7	40.0	42.6	38.0
AM90-312003	40.9	42.8	40.8	40.0	41.7	39.1
AM90-312022	39.9	40.5	40.5	39.0	40.1	39.3
HS88-4914	39.4	39.5	40.5	38.2	40.8	37.8
HS89-2943	40.5	40.6	41.1	39.9	41.3	39.5
HS89-2981	42.0	42.8	43.0	41.2	43.0	40.0
HS89-2983	41.3	41.5	41.3	40.1	43.0	40.5
HS89-2988	42.1	43.0	43.2	41.2	42.4	40.5
HS89-3032	39.9	41.2	40.4	38.5	41.6	37.7
HS89-3070	40.9	40.4	41.6	40.7	41.8	40.1
HS89-5477	40.6	40.9	41.5	40.7	41.3	38.7
K1200	38.7	39.1	40.2	37.7	39.4	37.2
K1201	37.8	38.1	41.0	37.9	38.0	33.9
K1202	40.5	40.6	41.4	40.9	41.3	38.3
K1203	38.9	38.9	40.8	39.0	39.9	35.7
K1204	41.0	40.6	43.8	40.9	40.3	39.3
K1205	39.7	40.3	40.8	38.6	41.2	37.5
K1206	39.9	40.0	41.2	39.5	40.6	38.4
LN88-736	40.6	40.8	41.1	39.6	41.4	40.1
LN88-7018	39.0	39.0	40.7	37.1	39.2	38.8
LN88-7756	39.4	39.5	41.3	38.8	41.2	36.1
LN88-8169	41.6	42.3	42.9	40.8	42.1	39.7
LN88-8277	39.1	38.8	41.2	39.2	39.5	36.9
LN88-9180	40.7	41.0	41.4	40.5	41.9	38.6
LN88-9838	39.6	39.8	41.5	38.9	40.8	36.9
LN88-9900	40.0	40.6	41.5	40.0	40.5	37.3
LN88-10534	39.9	40.3	41.2	39.5	40.6	38.0
LN88-10884	40.6	40.7	43.0	40.9	41.3	37.3
LN88-11017	39.8	40.2	39.8	38.3	41.9	38.7
SL89-314	40.2	40.4	41.6	40.0	41.2	37.7
SL89-337	41.4	41.5	42.8	41.8	40.8	40.2

PRELIMINARY TEST IIIA, 1991

OIL (%)

Strain	Mean 5 Tests	Winterset IA	Urbana IL	Lafayette IN	Manhattan KS	Hoytville OH
Burlison (II)	19.9	19.3	19.8	20.5	19.0	21.1
Flyer (IV)	21.1	20.6	20.7	21.7	20.8	21.5
Resnik (III)	21.7	21.1	21.3	22.2	21.3	22.4
AM90-211032	21.7	21.1	22.2	22.9	20.1	22.1
AM90-211033	21.7	21.0	21.7	22.6	20.6	22.4
AM90-211034	21.2	20.7	21.3	22.4	19.7	22.1
AM90-212021	22.2	21.6	22.8	22.6	21.4	22.8
AM90-311006	21.4	20.9	21.4	21.9	20.7	22.0
AM90-311011	21.7	20.6	22.4	22.6	20.4	22.4
AM90-312001	21.7	21.3	21.6	22.3	20.4	22.7
AM90-312003	21.8	20.9	22.1	22.5	20.6	23.1
AM90-312022	21.8	21.3	21.8	22.5	21.4	22.2
HS88-4914	21.6	20.8	21.6	22.4	20.3	22.7
HS89-2943	21.6	21.3	21.9	21.8	20.8	22.3
HS89-2981	21.6	20.8	21.2	22.3	21.1	22.5
HS89-2983	21.5	21.5	21.8	22.4	20.1	21.9
HS89-2988	21.2	20.7	21.1	21.9	20.7	21.6
HS89-3032	21.1	20.4	21.5	21.8	20.1	21.9
HS89-3070	21.9	21.4	22.4	22.0	21.2	22.4
HS89-5477	21.1	20.5	21.6	21.5	19.9	22.0
K1200	22.7	22.0	22.7	23.7	22.0	23.2
K1201	23.6	22.8	23.0	23.6	22.7	25.7
K1202	22.1	21.8	22.4	22.1	21.7	22.7
K1203	22.9	22.0	23.0	23.0	22.1	24.3
K1204	21.4	21.0	21.0	22.0	20.9	22.0
K1205	22.3	21.6	22.5	23.3	21.3	23.0
K1206	21.8	21.4	22.3	22.2	20.7	22.4
LN88-736	21.9	21.3	21.8	22.5	21.3	22.4
LN88-7018	21.8	20.6	22.2	22.9	20.9	22.3
LN88-7756	22.1	21.7	21.9	22.8	20.8	23.5
LN88-8169	21.2	20.4	21.4	22.4	19.9	22.0
LN88-8277	21.5	20.9	21.4	21.9	20.7	22.4
LN88-9180	21.3	20.6	21.7	21.8	20.1	22.2
LN88-9838	22.4	21.8	22.3	23.3	21.2	23.4
LN88-9900	20.6	19.9	20.3	21.0	20.2	21.4
LN88-10534	21.7	21.5	21.6	22.1	20.9	22.5
LN88-10884	21.0	20.8	20.3	21.5	20.0	22.4
LN88-11017	21.6	20.8	22.5	23.1	19.5	22.2
SL89-314	21.7	21.4	21.6	22.1	21.0	22.3
SL89-337	20.6	20.0	20.1	20.5	20.3	22.0

PRELIMINARY TEST IIIB, 1991

Strain	Parentage	Generation Composited	Unique Traits
Burlison (II)	K74-113-76-486 x Century	F5	Rps1-b, Rps3
Flyer (IV)	Asgrow A3127^4 x Williams 82	BC3 F2	Rps1-k
Resnik (III)	Asgrow A3127^4 x Williams 82	BC3 F2	Rps1-k
C1831	Spencer x Resnik	F5	Rps1-k
C1832	Spencer x Resnik	F5	Rps1-k
C1833	Spencer x Elgin 87	F5	Rps1-k
C1835	C1678 x Resnik	F5	Rps1-k
C1837	C1678 x C1696	F5	
C1838	Elgin 87 x Resnik	F5	Rps1-k
C1839	Elgin 87 x Resnik	F5	Rps1-k
C1842	(Spencer^2 x Pella 86) x Resnik	F5	Rps1-k
C1843	(Spencer^2 x Pella 86) x Resnik	F5	Rps1-k
C1845	(Spencer^2 x Pella 86) x Resnik	F5	Rps1-k(H)
C1846	Sherman x Resnik	F5	Rps1-k
C1847	C1678 x PRX305-146	F5	Rps1-k
C1850	Spencer x PRX305-146	F5	Rps1-k
HM9092	Ripley x Asgrow A3127 BC_3 F_2-1	F5	Rps1-k
HM9093	Will x Asgrow A3127	F5	Dt2
LL89-657	Male Sterile Intermating Pop.	F5	
U90-2226	Sherman x U83-63042		
U90-3103	U80-64032 x HC80-585	F5	
U90-3108	Fremont x Hobbit	F5	
U90-3131	U80-64032 x HC80-585	F5	
U90-3135	A82-267015 x U80-65127	F5	
U90-3206	Platte x Asgrow A3127	F5	
U90-3214	U80-64032 x Jacques J822	F5	
U90-3301	U80-64032 x HC80-585	F5	
U90-3328	Fremont x A82-267015	F5	
U90-3405	BSR 101 x Mead PR	F5	
U90-3436	SG_1/BC/86-E_2	F4	
HC78-676-2	HC78-676^6 x Willaims 82	F5	dt1
HC78-676-3	HC78-676^6 x Willaims 82	F5	dt1
HC78-676-9	HC78-676^6 x Willaims 82	F5	dt1
HC78-676-13	HC78-676^6 x Willaims 82	F5	dt1
HC86-277	Pixie x HC78-676	F5	dt1
HC87-219	Hoyt x Amcor	F5	dt1
HC87-476	Hoyt x Gnome 85	F5	dt1
HC87-3287	Coker 237 x Asgrow A3127	F5	dt1
HC87-5691	Sprite x Asgrow A3127	F5	dt1
HC87-5845	Pixie x HC78-676	F5	dt1

PRELIMINARY TEST IIIB, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Shattering Score Manhattan	BSR-Boone Plant n %	BSR-Boone Stem n %
Burlison (II)	WTTIYBlI	1	100	58.4
Flyer (IV)	PTTYBlI	1	80	39.5
Resnik (III)	PTTYBlI	1	90	58.2
C1831	PTTDYBlI	1	80	36.3
C1832	PTTDYBlI	1	70	40.9
C1833	WTT+BDYBrI	1	100	47.2
C1835	PTTDYBlI	1	60	36.2
C1837	PTTDYBlD	2	90	65.2
C1838	PTTDYBlI	1	70	52.8
C1839	PTTDYBlI	1	100	62.9
C1842	PTTDYBlI	1	100	56.7
C1843	PTTDYBlI	1	80	48.1
C1845	WTTDYBlI	1	100	49.2
C1846	WTTIYBrI	1	80	35.6
C1847	WTTSYBlD	1	100	84.8
C1850	WTBDYBlI	2	50	26.3
HM9092	WTTDYBlI	1	80	53.4
HM9093	PTTDYBlSD	1	80	64.4
LL89-657	PTTIYBlSD	1	40	18.1
U90-2226	WGBIYBfI	1	90	50.7
U90-3103	WG+TT+BIYBrI	1	80	51.9
U90-3108	WGTIYYI	1	80	45.0
U90-3131	WGBSYBfI	1	90	45.9
U90-3135	WGBDYBfI	1	100	69.2
U90-3206	PGTSYIbI	1	100	51.8
U90-3214	P+WGBSYBfI	1	90	49.8
U90-3301	WTBSYBrI	2	80	38.0
U90-3328	WGBSYYI	1	90	60.3
U90-3405	PGBDYIbI	2	90	40.1
U90-3436	PTBSYBrI	2	90	61.9
HC78-676-2	PTBDYBrD	1	70	60.7
HC78-676-3	PTBIYBrD	1	80	68.5
HC78-676-9	PTBIYBrD	1	100	97.8
HC78-676-13	PTBDYBrD	1	100	87.2
HC86-277	PTTIYBrD	1	90	80.7
HC87-219	PGBSYGrD	1	40	32.2
HC87-476	PTTDYBlD	1	20	11.4
HC87-3287	PTTDYBlD	1	100	91.1
HC87-5691	P+WTTDYBlD	1	100	97.1
HC87-5845	PTBDYBlD	1	70	45.9

PRELIMINARY TEST IIIB, 1991

DISEASE DATA

Strain	PR			Germination	PS	PSB	SMV
	Custer Phyto. Tolerance	Urbana Race 1	Ames Race 4	Lafayette	Lafayette		
					a	n	a
				%	%	%	Score
Burlison (II)	4.1	R	R	71	52	6	4e
Flyer (IV)	2.8	R	R	88	22	3	5e
Resnik (III)	3.4	R	H	89	18	2	5e
C1831	3.3	R	H	90	14	2	5e
C1832	3.4	R	H	86	17	8	5e
C1833	6.9	R	H	78	37	16	5e
C1835	6.8	R	R	86	35	4	3e
C1837	5.8	R	S	94	17	2	5e
C1838	3.8	R	H	92	12	0	4e
C1839	3.9	R	R	94	26	2	5e
C1842	4.1	R	S	86	25	4	3e
C1843	6.8	R	R	66	46	10	3e
C1845	4.5	H	H	88	39	4	5e
C1846	3.8	R	H	94	28	2	4e
C1847	5.8	R	H	78	9	6	5e
C1850	3.8	R	R	86	36	6	4m
HM9092	3.0	R	H	92	6	2	4e
HM9093	5.8	S	S	92	39	6	2m
LL89-657	5.0	R	S	78	15	8	4e
U90-2226	4.1	S	S	84	34	4	1
U90-3103	3.5	S	S	90	18	4	1
U90-3108	6.5	S	S	90	10	6	5e
U90-3131	3.5	S	S	92	34	4	3e
U90-3135	8.3	S	S	88	15	22	2e
U90-3206	3.8	S	S	94	20	2	3e
U90-3214	3.5	S	S	92	32	2	2m
U90-3301	2.8	S	S	78	29	8	5e
U90-3328	3.1	S	S	92	21	4	5m
U90-3405	3.3	R	S	92	33	6	3m
U90-3436	5.5	S	S	84	16	10	5s
HC78-676-2	7.8	R	R	90	29	0	5e
HC78-676-3	7.8	R	R	84	20	4	5e
HC78-676-9	6.1	R	R	96	21	0	5s
HC78-676-13	7.3	R	R	96	27	2	5e
HC86-277	6.8	S	S	98	6	0	5e
HC87-219	7.5	R	S	96	13	2	5e
HC87-476	7.5	R	H	86	16	2	5e
HC87-3287	5.8	S	S	96	3	0	3e
HC87-5691	7.3	S	S	78	18	16	3e
HC87-5845	7.0	S	S	74	20	6	3e

PRELIMINARY TEST IIIB, 1991

REGIONAL SUMMARY

No. of Tests Strain	Yield 10 bu/a	Rank 10 No.	Maturity 8 Date	Lodging 10 Score	Plant Height 10 In.	Seed Quality 10 Score	Seed Size 10 g/100	Composition Protein 5 %	 Oil 5 %
Burlison (II)	50.7	22	-4.8	1.1	30	1.9	17.7	42.1	20.2
Flyer (IV)	52.5	14	5.3	1.2	34	1.7	14.3	41.0	21.3
Resnik (III)	55.3	3	09/14*	1.2	33	1.9	15.0	40.5	21.5
C1831	53.6	8	3.4	1.3	36	2.2	15.7	40.5	21.1
C1832	55.0	5	4.0	1.3	33	2.2	15.5	40.0	21.2
C1833	53.0	11	1.9	1.4	33	2.6	16.6	38.5	21.7
C1835	52.0	19	-1.3	1.4	35	2.0	16.0	40.5	21.4
C1837	44.7	36	-1.1	1.1	24	2.1	15.3	37.7	22.2
C1838	52.8	13	1.3	1.1	33	1.9	15.1	41.1	20.9
C1839	54.1	6	1.0	1.2	34	1.9	15.1	41.0	21.1
C1842	56.7	1	6.8	1.2	34	2.1	16.8	40.4	21.1
C1843	55.1	4	0.0	1.3	37	2.0	17.1	40.0	21.2
C1845	55.4	2	4.4	1.2	33	2.2	17.2	39.5	21.3
C1846	53.3	10	-0.5	1.2	34	1.9	15.7	40.7	21.6
C1847	45.7	35	-4.5	1.1	23	1.6	15.4	39.5	21.0
C1850	52.1	17	2.1	1.4	36	1.9	18.9	39.7	21.7
HM9092	52.5	14	1.4	1.5	34	1.8	14.5	39.7	20.8
HM9093	46.9	31	-3.3	1.1	23	1.7	16.1	40.5	21.6
LL89-657	47.2	30	2.4	1.1	25	2.0	15.6	40.6	22.4
U90-2226	53.9	7	1.4	1.4	32	1.6	15.3	39.5	22.1
U90-3103	51.1	21	6.8	1.5	39	2.3	16.6	38.7	22.5
U90-3108	49.5	27	2.8	1.4	35	2.0	17.5	39.2	21.7
U90-3131	50.4	23	3.5	1.8	36	1.9	16.4	39.8	22.3
U90-3135	45.8	34	9.5	1.8	40	2.5	15.7	40.2	21.7
U90-3206	46.9	31	8.0	1.6	40	2.3	14.4	38.0	22.0
U90-3214	48.6	28	9.8	1.7	38	2.2	17.6	40.4	21.3
U90-3301	52.9	12	3.0	1.3	37	2.1	17.1	39.6	21.9
U90-3328	49.7	26	4.8	1.7	38	2.1	15.1	38.9	21.7
U90-3405	46.9	31	1.0	1.7	39	2.6	16.9	40.9	20.4
U90-3436	47.6	29	8.3	1.7	39	2.7	18.6	41.1	21.1
HC78-676-2	53.4	9	4.5	1.1	21	2.0	15.5	40.1	20.5
HC78-676-3	51.8	20	4.8	1.1	21	2.1	16.1	40.7	20.2
HC78-676-9	52.4	16	3.5	1.1	21	2.0	15.8	40.0	20.4
HC78-676-13	52.1	17	3.9	1.1	19	2.3	15.9	40.4	20.5
HC86-277	50.1	24	3.6	1.1	20	1.9	16.1	40.7	21.1
HC87-219	41.8	38	-3.9	1.1	19	2.4	15.7	38.6	21.9
HC87-476	44.6	37	-2.8	1.1	18	1.9	16.5	39.9	21.5
HC87-3287	37.7	39	8.1	1.1	21	1.9	18.5	39.3	21.5
HC87-5691	34.1	40	5.9	1.1	17	1.9	17.9	39.4	22.5
HC87-5845	49.8	25	4.6	1.1	22	2.0	16.8	39.2	21.4

* 121.1 Days After Planting

PRELIMINARY TEST IIIB, 1991

YIELD (bu/a)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	50.7	58.5	49.1	53.8	30.6	69.7
Flyer (IV)	52.5	51.3	46.2	61.9	43.1	73.9
Resnik (III)	55.3	64.3	52.9	66.0	37.3	71.2
C1831	53.6	55.6	50.1	72.5	41.1	73.2
C1832	55.0	65.8	55.4	59.6	36.7	75.8
C1833	53.0	63.1	42.5	62.8	30.5	64.8
C1835	52.0	52.7	51.9	59.6	31.4	69.8
C1837	44.7	46.6	54.7	41.5	29.8	61.1
C1838	52.8	58.7	49.6	59.7	37.6	73.5
C1839	54.1	59.9	50.0	66.1	37.2	72.2
C1842	56.7	58.9	56.1	68.1	42.9	74.2
C1843	55.1	62.7	47.3	66.7	30.3	75.2
C1845	55.4	62.8	49.3	70.0	39.3	72.5
C1846	53.3	50.9	51.5	61.9	35.8	66.0
C1847	45.7	44.5	52.1	44.2	25.9	50.1
C1850	52.1	58.8	48.8	61.2	40.2	70.9
HM9092	52.5	57.6	53.9	60.7	40.5	66.4
HM9093	46.9	53.9	52.4	45.8	24.0	68.8
LL89-657	47.2	55.5	47.2	61.9	33.0	51.5
U90-2226	53.9	58.6	50.8	56.6	49.4	72.9
U90-3103	51.1	51.6	50.9	61.6	42.2	75.6
U90-3108	49.5	57.0	52.1	58.4	33.3	69.7
U90-3131	50.4	49.5	48.4	61.8	37.7	63.7
U90-3135	45.8	49.6	45.4	57.1	33.0	60.5
U90-3206	46.9	57.0	44.4	41.1	38.4	72.9
U90-3214	48.6	50.2	46.6	52.9	38.2	64.4
U90-3301	52.9	55.7	50.5	58.9	40.9	73.5
U90-3328	49.7	49.4	45.7	62.8	37.1	69.7
U90-3405	46.9	52.7	40.8	52.7	31.5	70.4
U90-3436	47.6	51.6	40.9	62.9	32.5	68.2
HC78-676-2	53.4	42.9	53.3	61.6	30.5	72.5
HC78-676-3	51.8	45.3	54.5	60.7	29.6	63.5
HC78-676-9	52.4	49.9	51.8	64.3	28.0	65.0
HC78-676-13	52.1	41.9	49.4	66.3	36.7	62.0
HC86-277	50.1	48.1	53.5	57.8	41.0	64.9
HC87-219	41.8	44.3	53.4	37.3	20.0	55.9
HC87-476	44.6	37.6	53.7	44.0	26.9	59.6
HC87-3287	37.7	35.2	44.8	38.9	27.2	47.4
HC87-5691	34.1	32.8	42.9	34.2	20.8	46.5
HC87-5845	49.8	48.0	56.2	49.5	43.6	68.1
C.V. (%)		9.9	7.3	12.0	12.3	10.8
L.S.D. (5%)		10.4	7.3	14.0	8.7	12.2
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIIB, 1991

YIELD (bu/a)

Strain	Columbia MO	David City NE	Lincoln NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	47.8	51.3	41.6	42.1	62.8
Flyer (IV)	57.6	39.9	33.2	49.9	68.2
Resnik (III)	57.1	46.5	41.1	40.7	75.8
C1831	50.3	43.7	38.1	42.2	69.5
C1832	56.1	41.5	34.5	51.1	73.2
C1833	57.0	50.0	43.1	43.8	72.3
C1835	51.4	46.2	43.0	46.5	67.2
C1837	25.3	53.0	40.2	35.5	58.9
C1838	53.0	44.9	34.7	46.1	70.2
C1839	50.2	43.8	43.1	45.6	72.6
C1842	63.0	45.6	36.4	46.5	75.5
C1843	57.1	48.7	42.5	46.3	73.9
C1845	49.9	50.1	39.1	41.8	79.0
C1846	54.0	48.0	42.4	48.4	74.2
C1847	46.7	52.3	43.0	44.9	53.5
C1850	45.0	45.8	38.3	44.1	67.8
HM9092	42.3	45.9	38.5	44.6	74.3
HM9093	35.8	47.7	40.2	35.3	64.9
LL89-657	43.4	42.2	35.4	33.1	68.5
U90-2226	53.7	50.9	40.6	39.0	66.4
U90-3103	54.2	33.4	28.5	43.1	69.7
U90-3108	30.7	45.5	40.4	38.5	69.2
U90-3131	49.8	47.0	37.5	39.4	69.6
U90-3135	46.3	32.6	31.4	37.1	65.4
U90-3206	32.7	34.2	34.7	39.2	74.0
U90-3214	50.1	40.2	34.2	38.0	71.2
U90-3301	56.4	37.3	36.6	47.0	72.6
U90-3328	42.3	43.8	38.4	37.1	70.3
U90-3405	50.7	32.4	35.4	39.3	63.2
U90-3436	48.9	35.2	39.2	32.1	64.4
HC78-676-2	53.5	54.0	40.6	47.3	77.5
HC78-676-3	48.7	52.7	39.8	43.4	79.6
HC78-676-9	62.8	51.7	41.4	42.9	66.6
HC78-676-13	51.0	50.5	42.9	51.6	68.6
HC86-277	42.5	50.5	41.9	27.5	73.6
HC87-219	35.7	54.8	40.2	30.3	46.3
HC87-476	46.2	54.9	39.5	35.6	48.4
HC87-3287	31.0	42.7	32.9	34.5	42.4
HC87-5691	27.1	42.8	26.0	34.1	33.6
HC87-5845	33.5	46.4	44.5	35.1	73.3
C.V. (%)	21.3	5.9	8.7	8.3	8.7
L.S.D. (5%)	20.7	5.4	6.8	6.7	11.2
Row Sp. (In.)	30	30	30	30	7
Rows/Plot	4	4	4	4	8
Reps	2	2	2	2	2

PRELIMINARY TEST IIIB, 1991

YIELD RANK

Strain	Yield Rank	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	22	11	26	29	28	18
Flyer (IV)	14	23	32	12	3	5
Resnik (III)	3	2	11	7	16	14
C1831	8	16	21	1	6	8
C1832	5	1	3	22	19	1
C1833	11	3	38	10	29	28
C1835	19	19	15	22	27	17
C1837	36	32	4	36	32	33
C1838	13	9	23	21	15	6
C1839	6	6	22	6	17	13
C1842	1	7	2	3	4	4
C1843	4	5	29	4	31	3
C1845	2	4	25	2	11	11
C1846	10	24	17	12	21	25
C1847	35	34	13	34	37	38
C1850	17	8	27	18	10	15
HM9092	14	12	6	19	9	24
HM9093	31	18	12	33	38	21
LL89-657	30	17	30	12	23	37
U90-2226	7	10	19	28	1	9
U90-3103	21	21	18	16	5	2
U90-3108	27	13	13	25	22	18
U90-3131	23	28	28	15	14	30
U90-3135	34	27	34	27	23	34
U90-3206	31	13	36	37	12	9
U90-3214	28	25	31	30	13	29
U90-3301	12	15	20	24	8	6
U90-3328	26	29	33	10	18	18
U90-3405	31	19	40	31	26	16
U90-3436	29	21	39	9	25	22
HC78-676-2	9	36	10	16	29	11
HC78-676-3	20	33	5	19	33	31
HC78-676-9	16	26	16	8	34	26
HC78-676-13	17	37	24	5	19	32
HC86-277	24	30	8	26	7	27
HC87-219	38	35	9	39	40	36
HC87-476	37	38	7	35	36	35
HC87-3287	39	39	35	38	35	39
HC87-5691	40	40	37	40	39	40
HC87-5845	25	31	1	32	2	23

PRELIMINARY TEST IIIB, 1991

YIELD RANK

Strain	Columbia MO	David City NE	Lincoln NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	24	8	11	20	34
Flyer (IV)	3	34	37	3	25
Resnik (III)	4	18	13	22	4
C1831	17	28	27	19	21
C1832	8	32	35	2	12
C1833	6	13	3	15	15
C1835	14	20	5	7	27
C1837	40	4	17	32	35
C1838	13	25	33	10	18
C1839	18	27	3	11	13
C1842	1	23	30	7	5
C1843	4	14	8	9	9
C1845	20	12	23	21	2
C1846	10	15	9	4	7
C1847	25	6	5	12	36
C1850	28	22	26	14	26
HM9092	31	21	24	13	6
HM9093	33	16	17	33	31
LL89-657	29	31	31	37	24
U90-2226	11	9	14	26	29
U90-3103	9	38	40	17	19
U90-3108	38	24	16	27	22
U90-3131	21	17	28	23	20
U90-3135	26	39	39	29	30
U90-3206	36	37	33	25	8
U90-3214	18	33	36	28	16
U90-3301	7	35	29	6	13
U90-3328	31	26	25	29	17
U90-3405	16	40	31	24	33
U90-3436	22	36	22	38	32
HC78-676-2	12	3	14	5	3
HC78-676-3	23	5	20	16	1
HC78-676-9	2	7	12	18	28
HC78-676-13	15	10	7	1	23
HC86-277	30	10	10	40	10
HC87-219	34	2	17	39	38
HC87-476	27	1	21	31	37
HC87-3287	37	30	38	35	39
HC87-5691	39	29	41	36	40
HC87-5845	35	19	2	34	11

PRELIMINARY TEST IIIB, 1991

MATURITY (date)

Strain	Mean 8 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	-4.8		-4	-7	-4	-2
Flyer (IV)	5.3		6	3	4	8
Resnik (III)	09/14		09/15	09/12	09/10	09/22
C1831	3.4		4	0	3	7
C1832	4.0		5	2	6	8
C1833	1.9		2	0	5	4
C1835	-1.3		0	-2	-1	3
C1837	-1.1		2	0	-7	6
C1838	1.3		2	1	0	3
C1839	1.0		4	2	0	3
C1842	6.8		6	6	20	8
C1843	0.0		4	-3	-3	3
C1845	4.4		5	2	7	6
C1846	-0.5		2	-1	-1	3
C1847	-4.5		1	-6	-8	-1
C1850	2.1		5	0	4	6
HM9092	1.4		2	-1	5	4
HM9093	-3.3		-2	-1	-5	-3
LL89-657	2.4		3	3	6	1
U90-2226	1.4		2	0	9	4
U90-3103	6.8		4	5	6	12
U90-3108	2.8		6	1	2	7
U90-3131	3.5		4	4	7	6
U90-3135	9.5		11	4	13	13
U90-3206	8.0		11	3	10	10
U90-3214	9.8		12	7	15	12
U90-3301	3.0		6	-1	2	8
U90-3328	4.8		4	2	6	8
U90-3405	1.0		2	0	2	4
U90-3436	8.3		12	7	14	8
HC78-676-2	4.5		8	4	12	9
HC78-676-3	4.8		8	4	9	10
HC78-676-9	3.5		8	4	5	10
HC78-676-13	3.9		8	4	6	10
HC86-277	3.6		8	2	4	10
HC87-219	-3.9		0	-8	-9	2
HC87-476	-2.8		-3	-7	-2	6
HC87-3287	8.1		9	7	12	12
HC87-5691	5.9		8	5	11	13
HC87-5845	4.6		9	3	9	10
Date Planted	05/16		05/19	04/30	05/11	05/29
Days to Mature	121.1		119	135	122	116

PRELIMINARY TEST IIIB, 1991

MATURITY (date)

Strain	Columbia MO	David City NE	Lincoln NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	-6	-2		-6	-7
Flyer (IV)	6	4		4	7
Resnik (III)	09/07	09/30		09/16	09/05
C1831	3	1		1	8
C1832	3	0		2	6
C1833	2	-3		-1	6
C1835	-4	-3		-1	-2
C1837	-2	-4		-2	-2
C1838	2	0		2	0
C1839	-2	0		1	0
C1842	5	1		5	3
C1843	0	0		-1	0
C1845	2	1		5	7
C1846	-2	-2		-2	-1
C1847	-7	-4		-4	-7
C1850	1	0		0	1
HM9092	0	0		2	-1
HM9093	-5	-3		-3	-4
LL89-657	-1	0		5	2
U90-2226	-3	-1		0	0
U90-3103	6	1		8	12
U90-3108	1	1		4	0
U90-3131	2	0		2	3
U90-3135	6	4		8	17
U90-3206	5	4		6	15
U90-3214	6	1		9	16
U90-3301	3	4		2	0
U90-3328	1	2		6	9
U90-3405	-1	1		0	0
U90-3436	5	1		7	12
HC78-676-2	-1	1		2	1
HC78-676-3	1	2		4	0
HC78-676-9	-1	1		2	-1
HC78-676-13	1	1		3	-2
HC86-277	1	1		3	0
HC87-219	-4	-2		-4	-6
HC87-476	-2	-2		-5	-7
HC87-3287	4	3		7	11
HC87-5691	0	4		6	0
HC87-5845	0	2		3	1
Date Planted	05/15	06/10		05/15	05/02
Days to Mature	115	112		124	126

PRELIMINARY TEST IIIB, 1991

LODGING (score)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	1.1	1.7	1.1	1.0	1.0	1.0
Flyer (IV)	1.2	1.7	1.2	1.0	1.0	1.5
Resnik (III)	1.2	1.7	1.2	1.0	1.0	1.5
C1831	1.3	1.7	1.3	1.0	1.0	2.5
C1832	1.3	1.7	1.2	1.0	1.0	3.0
C1833	1.4	1.6	1.2	1.2	1.0	3.5
C1835	1.4	1.6	1.4	1.2	1.0	3.0
C1837	1.1	1.7	1.3	1.0	1.0	1.0
C1838	1.1	1.8	1.3	1.0	1.0	1.0
C1839	1.2	1.8	1.2	1.0	1.0	1.5
C1842	1.2	1.6	1.1	1.0	1.0	2.0
C1843	1.3	1.6	1.7	1.0	1.0	2.0
C1845	1.2	1.6	1.1	1.0	1.0	2.0
C1846	1.2	1.6	1.2	1.0	1.0	2.0
C1847	1.1	1.8	1.3	1.0	1.0	1.0
C1850	1.4	1.7	1.6	1.0	1.0	3.0
HM9092	1.5	1.9	1.4	1.0	1.0	3.5
HM9093	1.1	1.7	1.3	1.0	1.0	1.0
LL89-657	1.1	1.6	1.1	1.0	1.0	1.0
U90-2226	1.4	1.7	1.3	1.0	1.0	4.0
U90-3103	1.5	1.7	1.7	1.0	1.0	3.5
U90-3108	1.4	1.8	2.1	1.0	1.0	3.0
U90-3131	1.8	1.8	2.0	1.0	1.0	4.0
U90-3135	1.8	2.2	1.7	1.0	1.0	4.5
U90-3206	1.6	1.8	2.2	1.0	1.0	3.5
U90-3214	1.7	2.5	1.8	1.0	1.0	5.0
U90-3301	1.3	1.8	1.3	1.0	1.0	2.5
U90-3328	1.7	1.8	2.4	1.0	1.0	4.5
U90-3405	1.7	1.9	1.9	1.0	1.0	3.5
U90-3436	1.7	1.8	2.4	1.0	1.0	4.0
HC78-676-2	1.1	2.0	1.2	1.0	1.0	1.0
HC78-676-3	1.1	1.7	1.3	1.0	1.0	1.0
HC78-676-9	1.1	1.8	1.1	1.0	1.0	1.0
HC78-676-13	1.1	1.8	1.2	1.0	1.0	1.0
HC86-277	1.1	1.6	1.2	1.0	1.0	1.0
HC87-219	1.1	1.9	1.2	1.0	1.0	1.0
HC87-476	1.1	1.8	1.1	1.0	1.0	1.0
HC87-3287	1.1	1.8	1.2	1.0	1.0	1.0
HC87-5691	1.1	1.7	1.3	1.0	1.0	1.0
HC87-5845	1.1	1.8	1.3	1.0	1.0	1.0

PRELIMINARY TEST IIIB, 1991

LODGING (score)

Strain	Columbia MO	David City NE	Lincoln NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	1.0	1.0	1.0	1.0	1.0
Flyer (IV)	1.0	1.0	1.0	1.0	1.2
Resnik (III)	1.0	1.0	1.0	1.0	1.2
C1831	1.0	1.0	1.0	1.0	1.2
C1832	1.0	1.0	1.0	1.0	1.2
C1833	1.0	1.0	1.0	1.0	1.2
C1835	1.0	1.0	1.0	1.0	1.5
C1837	1.0	1.0	1.0	1.0	1.0
C1838	1.0	1.0	1.0	1.0	1.2
C1839	1.0	1.0	1.0	1.0	1.0
C1842	1.0	1.0	1.0	1.0	1.0
C1843	1.0	1.0	1.0	1.0	1.2
C1845	1.0	1.0	1.0	1.0	1.0
C1846	1.0	1.0	1.0	1.0	1.2
C1847	1.0	1.0	1.0	1.0	1.0
C1850	1.0	1.0	1.0	1.0	1.2
HM9092	1.0	1.0	1.0	1.0	1.8
HM9093	1.0	1.0	1.0	1.0	1.0
LL89-657	1.0	1.0	1.0	1.0	1.0
U90-2226	1.0	1.0	1.0	1.0	1.2
U90-3103	1.0	1.5	1.0	1.0	1.8
U90-3108	1.0	1.0	1.0	1.0	1.2
U90-3131	1.0	2.5	1.0	1.0	2.8
U90-3135	1.0	2.5	1.0	1.0	2.2
U90-3206	1.0	1.0	1.5	1.0	2.2
U90-3214	1.0	1.0	1.0	1.0	2.0
U90-3301	1.0	1.0	1.0	1.0	1.5
U90-3328	1.0	1.0	1.0	1.0	2.5
U90-3405	1.0	2.5	1.0	1.0	2.2
U90-3436	1.0	2.0	1.0	1.0	1.8
HC78-676-2	1.0	1.0	1.0	1.0	1.0
HC78-676-3	1.0	1.0	1.0	1.0	1.0
HC78-676-9	1.0	1.0	1.0	1.0	1.0
HC78-676-13	1.0	1.0	1.0	1.0	1.0
HC86-277	1.0	1.0	1.0	1.0	1.0
HC87-219	1.0	1.0	1.0	1.0	1.0
HC87-476	1.0	1.0	1.0	1.0	1.0
HC87-3287	1.0	1.0	1.0	1.0	1.0
HC87-5691	1.0	1.0	1.0	1.0	1.0
HC87-5845	1.0	1.0	1.0	1.0	1.0

PRELIMINARY TEST IIIB, 1991

PLANT HEIGHT (inches)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	30	29	32	23	27	34
Flyer (IV)	34	22	35	32	33	45
Resnik (III)	33	32	36	28	30	41
C1831	36	32	40	34	33	43
C1832	33	34	38	30	32	27
C1833	33	34	35	32	31	28
C1835	35	32	37	30	32	48
C1837	24	20	32	18	22	33
C1838	33	32	36	29	30	42
C1839	34	35	36	30	28	42
C1842	34	34	37	33	27	36
C1843	37	38	40	32	37	41
C1845	33	28	36	29	29	42
C1846	34	28	36	30	33	41
C1847	23	18	30	19	19	28
C1850	36	32	40	29	36	48
HM9092	34	34	38	30	33	46
HM9093	23	23	28	18	21	21
LL89-657	25	24	28	22	24	25
U90-2226	32	31	36	24	31	41
U90-3103	39	30	40	31	39	48
U90-3108	35	32	38	29	33	50
U90-3131	36	28	38	31	34	48
U90-3135	40	41	40	31	41	52
U90-3206	40	38	44	32	38	55
U90-3214	38	34	38	33	38	49
U90-3301	37	32	38	30	34	54
U90-3328	38	34	40	34	36	48
U90-3405	39	38	41	31	38	47
U90-3436	39	29	41	35	37	51
HC78-676-2	21	18	28	20	19	20
HC78-676-3	21	20	28	20	18	16
HC78-676-9	21	25	26	21	18	17
HC78-676-13	19	15	26	20	18	18
HC86-277	20	20	27	20	18	20
HC87-219	19	17	27	15	17	16
HC87-476	18	16	26	16	16	16
HC87-3287	21	14	24	15	17	22
HC87-5691	17	12	22	13	14	26
HC87-5845	22	26	30	19	19	20

PRELIMINARY TEST IIIB, 1991

PLANT HEIGHT (inches)

Strain	Columbia MO	David City NE	Lincoln NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	24	40	36	27	24
Flyer (IV)	30	40	35	29	35
Resnik (III)	28	39	33	27	33
C1831	29	42	34	31	38
C1832	33	43	33	31	32
C1833	31	43	37	29	33
C1835	34	41	37	30	32
C1837	14	34	28	16	19
C1838	27	40	33	28	32
C1839	29	40	34	33	32
C1842	35	43	33	29	35
C1843	33	43	39	33	36
C1845	29	39	32	28	33
C1846	31	41	34	28	34
C1847	19	30	25	19	18
C1850	30	45	36	28	33
HM9092	27	39	35	30	32
HM9093	14	33	29	18	20
LL89-657	18	35	29	18	22
U90-2226	27	39	33	27	30
U90-3103	34	51	43	31	38
U90-3108	28	42	38	29	34
U90-3131	33	41	40	32	37
U90-3135	36	46	45	31	38
U90-3206	27	47	43	34	39
U90-3214	32	43	38	32	39
U90-3301	32	45	39	34	34
U90-3328	30	48	40	31	39
U90-3405	36	46	41	31	39
U90-3436	36	50	41	29	40
HC78-676-2	18	28	23	17	17
HC78-676-3	17	29	25	18	18
HC78-676-9	17	26	22	17	18
HC78-676-13	15	27	22	16	17
HC86-277	12	28	24	13	18
HC87-219	14	31	24	14	18
HC87-476	13	28	20	17	15
HC87-3287	13	51	22	15	17
HC87-5691	13	23	19	14	13
HC87-5845	12	28	25	16	20

PRELIMINARY TEST IIIB, 1991

SEED QUALITY (score)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	1.9	2.3	3.0	2.5	1.0	2.0
Flyer (IV)	1.7	2.0	3.0	2.0	1.0	2.0
Resnik (III)	1.9	2.5	3.0	2.0	1.0	2.0
C1831	2.2	3.3	4.7	1.8	1.5	2.0
C1832	2.2	3.0	3.2	2.0	1.5	2.0
C1833	2.6	3.1	4.7	2.5	3.0	3.0
C1835	2.0	2.9	2.8	2.0	1.0	2.0
C1837	2.1	2.7	4.0	2.8	1.5	2.0
C1838	1.9	2.0	2.7	2.0	1.0	2.0
C1839	1.9	2.7	3.0	1.8	1.0	2.0
C1842	2.1	2.6	3.1	2.3	1.5	2.0
C1843	2.0	2.1	3.3	1.8	1.0	2.0
C1845	2.2	2.6	4.6	2.0	1.0	2.0
C1846	1.9	2.1	4.0	2.0	1.0	2.0
C1847	1.6	2.0	4.0	1.8	1.0	1.0
C1850	1.9	2.6	3.4	1.8	1.0	2.0
HM9092	1.8	1.8	3.8	2.0	1.0	2.0
HM9093	1.7	2.0	2.6	2.3	1.0	2.0
LL89-657	2.0	2.6	3.7	2.0	1.0	2.0
U90-2226	1.6	2.4	2.8	1.5	1.5	2.0
U90-3103	2.3	3.4	3.3	2.3	1.5	2.0
U90-3108	2.0	2.0	2.8	2.5	1.5	2.0
U90-3131	1.9	2.4	3.5	1.5	1.0	2.0
U90-3135	2.5	2.5	3.5	2.0	1.5	2.0
U90-3206	2.3	2.4	3.7	2.0	1.5	2.0
U90-3214	2.2	3.6	3.3	2.0	1.5	2.0
U90-3301	2.1	2.8	2.8	2.0	1.5	3.0
U90-3328	2.1	2.5	3.7	2.0	1.0	2.0
U90-3405	2.6	2.9	3.7	2.3	1.5	2.0
U90-3436	2.7	3.0	4.0	2.3	2.0	3.0
HC78-676-2	2.0	3.3	3.3	2.8	1.5	2.0
HC78-676-3	2.1	3.5	3.0	3.3	2.0	3.0
HC78-676-9	2.0	2.7	2.8	3.5	1.5	2.0
HC78-676-13	2.3	2.9	3.6	3.5	2.0	3.0
HC86-277	1.9	2.2	3.0	3.3	1.5	2.0
HC87-219	2.4	2.4	2.6	2.3	1.5	2.0
HC87-476	1.9	2.1	2.8	2.5	1.0	3.0
HC87-3287	1.9	2.0	2.7	2.3	1.0	2.0
HC87-5691	1.9	2.6	2.7	2.0	1.0	3.0
HC87-5845	2.0	2.2	2.6	3.0	1.5	2.0

PRELIMINARY TEST IIIB, 1991

SEED QUALITY (score)

Strain	Columbia MO	David City NE	Lincoln NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	2.0	1.0	1.5	1.8	2.0
Flyer (IV)	2.0	1.0	1.5	1.3	1.5
Resnik (III)	2.0	1.5	1.0	1.3	2.5
C1831	1.5	2.0	1.0	1.8	2.5
C1832	2.0	1.5	2.0	2.0	3.0
C1833	2.0	2.0	1.5	1.6	3.0
C1835	2.0	2.0	1.5	1.4	2.5
C1837	2.0	1.5	1.5	1.4	2.0
C1838	2.0	1.5	2.0	1.4	2.0
C1839	1.5	1.0	1.0	1.6	3.0
C1842	2.5	1.5	1.0	1.7	3.0
C1843	2.0	1.5	2.0	1.8	2.0
C1845	2.0	1.5	2.0	1.4	2.5
C1846	2.0	1.0	1.0	1.5	2.0
C1847	1.5	1.0	1.0	1.5	1.0
C1850	2.0	1.0	2.0	1.3	2.0
HM9092	2.0	1.5	1.0	1.4	1.5
HM9093	2.0	1.0	1.0	1.5	1.5
LL89-657	2.0	2.0	1.0	1.3	2.0
U90-2226	1.5	1.0	1.0	1.2	1.5
U90-3103	2.5	2.0	2.0	1.5	2.5
U90-3108	1.5	2.5	2.5	1.3	1.5
U90-3131	1.5	1.5	2.0	1.3	2.5
U90-3135	2.0	2.5	3.0	1.7	4.0
U90-3206	2.5	1.5	2.0	1.4	4.0
U90-3214	2.0	2.5	2.0	1.3	2.0
U90-3301	2.0	2.0	1.5	1.8	2.0
U90-3328	1.5	3.0	2.0	2.0	1.5
U90-3405	2.5	2.5	2.0	1.8	4.5
U90-3436	2.5	1.5	2.0	1.8	4.5
HC78-676-2	2.0	1.0	1.0	1.6	1.5
HC78-676-3	2.0	1.0	1.0	1.6	1.0
HC78-676-9	2.0	1.0	1.0	1.5	1.5
HC78-676-13	2.0	1.0	1.0	1.6	2.0
HC86-277	2.0	1.5	1.0	1.7	1.0
HC87-219	2.0	2.0	2.5	2.4	4.0
HC87-476	2.0	1.0	1.0	2.0	2.0
HC87-3287	2.0	1.0	1.5	2.4	2.0
HC87-5691	2.0	1.0	1.0	2.0	2.0
HC87-5845	2.5	1.0	1.5	1.8	1.5

PRELIMINARY TEST IIIB, 1991

SEED SIZE (g/100)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	17.7	18.6	17.4	18.7	16.6	19.2
Flyer (IV)	14.3	14.4	13.7	15.0	14.1	16.3
Resnik (III)	15.0	15.2	13.8	16.2	15.0	18.1
C1831	15.7	17.4	13.7	17.2	16.8	17.7
C1832	15.5	17.0	14.8	16.3	17.1	16.8
C1833	16.6	19.2	13.6	17.9	16.6	19.0
C1835	16.0	16.3	15.9	17.9	16.3	17.5
C1837	15.3	16.9	14.2	15.7	15.1	18.6
C1838	15.1	16.2	13.8	15.7	14.9	18.2
C1839	15.1	15.6	14.6	14.2	15.2	18.6
C1842	16.8	16.6	16.1	17.0	18.1	20.0
C1843	17.1	19.0	16.7	17.1	16.6	19.6
C1845	17.2	18.8	15.2	17.6	16.6	18.3
C1846	15.7	17.4	15.4	16.4	15.8	18.8
C1847	15.4	15.2	15.0	14.5	15.9	16.9
C1850	18.9	22.1	20.3	16.6	19.0	22.7
HM9092	14.5	15.2	13.3	16.3	15.0	16.5
HM9093	16.1	16.8	15.4	16.7	15.5	18.0
LL89-657	15.6	17.0	14.6	16.3	16.2	18.1
U90-2226	15.3	16.8	14.6	15.1	16.7	17.0
U90-3103	16.6	18.4	17.2	19.3	17.9	17.8
U90-3108	17.5	20.2	17.8	19.3	17.3	20.1
U90-3131	16.4	17.6	14.9	17.3	18.0	18.7
U90-3135	15.7	17.8	15.1	16.9	17.0	19.0
U90-3206	14.4	14.4	13.7	14.7	16.9	16.5
U90-3214	17.6	19.0	17.5	19.9	18.9	20.8
U90-3301	17.1	18.6	17.0	18.0	17.7	20.7
U90-3328	15.1	16.3	14.2	15.9	16.4	19.1
U90-3405	16.9	18.6	15.8	18.3	17.9	19.1
U90-3436	18.6	20.8	19.4	21.2	19.5	21.5
HC78-676-2	15.5	17.0	15.2	16.5	16.6	15.5
HC78-676-3	16.1	17.9	15.9	17.7	16.8	17.1
HC78-676-9	15.8	17.2	16.1	16.5	16.0	17.6
HC78-676-13	15.9	17.3	15.6	16.8	16.3	18.0
HC86-277	16.1	17.0	15.0	16.1	18.0	18.2
HC87-219	15.7	17.3	14.8	15.0	16.0	17.3
HC87-476	16.5	17.2	15.7	16.5	16.2	20.9
HC87-3287	18.5	19.8	17.0	18.2	19.8	22.7
HC87-5691	17.9	20.1	16.1	16.4	18.6	26.1
HC87-5845	16.8	19.8	15.9	17.6	18.7	18.8

PRELIMINARY TEST IIIB, 1991

SEED SIZE (g/100)

Strain	Columbia MO	David City NE	Lincoln NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	15.9	18.9	17.9	15.5	18.0
Flyer (IV)	14.7	14.2	13.8	12.7	13.8
Resnik (III)	14.3	15.8	13.9	12.9	15.0
C1831	14.3	14.5	15.2	14.5	15.2
C1832	13.6	14.7	15.9	14.5	14.2
C1833	14.4	17.8	16.5	13.8	17.0
C1835	13.6	16.6	15.8	14.1	15.8
C1837	14.6	15.1	14.2	12.6	16.0
C1838	13.7	15.1	14.4	13.3	15.3
C1839	13.5	15.7	14.9	13.5	15.1
C1842	16.6	15.5	16.2	16.1	15.7
C1843	16.0	18.0	17.5	14.6	15.7
C1845	16.2	17.2	17.5	18.3	16.5
C1846	9.4	16.4	16.4	14.8	16.5
C1847	15.5	16.5	16.9	13.0	14.6
C1850	16.5	18.6	18.2	17.1	18.1
HM9092	13.1	14.8	14.4	12.9	13.3
HM9093	14.4	16.8	15.7	14.7	16.9
LL89-657	15.8	14.1	14.0	13.8	16.3
U90-2226	14.7	14.8	16.2	13.4	14.1
U90-3103	16.6	12.5	14.8	15.6	15.5
U90-3108	15.5	15.3	16.7	16.0	16.8
U90-3131	15.1	15.9	16.6	14.7	15.4
U90-3135	14.0	12.2	14.3	15.1	15.7
U90-3206	14.2	12.3	13.3	13.4	14.1
U90-3214	15.7	15.9	16.7	15.5	16.4
U90-3301	16.3	15.5	16.0	16.1	15.4
U90-3328	13.7	12.6	13.9	13.4	15.0
U90-3405	15.6	15.3	17.0	15.3	15.8
U90-3436	17.7	15.2	16.6	18.1	16.4
HC78-676-2	14.5	15.0	14.6	14.9	15.6
HC78-676-3	14.7	14.7	15.5	15.0	15.4
HC78-676-9	14.9	14.6	15.2	14.0	15.5
HC78-676-13	14.2	15.1	15.5	14.7	15.1
HC86-277	15.8	14.8	15.6	14.6	16.0
HC87-219	15.1	14.1	17.3	15.0	15.5
HC87-476	15.2	16.8	17.3	14.1	15.5
HC87-3287	17.6	16.8	16.2	18.3	18.3
HC87-5691	14.9	16.5	16.9	16.2	16.9
HC87-5845	16.1	14.3	15.6	16.0	15.5

PRELIMINARY TEST IIIB, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Winterset IA	Urbana IL	Lafayette IN	Manhattan KS	Hoytville OH
Burlison (II)	42.1	41.6	44.5	41.5	43.6	39.4
Flyer (IV)	41.0	41.5	42.7	39.9	40.6	40.3
Resnik (III)	40.5	41.2	42.2	39.6	39.8	39.7
C1831	40.5	41.3	41.4	39.8	41.8	38.1
C1832	40.0	40.5	41.0	39.7	41.8	36.8
C1833	38.5	39.5	39.0	38.8	39.0	36.0
C1835	40.5	40.8	42.5	39.5	41.1	38.5
C1837	37.7	39.0	40.6	35.2	39.6	33.9
C1838	41.1	40.6	43.8	39.7	41.1	40.1
C1839	41.0	41.0	43.0	40.5	41.0	39.7
C1842	40.4	40.0	42.1	39.4	41.5	39.2
C1843	40.0	40.3	42.1	39.8	39.7	38.3
C1845	39.5	40.2	40.5	38.4	39.5	39.1
C1846	40.7	40.4	42.6	40.1	41.4	38.9
C1847	39.5	40.0	42.7	38.0	40.5	36.5
C1850	39.7	40.4	41.2	37.7	40.8	38.2
HM9092	39.7	40.7	41.1	38.3	40.6	38.0
HM9093	40.5	39.9	44.2	39.0	41.0	38.3
LL89-657	40.6	40.8	43.1	40.6	39.6	39.0
U90-2226	39.5	39.8	40.1	39.3	42.0	36.2
U90-3103	38.7	39.6	40.7	37.5	38.8	36.8
U90-3108	39.2	39.5	41.4	38.3	39.3	37.6
U90-3131	39.8	40.6	41.5	39.2	41.0	36.9
U90-3135	40.2	40.0	40.4	40.7	41.5	38.3
U90-3206	38.0	38.0	40.0	37.2	39.0	36.0
U90-3214	40.4	40.7	42.1	39.7	41.3	38.1
U90-3301	39.6	41.3	41.1	38.0	40.3	37.5
U90-3328	38.9	40.1	39.7	37.5	40.4	36.6
U90-3405	40.9	42.0	42.1	40.1	40.7	39.4
U90-3436	41.1	41.1	42.6	40.2	40.7	40.8
HC78-676-2	40.1	41.2	43.3	37.7	40.3	37.9
HC78-676-3	40.7	41.2	44.0	40.0	40.3	38.1
HC78-676-9	40.0	40.6	44.0	38.1	40.3	37.1
HC78-676-13	40.4	41.0	43.3	39.0	40.9	37.8
HC86-277	40.7	41.2	43.3	39.5	41.2	38.5
HC87-219	38.6	39.5	39.7	35.6	40.1	38.3
HC87-476	39.9	40.1	42.3	37.5	42.1	37.6
HC87-3287	39.3	40.5	40.2	38.3	39.5	38.1
HC87-5691	39.4	39.9	40.8	37.5	39.8	39.1
HC87-5845	39.2	39.3	42.4	37.4	39.2	37.8

PRELIMINARY TEST IIIB, 1991

OIL (%)

Strain	Mean 5 Tests	Winterset IA	Urbana IL	Lafayette IN	Manhattan KS	Hoytville OH
Burlison (II)	20.2	20.4	19.7	20.9	19.1	21.1
Flyer (IV)	21.3	20.8	21.2	22.4	20.2	22.0
Resnik (III)	21.5	20.7	21.3	22.3	21.1	22.0
C1831	21.1	20.2	21.3	21.9	20.2	22.0
C1832	21.2	20.5	21.2	22.3	20.2	21.8
C1833	21.7	20.9	22.4	21.4	21.2	22.6
C1835	21.4	20.9	21.0	21.9	21.3	22.1
C1837	22.2	21.5	21.8	23.2	20.6	23.9
C1838	20.9	20.5	20.4	21.6	20.4	21.5
C1839	21.1	20.7	21.1	21.7	20.3	21.5
C1842	21.1	20.9	21.1	21.0	20.3	22.0
C1843	21.2	20.6	20.8	22.0	20.9	21.8
C1845	21.3	20.9	21.5	21.1	21.1	22.0
C1846	21.6	21.2	21.7	22.5	20.6	22.2
C1847	21.0	20.3	20.5	22.1	20.0	22.2
C1850	21.7	21.6	21.3	22.3	21.0	22.1
HM9092	20.8	19.9	21.1	21.3	19.9	21.7
HM9093	21.6	21.4	20.5	22.6	20.6	22.8
LL89-657	22.4	21.8	22.3	23.0	21.8	22.9
U90-2226	22.1	21.4	22.5	22.1	20.6	23.7
U90-3103	22.5	21.4	22.4	23.1	22.0	23.4
U90-3108	21.7	21.4	21.1	22.3	21.0	22.9
U90-3131	22.3	21.4	22.5	22.7	21.7	23.1
U90-3135	21.7	21.6	22.0	21.2	20.9	22.6
U90-3206	22.0	22.0	22.0	22.1	20.9	23.2
U90-3214	21.3	20.9	21.5	21.3	20.5	22.4
U90-3301	21.9	21.0	22.4	22.1	21.5	22.5
U90-3328	21.7	21.3	21.7	21.8	20.9	22.6
U90-3405	20.4	19.6	20.2	20.3	20.6	21.4
U90-3436	21.1	20.9	20.9	21.1	21.2	21.3
HC78-676-2	20.5	19.8	19.7	21.6	19.9	21.5
HC78-676-3	20.2	19.7	19.3	21.3	19.4	21.2
HC78-676-9	20.4	20.5	19.2	21.5	19.7	21.3
HC78-676-13	20.5	20.4	19.9	21.4	19.4	21.4
HC86-277	21.1	20.6	20.8	21.8	20.5	21.9
HC87-219	21.9	21.2	22.1	23.6	20.8	22.0
HC87-476	21.5	21.2	21.1	22.9	20.3	22.2
HC87-3287	21.5	20.8	21.7	22.3	20.6	22.3
HC87-5691	22.5	22.1	22.1	23.6	22.2	22.5
HC87-5845	21.4	21.0	20.6	22.2	20.2	23.0

UNIFORM TEST IV, 1991

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Delsoy 4210 (SCN)	(Williams x PI 88.788) x (Union x Douglas)	3	F6	SCN 3, 4
Flyer (E)	Asgrow A3127[4] x Williams 82	4	BC3 F2	Rps1-k
Spencer (IV)	A75-305022 x Century	6	F5	
L83-3804 (L) Spry	L78-8694 x L78L-449	3	F6	
C1758	C1627 x Harper	1	F6	
C1803	Bradley x L80-4323	PTIVA	F4	
C1804	Bradley x L80-4323	PTIVA	F4	
C1813	C1655 x Pella 86	PTIVA	F5	
HC84-4850	Sprite x Williams 82	2	F5	Dt1
HC85-161	HC78-676 x Sprite	PTIVB	F5	dt1
HC85-1848	Pixie x [Elf[5] x Williams 82]	PTIIIB	F5	dt1
HC85-2206	Elf x Williams 82	PTIVB	F5	dt1
HC86-3403	HC78-279 x Asgrow A3127	PTIVA	F5	Dt1
HC86-4367	Asgrow A3127 x Sprite 87	PTIIIB	F5	dt1
HC87-3212	Essex x Asgrow A3127	PTIVB	F5	dt1
HC87-3329	Coker 237 x HC78-676	PTIIIB	F5	dt1
HC87-5844	Pixie x HC78-676	PTIIIB	F5	dt1
K1183	Sherman x Asgrow A3659	PTIIIA	F5	
K1185	Sherman x Harper	PTIIIA	F5	
K1190	Toano x Asgrow A3659	PTIVB	F5	
K1191	Sherman x Toano	PTIVB	F5	
L84-6089	Willaims 82 x L78-4094	PTIVA	F6	Rps1-k, BSR Resis.
LS86-1922	Pyramid x LS78-W124-1	SCN PIV		
LS87-1257	Fayette x Pyramid	PTIVA	F5	
LS87-1311	Fayette x Pyramid	PTIVA	F5	
LS87-1615	Fayette x Pyramid	PTIVA	F5	
LS87-2154	Fayette x Pyramid	PTIVA	F5	
Md85-5443	Essex x Harper	2	F5	
Md86-5324	Douglas x Md77-5675	1	F5	
S86-2209	Peking x Elf	1	F8	SCN 3
S86-4496	(L77-443 x L77-906) x Pella	SCN PIV	F6	SCN 4, 14
S86-4499	(L77-443 x L77-906) x Pella	SCN IV	F6	SCN 4, 14

* Number of years in test or name of 1990 test.

UNIFORM TEST IV, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Emerg. Score Ames	Shattering Score Lubbock	Shattering Score Manhattan	PR Custer Phyto. Tol.	PR Urbana Race 1	PR Ames Race 4	PM Score Urbana	PS Lafayette a %	PSB Lafayette n %	SMV Lafayette a Score
Delsoy 4210 (SCN)	WTTSYBlI	1	2.0	1	8.0	R	S	1.0	8	42	1
Flyer (E)	PTTYBlI	1	2.0	2	3.0	R	R	1.7	22	27	5e
Spencer (IV)	WTBIYBrI	5	2.0	1	6.5	S	S	1.7	39	30	5e
L83-3804 (L) Spry	PTTDYBlD	2	1.5	1	2.2	S	S	2.3	4	26	5e
C1758	PGBIYIbI	5	2.0	1	2.8	S	S	1.0	15	16	3m
C1803	WTTSYBlI	2	2.7	1	2.4	S	S	1.0	20	62	4e
C1804	WTTIYBlI	5	2.0	1	2.0	R	S	2.3	1	32	5e
C1813	PTTSYBlI	2	2.2	1	3.0	R	R	1.0	13	28	4e
HC84-4850	WTTIYBlI	3	2.0	1	4.6	R	R	1.3	11	62	4e
HC85-161	WTBIYBlD	5	2.0	1	3.0	H	S	1.0	9	60	4e
HC85-1848	PTTDYBlD	2	2.7	1	3.2	R	R	1.0	4	48	3e
HC85-2206	PTTIYBlD	3	3.0	1	4.3	R	R	1.0	8	54	4e
HC86-3403	PTTDYBlI	2	1.5	1	3.1	S	S	1.0	2	34	3e
HC86-4367	WTTIYBlD	4	2.2	1	5.4	R	R	1.0	4	48	3e
HC87-3212	PTTDYBlD	2	2.0	1	5.0	S	S	1.0	4	66	4e
HC87-3329	PTTDYBlD	3	2.2	1	5.8	R	S	1.0	36	24	5e
HC87-5844	PTTDYBrD	1	2.2	1	5.4	S	S	1.0	16	20	5e
K1183	WTTDYBlI	5	2.0	1	3.0	S	S	1.0	21	30	3e
K1185	PGBIYIbI	5	2.0	1	5.9	S	S	1.0	17	28	2e
K1190	PTBIYBlI	5	1.7	1	3.7	R	S	1.3	23	34	3e
K1191	P+GBIYIbI	4	1.7	1	1.8	S	S	1.0	14	16	1
L84-6089	WTBIYBlI	4	1.7	1	2.6	R	R	1.0	20	14	3m
LS86-1922	PTTDYBlI	1	2.0	1	6.3	S	S	2.3	1	18	5e
LS87-1257	PTTDYBlI	5	2.0	1	2.8	H	H	3.0	11	40	5e
LS87-1311	P+WTTSYBlI	5	1.7	1	4.5	R	S	1.7	8	38	5e
LS87-1615	WGTDYBfI	5	1.7	1	3.0	S	S	1.0	9	34	5e
LS87-2154	PTTDYBlI	2	2.0	2	4.3	S	S	3.0	15	36	5e
Md85-5443	PTTDYBrI	1	2.0	1	3.1	S	S	1.0	10	26	3e
Md86-5324	PTTSYBlI	3	2.0	1	2.1	R	H	1.0	6	14	3m
S86-2209	WTTSYBlI	2	1.5	1	8.3	S	S	2.0	3	46	3e
S86-4496	PTTDYBlI	5	1.5	1	10.0	R	S	1.0	15	32	4e
S86-4499	PTTDYBlI	5	1.5	1	5.0	R	H	1.0	7	32	4e

UNIFORM TEST IV, 1991

REGIONAL SUMMARY

No. of Tests Strain	Yield 18 bu/a	Rank 18 No.	Maturity 15 Date	Lodging 18 Score	Plant Height 18 In.	Seed Quality 16 Score	Seed Size 17 g/100	Composition Protein 5 %	 Oil 5 %
Delsoy 4210 (SCN)	42.6	25	3.5	1.8	38	2.0	17.5	41.2	21.6
Flyer (E)	47.9	5	-4.7	1.4	32	1.7	14.2	41.2	21.1
Spencer (IV)	48.6	3	09/22*	1.3	35	2.4	18.0	40.3	21.7
L83-3804 (L) Spry	49.0	2	5.7	1.7	33	1.8	17.5	40.2	21.5
C1758	47.6	7	-1.9	1.3	34	2.4	18.6	40.9	21.6
C1803	43.1	24	-2.7	1.6	37	1.9	15.7	39.6	22.0
C1804	46.2	13	1.4	1.7	39	1.9	16.9	41.2	20.9
C1813	47.0	10	0.3	1.4	34	2.1	18.4	38.9	22.9
HC84-4850	46.1	14	-2.3	2.0	37	1.7	16.7	41.2	21.3
HC85-161	41.1	28	-4.3	1.1	18	1.9	17.3	41.0	21.2
HC85-1848	38.1	31	-5.4	1.0	18	1.7	17.6	41.1	20.8
HC85-2206	39.3	30	-4.9	1.0	16	1.9	18.5	41.0	21.5
HC86-3403	47.3	8	-1.1	1.3	33	1.8	16.4	42.6	21.5
HC86-4367	35.5	32	-5.7	1.0	16	1.8	14.1	39.2	21.7
HC87-3212	42.2	26	-3.8	1.0	20	1.9	18.2	40.0	22.6
HC87-3329	41.7	27	-4.9	1.0	18	1.9	16.3	38.7	22.1
HC87-5844	40.1	29	-5.7	1.1	17	1.9	16.2	39.6	21.5
K1183	45.0	20	-3.7	1.3	32	1.8	15.5	39.7	21.9
K1185	44.8	21	-2.4	1.3	30	1.8	16.3	39.0	22.0
K1190	47.2	9	-1.8	1.5	33	2.1	17.1	39.1	22.0
K1191	52.2	1	6.9	1.6	36	1.8	17.2	40.1	21.5
L84-6089	45.9	17	0.8	1.7	39	1.9	16.4	40.4	21.5
LS86-1922	48.0	4	3.5	2.2	43	1.8	15.2	39.3	21.3
LS87-1257	43.3	23	0.9	1.9	43	1.7	16.0	41.5	20.2
LS87-1311	47.8	6	1.7	1.4	39	1.6	15.1	38.6	21.8
LS87-1615	45.8	18	1.1	1.3	38	1.8	15.0	40.6	20.7
LS87-2154	46.0	15	1.1	1.7	42	1.8	15.8	38.5	21.5
Md85-5443	46.8	11	-4.2	1.4	34	1.8	16.9	41.9	20.7
Md86-5324	46.0	15	0.9	1.2	30	2.0	19.4	41.3	21.3
S86-2209	44.0	22	1.6	1.7	37	1.7	14.6	41.4	20.6
S86-4496	45.4	19	5.1	1.9	41	2.1	17.4	39.7	20.9
S86-4499	46.7	12	6.3	1.8	40	2.3	17.0	39.3	21.1

* 127.9 Days After Planting

UNIFORM TEST IV, 1991

1990-1991 2-YEAR MEAN

No. of Tests Strain	Yield 39 bu/a	Rank 39 No.	Maturity 31 Date	Lodging 38 Score	Plant Height 39 In.	Seed Quality 35 Score	Seed Size 34 g/100	Composition Protein 10 %	 Oil 10 %
Delsoy 4210 (SCN)	45.9	9	3.5	2.0	38	1.9	17.3	41.2	21.4
Flyer (E)	49.2	3	-3.9	1.4	31	1.8	14.6	41.4	21.2
L83-3804 (L)	49.8	1	5.7	1.9	33	1.8	16.7	40.4	21.5
Spencer (IV)	49.0	5	9/26.0*	1.3	34	2.1	17.8	40.5	21.8
C1758	49.6	2	-0.7	1.3	33	2.3	18.7	41.2	21.4
HC84-4850	48.3	6	-1.4	2.1	36	1.8	17.0	41.4	21.3
Md85-5443	49.2	3	-3.3	1.5	33	1.7	16.9	42.0	20.7
Md86-5324	47.8	7	2.1	1.4	30	1.9	19.3	41.1	21.2
S86-2209	46.2	8	2.0	1.8	37	1.7	14.4	41.6	20.4

* 126.4 Days After Planting

1989-1991 3-YEAR MEAN

No. of Tests Strain	Yield 57 bu/a	Rank 57 No.	Maturity 48 Date	Lodging 57 Score	Plant Height 56 In.	Seed Quality 53 Score	Seed Size 52 g/100	Composition Protein 14 %	 Oil 14 %
Delsoy 4210 (SCN)	46.7	6	3.3	2.1	38	2.0	17.4	41.4	21.1
Flyer (E)	49.7	3	-4.0	1.4	31	1.8	14.7	41.5	21.0
L83-3804 (L)	50.1	2	6.0	2.0	34	1.8	16.8	40.5	21.2
Spencer (IV)	49.0	4	9/27.3*	1.4	34	2.3	18.0	40.8	21.5
HC84-4850	48.4	5	-1.7	2.1	36	1.9	17.0	41.6	21.3
Md85-5443	50.3	1	-1.7	1.5	33	1.8	17.0	42.1	20.5

* 128.4 Days After Planting

UNIFORM TEST IV, 1991

YIELD (bu/a)

Strain	Mean 18 Tests	George-town DE	Belle-ville IL	Cora IL	Urbana IL	Lafay-ette IN
Delsoy 4210 (SCN)	42.6	39.7	39.1	50.9	41.3	39.4
Flyer (E)	47.9	48.2	47.6	46.6	46.7	41.3
Spencer (IV)	48.6	55.8	42.3	52.1	45.1	44.9
L83-3804 (L) Spry	49.0	45.4	49.6	57.8	43.9	46.8
C1758	47.6	44.3	49.7	49.0	43.8	33.4
C1803	43.1	46.8	46.4	47.5	43.8	43.3
C1804	46.2	42.3	42.1	53.1	50.5	40.5
C1813	47.0	48.0	47.6	53.4	47.8	37.1
HC84-4850	46.1	48.5	37.8	47.2	49.5	41.4
HC85-161	41.1	27.9	41.0	45.1	47.7	37.3
HC85-1848	38.1	24.0	39.8	38.3	48.4	40.1
HC85-2206	39.3	32.9	28.4	45.4	48.6	30.8
HC86-3403	47.3	39.6	43.1	53.4	52.8	47.2
HC86-4367	35.5	28.4	26.6	40.0	48.3	32.2
HC87-3212	42.2	38.2	27.6	45.9	51.0	38.4
HC87-3329	41.7	37.3	25.6	45.9	49.4	37.8
HC87-5844	40.1	30.7	34.6	41.0	50.4	34.6
K1183	45.0	42.7	46.2	54.8	46.7	31.7
K1185	44.8	48.7	44.8	55.8	40.0	39.4
K1190	47.2	51.8	47.2	52.9	44.4	34.6
K1191	52.2	49.7	48.7	60.0	49.5	37.5
L84-6089	45.9	41.0	42.7	46.6	43.9	41.2
LS86-1922	48.0	49.9	48.1	54.0	43.0	47.6
LS87-1257	43.3	38.3	38.4	54.6	41.0	37.9
LS87-1311	47.8	42.4	43.2	50.3	43.2	48.0
LS87-1615	45.8	40.2	43.9	51.6	43.0	40.7
LS87-2154	46.0	46.2	50.1	51.1	45.6	42.6
Md85-5443	46.8	50.8	47.6	51.9	46.4	39.3
Md86-5324	46.0	41.2	37.7	52.5	50.1	39.0
S86-2209	44.0	33.8	46.3	55.4	42.3	44.0
S86-4496	45.4	42.8	46.3	58.8	43.2	33.6
S86-4499	46.7	48.8	43.4	56.1	44.5	33.7
C.V. (%)		10.7	15.0	6.5	8.9	12.1
L.S.D. (5%)		7.4	3.2	5.4	6.7	7.8
Row Sp. (In.)		20	30	30	30	24
Rows/Plot		4	4	4	4	4
Reps		3	3	3	3	3

UNIFORM TEST IV, 1991

YIELD (bu/a)

Strain	Vince-nnes IN	Manhat-tan KS	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Portage ville MO	Falls City NE
Delsoy 4210 (SCN)	57.1	47.7	14.5	68.0	48.4	45.4	50.2	33.7
Flyer (E)	54.6	62.4	18.7	71.0	49.2	57.0	38.2	45.1
Spencer (IV)	57.7	64.1	16.1	72.0	52.0	49.7	37.7	41.0
L83-3804 (L) Spry	54.7	54.0	18.1	72.0	51.5	50.0	42.4	31.8
C1758	49.7	60.3	18.4	76.5	49.8	52.1	36.4	42.3
C1803	33.8	47.9	17.4	69.5	42.6	46.2	44.3	40.1
C1804	60.4	44.7	23.2	63.0	45.2	49.4	53.3	38.9
C1813	49.0	62.2	18.1	69.7	54.3	50.9	35.3	40.4
HC84-4850	41.6	58.8	22.6	70.4	42.7	49.8	42.8	43.5
HC85-161	26.9	57.7	16.1	47.2	49.8	40.0	39.0	47.0
HC85-1848	18.4	56.2	17.4	48.3	47.0	41.0	26.3	45.4
HC85-2206	17.2	58.6	16.1	54.5	44.9	40.5	31.6	47.7
HC86-3403	50.3	60.7	20.3	70.0	51.9	55.2	42.3	40.3
HC86-4367	10.1	59.0	18.4	33.7	44.9	38.5	30.0	47.5
HC87-3212	25.5	55.8	22.3	56.4	47.0	51.7	33.8	49.9
HC87-3329	28.5	60.5	17.4	62.9	53.2	45.9	27.1	46.1
HC87-5844	28.1	55.2	17.4	42.2	46.8	50.6	34.8	48.3
K1183	37.7	62.0	10.3	74.0	52.4	50.7	40.2	45.5
K1185	39.8	68.3	12.9	72.1	50.4	51.3	43.7	43.2
K1190	49.9	54.5	17.4	69.4	52.8	51.7	41.7	46.4
K1191	62.7	61.0	15.2	69.2	59.1	53.5	50.9	40.7
L84-6089	41.8	58.0	14.9	61.5	45.3	47.5	44.2	40.7
LS86-1922	60.4	55.1	22.2	64.7	45.1	44.8	51.7	35.7
LS87-1257	45.3	51.9	19.4	64.2	46.7	42.4	49.9	32.9
LS87-1311	54.1	59.4	25.2	69.8	47.5	51.0	58.9	34.6
LS87-1615	47.5	41.5	21.3	69.6	50.4	45.7	51.9	36.0
LS87-2154	53.7	53.7	21.0	64.2	45.1	46.4	52.9	32.9
Md85-5443	41.2	60.7	16.8	67.1	42.4	53.9	40.1	45.7
Md86-5324	38.0	60.4	20.4	70.8	52.7	50.8	42.2	35.3
S86-2209	43.8	48.3	20.0	58.6	50.4	43.3	53.2	33.8
S86-4496	65.9	46.5	18.4	59.0	48.4	44.6	54.4	33.2
S86-4499	57.4	43.3	19.4	69.3	46.2	48.6	51.2	32.4
C.V. (%)	30.7	13.6	20.5	9.0	8.1	6.6	9.2	7.8
L.S.D. (5%)	22.1	10.4	5.1	8.0	4.2	5.2	6.5	5.3
Row Sp. (In.)	24	30	30	30	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 IV, 1991

YIELD (bu/a)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX
Delsoy 4210 (SCN)	47.9	46.6	58.7	38.2	42.1
Flyer (E)	53.2	51.6	73.8	27.3	30.1
Spencer (IV)	50.3	58.9	73.8	27.8	33.0
L83-3804 (L) Spry	50.4	64.4	73.1	36.4	39.8
C1758	53.7	57.6	72.9	30.2	37.1
C1803	48.5	47.6	59.8	23.8	26.1
C1804	36.9	61.9	59.9	29.6	36.2
C1813	44.6	56.3	65.8	25.7	40.6
HC84-4850	43.1	60.1	71.7	24.8	34.3
HC85-161	41.8	53.1	74.5	24.1	23.1
HC85-1848	40.3	34.4	75.3	23.9	21.9
HC85-2206	43.4	41.8	80.9	25.5	17.9
HC86-3403	42.7	59.4	64.7	29.6	27.3
HC86-4367	33.1	45.3	60.2	25.1	17.3
HC87-3212	43.0	47.4	75.7	25.7	23.9
HC87-3329	47.6	37.6	74.4	30.2	23.4
HC87-5844	46.1	38.4	69.9	27.0	25.8
K1183	49.5	37.9	65.8	25.5	37.2
K1185	43.9	18.0	71.2	25.9	36.8
K1190	49.9	45.5	69.6	30.3	40.2
K1191	59.7	68.7	69.6	36.6	47.3
L84-6089	51.4	58.5	69.3	36.5	41.3
LS86-1922	53.9	59.4	58.5	26.8	42.8
LS87-1257	50.2	50.1	51.4	26.8	38.0
LS87-1311	43.6	54.5	66.1	29.4	39.8
LS87-1615	48.2	49.8	69.0	33.3	41.1
LS87-2154	44.4	55.1	61.3	26.1	35.3
Md85-5443	47.9	62.3	66.6	28.9	32.3
Md86-5324	46.4	55.4	73.9	30.9	29.8
S86-2209	40.3	59.1	56.9	27.3	34.4
S86-4496	41.9	50.6	61.5	29.4	39.1
S86-4499	44.5	60.1	62.2	35.7	44.3
C.V. (%)	12.8	22.9	10.2	12.4	14.5
L.S.D. (5%)	9.8	19.5	11.2	5.8	8.0
Row Sp. (In.)	30	20	7	24	40
Rows/Plot	4	4	8	4	4
Reps	3	3	3	3	3

UNIFORM TEST IV, 1991

YIELD RANK

Strain	Yield Rank	George-town DE	Belle-ville IL	Cora IL	Urbana IL	Lafay-ette IN
Delsoy 4210 (SCN)	25	22	24	19	30	15
Flyer (E)	5	9	6	24	14	10
Spencer (IV)	3	1	20	15	18	5
L83-3804 (L) Spry	2	13	3	3	21	4
C1758	7	14	2	21	23	29
C1803	24	11	10	22	23	7
C1804	13	18	21	12	3	13
C1813	10	10	6	10	12	24
HC84-4850	14	8	26	23	6	9
HC85-161	28	31	22	29	13	23
HC85-1848	31	32	23	32	10	14
HC85-2206	30	28	29	28	9	32
HC86-3403	8	23	18	10	1	3
HC86-4367	32	30	31	31	11	30
HC87-3212	26	25	30	26	2	19
HC87-3329	27	26	32	26	8	21
HC87-5844	29	29	28	30	4	25
K1183	20	16	13	7	14	31
K1185	21	7	14	6	32	15
K1190	9	2	9	13	20	25
K1191	1	5	4	1	6	22
L84-6089	17	20	19	24	21	11
LS86-1922	4	4	5	9	27	2
LS87-1257	23	24	25	8	31	20
LS87-1311	6	17	17	20	25	1
LS87-1615	18	21	15	17	27	12
LS87-2154	15	12	1	18	17	8
Md85-5443	11	3	6	16	16	17
Md86-5324	15	19	27	14	5	18
S86-2209	22	27	11	5	29	6
S86-4496	19	15	11	2	25	28
S86-4499	12	6	16	4	19	27

UNIFORM TEST IV, 1991

YIELD RANK

Strain	Vince-nnes IN	Manhat-tan KS	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Portage ville MO	Falls City NE
Delsoy 4210 (SCN)	7	28	30	17	17	24	10	28
Flyer (E)	9	3	13	6	15	1	23	12
Spencer (IV)	5	2	25	4	7	16	24	16
L83-3804 (L) Spry	8	23	17	4	9	14	16	33
C1758	14	11	14	1	13	5	25	15
C1803	25	27	19	13	31	21	12	21
C1804	3	30	2	22	25	17	3	22
C1813	15	4	17	11	2	10	26	19
HC84-4850	20	14	3	8	30	15	15	13
HC85-161	28	17	25	30	13	31	22	6
HC85-1848	30	18	19	29	20	29	32	11
HC85-2206	31	15	25	28	28	30	29	4
HC86-3403	12	7	9	9	8	2	17	20
HC86-4367	32	13	14	32	28	32	30	5
HC87-3212	29	19	4	27	20	6	28	2
HC87-3329	26	9	19	23	3	22	31	8
HC87-5844	27	20	19	31	22	13	27	3
K1183	24	5	32	2	6	12	20	10
K1185	22	1	31	3	10	8	14	14
K1190	13	22	19	14	4	6	19	7
K1191	2	6	28	16	1	4	9	17
L84-6089	19	16	29	24	24	19	13	17
LS86-1922	3	21	5	19	27	25	7	24
LS87-1257	17	25	11	20	23	28	11	30
LS87-1311	10	12	1	10	19	9	1	26
LS87-1615	16	32	6	12	10	23	6	23
LS87-2154	11	24	7	20	26	20	5	30
Md85-5443	21	7	24	18	32	3	21	9
Md86-5324	23	10	8	7	5	11	18	25
S86-2209	18	26	10	26	10	27	4	27
S86-4496	1	29	15	25	17	26	2	29
S86-4499	6	31	11	15	15	18	8	32

UNIFORM TEST IV, 1991

YIELD RANK

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX
Delsoy 4210 (SCN)	13	24	29	1	4
Flyer (E)	4	18	7	17	22
Spencer (IV)	7	10	7	16	20
L83-3804 (L) Spry	6	2	9	4	9
C1758	3	12	10	9	14
C1803	11	22	28	32	25
C1804	31	4	27	11	16
C1813	18	13	20	24	7
HC84-4850	24	5	11	29	19
HC85-161	28	17	4	30	29
HC85-1848	29	31	3	31	30
HC85-2206	23	27	1	26	31
HC86-3403	26	7	22	11	24
HC86-4367	32	26	26	28	32
HC87-3212	25	23	2	24	27
HC87-3329	15	30	5	9	28
HC87-5844	17	28	13	19	26
K1183	10	29	20	26	13
K1185	21	32	12	23	15
K1190	9	25	14	8	8
K1191	1	1	14	2	1
L84-6089	5	11	16	3	5
LS86-1922	2	7	30	20	3
LS87-1257	8	20	32	20	12
LS87-1311	22	16	19	13	9
LS87-1615	12	21	17	6	6
LS87-2154	20	15	25	22	17
Md85-5443	13	3	18	15	21
Md86-5324	16	14	6	7	23
S86-2209	29	9	31	17	18
S86-4496	27	19	24	13	11
S86-4499	19	5	23	5	2

UNIFORM TEST IV, 1991

MATURITY (date)

Strain	Mean 15 Tests	George-town DE	Belle-ville IL	Cora IL	Urbana IL	Lafay-ette IN
Delsoy 4210 (SCN)	3.5	3		1	7	2
Flyer (E)	-4.7	-3		-2	0	-16
Spencer (IV)	09/22	10/01		09/13	09/07	10/04
L83-3804 (L) Spry	5.7	3		6	7	2
C1758	-1.9	-6		0	1	-5
C1803	-2.7	-4		0	-1	-11
C1804	1.4	-3		0	5	2
C1813	0.3	1		2	4	-7
HC84-4850	-2.3	-4		0	3	-10
HC85-161	-4.3	-6		0	-1	-9
HC85-1848	-5.4	-5		0	-3	-15
HC85-2206	-4.9	1		-2	-5	-15
HC86-3403	-1.1	-3		-1	5	-4
HC86-4367	-5.7	-8		-1	-2	-11
HC87-3212	-3.8	-5		2	-1	-15
HC87-3329	-4.9	-6		2	0	-14
HC87-5844	-5.7	-8		-1	-3	-17
K1183	-3.7	-5		-2	1	-12
K1185	-2.4	-4		-2	-1	-2
K1190	-1.8	-6		-1	0	-5
K1191	6.9	5		4	9	2
L84-6089	0.8	-4		1	4	1
LS86-1922	3.5	3		3	6	-5
LS87-1257	0.9	-1		-1	6	-7
LS87-1311	1.7	-2		0	5	-4
LS87-1615	1.1	0		-2	5	-2
LS87-2154	1.1	-1		0	7	-4
Md85-5443	-4.2	-4		-2	-1	-12
Md86-5324	0.9	-1		1	5	-3
S86-2209	1.6	-5		1	5	-1
S86-4496	5.1	2		3	7	-2
S86-4499	6.3	3		6	8	-1
Date Planted	05/17	06/06		05/15	04/30	05/11
Days to Mature	127.9	117		121	130	146

UNIFORM TEST IV, 1991

MATURITY (date)

Strain	Vince-nnes IN	Manhat-tan KS	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Portage ville MO	Falls City NE
Delsoy 4210 (SCN)	-1	6			4	1	3	3
Flyer (E)	-12	-1			-9	-3	-6	-1
Spencer (IV)	09/20	09/30			09/15	09/27	09/19	10/05
L83-3804 (L) Spry	1	5			9	4	4	7
C1758	-5	-1			-4	-2	-6	-1
C1803	-9	-2			0	-3	-4	0
C1804	1	1			2	0	5	1
C1813	-4	1			1	0	1	-1
HC84-4850	-9	0			-3	-2	-1	-1
HC85-161	-9	2			-11	-3	-6	0
HC85-1848	-14	1			-12	-6	-8	-2
HC85-2206	-12	0			-9	-4	-7	-2
HC86-3403	-7	1			-3	1	-2	1
HC86-4367	-14	1			-11	-8	-8	-1
HC87-3212	-13	0			-9	-1	-5	-1
HC87-3329	-10	-4			-12	-6	-7	-1
HC87-5844	-10	0			-11	-3	-8	-1
K1183	-10	-2			-8	-2	-5	0
K1185	-8	1			-2	-2	-2	-1
K1190	-6	0			-3	-4	1	-2
K1191	3	4			12	7	9	4
L84-6089	-7	3			-2	0	2	1
LS86-1922	0	4			10	4	9	1
LS87-1257	-6	2			5	2	6	0
LS87-1311	-2	5			2	0	7	2
LS87-1615	-1	0			2	0	1	3
LS87-2154	-2	2			7	-1	4	1
Md85-5443	-12	-1			-5	-4	-6	0
Md86-5324	-7	2			1	0	1	6
S86-2209	-4	3			3	-2	7	2
S86-4496	2	5			12	2	11	5
S86-4499	3	5			12	4	11	5
Date Planted	05/08	05/29			05/16	05/30	05/22	06/04
Days to Mature	135	124			122	120	120	123

UNIFORM TEST IV, 1991

MATURITY (date)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX
Delsoy 4210 (SCN)	8	3	7	0	5
Flyer (E)	-1	-8	-7	0	-2
Spencer (IV)	10/07	09/16	09/20	09/27	09/09
L83-3804 (L) Spry	7	5	11	2	13
C1758	1	-3	5	-4	1
C1803	0	-4	-2	-2	2
C1804	0	-1	2	-2	8
C1813	2	1	0	-2	5
HC84-4850	0	-4	-4	0	1
HC85-161	-3	-10	-10	-2	4
HC85-1848	2	-8	-8	-2	-1
HC85-2206	-1	-8	-6	-2	-1
HC86-3403	2	-6	-2	0	2
HC86-4367	-2	-11	-12	-2	4
HC87-3212	1	-6	-9	0	5
HC87-3329	0	-10	-6	-2	3
HC87-5844	-1	-11	-11	-4	3
K1183	-1	-5	-6	-2	4
K1185	-1	-8	-5	-4	5
K1190	2	-5	-6	0	8
K1191	8	7	10	2	18
L84-6089	3	2	2	0	6
LS86-1922	6	4	2	-2	7
LS87-1257	2	1	2	-4	6
LS87-1311	1	1	1	0	9
LS87-1615	2	-1	1	2	7
LS87-2154	3	0	3	-4	2
Md85-5443	-1	-6	-7	-2	0
Md86-5324	8	-2	0	2	1
S86-2209	3	4	7	-4	5
S86-4496	8	4	7	0	10
S86-4499	7	6	12	2	12
Date Planted	05/29	05/03	05/02	05/13	05/17
Days to Mature	131	136	141	137	115

UNIFORM TEST IV, 1991

LODGING (score)

Strain	Mean 18 Tests	George-town DE	Belle-ville IL	Cora IL	Urbana IL	Lafay-ette IN
Delsoy 4210 (SCN)	1.8	1.3	1.5	1.9	1.5	1.2
Flyer (E)	1.4	1.0	1.0	1.0	1.2	1.0
Spencer (IV)	1.3	1.0	1.0	1.0	1.0	1.0
L83-3804 (L) Spry	1.7	1.7	1.2	1.3	1.5	2.3
C1758	1.3	1.0	1.0	1.0	1.0	1.0
C1803	1.6	2.0	1.5	1.2	1.5	1.0
C1804	1.7	1.3	1.0	1.5	1.5	1.2
C1813	1.4	1.7	1.0	1.0	1.3	1.0
HC84-4850	2.0	2.0	1.3	1.3	1.5	1.0
HC85-161	1.1	1.0	1.0	1.0	1.0	1.0
HC85-1848	1.0	1.0	1.0	1.0	1.0	1.0
HC85-2206	1.0	1.0	1.0	1.0	1.0	1.0
HC86-3403	1.3	1.0	1.0	1.0	1.3	1.0
HC86-4367	1.0	1.0	1.0	1.0	1.0	1.0
HC87-3212	1.0	1.0	1.0	1.0	1.0	1.0
HC87-3329	1.0	1.0	1.0	1.0	1.0	1.0
HC87-5844	1.1	1.0	1.0	1.0	1.0	1.0
K1183	1.3	1.0	1.0	1.0	1.0	1.0
K1185	1.3	1.0	1.0	1.0	1.0	1.0
K1190	1.5	1.0	1.7	1.0	1.2	1.0
K1191	1.6	1.7	1.0	1.2	1.5	1.0
L84-6089	1.7	1.0	1.5	1.7	1.3	1.0
LS86-1922	2.2	2.7	2.3	1.7	1.5	1.8
LS87-1257	1.9	1.0	2.2	1.8	1.5	1.8
LS87-1311	1.4	1.0	1.2	1.1	1.3	1.0
LS87-1615	1.3	1.0	1.0	1.0	1.3	1.0
LS87-2154	1.7	1.7	1.7	1.4	1.5	1.0
Md85-5443	1.4	1.0	1.0	1.2	1.3	1.0
Md86-5324	1.2	1.0	1.0	1.0	1.5	1.0
S86-2209	1.7	1.3	1.5	1.5	1.5	1.0
S86-4496	1.9	1.7	1.8	2.7	1.5	1.5
S86-4499	1.8	1.3	1.8	1.8	1.5	1.0

UNIFORM TEST IV, 1991

LODGING (score)

Strain	Vince-nnes IN	Manhat-tan KS	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Portage ville MO	Falls City NE
Delsoy 4210 (SCN)	1.5	2.3	1.0	2.7	2.0	2.8	1.5	1.0
Flyer (E)	1.3	1.7	1.0	1.7	2.0	2.0	1.0	1.0
Spencer (IV)	1.2	1.0	1.0	3.0	1.0	2.0	1.0	1.0
L83-3804 (L) Spry	1.2	1.0	3.0	1.3	2.0	3.5	1.0	1.7
C1758	1.3	1.7	1.0	2.0	2.0	2.0	1.0	1.0
C1803	1.2	1.7	1.0	2.7	3.0	3.0	1.0	1.0
C1804	2.0	1.3	1.0	3.3	3.0	3.0	1.0	1.0
C1813	1.3	1.0	1.0	2.3	2.0	2.3	1.0	1.0
HC84-4850	1.2	2.0	1.0	4.0	5.0	3.0	1.5	1.0
HC85-161	1.0	1.0	1.0	1.0	2.0	1.7	1.0	1.0
HC85-1848	1.0	1.0	1.0	1.0	1.0	1.3	1.0	1.0
HC85-2206	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC86-3403	1.3	1.3	1.0	1.7	2.0	2.0	1.0	1.0
HC86-4367	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC87-3212	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC87-3329	1.0	1.0	1.0	1.0	1.0	1.3	1.0	1.0
HC87-5844	1.0	1.0	1.0	1.0	2.0	1.7	1.0	1.0
K1183	1.0	1.0	1.0	1.7	2.0	2.0	1.0	1.0
K1185	1.0	1.7	1.0	2.3	2.0	2.0	1.0	1.0
K1190	1.5	1.7	1.0	2.7	1.0	2.7	1.0	1.0
K1191	1.5	2.0	1.0	2.3	2.0	3.0	1.0	1.0
L84-6089	1.0	1.3	1.0	2.7	3.0	2.8	1.0	1.0
LS86-1922	2.0	1.7	1.0	4.3	3.0	3.5	1.5	1.0
LS87-1257	1.5	1.7	1.0	3.7	2.0	3.3	2.0	1.0
LS87-1311	1.3	1.0	1.0	3.0	2.0	2.8	1.0	1.0
LS87-1615	1.2	1.3	1.0	2.3	2.0	1.8	1.0	1.0
LS87-2154	1.5	1.7	1.0	2.7	3.0	2.8	1.0	1.0
Md85-5443	1.0	2.0	1.0	1.7	3.0	2.0	1.0	1.0
Md86-5324	1.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0
S86-2209	1.0	1.7	1.0	3.0	3.0	2.8	1.0	1.0
S86-4496	1.7	2.0	1.0	3.3	2.0	2.2	1.0	1.0
S86-4499	1.8	2.3	1.0	3.3	2.0	2.3	1.0	1.0

UNIFORM TEST IV, 1991

LODGING (score)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX
Delsoy 4210 (SCN)	1.7	1.7	2.0	1.0	3.0
Flyer (E)	1.3	1.5	1.2	1.0	2.5
Spencer (IV)	1.3	1.8	1.0	1.0	1.5
L83-3804 (L) Spry	2.0	1.6	1.8	1.0	1.7
C1758	1.3	1.3	1.5	1.0	1.5
C1803	1.7	1.3	1.5	1.0	2.0
C1804	1.3	2.7	2.0	1.0	2.2
C1813	1.7	1.6	1.2	1.0	2.0
HC84-4850	1.7	2.5	2.0	1.0	2.7
HC85-161	1.0	1.1	1.0	1.0	1.0
HC85-1848	1.0	1.1	1.0	1.0	1.0
HC85-2206	1.0	1.0	1.0	1.0	1.0
HC86-3403	1.7	1.4	1.3	1.0	2.2
HC86-4367	1.0	1.1	1.0	1.0	1.2
HC87-3212	1.3	1.0	1.0	1.0	1.0
HC87-3329	1.0	1.1	1.0	1.0	1.0
HC87-5844	1.0	1.0	1.0	1.0	1.0
K1183	1.7	1.2	1.0	1.0	2.0
K1185	1.0	1.3	1.0	1.0	2.0
K1190	1.7	1.3	1.7	1.0	2.0
K1191	1.7	1.7	1.7	1.0	2.2
L84-6089	1.7	2.2	2.0	1.0	2.7
LS86-1922	2.0	3.5	2.2	1.0	2.8
LS87-1257	2.0	2.4	2.0	1.0	2.7
LS87-1311	1.3	1.5	1.2	1.0	1.5
LS87-1615	1.3	1.5	1.2	1.0	1.7
LS87-2154	1.7	1.9	1.7	1.0	2.5
Md85-5443	1.3	1.5	1.5	1.0	2.2
Md86-5324	1.3	1.5	1.2	1.0	1.0
S86-2209	2.0	3.1	1.8	1.0	2.0
S86-4496	1.3	2.9	2.3	1.0	2.5
S86-4499	2.0	2.8	2.7	1.0	2.2

UNIFORM TEST IV, 1991

PLANT HEIGHT (inches)

Strain	Mean 18 Tests	George-town DE	Belle-ville IL	Cora IL	Urbana IL	Lafay-ette IN
Delsoy 4210 (SCN)	38	34	44	42	37	42
Flyer (E)	32	29	33	34	30	32
Spencer (IV)	35	32	36	41	31	35
L83-3804 (L) Spry	33	30	32	38	30	42
C1758	34	32	36	40	29	36
C1803	37	37	44	44	34	40
C1804	39	35	40	45	36	40
C1813	34	32	34	41	29	31
HC84-4850	37	32	35	42	36	41
HC85-161	18	14	18	20	21	20
HC85-1848	18	21	16	19	21	18
HC85-2206	16	12	14	18	19	14
HC86-3403	33	27	34	37	33	34
HC86-4367	16	13	12	18	19	14
HC87-3212	20	18	17	20	21	21
HC87-3329	18	15	13	21	19	19
HC87-5844	17	13	14	19	18	17
K1183	32	29	34	36	28	32
K1185	30	27	30	38	28	31
K1190	33	29	35	43	29	35
K1191	36	35	38	40	32	34
L84-6089	39	35	40	48	35	38
LS86-1922	43	41	48	48	43	44
LS87-1257	43	34	48	49	42	43
LS87-1311	39	34	46	46	35	40
LS87-1615	38	35	43	44	32	34
LS87-2154	42	39	48	50	40	44
Md85-5443	34	28	36	40	28	34
Md86-5324	30	28	28	30	28	35
S86-2209	37	34	45	43	33	37
S86-4496	41	39	48	46	38	40
S86-4499	40	35	46	46	37	37

UNIFORM TEST IV, 1991

PLANT HEIGHT (inches)

Strain	Vince-nnes IN	Manhat-tan KS	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Portage ville MO	Falls City NE
Delsoy 4210 (SCN)	41	43	26	52	41	41	32	46
Flyer (E)	36	44	22	43	34	35	27	37
Spencer (IV)	37	44	22	55	39	35	29	38
L83-3804 (L) Spry	30	38	33	37	38	35	24	45
C1758	36	45	25	46	37	34	28	39
C1803	33	48	26	48	42	42	33	42
C1804	39	52	27	51	40	42	33	44
C1813	34	43	21	49	38	34	29	40
HC84-4850	36	47	27	48	38	40	35	43
HC85-161	20	18	18	13	20	13	18	25
HC85-1848	17	17	19	16	22	15	11	25
HC85-2206	15	16	18	13	20	12	14	27
HC86-3403	35	40	21	45	39	31	30	37
HC86-4367	13	16	16	11	19	12	13	22
HC87-3212	19	18	18	17	25	19	17	26
HC87-3329	17	17	19	16	26	16	13	27
HC87-5844	20	18	16	13	24	15	17	25
K1183	30	42	21	46	37	38	31	38
K1185	28	45	21	45	34	33	29	35
K1190	32	49	22	47	38	34	30	39
K1191	37	48	23	47	39	38	32	41
L84-6089	35	48	25	54	47	45	38	46
LS86-1922	42	53	29	58	49	49	43	51
LS87-1257	38	57	28	57	49	50	43	49
LS87-1311	37	50	25	56	42	43	37	46
LS87-1615	35	51	24	54	38	43	38	43
LS87-2154	45	52	26	54	47	46	41	51
Md85-5443	34	38	25	43	39	41	30	37
Md86-5324	27	33	30	33	36	30	25	38
S86-2209	34	50	23	52	41	40	35	40
S86-4496	44	54	26	56	46	41	40	47
S86-4499	43	51	26	58	44	40	38	46

UNIFORM TEST IV, 1991

PLANT HEIGHT (inches)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX
Delsoy 4210 (SCN)	36	35	41	30	24
Flyer (E)	30	31	34	25	19
Spencer (IV)	34	39	37	24	22
L83-3804 (L) Spry	29	28	36	33	21
C1758	34	33	36	24	22
C1803	35	36	38	26	24
C1804	33	42	41	29	26
C1813	29	34	35	27	24
HC84-4850	34	41	36	31	25
HC85-161	19	20	21	21	11
HC85-1848	18	17	21	20	12
HC85-2206	18	18	19	18	10
HC86-3403	30	35	39	27	19
HC86-4367	17	18	18	20	11
HC87-3212	22	20	22	21	12
HC87-3329	21	17	21	22	11
HC87-5844	19	16	17	20	10
K1183	31	24	31	26	21
K1185	25	18	34	24	21
K1190	30	26	34	24	24
K1191	33	34	38	25	26
L84-6089	34	40	42	30	26
LS86-1922	41	43	43	26	26
LS87-1257	39	42	43	29	28
LS87-1311	35	38	40	27	26
LS87-1615	36	34	38	30	27
LS87-2154	36	42	44	30	27
Md85-5443	30	34	35	27	24
Md86-5324	31	28	32	31	18
S86-2209	33	41	37	26	24
S86-4496	36	41	41	28	30
S86-4499	37	40	37	32	31

UNIFORM TEST IV, 1991

SEED QUALITY (score)

Strain	Mean 16 Tests	George-town DE	Belle-ville IL	Cora IL	Urbana IL	Lafay-ette IN
Delsoy 4210 (SCN)	2.0	1.0			1.8	2.0
Flyer (E)	1.7	1.0			1.5	2.0
Spencer (IV)	2.4	1.0			1.8	2.0
L83-3804 (L) Spry	1.8	1.0			2.2	2.0
C1758	2.4	1.0			1.7	2.0
C1803	1.9	1.0			1.7	1.5
C1804	1.9	1.0			1.8	1.5
C1813	2.1	1.0			1.7	2.0
HC84-4850	1.7	1.0			1.7	1.5
HC85-161	1.9	1.0			1.4	1.5
HC85-1848	1.7	1.0			1.4	1.0
HC85-2206	1.9	1.0			1.4	1.0
HC86-3403	1.8	1.0			1.7	2.0
HC86-4367	1.8	1.0			1.5	1.0
HC87-3212	1.9	1.0			1.5	1.5
HC87-3329	1.9	1.0			1.7	1.0
HC87-5844	1.9	1.0			1.7	1.5
K1183	1.8	1.0			1.7	1.5
K1185	1.8	1.0			1.4	2.0
K1190	2.1	1.0			1.7	2.0
K1191	1.8	1.0			1.8	2.0
L84-6089	1.9	1.0			1.5	2.0
LS86-1922	1.8	1.0			1.5	2.0
LS87-1257	1.7	1.0			2.0	1.0
LS87-1311	1.6	1.0			1.5	1.0
LS87-1615	1.8	1.0			1.7	1.5
LS87-2154	1.8	1.0			1.8	2.0
Md85-5443	1.8	1.0			1.7	2.5
Md86-5324	2.0	1.0			1.7	1.5
S86-2209	1.7	1.0			1.7	1.5
S86-4496	2.1	1.0			2.2	1.5
S86-4499	2.3	1.0			2.2	3.0

UNIFORM TEST IV, 1991

SEED QUALITY (score)

Strain	Vince-nnes IN	Manhat-tan KS	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Portage ville MO	Falls City NE
Delsoy 4210 (SCN)	1.5	2.0	2.0	3.0	2.0	1.5	2.5	1.7
Flyer (E)	1.0	2.0	2.0	1.0	2.0	1.5	2.0	1.3
Spencer (IV)	2.5	2.0	3.0	2.0	3.0	2.3	3.5	2.3
L83-3804 (L) Spry	1.0	1.0	2.0	2.0	2.0	2.0	2.5	2.0
C1758	2.0	3.0	2.0	2.0	2.0	3.0	3.0	2.3
C1803	1.5	2.0	2.0	2.0	3.0	1.7	3.5	1.7
C1804	1.5	2.0	2.0	2.0	3.0	1.5	2.5	1.7
C1813	1.5	2.0	2.0	2.0	3.0	2.5	2.5	2.0
HC84-4850	1.0	2.0	2.0	1.0	2.0	2.7	2.5	1.0
HC85-161	1.5	3.0	2.0	2.0	2.0	2.5	2.5	1.0
HC85-1848	1.0	2.0	2.0	3.0	2.0	2.0	2.0	1.3
HC85-2206	1.5	2.0	2.0	3.0	3.0	1.8	2.5	1.3
HC86-3403	1.5	2.0	2.0	2.0	2.0	1.5	2.0	1.3
HC86-4367	1.0	2.0	2.0	3.0	2.0	1.3	2.0	1.7
HC87-3212	1.0	3.0	2.0	3.0	2.0	2.0	2.5	1.0
HC87-3329	1.5	2.0	2.0	2.0	2.0	2.2	3.0	1.3
HC87-5844	2.0	2.0	2.0	3.0	3.0	1.8	2.0	1.0
K1183	2.0	2.0	2.0	2.0	2.0	1.8	2.5	1.3
K1185	1.5	1.0	2.0	2.0	1.0	2.0	2.5	2.0
K1190	2.0	3.0	3.0	2.0	2.0	1.8	3.0	2.0
K1191	1.5	2.0	2.0	2.0	1.0	1.5	2.5	1.7
L84-6089	1.5	2.0	2.0	2.0	2.0	2.0	3.0	1.3
LS86-1922	1.5	2.0	2.0	2.0	2.0	1.0	2.5	1.7
LS87-1257	1.0	2.0	2.0	2.0	2.0	1.5	2.5	2.0
LS87-1311	1.0	2.0	2.0	2.0	2.0	1.5	2.0	2.0
LS87-1615	2.0	2.0	3.0	2.0	1.0	1.0	2.5	1.3
LS87-2154	1.5	2.0	2.0	1.0	2.0	1.2	2.5	2.0
Md85-5443	1.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0
Md86-5324	1.0	2.0	3.0	2.0	2.0	2.0	2.5	2.0
S86-2209	1.5	2.0	2.0	2.0	1.0	1.5	3.0	1.3
S86-4496	1.5	2.0	2.0	3.0	2.0	1.5	3.0	1.7
S86-4499	1.5	2.0	2.0	3.0	2.0	2.5	3.0	1.7

UNIFORM TEST IV, 1991

SEED QUALITY (score)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX
Delsoy 4210 (SCN)	1.0	1.3	3.5	2.7	2.2
Flyer (E)	1.0	1.0	2.0	3.2	2.2
Spencer (IV)	1.3	1.7	4.0	4.2	2.5
L83-3804 (L) Spry	1.3	1.0	2.5	2.8	2.2
C1758	1.0	2.3	4.5	3.0	3.5
C1803	1.0	1.3	2.0	2.7	2.5
C1804	1.0	1.0	2.5	2.3	3.0
C1813	1.0	1.3	3.0	3.2	2.5
HC84-4850	1.0	1.0	1.5	3.2	2.5
HC85-161	1.7	1.0	1.5	3.3	2.5
HC85-1848	1.3	1.3	1.0	2.5	2.8
HC85-2206	1.0	1.3	1.5	2.8	2.5
HC86-3403	1.0	1.0	2.5	2.5	2.0
HC86-4367	1.0	1.0	1.0	3.7	3.0
HC87-3212	1.3	1.0	1.5	3.0	3.2
HC87-3329	1.0	1.7	1.5	2.7	3.0
HC87-5844	1.0	1.0	2.5	3.0	2.5
K1183	1.0	1.0	2.0	3.0	2.0
K1185	1.0	1.3	2.5	2.7	2.5
K1190	1.0	1.0	3.0	3.2	2.5
K1191	1.0	1.3	2.0	2.7	2.2
L84-6089	1.0	1.0	2.0	2.8	2.5
LS86-1922	1.7	1.3	1.5	2.7	2.5
LS87-1257	1.0	1.0	2.0	2.7	2.0
LS87-1311	1.0	1.0	1.5	2.5	2.2
LS87-1615	1.0	1.3	2.5	2.8	2.0
LS87-2154	1.0	1.0	2.0	3.2	2.5
Md85-5443	1.0	1.0	2.0	2.8	2.2
Md86-5324	1.0	1.3	2.5	3.5	2.5
S86-2209	1.0	1.0	2.5	2.3	2.5
S86-4496	1.3	1.7	4.0	2.8	2.5
S86-4499	1.7	1.7	3.5	2.7	2.5

UNIFORM TEST IV, 1991

SEED SIZE (g/100)

Strain	Mean 17 Tests	George-town DE	Belle-ville IL	Cora IL	Urbana IL	Lafay-ette IN
Delsoy 4210 (SCN)	17.5		17.7	15.0	17.3	20.8
Flyer (E)	14.2		14.2	12.8	12.2	14.8
Spencer (IV)	18.0		18.5	15.0	15.9	21.2
L83-3804 (L) Spry	17.5		18.6	16.8	15.9	19.9
C1758	18.6		19.3	16.5	16.9	18.9
C1803	15.7		17.4	14.8	14.0	17.9
C1804	16.9		18.1	14.8	16.1	19.1
C1813	18.4		19.9	16.1	18.3	18.3
HC84-4850	16.7		16.9	15.0	14.5	18.6
HC85-161	17.3		17.0	16.5	17.7	19.6
HC85-1848	17.6		17.3	16.9	16.1	20.3
HC85-2206	18.5		18.6	17.8	17.4	19.2
HC86-3403	16.4		16.9	15.4	14.3	17.7
HC86-4367	14.1		14.6	14.5	14.2	15.5
HC87-3212	18.2		18.9	18.5	17.3	19.8
HC87-3329	16.3		16.0	15.9	15.9	18.4
HC87-5844	16.2		16.8	16.1	16.4	18.6
K1183	15.5		15.4	14.1	14.5	15.8
K1185	16.3		16.9	15.3	14.3	19.3
K1190	17.1		18.9	15.8	16.8	18.1
K1191	17.2		17.7	15.0	15.4	19.1
L84-6089	16.4		17.2	13.4	15.5	18.7
LS86-1922	15.2		15.8	13.0	13.4	17.7
LS87-1257	16.0		16.1	13.8	16.5	18.9
LS87-1311	15.1		16.2	14.0	13.6	17.4
LS87-1615	15.0		15.6	13.1	14.9	18.7
LS87-2154	15.8		17.4	14.2	14.4	18.7
Md85-5443	16.9		17.3	16.2	15.7	18.6
Md86-5324	19.4		19.4	18.1	17.3	22.2
S86-2209	14.6		15.6	12.4	12.1	16.1
S86-4496	17.4		18.3	16.1	17.4	17.6
S86-4499	17.0		17.2	15.8	17.6	18.4

UNIFORM TEST IV, 1991

SEED SIZE (g/100)

Strain	Vince-nnes IN	Manhat-tan KS	Ottawa KS	Topeka KS	Lexing-ton KY	Queens-town MD	Portage ville MO	Falls City NE
Delsoy 4210 (SCN)	19.7	15.6	17.9	19.9	17.1	15.2	17.4	14.1
Flyer (E)	13.9	15.4	15.4	15.1	11.8	14.9	11.1	13.9
Spencer (IV)	17.0	19.6	17.9	18.7	18.7	17.3	15.3	17.0
L83-3804 (L) Spry	19.4	16.3	18.6	19.3	19.1	16.5	16.1	13.7
C1758	18.9	21.0	17.6	19.3	18.1	18.0	15.1	15.9
C1803	16.3	15.5	14.2	17.9	15.5	15.2	14.1	14.8
C1804	19.2	16.0	18.2	17.4	16.3	15.6	15.0	14.5
C1813	20.0	20.4	18.7	18.0	18.6	18.3	15.8	16.0
HC84-4850	16.8	18.6	17.2	18.8	16.3	16.0	14.9	15.5
HC85-161	17.9	19.1	15.3	18.9	15.7	15.1	14.0	17.2
HC85-1848	17.8	21.8	17.0	20.1	16.4	15.5	14.7	16.7
HC85-2206	17.9	20.2	18.1	20.9	18.0	16.7	15.0	19.2
HC86-3403	19.8	17.1	14.8	16.5	15.5	17.0	14.4	15.3
HC86-4367	12.4	16.4	12.7	16.7	12.0	13.0	12.1	15.1
HC87-3212	18.1	21.0	16.1	20.8	17.6	18.6	15.7	17.3
HC87-3329	17.3	18.0	15.1	18.4	15.8	14.3	11.5	17.0
HC87-5844	17.4	18.6	14.0	18.7	14.6	14.5	12.6	16.2
K1183	14.6	17.1	14.7	16.6	14.2	15.6	13.3	15.1
K1185	16.9	17.6	16.7	18.4	14.3	15.7	14.2	14.3
K1190	18.7	14.7	16.1	17.1	16.4	16.6	14.4	16.4
K1191	18.3	17.3	20.1	17.3	16.6	16.6	15.4	14.3
L84-6089	15.9	16.6	17.6	15.8	17.1	15.0	15.0	14.8
LS86-1922	16.7	15.1	18.6	14.0	17.9	13.8	14.4	11.7
LS87-1257	15.3	15.7	18.7	16.2	16.2	14.6	15.4	13.6
LS87-1311	15.6	14.8	16.7	15.9	14.7	14.6	14.3	12.1
LS87-1615	16.0	14.4	16.9	14.8	14.0	13.6	14.4	13.2
LS87-2154	17.8	16.1	17.7	15.2	16.1	14.2	14.9	12.0
Md85-5443	17.7	18.9	17.5	14.9	14.8	16.8	13.6	15.7
Md86-5324	19.0	19.6	21.3	20.0	18.8	18.3	16.7	16.3
S86-2209	15.9	14.8	15.6	15.8	14.5	13.0	14.1	11.3
S86-4496	20.7	17.1	17.8	17.0	19.7	15.0	17.8	13.9
S86-4499	19.6	14.6	18.0	18.0	18.5	14.9	17.6	13.6

UNIFORM TEST IV, 1991

SEED SIZE (g/100)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX
Delsoy 4210 (SCN)	18.3	14.7	18.3	17.7	20.8
Flyer (E)	16.7	12.3	14.3	14.4	18.1
Spencer (IV)	18.7	17.0	17.7	18.6	21.7
L83-3804 (L) Spry	16.7	15.3	18.1	16.6	20.3
C1758	19.7	16.7	18.2	19.8	25.8
C1803	16.7	14.3	14.7	14.7	19.2
C1804	17.3	15.0	16.8	17.4	20.3
C1813	20.3	17.0	18.1	17.8	21.8
HC84-4850	17.0	14.7	15.8	16.0	21.6
HC85-161	18.3	15.0	17.3	17.9	20.8
HC85-1848	17.3	14.3	18.5	17.5	21.3
HC85-2206	20.0	16.3	19.0	19.2	21.3
HC86-3403	18.0	15.0	16.3	15.4	19.7
HC86-4367	15.0	11.7	13.9	12.8	17.7
HC87-3212	18.7	16.3	18.2	15.7	21.4
HC87-3329	17.7	13.7	16.4	15.6	20.2
HC87-5844	16.7	13.0	16.9	16.1	18.1
K1183	18.0	12.7	15.5	15.2	20.5
K1185	17.7	12.0	15.4	15.7	22.3
K1190	18.7	15.7	17.4	17.1	22.0
K1191	18.3	15.0	18.0	17.6	19.9
L84-6089	18.0	14.3	16.4	17.3	20.5
LS86-1922	15.0	12.3	14.7	16.9	17.1
LS87-1257	17.0	14.3	15.8	15.6	19.0
LS87-1311	16.7	13.0	13.8	14.8	17.9
LS87-1615	16.7	12.3	13.6	16.4	17.1
LS87-2154	16.3	13.7	15.3	15.8	18.2
Md85-5443	19.7	15.3	16.5	17.1	20.8
Md86-5324	22.0	18.3	20.1	19.9	22.1
S86-2209	15.7	14.0	14.6	14.3	17.9
S86-4496	17.3	16.7	17.7	16.3	19.8
S86-4499	16.7	16.0	17.4	17.0	18.8

UNIFORM TEST IV, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Urbana IL	Vincennes IN	Manhattan KS	Portage-ville MO	Mt. Orab OH
Delsoy 4210 (SCN)	41.2	40.8	42.1	40.1	40.4	42.5
Flyer (E)	41.2	41.4	42.8	40.1	41.7	40.1
Spencer (IV)	40.3	40.9	42.9	40.0	38.5	39.2
L83-3804 (L) Spry	40.2	40.4	42.1	39.5	38.9	40.1
C1758	40.9	39.6	42.0	41.6	39.5	41.7
C1803	39.6	38.9	40.1	39.5	39.1	40.3
C1804	41.2	39.7	43.3	41.0	40.1	41.8
C1813	38.9	38.2	41.0	38.8	38.0	38.4
HC84-4850	41.2	39.4	43.4	41.1	41.1	41.2
HC85-161	41.0	39.7	44.0	40.3	41.5	39.5
HC85-1848	41.1	40.0	43.1	40.3	41.6	40.4
HC85-2206	41.0	40.0	42.0	40.0	42.3	40.6
HC86-3403	42.6	42.6	45.7	41.1	42.6	41.1
HC86-4367	39.2	38.0	40.5	39.6	39.7	38.0
HC87-3212	40.0	39.5	42.9	39.6	40.1	37.9
HC87-3329	38.7	37.8	41.3	37.8	40.1	36.7
HC87-5844	39.6	38.8	41.5	39.5	39.7	38.7
K1183	39.7	38.9	41.1	38.5	39.8	40.2
K1185	39.0	38.5	40.7	39.0	37.7	39.0
K1190	39.1	38.8	41.6	39.7	37.7	37.6
K1191	40.1	38.8	42.6	39.6	39.1	40.5
L84-6089	40.4	40.3	41.9	41.3	39.2	39.5
LS86-1922	39.3	38.7	40.7	39.5	37.9	39.5
LS87-1257	41.5	42.5	42.3	41.6	39.6	41.7
LS87-1311	38.6	37.4	40.7	38.3	38.0	38.4
LS87-1615	40.6	41.2	43.0	40.8	38.7	39.5
LS87-2154	38.5	38.5	40.3	38.3	37.9	37.3
Md85-5443	41.9	41.3	43.5	41.3	42.7	40.6
Md86-5324	41.3	40.1	42.4	40.8	41.1	42.1
S86-2209	41.4	41.5	42.6	42.3	40.2	40.6
S86-4496	39.7	38.7	41.6	39.5	39.5	39.0
S86-4499	39.3	38.7	41.8	39.5	38.8	37.8

UNIFORM TEST IV, 1991

OIL (%)

Strain	Mean 5 Tests	Urbana IL	Vincennes IN	Manhattan KS	Portage-ville MO	Mt. Orab OH
Delsoy 4210 (SCN)	21.6	22.0	21.8	21.1	22.2	20.7
Flyer (E)	21.1	21.2	21.3	21.1	20.2	21.5
Spencer (IV)	21.7	21.2	21.8	21.7	22.0	21.9
L83-3804 (L) Spry	21.5	22.0	21.5	21.0	22.1	20.9
C1758	21.6	22.2	21.6	21.3	21.8	21.1
C1803	22.0	22.3	22.9	21.4	21.6	21.6
C1804	20.9	21.9	20.9	20.4	20.9	20.4
C1813	22.9	23.5	23.3	22.4	22.5	22.9
HC84-4850	21.3	22.1	21.4	20.8	20.9	21.3
HC85-161	21.2	22.1	20.9	20.7	20.5	21.8
HC85-1848	20.8	21.1	21.2	21.1	20.2	20.4
HC85-2206	21.5	21.7	22.2	21.1	20.8	21.7
HC86-3403	21.5	21.8	20.7	21.5	21.2	22.2
HC86-4367	21.7	22.5	22.6	20.5	20.9	21.8
HC87-3212	22.6	23.1	22.8	21.6	21.9	23.4
HC87-3329	22.1	22.4	22.4	21.7	21.4	22.5
HC87-5844	21.5	22.1	21.7	20.9	21.1	21.5
K1183	21.9	22.0	22.5	22.4	21.3	21.2
K1185	22.0	22.3	23.1	21.4	22.0	21.2
K1190	22.0	22.6	21.7	21.1	22.0	22.4
K1191	21.5	22.4	21.6	20.7	21.3	21.3
L84-6089	21.5	21.3	21.9	20.7	21.7	21.8
LS86-1922	21.3	21.9	22.7	19.9	21.5	20.6
LS87-1257	20.2	20.5	21.1	19.5	20.5	19.4
LS87-1311	21.8	22.5	22.4	20.7	22.0	21.6
LS87-1615	20.7	20.8	21.3	19.7	21.3	20.4
LS87-2154	21.5	21.7	21.9	20.9	20.8	22.2
Md85-5443	20.7	21.2	21.4	20.5	19.4	20.9
Md86-5324	21.3	21.7	22.5	21.0	20.2	20.9
S86-2209	20.6	19.9	21.7	19.8	20.7	21.0
S86-4496	20.9	21.7	21.2	20.0	20.9	20.8
S86-4499	21.1	21.7	21.5	19.7	21.4	21.2

PRELIMINARY TEST IVA, 1991

Strain	Parentage	Generation Composited	Unique Traits
Desoy 4210 (SCN)	(Williams x PI 88.788) x (Union x Douglas)	F6	SCN 3, 4
Flyer (E)	Asgrow A3127[4] x Williams 82	BC3 F2	Rps1-k
Spencer (IV)	A75-305022 x Century	F5	
L83-3804 (L) Spry	L78-8694 x L78L-449	F6	
HS89-5467	HS84-6276 x Conrad	F5	
K1207	Sherman x Harper	F5	
K1208	Spencer x Sparks	F5	
K1209	Zane x Hutcheson	F5	
K1210	Pennyrile x Asgrow A3427	F5	
K1211	Zane x Hutcheson	F5	
K1212	Sherman x Hutcheson	F5	
K1213	Hutcheson x Asgrow A3427	F5	
K1214	Sherman x Morgan	F5	
LN88-7616	Hack x HW8221	F5	Rps?
LN88-9123	Sherman x Chamberlain	F5	
LN88-9172	Sherman x Chamberlain	F5	
LN88-9544	Sherman x Asgrow A2943	F5	
LS87-1049	Fayette x Pyramid	F6	SCN Res.
LS87-1116	Fayette x Pyramid	F6	SCN Res.
LS87-1123	Fayette x Pyramid	F6	SCN Res.
LS87-1428	Fayette x Pyramid	F6	SCN Res.
LS87-1734	Fayette x Pyramid	F6	SCN Res.
LS87-1922	Fayette x Pyramid	F6	SCN Res.
LS87-1946	78-815 x LS79-220	F6	SCN Res.
LS87-1956	78-815 x LS79-220	F6	SCN Res.
LS88-240	LS79-220 x Fayette	F6	SCN Res.
Md88-5241	Spencer x Delsoy 4900	F5	
Md88-5330	Md-Mbb80-79 x Morgan	F5	
S87-1021	Fayette x S79-4296	F6	SCN 3, 4
SL89-328	HC79-478 x Asgrow A3127 BC-26		

PRELIMINARY TEST IVA, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	PR Custer Phyto. Tol.	PR Urbana Race 1	PR Ames Race 4	Germination Lafayette %	PS Lafayette a %	PSB Lafayette n %	SMV Lafayette a Score	Shatter Score Manhattan
Desoy 4210 (SCN)	WTTSYBlI	6.3	R	H	42	7	32	3m	1
Flyer (E)	PTTYBlI	3.0	R	R	45	22	27	5e	1
Spencer (IV)	WTBIYBrI	5.0	S	S	45	39	30	5e	1
L83-3804 (L) Spry	PTTDYBlD	2.6	S	S	42	4	26	4e	1
HS89-5467	PTTDYBrI	3.0	H	S	66	21	20	3e	1
K1207	PGTIYBlI	3.4	S	S	34	9	46	1	1
K1208	WTTDYBlI	5.0	R	S	38	20	40	4e	1
K1209	WTBDYIbI	3.5	S	S	56	5	28	1	1
K1210	PTTPTTDYIb	3.5	R	S	52	10	34	3e	1
K1211	WTTDYIbI	4.1	S	S	40	9	34	3e	1
K1212	WGBSYBfI	3.4	S	S	66	8	30	1	1
K1213	PTTIYIbI	3.0	S	S	52	16	28	4m	1
K1214	WGBIYBfI	3.3	S	S	58	8	26	3e	1
LN88-7616	WGTSYBfI	4.1	R	R	54	27	14	2e	1
LN88-9123	WTBDYBrI	3.6	S	S	46	24	18	5e	1
LN88-9172	WTBDYBrI	7.0	S	S	36	23	40	4e	1
LN88-9544	WGBDYBfI	8.8	R	S	48	13	26	3e	1
LS87-1049	WTTDYBlI	8.0	R	S	52	5	38	5e	1
LS87-1116	WTTIYBlI	8.0	R	H	44	2	38	5e	1
LS87-1123	WTTDYBlI	3.8	S	S	32	4	42	5e	1
LS87-1428	WGTDYBfI	7.8	S	S	40	4	44	3e	1
LS87-1734	PTTSYBlI	5.3	H	S	58	11	30	5e	1
LS87-1922	WTTSYBrI	3.3	H	S	24	6	46	3e	1
LS87-1946	WTTDYBlI	6.0	S	S	60	13	10	2e	1
LS87-1956	WTTDYBlI	6.5	S	S	70	10	10	4e	1
LS88-240	WGTSYBfD	8.5	S	H	64	8	8	4e	1
Md88-5241	PTTSYBlI	3.3	R	S	50	14	30	3e	1
Md88-5330	PGBDYIbI	3.9	R	S	52	14	30	3e	1
S87-1021	WTTSYBlI	3.3	R	H	60	9	6	3e	1
SL89-328	PTBDYBlI	9.3	R	S	38	59	4	3e	1

PRELIMINARY TEST IVA, 1991

REGIONAL SUMMARY

No. of Tests Strain	Yield 10 bu/a	Rank 10 No.	Maturity 10 Date	Lodging 10 Score	Plant Height 10 In.	Seed Quality 10 Score	Seed Size 10 g/100	Composition Protein 5 %	 Oil 5 %
Delsoy 4210	45.0	24	4.5	1.8	38	2.2	17.0	41.1	21.2
Flyer (E)	49.2	6	-4.1	1.2	33	1.9	14.0	41.6	21.0
Spencer (IV)	48.1	13	09/20*	1.4	35	2.6	17.4	40.9	21.6
L83-3804 (L)	51.8	1	6.0	1.8	34	1.9	16.7	40.8	21.3
HS89-5467	50.3	3	-3.3	1.3	34	1.9	15.1	37.6	21.5
K1207	47.9	14	2.0	2.1	36	2.0	15.0	40.5	21.4
K1208	43.9	27	-1.2	1.2	34	2.3	15.2	40.1	21.2
K1209	47.3	15	4.0	1.7	39	2.1	16.1	41.2	20.7
K1210	48.5	10	1.4	1.4	36	2.1	14.9	41.0	21.5
K1211	45.7	19	2.9	1.4	32	2.5	17.1	41.2	21.2
K1212	51.0	2	6.2	1.5	35	1.7	13.6	39.5	21.6
K1213	50.0	4	1.6	1.7	36	1.8	14.8	40.4	21.5
K1214	45.3	22	1.8	1.8	39	2.2	16.1	41.1	21.2
LN88-7616	50.0	4	-1.5	1.7	34	1.8	16.7	40.0	20.9
LN88-9123	46.0	18	-3.8	1.6	33	2.2	16.1	39.5	22.1
LN88-9172	45.5	21	-3.8	1.4	32	2.1	16.2	39.5	22.3
LN88-9544	48.6	9	-0.4	1.4	33	1.7	14.2	39.7	21.5
LS87-1049	46.7	16	0.7	1.6	41	2.0	17.0	40.0	21.6
LS87-1116	46.3	17	0.4	1.8	44	1.9	16.0	41.0	20.8
LS87-1123	48.8	8	4.7	2.0	45	1.7	14.2	40.7	20.6
LS87-1428	44.2	25	3.3	1.6	43	1.9	13.9	39.8	21.1
LS87-1734	43.4	29	-1.1	1.3	38	1.7	15.8	41.4	20.6
LS87-1922	45.6	20	1.4	1.5	38	1.6	14.5	41.8	20.6
LS87-1946	42.3	30	7.7	1.4	45	1.8	14.1	40.9	20.8
LS87-1956	44.2	25	2.9	1.9	41	1.8	14.7	40.7	20.0
LS88-240	48.9	7	2.8	1.3	26	1.5	15.0	40.1	20.9
Md88-5241	48.5	10	2.2	1.5	35	2.0	17.0	42.4	21.0
Md88-5330	45.1	23	0.6	1.6	37	1.9	16.1	40.7	20.9
S87-1021	43.6	28	3.8	2.5	45	2.0	16.0	42.1	20.6
SL89-328	48.4	12	-4.6	1.8	35	1.9	15.7	41.2	22.0

* 128.0 Days After Planting

PRELIMINARY TEST IVA, 1991

YIELD (bu/a)

Strain	Mean 10 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO	MT. Orab OH	S.Charle-ston OH
Desoy 4210	45.0	33.2	36.4	45.9	33.7	40.3	44.5	53.6	58.3	45.8	58.2
Flyer (E)	49.2	40.9	52.2	53.1	41.1	44.8	55.3	56.1	37.9	48.9	61.7
Spencer (IV)	48.1	46.5	46.8	30.9	45.6	51.7	50.3	47.5	40.0	57.1	64.8
L83-3804 (L)	51.8	44.9	46.4	47.3	37.8	48.9	47.4	62.3	44.6	76.1	62.3
HS89-5467	50.3	43.8	48.2	55.0	45.7	42.4	51.4	53.0	34.8	71.4	57.1
K1207	47.9	40.9	50.6	44.2	45.5	48.5	53.8	54.8	46.3	49.9	44.3
K1208	43.9	36.1	44.9	32.5	47.5	42.4	49.6	51.5	34.8	48.2	51.4
K1209	47.3	29.1	45.4	56.0	45.6	43.6	51.2	50.8	56.0	44.5	51.1
K1210	48.5	36.6	51.9	43.9	47.0	47.6	48.6	57.4	47.0	62.2	42.3
K1211	45.7	29.6	40.9	45.8	49.0	46.3	49.2	51.2	47.1	50.4	47.6
K1212	51.0	44.2	42.9	54.3	45.4	44.6	51.2	58.3	57.7	60.7	50.2
K1213	50.0	41.1	49.9	41.9	48.2	46.7	50.6	59.4	49.0	56.9	56.6
K1214	45.3	41.9	38.1	40.2	39.3	48.5	50.7	49.8	44.3	57.9	42.7
LN88-7616	50.0	38.8	41.2	46.6	49.0	49.6	53.4	53.6	34.8	67.7	65.5
LN88-9123	46.0	37.6	43.0	39.2	52.1	40.9	54.2	47.2	46.3	31.8	67.4
LN88-9172	45.5	33.2	48.6	27.0	57.3	46.0	51.7	50.6	48.6	28.3	64.0
LN88-9544	48.6	34.7	47.5	44.4	61.9	46.2	51.4	41.2	49.0	52.3	57.5
LS87-1049	46.7	40.9	41.4	35.1	45.4	38.8	51.1	56.0	50.2	61.0	47.3
LS87-1116	46.3	33.4	45.0	44.5	34.8	39.9	45.8	46.2	50.1	66.0	57.3
LS87-1123	48.8	45.2	38.7	52.1	44.7	45.1	45.9	53.9	51.2	58.3	52.4
LS87-1428	44.2	46.1	41.3	34.3	35.5	44.8	44.4	43.6	53.2	53.5	44.8
LS87-1734	43.4	35.3	35.3	45.4	35.8	38.4	44.4	40.2	51.3	55.3	52.1
LS87-1922	45.6	34.8	40.6	38.3	37.8	44.3	49.4	50.0	50.9	58.7	51.4
LS87-1946	42.3	38.9	40.7	44.6	26.4	43.4	45.1	42.9	43.5	54.2	42.9
LS87-1956	44.2	43.8	37.5	36.3	37.2	40.5	49.3	47.8	49.8	45.2	54.5
LS88-240	48.9	47.3	39.6	46.2	37.4	45.0	49.3	58.6	44.3	59.8	61.2
Md88-5241	48.5	31.7	44.6	36.1	53.1	45.2	53.7	56.7	53.1	60.5	50.3
Md88-5330	45.1	38.3	38.8	29.7	40.1	44.9	48.6	48.8	53.3	0.0*	63.4
S87-1021	43.6	32.3	35.4	52.2	32.8	44.7	39.7	47.6	51.7	52.2	47.2
SL89-328	48.4	37.4	50.6	35.7	51.1	42.0	50.3	54.5	39.4	49.7	73.6
C.V. (%)		15.6	8.7	24.1	15.5	5.9	5.5	8.7	6.3	18.0	14.3
L.S.D. (5%)		12.0	7.7	21.1	11.4	3.5	5.5	8.9	6.1	19.8	16.0
Row Sp. (In.)		30	30	24	30	30	30	30	30	20	7
Rows/Plot		4	4	4	4	4	4	4	4	4	8
Reps		2	2	2	2	2	2	2	2	2	2

* Plot killed by phyto. Data not included in the mean.

PRELIMINARY TEST IVA, 1991

YIELD RANK

Strain	Yield Rank	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO	MT. Orab OH	S.Charle-ston OH
Desoy 4210	24	25	28	10	28	27	27	12	1	25	10
Flyer (E)	6	11	1	4	18	15	1	7	27	23	8
Spencer (IV)	13	2	9	28	12	1	14	24	25	13	4
L83-3804 (L)	1	5	10	7	21	3	23	1	21	1	7
HS89-5467	3	7	7	2	11	22	7	14	28	2	13
K1207	14	11	3	16	14	4	3	9	19	21	27
K1208	27	20	13	27	9	22	16	15	28	24	18
K1209	15	30	11	1	12	20	9	17	3	27	20
K1210	10	19	2	17	10	6	21	5	18	5	30
K1211	19	29	20	11	6	8	20	16	17	20	23
K1212	2	6	16	3	15	18	9	4	2	7	22
K1213	4	10	5	18	8	7	13	2	14	14	14
K1214	22	9	26	19	20	4	12	20	22	12	29
LN88-7616	4	15	19	8	6	2	5	12	28	3	3
LN88-9123	18	17	15	20	4	25	2	25	19	28	2
LN88-9172	21	25	6	30	2	10	6	18	16	29	5
LN88-9544	9	23	8	15	1	9	7	29	14	18	11
LS87-1049	16	11	17	25	15	29	11	8	11	6	24
LS87-1116	17	24	12	14	27	28	25	26	12	4	12
LS87-1123	8	4	25	6	17	12	24	11	9	11	16
LS87-1428	25	3	18	26	26	15	28	27	5	17	26
LS87-1734	29	21	30	12	25	30	28	30	8	15	17
LS87-1922	20	22	22	21	21	19	17	19	10	10	18
LS87-1946	30	14	21	13	30	21	26	28	24	16	28
LS87-1956	25	7	27	22	24	26	18	22	13	26	15
LS88-240	7	1	23	9	23	13	18	3	22	9	9
Md88-5241	10	28	14	23	3	11	4	6	6	8	21
Md88-5330	23	16	24	29	19	14	21	21	4	30*	6
S87-1021	28	27	29	5	29	17	30	23	7	19	25
SL89-328	12	18	3	24	5	24	14	10	26	22	1

* Plot killed by phyto. Data not included in the mean.

PRELIMINARY TEST IVA, 1991

MATURITY (date)

Strain	Mean 10 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO	MT. Orab OH	S.Charle-ston OH
Desoy 4210	4.5	-1	6	6	2	6	0	5	7	3	11
Flyer (E)	-4.1	-4	0	-2	-2	-5	-3	-3	-7	-6	-9
Spencer (IV)	09/20	09/30	09/08	09/15	09/26	09/12	09/26	09/30	09/20	09/15	09/22
L83-3804 (L)	6.0	2	7	10	2	12	5	7	5	5	5
HS89-5467	-3.3	-5	0	0	-4	-1	-2	-3	-7	-4	-7
K1207	2.0	-3	3	6	-1	5	3	3	1	-3	6
K1208	-1.2	-4	1	-1	1	0	-2	1	-4	-3	-1
K1209	4.0	2	4	7	2	5	3	3	5	6	3
K1210	1.4	-5	6	3	2	4	-1	2	-1	1	3
K1211	2.9	-3	4	7	5	6	1	2	5	-2	4
K1212	6.2	-2	10	9	2	10	5	4	9	9	6
K1213	1.6	-4	6	1	2	6	2	2	1	2	-2
K1214	1.8	-4	5	1	0	5	5	3	2	1	0
LN88-7616	-1.5	-5	-1	5	-2	0	-1	2	-4	-2	-7
LN88-9123	-3.8	-5	0	-4	-1	-5	-2	-3	-3	-6	-9
LN88-9172	-3.8	-6	-2	-6	-2	-5	-2	-2	1	-5	-9
LN88-9544	-0.4	-3	-3	3	2	4	-1	1	-5	-2	0
LS87-1049	0.7	-2	4	0	2	5	2	0	2	-2	-4
LS87-1116	0.4	-4	3	-1	2	4	0	1	5	-1	-5
LS87-1123	4.7	-1	8	7	5	10	2	4	7	3	2
LS87-1428	3.3	0	8	0	4	6	3	4	5	0	3
LS87-1734	-1.1	-5	3	1	-1	4	-1	-2	-1	-3	-6
LS87-1922	1.4	-1	2	2	1	5	2	1	1	0	1
LS87-1946	7.7	3	16	7	4	12	5	5	8	6	11
LS87-1956	2.9	-2	5	2	4	6	1	4	8	0	1
LS88-240	2.8	-4	5	5	-2	6	2	6	0	1	9
Md88-5241	2.2	0	4	2	3	4	2	3	0	1	3
Md88-5330	0.6	-1	-2	2	1	4	1	-1	0	--*	1
S87-1021	3.8	2	15	5	5	-14	3	4	9	2	7
SL89-328	-4.6	-3	0	-6	-2	-5	-2	-3	-8	-6	-11
Date Planted	05/15	05/22	04/30	05/08	05/29	05/16	05/30	05/22	05/22	05/03	05/02
Days to Mat.	128.0	131	131	130	120	119	119	131	121	135	143

* Plot killed by phyto. Data not included in the mean.

PRELIMINARY TEST IVA, 1991

LODGING (score)

Strain	Mean 10 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO	MT. Orab OH	S.Charle-ston OH
Desoy 4210	1.8	2.0	1.2	1.5	2.0	2.0	2.5	1.0	1.0	2.5	2.3
Flyer (E)	1.2	1.0	1.2	1.5	1.0	1.0	2.0	1.0	1.0	1.5	1.0
Spencer (IV)	1.4	1.0	1.0	1.0	1.0	2.0	2.5	1.0	1.0	2.0	1.0
L83-3804 (L)	1.8	1.4	1.2	1.3	1.0	3.0	3.5	1.0	1.0	2.4	2.0
HS89-5467	1.3	1.0	1.2	1.3	1.0	1.0	2.3	1.0	1.0	1.7	1.0
K1207	2.1	3.0	1.5	1.5	2.0	3.0	3.0	1.0	1.0	3.0	1.5
K1208	1.2	1.0	1.0	1.0	1.0	1.0	2.0	1.0	1.0	2.4	1.0
K1209	1.7	1.3	1.5	1.8	2.0	2.0	2.3	1.0	1.0	2.6	1.3
K1210	1.4	1.0	1.5	1.3	1.0	2.0	2.0	1.0	1.0	2.0	1.0
K1211	1.4	1.0	1.2	1.5	2.0	2.0	2.0	1.0	1.0	1.3	1.0
K1212	1.5	1.0	1.0	1.3	2.0	2.0	2.3	1.0	1.0	2.2	1.0
K1213	1.7	1.3	1.5	1.0	2.0	1.0	2.0	1.0	1.0	4.9	1.0
K1214	1.8	2.3	1.5	1.0	3.0	2.0	3.0	1.0	1.0	1.8	1.8
LN88-7616	1.7	1.5	1.0	2.5	1.0	2.0	2.5	1.0	1.0	2.8	1.3
LN88-9123	1.6	1.0	1.2	1.3	2.0	2.0	2.5	1.0	1.0	2.0	1.5
LN88-9172	1.4	1.1	1.2	1.0	2.0	1.0	2.3	1.0	1.0	2.3	1.5
LN88-9544	1.4	1.3	1.0	1.5	1.0	1.0	2.0	1.0	1.0	3.4	1.0
LS87-1049	1.6	1.6	1.5	1.0	2.0	2.0	2.0	1.0	1.0	2.5	1.3
LS87-1116	1.8	2.0	1.5	1.5	2.0	2.0	3.0	1.0	1.0	2.5	1.5
LS87-1123	2.0	2.3	1.2	2.3	1.0	3.0	3.3	1.0	1.0	3.6	1.5
LS87-1428	1.6	2.0	1.2	1.0	2.0	2.0	2.8	1.0	1.0	1.9	1.0
LS87-1734	1.3	1.0	1.0	1.3	1.0	2.0	2.5	1.0	1.0	1.5	1.0
LS87-1922	1.5	1.0	1.5	1.0	1.0	2.0	2.5	1.0	1.0	2.5	1.3
LS87-1946	1.4	1.8	1.0	1.0	1.0	1.0	2.5	1.0	1.0	2.5	1.0
LS87-1956	1.9	2.2	1.5	1.3	2.0	2.0	3.3	1.0	1.0	2.4	1.8
LS88-240	1.3	1.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0	1.7	1.0
Md88-5241	1.5	1.0	1.0	1.0	2.0	1.0	2.5	1.0	1.0	3.8	1.0
Md88-5330	1.6	1.2	1.5	1.0	2.0	2.0	3.3	1.0	1.0	1.0*	1.3
S87-1021	2.5	3.5	1.0	1.5	3.0	2.0	3.0	2.5	1.0	4.3	3.0
SL89-328	1.8	1.4	1.2	1.3	2.0	2.0	2.8	1.0	1.0	3.2	2.0

* Plot killed by phyto. Data not included in the mean.

PRELIMINARY TEST IVA, 1991

PLANT HEIGHT (inches)

Strain	Mean 10 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO	MT. Orab OH	S.Charle-ston OH
Desoy 4210	38	43	35	34	45	43	42	34	36	35	37
Flyer (E)	33	33	29	35	40	35	35	27	26	32	33
Spencer (IV)	35	36	31	30	45	40	38	28	29	35	37
L83-3804 (L)	34	34	34	33	39	36	37	29	24	37	34
HS89-5467	34	35	30	36	41	36	37	29	26	35	33
K1207	36	38	32	35	43	43	38	28	33	35	34
K1208	34	37	30	33	45	35	38	31	27	32	34
K1209	39	44	35	38	45	43	44	33	31	38	36
K1210	36	39	33	36	45	36	34	32	30	39	36
K1211	32	35	28	33	42	37	35	27	26	30	30
K1212	35	35	32	34	45	33	36	30	33	34	33
K1213	36	40	34	31	43	35	36	32	32	44	34
K1214	39	45	33	36	52	43	41	37	36	34	35
LN88-7616	34	34	24	34	43	39	38	30	24	41	34
LN88-9123	33	33	27	30	42	34	38	27	27	33	36
LN88-9172	32	31	28	29	41	35	34	30	28	32	34
LN88-9544	33	33	31	33	42	34	34	27	29	34	34
LS87-1049	41	44	38	36	53	39	45	34	39	43	36
LS87-1116	44	44	41	44	53	46	48	37	37	48	44
LS87-1123	45	48	41	46	55	45	46	39	40	48	42
LS87-1428	43	51	42	40	52	46	46	33	36	41	40
LS87-1734	38	44	34	41	47	41	43	31	33	31	35
LS87-1922	38	42	35	36	52	40	38	32	29	36	37
LS87-1946	45	51	43	40	52	45	45	41	39	46	43
LS87-1956	41	43	38	37	53	43	42	37	35	43	40
LS88-240	26	27	23	23	26	35	32	23	12	31	28
Md88-5241	35	37	32	32	41	37	37	31	27	40	35
Md88-5330	37	40	33	34	48	40	42	32	29	11*	36
S87-1021	45	53	45	42	50	45	44	40	35	44	47
SL89-328	35	37	26	35	45	40	39	31	27	36	38

* Plot killed by phyto. Data not included in the mean.

PRELIMINARY TEST IVA, 1991

SEED QUALITY (score)

Strain	Mean 10 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO	MT. Orab OH	S.Charle-ston OH
Desoy 4210	2.2		1.5	2.5	2.0	2.0	2.3	2.0	2.5	1.4	3.5
Flyer (E)	1.9		1.8	2.5	1.0	3.0	1.5	2.0	2.5	1.1	1.5
Spencer (IV)	2.6		1.8	3.5	2.0	2.0	2.0	2.5	3.5	2.0	4.0
L83-3804 (L)	1.9		2.0	1.0	2.0	2.0	1.5	2.0	3.0	1.1	2.5
HS89-5467	1.9		1.8	1.5	2.0	2.0	1.8	2.0	2.5	1.3	2.5
K1207	2.0		1.5	1.5	2.0	2.0	1.3	2.0	2.5	1.3	3.5
K1208	2.3		2.0	2.5	1.0	3.0	1.8	2.0	3.5	1.3	3.5
K1209	2.1		1.5	2.0	2.0	2.0	1.5	2.0	3.5	1.6	3.0
K1210	2.1		1.5	1.5	2.0	2.0	1.5	2.5	3.0	1.0	4.0
K1211	2.5		1.8	2.0	2.0	3.0	1.8	2.0	4.0	2.0	4.0
K1212	1.7		1.5	1.5	2.0	1.0	1.3	1.5	2.0	1.3	3.0
K1213	1.8		1.8	1.5	2.0	1.0	1.3	2.0	2.0	1.4	3.5
K1214	2.2		1.8	3.5	2.0	2.0	1.5	2.0	2.5	1.1	3.5
LN88-7616	1.8		1.8	1.5	2.0	1.0	2.5	2.0	2.0	1.3	2.0
LN88-9123	2.2		1.5	1.5	3.0	3.0	1.8	2.0	2.5	2.1	2.5
LN88-9172	2.1		1.8	2.0	2.0	2.0	1.5	2.5	3.0	1.9	2.5
LN88-9544	1.7		1.5	2.0	2.0	2.0	1.0	1.5	2.0	1.0	2.5
LS87-1049	2.0		2.0	1.0	3.0	3.0	1.5	1.5	2.5	1.3	2.0
LS87-1116	1.9		2.0	1.5	2.0	2.0	1.8	2.0	2.5	1.2	2.0
LS87-1123	1.7		1.8	1.5	2.0	2.0	1.3	1.5	2.0	1.3	1.5
LS87-1428	1.9		1.8	2.0	2.0	2.0	1.5	2.0	2.5	1.0	2.5
LS87-1734	1.7		1.5	1.0	2.0	2.0	1.8	1.5	2.5	1.2	1.5
LS87-1922	1.6		1.5	1.5	1.0	1.0	1.5	2.0	2.0	1.0	2.5
LS87-1946	1.8		1.5	1.5	2.0	1.0	1.0	2.0	2.0	2.3	2.5
LS87-1956	1.8		1.5	1.0	2.0	2.0	1.0	2.0	3.0	1.0	2.5
LS88-240	1.5		1.5	1.0	2.0	1.0	1.0	1.0	3.0	1.4	1.5
Md88-5241	2.0		1.8	1.0	2.0	2.0	1.5	2.0	3.0	1.0	4.0
Md88-5330	1.9		1.8	1.5	2.0	1.0	1.5	2.0	2.5	2.5*	3.0
S87-1021	2.0		2.5	1.0	3.0	2.0	1.8	2.0	2.0	1.4	2.5
SL89-328	1.9		1.8	1.0	1.0	2.0	1.5	2.5	2.5	1.4	3.0

* Plot killed by phyto. Data not included in the mean.

PRELIMINARY TEST IVA, 1991

SEED SIZE (g/100)

Strain	Mean 10 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO	MT. Orab OH	S.Charle-ston OH
Desoy 4210	17.0	17.4	15.6	18.5	14.2	17.0	15.4	20.0	18.0	15.0	18.8
Flyer (E)	14.0	14.9	11.4	17.7	15.1	12.9	14.3	15.5	11.9	11.3	14.8
Spencer (IV)	17.4	18.7	15.2	17.9	16.9	16.5	16.6	21.0	16.7	16.4	17.8
L83-3804 (L)	16.7	18.2	14.3	18.6	15.5	17.2	15.8	20.2	16.2	15.1	15.8
HS89-5467	15.1	16.3	13.3	16.2	14.6	14.8	14.8	17.8	14.2	14.2	15.0
K1207	15.0	16.0	13.2	16.6	15.0	14.6	14.9	17.2	14.6	12.8	15.3
K1208	15.2	15.6	13.5	16.4	15.0	14.6	15.5	18.5	12.9	13.0	16.8
K1209	16.1	16.4	13.6	17.4	15.4	16.3	16.0	18.4	17.2	14.1	15.7
K1210	14.9	14.7	13.9	16.3	14.8	14.4	13.4	17.6	15.8	13.5	14.4
K1211	17.1	16.3	14.3	19.4	17.7	17.7	16.6	20.0	17.1	15.0	17.3
K1212	13.6	13.5	11.5	14.5	12.3	14.0	13.3	15.9	15.0	12.2	13.9
K1213	14.8	15.4	13.4	15.8	15.0	15.1	13.6	16.1	14.7	13.3	15.6
K1214	16.1	17.1	14.7	21.2	14.9	16.2	15.6	16.8	13.9	14.3	16.1
LN88-7616	16.7	17.9	15.2	14.9	17.8	16.3	16.4	19.1	15.7	17.3	16.8
LN88-9123	16.1	16.6	14.9	16.3	17.4	15.4	17.6	19.6	14.7	12.6	15.7
LN88-9172	16.2	15.4	14.1	15.9	18.4	15.4	18.0	20.1	14.8	13.5	16.1
LN88-9544	14.2	14.3	11.2	17.1	16.2	14.2	14.0	16.1	12.4	12.7	13.4
LS87-1049	17.0	18.7	14.1	15.8	17.4	17.2	17.5	19.6	17.6	14.6	17.4
LS87-1116	16.0	16.7	12.8	18.4	15.0	15.9	15.8	18.3	16.5	14.9	15.5
LS87-1123	14.2	15.7	11.7	13.4	13.5	14.5	13.9	16.8	15.0	12.7	15.2
LS87-1428	13.9	15.0	11.8	18.6	12.7	13.3	13.1	16.3	14.9	11.2	12.5
LS87-1734	15.8	17.0	12.5	16.2	14.9	15.6	15.9	19.3	16.1	14.0	16.4
LS87-1922	14.5	16.0	12.1	14.4	13.8	14.7	14.5	17.2	14.1	13.7	14.8
LS87-1946	14.1	15.0	14.1	15.8	10.8	13.7	13.9	14.8	14.6	12.8	15.1
LS87-1956	14.7	16.0	11.5	17.8	12.1	15.1	14.1	17.7	16.4	12.4	14.2
LS88-240	15.0	15.0	13.3	17.4	12.1	15.4	14.4	16.2	16.3	14.1	15.4
Md88-5241	17.0	18.8	13.7	18.8	17.2	16.6	17.5	19.5	16.8	15.0	16.1
Md88-5330	16.1	16.7	12.6	18.3	15.4	14.6	16.5	18.7	15.8	11.3*	16.5
S87-1021	16.0	15.6	14.9	18.8	13.0	16.4	14.8	16.9	16.1	15.4	17.6
SL89-328	15.7	17.3	13.3	16.0	15.5	13.9	15.9	19.4	14.5	14.8	16.0

* Plot killed by phyto. Data not included in the mean.

PRELIMINARY TEST IVA, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Urbana IL	Vincennes IN	Manhattan KS	Queenstown MD	Mt. Orab OH
Delsoy 4210 (SCN)	41.1	40.2	41.4	41.3	42.0	40.6
Flyer (E)	41.6	40.8	43.3	40.6	42.7	40.4
Spencer (IV)	40.9	39.7	43.0	40.8	41.7	39.5
L83-3804 (L) Spry	40.8	40.2	40.2	41.4	41.3	40.7
HS89-5467	37.6	36.6	38.9	37.2	39.0	36.5
K1207	40.5	39.6	41.8	40.7	40.8	39.5
K1208	40.1	39.1	42.6	40.3	40.3	38.3
K1209	41.2	39.9	42.1	42.5	40.7	40.9
K1210	41.0	39.8	42.6	41.5	40.9	40.0
K1211	41.2	40.8	42.6	41.5	40.6	40.6
K1212	39.5	39.3	39.5	37.9	41.1	39.7
K1213	40.4	39.1	41.6	39.7	41.4	40.2
K1214	41.1	40.8	42.2	41.7	41.3	39.7
LN88-7616	40.0	38.7	42.8	40.0	40.9	37.4
LN88-9123	39.5	39.5	39.8	39.6	40.1	38.3
LN88-9172	39.5	38.5	39.5	39.8	40.9	38.9
LN88-9544	39.7	39.1	40.5	38.7	40.2	39.8
LS87-1049	40.0	38.8	42.4	40.4	40.0	38.6
LS87-1116	41.0	39.7	40.4	43.0	42.3	39.6
LS87-1123	40.7	41.1	41.7	41.0	41.0	38.9
LS87-1428	39.8	38.7	41.4	41.0	40.1	37.8
LS87-1734	41.4	40.0	43.6	41.9	42.2	39.4
LS87-1922	41.8	41.1	43.5	42.9	40.8	40.8
LS87-1946	40.9	40.8	41.0	42.0	41.3	39.3
LS87-1956	40.7	38.5	41.0	42.3	41.6	40.2
LS88-240	40.1	39.3	40.5	40.0	41.9	38.8
Md88-5241	42.4	41.5	43.0	42.6	43.6	41.5
Md88-5330	40.7	39.0	40.6	41.7	41.4	41.0
S87-1021	42.1	41.9	42.8	41.5	43.7	40.5
SL89-328	41.2	40.0	42.8	39.9	42.8	40.5

PRELIMINARY TEST IVA, 1991

OIL (%)

Strain	Mean 5 Tests	Urbana IL	Vincennes IN	Manhattan KS	Queenstown MD	Mt. Orab OH
Delsoy 4210 (SCN)	21.2	22.6	21.6	20.3	20.3	21.4
Flyer (E)	21.0	22.1	20.4	21.4	20.4	20.9
Spencer (IV)	21.6	22.2	21.5	21.4	20.7	22.1
L83-3804 (L) Spry	21.3	22.1	22.0	19.5	20.8	21.9
HS89-5467	21.5	22.5	21.4	21.1	20.4	22.3
K1207	21.4	22.5	21.1	21.2	20.6	21.6
K1208	21.2	22.2	21.0	20.6	20.1	22.1
K1209	20.7	22.1	20.6	19.5	20.2	21.1
K1210	21.5	22.4	21.4	20.7	21.2	22.0
K1211	21.2	21.9	20.9	20.6	21.1	21.4
K1212	21.6	22.1	22.4	21.7	20.3	21.5
K1213	21.5	22.4	21.7	21.6	20.6	21.3
K1214	21.2	22.1	22.0	20.3	20.2	21.4
LN88-7616	20.9	21.7	20.0	20.7	20.3	21.9
LN88-9123	22.1	22.6	22.8	21.3	21.6	22.0
LN88-9172	22.3	23.2	23.4	21.4	21.3	22.0
LN88-9544	21.5	22.2	21.4	21.8	20.7	21.3
LS87-1049	21.6	22.5	21.3	21.1	21.4	21.7
LS87-1116	20.8	22.4	21.3	18.9	20.0	21.3
LS87-1123	20.6	21.5	20.1	20.0	20.3	21.3
LS87-1428	21.1	22.7	21.4	19.5	20.4	21.3
LS87-1734	20.6	21.6	20.4	19.8	19.8	21.5
LS87-1922	20.6	21.5	20.4	19.5	20.6	21.2
LS87-1946	20.8	22.0	21.5	19.1	20.1	21.3
LS87-1956	20.0	21.2	20.5	18.6	19.4	20.2
LS88-240	20.9	22.0	20.9	20.8	19.2	21.8
Md88-5241	21.0	22.0	21.4	20.5	20.0	21.0
Md88-5330	20.9	22.4	21.8	19.9	20.0	20.6
S87-1021	20.6	21.5	20.7	20.5	19.1	21.4
SL89-328	22.0	22.1	22.0	22.8	21.0	21.9

PRELIMINARY TEST IVB, 1991

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	
L83-3804 (L) Spry	L78-8694 x L78L-449	F6	
C1827	Harper x (Williams 82 x PI 423.463)	F6	
C1841	(Spencer[2] x Pella 86) x Resnik	F5	Rps1-k
C1844	(Spencer[2] x Pella 86) x Resnik	F5	Rps1-k
C1851	Spencer[3] x Pella 86	F5	Rps1-k
C1852	Spencer[3] x Pella 86	F5	Rps1-k
Ky88-1195	Dekalb Pfizer CX415 x FFR561	F5	
Ky88-5037	Asgrow A4595 x CX415	F5	
Ky88-8033	A4595 x CX415	F5	
Pixie (dt)	Williams x Ransom	F5	dt1
HCPixie-39	Pixie[6] x Williams 82	F5	dt1
HCPixie-1836-47	Pixie[6] x L77-1836	F5	dt1
HCPixie-1836-50	Pixie[6] x L77-1836	F5	dt1
HCPixie-1836 LB	Pixie[6] x L77-1836	F5	dt1
HC85-285	HC78-353 x Sprite	F5	dt1
HC85-6571	HC78-350 x HC78-676	F5	dt1
HC86-278	Pixie x HC78-676	F5	dt1
HC86-4572	HC78-3400 x HC78-352	F5	dt1
HC86-4617	Ripley x Essex	F5	dt1
HC87-799	HC78-352 x Pixie	F5	dt1
HC87-1083	HC78-354 x Hobbit 87	F5	dt1
HC87-1891	HC78-354 x D77-5169	F5	dt1
HC87-2191	Ripley x Pixie	F5	dt1
HC87-2748	HC78-354 x Elf BC	F5	dt1
HC87-3086-7	Ripley x Essex	F5	dt1
HC87-3330	Coker 237 x HC78-676	F5	dt1
HC87-5986	Coker 237 x HC78-676	F5	dt1

PRELIMINARY TEST IVB, 1991

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	PR			Germination	PS PSB SMV			Shatter Score
		Custer Phyto. Tol.	Urbana Race 1	Ames Race 4	Lafayette %	Lafayette a %	n %	a Score	Manhattan
Flyer (E)	PTTYB1I	3.4	R	R	45	22	27	5e	1
Spencer (IV)	WTBIYBrI	3.4	S	S	45	39	30	5e	1
L83-3804 (L) Spry	PTTDYB1D	1.8	S	S	42	4	26	5e	1
C1827	WTBIYB1I	2.5	S	S	46	11	34	2e	1
C1841	WTTDYBrI	3.3	R	R	48	27	12	4e	1
C1844	WTTDYB1I	2.8	S	R	54	10	24	3e	1
C1851	PTBDYB1+BrI	2.2	R	R	40	30	32	3e	1
C1852	PTBDYBrI	2.0	R	R	60	24	16	3e	1
Ky88-1195	WTTDYB1I	3.5	R	H	60	18	12	3m	1
Ky88-5037	WTTDYB1I	3.5	S	S	52	10	16	1	1
Ky88-8033	WTTDYB1I	3.6	R	S	66	12	18	2e	1
Pixie (dt)	PTTDYB1D	5.0	R	S	60	10	20	5e	1
HCPixie-39	PTTDYB1D	3.5	S	R	58	19	18	5e	1
HCPixie-1836-47	PTTDYB1D	4.8	S	R	68	18	24	4e	1
HCPixie-1836-50	PTTDYB1D	5.3	S	R	46	21	32	5e	1
HCPixie-1836 LB	PTTDYB1D	4.4	S	R	48	15	16	5e	1
HC85-285	P+WTTIYB1D	3.8	S	S	46	20	28	5e	1
HC85-6571	PTTDYBrD	5.4	S	S	46	39	18	5e	1
HC86-278	PTTDYBrD	6.5	S	S	52	53	10	5e	1
HC86-4572	PTBDYB1D	5.1	S	S	48	40	16	5e	1
HC86-4617	WGTDYBfI	4.2	S	H	52	6	22	1	1
HC87-799	PTTDYB1D	5.1	S	S	52	12	26	5e	1
HC87-1083	WTTDYB1D	6.0	S	S	44	24	28	5e	1
HC87-1891	PTTDYB1D	4.7	R	S	8	10	70	4e	1
HC87-2191	PTTDYB1D	4.1	S	S	44	25	32	3e	1
HC87-2748	PTTDYB1D	3.6	R	S	26	16	38	3e	1
HC87-3086-7	PGTDYIbD	5.8	S	S	54	2	42	3m	1
HC87-3330	PTTDYB1D	6.5	R	S	36	28	40	4e	1
HC87-5986	P+WTBIYB1+B	6.3	R	S	46	7	32	2e	1

PRELIMINARY TEST IVB, 1991

REGIONAL SUMMARY

No. of Tests Strain	Yield 8 bu/a	Rank 8 No.	Maturity 8 Date	Lodging 8 Score	Plant Height 8 In.	Seed Quality 7 Score	Seed Size 8 g/100	Composition Protein 5 %	 Oil 5 %
Flyer (E)	52.4	8	-5.8	1.4	34	1.7	13.0	41.5	20.8
Spencer (IV)	55.9	1	09/20*	1.4	38	2.2	16.8	40.8	21.5
L83-3804 (L)	53.4	6	5.4	2.1	34	2.0	16.4	40.8	21.3
C1827	50.8	11	-1.3	1.5	35	2.0	17.9	41.2	21.4
C1841	54.8	2	-3.6	1.9	35	2.1	15.8	42.1	21.3
C1844	52.2	9	-3.3	1.4	33	1.8	14.9	39.3	21.5
C1851	53.7	4	-2.4	1.4	37	2.1	16.3	40.6	21.7
C1852	53.3	7	1.9	1.5	37	2.2	16.9	41.6	20.9
Ky88-1195	53.5	5	2.9	1.5	37	1.8	15.4	42.6	20.6
Ky88-5037	54.4	3	7.9	2.0	43	1.8	14.7	40.2	21.2
Ky88-8033	51.1	10	5.3	2.1	39	1.9	15.2	39.9	21.5
Pixie (dt)	37.9	27	-6.0	1.0	17	1.7	16.0	41.4	20.9
HCPixie-39	41.6	17	-6.0	1.0	17	1.4	15.8	41.5	20.9
HCPixie-1836 47	41.3	18	-5.1	1.0	15	1.6	16.3	40.8	21.4
HCPixie-1836 50	40.4	22	-5.3	1.2	17	1.4	16.5	41.5	21.0
HCPixie-1836 48	39.9	23	-4.1	1.2	16	1.4	16.0	41.6	20.9
HC85-285	41.3	18	-5.5	1.0	18	1.8	17.1	40.6	21.8
HC85-6571	40.9	20	-5.4	1.2	16	1.9	15.7	40.5	21.9
HC86-278	42.2	16	-8.1	1.1	17	1.7	14.5	42.1	20.7
HC86-4572	39.4	24	-6.8	1.0	15	1.6	16.2	41.4	21.4
HC86-4617	48.0	12	0.0	1.1	18	1.5	13.7	38.7	22.4
HC87-799	31.9	29	-7.1	1.0	16	1.5	16.9	43.0	20.7
HC87-1083	46.1	13	-1.8	1.0	19	1.7	16.2	39.7	22.0
HC87-1891	36.4	28	-0.4	1.2	17	1.8	19.5	42.6	21.5
HC87-2191	39.4	24	-4.6	1.0	17	1.7	16.5	42.3	20.8
HC87-2748	40.9	20	-3.9	1.2	17	1.7	16.1	41.3	22.2
HC87-3086-7	42.4	15	-4.8	1.0	20	1.6	14.7	41.1	21.4
HC87-3330	44.7	14	-5.3	1.0	19	1.8	16.3	39.4	22.0
HC87-5986	38.9	26	-2.0	1.0	18	1.8	15.0	40.2	21.1

* 129.3 Days After Planting

PRELIMINARY TEST IVB, 1991

YIELD (bu/a)

Strain	Mean 8 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	MT. Orab OH	S.Charle-ston OH
Flyer (E)	52.4	37.7	48.4	35.4	55.0	48.5	55.7	60.7	78.0
Spencer (IV)	55.9	53.5	46.5	47.4	51.4	56.0	59.8	66.2	66.0
L83-3804 (L)	53.4	38.3	45.9	48.3	48.6	52.2	56.2	62.0	75.6
C1827	50.8	48.1	42.1	33.2	47.0	50.1	57.7	54.1	74.3
C1841	54.8	37.5	45.0	45.9	57.4	46.3	62.7	69.8	73.8
C1844	52.2	47.0	46.5	28.6	60.0	49.1	58.4	55.3	72.8
C1851	53.7	46.3	44.3	47.3	48.2	55.0	57.3	54.4	76.8
C1852	53.3	48.9	45.0	23.8	44.3	55.4	59.8	71.2	77.7
Ky88-1195	53.5	44.6	44.4	41.1	46.0	54.3	55.6	69.0	72.8
Ky88-5037	54.4	42.8	46.3	56.1	44.3	53.9	55.6	62.8	73.2
Ky88-8033	51.1	43.7	42.2	34.6	51.3	51.6	53.3	58.8	73.3
Pixie (dt)	37.9	22.7	48.1	10.0	27.7	44.2	38.0	47.2	65.1
HCPixie-39	41.6	32.4	41.1	19.9	37.3	44.2	44.8	44.3	68.4
HCPixie-1836	41.3	29.9	44.8	11.8	37.4	51.9	41.0	43.4	70.3
HCPixie-1836	40.4	26.3	45.9	4.6	38.4	49.2	42.1	38.8	77.7
HCPixie-1836	39.9	28.2	48.8	7.0	35.8	49.7	36.8	40.3	72.2
HC85-285	41.3	31.9	48.2	10.1	37.5	40.6	43.7	48.3	70.2
HC85-6571	40.9	22.5	49.3	10.2	36.4	50.2	46.6	32.8	79.3
HC86-278	42.2	29.5	46.7	11.6	35.0	47.7	49.3	46.3	71.6
HC86-4572	39.4	20.3	42.7	18.4	40.5	42.7	40.3	41.1	68.8
HC86-4617	48.0	32.1	45.1	31.5	36.3	50.2	42.2	75.0	71.2
HC87-799	31.9	24.2	36.7	4.7	24.3	42.5	37.1	29.2	56.3
HC87-1083	46.1	38.2	45.2	23.6	38.0	50.3	45.7	52.3	75.8
HC87-1891	36.4	24.9	38.8	5.3	27.0	52.3	33.9	53.2	55.8
HC87-2191	39.4	27.5	47.7	15.0	34.0	44.0	44.7	40.0	62.6
HC87-2748	40.9	24.3	45.4	22.4	35.0	48.1	44.5	37.7	70.1
HC87-3086-7	42.4	22.3	40.8	17.1	40.1	41.9	43.6	54.8	78.4
HC87-3330	44.7	41.3	50.0	17.9	42.0	48.2	41.7	34.8	81.4
HC87-5986	38.9	28.5	44.7	8.8	28.5	51.9	41.7	36.7	70.4
C.V. (%)		18.4	6.4	42.8	13.0	8.1	4.7	23.2	5.7
L.S.D. (5%)		13.3	5.9	21.2	9.7	5.2	4.7	25.2	8.3
Row Sp. (In.)		30	30	24	30	30	30	20	7
Rows/Plot		4	4	4	4	4	4	4	8
Reps		2	2	2	2	2	2	2	2

PRELIMINARY TEST IVB, 1991

YIELD RANK

Strain	Yield Rank	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	MT. Orab OH	S.Charle-ston OH
Flyer (E)	8	12	4	7	3	18	8	8	4
Spencer (IV)	1	1	9	3	4	1	2	5	25
L83-3804 (L)	6	10	12	2	6	7	7	7	9
C1827	11	3	25	9	8	14	5	13	10
C1841	2	13	17	5	2	22	1	3	11
C1844	9	4	9	11	1	17	4	10	14
C1851	4	5	22	4	7	3	6	12	7
C1852	7	2	17	12	10	2	2	2	5
Ky88-1195	5	6	21	6	9	4	9	4	14
Ky88-5037	3	8	11	1	10	5	9	6	13
Ky88-8033	10	7	24	8	5	10	11	9	12
Pixie (dt)	27	26	6	24	27	23	26	17	26
HCPixie-39	17	14	26	15	19	23	15	19	24
HCPixie-1836	18	17	19	20	18	8	24	20	20
HCPixie-1836	22	22	12	29	15	16	21	24	5
HCPixie-1836	23	20	3	26	22	15	28	22	16
HC85-285	18	16	5	23	17	29	18	16	21
HC85-6571	20	27	2	22	20	12	13	28	2
HC86-278	16	18	8	21	23	21	12	18	17
HC86-4572	24	29	23	16	13	26	25	21	23
HC86-4617	12	15	16	10	21	12	20	1	18
HC87-799	29	25	29	28	29	27	27	29	28
HC87-1083	13	11	15	13	16	11	14	15	8
HC87-1891	28	23	28	27	28	6	29	14	29
HC87-2191	24	21	7	19	25	25	16	23	27
HC87-2748	20	24	14	14	23	20	17	25	22
HC87-3086-7	15	28	27	18	14	28	19	11	3
HC87-3330	14	9	1	17	12	19	22	27	1
HC87-5986	26	19	20	25	26	8	22	26	19

PRELIMINARY TEST IVB, 1991

MATURITY (date)

Strain	Mean 8 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	MT. Orab OH	S.Charle-ston OH
Flyer (E)	-5.8	-5	-1	-8	-5	-10	-4	-4	-9
Spencer (IV)	09/20	09/30	09/07	09/15	09/30	09/17	09/28	09/12	09/21
L83-3804 (L)	5.4	1	8	5	2	7	5	5	10
C1827	-1.3	-2	-2	2	-3	0	-3	0	-2
C1841	-3.6	-5	1	-4	-2	-9	-4	-1	-5
C1844	-3.3	-4	-3	-5	0	-7	-3	0	-4
C1851	-2.4	-3	-3	0	-2	-5	-1	-1	-4
C1852	1.9	2	2	0	1	4	0	5	1
Ky88-1195	2.9	1	5	2	3	1	3	5	3
Ky88-5037	7.9	2	7	8	6	11	7	10	12
Ky88-8033	5.3	1	3	4	3	11	3	7	10
Pixie (dt)	-6.0	-7	-3	-5	-1	-14	-4	-5	-9
HCPixie-39	-6.0	-7	-3	-4	-4	-14	-2	-5	-9
HCPixie-1836	-5.1	-7	-3	-4	0	-11	-3	-4	-9
HCPixie-1836	-5.3	-7	-3	-6	1	-9	-4	-5	-9
HCPixie-1836	-4.1	-6	-1	-3	-1	-11	-3	-3	-5
HC85-285	-5.5	-5	-2	-2	0	-14	-5	-6	-10
HC85-6571	-5.4	-6	-2	-4	0	-12	-4	-9	-6
HC86-278	-8.1	-6	-3	-5	-3	-14	-10	-7	-17
HC86-4572	-6.8	-6	0	-6	-2	-14	-6	-7	-13
HC86-4617	0.0	-1	6	-3	-3	-3	-3	4	3
HC87-799	-7.1	-7	-4	-7	0	-14	-7	-8	-10
HC87-1083	-1.8	-5	0	-2	4	-9	0	-2	0
HC87-1891	-0.4	-2	0	-1	5	-4	1	-1	-1
HC87-2191	-4.6	-5	-1	-3	0	-13	-10	-4	-1
HC87-2748	-3.9	-5	-2	-4	1	-13	-2	-4	-2
HC87-3086-7	-4.8	-6	0	-3	0	-9	-10	-7	-3
HC87-3330	-5.3	-6	2	-4	-2	-12	-5	-7	-8
HC87-5986	-2.0	-7	0	-3	2	-7	2	-4	1
Date Planted	05/13	05/22	04/30	05/08	05/29	05/16	05/30	05/03	05/02
Days to Mat.	129.3	131	130	130	124	124	121	132	142

PRELIMINARY TEST IVB, 1991

LODGING (score)

Strain	Mean 8 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	MT. Orab OH	S.Charle-ston OH
Flyer (E)	1.4	1.0	1.0	1.0	1.0	2.0	2.3	1.6	1.0
Spencer (IV)	1.4	1.0	1.2	1.0	1.0	2.0	2.0	2.1	1.0
L83-3804 (L)	2.1	1.3	1.2	1.3	1.0	3.0	3.5	2.4	2.8
C1827	1.5	1.0	1.0	1.0	1.0	2.0	2.3	2.3	1.2
C1841	1.9	1.3	1.0	1.5	1.5	3.0	2.5	2.5	1.8
C1844	1.4	1.0	1.0	1.0	1.5	2.0	2.0	1.5	1.2
C1851	1.4	1.0	1.0	1.3	1.0	1.0	2.5	2.2	1.2
C1852	1.5	1.0	1.0	1.0	1.0	2.0	2.8	1.6	1.5
Ky88-1195	1.5	1.0	1.2	1.0	1.5	2.0	2.0	2.0	1.2
Ky88-5037	2.0	1.2	1.5	1.3	2.0	2.0	2.5	3.0	2.2
Ky88-8033	2.1	1.0	1.5	1.0	1.5	3.0	3.0	3.0	2.5
Pixie (dt)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0
HCPixie-39	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HCPixie-1836	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HCPixie-1836	1.2	1.0	1.0	1.0	1.0	2.0	1.0	1.2	1.0
HCPixie-1836	1.2	1.0	1.0	1.0	1.0	2.0	1.0	1.3	1.0
HC85-285	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0
HC85-6571	1.2	1.0	1.0	1.0	1.0	2.0	1.0	1.3	1.0
HC86-278	1.1	1.0	1.0	1.0	1.0	2.0	1.0	1.1	1.0
HC86-4572	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0
HC86-4617	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.4	1.0
HC87-799	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC87-1083	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0
HC87-1891	1.2	1.0	1.0	1.0	1.0	2.0	1.0	1.2	1.0
HC87-2191	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0
HC87-2748	1.2	1.0	1.0	1.0	1.0	2.0	1.0	1.3	1.0
HC87-3086-7	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0
HC87-3330	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0
HC87-5986	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.0

PRELIMINARY TEST IVB, 1991

PLANT HEIGHT (inches)

Strain	Mean 8 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	MT. Orab OH	S.Charle-ston OH
Flyer (E)	34	34	30	29	37	34	36	34	36
Spencer (IV)	38	38	36	33	40	40	41	38	38
L83-3804 (L)	34	31	35	29	34	34	34	36	36
C1827	35	38	29	30	37	39	37	34	36
C1841	35	35	31	33	42	37	38	25	37
C1844	33	33	24	27	39	39	37	35	32
C1851	37	36	29	31	41	39	39	38	39
C1852	37	37	30	29	41	40	40	37	40
Ky88-1195	37	38	33	31	40	39	38	38	36
Ky88-5037	43	43	34	40	50	45	43	46	41
Ky88-8033	39	39	31	34	45	44	41	40	39
Pixie (dt)	17	16	21	14	12	22	13	19	18
HCPixie-39	17	15	20	14	13	22	14	18	18
HCPixie-1836	15	15	17	14	14	20	10	15	18
HCPixie-1836	17	17	21	16	14	18	11	21	20
HCPixie-1836	16	16	20	11	12	21	11	18	20
HC85-285	18	18	22	15	15	22	13	20	21
HC85-6571	16	15	19	12	15	21	14	15	18
HC86-278	17	14	21	13	13	22	12	16	22
HC86-4572	15	15	18	11	11	18	12	17	20
HC86-4617	18	19	19	16	13	19	18	21	22
HC87-799	16	15	19	12	14	22	11	15	18
HC87-1083	19	18	22	15	15	23	15	20	22
HC87-1891	17	15	19	11	16	24	11	19	22
HC87-2191	17	18	20	14	15	22	14	16	18
HC87-2748	17	16	21	14	14	23	13	15	18
HC87-3086-7	20	18	23	14	16	25	18	24	24
HC87-3330	19	21	23	17	13	25	12	19	23
HC87-5986	18	14	22	12	16	24	15	17	20

PRELIMINARY TEST IVB, 1991

SEED QUALITY (score)

Strain	Mean 7 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	MT. Orab OH	S.Charle-ston OH
Flyer (E)	1.7		1.8	2.0	2.0	2.0	1.0	1.4	2.0
Spencer (IV)	2.2		2.0	2.5	2.0	3.0	1.0	1.7	3.5
L83-3804 (L)	2.0		1.5	1.5	2.0	3.0	1.5	1.2	3.5
C1827	2.0		1.4	2.0	2.0	3.0	1.8	1.1	3.0
C1841	2.1		1.5	2.5	2.0	2.0	1.8	1.2	3.5
C1844	1.8		1.5	2.0	2.0	2.0	1.5	1.3	2.0
C1851	2.1		1.5	2.0	2.0	2.0	1.8	1.7	3.5
C1852	2.2		1.8	2.5	2.0	2.0	1.5	2.1	3.5
Ky88-1195	1.8		1.8	2.5	2.0	2.0	1.0	1.3	2.0
Ky88-5037	1.8		2.0	1.5	1.0	2.0	1.5	1.9	3.0
Ky88-8033	1.9		1.4	2.5	2.0	2.0	1.5	1.2	3.0
Pixie (dt)	1.7		1.4	1.5	2.0	3.0	1.8	1.0	1.0
HCPixie-39	1.4		1.2	2.0	2.0	1.0	1.5	1.1	1.0
HCPixie-1836	1.6		1.2	1.5	2.0	2.0	2.0	1.2	1.0
HCPixie-1836	1.4		1.2	2.0	2.0	1.0	1.5	1.1	1.0
HCPixie-1836	1.4		1.2	1.0	2.0	2.0	1.8	1.1	1.0
HC85-285	1.8		1.2	2.0	2.0	3.0	1.8	1.1	1.5
HC85-6571	1.9		2.0	2.0	2.0	2.0	1.8	1.3	2.0
HC86-278	1.7		1.8	1.5	2.0	2.0	1.8	1.2	1.5
HC86-4572	1.6		1.8	2.0	2.0	2.0	1.5	1.1	1.0
HC86-4617	1.5		2.3	1.0	2.0	1.0	1.8	1.1	1.5
HC87-799	1.5		1.4	1.0	2.0	2.0	1.5	1.2	1.5
HC87-1083	1.7		1.5	2.0	2.0	2.0	1.5	1.1	1.5
HC87-1891	1.8		1.4	2.0	2.0	2.0	1.8	1.4	2.0
HC87-2191	1.7		1.5	2.0	2.0	2.0	1.5	1.2	1.5
HC87-2748	1.7		1.5	2.0	2.0	2.0	1.5	1.1	1.5
HC87-3086-7	1.6		1.5	2.5	2.0	1.0	2.0	1.1	1.0
HC87-3330	1.8		1.6	2.0	2.0	2.0	2.3	1.6	1.0
HC87-5986	1.8		1.4	2.0	3.0	2.0	1.3	1.5	1.5

PRELIMINARY TEST IVB, 1991

SEED SIZE (g/100)

Strain	Mean 8 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	MT. Orab OH	S.Charle-ston OH
Flyer (E)	13.0	13.9	11.6	11.7	14.7	12.2	14.4	12.7	13.2
Spencer (IV)	16.8	17.7	14.9	15.9	18.4	16.4	17.1	16.7	17.0
L83-3804 (L)	16.4	17.6	15.3	16.9	15.6	15.9	17.6	15.6	16.9
C1827	17.9	18.0	15.1	21.1	16.9	18.4	18.4	17.5	17.8
C1841	15.8	16.2	14.4	15.8	17.6	14.2	17.2	15.0	16.0
C1844	14.9	14.5	12.9	14.8	16.0	16.1	15.4	14.5	14.6
C1851	16.3	17.3	14.4	15.4	15.9	17.1	16.7	16.9	16.6
C1852	16.9	18.4	14.4	17.6	18.3	15.8	17.2	16.8	16.9
Ky88-1195	15.4	16.6	13.8	14.6	14.5	17.3	15.8	15.2	15.5
Ky88-5037	14.7	14.7	14.2	15.9	13.6	15.5	14.9	14.7	14.3
Ky88-8033	15.2	15.8	14.1	16.9	14.4	15.3	15.6	14.3	15.4
Pixie (dt)	16.0	16.5	14.5	17.6	18.5	14.3	15.4	15.3	15.7
HCPixie-39	15.8	15.4	14.9	17.7	18.7	14.2	15.7	14.4	15.3
HCPixie-1836	16.3	16.6	14.4	17.2	19.9	14.0	17.0	15.2	15.9
HCPixie-1836	16.5	16.7	15.1	16.4	19.6	15.9	17.0	14.4	16.5
HCPixie-1836	16.0	16.3	14.7	16.7	17.8	15.8	15.4	14.7	16.5
HC85-285	17.1	17.8	16.3	16.8	20.6	16.2	16.6	15.3	17.4
HC85-6571	15.7	16.2	15.3	17.2	15.5	14.5	16.0	13.8	17.2
HC86-278	14.5	15.0	14.3	16.7	16.9	12.5	13.3	13.2	14.2
HC86-4572	16.2	16.2	15.3	17.8	17.4	15.4	15.8	14.3	17.0
HC86-4617	13.7	14.4	12.5	14.5	14.5	12.1	14.2	13.3	13.7
HC87-799	16.9	17.2	14.4	16.8	20.8	15.3	18.0	14.9	17.6
HC87-1083	16.2	15.8	14.3	18.3	17.3	15.3	16.0	15.1	17.2
HC87-1891	19.5	20.3	15.7	19.8	23.1	18.1	21.2	18.0	19.8
HC87-2191	16.5	16.7	14.8	18.7	19.5	14.2	16.2	14.1	17.8
HC87-2748	16.1	16.4	14.8	17.2	19.6	13.8	16.1	14.6	16.2
HC87-3086-7	14.7	15.8	14.9	15.5	17.0	12.6	13.6	12.9	14.9
HC87-3330	16.3	17.7	15.1	16.6	17.4	14.8	15.8	15.4	17.2
HC87-5986	15.0	14.1	12.9	16.8	17.4	14.1	15.9	14.3	14.7

PRELIMINARY TEST IVB, 1991

PROTEIN (%)

Strain	Mean 5 Tests	Urbana IL	Vincennes IN	Manhattan KS	Queenstown MD	Mt. Orab OH
Flyer (E)	41.5	41.5	43.4	40.2	42.2	40.3
Spencer (IV)	40.8	40.4	43.1	39.8	40.8	39.7
L83-3804 (L) Spry	40.8	41.1	41.6	40.2	40.7	40.4
C1827	41.2	39.5	43.7	41.7	41.4	39.8
C1841	42.1	41.6	45.1	40.6	41.8	41.5
C1844	39.3	38.1	41.4	38.5	40.3	38.0
C1851	40.6	40.0	43.1	39.8	40.5	39.6
C1852	41.6	40.5	44.3	40.4	41.8	41.0
Ky88-1195	42.6	41.8	44.0	43.0	42.7	41.3
Ky88-5037	40.2	40.1	41.6	40.1	39.9	39.2
Ky88-8033	39.9	38.6	41.7	40.3	39.9	38.8
Pixie (dt)	41.4	39.7	42.9	40.5	42.5	41.3
HCPixie-39	41.5	40.7	44.1	41.0	41.8	39.7
HCPixie-1836-47	40.8	39.2	43.1	40.9	40.8	40.0
HCPixie-1836-50	41.5	40.1	44.3	41.1	41.8	40.1
HCPixie-1836 LB	41.6	40.1	44.6	41.8	42.2	39.2
HC85-285	40.6	38.8	43.4	39.8	40.9	40.1
HC85-6571	40.5	39.3	42.8	40.8	40.3	39.4
HC86-278	42.1	40.6	44.8	41.9	41.4	41.7
HC86-4572	41.4	40.8	44.4	40.7	41.1	39.9
HC86-4617	38.7	37.3	41.1	38.0	39.6	37.3
HC87-799	43.0	42.2	44.9	41.9	43.6	42.5
HC87-1083	39.7	38.2	41.7	39.0	39.9	39.8
HC87-1891	42.6	40.7	44.0	43.3	43.0	42.0
HC87-2191	42.3	41.1	45.2	42.1	41.8	41.1
HC87-2748	41.3	39.9	42.7	41.4	41.3	41.1
HC87-3086-7	41.1	39.8	44.5	40.4	41.2	39.7
HC87-3330	39.4	38.0	42.0	39.7	39.5	38.0
HC87-5986	40.2	39.4	41.1	41.3	40.2	38.8

PRELIMINARY TEST IVB, 1991

OIL (%)

Strain	Mean 5 Tests	Urbana IL	Vincennes IN	Manhattan KS	Queenstown MD	Mt. Orab OH
Flyer (E)	20.8	20.9	20.1	21.7	20.1	21.1
Spencer (IV)	21.5	21.5	21.2	22.2	20.8	21.9
L83-3804 (L) Spry	21.3	21.5	20.9	21.0	21.6	21.7
C1827	21.4	21.8	20.7	21.5	20.9	22.0
C1841	21.3	21.0	20.9	22.3	21.3	21.2
C1844	21.5	21.5	21.8	22.1	20.1	22.1
C1851	21.7	21.6	21.2	22.4	20.9	22.2
C1852	20.9	20.5	20.6	21.9	20.4	21.3
Ky88-1195	20.6	20.3	21.0	20.4	20.2	21.1
Ky88-5037	21.2	21.4	21.5	20.9	20.7	21.5
Ky88-8033	21.5	22.0	21.5	21.5	20.7	21.9
Pixie (dt)	20.9	21.4	21.5	21.1	19.9	20.5
HCPixie-39	20.9	21.1	21.1	21.1	20.4	21.0
HCPixie-1836-47	21.4	22.2	21.6	21.1	21.1	21.1
HCPixie-1836-50	21.0	21.9	20.9	20.8	20.6	20.9
HCPixie-1836 LB	20.9	21.7	20.7	20.6	20.2	21.5
HC85-285	21.8	22.5	21.4	21.8	21.5	21.6
HC85-6571	21.9	22.4	22.0	21.4	21.6	22.0
HC86-278	20.7	21.4	20.3	20.5	20.6	20.7
HC86-4572	21.4	21.8	20.9	21.0	21.4	22.0
HC86-4617	22.4	22.8	22.4	22.5	21.7	22.7
HC87-799	20.7	21.0	20.4	20.8	20.3	20.9
HC87-1083	22.0	22.4	21.7	21.8	21.9	22.3
HC87-1891	21.5	22.4	20.5	21.1	21.8	21.9
HC87-2191	20.8	21.4	19.9	20.6	21.0	20.9
HC87-2748	22.2	22.9	22.0	21.9	21.8	22.4
HC87-3086-7	21.4	22.2	20.4	21.3	21.6	21.5
HC87-3330	22.0	22.7	21.9	21.8	21.4	22.0
HC87-5986	21.1	21.5	21.7	20.3	20.4	21.5