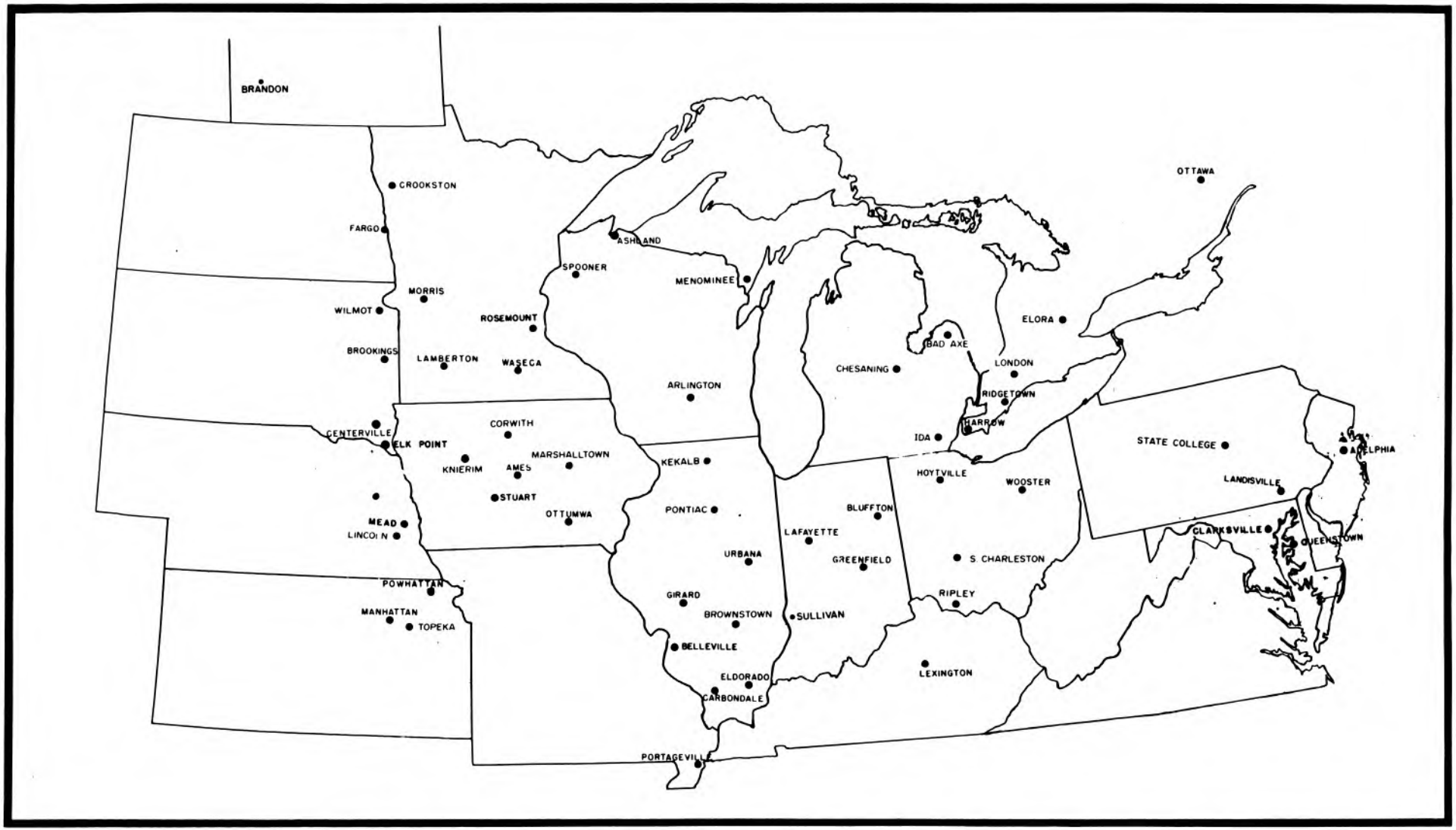

LOCATIONS OF UNIFORM SOYBEAN TESTS, NORTHERN STATES, 1983

THE UNIFORM SOYBEAN TESTS

NORTHERN STATES

1990

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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 Statements or data in the report, therefore, should not be published unless permission has been obtained previously by those concerned.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 not 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, 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. 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 and one later "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)	Sibley (I)
I	Sibley	-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)	Pennyrile (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^{o}), 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 Northern Regional Research Center, 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-dectrose 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 four 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. 301-344-2725). 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 1990

Variety	Exp. Desig.	Uniform Test Evaluations
A20*	A87-195034	SCN I 1988, SCN IA 1989-1990, UT I 1989
Archer	ABSR 101 BC	UT I 1989, UT II 1990
Chapman	HM8625	PT IIB 1987, UT III 1988, UT II 1989-1990
Edison	HM8597	PT IIIB 1987, UT III 1988-1990
Kasota	M82-106	PT I 1986, UT I 1987-1989
Newton	A87-195032	SCN IIA 1988-1990, UT II 1989

* Germplasm release

Variety	Release Date	Releasing States	Found. Seed Production
A20*	August 15, 1990	IA	-
Archer	August 15. 1990	IL, IN, MI, MN, OH	1990
Chapman	September 1, 1990	IL, IN, NE, OH	1990
Edison	September 1, 1990	IL, IN, KS, MD, MO, NE, OH	1990
Kasota	February 15, 1990	MN, SD	1989
Newton	August 15, 1990	IA	1990

* Germplasm release

UNIFORM TEST LOCATIONS - 1990

Location		Tests Conducted By:	Uniform Tests						Preliminary Tests			
			00	0	I	II	III	IV	I	II	III	IV
DE	Georgetown	B. Uniatowski					X	X		X		
	Middeltown						X	X				
IA	Ames	W.R. Fehr				X				X		
	Green	W.R. Fehr			X							
	Halbur	W.R. Fehr				X						
	Kanawha	W.R. Fehr			X1				X1			
	Marshalltown	W.R. Fehr				X1				X1		
	Royal	W.R. Fehr			X				X			
	Fairfield	W.R. Fehr					X				X	
	Tingley	W.R. Fehr					X					
	Winterset	W.R. Fehr					X1				X1	
IL	Belleville	M. Schmidt						X				X
	Carbondale	M. Schmidt						X				
	Dekalb	C.D. Nickell				X						
	Gibson City	C.D. Nickell				X						
	Ridgway	C.D. Nickell					X1	X1				
	Urbana	C.D. Nickell				X1	X1	X1		X1	X1	X1
IN	Bluffton	J.R. Wilcox				X	X					
	Lafayette	J.R. Wilcox			X	X1	X1	X		X1	X1	
	Vincennes	J.R. Wilcox					X	X				X
KS	Manhattan	W.T. Schapaugh					X	X			X	X
	Topeka	W.T. Schapaugh					X	X				
	Powhattan	W.T. Schapaugh					X	X				
KY	Lexington	T. Pfeiffer					X	X1				X1
MAN	Brandon	H. Voldeng	X									
MD	Queenstown	W.J. Kenworthy & P.B. Creegan					X	X1				X1
MI	Birch Run	C. H. Sneller			X							
	Britton	C. H. Sneller				X						
	E. Lansing	C. H. Sneller			X	X			X	X		
MN	Crookston	J.H. Orf	X1									
	Lamberton	J.H. Orf			X1	X			X1			
	Moorhead	J.H. Orf	X1									
	Morris	J.H. Orf		X1								
	Rosemount	J.H. Orf		X1								
	Shelly	J.H. Orf	X									
	Waseca	J.H. Orf			X1	X			X1			
MO	Columbia	H. Minor					X	X			X	X
	Portageville(Loam)	S.C. Anand						X				X

UNIFORM TEST LOCATIONS - 1990

Location		Tests Conducted By:	Uniform Tests 00	0	I	II	III	IV	Preliminary Tests I	II	III	IV
NE	Concord	L. Korte			X	X				X		
	Falls City	&G. Graef					X				X	
	Holbrook	L. Korte					X					
	Oconto	&G. Graef			X	X1						
	O'Neill	L. Korte				X				X1		
	Tekamah	&G. Graef					X				X	
NJ	Adelphia	J.R. Justin				X	X	X		X		
ND	Casselton	T. Helms	X1	X1								
OH	Hoytville	B.A. McBlain				X1	X1			X1	X1	
	Mt. Orab	S. St. Martin					X	X1				X1
	S. Charleston	R.L. Cooper					X	X			X	X
	Wooster	B.A. McBlain				X	X					
ONT	Elora	P. Gostovic	X1									
	Inwood	G.R. Ablett										
	London	P. Gostovic			X							
	Malden	R.I. Buzzell					X					
	Ottawa	H.D. Voldeng	X	X								
	Ridgetown	G.R. Ablett				X				X		
	Woodstock	P. Gostovic		X1								
PA	Landisville	J.O. Yocum					X	X				
TX	Lubbock	R.D. Brigham						X				
SD	Brookings	J.J. Bonneman			X1	X			X1			
	Centerville	J.J. Bonneman				X				X		
	Elk Point	J.J. Bonneman					X					
	Wilmot	J.J. Bonneman		X	X							
WI	Arlington	E.T. Gritton			X1	X			X1	X		
	Ashland	E.T. Gritton	X									
	Spooner	E.T. Gritton		X1								
VA	Orange	G.R. Buss D.E. Starner						X				
X	Location with Agronomic Data		8	7	14	22	25	19	7	13	10	10
X1	Location With Seed Compostion Data		5	5	5	5	5	5	5	5	4	4

1990 DISEASE, SHATTERING, AND DESCRIPTIVE DATA

Location		Tests Conducted By:	Tests	U.T.	P.T.
IA	Ames	J. Dunleavy	BTS	00-IV	
	Ames	W. R. Fehr	Iron Chlorosis	00-III	I-III
	Ames	W. R. Fehr	Emergence	00-IV	
	Ames	R. Ruff	BSR	I-III	I-III
	Ames	R. Ruff	PR Innoc. Race 4	I-III	I-III
IL	Urbana	C. D. Nickell	Bacterial Blight	II-IV	II-IV
			PR Innoc. Race 1	00-IV	I-IV
	Ridgway		SDS	III-IV	
IN	Lafayette	T. S. Abney & T. L. Richards	PS, PSB	00-IV	I-IV
		J.R. Wilcox	PR Innoc. Race 7	00-IV	I IV
KS	Manhattan	W. T. Schapaugh, Jr.	Shattering	00-IV	I-IV
MN	Lamberton	J. H. Orf	Iron Chlorosis	00-IV	
OH	Vickery	Schmitthenner	Phyto. Tolerance	II-IV	II-IV
TX	Lubbock	R. D. Brigham	Shattering	IV	
VA	Orange	D. E. Starner & G. R. Buss	PS	IV	

IDENTIFICATION OF PARENT STRAINS, 1990

Strain	Parentage
A1	Anoka x Mack
A8	A75-332035 x Century
A55-5629	Roanoke x Hawkeye
A72-507	Amsoy x Wayne
A73-19084	IVR Ex5003 x Wells
A73D22	Amsoy x L61-344
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
A76-304005	AP6
A76-304020	(Beeson x AP68-1016) x (L15 x Calland)
A77-211021	Beeson x A72-507
A78-121014	Pride B216 x Hodgson
A78-123018	Pride B216 x Hodgson
A79-136012	Pride B216 x Land O' Lakes 4102
A79-236002	Pride B216 x Cumberland
A79-331022	AX913-5 x Oakland
A79-344010	Pride B216 x Land O' Lakes 4102
A80-147002	Northrup King S1492 x Pella
A80-147003	Northrup King S1492 x Pella
A80-244003	Northrup King S1492 x Pella
A80-244035	(Corsoy x Wayne) x Pella
A80-244036	A74-204034 x Cumberland
A80-344003	A75-332035 x Century
A80-345005	Northrup King S1492 x A75-204018
A80-346029	A75-204018 x BSR 301
A81-151026	A75-204018 x Century
A81-156027	A76-202015 x A76-304020
A82-161034	A76-103002 x A77-211021
A82-161035	Pride B216 x A77-211021
A82-267015	AP6MTW 2YT (F4) C2
A83-271027	Northrup King S1492 x Asgrow A3127
A85-144015	Sel. from AP9 Fe (S1) C7
A85-394009	A79-331022 x A79-344010
Agripro AP200	CX407BC7-255 x Swift
AP6	40 lines intermated (Crop Sci.15:739, 1975)
AP9	Unknown
AP68-1016	Clark (5) x PI 84.946-2
Asgrow A1564	Hark x C1453
Asgrow A1937	Hodgson 78 x Wayne
Asgrow A2943	Asgrow A1564 x Asgrow A3127
Asgrow A3127	Williams x Essex
Asgrow A3659	Williams x Essex
Asgrow A4268	Williams x Essex
AX913-5	L15 x AP68-1016
BD22115	(Amsoy x Portage)F1 x (Holmberg) 840-7-3
BK-17-1-4	Unknown
C1079	Lincoln x Ogden
C1253	Blackhawk x Harosoy

IDENTIFICATION OF PARENT STRAINS, 1990

Strain	Parentage
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
C1640	Century M2 fan (low 18:3)
C1641	Hodgson x Union
C1643	Weber x L69U37-17-5
C1651	A75-305022 x Century
C1655	Hobbit x Century
C1664	A75-305022 x Century
C1665	Nebsoy x A75-305022
C1671	Hobbit x K1048
C1676	Hobbit x Lakota
C1680	Hobbit x Amcor
Coker 237	Hutton x N63-858
CX407BC7-255	Amsoy(8) L2 Rps1 x C1253
CX456-90	Amsoy x PI 219.782
CX663-37-2-2-1-6	L72-844c-1 x CX456-90
CX773-28-3-4	A73D22 x Essex
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
GL2634	Unknown
HC74-634RE	Williams x Ransom
HC76-4030	L72U-2567 x Essex
HC78-279	L72U-2567 x Essex
HC78-350	L72U-2567 x Essex
HC78-353	L72U-2567 x Essex
HC78-354	L72U-2567 x Essex
HC78-676	L70T-543G x L74D-619
HC78-2836	L72U-2567 x Essex
HC79-478	L70T-543G x L74D-619
HW74-3400	Williams x Ransom
HW8028	A75-105021 x Century
HW8039	Weber x Pella
HW8123	A76-20215 x A76-304005
HW79022	Woodworth x L60-347-1-60-2B
HW79116	Cumberland x Pella
HW79149	[A72-507 (6) x A1] x [A72-507 (5) x PI 82.263-21]
IVR Ex4731	Amsoy x Wayne
IVR Ex5003	Provar x (Amsoy x PI 191.110-1)
J74-5	Forrest x (D68-18 x PI 88.788)
Jacques J102A	Corsoy x PI 88.029
Jacques J103	Clay x Williams

IDENTIFICATION OF PARENT STRAINS, 1990

Strain	Parentage
Jacques J231	Unknown
Jewel	Corsoy x Wells
K74-113-76-486	Tracy x Pomona
K1047	Tracy x Bonus
K1048	Tracy x Bonus
K1062	Tracy x Williams
K1074	Tracy x Williams
K1075	Tracy x Bonus
K1103	Unknown
L6	L8 x L7; Clark-Rps1 rxp
L7	Clark(8) Rps1 x Blackhawk
L8	Clark(6) rxp x L49-4091
L6-5679	Lincoln x Richland
L11	[Clark(6) I x T201] x [Wayne(10) Rpm x Kanrich]
L12	L6 x L11
L15	Wayne(6) x Clark 63; Rps1 isoline
L49-4091	[F3 Lincoln(2) x Richland] x (F1 Lincoln x CNS)
L60-347-1-60-2B	Harosoy x Higan
L61-344	Harosoy(6) Dt2 x T117
L61-2193	Sioux x Harosoy
L61-2196	Sioux x Harosoy
L62-361	Harosoy(6) Dt2 x T117
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)
L66-531	[Clark(6) x PI 86.024] x [Clark(6) X T175]; dt1, 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
L68-4096	[L15(5) r x L12] x [Wayne(10) Rpm x Kanrich]
L68-4106	[L15(5) r x L11] x [Wayne(10) Rpm x Kanrich]
L69-202	L61-2193 x L61-2196
L69L-3	L66-531 x L62-535
L69U37-17-5	Calland x Corsoy
L70T-543G	L15 x Amsoy 71
L71-3628	L66-1322 x L62-535
L72-844C-1	Williams(5) Rps1 Rpm x L68-4096
L72U-2567	Williams x Ransom
L73-4124	D66-12392 x L69L-3
L74D-619	Williams x Ransom
L77 756	Unknown
L77-906	Williams x PI 209.332
L77-1836	Williams(7) Rps1-b x Harrel
L78-4054	Williams x PI 90.138
L78-4094	Beeson x L68-0376
L78-4245	L68-4106 x L68-0376
L78-8694	L71-3628 x Elf
L78L-449	L73-4124 x Essex
L80-4323	Williams(2) x PI 88.788
L81-4583	Williams(5) x PI 157.440
Land O Lakes Max	[Wayne x (Clark x Adams)] x Cutler
Land O Lakes 4102	Unknown

IDENTIFICATION OF PARENT STRAINS, 1990

Strain	Parentage
LN78-257	Union x C1528
LN80-7532	Century x A76-304020
LN80-9359	Weber x A76-202015
LN80-9729	Hardin x A76-304020
LN80-10398	Century x Land O Lakes 'Max'
LN80-10508	Century x Land O Lakes 'Max'
LNX8115	(HW79149 x A78-121014)F1
LNX8132	(Hack x A78-121014)F1
LNX8138	(Hack x PI 92.718-2)F1
LNX8179	(Northrup King S1492 x PI 92.718-2)F1
LS78-W124-1	Franklin x J74-5
M10	Lincoln(2) x Richland
M53-43	M10 x PI 180.501
M53-117	M10 x PI 180.501
M54-12	Renville x Capital
M54-110	Harosoy x Norchief
M54-139	Renville x Capital
M54-240	[Lincoln(2) x Richland] x Korean
M59-120	M54-240 x M54-139
M61-20	Merit x Comet
M61-224	Merit x Harosoy
M62-93	Merit x M54-110
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
M64-157	Merit x Amsoy
M65-69	M54-12 x Corsoy
M65-207	Clay x Hark
M66-30	Magna x M61-20
M67-141	Corsoy x Wayne
M68-2	Wilkin x M59-120
M68-49 26	Evans x M59-120
M68-99	M59-120 x Amsoy 71
M68-256	Evans x Steele
M69-20	Merit x Clay
M69-45	M63-158(Bf) x Provar
M70-127	Evans x M63-217Y
M70-184	Steele x (Evans x Lee)
M70-187	Merit x SS65-5702
M70-271	Merit x M64-3
M70-330	M62-93 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
M72-127(E)	Evans x Unknown
M73-62	M61-224 x Nagyszemi Feher
M74-23	M68-2 x Hodgson
M74-179	M68-256 x Clay
M74-270	M65-69 x M68-99
M74-349	M68-49 x M65-207
M74-399	Hodgson x Wells

IDENTIFICATION OF PARENT STRAINS, 1990

Strain	Parentage
M74-498	PX20 x [Hodgson(4) Rps1 x Merit]
M75-2	Hodgson x [M67-141 x (Chippewa x Higan)]
M75-89	Unknown
M75-244	Evans x A73-19084
M75-274	Evans x L70T-543
M75-322	M68-49-26 x Hodgson 78
M76-33	M64-157 x McCall
M76-55	M69-20 x McCall
M76-142	M70-271 x Corsoy
M76-151	M70-271 x Hodgson 78
M76-160	M70-330 x [Hodgson(6) Rps1 x Merit]
M76-349	L69-202 x M69-45
M77-75	Coles x M66-30
M77-210	M71-135 x Simpson
M81-79	M68-49-26 x M70-184
M81-610	Dawson x M70-447
M319W	Lincoln x Hawkeye
Madison GL2810	Unknown
Md77-5675	V68-1171 x Columbus
N45-745	Ogden x CNS
N63-858	D58-3358 x D59-9289
Northrup King S1346	A55-5629-4 x PI 257.435
Northrup King S1492	Corsoy x Wayne
OX611	Unknown
P6122	Harosoy x Capital
Peterson 85	Provar x (Amsoy x PI 248.404; Novosudska Bela)
PMGTC3	Unknown
Pride B152	Northrup King S1346(6) x Mack
Pride B216	Corsoy x Wayne
Pride PEX110 B236	~~Unknown~~ S1346 x Agripro 25
Pridesoy II	Unknown
Profiseed 1138	Unknown
Prosoy PS104	Unknown
PRX54-53-2	Harosoy x Altona
PRX54-59	Harosoy x Altona
PX20	Blend 50% Wells : 50% P6122
Riverside 2024	Unknown
S79-4296	Bedford x Crawford
S82-1044	Cumberland x Forrest
SS65-5702	Clark x [Scott(2) x Peking]
T117	AK114 x PI 65.394 (Dt2, lw1, Lw2)
T145	Unknown
T180	F3 sib of T181
T181	non-nodulating rj1 mutant in Lincoln(2) x Richland
T201	T181 x T180
T8112	Unknown
Thompson 7803	Unknown
U76168	Williams x PI 89.075
V63-76	Hill x D53-354
V68-1034	York x PI 71.506
V68-1171	PI 80.837 x V63-76
554-10	Hodgson(4) x Merit Rps1
840-7-3	from Sven A. Holmberg, Sweden

HYDROPONICS SENCOR TOLERANCE TESTS

Above Normal Tolerance	Normal Tolerance			Sensitive
A Hardin BC(6)	A87-297015	A87-296011	A Hardin BC(k)	Burlison
M86-2301	M86-2334	C1768	A88-121-25	Coker 156*
Resnik	M86-2337	E86237	C1764	Altona*
HM8597	ORC 9001	HC85-279	E86339	HS87-4087
HM8735	OT87-7	HC85-6500	HC85-1440	M84-1034
Maple Glen	S86-2212	LN86-1088	HC85-164	M86-626
M86-2301	A 3659*	LN86-983	HC85-604	ND2337
HC84-4850	Glenwood	M86-122	HC85-606	OT88-11
M83-899	HS87-2067	M86-1322	HC85-690	
M86-1410	M83-899	M86-138	K1164	
Sturdy	M86-612	M86-2197	K1169	
Essex*	Maple Presto	M86-2337	K82-1-48	
Bell	ORC 8805	OT88-2	LS83-5616	
C1747	S85-1554	Ripley	M85-1112	
Flyer	Spencer	S86-2209	M85-52	
HC85-275	W87-15	A88-121019	M85-610	
HM8734	Union*	C1758	M85-647	
Hobbit 87	A87-196014	E86315	M85-85	
ORC 8801	A88-221006	E86348	M85-907	
Williams 82*	Kenwood	E87223	ND2338	
	L83-3804	HC84-2612	Sibley	
	LN84-8588	Ky85-09073	HC85-602	
	M86-299	LN85-6800	HM8890	
	M86-571	M84-748	M86-1800	
	OT87-4	M84-833	Pennyrile	
	Hardin	M84-916	W87-11	
	ORC 8803	M85-122	Amsoy 71*	
	A88-221005	M85-396	E87202	
	A88-221020	M86-130	HC85-607	
	Corsoy*	M86-750	HC85-618	
	HC85-477	M86-918	HM8625	
	HC85-6484	S85-1084	M86-1973	
	K1161	U87-63041	M86-245	
	M86-169	Bragg*	M86-356	
	M86-479		M86-5324	
	OT89-24		Sturdy	
			K1166	
			Maple Ridge	
			McCall	

* Marker varieties

UNIFORM TEST OO, 1990

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Clay (0)	Renville x Capital	13	F5	
Maple Glen	BD22115 x Premier	4	F5	
Maple Presto	(Amsoy x Portage) x 840-7-3	2	F5	
Maple Ridge	Fiskeby III x Evans	10	F5	
McCall (00)	(Acme x Chippewa) x Hark	16	F5	
M84-456	Simpson x M71-148	2	F5	Rps1
M85-23	M71-148 x Simpson	UTO	F4	Rps1
M86-2301	M76-55 x M74-23(P)	-	F5	Rps1
ND2337	Wilkin x L62-361	1988	F6	
ND2338	Wilkin x L62-361	2	F6	
OT87-4	(Thompson 7803 x Bk-17-1-4) x McCall	1	F5	
OT87-7	(Maple Presto x Williams) x Weber	2	F5	
OT88-2	[840-7-3 x Evans(2) x Maple Arrow] x Weber	-	F5	
OT88-11	Maple Ridge x Lakota	1	F5	
OT89-24	OX611 x Maple Presto	-	F5	ln Dt_2

* Number of years in test or name of 1989 test.

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Chlorosis Score Lamberton	Emergence Score Ames	Shatter Score Manhattan	BTS Ames a Score	PR Urbana Race 1	PR Laf. Race 7	PS Lafayette a %	PSB Lafayette n %
Clay (0)	PGTIYI	1.9	1.0	5.0	1.0	3.7	S	S	46	28
Maple Glen	PTBDYI	3.9	2.0	1.0	1.0	4.0	S	H	40	18
Maple Presto	PTBIYI	2.5	2.0	4.0	3.0	3.0	R	H	32	44
Maple Ridge	PTBSYI	1.4	1.0	2.0	2.0	5.0	S	S	14	32
McCall (00)	PGTDYI	1.5	2.0	1.0	1.0	5.0	S	S	20	52
M84-456	PGBDBr+IbI	1.8	1.5	1.0	1.0	3.7	R	S	62	18
M85-23	WGBDIbI	2.6	1.0	1.0	1.0	3.0	R	S	50	28
M86-2301	PGBDBfI	1.9	1.5	1.0	1.0	4.3	R	S	72	8
ND2337	WGBSYI	1.8	2.0	5.0	1.0	---	S	S	30	40
ND2338	PGBDYI	1.5	2.0	3.0	1.0	---	R	S	42	24
OT87-4	PGTIIbI	1.5	2.0	2.0	1.0	4.3	S	H	40	32
OT87-7	WTBSBlI	1.5	1.0	1.0	1.0	3.3	R	S	8	48
OT88-2	WTBIBlI	1.5	2.0	1.0	2.0	3.0	S	H	20	36
OT88-11	PTBSYI	2.2	2.0	2.0	1.0	3.0	S	S	34	24
OT89-24	PTBSYI	3.8	2.0	1.0	1.0	3.3	R	S	18	38

UNIFORM TEST 00, 1990

REGIONAL SUMMARY

No. of Tests / Strain	Yield 8 bu/a	Rank 8 No.	Maturity 7 Date	Lodging 8 Score	Plant Height 8 In	Seed Quality 7 Score	Seed Size 7 g/100	Composition Protein 5 %	Composition Oil 5 %
Clay (0)	28.4	9	8.0	1.2	23	1.4	15.5	40.3	20.4
Maple Glen	29.4	6	7.0	1.2	24	3.1	17.6	40.7	20.0
Maple Presto	17.2	15	-9.1	1.2	21	3.4	15.0	39.1	20.2
Maple Ridge	26.7	11	-7.3	1.1	21	2.3	14.0	40.3	19.1
McCall (00)	30.3	5	09/03*	1.2	24	2.6	14.4	40.0	19.5
M84-456	31.2	1	7.8	1.1	25	2.7	14.1	41.1	20.0
M85-23	28.7	8	10.0	1.2	25	2.6	14.1	39.9	19.9
M86-2301	30.5	4	10.0	1.1	24	2.7	15.1	40.9	19.5
ND2337	25.0	13	-3.4	1.1	21	2.6	13.2	41.5	19.1
ND2338	26.1	12	-1.3	1.1	23	2.8	16.9	41.3	19.4
OT87-4	29.1	7	1.0	1.2	25	2.6	16.5	41.4	20.2
OT87-7	30.7	3	0.7	1.1	23	2.3	14.1	38.8	21.5
OT88-2	31.0	2	9.8	1.7	26	2.6	16.0	39.4	20.3
OT88-11	27.0	10	-0.9	1.3	24	3.0	14.2	42.3	18.8
OT89-24	24.7	14	-7.4	1.1	20	3.0	14.1	40.1	19.9

*114.3 Days After Planting

UNIFORM TEST 00, 1990

1989-1990, 2-YEAR MEAN

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Oil
No. of Tests	15	15	13	16	16	15	15	8	8
	bu/a	No.	Date	Score	In	Score	g/100	%	%
Clay (0)	25.6	7	7.6	1.2	20	1.4	14.2	40.8	20.2
Maple Glen	27.4	4	5.5	1.2	22	2.4	16.2	40.9	20.1
Maple Presto	17.0	10	-11.3	1.2	20	3.1	13.8	39.6	19.8
Maple Ridge	24.4	8	-7.8	1.1	20	2.2	13.0	41.1	18.6
McCall (00)	28.2	2	9/7.5*	1.2	21	2.2	13.6	40.3	19.6
M84-456	26.7	5	6.3	1.2	22	2.2	12.6	41.4	20.0
ND2338	23.4	9	-2.4	1.2	20	2.5	15.6	41.8	19.3
OT87-4	28.2	2	-1.2	1.2	22	2.2	15.6	41.4	20.3
OT87-7	29.0	1	-0.6	1.2	20	2.0	13.4	39.4	21.5
OT88-11	26.6	6	-3.0	1.2	22	2.5	13.2	42.1	19.5

*115.0 Days After Planting

1988-1990, 3-YEAR MEAN

Strain									
No. of Tests	22	22	19	23	23	22	22	13	13
Clay (0)	25.3	5	8.5	1.3	21	1.9	14.8	40.6	20.7
Maple Glen	26.1	3	6.1	1.3	21	2.5	16.5	41.0	20.4
Maple Presto	16.9	8	-12.9	1.2	20	3.3	13.9	39.6	20.2
Maple Ridge	23.0	6	-7.8	1.2	19	2.6	13.4	41.0	19.0
McCall (00)	26.2	2	9/4.3*	1.3	21	2.5	13.9	40.1	20.0
M84-456	25.5	4	7.3	1.2	22	2.3	13.0	41.4	20.4
ND2338	22.7	7	-2.7	1.2	20	2.8	15.6	41.2	19.8
OT87-7	27.4	1	0.1	1.2	20	2.3	13.4	39.1	22.0

*111.7 Days After Planting

UNIFORM TEST 00, 1990

YIELD (bu/a)

Strain	Mean 8 Tests	Brandon Man.	Crook-ston MN	Moor-head MN	Shelly MN	Cassel-ton ND	Elora Ont.	Ottawa Ont.	Ash-land WI
Clay (0)	28.4	32.4	21.8	24.6	25.3	23.6	46.4	24.9	28.3
Maple Glen	29.4	39.4	17.3	21.1	24.6	19.0	52.5	36.4	24.6
Maple Presto	17.2	8.2	10.9	23.3	22.5	15.6	27.6	17.2	12.2
Maple Ridge	26.7	32.8	18.5	26.5	25.2	18.5	41.2	27.7	22.8
McCall (00)	30.3	51.7	15.8	27.2	20.9	23.2	45.6	33.4	24.6
M84-456	31.2	46.7	20.1	23.1	25.6	22.1	49.6	29.7	32.6
M85-23	28.7	44.5	18.1	21.4	23.1	24.1	45.4	29.3	23.8
M86-2301	30.5	44.2	18.9	24.9	25.8	21.5	52.1	25.6	31.0
ND2337	25.0	31.3	15.3	24.9	21.9	16.5	38.6	27.4	23.7
ND2338	26.1	30.9	15.7	27.2	23.2	19.9	40.1	29.7	21.8
OT87-4	29.1	33.8	17.8	28.1	24.1	21.4	49.3	32.4	25.9
OT87-7	30.7	38.0	21.8	28.5	25.1	23.7	48.4	31.7	28.0
OT88-2	31.0	44.3	23.1	21.7	23.8	20.9	54.2	32.2	27.8
OT88-11	27.0	29.5	18.4	29.3	21.8	17.9	42.0	32.7	24.4
OT89-24	24.7	28.5	16.3	28.4	22.5	18.4	39.0	27.1	17.5
C.V. (%)		13.4	13.6	9.4	14.4	16.0	8.5	9.7	11.0
L.S.D. (5%)		6.8	3.5	4.0	ns	5.3	5.4	4.0	4.6
Row Sp. (in.)		10	12	10	10	30	14.8	16	24
Rows/Plot		4	8	8	8	4	4	4	4
Reps		4	4	3	3	3	4	4	3

UNIFORM TEST 00, 1990

YIELD RANK

Strain	Yield Rank	Brandon Man.	Crook-ston MN	Moor-head MN	Shelly MN	Cassel-ton ND	Elora Ont.	Ottawa Ont.	Ash-land WI
Clay (0)	9	10	2	10	3	3	7	14	3
Maple Glen	6	6	10	15	6	10	2	1	7
Maple Presto	15	15	15	11	11	15	15	15	15
Maple Ridge	11	9	6	7	4	11	11	10	12
McCall (00)	5	1	12	5	15	4	8	2	7
M84-456	1	2	4	12	2	5	4	7	1
M85-23	8	3	8	14	10	1	9	9	10
M86-2301	4	5	5	8	1	6	3	13	2
ND2337	13	11	14	8	13	14	14	11	11
ND2338	12	12	13	5	9	9	12	7	13
OT87-4	7	8	9	4	7	7	5	4	6
OT87-7	3	7	2	2	5	2	6	6	4
OT88-2	2	4	1	13	8	8	1	5	5
OT88-11	10	13	7	1	14	13	10	3	9
OT89-24	14	14	11	3	11	12	13	12	14

MATURITY (date)

Strain	Mean 7 Tests							
Clay (0)	8.0	12	5	11	14	5	6	3
Maple Glen	7.0	6	5	9	10	5	7	F
Maple Presto	-9.1	-10	-10	-5	-4	-6	-17	-12
Maple Ridge	-7.3	-8	-8	-5	-3	-7	-12	-8
McCall (00)	09/03	08/20	08/26	08/27	08/21	09/02	09/21	10/02
M84-456	7.8	14	4	10	13	2	4	F
M85-23	10.0	15	4	11	14	11	5	F
M86-2301	10.0	14	5	11	15	7	8	F
ND2337	-3.4	-4	-2	-2	-3	-3	-8	-2
ND2338	-1.3	0	0	0	0	-2	-9	2
OT87-4	1.0	-1	0	0	5	3	-1	F
OT87-7	0.7	1	3	-1	4	0	-2	0
OT88-2	9.8	12	8	8	11	8	12	F
OT88-11	-0.9	-2	0	0	4	-3	-5	0
OT89-24	-7.4	-6	-7	0	-4	-10	-13	-12
Date Planted	05/12	05/07	05/08	05/08	05/12	05/25	05/24	05/02
Days to Mature	114.3	105	110	111	101	100	120	153

UNIFORM TEST 00, 1990

LODGING (score)

Strain	Mean 8 Tests	Brandon Man.	Crookston MN	Moorhead MN	Shelly MN	Casselton ND	Elora Ont.	Ottawa Ont.	Ashland WI
Clay (0)	1.2	1.3	1.0	1.0	1.0	1.0	1.0	2.6	1.0
Maple Glen	1.2	1.0	1.0	1.0	1.0	1.0	1.3	2.3	1.0
Maple Presto	1.2	1.0	1.0	1.0	1.0	1.0	1.0	2.3	1.0
Maple Ridge	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.7	1.0
McCall (00)	1.2	1.0	1.0	1.0	1.0	1.0	1.3	2.5	1.0
M84-456	1.1	1.0	1.0	1.0	1.0	1.0	1.1	2.0	1.0
M85-23	1.2	1.0	1.0	1.0	1.0	1.0	1.6	2.3	1.0
M86-2301	1.1	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0
ND2337	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.0
ND2338	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.9	1.0
OT87-4	1.2	1.3	1.0	1.0	1.0	1.0	1.1	2.2	1.0
OT87-7	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.7	1.0
OT88-2	1.7	3.0	1.0	1.0	1.0	1.0	1.9	3.5	1.0
OT88-11	1.3	1.0	1.0	1.0	1.0	1.0	1.5	2.7	1.0
OT89-24	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.8	1.0

PLANT HEIGHT (inches)

Strain	Mean 8 Tests								
Clay (0)	23	25	20	24	17	19	25	30	24
Maple Glen	24	25	22	22	17	19	28	32	27
Maple Presto	21	22	18	19	17	19	27	25	22
Maple Ridge	21	21	20	23	17	18	21	23	24
McCall (00)	24	27	19	23	15	21	27	32	29
M84-456	25	30	19	21	18	20	28	31	30
M85-23	25	28	23	19	16	21	33	30	26
M86-2301	24	28	19	23	17	20	28	32	27
ND2337	21	22	19	20	15	17	26	22	25
ND2338	23	24	21	23	16	19	27	25	27
OT87-4	25	28	21	25	18	21	27	31	26
OT87-7	23	25	20	22	17	20	27	28	24
OT88-2	26	28	22	25	20	21	29	37	29
OT88-11	24	26	22	23	17	20	27	31	27
OT89-24	20	22	18	20	15	18	23	22	24

UNIFORM TEST 00, 1990

SEED QUALITY (score)

Strain	Mean 7 Tests	Brandon Man.	Crook-ston MN	Moor-head MN	Shelly MN	Cassel-ton ND	Elora Ont.	Ottawa Ont.	Ash-land WI
Clay (0)	1.4		4.0	3.7	3.7	1.7	2.0	3.3	3.0
Maple Glen	3.1		4.0	3.0	3.7	1.3	2.0	3.7	4.0
Maple Presto	3.4		4.0	3.3	4.0	1.3	2.5	5.0	4.0
Maple Ridge	2.3		2.5	2.7	2.3	1.3	1.5	4.1	2.0
McCall (00)	2.6		3.7	3.3	2.3	1.3	1.5	3.4	3.0
M84-456	2.7		4.0	3.7	3.7	1.3	1.0	3.1	2.0
M85-23	2.6		3.7	3.3	3.0	1.3	1.5	2.5	3.0
M86-2301	2.7		3.8	3.0	3.3	1.3	1.0	3.3	3.0
ND2337	2.6		2.5	4.0	4.0	1.3	1.0	2.6	3.0
ND2338	2.8		3.8	3.0	3.7	1.7	2.0	2.3	3.0
OT87-4	2.6		4.0	2.3	2.3	1.3	1.5	3.9	3.0
OT87-7	2.3		3.8	2.0	3.3	1.0	1.0	3.1	2.0
OT88-2	2.6		3.8	3.0	2.3	1.3	1.5	3.5	3.0
OT88-11	3.0		4.0	3.0	3.3	1.7	2.0	3.8	3.0
OT89-24	3.0		3.0	3.7	3.7	1.3	1.5	4.1	4.0

SEED SIZE (g/100)

Strain	Mean 7 Tests							
Clay (0)	15.5	17.4	12.9	13.1	13.0	15.9	18.0	18.0
Maple Glen	17.6	19.8	14.2	15.0	14.2	21.1	18.2	20.6
Maple Presto	15.0	14.8	15.5	13.7	13.5	14.5	16.5	16.3
Maple Ridge	14.0	13.2	12.8	13.4	12.7	14.8	15.1	16.0
McCall (00)	14.4	15.7	11.8	13.6	12.4	14.8	14.7	17.8
M84-456	14.1	16.9	10.8	12.3	13.1	13.9	14.9	16.9
M85-23	14.1	17.6	11.7	11.6	11.8	15.0	13.7	17.2
M86-2301	15.1	18.4	11.6	12.3	12.8	16.5	16.7	17.4
ND2337	13.2	11.9	10.9	11.8	11.2	15.7	16.7	14.5
ND2338	16.9	17.0	15.3	16.1	15.1	16.6	19.2	19.3
OT87-4	16.5	18.4	13.9	15.5	15.1	16.6	15.6	20.4
OT87-7	14.1	14.3	12.1	12.7	11.6	15.4	15.5	17.0
OT88-2	16.0	18.6	12.8	13.1	12.4	18.6	16.3	20.0
OT88-11	14.2	15.2	12.7	12.5	12.6	14.6	16.0	15.8
OT89-24	14.1	12.1	13.3	12.7	13.1	14.5	17.1	16.1

UNIFORM TEST 00, 1990

PROTEIN (%)

Strain	Mean 5 Tests	Crookston MN	Moorhead MN	Casselton ND	Elora Ont.	Ashland WI
Clay (0)	40.3	41.0	39.2	40.0	41.1	40.3
Maple Glen	40.7	40.4	38.3	41.3	41.4	42.2
Maple Presto	39.1	40.2	38.5	38.8	38.0	39.9
Maple Ridge	40.3	41.5	39.5	40.3	39.6	40.5
McCall (00)	40.0	40.8	39.7	39.5	39.6	40.6
M84-456	41.1	40.8	40.3	41.0	41.5	42.0
M85-23	39.9	39.3	38.7	38.6	41.4	41.6
M86-2301	40.9	40.6	40.6	41.0	41.0	41.2
ND2337	41.5	43.0	41.2	41.2	41.0	41.2
ND2338	41.3	42.5	39.9	41.2	41.3	41.5
OT87-4	41.4	43.7	40.7	41.3	40.3	41.0
OT87-7	38.8	40.5	39.2	38.2	38.7	37.5
OT88-2	39.4	39.2	37.7	38.5	41.2	40.3
OT88-11	42.3	42.7	41.6	42.1	41.7	43.2
OT89-24	40.1	39.3	40.1	40.0	39.6	41.3

OIL (%)

Strain	Mean 5 Tests					
Clay (0)	20.4	19.6	21.1	21.0	20.4	20.1
Maple Glen	20.0	19.9	20.7	19.1	20.7	19.8
Maple Presto	20.2	19.7	20.6	20.9	21.0	18.8
Maple Ridge	19.1	19.0	19.4	18.7	19.8	18.6
McCall (00)	19.5	19.5	19.6	19.8	20.0	18.6
M84-456	20.0	20.4	19.6	20.4	20.1	19.7
M85-23	19.9	20.1	19.4	20.8	20.3	18.9
M86-2301	19.5	20.1	18.9	19.3	20.1	19.3
ND2337	19.1	18.5	19.5	19.1	19.5	18.9
ND2338	19.4	18.7	20.3	19.4	19.9	18.8
OT87-4	20.2	19.0	21.1	20.2	20.8	20.0
OT87-7	21.5	20.7	21.3	21.9	21.8	21.9
OT88-2	20.3	20.2	20.6	20.5	20.1	19.9
OT88-11	18.8	19.0	19.4	18.4	19.4	18.0
OT89-24	19.9	20.5	20.1	19.4	20.5	19.0

UNIFORM TEST O, 1990

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Glenwood (0)	Evans x Peterson 85	5	F5	
McCall (00)	(Acme x Chippewa) x Hark	10	F5	
Sibley (I)	M68-256 x Hodgson	3	F5	
M84-748	M75-274 x M76-151	2	F5	Rps1
M84-833	M76-142 x Weber	2	F5	Rps1
M85-52	M73-62 x Simpson	1	F4	Rps1
M85-85	M73-62 x Simpson	1	F4	Rps1
M85-396	M73-62 x M74-399	1	F5	Rps1
M85-1112	M74-349 x M77-210	1	F5	Rps1
M86-122	M72-127(E) x M81-610	-	F5	Rps1
M86-130	M72-127(E) x M81-610	-	F5	Rps1
M86-138	M72-127(E) x PI 438,454	-	F5	Rps1
M86-162	M73-62 x Corsoy 79	-	F5	Rps1-c
M86-169	M73-62 x Corsoy 79	-	F5	Rps1-c
M86-245	M75-244 x M75-322	-	F5	Rps1
M86-299	M76-33(w) x M74-498	-	F5	Rps1
M86-356	M81-610 x M76-349	-	F5	
M86-479	Evans x Hardin	-	F5	Rps1
M86-571	Ozzie x A80-244003	-	F5	Rps1 Het.
M86-626	Weber 84 x Dassel	-	F5	Rps6
M86-750	M76-160 x Hardin	-	F5	Rps1
M86-918	J103 x Ozzie	-	F5	Rps1
M86-2197	M72-127(E) x M81-610	-	F5	Rps1 Het.
M86-2237	M73-62 x Corsoy 79	-	F5	Rps1-c
M86-2334	Evans x Asgrow A1937	-	F5	Rps1 Het.
M86-2337	Evans x Asgrow A1937	-	F5	Rps1
ORC 9001	Jewel x Pride B152	-	F5	

* Number of years in test or name of 1989 test.

UNIFORM TEST 0, 1990

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Chlorosis Score Lamberton	Emergence Score Ames	Shattering Score Manhattan
Glenwood (0)	PGB+TIBlI	2.1	2.5	1.0	2.0
McCall (00)	PGTDYI	1.2	2.0	1.0	2.0
Sibley (I)	WGBIYI	2.2	1.0	1.0	2.0
M84-748	PGBSBfI	1.8	1.0	3.0	1.0
M84-833	WGBDYI	1.8	1.0	2.0	1.0
M85-52	P+WGBDBfI	3.2	2.0	1.0	1.0
M85-85	PGTDIbI	2.0	1.5	5.0	1.0
M85-396	P+WGBDYI	2.2	2.0	3.0	1.0
M85-1112	PGBDYI	1.2	1.0	1.0	1.0
M86-122	WGBDYI	2.1	2.0	5.0	1.0
M86-130	PGBDYI	4.0	2.0	1.0	1.0
M86-138	WGBDYI	2.4	1.0	2.0	1.0
M86-162	WGBDYI	3.1	3.0	1.0	1.0
M86-169	PGBDYI	1.5	1.0	1.0	1.0
M86-245	P+WGBDYI	2.2	3.0	5.0	2.0
M86-299	PGBDBfI	2.5	1.5	5.0	2.0
M86-356	PGBDYI	3.5	2.0	3.0	1.0
M86-479	PGBDYI	2.5	1.0	1.0	1.0
M86-571	PTTDBlI	2.6	2.5	1.0	1.0
M86-626	PG+TBIYI	1.4	1.0	5.0	2.0
M86-750	WGBDYI	1.5	1.0	5.0	2.0
M86-918	PGBIYI	1.6	1.5	5.0	1.0
M86-2197	WGTDYI	1.8	2.5	1.0	1.0
M86-2237	P+WGBIGr+YI	1.9	2.0	1.0	1.0
M86-2334	PGBDYI	3.2	2.5	1.0	1.0
M86-2337	P+WGBDBf+YI	1.9	2.5	1.0	1.0
ORC 9001	PGBSYI	1.8	1.0	5.0	1.0

UNIFORM TEST 0, 1990

DISEASE DATA

Strain	BTS Ames a Score	PR Urbana Race 1	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %
Glenwood (0)	3.3	R	S	70	15
McCall (00)	4.3	S	S	35	34
Sibley (I)	3.3	R	S	44	14
M84-748	4.3	R	S	82	6
M84-833	1.3	S	S	18	46
M85-52	2.7	R	S	48	10
M85-85	3.0	R	S	38	44
M85-396	2.3	S	S	60	12
M85-1112	4.3	R	S	60	10
M86-122	3.7	R	S	40	22
M86-130	3.7	S	S	54	20
M86-138	3.0	R	R	70	12
M86-162	3.0	R	R	40	14
M86-169	2.7	R	R	32	16
M86-245	3.0	R	S	40	16
M86-299	3.0	R	S	46	28
M86-356	3.0	S	S	48	12
M86-479	2.3	R	S	52	22
M86-571	3.3	H	S	40	16
M86-626	3.0	R	S	36	38
M86-750	3.3	R	S	26	36
M86-918	2.7	S	S	30	34
M86-2197	2.7	S	S	60	8
M86-2237	2.7	S	R	38	12
M86-2334	3.0	R	S	52	10
M86-2337	3.0	R	S	38	16
ORC 9001	2.7	S	S	48	14

UNIFORM TEST 0, 1990

REGIONAL SUMMARY

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	7	7	7	7	7	7	7	5	5
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Glenwood (0)	37.8	17	09/22*	1.8	31	2.5	16.6	40.6	20.3
McCall (00)	32.7	27	-14.0	1.5	27	2.1	14.7	39.5	20.0
Sibley (I)	38.2	13	6.6	1.9	33	2.4	18.4	39.7	21.0
M84-748	41.9	1	1.0	1.7	32	2.2	16.3	40.2	21.0
M84-833	39.4	5	4.6	1.6	30	2.1	14.8	39.9	20.3
M85-52	38.1	14	3.1	1.9	31	2.5	16.5	39.3	21.3
M85-85	38.4	11	0.4	1.6	29	2.4	15.8	39.8	21.0
M85-396	38.0	16	3.1	1.8	33	2.6	16.7	39.6	21.0
M85-1112	39.6	3	3.1	1.7	30	2.6	17.1	39.0	21.2
M86-122	39.5	4	3.4	1.6	33	2.6	17.0	40.7	20.3
M86-130	35.2	25	-2.9	1.3	29	2.6	16.7	41.2	20.1
M86-138	35.7	24	2.0	1.7	32	2.3	16.0	40.4	20.4
M86-162	37.0	21	-0.7	1.8	32	2.3	15.3	40.1	20.6
M86-169	34.2	26	-3.1	1.5	28	2.2	15.9	40.8	20.2
M86-245	38.5	10	1.7	1.8	32	2.7	16.4	39.9	20.5
M86-299	38.4	11	1.4	1.6	33	2.5	16.4	40.7	20.0
M86-356	37.5	18	3.1	1.6	32	2.3	14.9	42.9	18.8
M86-479	37.3	20	2.1	1.9	36	2.2	14.5	41.4	19.8
M86-571	40.9	2	3.7	1.7	31	2.3	16.5	40.9	19.8
M86-626	36.9	22	1.7	1.7	32	3.0	16.0	39.2	21.6
M86-750	39.3	6	2.6	1.6	31	2.1	16.4	39.8	20.9
M86-918	38.9	7	-1.6	1.4	31	2.1	16.3	40.0	21.4
M86-2197	36.6	23	-1.9	1.8	31	2.5	15.8	40.6	20.3
M86-2237	37.5	18	-3.9	2.0	29	2.3	15.2	39.5	21.0
M86-2334	38.6	8	-0.7	1.7	33	2.3	16.5	39.8	20.9
M86-2337	38.6	8	-1.9	1.8	33	2.3	15.8	39.9	20.6
ORC 9001	38.1	14	0.4	1.5	33	1.9	16.7	40.3	20.7

*122.9 Days After Planting

UNIFORM TEST 0, 1990

1989-1990 2-YEAR MEAN

	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	16	16	13	16	16	15	16	8	8
Strain	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Glenwood (0)	34.6	8	9/20.5*	1.4	27	2.2	17.0	41.0	19.9
McCall (00)	30.4	9	-13.6	1.4	25	2.2	15.0	40.3	19.6
Sibley (I)	39.0	4	6.8	1.6	31	2.1	18.9	40.5	20.4
M84-748	40.8	1	1.3	1.6	29	2.1	16.6	41.1	20.5
M84-833	40.2	2	4.0	1.4	28	2.0	15.2	40.5	19.7
M85-52	39.0	4	3.6	1.6	29	2.3	16.6	36.6	20.6
M85-85	37.6	7	0.6	1.4	26	2.2	15.6	40.1	20.7
M85-396	38.5	6	3.5	1.5	30	2.2	16.4	40.6	20.4
M85-1112	39.3	3	3.6	1.4	27	2.4	17.6	39.4	21.0

*122.8 Days After Planting

1988-1990 3-YEAR MEAN

No. of Tests	25	25	22	25	25	24	25	13	13
Strain									
Glenwood (0)	32.8	4	9/18.6*	1.5	26	2.2	16.9	41.1	20.2
McCall (00)	27.4	5	-13.1	1.4	24	2.4	14.9	40.6	19.9
Sibley (I)	36.7	3	6.7	1.6	31	2.1	18.1	40.6	20.5
M84-748	37.8	1	1.4	1.4	29	2.2	16.3	40.9	20.6
M84-833	37.5	2	2.9	1.4	27	2.1	15.1	40.8	19.8

*121.0 Days After Planting

UNIFORM TEST 0, 1990

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)	37.8	29.1	45.9	32.1	41.7	50.3	31.3	34.5
McCall (00)	32.7	18.6	42.9	26.0	41.6	40.4	25.5	34.1
Sibley (I)	38.2	34.2	45.4	31.6	35.3	47.5	38.8	34.8
M84-748	41.9	30.6	54.3	35.4	50.6	50.8	35.6	36.2
M84-833	39.4	29.3	49.2	34.8	43.2	53.4	34.0	32.0
M85-52	38.1	31.3	45.3	31.2	48.0	48.8	32.5	29.8
M85-85	38.4	27.9	50.9	27.5	44.2	50.4	35.7	32.0
M85-396	38.0	29.7	51.6	27.1	38.2	49.1	38.5	32.1
M85-1112	39.6	25.8	52.7	35.9	45.1	49.2	34.9	33.5
M86-122	39.5	30.0	56.2	25.3	46.9	51.2	35.5	31.7
M86-130	35.2	25.2	50.3	28.8	44.6	40.2	28.7	28.9
M86-138	35.7	24.2	44.4	28.8	43.9	45.4	30.3	33.0
M86-162	37.0	30.9	48.8	30.1	39.2	45.8	30.0	33.9
M86-169	34.2	23.1	47.3	23.2	44.1	46.5	27.0	28.1
M86-245	38.5	27.1	49.1	27.0	43.4	46.2	40.2	36.5
M86-299	38.4	29.5	48.9	26.4	44.1	51.0	35.4	33.6
M86-356	37.5	27.6	46.5	35.8	39.6	48.9	32.3	31.8
M86-479	37.3	33.3	44.8	27.9	38.1	48.0	33.9	35.0
M86-571	40.9	34.7	49.3	32.6	39.0	54.9	38.7	37.3
M86-626	36.9	25.2	49.2	28.2	43.3	50.4	26.1	35.9
M86-750	39.3	34.8	52.4	30.9	44.0	49.3	32.1	31.3
M86-918	38.9	30.9	50.9	32.3	47.8	40.0	35.2	35.0
M86-2197	36.6	21.6	47.1	24.5	45.6	49.7	33.3	34.6
M86-2237	37.5	28.4	48.0	34.7	41.0	44.7	33.6	32.0
M86-2334	38.6	25.1	49.4	28.1	46.3	54.5	29.7	37.0
M86-2337	38.6	27.4	48.0	29.0	47.0	48.0	34.9	35.7
ORC 9001	38.1	28.7	49.0	32.9	47.5	39.5	34.3	34.9
C.V. (%)		17.2	8.3	18.2	8.2	8.8	12.4	13.5
L.S.D. (5%)		8.0	6.6	8.7	5.0	6.0	6.7	7.4
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, 1990

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)	17	13	22	9	19	9	20	12
McCall (00)	27	27	27	24	20	24	27	13
Sibley (I)	13	3	23	10	27	18	2	10
M84-748	1	8	2	3	1	6	6	4
M84-833	5	12	11	4	18	3	13	19
M85-52	14	5	24	11	2	15	17	25
M85-85	11	16	6	20	11	7	5	19
M85-396	16	10	5	21	25	13	4	18
M85-1112	3	20	3	1	9	12	10	16
M86-122	4	9	1	25	6	4	7	23
M86-130	25	21	8	15	10	25	24	26
M86-138	24	24	26	15	15	22	21	17
M86-162	21	6	16	13	23	21	22	14
M86-169	26	25	19	27	12	19	25	27
M86-245	10	19	13	22	16	20	1	3
M86-299	11	11	15	23	12	5	8	15
M86-356	18	17	21	2	22	14	18	22
M86-479	20	4	25	19	26	16	14	7
M86-571	2	2	10	7	24	1	3	1
M86-626	22	21	11	17	17	7	26	5
M86-750	6	1	4	12	14	11	19	24
M86-918	7	6	6	8	3	26	9	7
M86-2197	23	26	20	26	8	10	16	11
M86-2237	18	15	17	5	21	23	15	19
M86-2334	8	23	9	18	7	2	23	2
M86-2337	8	18	17	14	5	16	10	6
ORC 9001	14	14	14	6	4	27	12	9

UNIFORM TEST 0, 1990

MATURITY (date)

Strain	Mean 7 Tests	Morris MN	Rose-mount MN	Cassel-ton ND	Ottawa Ont.	Wood-stock Ont.	Wil-mot SD	Spooner WI
Glenwood (0)	09/22	09/15	09/18	09/14	10/10	09/21	09/19	09/29
McCall (00)	-14.0	-12	-11	-20	-25	-15	-13	-2
Sibley (I)	6.6	8	8	5	6	12	6	1
M84-748	1.0	0	2	2	0	2	2	-1
M84-833	4.6	6	5	4	3	8	2	4
M85-52	3.1	4	5	3	3	9	2	-4
M85-85	0.4	-7	1	0	2	3	2	2
M85-396	3.1	1	5	3	3	8	3	-1
M85-1112	3.1	4	4	4	3	3	3	1
M86-122	3.4	4	6	3	3	5	2	1
M86-130	-2.9	-4	-2	-1	-9	-2	-1	-1
M86-138	2.0	1	2	2	2	3	2	2
M86-162	-0.7	-7	2	-4	-1	5	-1	1
M86-169	-3.1	-4	-4	-2	-6	-2	-2	-2
M86-245	1.7	-1	2	2	1	3	3	2
M86-299	1.4	-2	4	0	-1	7	3	-1
M86-356	3.1	4	4	2	3	7	3	-1
M86-479	2.1	4	3	1	3	4	1	-1
M86-571	3.7	4	5	4	4	5	4	0
M86-626	1.7	-2	3	1	1	7	1	1
M86-750	2.6	5	5	4	2	3	2	-3
M86-918	-1.6	-4	-1	-1	-7	0	2	0
M86-2197	-1.9	-4	0	-6	-4	-1	1	1
M86-2237	-3.9	-7	-2	-3	-5	-7	-1	-2
M86-2334	-0.7	-1	-3	-3	0	3	0	-1
M86-2337	-1.9	-3	-2	-2	-3	-3	0	0
ORC 9001	0.4	3	1	3	-2	3	-1	-4
Date Planted	05/22	05/09	05/30	05/12	05/24	05/24	05/31	05/27
Days to Mature	122.9	129	111	125	139	120	111	125

UNIFORM TEST 0, 1990

LODGING (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)	1.8	1.0	3.3	1.0	4.0	1.4	1.0	1.0
McCall (00)	1.5	1.0	2.0	1.0	2.6	1.9	1.0	1.0
Sibley (I)	1.9	1.0	4.0	1.0	4.0	1.5	1.0	1.0
M84-748	1.7	1.0	3.0	1.0	3.5	1.1	1.0	1.0
M84-833	1.6	1.0	2.0	1.0	4.0	1.4	1.0	1.0
M85-52	1.9	1.0	4.0	1.0	4.0	1.6	1.0	1.0
M85-85	1.6	1.0	2.3	1.0	3.8	1.3	1.0	1.0
M85-396	1.8	1.0	3.0	1.0	4.0	1.4	1.0	1.0
M85-1112	1.7	1.0	2.3	1.0	4.0	1.4	1.0	1.0
M86-122	1.6	1.0	3.0	1.0	3.2	1.1	1.0	1.0
M86-130	1.3	1.0	2.0	1.0	2.0	1.1	1.0	1.0
M86-138	1.7	1.0	3.0	1.0	3.3	1.3	1.0	1.0
M86-162	1.8	1.3	3.0	1.0	4.0	1.1	1.0	1.0
M86-169	1.5	1.0	2.3	1.0	3.0	1.3	1.0	1.0
M86-245	1.8	1.0	2.7	1.0	3.8	1.9	1.0	1.0
M86-299	1.6	1.0	2.7	1.0	3.4	1.1	1.0	1.0
M86-356	1.6	1.0	2.7	1.0	3.2	1.1	1.0	1.0
M86-479	1.9	1.0	3.7	1.0	3.8	1.5	1.0	1.0
M86-571	1.7	1.0	2.7	1.0	4.0	1.0	1.0	1.0
M86-626	1.7	1.0	3.0	1.0	3.7	1.3	1.0	1.0
M86-750	1.6	1.0	2.7	1.0	3.2	1.4	1.0	1.0
M86-918	1.4	1.0	2.3	1.0	2.5	1.0	1.0	1.0
M86-2197	1.8	1.0	3.7	1.0	3.3	1.4	1.0	1.0
M86-2237	2.0	1.3	3.0	1.0	3.7	2.8	1.0	1.0
M86-2334	1.7	1.0	3.0	1.0	3.7	1.3	1.0	1.0
M86-2337	1.8	1.0	3.0	1.0	3.5	1.8	1.0	1.0
ORC 9001	1.5	1.0	2.3	1.0	3.0	1.0	1.0	1.0

UNIFORM TEST 0, 1990

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)	31	23	37	24	37	30	34	32
McCall (00)	27	19	29	22	31	29	33	29
Sibley (I)	33	26	40	25	44	34	36	28
M84-748	32	22	38	26	40	30	35	33
M84-833	30	23	34	22	38	32	34	26
M85-52	31	21	39	23	40	32	35	28
M85-85	29	21	32	20	34	31	33	33
M85-396	33	24	40	23	41	35	38	27
M85-1112	30	20	34	25	35	31	31	31
M86-122	33	25	41	24	41	32	36	29
M86-130	29	21	34	23	33	30	31	31
M86-138	32	23	40	25	40	34	35	26
M86-162	32	23	38	25	38	31	34	32
M86-169	28	20	35	20	35	29	33	26
M86-245	32	23	42	23	35	33	35	33
M86-299	33	23	37	24	42	36	37	30
M86-356	32	23	37	25	37	31	36	37
M86-479	36	28	46	27	42	36	40	31
M86-571	31	23	36	23	36	30	33	37
M86-626	32	26	38	23	40	35	33	29
M86-750	31	22	36	24	37	30	34	31
M86-918	31	23	36	24	38	31	33	31
M86-2197	31	22	38	20	37	32	35	31
M86-2237	29	20	39	24	35	28	30	30
M86-2334	33	24	38	23	40	36	38	32
M86-2337	33	24	39	25	38	35	35	34
ORC 9001	33	27	39	28	38	33	39	29

UNIFORM TEST 0, 1990

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	4.0	2.0	2.7	3.0	2.0	2.0	2.0
McCall (00)	2.1	3.0	1.7	1.3	2.8	2.0	3.0	1.0
Sibley (I)	2.4	4.0	2.0	2.3	3.5	1.0	2.0	2.0
M84-748	2.2	3.7	1.7	1.7	2.8	1.5	2.0	2.0
M84-833	2.1	3.3	1.3	1.7	3.0	1.5	2.0	2.0
M85-52	2.5	4.0	1.7	2.7	3.0	2.0	2.0	2.0
M85-85	2.4	4.0	1.3	2.4	3.2	2.0	2.0	2.0
M85-396	2.6	4.0	2.0	2.3	3.8	2.0	2.0	2.0
M85-1112	2.6	3.3	2.7	3.3	3.7	1.5	2.0	2.0
M86-122	2.6	3.7	2.0	3.0	2.7	1.5	3.0	2.0
M86-130	2.6	4.0	3.0	2.2	2.3	1.5	3.0	2.0
M86-138	2.3	3.7	2.0	3.1	2.7	1.5	2.0	1.0
M86-162	2.3	3.3	3.0	1.3	3.3	1.0	2.0	2.0
M86-169	2.2	3.7	3.0	1.4	2.5	2.0	2.0	1.0
M86-245	2.7	4.0	3.0	1.7	3.0	2.0	3.0	2.0
M86-299	2.5	4.0	2.0	2.9	3.0	1.5	2.0	2.0
M86-356	2.3	3.3	3.0	1.2	3.0	1.5	2.0	2.0
M86-479	2.2	3.0	2.7	1.3	3.2	1.5	2.0	2.0
M86-571	2.3	3.7	3.0	1.4	2.8	1.5	2.0	2.0
M86-626	3.0	4.0	3.0	2.7	3.8	2.5	3.0	2.0
M86-750	2.1	3.3	2.0	2.0	2.7	1.5	2.0	1.0
M86-918	2.1	3.3	2.0	1.3	2.5	1.5	2.0	2.0
M86-2197	2.5	3.3	3.0	1.9	3.0	2.0	2.0	2.0
M86-2237	2.3	3.7	2.0	1.6	2.7	2.0	2.0	2.0
M86-2334	2.3	3.7	3.0	1.3	2.5	1.5	3.0	1.0
M86-2337	2.3	3.7	2.0	1.5	2.3	1.5	3.0	2.0
ORC 9001	1.9	3.0	1.3	2.7	2.0	1.0	1.0	2.0

UNIFORM TEST 0, 1990

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)	16.6	19.4	15.4	15.4	17.2	16.2	16.4	16.4
McCall (00)	14.7	15.9	13.9	12.1	15.0	13.4	15.2	17.2
Sibley (I)	18.4	18.8	18.7	19.0	19.0	17.9	18.2	17.1
M84-748	16.3	17.7	15.5	14.4	16.1	16.2	16.7	17.3
M84-833	14.8	14.8	13.6	14.1	15.7	14.0	14.3	17.3
M85-52	16.5	17.0	15.7	15.6	17.4	16.9	15.2	17.5
M85-85	15.8	16.0	16.2	13.8	16.2	15.1	15.0	18.0
M85-396	16.7	17.0	17.4	17.2	16.4	16.7	16.5	15.7
M85-1112	17.1	19.2	16.0	17.2	18.0	16.9	16.8	15.7
M86-122	17.0	18.6	17.9	15.5	17.0	16.7	15.8	17.3
M86-130	16.7	18.4	17.0	15.9	16.9	15.4	16.0	17.3
M86-138	16.0	17.5	15.7	16.0	16.1	15.6	15.1	15.8
M86-162	15.3	14.8	16.2	12.3	16.3	16.7	13.8	17.0
M86-169	15.9	16.3	14.5	13.6	17.2	16.1	15.4	18.2
M86-245	16.4	19.8	15.7	15.9	15.1	15.4	15.0	17.7
M86-299	16.4	15.3	14.8	14.7	17.2	17.9	17.9	17.3
M86-356	14.9	14.9	15.1	13.1	15.2	15.6	14.1	16.4
M86-479	14.5	15.6	13.9	12.4	14.6	14.7	13.5	16.9
M86-571	16.5	17.7	16.2	15.0	16.7	16.6	16.0	17.6
M86-626	16.0	17.2	16.0	13.6	16.2	16.9	14.4	17.4
M86-750	16.4	16.7	16.7	15.3	16.4	17.5	15.0	17.2
M86-918	16.3	17.7	15.7	15.2	16.7	15.5	15.9	17.4
M86-2197	15.8	17.0	16.8	12.6	16.3	15.5	16.4	16.3
M86-2237	15.2	16.5	15.1	13.3	16.7	14.1	14.4	16.1
M86-2334	16.5	17.5	16.4	12.9	17.4	17.9	14.7	18.4
M86-2337	15.8	17.4	15.1	13.9	16.7	15.3	16.0	16.0
ORC 9001	16.7	19.1	16.2	15.8	16.3	15.4	17.2	16.7

UNIFORM TEST 0, 1990

PROTEIN (%)

Strain	Mean 5 Tests	Morris MN	Rosemount MN	Casselton ND	Woodstock Ont.	Spooner WI
Glenwood (0)	40.6	42.2	41.1	39.6	43.6	36.7
McCall (00)	39.5	40.2	38.9	39.6	43.2	35.6
Sibley (I)	39.7	40.4	40.3	39.6	42.8	35.3
M84-748	40.2	40.7	40.5	37.8	46.2	35.9
M84-833	39.9	39.8	40.2	37.9	44.1	37.5
M85-52	39.3	39.1	38.9	38.9	42.3	37.4
M85-85	39.8	39.9	39.7	39.7	44.5	35.0
M85-396	39.6	40.4	41.0	38.2	43.3	35.2
M85-1112	39.0	40.4	38.9	38.2	42.3	35.4
M86-122	40.7	40.6	41.8	41.2	43.2	36.9
M86-130	41.2	42.1	41.6	40.8	44.6	36.9
M86-138	40.4	41.1	41.0	39.6	44.9	35.2
M86-162	40.1	40.0	40.1	40.0	43.8	36.4
M86-169	40.8	40.8	40.8	41.1	43.6	37.6
M86-245	39.9	40.6	40.0	40.2	44.1	34.5
M86-299	40.7	41.7	41.8	40.4	42.7	36.8
M86-356	42.9	44.6	44.6	43.0	48.3	34.2
M86-479	41.4	41.7	42.6	41.0	45.4	36.5
M86-571	40.9	41.2	42.3	40.4	45.6	34.8
M86-626	39.2	40.0	40.2	38.2	42.3	35.4
M86-750	39.8	40.0	40.3	38.8	42.9	36.8
M86-918	40.0	41.6	40.4	38.6	43.1	36.4
M86-2197	40.6	40.8	41.5	41.0	45.4	34.5
M86-2237	39.5	40.6	39.2	38.7	43.0	36.2
M86-2334	39.8	39.5	40.6	39.7	43.0	36.3
M86-2337	39.9	40.9	39.5	38.8	42.8	37.3
ORC 9001	40.3	39.7	40.2	40.3	44.5	36.8

UNIFORM TEST 0, 1990

OIL (%)

Strain	Mean 5 Tests	Morris MN	Rosemount MN	Casselton ND	Woodstock Ont.	Spooner WI
Glenwood (0)	20.3	20.1	19.9	20.8	18.7	22.0
McCall (00)	20.0	20.4	20.2	19.4	18.1	22.0
Sibley (I)	21.0	21.6	21.2	21.2	19.3	21.7
M84-748	21.0	21.1	21.7	21.8	18.3	21.9
M84-833	20.3	21.1	20.6	20.8	17.9	20.9
M85-52	21.3	21.9	21.7	21.5	19.9	21.3
M85-85	21.0	21.3	21.5	20.9	18.9	22.4
M85-396	21.0	21.4	21.2	21.8	19.8	21.0
M85-1112	21.2	21.3	21.3	21.8	20.0	21.7
M86-122	20.3	20.7	20.0	19.6	20.1	21.2
M86-130	20.1	20.1	20.4	20.2	18.9	21.1
M86-138	20.4	20.9	20.7	20.6	18.7	21.1
M86-162	20.6	21.4	21.4	19.3	19.4	21.4
M86-169	20.2	20.6	20.0	19.5	19.6	21.5
M86-245	20.5	21.3	20.6	20.2	18.5	21.9
M86-299	20.0	20.1	19.1	19.6	19.5	21.7
M86-356	18.8	18.6	18.5	18.6	16.2	21.9
M86-479	19.8	20.2	19.5	19.2	18.6	21.5
M86-571	19.8	20.4	19.0	19.8	17.6	22.2
M86-626	21.6	21.9	21.4	21.7	20.6	22.3
M86-750	20.9	21.5	20.9	21.2	20.0	21.0
M86-918	21.4	21.3	21.5	22.0	20.5	21.6
M86-2197	20.3	20.7	20.3	19.8	18.2	22.4
M86-2237	21.0	21.5	21.0	20.9	19.4	22.2
M86-2334	20.9	21.0	21.4	20.5	20.4	21.1
M86-2337	20.6	21.4	21.2	20.6	18.8	20.9
ORC 9001	20.7	20.8	21.4	21.2	19.4	20.9

UNIFORM TEST I, 1990

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Bell (SCN)	Fayette, x LN80-10398	1	F5	SCN 3,4
Glenwood (0)	Evans x Peterson 85	1	F5	
Sibley (I)	M68-256 x Hodgson	7	F5	
Sturdy (L)	M70-127 x Century	3	F5	
Hardin	Corsoy(3) x Cutler 71	1988	F5	
A Hardin BC (k)	Hardin(5) x Williams 82	-	BC4 F4	Rps1-k
A Hardin BC (6)	Hardin(5) x PRX54-53-2	-	BC4 F4	Rps6
E86237	Prosoy PS104 x HW8028	1	F3	
M83-108	Hodgson 78 x Pella	2	F4	
M83-899	M74-270 x A78-123018	2	F5	
M84-916	A79-136012 x Dawson	1	F5	Rps1
M84-1034	M75-2 x K1062	1	F5	Rps1
M85-122	M74-179 x M77-75	PTI	F4	Rps1/Rps3
M85-610	Fayette x McCall	1	F5	SCN 3
M85-907	Simpson x A80-147003	PTI	F5	Rps1
M86-1322	M75-2 x L77-906	SCN IA	F5	SCN 3
M86-1410	M72-3 x L77-756	SCN IA	F5	SCN 3
ORC 8803	Pride B152 x HW8039	PTI	F5	
W87-11	Hodgson 78 x Wells II	PTI	F4	
W87-15	Hodgson 78 x Wells II	PTI	F4	

* Number of years in test or name of 1989 test.

UNIFORM TEST I, 1990

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score		Emergence Score	Shattering Score
		Ames	Lamberton	Ames	Manhattan
Bell (SCN)	PTTIBlI	2.4	1.5	5.0	3.0
Glenwood (0)	PGB+TIBlI	2.2	2.5	1.0	2.0
Sibley (I)	WGBIYI	2.9	1.0	1.0	2.0
Sturdy (L)	PGBIIbI	2.5	1.0	5.0	2.0
Hardin	PGBIYI	3.1	2.5	1.0	1.0
A Hardin BC(k)	PGBDYI	3.4	1.5	5.0	1.0
A Hardin BC(6)	PGBDYI	3.4	2.0	3.0	1.0
E86237	WGBIBfI	2.6	1.5	2.0	2.0
M83-108	PGTIIbI	2.5	2.0	5.0	2.0
M83-899	PGBIBfI	3.9	2.0	5.0	2.0
M84-916	WGBIBfI	2.9	2.5	5.0	2.0
M84-1034	WGTIBfI	2.6	3.5	2.0	1.0
M85-122	WGBIYI	3.6	1.0	1.0	2.0
M85-610	P+WTTIYI	2.1	2.0	2.0	2.0
M85-907	P+WGBDBfI	3.8	2.0	1.0	1.0
M86-1322	WGTDBfI	3.5	1.5	1.0	2.0
M86-1410	PGBDIbI	2.0	1.5	5.0	2.0
ORC 8803	PTBIBrI	2.5	2.0	1.0	2.0
W87-11	PGBIBfI	2.6	2.0	2.0	1.0
W87-15	PGBIBfI	3.5	1.5	2.0	3.0

UNIFORM TEST I, 1990

DISEASE DATA

	BTS	BSR-Ames		PR			PS	PSB
	Ames	Plant	Stem	Urbana	Ames	Lafayette	Lafayette	
	a	n	n	Race	Race	Race	a	n
Strain	Score	%	%	1	4	7	%	%
Bell (SCN)	3.3	60.0	13.3	S	S	H	54	26
Glenwood (0)	3.0	80.0	60.4	R	S	S	70	15
Sibley (I)	3.3	100.0	38.9	R	S	S	44	14
Sturdy (L)	3.3	100.0	38.9	R	S	S	44	14
Hardin	3.0	10.0	3.0	R	S	S	62	16
A Hardin BC(k)	2.7	70.0	25.8	R	R	R	54	6
A Hardin BC(6)	3.0	70.0	43.2	R	R	S	66	4
E86237	3.0	40.0	7.0	R	S	S	--	--
M83-108	4.0	70.0	38.2	R	S	S	54	12
M83-899	3.0	30.0	3.9	R	S	S	80	6
M84-916	4.0	50.0	28.6	R	S	H	52	24
M84-1034	3.7	80.0	29.6	R	R	R	44	24
M85-122	3.7	90.0	64.0	R	S	S	58	8
M85-610	4.3	50.0	16.6	H	S	H	30	32
M85-907	2.3	80.0	28.7	R	S	R	38	36
M86-1322	3.3	80.0	22.8	R	S	H	58	16
M86-1410	2.7	100.0	39.8	R	S	H	18	36
ORC 8803	2.3	40.0	6.4	R	S	R	2	50
W87-11	3.0	100.0	54.7	R	S	S	56	18
W87-15	3.3	50.0	23.9	R	S	R	48	12

UNIFORM TEST I, 1990

REGIONAL SUMMARY

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	14	14	11	14	14	12	14	5	5
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Bell (SCN)	46.5	15	5.2	2.2	34	1.7	19.1	41.8	20.7
Glenwood (0)	42.7	20	-8.3	1.5	29	2.5	17.3	40.5	20.7
Sibley (I)	49.1	9	09/21*	2.2	35	1.9	18.8	40.6	20.8
Sturdy (L)	53.8	1	6.0	1.9	36	2.2	18.9	40.2	21.0
Hardin	48.0	11	1.2	2.2	36	2.2	16.0	40.8	20.9
A Hardin BC(k)	48.7	10	3.9	2.3	35	2.2	16.2	40.4	20.8
A Hardin BC(6)	43.7	19	3.3	2.2	35	2.2	16.6	39.8	21.1
E86237	52.6	3	3.7	2.0	36	2.0	17.7	40.9	21.0
M83-108	52.6	3	2.5	1.4	36	2.2	18.4	40.0	21.4
M83-899	50.5	7	2.5	2.1	39	2.3	16.2	38.8	21.0
M84-916	53.0	2	-0.1	2.3	37	2.2	18.3	40.0	21.2
M84-1034	51.1	6	1.8	1.4	31	1.8	18.4	40.8	21.1
M85-122	50.5	7	0.5	1.6	33	2.1	18.6	40.9	20.6
M85-610	46.2	16	-1.1	2.6	35	2.3	14.5	41.1	20.2
M85-907	47.6	13	-1.0	2.0	32	2.0	15.1	40.2	20.8
M86-1322	45.0	17	1.4	2.3	32	2.4	14.0	39.7	21.7
M86-1410	47.0	14	2.8	1.9	33	2.0	16.8	42.2	18.3
ORC 8803	51.9	5	1.8	1.7	34	2.1	18.6	39.2	21.1
W87-11	44.7	18	1.5	2.1	35	2.4	17.0	39.9	21.2
W87-15	47.7	12	0.6	1.8	33	2.5	17.4	41.9	19.6

*124.4 Days After Planting

UNIFORM TEST I, 1990

1989-1990 2-YEAR MEAN

	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	30	30	23	30	30	26	29	8	8
Strain	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Glenwood (O)	39.2	9	-7.9	1.3	28	2.2	16.5	40.6	20.5
Sibley (I)	45.9	7	9/20.0*	1.9	34	1.7	17.9	40.2	20.9
Sturdy (L)	50.1	1	5.7	1.7	35	2.0	18.4	39.9	20.9
E86237	48.9	3	2.9	2.0	36	1.8	16.9	40.3	21.0
M83-108	48.8	4	3.3	1.3	35	2.0	18.0	40.1	21.5
M83-899	47.0	6	3.0	1.9	39	2.2	15.7	38.9	21.0
M84-916	50.0	2	0.6	2.0	37	2.0	17.8	39.5	21.4
M84-1034	48.2	5	2.7	1.4	31	1.7	17.8	40.4	21.3
M845-610	43.3	8	-0.4	2.2	35	2.0	14.2	41.2	20.2

*125.0 Days After Planting

1988-1990 3-YEAR MEAN

No. of Tests	45	45	36	44	45	41	44	13	13
Strain									
Sibley (I)	42.6	4	9/17.0*	1.8	33	1.9	17.5	39.7	21.6
Sturdy (L)	46.9	1	5.3	1.6	34	1.8	18.1	39.4	21.3
M83-108	45.7	2	3.7	1.5	34	2.1	18.2	39.7	21.7
M83-899	45.2	3	3.6	1.8	38	2.2	15.7	38.9	21.4

*123.1 Days After Planting

UNIFORM TEST I, 1990

YIELD (bu/a)

Strain	Mean 14 Tests	Green IA	Kanawha IA	Royal IA	Lafayette IN	East Lansing MI	Birch Run MI	Lamber-ton MN
Bell (SCN)	46.5	51.2	50.7	39.2	53.8	55.8	54.0	49.9
Glenwood (0)	42.7	48.6	37.6	33.2	35.2	54.9	41.2	43.4
Sibley (I)	49.1	54.2	51.4	39.6	49.3	61.4	40.9	60.6
Sturdy (L)	53.8	56.0	54.0	43.3	56.6	64.5	55.5	62.0
Hardin	48.0	56.7	55.3	29.8	50.0	64.4	55.5	61.8
A Hardin BC(k)	48.7	55.2	54.1	34.2	54.9	58.4	50.5	60.8
A Hardin BC(6)	43.7	51.1	54.5	22.0	50.9	62.0	42.5	61.3
E86237	52.6	54.6	51.1	39.3	64.6	59.2	54.7	57.0
M83-108	52.6	53.1	51.9	44.8	58.0	64.4	51.7	57.3
M83-899	50.5	54.9	50.5	35.6	56.6	64.9	51.2	62.2
M84-916	53.0	54.5	54.3	46.2	56.3	59.2	48.5	59.8
M84-1034	51.1	55.9	53.8	40.8	54.4	52.0	56.0	54.7
M85-122	50.5	52.7	50.4	42.6	48.3	59.2	49.8	54.3
M85-610	46.2	47.7	48.9	39.3	41.8	49.0	43.8	48.6
M85-907	47.6	50.8	56.9	45.1	44.2	51.0	49.8	49.5
M86-1322	45.0	46.5	50.9	30.9	45.4	49.8	48.7	54.3
M86-1410	47.0	49.9	47.1	38.7	49.7	54.9	48.4	50.1
ORC 8803	51.9	57.0	53.8	42.6	58.6	61.0	53.1	55.6
W87-11	44.7	51.7	53.1	25.4	53.5	56.0	44.8	50.5
W87-15	47.7	50.7	48.5	35.8	53.8	50.5	50.2	51.1
C.V. (%)		7.2	5.2	9.6	9.5	11.6	9.0	8.3
L.S.D. (5%)		6.2	4.4	5.9	8.2	11.0	7.4	7.5
Row Sp. (In.)		27	27	27	24	20	20	10
Rows/Plot		4	4	4	4	4	4	10
Reps		3	3	3	3	3	3	3

UNIFORM TEST I, 1990

YIELD (bu/a)

Strain	Waseca MN	Oconto NE	O'Neill (Concord) NE	London Ont.	Brook-ings SD	Wilmot SD	Arling-ton WI
Bell (SCN)	24.6	59.1	27.8	52.2	47.9	36.5	47.6
Glenwood (0)	58.7	51.2	25.9	45.6	44.2	31.4	47.1
Sibley (I)	64.6	66.2	20.6	52.0	43.0	36.4	46.9
Sturdy (L)	73.3	69.9	27.8	51.2	48.9	38.0	52.5
Hardin	70.7	38.5	27.6	53.3	21.5	36.4	49.9
A Hardin BC(k)	75.3	41.8	31.2	46.8	28.7	36.0	53.6
A Hardin BC(6)	61.3	20.1	30.1	46.7	25.4	36.0	47.2
E86237	74.3	68.0	25.0	55.2	48.4	37.3	48.3
M83-108	73.1	68.5	27.4	49.2	48.1	37.9	50.6
M83-899	65.5	73.8	27.2	48.1	29.2	38.0	49.4
M84-916	73.2	69.5	25.4	50.7	53.2	41.2	49.6
M84-1034	70.0	63.5	27.4	54.8	42.3	39.9	50.1
M85-122	68.5	70.0	26.4	47.7	46.2	40.0	51.4
M85-610	61.9	66.7	24.7	46.8	45.4	35.0	46.5
M85-907	61.7	52.5	23.7	38.5	56.4	35.1	51.8
M86-1322	65.5	56.3	28.2	47.4	32.1	28.1	46.5
M86-1410	61.6	61.0	23.6	45.2	44.2	34.3	49.9
ORC 8803	67.6	56.7	27.4	54.2	51.1	34.1	53.4
W87-11	63.1	58.1	25.0	45.7	17.8	33.1	48.5
W87-15	65.2	61.8	26.8	48.3	42.5	37.7	45.0
C.V. (%)	7.0	11.0	13.5	7.6	11.8	12.6	7.2
L.S.D. (5%)	7.4	10.7	5.9	5.3	7.8	ns	5.8
Row Sp. (In.)	10	30	30	14.8	30	30	30
Rows/Plot	10	4	4	4	4	4	4
Reps	3	3	3	4	3	3	3

UNIFORM TEST I, 1990

YIELD RANK

Strain	Yield Rank	Green IA	Kanawha IA	Royal IA	Lafayette IN	East Lansing MI	Birch Run MI	Lamber-ton MN
Bell (SCN)	15	13	14	11	9	13	5	17
Glenwood (0)	20	18	20	16	20	14	19	20
Sibley (I)	9	9	11	8	15	6	20	6
Sturdy (L)	1	3	6	4	4	2	2	2
Hardin	11	2	2	18	13	3	2	3
A Hardin BC(k)	10	5	5	15	7	11	9	5
A Hardin BC(6)	19	14	3	20	12	5	18	4
E86237	3	7	12	9	1	8	4	9
M83-108	3	10	10	3	3	4	7	8
M83-899	7	6	15	14	4	1	8	1
M84-916	2	8	4	1	6	9	14	7
M84-1034	6	4	7	7	8	16	1	11
M85-122	7	11	16	5	16	10	11	12
M85-610	16	19	17	9	19	20	17	18
M85-907	13	15	1	2	18	17	12	19
M86-1322	17	20	13	17	17	19	13	12
M86-1410	14	17	19	12	14	15	15	16
ORC 8803	5	1	7	5	2	7	6	10
W87-11	18	12	9	19	11	12	16	15
W87-15	12	16	18	13	9	18	10	14

UNIFORM TEST I, 1990

YIELD RANK

Strain	Waseca MN	Oconto NE	O'Neill (Concord) NE	London Ont.	Brook-ings SD	Wilmot SD	Arling-ton WI
Bell (SCN)	20	12	4	5	7	9	14
Glenwood (0)	19	17	13	18	10	19	16
Sibley (I)	13	8	20	6	12	10	17
Sturdy (L)	3	3	4	7	4	4	3
Hardin	6	19	6	4	19	10	8
A Hardin BC(k)	1	18	1	14	17	12	1
A Hardin BC(6)	18	20	2	16	18	12	15
E86237	2	6	15	1	5	8	13
M83-108	5	5	7	9	6	6	6
M83-899	10	1	10	11	16	4	11
M84-916	4	4	14	8	2	1	10
M84-1034	7	9	7	2	14	3	7
M85-122	8	2	12	12	8	2	5
M85-610	15	7	17	14	9	15	18
M85-907	16	16	18	20	1	14	4
M86-1322	10	15	3	13	15	20	18
M86-1410	17	11	19	19	10	16	8
ORC 8803	9	14	7	3	3	17	2
W87-11	14	13	15	17	20	18	12
W87-15	12	10	11	10	13	7	20

UNIFORM TEST I, 1990

MATURITY (date)

Strain	Mean 11 Tests	Green IA	Kanawha IA	Royal IA	Lafayette IN	East Lansing MI	Birch Run MI	Lamber-ton MN
Bell (SCN)	5.2		6		4	2	13	6
Glenwood (0)	-8.3		-13		-9	-2	-5	-15
Sibley (I)	09/21		09/15		09/15	09/27	09/20	09/20
Sturdy (L)	6.0		6		3	7	14	5
Hardin	1.2		0		1	1	5	-2
A Hardin BC(k)	3.9		6		5	2	6	5
A Hardin BC(6)	3.3		2		4	6	7	1
E86237	3.7		2		3	4	12	3
M83-108	2.5		2		2	3	5	1
M83-899	2.5		3		2	4	8	2
M84-916	-0.1		1		-1	0	-3	0
M84-1034	1.8		1		2	3	5	-2
M85-122	0.5		0		-2	2	3	0
M85-610	-1.1		1		-3	-2	-3	-3
M85-907	-1.0		0		-3	-2	-2	-1
M86-1322	1.4		0		1	1	6	-1
M86-1410	2.8		-1		3	3	11	1
ORC 8803	1.8		3		4	0	3	1
W87-11	1.5		0		1	3	7	0
W87-15	0.6		-1		2	0	4	0
Date Planted	05/19		05/14		05/23	05/14	05/15	05/03
Days to Mature	124.4		124		115	136	128	140

UNIFORM TEST I, 1990

MATURITY (date)

Strain	Waseca MN	Oconto NE	O'Neill (Concord) NE	London Ont.	Brook-ings SD	Wilmot SD	Arling-ton WI
Bell (SCN)	3		5	5	5	4	4
Glenwood (0)	-15		-1	-6	-10	-8	-7
Sibley (I)	09/24		09/05	10/01	09/28	09/25	09/21
Sturdy (L)	4		3	7	5	6	6
Hardin	0		1	1	1	0	5
A Hardin BC(k)	2		4	4	2	2	5
A Hardin BC(6)	1		5	3	1	2	4
E86237	2		2	6	2	1	4
M83-108	2		5	-1	4	2	3
M83-899	1		2	-3	2	4	2
M84-916	0		1	-3	2	3	-1
M84-1034	0		3	3	1	0	4
M85-122	-1		1	-1	1	0	3
M85-610	0		1	-3	0	2	-2
M85-907	-1		3	-3	0	0	-2
M86-1322	0		2	0	1	2	3
M86-1410	2		0	7	2	-1	4
ORC 8803	1		5	-1	3	-1	2
W87-11	0		2	-1	1	2	1
W87-15	0		3	-2	1	1	-1
Date Planted	05/04		05/31	05/30	05/22	05/31	05/29
Days to Mature	143		97	124	129	117	115

UNIFORM TEST I, 1990

LODGING (score)

Strain	Mean 14 Tests	Green IA	Kanawha IA	Royal IA	Lafayette IN	East Lansing MI	Birch Run MI	Lamber-ton MN
Bell (SCN)	2.2	2.7	2.4	1.8	2.7	1.3	2.7	3.3
Glenwood (0)	1.5	1.5	1.4	1.5	1.5	1.0	2.0	1.0
Sibley (I)	2.2	2.4	2.3	1.6	3.0	1.7	3.0	3.7
Sturdy (L)	1.9	2.1	2.6	1.7	1.8	1.3	2.3	2.3
Hardin	2.2	2.7	3.1	1.7	2.7	1.3	2.3	2.0
A Hardin BC(k)	2.3	2.7	2.6	1.7	2.7	1.7	2.7	2.7
A Hardin BC(6)	2.2	2.9	2.1	1.5	2.7	1.0	2.0	2.7
E86237	2.0	2.2	2.8	1.7	2.3	1.0	2.3	3.3
M83-108	1.4	1.8	1.9	1.7	1.5	1.0	1.0	1.3
M83-899	2.1	2.4	2.4	1.7	2.3	1.7	2.3	3.3
M84-916	2.3	2.7	3.1	1.8	3.3	1.7	3.0	3.7
M84-1034	1.4	1.8	1.8	1.5	1.3	1.0	1.7	1.7
M85-122	1.6	1.7	1.7	1.7	1.8	1.7	1.0	2.3
M85-610	2.6	4.1	3.1	2.4	3.7	2.0	3.0	3.0
M85-907	2.0	1.9	1.9	1.6	2.0	1.3	1.0	2.7
M86-1322	2.3	2.3	2.2	1.7	3.0	1.3	2.7	3.3
M86-1410	1.9	2.0	2.1	1.7	2.3	1.7	2.0	3.0
ORC 8803	1.7	1.8	2.3	1.6	1.8	1.0	1.7	2.7
W87-11	2.1	1.8	2.5	1.6	3.0	1.3	3.0	2.3
W87-15	1.8	2.1	1.9	1.6	2.0	1.3	2.7	2.3

PLANT HEIGHT (inches)

Strain	Mean 14 Tests							
Bell (SCN)	34	38	34	31	32	35	37	35
Glenwood (0)	29	32	28	23	23	30	29	35
Sibley (I)	35	36	34	29	30	38	33	39
Sturdy (L)	36	36	37	33	32	37	36	40
Hardin	36	37	35	27	33	38	40	38
A Hardin BC(k)	35	36	37	26	32	35	37	40
A Hardin BC(6)	35	39	33	25	31	38	36	37
E86237	36	36	34	30	33	35	39	38
M83-108	36	38	36	33	33	38	34	40
M83-899	39	39	37	29	35	43	44	43
M84-916	37	35	36	32	33	42	37	40
M84-1034	31	32	32	25	26	32	32	35
M85-122	33	35	33	28	29	34	30	39
M85-610	35	34	34	30	33	39	36	38
M85-907	32	32	31	26	27	28	31	35
M86-1322	32	34	30	26	29	34	34	36
M86-1410	33	35	34	29	28	35	31	37
ORC 8803	34	36	35	31	32	36	34	38
W87-11	35	34	36	28	31	36	38	38
W87-15	33	36	31	25	30	33	34	38

UNIFORM TEST I, 1990

LODGING (score)

Strain	Waseca MN	Oconto NE	O'Neill (Concord) NE	London Ont.	Brook-ings SD	Wilmot SD	Arling-ton WI
Bell (SCN)	3.0	1.7	1.0	3.0	1.7	1.0	2.5
Glenwood (0)	1.0	1.0	1.0	4.3	1.3	1.0	1.3
Sibley (I)	3.0	2.0	1.0	2.3	2.0	1.0	2.2
Sturdy (L)	3.0	1.7	1.0	1.9	1.7	1.0	2.5
Hardin	3.0	2.7	1.0	1.8	3.0	1.0	3.0
A Hardin BC(k)	3.0	3.3	1.0	1.9	2.3	1.0	2.7
A Hardin BC(6)	2.7	4.7	1.0	1.9	2.3	1.0	2.2
E86237	3.0	1.7	1.0	1.6	1.7	1.0	2.7
M83-108	1.7	1.0	1.0	1.3	1.3	1.0	1.5
M83-899	2.7	2.3	1.0	2.3	2.3	1.0	2.2
M84-916	3.0	1.3	1.0	2.1	2.0	1.0	3.0
M84-1034	1.7	1.0	1.0	1.3	1.7	1.0	1.5
M85-122	2.0	1.0	1.0	2.3	1.3	1.0	1.3
M85-610	3.0	1.0	1.0	2.4	2.0	1.0	4.0
M85-907	2.7	3.0	1.0	4.3	1.7	1.0	1.8
M86-1322	4.0	1.7	1.0	3.0	2.3	1.0	3.0
M86-1410	2.7	1.0	1.0	2.8	2.3	1.0	1.5
ORC 8803	1.7	2.0	1.0	1.5	1.7	1.0	1.5
W87-11	2.7	1.0	1.0	3.0	3.0	1.0	2.0
W87-15	2.3	1.0	1.0	2.3	1.3	1.0	1.8

PLANT HEIGHT (inches)

Strain							
Bell (SCN)	30	34	28	35	38	34	29
Glenwood (0)	32	30	27	29	32	33	26
Sibley (I)	40	38	28	34	36	36	32
Sturdy (L)	41	37	27	37	38	35	35
Hardin	38	36	31	37	35	41	35
A Hardin BC(k)	39	35	31	36	33	39	32
A Hardin BC(6)	39	34	31	35	37	36	33
E86237	41	39	28	36	36	41	35
M83-108	40	38	29	33	39	36	32
M83-899	44	42	30	37	35	43	38
M84-916	44	39	32	37	37	38	37
M84-1034	34	31	27	31	33	32	29
M85-122	39	36	26	32	37	32	29
M85-610	41	34	27	30	37	42	35
M85-907	34	40	33	35	35	33	28
M86-1322	35	33	29	32	32	31	29
M86-1410	38	37	28	31	36	36	28
ORC 8803	39	36	29	34	36	34	31
W87-11	40	38	27	35	34	37	34
W87-15	36	38	28	34	33	35	32

UNIFORM TEST I, 1990

SEED QUALITY (score)

Strain	Mean 12 Tests	Green IA	Kanawha IA	Royal IA	Lafayette IN	East Lansing MI	Birch Run MI	Lamber-ton MN
Bell (SCN)	1.7	1.5	1.5	2.0	1.0			2.3
Glenwood (0)	2.5	3.5	2.5	3.0	1.5			3.0
Sibley (I)	1.9	2.0	1.5	1.5	1.0			2.3
Sturdy (L)	2.2	2.5	2.0	2.0	1.0			2.7
Hardin	2.2	2.0	2.0	2.5	1.0			2.7
A Hardin BC(k)	2.2	2.5	2.0	2.5	1.0			2.7
A Hardin BC(6)	2.2	2.5	2.0	2.5	1.0			2.3
E86237	2.0	1.5	1.0	3.5	1.0			2.7
M83-108	2.2	2.5	2.5	3.0	1.5			2.0
M83-899	2.3	2.0	2.0	3.5	1.5			2.7
M84-916	2.2	2.0	1.0	3.0	1.5			2.7
M84-1034	1.8	2.0	1.5	2.0	1.0			2.7
M85-122	2.1	2.0	1.5	2.5	1.5			3.0
M85-610	2.3	2.0	2.0	3.5	1.0			2.7
M85-907	2.0	2.5	1.5	2.0	1.0			2.7
M86-1322	2.4	3.0	2.0	3.0	1.5			2.3
M86-1410	2.0	2.0	1.5	3.0	1.5			2.7
ORC 8803	2.1	2.0	2.5	2.5	1.0			2.3
W87-11	2.4	2.5	1.5	3.5	1.5			3.0
W87-15	2.5	2.5	2.0	3.5	1.5			2.3

SEED SIZE (g/100)

Strain	Mean 14 Tests							
Bell (SCN)	19.1	20.6	19.2	17.8	20.2	18.3	22.4	19.2
Glenwood (0)	17.3	18.2	17.2	17.0	17.0	17.0	17.7	16.7
Sibley (I)	18.8	20.2	18.7	17.9	18.5	19.3	20.5	19.1
Sturdy (L)	18.9	19.3	18.8	16.4	19.1	19.6	21.5	18.8
Hardin	16.0	16.7	15.4	15.0	15.8	17.3	17.9	15.3
A Hardin BC(k)	16.2	15.8	15.8	14.6	15.9	16.8	18.5	16.9
A Hardin BC(6)	16.6	17.2	16.6	14.2	16.7	17.8	17.9	16.1
E86237	17.7	18.7	17.4	15.2	18.2	18.3	19.9	18.1
M83-108	18.4	18.6	18.4	17.6	17.8	18.7	20.4	18.0
M83-899	16.2	16.0	15.7	14.6	16.2	17.1	17.8	15.9
M84-916	18.3	18.3	18.4	17.4	18.1	18.8	18.5	18.2
M84-1034	18.4	18.2	18.4	17.2	18.6	18.5	20.5	17.5
M85-122	18.6	19.7	18.9	17.5	18.4	19.9	20.3	18.4
M85-610	14.5	13.6	14.0	12.3	14.6	14.9	15.7	14.5
M85-907	15.1	15.6	15.0	14.9	14.5	15.2	15.5	14.1
M86-1322	14.0	13.8	12.9	13.0	14.1	13.8	15.5	13.9
M86-1410	16.8	18.2	16.5	15.4	16.2	16.3	18.2	17.0
ORC 8803	18.6	18.8	19.0	16.9	17.3	19.7	20.6	18.3
W87-11	17.0	17.7	16.8	15.0	17.2	17.3	19.8	16.8
W87-15	17.4	17.8	17.8	15.4	17.7	16.5	19.1	17.5

UNIFORM TEST I, 1990

SEED QUALITY (score)

Strain	Waseca MN	Oconto NE	O'Neill (Concord) NE	London Ont.	Brook-ings SD	Wilmot SD	Arling-ton WI
Bell (SCN)	2.0	1.0	1.7	1.5	3.0	2.0	1.0
Glenwood (0)	3.3	2.0	2.0	3.0	2.0	2.0	2.0
Sibley (I)	3.0	1.7	2.0	2.0	2.0	2.0	2.0
Sturdy (L)	3.7	1.7	1.3	2.0	3.0	3.0	2.0
Hardin	3.0	2.0	1.7	2.0	4.0	2.0	2.0
A Hardin BC(k)	3.3	2.0	1.3	2.0	3.0	2.0	2.0
A Hardin BC(6)	3.7	2.0	1.3	1.5	4.0	2.0	2.0
E86237	2.7	1.0	2.0	1.5	3.0	2.0	2.0
M83-108	3.3	1.0	1.7	2.0	3.0	2.0	2.0
M83-899	3.0	1.3	2.0	2.0	4.0	2.0	2.0
M84-916	2.7	2.0	2.0	1.5	3.0	3.0	2.0
M84-1034	2.0	1.0	2.0	1.5	3.0	2.0	1.0
M85-122	3.3	2.0	2.3	1.5	2.0	2.0	1.0
M85-610	3.3	1.7	1.7	1.5	3.0	2.0	3.0
M85-907	2.7	1.7	1.7	1.5	3.0	2.0	2.0
M86-1322	3.7	1.7	2.0	2.0	3.0	2.0	2.0
M86-1410	3.0	1.0	1.7	1.0	3.0	2.0	2.0
ORC 8803	2.7	1.7	2.0	1.5	3.0	3.0	1.0
W87-11	3.3	2.0	2.0	1.5	4.0	2.0	2.0
W87-15	4.0	2.0	2.0	2.0	3.0	3.0	2.0

SEED SIZE (g/100)

Strain							
Bell (SCN)	18.8	20.5	15.7	21.1	19.1	16.1	18.7
Glenwood (0)	17.0	19.9	13.7	17.9	19.1	17.4	16.4
Sibley (I)	19.1	21.6	13.1	20.4	18.8	18.2	17.3
Sturdy (L)	20.0	19.5	14.4	21.0	18.5	18.6	18.6
Hardin	16.3	18.8	11.6	16.7	17.5	13.9	16.3
A Hardin BC(k)	16.0	19.7	12.3	16.8	16.5	14.7	16.0
A Hardin BC(6)	17.2	20.6	12.7	16.8	17.6	14.5	15.9
E86237	18.5	20.2	13.3	20.1	17.6	15.5	17.3
M83-108	17.6	20.8	15.9	19.8	18.9	17.4	17.4
M83-899	16.3	18.8	12.6	17.4	16.4	15.7	16.1
M84-916	19.4	21.5	13.4	19.8	19.4	18.4	17.0
M84-1034	18.9	20.7	15.0	20.5	18.9	17.0	18.1
M85-122	18.3	21.0	13.2	19.5	19.7	18.1	17.3
M85-610	15.1	17.3	12.0	16.2	15.0	13.5	14.4
M85-907	15.2	15.6	12.1	15.8	16.9	15.8	15.2
M86-1322	14.2	16.3	11.2	15.8	15.3	12.4	14.1
M86-1410	17.1	18.0	12.7	19.0	17.4	15.6	17.4
ORC 8803	19.0	20.5	15.3	20.6	18.9	16.6	18.8
W87-11	16.8	18.4	13.0	19.7	17.8	16.1	16.0
W87-15	18.3	19.6	13.1	18.4	18.5	17.3	16.0

UNIFORM TEST I, 1990

PROTEIN (%)

Strain	Mean 5 Tests	Kanawha IA	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Bell (SCN)	41.8	42.8	41.7	41.7	42.5	40.5
Glenwood (0)	40.5	40.3	41.1	40.8	41.3	39.1
Sibley (I)	40.6	41.5	39.9	40.2	41.4	39.8
Sturdy (L)	40.2	40.3	39.0	40.1	41.0	40.6
Hardin	40.8	41.5	39.6	40.3	42.1	40.5
A Hardin BC(k)	40.4	41.1	38.6	40.7	40.8	41.0
A Hardin BC(6)	39.8	40.5	38.0	40.2	41.1	39.3
E86237	40.9	41.8	40.5	40.6	41.6	40.2
M83-108	40.0	40.3	39.2	40.0	41.0	39.3
M83-899	38.8	39.1	38.5	38.6	39.8	38.1
M84-916	40.0	40.7	38.5	40.2	40.8	39.7
M84-1034	40.8	41.8	39.9	41.0	41.0	40.2
M85-122	40.9	42.0	40.1	41.2	41.2	39.8
M85-610	41.1	42.5	41.8	42.3	40.9	38.0
M85-907	40.2	39.5	38.7	39.8	39.5	43.3
M86-1322	39.7	39.6	38.1	40.6	40.4	39.7
M86-1410	42.2	42.5	41.3	42.5	42.8	42.1
ORC 8803	39.2	40.0	39.1	37.7	39.9	39.2
W87-11	39.9	40.2	38.5	40.1	41.6	39.0
W87-15	41.9	41.8	40.6	42.0	43.9	41.4

OIL (%)

Strain	Mean 5 Tests					
Bell (SCN)	20.7	20.4	20.8	20.9	20.2	21.2
Glenwood (0)	20.7	20.9	21.4	19.8	20.6	20.9
Sibley (I)	20.8	20.6	20.8	21.4	20.8	20.5
Sturdy (L)	21.0	21.0	21.8	21.1	21.0	19.9
Hardin	20.9	20.6	21.4	21.1	20.5	20.7
A Hardin BC(k)	20.8	20.4	21.6	20.6	21.2	20.0
A Hardin BC(6)	21.1	20.9	21.9	20.9	20.8	20.8
E86237	21.0	20.7	21.5	21.2	20.5	21.0
M83-108	21.4	21.1	22.0	21.3	21.2	21.4
M83-899	21.0	20.9	21.6	21.4	20.5	20.8
M84-916	21.2	21.0	22.2	21.0	20.6	21.1
M84-1034	21.1	21.0	21.6	20.9	21.1	21.0
M85-122	20.6	20.1	21.3	20.1	20.6	21.0
M85-610	20.2	19.0	19.4	18.8	22.2	21.6
M85-907	20.8	21.7	21.4	21.4	21.9	17.8
M86-1322	21.7	21.7	22.8	21.0	21.8	21.2
M86-1410	18.3	18.5	19.1	17.7	18.0	18.1
ORC 8803	21.1	21.3	21.5	21.1	21.1	20.6
W87-11	21.2	20.6	21.9	20.9	21.6	20.9
W87-15	19.6	19.9	20.4	19.0	19.4	19.4

PRELIMINARY TEST I, 1990

Strain	Parentage	Generation Composited	Unique Traits
Glenwood (0)	Evans x Peterson 85	F5	
Sibley (I)	M68-256 x Hodgson	F5	
Sturdy (L)	M70-127 x Century	F5	
AC89-140013	AP6E2YT(F4)C4	F5	
AC89-140022	AP6E2YT(F4)C4	F5	
AC89-141012	AP6E2YTTW(F4)C4	F5	
AC89-141013	AP6E2YTTW(F4)C4	F5	
AC89-141030	AP6E2YTTW(F4)C4	F5	
AC89-145004	[A82-161034 x AP9Fe(S1) C6-39-1] x Jacques J231	F5	Fe Chlor. Resis.
AC89-145008	Pride B152 x A81-151026	F5	Fe Chlor. Resis.
AC89-145013	BSR 101_2 x A81-151026	F5	Fe Chlor. Resis.
AC89-145021	BSR 101^2 x A85-144015	F5	Fe Chlor. Resis.
AC89-145024	BSR 101^2 x A85-144015	F5	Fe Chlor. Resis.
AM89-144003	BSR 101 x Asgrow A1937	F5	BSR Resis.
AM89-144011	Jacques J231 x BSR 101	F5	BSR Resis.
AM89-144019	Asgrow A1937 x Jacques J231	F5	
AM89-144024	Jacques J231 x A8	F5	BSR Resis.
AM89-144026	Jacques J231 x A8	F5	BSR Resis.
AM89-144029	A82-161034 x BSR 101	F5	BSR Resis.
AM89-144034	A85-394009 x Asgrow A1937	F5	BSR Resis.
AM89-144036	A82-161034 x BSR 101	F5	BSR Resis.
C1790	Hack x C1627	F5	
C1797	C1627 x A81-151026	F5	
E88550	GL 2634 x Asgrow A1937	F3	
E88559	Asgrow A1937 X Agripro AP200	F3	
M86-575	Ozzie x A80-244003	F5	Rps1
M86-584	Ozzie x A80-244003	F5	Rps1
M86-587	Ozzie x A80-244003	F5	Rps1
M86-892	Hack x Hodgson 78	F5	Rps1
M86-956	J102A x Dassel	F5	Rps6
M86-1008	L81-4583 x Hodgson 78	F5	Rps1 ti
M86-1009	L81-4583 x Hodgson 78	F5	Rps1 Het. ti
M86-1015	L81-4583 x Hodgson 78	F5	Rps1 ti
ORC 9003	Pride B152 x T8112	F5	

PRELIMINARY TEST I, 1990

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Shattering Score Manhattan
Glenwood (0)	PGB+TIBlI	2.7	2.0
Sibley (I)	WGBIYI	2.2	2.0
Sturdy (L)	PGBIIbI	2.7	2.0
AC89-140013	PTBIBli	3.2	1.0
AC89-140022	PGTIBfI	3.0	1.0
AC89-141012	WGTDBfI	1.8	1.0
AC89-141013	WGTDBfI	1.8	1.0
AC89-141030	WGTDBfI	1.8	2.0
AC89-145004	PGBDGrI	1.2	1.0
AC89-145008	WTBDBrI	2.3	2.0
AC89-145013	PTTIBrI	1.7	2.0
AC89-145021	PGTIIbI	1.3	2.0
AC89-145024	PTTIBrI	1.2	2.0
AM89-144003	PGTIIbI	2.8	2.0
AM89-144011	PGBIIbI	3.0	3.0
AM89-144019	PGBIIbI	2.0	1.0
AM89-144024	P+WGBIBfI	2.7	1.0
AM89-144026	WGBIBfI	1.8	1.0
AM89-144029	P+WGTIBf+IbI	2.0	2.0
AM89-144034	PTTIBl+BrI	3.8	2.0
AM89-144036	PGTIIbI	2.2	2.0
C1790	PGTIIbI	3.0	1.0
C1797	PTBIBrI	1.8	2.0
E88550	P+WGBDBfI	4.5	2.0
E88559	PTBIBfI	4.2	2.0
M86-575	WTBIBrI	2.5	2.0
M86-584	WGTIBfI	1.8	1.0
M86-587	PGT+BIYI	2.2	2.0
M86-892	WGBSBfI	2.2	2.0
M86-956	PGBSYI	3.7	1.0
M86-1008	WGTSBfI	3.0	3.0
M86-1009	PGTSBfI	2.5	3.0
M86-1015	WGBIBfI	3.0	1.0
ORC 9003	PGBIYI	2.2	1.0

PRELIMINARY TEST I, 1990

DISEASE DATA

	BSR-Ames		PR			PS	PSB
	Plant	Stem	Urbana	Ames	Lafayette	Lafayette	
	n	n	Race	Race	Race	a	n
Strain	%	%	1	4	7	%	%
Glenwood (0)	80.0	40.1	R	S	S	70	15
Sibley (I)	100.0	29.3	R	S	S	44	14
Sturdy (L)	90.0	30.5	R	S	S	44	14
AC89-140013	100.0	38.9	R	S	S	44	24
AC89-140022	70.0	23.9	S	S	S	60	10
AC89-141012	90.0	42.7	R	S	S	50	22
AC89-141013	80.0	29.8	R	S	S	64	12
AC89-141030	70.0	29.7	R	S	S	72	8
AC89-145004	90.0	23.4	R	S	S	60	4
AC89-145008	50.0	11.0	S	S	S	54	6
AC89-145013	60.0	11.4	H	S	S	32	32
AC89-145021	40.0	4.9	H	S	S	54	16
AC89-145024	70.0	19.5	S	S	S	4	12
AM89-144003	90.0	17.5	R	S	S	72	12
AM89-144011	70.0	13.3	R	S	S	50	14
AM89-144019	100.0	22.6	R	S	S	56	10
AM89-144024	80.0	17.5	R	S	S	80	6
AM89-144026	90.0	10.0	R	S	S	84	6
AM89-144029	50.0	9.6	R	S	S	60	6
AM89-144034	60.0	8.6	R	S	H	82	4
AM89-144036	70.0	10.5	R	S	S	44	18
C1790	90.0	32.0	R	S	S	82	2
C1797	60.0	16.6	S	S	S	62	6
E88550	60.0	19.9	R	H	H	64	8
E88559	60.0	25.8	R	S	S	68	6
M86-575	40.0	10.4	H	S	S	50	32
M86-584	90.0	25.6	R	S	S	60	14
M86-587	60.0	17.2	R	S	S	70	8
M86-892	100.0	58.5	R	S	S	70	16
M86-956	100.0	36.8	R	R	S	46	24
M86-1008	90.0	45.6	R	R	R	46	10
M86-1009	100.0	37.1	H	S	S	54	16
M86-1015	90.0	25.9	R	S	H	60	10
ORC 9003	60.0	14.5	R	S	R	8	20

PRELIMINARY TEST I, 1990

REGIONAL SUMMARY

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	7	7	6	7	7	6	7	5	5
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Glenwood (0)	44.1	33	-10.5	1.2	28	3.0	17.3	40.8	20.2
Sibley (I)	49.2	24	09/22*	2.2	36	2.6	18.5	40.7	21.0
Sturdy (L)	54.2	5	5.2	1.9	36	2.6	18.7	40.1	20.6
AC89-140013	51.6	14	3.7	2.1	33	2.8	20.2	39.0	20.3
AC89-140022	48.9	26	2.5	1.8	33	2.7	15.9	40.3	19.2
AC89-141012	47.9	29	-0.2	1.2	28	2.3	16.9	40.0	21.1
AC89-141013	49.4	22	0.2	1.5	30	2.2	17.0	39.7	20.7
AC89-141030	50.3	19	0.3	1.2	28	2.6	17.2	39.9	21.0
AC89-145004	47.0	30	1.3	2.0	35	2.7	18.0	40.8	19.9
AC89-145008	53.2	7	2.0	3.1	38	2.7	14.9	41.2	20.6
AC89-145013	52.4	9	3.5	2.0	36	2.6	18.6	40.3	20.3
AC89-145021	53.2	7	3.3	1.9	35	2.6	17.3	42.6	18.8
AC89-145024	50.4	18	3.2	2.2	35	2.4	19.6	39.7	21.1
AM89-144003	54.2	5	3.0	1.8	34	2.3	15.8	40.2	20.0
AM89-144011	49.3	23	1.0	2.2	36	2.3	17.9	40.0	20.8
AM89-144019	51.3	15	4.7	1.8	37	2.7	18.3	40.7	21.2
AM89-144024	54.9	3	4.5	1.6	33	2.6	17.0	38.6	21.7
AM89-144026	55.3	2	6.2	1.6	34	2.4	17.7	39.7	20.8
AM89-144029	54.9	3	5.3	1.6	35	2.9	17.5	38.8	20.7
AM89-144034	50.8	17	3.7	2.2	35	2.8	18.2	41.5	20.4
AM89-144036	57.2	1	5.5	1.8	34	2.7	16.5	39.5	20.6
C1790	51.7	13	7.2	1.5	38	2.2	16.3	38.5	21.6
C1797	52.1	10	5.7	2.7	40	2.9	16.3	40.3	20.7
E88550	52.1	10	5.2	2.1	36	2.5	17.4	40.5	20.7
E88559	49.1	25	0.2	2.1	35	2.5	16.6	39.8	20.5
M86-575	48.8	27	1.2	2.6	38	2.7	18.1	42.7	19.8
M86-584	51.0	16	2.2	2.0	36	2.3	15.9	40.5	20.7
M86-587	50.2	20	1.5	1.6	35	2.6	16.9	41.8	20.0
M86-892	49.8	21	2.2	1.6	34	2.8	18.0	40.8	20.8
M86-956	40.1	34	5.3	3.0	37	2.8	18.0	42.3	19.9
M86-1008	48.0	28	0.8	2.3	35	2.5	19.7	41.5	20.6
M86-1009	46.8	31	2.2	1.9	38	2.5	17.7	39.0	22.0
M86-1015	46.0	32	9.0	2.4	41	2.6	19.7	41.1	20.9
ORC 9003	52.0	12	1.0	2.7	32	2.2	17.4	38.6	21.3

*131.0 Days After Planting

PRELIMINARY TEST I, 1990

YIELD (bu/a)

Strain	Mean 7 Tests	Kanawha IA	Royal IA	East Lansing MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	44.1	37.4	37.1	56.6	41.2	49.2	35.0	52.4
Sibley (I)	49.2	44.7	38.2	59.6	56.5	60.2	40.7	44.4
Sturdy (L)	54.2	53.1	42.8	58.8	61.3	62.1	49.3	51.9
AC89-140013	51.6	53.8	40.7	49.3	51.6	70.6	48.9	46.3
AC89-140022	48.9	49.9	38.4	56.5	51.6	58.5	37.6	49.5
AC89-141012	47.9	45.4	36.7	49.8	50.2	56.3	49.2	48.0
AC89-141013	49.4	48.9	38.7	49.7	53.9	56.0	48.9	49.8
AC89-141030	50.3	48.1	37.8	55.1	51.0	57.3	49.2	53.9
AC89-145004	47.0	51.7	37.8	41.9	50.0	59.9	37.1	50.5
AC89-145008	53.2	56.7	39.5	61.1	49.5	63.5	48.6	53.2
AC89-145013	52.4	52.4	38.0	63.0	54.5	66.6	45.4	46.6
AC89-145021	53.2	56.4	42.8	50.6	59.4	63.4	45.2	54.8
AC89-145024	50.4	51.2	36.3	56.5	54.2	59.9	48.7	46.0
AM89-144003	54.2	54.9	43.1	54.7	58.1	67.1	48.6	53.1
AM89-144011	49.3	54.2	39.0	44.5	56.2	63.0	43.4	44.5
AM89-144019	51.3	53.0	39.5	55.6	54.9	65.0	35.6	55.3
AM89-144024	54.9	56.8	38.2	61.7	61.2	67.0	42.6	56.7
AM89-144026	55.3	55.1	44.2	63.5	61.5	72.9	32.4	57.4
AM89-144029	54.9	55.5	43.9	63.4	58.2	63.7	46.0	53.4
AM89-144034	50.8	56.0	35.5	61.1	53.8	63.7	35.4	50.2
AM89-144036	57.2	60.8	44.2	59.0	60.8	66.8	50.7	58.0
C1790	51.7	47.0	40.7	61.6	50.3	64.8	48.8	48.4
C1797	52.1	54.2	37.9	64.7	54.8	59.2	45.0	49.0
E88550	52.1	54.5	43.6	59.2	55.3	65.6	34.8	52.0
E88559	49.1	51.1	36.0	50.7	56.2	68.7	31.4	49.3
M86-575	48.8	49.6	38.2	56.0	54.9	54.9	39.5	48.7
M86-584	51.0	46.6	34.6	62.4	54.9	67.3	38.9	52.6
M86-587	50.2	49.8	40.0	49.7	55.1	62.3	43.0	51.8
M86-892	49.8	48.6	42.8	49.7	56.0	62.2	35.7	53.4
M86-956	40.1	40.4	32.5	42.8	48.2	57.5	18.5	40.9
M86-1008	48.0	48.1	38.3	56.7	49.2	57.2	37.4	48.8
M86-1009	46.8	43.2	37.5	38.4	51.8	61.5	46.8	48.3
M86-1015	46.0	45.4	33.6	58.3	53.2	57.4	31.2	42.9
ORC 9003	52.0	55.8	43.0	53.3	50.1	66.7	41.1	54.0
C.V. (%)		6.6	8.5	14.9	6.0	5.5	10.5	7.5
L.S.D. (5%)		6.8	6.7	16.7	6.6	7.0	8.7	7.7
Row Sp. (In.)		27	27	20	10	10	30	30
Rows/Plot		4	4	4	4	4	4	4
Reps		2	2	3	2	2	2	2

PRELIMINARY TEST I, 1990

YIELD RANK

Strain	Yield Rank	Kanawha IA	Royal IA	East Lansing MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	33	34	27	16	34	34	29	13
Sibley (I)	24	31	19	10	8	23	20	32
Sturdy (L)	5	14	7	13	2	20	2	15
AC89-140013	14	13	10	30	24	2	5	29
AC89-140022	26	20	17	17	24	26	23	20
AC89-141012	29	29	28	26	28	31	3	27
AC89-141013	22	23	16	27	20	32	5	19
AC89-141030	19	25	24	21	26	29	3	7
AC89-145004	30	17	24	33	30	21	25	17
AC89-145008	7	3	13	8	31	15	10	10
AC89-145013	9	16	22	4	18	9	13	28
AC89-145021	7	4	7	25	5	16	14	5
AC89-145024	18	18	29	18	19	24	8	30
AM89-144003	5	9	5	22	7	5	9	11
AM89-144011	23	11	15	31	9	17	16	31
AM89-144019	15	15	13	20	14	11	27	4
AM89-144024	3	2	19	6	3	6	18	3
AM89-144026	2	8	1	2	1	1	31	2
AM89-144029	3	7	3	3	6	13	12	8
AM89-144034	17	5	31	9	21	13	28	18
AM89-144036	1	1	1	12	4	7	1	1
C1790	13	27	10	7	27	12	7	25
C1797	10	11	23	1	17	25	15	22
E88550	10	10	4	11	12	10	30	14
E88559	25	19	30	24	9	3	32	21
M86-575	27	22	19	19	14	33	21	24
M86-584	16	28	32	5	14	4	22	12
M86-587	20	21	12	28	13	18	17	16
M86-892	21	24	7	29	11	18	26	8
M86-956	34	33	34	32	33	27	34	34
M86-1008	28	25	18	15	32	30	24	23
M86-1009	31	32	26	34	23	22	11	26
M86-1015	32	29	33	14	22	28	33	33
ORC 9003	12	6	6	23	29	8	19	6

PRELIMINARY TEST I, 1990

MATURITY (date)

Strain	Mean 6 Tests	Kanawha IA	Royal IA	East Lansing MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	-10.5	-13		-2	-17	-12	-12	-7
Sibley (I)	09/22	09/15		09/24	09/20	09/23	09/30	09/23
Sturdy (L)	5.2	3		9	6	4	5	4
AC89-140013	3.7	6		6	5	3	1	1
AC89-140022	2.5	5		2	5	0	2	1
AC89-141012	-0.2	0		1	-1	-1	1	-1
AC89-141013	0.2	0		2	-1	-1	1	0
AC89-141030	0.3	0		6	0	-2	0	-2
AC89-145004	1.3	2		2	2	0	2	0
AC89-145008	2.0	2		2	4	3	2	-1
AC89-145013	3.5	4		6	4	3	1	3
AC89-145021	3.3	4		9	2	0	2	3
AC89-145024	3.2	4		4	4	2	1	4
AM89-144003	3.0	5		7	2	1	0	3
AM89-144011	1.0	0		2	2	0	1	1
AM89-144019	4.7	6		12	2	3	2	3
AM89-144024	4.5	6		7	4	3	4	3
AM89-144026	6.2	8		13	4	4	4	4
AM89-144029	5.3	6		13	5	3	2	3
AM89-144034	3.7	6		6	4	2	2	2
AM89-144036	5.5	7		10	5	3	6	2
C1790	7.2	7		11	7	7	8	3
C1797	5.7	6		12	5	3	5	3
E88550	5.2	6		13	4	3	2	3
E88559	0.2	0		1	-1	0	2	-1
M86-575	1.2	1		1	5	0	0	0
M86-584	2.2	1		7	3	0	1	1
M86-587	1.5	1		5	4	0	1	-2
M86-892	2.2	1		3	3	3	0	3
M86-956	5.3	6		7	7	6	2	4
M86-1008	0.8	-2		4	0	0	1	2
M86-1009	2.2	0		4	2	3	2	2
M86-1015	9.0	10		15	9	7	6	7
ORC 9003	1.0	2		0	1	2	2	-1
Date Planted	05/14	05/14		05/15	05/03	05/04	05/22	05/29
Days to Mature	131.0	124		132	140	142	131	117

PRELIMINARY TEST I, 1990

LODGING (score)

Strain	Mean 7 Tests	Kanawha IA	Royal IA	East Lansing MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	1.2	1.3	1.4	1.0	1.0	1.0	1.0	1.5
Sibley (I)	2.2	2.5	1.5	1.5	2.5	3.5	2.0	2.0
Sturdy (L)	1.9	2.0	1.7	1.0	2.5	3.0	1.5	1.8
AC89-140013	2.1	2.1	1.8	1.0	2.5	3.0	2.0	2.0
AC89-140022	1.8	1.8	1.6	1.0	2.0	3.0	2.0	1.5
AC89-141012	1.2	1.7	1.5	1.0	1.0	1.5	1.0	1.0
AC89-141013	1.5	1.4	1.6	1.0	1.5	2.0	2.0	1.3
AC89-141030	1.2	1.5	1.6	1.0	1.0	1.0	1.0	1.3
AC89-145004	2.0	2.4	1.4	1.0	2.5	2.5	2.5	2.0
AC89-145008	3.1	3.8	1.8	2.0	4.0	4.0	2.5	3.8
AC89-145013	2.0	1.9	1.5	1.0	2.5	3.0	2.0	2.0
AC89-145021	1.9	1.4	1.6	1.0	2.5	3.0	2.0	1.5
AC89-145024	2.2	2.3	1.5	1.5	2.5	3.0	1.5	3.0
AM89-144003	1.8	1.8	1.6	1.0	3.0	2.5	1.0	1.5
AM89-144011	2.2	2.8	1.8	1.0	2.5	3.0	2.0	2.0
AM89-144019	1.8	1.7	1.7	1.0	2.0	3.0	2.0	1.5
AM89-144024	1.6	1.7	1.5	1.0	2.0	3.0	1.0	1.3
AM89-144026	1.6	1.7	1.6	1.0	1.5	3.0	1.5	1.0
AM89-144029	1.6	1.9	1.5	1.0	1.5	2.5	1.5	1.3
AM89-144034	2.2	2.2	1.8	1.5	2.0	3.5	2.0	2.3
AM89-144036	1.8	1.7	1.6	1.0	2.0	3.0	2.0	1.3
C1790	1.5	1.9	1.4	1.0	1.5	2.0	1.5	1.0
C1797	2.7	3.0	1.8	2.0	2.5	4.0	2.5	2.8
E88550	2.1	2.0	1.6	1.5	2.5	2.5	2.5	2.0
E88559	2.1	2.0	1.7	1.0	2.5	3.0	2.0	2.3
M86-575	2.6	2.3	1.8	1.0	3.0	3.5	3.5	2.8
M86-584	2.0	1.4	1.5	1.0	2.0	3.0	2.0	2.8
M86-587	1.6	1.4	1.3	1.0	3.0	1.5	2.0	1.3
M86-892	1.6	2.1	1.3	1.0	2.0	2.0	1.5	1.0
M86-956	3.0	3.5	2.0	1.0	4.0	4.5	2.5	3.5
M86-1008	2.3	2.1	1.8	1.5	4.0	2.5	2.5	2.0
M86-1009	1.9	2.3	1.5	1.0	2.5	3.0	1.5	1.3
M86-1015	2.4	3.1	1.6	2.0	2.0	3.0	2.0	2.8
ORC 9003	2.7	2.1	1.6	1.0	4.0	3.0	4.0	3.0

PRELIMINARY TEST I, 1990

PLANT HEIGHT (inches)

Strain	Mean 7 Tests	Kanawha IA	Royal IA	East Lansing MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	28	24	23	27	32	34	28	27
Sibley (I)	36	34	28	39	41	38	36	33
Sturdy (L)	36	35	30	35	40	42	39	34
AC89-140013	33	34	26	31	37	39	36	30
AC89-140022	33	34	28	33	34	38	34	31
AC89-141012	28	32	26	26	29	32	31	22
AC89-141013	30	30	24	28	32	33	36	26
AC89-141030	28	28	22	25	32	33	32	24
AC89-145004	35	38	28	33	41	41	37	30
AC89-145008	38	40	31	39	41	39	39	34
AC89-145013	36	33	30	38	39	42	38	32
AC89-145021	35	36	32	35	37	37	37	32
AC89-145024	35	34	26	36	38	40	37	32
AM89-144003	34	32	29	32	40	38	35	30
AM89-144011	36	36	31	35	38	40	36	35
AM89-144019	37	36	32	38	39	41	37	35
AM89-144024	33	34	26	32	37	38	33	33
AM89-144026	34	35	30	35	36	36	33	31
AM89-144029	35	28	28	37	42	38	39	34
AM89-144034	35	36	30	38	35	40	34	35
AM89-144036	34	36	26	30	37	38	37	31
C1790	38	34	33	36	42	43	45	35
C1797	40	39	34	40	43	42	42	37
E88550	36	36	30	37	40	42	32	33
E88559	35	36	28	37	36	40	34	34
M86-575	38	37	32	40	40	42	37	36
M86-584	36	34	27	40	39	39	37	33
M86-587	35	34	28	32	38	39	38	33
M86-892	34	33	26	32	39	39	38	33
M86-956	37	37	32	35	40	41	35	37
M86-1008	35	35	29	34	39	39	34	32
M86-1009	38	38	32	34	40	41	41	38
M86-1015	41	34	40	42	50	45	39	40
ORC 9003	32	30	30	29	35	40	30	29

PRELIMINARY TEST I, 1990

SEED QUALITY (score)

Strain	Mean 6 Tests	Kanawha IA	Royal IA	East Lansing MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	3.0	3.0	3.5		3.5	3.0	3.0	2.0
Sibley (I)	2.6	1.5	2.5		3.5	3.0	3.0	2.0
Sturdy (L)	2.6	2.5	2.5		3.5	3.0	3.0	1.0
AC89-140013	2.8	2.5	3.0		3.5	3.0	3.0	2.0
AC89-140022	2.7	2.0	3.0		3.0	3.0	3.0	2.0
AC89-141012	2.3	1.5	2.0		3.0	3.0	2.0	2.0
AC89-141013	2.2	1.5	2.5		2.5	2.5	2.0	2.0
AC89-141030	2.6	1.5	3.0		3.0	3.0	3.0	2.0
AC89-145004	2.7	2.5	2.5		3.5	2.5	3.0	2.0
AC89-145008	2.7	2.0	3.0		3.0	3.0	3.0	2.0
AC89-145013	2.6	1.5	2.5		3.5	3.0	3.0	2.0
AC89-145021	2.6	2.0	2.5		3.0	3.0	3.0	2.0
AC89-145024	2.4	1.5	2.5		2.5	3.0	3.0	2.0
AM89-144003	2.3	1.5	2.5		2.0	2.5	3.0	2.0
AM89-144011	2.3	1.5	3.0		3.0	2.5	3.0	1.0
AM89-144019	2.7	2.5	2.5		3.0	3.0	3.0	2.0
AM89-144024	2.6	2.0	3.5		3.0	2.0	3.0	2.0
AM89-144026	2.4	2.0	2.5		2.5	2.5	3.0	2.0
AM89-144029	2.9	2.5	3.0		4.0	3.0	3.0	2.0
AM89-144034	2.8	2.0	3.5		3.0	3.0	3.0	2.0
AM89-144036	2.7	2.5	3.0		3.5	3.0	3.0	1.0
C1790	2.2	2.0	2.5		3.0	2.5	2.0	1.0
C1797	2.9	2.5	3.5		3.5	3.0	3.0	2.0
E88550	2.5	2.5	3.0		2.5	2.0	3.0	2.0
E88559	2.5	2.0	3.5		2.5	2.0	3.0	2.0
M86-575	2.7	2.0	3.5		3.0	2.5	3.0	2.0
M86-584	2.3	1.5	3.0		3.5	2.5	2.0	1.0
M86-587	2.6	1.5	2.5		3.5	3.0	3.0	2.0
M86-892	2.8	3.5	3.0		3.0	2.0	3.0	2.0
M86-956	2.8	2.0	3.5		3.0	2.5	4.0	2.0
M86-1008	2.5	2.0	2.5		2.5	3.0	3.0	2.0
M86-1009	2.5	1.5	3.5		2.5	2.5	3.0	2.0
M86-1015	2.6	2.5	3.0		2.5	2.5	3.0	2.0
ORC 9003	2.2	1.0	3.0		2.0	2.0	4.0	1.0

PRELIMINARY TEST I, 1990

SEED SIZE (g/100)

Strain	Mean 7 Tests	Kanawha IA	Royal IA	East Lansing MI	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	17.3	17.7	17.2	17.0	16.9	16.3	19.6	16.1
Sibley (I)	18.5	18.8	16.8	19.7	19.1	19.7	18.3	17.2
Sturdy (L)	18.7	18.8	16.8	18.0	20.2	19.7	18.1	19.3
AC89-140013	20.2	20.6	19.1	20.0	19.4	21.7	21.0	19.4
AC89-140022	15.9	16.2	15.0	15.4	15.8	16.5	16.6	16.1
AC89-141012	16.9	17.2	16.1	16.0	17.6	17.4	17.5	16.6
AC89-141013	17.0	16.6	15.4	16.5	17.8	17.8	18.3	16.8
AC89-141030	17.2	16.9	15.4	18.1	18.1	16.9	17.7	17.2
AC89-145004	18.0	18.8	15.6	18.6	19.0	17.1	18.8	17.8
AC89-145008	14.9	15.1	13.6	14.8	14.6	15.7	15.9	14.3
AC89-145013	18.6	18.4	16.8	19.6	19.2	19.0	18.9	18.0
AC89-145021	17.3	17.7	16.8	16.4	18.5	17.3	16.5	17.8
AC89-145024	19.6	19.1	17.6	19.7	19.9	19.9	20.7	20.2
AM89-144003	15.8	15.6	13.9	15.6	16.7	16.9	15.9	16.0
AM89-144011	17.9	18.6	16.2	18.1	18.3	18.2	18.0	17.7
AM89-144019	18.3	18.0	17.2	17.7	19.3	20.1	18.0	18.1
AM89-144024	17.0	18.1	14.8	16.6	18.6	17.9	15.7	17.5
AM89-144026	17.7	17.4	16.0	17.6	19.0	19.9	17.2	17.0
AM89-144029	17.5	17.1	15.2	18.2	19.1	18.5	17.2	16.9
AM89-144034	18.2	18.4	16.4	18.5	18.1	18.9	19.3	18.0
AM89-144036	16.5	16.8	14.2	16.1	19.0	17.3	16.4	15.5
C1790	16.3	15.8	14.6	16.4	17.0	17.9	16.0	16.2
C1797	16.3	16.2	13.4	16.4	17.7	17.8	16.1	16.8
E88550	17.4	17.6	16.4	18.4	17.9	18.4	17.0	16.4
E88559	16.6	15.8	15.4	17.4	16.4	17.5	17.8	15.6
M86-575	18.1	17.5	15.6	18.4	18.5	19.5	18.7	18.2
M86-584	15.9	16.2	14.0	15.5	16.2	16.6	17.1	15.4
M86-587	16.9	17.1	15.2	17.4	18.0	16.6	18.1	15.6
M86-892	18.0	18.6	16.6	18.0	18.2	18.9	18.3	17.6
M86-956	18.0	18.3	15.5	18.4	19.8	19.7	16.6	18.0
M86-1008	19.7	19.2	18.6	20.5	19.2	19.9	21.3	19.0
M86-1009	17.7	18.2	17.0	16.5	17.9	19.4	17.4	17.4
M86-1015	19.7	20.0	16.9	21.1	20.3	21.5	17.9	20.4
ORC 9003	17.4	18.1	15.1	17.6	17.1	18.8	18.1	16.9

PRELIMINARY TEST I, 1990

PROTEIN (%)

Strain	Mean 5 Tests	Kanawha IA	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	40.8	40.3	40.6	40.6	41.6	40.7
Sibley (I)	40.7	40.8	39.3	41.4	41.2	40.6
Sturdy (L)	40.1	40.3	39.8	40.1	39.8	40.6
AC89-140013	39.0	40.2	37.9	38.6	39.7	38.7
AC89-140022	40.3	40.4	38.2	40.6	41.5	40.6
AC89-141012	40.0	40.2	39.2	39.8	40.7	40.0
AC89-141013	39.7	38.8	40.2	39.9	40.5	39.0
AC89-141030	39.9	40.1	38.6	40.8	40.3	39.7
AC89-145004	40.8	40.7	40.2	41.2	41.5	40.2
AC89-145008	41.2	41.2	40.1	41.8	41.7	41.1
AC89-145013	40.3	40.4	39.0	40.3	40.8	41.1
AC89-145021	42.6	41.9	43.0	41.4	43.5	43.0
AC89-145024	39.7	39.9	39.2	39.5	39.6	40.5
AM89-144003	40.2	40.1	38.9	40.2	40.2	41.5
AM89-144011	40.0	40.2	38.6	40.5	40.0	40.9
AM89-144019	40.7	40.7	40.6	41.0	41.1	39.9
AM89-144024	38.6	38.8	38.3	38.1	39.0	38.9
AM89-144026	39.7	39.0	39.8	40.0	39.6	40.0
AM89-144029	38.8	39.0	38.7	38.9	38.7	38.6
AM89-144034	41.5	41.8	42.2	40.7	41.1	41.7
AM89-144036	39.5	40.0	39.7	39.5	40.0	38.5
C1790	38.5	38.8	37.3	38.7	38.7	38.8
C1797	40.3	40.2	39.5	40.6	40.6	40.7
E88550	40.5	40.5	38.4	40.5	41.1	41.8
E88559	39.8	39.8	37.5	39.7	40.8	41.3
M86-575	42.7	42.2	41.8	43.5	42.9	42.9
M86-584	40.5	40.0	40.0	40.7	40.0	41.6
M86-587	41.8	42.6	41.9	41.2	41.6	41.7
M86-892	40.8	43.5	40.2	40.9	40.5	39.0
M86-956	42.3	41.0	41.8	43.1	42.1	43.6
M86-1008	41.5	42.1	39.6	41.7	42.8	41.1
M86-1009	39.0	39.5	37.6	40.1	39.6	38.0
M86-1015	41.1	41.1	40.1	41.9	41.0	41.5
ORC 9003	38.6	39.6	38.0	38.4	38.2	38.8

PRELIMINARY TEST I, 1990

OIL (%)

Strain	Mean 5 Tests	Kanawha IA	Lamberton MN	Waseca MN	Brookings SD	Arlington WI
Glenwood (0)	20.2	20.3	20.3	20.0	20.3	20.0
Sibley (I)	21.0	21.1	21.7	20.6	20.8	20.9
Sturdy (L)	20.6	20.9	21.0	20.7	20.2	20.1
AC89-140013	20.3	21.4	20.9	19.9	19.7	19.7
AC89-140022	19.2	19.5	20.4	18.6	18.8	18.7
AC89-141012	21.1	20.9	21.7	20.7	21.0	21.1
AC89-141013	20.7	20.2	20.9	20.4	21.0	21.2
AC89-141030	21.0	21.3	21.1	20.5	21.2	20.8
AC89-145004	19.9	20.0	20.4	19.2	19.8	20.1
AC89-145008	20.6	20.3	20.9	20.2	20.5	20.9
AC89-145013	20.3	20.4	20.9	20.4	20.2	19.7
AC89-145021	18.8	19.4	18.5	18.9	19.1	18.1
AC89-145024	21.1	21.3	21.9	21.1	20.9	20.3
AM89-144003	20.0	20.3	21.3	19.7	19.9	19.0
AM89-144011	20.8	20.9	21.6	20.8	20.5	20.3
AM89-144019	21.2	21.2	21.4	21.1	20.9	21.4
AM89-144024	21.7	21.8	22.3	21.5	21.5	21.6
AM89-144026	20.8	20.8	21.1	20.5	20.8	20.9
AM89-144029	20.7	20.9	21.4	20.3	20.7	20.4
AM89-144034	20.4	19.9	20.7	20.4	20.5	20.4
AM89-144036	20.6	20.4	20.7	20.6	20.6	20.8
C1790	21.6	21.8	22.4	21.5	21.1	21.2
C1797	20.7	20.8	21.6	20.3	20.6	20.3
E88550	20.7	21.3	21.9	20.5	20.1	19.5
E88559	20.5	20.5	21.9	20.7	19.9	19.6
M86-575	19.8	20.3	20.5	19.3	19.4	19.4
M86-584	20.7	21.4	21.1	20.6	21.0	19.6
M86-587	20.0	19.8	20.6	20.1	19.9	19.4
M86-892	20.8	20.6	20.7	20.7	20.7	21.2
M86-956	19.9	20.9	20.4	19.6	19.7	18.8
M86-1008	20.6	20.2	21.8	20.4	19.9	20.5
M86-1009	22.0	21.9	22.9	21.6	21.9	21.8
M86-1015	20.9	21.4	21.9	20.9	20.2	20.2
ORC 9003	21.3	21.4	21.4	21.4	21.4	20.9

UNIFORM TEST II, 1990

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Archer	Williams 82 & PRX 54-59 x BSR 101(5)	UTI	BC4 F3	Rps1-k, Rps6
Burlison (L)	K74-113-76-486 x Century	3	F5	Rps1-b, Rps3
Kenwood (II)	Elgin x Asgrow A1937	3	F5	
Sturdy (I)	M70-127 x Century	4	F5	
Jack (SCN)	Fayette x Hardin	1	F4	SCN 3,4
A87-196014	BSR 101 x A80-344003	1	F5	BSR Resis
A87-297015	Pride B152 x A80-244003	1	F5	
A88-121019	A82-267015 x Sherman	PTI	F5	
A88-121025	A8 x Profiseed 1138	PTI	F5	BSR Resis.
A88-221005	A82-267015 x Sherman	PTIIA	F5	
A88-221006	Riverside 2024 x Harper	PTIIIA	F5	BSR Resis.
C1764	Sparks x Century	PTIIA	F6	
E86315	HW8039 x Pella	1	F3	
E86339	HW8039 x Elgin	1	F3	
E86348	HW8039 x A80-244035	1	F3	
E87202	Corsoy 79 x HW8123	PTIIA	F3	
E87223	HW8123 x LN80-10508	PTIIA	F3	
HM8625 (Chapman)	A79-236002 x HW79149	1	BC2F3	
HM8734	A78-123018(2) x Century 84	1	BC1 F3	Rps1-k
HM8735 (Erie)	A78-123018(2) x Century 84	1	BC1 F3	Rps1-k
HS87-4087	A81-156027 x [Asgrow A3127(4) x Williams 82]	PTIIA	BC2 F3	Rps1-k
LN84-8588	Hack x Harper	PTIIB	F5	Rps?, BSR Resis.
LN85-6800	LNX8132 x LN80-7532	PTIIB	F5	Rps1, BSR Resis.
LN86-983	Hack x BSR 101	PTIIB	F5	Rps1
M85-647	Ozzie x Fayette	PTIIA	F4	Rps1, SCN 3,4
M86-1800	M70-187 x L77-906	SCN IIB	F5	SCN 3
M86-1973	L77-906 x M75-89	SCN IIB	F4	SCN 3
ORC 8801	Pride B152 x T8112	PTIIA	F5	
ORC 8805	A80-147002 x Pride B152	PTIIA	F5	
U8763041	Sherman x Harper	PTI	F5	

* Number of years in test or name of 1989 test.

UNIFORM TEST II, 1990

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Chlorosis Score Lamberton	Emergence Score Ames	Shattering Score Manhattan
Archer	PGTDIbI	2.0	2.0	5.0	2.0
Burlison (L)	WTTIBlI	2.5	2.0	1.0	2.0
Kenwood (II)	PTBIBlI	3.1	2.0	2.0	1.0
Sturdy (I)	PGBIIbI	2.5	1.0	5.0	2.0
Jack (SCN)	WGBIYI	2.4	1.5	5.0	1.0
A87-196014	WGTDBfI	3.4	2.0	1.0	4.0
A87-297015	PTBDBrI	3.8	2.5	1.0	1.0
A88-121019	WGBSYI	3.1	2.0	4.0	2.0
A88-121025	PTBIYI	3.2	2.0	1.0	1.0
A88-221005	WGBSBfI	3.8	1.0	5.0	2.0
A88-221006	PTBSBlI	3.0	2.0	5.0	2.0
C1764	PTBIBlI	2.6	2.0	5.0	2.0
E86315	PTTIBlI	3.0	2.5	2.0	1.0
E86339	PTBIBlI	2.1	1.5	5.0	2.0
E86348	PTBIBlI	2.9	2.5	1.0	2.0
E87202	PGBIBfI	2.4	2.0	1.0	1.0
E87223	PGBIBfI	2.8	1.0	5.0	2.0
HM8625 (Chapman)	PGBIIbI	3.0	2.5	3.0	1.0
HM8734	PGBIIbI	3.4	2.0	5.0	3.0
HM8735	PTBIBrI	3.9	2.5	2.0	2.0
HS87-4087	WTBIBrI	3.4	2.5	1.0	1.0
LN84-8588	WGTSBfI	3.4	1.5	5.0	1.0
LN85-6800	PGTIIbI	3.8	2.0	1.0	1.0
LN86-983	PGTIIbI	3.4	1.5	1.0	3.0
M85-647	WGTDYI	2.8	1.5	1.0	2.0
M86-1800	WG+TBDBf+Ib	2.8	3.0	3.0	1.0
M86-1973	PGBDBfI	2.9	3.0	1.0	1.0
ORC 8801	PGBDYI	2.4	1.5	4.0	1.0
ORC 8805	PGBDBfI	3.1	2.0	1.0	1.0
U8763041	WG+TBIBrI	2.8	1.0	5.0	2.0

UNIFORM TEST II, 1990

DISEASE DATA

Strain	BTS Ames n Score	BB Urbana n Score	BSR-Ames Plant n %	BSR-Ames Stem n %	PR Vickery Phyto. Tol.	PR Urbana Race 1	PR Ames Race 4	PR Laf. Race 7	PS Lafayette a %	PSB Lafayette n %
Archer	2.7	1.4	60.0	42.4	4.0	R	R	R	56	8
Burlison (L)	3.3	3.0	100.0	72.5	4.0	R	R	R	54	10
Kenwood (II)	3.3	1.0	100.0	68.3	4.0	S	S	S	35	25
Sturdy (I)	3.0	1.5	100.0	87.5	5.3	R	S	S	44	14
Jack (SCN)	3.7	2.0	100.0	62.8	3.7	S	S	S	70	6
A87-196014	3.0	2.0	60.0	11.2	4.3	R	S	S	64	16
A87-297015	2.7	1.0	90.0	49.4	4.7	R	S	R	62	14
A88-121019	3.0	3.0	80.0	46.5	5.0	S	S	S	40	6
A88-121025	3.7	4.5	100.0	48.0	6.3	H	S	S	52	22
A88-221005	2.7	2.0	100.0	59.8	4.3	S	S	H	18	26
A88-221006	3.0	2.5	100.0	58.5	6.0	R	S	S	14	10
C1764	2.7	2.0	100.0	53.4	5.0	R	S	S	4	30
E86315	3.0	1.3	100.0	93.7	5.0	H	H	S	8	44
E86339	2.7	1.2	100.0	96.4	4.0	S	S	S	12	22
E86348	3.0	1.0	100.0	64.0	8.0	S	S	S	4	8
E87202	3.3	1.5	100.0	74.3	3.5	S	S	S	18	58
E87223	3.7	1.0	90.0	60.5	3.5	R	S	S	22	18
HM8625 (Chapman)	2.3	1.0	100.0	74.1	4.3	R	R	H	12	14
HM8734	3.0	3.0	100.0	60.2	4.3	R	R	R	8	40
HM8735	3.0	3.5	80.0	53.0	4.3	R	R	R	4	36
HS87-4087	3.7	4.0	100.0	84.8	4.3	R	R	R	12	20
LN84-8588	3.3	2.5	100.0	78.0	4.0	S	S	H	8	4
LN85-6800	3.3	4.0	90.0	53.7	4.0	R	S	S	14	18
LN86-983	2.7	2.5	80.0	38.9	4.7	R	S	S	22	38
M85-647	3.7	3.5	100.0	65.8	5.0	H	S	H	14	50
M86-1800	3.3	4.0	100.0	94.2	7.3	R	S	S	12	28
M86-1973	3.3	3.5	100.0	88.1	5.7	R	S	H	2	38
ORC 8801	3.0	2.0	100.0	57.6	4.0	R	S	R	2	20
ORC 8805	3.0	1.0	100.0	81.4	4.0	R	S	R	18	6
U8763041	3.0	2.0	100.0	80.3	4.5	S	S	S	40	28

UNIFORM TEST II, 1990

REGIONAL SUMMARY

No. of Tests Strain	Yield 22 bu/a	Rank 22 No.	Maturity 18 Date	Lodging 22 Score	Plant Height 22 In.	Seed Quality 20 Score	Seed Size 22 g/100	Composition Protein 5 %	 Oil 5 %
Archer	52.3	20	-3.2	1.8	35	2.3	18.1	39.7	21.5
Burlison (L)	53.9	11	4.2	1.8	34	1.7	19.6	42.8	19.8
Kenwood (II)	55.9	2	09/24*	2.1	35	2.2	16.5	39.3	21.6
Sturdy (I)	52.5	19	-2.2	1.9	33	2.1	18.3	40.5	21.2
Jack (SCN)	55.1	5	5.3	2.5	39	2.2	15.8	40.5	21.4
A87-196014	56.1	1	-1.9	2.2	35	1.9	15.5	38.6	21.5
A87-297015	55.5	3	4.7	1.9	35	2.0	18.7	39.4	21.6
A88-121019	53.6	15	-1.6	2.2	32	1.8	15.9	39.2	22.4
A88-121025	52.9	17	0.7	1.9	33	2.3	17.1	41.0	20.9
A88-221005	52.0	22	2.5	1.7	33	1.8	16.7	41.9	21.1
A88-221006	53.8	12	1.8	1.8	34	1.9	17.3	39.9	21.9
C1764	53.1	16	4.1	2.1	38	2.0	18.5	40.8	20.9
E86315	52.2	21	-3.1	1.8	33	2.1	18.7	40.4	21.0
E86339	54.1	10	-1.4	1.7	30	2.2	18.2	39.8	21.2
E86348	54.3	8	0.7	1.8	35	2.0	18.6	39.9	21.5
E87202	51.1	27	-1.7	2.1	36	2.2	17.7	40.5	20.8
E87223	52.0	22	1.4	2.3	34	2.2	16.5	41.2	20.3
HM8625 (Chapman)	54.4	7	1.7	1.7	34	2.0	20.2	39.9	22.3
HM8734	52.0	22	2.0	2.3	36	2.1	16.1	41.4	20.3
HM8735 (Erie)	50.6	28	-1.6	2.7	33	1.9	16.1	42.0	20.7
HS87-4087	51.6	25	2.3	2.0	36	1.8	16.8	40.7	20.4
LN84-8588	53.8	12	2.4	1.7	32	1.9	16.7	38.8	21.2
LN85-6800	54.5	6	2.9	1.9	37	2.2	16.6	39.9	21.8
LN86-983	55.3	4	-0.1	2.3	36	2.0	16.5	38.7	21.8
M85-647	49.7	29	-2.3	2.5	31	2.0	15.7	41.0	21.6
M86-1800	45.0	30	-0.2	2.2	33	2.0	14.3	38.9	20.9
M86-1973	51.4	26	-0.8	1.6	31	2.0	18.1	39.0	21.3
ORC 8801	54.3	8	1.1	2.9	31	2.1	17.7	38.4	22.1
ORC 8805	53.7	14	-1.4	1.9	32	2.4	17.6	40.7	21.0
U8763041	52.7	18	-1.9	1.8	32	1.9	18.3	40.8	21.5

*131.3 Days After Planting

UNIFORM TEST II, 1990

1989-1990 2-YEAR MEAN

No. of Tests Strain	Yield 44 bu/a	Rank 44 No.	Maturity 35 Date	Lodging 44 Score	Plant Height 44 In.	Seed Quality 40 Score	Seed Size 44 g/100	Composition Protein 10 %	 Oil 10 %
Burlison (L)	49.3	8	4.5	1.6	33	1.9	18.8	41.8	19.6
Kenwood (II)	52.3	1	9/24.0*	1.9	35	2.1	15.9	38.3	21.6
Sturdy (I)	50.0	7	-2.9	1.7	33	2.0	18.1	39.4	21.1
A87-196014	51.0	4	-1.4	1.9	34	1.8	15.2	37.9	21.5
A87-297015	51.4	3	4.3	1.6	34	2.1	18.1	38.7	21.3
E86315	49.2	9	-2.7	1.6	32	2.0	18.0	39.2	21.0
E86339	51.0	4	-1.1	1.6	30	2.2	17.5	38.6	21.4
E86348	50.5	6	1.4	1.6	34	2.0	18.0	38.4	21.5
HM8625 (Chapman)	51.6	2	2.3	1.6	34	2.0	19.8	39.2	22.0
HM8734	48.9	10	1.6	2.1	36	2.0	15.8	40.3	20.6
HM8735 (Erie)	47.7	11	-2.4	2.5	32	1.9	15.7	41.2	20.7

*129.6 Days After Planting

UNIFORM TEST II, 1990

YIELD (bu/a)

Strain	Mean 22 Tests	Ames IA	Halbur IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Archer	52.3	53.4	51.8	58.4	63.4	64.0	64.6
Burlison (L)	53.9	52.1	50.3	52.1	60.4	76.4	71.6
Kenwood (II)	55.9	54.2	56.4	59.9	73.8	73.3	68.3
Sturdy (I)	52.5	55.3	53.2	54.0	68.7	70.4	58.0
Jack (SCN)	55.1	50.8	53.3	56.4	65.3	74.8	72.0
A87-196014	56.1	51.8	58.2	57.7	68.2	72.6	61.0
A87-297015	55.5	52.4	52.4	55.4	67.4	74.2	69.9
A88-121019	53.6	55.6	54.3	53.5	66.7	65.4	67.4
A88-121025	52.9	50.2	52.7	55.7	69.2	70.8	63.4
A88-221005	52.0	49.0	49.0	48.6	62.2	71.5	67.9
A88-221006	53.8	51.3	53.2	53.6	68.1	77.7	71.1
C1764	53.1	50.2	52.5	55.5	62.7	76.8	64.8
E86315	52.2	55.9	52.1	51.9	60.9	70.1	66.9
E86339	54.1	52.8	53.8	60.2	58.9	71.6	70.9
E86348	54.3	54.8	52.0	56.5	63.6	73.4	74.5
E87202	51.1	51.7	49.3	56.3	64.8	66.0	64.9
E87223	52.0	51.1	51.9	53.7	59.0	66.4	65.6
HM8625 (Chapman)	54.4	49.2	54.5	55.7	63.9	76.8	67.5
HM8734	52.0	50.3	51.4	54.2	64.2	73.0	65.4
HM8735	50.6	53.1	52.9	55.2	62.3	61.4	62.2
HS87-4087	51.6	45.9	45.2	46.3	70.9	76.1	69.2
LN84-8588	53.8	56.1	50.6	56.3	73.8	74.9	67.8
LN85-6800	54.5	54.2	50.2	54.5	72.0	72.4	68.0
LN86-983	55.3	52.5	58.4	58.8	63.3	67.6	60.6
M85-647	49.7	49.3	51.7	55.1	59.4	66.9	63.7
M86-1800	45.0	47.6	45.5	53.0	54.7	70.3	55.8
M86-1973	51.4	49.9	51.9	53.7	63.4	75.3	67.1
ORC 8801	54.3	52.3	57.0	57.3	64.0	72.6	65.8
ORC 8805	53.7	53.8	53.2	54.5	64.1	71.8	68.2
U8763041	52.7	51.9	55.9	57.2	61.0	68.2	65.0
C.V. (%)		5.4	4.9	6.2	6.7	7.0	5.9
L.S.D. (5%)		4.5	4.2	5.5	7.1	8.1	6.4
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, 1990

YIELD (bu/a)

Strain	Bluff-ton IN	Lafay-ette IN	Britton MI	East Lansing MI	Lamber-ton MN	Waseca MN	Con-cord NE	Oconto NE	O'-Neill NE
Archer	45.0	68.8	56.5	61.0	59.7	62.8	30.5	57.5	44.7
Burlison (L)	49.8	66.4	65.5	55.5	63.5	66.1	29.4	55.5	49.0
Kenwood (II)	55.2	62.7	68.2	59.1	68.3	69.9	30.4	59.3	52.4
Sturdy (I)	54.5	60.8	60.2	54.0	61.7	64.8	28.4	60.9	44.2
Jack (SCN)	52.2	68.2	59.7	55.9	62.1	71.2	27.3	54.0	57.2
A87-196014	52.2	67.8	60.2	65.2	72.7	75.1	27.5	58.9	59.4
A87-297015	60.2	72.2	68.1	53.4	58.4	68.0	29.3	52.8	63.2
A88-121019	50.6	56.3	56.8	45.7	62.0	65.9	38.8	65.5	52.6
A88-121025	46.3	68.4	61.1	60.0	62.2	71.4	30.0	52.9	42.2
A88-221005	58.4	59.9	63.3	53.0	56.8	61.0	34.6	55.5	50.6
A88-221006	55.2	63.4	63.0	49.0	62.7	65.4	30.6	55.0	49.2
C1764	53.6	63.0	60.2	55.6	55.7	71.1	31.0	60.8	53.4
E86315	47.1	54.3	57.0	54.5	65.1	65.3	29.9	58.1	61.0
E86339	42.8	64.2	63.9	56.1	60.2	70.6	27.1	64.2	60.2
E86348	53.9	61.9	58.7	52.3	61.7	68.6	26.0	60.4	52.6
E87202	45.9	61.8	57.0	48.7	57.2	62.1	36.8	55.3	52.8
E87223	52.9	63.9	61.2	53.9	55.4	66.2	24.0	60.7	53.6
HM8625 (Chapman)	54.6	67.0	64.8	50.6	66.7	71.3	27.2	57.5	55.4
HM8734	55.4	58.2	58.0	41.0	50.8	67.0	26.6	59.2	60.7
HM8735	43.4	51.8	53.9	49.8	61.9	68.9	28.4	58.6	54.4
HS87-4087	55.3	64.0	67.2	41.0	48.4	63.8	18.6	58.9	52.0
LN84-8588	54.4	61.8	59.2	50.9	63.9	71.2	29.1	59.7	47.9
LN85-6800	53.7	69.1	63.9	61.1	64.0	65.6	33.4	56.2	52.8
LN86-983	47.2	61.0	65.2	62.5	60.0	74.0	31.5	59.6	60.2
M85-647	43.9	51.3	60.6	55.3	68.0	67.8	29.9	47.3	49.8
M86-1800	28.1	48.9	45.9	35.3	49.8	59.0	28.4	54.6	55.2
M86-1973	43.4	56.7	57.9	60.9	59.2	65.7	34.7	61.9	34.4
ORC 8801	55.2	65.4	68.8	49.5	56.3	66.4	29.7	57.3	52.9
ORC 8805	42.4	59.0	64.1	57.2	64.3	69.8	27.2	54.2	46.9
U8763041	50.8	61.9	61.2	56.9	61.3	65.4	27.7	63.2	57.0
C.V. (%)	12.7	9.3	7.1	13.0	9.7	6.7	18.2	8.0	11.1
L.S.D. (5%)	10.4	9.4	7.1	11.4	9.6	7.4	8.9	7.5	9.6
Row Sp. (In.)	24	24	20	20	10	10	30	30	30
Rows/Plot	4	4	4	4	10	10	4	4	4
Reps	3	3	3	3	3	3	3	3	3

UNIFORM TEST II, 1990

YIELD (bu/a)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Archer	45.8	51.1	34.0	46.6	47.4	33.6	50.5
Burlison (L)	46.8	56.3	43.4	54.9	38.4	37.0	45.6
Kenwood (II)	49.1	40.6	39.8	55.5	43.8	37.4	52.9
Sturdy (I)	45.7	36.6	36.5	50.5	47.0	32.8	56.8
Jack (SCN)	42.3	54.7	44.3	54.4	44.1	36.2	56.8
A87-196014	47.9	41.6	39.4	55.9	49.6	37.9	52.4
A87-297015	46.1	55.2	44.3	50.1	39.0	34.3	53.8
A88-121019	47.0	47.4	36.5	47.8	50.8	39.7	52.4
A88-121025	48.1	34.7	39.6	48.0	46.2	36.7	53.0
A88-221005	39.5	41.7	43.3	44.4	47.3	34.3	51.2
A88-221006	44.9	45.3	40.3	47.5	43.8	36.4	56.4
C1764	47.6	38.3	41.8	51.8	35.6	38.8	47.2
E86315	45.7	35.9	33.6	55.6	42.3	35.2	50.2
E86339	45.7	36.0	41.6	47.5	46.7	36.4	57.7
E86348	47.5	42.5	44.3	52.0	42.2	38.7	55.9
E87202	40.9	39.0	35.5	52.1	41.0	35.3	50.6
E87223	40.7	46.7	41.0	44.1	43.2	38.4	50.4
HM8625 (Chapman)	42.7	50.6	41.0	47.6	45.8	33.4	53.0
HM8734	42.0	52.5	42.5	48.2	39.0	37.1	48.0
HM8735	37.5	43.5	36.9	45.6	47.1	36.5	48.5
HS87-4087	46.0	50.3	46.0	53.3	37.3	33.3	46.2
LN84-8588	42.8	40.9	34.6	51.8	49.7	36.5	50.6
LN85-6800	46.8	49.2	43.6	51.7	30.2	34.8	50.7
LN86-983	50.0	45.1	38.5	54.5	52.2	36.8	56.7
M85-647	43.3	40.8	28.4	47.3	30.8	30.8	51.6
M86-1800	35.9	32.7	34.2	42.9	35.2	32.0	45.7
M86-1973	39.3	43.0	32.7	56.0	39.7	33.4	51.3
ORC 8801	44.6	56.0	40.1	50.6	37.2	37.8	56.7
ORC 8805	40.8	55.7	38.5	54.4	50.0	34.9	55.9
U8763041	38.9	39.0	33.8	51.6	43.0	34.0	53.8
C.V. (%)	9.0	12.0	7.6	10.5	7.1	8.1	5.4
L.S.D. (5%)	4.4	8.8	4.9	8.6	5.0	4.7	6.4
Row Sp. (In.)	30	30	30	24	30	30	30
Rows/Plot	4	4	4	4	4	4	4
Reps	3	3	3	3	3	3	3

UNIFORM TEST II, 1990

YIELD RANK

Strain	Yield Rank	Ames IA	Halbur IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Archer	20	9	21	4	18	29	23
Burlison (L)	11	15	25	27	26	4	3
Kenwood (II)	2	6	4	2	1	11	8
Sturdy (I)	19	4	10	21	6	20	29
Jack (SCN)	5	21	9	9	11	8	2
A87-196014	1	17	2	5	7	13	27
A87-297015	3	13	16	15	9	9	6
A88-121019	15	3	7	25	10	28	14
A88-121025	17	23	14	12	5	19	25
A88-221005	22	28	28	29	23	18	11
A88-221006	12	19	10	24	8	1	4
C1764	16	23	15	14	21	2	22
E86315	21	2	17	28	25	22	16
E86339	10	11	8	1	29	17	5
E86348	8	5	18	8	17	10	1
E87202	27	18	27	10	12	27	21
E87223	22	20	19	22	28	26	18
HM8625 (Chapman)	7	27	6	12	16	2	13
HM8734	22	22	23	20	13	12	19
HM8735	28	10	13	16	22	30	26
HS87-4087	25	30	30	30	4	5	7
LN84-8588	12	1	24	10	1	7	12
LN85-6800	6	6	26	18	3	15	10
LN86-983	4	12	1	3	20	24	28
M85-647	29	26	22	17	27	25	24
M86-1800	30	29	29	26	30	21	30
M86-1973	26	25	19	22	18	6	15
ORC 8801	8	14	3	6	15	13	17
ORC 8805	14	8	10	18	14	16	9
U8763041	18	16	5	7	24	23	20

UNIFORM TEST II, 1990

YIELD RANK

Strain	Bluff-ton IN	Lafay-ette IN	Britton MI	East Lansing MI	Lamber-ton MN	Waseca MN	Con-cord NE	Oconto NE	O'-Neill NE
Archer	24	3	28	4	20	27	9	17	27
Burlison (L)	19	8	5	13	9	18	15	21	24
Kenwood (II)	5	15	2	7	2	9	10	11	19
Sturdy (I)	9	21	17	16	15	25	18	5	28
Jack (SCN)	15	5	20	11	12	5	23	27	7
A87-196014	15	6	17	1	1	1	22	13	6
A87-297015	1	1	3	18	22	13	16	29	1
A88-121019	18	26	27	27	13	19	1	1	17
A88-121025	22	4	15	6	11	3	11	28	29
A88-221005	2	22	11	19	24	29	4	21	21
A88-221006	5	13	12	25	10	22	8	24	23
C1764	13	14	19	12	26	7	7	6	13
E86315	21	27	26	15	5	24	13	16	2
E86339	28	10	9	10	18	8	26	2	4
E86348	11	16	22	20	15	12	28	8	17
E87202	23	18	25	26	23	28	2	23	15
E87223	14	12	13	17	27	17	29	7	12
HM8625 (Chapman)	8	7	7	22	4	4	24	17	9
HM8734	3	24	23	28	28	15	27	12	3
HM8735	26	28	29	23	14	11	18	15	11
HS87-4087	4	11	4	29	30	26	30	13	20
LN84-8588	10	18	21	21	8	5	17	9	25
LN85-6800	12	2	10	3	7	21	5	20	15
LN86-983	20	20	6	2	19	2	6	10	5
M85-647	25	29	16	14	3	14	12	30	22
M86-1800	30	30	30	30	29	30	18	25	10
M86-1973	26	25	24	5	21	20	3	4	30
ORC 8801	5	9	1	24	25	16	14	19	14
ORC 8805	29	23	8	8	6	10	24	26	26
U8763041	17	16	14	9	17	22	21	3	8

UNIFORM TEST II, 1990

YIELD RANK

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Archer	12	7	26	26	6	24	22
Burlison (L)	8	1	6	5	24	9	30
Kenwood (II)	2	22	15	4	14	7	13
Sturdy (I)	13	26	21	17	9	28	2
Jack (SCN)	21	5	2	7	13	16	2
A87-196014	4	19	17	2	5	5	14
A87-297015	10	4	2	18	22	21	9
A88-121019	7	11	21	21	2	1	14
A88-121025	3	29	16	20	11	11	11
A88-221005	26	18	7	28	7	21	18
A88-221006	16	13	13	23	14	14	6
C1764	5	25	9	12	27	2	27
E86315	13	28	28	3	18	18	24
E86339	13	27	10	23	10	14	1
E86348	6	17	2	11	19	3	7
E87202	23	23	23	10	20	17	20
E87223	25	12	11	29	16	4	23
HM8625 (Chapman)	20	8	11	22	12	25	11
HM8734	22	6	8	19	22	8	26
HM8735	29	15	20	27	8	12	25
HS87-4087	11	9	1	9	25	27	28
LN84-8588	19	20	24	12	4	12	20
LN85-6800	8	10	5	14	30	20	19
LN86-983	1	14	18	6	1	10	4
M85-647	18	21	30	25	29	30	16
M86-1800	30	30	25	30	28	29	29
M86-1973	27	16	29	1	21	25	17
ORC 8801	17	2	14	16	26	6	4
ORC 8805	23	3	18	7	3	19	7
U8763041	28	23	27	15	17	23	9

UNIFORM TEST II, 1990

MATURITY (date)

Strain	Mean 18 Tests	Ames IA	Halbur IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Archer	-3.2	-5			-8	-6	-6
Burlison (L)	4.2	3			3	2	3
Kenwood (II)	09/24	09/20			09/26	09/19	09/11
Sturdy (I)	-2.2	-3			-6	-2	-8
Jack (SCN)	5.3	6			5	8	6
A87-196014	-1.9	-3			-6	-1	-5
A87-297015	4.7	4			6	2	3
A88-121019	-1.6	1			-6	-2	-4
A88-121025	0.7	1			-1	0	1
A88-221005	2.5	3			-1	2	3
A88-221006	1.8	1			0	2	2
C1764	4.1	4			5	4	3
E86315	-3.1	-4			-6	-3	-3
E86339	-1.4	1			-5	-2	-4
E86348	0.7	2			-1	0	2
E87202	-1.7	-2			-4	-2	-4
E87223	1.4	0			-4	1	1
HM8625 (Chapman)	1.7	5			-1	1	2
HM8734	2.0	3			1	3	0
HM8735	-1.6	-2			-2	-2	-5
HS87-4087	2.3	2			2	2	2
LN84-8588	2.4	4			1	1	2
LN85-6800	2.9	3			1	1	2
LN86-983	-0.1	-1			-6	-1	-4
M85-647	-2.3	0			-6	-2	-4
M86-1800	-0.2	1			-6	0	2
M86-1973	-0.8	0			-6	0	-4
ORC 8801	1.1	1			2	3	-4
ORC 8805	-1.4	-2			-2	-2	-4
U8763041	-1.9	-5			-7	-2	-3
Date Planted	05/16	05/08			04/30	04/30	05/01
Days to Mature	131.3	135			149	142	133

UNIFORM TEST II, 1990

MATURITY (date)

Strain	Bluff-ton IN	Lafay-ette IN	Britton MI	East Lansing MI	Lamber-ton MN	Waseca MN	Con-cord NE	Oconto NE	O'-Neill NE
Archer	-3	-3	-3	1	-3	0	-2		
Burlison (L)	5	6	5	10	2	2	5		
Kenwood (II)	09/28	09/20	10/03	10/05	09/27	09/26	09/10		
Sturdy (I)	1	-3	-1	1	-1	1	-3		
Jack (SCN)	5	9	6	7	8	6	3		
A87-196014	-1	-1	0	2	-2	-1	-3		
A87-297015	6	7	6	8	8	4	3		
A88-121019	-1	2	-3	-7	-3	0	2		
A88-121025	-1	3	-1	4	0	0	2		
A88-221005	4	5	3	2	1	2	5		
A88-221006	2	4	3	1	0	1	5		
C1764	5	6	6	7	2	3	3		
E86315	-4	-2	-3	-4	-3	0	-1		
E86339	-2	-1	-1	-3	-3	0	1		
E86348	1	1	0	-2	-1	0	2		
E87202	-1	2	0	-3	-1	0	1		
E87223	3	4	1	6	2	1	1		
HM8625 (Chapman)	2	4	2	-2	1	2	4		
HM8734	3	5	4	2	2	4	-1		
HM8735	0	3	-2	-5	-1	0	-1		
HS87-4087	2	3	5	-2	2	0	3		
LN84-8588	4	5	5	6	1	3	2		
LN85-6800	3	5	4	8	3	3	3		
LN86-983	1	2	3	4	-2	1	2		
M85-647	0	2	0	-5	-2	0	1		
M86-1800	0	2	-1	-6	-2	0	4		
M86-1973	0	0	0	4	0	0	1		
ORC 8801	2	3	2	-3	1	2	2		
ORC 8805	-1	2	-2	0	-1	2	0		
U8763041	-1	1	-2	-3	-1	0	-3		
Date Planted	05/31	05/23	05/09	05/14	05/03	05/04	05/31		
Days to Mature	120	120	147	144	147	145	102		

UNIFORM TEST II, 1990

MATURITY (date)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Archer	-6	-1	-5	-1	-3	-3	-1
Burlison (L)	0	8	3	8	6	3	2
Kenwood (II)	09/28	09/27	09/23	09/26	10/09	09/18	09/27
Sturdy (I)	-4	2	-8	2	-3	-5	0
Jack (SCN)	-7	7	6	9	4	4	4
A87-196014	-5	0	-6	1	-1	-1	-2
A87-297015	-1	8	5	7	3	3	3
A88-121019	-2	2	0	-3	-3	0	-1
A88-121025	-1	1	1	2	3	-1	0
A88-221005	0	4	4	2	3	4	-1
A88-221006	-1	2	1	5	3	2	0
C1764	0	4	3	7	5	4	2
E86315	-7	1	-6	-6	0	-2	-2
E86339	-4	2	0	-5	-1	1	1
E86348	-3	4	1	1	3	2	0
E87202	-4	0	-6	-2	-2	-2	0
E87223	-3	3	3	3	1	1	1
HM8625 (Chapman)	-2	4	1	3	3	2	0
HM8734	-4	5	2	3	3	1	0
HM8735	-9	0	-2	-1	1	0	0
HS87-4087	-1	4	3	6	3	4	1
LN84-8588	-3	5	0	4	1	2	0
LN85-6800	-2	3	2	3	7	2	2
LN86-983	-3	2	0	2	0	-1	0
M85-647	-6	2	-12	-5	-4	0	-1
M86-1800	-3	2	2	2	-1	2	-1
M86-1973	-2	2	-10	1	-1	-1	1
ORC 8801	0	5	0	1	0	2	0
ORC 8805	-9	2	-5	0	0	-2	-1
U8763041	-2	2	-2	-4	0	-1	-1
Date Planted	06/13	06/01	05/01	05/25	05/22	05/17	05/29
Days to Mature	107	118	145	124	140	124	121

UNIFORM TEST II, 1990

LODGING (score)

Strain	Mean 22 Tests	Ames IA	Halbur IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Archer	1.8	1.6	2.3	2.2	2.0	1.8	1.0
Burlison (L)	1.8	1.7	2.4	1.9	2.2	2.0	1.0
Kenwood (II)	2.1	1.8	2.8	2.2	2.2	2.0	1.3
Sturdy (I)	1.9	1.7	3.3	1.6	2.5	2.0	1.0
Jack (SCN)	2.5	2.5	3.5	2.0	3.3	2.7	3.0
A87-196014	2.2	2.2	3.8	2.7	2.8	2.5	1.3
A87-297015	1.9	1.4	2.6	2.2	2.3	1.8	1.0
A88-121019	2.2	1.9	4.0	2.8	2.3	2.8	1.0
A88-121025	1.9	1.9	2.5	1.8	2.5	1.8	1.3
A88-221005	1.7	1.4	2.4	1.7	2.0	2.0	1.0
A88-221006	1.8	1.8	2.5	1.9	2.5	2.0	1.3
C1764	2.1	2.1	3.3	1.9	2.2	2.0	1.3
E86315	1.8	1.5	3.4	1.8	2.0	1.8	1.0
E86339	1.7	1.5	2.8	1.7	2.0	1.7	1.0
E86348	1.8	1.6	2.6	1.7	2.2	1.5	1.7
E87202	2.1	1.7	3.4	2.6	2.5	2.0	1.0
E87223	2.3	1.9	3.4	2.6	2.8	2.7	1.7
HM8625 (Chapman)	1.7	1.6	2.3	1.7	2.0	1.8	1.0
HM8734	2.3	1.8	3.0	2.5	3.2	2.0	2.0
HM8735	2.7	1.9	3.8	3.1	3.0	3.0	2.3
HS87-4087	2.0	1.8	2.4	2.2	2.8	2.0	1.3
LN84-8588	1.7	1.7	2.2	1.7	2.0	1.5	1.0
LN85-6800	1.9	2.0	3.0	2.2	2.0	2.0	1.0
LN86-983	2.3	2.1	3.4	2.8	2.8	2.5	1.3
M85-647	2.5	2.4	4.2	2.8	2.7	2.8	2.0
M86-1800	2.2	1.7	4.1	2.4	2.3	1.8	1.0
M86-1973	1.6	1.6	2.9	1.4	1.8	1.7	1.0
ORC 8801	2.9	2.0	3.8	3.1	3.8	3.5	4.3
ORC 8805	1.9	1.4	3.4	1.7	2.0	1.5	1.0
U8763041	1.8	1.7	2.7	1.8	2.0	1.5	1.0

UNIFORM TEST II, 1990

LODGING (score)

Strain	Bluff-ton IN	Lafay-ette IN	Britton MI	East Lansing MI	Lamber-ton MN	Waseca MN	Con-cord NE	Oconto NE	O'-Neill NE
Archer	1.8	3.0	1.7	2.7	2.0	2.3	1.0	1.0	1.0
Burlison (L)	1.5	2.7	2.0	2.7	2.7	2.7	1.0	1.0	1.0
Kenwood (II)	2.3	3.0	2.0	3.0	3.0	2.7	1.0	1.0	1.0
Sturdy (I)	1.0	2.2	2.0	2.7	2.7	3.0	1.0	1.3	1.0
Jack (SCN)	2.2	3.5	2.7	4.0	4.0	3.0	1.3	2.0	1.0
A87-196014	1.8	3.5	2.0	2.0	2.3	4.0	1.0	1.3	1.0
A87-297015	1.2	3.0	2.3	3.3	3.3	2.3	1.0	1.0	1.0
A88-121019	1.5	3.0	2.0	4.3	3.3	3.3	1.0	1.0	1.0
A88-121025	1.5	3.3	2.0	2.3	2.3	3.3	1.0	1.0	1.0
A88-221005	1.2	1.7	2.0	2.3	3.0	2.3	1.0	1.0	1.0
A88-221006	1.7	2.3	2.0	2.3	2.3	3.0	1.0	1.0	1.0
C1764	1.7	3.2	2.0	3.7	3.0	2.7	1.0	1.7	1.0
E86315	1.3	2.2	1.3	3.3	2.0	2.3	1.0	1.7	1.0
E86339	1.2	1.8	2.0	3.3	2.0	2.3	1.0	1.0	1.0
E86348	1.3	2.0	2.0	2.7	2.7	3.0	1.0	2.0	1.0
E87202	1.8	2.8	2.3	2.7	2.7	3.0	1.0	1.0	1.0
E87223	1.7	3.5	2.7	3.3	4.3	3.3	1.0	1.3	1.0
HM8625 (Chapman)	1.7	2.3	2.0	2.0	3.0	3.3	1.0	1.0	1.0
HM8734	2.2	2.7	2.7	4.0	3.3	3.7	1.0	1.0	1.0
HM8735	2.8	3.5	3.0	4.7	4.0	4.0	1.0	1.0	1.0
HS87-4087	1.8	2.2	2.3	2.7	3.3	2.7	1.0	1.0	1.0
LN84-8588	1.3	2.3	1.7	3.0	2.3	3.0	1.0	1.0	1.0
LN85-6800	1.3	2.5	1.7	2.7	3.3	3.0	1.0	1.3	1.0
LN86-983	2.0	3.5	2.5	2.3	3.7	3.7	1.0	1.3	1.0
M85-647	2.0	3.5	2.3	2.0	3.0	3.0	1.0	1.7	1.0
M86-1800	1.8	2.8	3.0	3.7	3.3	3.7	1.0	1.3	1.0
M86-1973	1.7	1.3	1.7	2.1	2.0	2.0	1.0	1.0	1.0
ORC 8801	1.8	3.8	3.0	4.3	4.3	4.3	1.0	1.0	1.0
ORC 8805	1.5	2.7	2.0	2.7	2.3	3.0	1.0	1.0	1.0
U8763041	1.5	2.7	1.7	2.0	2.7	3.0	1.0	1.0	1.0

UNIFORM TEST II, 1990

LODGING (score)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Archer	1.0	1.9	1.6	3.3	1.7	1.0	2.0
Burlison (L)	1.0	1.6	1.8	3.0	1.7	1.0	2.0
Kenwood (II)	2.0	1.7	2.3	3.0	2.0	1.0	2.0
Sturdy (I)	2.0	1.6	1.6	3.0	2.0	1.0	1.7
Jack (SCN)	1.0	1.9	3.7	3.0	2.3	1.0	2.0
A87-196014	1.7	2.0	1.9	3.0	1.7	1.0	2.2
A87-297015	1.0	1.6	1.6	3.3	2.3	1.0	1.2
A88-121019	1.0	1.8	2.0	4.0	2.0	1.0	1.8
A88-121025	1.3	1.6	1.7	3.0	1.7	1.0	1.2
A88-221005	1.0	1.5	1.8	3.3	1.0	1.0	1.2
A88-221006	1.0	1.7	1.6	3.3	1.7	1.0	1.3
C1764	1.7	1.8	2.0	3.0	2.0	1.0	2.0
E86315	1.3	1.6	1.5	3.0	2.0	1.0	1.7
E86339	1.0	1.6	1.5	3.3	1.7	1.0	1.5
E86348	1.3	1.5	1.5	2.7	2.0	1.0	1.5
E87202	1.7	1.7	1.5	3.7	2.3	1.0	2.2
E87223	1.0	1.8	2.2	3.7	2.0	1.0	2.2
HM8625 (Chapman)	1.0	1.8	1.4	2.3	1.7	1.0	1.3
HM8734	2.0	1.9	2.1	3.0	2.3	1.0	2.7
HM8735	1.0	2.6	2.3	4.0	2.7	1.0	3.5
HS87-4087	1.0	1.8	2.5	3.3	2.0	1.0	2.0
LN84-8588	1.0	1.5	1.3	2.7	1.0	1.0	1.2
LN85-6800	1.0	1.6	1.8	3.0	2.3	1.0	1.5
LN86-983	2.0	2.2	2.4	4.0	1.7	1.0	2.0
M85-647	1.7	3.3	1.6	4.0	3.7	1.0	2.5
M86-1800	1.0	1.6	2.1	3.7	2.0	1.0	1.8
M86-1973	1.0	1.5	1.7	2.3	1.3	1.0	1.7
ORC 8801	2.3	2.0	1.8	4.3	3.3	1.0	3.0
ORC 8805	1.0	1.8	1.5	3.3	2.0	1.0	2.0
U8763041	1.7	1.7	1.5	2.7	2.0	1.0	1.5

UNIFORM TEST II, 1990

PLANT HEIGHT (inches)

Strain	Mean 22 Tests	Ames IA	Halbur IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Archer	35	36	39	36	36	36	36
Burlison (L)	34	34	37	33	35	37	33
Kenwood (II)	35	37	40	36	38	36	36
Sturdy (I)	33	35	36	34	37	36	29
Jack (SCN)	39	40	42	45	44	43	41
A87-196014	35	37	37	38	38	36	35
A87-297015	35	36	37	35	36	37	37
A88-121019	32	34	37	33	33	35	34
A88-121025	33	34	37	37	37	38	33
A88-221005	33	35	37	36	34	35	35
A88-221006	34	35	37	37	36	39	35
C1764	38	37	39	39	44	38	40
E86315	33	34	38	37	35	35	31
E86339	30	31	35	31	35	36	33
E86348	35	36	39	37	37	38	35
E87202	36	37	39	37	35	37	37
E87223	34	34	38	34	34	35	37
HM8625 (Chapman)	34	35	38	35	35	38	35
HM8734	36	35	39	38	36	38	37
HM8735	33	33	36	33	32	34	33
HS87-4087	36	37	41	40	38	37	39
LN84-8588	32	34	36	33	34	35	32
LN85-6800	37	39	37	40	38	40	39
LN86-983	36	37	38	39	35	40	37
M85-647	31	34	34	32	33	32	29
M86-1800	33	33	34	33	34	37	35
M86-1973	31	31	36	32	33	30	28
ORC 8801	31	31	34	30	29	32	33
ORC 8805	32	34	37	33	35	37	35
U8763041	32	32	36	33	33	35	32

UNIFORM TEST II, 1990

PLANT HEIGHT (inches)

Strain	Bluff-ton IN	Lafay-ette IN	Britton MI	East Lansing MI	Lamber-ton MN	Waseca MN	Con-cord NE	Oconto NE	O'-Neill NE
Archer	29	33	32	42	42	39	31	37	25
Burlison (L)	30	31	32	42	40	39	31	36	28
Kenwood (II)	28	34	34	42	42	41	30	36	25
Sturdy (I)	28	31	31	38	38	41	30	36	22
Jack (SCN)	33	38	37	47	48	44	34	42	30
A87-196014	32	36	32	44	44	43	31	39	27
A87-297015	32	33	34	41	42	41	31	37	27
A88-121019	28	31	29	36	39	38	30	36	23
A88-121025	32	33	30	40	40	39	29	34	25
A88-221005	27	33	28	36	37	40	30	34	28
A88-221006	29	35	32	40	40	39	27	35	25
C1764	33	37	35	52	46	43	35	41	29
E86315	28	32	28	39	41	37	30	36	29
E86339	24	30	27	35	35	35	24	30	25
E86348	31	33	29	43	44	40	30	38	27
E87202	31	36	34	39	44	41	37	39	27
E87223	30	32	31	37	41	40	26	39	28
HM8625 (Chapman)	30	33	30	41	40	38	30	36	27
HM8734	31	33	35	40	43	41	32	40	31
HM8735	29	32	32	39	41	40	29	34	26
HS87-4087	30	36	33	41	42	43	27	41	32
LN84-8588	28	31	28	38	38	36	28	35	26
LN85-6800	32	35	34	46	43	41	35	39	28
LN86-983	30	32	34	42	43	42	32	40	26
M85-647	28	30	30	38	40	38	32	32	23
M86-1800	27	32	31	38	40	40	30	36	29
M86-1973	29	29	29	41	39	38	31	33	19
ORC 8801	28	29	31	36	36	35	28	34	23
ORC 8805	25	31	31	37	38	38	29	34	25
U8763041	29	32	31	36	39	38	29	32	27

UNIFORM TEST II, 1990

PLANT HEIGHT (inches)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Archer	31	31	25	41	41	30	31
Burlison (L)	30	33	24	41	40	29	34
Kenwood (II)	36	30	27	37	39	31	34
Sturdy (I)	32	26	24	37	37	29	34
Jack (SCN)	30	36	32	43	42	35	37
A87-196014	33	28	25	35	42	31	36
A87-297015	31	31	26	38	38	29	33
A88-121019	28	25	23	31	38	30	28
A88-121025	31	24	26	36	38	28	32
A88-221005	29	27	24	32	40	27	31
A88-221006	32	30	26	37	41	30	34
C1764	37	30	29	43	43	33	38
E86315	31	25	23	32	42	29	33
E86339	28	24	24	28	34	26	28
E86348	32	29	26	34	41	32	35
E87202	32	28	25	37	44	32	33
E87223	29	31	24	35	40	30	32
HM8625 (Chapman)	31	32	26	34	38	28	33
HM8734	32	33	27	37	40	30	34
HM8735	29	33	25	31	39	33	32
HS87-4087	33	25	31	38	42	29	33
LN84-8588	27	27	22	33	37	28	31
LN85-6800	33	33	28	39	42	32	37
LN86-983	35	31	27	42	42	31	33
M85-647	30	27	23	33	34	28	29
M86-1800	28	26	24	33	38	28	33
M86-1973	29	26	23	36	35	27	33
ORC 8801	33	31	24	34	32	27	30
ORC 8805	29	27	22	33	33	29	32
U8763041	30	25	25	31	34	31	30

UNIFORM TEST II, 1990

SEED QUALITY (score)

Strain	Mean 20 Tests	Ames IA	Halbur IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Archer	2.3	3.5	2.0	2.5	2.2	2.3	1.6
Burlison (L)	1.7	3.5	2.5	2.0	1.7	2.0	1.1
Kenwood (II)	2.2	4.0	2.5	2.0	1.8	1.5	1.1
Sturdy (I)	2.1	4.0	2.5	2.0	1.5	1.7	1.1
Jack (SCN)	2.2	3.5	2.5	1.5	1.5	1.5	1.7
A87-196014	1.9	2.5	2.0	1.5	1.5	1.6	1.1
A87-297015	2.0	3.0	2.5	2.0	1.5	1.5	1.2
A88-121019	1.8	2.5	1.5	2.0	1.5	1.5	1.1
A88-121025	2.3	4.0	2.5	2.0	1.7	2.2	1.6
A88-221005	1.8	2.5	2.0	1.5	1.5	1.4	1.2
A88-221006	1.9	3.0	1.5	2.0	1.5	1.5	1.2
C1764	2.0	3.5	2.0	2.0	1.7	2.2	1.5
E86315	2.1	3.0	2.0	1.5	1.5	1.5	1.5
E86339	2.2	4.0	2.5	2.5	1.5	1.5	1.5
E86348	2.0	3.5	2.0	1.5	1.5	1.5	1.6
E87202	2.2	3.0	2.0	2.0	2.3	2.0	1.4
E87223	2.2	4.0	2.0	2.0	1.5	1.5	1.7
HM8625 (Chapman)	2.0	3.5	2.0	2.0	1.5	1.5	1.2
HM8734	2.1	3.5	2.0	1.5	1.5	1.5	1.3
HM8735	1.9	3.0	2.0	2.0	1.5	1.5	1.1
HS87-4087	1.8	2.5	2.0	2.0	1.5	1.5	1.2
LN84-8588	1.9	3.0	2.5	2.0	1.5	1.7	1.2
LN85-6800	2.2	3.5	2.0	2.0	1.8	2.0	1.4
LN86-983	2.0	4.0	2.0	1.5	1.5	1.4	1.2
M85-647	2.0	2.5	1.5	1.5	1.5	1.5	1.4
M86-1800	2.0	2.5	1.5	2.0	1.5	1.5	1.4
M86-1973	2.0	3.0	2.0	2.0	1.7	2.0	1.6
ORC 8801	2.1	2.5	2.0	2.5	1.7	2.7	1.8
ORC 8805	2.4	3.0	2.5	2.5	2.0	2.5	1.8
U8763041	1.9	3.0	1.5	1.5	1.5	1.7	1.2

UNIFORM TEST II, 1990

SEED QUALITY (score)

Strain	Bluff-ton IN	Lafay-ette IN	Britton MI	East Lansing MI	Lamber-ton MN	Waseca MN	Con-cord NE	Oconto NE	O'-Neill NE
Archer	1.5	1.5			3.3	2.7	2.0	2.0	2.0
Burlison (L)	1.0	1.0			2.7	2.0	1.0	1.0	1.0
Kenwood (II)	1.5	2.0			2.7	2.3	2.3	1.3	2.0
Sturdy (I)	1.5	1.5			2.7	2.7	2.0	1.7	1.7
Jack (SCN)	1.0	1.5			3.0	2.7	3.0	2.0	2.0
A87-196014	1.5	1.0			2.7	2.0	2.0	1.3	1.3
A87-297015	1.0	1.5			2.3	2.3	2.3	2.0	2.0
A88-121019	1.0	1.5			2.3	2.3	2.0	2.0	1.3
A88-121025	1.0	1.0			3.0	3.0	2.7	2.0	2.0
A88-221005	1.0	1.0			3.0	2.3	2.3	1.0	2.0
A88-221006	1.0	1.0			2.7	2.0	1.7	1.3	2.0
C1764	1.0	1.5			2.3	2.3	2.0	1.0	1.7
E86315	2.0	1.5			3.0	2.3	2.3	1.3	2.0
E86339	1.5	1.0			3.0	2.7	3.0	1.7	2.0
E86348	1.0	1.0			2.7	2.3	2.0	1.0	2.0
E87202	2.0	1.5			2.7	2.7	2.3	1.3	2.0
E87223	1.5	1.5			2.7	2.3	2.7	2.0	2.0
HM8625 (Chapman)	1.5	1.0			3.3	2.3	2.3	1.3	1.3
HM8734	1.0	2.0			2.7	2.3	2.3	2.0	2.0
HM8735	1.0	1.0			2.3	2.0	2.0	1.0	2.0
HS87-4087	1.0	1.0			2.3	2.3	2.0	1.0	1.3
LN84-8588	1.0	1.5			3.0	2.3	1.7	1.0	1.3
LN85-6800	1.5	2.0			2.7	2.7	2.0	1.7	2.0
LN86-983	1.5	1.0			2.7	2.3	2.0	1.7	1.7
M85-647	1.5	1.5			2.3	2.0	3.0	1.3	1.7
M86-1800	1.0	1.0			3.0	2.7	2.3	2.0	2.0
M86-1973	1.0	1.0			2.7	2.3	2.0	2.0	2.0
ORC 8801	1.0	1.0			4.0	2.3	3.3	1.7	2.0
ORC 8805	2.0	1.5			4.0	3.0	2.0	2.0	2.0
U8763041	1.0	1.5			3.0	2.0	2.0	1.0	2.0

UNIFORM TEST II, 1990

SEED QUALITY (score)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Archer	2.3	3.0	2.1	2.0	2.0	3.0	2.0
Burlison (L)	1.0	2.3	1.8	2.0	2.0	2.0	1.0
Kenwood (II)	1.0	3.0	2.5	2.0	3.0	3.0	2.0
Sturdy (I)	1.3	2.1	1.6	2.0	3.0	3.0	2.0
Jack (SCN)	1.3	3.4	2.2	2.0	3.0	3.0	2.0
A87-196014	2.0	3.0	1.9	2.0	3.0	3.0	2.0
A87-297015	1.0	2.4	2.1	2.0	3.0	3.0	1.0
A88-121019	1.0	2.2	1.7	2.0	3.0	3.0	1.0
A88-121025	1.0	2.5	2.0	3.0	4.0	3.0	2.0
A88-221005	1.0	1.9	1.6	2.0	3.0	3.0	1.0
A88-221006	1.0	2.8	1.2	3.0	3.0	3.0	1.0
C1764	2.0	2.8	1.7	2.0	3.0	2.0	2.0
E86315	1.3	2.2	2.5	2.0	3.0	3.0	2.0
E86339	1.0	3.1	2.0	3.0	3.0	3.0	1.0
E86348	1.0	2.0	2.6	2.0	3.0	3.0	2.0
E87202	2.0	2.5	2.5	2.0	3.0	3.0	2.0
E87223	2.3	2.3	2.1	2.0	3.0	2.0	2.0
HM8625 (Chapman)	2.0	2.0	1.5	1.0	3.0	3.0	2.0
HM8734	2.0	1.9	2.2	2.0	4.0	3.0	1.0
HM8735	1.0	2.1	1.7	3.0	3.0	3.0	2.0
HS87-4087	2.0	2.0	1.6	2.0	2.0	2.0	2.0
LN84-8588	1.0	1.8	1.9	2.0	3.0	3.0	2.0
LN85-6800	1.7	2.5	1.6	3.0	3.0	3.0	2.0
LN86-983	1.7	2.0	1.5	3.0	2.0	3.0	2.0
M85-647	1.0	2.7	1.4	3.0	3.0	3.0	2.0
M86-1800	1.0	2.1	1.8	3.0	3.0	3.0	2.0
M86-1973	1.0	2.6	2.0	2.0	3.0	3.0	2.0
ORC 8801	1.0	1.5	1.8	2.0	3.0	3.0	1.0
ORC 8805	2.3	2.7	1.8	2.0	3.0	3.0	2.0
U8763041	1.3	1.9	2.0	2.0	3.0	3.0	1.0

UNIFORM TEST II, 1990

SEED SIZE (g/100)

Strain	Mean 22 Tests	Ames IA	Halbur IA	Marshall-town IA	Dekalb IL	Gibson City IL	Urbana IL
Archer	18.1	17.0	17.2	18.7	20.1	17.2	16.6
Burlison (L)	19.6	17.0	19.8	21.5	22.8	21.2	18.3
Kenwood (II)	16.5	15.2	16.6	17.6	20.1	16.1	14.2
Sturdy (I)	18.3	16.8	16.3	19.5	20.4	16.3	16.5
Jack (SCN)	15.8	13.8	14.1	15.4	17.5	18.9	14.9
A87-196014	15.5	13.2	14.4	15.1	16.3	15.6	13.4
A87-297015	18.7	16.6	18.6	19.7	21.7	19.7	17.0
A88-121019	15.9	14.3	15.5	16.7	17.1	16.4	14.9
A88-121025	17.1	15.3	16.2	17.8	19.4	17.5	16.0
A88-221005	16.7	14.8	16.2	17.0	18.2	17.4	15.3
A88-221006	17.3	16.3	16.4	18.0	18.6	18.8	16.5
C1764	18.5	16.9	17.4	19.4	20.3	19.9	17.6
E86315	18.7	17.7	16.1	18.6	19.5	18.9	15.9
E86339	18.2	16.2	19.0	19.4	19.7	17.6	16.8
E86348	18.6	17.4	18.3	19.0	21.2	19.1	17.7
E87202	17.7	15.8	17.3	17.2	19.5	17.3	16.6
E87223	16.5	14.8	16.2	17.2	18.6	16.5	14.9
HM8625 (Chapman)	20.2	18.8	20.3	21.4	22.9	20.6	19.0
HM8734	16.1	15.2	16.8	17.4	17.5	16.5	14.1
HM8735	16.1	13.7	16.7	17.2	17.6	17.7	15.2
HS87-4087	16.8	13.6	15.1	16.8	19.7	17.5	15.3
LN84-8588	16.7	14.6	15.6	16.6	18.1	16.5	15.4
LN85-6800	16.6	13.8	15.4	17.4	18.3	16.9	15.4
LN86-983	16.5	13.5	15.6	16.6	17.7	16.9	14.4
M85-647	15.7	14.4	14.2	16.2	16.9	16.9	14.7
M86-1800	14.3	12.4	13.4	14.5	14.7	14.1	12.2
M86-1973	18.1	15.6	18.2	17.8	20.2	19.4	17.9
ORC 8801	17.7	15.4	18.3	19.8	19.7	18.5	15.1
ORC 8805	17.6	15.1	17.3	17.8	19.4	17.1	17.0
U8763041	18.3	15.4	18.6	18.5	20.9	19.1	17.2

UNIFORM TEST II, 1990

SEED SIZE (g/100)

Strain	Bluff-ton IN	Lafay-ette IN	Britton MI	East Lansing MI	Lamber-ton MN	Waseca MN	Con-cord NE	Oconto NE	O'-Neill NE
Archer	21.1	18.9	19.7	19.0	19.3	18.0	14.7	17.8	18.6
Burlison (L)	22.0	22.2	22.8	20.2	20.2	21.5	14.7	17.4	18.4
Kenwood (II)	18.8	16.3	18.0	17.7	16.6	16.8	12.3	16.2	16.6
Sturdy (I)	23.8	18.2	22.0	19.4	20.2	18.8	14.5	20.0	20.0
Jack (SCN)	18.5	16.1	17.1	16.6	15.9	15.6	11.3	14.8	16.4
A87-196014	19.1	16.2	17.9	17.2	16.2	14.8	12.1	15.4	16.5
A87-297015	23.8	20.2	20.5	19.0	19.6	19.4	14.1	17.6	19.4
A88-121019	18.1	16.3	17.3	16.4	16.9	16.2	13.0	16.3	17.2
A88-121025	19.7	18.0	18.8	18.6	18.7	17.1	14.0	16.7	18.4
A88-221005	19.5	17.6	18.8	17.4	18.2	17.0	13.9	17.6	16.7
A88-221006	21.3	18.7	19.4	17.0	16.8	18.0	14.4	16.9	18.2
C1764	22.4	19.5	22.1	18.6	18.2	18.4	14.6	17.1	18.7
E86315	22.6	19.0	20.5	19.3	19.9	19.4	14.7	20.0	20.4
E86339	18.2	19.5	20.2	18.5	19.5	19.6	14.5	19.2	19.4
E86348	21.1	19.9	20.4	17.4	19.9	19.3	14.5	20.1	19.3
E87202	19.6	17.2	18.5	19.3	18.3	18.7	15.1	18.6	18.9
E87223	19.8	17.4	18.1	17.5	17.0	17.7	12.4	16.5	16.7
HM8625 (Chapman)	24.3	21.7	22.7	20.9	22.4	21.2	16.1	20.4	22.0
HM8734	18.9	17.0	17.7	15.9	16.5	16.8	12.2	16.3	16.6
HM8735	17.8	16.7	16.8	17.5	16.6	16.8	12.9	16.6	16.8
HS87-4087	20.9	17.0	19.3	16.8	17.2	17.1	12.9	17.1	18.0
LN84-8588	20.1	17.6	19.3	17.7	17.6	16.9	14.3	16.8	18.8
LN85-6800	20.4	17.6	19.6	17.0	17.1	16.7	13.3	15.6	17.5
LN86-983	20.2	16.9	20.4	16.9	18.0	16.8	13.8	16.3	17.2
M85-647	19.0	15.3	17.8	18.4	17.5	15.4	12.2	17.0	17.7
M86-1800	16.1	14.8	15.4	13.5	14.6	14.2	11.7	14.8	16.4
M86-1973	19.7	17.5	19.2	19.7	17.2	18.2	15.8	19.7	20.9
ORC 8801	20.2	18.7	19.1	19.2	18.3	18.8	13.2	17.6	18.5
ORC 8805	20.1	18.1	18.8	18.5	16.0	18.1	14.6	18.4	19.5
U8763041	21.0	19.2	20.4	20.0	19.0	18.6	13.5	19.0	18.4

UNIFORM TEST II, 1990

SEED SIZE (g/100)

Strain	Adel-phia NJ	Hoyt-ville OH	Wooster OH	Ridge-town Ont.	Brook-ings SD	Center-ville SD	Arling-ton WI
Archer	20.0	18.3	16.0	18.3	18.0	16.3	17.8
Burlison (L)	20.0	20.2	19.4	18.6	17.7	16.3	19.2
Kenwood (II)	16.0	20.3	15.8	16.9	15.7	13.5	15.7
Sturdy (I)	16.0	16.9	14.8	17.8	18.8	16.2	19.1
Jack (SCN)	20.0	18.1	15.0	15.7	12.9	12.8	15.2
A87-196014	16.0	15.5	13.6	16.8	15.9	14.2	15.8
A87-297015	17.0	20.3	17.3	19.7	15.5	15.4	18.3
A88-121019	16.0	16.6	13.2	15.4	16.3	14.7	14.8
A88-121025	17.0	16.5	15.1	16.7	15.5	15.5	16.6
A88-221005	17.0	17.7	16.0	16.1	14.9	15.0	15.9
A88-221006	17.0	18.7	15.4	16.3	15.5	15.7	16.6
C1764	21.0	19.4	16.3	18.2	15.7	16.7	17.7
E86315	20.0	20.0	17.4	17.9	18.9	16.8	18.0
E86339	17.0	19.3	16.9	17.0	19.3	16.8	17.7
E86348	17.0	20.6	16.8	18.4	17.2	16.5	18.5
E87202	18.0	18.8	15.1	17.7	17.8	17.5	17.6
E87223	16.0	15.9	16.1	15.8	15.5	14.9	17.1
HM8625 (Chapman)	20.0	20.1	15.8	18.7	18.2	18.8	18.7
HM8734	16.0	17.1	16.0	17.3	13.9	13.2	15.5
HM8735	16.0	16.7	14.0	16.1	15.2	14.3	16.0
HS87-4087	17.0	18.3	16.6	18.2	14.7	13.4	16.5
LN84-8588	17.0	17.9	13.8	15.7	15.4	15.7	16.7
LN85-6800	17.0	17.4	15.1	17.0	14.5	15.2	16.6
LN86-983	16.0	16.7	14.2	17.5	16.4	15.7	15.7
M85-647	15.0	16.7	12.8	15.6	13.8	13.7	14.3
M86-1800	14.0	14.7	14.3	14.6	13.9	13.9	15.6
M86-1973	17.0	21.0	15.7	18.0	16.6	16.7	17.0
ORC 8801	18.0	19.6	17.1	17.4	15.9	14.0	17.3
ORC 8805	18.0	19.3	16.0	17.9	17.0	15.7	16.8
U8763041	20.0	18.5	16.1	18.4	18.1	15.1	18.0

UNIFORM TEST II, 1990

PROTEIN (%)

Strain	Mean 5 Tests	Marshalltown IA	Urbana IL	Lafayette IN	Oconto NE	Hoytville OH
Archer	39.7	39.8	38.9	41.1	38.0	40.5
Burlison (L)	42.8	43.7	42.6	44.4	38.7	44.6
Kenwood (II)	39.3	40.6	38.8	41.2	35.0	41.1
Sturdy (I)	40.5	41.0	39.1	41.5	39.1	42.0
Jack (SCN)	40.5	41.0	40.9	42.2	37.8	40.6
A87-196014	38.6	40.1	38.5	39.7	34.4	40.1
A87-297015	39.4	40.6	40.5	40.5	35.5	40.0
A88-121019	39.2	41.0	37.7	40.9	35.3	41.0
A88-121025	41.0	41.9	40.6	44.2	37.2	41.2
A88-221005	41.9	43.2	42.8	43.4	37.5	42.6
A88-221006	39.9	41.7	40.3	41.1	35.8	40.5
C1764	40.8	41.3	40.8	42.1	38.8	41.1
E86315	40.4	41.0	39.8	41.9	39.1	40.1
E86339	39.8	41.0	39.5	41.1	37.3	40.3
E86348	39.9	40.4	39.1	40.5	39.8	39.8
E87202	40.5	41.8	39.3	42.8	37.9	40.9
E87223	41.2	42.1	41.0	42.6	39.2	41.1
HM8625 (Chapman)	39.9	40.6	40.1	42.0	35.4	41.6
HM8734	41.4	43.5	40.8	43.9	37.3	41.6
HM8735	42.0	44.0	42.3	43.7	37.6	42.6
HS87-4087	40.7	42.7	40.7	42.9	36.3	40.7
LN84-8588	38.8	40.0	39.5	40.8	34.3	39.3
LN85-6800	39.9	40.8	39.7	41.4	36.0	41.5
LN86-983	38.7	39.6	37.9	40.4	35.5	40.3
M85-647	41.0	41.9	41.5	41.5	37.8	42.1
M86-1800	38.9	39.9	38.0	39.3	36.2	41.0
M86-1973	39.0	39.7	38.0	40.1	36.7	40.3
ORC 8801	38.4	40.0	38.9	39.9	33.7	39.3
ORC 8805	40.7	42.0	40.9	42.2	37.2	41.0
U8763041	40.8	41.8	40.2	42.9	37.9	41.1

UNIFORM TEST II, 1990

OIL (%)

Strain	Mean 5 Tests	Marshalltown IA	Urbana IL	Lafayette IN	Oconto NE	Hoytville OH
Archer	21.5	20.9	21.9	21.0	22.0	21.5
Burlison (L)	19.8	19.6	20.2	19.3	21.4	18.5
Kenwood (II)	21.6	20.4	21.6	21.1	23.5	21.2
Sturdy (I)	21.2	20.9	21.4	21.0	21.2	21.3
Jack (SCN)	21.4	20.8	21.5	20.9	22.4	21.5
A87-196014	21.5	20.5	21.6	21.2	22.6	21.5
A87-297015	21.6	21.0	21.4	21.4	22.9	21.5
A88-121019	22.4	21.5	23.2	21.5	23.5	22.1
A88-121025	20.9	20.2	21.2	19.4	22.3	21.4
A88-221005	21.1	20.5	20.8	20.0	22.9	21.2
A88-221006	21.9	20.6	21.9	21.5	23.8	21.7
C1764	20.9	20.6	21.3	20.2	21.4	21.1
E86315	21.0	20.7	21.1	20.4	21.7	21.0
E86339	21.2	20.9	20.9	20.4	22.2	21.4
E86348	21.5	21.2	21.9	21.0	21.8	21.5
E87202	20.8	19.9	21.1	19.6	21.5	21.7
E87223	20.3	19.7	20.3	19.7	21.2	20.7
HM8625 (Chapman)	22.3	21.8	23.1	21.6	23.7	21.5
HM8734	20.3	19.2	20.7	19.2	21.3	21.1
HM8735	20.7	19.4	20.4	20.2	22.6	20.9
HS87-4087	20.4	18.8	20.4	19.9	21.6	21.1
LN84-8588	21.2	20.6	21.1	20.4	22.1	22.0
LN85-6800	21.8	21.1	22.1	21.1	23.2	21.5
LN86-983	21.8	20.9	22.4	21.4	22.9	21.5
M85-647	21.6	21.0	21.1	21.0	23.4	21.5
M86-1800	20.9	19.9	21.2	20.5	21.5	21.3
M86-1973	21.3	21.2	21.5	20.7	21.9	21.4
ORC 8801	22.1	21.5	21.7	21.5	23.9	21.9
ORC 8805	21.0	20.5	21.3	20.3	21.8	21.3
U8763041	21.5	20.9	22.0	21.0	21.9	21.7

PRELIMINARY TEST IIA, 1990

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	
AC89-140002	AP6E2YT(F4)C4	F5	
AC89-140010	AP6E2YT(F4)C4	F5	
AC89-141024	AP6E2YTTW(F4)C4	F5	
AC89-141027	AP6E2YTTW(F4)C4	F5	
AC89-241002	AP6M2YTTW(F4)C4	F5	
AC89-241003	AP6M2YTTW(F4)C4	F5	
AC89-241004	AP6M2YTTW(F4)C4	F5	
AC89-241029	AP6M2YTTW(F4)C4	F5	
AM89-140032	Jacques J231 x Pride PEX110	F5	
AM89-244003	Pride PEX110 x BSR 201	F5	BSR Resis.
AM89-244007	Jacques J231 x Pride PEX110	F5	
AM89-244024	Jacques J231 x Pride PEX110	F5	
AM89-244029	Jacques J231 x A8	F5	BSR Resis.
AM89-244033	Jacques J231 x BSR 101	F5	BSR Resis.
AM89-244039	Asgrow A1937 x Jacques J231	F5	
AM89-244043	Pride PEX110 x Asgrow A1937	F5	
AM89-344033	Pride PEX110 x Asgrow A1937	F5	
HM8935	Hobbit x Maple Arrow	F6	
HM8943	Gnome x Maple Arrow	F6	
HM8945	Amcor x Zane	F6	
HM8947	Hack x Century 84	F6	Rps1-k ?
HM8948	Asgrow A1937 x Asgrow A3127	F6	
HS88-4905	Conrad x Hayes	F5	Rps1-k
HS88-4906	Conrad x Hayes	F5	Rps1-k
HS88-4908	Conrad x Hayes	F5	Rps1-k
HS88-4909	Conrad x Hayes	F5	Rps1-k
HS88-4918	Asgrow A2943 x A83-271027	F5	
LN85-7317	LNX8138 x A80-244003	F5	Rps?
LN86-1167	Hack x A80-244036	F5	Rps1-a
LN86-1285	Hack x Preston	F5	
LN87-1065	A8 x Zane	F5	Rps1-a
LN87-1672	Sherman x LN80-9729	F5	Rps1-a
LN87-3257	LNX8115 X A80-244003	F5	Rps?
LN87-3574	LNX8115 X A80-244003	F5	Rps?
LN87-3600	LNX8115 X A80-244003	F5	Rps?
LN87-4314	LNX8179 x LN80-10398	F5	
LN87-4663	LNX8179 x LN80-10398	F5	Rps?

PRELIMINARY TEST IIA, 1990

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Shattering Score Manhattan	BSR - Ames Plant n %	Stem n %
Burlison (L)	WTTIBlI	1.3	2.0	100.0	89.1
Kenwood (II)	PTBIBlI	3.8	1.0	100.0	84.1
Sturdy (I)	PGBIIbI	1.5	2.0	100.0	40.0
AC89-140002	PGBIIbI	1.3	1.0	90.0	74.2
AC89-140010	PGBIBfI	1.8	1.0	100.0	98.7
AC89-141024	PTBIBfI	1.8	1.0	100.0	87.2
AC89-141027	WGBDBfI	1.8	1.0	80.0	56.4
AC89-241002	PGBIYI	2.8	1.0	70.0	37.5
AC89-241003	PGBIYI	2.8	1.0	80.0	65.1
AC89-241004	PGBIYI	2.7	1.0	100.0	41.9
AC89-241029	PTBIYI	1.8	1.0	80.0	30.2
AM89-140032	PGBDGrI	1.0	1.0	50.0	24.1
AM89-244003	PGBIIbI	2.7	3.0	20.0	1.4
AM89-244007	PG+TBDGrI	1.3	1.0	50.0	15.5
AM89-244024	PGBIIbI	1.5	1.0	30.0	17.0
AM89-244029	PGTDIbI	1.5	3.0	70.0	38.2
AM89-244033	PGBIIbI	1.8	2.0	40.0	5.4
AM89-244039	PGBDIbI	2.5	1.0	90.0	62.8
AM89-244043	PGB+TDGrI	2.3	1.0	60.0	17.8
AM89-344033	PGBDHI	2.8	1.0	100.0	68.2
HM8935	PTB+TIBlI	3.8	2.0	100.0	67.5
HM8943	WTBIBlI	2.8	1.0	90.0	50.9
HM8945	PGBSYI	3.2	1.0	100.0	56.6
HM8947	WTTSBlI	2.0	1.0	100.0	69.9
HM8948	PTTDHI	2.5	1.0	90.0	50.0
HS88-4905	PG+TBDBfI	3.2	1.0	100.0	59.3
HS88-4906	PGBIBfI	2.7	1.0	100.0	65.2
HS88-4908	PGTIBfI	3.2	2.0	100.0	76.7
HS88-4909	PGBIBfI	2.8	1.0	100.0	66.6
HS88-4918	PTTDBlI	2.8	1.0	80.0	34.5
LN85-7317	PTTIBlI	2.0	1.0	90.0	48.1
LN86-1167	WGTIBfI	3.0	1.0	100.0	59.5
LN86-1285	WGBDBfI	2.3	1.0	100.0	69.3
LN87-1065	WGBIBfI	2.3	1.0	90.0	41.8
LN87-1672	W+PGBDIbI	1.8	2.0	100.0	60.1
LN87-3257	WGTDBfI	4.7	2.0	80.0	30.4
LN87-3574	WGTIBfI	3.7	1.0	90.0	53.1
LN87-3600	PTTIBl+BrI	3.8	1.0	90.0	55.9
LN87-4314	PGTIIbI	3.3	2.0	100.0	92.6
LN87-4663	PT+GBIBlI	2.7	2.0	-----	----

PRELIMINARY TEST IIA, 1990

DISEASE DATA

Strain	BB Urbana n Score	PR Vickery Phyto. Tolerance	PR Urbana Race 1	PR Ames Race 4	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %
Burlison (L)	3.5	3.7	R	R	R	54	10
Kenwood (II)	3.0	4.7	S	S	S	35	25
Sturdy (I)	4.0	5.3	R	S	S	44	14
AC89-140002	2.5	4.3	R	S	H	30	30
AC89-140010	2.5	4.3	S	S	S	28	26
AC89-141024	3.0	6.0	R	S	S	30	12
AC89-141027	3.5	4.0	R	S	S	8	42
AC89-241002	3.0	4.0	H	S	S	12	18
AC89-241003	3.5	8.3	S	S	S	16	18
AC89-241004	3.5	8.0	S	S	S	12	10
AC89-241029	4.0	7.7	R	S	S	18	24
AM89-140032	3.0	6.3	R	S	H	6	18
AM89-244003	4.5	4.7	R	S	R	16	8
AM89-244007	4.0	4.0	R	S	H	10	4
AM89-244024	3.5	6.7	R	S	H	10	22
AM89-244029	3.5	4.3	R	S	H	18	24
AM89-244033	4.0	4.3	R	S	H	14	10
AM89-244039	3.5	4.3	R	S	S	18	18
AM89-244043	3.0	6.3	H	S	S	6	24
AM89-344033	3.0	4.7	R	S	H	24	8
HM8935	2.0	4.7	R	S	S	2	26
HM8943	2.0	4.7	S	S	S	8	14
HM8945	3.0	3.3	S	S	S	24	22
HM8947	2.0	4.0	R	S	H	24	30
HM8948	4.0	6.3	S	S	S	24	12
HS88-4905	1.5	4.7	R	R	R	22	24
HS88-4906	2.0	4.3	R	R	R	20	18
HS88-4908	2.0	4.7	R	H	R	14	4
HS88-4909	2.0	5.0	R	R	R	30	22
HS88-4918	3.0	4.3	S	S	S	10	2
LN85-7317	4.5	4.3	R	R	H	20	12
LN86-1167	1.5	3.3	R	S	S	12	20
LN86-1285	3.5	3.3	S	S	S	8	14
LN87-1065	3.5	3.7	R	S	R	14	12
LN87-1672	3.5	3.7	R	S	H	10	4
LN87-3257	3.5	2.7	R	H	R	2	42
LN87-3574	3.0	3.7	R	S	R	6	32
LN87-3600	2.0	2.7	R	R	R	16	20
LN87-4314	2.0	4.7	H	R	S	10	14
LN87-4663	3.0	4.0	R	R	S	14	6

PRELIMINARY TEST IIA, 1990

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)	49.3	7	4.1	1.6	33	1.5	18.9	43.6	19.1
Kenwood (II)	50.5	3	09/22*	1.9	34	2.3	16.1	39.8	21.2
Sturdy (I)	47.0	22	-1.6	1.5	32	2.2	18.5	40.5	21.2
AC89-140002	49.1	10	-0.1	2.0	31	2.3	16.7	41.3	19.6
AC89-140010	48.2	14	-0.7	1.5	30	2.6	18.9	40.8	20.1
AC89-141024	48.6	13	3.2	1.7	31	2.1	17.5	41.9	20.3
AC89-141027	41.7	40	-2.4	1.2	26	1.8	16.4	40.7	21.1
AC89-241002	45.8	30	2.1	2.0	29	2.4	16.4	38.3	21.9
AC89-241003	45.2	33	1.8	2.0	29	2.3	17.2	40.2	21.7
AC89-241004	44.8	36	2.2	2.5	30	2.1	16.2	39.3	21.6
AC89-241029	47.0	22	1.6	1.6	32	2.4	15.5	40.4	21.3
AM89-140032	46.2	29	-1.4	1.3	30	2.2	19.6	39.3	21.3
AM89-244003	47.5	18	-0.8	1.7	29	2.2	15.5	39.0	21.0
AM89-244007	47.0	22	2.9	1.5	32	2.6	19.7	38.6	21.2
AM89-244024	46.4	28	1.5	1.9	35	2.1	18.9	38.8	21.5
AM89-244029	47.4	21	2.5	1.7	36	2.1	17.0	39.1	21.1
AM89-244033	44.7	37	-1.1	1.7	32	2.1	18.3	39.4	21.3
AM89-244039	45.1	35	1.7	1.3	32	2.2	16.2	39.6	21.7
AM89-244043	46.6	27	-0.3	1.5	33	2.0	18.8	38.1	21.7
AM89-344033	44.3	39	2.4	1.2	32	1.8	16.1	40.4	20.8
HM8935	45.5	31	-1.8	2.0	32	1.8	19.1	41.3	20.0
HM8943	45.2	33	3.9	2.3	38	2.0	15.8	40.6	21.5
HM8945	47.6	17	4.2	2.3	36	2.0	17.8	38.1	21.9
HM8947	47.5	18	0.9	1.4	32	1.8	18.6	41.9	20.4
HM8948	47.9	15	2.5	1.4	31	2.1	13.9	40.8	20.9
HS88-4905	49.3	7	0.3	1.5	34	2.0	17.5	39.7	21.5
HS88-4906	50.7	2	4.1	1.9	34	2.0	18.1	39.5	21.4
HS88-4908	50.5	3	5.1	1.4	34	1.7	17.5	38.9	22.1
HS88-4909	52.6	1	3.3	1.6	36	2.0	18.5	39.3	21.7
HS88-4918	46.8	25	4.3	1.8	34	1.8	15.5	42.0	20.9
LN85-7317	46.8	25	1.5	2.0	33	2.1	20.0	41.2	20.8
LN86-1167	49.6	6	3.3	1.5	32	2.0	17.5	38.9	21.8
LN86-1285	49.3	7	4.9	2.1	36	1.6	17.2	40.6	21.1
LN87-1065	50.3	5	5.1	1.6	33	2.1	17.6	40.8	21.3
LN87-1672	47.5	18	7.3	2.4	36	2.2	19.0	42.7	20.7
LN87-3257	47.8	16	1.5	1.8	33	1.9	17.6	40.1	21.1
LN87-3574	49.1	10	3.3	1.8	37	2.0	16.9	40.9	20.9
LN87-3600	49.0	12	4.7	1.9	37	2.0	18.0	39.8	21.2
LN87-4314	45.5	31	6.1	1.7	36	2.1	16.2	43.1	20.2
LN87-4663	44.7	37	2.9	1.5	34	1.9	17.8	42.0	20.6

*122.5 Days After Planting

PRELIMINARY TEST IIA, 1990

YIELD (bu/a)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	49.3	47.7	49.9	69.9	63.5	51.2
Kenwood (II)	50.5	56.8	57.7	67.7	68.7	57.9
Sturdy (I)	47.0	55.5	55.0	56.3	60.9	55.2
AC89-140002	49.1	52.5	51.3	62.7	56.1	64.1
AC89-140010	48.2	54.7	54.3	66.1	55.7	48.2
AC89-141024	48.6	52.2	52.7	65.7	64.1	58.6
AC89-141027	41.7	47.7	46.2	51.7	37.7	50.8
AC89-241002	45.8	51.3	51.7	56.9	52.6	51.6
AC89-241003	45.2	48.3	52.1	56.3	48.1	55.6
AC89-241004	44.8	52.9	53.6	57.2	59.8	50.5
AC89-241029	47.0	53.3	49.5	67.1	52.4	62.8
AM89-140032	46.2	53.9	55.1	59.4	58.3	46.2
AM89-244003	47.5	54.2	58.4	63.6	61.1	55.2
AM89-244007	47.0	51.3	52.6	64.4	65.7	66.8
AM89-244024	46.4	46.3	49.0	59.4	63.5	53.1
AM89-244029	47.4	49.2	50.5	60.3	61.7	58.9
AM89-244033	44.7	47.5	53.1	62.5	56.2	54.2
AM89-244039	45.1	45.8	56.8	61.0	53.1	58.1
AM89-244043	46.6	47.0	54.4	62.1	58.3	54.3
AM89-344033	44.3	44.8	50.6	63.0	61.7	43.0
HM8935	45.5	52.9	48.8	58.4	65.0	44.6
HM8943	45.2	50.0	46.3	68.5	64.8	48.4
HM8945	47.6	42.2	49.8	64.7	55.3	60.7
HM8947	47.5	53.9	55.4	60.8	63.9	40.5
HM8948	47.9	54.8	49.9	62.3	74.8	49.8
HS88-4905	49.3	54.7	59.0	61.1	67.6	52.5
HS88-4906	50.7	54.5	57.8	71.0	58.1	56.7
HS88-4908	50.5	50.7	56.5	67.6	61.9	62.5
HS88-4909	52.6	58.4	56.8	69.7	70.3	64.3
HS88-4918	46.8	50.0	46.7	67.4	57.3	66.4
LN85-7317	46.8	52.6	51.7	61.2	68.6	48.6
LN86-1167	49.6	52.7	54.3	66.7	67.6	54.2
LN86-1285	49.3	49.1	53.4	63.7	71.5	61.4
LN87-1065	50.3	49.3	51.5	69.1	60.3	61.5
LN87-1672	47.5	43.4	58.5	60.1	66.4	56.6
LN87-3257	47.8	49.6	51.7	65.8	59.0	55.0
LN87-3574	49.1	51.9	53.8	61.6	57.2	52.6
LN87-3600	49.0	47.4	51.5	68.5	73.2	55.1
LN87-4314	45.5	45.6	48.3	64.7	66.2	37.5
LN87-4663	44.7	49.1	48.7	61.7	55.6	50.0
C.V. (%)		6.6	6.0	8.6	9.4	14.0
L.S.D. (5%)		6.7	6.3	ns	11.8	15.4
Row Sp. (In.)		27	27	30	24	20
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIA, 1990

YIELD (bu/a)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	27.7	53.0	51.8	59.9	38.0	33.9	44.7
Kenwood (II)	28.2	53.4	46.0	45.3	36.2	39.4	49.0
Sturdy (I)	31.0	42.8	42.2	41.5	38.4	32.9	52.8
AC89-140002	32.4	53.3	41.7	50.7	35.5	37.0	52.4
AC89-140010	33.9	48.9	45.9	43.2	37.6	40.8	48.6
AC89-141024	27.4	56.1	44.2	49.0	33.4	35.6	44.4
AC89-141027	32.9	46.8	29.4	35.1	36.9	37.5	48.2
AC89-241002	26.8	58.9	44.6	38.9	34.1	35.2	47.3
AC89-241003	29.4	57.1	42.5	27.2	38.2	39.2	48.6
AC89-241004	27.6	50.6	37.9	42.2	28.7	37.1	39.9
AC89-241029	28.8	46.4	44.1	42.9	36.5	35.6	44.9
AM89-140032	33.7	37.7	44.5	33.0	43.5	37.3	51.4
AM89-244003	25.8	52.7	43.2	44.5	32.4	38.9	40.3
AM89-244007	28.6	42.3	40.5	29.1	34.6	35.1	52.8
AM89-244024	32.6	52.5	41.0	43.8	34.5	35.1	45.9
AM89-244029	29.5	47.7	45.7	52.2	36.3	31.8	45.4
AM89-244033	23.7	49.2	42.7	26.4	37.5	33.7	49.6
AM89-244039	28.6	40.7	40.9	34.7	40.1	35.7	45.3
AM89-244043	31.7	49.9	38.2	42.9	35.4	36.1	48.6
AM89-344033	27.4	43.0	42.1	35.6	34.5	35.4	50.2
HM8935	28.5	47.4	40.5	46.0	40.4	31.5	41.8
HM8943	26.7	55.7	37.3	46.1	22.5	35.5	40.2
HM8945	24.7	62.3	42.8	49.8	36.3	39.1	44.0
HM8947	29.3	51.0	44.8	42.3	42.0	36.3	49.4
HM8948	23.0	53.6	45.9	47.6	29.3	34.8	49.4
HS88-4905	29.0	46.5	43.7	43.9	45.2	36.1	51.7
HS88-4906	29.1	52.0	46.6	58.3	39.8	36.0	48.7
HS88-4908	32.7	48.4	44.0	49.2	43.9	42.2	46.1
HS88-4909	28.2	58.5	44.5	46.5	45.8	37.3	51.0
HS88-4918	20.2	55.3	43.4	40.0	33.1	37.6	44.4
LN85-7317	25.6	50.6	38.3	48.1	32.8	34.6	48.7
LN86-1167	26.0	53.3	46.1	47.1	37.5	38.3	50.8
LN86-1285	27.3	56.1	43.7	41.5	38.3	38.7	46.7
LN87-1065	39.6	54.9	54.5	47.1	29.1	38.4	48.8
LN87-1672	21.7	56.5	48.7	46.8	32.4	33.6	45.3
LN87-3257	29.7	55.1	40.6	49.3	34.6	35.1	48.2
LN87-3574	27.7	60.4	47.9	53.4	33.1	39.7	49.4
LN87-3600	24.6	53.3	46.3	50.6	36.3	34.3	46.6
LN87-4314	27.9	48.2	43.3	49.3	34.4	35.1	45.1
LN87-4663	21.9	51.1	39.4	42.3	34.6	34.5	48.0
C.V. (%)	15.4	8.3	11.1	15.4	10.4	8.0	7.5
L.S.D. (5%)	8.8	8.6	7.0	13.4	7.6	ns	7.2
Row Sp. (In.)	30	30	30	30	24	30	30
Rows/Plot	4	4	4	4	4	4	4
Reps	2	3	2	2	2	2	2

PRELIMINARY TEST IIA, 1990

YIELD RANK

Strain	Yield Rank	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	7	30	30	2	16	28
Kenwood (II)	3	2	5	7	5	13
Sturdy (I)	22	3	11	38	22	18
AC89-140002	10	16	27	21	32	4
AC89-140010	14	5	13	12	33	35
AC89-141024	13	17	19	14	14	11
AC89-141027	40	30	40	40	40	29
AC89-241002	30	19	22	37	37	27
AC89-241003	33	29	21	38	39	16
AC89-241004	36	12	16	36	24	30
AC89-241029	22	11	33	10	38	5
AM89-140032	29	9	10	33	26	36
AM89-244003	18	8	3	19	21	17
AM89-244007	22	19	20	17	11	1
AM89-244024	28	35	34	33	16	24
AM89-244029	21	26	29	31	19	10
AM89-244033	37	32	18	22	31	23
AM89-244039	35	36	6	29	36	12
AM89-244043	27	34	12	24	26	21
AM89-344033	39	38	28	20	19	38
HM8935	31	12	35	35	12	37
HM8943	33	22	39	5	13	34
HM8945	17	40	32	15	35	9
HM8947	18	9	9	30	15	39
HM8948	15	4	30	23	1	32
HS88-4905	7	5	1	28	7	26
HS88-4906	2	7	4	1	28	14
HS88-4908	3	21	8	8	18	6
HS88-4909	1	1	6	3	4	3
HS88-4918	25	22	38	9	29	2
LN85-7317	25	15	22	27	6	33
LN86-1167	6	14	13	11	7	22
LN86-1285	7	27	17	18	3	8
LN87-1065	5	25	25	4	23	7
LN87-1672	18	39	2	32	9	15
LN87-3257	16	24	22	13	25	20
LN87-3574	10	18	15	26	30	25
LN87-3600	12	33	25	5	2	19
LN87-4314	31	37	37	15	10	40
LN87-4663	37	27	36	25	34	31

PRELIMINARY TEST IIA, 1990

YIELD RANK

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	23	18	2	1	12	35	33
Kenwood (II)	20	14	8	20	21	4	13
Sturdy (I)	9	37	27	30	9	38	1
AC89-140002	7	16	29	5	22	16	3
AC89-140010	2	28	9	24	13	2	17
AC89-141024	26	7	16	11	31	22	34
AC89-141027	4	33	40	35	16	12	20
AC89-241002	29	3	13	33	30	26	23
AC89-241003	12	5	26	39	11	5	17
AC89-241004	25	24	38	29	39	15	40
AC89-241029	16	35	17	25	17	22	32
AM89-140032	3	40	14	37	4	13	5
AM89-244003	32	19	23	21	35	7	38
AM89-244007	17	38	33	38	25	27	1
AM89-244024	6	20	30	23	27	27	27
AM89-244029	11	31	11	4	18	39	28
AM89-244033	36	27	25	40	14	36	9
AM89-244039	17	39	31	36	7	21	29
AM89-244043	8	26	37	25	23	18	17
AM89-344033	26	36	28	34	27	25	8
HM8935	19	32	33	19	6	40	37
HM8943	30	9	39	18	40	24	39
HM8945	34	1	24	7	18	6	36
HM8947	13	23	12	27	5	17	10
HM8948	37	13	9	13	37	31	10
HS88-4905	15	34	19	22	2	18	4
HS88-4906	14	21	5	2	8	20	15
HS88-4908	5	29	18	10	3	1	26
HS88-4909	20	4	14	17	1	13	6
HS88-4918	40	10	21	32	32	11	34
LN85-7317	33	25	36	12	34	32	15
LN86-1167	31	15	7	14	14	10	7
LN86-1285	28	8	19	30	10	8	24
LN87-1065	1	12	1	14	38	9	14
LN87-1672	39	6	3	16	35	37	29
LN87-3257	10	11	32	8	25	27	20
LN87-3574	23	2	4	3	33	3	10
LN87-3600	35	17	6	6	18	34	25
LN87-4314	22	30	22	8	29	27	31
LN87-4663	38	22	35	27	24	33	22

PRELIMINARY TEST IIA, 1990

MATURITY (date)

Strain	Mean 10 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	4.1	2		1	4	9
Kenwood (II)	09/22	09/20		09/12	09/22	09/29
Sturdy (I)	-1.6	-3		-8	-3	4
AC89-140002	-0.1	-2		-5	2	7
AC89-140010	-0.7	-1		-5	-3	1
AC89-141024	3.2	4		2	5	9
AC89-141027	-2.4	-4		-8	-6	1
AC89-241002	2.1	3		-2	2	7
AC89-241003	1.8	4		0	2	1
AC89-241004	2.2	4		1	3	6
AC89-241029	1.6	1		3	0	5
AM89-140032	-1.4	-2		-7	-3	2
AM89-244003	-0.8	-2		-3	-1	1
AM89-244007	2.9	0		0	2	10
AM89-244024	1.5	-2		-2	2	6
AM89-244029	2.5	0		-2	1	8
AM89-244033	-1.1	-4		-8	-3	6
AM89-244039	1.7	0		-2	1	10
AM89-244043	-0.3	-2		-6	0	4
AM89-344033	2.4	0		0	1	6
HM8935	-1.8	-6		-6	1	3
HM8943	3.9	4		4	5	9
HM8945	4.2	6		1	6	9
HM8947	0.9	1		0	2	1
HM8948	2.5	3		1	3	6
HS88-4905	0.3	0		-3	0	4
HS88-4906	4.1	6		2	4	9
HS88-4908	5.1	6		4	5	10
HS88-4909	3.3	4		2	4	10
HS88-4918	4.3	4		3	3	9
LN85-7317	1.5	2		-1	2	3
LN86-1167	3.3	3		1	2	9
LN86-1285	4.9	4		5	5	10
LN87-1065	5.1	4		4	5	9
LN87-1672	7.3	7		7	11	11
LN87-3257	1.5	0		1	-1	4
LN87-3574	3.3	4		2	2	10
LN87-3600	4.7	4		3	5	10
LN87-4314	6.1	6		6	6	10
LN87-4663	2.9	3		1	3	3
Date Planted	05/22	05/08		05/01	05/23	05/14
Days to Mature	122.5	135		134	122	138

PRELIMINARY TEST IIA, 1990

MATURITY (date)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	5		3	7	6	2	2
Kenwood (II)	09/10		09/25	09/28	10/02	09/19	09/27
Sturdy (I)	0		-1	1	0	-7	1
AC89-140002	1		-3	2	-1	-1	-1
AC89-140010	3		0	1	-1	-1	-1
AC89-141024	3		2	5	3	-1	0
AC89-141027	3		-6	2	-1	-2	-3
AC89-241002	3		2	5	0	1	0
AC89-241003	3		0	6	0	2	0
AC89-241004	3		2	4	-1	1	-1
AC89-241029	3		1	2	0	1	0
AM89-140032	0		-3	3	0	-3	-1
AM89-244003	-3		-2	2	0	-2	2
AM89-244007	3		-2	5	6	3	2
AM89-244024	3		2	3	2	1	0
AM89-244029	4		2	6	5	-1	2
AM89-244033	0		-2	3	-1	-2	0
AM89-244039	2		0	3	0	2	1
AM89-244043	2		-1	1	1	-1	-1
AM89-344033	4		1	3	7	2	0
HM8935	0		-5	-1	-3	-4	3
HM8943	8		3	3	3	2	-2
HM8945	3		5	8	1	3	0
HM8947	3		-1	1	2	0	0
HM8948	5		0	3	2	3	-1
HS88-4905	1		1	3	-2	-2	1
HS88-4906	4		4	7	4	2	-1
HS88-4908	6		6	7	4	3	0
HS88-4909	2		3	4	4	0	0
HS88-4918	5		3	5	6	3	2
LN85-7317	3		-2	3	4	0	1
LN86-1167	4		5	5	1	2	1
LN86-1285	4		6	6	6	2	1
LN87-1065	6		8	4	6	3	2
LN87-1672	6		9	9	7	3	3
LN87-3257	3		1	1	2	-1	5
LN87-3574	4		1	3	5	1	1
LN87-3600	5		5	5	6	2	2
LN87-4314	6		6	8	6	3	4
LN87-4663	3		3	4	4	1	4
Date Planted	05/31		06/13	06/01	05/30	05/17	05/29
Days to Mature	102		104	119	125	125	121

PRELIMINARY TEST IIA, 1990

LODGING (score)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	1.6	1.6	1.6	1.0	3.0	1.5
Kenwood (II)	1.9	1.7	2.4	2.0	3.0	1.5
Sturdy (I)	1.5	1.4	1.8	1.0	2.8	1.0
AC89-140002	2.0	1.6	2.3	1.0	3.3	2.0
AC89-140010	1.5	1.7	1.8	1.0	2.3	1.0
AC89-141024	1.7	1.3	2.5	1.0	3.0	2.0
AC89-141027	1.2	1.3	1.5	1.0	1.0	1.0
AC89-241002	2.0	1.6	2.6	2.5	3.3	2.0
AC89-241003	2.0	1.7	3.0	3.5	2.5	1.0
AC89-241004	2.5	2.3	3.1	4.5	4.0	2.0
AC89-241029	1.6	1.5	1.6	1.5	2.0	1.0
AM89-140032	1.3	1.4	1.8	1.0	1.8	1.0
AM89-244003	1.7	1.8	2.4	1.0	3.0	1.5
AM89-244007	1.5	1.7	1.6	1.0	2.8	2.0
AM89-244024	1.9	1.8	2.2	2.0	3.5	1.5
AM89-244029	1.7	1.8	1.6	2.0	2.3	1.0
AM89-244033	1.7	2.4	1.6	1.7	2.5	1.0
AM89-244039	1.3	1.4	1.6	1.0	2.3	1.0
AM89-244043	1.5	1.7	2.0	1.0	2.5	1.0
AM89-344033	1.2	1.2	1.2	1.0	1.5	1.0
HM8935	2.0	2.0	1.6	1.0	3.3	1.5
HM8943	2.3	2.6	2.8	2.0	3.8	2.0
HM8945	2.3	2.1	2.6	3.0	3.8	1.5
HM8947	1.4	1.3	2.0	1.0	2.0	1.0
HM8948	1.4	1.6	1.6	1.5	2.0	1.0
HS88-4905	1.5	1.7	1.6	1.0	2.5	1.0
HS88-4906	1.9	2.0	2.3	2.0	2.8	2.0
HS88-4908	1.4	1.4	1.8	1.0	1.8	1.5
HS88-4909	1.6	1.9	1.8	1.0	2.3	2.0
HS88-4918	1.8	1.9	2.6	2.0	3.3	1.5
LN85-7317	2.0	1.7	2.9	1.5	3.5	1.5
LN86-1167	1.5	2.1	2.2	1.0	3.0	1.0
LN86-1285	2.1	2.1	2.1	2.0	3.5	2.5
LN87-1065	1.6	1.3	2.1	2.0	2.5	1.5
LN87-1672	2.4	1.9	2.6	2.5	3.5	5.0
LN87-3257	1.8	1.6	2.8	1.0	3.0	1.5
LN87-3574	1.8	2.1	2.1	1.5	2.5	2.0
LN87-3600	1.9	1.8	2.7	2.0	3.0	1.5
LN87-4314	1.7	1.6	1.4	1.5	3.3	1.0
LN87-4663	1.5	1.7	1.6	1.0	2.8	1.0

PRELIMINARY TEST IIA, 1990

LODGING (score)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	1.0	1.0	1.5	2.0	2.6	1.0	1.8
Kenwood (II)	1.0	1.0	1.5	1.7	3.1	1.0	2.5
Sturdy (I)	1.0	1.0	1.0	1.6	2.3	1.0	1.5
AC89-140002	1.0	1.0	3.0	2.0	3.2	1.0	3.0
AC89-140010	1.0	1.0	1.5	1.6	2.9	1.0	1.5
AC89-141024	1.0	1.0	2.0	1.6	2.9	1.0	1.5
AC89-141027	1.0	1.0	1.0	1.4	1.7	1.0	1.3
AC89-241002	1.0	1.0	2.0	1.6	3.4	1.0	1.5
AC89-241003	1.0	1.0	2.0	1.6	3.1	1.0	2.5
AC89-241004	1.0	1.0	3.0	1.6	4.0	1.0	2.5
AC89-241029	1.0	1.0	3.0	1.5	2.7	1.0	1.3
AM89-140032	1.0	1.0	1.0	1.5	1.7	1.0	1.5
AM89-244003	1.0	1.0	1.5	1.8	2.7	1.0	1.5
AM89-244007	1.0	1.0	1.0	1.6	2.5	1.0	1.3
AM89-244024	1.0	1.0	2.0	1.7	2.5	1.0	2.3
AM89-244029	1.0	1.0	2.0	1.8	2.5	1.0	1.8
AM89-244033	1.0	1.0	2.0	1.6	2.6	1.0	1.8
AM89-244039	1.0	1.0	1.0	1.5	1.7	1.0	1.5
AM89-244043	1.0	1.0	1.0	1.9	2.7	1.0	1.5
AM89-344033	1.0	1.0	1.0	1.5	1.5	1.0	1.3
HM8935	1.0	1.0	2.5	1.7	3.8	1.0	3.0
HM8943	1.5	1.0	3.5	1.8	3.4	1.0	2.0
HM8945	1.0	1.0	3.5	1.8	2.6	1.0	3.3
HM8947	1.0	1.0	1.5	1.5	2.2	1.0	1.5
HM8948	1.0	1.0	1.0	1.6	2.1	1.0	1.3
HS88-4905	1.0	1.0	2.0	1.7	2.4	1.0	1.5
HS88-4906	1.0	1.0	2.5	2.3	2.2	1.0	2.0
HS88-4908	1.0	1.0	1.0	1.5	1.9	1.0	1.5
HS88-4909	1.0	1.0	1.5	1.6	2.6	1.0	1.5
HS88-4918	1.0	1.0	1.0	1.8	2.6	1.0	1.8
LN85-7317	1.0	1.0	2.0	2.1	3.3	1.0	2.0
LN86-1167	1.0	1.0	1.0	1.6	1.1	1.0	1.8
LN86-1285	1.0	1.0	3.0	1.6	2.8	1.0	2.5
LN87-1065	1.0	1.0	1.0	1.7	2.6	1.0	1.5
LN87-1672	1.0	1.0	1.5	2.0	3.6	1.0	2.8
LN87-3257	1.0	1.0	1.5	2.1	2.3	1.0	2.5
LN87-3574	1.0	1.0	2.0	2.0	2.5	1.0	1.5
LN87-3600	1.0	1.0	2.0	1.8	2.3	1.0	2.5
LN87-4314	1.0	1.0	2.5	1.6	2.2	1.0	1.8
LN87-4663	1.0	1.0	1.5	1.6	2.8	1.0	1.5

PRELIMINARY TEST IIA, 1990

PLANT HEIGHT (inches)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	33	32	36	33	32	38
Kenwood (II)	34	37	39	35	34	37
Sturdy (I)	32	34	34	30	32	36
AC89-140002	31	32	34	32	33	37
AC89-140010	30	35	34	32	29	31
AC89-141024	31	34	34	34	33	35
AC89-141027	26	28	32	23	27	26
AC89-241002	29	32	32	33	31	30
AC89-241003	29	32	34	31	29	33
AC89-241004	30	33	34	31	29	31
AC89-241029	32	34	36	34	30	37
AM89-140032	30	34	36	32	30	26
AM89-244003	29	30	32	31	29	33
AM89-244007	32	34	40	35	34	37
AM89-244024	35	33	39	36	38	34
AM89-244029	36	36	41	37	35	38
AM89-244033	32	32	35	33	30	34
AM89-244039	32	32	36	32	33	37
AM89-244043	33	34	38	33	35	37
AM89-344033	32	32	35	34	34	32
HM8935	32	34	32	31	33	37
HM8943	38	36	40	34	38	43
HM8945	36	36	39	39	39	38
HM8947	32	36	38	35	34	30
HM8948	31	34	35	34	35	32
HS88-4905	34	38	40	32	36	36
HS88-4906	34	38	40	36	32	37
HS88-4908	34	36	40	35	33	36
HS88-4909	36	38	38	38	37	42
HS88-4918	34	36	40	37	35	41
LN85-7317	33	36	39	34	35	35
LN86-1167	32	34	39	33	34	35
LN86-1285	36	38	42	40	39	44
LN87-1065	33	34	36	36	33	36
LN87-1672	36	38	36	40	38	44
LN87-3257	33	34	36	35	37	36
LN87-3574	37	37	44	37	35	44
LN87-3600	37	36	38	40	37	39
LN87-4314	36	38	44	39	35	34
LN87-4663	34	38	40	38	33	39

PRELIMINARY TEST IIA, 1990

PLANT HEIGHT (inches)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	29	32	31	35	35	28	33
Kenwood (II)	31	30	32	30	36	31	34
Sturdy (I)	29	22	31	29	38	31	34
AC89-140002	31	27	29	29	31	29	32
AC89-140010	29	24	29	27	33	29	31
AC89-141024	29	27	30	31	32	27	29
AC89-141027	24	21	22	22	28	25	28
AC89-241002	26	27	28	19	32	26	26
AC89-241003	26	26	29	22	32	26	30
AC89-241004	28	26	30	27	32	27	27
AC89-241029	31	24	30	30	37	30	31
AM89-140032	29	23	28	26	33	29	34
AM89-244003	24	21	29	24	33	27	30
AM89-244007	30	22	32	20	38	31	35
AM89-244024	35	29	35	31	38	33	37
AM89-244029	34	29	36	35	40	31	40
AM89-244033	31	29	35	21	37	31	36
AM89-244039	32	23	30	29	37	30	35
AM89-244043	33	26	33	29	36	31	34
AM89-344033	29	30	31	30	35	29	35
HM8935	31	26	31	34	35	28	35
HM8943	36	33	42	35	35	38	41
HM8945	32	32	37	33	39	32	37
HM8947	28	26	30	32	34	29	34
HM8948	27	26	31	29	34	28	32
HS88-4905	33	25	32	32	33	34	35
HS88-4906	33	30	31	34	32	32	32
HS88-4908	33	26	30	33	34	32	34
HS88-4909	35	32	34	36	35	33	34
HS88-4918	28	29	33	29	35	30	34
LN85-7317	30	27	33	33	36	29	33
LN86-1167	27	26	32	30	33	29	35
LN86-1285	29	31	35	32	34	32	36
LN87-1065	29	28	32	31	34	27	34
LN87-1672	29	34	37	34	39	31	37
LN87-3257	32	26	30	30	36	30	35
LN87-3574	34	33	34	36	39	32	36
LN87-3600	33	35	37	35	39	33	38
LN87-4314	34	32	34	35	36	32	37
LN87-4663	29	29	35	27	36	31	35

PRELIMINARY TEST IIA, 1990

SEED QUALITY (score)

Strain	Mean 11 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	1.5	2.5	1.5	1.3	1.5	
Kenwood (II)	2.3	4.0	2.5	1.1	2.0	
Sturdy (I)	2.2	4.0	2.0	1.1	1.0	
AC89-140002	2.3	4.0	2.5	1.1	1.5	
AC89-140010	2.6	3.5	3.0	2.3	2.5	
AC89-141024	2.1	3.5	2.5	1.5	1.5	
AC89-141027	1.8	3.0	1.5	1.1	1.5	
AC89-241002	2.4	4.5	3.0	1.3	1.5	
AC89-241003	2.3	4.5	2.5	1.8	1.5	
AC89-241004	2.1	4.0	2.5	1.3	1.5	
AC89-241029	2.4	4.5	2.5	2.0	1.0	
AM89-140032	2.2	4.0	2.5	1.3	1.5	
AM89-244003	2.2	4.0	2.0	1.3	1.5	
AM89-244007	2.6	4.5	2.5	1.8	1.5	
AM89-244024	2.1	3.5	2.0	1.8	1.5	
AM89-244029	2.1	4.0	2.0	1.3	2.0	
AM89-244033	2.1	4.0	1.5	1.5	1.5	
AM89-244039	2.2	4.0	2.0	1.3	1.5	
AM89-244043	2.0	4.0	1.5	1.5	1.5	
AM89-344033	1.8	2.0	2.0	1.6	1.0	
HM8935	1.8	2.5	1.5	1.3	1.5	
HM8943	2.0	3.0	1.5	1.3	1.5	
HM8945	2.0	3.0	2.0	1.7	1.5	
HM8947	1.8	4.0	1.5	1.1	1.0	
HM8948	2.1	4.0	1.5	1.7	1.5	
HS88-4905	2.0	3.5	1.5	1.5	1.5	
HS88-4906	2.0	3.0	2.5	1.5	1.5	
HS88-4908	1.7	2.5	1.5	1.3	1.0	
HS88-4909	2.0	3.0	2.5	1.5	1.5	
HS88-4918	1.8	3.0	1.5	1.1	1.0	
LN85-7317	2.1	4.0	2.5	1.8	2.0	
LN86-1167	2.0	3.0	2.5	1.3	1.5	
LN86-1285	1.6	3.0	1.5	1.1	1.0	
LN87-1065	2.1	3.5	2.0	1.5	2.0	
LN87-1672	2.2	4.0	2.5	2.2	3.0	
LN87-3257	1.9	2.5	2.0	1.7	1.0	
LN87-3574	2.0	3.5	1.5	1.5	1.5	
LN87-3600	2.0	4.0	1.5	1.1	1.0	
LN87-4314	2.1	4.0	2.5	1.8	1.5	
LN87-4663	1.9	3.0	2.5	1.3	1.5	

PRELIMINARY TEST IIA, 1990

SEED QUALITY (score)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	2.0	1.0	1.0	1.7	1.0	2.0	1.0
Kenwood (II)	2.5	2.0	2.0	1.9	2.0	3.0	2.0
Sturdy (I)	2.0	2.0	1.5	1.7	2.0	4.0	3.0
AC89-140002	2.0	2.0	2.0	2.0	2.0	3.0	3.0
AC89-140010	2.0	2.0	3.0	2.6	2.0	4.0	2.0
AC89-141024	3.0	2.0	1.0	1.5	2.0	3.0	2.0
AC89-141027	2.0	2.0	1.5	1.8	1.0	3.0	1.0
AC89-241002	2.0	2.0	1.0	1.7	2.0	4.0	3.0
AC89-241003	2.0	2.0	1.5	1.5	2.0	4.0	2.0
AC89-241004	2.0	1.5	1.0	1.4	2.0	4.0	2.0
AC89-241029	2.0	2.0	1.0	2.2	3.0	4.0	2.0
AM89-140032	1.5	2.0	1.0	2.3	2.0	4.0	2.0
AM89-244003	2.0	2.0	1.0	1.7	3.0	4.0	2.0
AM89-244007	2.0	2.0	1.5	2.3	3.0	4.0	3.0
AM89-244024	2.5	1.5	1.0	2.0	1.0	4.0	2.0
AM89-244029	2.0	2.0	1.0	1.7	2.0	3.0	2.0
AM89-244033	2.0	2.0	1.5	2.1	2.0	3.0	2.0
AM89-244039	2.0	2.0	2.0	1.6	2.0	3.0	3.0
AM89-244043	2.5	2.0	1.5	2.0	1.0	3.0	2.0
AM89-344033	2.0	1.5	2.0	1.7	2.0	3.0	1.0
HM8935	2.0	1.5	1.5	1.7	2.0	2.0	2.0
HM8943	2.0	2.0	1.5	1.7	2.0	3.0	2.0
HM8945	3.0	2.0	1.0	1.8	1.0	3.0	2.0
HM8947	1.5	2.0	1.0	1.5	1.0	3.0	2.0
HM8948	2.0	2.0	1.5	2.1	2.0	3.0	2.0
HS88-4905	2.0	2.0	1.5	1.5	2.0	3.0	2.0
HS88-4906	2.0	2.0	1.0	2.0	1.0	3.0	2.0
HS88-4908	2.0	1.5	1.0	1.7	2.0	2.0	2.0
HS88-4909	2.0	2.0	1.5	2.2	2.0	2.0	2.0
HS88-4918	2.0	1.5	1.5	1.7	2.0	3.0	2.0
LN85-7317	2.0	2.0	1.0	1.4	1.0	3.0	2.0
LN86-1167	2.0	2.0	1.0	1.7	2.0	3.0	2.0
LN86-1285	1.5	1.5	1.0	1.6	2.0	2.0	1.0
LN87-1065	2.0	2.0	1.5	1.5	2.0	3.0	2.0
LN87-1672	2.0	1.0	1.0	2.0	1.0	3.0	2.0
LN87-3257	2.0	2.0	1.5	2.1	1.0	3.0	2.0
LN87-3574	2.0	2.0	1.5	1.7	2.0	3.0	2.0
LN87-3600	2.0	2.0	1.0	1.7	1.0	4.0	3.0
LN87-4314	2.0	2.0	1.5	1.3	2.0	3.0	2.0
LN87-4663	2.0	1.5	1.0	1.7	1.0	3.0	2.0

PRELIMINARY TEST IIA, 1990

SEED SIZE (g\100)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	18.9	17.9	21.0	19.1	22.2	18.4
Kenwood (II)	16.1	14.5	17.8	15.2	17.5	17.4
Sturdy (I)	18.5	16.2	19.6	17.4	20.4	18.8
AC89-140002	16.7	15.1	17.8	15.9	18.7	18.3
AC89-140010	18.9	17.3	21.0	18.4	20.1	17.5
AC89-141024	17.5	15.6	18.6	16.9	21.2	19.5
AC89-141027	16.4	15.8	15.8	17.1	16.3	17.2
AC89-241002	16.4	14.8	18.3	14.9	19.6	16.9
AC89-241003	17.2	15.6	20.2	16.5	18.9	17.6
AC89-241004	16.2	15.2	18.9	15.5	18.6	16.7
AC89-241029	15.5	15.0	17.2	15.7	15.6	17.8
AM89-140032	19.6	19.0	20.8	19.1	21.6	19.3
AM89-244003	15.5	14.3	17.1	14.4	17.0	15.8
AM89-244007	19.7	17.8	20.5	19.5	21.2	22.7
AM89-244024	18.9	17.2	20.2	18.3	20.4	19.2
AM89-244029	17.0	15.0	17.6	17.3	18.2	18.4
AM89-244033	18.3	16.4	18.2	16.8	18.9	19.3
AM89-244039	16.2	14.3	16.8	16.7	18.0	16.6
AM89-244043	18.8	16.4	19.6	17.6	21.1	19.2
AM89-344033	16.1	13.4	16.5	16.3	17.2	15.5
HM8935	19.1	18.5	20.0	18.6	20.5	19.0
HM8943	15.8	15.7	16.4	17.3	17.4	16.3
HM8945	17.8	14.2	20.0	18.1	19.5	19.8
HM8947	18.6	15.3	19.6	18.3	20.6	17.6
HM8948	13.9	16.6	13.5	12.8	14.7	13.9
HS88-4905	17.5	12.0	18.6	18.6	18.8	17.9
HS88-4906	18.1	15.6	20.0	20.1	20.1	19.1
HS88-4908	17.5	15.0	18.8	18.4	17.5	18.6
HS88-4909	18.5	16.2	19.6	19.3	20.3	20.1
HS88-4918	15.5	14.2	15.2	14.6	17.2	17.8
LN85-7317	20.0	17.4	20.2	20.5	22.5	20.2
LN86-1167	17.5	14.8	18.6	16.9	19.0	17.7
LN86-1285	17.2	15.5	18.6	17.1	20.1	17.9
LN87-1065	17.6	16.0	18.4	16.9	19.3	18.4
LN87-1672	19.0	16.4	21.8	18.8	20.9	20.5
LN87-3257	17.6	16.0	19.3	16.6	19.1	17.5
LN87-3574	16.9	15.1	18.8	16.6	18.0	17.7
LN87-3600	18.0	15.0	18.8	19.2	19.8	18.0
LN87-4314	16.2	13.8	18.0	16.3	19.0	14.0
LN87-4663	17.8	16.0	19.3	18.1	19.5	17.4

PRELIMINARY TEST IIA, 1990

SEED SIZE (g\100)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	15.0	18.3	20.0	20.9	17.7	16.9	19.2
Kenwood (II)	13.1	17.5	15.0	18.1	16.3	13.7	16.6
Sturdy (I)	16.0	21.2	18.0	20.0	19.2	17.0	18.4
AC89-140002	14.2	18.2	17.0	17.0	15.6	15.7	16.4
AC89-140010	15.7	22.4	19.0	20.6	17.8	17.8	18.6
AC89-141024	15.3	18.6	16.0	18.4	16.8	16.2	16.8
AC89-141027	15.4	18.2	14.0	18.1	16.8	16.3	15.7
AC89-241002	13.7	17.4	17.0	17.5	15.6	15.3	15.7
AC89-241003	14.3	17.8	17.0	18.2	17.6	15.1	17.8
AC89-241004	12.8	16.6	16.0	18.0	16.0	14.6	15.3
AC89-241029	13.1	16.2	14.0	17.4	15.9	14.0	14.5
AM89-140032	16.4	20.9	18.0	22.3	19.6	19.2	19.3
AM89-244003	11.7	16.6	16.0	16.6	15.7	14.7	16.1
AM89-244007	17.4	21.3	17.0	20.9	19.4	18.8	20.3
AM89-244024	16.1	21.1	18.0	21.0	18.1	18.7	18.9
AM89-244029	14.3	18.6	17.0	18.9	16.5	15.2	16.9
AM89-244033	14.1	20.8	17.0	21.1	18.4	18.8	19.3
AM89-244039	13.4	17.9	16.0	17.4	16.6	14.8	15.4
AM89-244043	15.8	21.5	19.0	21.1	17.9	17.1	19.7
AM89-344033	14.1	18.3	17.0	18.1	15.7	14.5	16.2
HM8935	15.6	19.0	20.0	21.3	20.5	17.4	18.5
HM8943	13.8	15.6	16.0	16.8	14.3	14.9	15.5
HM8945	14.0	20.0	17.0	19.9	17.5	16.4	16.6
HM8947	17.1	20.2	19.0	20.9	18.9	17.3	18.8
HM8948	11.6	14.2	15.0	15.3	13.6	12.5	13.6
HS88-4905	16.0	19.8	18.0	19.5	17.8	15.8	17.4
HS88-4906	14.2	18.9	18.0	20.7	18.0	15.7	17.2
HS88-4908	15.8	20.8	17.0	18.1	16.8	16.9	16.2
HS88-4909	15.1	20.0	18.0	20.2	18.8	16.0	18.5
HS88-4918	12.8	17.0	16.0	17.0	15.2	13.9	15.2
LN85-7317	17.6	19.8	20.0	21.8	21.1	19.2	20.1
LN86-1167	15.3	18.7	18.0	18.2	18.2	16.5	18.1
LN86-1285	13.9	18.7	17.0	17.9	16.2	15.9	17.8
LN87-1065	15.3	18.1	20.0	18.0	16.6	17.1	16.9
LN87-1672	15.0	18.6	21.0	19.7	19.3	17.3	19.1
LN87-3257	14.4	20.1	17.0	19.4	17.2	16.2	18.1
LN87-3574	14.6	18.2	18.0	17.9	15.5	15.4	16.7
LN87-3600	16.3	18.3	18.0	20.3	17.5	16.5	18.4
LN87-4314	14.0	17.2	17.0	17.6	15.9	15.2	16.5
LN87-4663	15.0	19.1	20.0	18.1	17.0	16.1	18.3

PRELIMINARY TEST IIA, 1990

PROTEIN (%)

Strain	Mean 5 Tests	Marshalltown IA	Urbana IL	Lafayette IN	O'Neill NE	Hoytville OH
Burlison (L)	43.6	42.9	43.3	45.1	42.5	44.2
Kenwood (II)	39.8	40.9	38.6	42.1	37.5	39.8
Sturdy (I)	40.5	41.0	39.2	41.9	40.1	40.5
AC89-140002	41.3	42.8	40.0	42.3	40.3	41.2
AC89-140010	40.8	41.5	39.5	41.3	40.5	41.4
AC89-141024	41.9	42.8	41.8	43.1	40.7	41.2
AC89-141027	40.7	40.2	40.7	42.0	39.6	41.1
AC89-241002	38.3	40.2	37.0	40.6	36.6	39.2
AC89-241003	40.2	42.0	39.5	41.3	38.0	40.2
AC89-241004	39.3	40.6	39.0	41.2	36.3	39.5
AC89-241029	40.4	41.2	39.8	41.4	39.3	40.2
AM89-140032	39.3	39.3	37.7	40.3	40.3	39.0
AM89-244003	39.0	39.8	37.3	40.3	39.0	38.8
AM89-244007	38.6	39.0	37.7	40.1	38.4	38.0
AM89-244024	38.8	39.6	37.3	40.0	38.5	38.5
AM89-244029	39.1	40.2	38.3	39.7	38.3	38.9
AM89-244033	39.4	40.5	37.8	39.9	39.5	39.5
AM89-244039	39.6	39.8	37.8	42.0	38.9	39.6
AM89-244043	38.1	38.4	37.8	39.9	36.8	37.6
AM89-344033	40.4	40.8	39.3	41.7	39.9	40.4
HM8935	41.3	41.3	40.8	42.3	40.6	41.6
HM8943	40.6	42.5	40.6	41.8	37.9	40.4
HM8945	38.1	39.8	37.4	40.2	34.9	38.2
HM8947	41.9	43.5	40.5	43.1	40.8	41.8
HM8948	40.8	41.8	40.8	41.9	39.7	39.9
HS88-4905	39.7	41.4	39.3	40.3	38.1	39.2
HS88-4906	39.5	40.8	39.1	40.3	37.3	39.8
HS88-4908	38.9	39.9	38.5	39.9	37.8	38.2
HS88-4909	39.3	40.6	37.9	40.1	38.9	38.9
HS88-4918	42.0	43.3	41.7	43.7	40.5	40.8
LN85-7317	41.2	42.8	40.9	42.2	38.8	41.4
LN86-1167	38.9	40.3	38.1	41.4	36.1	38.6
LN86-1285	40.6	41.8	40.2	42.2	38.3	40.3
LN87-1065	40.8	42.3	41.2	43.4	36.9	40.4
LN87-1672	42.7	44.1	43.1	44.3	40.0	42.2
LN87-3257	40.1	41.0	38.8	41.6	39.1	40.0
LN87-3574	40.9	42.2	40.1	42.8	38.5	40.8
LN87-3600	39.8	40.5	38.7	41.5	38.2	40.3
LN87-4314	43.1	44.1	42.6	45.4	41.2	42.1
LN87-4663	42.0	43.1	41.1	43.3	41.1	41.2

PRELIMINARY TEST IIA, 1990

OIL (%)

Strain	Mean 5 Tests	Marshalltown IA	Urbana IL	Lafayette IN	O'Neill NE	Hoytville OH
Burlison (L)	19.1	19.4	20.1	18.6	19.6	18.0
Kenwood (II)	21.2	20.5	22.0	20.8	21.7	20.9
Sturdy (I)	21.2	20.8	21.9	21.0	21.3	20.8
AC89-140002	19.6	18.9	20.6	19.4	19.2	20.0
AC89-140010	20.1	19.8	21.2	20.1	20.1	19.4
AC89-141024	20.3	19.5	20.5	20.1	20.9	20.3
AC89-141027	21.1	21.0	21.2	20.4	21.6	21.1
AC89-241002	21.9	21.0	22.8	20.8	22.3	21.4
AC89-241003	21.7	20.9	22.4	21.2	22.4	21.4
AC89-241004	21.6	21.1	22.0	21.0	22.6	21.2
AC89-241029	21.3	21.0	21.7	20.9	21.7	21.2
AM89-140032	21.3	21.2	22.0	21.1	21.6	20.6
AM89-244003	21.0	20.5	21.2	20.6	21.5	21.1
AM89-244007	21.2	21.4	21.9	20.4	21.9	20.5
AM89-244024	21.5	21.4	22.1	21.4	21.8	20.7
AM89-244029	21.1	21.0	21.8	20.6	21.8	20.4
AM89-244033	21.3	20.9	22.0	21.0	21.3	21.3
AM89-244039	21.7	21.3	22.7	20.9	22.1	21.6
AM89-244043	21.7	21.7	22.1	21.2	22.3	21.3
AM89-344033	20.8	20.5	21.6	20.4	20.8	20.5
HM8935	20.0	19.9	20.2	19.7	20.5	19.5
HM8943	21.5	20.7	22.3	21.4	22.0	21.3
HM8945	21.9	20.9	22.9	21.4	23.2	21.1
HM8947	20.4	19.6	21.2	20.2	20.9	20.0
HM8948	20.9	20.3	21.5	20.9	21.1	20.7
HS88-4905	21.5	20.4	21.9	21.2	22.4	21.7
HS88-4906	21.4	20.7	22.1	21.4	22.4	20.4
HS88-4908	22.1	21.0	22.4	21.9	22.9	22.1
HS88-4909	21.7	20.7	22.8	22.0	22.0	21.0
HS88-4918	20.9	20.5	21.4	20.5	21.4	20.6
LN85-7317	20.8	20.3	21.2	20.7	21.8	19.9
LN86-1167	21.8	20.8	22.6	21.4	22.7	21.5
LN86-1285	21.1	20.8	21.4	20.6	21.9	20.7
LN87-1065	21.3	20.5	21.6	20.6	22.6	21.1
LN87-1672	20.7	19.9	20.9	20.1	21.4	21.4
LN87-3257	21.1	21.3	21.8	20.8	20.9	20.9
LN87-3574	20.9	20.2	21.4	20.4	21.4	21.0
LN87-3600	21.2	21.0	21.9	21.1	21.6	20.5
LN87-4314	20.2	19.9	20.9	19.1	20.6	20.4
LN87-4663	20.6	20.1	21.2	20.7	20.3	20.7

PRELIMINARY TEST IIB, 1990

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	
C1786	C1623 x A81-151026	F5	
C1787	C1627 x C1623	F5	
C1794	Hack x C1643	F5	
C1795	C1627 x A81-151026	F5	
C1796	C1627 x A81-151026	F5	
C1799	C1643 x HC78-2836	F5	
C1800	C1651 x A81-151026	F5	
C1802	C1651 x C1627	F5	
C1818	C1664 x Pella 86	F5	
M86-752	M76-160 x Hardin	F5	Rps1
M86-912	Hack x M81-79(p)	F5	Rps1
ORC 8902	Hack x Jewel	F5	
ORC 8905	Pride B152 x Jewel	F5	
U892203	Hack x A80-244036	F5	
U892213	BSR 101 x C1626	F5	
U892215	BSR 101 x C1626	F5	
U892220	BSR 101 x C1626	F5	
U892301	LN80-9359 x Platte	F5	
U892305	Century x Harosoy	F4	Lf_1LF_1lnln
U892317	BSR 101 x Century 84	F5	
U892325	BSR 101 x Century 84	F5	
U892327	A82-161035 x C1626	F5	
U892404	Mead x K1074	F5	
U892420	$SG_1/BC/85\text{-}E_1$*	F5	
U892431	$SG_1/BC/85\text{-}E_1$*	F5	
Hoyt (dtl)	Harcor x Elf	F5	dtl
C1822	C1671 x C1676	F5	dtl
HC86-4384	Pella x HC74-634RE	F5	dtl
HC86-4481	HC78-354 x Gnome 84	F5	dtl
HC86-4499	Hoyt x Corsoy 79	F5	dtl
HC86-4501	Hoyt x Corsoy 79	F5	dtl
HC86-4913	Hoyt x Amcor	F5	dtl
HC86-4914	Hoyt x HC78-354	F5	dtl
U892035	$SG_1/BC/85\text{-}E_1$*	F5	dtl

*$SG_1/NS/84\text{-}RM_3/MS$ x 32 Elite High Yielding Lines.
See CROP SCI. 25:717-718

PRELIMINARY TEST IIB, 1990

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Shattering Score Manhattan	BSR - Ames Plant n %	BSR - Ames Stem n %
Burlison (L)	WTTIBlI	1.5	2.0	100.0	73.4
Kenwood (II)	PTBIBlI	2.7	1.0	80.0	45.6
Sturdy (I)	PGBIIbI	1.2	2.0	100.0	55.9
C1786	PTBIBrI	2.5	1.0	100.0	86.4
C1787	PGBIIbI	1.5	1.0	100.0	76.8
C1794	WGBSBfI	2.7	1.0	100.0	71.1
C1795	PTBIBlI	1.7	2.0	100.0	50.5
C1796	PGBIBfI	1.5	1.0	100.0	74.2
C1799	WGTIBfI	1.5	1.0	100.0	65.0
C1800	WTBIBl+BrI	2.7	1.0	100.0	85.1
C1802	WGBIBfI	2.7	2.0	100.0	91.2
C1818	P+WTBSBlI	2.7	1.0	90.0	68.8
M86-752	WGBIYI	2.2	1.0	100.0	76.7
M86-912	WGBIYI	2.0	1.0	100.0	78.1
ORC 8902	PGTSGrI	1.7	1.0	90.0	64.8
ORC 8905	PGBIYI	1.8	1.0	100.0	66.8
U892203	WTTIBlI	1.7	1.0	100.0	58.2
U892213	PTBIBlI	1.8	2.0	100.0	61.1
U892215	PTBIBlI	2.7	2.0	100.0	71.4
U892220	PTTIBlI	1.7	2.0	100.0	48.2
U892301	W+PTBSBrI	2.3	1.0	100.0	70.0
U892305	PGBIYI	2.2	2.0	100.0	76.6
U892317	PTTDBlI	2.3	3.0	100.0	72.2
U892325	PTTIBlI	2.2	1.0	100.0	86.5
U892327	PGBDIbI	1.5	1.0	100.0	80.0
U892404	WTBIBlI	1.8	2.0	100.0	67.0
U892420	PTTIBlI	3.2	1.0	100.0	96.8
U892431	PTTDBf+BlI	1.7	1.0	100.0	91.0
Hoyt (dtl)	PTTIBlD	2.7	1.0	100.0	80.0
C1822	WTTIBlD	2.7	2.0	100.0	66.4
HC86-4384	PTTIBlD	2.5	1.0	100.0	92.4
HC86-4481	PTTDBlD	1.2	1.0	100.0	73.3
HC86-4499	PTBSBlD	2.0	1.0	100.0	83.9
HC86-4501	PTBIBlD	2.5	1.0	100.0	99.0
HC86-4913	PGBSBfD	1.8	1.0	100.0	71.7
HC86-4914	PTTIBlD	2.8	1.0	100.0	67.0
U892035	WGT+BIBfD	1.3	1.0	100.0	99.1

PRELIMINARY TEST IIB, 1990

DISEASE DATA

Strain	BB Urbana n Score	PR Vickery Phyto. Tolerance	PR Urbana Race 1	PR Ames Race 4	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %
Burlison (L)	3.5	3.8	R	R	R	54	10
Kenwood (II)	3.5	5.8	S	S	S	35	25
Sturdy (I)	4.0	4.3	R	S	S	44	14
C1786	3.0	4.7	H	S	H	2	6
C1787	3.5	4.0	S	S	H	12	4
C1794	2.0	4.0	S	S	R	10	26
C1795	2.5	4.0	H	S	R	16	18
C1796	1.0	3.7	H	S	H	6	8
C1799	1.5	4.5	S	S	H	4	30
C1800	2.0	4.0	R	S	S	14	8
C1802	1.5	4.3	H	S	S	28	4
C1818	3.0	3.5	R	S	S	10	4
M86-752	4.0	4.0	R	S	S	6	40
M86-912	3.5	4.5	R	S	H	24	34
ORC 8902	4.5	4.0	R	S	R	16	16
ORC 8905	3.5	3.6	H	S	H	8	32
U892203	4.0	4.8	R	S	H	12	18
U892213	1.5	7.0	H	S	H	8	20
U892215	3.0	5.8	S	S	S	0	30
U892220	1.5	5.4	R	S	S	6	24
U892301	1.0	6.4	R	S	S	10	4
U892305	2.0	4.6	R	S	H	2	12
U892317	3.0	4.2	R	H	H	0	2
U892325	3.5	4.6	R	S	S	12	32
U892327	1.5	4.0	H	S	H	4	6
U892404	4.0	4.4	R	S	S	14	4
U892420	3.5	4.6	S	S	H	12	30
U892431	1.0	6.4	S	S	S	6	32
Hoyt (dtl)	4.0	4.8	S	S	S	12	0
C1822	1.5	4.5	S	S	S	10	44
HC86-4384	2.0	4.0	R	S	S	8	2
HC86-4481	2.5	4.3	R	S	S	2	0
HC86-4499	3.0	4.5	R	S	R	8	6
HC86-4501	4.0	4.3	R	S	H	0	26
HC86-4913	4.0	6.5	R	H	S	4	14
HC86-4914	3.0	4.2	S	S	S	2	4
U892035	1.5	4.4	R	S	H	24	26

PRELIMINARY TEST IIB, 1990

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)	51.2	2	4.8	1.7	33	1.7	19.1	44.0	19.3
Kenwood (II)	50.5	6	09/21*	1.8	33	2.2	15.8	39.7	21.4
Sturdy (I)	47.2	30	-1.5	1.6	31	1.9	18.7	40.6	21.0
C1786	49.8	14	4.5	2.0	37	2.1	18.1	41.2	19.9
C1787	50.8	5	1.9	1.8	34	1.9	17.8	40.8	21.2
C1794	49.3	17	4.0	1.8	35	1.9	15.4	39.2	21.5
C1795	48.8	20	1.4	1.7	33	1.8	16.6	40.9	20.9
C1796	50.3	8	1.4	1.6	34	1.9	16.0	40.0	20.9
C1799	49.0	18	4.1	1.7	33	1.9	15.9	41.3	20.2
C1800	47.4	27	4.3	1.6	32	2.1	16.9	42.1	20.1
C1802	51.2	2	6.2	1.4	33	2.1	17.1	39.6	21.5
C1818	48.4	21	3.5	1.6	32	1.9	18.4	39.3	21.4
M86-752	49.5	15	2.7	1.4	32	2.1	19.5	40.5	21.6
M86-912	49.4	16	2.7	1.5	31	1.8	17.1	40.3	21.7
ORC 8902	50.1	11	4.2	1.4	31	2.0	16.4	38.8	22.0
ORC 8905	51.5	1	2.7	1.7	32	2.1	17.6	39.1	21.8
U892203	47.4	27	2.3	2.0	34	2.1	18.7	38.4	22.0
U892213	50.2	9	-0.2	1.5	35	2.0	19.4	41.1	20.7
U892215	44.6	35	3.7	2.2	36	2.1	17.0	40.3	20.5
U892220	49.0	18	2.7	1.9	36	2.0	17.8	39.1	21.4
U892301	47.5	25	4.0	2.2	35	2.0	16.0	40.8	21.1
U892305	47.3	29	3.5	2.1	36	2.1	17.6	41.4	20.6
U892317	49.9	12	2.5	1.5	32	1.8	17.4	41.2	20.9
U892325	48.1	22	0.8	1.5	34	2.1	18.1	42.1	19.8
U892327	50.2	9	6.1	1.9	37	2.0	14.5	40.9	21.0
U892404	44.3	36	6.3	1.5	34	2.2	15.5	42.8	19.7
U892420	47.6	23	2.3	2.0	35	1.8	18.0	40.0	22.8
U892431	49.9	12	4.0	2.0	39	1.7	16.5	40.4	21.5
Hoyt (dtl)	45.8	33	2.5	1.5	22	1.8	14.2	40.7	21.4
C1822	40.5	37	0.7	2.4	36	1.7	14.8	39.8	21.9
HC86-4384	51.0	4	5.0	1.2	24	1.9	18.1	41.0	21.2
HC86-4481	46.6	31	5.4	1.3	22	1.7	17.1	42.1	21.3
HC86-4499	47.5	25	3.1	1.4	23	1.7	15.9	42.2	20.1
HC86-4501	45.6	34	4.4	1.6	24	1.9	16.1	41.6	20.2
HC86-4913	47.6	23	6.0	1.6	25	2.1	16.0	40.1	21.5
HC86-4914	45.9	32	5.7	1.5	23	2.0	17.0	41.6	21.4
U892035	50.5	6	3.4	1.4	28	1.8	18.4	40.8	21.4

*122.4 Days After Planting

PRELIMINARY TEST IIB, 1990

YIELD (bu/a)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	51.2	57.8	54.2	63.4	63.6	60.6
Kenwood (II)	50.5	58.7	58.5	61.2	60.1	68.6
Sturdy (I)	47.2	54.3	52.7	48.9	52.6	60.8
C1786	49.8	53.1	53.2	60.8	49.9	66.9
C1787	50.8	59.2	55.1	64.5	52.9	57.4
C1794	49.3	57.1	53.3	60.5	54.8	58.7
C1795	48.8	56.8	55.7	61.0	58.4	53.7
C1796	50.3	63.6	51.5	63.2	67.9	56.0
C1799	49.0	56.5	53.7	59.8	52.8	56.7
C1800	47.4	54.8	49.7	61.0	57.8	58.7
C1802	51.2	50.7	55.3	66.3	67.3	54.2
C1818	48.4	55.9	54.4	57.0	60.1	52.7
M86-752	49.5	53.6	56.0	63.0	57.0	62.6
M86-912	49.4	60.0	58.2	57.4	55.2	56.7
ORC 8902	50.1	55.6	55.4	65.5	61.7	50.5
ORC 8905	51.5	52.2	55.9	63.5	65.1	58.7
U892203	47.4	55.3	52.5	55.8	57.6	61.3
U892213	50.2	52.6	55.8	66.3	64.9	63.6
U892215	44.6	56.7	41.7	55.6	51.1	57.2
U892220	49.0	46.8	51.8	62.8	64.0	59.3
U892301	47.5	49.7	51.4	61.7	55.4	66.2
U892305	47.3	51.4	53.7	59.2	58.1	57.8
U892317	49.9	53.7	55.9	57.7	65.4	55.9
U892325	48.1	55.0	51.2	55.8	56.1	59.0
U892327	50.2	57.4	55.8	52.2	67.4	53.4
U892404	44.3	45.8	45.9	64.6	60.7	48.5
U892420	47.6	52.5	46.3	60.0	60.9	64.1
U892431	49.9	54.4	56.0	62.7	62.4	67.6
Hoyt (dtl)	45.8	54.1	58.0	49.4	55.6	44.2
C1822	40.5	47.5	42.5	57.3	50.6	47.2
HC86-4384	51.0	53.2	54.9	61.7	62.4	54.8
HC86-4481	46.6	50.4	52.7	55.8	54.8	58.5
HC86-4499	47.5	49.2	52.2	52.9	50.7	63.4
HC86-4501	45.6	46.6	54.4	43.4	45.1	59.1
HC86-4913	47.6	50.9	52.4	58.5	53.3	53.4
HC86-4914	45.9	51.8	55.2	52.4	60.3	61.1
U892035	50.5	54.7	56.3	66.7	65.0	61.8
C.V. (%)		5.5	5.5	6.6	10.8	10.8
L.S.D. (5%)		5.9	5.9	7.9	12.9	12.7
Row Sp. (In.)		27	27	30	24	20
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIB, 1990

YIELD (bu/a)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	26.6	52.9	48.1	51.3	52.5	37.9	45.2
Kenwood (II)	29.8	53.8	45.0	29.8	53.0	35.7	51.5
Sturdy (I)	33.2	37.6	42.5	43.2	50.8	34.4	55.0
C1786	29.4	60.5	41.1	46.3	52.6	36.5	46.9
C1787	29.8	62.8	44.3	42.3	54.1	35.2	52.2
C1794	29.6	57.3	45.4	39.0	45.1	35.4	55.1
C1795	28.2	52.0	41.2	41.4	53.7	32.4	50.6
C1796	27.2	55.0	44.8	45.0	47.6	31.4	50.8
C1799	32.0	61.0	43.6	45.5	45.8	35.8	44.7
C1800	24.3	55.6	45.4	30.8	49.4	37.9	42.8
C1802	30.4	58.3	46.6	42.4	56.6	34.6	51.1
C1818	23.4	52.7	41.9	45.7	48.6	40.3	48.1
M86-752	28.8	53.7	45.0	34.6	55.0	31.1	53.3
M86-912	28.6	56.3	39.9	46.1	42.2	38.1	53.5
ORC 8902	29.9	57.6	47.1	50.2	42.4	34.0	50.9
ORC 8905	29.9	57.1	45.8	54.8	47.9	37.7	49.9
U892203	25.7	56.0	40.5	41.0	47.0	27.9	48.3
U892213	27.0	52.6	44.4	42.0	48.8	34.5	49.5
U892215	25.2	53.7	43.5	27.7	43.3	34.8	44.2
U892220	31.2	50.8	46.0	40.9	51.5	31.3	51.8
U892301	22.9	56.4	41.8	41.0	46.3	28.1	49.5
U892305	25.4	59.2	39.0	38.4	47.3	35.6	43.0
U892317	26.9	57.2	47.4	47.1	50.0	26.9	54.9
U892325	23.6	48.3	40.8	45.4	55.0	34.0	52.5
U892327	24.2	61.6	47.2	49.2	43.3	38.8	52.4
U892404	22.9	52.9	43.5	36.2	35.5	31.7	43.7
U892420	25.9	57.2	41.4	37.3	49.2	30.1	46.1
U892431	23.8	56.3	42.0	45.9	49.7	29.1	48.5
Hoyt (dt1)	30.4	54.1	43.0	36.7	41.6	33.4	48.7
C1822	22.2	46.1	32.0	30.2	41.4	31.7	37.7
HC86-4384	23.5	55.5	45.4	60.9	51.0	37.3	51.6
HC86-4481	25.3	48.1	51.1	32.8	51.4	34.2	44.5
HC86-4499	25.5	51.0	40.4	53.3	48.8	31.3	51.0
HC86-4501	26.5	48.3	43.7	53.8	47.5	31.2	47.5
HC86-4913	27.7	57.7	46.9	46.0	45.2	29.0	50.1
HC86-4914	23.6	53.2	44.9	42.7	30.1	30.0	45.3
U892035	22.5	60.3	45.2	32.2	50.6	36.3	54.3
C.V. (%)	9.8	8.3	8.6	15.4	7.6	10.3	6.1
L.S.D. (5%)	5.3	9.2	5.7	13.4	7.3	7.0	6.1
Row Sp. (In.)	30	30	30	30	24	30	30
Rows/Plot	4	4	4	4	4	4	4
Reps	2	3	2	2	2	2	2

PRELIMINARY TEST IIB, 1990

YIELD RANK

Strain	Yield Rank	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	2	5	19	8	9	13
Kenwood (II)	6	4	1	15	16	1
Sturdy (I)	30	18	24	36	32	12
C1786	14	23	23	18	36	3
C1787	5	3	15	6	30	22
C1794	17	7	22	19	27	17
C1795	20	8	11	16	18	30
C1796	8	1	30	9	1	26
C1799	18	10	20	21	31	24
C1800	27	15	33	16	20	18
C1802	2	30	13	2	3	29
C1818	21	11	17	27	16	33
M86-752	15	21	5	10	22	8
M86-912	16	2	2	25	26	25
ORC 8902	11	12	12	4	12	34
ORC 8905	1	26	7	7	5	19
U892203	27	13	26	28	21	10
U892213	9	24	9	2	7	6
U892215	35	9	37	31	33	23
U892220	18	35	29	11	8	14
U892301	25	32	31	13	25	4
U892305	29	28	20	22	19	21
U892317	12	20	7	24	4	27
U892325	22	14	32	28	23	16
U892327	9	6	9	34	2	31
U892404	36	37	35	5	14	35
U892420	23	25	34	20	13	5
U892431	12	17	5	12	10	2
Hoyt (dtl)	33	19	3	35	24	37
C1822	37	34	36	26	35	36
HC86-4384	4	22	16	13	10	28
HC86-4481	31	31	24	28	27	20
HC86-4499	25	33	28	32	34	7
HC86-4501	34	36	17	37	37	15
HC86-4913	23	29	27	23	29	32
HC86-4914	32	27	14	33	15	11
U892035	6	16	4	1	6	9

PRELIMINARY TEST IIB, 1990

YIELD RANK

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	19	26	2	5	8	4	30
Kenwood (II)	8	22	14	36	6	11	12
Sturdy (I)	1	37	25	17	12	18	2
C1786	11	4	31	9	7	8	27
C1787	8	1	19	20	4	14	9
C1794	10	10	10	26	29	13	1
C1795	14	30	30	22	5	23	17
C1796	16	20	17	16	22	26	16
C1799	2	3	21	14	27	10	31
C1800	27	18	10	34	16	4	36
C1802	4	7	7	19	1	16	13
C1818	33	28	27	13	20	1	25
M86-752	12	24	14	31	2	30	6
M86-912	13	16	35	10	33	3	5
ORC 8902	6	9	5	6	32	20	15
ORC 8905	6	13	9	2	21	6	19
U892203	22	17	33	23	25	36	24
U892213	17	29	18	21	18	17	20
U892215	26	23	22	37	30	15	33
U892220	3	32	8	25	9	27	10
U892301	34	14	28	23	26	35	20
U892305	24	6	36	27	24	12	35
U892317	18	11	3	8	14	37	3
U892325	30	34	32	15	2	20	7
U892327	28	2	4	7	30	2	8
U892404	34	27	22	30	36	24	34
U892420	21	12	29	28	17	31	28
U892431	29	15	26	12	15	33	23
Hoyt (dtl)	4	21	24	29	34	22	22
C1822	37	36	37	35	35	24	37
HC86-4384	32	19	10	1	11	7	11
HC86-4481	25	35	1	32	10	19	32
HC86-4499	23	31	34	4	18	27	14
HC86-4501	20	33	20	3	23	29	26
HC86-4913	15	8	6	11	28	34	18
HC86-4914	30	25	16	18	37	32	29
U892035	36	5	13	33	13	9	4

PRELIMINARY TEST IIB, 1990

MATURITY (date)

Strain	Mean 10 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	4.8	2		3	6	6
Kenwood (II)	09/21	09/20		09/11	09/19	10/04
Sturdy (I)	-1.5	-2		-8	-3	2
C1786	4.5	3		4	7	5
C1787	1.9	1		-3	3	5
C1794	4.0	4		3	4	5
C1795	1.4	0		2	2	2
C1796	1.4	1		-3	3	4
C1799	4.1	5		4	6	5
C1800	4.3	4		7	5	5
C1802	6.2	4		6	8	7
C1818	3.5	4		3	4	6
M86-752	2.7	0		-2	4	5
M86-912	2.7	2		2	5	4
ORC 8902	4.2	5		3	7	5
ORC 8905	2.7	6		4	5	3
U892203	2.3	2		1	4	4
U892213	-0.2	-3		-3	0	3
U892215	3.7	4		4	5	6
U892220	2.7	1		4	3	5
U892301	4.0	6		4	6	4
U892305	3.5	2		6	7	4
U892317	2.5	1		2	2	5
U892325	0.8	2		-1	-1	4
U892327	6.1	5		7	9	6
U892404	6.3	6		8	9	6
U892420	2.3	2		-1	3	4
U892431	4.0	2		3	6	5
Hoyt (dtl)	2.5	2		2	5	3
C1822	0.7	0		2	2	1
HC86-4384	5.0	6		7	8	4
HC86-4481	5.4	7		7	9	4
HC86-4499	3.1	2		4	8	3
HC86-4501	4.4	3		5	8	5
HC86-4913	6.0	6		7	11	6
HC86-4914	5.7	6		7	9	6
U892035	3.4	4		2	6	4
Date Planted	05/22	05/08		05/01	05/23	05/14
Days to Mature	122.4	135		133	119	143

PRELIMINARY TEST IIB, 1990

MATURITY (date)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	4		6	9	6	3	3
Kenwood (II)	09/11		09/24	09/28	09/26	09/19	09/26
Sturdy (I)	-1		-2	2	1	-5	1
C1786	3		3	7	8	1	4
C1787	2		0	5	2	2	2
C1794	4		6	4	4	4	2
C1795	2		0	3	1	0	2
C1796	1		1	3	2	1	1
C1799	3		6	5	2	2	3
C1800	3		5	6	3	3	2
C1802	5		7	9	8	4	4
C1818	2		3	6	4	1	2
M86-752	2		4	5	6	1	2
M86-912	2		3	6	0	1	2
ORC 8902	4		6	5	2	2	3
ORC 8905	2		2	4	0	0	1
U892203	2		0	3	0	3	4
U892213	2		-2	0	-2	0	3
U892215	2		3	4	4	2	3
U892220	4		2	1	2	1	4
U892301	3		4	5	2	3	3
U892305	0		7	5	2	-1	3
U892317	3		4	3	2	0	3
U892325	2		-1	0	1	1	1
U892327	3		7	7	7	5	5
U892404	5		7	8	4	5	5
U892420	2		2	3	3	1	4
U892431	3		5	2	8	1	5
Hoyt (dtl)	2		3	4	1	1	2
C1822	2		1	1	-3	0	1
HC86-4384	5		5	7	2	3	3
HC86-4481	4		7	7	2	3	4
HC86-4499	2		3	4	2	1	2
HC86-4501	3		7	5	3	2	3
HC86-4913	3		6	8	6	3	4
HC86-4914	4		7	7	2	3	6
U892035	4		5	2	2	3	2
Date Planted	05/31		06/13	06/01	05/25	05/17	05/29
Days to Mature	103		103	119	124	125	120

PRELIMINARY TEST IIB, 1990

LODGING (score)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	1.7	1.6	2.2	1.0	2.3	2.0
Kenwood (II)	1.8	1.9	2.7	1.5	3.3	1.5
Sturdy (I)	1.6	1.4	1.6	1.5	2.0	1.5
C1786	2.0	2.0	2.3	2.0	3.0	3.0
C1787	1.8	2.0	2.6	1.5	2.3	2.0
C1794	1.8	1.8	1.9	2.0	2.5	2.0
C1795	1.7	2.1	2.1	2.0	2.8	1.0
C1796	1.6	1.6	2.0	1.0	2.5	1.0
C1799	1.7	1.6	2.4	2.0	2.3	1.5
C1800	1.6	1.6	1.9	1.5	2.0	2.0
C1802	1.4	1.5	1.8	1.0	1.8	1.5
C1818	1.6	1.6	2.0	1.0	2.3	1.0
M86-752	1.4	1.3	1.4	1.0	1.8	2.0
M86-912	1.5	1.6	1.6	1.0	1.5	1.0
ORC 8902	1.4	1.5	1.5	1.0	1.8	1.0
ORC 8905	1.7	1.6	2.5	1.0	2.5	1.5
U892203	2.0	1.8	2.3	1.0	2.8	2.0
U892213	1.5	1.5	2.3	1.0	2.0	1.5
U892215	2.2	2.8	2.4	2.0	3.8	3.0
U892220	1.9	3.0	1.8	2.0	2.8	2.0
U892301	2.2	2.1	2.6	2.0	3.8	2.5
U892305	2.1	2.0	1.6	2.0	3.0	4.0
U892317	1.5	1.6	1.5	1.0	1.8	2.0
U892325	1.5	1.7	1.9	1.0	2.0	1.5
U892327	1.9	1.8	2.0	4.0	2.8	2.5
U892404	1.5	1.6	1.6	1.0	2.0	2.0
U892420	2.0	1.8	2.6	2.0	2.8	2.0
U892431	2.0	2.6	2.2	2.0	2.8	2.5
Hoyt (dtl)	1.5	1.2	1.4	1.0	1.3	1.0
C1822	2.4	3.3	3.3	2.0	3.0	2.0
HC86-4384	1.2	1.2	1.3	1.0	1.0	1.0
HC86-4481	1.3	1.2	1.3	1.0	1.3	1.0
HC86-4499	1.4	1.2	1.2	1.0	1.0	1.0
HC86-4501	1.6	1.3	1.2	1.0	1.3	1.0
HC86-4913	1.6	1.2	1.3	1.0	1.5	1.0
HC86-4914	1.5	1.3	1.4	1.0	1.5	1.0
U892035	1.4	1.5	1.9	1.0	1.8	1.0

PRELIMINARY TEST IIB, 1990

LODGING (score)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	1.0	1.0	1.5	1.8	2.5	1.0	2.3
Kenwood (II)	1.0	1.0	1.5	1.7	3.0	1.0	1.8
Sturdy (I)	1.0	1.0	1.5	1.7	3.0	1.0	2.0
C1786	1.0	1.0	2.5	1.6	3.0	1.0	2.0
C1787	1.0	1.0	1.5	1.7	3.0	1.0	2.5
C1794	1.0	1.0	2.0	1.6	2.5	1.0	2.3
C1795	1.0	1.0	1.5	1.6	2.5	1.0	2.3
C1796	1.0	1.0	1.0	1.7	3.0	1.0	2.0
C1799	1.0	1.0	1.0	1.8	3.0	1.0	2.0
C1800	1.0	1.0	1.0	1.6	3.0	1.0	1.5
C1802	1.0	1.0	1.0	1.6	2.5	1.0	1.0
C1818	1.0	1.0	1.0	1.5	3.5	1.0	2.3
M86-752	1.0	1.0	1.0	1.5	2.0	1.0	1.3
M86-912	1.0	1.0	1.0	1.7	3.0	1.0	2.0
ORC 8902	1.0	1.0	1.5	1.4	2.5	1.0	1.3
ORC 8905	1.0	1.0	1.5	1.6	2.6	1.0	2.8
U892203	1.0	1.0	1.5	1.9	4.0	1.0	3.8
U892213	1.0	1.0	1.0	1.9	2.0	1.0	1.8
U892215	1.0	1.0	2.0	1.6	3.0	1.0	2.3
U892220	1.0	1.0	1.5	1.7	3.0	1.0	2.3
U892301	1.0	1.0	3.0	1.6	3.0	1.0	3.0
U892305	1.0	1.0	2.0	1.8	3.5	1.0	2.5
U892317	1.0	1.0	1.0	1.6	3.0	1.0	1.5
U892325	1.0	1.0	1.0	1.6	2.4	1.0	1.5
U892327	1.0	1.0	1.0	1.6	2.9	1.0	1.5
U892404	1.0	1.0	1.0	1.5	2.5	1.0	1.5
U892420	1.0	1.0	2.0	1.8	3.0	1.0	2.8
U892431	1.0	1.0	2.0	1.8	3.0	1.0	2.3
Hoyt (dtl)	1.0	1.0	1.0	1.5	3.0	1.0	3.0
C1822	1.0	1.0	4.0	1.7	3.0	1.0	4.0
HC86-4384	1.0	1.0	1.0	1.5	2.0	1.0	1.5
HC86-4481	1.0	1.0	1.0	1.4	2.5	1.0	1.5
HC86-4499	1.0	1.0	1.5	1.5	2.5	1.0	2.5
HC86-4501	1.0	1.0	2.0	1.7	3.1	1.0	3.5
HC86-4913	1.0	1.0	2.0	1.6	3.0	1.0	3.3
HC86-4914	1.0	1.0	1.5	1.5	3.0	1.0	2.3
U892035	1.0	1.0	1.0	1.5	3.0	1.0	1.0

PRELIMINARY TEST IIB, 1990

PLANT HEIGHT (inches)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	33	34	36	35	32	34
Kenwood (II)	33	38	36	35	34	35
Sturdy (I)	31	33	36	29	28	32
C1786	37	40	41	36	38	39
C1787	34	36	34	34	32	42
C1794	35	39	44	37	35	41
C1795	33	36	38	33	36	33
C1796	34	38	39	37	36	35
C1799	33	36	33	36	33	37
C1800	32	36	37	34	34	36
C1802	33	36	36	36	35	39
C1818	32	37	36	35	33	29
M86-752	32	34	36	32	29	42
M86-912	31	36	34	33	33	28
ORC 8902	31	34	35	31	32	30
ORC 8905	32	36	38	33	32	34
U892203	34	35	38	34	31	37
U892213	35	38	42	35	35	40
U892215	36	42	41	42	35	43
U892220	36	40	38	36	36	41
U892301	35	38	44	36	34	44
U892305	36	39	40	39	35	44
U892317	32	35	36	33	34	37
U892325	34	36	36	36	36	38
U892327	37	40	44	38	39	44
U892404	34	38	39	38	35	39
U892420	35	36	38	37	36	41
U892431	39	42	43	36	35	45
Hoyt (dtl)	22	22	24	20	21	18
C1822	36	40	40	35	33	40
HC86-4384	24	24	22	22	23	23
HC86-4481	22	22	24	20	20	23
HC86-4499	23	22	24	22	22	24
HC86-4501	24	22	21	21	22	27
HC86-4913	25	24	28	21	22	28
HC86-4914	23	24	22	20	23	22
U892035	28	26	34	27	28	30

PRELIMINARY TEST IIB, 1990

PLANT HEIGHT (inches)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	30	29	32	32	41	27	33
Kenwood (II)	31	29	32	27	35	30	33
Sturdy (I)	29	22	31	28	39	29	34
C1786	33	32	37	33	41	33	37
C1787	33	32	33	31	38	28	36
C1794	33	28	36	26	38	29	37
C1795	31	25	34	30	39	30	35
C1796	32	29	32	31	36	31	34
C1799	31	24	31	31	36	30	34
C1800	25	30	32	23	37	28	33
C1802	31	28	30	29	36	29	35
C1818	27	27	33	27	36	30	37
M86-752	29	27	30	24	38	28	33
M86-912	29	27	30	26	35	28	32
ORC 8902	28	28	33	29	33	28	31
ORC 8905	28	27	33	28	37	28	35
U892203	32	29	34	28	40	36	36
U892213	28	32	34	33	37	31	35
U892215	29	28	38	22	42	33	39
U892220	34	28	37	29	40	31	39
U892301	29	26	34	32	36	30	33
U892305	28	31	34	32	45	31	34
U892317	29	28	31	29	37	26	33
U892325	30	27	34	31	39	33	35
U892327	28	34	35	33	41	32	38
U892404	30	31	31	28	34	29	34
U892420	31	31	33	34	40	31	33
U892431	35	35	42	36	46	36	41
Hoyt (dt1)	23	20	24	18	28	22	25
C1822	35	25	36	31	38	35	39
HC86-4384	25	24	25	24	26	23	26
HC86-4481	24	20	24	20	24	23	25
HC86-4499	25	18	24	21	29	20	27
HC86-4501	26	19	25	25	27	26	27
HC86-4913	29	20	28	24	32	24	19
HC86-4914	27	18	24	21	23	21	26
U892035	24	26	26	25	31	27	30

PRELIMINARY TEST IIB, 1990

SEED QUALITY (score)

Strain	Mean 11 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	1.7	2.5	2.0	2.0	1.5	
Kenwood (II)	2.2	4.0	2.5	1.1	1.5	
Sturdy (I)	1.9	4.0	2.0	1.3	1.5	
C1786	2.1	3.5	2.0	2.0	1.5	
C1787	1.9	4.0	1.5	1.1	1.0	
C1794	1.9	2.5	2.0	1.3	1.5	
C1795	1.8	3.0	1.5	1.1	1.0	
C1796	1.9	2.5	2.0	1.3	1.0	
C1799	1.9	3.0	2.0	1.5	1.0	
C1800	2.1	3.5	2.5	2.3	1.5	
C1802	2.1	4.0	2.0	2.3	1.5	
C1818	1.9	3.5	2.0	1.6	1.0	
M86-752	2.1	2.5	1.5	1.6	1.0	
M86-912	1.8	2.5	1.5	1.5	1.5	
ORC 8902	2.0	4.0	1.0	1.5	1.5	
ORC 8905	2.1	3.0	1.5	1.8	1.5	
U892203	2.1	3.0	2.0	1.3	1.5	
U892213	2.0	3.5	1.5	1.5	1.5	
U892215	2.1	4.0	2.0	2.3	1.5	
U892220	2.0	4.0	2.0	2.3	1.0	
U892301	2.0	4.0	1.5	2.0	1.0	
U892305	2.1	3.5	2.0	2.0	1.5	
U892317	1.8	2.5	1.5	2.3	1.5	
U892325	2.1	4.0	2.0	2.3	1.0	
U892327	2.0	3.0	1.5	1.6	1.5	
U892404	2.2	3.5	2.0	2.0	1.5	
U892420	1.8	3.0	1.5	1.1	1.5	
U892431	1.7	3.0	1.5	1.5	1.0	
Hoyt (dtl)	1.8	3.0	1.5	1.5	1.0	
C1822	1.7	2.5	1.0	1.5	1.5	
HC86-4384	1.9	3.0	2.0	1.1	1.0	
HC86-4481	1.7	2.5	1.5	1.3	1.5	
HC86-4499	1.7	2.5	1.0	1.8	1.0	
HC86-4501	1.9	3.5	1.5	1.6	1.0	
HC86-4913	2.1	3.0	2.0	2.8	1.5	
HC86-4914	2.0	3.5	1.5	2.0	1.0	
U892035	1.8	3.0	1.0	1.3	1.5	

PRELIMINARY TEST IIB, 1990

SEED QUALITY (score)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	1.0	1.5	1.5	1.7	2.0	2.0	1.0
Kenwood (II)	2.0	2.0	2.0	2.1	2.0	3.0	2.0
Sturdy (I)	1.5	1.5	1.0	1.6	2.0	3.0	2.0
C1786	2.0	2.0	1.5	1.6	2.0	3.0	2.0
C1787	2.0	1.5	1.5	1.7	2.0	3.0	2.0
C1794	2.0	1.5	1.0	2.1	2.0	3.0	2.0
C1795	2.0	2.0	1.0	1.6	2.0	3.0	2.0
C1796	2.0	2.0	1.0	1.8	2.0	3.0	2.0
C1799	2.0	2.0	2.0	1.7	2.0	2.0	2.0
C1800	2.0	1.5	1.0	2.0	2.0	3.0	2.0
C1802	1.5	2.0	1.5	2.2	1.0	3.0	2.0
C1818	2.0	2.0	1.5	1.6	1.0	3.0	2.0
M86-752	3.0	1.5	2.5	3.0	1.0	3.0	2.0
M86-912	2.5	2.0	1.0	1.5	2.0	2.0	2.0
ORC 8902	2.5	1.0	2.0	1.7	2.0	3.0	2.0
ORC 8905	2.0	2.0	1.5	1.7	2.0	4.0	2.0
U892203	1.5	2.0	2.0	1.5	3.0	3.0	2.0
U892213	3.0	1.5	1.5	1.7	1.0	3.0	2.0
U892215	2.0	1.0	1.5	1.8	2.0	3.0	2.0
U892220	2.0	1.0	1.0	2.4	2.0	2.0	2.0
U892301	2.0	1.5	1.0	2.0	2.0	3.0	2.0
U892305	2.0	2.0	1.0	2.1	2.0	3.0	2.0
U892317	1.5	1.0	1.0	1.6	2.0	3.0	2.0
U892325	2.0	1.5	2.0	1.6	2.0	3.0	2.0
U892327	2.5	2.0	1.0	1.8	2.0	3.0	2.0
U892404	2.0	1.0	2.0	2.0	3.0	3.0	2.0
U892420	1.5	1.0	2.0	2.0	1.0	3.0	2.0
U892431	2.0	1.5	1.5	1.6	1.0	2.0	2.0
Hoyt (dtl)	1.5	2.0	1.0	1.8	3.0	2.0	2.0
C1822	1.0	1.0	1.0	2.0	2.0	3.0	2.0
HC86-4384	2.0	2.0	1.0	1.4	2.0	3.0	2.0
HC86-4481	2.0	1.5	1.0	1.4	1.0	3.0	2.0
HC86-4499	2.0	2.0	1.0	1.5	2.0	2.0	2.0
HC86-4501	2.0	1.5	1.0	1.6	2.0	3.0	2.0
HC86-4913	2.0	2.0	1.0	2.0	3.0	2.0	2.0
HC86-4914	1.5	2.0	1.5	1.5	3.0	2.0	2.0
U892035	2.5	1.5	1.0	1.7	2.0	3.0	1.0

PRELIMINARY TEST IIB, 1990

SEED SIZE (g\100)

Strain	Mean 12 Tests	Ames IA	Marshall-town IA	Urbana IL	Lafay-ette IN	East Lansing MI
Burlison (L)	19.1	18.2	20.5	18.3	22.0	19.1
Kenwood (II)	15.8	15.8	17.6	14.3	17.1	17.1
Sturdy (I)	18.7	15.7	21.8	16.6	17.3	19.2
C1786	18.1	16.2	18.7	16.6	19.6	19.7
C1787	17.8	17.2	19.0	15.6	18.7	17.8
C1794	15.4	13.6	15.0	13.5	16.1	15.9
C1795	16.6	14.9	17.1	15.5	17.8	16.7
C1796	16.0	15.0	16.7	14.5	17.7	16.1
C1799	15.9	15.8	18.2	14.4	16.6	16.1
C1800	16.9	15.7	18.2	16.1	18.1	16.5
C1802	17.1	15.2	17.7	17.1	19.2	15.9
C1818	18.4	17.2	20.7	17.1	21.5	17.9
M86-752	19.5	17.6	21.2	18.1	17.5	22.3
M86-912	17.1	16.2	18.0	16.3	20.9	17.7
ORC 8902	16.4	14.2	17.1	14.4	17.3	16.9
ORC 8905	17.6	16.8	18.7	16.2	18.8	17.8
U892203	18.7	17.4	20.1	17.1	21.1	19.2
U892213	19.4	18.0	20.2	18.1	21.5	21.1
U892215	17.0	15.9	18.4	16.2	17.7	17.5
U892220	17.8	15.6	18.4	17.1	19.1	19.1
U892301	16.0	13.2	16.5	14.5	17.3	17.2
U892305	17.6	15.3	18.4	16.0	18.8	19.0
U892317	17.4	16.4	17.8	15.0	20.3	16.9
U892325	18.1	16.4	19.2	15.5	18.7	18.7
U892327	14.5	13.0	15.2	12.9	15.7	14.0
U892404	15.5	13.6	16.7	14.0	17.6	16.6
U892420	18.0	16.3	17.9	15.7	20.1	19.9
U892431	16.5	15.0	17.6	15.4	17.8	17.6
Hoyt (dtl)	14.2	12.6	13.8	13.3	15.8	14.9
C1822	14.8	13.6	14.4	14.3	15.9	16.0
HC86-4384	18.1	18.0	19.4	17.7	18.5	19.7
HC86-4481	17.1	17.0	18.4	16.8	20.7	19.4
HC86-4499	15.9	14.8	15.7	15.3	17.6	18.5
HC86-4501	16.1	14.2	16.0	16.6	17.3	18.5
HC86-4913	16.0	13.8	16.2	16.0	18.9	18.4
HC86-4914	17.0	16.6	16.8	17.0	19.3	19.8
U892035	18.4	16.7	18.6	18.2	20.2	19.9

PRELIMINARY TEST IIB, 1990

SEED SIZE (g\100)

Strain	Concord NE	O'Neill NE	Adelphia NJ	Hoytville OH	Ridge-town Ont.	Center-ville SD	Arling-ton WI
Burlison (L)	14.8	19.0	20.0	21.5	20.0	16.2	20.0
Kenwood (II)	11.3	16.9	16.0	18.0	16.9	13.1	15.6
Sturdy (I)	15.8	21.1	19.0	20.3	20.2	17.4	19.5
C1786	14.9	17.8	18.0	20.8	20.1	17.4	17.4
C1787	13.7	18.0	19.0	20.8	19.4	16.0	18.6
C1794	12.1	17.3	16.0	17.1	17.9	15.5	15.2
C1795	14.1	18.6	16.0	18.9	18.3	14.3	16.9
C1796	13.5	16.8	17.0	17.8	16.6	14.7	15.4
C1799	13.0	16.4	16.0	16.8	16.3	15.5	16.0
C1800	13.5	17.9	18.0	16.8	17.8	15.9	18.3
C1802	14.5	17.6	19.0	18.2	17.4	16.1	16.9
C1818	14.6	18.5	19.0	20.2	18.8	16.9	18.7
M86-752	16.5	20.5	20.0	21.9	22.0	18.3	18.6
M86-912	13.4	18.2	16.0	18.7	17.5	15.5	16.8
ORC 8902	14.7	17.4	17.0	19.1	16.9	15.6	16.7
ORC 8905	14.2	18.3	19.0	19.7	17.0	16.0	18.1
U892203	15.6	19.2	19.0	21.4	19.3	16.2	19.0
U892213	16.7	19.7	18.0	21.8	19.7	17.6	20.6
U892215	12.7	17.0	17.0	18.6	18.8	15.6	18.0
U892220	13.8	17.4	17.0	20.3	20.3	16.1	19.1
U892301	12.2	16.2	16.0	18.4	18.5	15.4	16.8
U892305	14.0	18.1	18.0	19.4	18.8	16.2	18.7
U892317	14.9	17.1	19.0	18.3	18.7	15.9	18.1
U892325	15.7	18.4	20.0	19.6	19.4	17.5	18.6
U892327	10.9	14.1	16.0	15.3	19.6	13.8	13.8
U892404	12.2	15.6	16.0	16.8	15.7	15.3	15.4
U892420	14.2	19.0	19.0	19.9	18.1	16.4	19.3
U892431	12.9	16.5	17.0	18.5	17.6	14.2	17.7
Hoyt (dtl)	10.8	15.1	15.0	16.6	15.8	12.6	13.7
C1822	11.9	16.1	16.0	16.0	14.9	13.9	14.9
HC86-4384	14.0	17.8	17.0	21.4	19.1	16.0	18.6
HC86-4481	12.3	16.1	17.0	18.1	18.3	14.1	17.3
HC86-4499	11.3	15.6	16.0	18.6	17.1	13.7	16.0
HC86-4501	11.6	15.9	16.0	18.9	17.7	14.3	16.6
HC86-4913	10.9	15.9	17.0	19.2	16.8	13.1	16.1
HC86-4914	12.6	15.6	18.0	18.5	18.0	14.7	17.1
U892035	15.3	18.9	18.0	20.4	20.3	16.2	18.3

PRELIMINARY TEST IIB, 1990

PROTEIN (%)

Strain	Mean 5 Tests	Marshalltown IA	Urbana IL	Lafayette IN	O'Neill NE	Hoytville OH
Burlison (L)	44.0	43.8	43.4	45.7	42.0	45.0
Kenwood (II)	39.7	41.0	38.7	41.7	37.7	39.5
Sturdy (I)	40.6	41.5	39.1	41.2	40.6	40.5
C1786	41.2	42.1	39.5	41.9	40.0	42.3
C1787	40.8	41.2	40.6	43.5	37.9	40.7
C1794	39.2	40.0	37.3	42.2	37.0	39.5
C1795	40.9	40.8	40.6	41.8	40.2	40.9
C1796	40.0	40.9	40.6	41.6	38.0	40.6
C1799	41.3	42.7	41.0	42.9	38.5	41.4
C1800	42.1	43.5	42.2	43.6	39.3	41.9
C1802	39.6	39.4	39.4	41.2	37.8	40.2
C1818	39.3	40.5	37.9	41.5	37.3	39.2
M86-752	40.5	41.1	39.9	42.8	37.7	40.9
M86-912	40.3	40.5	39.1	42.8	38.6	40.5
ORC 8902	38.8	39.3	37.9	40.6	36.2	40.1
ORC 8905	39.1	41.0	38.1	41.6	36.0	39.0
U892203	38.4	39.0	37.8	40.1	36.5	38.5
U892213	41.1	42.1	40.5	43.1	39.3	40.7
U892215	40.3	41.8	39.5	41.8	38.3	40.1
U892220	39.1	39.5	40.2	40.5	36.4	38.8
U892301	40.8	41.2	41.4	42.3	38.0	41.0
U892305	41.4	42.3	40.6	43.5	39.4	41.4
U892317	41.2	40.6	42.1	42.8	39.5	41.0
U892325	42.1	43.5	41.0	43.6	40.7	41.5
U892327	40.9	41.7	41.6	43.0	38.1	40.2
U892404	42.8	43.6	42.8	45.2	40.1	42.1
U892420	40.0	41.9	38.7	42.2	37.8	39.5
U892431	40.4	41.2	40.3	41.4	39.1	40.1
Hoyt (dtl)	40.7	41.3	40.5	42.5	38.6	40.4
C1822	39.8	40.3	38.8	41.9	38.1	39.8
HC86-4384	41.0	40.2	41.8	42.1	39.3	41.5
HC86-4481	42.1	43.4	42.0	43.3	40.3	41.3
HC86-4499	42.2	42.4	41.7	44.5	40.5	42.0
HC86-4501	41.6	41.9	41.8	43.4	39.5	41.6
HC86-4913	40.1	41.0	40.0	41.7	37.8	40.0
HC86-4914	41.6	41.7	42.3	43.1	39.4	41.3
U892035	40.8	41.8	40.6	42.5	38.8	40.2

PRELIMINARY TEST IIB, 1990

OIL (%)

Strain	Mean 5 Tests	Marshalltown IA	Urbana IL	Lafayette IN	O'Neill NE	Hoytville OH
Burlison (L)	19.3	19.5	19.5	18.7	20.3	18.3
Kenwood (II)	21.4	20.5	22.2	21.0	21.9	21.4
Sturdy (I)	21.0	20.5	21.7	20.8	21.2	20.6
C1786	19.9	19.6	21.0	19.6	20.4	19.0
C1787	21.2	21.4	21.5	20.2	22.5	20.6
C1794	21.5	20.9	22.5	20.4	22.3	21.4
C1795	20.9	21.2	20.8	20.4	21.2	20.9
C1796	20.9	20.1	20.6	19.8	21.6	21.4
C1799	20.2	19.2	20.4	19.6	21.4	20.2
C1800	20.1	19.3	20.6	19.2	21.0	20.4
C1802	21.5	21.5	22.1	20.7	22.2	20.8
C1818	21.4	21.2	22.5	20.9	22.0	20.6
M86-752	21.6	21.8	22.2	21.0	22.6	20.3
M86-912	21.7	21.8	22.6	20.9	22.4	20.7
ORC 8902	22.0	21.7	22.7	21.7	22.8	21.2
ORC 8905	21.8	21.1	22.4	21.5	22.6	21.4
U892203	22.0	22.2	22.6	21.7	22.2	21.1
U892213	20.7	20.1	21.4	20.4	21.1	20.5
U892215	20.5	19.9	20.8	20.4	21.1	20.2
U892220	21.4	21.2	21.4	21.4	22.3	20.9
U892301	21.1	21.3	21.0	20.8	21.7	20.9
U892305	20.6	20.1	21.8	20.0	20.9	20.3
U892317	20.9	21.1	20.5	20.8	21.5	20.8
U892325	19.8	19.1	20.0	19.4	20.3	20.1
U892327	21.0	20.0	20.9	20.0	22.0	21.9
U892404	19.7	19.0	20.1	19.0	20.2	20.2
U892420	22.8	22.1	23.6	22.5	23.4	22.3
U892431	21.5	21.1	22.1	21.2	21.5	21.4
Hoyt (dtl)	21.4	21.0	21.5	20.8	21.9	21.7
C1822	21.9	21.4	22.0	21.6	22.3	22.1
HC86-4384	21.2	21.0	20.9	20.9	22.3	20.8
HC86-4481	21.3	20.9	21.5	21.2	22.1	21.0
HC86-4499	20.1	19.6	20.3	19.5	20.8	20.4
HC86-4501	20.2	20.1	20.1	19.4	21.2	20.3
HC86-4913	21.5	21.0	21.4	21.3	22.5	21.1
HC86-4914	21.4	21.4	20.8	20.8	22.4	21.4
U892035	21.4	21.1	21.4	20.9	22.4	21.2

UNIFORM TEST III, 1990

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Burlison (II)	K74-113-76-486 x Century	1	F5	Rps1-b, Rps3
Linford (SCN)	Williams(2) x Fayette	SCNIIIA	F4	SCN 3,4
Flyer (IV)	Asgrow A3127(4) x Williams 82	4	BC3 F2	Rps1-k
Hobbit 87 (dt)	Hobbit(6) x Williams 82	4	BC5 F3	Rps1-k
Resnik (III)	Asgrow A3127(4) x Williams 82	4	BC3 F3	Rps1-k
A87-296011	Harper x A80-346029	1	F5	BSR Resis.
A88-221020	A82-267015 x Harper	PTIIA	F5	
HC84-2612	HC78-676 x Hobbit	PTIIIB	F5	dt1
HC85-164	HC78-676 x Sprite	PTIIIB	F5	dt1
HC85-477	HC78-676 x HW74-3400	PTIIB	F5	dt1
HC85-602	Sprite x Asgrow A3127	PTIVB	F5	dt1
HC85-604	Sprite x Asgrow A3127	PTIIIB	F5	dt1
HC85-606	Sprite x Asgrow A3127	PTIIIB	F5	dt1
HC85-607	Sprite x Asgrow A3127	PTIIIB	F5	dt1
HC85-618	Sprite x Asgrow A3127	PTIIIB	F5	dt1
HC85-690	HC78-676 x Asgrow A3127	PTIIIB	F5	dt1
HC85-1440	Hobbit x Forrest	PTIIB	F5	dt1
HC85-6500	Pixie x HC78-676	1	F5	dt1
HC85-6577	HC78-350 x HC78-676	1	F5	dt1
HC85-6611	HC78-279 x HC78-676	PTIIIB	F5	dt1
HC85-6716	HC74-634RE x HC78-676	PTIIIB	F5	dt1
HC85-6724	HC74-634RE x HC78-676	1	F5	dt1
HM8597 (Edison)	HW79116 x HW79022	2	F6	
HM8890	A80-344003 x Asgrow A3127 BC3 F2-1	PTIIIA	F6	
HS87-2067	Sherman x Madison GL2810	PTIIIA	F5	
K1161	Harper x Asgrow A3127	PTIIIA	F5	
K1164	Harper x Asgrow A3127	PTIIIA	F5	
LN86-1088	Hack x A80-244036	PTIIB	F5	Rps1
U85-74089 Dunbar	Platte x Asgrow A3127	1	F5	
U86-62062	K1047 x Mead	PTIIIB	F5	dt1

* Number of years in test or name of 1989 test.

UNIFORM TEST III, 1990

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Chlorosis Score Lamberton	Emergence Score Ames	Shattering Score Manhattan
Burlison (II)	WTTIBlI	1.4	2.0	1.0	1.0
Linford (SCN)	WTTIBlI	3.5	2.0	3.0	2.0
Flyer (IV)	PTTSBlI	2.4	1.5	1.0	1.0
Hobbit 87 (dt)	WTTDBlD	2.5	3.5	3.0	1.0
Resnik (III)	PTTIBlI	3.4	2.5	1.0	1.0
A87-296011	PTBDBfI	1.9	1.5	5.0	2.0
A88-221020	WGBIYI	2.4	2.0	5.0	2.0
HC84-2612	PTBIBlD	2.2	2.0	5.0	1.0
HC85-164	PTBIBrD	3.2	2.5	1.0	1.0
HC85-477	W+PTBIHD	3.0	1.5	2.0	1.0
HC85-602	W+PTBIBlD	3.2	3.5	1.0	1.0
HC85-604	W+PTTIBlD	3.6	3.5	1.0	1.0
HC85-606	WTTIBlD	3.8	2.5	1.0	1.0
HC85-607	PTTIBlD	3.4	3.5	1.0	1.0
HC85-618	PTBIBlD	3.4	3.5	1.0	1.0
HC85-690	PTBIBlD	1.9	2.0	2.0	1.0
HC85-1440	PTBIBlD	2.8	2.0	3.0	1.0
HC85-6500	PTBSBlD	2.8	2.0	1.0	1.0
HC85-6577	PTBIBlD	1.5	1.0	1.0	1.0
HC85-6611	PTTIBlD	2.0	2.0	1.0	1.0
HC85-6716	WTBIBrD	2.0	2.0	3.0	1.0
HC85-6724	PTTIBlD	2.8	1.5	1.0	1.0
HM8597 (Edison)	PTTDBlI	3.1	1.5	1.0	1.0
HM8890	WTBIBLI	2.4	2.0	1.0	1.0
HS87-2067	PGBIBfI	1.4	2.0	5.0	1.0
K1161	PTBDBlI	2.8	2.0	4.0	2.0
K1164	PTBIBlI	3.1	2.0	1.0	1.0
LN86-1088	WGTIBfI	3.0	2.5	5.0	1.0
U85-74089	PGBSIbI	2.1	1.5	2.0	2.0
U86-62062	PTTIBLD	2.5	-	1.0	1.0

UNIFORM TEST III, 1990

DISEASE DATA

Strain	BTS Ames n Score	BB Urbana n Score	BSR-Ames Plant n %	BSR-Ames Stem n %	PR Vickery Phyto. Tol.	PR Urbana Race 1	PR Ames Race 4	PR Laf. Race 7	PS Lafayette a %	PSB Lafayette n %
Burlison (II)	3.7	4.0	90.0	47.3	3.5	R	R	R	54	10
Linford (SCN)	3.7	2.0	100.0	35.8	3.0	S	S	S	14	16
Flyer (IV)	2.7	3.5	100.0	55.3	6.3	R	H	R	2	4
Hobbit 87 (dt)	3.0	3.0	100.0	38.8	8.3	R	R	R	2	2
Resnik (III)	3.0	3.0	100.0	38.1	4.3	R	R	R	8	18
A87-296011	1.7	1.0	80.0	11.9	4.5	S	S	S	12	0
A88-221020	3.0	1.0	50.0	17.5	4.5	S	S	S	18	16
HC84-2612	3.0	4.0	60.0	34.4	7.0	R	S	R	4	8
HC85-164	2.7	1.5	90.0	55.2	4.7	H	S	S	12	4
HC85-477	3.7	2.0	100.0	80.1	6.3	R	S	S	16	6
HC85-602	3.0	2.5	90.0	41.4	7.0	S	S	S	4	4
HC85-604	2.7	1.5	100.0	66.5	7.0	S	S	S	0	2
HC85-606	2.0	2.5	90.0	44.8	6.0	S	S	S	6	4
HC85-607	3.0	3.0	80.0	48.2	4.5	S	S	S	4	2
HC85-618	3.0	2.0	90.0	50.0	4.3	S	S	R	0	0
HC85-690	2.7	2.5	100.0	72.6	7.0	R	S	H	4	2
HC85-1440	3.0	4.0	100.0	76.0	6.3	H	S	R	0	2
HC85-6500	2.7	4.0	70.0	25.2	4.0	R	S	S	8	2
HC85-6577	3.7	3.5	60.0	21.2	4.3	R	S	S	14	0
HC85-6611	3.0	3.5	80.0	33.4	5.8	R	S	S	16	4
HC85-6716	2.3	3.0	80.0	33.1	5.0	R	S	S	4	4
HC85-6724	2.3	2.5	70.0	16.8	7.5	S	S	S	10	2
HM8597 (Edison)	2.3	2.0	90.0	49.4	7.0	R	H	R	12	4
HM8890	3.3	3.0	70.0	27.8	5.7	R	R	R	8	4
HS87-2067	2.7	2.0	80.0	27.6	7.0	S	S	S	24	6
K1161	3.0	1.5	100.0	57.3	4.3	S	S	H	10	0
K1164	4.0	2.5	100.0	72.1	6.0	S	S	H	8	4
LN86-1088	2.7	2.0	90.0	41.8	4.5	R	S	R	10	16
U85-74089	2.7	3.0	100.0	55.3	5.3	R	S	R	46	6
U86-62062	3.0	3.0	80.0	52.7	4.8	R	H	R	2	0

UNIFORM TEST III, 1990

REGIONAL SUMMARY

	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	27	27	19	26	27	25	23	5	5
Strain	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Burlison (II)	49.3	25	-2.8	1.4	29	1.9	18.8	43.9	19.3
Linford (SCN)	48.4	28	6.3	2.5	38	1.7	16.9	42.6	20.2
Flyer (IV)	51.5	13	4.3	1.4	32	1.7	15.0	42.0	20.9
Hobbit 87 (dt)	47.9	29	2.1	1.2	21	1.7	16.4	40.4	21.7
Resnik (III)	51.9	10	09/26*	1.3	31	1.6	15.9	42.0	20.8
A87-296011	51.3	15	-0.7	1.4	27	1.9	19.0	40.7	21.2
A88-221020	49.6	24	-0.6	1.7	30	1.9	16.6	40.5	21.9
HC84-2612	50.4	21	1.2	1.3	22	1.9	16.3	39.1	22.1
HC85-164	49.3	25	2.4	1.5	22	1.6	16.1	40.2	21.5
HC85-477	48.9	27	0.9	1.4	23	1.8	15.8	40.0	22.0
HC85-602	51.0	16	3.5	1.3	22	1.5	16.5	40.9	21.6
HC85-604	52.1	6	2.9	1.3	22	1.6	15.9	40.4	21.6
HC85-606	52.6	4	2.9	1.3	22	1.7	16.0	40.7	21.8
HC85-607	52.0	7	2.9	1.3	23	1.8	16.6	40.1	21.5
HC85-618	53.0	2	4.0	1.4	23	1.8	16.8	40.6	21.3
HC85-690	50.7	20	2.6	1.3	24	1.8	16.3	40.6	21.2
HC85-1440	49.7	23	0.5	1.2	21	1.8	16.3	40.0	21.2
HC85-6500	50.8	18	4.4	1.5	24	1.8	16.0	40.3	21.3
HC85-6577	52.6	4	5.4	1.3	23	1.7	18.3	40.8	21.2
HC85-6611	50.8	18	3.7	1.2	22	1.7	16.9	41.0	20.9
HC85-6716	51.8	11	2.5	1.6	22	1.9	16.2	40.2	21.0
HC85-6724	53.1	1	3.1	1.6	23	1.6	16.0	41.6	20.8
HM8597 (Edison)	52.0	7	2.3	1.3	31	1.6	14.4	41.1	20.6
HM8890	52.7	3	0.9	1.6	31	1.8	17.6	42.1	20.9
HS87-2067	50.9	17	-1.4	1.5	27	1.9	18.5	39.8	23.2
K1161	51.7	12	3.8	1.3	33	1.8	15.9	42.0	21.0
K1164	52.0	7	0.8	1.4	32	2.0	16.2	42.1	20.9
LN86-1088	49.9	22	-2.4	2.3	32	2.0	18.3	39.4	21.3
U85-74089	51.4	14	0.6	1.5	31	1.8	14.8	42.2	20.5
U86-62062	46.8	30	0.6	1.6	24	1.5	17.8	44.5	20.1

*122.7 Days After Planting

UNIFORM TEST III, 1990

1989-1990 2-YEAR MEAN

	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	48	48	34	47	48	45	43	8	8
Strain	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Burlison (II)	48.8	10	-3.2	1.4	30	2.1	18.4	42.4	19.5
Edison	52.6	3	2.6	1.4	31	1.6	14.6	39.7	21.1
Flyer (IV)	51.9	4	4.8	1.4	33	1.8	15.0	41.3	20.9
Hobbit 87 (dt)	49.0	9	1.8	1.2	22	1.8	16.2	39.1	22.1
Resnik (III)	51.6	5	9/25.5*	1.4	32	1.7	15.7	40.6	21.1
A87-296011	50.4	8	-1.0	1.4	27	2.0	18.6	39.5	21.2
HC85-6500	50.8	7	4.2	1.6	25	1.9	15.8	39.1	21.1
HC85-6577	53.0	1	5.1	1.3	23	1.8	18.0	39.8	21.3
HC85-6724	52.8	2	2.9	1.5	24	1.6	15.8	40.7	20.6
U85-74089	51.6	5	1.2	1.5	32	1.9	14.8	40.6	20.9

*124.2 Days After Planting

1988-1990 3-YEAR MEAN

	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	71	71	53	70	70	66	65	13	13
Strain	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Edison	49.6	1	2.8	1.4	32	1.7	14.1	40.0	21.1
Flyer (IV)	48.6	2	4.6	1.4	33	1.8	14.5	41.5	20.7
Hobbit 87 (dt)	46.0	4	1.4	1.2	22	1.7	15.7	40.1	22.4
Resnik (III)	48.6	2	9/24.0*	1.4	32	1.7	15.0	41.0	21.0

*125.6 Days After Planting

UNIFORM TEST III, 1990

YIELD (bu/a)

Strain	Mean 27 Tests	George-town DE	Middle-town DE	Fair field IA	Tingley IA	Winter-set IA	Ridg-way IL	Urbana IL
Burlison (II)	49.3	32.1	45.6	60.8	41.7	52.2	23.0	64.0
Linford (SCN)	48.4	46.0	47.9	50.5	42.6	41.2	49.8	50.0
Flyer (IV)	51.5	40.4	46.1	56.8	43.0	47.5	43.3	56.4
Hobbit 87 (dt)	47.9	40.7	36.1	58.9	41.9	48.4	25.3	52.6
Resnik (III)	51.9	42.0	51.5	60.8	41.3	50.8	40.6	57.8
A87-296011	51.3	41.7	46.1	60.0	47.3	51.4	45.1	62.4
A88-221020	49.6	42.8	48.6	62.2	44.6	52.2	33.5	55.9
HC84-2612	50.4	41.3	33.3	70.6	43.8	51.3	33.3	57.1
HC85-164	49.3	38.8	32.4	60.4	40.0	44.4	43.1	55.6
HC85-477	48.9	36.7	43.4	56.6	40.3	45.3	30.7	53.2
HC85-602	51.0	42.0	43.2	61.2	44.9	49.8	29.9	55.9
HC85-604	52.1	41.3	39.5	62.4	45.1	52.1	34.3	61.0
HC85-606	52.6	43.3	44.1	66.4	50.5	51.6	33.1	56.9
HC85-607	52.0	38.6	42.6	66.0	45.6	53.4	32.5	60.0
HC85-618	53.0	41.6	49.9	64.1	48.2	51.4	35.1	63.7
HC85-690	50.7	43.4	26.8	62.9	44.9	49.6	44.2	61.5
HC85-1440	49.7	44.5	46.3	62.4	37.9	49.3	40.0	57.1
HC85-6500	50.8	42.5	50.2	63.6	40.7	43.3	37.3	57.8
HC85-6577	52.6	41.7	45.0	63.5	43.7	54.5	45.7	58.6
HC85-6611	50.8	41.6	50.6	64.3	39.9	50.4	32.0	53.3
HC85-6716	51.8	47.6	39.1	66.9	46.6	53.3	38.1	55.8
HC85-6724	53.1	37.5	42.0	63.8	45.8	54.2	40.5	56.5
HM8597 (Edison)	52.0	48.8	48.3	59.3	43.4	46.7	43.1	59.1
HM8890	52.7	42.5	53.9	55.9	43.2	48.6	49.0	64.5
HS87-2067	50.9	39.8	41.9	65.9	46.6	56.6	41.9	66.9
K1161	51.7	47.8	50.9	56.4	45.8	50.1	48.0	57.9
K1164	52.0	48.8	50.2	57.3	43.0	51.5	51.0	59.8
LN86-1088	49.9	53.3	47.3	60.4	39.9	45.3	45.3	59.0
U85-74089	51.4	42.7	46.3	54.7	45.2	51.7	45.8	56.7
U86-62062	46.8	38.8	44.0	62.3	41.3	49.6	45.3	53.9
C.V. (%)		13.1	15.2	5.2	7.2	5.3	19.2	6.9
L.S.D. (5%)		9.1	11.3	5.1	5.1	4.2	12.3	6.5
Row Sp. (in.)		20	20	27	27	27	30	30
Rows/Plot		4	4	4	4	4	4	4
Reps		3	3	3	3	3	3	3

UNIFORM TEST III, 1990

YIELD (bu/a)

Strain	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Burlison (II)	57.2	62.6	58.6	57.3	41.8	54.4	41.9
Linford (SCN)	51.7	59.9	66.5	47.6	41.3	50.2	52.3
Flyer (IV)	54.8	69.9	54.1	56.3	43.7	60.5	59.6
Hobbit 87 (dt)	54.1	64.7	57.1	60.5	42.5	48.2	44.9
Resnik (III)	61.9	62.2	57.0	55.8	43.6	57.3	45.3
A87-296011	59.2	67.2	55.1	57.1	37.5	55.1	44.6
A88-221020	53.8	63.0	56.4	55.1	40.1	55.8	47.6
HC84-2612	48.3	75.7	62.2	56.9	42.3	56.7	45.1
HC85-164	54.5	56.6	50.4	57.8	43.5	51.9	52.7
HC85-477	50.7	59.7	51.8	61.3	45.0	53.6	50.7
HC85-602	52.7	66.8	62.4	61.2	44.6	54.0	60.0
HC85-604	37.4	66.6	66.8	61.7	48.5	59.2	52.2
HC85-606	65.3	68.3	56.7	63.9	44.5	49.4	59.8
HC85-607	57.7	57.2	67.3	62.8	46.7	55.8	51.6
HC85-618	60.3	68.9	65.4	61.8	47.5	58.1	49.6
HC85-690	45.8	70.0	58.9	58.6	50.3	56.1	50.1
HC85-1440	50.8	66.2	58.3	57.3	41.9	49.0	40.3
HC85-6500	53.9	69.0	63.0	56.3	40.2	56.6	50.1
HC85-6577	48.9	70.6	71.3	56.4	45.4	52.6	47.3
HC85-6611	55.4	65.7	58.1	54.1	40.9	48.0	47.0
HC85-6716	52.4	65.8	67.0	57.2	44.3	57.0	42.8
HC85-6724	61.4	65.7	67.6	59.0	47.0	54.2	51.5
HM8597 (Edison)	62.4	66.9	53.2	56.3	43.0	57.6	55.8
HM8890	58.6	74.6	56.9	50.9	42.1	55.9	58.9
HS87-2067	54.1	68.1	52.1	59.0	41.6	54.2	41.1
K1161	54.4	60.7	59.7	55.3	40.2	56.0	58.1
K1164	56.6	64.3	60.6	54.1	47.3	61.3	52.8
LN86-1088	45.1	65.1	57.6	49.1	41.8	58.1	47.4
U85-74089	58.0	59.2	53.9	57.4	45.8	58.7	58.9
U86-62062	35.9	56.9	55.6	53.3	35.7	36.8	44.9
C.V. (%)	19.0	11.4	10.4	5.4	10.1	6.4	10.5
L.S.D. (5%)	16.7	12.2	10.1	5.0	7.2	5.7	7.2
Row Sp. (in.)	24	24	24	30	30	30	30
Rows/Plot	4	4	4	4	4	4	4
Reps	3	3	3	3	3	3	3

UNIFORM TEST III, 1990

YIELD (bu/a)

Strain	Queens-town MD	Colum-bia MO	Falls City NE	Holbrook NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	57.6	39.8	42.4	54.4	49.8	47.1	49.9	32.8
Linford (SCN)	57.0	44.5	41.0	49.5	40.8	47.2	37.2	40.0
Flyer (IV)	59.5	46.9	42.1	58.3	45.2	51.5	47.2	36.9
Hobbit 87 (dt)	55.3	37.8	39.5	60.4	47.8	47.8	47.1	26.0
Resnik (III)	66.1	42.5	45.7	57.9	47.7	50.8	47.2	34.0
A87-296011	59.8	43.7	43.3	59.2	51.6	50.7	42.3	34.8
A88-221020	53.0	51.1	42.4	64.0	49.8	49.9	25.5	30.1
HC84-2612	61.7	41.7	38.4	66.6	54.0	53.1	26.2	38.2
HC85-164	58.6	48.2	37.9	62.5	49.5	47.7	36.8	35.4
HC85-477	59.4	41.2	41.8	61.6	47.9	45.1	32.2	38.0
HC85-602	57.5	45.7	39.9	61.9	48.1	47.2	38.9	31.0
HC85-604	56.6	50.2	47.1	62.0	49.6	50.0	42.8	33.7
HC85-606	57.7	48.2	45.6	61.5	52.9	47.8	38.0	35.5
HC85-607	57.3	43.6	43.5	64.4	50.8	49.1	37.3	35.5
HC85-618	61.3	45.3	45.1	60.6	47.0	45.2	41.0	40.2
HC85-690	63.9	45.6	37.6	60.3	45.0	49.9	45.1	29.7
HC85-1440	59.9	44.0	39.5	62.2	50.2	47.4	23.9	32.7
HC85-6500	62.0	45.3	44.5	55.7	43.0	47.4	27.3	46.6
HC85-6577	63.6	42.9	41.1	57.8	49.6	51.5	49.5	41.5
HC85-6611	61.2	47.3	40.0	56.1	50.4	48.9	39.5	39.8
HC85-6716	58.5	47.7	42.2	56.2	51.5	50.4	36.3	38.6
HC85-6724	63.4	46.7	46.2	60.9	49.1	54.2	41.7	32.3
HM8597 (Edison)	60.9	39.7	43.3	57.7	45.5	49.4	50.7	33.4
HM8890	61.1	39.1	44.0	61.3	46.1	53.0	46.5	36.4
HS87-2067	63.5	46.5	44.4	56.3	53.2	49.9	30.5	28.7
K1161	59.7	50.0	42.8	55.4	48.2	49.6	37.8	37.4
K1164	58.9	48.8	47.5	59.0	45.9	46.3	32.5	32.5
LN86-1088	61.6	47.6	43.3	49.8	52.9	48.4	31.3	32.9
U85-74089	65.0	46.9	44.7	62.8	44.2	49.6	40.6	31.1
U86-62062	55.2	43.1	39.2	55.1	47.6	37.7	37.0	38.4
C.V. (%)	6.1	8.0	7.4	6.5	4.6	7.3	12.2	14.1
L.S.D. (5%)	5.9	6.5	5.2	6.3	3.7	3.9	7.8	7.9
Row Sp. (in.)	30	30	30	30	30	30	30	30
Rows/Plot	4	4	4	4	4	4	4	4
Reps	3	2	3	3	3	3	3	3

UNIFORM TEST III, 1990

YIELD (bu/a)

Strain	So. Charleston OH	Wooster OH	Malden Ont.	Landisville PA	Elk Point SD
Burlison (II)	62.3	43.4	58.9	52.6	46.2
Linford (SCN)	63.2	40.6	52.4	53.1	43.8
Flyer (IV)	65.4	49.5	55.4	58.4	42.6
Hobbit 87 (dt)	55.2	36.3	57.1	56.7	50.1
Resnik (III)	65.1	50.2	60.4	55.4	50.5
A87-296011	61.9	42.4	62.4	54.1	47.9
A88-221020	58.7	38.8	56.1	54.5	53.3
HC84-2612	61.1	43.3	60.2	55.8	43.0
HC85-164	61.0	47.1	58.9	56.0	49.9
HC85-477	61.2	45.4	59.7	57.0	52.0
HC85-602	65.1	42.4	61.5	57.2	50.9
HC85-604	65.0	48.5	62.4	60.2	49.3
HC85-606	60.1	37.9	64.5	62.1	55.0
HC85-607	65.0	47.4	58.8	61.8	50.4
HC85-618	65.6	45.7	59.4	57.9	50.0
HC85-690	64.1	41.6	52.9	60.5	49.2
HC85-1440	62.7	42.1	57.6	64.8	52.7
HC85-6500	69.2	46.9	53.5	56.8	50.2
HC85-6577	65.2	46.3	57.4	58.1	51.0
HC85-6611	68.0	46.7	62.3	59.7	50.5
HC85-6716	67.4	42.4	58.4	63.9	52.0
HC85-6724	69.6	45.5	61.7	60.4	55.6
HM8597 (Edison)	67.7	47.1	60.7	52.9	51.6
HM8890	67.3	48.9	56.0	59.9	47.7
HS87-2067	66.0	39.0	60.8	54.7	51.8
K1161	65.0	45.9	53.3	61.0	49.0
K1164	64.2	47.8	55.8	58.7	48.0
LN86-1088	61.5	43.1	52.8	55.6	51.9
U85-74089	63.4	47.0	53.6	50.0	54.9
U86-62062	51.6	45.7	58.5	52.2	47.7
C.V. (%)	7.9	6.6	6.4	7.5	10.1
L.S.D. (5%)	7.7	4.9	6.1	7.1	ns
Row Sp. (in.)	7	30	24	24	30
Rows/Plot	8	4	4	4	4
Reps	3	3	4	3	3

UNIFORM TEST III, 1990

YIELD RANK

Strain	Yield Rank	George-town DE	Middle-town DE	Fair field IA	Tingley IA	Winter-set IA	Ridg-way IL	Urbana IL
Burlison (II)	25	30	16	17	22	6	30	3
Linford (SCN)	28	6	10	30	20	30	2	30
Flyer (IV)	13	23	14	25	18	24	11	21
Hobbit 87 (dt)	29	22	27	23	21	23	29	29
Resnik (III)	10	14	2	17	23	15	15	14
A87-296011	15	16	14	21	3	12	9	5
A88-221020	24	10	8	15	13	6	22	22
HC84-2612	21	20	28	1	14	14	23	16
HC85-164	25	25	29	19	27	28	12	25
HC85-477	27	29	20	26	26	26	27	28
HC85-602	16	14	21	16	11	18	28	22
HC85-604	6	20	25	12	10	8	21	7
HC85-606	4	9	18	3	1	10	24	18
HC85-607	7	27	22	4	8	4	25	8
HC85-618	2	18	7	7	2	12	20	4
HC85-690	20	8	30	11	11	19	10	6
HC85-1440	23	7	12	12	30	21	17	16
HC85-6500	18	12	5	9	25	29	19	14
HC85-6577	4	16	17	10	15	2	6	12
HC85-6611	18	18	4	6	28	16	26	27
HC85-6716	11	4	26	2	4	5	18	24
HC85-6724	1	28	23	8	6	3	16	20
HM8597 (Edison)	7	2	9	22	16	25	12	10
HM8890	3	12	1	28	17	22	3	2
HS87-2067	17	24	24	5	4	1	14	1
K1161	12	3	3	27	6	17	4	13
K1164	7	5	5	24	18	11	1	9
LN86-1088	22	1	11	19	28	26	7	11
U85-74089	14	11	12	29	9	9	5	19
U86-62062	30	25	19	14	23	19	7	26

UNIFORM TEST III, 1990

YIELD RANK

Strain	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Burlison (II)	10	22	14	13	21	18	27
Linford (SCN)	22	25	6	30	24	25	10
Flyer (IV)	13	5	25	19	13	2	3
Hobbit 87 (dt)	16	19	18	7	17	28	24
Resnik (III)	3	23	19	22	14	8	22
A87-296011	6	10	24	16	29	17	26
A88-221020	19	21	22	24	28	15	17
HC84-2612	26	1	10	17	18	10	23
HC85-164	14	30	30	11	15	24	9
HC85-477	24	26	29	5	9	22	14
HC85-602	20	12	9	6	10	21	1
HC85-604	29	13	5	4	2	3	11
HC85-606	1	8	21	1	11	26	2
HC85-607	9	28	3	2	6	15	12
HC85-618	5	7	7	3	3	5	17
HC85-690	27	4	13	10	1	12	15
HC85-1440	23	14	15	13	20	27	30
HC85-6500	18	6	8	19	26	11	15
HC85-6577	25	3	1	18	8	23	19
HC85-6611	12	16	16	25	25	29	21
HC85-6716	21	15	4	15	12	9	27
HC85-6724	4	16	2	9	5	19	13
HM8597 (Edison)	2	11	27	19	16	7	7
HM8890	7	2	20	28	19	14	4
HS87-2067	16	9	28	8	23	19	29
K1161	15	24	12	23	26	13	6
K1164	11	20	11	25	4	1	8
LN86-1088	28	18	17	29	21	5	19
U85-74089	8	27	26	12	7	4	4
U86-62062	30	29	23	27	30	30	24

UNIFORM TEST III, 1990

YIELD RANK

Strain	Queens-town MD	Colum-bia MO	Falls City NE	Holbrook NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	23	27	16	28	10	26	2	21
Linford (SCN)	26	18	22	30	30	24	19	4
Flyer (IV)	17	10	19	18	26	4	4	11
Hobbit 87 (dt)	28	30	25	14	19	19	6	30
Resnik (III)	1	24	4	19	20	6	4	17
A87-296011	15	20	12	16	5	7	10	16
A88-221020	30	1	16	3	10	10	29	27
HC84-2612	8	25	28	1	1	2	28	8
HC85-164	20	5	29	5	14	20	21	15
HC85-477	18	26	20	9	18	29	24	9
HC85-602	24	14	24	8	17	24	15	26
HC85-604	27	2	2	7	12	9	9	18
HC85-606	22	5	5	10	3	20	16	13
HC85-607	25	21	11	2	7	16	14	13
HC85-618	10	16	6	13	22	28	12	3
HC85-690	3	15	30	15	27	10	8	28
HC85-1440	14	19	25	6	9	22	30	22
HC85-6500	7	16	8	25	29	22	27	1
HC85-6577	4	23	21	20	12	4	3	2
HC85-6611	11	9	23	24	8	17	14	5
HC85-6716	21	7	18	23	6	8	22	6
HC85-6724	6	12	3	12	15	1	11	24
HM8597 (Edison)	13	28	12	21	25	15	1	19
HM8890	12	29	10	11	23	3	7	12
HS87-2067	5	13	9	22	2	10	26	29
K1161	16	3	15	26	16	13	17	10
K1164	19	4	1	17	24	27	23	23
LN86-1088	9	8	12	29	3	18	25	20
U85-74089	2	10	7	4	28	13	13	25
U86-62062	29	22	27	27	21	30	20	7

UNIFORM TEST III, 1990

YIELD RANK

Strain	So. Charleston OH	Wooster OH	Malden Ont.	Landisville PA	Elk Point SD
Burlison (II)	21	18	13	28	27
Linford (SCN)	19	26	30	26	28
Flyer (IV)	9	2	24	12	30
Hobbit 87 (dt)	29	30	20	18	17
Resnik (III)	11	1	9	22	13
A87-296011	22	21	2	25	24
A88-221020	28	28	21	24	4
HC84-2612	25	18	10	20	29
HC85-164	26	7	13	19	19
HC85-477	24	17	11	16	6
HC85-602	11	21	6	15	12
HC85-604	13	4	2	8	20
HC85-606	27	29	1	3	2
HC85-607	13	6	15	4	15
HC85-618	8	15	12	14	18
HC85-690	17	25	28	6	21
HC85-1440	20	24	18	1	5
HC85-6500	2	10	26	17	16
HC85-6577	10	12	19	13	11
HC85-6611	3	11	4	10	13
HC85-6716	5	21	17	2	6
HC85-6724	1	15	5	7	1
HM8597 (Edison)	4	7	8	27	10
HM8890	6	3	22	9	25
HS87-2067	7	27	7	23	9
K1161	13	13	27	5	22
K1164	16	25	23	11	23
LN86-1088	23	20	29	21	8
U85-74089	18	9	25	30	3
U86-62062	30	14	16	29	25

UNIFORM TEST III, 1990

MATURITY (date)

Strain	Mean 19 Tests	George-town DE	Middle-town DE	Fair field IA	Tingley IA	Winter-set IA	Ridg-way IL	Urbana IL
Burlison (II)	-2.8	-2				-4	1	-4
Linford (SCN)	6.3	10				6	11	8
Flyer (IV)	4.3	2				6	6	5
Hobbit 87 (dt)	2.1	3				3	-1	2
Resnik (III)	09/26	09/21				09/22	09/13	09/15
A87-296011	-0.7	5				0	1	-1
A88-221020	-0.6	1				-1	-1	0
HC84-2612	1.2	6				2	-2	1
HC85-164	2.4	5				4	4	3
HC85-477	0.9	7				-1	-2	0
HC85-602	3.5	7				5	2	6
HC85-604	2.9	7				4	3	4
HC85-606	2.9	4				3	3	3
HC85-607	2.9	1				3	1	4
HC85-618	4.0	9				6	2	6
HC85-690	2.6	0				5	1	5
HC85-1440	0.5	2				1	0	2
HC85-6500	4.4	8				3	1	5
HC85-6577	5.4	8				6	4	5
HC85-6611	3.7	8				4	3	3
HC85-6716	2.5	8				3	1	2
HC85-6724	3.1	7				3	1	3
HM8597 (Edison)	2.3	7				5	4	2
HM8890	0.9	-1				1	2	2
HS87-2067	-1.4	-2				0	5	0
K1161	3.8	4				5	8	4
K1164	0.8	-1				1	2	2
LN86-1088	-2.4	1				-6	0	-4
U85-74089	0.6	0				1	1	2
U86-62062	0.6	0				3	0	1
Date Planted	05/26	06/08				05/31	06/04	05/01
Days to Mature	122.7	105				114	101	137

UNIFORM TEST III, 1990

MATURITY (date)

Strain	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Burlison (II)	0	-3	0	-7			-8
Linford (SCN)	3	6	3	4			5
Flyer (IV)	2	4	1	4			5
Hobbit 87 (dt)	2	4	1	6			2
Resnik (III)	10/04	09/28	10/11	09/23			09/22
A87-296011	-2	1	0	3			-3
A88-221020	-1	-1	1	2			1
HC84-2612	0	3	1	3			0
HC85-164	2	2	2	6			5
HC85-477	-1	0	0	6			1
HC85-602	3	4	2	6			5
HC85-604	1	5	1	6			3
HC85-606	2	2	3	6			4
HC85-607	3	3	1	5			4
HC85-618	4	4	0	7			4
HC85-690	1	5	2	7			5
HC85-1440	-2	1	0	4			-1
HC85-6500	4	6	1	5			5
HC85-6577	4	7	3	7			5
HC85-6611	3	5	1	6			5
HC85-6716	1	6	1	6			1
HC85-6724	2	5	0	5			3
HM8597 (Edison)	2	1	1	0			5
HM8890	0	2	-1	-2			4
HS87-2067	-1	-1	1	-1			-5
K1161	2	2	0	2			5
K1164	0	-1	0	-1			4
LN86-1088	-4	-1	0	-4			-5
U85-74089	0	0	0	0			5
U86-62062	0	1	0	-1			-2
Date Planted	05/31	05/23	06/26	05/29			05/25
Days to Mature	126	128	107	117			120

UNIFORM TEST III, 1990

MATURITY (date)

Strain	Queens-town MD	Colum-bia MO	Falls City NE	Holbrook NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	-1				-1	-3	0	-4
Linford (SCN)	4				6	6	6	8
Flyer (IV)	4				4	4	4	6
Hobbit 87 (dt)	2				5	1	3	1
Resnik (III)	09/25				09/24	10/01	10/07	09/22
A87-296011	0				0	-1	-1	-3
A88-221020	0				-1	0	-1	-4
HC84-2612	3				4	2	0	0
HC85-164	5				5	1	0	-2
HC85-477	2				-1	0	-1	1
HC85-602	6				4	0	3	0
HC85-604	4				4	0	3	0
HC85-606	4				4	0	5	0
HC85-607	2				4	1	1	2
HC85-618	6				4	1	3	3
HC85-690	6				4	3	4	0
HC85-1440	-1				1	-1	-1	1
HC85-6500	4				3	2	3	5
HC85-6577	7				5	4	5	5
HC85-6611	5				4	2	3	4
HC85-6716	6				2	0	1	1
HC85-6724	6				6	2	1	0
HM8597 (Edison)	-1				1	2	3	3
HM8890	1				1	2	-1	1
HS87-2067	0				-1	-3	0	-3
K1161	2				4	3	2	5
K1164	2				0	0	1	2
LN86-1088	-2				-3	-1	-2	-4
U85-74089	1				-2	0	1	-1
U86-62062	-1				3	1	2	2
Date Planted	06/05				05/28	06/13	06/01	05/24
Days to Mature	112				119	110	128	121

UNIFORM TEST III, 1990

MATURITY (date)

Strain	So. Charleston OH	Wooster OH	Malden Ont.	Landisville PA	Elk Point SD
Burlison (II)	-7	-4	-1	-4	-2
Linford (SCN)	9	6	7	6	6
Flyer (IV)	6	4	2	4	8
Hobbit 87 (dt)	0	-1	2	3	1
Resnik (III)	09/19	09/30	10/07	09/25	09/29
A87-296011	-5	-5	-1	-2	0
A88-221020	-5	-3	0	0	1
HC84-2612	-3	-4	3	6	-2
HC85-164	0	-1	0	0	4
HC85-477	-3	0	3	6	1
HC85-602	8	-1	1	3	3
HC85-604	4	-1	1	5	2
HC85-606	3	-1	1	6	3
HC85-607	2	1	6	7	4
HC85-618	4	-3	7	5	4
HC85-690	1	-2	-1	0	3
HC85-1440	-2	-2	3	3	2
HC85-6500	5	1	7	5	10
HC85-6577	5	1	7	7	7
HC85-6611	4	1	6	7	-4
HC85-6716	0	-2	3	5	3
HC85-6724	0	0	5	7	3
HM8597 (Edison)	2	2	1	2	2
HM8890	1	1	1	3	1
HS87-2067	-6	-3	-2	-3	-1
K1161	6	2	2	6	8
K1164	0	2	0	0	2
LN86-1088	-5	-2	-1	-2	-1
U85-74089	0	1	0	0	2
U86-62062	-5	0	3	1	3
Date Planted	05/01	05/01	05/25	05/23	05/29
Days to Mature	141	152	135	125	123

UNIFORM TEST III, 1990

LODGING (score)

Strain	Mean 26 Tests	George-town DE	Middle-town DE	Fair field IA	Tingley IA	Winter-set IA	Ridg-way IL	Urbana IL
Burlison (II)	1.4	1.0	1.0	1.5	1.4	1.2	1.0	1.0
Linford (SCN)	2.5	1.0	2.0	4.0	1.8	2.3	3.0	3.0
Flyer (IV)	1.4	1.0	1.0	1.4	1.2	1.1	1.2	1.0
Hobbit 87 (dt)	1.2	1.0	1.0	1.1	1.2	1.1	1.0	1.0
Resnik (III)	1.3	1.0	1.0	1.3	1.2	1.1	1.0	1.0
A87-296011	1.4	1.0	1.0	1.5	1.3	1.1	1.2	1.0
A88-221020	1.7	1.0	1.0	3.5	1.3	1.4	1.5	1.3
HC84-2612	1.3	1.0	1.0	1.2	1.3	1.4	1.2	1.0
HC85-164	1.5	1.0	1.0	1.3	1.3	1.4	1.7	1.0
HC85-477	1.4	1.0	1.0	1.3	1.4	1.8	1.0	1.0
HC85-602	1.3	1.0	1.0	1.2	1.2	1.2	1.3	1.0
HC85-604	1.3	1.0	1.0	1.2	1.2	1.2	1.2	1.0
HC85-606	1.3	1.0	1.0	1.2	1.2	1.2	1.0	1.0
HC85-607	1.3	1.0	1.0	1.1	1.3	1.3	1.3	1.0
HC85-618	1.4	1.0	1.0	1.3	1.5	1.4	1.0	1.0
HC85-690	1.3	1.0	1.0	1.2	1.3	1.3	1.2	1.0
HC85-1440	1.2	1.0	1.0	1.2	1.2	1.1	1.0	1.0
HC85-6500	1.5	1.0	1.0	1.3	1.3	1.6	1.2	1.0
HC85-6577	1.3	1.0	1.0	1.3	1.3	1.2	1.3	1.0
HC85-6611	1.2	1.0	1.0	1.3	1.2	1.4	1.3	1.0
HC85-6716	1.6	1.0	1.0	1.4	1.4	1.5	1.3	1.0
HC85-6724	1.6	1.0	1.0	1.4	1.3	1.5	1.3	1.0
HM8597 (Edison)	1.3	1.0	1.3	1.1	1.2	1.1	1.3	1.0
HM8890	1.6	1.0	1.7	2.9	1.4	1.3	2.0	2.0
HS87-2067	1.5	1.0	1.0	2.2	1.3	1.2	1.2	1.5
K1161	1.3	1.0	1.0	1.3	1.2	1.1	1.5	1.0
K1164	1.4	1.0	1.0	1.4	1.3	1.1	1.3	1.0
LN86-1088	2.3	1.0	1.7	3.1	1.5	3.0	1.8	2.8
U85-74089	1.5	1.0	1.0	2.1	1.3	1.1	1.2	1.0
U86-62062	1.6	1.0	1.3	1.4	1.5	2.0	1.7	1.0

UNIFORM TEST III, 1990

LODGING (score)

Strain	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Burlison (II)	1.5	2.5	1.0	2.0	1.0	1.0	1.5
Linford (SCN)	2.0	3.8	2.7	2.7	1.7	3.0	3.7
Flyer (IV)	1.0	2.3	1.5	1.7	1.0	1.0	1.8
Hobbit 87 (dt)	1.0	1.3	1.0	1.0	1.0	1.0	1.8
Resnik (III)	1.2	1.8	1.0	2.0	1.0	1.0	1.0
A87-296011	1.2	2.0	1.0	2.0	1.0	1.0	1.3
A88-221020	1.8	3.7	1.0	2.3	1.3	2.0	1.5
HC84-2612	1.0	2.3	1.2	1.0	1.0	1.0	1.8
HC85-164	2.2	2.0	2.0	1.0	1.0	1.0	2.7
HC85-477	1.5	2.8	2.3	1.0	1.0	1.0	2.3
HC85-602	1.2	1.7	1.3	1.0	1.0	1.0	2.0
HC85-604	1.2	1.5	1.0	1.0	1.0	1.0	2.3
HC85-606	1.3	2.0	1.2	1.0	1.0	1.0	2.7
HC85-607	1.3	2.0	1.5	1.0	1.0	1.0	2.2
HC85-618	1.3	2.2	1.5	1.0	1.0	1.0	2.3
HC85-690	1.3	2.0	1.2	1.0	1.0	1.0	2.0
HC85-1440	1.2	1.5	1.0	1.0	1.0	1.0	1.7
HC85-6500	1.8	2.3	1.7	1.0	1.0	1.0	2.8
HC85-6577	1.2	1.8	1.3	1.0	1.0	1.0	1.7
HC85-6611	1.0	1.5	1.0	1.0	1.0	1.0	2.0
HC85-6716	1.7	2.0	2.3	1.0	1.0	1.0	3.8
HC85-6724	1.8	2.2	1.8	1.0	1.0	1.0	3.3
HM8597 (Edison)	1.0	1.5	1.2	2.0	1.0	1.0	1.5
HM8890	1.3	2.3	1.2	2.0	1.0	1.0	1.5
HS87-2067	1.2	3.0	1.2	2.0	1.0	1.0	1.7
K1161	1.2	1.7	1.2	1.3	1.0	1.0	1.5
K1164	1.5	2.5	1.0	2.0	1.0	2.0	1.8
LN86-1088	1.7	3.5	3.2	2.3	1.7	3.0	2.5
U85-74089	1.2	2.8	1.0	2.0	1.0	2.0	1.5
U86-62062	1.2	3.0	1.5	1.0	1.0	1.0	1.8

UNIFORM TEST III, 1990

LODGING (score)

Strain	Queens-town MD	Colum-bia MO	Falls City NE	Holbrook NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	1.7		1.0	1.0	1.0	1.0	2.3	1.0
Linford (SCN)	2.7		1.0	2.0	2.0	2.7	2.4	1.2
Flyer (IV)	1.2		1.0	1.0	1.0	1.0	1.8	1.2
Hobbit 87 (dt)	1.2		1.0	1.0	1.0	1.3	1.7	1.2
Resnik (III)	1.3		1.0	1.0	1.0	1.0	1.6	1.0
A87-296011	1.7		1.0	1.0	1.0	1.0	1.7	1.0
A88-221020	1.5		1.0	1.0	1.0	1.3	1.6	1.2
HC84-2612	1.0		1.0	1.0	1.0	1.0	1.4	1.0
HC85-164	1.0		1.0	1.0	1.0	1.7	1.7	1.0
HC85-477	1.0		1.0	1.0	1.0	1.3	1.8	1.2
HC85-602	1.2		1.0	1.0	1.0	1.7	1.6	1.0
HC85-604	1.2		1.0	1.0	1.0	1.0	1.6	1.0
HC85-606	1.3		1.0	1.0	1.0	1.0	1.7	1.0
HC85-607	1.0		1.0	1.0	1.0	1.7	1.5	1.2
HC85-618	1.0		1.0	1.0	1.0	1.7	1.6	1.0
HC85-690	1.7		1.0	1.0	1.0	2.0	1.9	1.0
HC85-1440	1.2		1.0	1.0	1.0	1.0	1.1	1.1
HC85-6500	1.3		1.0	1.0	1.0	2.0	1.8	1.2
HC85-6577	1.0		1.0	1.0	1.0	1.3	1.6	1.0
HC85-6611	1.0		1.0	1.0	1.0	1.0	1.6	1.0
HC85-6716	1.2		1.0	1.0	1.0	2.7	1.8	1.2
HC85-6724	1.3		1.0	1.0	1.0	1.7	1.9	1.0
HM8597 (Edison)	1.2		1.0	1.0	1.0	1.0	1.6	1.2
HM8890	1.8		1.0	1.0	1.0	1.0	2.1	1.0
HS87-2067	1.5		1.0	1.0	1.0	1.3	1.5	1.0
K1161	1.3		1.0	1.0	1.0	1.0	1.6	1.0
K1164	1.2		1.0	1.0	1.0	1.0	1.5	1.0
LN86-1088	2.3		1.0	2.0	2.0	1.7	2.3	1.5
U85-74089	1.8		1.0	1.0	1.0	1.0	1.8	1.0
U86-62062	1.2		1.0	1.0	1.0	4.3	1.7	1.0

UNIFORM TEST III, 1990

LODGING (score)

Strain	So. Charleston OH	Wooster OH	Malden Ont.	Landisville PA	Elk Point SD
Burlison (II)	1.2	1.9	2.2	2.3	1.3
Linford (SCN)	3.0	3.2	2.2	3.3	2.3
Flyer (IV)	2.0	2.1	1.7	2.0	1.7
Hobbit 87 (dt)	1.0	1.4	1.5	1.7	1.3
Resnik (III)	1.8	1.9	1.7	2.2	1.7
A87-296011	1.7	1.6	1.5	2.0	2.3
A88-221020	1.7	1.6	2.3	2.7	2.7
HC84-2612	1.0	1.7	2.0	3.0	1.7
HC85-164	1.3	1.7	1.8	2.3	1.7
HC85-477	1.2	1.8	1.8	2.2	1.3
HC85-602	1.2	1.5	1.7	2.0	1.7
HC85-604	1.0	2.1	1.5	2.2	1.7
HC85-606	1.0	1.7	2.2	2.0	1.3
HC85-607	1.2	2.0	1.3	2.3	1.3
HC85-618	1.3	1.6	1.7	2.5	1.7
HC85-690	1.2	1.4	1.3	2.0	1.3
HC85-1440	1.0	1.7	1.3	2.5	1.3
HC85-6500	1.5	2.1	2.0	2.8	1.7
HC85-6577	1.0	2.1	2.0	2.0	2.0
HC85-6611	1.0	1.7	1.5	2.5	1.3
HC85-6716	1.8	1.8	2.5	2.7	1.7
HC85-6724	1.7	2.5	2.0	2.7	2.0
HM8597 (Edison)	1.2	2.0	1.2	1.8	1.3
HM8890	1.7	1.7	1.3	2.2	2.3
HS87-2067	1.7	1.3	1.8	2.7	2.0
K1161	1.3	1.7	1.3	2.0	1.3
K1164	1.3	1.7	1.3	2.2	1.7
LN86-1088	3.0	2.1	2.0	3.3	2.7
U85-74089	1.7	1.6	1.5	2.5	1.7
U86-62062	1.0	2.0	2.2	2.2	2.0

UNIFORM TEST III, 1990

PLANT HEIGHT (inches)

Strain	Mean 27 Tests	George-town DE	Middle-town DE	Fair field IA	Tingley IA	Winter-set IA	Ridg-way IL	Urbana IL
Burlison (II)	29	17	19	39	30	33	23	32
Linford (SCN)	38	29	30	47	36	39	36	43
Flyer (IV)	32	20	24	40	33	35	32	36
Hobbit 87 (dt)	21	15	12	25	24	25	17	24
Resnik (III)	31	19	24	38	30	33	28	37
A87-296011	27	18	25	38	29	29	25	34
A88-221020	30	19	24	42	31	34	25	36
HC84-2612	22	12	13	28	25	27	20	22
HC85-164	22	13	12	26	23	24	21	23
HC85-477	23	13	15	27	28	25	20	23
HC85-602	22	13	12	29	25	27	21	23
HC85-604	22	14	14	26	27	28	18	23
HC85-606	22	15	14	28	25	26	18	22
HC85-607	23	15	13	27	26	29	20	23
HC85-618	23	15	15	28	27	26	20	24
HC85-690	24	11	12	31	30	32	24	26
HC85-1440	21	14	14	26	23	25	21	21
HC85-6500	24	15	16	27	24	28	20	24
HC85-6577	23	13	13	28	25	27	22	23
HC85-6611	22	14	11	26	23	26	19	22
HC85-6716	22	12	12	27	23	25	22	23
HC85-6724	23	13	13	28	23	28	21	25
HM8597 (Edison)	31	22	23	37	31	32	29	33
HM8890	31	19	24	39	32	34	29	35
HS87-2067	27	15	17	38	28	32	26	32
K1161	33	23	27	43	33	34	32	37
K1164	32	20	26	42	33	36	33	37
LN86-1088	32	19	23	37	27	34	33	37
U85-74089	31	17	24	40	31	36	29	36
U86-62062	24	13	16	30	25	28	26	25

UNIFORM TEST III, 1990

PLANT HEIGHT (inches)

Strain	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Burlison (II)	31	30	33	33	23	27	27
Linford (SCN)	39	41	40	40	34	39	35
Flyer (IV)	34	35	33	36	26	33	29
Hobbit 87 (dt)	25	25	24	24	17	13	24
Resnik (III)	34	35	34	34	27	32	29
A87-296011	28	30	23	33	21	28	25
A88-221020	29	31	30	37	22	34	31
HC84-2612	23	27	27	24	18	15	24
HC85-164	25	24	22	23	17	17	25
HC85-477	26	27	25	25	19	16	27
HC85-602	27	26	23	24	18	16	25
HC85-604	24	23	21	24	19	20	25
HC85-606	27	26	22	22	18	19	26
HC85-607	27	26	25	25	19	18	26
HC85-618	26	26	23	25	19	16	27
HC85-690	27	29	31	25	20	20	28
HC85-1440	25	23	21	24	18	14	25
HC85-6500	26	27	28	26	17	17	29
HC85-6577	25	26	27	23	18	18	24
HC85-6611	25	24	22	23	17	16	26
HC85-6716	25	23	23	23	18	18	24
HC85-6724	25	27	24	25	20	17	28
HM8597 (Edison)	34	33	32	35	25	31	29
HM8890	32	34	31	34	23	32	29
HS87-2067	25	32	28	33	22	30	27
K1161	34	35	34	36	26	32	31
K1164	35	36	30	35	28	33	31
LN86-1088	30	38	33	38	24	35	31
U85-74089	32	35	31	39	26	29	32
U86-62062	23	29	26	24	18	15	25

UNIFORM TEST III, 1990

PLANT HEIGHT (inches)

Strain	Queens-town MD	Colum-bia MO	Falls City NE	Holbrook NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	26	22	27	36	38	29	32	19
Linford (SCN)	38	33	36	45	47	43	35	28
Flyer (IV)	31	27	30	40	39	33	30	22
Hobbit 87 (dt)	18	15	19	20	23	24	22	16
Resnik (III)	31	26	29	37	38	31	32	22
A87-296011	27	23	27	32	35	27	26	18
A88-221020	28	26	28	36	40	31	22	18
HC84-2612	19	17	20	23	26	26	20	17
HC85-164	18	18	20	26	23	25	21	18
HC85-477	21	17	22	24	26	25	19	17
HC85-602	18	20	21	25	26	25	25	16
HC85-604	17	18	21	26	30	25	22	17
HC85-606	19	20	21	23	27	25	21	18
HC85-607	20	17	21	25	27	26	22	18
HC85-618	19	19	22	25	27	26	23	20
HC85-690	22	15	24	29	31	28	25	16
HC85-1440	17	15	20	22	24	24	19	16
HC85-6500	20	17	22	27	29	27	21	20
HC85-6577	19	20	20	26	26	26	24	18
HC85-6611	19	19	20	24	26	24	20	16
HC85-6716	19	18	18	24	26	25	22	17
HC85-6724	20	17	21	25	27	28	21	17
HM8597 (Edison)	29	25	28	35	37	30	32	23
HM8890	28	30	28	38	32	31	31	20
HS87-2067	27	20	26	35	34	30	25	17
K1161	34	29	29	41	39	34	29	24
K1164	32	29	31	39	39	32	27	22
LN86-1088	33	29	28	42	41	35	25	21
U85-74089	33	27	32	40	40	32	29	19
U86-62062	21	18	22	30	33	27	24	17

UNIFORM TEST III, 1990

PLANT HEIGHT (inches)

Strain	So. Charleston OH	Wooster OH	Malden Ont.	Landisville PA	Elk Point SD
Burlison (II)	29	23	32	30	33
Linford (SCN)	40	38	41	39	43
Flyer (IV)	33	31	34	36	37
Hobbit 87 (dt)	20	15	24	23	30
Resnik (III)	34	30	34	31	29
A87-296011	27	21	26	27	32
A88-221020	30	24	30	30	38
HC84-2612	23	20	25	28	28
HC85-164	21	21	26	26	29
HC85-477	23	21	25	24	29
HC85-602	23	19	23	24	31
HC85-604	25	21	24	24	30
HC85-606	21	21	25	25	30
HC85-607	22	24	25	25	28
HC85-618	25	19	27	28	30
HC85-690	25	19	23	24	32
HC85-1440	23	18	23	24	29
HC85-6500	24	22	29	28	26
HC85-6577	24	20	26	24	29
HC85-6611	21	21	25	25	29
HC85-6716	23	17	24	23	28
HC85-6724	24	20	26	25	30
HM8597 (Edison)	32	29	32	29	37
HM8890	31	28	32	31	39
HS87-2067	29	24	27	27	35
K1161	35	31	35	33	39
K1164	36	31	33	33	38
LN86-1088	32	27	32	31	38
U85-74089	31	28	32	29	40
U86-62062	22	19	27	25	33

UNIFORM TEST III, 1990

SEED QUALITY (score)

Strain	Mean 25 Tests	George-town DE	Middle-town DE	Fair field IA	Tingley IA	Winter-set IA	Ridg-way IL	Urbana IL
Burlison (II)	1.9	1.0	1.0	1.5	1.0	1.5	1.5	1.1
Linford (SCN)	1.7	1.0	1.0	1.0	1.0	1.0	1.5	1.4
Flyer (IV)	1.7	1.0	1.0	1.5	1.5	2.0	1.5	1.4
Hobbit 87 (dt)	1.7	1.0	1.0	1.0	1.5	1.5	1.5	1.1
Resnik (III)	1.6	1.0	1.0	1.0	1.0	1.0	1.5	1.2
A87-296011	1.9	1.0	1.0	1.5	2.0	1.5	1.5	1.1
A88-221020	1.9	1.0	1.0	1.5	1.5	1.5	1.5	1.4
HC84-2612	1.9	1.0	1.0	2.0	2.0	2.0	1.5	1.2
HC85-164	1.6	1.0	1.0	1.0	1.5	2.0	1.7	1.1
HC85-477	1.8	1.0	1.0	1.5	1.5	1.5	1.5	1.1
HC85-602	1.5	1.0	1.0	1.0	1.0	1.5	1.5	1.2
HC85-604	1.6	1.0	1.0	1.5	1.0	1.5	1.5	1.1
HC85-606	1.7	1.0	1.0	1.5	1.5	1.5	1.5	1.2
HC85-607	1.8	1.0	1.0	1.5	1.5	1.5	1.5	1.2
HC85-618	1.8	1.0	1.0	1.5	1.5	2.0	1.5	1.2
HC85-690	1.8	1.0	1.0	1.0	1.0	1.5	1.5	1.1
HC85-1440	1.8	1.0	1.0	1.0	2.0	2.0	1.7	1.1
HC85-6500	1.8	1.0	1.0	1.5	2.0	2.0	1.5	1.1
HC85-6577	1.7	1.0	1.0	1.0	1.0	1.5	1.5	1.2
HC85-6611	1.7	1.0	1.0	1.0	1.0	1.0	1.5	1.1
HC85-6716	1.9	1.0	1.0	1.5	1.5	1.5	1.5	1.1
HC85-6724	1.6	1.0	1.0	1.5	1.0	1.5	1.5	1.2
HM8597 (Edison)	1.6	1.0	1.0	1.0	1.0	2.5	1.5	1.1
HM8890	1.8	1.0	1.0	2.0	2.0	2.0	1.5	1.1
HS87-2067	1.9	1.0	1.0	1.5	1.5	1.5	1.5	1.1
K1161	1.8	1.0	1.0	1.5	1.5	2.0	1.5	1.2
K1164	2.0	1.0	1.0	2.0	1.5	2.0	1.5	1.4
LN86-1088	2.0	1.0	1.0	1.5	1.5	1.0	1.5	1.2
U85-74089	1.8	1.0	1.0	1.0	1.0	1.5	1.5	1.4
U86-62062	1.5	1.0	1.0	1.0	1.0	2.0	1.5	1.1

UNIFORM TEST III, 1990

SEED QUALITY (score)

Strain	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Burlison (II)	1.0	1.5	1.0	4.0	4.0	3.0	2.0
Linford (SCN)	1.0	1.0	1.0	5.0	3.0	4.0	2.0
Flyer (IV)	1.0	1.5	1.0	4.0	2.0	3.0	2.0
Hobbit 87 (dt)	1.0	1.0	1.0	4.0	3.0	3.0	2.0
Resnik (III)	1.0	1.5	1.0	3.0	3.0	2.0	2.0
A87-296011	1.5	1.5	1.5	5.0	3.0	3.0	2.0
A88-221020	1.0	1.5	1.5	4.0	3.0	2.0	2.0
HC84-2612	1.0	1.5	1.0	3.0	3.0	3.0	2.0
HC85-164	1.0	1.0	1.0	2.0	2.0	2.0	1.0
HC85-477	1.0	1.5	1.5	4.0	3.0	3.0	3.0
HC85-602	1.0	1.0	1.0	2.0	3.0	2.0	1.0
HC85-604	1.0	1.0	1.0	4.0	2.0	2.0	2.0
HC85-606	1.0	1.5	1.0	3.0	3.0	3.0	2.0
HC85-607	1.0	1.5	1.5	3.0	3.0	3.0	3.0
HC85-618	1.0	1.0	1.0	3.0	3.0	3.0	2.0
HC85-690	1.0	1.5	1.5	3.0	3.0	3.0	2.0
HC85-1440	1.0	1.5	1.0	3.0	3.0	3.0	2.0
HC85-6500	1.0	1.0	1.0	3.0	3.0	3.0	2.0
HC85-6577	1.0	1.5	1.5	3.0	3.0	2.0	3.0
HC85-6611	1.0	1.0	1.5	3.0	2.0	2.0	3.0
HC85-6716	1.5	1.5	1.5	3.0	3.0	3.0	2.0
HC85-6724	1.0	1.0	1.0	3.0	2.0	2.0	2.0
HM8597 (Edison)	1.0	1.0	1.0	3.0	3.0	3.0	2.0
HM8890	1.0	1.5	1.0	4.0	4.0	2.0	2.0
HS87-2067	1.0	1.5	1.5	3.0	4.0	3.0	2.0
K1161	1.0	2.0	1.0	4.0	3.0	3.0	2.0
K1164	1.0	1.5	1.5	4.0	3.0	2.0	3.0
LN86-1088	1.0	2.0	1.0	4.0	3.0	3.0	1.0
U85-74089	1.0	1.5	1.5	3.0	3.0	3.0	2.0
U86-62062	1.0	1.0	1.0	3.0	2.0	3.0	2.0

UNIFORM TEST III, 1990

SEED QUALITY (score)

Strain	Queens-town MD	Colum-bia MO	Falls City NE	Holbrook NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	3.5		2.0	2.0	1.3	1.3	1.8	2.3
Linford (SCN)	1.3		2.0	1.0	1.0	1.0	1.6	1.6
Flyer (IV)	1.2		2.0	1.0	1.3	1.0	1.7	1.9
Hobbit 87 (dt)	1.7		2.0	1.0	1.0	1.0	1.4	3.1
Resnik (III)	1.0		2.3	1.3	1.0	1.0	1.4	2.2
A87-296011	1.7		2.7	2.0	1.7	1.0	1.3	2.4
A88-221020	2.5		2.7	2.0	1.7	1.0	1.6	2.6
HC84-2612	3.0		2.0	1.0	1.0	1.0	1.6	4.0
HC85-164	1.5		2.0	1.0	1.3	1.0	1.5	3.4
HC85-477	1.7		2.0	1.0	1.0	1.0	1.5	2.0
HC85-602	1.2		2.0	1.0	1.0	1.0	1.6	2.4
HC85-604	1.5		2.0	1.0	1.0	1.0	1.6	2.6
HC85-606	1.2		2.0	1.0	1.0	1.0	1.5	2.5
HC85-607	1.5		2.0	1.0	1.0	1.3	1.3	2.3
HC85-618	1.3		2.0	1.0	1.0	1.0	1.5	3.6
HC85-690	1.8		2.0	1.0	1.0	1.0	1.5	4.2
HC85-1440	1.8		2.0	1.0	1.3	1.0	1.5	4.1
HC85-6500	1.3		2.0	1.0	1.0	1.0	1.4	2.5
HC85-6577	1.8		3.0	1.0	1.0	1.0	1.4	3.2
HC85-6611	1.5		2.0	1.3	1.3	1.0	1.6	3.1
HC85-6716	1.7		2.0	1.0	1.0	1.3	1.5	4.0
HC85-6724	1.0		2.3	1.0	1.0	1.0	1.3	2.4
HM8597 (Edison)	1.0		2.0	1.0	1.0	1.0	1.4	2.0
HM8890	1.7		2.0	1.7	1.0	1.0	1.5	1.3
HS87-2067	1.7		2.0	2.0	2.0	1.0	1.5	2.2
K1161	1.0		2.3	1.3	1.3	1.3	1.5	1.6
K1164	1.0		2.0	1.3	3.7	2.0	1.3	2.1
LN86-1088	2.5		2.0	2.0	1.3	2.0	1.5	4.7
U85-74089	1.3		2.0	1.0	1.0	1.0	1.4	3.1
U86-62062	1.5		2.0	1.0	1.0	1.0	1.4	2.2

UNIFORM TEST III, 1990

SEED QUALITY (score)

Strain	So. Charleston OH	Wooster OH	Malden Ont.	Landisville PA	Elk Point SD
Burlison (II)		1.3	1.8	2.3	3.0
Linford (SCN)		1.5	2.0	2.1	3.0
Flyer (IV)		1.4	1.8	2.0	4.0
Hobbit 87 (dt)		1.3	1.8	2.5	3.0
Resnik (III)		1.3	1.8	2.3	3.0
A87-296011		1.2	1.3	2.3	4.0
A88-221020		1.6	2.7	2.2	3.0
HC84-2612		1.4	2.0	2.0	3.0
HC85-164		1.4	1.5	2.5	3.0
HC85-477		1.3	2.0	2.2	3.0
HC85-602		1.3	2.0	2.0	3.0
HC85-604		1.3	2.0	2.0	3.0
HC85-606		1.3	1.8	2.0	3.0
HC85-607		1.4	2.2	2.3	3.0
HC85-618		1.4	2.5	2.2	3.0
HC85-690		1.4	2.2	2.3	3.0
HC85-1440		1.5	2.2	2.3	3.0
HC85-6500		1.4	3.2	2.2	3.0
HC85-6577		1.3	1.8	2.3	2.0
HC85-6611		1.3	2.2	2.0	3.0
HC85-6716		1.4	2.7	2.2	3.0
HC85-6724		1.3	3.2	1.8	3.0
HM8597 (Edison)		1.3	1.8	1.8	3.0
HM8890		1.4	2.8	2.0	3.0
HS87-2067		1.3	2.0	2.8	3.0
K1161		1.4	2.0	2.0	3.0
K1164		1.3	2.5	2.2	3.0
LN86-1088		1.7	3.0	2.8	3.0
U85-74089		1.2	2.8	2.7	3.0
U86-62062		1.2	1.8	2.0	2.0

UNIFORM TEST III, 1990

SEED SIZE (g/100)

Strain	Mean 23 Tests	George-town DE	Middle-town DE	Fair field IA	Tingley IA	Winter-set IA	Ridg-way IL	Urbana IL
Burlison (II)	18.8			19.0	16.7	18.4	15.2	17.5
Linford (SCN)	16.9			16.6	14.9	15.0	16.1	14.0
Flyer (IV)	15.0			14.8	13.0	14.6	12.8	12.2
Hobbit 87 (dt)	16.4			15.6	14.6	15.2	14.7	15.0
Resnik (III)	15.9			15.6	13.3	15.2	13.8	13.4
A87-296011	19.0			19.4	17.6	17.6	17.5	16.8
A88-221020	16.6			17.8	14.1	15.9	14.1	13.7
HC84-2612	16.3			16.3	14.4	15.4	14.9	14.0
HC85-164	16.1			16.0	13.9	14.4	14.6	14.4
HC85-477	15.8			15.5	12.9	14.0	14.6	12.8
HC85-602	16.5			16.9	14.0	15.6	15.5	14.5
HC85-604	15.9			16.0	14.0	15.0	17.1	14.2
HC85-606	16.0			15.8	13.9	13.7	15.2	14.0
HC85-607	16.6			16.0	13.6	15.0	16.4	14.7
HC85-618	16.8			17.2	15.2	16.1	14.1	14.3
HC85-690	16.3			16.2	14.8	14.8	15.5	14.1
HC85-1440	16.3			16.6	12.6	14.3	15.1	14.2
HC85-6500	16.0			15.6	13.2	13.6	14.5	13.1
HC85-6577	18.3			17.8	16.0	17.6	17.1	16.3
HC85-6611	16.9			17.2	13.8	15.1	15.8	14.5
HC85-6716	16.2			17.3	13.4	15.0	15.2	13.5
HC85-6724	16.0			16.7	14.0	14.5	13.3	13.3
HM8597 (Edison)	14.4			14.8	12.4	13.6	12.8	12.1
HM8890	17.6			18.2	13.9	16.1	14.8	15.2
HS87-2067	18.5			19.2	15.8	18.0	16.9	17.0
K1161	15.9			16.8	13.8	14.6	14.3	15.3
K1164	16.2			16.6	14.3	14.9	14.9	14.3
LN86-1088	18.3			17.8	14.9	16.4	15.1	17.4
U85-74089	14.8			16.0	11.8	14.1	12.7	12.6
U86-62062	17.8			18.6	14.0	16.2	16.2	17.2

UNIFORM TEST III, 1990

SEED SIZE (g/100)

Strain	Bluff-ton IN	Lafay-ette IN	Vince-nnes IN	Man-hattan KS	Pow-hattan KS	Topeka KS	Lexing-ton KY
Burlison (II)	21.2	21.4	20.0	18.1	19.9	18.9	14.0
Linford (SCN)	19.7	17.8	19.4	15.9	15.2	16.4	18.2
Flyer (IV)	16.2	16.2	16.1	14.4	13.6	15.3	16.9
Hobbit 87 (dt)	19.4	18.6	17.3	16.3	14.7	17.3	15.6
Resnik (III)	18.7	17.5	17.0	16.3	14.1	15.8	16.6
A87-296011	23.0	21.8	20.2	18.1	18.1	20.1	17.8
A88-221020	20.0	17.0	15.9	14.1	16.4	18.7	16.2
HC84-2612	18.5	18.3	17.0	15.3	15.3	18.1	15.1
HC85-164	19.3	17.0	16.1	17.5	14.5	17.2	18.4
HC85-477	17.9	16.9	15.2	18.5	16.4	19.5	15.0
HC85-602	19.4	17.8	17.4	19.4	16.2	18.8	16.6
HC85-604	17.5	16.9	17.2	17.0	14.9	18.0	16.1
HC85-606	19.0	16.2	16.2	17.6	14.2	18.0	16.7
HC85-607	19.6	16.6	17.0	17.9	16.3	18.0	17.3
HC85-618	20.7	18.0	18.5	18.7	16.1	18.6	16.7
HC85-690	18.1	17.6	16.8	16.9	14.9	17.4	16.2
HC85-1440	18.3	18.3	17.4	17.9	15.7	17.8	15.6
HC85-6500	19.1	17.7	18.1	17.3	14.0	17.7	18.2
HC85-6577	20.6	19.3	19.9	17.8	17.4	19.8	18.4
HC85-6611	19.5	18.3	18.0	17.9	16.4	18.6	17.6
HC85-6716	18.3	17.8	18.1	17.3	14.0	17.1	15.4
HC85-6724	19.5	17.9	17.5	16.7	14.6	17.3	16.1
HM8597 (Edison)	16.2	15.3	16.1	12.8	12.6	15.1	15.3
HM8890	20.6	19.7	19.0	17.5	16.5	18.5	18.1
HS87-2067	23.0	20.9	18.8	17.1	17.8	19.3	14.7
K1161	17.2	17.5	18.1	17.6	14.4	17.6	16.2
K1164	18.4	18.0	17.6	14.2	14.7	17.2	17.2
LN86-1088	20.4	20.7	18.6	16.5	17.4	17.9	15.9
U85-74089	17.8	16.0	15.4	15.0	12.9	15.7	15.8
U86-62062	19.6	19.9	19.3	18.3	18.3	17.0	16.6

UNIFORM TEST III, 1990

SEED SIZE (g/100)

Strain	Queens-town MD	Colum-bia MO	Falls City NE	Holbrook NE	Tekamah NE	Adel-phia NJ	Hoyt-ville OH	Mt. Orab OH
Burlison (II)	21.1		16.4	20.9	18.7	19.0	18.5	16.5
Linford (SCN)	17.2		17.4	18.1	15.0	18.0	17.1	15.3
Flyer (IV)	16.2		12.5	17.8	14.7	17.0	15.5	12.2
Hobbit 87 (dt)	16.3		15.5	17.8	15.6	17.0	16.9	13.9
Resnik (III)	17.2		13.1	19.0	14.5	17.0	16.7	13.0
A87-296011	19.9		15.6	21.8	18.3	19.0	20.4	16.3
A88-221020	18.6		15.3	19.4	15.5	17.0	17.0	13.6
HC84-2612	18.2		15.6	18.6	16.5	16.0	15.3	13.7
HC85-164	16.5		14.4	18.3	15.5	15.0	15.5	14.2
HC85-477	16.7		15.3	17.1	14.1	14.0	16.0	14.1
HC85-602	16.7		15.4	18.1	15.2	16.0	15.0	13.3
HC85-604	16.5		15.3	16.6	14.2	15.0	15.5	12.8
HC85-606	16.1		15.4	16.4	14.5	16.0	17.2	14.3
HC85-607	16.6		15.3	17.8	15.4	16.0	16.3	14.7
HC85-618	17.1		16.3	17.7	16.1	17.0	16.6	14.6
HC85-690	17.2		14.7	17.6	14.2	17.0	17.0	12.8
HC85-1440	17.2		16.0	17.6	15.2	16.0	15.8	13.9
HC85-6500	17.0		14.0	17.1	14.4	16.0	16.1	14.4
HC85-6577	19.7		16.8	19.7	16.3	19.0	18.0	15.4
HC85-6611	18.4		16.0	17.8	15.2	16.0	16.9	14.8
HC85-6716	16.9		14.6	17.4	15.1	17.0	15.3	13.9
HC85-6724	16.6		14.4	17.7	15.5	17.0	15.3	13.2
HM8597 (Edison)	15.5		11.4	16.6	13.5	16.0	15.6	11.9
HM8890	19.4		15.2	19.9	16.2	19.0	17.6	15.1
HS87-2067	19.2		17.2	20.9	19.1	19.0	19.9	14.1
K1161	16.5		14.2	17.5	14.6	15.0	15.6	13.4
K1164	17.3		14.1	19.2	14.9	16.0	16.9	13.8
LN86-1088	19.8		15.1	21.1	18.1	19.0	20.2	16.1
U85-74089	15.9		12.7	17.3	13.6	15.0	14.3	12.9
U86-62062	17.7		16.6	19.9	18.3	18.0	18.9	15.7

UNIFORM TEST III, 1990

SEED SIZE (g/100)

Strain	So. Charleston OH	Wooster OH	Malden Ont.	Landisville PA	Elk Point SD
Burlison (II)		18.5	22.0	19.6	19.9
Linford (SCN)		15.3	21.8	17.9	15.3
Flyer (IV)		15.6	17.3	15.8	15.1
Hobbit 87 (dt)		16.2	19.9	18.3	15.8
Resnik (III)		16.3	18.2	16.6	16.5
A87-296011		18.3	21.9	19.0	19.4
A88-221020		15.5	20.0	18.3	17.8
HC84-2612		15.2	20.2	17.2	15.8
HC85-164		16.5	18.8	18.2	15.0
HC85-477		15.1	19.1	17.5	15.1
HC85-602		15.1	19.0	16.7	15.8
HC85-604		15.8	18.4	17.0	14.9
HC85-606		16.1	19.9	16.5	15.8
HC85-607		16.7	20.6	18.0	15.8
HC85-618		16.0	18.8	17.6	14.7
HC85-690		16.3	19.3	18.2	17.2
HC85-1440		16.3	20.3	18.2	15.6
HC85-6500		15.8	18.9	17.8	14.2
HC85-6577		18.7	20.3	21.0	17.2
HC85-6611		16.3	19.6	20.1	15.2
HC85-6716		15.5	20.3	18.6	15.8
HC85-6724		16.0	19.2	16.5	15.5
HM8597 (Edison)		15.1	17.2	14.5	15.6
HM8890		16.8	20.1	18.5	17.9
HS87-2067		18.1	22.1	19.0	19.3
K1161		14.7	17.9	16.9	16.7
K1164		15.4	18.9	17.1	17.6
LN86-1088		18.1	23.9	21.4	18.9
U85-74089		14.6	16.4	15.9	16.7
U86-62062		17.6	20.7	19.2	16.5

UNIFORM TEST III, 1990

PROTEIN (%)

Strain	Mean 5 Tests	Winterset IA	Urbana IL	Ridgway IL	Lafayette IN	Hoytville OH
Burlison (II)	43.9	43.5	43.0	43.8	45.0	44.1
Linford (SCN)	42.6	42.6	42.5	42.5	43.8	41.5
Flyer (IV)	42.0	42.7	42.8	42.7	42.2	39.5
Hobbit 87 (dt)	40.4	39.6	40.1	40.2	42.6	39.6
Resnik (III)	42.0	42.0	41.5	42.6	42.4	41.6
A87-296011	40.7	40.7	40.3	40.4	41.7	40.3
A88-221020	40.5	40.5	39.8	40.5	42.1	39.5
HC84-2612	39.1	39.0	38.8	39.5	40.0	38.1
HC85-164	40.2	40.1	39.8	40.7	40.8	39.6
HC85-477	40.0	40.0	39.0	40.0	40.4	40.5
HC85-602	40.9	41.0	40.5	41.7	41.2	40.0
HC85-604	40.4	40.4	40.4	41.2	40.6	39.6
HC85-606	40.7	40.0	40.9	41.6	40.7	40.5
HC85-607	40.1	39.3	39.9	40.8	40.2	40.3
HC85-618	40.6	41.7	40.6	41.1	40.6	39.1
HC85-690	40.6	40.0	41.5	41.9	41.7	37.7
HC85-1440	40.0	40.3	40.2	39.8	41.0	38.7
HC85-6500	40.3	41.3	40.6	39.8	40.4	39.4
HC85-6577	40.8	40.8	41.5	40.7	40.9	40.2
HC85-6611	41.0	41.0	41.1	41.0	41.6	40.3
HC85-6716	40.2	39.7	41.1	40.7	41.1	38.4
HC85-6724	41.6	41.6	41.5	42.1	43.1	39.9
HM8597 (Edison)	41.1	40.8	41.3	41.8	41.3	40.3
HM8890	42.1	41.8	41.4	42.6	43.5	41.1
HS87-2067	39.8	39.1	39.4	39.5	41.2	39.8
K1161	42.0	41.4	41.6	43.3	43.0	40.5
K1164	42.1	42.2	42.3	41.8	43.1	41.0
LN86-1088	39.4	41.2	38.3	39.0	40.5	37.8
U85-74089	42.2	42.0	42.7	43.6	42.4	40.3
U86-62062	44.5	44.3	43.5	44.7	45.8	44.3

UNIFORM TEST III, 1990

OIL (%)

Strain	Mean 5 Tests	Winterset IA	Urbana IL	Ridgway IL	Lafayette IN	Hoytville OH
Burlison (II)	19.3	19.5	20.2	19.6	18.9	18.5
Linford (SCN)	20.2	20.0	20.4	20.9	19.3	20.3
Flyer (IV)	20.9	20.5	20.4	21.1	20.9	21.8
Hobbit 87 (dt)	21.7	22.0	22.0	22.1	20.6	21.6
Resnik (III)	20.8	20.5	21.4	21.0	20.9	20.3
A87-296011	21.2	20.9	22.3	22.4	20.1	20.4
A88-221020	21.9	22.2	22.4	22.5	20.8	21.8
HC84-2612	22.1	21.8	22.1	22.4	21.4	22.6
HC85-164	21.5	21.2	21.7	21.9	21.1	21.8
HC85-477	22.0	22.0	22.8	22.3	21.8	21.3
HC85-602	21.6	21.7	22.0	21.4	21.4	21.4
HC85-604	21.6	21.8	21.3	21.6	21.2	22.2
HC85-606	21.8	21.6	22.6	21.6	21.8	21.2
HC85-607	21.5	21.9	21.5	21.8	21.4	20.7
HC85-618	21.3	20.8	21.4	21.5	21.7	21.3
HC85-690	21.2	22.1	20.4	21.0	20.4	22.1
HC85-1440	21.2	21.1	20.9	22.0	20.3	21.6
HC85-6500	21.3	21.0	20.5	22.4	21.1	21.5
HC85-6577	21.2	21.4	21.0	21.8	20.9	20.9
HC85-6611	20.9	21.0	20.8	21.6	20.3	20.9
HC85-6716	21.0	21.2	20.6	21.7	20.0	21.5
HC85-6724	20.8	20.8	21.4	20.7	19.8	21.2
HM8597 (Edison)	20.6	20.5	20.7	20.6	20.4	20.9
HM8890	20.9	21.1	21.5	21.3	20.2	20.5
HS87-2067	23.2	23.9	23.8	24.1	22.5	21.8
K1161	21.0	21.1	21.4	20.9	20.6	21.1
K1164	20.9	20.5	20.9	21.4	20.7	20.8
LN86-1088	21.3	20.9	21.9	21.5	21.0	21.1
U85-74089	20.5	20.9	20.8	20.6	20.4	19.9
U86-62062	20.1	20.2	20.6	20.6	19.4	19.6

PRELIMINARY TEST IIIA, 1990

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
AC89-340001	AP6L2YT(F4)C4	F5	
AC89-340020	AP6L2YT(F4)C4	F5	
AC89-340026	AP6L2YT(F4)C4	F5	
AC89-340027	AP6L2YT(F4)C4	F5	
AC89-341004	AP6L2YTTW(F4)C4	F5	
AC89-341010	AP6L2YTTW(F4)C4	F5	
AC89-341019	AP6L2YTTW(F4)C4	F5	
AC89-341020	AP6L2YTTW(F4)C4	F5	
AC89-341029	AP6L2YTTW(F4)C4	F5	
AC89-341030	AP6L2YTTW(F4)C4	F5	
AM89-244028	Jacques J231 x BSR 101	F5	BSR Resis.
AM89-344001	Pride PEX110 x BSR 201	F5	BSR Resis.
AM89-344013	Jacques J231 x A8	F5	BSR Resis.
AM89-344017	A85-394009 x Asgrow A1937	F5	BSR Resis.
AM89-344018	A85-394009 x Asgrow A1937	F5	BSR Resis.
C1793	Hack x C1643	F5	
C1819	C1664 x C1680	F5	
C1825	C1665 x Pella 86	F5	
HM8977	$PMGTC_3$ (Cycle 3 Rec. Sel.)	S5	Pmg Tolerant?
L84-6112	Williams 82 x L78-4094	F6	Rps1-k, BSR Resis.
L84-6186	Williams 82 x L78-4245	F6	Rps1-k, BSR Resis.
LN86-3357	LN78-257 x Asgrow A3127	F5	Rps1-a
LN87-1456	A80-346029 x LN80-7532	F5	Rps?
LN87-1744	Sherman x LN80-9729	F5	
LN87-2265	Sherman x A8	F5	
LN87-2305	Sherman x A8	F5	
LN87-3684	LNX8115 x A8	F5	Rps?
K1180	Sherman x C1623	F5	
K1181	Sherman x Harper	F5	
K1182	Sherman x Harper	F5	
K1183	Sherman x Asgrow A3659	F5	
K1184	Sherman x Harper	F5	
K1185	Sherman x Harper	F5	

PRELIMINARY TEST IIIA, 1990

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Shattering Score Manhattan	BSR-Ames Plant n %	BSR-Ames Stem n %
Burlison (II)	WTTIBlI	1.5	1.0	100.0	68.0
Flyer (IV)	PTTSBlI	1.8	1.0	100.0	74.8
Resnik (III)	PTTIBlI	2.2	1.0	100.0	75.2
AC89-340001	PTBDBlI	4.5	2.0	100.0	85.6
AC89-340020	WTB+TIBlI	3.2	1.0	100.0	88.0
AC89-340026	WTTSBlI	3.2	2.0	100.0	83.5
AC89-340027	WTTDBlI	2.7	1.0	100.0	39.8
AC89-341004	WGBDYI	1.7	1.0	100.0	62.7
AC89-341010	WGBDBrI	1.7	1.0	90.0	61.2
AC89-341019	WTBIBlI	2.2	1.0	100.0	52.4
AC89-341020	WTBDBlI	2.2	2.0	100.0	70.8
AC89-341029	WGBIBlI	1.7	2.0	100.0	79.1
AC89-341030	PGBIBlI	2.2	2.0	100.0	64.4
AM89-244028	PGTDIbI	1.7	1.0	100.0	49.8
AM89-344001	PGBDIbI	2.0	1.0	50.0	16.2
AM89-344013	WG+TBDBfI	1.7	1.0	100.0	33.7
AM89-344017	PTBDHI	2.3	1.0	50.0	11.4
AM89-344018	PTBDBlI	3.0	1.0	60.0	18.0
C1793	PTTDBl+BrI	1.8	1.0	100.0	73.4
C1819	WGBIYI	1.8	1.0	100.0	61.8
C1825	WTBIBlI	1.8	1.0	90.0	49.4
HM8977	PTBIBlI	1.7	2.0	100.0	59.0
L84-6112	WTBIIbI	1.7	2.0	70.0	21.3
L84-6186	WTTDBrI	2.5	1.0	100.0	21.1
LN86-3357	WGTDBfI	1.8	1.0	90.0	33.9
LN87-1456	PTBIBlI	1.8	1.0	100.0	41.6
LN87-1744	PGBDBfI	1.3	1.0	70.0	33.2
LN87-2265	WGBDBfI	1.3	1.0	70.0	21.2
LN87-2305	WGBDBfI	1.7	2.0	80.0	23.9
LN87-3684	WTBDBrI	2.5	2.0	50.0	11.6
K1180	WGBIBfI	1.8	2.0	80.0	51.5
K1181	WGBSBfI	2.0	2.0	100.0	60.0
K1182	WGBIBfI	2.3	2.0	90.0	47.9
K1183	WTBDBlI	2.7	1.0	100.0	73.8
K1184	WGBIBfI	2.2	1.0	80.0	56.4
K1185	PGBIIbI	1.5	2.0	100.0	76.0

PRELIMINARY TEST IIIA, 1990

DISEASE DATA

Strain	BB Urbana n Score	PR Vickery Phyto. Tolerance	PR Urbana Race 1	PR Ames Race 4	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %
Burlison (II)	4.0	3.0	R	R	R	54	10
Flyer (IV)	4.0	3.8	R	R	R	8	4
Resnik (III)	2.5	4.0	R	R	R	8	18
AC89-340001	2.0	4.0	S	S	S	10	6
AC89-340020	1.5	3.6	H	S	S	18	10
AC89-340026	1.5	4.2	S	S	S	18	4
AC89-340027	1.5	5.6	S	S	S	12	0
AC89-341004	1.5	5.8	S	S	S	12	0
AC89-341010	3.0	4.2	S	S	S	16	8
AC89-341019	2.5	3.8	S	S	S	22	0
AC89-341020	2.0	4.0	S	S	S	26	2
AC89-341029	2.0	5.4	S	S	S	24	0
AC89-341030	2.0	3.6	R	S	S	14	0
AM89-244028	2.0	3.6	R	S	S	24	22
AM89-344001	3.5	5.0	R	S	H	14	6
AM89-344013	2.5	5.2	R	S	S	22	4
AM89-344017	1.5	3.4	R	S	S	26	2
AM89-344018	2.5	3.6	R	H	S	28	8
C1793	4.5	4.8	S	-	S	26	2
C1819	2.0	3.2	R	S	S	28	2
C1825	4.0	3.2	R	R	R	28	2
HM8977	2.0	3.5	H	S	H	6	8
L84-6112	3.5	2.6	R	R	R	16	2
L84-6186	4.0	4.4	R	R	R	14	0
LN86-3357	4.0	4.6	R	S	S	18	0
LN87-1456	3.5	4.4	S	S	S	14	0
LN87-1744	2.0	3.8	S	S	S	24	0
LN87-2265	2.5	4.2	H	S	S	12	2
LN87-2305	3.0	4.2	R	S	S	42	0
LN87-3684	3.5	3.0	R	S	R	14	2
K1180	2.0	4.6	S	S	S	44	8
K1181	1.5	4.8	H	S	S	24	4
K1182	2.0	4.0	S	S	H	22	2
K1183	1.5	5.2	S	S	S	6	4
K1184	3.0	4.6	S	S	S	22	4
K1185	3.0	6.4	S	S	S	20	0

PRELIMINARY TEST IIIA, 1990

REGIONAL SUMMARY

No. of Tests Strain	Yield 10 bu/a	Rank 10 No.	Maturity 7 Date	Lodging 9 Score	Plant Height 10 In.	Seed Quality 8 Score	Seed Size 8 g/100	Composition Protein 4 %	 Oil 4 %
Burlison (II)	54.2	5	-2.7	1.5	31	1.8	18.6	43.1	19.6
Flyer (IV)	54.2	5	5.6	1.5	35	1.7	15.0	42.0	20.9
Resnik (III)	53.1	12	09/24*	1.3	34	1.8	15.3	41.9	20.9
AC89-340001	50.4	26	4.7	2.0	35	1.8	16.1	40.8	20.9
AC89-340020	47.8	32	1.4	2.3	35	1.5	15.6	40.5	21.2
AC89-340026	48.1	31	1.3	2.2	34	1.6	16.4	41.9	21.0
AC89-340027	43.0	36	-0.4	2.1	32	2.0	16.9	42.1	21.2
AC89-341004	45.2	35	2.3	2.2	37	1.7	14.9	41.4	20.4
AC89-341010	50.3	27	3.7	1.9	35	1.6	15.5	40.7	20.5
AC89-341019	50.9	23	4.6	1.8	36	1.7	15.1	38.9	21.8
AC89-341020	49.2	30	1.3	2.4	35	1.7	14.6	40.9	20.3
AC89-341029	47.8	32	3.7	1.6	33	1.5	15.5	38.6	21.7
AC89-341030	49.8	28	2.0	2.4	36	1.5	16.0	41.3	20.4
AM89-244028	52.3	16	-2.3	1.6	36	1.8	17.6	38.8	21.6
AM89-344001	50.5	25	-3.0	1.5	31	1.7	16.1	39.6	21.0
AM89-344013	46.7	34	1.6	1.4	33	2.2	16.4	41.4	20.4
AM89-344017	51.5	22	-2.0	2.1	37	2.2	15.2	41.6	20.5
AM89-344018	49.6	29	-1.4	2.5	37	1.9	16.2	42.1	20.5
C1793	51.9	20	-1.9	1.5	32	1.5	16.0	39.4	21.8
C1819	51.6	21	5.0	1.8	39	1.7	16.9	39.3	21.3
C1825	53.3	11	3.3	1.8	39	1.7	17.5	40.7	21.0
HM8977	52.6	15	-5.3	1.8	33	1.7	17.8	41.4	21.4
L84-6112	50.8	24	6.9	2.1	37	1.6	16.2	42.0	19.7
L84-6186	52.2	18	5.6	2.5	40	1.8	15.0	41.2	20.9
LN86-3357	54.7	2	3.6	1.4	37	1.4	13.7	40.3	20.5
LN87-1456	52.8	13	4.4	2.2	36	1.8	16.2	42.6	20.2
LN87-1744	54.4	3	4.0	2.0	34	1.9	17.8	42.4	20.9
LN87-2265	52.3	16	5.4	1.5	35	1.9	16.1	41.8	20.8
LN87-2305	52.1	19	2.7	1.9	34	1.9	14.8	42.4	20.2
LN87-3684	52.7	14	-1.0	2.0	36	1.9	14.5	41.2	20.5
K1180	55.3	1	2.9	2.1	33	1.8	16.1	41.5	21.3
K1181	54.1	7	6.7	2.1	38	1.8	18.0	40.9	21.3
K1182	53.5	10	2.3	1.8	33	1.6	16.8	41.2	21.4
K1183	54.3	4	6.1	1.4	35	1.8	15.8	40.2	21.2
K1184	53.9	9	3.0	2.2	35	1.6	16.9	40.3	21.5
K1185	54.1	7	7.1	2.1	36	1.7	16.0	39.4	21.0

*126.7 Days After Planting

PRELIMINARY TEST IIIA, 1990

YIELD (bu/a)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	54.2	61.9	50.8	61.9	63.5	57.6
Flyer (IV)	54.2	54.8	46.7	63.2	72.4	54.6
Resnik (III)	53.1	59.6	46.4	58.6	65.1	56.0
AC89-340001	50.4	57.4	46.6	54.4	58.9	56.6
AC89-340020	47.8	55.5	45.1	49.8	57.2	54.2
AC89-340026	48.1	58.5	44.4	51.3	63.0	53.8
AC89-340027	43.0	48.5	41.3	50.4	55.7	48.1
AC89-341004	45.2	52.0	46.1	55.9	59.1	57.4
AC89-341010	50.3	53.6	48.3	58.1	62.9	53.5
AC89-341019	50.9	58.1	50.1	53.3	70.7	56.2
AC89-341020	49.2	58.0	47.5	58.6	68.8	53.6
AC89-341029	47.8	57.4	50.3	51.8	65.0	60.8
AC89-341030	49.8	51.6	45.1	54.4	62.5	54.5
AM89-244028	52.3	66.5	49.8	63.8	67.5	56.4
AM89-344001	50.5	58.2	48.3	58.8	69.8	56.5
AM89-344013	46.7	57.2	46.7	58.2	64.6	48.6
AM89-344017	51.5	57.8	50.8	60.9	67.2	54.1
AM89-344018	49.6	52.7	47.1	54.8	64.9	50.9
C1793	51.9	63.4	46.2	66.0	75.7	58.0
C1819	51.6	50.2	45.9	55.3	67.4	57.8
C1825	53.3	55.2	47.8	57.7	73.4	53.6
HM8977	52.6	56.2	49.6	58.9	68.2	50.7
L84-6112	50.8	53.0	44.4	58.0	66.0	52.8
L84-6186	52.2	58.7	41.4	55.3	70.0	54.3
LN86-3357	54.7	56.7	46.4	61.5	84.1	58.0
LN87-1456	52.8	52.6	46.8	64.5	67.1	57.7
LN87-1744	54.4	56.6	50.4	55.5	65.5	56.8
LN87-2265	52.3	55.3	45.8	52.8	69.3	56.1
LN87-2305	52.1	56.1	46.0	51.8	69.3	56.7
LN87-3684	52.7	54.3	44.1	63.9	64.9	60.5
K1180	55.3	60.9	50.0	57.6	70.9	59.7
K1181	54.1	57.6	49.0	58.5	68.6	57.3
K1182	53.5	60.9	53.3	59.5	56.4	59.3
K1183	54.3	57.2	48.7	69.6	74.0	59.8
K1184	53.9	57.2	47.6	63.1	61.6	56.9
K1185	54.1	58.9	49.7	59.2	67.2	60.6
C.V. (%)		5.2	4.4	9.0	8.3	4.5
L.S.D. (5%)		5.9	4.1	ns	11.3	5.1
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIIA, 1990

YIELD (bu/a)

Strain	Columbia MO	Falls City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	47.3	40.5	46.6	53.3	58.5
Flyer (IV)	43.7	44.7	45.8	45.4	70.5
Resnik (III)	46.8	44.7	43.6	45.7	64.9
AC89-340001	47.1	47.5	45.3	27.0	63.5
AC89-340020	41.9	43.5	45.3	35.0	50.9
AC89-340026	44.5	40.1	47.2	30.6	47.4
AC89-340027	37.0	39.9	39.7	24.5	44.9
AC89-341004	42.1	39.2	43.6	20.6	36.2
AC89-341010	42.3	43.2	45.0	34.5	61.7
AC89-341019	46.2	42.6	47.0	38.1	46.4
AC89-341020	42.6	41.4	42.1	41.1	37.9
AC89-341029	46.4	49.1	46.0	19.0	31.9
AC89-341030	43.9	42.6	41.0	38.0	64.2
AM89-244028	38.1	35.9	47.4	37.6	60.4
AM89-344001	40.5	36.6	45.2	26.1	65.4
AM89-344013	35.1	37.1	40.4	18.9	60.0
AM89-344017	40.7	42.3	47.6	34.5	58.9
AM89-344018	50.7	36.7	44.5	27.6	65.6
C1793	46.1	44.0	44.7	28.6	46.2
C1819	37.0	49.0	43.5	39.0	70.8
C1825	41.0	43.6	42.5	49.1	69.1
HM8977	41.4	42.5	49.1	50.4	59.4
L84-6112	41.6	39.4	40.1	41.1	71.2
L84-6186	41.2	37.3	39.7	53.8	70.2
LN86-3357	42.4	40.1	42.0	41.7	73.6
LN87-1456	45.5	46.2	46.4	32.0	68.7
LN87-1744	50.2	44.0	51.8	43.8	68.9
LN87-2265	40.8	42.6	44.2	44.3	72.0
LN87-2305	43.8	44.8	42.1	44.4	65.9
LN87-3684	45.2	39.9	38.9	46.6	68.4
K1180	46.8	49.6	51.8	43.9	61.4
K1181	44.8	44.7	47.1	39.3	74.1
K1182	42.8	46.3	46.5	42.6	67.0
K1183	46.8	49.9	44.2	31.2	61.3
K1184	48.5	51.5	50.6	37.1	64.6
K1185	51.8	49.9	48.0	28.0	68.1
C.V. (%)	10.7	7.8	4.8	18.0	11.0
L.S.D. (5%)	9.5	6.8	4.4	14.0	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, 1990

YIELD RANK

Strain	Yield Rank	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	5	3	2	8	27	11
Flyer (IV)	5	27	20	6	5	23
Resnik (III)	12	6	23	15	22	22
AC89-340001	26	15	22	28	33	17
AC89-340020	32	24	30	36	34	26
AC89-340026	31	9	32	34	28	28
AC89-340027	36	36	36	35	36	36
AC89-341004	35	33	26	23	32	12
AC89-341010	27	29	13	19	29	31
AC89-341019	23	11	6	30	7	20
AC89-341020	30	12	17	15	12	29
AC89-341029	32	15	5	32	23	1
AC89-341030	28	34	30	28	30	24
AM89-244028	16	1	8	5	15	19
AM89-344001	25	10	13	14	9	18
AM89-344013	34	17	20	18	26	35
AM89-344017	22	13	2	10	17	27
AM89-344018	29	31	18	27	24	33
C1793	20	2	25	2	2	7
C1819	21	35	28	25	16	9
C1825	11	26	15	21	4	29
HM8977	15	22	10	13	14	34
L84-6112	24	30	32	20	20	32
L84-6186	18	8	35	25	8	25
LN86-3357	2	20	23	9	1	7
LN87-1456	13	32	19	3	19	10
LN87-1744	3	21	4	24	21	15
LN87-2265	16	25	29	31	10	21
LN87-2305	19	23	27	32	10	16
LN87-3684	14	28	34	4	24	3
K1180	1	4	7	22	6	5
K1181	7	14	11	17	13	13
K1182	10	4	1	11	35	6
K1183	4	17	12	1	3	4
K1184	9	17	16	7	31	14
K1185	7	7	9	12	17	2

PRELIMINARY TEST IIIA, 1990

YIELD RANK

Strain	Columbia MO	Falls City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	5	25	11	2	28
Flyer (IV)	19	11	15	7	6
Resnik (III)	7	11	24	6	17
AC89-340001	6	7	16	31	20
AC89-340020	25	17	16	22	29
AC89-340026	16	26	8	27	30
AC89-340027	34	28	34	33	33
AC89-341004	24	31	24	34	35
AC89-341010	23	18	19	23	21
AC89-341019	11	19	10	18	31
AC89-341020	21	24	28	15	34
AC89-341029	10	5	14	35	36
AC89-341030	17	19	31	19	19
AM89-244028	33	36	7	20	24
AM89-344001	32	35	18	32	16
AM89-344013	36	33	32	36	25
AM89-344017	31	23	6	23	27
AM89-344018	2	34	21	30	15
C1793	12	14	20	28	32
C1819	35	6	26	17	5
C1825	29	16	27	4	8
HM8977	27	22	4	3	26
L84-6112	26	30	33	14	4
L84-6186	28	32	34	1	7
LN86-3357	22	26	30	13	2
LN87-1456	13	9	13	25	10
LN87-1744	3	14	1	11	9
LN87-2265	30	19	23	9	3
LN87-2305	18	10	28	8	14
LN87-3684	14	28	36	5	11
K1180	7	4	1	10	22
K1181	15	11	9	16	1
K1182	20	8	12	12	13
K1183	7	2	22	26	23
K1184	4	1	3	21	18
K1185	1	2	5	29	12

PRELIMINARY TEST IIIA, 1990

MATURITY (date)

Strain	Mean 7 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	-2.7		-2	-4	-3	-7
Flyer (IV)	5.6		6	6	4	5
Resnik (III)	09/24		09/22	09/16	09/30	09/24
AC89-340001	4.7		4	4	2	5
AC89-340020	1.4		2	2	0	2
AC89-340026	1.3		2	2	0	-1
AC89-340027	-0.4		0	-2	-2	-1
AC89-341004	2.3		2	2	1	1
AC89-341010	3.7		2	3	4	2
AC89-341019	4.6		3	3	3	4
AC89-341020	1.3		0	3	-1	0
AC89-341029	3.7		2	2	1	5
AC89-341030	2.0		0	2	1	1
AM89-244028	-2.3		0	-3	-2	-7
AM89-344001	-3.0		-4	-3	-2	-6
AM89-344013	1.6		1	2	2	1
AM89-344017	-2.0		-2	-1	-3	-5
AM89-344018	-1.4		-4	-2	-2	-2
C1793	-1.9		-2	0	-2	-2
C1819	5.0		4	4	6	2
C1825	3.3		3	3	3	2
HM8977	-5.3		-6	-6	-6	-8
L84-6112	6.9		6	7	7	5
L84-6186	5.6		4	6	4	5
LN86-3357	3.6		4	4	2	1
LN87-1456	4.4		3	7	3	2
LN87-1744	4.0		3	5	5	3
LN87-2265	5.4		4	5	6	4
LN87-2305	2.7		1	3	6	1
LN87-3684	-1.0		-4	1	1	3
K1180	2.9		2	2	3	3
K1181	6.7		6	7	5	6
K1182	2.3		1	2	2	2
K1183	6.1		6	7	5	6
K1184	3.0		2	4	2	3
K1185	7.1		6	8	6	6
Date Planted	05/20		05/31	05/01	05/23	05/29
Days to Mature	126.7		114	138	130	118

PRELIMINARY TEST IIIA, 1990

MATURITY (date)

Strain	Columbia MO	Falls City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)			1	0	-4
Flyer (IV)			5	3	10
Resnik (III)			09/23	10/07	09/19
AC89-340001			5	4	9
AC89-340020			-1	0	5
AC89-340026			3	0	3
AC89-340027			-1	0	3
AC89-341004			1	4	5
AC89-341010			2	3	10
AC89-341019			4	4	11
AC89-341020			1	0	6
AC89-341029			1	4	11
AC89-341030			-2	3	9
AM89-244028			-1	0	-3
AM89-344001			-2	-4	0
AM89-344013			2	-1	4
AM89-344017			1	-4	0
AM89-344018			1	-2	1
C1793			-2	-1	-4
C1819			5	3	11
C1825			3	1	8
HM8977			-3	-2	-6
L84-6112			6	4	13
L84-6186			6	3	11
LN86-3357			4	3	7
LN87-1456			5	2	9
LN87-1744			3	2	7
LN87-2265			4	6	9
LN87-2305			-1	1	8
LN87-3684			-3	-3	-2
K1180			1	2	7
K1181			7	6	10
K1182			1	2	6
K1183			6	3	10
K1184			3	1	6
K1185			7	6	11
Date Planted			05/28	06/01	05/01
Days to Mature			118	128	141

PRELIMINARY TEST IIIA, 1990

LODGING (score)

Strain	Mean 9 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	1.5	1.5	1.1	1.0	2.8	2.0
Flyer (IV)	1.5	1.4	1.3	1.5	2.0	2.0
Resnik (III)	1.3	1.3	1.1	1.0	2.3	1.0
AC89-340001	2.0	3.8	1.3	2.0	3.5	2.0
AC89-340020	2.3	3.8	1.6	3.5	3.3	2.0
AC89-340026	2.2	3.2	1.3	3.0	3.5	2.0
AC89-340027	2.1	3.8	1.3	2.0	3.8	2.0
AC89-341004	2.2	4.1	1.9	2.5	3.3	3.0
AC89-341010	1.9	3.4	1.4	1.5	3.0	2.5
AC89-341019	1.8	3.3	1.3	2.0	2.8	2.5
AC89-341020	2.4	3.4	1.6	4.5	3.8	3.0
AC89-341029	1.6	3.3	1.3	1.5	2.0	2.0
AC89-341030	2.4	4.0	1.6	4.0	4.0	2.5
AM89-244028	1.6	2.5	1.5	1.0	2.5	2.0
AM89-344001	1.5	2.8	1.1	1.0	2.0	2.0
AM89-344013	1.4	2.4	1.2	1.0	2.3	1.5
AM89-344017	2.1	3.7	2.0	2.5	3.5	2.5
AM89-344018	2.5	4.0	2.5	2.5	3.8	3.0
C1793	1.5	2.1	1.1	1.0	2.8	2.0
C1819	1.8	3.0	1.2	1.0	3.0	2.0
C1825	1.8	2.6	1.3	2.0	3.0	2.0
HM8977	1.8	2.1	1.2	1.0	3.0	2.0
L84-6112	2.1	3.6	1.3	2.5	2.8	3.0
L84-6186	2.5	4.0	1.6	3.5	3.8	3.0
LN86-3357	1.4	1.3	1.1	1.0	2.0	2.0
LN87-1456	2.2	3.6	1.6	3.0	3.0	2.5
LN87-1744	2.0	2.9	1.4	2.0	2.0	2.5
LN87-2265	1.5	2.3	1.2	1.0	2.5	1.5
LN87-2305	1.9	3.0	1.3	2.0	2.5	2.5
LN87-3684	2.0	3.3	1.3	2.0	2.5	3.0
K1180	2.1	2.7	1.4	4.0	3.5	2.5
K1181	2.1	3.1	1.6	2.5	3.8	2.0
K1182	1.8	2.2	1.3	2.5	2.8	2.0
K1183	1.4	1.5	1.2	1.0	2.8	2.0
K1184	2.2	3.1	1.4	3.5	3.5	3.0
K1185	2.1	3.7	1.5	3.2	3.5	2.0

PRELIMINARY TEST IIIA, 1990

LODGING (score)

Strain	Columbia MO	Falls City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)		1.0	1.0	1.8	1.3
Flyer (IV)		1.0	1.0	1.6	1.5
Resnik (III)		1.0	1.0	1.6	1.0
AC89-340001		1.0	1.0	1.6	1.8
AC89-340020		1.0	1.0	1.6	3.0
AC89-340026		1.0	1.0	1.6	3.0
AC89-340027		1.0	1.0	1.6	2.8
AC89-341004		1.0	1.0	1.6	1.0
AC89-341010		1.0	1.0	1.5	1.5
AC89-341019		1.0	1.0	1.6	1.0
AC89-341020		1.0	1.0	2.0	1.5
AC89-341029		1.0	1.0	1.4	1.0
AC89-341030		1.0	1.0	1.6	2.0
AM89-244028		1.0	1.0	1.6	1.0
AM89-344001		1.0	1.0	1.4	1.0
AM89-344013		1.0	1.0	1.5	1.0
AM89-344017		1.0	1.0	1.6	1.5
AM89-344018		1.0	1.0	1.7	3.3
C1793		1.0	1.0	1.5	1.0
C1819		1.0	1.0	1.8	1.8
C1825		1.0	1.0	1.6	1.5
HM8977		1.0	1.0	1.7	3.0
L84-6112		1.0	1.0	1.6	2.5
L84-6186		1.0	1.0	1.7	3.0
LN86-3357		1.0	1.0	1.6	1.3
LN87-1456		1.0	1.0	1.6	2.3
LN87-1744		1.0	1.0	1.6	3.3
LN87-2265		1.0	1.0	1.5	1.3
LN87-2305		1.0	1.0	1.7	2.5
LN87-3684		1.0	1.0	1.8	2.0
K1180		1.0	1.0	1.6	1.5
K1181		1.0	1.0	1.5	2.0
K1182		1.0	1.0	1.6	1.5
K1183		1.0	1.0	1.5	1.0
K1184		1.0	1.0	1.5	1.8
K1185		1.0	1.0	1.5	1.5

PRELIMINARY TEST IIIA, 1990

PLANT HEIGHT (inches)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	31	37	32	32	32	35
Flyer (IV)	35	43	34	38	37	40
Resnik (III)	34	41	36	36	35	37
AC89-340001	35	44	38	42	35	36
AC89-340020	35	42	38	38	35	37
AC89-340026	34	43	36	39	33	38
AC89-340027	32	40	33	32	39	35
AC89-341004	37	44	40	43	38	39
AC89-341010	35	42	36	41	35	40
AC89-341019	36	45	40	41	39	40
AC89-341020	35	43	37	45	34	38
AC89-341029	33	44	36	36	37	41
AC89-341030	36	42	37	41	37	40
AM89-244028	36	48	36	39	35	39
AM89-344001	31	40	32	32	34	35
AM89-344013	33	45	37	33	37	34
AM89-344017	37	46	39	41	38	39
AM89-344018	37	47	38	40	36	42
C1793	32	39	32	35	35	38
C1819	39	44	40	43	40	40
C1825	39	45	38	43	39	38
HM8977	33	36	33	33	31	40
L84-6112	37	44	40	40	37	40
L84-6186	40	48	40	44	41	41
LN86-3357	37	48	37	39	40	42
LN87-1456	36	44	39	40	38	40
LN87-1744	34	41	33	37	36	36
LN87-2265	35	42	35	38	38	37
LN87-2305	34	40	36	39	34	39
LN87-3684	36	42	35	40	35	39
K1180	33	39	34	35	36	39
K1181	38	45	38	42	40	42
K1182	33	41	36	39	35	35
K1183	35	43	36	40	40	41
K1184	35	40	36	41	34	39
K1185	36	42	36	41	36	39

PRELIMINARY TEST IIIA, 1990

PLANT HEIGHT (inches)

Strain	Columbia MO	Falls City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	22	25	37	31	25
Flyer (IV)	27	30	40	34	31
Resnik (III)	28	30	37	32	30
AC89-340001	32	31	41	22	31
AC89-340020	28	28	43	27	30
AC89-340026	28	28	42	23	28
AC89-340027	25	27	36	26	27
AC89-341004	32	33	45	25	27
AC89-341010	29	31	44	24	30
AC89-341019	29	30	47	28	24
AC89-341020	30	29	42	27	29
AC89-341029	27	26	42	16	24
AC89-341030	28	28	40	30	33
AM89-244028	25	27	46	30	31
AM89-344001	25	25	35	23	24
AM89-344013	27	25	35	28	24
AM89-344017	32	32	45	27	29
AM89-344018	34	30	44	27	33
C1793	25	27	38	28	25
C1819	28	33	49	32	40
C1825	29	32	46	40	37
HM8977	25	29	39	28	33
L84-6112	25	30	39	36	40
L84-6186	31	31	48	38	38
LN86-3357	28	32	42	28	34
LN87-1456	29	29	42	28	34
LN87-1744	31	25	37	29	31
LN87-2265	28	27	41	29	32
LN87-2305	27	27	40	25	33
LN87-3684	29	29	40	31	35
K1180	26	29	39	26	27
K1181	28	32	44	28	36
K1182	26	26	39	25	31
K1183	28	31	39	25	31
K1184	30	32	43	25	33
K1185	29	30	42	29	33

PRELIMINARY TEST IIIA, 1990

SEED QUALITY (score)

Strain	Mean 8 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	1.8	2.0	1.5	1.1	1.0	3.0
Flyer (IV)	1.7	2.0	2.0	1.3	1.0	2.0
Resnik (III)	1.8	2.0	2.0	1.3	1.5	3.0
AC89-340001	1.8	2.5	2.0	1.1	1.5	3.0
AC89-340020	1.5	2.5	1.0	1.3	1.0	2.0
AC89-340026	1.6	1.5	2.0	1.1	1.5	2.0
AC89-340027	2.0	2.0	2.0	1.5	1.0	4.0
AC89-341004	1.7	1.5	1.5	1.5	1.0	3.0
AC89-341010	1.6	2.0	1.5	1.1	1.0	3.0
AC89-341019	1.7	2.0	1.0	1.3	1.5	3.0
AC89-341020	1.7	2.0	2.0	1.5	1.5	2.0
AC89-341029	1.5	1.5	1.0	1.1	1.0	3.0
AC89-341030	1.5	1.5	1.0	1.1	1.0	3.0
AM89-244028	1.8	1.5	1.5	1.5	1.5	3.0
AM89-344001	1.7	1.5	1.5	1.6	1.0	3.0
AM89-344013	2.2	2.5	2.0	1.5	2.0	3.0
AM89-344017	2.2	2.5	2.5	1.3	1.5	4.0
AM89-344018	1.9	2.0	2.0	1.3	1.0	4.0
C1793	1.5	1.5	1.5	1.3	1.5	2.0
C1819	1.7	1.5	1.0	1.1	1.0	3.0
C1825	1.7	1.5	1.5	1.3	1.5	3.0
HM8977	1.7	1.5	1.5	1.1	1.5	3.0
L84-6112	1.6	1.5	1.5	1.1	1.5	2.0
L84-6186	1.8	2.0	1.5	1.1	1.0	3.0
LN86-3357	1.4	1.0	1.0	1.3	1.0	2.0
LN87-1456	1.8	1.5	1.5	1.1	1.5	3.0
LN87-1744	1.9	2.0	1.5	1.7	1.5	3.0
LN87-2265	1.9	2.0	2.0	1.3	1.5	3.0
LN87-2305	1.9	2.0	2.0	1.3	1.5	4.0
LN87-3684	1.9	1.5	2.0	1.5	1.5	3.0
K1180	1.8	2.0	1.5	1.3	1.5	3.0
K1181	1.8	2.0	1.5	1.5	1.0	3.0
K1182	1.6	1.5	1.5	1.3	1.5	2.0
K1183	1.8	1.5	1.5	1.3	1.5	3.0
K1184	1.6	2.0	2.0	1.3	1.5	2.0
K1185	1.7	1.5	1.5	1.5	1.0	3.0

PRELIMINARY TEST IIIA, 1990

SEED QUALITY (score)

Strain	Columbia MO	Falls City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)		2.0	2.0	1.5	
Flyer (IV)		2.0	1.5	1.4	
Resnik (III)		2.0	1.0	1.3	
AC89-340001		2.0	1.0	1.3	
AC89-340020		2.0	1.0	1.3	
AC89-340026		2.0	1.0	1.3	
AC89-340027		2.0	2.0	1.4	
AC89-341004		2.0	1.5	1.3	
AC89-341010		1.5	1.0	1.4	
AC89-341019		2.0	1.5	1.5	
AC89-341020		2.0	1.0	1.4	
AC89-341029		2.0	1.0	1.3	
AC89-341030		2.0	1.0	1.4	
AM89-244028		3.0	1.0	1.6	
AM89-344001		2.5	1.0	1.5	
AM89-344013		3.0	2.0	1.6	
AM89-344017		2.0	2.0	1.5	
AM89-344018		2.0	1.5	1.6	
C1793		2.0	1.0	1.4	
C1819		2.5	2.0	1.8	
C1825		2.0	1.5	1.5	
HM8977		2.0	1.0	1.7	
L84-6112		2.0	1.0	1.8	
L84-6186		2.0	2.0	1.5	
LN86-3357		2.0	1.5	1.3	
LN87-1456		2.0	2.0	1.4	
LN87-1744		2.0	2.0	1.4	
LN87-2265		2.0	2.0	1.7	
LN87-2305		2.0	1.0	1.4	
LN87-3684		2.5	1.5	1.8	
K1180		2.0	1.5	1.3	
K1181		2.0	2.0	1.3	
K1182		2.0	2.0	1.3	
K1183		2.0	2.0	1.4	
K1184		2.0	1.0	1.2	
K1185		2.0	1.5	1.5	

PRELIMINARY TEST IIIA, 1990

SEED SIZE (g/100)

Strain	Mean 8 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	18.6	20.1	19.0	16.5	21.2	18.8
Flyer (IV)	15.0	15.4	14.4	14.5	17.0	15.3
Resnik (III)	15.3	15.4	15.2	14.0	17.3	15.5
AC89-340001	16.1	17.8	16.3	15.3	17.1	16.6
AC89-340020	15.6	18.6	15.3	14.3	18.0	16.4
AC89-340026	16.4	18.2	15.2	15.9	18.9	16.8
AC89-340027	16.9	19.4	16.1	15.7	20.3	18.1
AC89-341004	14.9	15.6	14.4	13.6	16.3	17.0
AC89-341010	15.5	16.0	14.6	16.5	16.7	15.0
AC89-341019	15.1	16.4	15.0	13.0	18.0	15.8
AC89-341020	14.6	14.0	13.4	13.8	16.9	15.5
AC89-341029	15.5	18.0	15.0	14.4	17.6	14.8
AC89-341030	16.0	17.8	15.8	14.2	19.1	17.6
AM89-244028	17.6	18.4	16.4	17.5	20.2	17.2
AM89-344001	16.1	16.8	15.3	15.5	19.1	15.9
AM89-344013	16.4	16.4	14.8	16.1	18.8	17.0
AM89-344017	15.2	15.1	14.3	13.4	17.1	16.6
AM89-344018	16.2	16.4	16.4	14.0	18.9	15.4
C1793	16.0	16.0	14.2	15.1	19.2	16.3
C1819	16.9	17.1	15.5	14.9	20.7	17.9
C1825	17.5	19.2	17.1	16.2	21.8	17.3
HM8977	17.8	18.6	17.4	17.3	20.9	16.0
L84-6112	16.2	17.9	16.8	14.1	19.0	17.1
L84-6186	15.0	15.8	14.2	14.6	17.9	16.6
LN86-3357	13.7	14.1	12.6	13.6	15.8	15.4
LN87-1456	16.2	17.2	16.2	16.7	19.4	16.8
LN87-1744	17.8	20.2	16.6	15.6	21.1	18.7
LN87-2265	16.1	17.6	14.2	14.1	19.3	18.5
LN87-2305	14.8	15.8	14.1	13.3	17.7	15.7
LN87-3684	14.5	15.1	13.6	13.8	16.1	15.1
K1180	16.1	18.7	15.4	14.4	18.2	17.7
K1181	18.0	18.0	17.5	17.0	21.0	19.7
K1182	16.8	18.2	15.6	15.9	19.0	18.1
K1183	15.8	16.1	14.8	15.3	18.5	16.9
K1184	16.9	18.2	15.4	16.8	19.7	18.6
K1185	16.0	18.0	15.1	15.6	17.5	17.0

PRELIMINARY TEST IIIA, 1990

SEED SIZE (g/100)

Strain	Columbia MO	Falls City NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)		17.2	17.5	18.6	
Flyer (IV)		13.0	14.3	16.4	
Resnik (III)		12.9	13.9	18.0	
AC89-340001		14.2	14.8	16.6	
AC89-340020		12.4	13.1	16.4	
AC89-340026		13.0	15.7	17.5	
AC89-340027		13.7	15.6	16.5	
AC89-341004		12.2	14.2	16.0	
AC89-341010		13.7	14.6	16.5	
AC89-341019		12.4	13.8	16.2	
AC89-341020		12.4	15.1	15.3	
AC89-341029		14.5	14.5	15.4	
AC89-341030		13.3	14.4	15.8	
AM89-244028		15.9	16.4	18.7	
AM89-344001		15.9	15.2	15.0	
AM89-344013		15.2	14.6	18.0	
AM89-344017		13.4	14.8	16.8	
AM89-344018		14.7	16.0	17.6	
C1793		15.1	13.9	18.0	
C1819		15.5	16.0	17.6	
C1825		15.1	17.0	16.1	
HM8977		15.8	16.9	19.7	
L84-6112		13.2	14.6	17.1	
L84-6186		12.4	14.3	14.3	
LN86-3357		11.3	12.2	14.8	
LN87-1456		12.9	14.2	16.4	
LN87-1744		15.8	17.3	16.7	
LN87-2265		14.4	15.2	15.5	
LN87-2305		13.0	14.0	14.6	
LN87-3684		15.0	13.2	14.4	
K1180		14.4	14.6	15.3	
K1181		16.6	17.3	16.7	
K1182		15.4	15.2	16.8	
K1183		13.8	14.8	16.5	
K1184		15.7	14.5	16.3	
K1185		15.2	15.3	14.3	

PRELIMINARY TEST IIIA, 1990

PROTEIN (%)

Strain	Mean 4 Tests	Winterset IA	Urbana IL	Lafayette IN	Hoytville OH
Burlison (II)	43.1	43.1	42.3	44.6	42.5
Flyer (IV)	42.0	41.4	42.4	42.9	41.4
Resnik (III)	41.9	42.3	41.8	41.8	41.5
AC89-340001	40.8	40.3	40.9	42.7	39.1
AC89-340020	40.5	40.5	40.5	41.7	39.2
AC89-340026	41.9	41.4	42.1	44.2	39.7
AC89-340027	42.1	42.8	42.1	42.8	40.5
AC89-341004	41.4	42.4	41.0	42.5	39.5
AC89-341010	40.7	39.9	40.4	42.2	40.1
AC89-341019	38.9	38.0	39.5	40.1	38.1
AC89-341020	40.9	40.8	41.1	42.0	39.6
AC89-341029	38.6	38.8	38.7	40.3	36.5
AC89-341030	41.3	41.5	41.8	42.2	39.6
AM89-244028	38.8	38.9	37.8	40.3	38.1
AM89-344001	39.6	39.5	39.0	40.4	39.6
AM89-344013	41.4	41.8	40.8	42.8	40.0
AM89-344017	41.6	42.3	40.9	43.0	40.1
AM89-344018	42.1	43.0	40.5	44.1	40.9
C1793	39.4	39.2	39.6	40.1	38.6
C1819	39.3	37.7	40.0	41.5	38.1
C1825	40.7	41.0	41.2	43.0	37.7
HM8977	41.4	42.3	40.8	42.7	39.8
L84-6112	42.0	41.6	41.0	44.6	40.8
L84-6186	41.2	41.5	41.8	42.6	38.9
LN86-3357	40.3	40.2	40.3	41.1	39.7
LN87-1456	42.6	43.0	42.7	44.4	40.1
LN87-1744	42.4	42.5	43.0	44.3	39.9
LN87-2265	41.8	41.3	42.3	43.2	40.2
LN87-2305	42.4	42.0	43.1	43.8	40.8
LN87-3684	41.2	40.5	41.8	42.1	40.2
K1180	41.5	41.1	42.1	43.3	39.5
K1181	40.9	40.7	42.1	42.8	38.0
K1182	41.2	39.8	41.0	43.8	40.1
K1183	40.2	40.3	39.6	41.7	39.2
K1184	40.3	40.3	40.8	42.2	37.7
K1185	39.4	39.1	40.5	41.7	36.1

PRELIMINARY TEST IIIA, 1990

OIL (%)

Strain	Mean 4 Tests	Winterset IA	Urbana IL	Lafayette IN	Hoytville OH
Burlison (II)	19.6	20.0	20.5	18.7	19.3
Flyer (IV)	20.9	21.4	21.0	20.2	20.8
Resnik (III)	20.9	20.9	21.3	20.8	20.7
AC89-340001	20.9	21.8	21.7	20.5	19.7
AC89-340020	21.2	21.7	21.1	20.5	21.3
AC89-340026	21.0	21.3	21.0	20.4	21.1
AC89-340027	21.2	21.1	21.6	21.2	20.8
AC89-341004	20.4	19.9	21.1	19.8	20.7
AC89-341010	20.5	20.6	21.4	19.3	20.7
AC89-341019	21.8	22.4	22.2	20.9	21.9
AC89-341020	20.3	20.7	20.6	20.2	19.7
AC89-341029	21.7	21.7	22.5	21.0	21.4
AC89-341030	20.4	20.3	20.9	19.5	20.9
AM89-244028	21.6	21.6	22.0	21.0	21.6
AM89-344001	21.0	21.2	21.4	20.3	20.9
AM89-344013	20.4	20.1	20.9	19.6	21.0
AM89-344017	20.5	20.0	20.8	20.4	20.9
AM89-344018	20.5	20.7	21.4	19.5	20.4
C1793	21.8	22.0	22.2	21.4	21.6
C1819	21.3	22.4	21.9	20.0	21.0
C1825	21.0	21.3	21.4	19.6	21.5
HM8977	21.4	21.1	22.1	21.1	21.3
L84-6112	19.7	20.4	20.9	18.4	19.2
L84-6186	20.9	21.3	21.4	20.5	20.3
LN86-3357	20.5	20.9	21.3	20.5	19.2
LN87-1456	20.2	20.6	21.1	18.9	20.0
LN87-1744	20.9	20.9	21.2	19.9	21.5
LN87-2265	20.8	21.3	21.3	20.3	20.3
LN87-2305	20.2	20.3	20.0	19.5	21.1
LN87-3684	20.5	21.3	20.5	19.9	20.1
K1180	21.3	21.5	21.5	20.4	21.9
K1181	21.3	21.4	21.4	20.7	21.5
K1182	21.4	22.1	21.7	20.1	21.5
K1183	21.2	21.3	22.4	20.9	20.1
K1184	21.5	22.0	22.0	20.6	21.4
K1185	21.0	21.6	21.5	20.3	20.5

PRELIMINARY TEST IIIB, 1990

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
HM8998	A79-136012 x Asgrow A3127	F6	
HS88-4912	Winchester x A83-271027	F5	Res to Pmg Race 4
HS88-4913	Winchester x A83-271027	F5	Res to Pmg Race 4
HS88-4970	Asgrow A2943 x A83-271027	F5	
HS88-4988	Winchester x A83-271027	F5	Res to Pmg Race 4
U893203	Hobbit x U76168	F5	
U893205	Winchester x A80-244036	F5	
U893217	Sherman x Harper	F5	
U893229	A80-345005 x Century 84	F5	
U893405	Winchester x HC79-478	F5	
U893809	Hobbit x Platte	F5	
U893915	Hack x Mead "PR"	F5	
U893925	Hack x Mead "PR"	F5	
U893937	Winchester x K1075	F5	
Hobbit 87 (dtl)	Hobbit (6) x Williams 82	BC5 F3	dtl Rps1-k
C1788	C1643 x Ripley	F5	dtl
C1789	C1643 x Ripley	F5	dtl
C1798	C1641 x C1651	F5	dtl
HC85-366	HC78-353 x Hobbit	F5	dtl
HC85-603	Sprite x Asgrow A3127	F5	dtl
HC85-744	HC78-676 x Asgrow A3127	F5	dtl
HC85 1848	Pixie x [Elf(5) x Williams 82]	F5	dtl
HC85-1901	HC78-353 x Sprite	F5	dtl
HC85-2125	Pixie x L77-1836	F5	dtl
HC85-2132	Pixie x L77-1836	F5	dtl
HC86-554	HC74-634RE x HC78-676	F5	dtl
HC86-4367	Asgrow A3127 x Sprite 87	F5	dtl
HC87-3329	Coker 237 x HC78-676	F5	dtl
HC87-5844	Pixie x HC78-676	F5	dtl
HC87-5848	Pixie x HC78-676	F5	dtl
HC87-6032	HC78-350 x Pella	F5	dtl
U893018	Hobbit x HC78-676	F5	dtl
U893020	Hobbit x HC78-676	F5	dtl
U893032	$SG_1/BC/85\text{-}E_1$*	F5	dtl
U893037	$SG_1/BC/85\text{-}E_1$*	F5	dtl

*$SG_1/NS/84\text{-}RM_3/MS$ x 32 Elite High Yeilding Lines.
See CROP SCI. 25:171-718

PRELIMINARY TEST IIIB, 1990

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Chlorosis Score Ames	Shattering Score Manhattan	BSR-Ames Plant n %	BSR-Ames Stem n %
Burlison (II)	WTTIBlI	1.5	1.0	100.0	86.7
Flyer (IV)	PTTSBlI	2.5	1.0	100.0	78.1
Resnik (III)	PTTIBlI	3.0	1.0	100.0	86.3
HM8998	WTTDBlI	2.8	1.0	100.0	79.7
HS88-4912	WTTIBlI	3.5	1.0	100.0	62.2
HS88-4913	WTTIBlI	2.8	2.0	100.0	78.9
HS88-4970	PTBIBlI	2.5	1.0	100.0	61.9
HS88-4988	WTTIBlI	2.3	1.0	100.0	57.2
U893203	PTBSBlI	1.3	1.0	100.0	51.0
U893205	WG+TTIBlI	1.5	2.0	100.0	48.3
U893217	PTBIBlI	2.2	2.0	100.0	56.1
U893229	WTBDBrI	2.8	2.0	100.0	62.9
U893405	W+PTBIBlI	2.5	2.0	100.0	61.2
U893809	PGBIBfI	1.7	2.0	100.0	80.0
U893915	WTBIBlI	2.7	3.0	100.0	89.0
U893925	W+PGBIBf+IbI	2.3	1.0	100.0	89.1
U893937	WTBDBlI	2.2	1.0	100.0	69.9
Hobbit 87 (dtl)	WTTDBlD	1.5	1.0	90.0	73.8
C1788	PGTIBfD	1.7	1.0	100.0	70.4
C1789	PGBILBfD	1.5	2.0	100.0	75.5
C1798	PTTIBlD	1.2	1.0	100.0	79.5
HC85-366	W+PTTIBrD	2.2	1.0	100.0	89.4
HC85-603	W+PTBDBlD	3.2	1.0	100.0	47.2
HC85-744	WTBIBrD	1.5	1.0	100.0	87.3
HC85 1848	PTBIBlD	2.3	1.0	100.0	83.7
HC85-1901	WTBIBlD	1.7	1.0	100.0	89.4
HC85-2125	PTBIBlD	2.3	1.0	100.0	70.1
HC85-2132	PTBIBlD	2.0	1.0	100.0	82.2
HC86-554	WTTSBrD	1.7	1.0	100.0	63.1
HC86-4367	WTTIBlD	2.2	1.0	100.0	83.4
HC87-3329	PTTIBlD	1.7	1.0	90.0	79.3
HC87-5844	PTTIBrD	1.5	1.0	100.0	67.9
HC87-5848	PTTIBrD	2.5	1.0	90.0	34.2
HC87-6032	PTTIBlD	1.5	1.0	80.0	38.1
U893018	PTBIBlD	1.8	3.0	100.0	79.6
U893020	PTBIBrD	1.5	1.0	100.0	88.6
U893032	PGTDHD	2.2	1.0	50.0	27.0
U893037	WGBIBfI	1.3	1.0	100.0	82.8

PRELIMINARY TEST IIIB, 1990

DISEASE DATA

Strain	BB Urbana n Score	PR Vickery Phyto. Tolerance	PR Urbana Race 1	PR Ames Race 4	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %
Burlison (II)	3.0	3.3	R	R	R	54	10
Flyer (IV)	3.0	3.7	R	R	R	2	4
Resnik (III)	4.0	3.7	R	R	R	8	18
HM8998	2.5	3.3	R	R	H	28	2
HS88-4912	2.5	3.0	R	R	R	6	20
HS88-4913	3.5	4.0	R	R	R	6	16
HS88-4970	3.5	4.0	S	S	H	10	4
HS88-4988	2.5	3.8	R	R	S	18	6
U893203	2.0	4.3	S	S	S	10	10
U893205	2.5	4.0	R	R	R	16	20
U893217	1.5	4.7	S	S	S	8	2
U893229	1.5	3.0	R	S	S	4	28
U893405	1.0	3.0	R	R	R	38	12
U893809	2.5	4.3	R	S	S	12	0
U893915	2.5	3.7	S	S	S	24	8
U893925	3.5	4.0	R	S	S	20	22
U893937	3.0	3.3	R	R	R	0	8
Hobbit 87 (dtl)	2.5	3.7	R	H	R	4	6
C1788	3.0	5.0	S	S	S	0	2
C1789	3.5	4.0	R	H	S	2	0
C1798	3.0	3.8	S	S	S	0	0
HC85-366	2.5	4.3	R	S	S	14	0
HC85-603	2.0	5.0	S	S	S	2	0
HC85-744	2.5	5.0	S	S	S	8	0
HC85 1848	2.0	5.3	R	R	R	0	2
HC85-1901	2.5	4.7	R	S	S	2	0
HC85-2125	2.5	4.7	S	S	S	2	0
HC85-2132	3.0	6.0	S	S	S	0	0
HC86-554	2.5	5.3	S	S	S	6	4
HC86-4367	2.5	3.7	R	R	R	2	0
HC87-3329	3.5	4.3	R	S	S	12	0
HC87-5844	3.0	4.7	S	S	S	8	2
HC87-5848	3.0	4.0	R	S	S	12	4
HC87-6032	2.5	4.3	S	S	S	0	0
U893018	2.5	4.7	H	S	S	2	2
U893020	2.5	5.0	R	S	S	24	6
U893032	1.5	4.0	H	S	H	14	12
U893037	1.0	3.7	H	S	H	14	12

PRELIMINARY TEST IIIB, 1990

REGIONAL SUMMARY

	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	10	10	7	9	10	8	8	4	4
Strain	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Burlison (II)	53.3	18	-3.7	1.5	32	1.8	18.9	43.4	19.8
Flyer (IV)	53.7	15	4.7	1.3	35	1.7	15.0	42.1	20.3
Resnik (III)	55.8	6	09/24*	1.3	34	1.8	15.6	41.9	20.6
HM8998	53.2	20	4.0	1.9	38	1.8	15.7	41.2	21.2
HS88-4912	53.3	18	-0.9	1.8	36	1.9	16.9	43.7	19.7
HS88-4913	52.0	29	-3.3	1.5	33	1.4	17.2	42.4	20.4
HS88-4970	50.4	35	-0.9	1.7	35	1.6	13.4	41.9	20.6
HS88-4988	53.0	23	-3.6	1.3	33	1.5	16.1	41.7	20.7
U893203	49.2	37	3.4	1.5	36	2.0	14.7	40.6	21.1
U893205	51.8	31	-1.6	2.0	39	1.8	17.5	40.8	20.9
U893217	53.4	17	0.3	1.9	32	1.7	16.5	41.5	20.6
U893229	52.0	29	-0.1	3.2	43	1.7	17.9	42.5	20.1
U893405	53.6	16	1.9	2.0	40	1.9	16.3	42.0	20.2
U893809	49.7	36	2.4	1.6	36	1.6	16.4	38.6	21.8
U893915	51.3	33	1.0	1.6	34	1.6	15.4	41.5	20.7
U893925	50.5	34	5.1	2.0	37	1.8	15.6	41.5	20.5
U893937	55.3	7	5.9	2.5	41	1.7	19.4	41.2	20.3
Hobbit 87 (dtl)	54.2	10	3.4	1.1	24	1.5	16.0	39.8	21.8
C1788	47.4	38	5.1	1.5	30	1.5	13.2	40.2	21.0
C1789	52.1	27	7.6	1.6	30	1.6	14.0	39.8	20.7
C1798	51.6	32	4.7	1.2	27	1.7	14.3	40.6	20.7
HC85-366	52.7	24	4.9	1.3	24	1.4	15.4	41.3	20.2
HC85-603	55.9	5	4.6	1.3	25	1.4	15.5	40.3	21.5
HC85-744	54.0	13	4.0	1.1	22	1.5	15.1	40.6	20.9
HC85 1848	56.8	4	8.9	1.3	24	1.6	17.8	42.0	19.8
HC85-1901	53.2	20	7.7	1.2	24	1.5	16.7	40.8	20.9
HC85-2125	54.0	13	6.0	1.3	24	1.4	16.3	41.6	20.0
HC85-2132	54.2	10	5.9	1.2	23	1.4	16.2	41.7	20.1
HC86-554	57.4	2	2.0	1.2	26	1.4	16.9	40.9	21.0
HC86-4367	60.4	1	5.0	1.2	24	1.4	14.6	39.3	21.6
HC87-3329	55.1	8	4.9	1.1	26	1.6	16.2	38.4	20.9
HC87-5844	57.3	3	5.4	1.2	24	1.6	15.1	39.7	20.9
HC87-5848	52.6	26	4.4	1.2	24	1.4	15.2	39.4	20.9
HC87-6032	52.7	24	4.3	1.2	23	1.8	17.2	40.9	20.7
U893018	54.1	12	3.0	1.3	24	1.4	15.6	39.7	21.7
U893020	52.1	27	1.7	1.3	25	1.4	14.3	39.9	20.9
U893032	54.3	9	-1.1	1.5	31	1.5	18.7	42.0	20.3
U893037	53.2	20	-1.6	1.4	34	1.7	18.9	41.5	20.8

*127.0 Days After Planting

PRELIMINARY TEST IIIB, 1990

YIELD (bu/a)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	53.3	64.3	51.9	56.7	67.2	55.1
Flyer (IV)	53.7	58.3	48.1	54.4	63.0	57.7
Resnik (III)	55.8	58.9	50.5	61.2	68.6	57.8
HM8998	53.2	54.5	47.1	59.0	68.6	52.0
HS88-4912	53.3	54.8	43.0	55.4	68.8	54.7
HS88-4913	52.0	56.7	42.7	51.8	66.1	54.6
HS88-4970	50.4	53.2	42.0	57.2	70.5	56.8
HS88-4988	53.0	59.7	45.8	54.3	66.6	55.0
U893203	49.2	58.2	43.5	53.4	64.5	55.0
U893205	51.8	52.2	43.5	59.8	61.1	57.4
U893217	53.4	59.9	50.1	63.1	66.0	52.7
U893229	52.0	57.6	46.9	52.8	65.0	53.5
U893405	53.6	58.0	39.5	56.4	67.0	55.7
U893809	49.7	57.3	47.1	54.7	63.5	58.3
U893915	51.3	57.7	45.1	57.8	60.9	57.4
U893925	50.5	53.0	47.4	54.8	56.8	52.9
U893937	55.3	62.0	47.0	59.9	75.2	52.7
Hobbit 87 (dtl)	54.2	58.7	54.0	54.5	64.1	62.2
C1788	47.4	50.8	46.2	61.7	56.9	52.7
C1789	52.1	57.6	45.5	54.6	57.4	58.4
C1798	51.6	59.3	44.8	61.4	72.8	54.4
HC85-366	52.7	59.6	47.5	59.4	76.5	57.2
HC85-603	55.9	63.7	52.7	67.9	73.5	60.7
HC85-744	54.0	57.0	48.2	60.0	68.1	57.2
HC85 1848	56.8	58.2	46.2	67.0	67.4	57.8
HC85-1901	53.2	56.2	45.9	61.4	73.2	55.2
HC85-2125	54.0	62.1	46.6	69.0	70.1	58.2
HC85-2132	54.2	60.6	49.4	62.8	76.6	57.1
HC86-554	57.4	62.5	51.2	68.8	71.9	64.1
HC86-4367	60.4	62.3	50.8	67.1	66.8	61.5
HC87-3329	55.1	66.5	50.2	66.6	63.6	63.7
HC87-5844	57.3	61.0	52.0	65.1	76.1	61.9
HC87-5848	52.6	61.4	46.8	61.9	74.1	58.0
HC87-6032	52.7	58.3	50.7	60.0	66.0	53.5
U893018	54.1	58.7	48.7	62.3	68.6	57.6
U893020	52.1	59.0	46.9	60.8	65.0	57.9
U893032	54.3	55.9	50.2	62.9	60.2	55.9
U893037	53.2	58.7	47.4	60.5	69.6	46.9
C.V. (%)		5.8	5.0	7.7	6.3	4.8
L.S.D. (5%)		6.8	4.8	9.3	8.7	5.6
Row Sp. (In.)		27	27	30	24	30
Rows/Plot		4	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIIB, 1990

YIELD (bu/a)

Strain	Columbia MO	Holbrook NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	31.6	54.9	44.8	49.6	56.6
Flyer (IV)	40.3	56.4	40.9	47.0	70.5
Resnik (III)	40.8	55.9	45.7	53.3	64.9
HM8998	36.6	57.5	38.7	48.4	69.5
HS88-4912	44.3	55.7	38.8	52.6	64.7
HS88-4913	42.2	56.2	39.3	46.9	63.8
HS88-4970	36.3	56.5	37.5	40.1	53.8
HS88-4988	45.0	55.0	41.3	46.0	61.6
U893203	46.8	48.9	42.5	25.4	53.5
U893205	36.1	58.8	39.6	44.9	64.6
U893217	47.2	60.2	45.3	28.8	60.7
U893229	39.1	56.4	40.8	50.5	57.2
U893405	42.8	56.3	38.5	48.6	72.7
U893809	34.9	53.5	43.3	22.9	61.2
U893915	36.5	51.7	39.8	40.6	65.8
U893925	37.6	55.2	43.8	36.9	66.8
U893937	41.6	51.5	38.9	54.9	69.7
Hobbit 87 (dtl)	34.6	58.6	44.0	49.9	61.1
C1788	34.0	47.1	39.1	28.5	57.0
C1789	32.4	47.2	41.5	52.1	74.5
C1798	37.0	54.8	41.1	41.5	49.2
HC85-366	38.4	52.0	42.0	20.2	74.5
HC85-603	37.9	63.1	44.1	37.8	57.1
HC85-744	42.0	61.6	43.8	38.4	63.6
HC85 1848	35.5	58.1	43.0	60.6	73.8
HC85-1901	36.1	50.4	42.1	50.9	60.5
HC85-2125	35.8	53.4	43.8	41.2	60.0
HC85-2132	35.4	56.7	39.4	35.9	68.4
HC86-554	39.3	68.7	44.6	42.9	60.0
HC86-4367	50.6	63.9	46.3	58.6	76.4
HC87-3329	38.8	59.9	44.0	25.5	71.9
HC87-5844	41.2	58.9	40.8	40.7	75.4
HC87-5848	33.7	51.9	40.6	24.6	73.3
HC87-6032	35.1	56.7	44.4	37.6	64.7
U893018	43.4	60.2	44.4	33.2	64.0
U893020	40.0	63.3	47.1	18.8	62.5
U893032	39.2	56.4	39.6	53.5	69.3
U893037	35.1	55.9	41.5	50.5	66.1
C.V. (%)	10.3	7.9	5.2	18.0	9.6
L.S.D. (5%)	7.4	9.1	4.4	14.0	11.7
Row Sp. (In.)	30	30	30	30	7
Rows/Plot	4	4	4	4	8
Reps	2	2	2	2	2

PRELIMINARY TEST IIIB, 1990

YIELD RANK

Strain	Yield Rank	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	18	2	4	27	19	25
Flyer (IV)	15	20	15	34	32	14
Resnik (III)	6	16	8	16	14	12
HM8998	22	34	19	24	14	37
HS88-4912	18	33	35	29	13	28
HS88-4913	29	30	36	38	23	29
HS88-4970	35	35	37	26	10	21
HS88-4988	23	12	29	35	22	26
U893203	37	22	33	36	28	26
U893205	31	37	33	22	33	16
U893217	17	11	11	8	24	34
U893229	29	26	22	37	26	31
U893405	16	24	38	28	20	23
U893809	36	28	19	31	31	8
U893915	33	25	31	25	34	16
U893925	34	36	17	30	38	33
U893937	7	7	21	21	4	34
Hobbit 87 (dtl)	10	17	1	33	29	3
C1788	38	38	26	13	37	34
C1789	27	26	30	32	36	7
C1798	32	14	32	14	8	30
HC85-366	24	13	16	23	2	18
HC85-603	5	3	2	3	6	6
HC85-744	13	29	14	19	17	18
HC85 1848	4	22	26	5	18	12
HC85-1901	20	31	28	14	7	24
HC85-2125	13	6	25	1	11	9
HC85-2132	10	10	12	10	1	20
HC86-554	2	4	5	2	9	1
HC86-4367	1	5	6	4	21	5
HC87-3329	8	1	9	6	30	2
HC87-5844	3	9	3	7	3	4
HC87-5848	26	8	24	12	5	10
HC87-6032	24	20	7	19	24	31
U893018	12	17	13	11	14	15
U893020	27	15	22	17	26	11
U893032	9	32	9	9	35	22
U893037	20	17	17	18	12	38

PRELIMINARY TEST IIIB, 1990

YIELD RANK

Strain	Columbia MO	Holbrook NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	38	27	5	12	35
Flyer (IV)	13	17	24	15	9
Resnik (III)	12	22	3	5	17
HM8998	23	13	36	14	11
HS88-4912	5	24	35	6	18
HS88-4913	8	21	32	16	22
HS88-4970	25	16	38	24	36
HS88-4988	4	26	22	17	25
U893203	3	36	17	34	37
U893205	26	10	29	18	20
U893217	2	6	4	31	28
U893229	17	17	25	9	32
U893405	7	20	37	13	7
U893809	33	29	15	36	26
U893915	24	33	28	23	16
U893925	21	25	12	28	14
U893937	10	34	34	3	10
Hobbit 87 (dtl)	34	11	10	11	27
C1788	35	38	33	32	34
C1789	37	37	20	7	3
C1798	22	28	23	20	38
HC85-366	19	31	19	37	3
HC85-603	20	4	9	26	33
HC85-744	9	5	12	25	23
HC85 1848	29	12	16	1	5
HC85-1901	27	35	18	8	29
HC85-2125	28	30	12	21	30
HC85-2132	30	14	31	29	13
HC86-554	15	1	6	19	30
HC86-4367	1	2	2	2	1
HC87-3329	18	8	10	33	8
HC87-5844	11	9	25	22	2
HC87-5848	36	32	27	35	6
HC87-6032	31	14	7	27	18
U893018	6	6	7	30	21
U893020	14	3	1	38	24
U893032	16	17	29	4	12
U893037	32	22	20	9	15

PRELIMINARY TEST IIIB, 1990

MATURITY (date)

Strain	Mean 7 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	-3.7		-4	-7	-3	-7
Flyer (IV)	4.7		6	3	4	3
Resnik (III)	09/24		09/22	09/18	09/29	09/24
HM8998	4.0		4	5	5	3
HS88-4912	-0.9		-2	0	1	-3
HS88-4913	-3.3		-4	-4	-3	-3
HS88-4970	-0.9		-2	1	-1	-1
HS88-4988	-3.6		-6	-5	-4	-3
U893203	3.4		4	3	3	3
U893205	-1.6		-2	1	-1	-3
U893217	0.3		2	0	0	0
U893229	-0.1		1	-1	1	-3
U893405	1.9		3	3	1	2
U893809	2.4		2	2	3	1
U893915	1.0		2	0	1	2
U893925	5.1		6	7	4	1
U893937	5.9		7	9	6	2
Hobbit 87 (dtl)	3.4		4	5	2	5
C1788	5.1		4	5	4	-2
C1789	7.6		6	8	6	2
C1798	4.7		5	8	6	5
HC85-366	4.9		6	5	7	5
HC85-603	4.6		3	4	4	6
HC85-744	4.0		6	4	5	5
HC85 1848	8.9		7	11	10	6
HC85-1901	7.7		8	11	7	6
HC85-2125	6.0		6	8	8	4
HC85-2132	5.9		6	7	8	3
HC86-554	2.0		2	3	4	4
HC86-4367	5.0		5	8	3	6
HC87-3329	4.9		4	10	4	5
HC87-5844	5.4		4	9	6	6
HC87-5848	4.4		4	8	6	4
HC87-6032	4.3		4	4	5	5
U893018	3.0		4	4	4	5
U893020	1.7		3	-1	4	4
U893032	-1.1		0	-1	1	0
U893037	-1.6		-2	0	-1	-1
Date Planted	05/20		05/31	05/01	05/23	05/29
Days to Mature	127.0		114	140	129	118

PRELIMINARY TEST IIIB, 1990

MATURITY (date)

Strain	Columbia MO	Holbrook NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)			-3	3	-5
Flyer (IV)			4	4	9
Resnik (III)			09/24	10/07	09/19
HM8998			2	2	7
HS88-4912			-1	-1	0
HS88-4913			-2	-3	-4
HS88-4970			-3	-1	1
HS88-4988			-3	-4	0
U893203			2	0	9
U893205			-1	-4	-1
U893217			-2	2	0
U893229			2	0	-1
U893405			2	0	2
U893809			-1	4	6
U893915			0	1	1
U893925			4	5	9
U893937			6	3	8
Hobbit 87 (dtl)			3	1	4
C1788			5	8	12
C1789			7	9	15
C1798			5	2	2
HC85-366			4	3	4
HC85-603			5	2	8
HC85-744			3	0	5
HC85 1848			7	7	14
HC85-1901			11	4	7
HC85-2125			5	3	8
HC85-2132			5	3	9
HC86-554			1	0	0
HC86-4367			4	3	6
HC87-3329			4	0	7
HC87-5844			3	3	7
HC87-5848			6	1	2
HC87-6032			5	2	5
U893018			2	1	1
U893020			3	0	-1
U893032			0	-3	-5
U893037			-1	-2	-4
Date Planted			05/28	06/01	05/01
Days to Mature			119	128	141

PRELIMINARY TEST IIIB, 1990

LODGING (score)

Strain	Mean 9 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	1.5	1.8	1.2	1.0	3.0	1.5
Flyer (IV)	1.3	1.3	1.1	1.0	2.0	2.0
Resnik (III)	1.3	1.4	1.1	1.0	2.5	1.0
HM8998	1.9	3.2	1.4	1.5	2.8	2.0
HS88-4912	1.8	3.0	1.2	2.0	2.8	1.5
HS88-4913	1.5	1.6	1.1	1.0	2.5	1.5
HS88-4970	1.7	2.1	1.1	1.5	3.0	2.0
HS88-4988	1.3	1.6	1.1	1.0	2.3	1.0
U893203	1.5	2.1	1.2	1.0	2.8	2.0
U893205	2.0	3.2	1.6	1.7	3.5	2.0
U893217	1.9	1.7	1.2	3.0	3.3	1.5
U893229	3.2	3.8	3.2	3.7	4.0	3.0
U893405	2.0	3.6	1.3	1.5	3.0	2.0
U893809	1.6	2.7	1.1	1.0	2.8	2.0
U893915	1.6	1.8	1.1	1.0	3.0	1.5
U893925	2.0	3.4	1.7	3.0	3.0	1.0
U893937	2.5	4.1	1.8	3.0	3.5	2.5
Hobbit 87 (dtl)	1.1	1.2	1.2	1.0	1.0	1.0
C1788	1.5	2.5	1.2	1.0	3.3	1.0
C1789	1.6	2.1	1.5	1.0	3.5	1.0
C1798	1.2	1.5	1.3	1.0	1.8	1.0
HC85-366	1.3	1.3	1.3	1.0	2.5	1.0
HC85-603	1.3	1.2	1.3	1.5	1.8	1.0
HC85-744	1.1	1.1	1.2	1.0	1.3	1.0
HC85 1848	1.3	1.2	1.2	1.0	2.3	1.0
HC85-1901	1.2	1.1	1.2	1.0	2.0	1.0
HC85-2125	1.3	1.3	1.2	1.0	2.0	1.0
HC85-2132	1.2	1.1	1.2	1.0	2.0	1.0
HC86-554	1.2	1.2	1.3	1.0	1.8	1.0
HC86-4367	1.2	1.2	1.2	1.0	2.0	1.0
HC87-3329	1.1	1.1	1.1	1.0	1.3	1.0
HC87-5844	1.2	1.2	1.2	1.0	1.8	1.0
HC87-5848	1.2	1.2	1.2	1.0	2.0	1.0
HC87-6032	1.2	1.3	1.1	1.0	1.8	1.0
U893018	1.3	1.3	1.4	1.0	1.8	1.0
U893020	1.3	1.2	1.3	1.0	2.5	1.0
U893032	1.5	1.7	1.2	1.5	2.3	1.0
U893037	1.4	2.3	1.1	1.0	2.5	1.5

PRELIMINARY TEST IIIB, 1990

LODGING (score)

Strain	Columbia MO	Holbrook NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)		1.0	1.0	1.7	1.0
Flyer (IV)		1.0	1.0	1.4	1.3
Resnik (III)		1.0	1.0	1.5	1.0
HM8998		1.0	1.0	1.5	2.3
HS88-4912		1.0	1.0	1.6	2.5
HS88-4913		1.0	1.0	1.7	2.0
HS88-4970		1.0	1.0	1.7	1.5
HS88-4988		1.0	1.0	1.6	1.0
U893203		1.0	1.0	1.4	1.0
U893205		1.0	1.0	1.8	2.3
U893217		1.0	1.0	1.4	2.8
U893229		3.0	2.5	2.1	3.5
U893405		1.5	1.0	1.7	2.8
U893809		1.0	1.0	1.4	1.8
U893915		1.0	1.0	1.5	2.3
U893925		2.0	1.0	1.5	1.5
U893937		2.5	1.0	1.8	2.3
Hobbit 87 (dtl)		1.0	1.0	1.5	1.0
C1788		1.0	1.0	1.6	1.3
C1789		1.0	1.0	2.0	1.5
C1798		1.0	1.0	1.6	1.0
HC85-366		1.0	1.0	1.5	1.5
HC85-603		1.0	1.0	1.5	1.0
HC85-744		1.0	1.0	1.4	1.0
HC85 1848		1.0	1.0	1.7	1.5
HC85-1901		1.0	1.0	1.5	1.0
HC85-2125		1.0	1.0	1.5	1.3
HC85-2132		1.0	1.0	1.5	1.0
HC86-554		1.0	1.0	1.5	1.0
HC86-4367		1.0	1.0	1.6	1.0
HC87-3329		1.0	1.0	1.5	1.0
HC87-5844		1.0	1.0	1.6	1.3
HC87-5848		1.0	1.0	1.6	1.0
HC87-6032		1.0	1.0	1.5	1.0
U893018		1.0	1.0	1.5	1.3
U893020		1.0	1.0	1.4	1.0
U893032		1.0	1.0	1.6	2.0
U893037		1.0	1.0	1.5	1.0

PRELIMINARY TEST IIIB, 1990

PLANT HEIGHT (inches)

Strain	Mean 10 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	32	36	34	30	30	32
Flyer (IV)	35	42	37	37	37	37
Resnik (III)	34	40	34	37	36	35
HM8998	38	48	40	42	36	38
HS88-4912	36	39	36	38	34	36
HS88-4913	33	38	34	34	33	33
HS88-4970	35	42	34	39	37	35
HS88-4988	33	39	34	35	32	34
U893203	36	42	34	36	36	39
U893205	39	48	38	40	34	36
U893217	32	35	32	34	34	32
U893229	43	50	40	43	38	43
U893405	40	43	36	40	38	40
U893809	36	43	38	38	37	36
U893915	34	40	33	35	35	36
U893925	37	40	38	40	39	29
U893937	41	47	37	40	39	42
Hobbit 87 (dtl)	24	26	26	26	25	24
C1788	30	34	30	30	31	27
C1789	30	33	31	29	31	31
C1798	27	29	28	28	28	24
HC85-366	24	27	26	23	27	24
HC85-603	25	27	29	26	25	21
HC85-744	22	24	23	22	24	22
HC85 1848	24	28	26	24	26	22
HC85-1901	24	28	23	23	26	22
HC85-2125	24	26	26	25	30	22
HC85-2132	23	26	25	23	26	21
HC86-554	26	29	28	24	26	24
HC86-4367	24	24	25	23	25	21
HC87-3329	26	28	30	25	25	24
HC87-5844	24	26	26	22	26	21
HC87-5848	24	24	26	21	26	24
HC87-6032	23	25	28	22	25	22
U893018	24	29	26	21	25	22
U893020	25	29	31	23	24	25
U893032	31	33	34	30	29	29
U893037	34	40	34	33	36	33

PRELIMINARY TEST IIIB, 1990

PLANT HEIGHT (inches)

Strain	Columbia MO	Holbrook NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)	22	41	39	30	28
Flyer (IV)	29	31	36	33	33
Resnik (III)	28	36	33	33	31
HM8998	30	41	40	28	34
HS88-4912	26	39	40	34	35
HS88-4913	25	34	34	32	35
HS88-4970	28	41	40	28	29
HS88-4988	26	36	37	28	28
U893203	30	42	42	25	30
U893205	30	45	40	35	40
U893217	28	34	37	22	31
U893229	34	55	45	37	40
U893405	33	45	43	35	42
U893809	27	42	39	25	33
U893915	25	40	38	27	32
U893925	27	53	44	26	35
U893937	34	51	44	37	36
Hobbit 87 (dtl)	19	21	29	23	21
C1788	23	36	38	26	28
C1789	23	30	34	30	30
C1798	19	32	31	22	25
HC85-366	20	22	33	17	24
HC85-603	16	26	27	23	25
HC85-744	20	22	26	18	22
HC85 1848	19	23	27	24	23
HC85-1901	15	23	26	24	25
HC85-2125	17	21	29	26	21
HC85-2132	19	23	27	18	22
HC86-554	19	29	31	20	28
HC86-4367	19	25	28	27	26
HC87-3329	17	28	31	23	26
HC87-5844	21	32	27	17	23
HC87-5848	18	24	27	22	23
HC87-6032	17	24	29	17	21
U893018	18	22	28	28	24
U893020	21	26	28	18	21
U893032	23	38	39	31	28
U893037	24	40	37	29	30

PRELIMINARY TEST IIIB, 1990

SEED QUALITY (score)

Strain	Mean 8 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	Man-hattan KS
Burlison (II)	1.8	2.0	1.5	1.3	1.0	3.0
Flyer (IV)	1.7	1.5	1.5	1.6	1.5	3.0
Resnik (III)	1.8	2.0	2.0	1.3	1.0	3.0
HM8998	1.8	2.5	1.5	1.8	1.5	3.0
HS88-4912	1.9	2.0	2.0	2.3	1.0	3.0
HS88-4913	1.4	1.0	1.5	1.1	1.0	3.0
HS88-4970	1.6	1.5	2.0	1.6	1.0	2.0
HS88-4988	1.5	1.5	1.0	1.1	1.0	3.0
U893203	2.0	2.0	3.5	1.5	1.5	3.0
U893205	1.8	2.5	2.0	1.1	1.5	3.0
U893217	1.7	2.0	1.5	1.3	1.5	3.0
U893229	1.7	1.5	1.5	1.8	1.5	3.0
U893405	1.9	2.5	3.5	1.5	1.5	2.0
U893809	1.6	2.0	2.5	1.3	1.0	2.0
U893915	1.6	2.0	2.0	1.1	1.0	3.0
U893925	1.8	2.0	2.0	1.8	1.0	3.0
U893937	1.7	1.5	2.0	2.3	1.0	3.0
Hobbit 87 (dtl)	1.5	2.0	1.5	1.1	1.0	3.0
C1788	1.5	1.5	1.5	1.5	1.0	2.0
C1789	1.6	1.5	1.5	1.8	1.0	2.0
C1798	1.7	2.5	2.5	1.7	1.0	2.0
HC85-366	1.4	2.0	1.5	1.1	1.0	2.0
HC85-603	1.4	2.0	1.5	1.1	1.0	2.0
HC85-744	1.5	1.5	2.0	1.1	1.0	3.0
HC85 1848	1.6	2.0	2.0	1.6	1.0	2.0
HC85-1901	1.5	2.0	2.0	1.3	1.0	2.0
HC85-2125	1.4	1.5	2.0	1.1	1.0	2.0
HC85-2132	1.4	1.5	2.0	1.1	1.0	2.0
HC86-554	1.4	1.0	2.5	1.5	1.0	2.0
HC86-4367	1.4	1.5	1.5	1.1	1.0	2.0
HC87-3329	1.6	2.0	2.0	1.7	1.0	2.0
HC87-5844	1.6	1.0	1.5	1.6	1.5	3.0
HC87-5848	1.4	1.5	1.5	1.3	1.0	2.0
HC87-6032	1.8	1.5	2.0	1.1	1.5	4.0
U893018	1.4	1.0	1.5	1.1	1.0	3.0
U893020	1.4	1.0	1.5	1.1	1.0	2.0
U893032	1.5	1.0	1.5	1.8	1.0	2.0
U893037	1.7	1.0	2.0	1.5	1.0	3.0

PRELIMINARY TEST IIIB, 1990

SEED QUALITY (score)

Strain	Columbia MO	Holbrook NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)		2.0	2.0	1.3	
Flyer (IV)		1.0	2.0	1.4	
Resnik (III)		2.0	2.0	1.4	
HM8998		1.0	2.0	1.3	
HS88-4912		2.0	1.5	1.5	
HS88-4913		1.5	1.0	1.3	
HS88-4970		2.0	1.5	1.4	
HS88-4988		1.5	1.5	1.3	
U893203		1.5	2.0	1.3	
U893205		1.5	1.5	1.5	
U893217		1.0	1.5	1.6	
U893229		1.0	1.5	1.6	
U893405		1.0	2.0	1.3	
U893809		1.5	1.0	1.4	
U893915		1.0	1.5	1.4	
U893925		1.0	2.0	1.5	
U893937		1.5	1.0	1.6	
Hobbit 87 (dtl)		1.0	1.0	1.3	
C1788		1.5	1.5	1.5	
C1789		1.5	2.0	1.2	
C1798		1.0	1.5	1.2	
HC85-366		1.0	1.5	1.3	
HC85-603		1.0	1.0	1.2	
HC85-744		1.0	1.5	1.2	
HC85 1848		1.0	1.5	1.3	
HC85-1901		1.0	1.5	1.3	
HC85-2125		1.0	1.5	1.2	
HC85-2132		1.0	1.5	1.3	
HC86-554		1.0	1.0	1.2	
HC86-4367		1.0	2.0	1.2	
HC87-3329		1.0	2.0	1.3	
HC87-5844		1.0	1.5	1.4	
HC87-5848		1.0	1.5	1.3	
HC87-6032		1.0	2.0	1.4	
U893018		1.0	1.0	1.3	
U893020		1.0	2.0	1.3	
U893032		2.0	1.0	1.5	
U893037		2.0	1.5	1.5	

PRELIMINARY TEST IIIB, 1990

SEED SIZE (g/100)

Strain	Mean 8 Tests	Fair-field IA	Winter-set IA	Urbana IL	Lafay-ette IN	.Man-hattan KS
Burlison (II)	18.9	20.3	18.2	17.3	20.8	19.2
Flyer (IV)	15.0	15.0	14.4	12.4	16.1	16.1
Resnik (III)	15.6	15.6	14.7	14.3	16.6	16.0
HM8998	15.7	16.9	14.6	14.8	18.0	16.5
HS88-4912	16.9	17.1	16.2	16.1	19.3	16.7
HS88-4913	17.2	16.6	15.4	16.1	19.7	18.0
HS88-4970	13.4	14.5	11.8	13.0	15.5	13.5
HS88-4988	16.1	16.2	15.2	14.6	18.0	16.3
U893203	14.7	15.1	13.8	13.0	17.8	15.9
U893205	17.5	17.7	16.5	17.3	19.4	16.9
U893217	16.5	18.3	15.5	15.2	19.4	16.7
U893229	17.9	17.8	17.0	16.8	20.7	17.0
U893405	16.3	17.6	14.9	16.6	20.3	12.1
U893809	16.4	17.6	16.0	14.2	18.8	16.4
U893915	15.4	16.0	14.4	13.9	17.1	15.5
U893925	15.6	16.0	14.2	14.0	16.1	17.9
U893937	19.4	20.5	18.6	18.7	21.9	19.4
Hobbit 87 (dtl)	16.0	16.7	15.6	14.4	18.4	15.9
C1788	13.2	13.3	12.2	12.9	14.2	12.8
C1789	14.0	14.5	13.0	14.2	14.6	15.4
C1798	14.3	14.4	12.8	14.4	16.3	16.0
HC85-366	15.4	15.8	13.7	14.9	17.6	15.8
HC85-603	15.5	15.3	14.7	14.9	17.2	17.3
HC85-744	15.1	15.8	14.6	13.7	16.9	15.7
HC85 1848	17.8	18.5	15.8	17.4	18.9	21.4
HC85-1901	16.7	16.6	15.4	16.6	18.8	18.6
HC85-2125	16.3	16.4	14.5	14.7	17.8	17.5
HC85-2132	16.2	16.6	14.6	14.0	17.8	18.3
HC86-554	16.9	17.0	17.0	15.8	18.8	17.4
HC86-4367	14.6	14.8	13.3	14.1	15.7	16.0
HC87-3329	16.2	15.7	15.0	15.6	18.4	16.8
HC87-5844	15.1	16.2	14.0	13.5	16.4	16.4
HC87-5848	15.2	15.7	13.2	14.4	16.5	16.5
HC87-6032	17.2	17.9	15.8	16.1	19.3	18.3
U893018	15.6	15.7	14.0	15.3	17.1	16.8
U893020	14.3	14.4	12.6	12.3	16.3	15.5
U893032	18.7	18.2	17.6	16.0	20.4	20.4
U893037	18.9	18.9	17.8	17.1	21.3	19.0

PRELIMINARY TEST IIIB, 1990

SEED SIZE (g/100)

Strain	Columbia MO	Holbrook NE	Tekamah NE	Hoyt-ville OH	So. Charles-ton OH
Burlison (II)		20.6	14.6	20.1	
Flyer (IV)		16.8	13.3	15.6	
Resnik (III)		17.7	13.0	16.5	
HM8998		16.7	12.4	15.6	
HS88-4912		20.6	13.4	15.5	
HS88-4913		19.1	13.9	19.0	
HS88-4970		15.3	10.4	13.5	
HS88-4988		17.9	13.2	17.0	
U893203		15.6	11.6	14.5	
U893205		20.6	13.1	18.6	
U893217		18.9	11.8	16.3	
U893229		18.7	15.2	19.6	
U893405		18.5	12.6	18.1	
U893809		17.2	14.4	16.7	
U893915		17.3	12.9	16.3	
U893925		18.0	12.5	16.1	
U893937		19.5	16.9	19.3	
Hobbit 87 (dtl)		17.2	13.2	16.4	
C1788		13.9	11.1	15.1	
C1789		14.7	11.3	14.2	
C1798		15.2	9.9	15.2	
HC85-366		16.8	13.0	15.3	
HC85-603		17.3	12.6	14.3	
HC85-744		17.4	12.8	14.2	
HC85 1848		17.2	14.2	19.1	
HC85-1901		16.1	14.5	16.9	
HC85-2125		18.3	14.5	16.7	
HC85-2132		18.0	13.2	16.7	
HC86-554		19.6	12.7	16.7	
HC86-4367		16.2	12.9	13.8	
HC87-3329		18.6	12.8	16.3	
HC87-5844		16.7	11.9	15.6	
HC87-5848		18.2	13.3	14.1	
HC87-6032		19.0	14.6	16.8	
U893018		16.8	12.7	16.6	
U893020		15.7	12.5	15.1	
U893032		21.8	14.5	20.3	
U893037		23.1	14.8	19.1	

PRELIMINARY TEST IIIB, 1990

PROTEIN (%)

Strain	Mean 4 Tests	Winterset IA	Urbana IL	Lafayette IN	Hoytville OH
Burlison (II)	43.4	44.0	41.8	44.5	43.4
Flyer (IV)	42.1	42.7	43.0	42.9	39.9
Resnik (III)	41.9	41.7	41.9	42.4	41.6
HM8998	41.2	40.1	41.2	42.9	40.6
HS88-4912	43.7	44.9	43.8	44.4	41.7
HS88-4913	42.4	43.4	42.3	42.8	41.3
HS88-4970	41.9	42.8	41.8	43.3	39.9
HS88-4988	41.7	43.3	41.1	42.2	40.1
U893203	40.6	41.2	40.3	42.1	38.6
U893205	40.8	41.6	40.0	42.2	39.5
U893217	41.5	41.2	41.5	43.1	40.0
U893229	42.5	42.7	42.8	43.1	41.4
U893405	42.0	42.9	41.9	42.8	40.3
U893809	38.6	38.6	39.8	40.6	35.3
U893915	41.5	41.6	42.2	42.6	39.6
U893925	41.5	41.7	41.5	43.2	39.5
U893937	41.2	40.6	41.7	43.0	39.3
Hobbit 87 (dtl)	39.8	39.6	39.6	40.1	39.8
C1788	40.2	38.8	40.2	41.8	39.8
C1789	39.8	38.5	40.1	41.3	39.2
C1798	40.6	40.5	40.8	42.6	38.5
HC85-366	41.3	42.0	42.6	42.9	37.7
HC85-603	40.3	40.0	40.9	41.0	39.2
HC85-744	40.6	41.4	41.7	42.3	37.1
HC85 1848	42.0	41.2	41.4	43.2	42.0
HC85-1901	40.8	40.1	40.6	42.0	40.3
HC85-2125	41.6	41.8	41.9	43.2	39.4
HC85-2132	41.7	41.7	41.9	43.4	39.9
HC86-554	40.9	41.9	41.9	41.6	38.0
HC86-4367	39.3	39.1	39.1	40.1	38.7
HC87-3329	38.4	39.3	39.3	40.2	34.6
HC87-5844	39.7	39.8	40.5	41.1	37.2
HC87-5848	39.4	41.0	40.5	41.7	34.2
HC87-6032	40.9	40.9	41.8	42.7	38.3
U893018	39.7	39.6	40.1	40.9	38.2
U893020	39.9	40.0	40.6	41.6	37.4
U893032	42.0	42.1	43.2	42.5	40.3
U893037	41.5	41.6	41.8	42.5	40.0

PRELIMINARY TEST IIIB, 1990

OIL (%)

Strain	Mean 4 Tests	Winterset IA	Urbana IL	Lafayette IN	Hoytville OH
Burlison (II)	19.8	19.5	20.6	19.0	19.9
Flyer (IV)	20.3	19.9	20.5	20.3	20.4
Resnik (III)	20.6	20.9	21.0	21.0	19.5
HM8998	21.2	21.6	21.4	19.9	21.7
HS88-4912	19.7	19.3	20.1	19.7	19.8
HS88-4913	20.4	19.4	21.1	20.6	20.6
HS88-4970	20.6	20.4	21.2	20.2	20.7
HS88-4988	20.7	20.1	21.6	20.7	20.3
U893203	21.1	20.9	21.7	20.7	21.2
U893205	20.9	20.6	21.4	20.4	21.3
U893217	20.6	21.1	20.9	20.3	20.2
U893229	20.1	20.3	20.5	19.6	19.9
U893405	20.2	18.6	20.7	20.4	21.0
U893809	21.8	22.1	22.1	21.6	21.5
U893915	20.7	21.2	20.2	20.6	20.8
U893925	20.5	20.4	20.9	20.2	20.4
U893937	20.3	20.4	20.3	20.0	20.4
Hobbit 87 (dtl)	21.8	22.1	22.2	22.5	20.5
C1788	21.0	21.6	21.1	20.4	20.8
C1789	20.7	21.6	20.8	19.9	20.4
C1798	20.7	20.5	21.0	20.1	21.0
HC85-366	20.2	20.1	20.4	19.9	20.2
HC85-603	21.5	21.4	21.5	21.9	21.1
HC85-744	20.9	21.0	21.0	20.2	21.2
HC85 1848	19.8	20.2	20.8	19.8	18.4
HC85-1901	20.9	21.4	21.2	20.8	20.3
HC85-2125	20.0	20.1	20.4	19.9	19.6
HC85-2132	20.1	20.3	20.7	19.9	19.3
HC86-554	21.0	20.9	21.2	20.8	21.1
HC86-4367	21.6	21.8	22.4	21.4	20.6
HC87-3329	20.9	21.1	21.6	21.0	19.9
HC87-5844	20.9	20.9	21.2	20.2	21.1
HC87-5848	20.9	20.4	21.4	20.2	21.7
HC87-6032	20.7	20.9	21.1	20.3	20.6
U893018	21.7	21.9	22.2	21.4	21.3
U893020	20.9	20.9	21.2	20.4	21.1
U893032	20.3	20.6	20.3	20.4	20.0
U893037	20.8	20.9	21.3	20.6	20.3

UNIFORM TEST IV, 1990

Strain	Parentage	Previous* Testing	Generation Composited	Unique Traits
Flyer (E)	Asgrow A3127(4) x Williams 82	3	BC3 F2	Rps1-k
Delsoy 4500 (SCN)	Cumberland x Forrest	3	F5	SCN 3
Pennyrile (L)	Williams x Essex	2	F5	
Ripley (dt)	Hodgson x V68-1034	8	F5	
Spencer (IV)	A75-305022 x Century	5	F5	
C1747	A80-344003 x Williams 82	1	F6	Rps1-k
C1758	C1627 x Harper	PTIVB	F6	
C1768	Winchester x Harper	PTIVB	F6	Rps1-b, Rps3
HC84-4850	Sprite x Williams 82	1	F5	Dt1
HC85-275	HC78-353 x Sprite	PTIVB	F5	dt1
HC85-279	HC78-353 x Sprite	PTIVB	F5	dt1
HC85-6484	Pixie x Forrest	PTIVB	F5	dt1
K82-1-48	Asgrow A4268 x Asgrow A3127	1	F5	
K1166	Harper x Asgrow A3127	PTIVA	F5	
K1169	Harper x Asgrow A3127	PTIVA	F5	
Ky85-09073	Ripley x Pershing	PTIVB	F5	dt1
L83-3804 Spry	L78-8694 x L78L-449	2	F6	
LS83-5616 Nile	Forrest x Union	1	F6	SCN 3
Md85-5443 Corsica	Essex x Harper	1	F5	
Md86-5324	Douglas x Md77-5675	PTIVA	F5	
S85-1084	(Williams x PI 88.788) x (Union x Douglas)	2	F6	SCN 3,4
S85-1554	Douglas x Peking	SCNIVB	F7	SCN 3
S86-2209	Peking x Elf	SCNIVB	F8	SCN 3
S86-2212	Peking x Elf	SCNIVB	F8	SCN 3

* Number of years in test or name of 1989 test.

UNIFORM TEST IV, 1990

DESCRIPTIVE DATA

Strain	Descriptive Code	Chlorosis Score Lamberton	Shattering Score Lubbock	Shattering Score Manhattan
Flyer (E)	PTTSBlI	1.5	2.0	1.0
Delsoy 4500 (SCN)	WGTSBfI	3.0	2.5	1.0
Pennyrile (L)	WTBIBlI	2.0	3.3	1.0
Ripley (dt)	PGTIBfD	1.5	2.5	1.0
Spencer (IV)	WTBIBrI	2.0	3.5	1.0
C1747	WTTIBlI	2.0	4.0	1.0
C1758	PGBIIbI	2.5	4.0	1.0
C1768	PTBIBlI	2.5	4.0	1.0
HC84-4850	WTTIBlI	3.5	2.5	1.0
HC85-275	WTTIBlD	1.5	2.5	1.0
HC85-279	PTTIBlD	2.0	2.2	1.0
HC85-6484	PTTIBlD	2.0	3.0	1.0
K82-1-48	PTBDBlI	2.5	2.5	1.0
K1166	PTTIBlI	2.5	4.0	1.0
K1169	PTTIBlI	3.0	2.2	2.0
Ky85-09073	PGTIBfD	3.0	2.5	1.0
L83-3804	PTTIBlD	2.0	2.5	1.0
LS83-5616	WTTDBlI	3.0	4.5	1.0
Md85-5443	PTTIBlI	2.0	4.7	1.0
Md86-5324	PTTSBlI	2.0	2.0	1.0
S85-1084	WTTSBlI	1.5	2.7	1.0
S85-1554	WTTSBlI	2.5	2.5	2.0
S86-2209	WTTSBlI	2.5	4.0	1.0
S86-2212	WTTSBlI	2.5	3.2	1.0

UNIFORM TEST IV, 1990

DISEASE DATA

Strain	BTS Ames n Score	BB Urbana n Score	Emergence Score Ames	PS Orange a %	PR Vickery Phyto. Tolerance	PR Urbana Race 1	PR Laf. Race 7	PS Lafayette a %	PSB Lafayette n %
Flyer (E)	2.3	2.5	1	0.0	3.8	R	R	2	4
Delsoy 4500 (SCN)	3.3	3.5	5	0.0	4.3	H	S	6	2
Pennyrile (L)	3.0	2.0	1	0.0	4.3	S	S	4	8
Ripley (dt)	3.0	3.0	1	0.0	4.8	R	S	2	0
Spencer (IV)	2.3	1.5	5	0.0	4.8	R	S	32	14
C1747	4.0	1.5	5	1.0	3.8	R	R	22	6
C1758	3.3	2.0	5	0.3	5.0	S	S	20	4
C1768	3.3	1.5	1	0.7	3.3	R	H	4	4
HC84-4850	2.7	1.5	1	2.3	4.0	R	R	22	6
HC85-275	2.3	1.5	1	0.0	3.5	S	S	2	0
HC85-279	3.3	3.5	2	0.0	4.8	S	S	0	0
HC85-6484	3.0	3.5	1	0.0	4.3	S	S	8	2
K82-1-48	2.3	3.5	2	0.0	5.3	S	S	2	2
K1166	3.3	2.0	1	0.0	6.0	S	S	6	4
K1169	3.0	2.0	1	0.0	7.0	S	S	10	4
Ky85-09073	3.0	4.5	1	0.0	3.5	R	S	0	6
L83-3804	3.3	2.0	1	0.3	4.3	S	S	2	6
LS83-5616	3.3	4.0	5	0.0	6.3	S	S	6	4
Md85-5443	3.0	2.0	3	0.0	4.5	S	S	28	2
Md86-5324	2.7	2.5	5	0.7	5.8	R	S	6	4
S85-1084	3.3	3.5	1	0.0	6.3	S	H	12	8
S85-1554	2.3	2.5	1	0.0	4.5	H	H	10	6
S86-2209	3.3	4.0	1	1.0	4.5	R	S	4	0
S86-2212	2.7	4.5	1	0.0	4.3	H	H	16	6

UNIFORM TEST IV, 1990

REGIONAL SUMMARY

No. of Tests / Strain	Yield 21 bu/a	Rank 21 No.	Maturity 16 Date	Lodging 20 Score	Plant Height 21 In.	Seed Quality 19 Score	Seed Size 17 g/100	Composition Protein 5 %	Composition Oil 5 %
Flyer (E)	50.5	3	-3.1	1.3	30	1.8	15.0	41.6	21.2
Delsoy 4500 (SCN)	48.8	16	4.4	1.8	37	1.5	14.7	40.9	20.8
Pennyrile (L)	49.7	9	5.1	1.7	38	1.6	16.0	41.4	20.8
Ripley (dt)	48.0	18	-0.5	1.3	21	1.5	13.9	39.5	21.1
Spencer (IV)	49.3	13	09/30*	1.3	32	1.8	17.6	40.7	21.8
C1747	50.2	6	-2.4	1.2	29	1.9	17.5	41.1	21.4
C1758	51.5	1	0.6	1.3	32	2.2	18.8	41.5	21.1
C1768	49.5	11	-0.2	1.5	32	1.7	18.9	41.5	20.7
HC84-4850	50.5	3	-0.5	2.1	35	1.9	17.3	41.5	21.3
HC85-275	45.9	22	-1.8	1.1	18	1.7	16.9	41.7	21.3
HC85-279	45.8	23	-2.4	1.1	19	1.9	17.6	40.8	21.4
HC85-6484	46.2	21	-1.3	1.1	18	2.1	14.4	40.8	21.4
K82-1-48	49.0	15	0.7	1.6	34	1.5	13.5	40.6	20.6
K1166	50.2	6	-1.4	1.9	35	1.8	15.6	40.3	20.9
K1169	49.9	8	-2.4	1.4	32	1.8	17.2	40.8	21.5
Ky85-09073	49.6	10	2.6	1.2	24	1.5	15.0	41.0	20.8
L83-3804	50.5	3	5.7	2.1	33	1.7	15.9	40.6	21.4
LS83-5616	46.8	20	0.1	2.2	39	1.6	13.5	39.9	20.7
Md85-5443	51.5	1	-2.4	1.5	31	1.6	16.9	42.0	20.7
Md86-5324	49.5	11	3.2	1.5	30	1.7	19.1	40.8	21.0
S85-1084	49.2	14	3.4	2.2	37	1.7	17.1	41.1	21.2
S85-1554	47.9	19	1.3	2.0	34	1.8	17.8	42.9	20.5
S86-2209	48.3	17	2.3	1.9	36	1.6	14.1	41.8	20.1
S86-2212	45.6	24	2.1	2.6	37	1.8	14.1	41.3	19.9

*124.8 Days After Planting

UNIFORM TEST IV, 1990

1989-1990 2-YEAR MEAN

No. of Tests Strain	Yield 39 bu/a	Rank 39 No.	Maturity 33 Date	Lodging 39 Score	Plant Height 38 In.	Seed Quality 37 Score	Seed Size 35 g/100	Composition Protein 9 %	 Oil 9 %
Flyer (E)	50.6	2	-3.6	1.4	31	1.8	15.0	41.7	20.9
Pennyrile (L)	48.3	9	6.2	1.7	40	1.8	16.5	41.8	20.6
Ripley (dt)	48.2	10	-0.6	1.2	22	1.5	14.1	39.4	20.9
Spencer (IV)	49.2	7	9/30.0*	1.4	33	2.2	18.0	41.1	21.4
C1747	50.0	4	-2.8	1.3	29	2.2	17.6	41.1	21.2
HC84-4850	49.5	5	-1.4	2.2	36	2.0	17.2	41.8	21.3
K82-1-48	49.5	5	1.2	1.8	34	1.6	13.6	40.5	20.5
L83-3804 Perry	50.6	2	6.2	2.2	34	1.8	16.4	40.6	21.1
LS83-5616	47.2	11	0.0	2.1	39	1.6	13.4	39.8	20.5
Md85-5443 Corsica	52.0	1	-0.4	1.6	32	1.8	17.0	42.2	20.4
S85-1084	48.8	8	3.2	2.2	38	2.0	17.4	41.5	20.9

*128.7 Days After Planting

1988-1990 3-YEAR MEAN

No. of Tests Strain	Yield 58 bu/a	Rank 58 No.	Maturity 51 Date	Lodging 58 Score	Plant Height 58 In.	Seed Quality 56 Score	Seed Size 51 g/100	Composition Protein 14 %	 Oil 14 %
Flyer (E)	48.2	2	-3.6	1.4	33	1.7	14.6	41.4	21.1
Pennyrile (L)	46.1	6	6.6	1.6	41	2.0	16.5	41.8	20.6
Ripley (dt)	46.5	4	-1.2	1.2	23	1.5	13.8	39.6	21.2
Spencer (IV)	47.2	3	9/29.3*	1.4	35	2.2	17.5	40.8	21.5
L83-3804	48.4	1	5.9	2.3	35	1.8	16.4	40.6	21.0
S85-1084	46.4	5	3.3	2.0	39	2.0	17.2	41.4	20.9

*129.5 Days After Planting

UNIFORM TEST IV, 1990

YIELD (bu/a)

Strain	Mean 21 Tests	George-town DE	Middle-town DE	Belle-ville IL	Carbon-dale IL	Ridg-way IL	Urbana IL	Lafay-ette IN
Flyer (E)	50.5	45.5	48.6	44.8	19.9	31.7	69.7	71.9
Delsoy 4500 (SCN)	48.8	45.8	57.0	45.2	29.7	49.1	51.3	59.8
Pennyrile (L)	49.7	44.3	46.3	44.1	28.7	43.3	59.5	62.0
Ripley (dt)	48.0	42.5	41.4	47.3	24.0	32.9	65.2	55.5
Spencer (IV)	49.3	42.6	45.9	44.2	23.6	37.6	64.2	73.8
C1747	50.2	43.7	52.2	42.7	26.4	30.2	70.9	63.3
C1758	51.5	54.8	50.1	39.9	31.4	42.3	65.2	68.2
C1768	49.5	46.6	48.0	43.1	27.8	33.6	67.1	64.5
HC84-4850	50.5	47.1	47.3	41.1	22.0	44.1	64.5	66.1
HC85-275	45.9	38.6	34.5	42.0	24.2	32.6	61.9	64.9
HC85-279	45.8	43.1	41.2	42.2	24.6	40.3	59.5	65.9
HC85-6484	46.2	36.1	41.7	50.8	31.0	33.9	54.3	55.5
K82-1-48	49.0	44.8	50.1	43.1	27.0	37.6	56.1	64.4
K1166	50.2	49.3	44.8	46.5	25.0	48.6	63.0	66.3
K1169	49.9	47.3	48.1	44.0	26.0	40.7	66.7	67.0
Ky85-09073	49.6	43.5	43.2	48.1	35.8	47.3	59.8	62.6
L83-3804	50.5	49.5	53.5	42.2	39.9	47.3	56.8	62.0
LS83-5616	46.8	45.2	52.2	42.6	28.7	49.2	50.3	58.4
Md85-5443	51.5	52.7	48.1	45.9	31.5	33.5	65.0	76.1
Md86-5324	49.5	47.7	49.7	40.9	25.9	28.9	66.1	66.4
S85-1084	49.2	50.5	50.9	41.9	34.3	46.0	58.0	65.6
S85-1554	47.9	46.7	51.2	41.4	22.6	41.2	55.3	59.5
S86-2209	48.3	47.5	51.4	46.1	27.6	46.3	51.9	63.2
S86-2212	45.6	43.4	44.2	42.9	29.6	52.7	48.9	51.5
C.V. (%)		10.9	8.9	7.2	16.7	21.7	7.1	7.1
L.S.D. (5%)		8.2	7.0	5.2	7.6	14.4	7.0	7.5
Row Sp. (In.)		20	20	30	30	30	30	24
Rows/Plot		4	4	4	4	4	4	4
Reps		3	3	3	3	3	3	3

UNIFORM TEST IV, 1990

YIELD (bu/a)

Strain	Vince-nnes IN	Manhat-tan KS	Powhat-tan KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO
Flyer (E)	53.4	56.9	40.9	58.8	58.8	57.6	48.7	42.8
Delsoy 4500 (SCN)	62.6	54.9	43.3	54.1	47.0	54.7	50.5	49.9
Pennyrile (L)	66.9	50.6	40.7	54.7	55.1	66.6	48.9	54.8
Ripley (dt)	65.3	59.7	38.4	56.2	57.6	53.6	47.9	32.1
Spencer (IV)	58.9	52.7	34.8	62.4	61.9	57.0	44.5	43.7
C1747	62.2	54.7	36.6	62.4	61.3	55.9	46.9	44.4
C1758	63.6	58.5	40.9	65.2	58.4	60.8	52.9	43.1
C1768	63.4	53.2	41.1	57.9	57.9	56.1	51.0	41.2
HC84-4850	59.6	60.0	44.7	59.8	56.5	60.8	43.0	43.4
HC85-275	53.5	59.1	39.7	46.9	52.6	53.9	51.2	35.3
HC85-279	56.2	57.1	37.9	48.9	51.6	59.7	43.4	30.4
HC85-6484	57.6	56.9	37.2	45.5	53.3	49.6	49.5	36.2
K82-1-48	64.5	55.4	40.9	59.6	56.1	58.9	49.5	44.6
K1166	67.2	56.4	37.5	62.2	58.8	62.3	50.0	24.2
K1169	60.8	54.4	35.6	60.7	55.2	59.6	53.0	30.6
Ky85-09073	70.3	52.4	33.2	49.2	55.8	56.9	49.0	36.6
L83-3804	56.1	51.5	40.1	55.1	57.0	62.9	49.3	39.4
LS83-5616	64.6	47.9	28.3	51.8	52.4	58.6	45.3	47.4
Md85-5443	68.5	58.8	38.8	63.4	55.8	60.5	51.0	45.3
Md86-5324	61.5	53.1	37.4	56.4	56.4	56.7	43.5	40.8
S85-1084	66.7	48.3	29.2	59.9	57.0	57.2	41.8	44.7
S85-1554	63.6	55.6	33.8	51.9	54.1	57.9	45.0	50.5
S86-2209	57.8	46.1	37.0	54.6	54.3	58.0	39.2	46.8
S86-2212	61.9	48.4	33.2	49.9	52.5	56.7	47.3	48.7
C.V. (%)	6.3	5.8	14.7	5.8	7.7	7.6	7.4	9.2
L.S.D. (5%)	6.5	5.2	9.2	5.5	5.9	7.3	5.9	6.3
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, 1990

YIELD (bu/a)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX	Orange VA
Flyer (E)	50.4	46.0	72.4	64.2	34.9	42.1
Delsoy 4500 (SCN)	39.1	38.4	58.6	56.6	39.7	38.3
Pennyrile (L)	43.6	38.3	61.5	55.2	35.5	42.4
Ripley (dt)	45.7	41.5	66.5	60.2	30.8	43.2
Spencer (IV)	45.0	28.4	69.6	65.6	36.2	42.7
C1747	50.3	45.2	65.1	64.6	33.9	40.8
C1758	43.5	34.0	65.9	61.0	39.5	42.8
C1768	46.7	46.6	63.7	55.1	34.0	40.9
HC84-4850	46.5	45.0	64.8	66.5	39.4	37.3
HC85-275	50.5	38.5	57.5	65.6	28.1	31.8
HC85-279	49.2	27.6	61.9	63.7	23.9	33.0
HC85-6484	50.1	34.6	65.7	65.5	25.2	40.1
K82-1-48	41.7	35.1	60.8	60.3	34.7	43.8
K1166	44.0	32.6	67.4	69.7	37.1	41.5
K1169	47.2	36.7	66.2	64.9	42.4	41.2
Ky85-09073	47.0	43.9	63.7	64.1	38.2	40.5
L83-3804	44.4	49.8	64.2	62.7	33.9	42.6
LS83-5616	40.2	30.8	59.9	58.9	33.1	38.0
Md85-5443	49.7	32.5	63.4	65.7	33.5	41.4
Md86-5324	48.3	44.5	67.5	65.5	38.5	43.2
S85-1084	43.3	37.0	62.9	62.3	33.8	41.4
S85-1554	46.5	33.7	61.9	56.3	37.7	39.2
S86-2209	46.2	41.7	61.2	58.7	32.8	45.0
S86-2212	35.6	38.7	55.8	46.9	31.3	38.5
C.V. (%)	12.8	15.8	8.2	8.1	8.1	11.0
L.S.D. (5%)	6.5	10.0	8.1	8.2	4.6	ns
Row Sp. (In.)	30	30	7	24	40	30
Rows/Plot	4	4	8	4	4	3
Reps	3	3	3	3	3	3

UNIFORM TEST IV, 1990

YIELD RANK

Strain	Yield Rank	George-town DE	Middle-town DE	Belle-ville IL	Carbon-dale IL	Ridg-way IL	Urbana IL	Lafay-ette IN
Flyer (E)	3	13	11	8	24	22	2	3
Delsoy 4500 (SCN)	16	12	1	7	7	3	22	19
Pennyrile (L)	9	16	16	10	9	10	14	17
Ripley (dt)	18	22	22	3	20	20	6	22
Spencer (IV)	13	21	17	9	21	15	10	2
C1747	6	17	3	15	14	23	1	14
C1758	1	1	8	24	5	11	6	4
C1768	11	11	14	12	11	18	3	12
HC84-4850	3	9	15	22	23	9	9	8
HC85-275	22	23	24	19	19	21	12	11
HC85-279	23	20	23	17	18	14	14	9
HC85-6484	21	24	21	1	6	17	20	22
K82-1-48	15	15	8	12	13	15	18	13
K1166	6	5	18	4	17	4	11	7
K1169	8	8	12	11	15	13	4	5
Ky85-09073	10	18	20	2	2	5	13	16
L83-3804	3	4	2	17	1	5	17	17
LS83-5616	20	14	3	16	9	2	23	21
Md85-5443	1	2	12	6	4	19	8	1
Md86-5324	11	6	10	23	16	24	5	6
S85-1084	14	3	7	20	3	8	16	10
S85-1554	19	10	6	21	22	12	19	20
S86-2209	17	7	5	5	12	7	21	15
S86-2212	24	19	19	14	8	1	24	24

UNIFORM TEST IV, 1990

YIELD RANK

Strain	Vince-nnes IN	Manhat-tan KS	Powhat-tan KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO
Flyer (E)	24	7	4	10	3	13	13	14
Delsoy 4500 (SCN)	12	12	2	17	24	21	6	3
Pennyrile (L)	4	20	7	15	16	1	12	1
Ripley (dt)	6	2	11	13	7	23	14	21
Spencer (IV)	18	17	19	3	1	15	19	11
C1747	13	13	17	3	2	20	16	10
C1758	9	5	4	1	5	4	2	13
C1768	11	15	3	11	6	19	4	15
HC84-4850	17	1	1	8	10	4	22	12
HC85-275	23	3	9	23	20	22	3	20
HC85-279	21	6	12	22	23	7	21	23
HC85-6484	20	7	15	24	19	24	8	19
K82-1-48	8	11	4	9	12	9	8	9
K1166	3	9	13	5	3	3	7	24
K1169	16	14	18	6	15	8	1	22
Ky85-09073	1	18	21	21	13	16	11	18
L83-3804	22	19	8	14	8	2	10	17
LS83-5616	7	23	24	19	22	10	17	5
Md85-5443	2	4	10	2	13	6	4	7
Md86-5324	15	16	14	12	11	17	20	16
S85-1084	5	22	23	7	8	14	23	8
S85-1554	9	10	20	18	18	12	18	2
S86-2209	19	24	16	16	17	11	24	6
S86-2212	14	21	21	20	21	17	15	4

UNIFORM TEST IV, 1990

YIELD RANK

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX	Orange VA
Flyer (E)	2	3	1	10	11	9
Delsoy 4500 (SCN)	18	12	22	20	2	20
Pennyrile (L)	23	13	18	22	10	8
Ripley (dt)	14	9	5	17	21	3
Spencer (IV)	15	23	2	4	9	6
C1747	3	4	9	9	14	15
C1758	19	18	7	15	3	5
C1768	10	2	12	23	13	14
HC84-4850	11	5	10	2	4	22
HC85-275	1	11	23	4	22	24
HC85-279	6	24	16	12	24	23
HC85-6484	4	17	8	6	23	17
K82-1-48	21	16	20	16	12	2
K1166	17	20	4	1	8	10
K1169	8	15	6	8	1	13
Ky85-09073	9	7	12	11	6	16
L83-3804	16	1	11	13	14	7
LS83-5616	22	22	21	18	18	21
Md85-5443	5	21	14	3	17	11
Md86-5324	7	6	3	6	5	3
S85-1084	20	14	15	14	16	11
S85-1554	11	19	16	21	7	18
S86-2209	13	8	19	19	19	1
S86-2212	24	10	24	24	20	19

UNIFORM TEST IV, 1990

MATURITY (date)

Strain	Mean 16 Tests	George-town DE	Middle-town DE	Belle-ville IL	Carbon-dale IL	Ridg-way IL	Urbana IL	Lafay-ette IN
Flyer (E)	-3.1	-1		0		-3	-6	-3
Delsoy 4500 (SCN)	4.4	3		10		7	2	3
Pennyrile (L)	5.1	1		7		8	5	7
Ripley (dt)	-0.5	-1		7		-4	-6	-1
Spencer (IV)	09/30	10/01		10/05		09/23	10/03	10/06
C1747	-2.4	-5		0		-3	-6	-1
C1758	0.6	0		2		4	-2	2
C1768	-0.2	0		1		0	-2	0
HC84-4850	-0.5	-1		5		-2	-4	-1
HC85-275	-1.8	-1		0		0	-6	-1
HC85-279	-2.4	-1		0		-4	-8	-1
HC85-6484	-1.3	-1		0		-4	-9	0
K82-1-48	0.7	1		0		4	-2	0
K1166	-1.4	-1		10		-3	-7	-3
K1169	-2.4	-1		2		-3	-6	-1
Ky85-09073	2.6	-1		11		1	-3	2
L83-3804	5.7	3		15		6	2	10
LS83-5616	0.1	-1		7		0	-4	0
Md85-5443	-2.4	-1		0		-3	-7	-2
Md86-5324	3.2	2		10		3	0	6
S85-1084	3.4	3		11		7	0	3
S85-1554	1.3	1		5		3	0	3
S86-2209	2.3	1		9		5	2	6
S86-2212	2.1	2		11		6	0	2
Date Planted	05/28	06/08		06/22		06/04	05/01	05/23
Days to Mature	124.8	115		105		111	155	136

UNIFORM TEST IV, 1990

MATURITY (date)

Strain	Vince-nnes IN	Manhat-tan KS	Powhat-tan KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO
Flyer (E)	-5	-2			-7	-3		-4
Delsoy 4500 (SCN)	-1	5			1	2		5
Pennyrile (L)	2	-2			5	5		13
Ripley (dt)	0	-2			-1	0		-8
Spencer (IV)	10/18	09/28			10/03	10/01		09/16
C1747	-5	0			-5	-3		-2
C1758	0	2			-1	0		0
C1768	0	1			-2	0		0
HC84-4850	1	4			-1	1		0
HC85-275	-1	1			-4	0		-3
HC85-279	-3	1			-5	0		-1
HC85-6484	-2	0			-3	0		-3
K82-1-48	-1	1			-1	0		2
K1166	-4	0			-4	0		-3
K1169	-6	-1			-5	-4		0
Ky85-09073	0	-2			4	0		-1
L83-3804	8	2			4	4		3
LS83-5616	-1	0			-2	0		0
Md85-5443	-2	0			-4	-1		-3
Md86-5324	1	5			2	1		1
S85-1084	1	2			1	0		4
S85-1554	-2	2			-1	-1		1
S86-2209	1	0			2	0		1
S86-2212	-1	3			0	0		2
Date Planted	06/26	05/29			05/25	06/05		05/16
Days to Mature	114	122			131	118		123

UNIFORM TEST IV, 1990

MATURITY (date)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX	Orange VA
Flyer (E)	-2	-4	-5	0	-3	-1
Delsoy 4500 (SCN)	2	6	3	7	12	4
Pennyrile (L)	4	1	10	3	5	7
Ripley (dt)	-3	-1	0	0	12	0
Spencer (IV)	10/07	10/02	09/30	10/01	09/11	09/27
C1747	1	-2	-4	0	-2	-1
C1758	0	-1	1	0	-1	3
C1768	0	0	-1	1	-2	1
HC84-4850	0	-3	-3	1	-4	-1
HC85-275	-1	-6	-8	1	2	-1
HC85-279	-1	-6	-11	0	4	-3
HC85-6484	0	-2	-2	3	2	0
K82-1-48	0	3	2	3	-4	3
K1166	0	-2	-2	1	-4	-1
K1169	-1	-3	-5	0	-2	-2
Ky85-09073	3	4	4	3	11	5
L83-3804	6	5	7	7	4	5
LS83-5616	1	2	-1	1	-1	0
Md85-5443	0	-5	-5	0	-4	-2
Md86-5324	4	1	3	7	3	2
S85-1084	5	3	3	5	3	3
S85-1554	4	1	2	2	2	-2
S86-2209	5	3	0	6	-5	1
S86-2212	3	2	1	4	-3	2
Date Planted	06/13	05/24	05/01	05/18	05/21	05/31
Days to Mature	116	131	152	136	113	119

UNIFORM TEST IV, 1990

LODGING (score)

Strain	Mean 20 Tests	George-town DE	Middle-town DE	Belle-ville IL	Carbon-dale IL	Ridg-way IL	Urbana IL	Lafay-ette IN
Flyer (E)	1.3	1.0	1.0	1.0	1.0	1.0	1.7	2.0
Delsoy 4500 (SCN)	1.8	1.0	2.0	1.5	1.0	1.2	2.2	3.3
Pennyrile (L)	1.7	1.0	1.7	2.0	1.0	1.0	2.2	2.3
Ripley (dt)	1.3	1.0	1.0	1.0	1.0	1.0	1.0	3.5
Spencer (IV)	1.3	1.0	1.0	1.0	1.0	1.0	1.0	2.0
C1747	1.2	1.0	1.0	1.0	1.0	1.2	1.3	1.3
C1758	1.3	1.0	1.0	1.0	1.0	1.0	1.3	2.0
C1768	1.5	1.0	1.7	1.0	1.0	1.0	1.3	3.2
HC84-4850	2.1	1.0	2.0	1.6	1.0	1.8	2.3	3.5
HC85-275	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC85-279	1.1	1.0	1.0	1.0	1.0	1.2	1.0	1.3
HC85-6484	1.1	1.0	1.0	1.0	1.0	1.2	1.0	1.0
K82-1-48	1.6	1.0	2.0	1.0	1.0	1.0	1.7	2.7
K1166	1.9	1.0	1.7	1.7	1.0	1.7	2.2	3.2
K1169	1.4	1.0	1.0	1.0	1.0	1.0	1.3	1.7
Ky85-09073	1.2	1.0	1.0	1.2	1.0	1.0	1.0	1.5
L83-3804	2.1	1.0	2.7	1.0	1.0	1.3	2.0	3.7
LS83-5616	2.2	1.0	2.3	1.0	1.0	1.8	3.2	4.0
Md85-5443	1.5	1.0	1.0	1.0	1.0	1.0	1.7	3.0
Md86-5324	1.5	1.0	2.0	1.5	1.0	1.0	1.0	3.3
S85-1084	2.2	1.0	2.7	2.0	1.0	1.3	2.3	3.8
S85-1554	2.0	1.0	2.3	1.3	1.0	1.2	2.0	3.5
S86-2209	1.9	1.0	2.0	1.8	1.0	1.0	2.0	3.2
S86-2212	2.6	1.0	3.3	3.7	1.0	2.2	3.0	4.5

UNIFORM TEST IV, 1990

LODGING (score)

Strain	Vince-nnes IN	Manhat-tan KS	Powhat-tan KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO
Flyer (E)	1.0	1.0	1.0	1.0	1.3	2.0		1.0
Delsoy 4500 (SCN)	2.0	2.7	1.0	2.0	3.0	2.7		1.0
Pennyrile (L)	1.3	2.0	1.0	2.0	2.8	2.3		1.0
Ripley (dt)	1.0	1.0	1.0	1.0	3.0	1.0		1.0
Spencer (IV)	1.0	1.3	1.0	1.0	1.5	2.0		1.0
C1747	1.0	2.0	1.0	1.0	1.3	1.8		1.0
C1758	1.0	1.3	1.0	1.0	2.2	1.8		1.0
C1768	1.3	1.0	1.0	1.0	2.5	2.2		1.0
HC84-4850	2.2	3.0	1.0	3.0	4.5	2.8		1.0
HC85-275	1.0	1.0	1.0	1.0	1.8	1.0		1.0
HC85-279	1.0	1.0	1.0	1.0	2.0	1.0		1.0
HC85-6484	1.0	1.0	1.0	1.0	1.8	1.0		1.0
K82-1-48	1.3	1.7	1.0	1.0	4.3	2.5		1.0
K1166	1.3	2.7	1.0	2.0	2.8	2.5		1.0
K1169	1.0	1.7	1.0	1.0	2.8	2.2		1.0
Ky85-09073	1.3	1.0	1.0	1.0	2.3	1.0		1.0
L83-3804	3.3	2.3	1.0	1.0	4.5	2.5		1.0
LS83-5616	2.0	3.0	1.0	3.0	4.0	2.7		1.0
Md85-5443	1.0	1.7	1.0	2.0	2.5	1.5		1.0
Md86-5324	1.2	1.3	1.0	1.0	3.2	1.7		1.0
S85-1084	2.0	2.3	1.0	3.0	3.0	3.0		1.5
S85-1554	1.8	2.0	1.0	1.0	4.5	2.7		1.0
S86-2209	1.3	2.3	1.0	1.0	4.8	2.5		1.0
S86-2212	2.5	2.7	1.0	1.0	4.8	3.0		1.0

UNIFORM TEST IV, 1990

LODGING (score)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX	Orange VA
Flyer (E)	1.0	1.1	1.3	2.2	1.5	1.0
Delsoy 4500 (SCN)	1.7	1.1	1.5	2.0	1.7	1.7
Pennyrile (L)	2.0	1.0	1.3	3.2	2.0	1.0
Ripley (dt)	1.0	1.0	1.2	2.8	1.0	1.0
Spencer (IV)	1.0	1.0	1.7	2.2	1.5	1.0
C1747	1.0	1.0	1.2	1.7	1.5	1.0
C1758	1.0	1.0	1.5	2.5	1.5	1.0
C1768	1.7	1.0	1.3	2.7	1.7	1.0
HC84-4850	2.3	1.3	1.8	3.3	2.2	1.0
HC85-275	1.3	1.0	1.0	2.2	1.0	1.0
HC85-279	1.0	1.0	1.2	2.2	1.0	1.0
HC85-6484	1.0	1.0	1.0	2.2	1.0	1.0
K82-1-48	1.0	1.0	1.3	2.7	1.7	1.3
K1166	2.0	1.1	1.7	3.5	2.0	1.3
K1169	1.7	1.0	1.2	2.3	2.2	1.0
Ky85-09073	1.0	1.0	1.2	2.5	1.0	1.0
L83-3804	4.0	1.2	2.3	3.3	1.0	2.0
LS83-5616	3.0	1.1	1.7	3.3	2.0	1.3
Md85-5443	1.3	1.0	1.5	2.5	1.5	1.0
Md86-5324	2.0	1.1	1.0	2.0	1.5	1.3
S85-1084	2.3	1.2	1.7	3.5	2.5	2.0
S85-1554	2.0	1.1	2.0	3.3	2.7	1.7
S86-2209	2.0	1.1	2.5	3.2	1.7	1.3
S86-2212	4.3	1.2	3.3	4.0	2.0	1.7

UNIFORM TEST IV, 1990

PLANT HEIGHT (inches)

Strain	Mean 21 Tests	George-town DE	Middle-town DE	Belle-ville IL	Carbon-dale IL	Ridg-way IL	Urbana IL	Lafay-ette IN
Flyer (E)	30	22	26	34	23	29	41	38
Delsoy 4500 (SCN)	37	29	38	45	34	35	47	39
Pennyrile (L)	38	28	32	44	31	38	47	47
Ripley (dt)	21	14	13	28	12	18	28	27
Spencer (IV)	32	24	27	34	26	32	43	41
C1747	29	24	27	31	25	27	39	36
C1758	32	26	28	35	27	31	42	39
C1768	32	24	30	36	27	30	42	39
HC84-4850	35	27	30	36	28	36	46	41
HC85-275	18	13	13	23	17	19	23	22
HC85-279	19	14	14	25	16	21	22	23
HC85-6484	18	12	13	23	17	17	23	23
K82-1-48	34	27	30	35	27	33	41	38
K1166	35	25	28	40	30	36	44	37
K1169	32	27	29	37	25	31	41	37
Ky85-09073	24	17	17	28	17	21	34	32
L83-3804	33	26	33	38	23	31	45	42
LS83-5616	39	32	38	44	29	41	47	41
Md85-5443	31	24	25	37	26	28	40	36
Md86-5324	30	24	26	34	24	27	36	37
S85-1084	37	32	35	45	31	34	43	43
S85-1554	34	27	33	35	24	31	46	41
S86-2209	36	25	34	41	30	33	46	41
S86-2212	37	32	35	41	30	37	44	38

UNIFORM TEST IV, 1990

PLANT HEIGHT (inches)

Strain	Vince-nnes IN	Manhat-tan KS	Powhat-tan KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO
Flyer (E)	30	38	27	32	31	29	30	27
Delsoy 4500 (SCN)	37	43	34	36	32	38	39	31
Pennyrile (L)	39	45	36	40	40	40	36	38
Ripley (dt)	28	27	17	15	27	20	19	12
Spencer (IV)	33	40	25	35	33	33	32	30
C1747	27	36	26	35	31	29	30	24
C1758	32	38	28	34	35	33	33	27
C1768	34	39	27	32	33	32	33	27
HC84-4850	34	43	32	39	37	37	33	32
HC85-275	19	21	18	15	25	17	17	14
HC85-279	24	23	18	15	24	17	18	15
HC85-6484	20	22	16	14	23	17	22	13
K82-1-48	35	40	33	35	33	37	35	31
K1166	39	40	30	37	38	36	35	29
K1169	32	40	27	35	33	33	32	30
Ky85-09073	32	29	19	20	29	22	25	15
L83-3804	38	37	35	26	37	31	33	21
LS83-5616	36	44	32	41	43	40	41	36
Md85-5443	35	41	26	31	34	31	32	29
Md86-5324	36	37	30	26	36	30	32	21
S85-1084	37	43	29	40	38	40	38	34
S85-1554	30	43	28	35	36	34	36	30
S86-2209	34	42	30	37	35	36	37	31
S86-2212	39	41	31	37	40	40	37	37

UNIFORM TEST IV, 1990

PLANT HEIGHT (inches)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX	Orange VA
Flyer (E)	32	26	36	34	23	32
Delsoy 4500 (SCN)	38	30	38	38	32	37
Pennyrile (L)	41	27	45	41	28	38
Ripley (dt)	26	18	27	29	11	21
Spencer (IV)	35	21	38	38	26	33
C1747	29	23	33	31	22	28
C1758	35	22	34	38	25	34
C1768	35	26	33	35	25	30
HC84-4850	36	31	38	41	26	35
HC85-275	21	18	21	23	9	19
HC85-279	23	16	21	23	8	20
HC85-6484	21	15	21	25	9	19
K82-1-48	34	25	36	37	29	34
K1166	40	25	36	40	27	34
K1169	35	23	32	38	25	33
Ky85-09073	29	22	29	31	11	25
L83-3804	37	27	39	42	16	34
LS83-5616	44	27	42	43	30	38
Md85-5443	33	23	32	34	25	31
Md86-5324	37	25	31	35	19	30
S85-1084	42	27	37	41	27	36
S85-1554	38	25	37	38	26	35
S86-2209	40	29	41	42	29	37
S86-2212	39	28	38	41	29	35

UNIFORM TEST IV, 1990

SEED QUALITY (score)

Strain	Mean 19 Tests	George-town DE	Middle-town DE	Belle-ville IL	Carbon-dale IL	Ridg-way IL	Urbana IL	Lafay-ette IN
Flyer (E)	1.8	1.0	1.0	2.0	2.0	1.5	1.5	1.5
Delsoy 4500 (SCN)	1.5	1.0	1.0	1.0	2.0	1.5	1.7	1.0
Pennyrile (L)	1.6	1.0	1.0	1.0	2.0	1.5	1.7	1.0
Ripley (dt)	1.5	1.0	1.0	1.0	2.0	1.5	1.5	1.0
Spencer (IV)	1.8	1.0	1.0	2.0	4.0	1.5	1.8	1.0
C1747	1.9	1.0	1.0	2.0	3.0	1.5	1.7	1.0
C1758	2.2	1.0	1.0	2.0	4.0	1.8	2.8	1.5
C1768	1.7	1.0	1.0	1.0	3.0	1.5	1.7	1.0
HC84-4850	1.9	1.0	1.0	1.0	3.0	1.5	1.5	1.0
HC85-275	1.7	1.0	1.0	2.0	2.0	1.5	1.5	1.0
HC85-279	1.9	1.0	1.0	2.0	3.0	1.5	1.5	1.0
HC85-6484	2.1	1.0	1.0	2.0	4.0	2.3	2.0	1.0
K82-1-48	1.5	1.0	1.0	1.0	2.0	1.5	1.8	1.0
K1166	1.8	1.0	1.0	1.0	3.0	1.5	1.5	1.0
K1169	1.8	1.0	1.0	2.0	3.0	1.5	1.8	1.0
Ky85-09073	1.5	1.0	1.0	1.0	2.0	1.5	1.5	1.0
L83-3804	1.7	1.0	1.0	1.0	2.0	1.5	1.5	1.0
LS83-5616	1.6	1.0	1.0	1.0	2.0	1.5	1.5	1.0
Md85-5443	1.6	1.0	1.0	1.0	2.0	1.5	1.7	1.0
Md86-5324	1.7	1.0	1.0	1.0	3.0	1.5	1.5	1.0
S85-1084	1.7	1.0	1.0	1.0	2.0	1.5	1.5	1.0
S85-1554	1.8	1.0	1.0	1.0	3.0	1.5	1.8	1.0
S86-2209	1.6	1.0	1.0	1.0	2.0	1.5	1.7	1.0
S86-2212	1.8	1.0	1.0	1.0	3.0	1.5	1.5	1.0

UNIFORM TEST IV, 1990

SEED QUALITY (score)

Strain	Vince-nnes IN	Manhat-tan KS	Powhat-tan KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO
Flyer (E)	1.0	4.0	3.0	3.0	2.0	1.0		2.0
Delsoy 4500 (SCN)	1.0	2.0	2.0	2.0	2.0	1.0		2.0
Pennyrile (L)	1.5	3.0	2.0	3.0	1.0	1.3		2.5
Ripley (dt)	1.0	3.0	2.0	3.0	2.0	1.0		2.0
Spencer (IV)	1.5	2.0	3.0	2.0	2.0	1.3		2.5
C1747	1.0	4.0	3.0	4.0	2.0	1.5		2.5
C1758	1.5	4.0	4.0	4.0	2.0	1.7		2.0
C1768	1.0	3.0	3.0	3.0	1.0	1.5		1.5
HC84-4850	1.0	3.0	3.0	3.0	3.0	1.0		2.0
HC85-275	1.0	2.0	3.0	3.0	2.0	1.0		2.5
HC85-279	1.0	3.0	3.0	3.0	3.0	1.3		2.5
HC85-6484	1.0	3.0	4.0	3.0	2.0	1.3		2.0
K82-1-48	1.0	2.0	2.0	2.0	2.0	1.0		1.5
K1166	1.0	3.0	3.0	3.0	2.0	1.2		2.5
K1169	1.0	3.0	3.0	3.0	2.0	1.0		2.0
Ky85-09073	1.0	3.0	3.0	2.0	1.0	1.0		2.0
L83-3804	1.0	2.0	2.0	2.0	2.0	1.3		2.0
LS83-5616	1.0	2.0	2.0	3.0	1.0	1.0		1.5
Md85-5443	1.0	3.0	2.0	3.0	2.0	1.2		2.5
Md86-5324	1.0	2.0	3.0	3.0	1.0	1.3		2.5
S85-1084	1.0	2.0	3.0	3.0	2.0	1.0		1.5
S85-1554	1.0	3.0	3.0	4.0	2.0	1.2		1.5
S86-2209	1.0	3.0	3.0	3.0	1.0	1.2		1.5
S86-2212	1.0	3.0	4.0	3.0	1.0	1.2		1.5

UNIFORM TEST IV, 1990

SEED QUALITY (score)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX	Orange VA
Flyer (E)	1.3	1.0		2.0	2.0	1.2
Delsoy 4500 (SCN)	1.0	1.0		2.2	1.5	1.0
Pennyrile (L)	2.0	1.0		2.0	1.5	1.2
Ripley (dt)	1.0	1.0		1.7	1.5	1.0
Spencer (IV)	1.0	1.2		2.2	2.2	1.0
C1747	1.0	1.1		2.3	2.2	1.0
C1758	1.0	1.3		2.3	2.5	1.2
C1768	1.7	1.1		1.8	2.2	1.0
HC84-4850	2.3	1.3		2.0	3.0	1.0
HC85-275	1.3	1.1		2.0	2.0	1.0
HC85-279	1.0	1.7		2.2	2.2	1.3
HC85-6484	1.0	1.1		2.3	3.0	2.0
K82-1-48	1.0	1.1		2.2	1.5	1.2
K1166	1.7	1.0		2.2	2.0	1.5
K1169	1.7	1.1		2.0	2.0	1.0
Ky85-09073	1.0	1.0		1.7	1.2	1.0
L83-3804	4.0	1.0		2.0	2.2	1.0
LS83-5616	3.0	1.0		2.2	2.0	1.0
Md85-5443	1.3	1.2		2.0	1.5	1.0
Md86-5324	2.0	1.1		2.0	2.5	1.0
S85-1084	2.3	1.1		2.2	2.5	1.0
S85-1554	2.0	1.1		2.0	2.0	1.0
S86-2209	2.0	1.0		2.0	2.0	1.0
S86-2212	4.3	1.0		1.8	2.2	1.0

UNIFORM TEST IV, 1990

SEED SIZE (g/100)

Strain	Mean 17 Tests	George-town DE	Middle-town DE	Belle-ville IL	Carbon-dale IL	Ridg-way IL	Urbana IL	Lafay-ette IN
Flyer (E)	15.0			15.1	14.0	13.1	14.3	17.5
Delsoy 4500 (SCN)	14.7			16.8	16.6	15.4	12.6	13.6
Pennyrile (L)	16.0			14.2	13.1	13.7	16.9	18.7
Ripley (dt)	13.9			14.7	13.2	11.6	13.8	14.2
Spencer (IV)	17.6			18.7	15.8	14.8	17.8	19.8
C1747	17.5			17.0	15.0	15.2	17.9	18.3
C1758	18.8			19.1	17.4	18.1	17.7	19.0
C1768	18.9			19.3	18.1	17.2	18.6	19.5
HC84-4850	17.3			16.5	16.1	16.1	16.8	16.9
HC85-275	16.9			15.7	15.1	15.7	17.8	17.9
HC85-279	17.6			18.0	16.5	17.2	17.6	19.4
HC85-6484	14.4			14.4	11.8	13.1	13.9	14.5
K82-1-48	13.5			14.3	12.7	12.2	13.9	14.4
K1166	15.6			16.9	14.2	14.1	15.4	16.5
K1169	17.2			17.3	16.4	16.1	17.6	17.5
Ky85-09073	15.0			16.1	13.3	13.4	13.7	15.9
L83-3804	15.9			16.6	15.8	16.2	16.8	15.5
LS83-5616	13.5			14.7	12.1	13.1	13.4	13.6
Md85-5443	16.9			17.1	16.9	15.1	17.2	18.9
Md86-5324	19.1			19.9	18.1	18.7	19.6	18.2
S85-1084	17.1			18.6	16.3	16.8	17.1	17.6
S85-1554	17.8			18.9	17.2	17.4	18.8	18.3
S86-2209	14.1			14.7	13.9	14.1	14.2	14.0
S86-2212	14.1			16.2	13.4	14.1	14.1	14.2

UNIFORM TEST IV, 1990

SEED SIZE (g/100)

Strain	Vince-nnes IN	Manhat-tan KS	Powhat-tan KS	Topeka KS	Lexing-ton KY	Queens-town MD	Colum-bia MO	Portage-ville MO
Flyer (E)	16.1	16.0	13.4	14.6	16.8	16.8		12.9
Delsoy 4500 (SCN)	16.4	13.4	11.4	12.1	13.4	13.7		13.2
Pennyrile (L)	19.5	17.0	16.0	16.5	19.2	19.3		17.3
Ripley (dt)	16.5	13.4	13.3	16.1	13.7	14.9		13.0
Spencer (IV)	18.6	16.5	16.4	17.6	20.2	19.6		16.7
C1747	18.6	16.7	16.8	18.0	19.2	19.6		16.2
C1758	22.1	19.3	18.0	19.4	19.9	20.3		18.2
C1768	21.1	18.9	17.8	18.1	20.1	19.9		18.3
HC84-4850	18.4	18.9	15.9	18.3	18.5	19.2		16.7
HC85-275	17.7	17.4	16.3	17.2	16.9	18.0		17.0
HC85-279	18.6	18.6	12.7	18.3	17.3	18.7		18.4
HC85-6484	17.3	15.8	12.8	15.6	14.6	14.5		14.2
K82-1-48	16.7	13.6	12.1	13.4	13.5	15.1		11.2
K1166	18.5	16.2	14.0	15.5	16.9	17.1		13.2
K1169	19.2	18.0	15.2	17.1	18.3	17.9		16.7
Ky85-09073	17.4	15.3	14.8	15.1	16.2	16.3		13.1
L83-3804	17.4	15.0	13.5	15.9	16.5	16.8		14.6
LS83-5616	16.5	13.6	11.3	12.7	14.1	15.1		12.3
Md85-5443	18.6	18.5	11.1	17.3	17.3	18.1		14.9
Md86-5324	20.9	18.7	17.6	19.5	18.8	20.2		18.8
S85-1084	21.6	15.7	14.7	16.4	20.0	18.2		14.1
S85-1554	19.3	18.1	16.4	18.4	19.0	20.5		15.8
S86-2209	17.5	12.8	12.1	13.2	14.1	15.1		12.0
S86-2212	18.5	13.8	11.1	14.8	14.0	15.5		11.4

UNIFORM TEST IV, 1990

SEED SIZE (g/100)

Strain	Adel-phia NJ	Mt. Orab OH	South Charleston OH	Landis-ville PA	Lubbock TX	Orange VA
Flyer (E)	15.0	14.0		14.4	15.6	15.0
Delsoy 4500 (SCN)	18.0	15.4		16.1	18.6	13.3
Pennyrile (L)	14.0	12.8		12.6	13.3	17.7
Ripley (dt)	13.0	12.7		13.3	15.3	13.4
Spencer (IV)	18.0	16.2		18.9	17.3	17.0
C1747	19.0	17.5		18.9	16.8	16.6
C1758	18.0	16.1		18.8	20.3	18.3
C1768	20.0	18.5		18.9	17.9	18.4
HC84-4850	18.0	15.6		18.1	18.3	16.6
HC85-275	17.0	14.7		19.4	17.1	16.2
HC85-279	17.0	15.6		19.5	20.3	16.2
HC85-6484	15.0	11.7		16.8	14.9	14.0
K82-1-48	13.0	12.5		14.9	12.8	12.7
K1166	15.0	14.4		16.6	15.9	15.3
K1169	16.0	15.9		17.5	18.9	16.8
Ky85-09073	15.0	13.5		15.6	14.9	14.6
L83-3804	17.0	15.0		17.0	15.5	15.2
LS83-5616	14.0	12.2		14.5	13.2	12.5
Md85-5443	17.0	15.3		18.7	17.6	17.0
Md86-5324	19.0	18.7		19.5	19.9	19.3
S85-1084	17.0	16.1		18.0	15.9	16.2
S85-1554	18.0	15.2		19.4	16.6	16.0
S86-2209	16.0	13.9		15.4	13.8	13.5
S86-2212	16.0	13.3		13.1	12.7	13.1

UNIFORM TEST IV, 1990

PROTEIN (%)

Strain	Mean 5 Tests	Urbana IL	Ridgway IL	Lexington KY	Queens-town MD	Mt. Orab OH
Flyer (E)	41.6	41.3	42.4	40.8	42.3	41.1
Delsoy 4500 (SCN)	40.9	40.9	39.1	42.1	40.5	42.0
Pennyrile (L)	41.4	42.0	41.6	42.0	41.9	39.5
Ripley (dt)	39.5	38.6	40.6	39.3	39.0	39.8
Spencer (IV)	40.7	41.3	40.2	40.6	40.9	40.6
C1747	41.1	41.6	41.3	39.9	41.8	41.0
C1758	41.5	41.9	41.4	41.0	40.9	42.3
C1768 •	41.5	41.5	42.1	41.3	40.8	41.9
HC84-4850	41.5	41.0	41.8	41.5	41.3	42.1
HC85-275	41.7	41.5	42.9	40.0	42.0	42.2
HC85-279	40.8	40.8	41.1	39.6	40.3	42.0
HC85-6484	40.8	42.6	41.9	38.5	40.6	40.6
K82-1-48	40.6	41.7	40.8	39.7	39.6	41.2
K1166	40.3	40.7	40.8	40.0	40.0	40.1
K1169	40.8	40.8	41.4	39.5	40.9	41.5
Ky85-09073	41.0	42.1	40.5	41.0	41.0	40.5
L83-3804	40.6	41.5	39.7	40.1	40.8	40.7
LS83-5616	39.9	40.1	39.7	39.1	40.4	40.0
Md85-5443	42.0	42.2	42.3	41.5	42.5	41.7
Md86-5324	40.8	41.0	40.6	40.8	40.8	40.8
S85-1084	41.1	42.4	39.7	41.6	41.2	40.7
S85-1554	42.9	43.6	42.3	43.0	42.8	43.0
S86-2209	41.8	42.8	40.7	41.5	41.4	42.5
S86-2212	41.3	42.0	39.5	41.5	42.1	41.2

UNIFORM TEST IV, 1990

OIL (%)

Strain	Mean 5 Tests	Urbana IL	Ridgway IL	Lexington KY	Queens-town MD	Mt. Orab OH
Flyer (E)	21.2	21.2	21.5	21.9	20.6	20.9
Delsoy 4500 (SCN)	20.8	19.9	22.1	20.9	20.5	20.5
Pennyrile (L)	20.8	20.5	22.1	20.5	20.6	20.4
Ripley (dt)	21.1	21.4	21.2	21.2	20.9	20.6
Spencer (IV)	21.8	21.4	22.9	21.9	21.5	21.1
C1747	21.4	21.0	22.1	21.8	20.5	21.5
C1758	21.1	20.7	22.2	21.0	20.8	20.8
C1768	20.7	20.9	21.0	20.9	20.4	20.4
HC84-4850	21.3	21.2	21.8	21.6	21.0	21.1
HC85-275	21.3	21.4	21.5	22.2	21.0	20.5
HC85-279	21.4	21.4	21.9	22.2	21.0	20.7
HC85-6484	21.4	20.3	21.9	23.1	20.8	21.1
K82-1-48	20.6	20.4	21.1	21.4	20.3	19.8
K1166	20.9	21.1	21.1	21.1	20.7	20.5
K1169	21.5	21.5	21.9	21.9	21.0	21.1
Ky85-09073	20.8	20.3	21.6	20.7	21.2	20.2
L83-3804	21.4	20.8	22.4	21.5	20.6	21.5
LS83-5616	20.7	20.7	21.1	21.3	20.0	20.3
Md85-5443	20.7	20.8	20.9	21.0	20.2	20.8
Md86-5324	21.0	20.9	21.6	21.3	20.3	21.1
S85-1084	21.2	20.8	22.6	20.8	20.8	20.9
S85-1554	20.5	20.4	21.4	20.7	20.3	19.6
S86-2209	20.1	19.9	21.2	20.4	19.8	19.4
S86-2212	19.9	19.9	21.1	19.7	19.0	19.6

PRELIMINARY TEST IVA, 1990

Strain	Parentage	Generation Composited	Unique Traits
Flyer (E)	Asgrow A3127(4) x Williams 82	BC3 F2	Rps1-k
Pennyrile (L)	Williams x Essex	F5	
Delsoy 4500 (SCN)	Cumberland x Forrest	F5	SCN 3
Spencer (IV)	A75-305022 x Century	F5	
C1803	Bradley x L80-4323	F4	
C1804	Bradley x L80-4323	F4	
C1811	Spencer x C1640	F5	
C1813	C1655 x Pella 86	F5	
C1826	Williams 82(3) x (PI54615-1 x PI86050)	F5	
HC85-5148	Pella x Gnome	F5	Dt1
HC85-5154	Pella x Gnome	F5	Dt1
HC86-3403	HC78-279 x Asgrow A3127	F5	Dt1
L84-5989	Willaims 82 x L78-4054	F6	Rps1-k, BSR Resis.
L84-6089	Willaims 82 x L78-4094	F6	Rps1-k, BSR Resis.
LN87-1455	A80-346029 x LN80-7532	F5	Rps1-a
LN87-1478	A80-346029 x LN80-7532	F5	Rps1-a
LS85-7707	Pyramid x LS78-W124-1	F4	
LS87-0626	Fayette x Pyramid	F5	
LS87-1257	Fayette x Pyramid	F5	
LS87-1311	Fayette x Pyramid	F5	
LS87-1422	Fayette x Pyramid	F5	
LS87-1615	Fayette x Pyramid	F5	
LS87-1638	Fayette x Pyramid	F5	
LS87-1907	Fayette x Pyramid	F5	
LS87-2154	Fayette x Pyramid	F5	
S88-1458	S82-1044 x S79-4296	F6	SCN 3,4 Resis.
U893810	Hobbit x Platte	F5	
U893907	Winchester x HC79-478	F5	

PRELIMINARY TEST IVA, 1990

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Shattering Score Manhattan	BB Urbana n Score	PR Vickery Phyto. Tolerance	PR Urbana Race 1	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %
Flyer (E)	PTTSBlI	1.0	2.5	3.7	R	R	2	4
Pennyrile (L)	WTBIBlI	1.0	2.5	4.7	S	S	4	8
Delsoy 4500 (SCN)	WGTSBfI	1.0	2.5	5.0	H	S	6	2
Spencer (IV)	WTBIBrI	1.0	2.0	6.3	R	S	32	14
C1803	WTTSBlI	2.0	4.0	3.7	R	R	26	0
C1804	WTTSBlI	2.0	2.0	3.3	R	R	20	0
C1811	PTTIBlI	2.0	2.0	4.7	R	S	24	2
C1813	PTTSBlI	1.0	3.0	4.3	R	H	26	0
C1826	WTBIBlI	1.0	2.0	4.0	R	S	6	10
HC85-5148	PTTIBlI	2.0	3.5	3.7	R	S	12	10
HC85-5154	PTTIBlI	2.0	3.5	4.3	S	S	4	2
HC86-3403	PTBIBlI	1.0	2.5	5.0	S	S	18	0
L84-5989	WTTSBlI	2.0	3.0	2.7	R	R	6	10
L84-6089	WTBIBlI	1.0	4.0	2.7	R	R	16	2
LN87-1455	WTBIBlI	2.0	3.0	6.7	R	S	24	4
LN87-1478	PTBIBlI	1.0	3.0	7.0	R	S	44	4
LS85-7707	WGTSBfI	2.0	4.5	6.0	R	S	4	2
LS87-0626	PTTSBlI	2.0	4.0	3.3	R	H	2	12
LS87-1257	PTBDBlI	1.0	3.0	3.0	R	H	12	4
LS87-1311	W+PTBSBlI	1.0	2.0	6.0	R	H	8	0
LS87-1422	WTTSBlI	2.0	2.5	6.0	S	S	20	8
LS87-1615	WGBDBfI	2.0	2.5	4.3	S	S	26	2
LS87-1638	PGTIIbI	2.0	4.5	4.7	H	S	14	0
LS87-1907	PGTIIbI	1.0	3.0	5.7	H	S	22	2
LS87-2154	PTBIIbI	2.0	2.0	3.7	R	H	4	6
S88-1458	WTBSBlI	1.0	2.5	3.7	R	H	2	0
U893810	PGBIBlI	1.0	3.0	4.3	S	S	20	4
U893907	WTTSBrI	1.0	3.0	3.7	R	H	24	0

PRELIMINARY TEST IVA, 1990

REGIONAL SUMMARY

	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	10	10	9	9	10	8	8	4	4
Strain	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Flyer (E)	50.6	14	-4.9	1.2	32	1.4	15.1	41.6	21.0
Pennyrile (L)	53.4	2	4.9	1.6	41	1.7	17.5	41.9	20.4
Delsoy 4500	51.2	12	2.0	1.9	38	1.3	13.8	41.2	20.0
Spencer (IV)	51.0	13	10/03*	1.3	34	1.9	18.2	41.5	21.1
C1803	52.0	7	-1.3	1.9	37	1.6	16.1	40.0	21.4
C1804	52.9	3	0.7	2.2	39	1.4	17.3	41.5	20.1
C1811	50.1	18	-3.2	1.7	35	1.8	17.0	41.7	20.9
C1813	54.6	1	-0.7	1.5	34	1.6	19.2	39.5	22.2
C1826	50.6	14	-0.7	1.8	34	1.5	16.3	40.4	20.8
HC85-5148	48.6	26	-4.0	1.9	37	1.9	19.0	41.1	21.6
HC85-5154	49.8	19	-3.4	1.7	34	1.6	19.0	40.7	22.0
HC86-3403	52.9	3	-0.1	1.5	33	1.4	17.4	43.2	21.3
L84-5989	49.2	22	-1.8	2.5	40	1.6	17.3	40.9	21.2
L84-6089	52.3	6	0.6	2.1	40	1.7	17.1	41.8	20.4
LN87-1455	46.4	28	-4.4	1.6	31	2.0	15.6	40.7	20.9
LN87-1478	49.1	23	-4.1	2.0	35	2.1	17.2	41.6	20.1
LS85-7707	48.8	25	0.8	1.8	38	1.6	12.7	37.8	20.2
LS87-0626	49.3	21	-1.8	2.5	42	1.5	16.4	41.8	20.9
LS87-1257	51.4	10	1.2	2.1	43	1.7	15.9	42.2	19.2
LS87-1311	52.5	5	1.3	1.6	39	1.3	15.4	39.2	20.8
LS87-1422	49.0	24	-3.0	2.0	41	1.7	16.2	39.9	21.7
LS87-1615	51.5	9	0.6	1.4	37	1.4	15.2	40.8	19.6
LS87-1638	47.0	27	-1.4	1.9	38	1.4	13.1	41.1	18.9
LS87-1907	49.4	20	0.1	2.5	39	1.4	14.1	40.2	20.1
LS87-2154	51.7	8	1.8	2.2	42	1.6	15.2	38.9	20.6
S88-1458	50.4	16	3.7	2.0	40	1.7	17.2	41.9	20.3
U893810	51.4	10	-3.6	1.8	35	1.7	18.0	42.4	20.5
U893907	50.3	17	-1.4	1.4	35	2.0	17.7	40.9	21.7

*129.3 Days After Planting

PRELIMINARY TEST IVA, 1990

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	Charle-ston OH
Flyer (E)	50.6	31.0	66.3	46.4	61.9	52.8	57.5	47.7	39.1	36.7	66.8
Pennyrile (L)	53.4	36.1	61.1	67.1	51.8	57.6	60.7	51.4	41.8	41.9	64.2
Delsoy 4500	51.2	41.2	59.0	63.4	53.9	41.0	51.7	59.0	53.3	33.8	55.9
Spencer (IV)	51.0	33.1	72.1	64.1	53.4	53.7	55.1	40.5	41.3	32.2	64.0
C1803	52.0	38.6	62.8	62.2	53.6	46.7	58.8	47.2	48.0	40.4	61.8
C1804	52.9	44.8	63.7	59.7	48.7	47.8	56.0	53.1	51.1	39.0	64.8
C1811	50.1	35.6	56.8	67.6	54.6	56.8	57.8	38.5	36.7	37.5	58.8
C1813	54.6	41.3	68.8	60.0	59.3	53.1	58.6	54.8	39.9	37.2	72.6
C1826	50.6	27.4	60.7	63.2	52.6	55.2	64.2	44.4	37.6	39.6	61.3
HC85-5148	48.6	30.1	57.8	66.4	48.8	43.8	53.4	47.2	34.8	40.3	63.2
HC85-5154	49.8	27.1	62.9	62.9	49.8	53.6	53.7	44.8	42.3	36.4	64.4
HC86-3403	52.9	26.2	67.4	64.9	57.9	50.1	61.9	52.1	46.2	39.5	62.5
L84-5989	49.2	30.7	53.6	57.4	55.2	47.8	58.6	42.7	37.6	40.4	67.8
L84-6089	52.3	35.8	57.8	63.7	52.9	52.1	54.4	51.0	39.5	45.4	70.5
LN87-1455	46.4	25.1	54.6	57.5	54.4	52.6	52.9	42.6	33.4	31.4	59.5
LN87-1478	49.1	31.8	63.1	50.8	51.4	54.2	59.4	46.0	38.4	33.9	61.7
LS85-7707	48.8	41.7	56.4	59.8	54.4	50.6	51.8	45.8	45.6	25.8	56.0
LS87-0626	49.3	35.6	58.1	61.4	52.8	42.9	52.1	46.4	47.6	37.5	58.8
LS87-1257	51.4	41.8	56.5	60.7	48.5	54.2	56.3	48.7	50.8	43.0	53.6
LS87-1311	52.5	45.2	57.3	63.6	50.3	57.5	58.2	47.4	41.6	38.1	65.8
LS87-1422	49.0	35.4	60.6	65.9	49.1	50.3	50.7	49.1	44.4	25.5	58.7
LS87-1615	51.5	36.4	59.6	62.6	55.5	53.4	52.1	47.7	48.8	35.0	64.1
LS87-1638	47.0	39.4	50.6	62.9	44.6	51.9	49.7	40.9	40.5	35.3	53.9
LS87-1907	49.4	35.7	55.4	63.1	50.3	53.2	56.8	40.8	43.5	37.8	57.4
LS87-2154	51.7	44.6	55.2	64.5	48.6	45.0	56.0	48.6	50.6	42.1	61.9
S88-1458	50.4	40.9	47.8	66.9	52.2	52.8	55.5	47.2	42.7	44.2	54.0
U893810	51.4	21.6	63.1	59.0	58.8	50.6	60.6	55.7	35.5	40.0	68.8
U893907	50.3	32.2	59.2	54.9	62.7	48.1	57.8	54.2	45.2	36.4	52.5
C.V. (%)		15.1	5.9	8.6	5.7	7.6	6.6	7.3	7.5	12.7	7.1
L.S.D. (5%)		10.5	7.3	10.8	6.3	6.7	ns	6.8	6.5	9.4	8.4
Row Sp. (In.)		30	30	24	30	30	30	30	30	30	7
Rows/Plot		4	4	4	4	4	4	4	4	4	8
Reps		2	2	2	2	2	2	2	2	2	2

PRELIMINARY TEST IVA, 1990

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	Charle-ston OH
Flyer (E)	14	21	4	28	2	12	12	13	21	18	5
Pennyrile (L)	2	12	10	2	18	1	3	7	15	5	9
Delsoy 4500	12	7	15	11	11	28	26	1	1	24	24
Spencer (IV)	13	18	1	8	13	7	18	27	17	25	11
C1803	7	10	9	17	12	24	6	17	6	6	15
C1804	3	2	5	22	25	22	15	5	2	12	7
C1811	18	15	20	1	8	3	10	28	25	15	19
C1813	1	6	2	20	3	11	7	3	19	17	1
C1826	14	24	11	12	16	4	1	22	23	10	17
HC85-5148	26	23	17	4	24	26	21	16	27	8	12
HC85-5154	19	25	8	14	22	8	20	21	14	19	8
HC86-3403	3	26	3	6	5	20	2	6	8	11	13
L84-5989	22	22	26	25	7	22	7	23	23	6	4
L84-6089	6	13	17	9	14	15	19	8	20	1	2
LN87-1455	28	27	25	24	9	14	22	24	28	26	18
LN87-1478	23	20	6	27	19	5	5	19	22	23	16
LS85-7707	25	5	22	21	9	17	25	20	9	27	23
LS87-0626	21	16	16	18	15	27	23	18	7	15	19
LS87-1257	10	4	21	19	27	5	14	10	3	3	27
LS87-1311	5	1	19	10	20	2	9	14	16	13	6
LS87-1422	24	17	12	5	23	19	27	9	11	28	21
LS87-1615	9	11	13	16	6	9	23	12	5	22	10
LS87-1638	27	9	27	14	28	16	28	25	18	21	26
LS87-1907	20	14	23	13	20	10	13	26	12	14	22
LS87-2154	8	3	24	7	26	25	15	11	4	4	14
S88-1458	16	8	28	3	17	12	17	15	13	2	25
U893810	10	28	6	23	4	17	4	2	26	9	3
U893907	17	19	14	26	1	21	10	4	10	19	28

PRELIMINARY TEST IVA, 1990

MATURITY (date)

Strain	Mean 9 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	Charle-ston OH
Flyer (E)	-4.9	-2	-8	-3	-2	-8	-3		-8	-5	-5
Pennyrile (L)	4.9	10	-3	2	5	3	4		8	7	8
Delsoy 4500	2.0	7	2	1	5	-2	1		1	3	0
Spencer (IV)	10/03	10/07	10/05	10/18	10/01	10/05	10/02		09/19	09/30	10/02
C1803	-1.3	-2	-2	0	-2	-2	1		0	-1	-4
C1804	0.7	5	0	0	0	-1	-1		2	1	0
C1811	-3.2	-2	-6	-1	-4	-2	-3		-5	-3	-3
C1813	-0.7	1	-4	0	-1	-2	0		0	1	-1
C1826	-0.7	2	-4	0	0	-2	0		-4	1	1
HC85-5148	-4.0	-2	-6	-2	-1	-7	-5		-3	-5	-5
HC85-5154	-3.4	0	-4	-5	-4	-8	-4		-2	0	-4
HC86-3403	-0.1	2	-3	0	2	-3	1		1	1	-2
L84-5989	-1.8	-2	-6	0	-1	-2	0		-6	1	0
L84-6089	0.6	5	-1	0	0	-2	0		0	0	3
LN87-1455	-4.4	-2	-5	-1	-4	-6	-6		-8	-4	-4
LN87-1478	-4.1	-2	-5	-4	-3	-3	-6		-6	-3	-5
LS85-7707	0.8	7	-3	1	0	-1	0		1	3	-1
LS87-0626	-1.8	-2	-4	0	-1	-5	-1		-2	0	-1
LS87-1257	1.2	5	0	0	0	-2	0		3	5	0
LS87-1311	1.3	8	1	-2	0	-2	0		5	2	0
LS87-1422	-3.0	-2	-6	0	-1	-6	-3		-3	-1	-5
LS87-1615	0.6	5	0	0	0	-1	0		0	1	0
LS87-1638	-1.4	5	-7	-1	-3	-2	-1		-5	1	0
LS87-1907	0.1	5	-2	0	0	-2	0		-2	2	0
LS87-2154	1.8	10	1	0	-1	0	0		2	2	2
S88-1458	3.7	11	0	3	4	0	1		6	5	3
U893810	-3.6	-2	-6	2	-2	-3	-3		-9	-5	-4
U893907	-1.4	0	-2	-4	0	-2	0		-4	-1	0
Date Planted	05/26	06/22	05/01	06/26	05/29	05/25	06/05		05/16	05/24	05/01
Days to Mature	129.3	107	157	114	125	133	119		126	129	154

PRELIMINARY TEST IVA, 1990

LODGING (score)

Strain	Mean 9 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	Charle-ston OH
Flyer (E)	1.2	1.0	1.0	1.3	1.0	1.0	2.3		1.0	1.0	1.5
Pennyrile (L)	1.6	1.0	2.0	1.8	2.0	2.0	2.5		1.0	1.0	1.5
Delsoy 4500	1.9	1.3	2.5	2.0	2.5	1.8	2.8		1.0	1.0	1.8
Spencer (IV)	1.3	1.0	1.0	1.0	1.5	1.2	2.3		1.0	1.0	1.5
C1803	1.9	1.0	1.5	2.3	2.5	2.8	2.8		1.0	1.0	2.3
C1804	2.2	1.0	2.0	2.5	3.0	3.5	2.8		1.0	1.2	2.5
C1811	1.7	1.0	2.0	1.0	2.0	1.7	2.8		1.0	1.0	2.8
C1813	1.5	1.0	2.0	1.3	1.5	1.5	2.8		1.0	1.0	1.8
C1826	1.8	1.0	1.5	1.8	2.0	1.8	3.0		1.0	1.2	2.8
HC85-5148	1.9	1.0	2.0	1.0	3.0	2.8	2.5		1.0	1.0	2.5
HC85-5154	1.7	1.0	1.5	1.3	2.5	1.5	2.8		1.0	1.0	2.5
HC86-3403	1.5	1.0	1.0	1.3	2.5	1.5	2.8		1.0	1.0	1.3
L84-5989	2.5	1.3	3.0	2.5	3.0	4.0	3.3		1.0	1.1	3.0
L84-6089	2.1	1.0	1.5	2.8	2.5	3.3	3.0		1.0	1.1	2.3
LN87-1455	1.6	1.0	2.0	1.0	2.0	1.3	2.3		1.0	1.0	2.8
LN87-1478	2.0	1.0	2.5	1.0	2.0	3.3	3.3		1.0	1.0	2.8
LS85-7707	1.8	1.3	1.5	2.8	2.0	2.0	2.3		1.0	1.0	2.0
LS87-0626	2.5	1.5	2.5	3.0	3.0	4.2	3.0		1.0	1.2	3.0
LS87-1257	2.1	1.3	1.5	2.3	2.5	3.5	2.8		1.5	1.1	2.5
LS87-1311	1.6	1.3	1.5	2.0	2.0	1.5	2.3		1.0	1.0	1.8
LS87-1422	2.0	1.0	2.5	1.8	3.0	2.5	2.8		1.0	1.0	2.0
LS87-1615	1.4	1.0	1.0	1.3	2.0	1.5	2.3		1.0	1.0	1.8
LS87-1638	1.9	1.3	2.0	2.3	2.0	2.5	2.5		1.0	1.1	2.3
LS87-1907	2.5	1.5	1.5	3.5	3.0	4.5	3.3		1.5	1.2	2.8
LS87-2154	2.2	1.8	2.5	2.0	2.5	3.5	3.0		1.0	1.1	2.5
S88-1458	2.0	1.5	1.5	3.0	2.0	2.8	2.5		1.5	1.1	2.0
U893810	1.8	1.3	2.0	1.3	1.5	2.3	3.3		1.0	1.0	2.8
U893907	1.4	1.0	1.0	1.0	2.5	1.5	2.5		1.0	1.0	1.0

PRELIMINARY TEST IVA, 1990

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	Charle-ston OH
Flyer (E)	32	25	40	33	39	27	32	31	29	24	35
Pennyrile (L)	41	38	52	41	43	35	43	42	41	30	43
Delsoy 4500	38	37	46	39	43	31	37	39	34	29	40
Spencer (IV)	34	28	44	33	42	32	33	35	30	23	36
C1803	37	37	44	38	43	33	42	36	30	29	40
C1804	39	36	47	37	45	36	41	40	33	29	42
C1811	35	31	48	36	41	35	35	37	25	25	39
C1813	34	30	44	29	38	32	36	33	30	25	38
C1826	34	30	43	35	40	30	38	35	29	27	35
HC85-5148	37	31	51	41	44	35	38	37	27	27	43
HC85-5154	34	31	45	33	37	31	36	33	31	25	40
HC86-3403	33	25	44	33	40	29	35	31	30	26	32
L84-5989	40	39	48	39	43	42	44	41	33	32	38
L84-6089	40	39	52	38	45	37	41	39	32	30	45
LN87-1455	31	27	46	29	38	27	31	33	23	22	35
LN87-1478	35	32	48	31	38	36	34	37	28	29	41
LS85-7707	38	37	45	40	44	36	34	40	37	28	40
LS87-0626	42	41	50	44	45	39	41	41	38	35	43
LS87-1257	43	42	56	41	45	43	43	43	43	27	47
LS87-1311	39	41	49	39	42	36	38	40	35	28	45
LS87-1422	41	44	50	44	43	41	40	40	34	27	42
LS87-1615	37	32	50	34	44	33	39	39	34	27	40
LS87-1638	38	40	50	40	42	33	38	37	35	30	38
LS87-1907	39	38	47	36	44	38	42	42	37	29	39
LS87-2154	42	42	51	41	46	37	43	44	40	34	45
S88-1458	40	39	47	39	41	37	39	42	39	32	44
U893810	35	26	44	33	42	30	37	39	27	32	38
U893907	35	28	48	34	43	32	38	36	32	24	35

PRELIMINARY TEST IVA, 1990

SEED QUALITY (score)

Strain	Mean 8 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	Charle-ston OH
Flyer (E)	1.4	1.0	1.5	1.0	2.0	2.0	1.0		2.0	1.0	
Pennyrile (L)	1.7	1.0	1.5	1.0	3.0	2.0	1.8		2.0	1.0	
Delsoy 4500	1.3	1.0	1.5	1.0	2.0	1.0	1.0		1.5	1.0	
Spencer (IV)	1.9	2.0	1.8	1.0	2.0	3.0	2.0		2.0	1.5	
C1803	1.6	1.0	1.5	1.0	2.0	2.0	1.8		2.0	1.1	
C1804	1.4	1.0	1.5	1.0	2.0	2.0	1.5		1.5	1.0	
C1811	1.8	2.0	2.0	1.0	3.0	1.0	1.8		2.5	1.0	
C1813	1.6	2.0	1.5	1.0	2.0	1.0	2.0		2.0	1.1	
C1826	1.5	1.0	1.8	1.0	2.0	1.0	1.5		3.0	1.0	
HC85-5148	1.9	2.0	1.8	1.0	3.0	2.0	2.0		2.5	1.0	
HC85-5154	1.6	1.0	1.5	1.5	3.0	1.0	1.8		2.0	1.0	
HC86-3403	1.4	1.0	1.5	1.0	2.0	2.0	1.0		2.0	1.0	
L84-5989	1.6	2.0	1.5	1.0	3.0	1.0	1.0		2.0	1.1	
L84-6089	1.7	1.0	1.8	1.0	3.0	2.0	1.8		2.0	1.1	
LN87-1455	2.0	2.0	2.0	1.5	2.0	2.0	2.0		3.0	1.3	
LN87-1478	2.1	2.0	2.0	2.0	2.0	3.0	2.0		2.5	1.1	
LS85-7707	1.6	1.0	1.8	1.0	3.0	2.0	1.5		1.5	1.0	
LS87-0626	1.5	1.0	1.8	1.0	2.0	2.0	1.5		1.5	1.0	
LS87-1257	1.7	1.0	2.0	1.0	3.0	2.0	1.3		2.0	1.0	
LS87-1311	1.3	1.0	1.5	1.0	1.0	2.0	1.3		1.5	1.0	
LS87-1422	1.7	1.0	1.5	1.0	3.0	3.0	1.8		1.5	1.0	
LS87-1615	1.4	1.0	1.5	1.0	2.0	2.0	1.0		2.0	1.0	
LS87-1638	1.4	1.0	1.8	1.0	2.0	1.0	1.5		2.0	1.0	
LS87-1907	1.4	1.0	1.5	1.0	2.0	1.0	1.5		2.0	1.0	
LS87-2154	1.6	1.0	2.0	1.0	2.0	2.0	1.8		2.0	1.0	
S88-1458	1.7	1.0	1.5	1.0	2.0	2.0	2.0		3.0	1.0	
U893810	1.7	2.0	1.8	1.5	2.0	2.0	1.0		2.0	1.0	
U893907	2.0	5.0	1.5	1.0	2.0	2.0	1.0		2.5	1.3	

PRELIMINARY TEST IVA, 1990

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	Colum-bia MO	Portage-ville MO	Mt. Orab OH	Charle-ston OH
Flyer (E)	15.1	14.3	15.0	16.9	15.6	15.9	17.0		12.7	13.7	
Pennyrile (L)	17.5	16.7	18.5	18.5	16.6	18.0	19.5		15.1	17.4	
Delsoy 4500	13.8	13.4	14.0	16.2	13.5	13.9	13.8		12.0	13.5	
Spencer (IV)	18.2	18.2	18.2	19.8	16.8	19.9	18.3		15.8	18.7	
C1803	16.1	16.8	16.7	18.7	15.8	14.7	17.1		14.3	14.8	
C1804	17.3	17.6	17.1	19.4	17.3	17.5	18.3		14.6	16.6	
C1811	17.0	16.3	17.4	19.7	16.3	18.1	17.4		14.3	16.3	
C1813	19.2	18.9	17.8	21.7	18.3	21.6	19.7		16.5	18.7	
C1826	16.3	16.4	16.0	18.6	15.8	17.9	17.9		11.7	15.9	
HC85-5148	19.0	17.6	19.4	21.4	19.0	18.6	20.7		15.3	19.8	
HC85-5154	19.0	18.0	19.3	21.5	17.7	19.9	18.9		17.6	19.0	
HC86-3403	17.4	15.4	18.0	19.4	17.6	18.1	17.8		15.8	16.9	
L84-5989	17.3	16.9	18.1	19.9	17.4	17.8	19.5		12.5	16.6	
L84-6089	17.1	17.6	16.8	19.1	17.4	18.6	17.8		12.9	16.7	
LN87-1455	15.6	15.5	16.1	18.2	15.1	17.3	15.6		13.2	14.0	
LN87-1478	17.2	17.0	17.9	18.9	16.8	19.1	17.0		14.9	15.8	
LS85-7707	12.7	13.6	11.8	15.6	12.4	12.6	13.3		11.1	11.0	
LS87-0626	16.4	15.9	16.8	20.2	14.9	17.1	17.0		13.1	16.4	
LS87-1257	15.9	15.7	16.6	17.9	15.7	17.4	15.8		13.3	15.1	
LS87-1311	15.4	16.0	14.9	17.8	13.5	16.6	16.7		13.1	14.3	
LS87-1422	16.2	16.5	16.1	19.5	15.2	16.9	16.6		13.5	15.2	
LS87-1615	15.2	16.3	14.6	18.3	13.4	17.2	14.5		13.8	13.3	
LS87-1638	13.1	14.1	12.0	17.7	11.9	13.3	12.9		10.4	12.3	
LS87-1907	14.1	14.8	13.9	17.7	12.4	15.1	14.1		12.4	12.3	
LS87-2154	15.2	16.6	14.7	18.4	13.8	14.6	16.1		12.9	14.3	
S88-1458	17.2	17.1	15.8	20.5	16.4	18.7	18.4		14.8	16.0	
U893810	18.0	16.7	18.5	17.2	18.6	20.0	19.5		15.2	18.1	
U893907	17.7	15.6	17.8	19.0	17.9	19.7	18.6		15.5	17.3	

PRELIMINARY TEST IVA, 1990

PROTEIN (%)

Strain	Mean 4 Tests	Urbana IL	Lexington KY	Queenstown MD	Mt. Orab OH
Flyer (E)	41.6	41.6	41.0	41.1	42.7
Pennyrile (L)	41.9	43.2	41.4	41.5	41.4
Delsoy 4500 (SCN)	41.2	41.8	41.0	40.0	41.8
Spencer (IV)	41.5	41.8	41.3	40.7	42.2
C1803	40.0	40.0	39.6	39.9	40.6
C1804	41.5	42.5	41.1	40.9	41.4
C1811	41.7	42.5	41.3	41.2	41.8
C1813	39.5	39.4	39.5	38.8	40.1
C1826	40.4	40.9	40.9	39.3	40.3
HC85-5148	41.1	41.7	40.1	40.9	41.8
HC85-5154	40.7	41.1	40.3	40.0	41.4
HC86-3403	43.2	42.2	43.5	42.5	44.4
L84-5989	40.9	41.7	40.0	40.3	41.4
L84-6089	41.8	43.3	41.5	40.8	41.6
LN87-1455	40.7	42.0	38.8	40.7	41.2
LN87-1478	41.6	42.2	41.3	40.7	42.3
LS85-7707	37.8	39.7	36.6	37.3	37.7
LS87-0626	41.8	42.4	41.8	40.9	42.1
LS87-1257	42.2	42.7	41.6	41.5	43.1
LS87-1311	39.2	39.5	38.8	39.1	39.5
LS87-1422	39.9	39.8	38.3	40.7	40.7
LS87-1615	40.8	42.0	40.7	40.3	40.3
LS87-1638	41.1	41.6	41.0	41.1	40.7
LS87-1907	40.2	40.3	39.3	39.7	41.3
LS87-2154	38.9	39.3	39.1	38.0	39.2
S88-1458	41.9	43.3	41.6	41.1	41.5
U893810	42.4	42.4	42.5	40.8	43.8
U893907	40.9	42.0	40.5	39.1	41.8

PRELIMINARY TEST IVA, 1990

OIL (%)

Strain	Mean 4 Tests	Urbana IL	Lexington KY	Queenstown MD	Mt. Orab OH
Flyer (E)	21.0	21.4	21.3	20.6	20.5
Pennyrile (L)	20.4	20.0	20.0	20.7	20.9
Delsoy 4500 (SCN)	20.0	19.8	20.1	20.1	20.0
Spencer (IV)	21.1	21.0	21.1	20.9	21.2
C1803	21.4	21.5	21.4	21.3	21.2
C1804	20.1	19.9	20.1	20.1	20.2
C1811	20.9	21.1	21.0	20.5	21.1
C1813	22.2	22.5	22.0	22.3	22.0
C1826	20.8	21.0	20.5	21.0	20.8
HC85-5148	21.6	21.8	22.1	21.4	21.2
HC85-5154	22.0	22.1	22.1	22.3	21.3
HC86-3403	21.3	21.9	21.0	21.3	20.8
L84-5989	21.2	21.0	21.4	21.4	21.0
L84-6089	20.4	19.8	20.3	20.9	20.6
LN87-1455	20.9	20.5	21.9	20.4	20.9
LN87-1478	20.1	20.1	20.1	20.2	20.0
LS85-7707	20.2	20.5	20.7	20.0	19.5
LS87-0626	20.9	21.0	21.2	21.3	20.2
LS87-1257	19.2	18.8	19.4	19.4	19.2
LS87-1311	20.8	20.8	20.4	20.7	21.3
LS87-1422	21.7	21.9	22.0	21.3	21.4
LS87-1615	19.6	19.5	20.0	19.3	19.6
LS87-1638	18.9	18.6	19.2	18.7	19.0
LS87-1907	20.1	20.5	20.6	19.9	19.3
LS87-2154	20.6	20.6	20.7	20.3	20.7
S88-1458	20.3	19.9	20.6	20.4	20.2
U893810	20.5	20.5	20.5	21.1	19.8
U893907	21.7	21.1	21.4	22.5	21.7

PRELIMINARY TEST IVB, 1990

Strain	Parentage	Generation Composited	Unique Traits
Flyer (E)	Asgrow A3127(4) x Williams 82	BC3 F2	Rps1-k
Pennyrile (L)	Williams x Essex	F5	
Spencer (IV)	A75-305022 x Century	F5	
K1186	Elgin x Asgrow A3659	F5	
K1187	Toano x Asgrow A3659	F5	
K1188	Sherman x K1103	F5	
K1189	Elgin x Asgrow A3659	F5	
K1190	Toano x Asgrow A3659	F5	
K1191	Sherman x Toano	F5	
Ky85-2094	Sparks x Mitchell	F5	
Ky85-2118	Sparks x Essex	F5	
Ripley (dtl)	Hodgson x V68-1034	F5	dtl
C1785	CX773-28-3-4 x CX663-37-2-2-1-6	F7	dtl
HC Elf-EB	Elf(6) x Williams 82	BC5 F7	dtl
HC84-2051	Pella x Hobbit	F5	dtl
HC85-35	Hodgson 78 x Hobbit	F5	dtl
HC85-161	HC78-676 x Sprite	F5	dtl
HC85-276	HC78-353 x Sprite	F5	dtl
HC85-282	HC78-353 x Sprite	F5	dtl
HC85-767	HC78-676 x Hobbit	F5	dtl
HC85-2206	Elf x Williams 82	F5	dtl
HC85-6004	Pella x Hobbit	F5	dtl
HC85-6508	Essex x Weber	F5	dtl
HC85-6606	HC78-279 x HC78-676	F5	dtl
HC85-6612	HC78-279 x HC78-676	F5	dtl
HC86-2950	Asgrow A3127 x Ransom	F5	dtl
HC86-4394	Pella x Sprite 87	F5	dtl
HC86-4899	HC78-354 x Williams 82	F5	dtl
HC87-3212	Essex x Asgrow A3127	F5	dtl
Ky85-1273	Ripley x Pershing	F5	dtl
U893025	Hobbit x Harosoy	F5	dtl
U893029	$SG_1/BC/85\text{-}E_1$*	F5	dtl

*$SG_1/NS/84\text{-}RM_3/MS$ x 32 Elite High Yielding Lines.
See CROP SCI. 25:717-718

PRELIMINARY TEST IVB, 1990

DESCRIPTIVE AND DISEASE DATA

Strain	Descriptive Code	Shattering Score Manhattan	BB Urbana n Score	PR Vickery Phyto. Tolerance	PR Urbana Race 1	PR Lafayette Race 7	PS Lafayette a %	PSB Lafayette n %
Flyer (E)	PTTSBlI	1.0	4.0	4.0	R	R	2	4
Pennyrile (L)	WTBIBlI	1.0	2.5	4.7	S	S	4	8
Spencer (IV)	WTBIBrI	1.0	2.0	4.0	R	S	32	14
K1186	PTTIBlI	2.0	3.0	3.7	S	S	14	2
K1187	PTTDBlI	1.0	4.5	4.7	S	S	8	0
K1188	WGBIBfI	1.0	3.0	6.7	S	S	16	2
K1189	PTBIBlI	1.0	2.0	6.3	S	S	18	0
K1190	PTTIBlI	2.0	3.5	5.3	R	H	18	6
K1191	P+WGBIIbI	1.0	3.5	6.3	H	H	28	2
Ky85-2094	PTTDBlI	---	3.0	5.0	-	S	--	-
Ky85-2118	PTTDBlI	---	4.0	5.0	S	H	36	4
Ripley (dtl)	PGTIBfD	1.0	4.0	4.0	R	S	2	0
C1785	PGBIYD	1.0	3.5	3.3	S	R	4	2
HC Elf-EB	PTTIBlD	1.0	3.0	3.0	R	S	2	2
HC84-2051	WTTIBlD	1.0	3.5	4.7	S	S	4	6
HC85-35	W+PTTIBlD	1.0	3.0	5.7	R	H	0	0
HC85-161	WTTSBlD	1.0	2.0	4.3	H	S	2	2
HC85-276	WTTIBlD	1.0	2.0	5.0	S	S	0	2
HC85-282	WTTSBlD	1.0	3.0	4.3	S	S	0	0
HC85-767	PTTIBl+BrD	1.0	3.0	4.7	R	R	2	0
HC85-2206	PTTSBlD	1.0	2.0	3.0	R	H	0	2
HC85-6004	PTTIBlD	1.0	3.0	4.7	H	S	2	4
HC85-6508	WTTIBlD	1.0	3.0	4.3	S	S	2	0
HC85-6606	PTBIBlD	1.0	2.5	4.7	H	S	2	4
HC85-6612	PTTIBlD	2.0	3.5	4.7	H	S	2	0
HC86-2950	PTTIBlD	1.0	3.5	7.3	S	S	0	2
HC86-4394	W+PTTIBlD	1.0	2.0	4.0	R	R	0	0
HC86-4899	PTTIBlD	1.0	2.5	4.7	S	S	6	0
HC87-3212	PTTSBlD	1.0	3.0	5.3	S	S	6	0
Ky85-1273	W+PTTIBfD	2.0	2.0	3.7	R	H	0	0
U893025	PTBIBrD	1.0	2.0	5.7	R	S	2	0
U893029	WGBIYSD	1.0	1.0	3.3	H	R	6	0

PRELIMINARY TEST IVB, 1990

REGIONAL SUMMARY

	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	8	8	8	8	8	7	7	4	4
Strain	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Flyer (E)	54.2	15	-3.1	1.3	33	1.4	15.2	40.9	21.2
Pennyrile (L	54.4	13	5.4	1.7	41	1.6	17.6	41.4	20.9
Spencer (IV)	57.3	3	10/03*	1.4	35	1.6	18.2	40.9	21.2
K1186	54.1	16	2.6	1.3	30	1.6	16.7	39.2	21.5
K1187	52.4	23	-0.9	1.6	34	1.4	15.2	42.0	20.9
K1188	54.1	16	-0.3	2.2	34	1.3	17.7	40.7	21.0
K1189	53.8	19	1.0	2.2	34	1.3	15.5	40.9	20.8
K1190	57.1	4	-1.0	1.9	35	1.7	18.3	39.6	21.3
K1191	56.4	8	5.4	1.7	35	1.4	17.2	40.5	20.6
Ky85-2094	48.5	30	2.6	2.3	43	1.7	17.5	41.4	20.5
Ky85-2118	53.4	20	0.3	2.2	35	1.4	17.1	41.0	20.9
Ripley (dtl)	56.7	5	0.3	1.4	25	1.4	14.2	39.4	20.8
C1785	54.4	13	0.1	1.8	31	1.3	16.3	41.9	21.8
HC Elf-EB	52.9	21	-2.6	1.5	22	1.6	17.0	41.2	20.8
HC84-2051	48.9	29	-0.6	1.3	22	1.6	16.8	39.6	22.2
HC85-35	48.2	31	-3.4	1.3	23	1.8	15.1	39.2	21.9
HC85-161	56.6	6	-1.6	1.8	23	1.5	17.1	40.3	21.5
HC85-276	55.3	10	0.0	1.4	21	1.7	18.9	41.3	21.4
HC85-282	54.1	16	-0.8	1.4	21	1.5	17.7	41.9	21.2
HC85-767	51.4	27	-4.5	1.2	22	2.6	15.9	38.8	21.7
HC85-2206	57.6	1	-1.1	1.4	23	1.6	20.1	41.4	21.5
HC85-6004	51.7	25	-3.8	1.3	23	1.6	17.8	39.9	21.4
HC85-6508	55.1	11	1.6	1.3	23	1.5	14.4	41.2	21.2
HC85-6606	52.7	22	-3.1	1.4	23	1.9	17.3	42.0	20.7
HC85-6612	56.1	9	0.3	1.4	23	1.7	17.3	41.4	21.3
HC86-2950	45.8	32	-1.5	1.2	20	1.7	17.0	42.4	20.5
HC86-4394	49.0	28	-1.0	1.4	20	1.4	17.1	39.0	22.0
HC86-4899	55.1	11	-2.1	1.3	21	1.9	16.4	42.3	20.5
HC87-3212	57.4	2	0.3	1.5	25	1.7	19.1	40.2	22.2
Ky85-1273	51.6	26	0.3	1.4	27	1.3	13.4	39.9	19.2
U893025	52.0	24	-0.5	1.6	25	1.5	17.8	40.5	21.4
U893029	56.6	6	-2.9	1.5	31	1.8	20.1	40.5	21.0

*128.5 Days After Planting

PRELIMINARY TEST IVB, 1990

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	Charle ston OH
Flyer (E)	54.2	38.2	67.1	48.4	52.9	63.4	62.8	37.0	64.1
Pennyrile (L)	54.4	37.3	60.9	68.1	47.0	56.6	68.2	37.9	59.4
Spencer (IV)	57.3	40.9	66.6	64.5	54.3	64.0	58.5	36.8	72.5
K1186	54.1	38.8	64.3	54.9	55.0	63.4	58.5	30.8	66.8
K1187	52.4	35.2	64.1	57.0	49.9	59.9	59.3	30.0	64.1
K1188	54.1	38.8	65.6	52.5	56.4	54.6	63.5	34.2	67.2
K1189	53.8	41.2	56.9	62.7	51.0	55.8	59.0	40.7	62.7
K1190	57.1	38.2	68.6	66.6	57.5	57.3	58.1	36.4	74.4
K1191	56.4	39.3	55.4	62.4	54.6	68.0	63.1	44.8	63.5
Ky85-2094	48.5	36.7	52.9	57.7	46.8	50.9	47.8	37.7	57.8
Ky85-2118	53.4	35.0	67.0	66.9	51.4	51.3	59.1	35.1	61.2
Ripley (dtl)	56.7	45.0	68.9	63.8	53.1	58.8	56.5	37.3	69.9
C1785	54.4	44.7	62.3	70.3	50.6	50.9	55.8	36.6	64.2
HC Elf-EB	52.9	34.4	61.0	50.6	52.2	60.1	52.2	46.5	66.5
HC84-2051	48.9	36.0	56.2	57.5	53.8	50.1	47.7	32.0	57.9
HC85-35	48.2	30.7	59.3	49.1	54.9	48.2	49.6	31.0	63.1
HC85-161	56.6	42.9	64.7	71.1	54.2	49.8	56.9	43.3	69.5
HC85-276	55.3	40.1	63.1	66.0	55.7	62.6	56.0	36.6	62.3
HC85-282	54.1	37.1	62.8	60.6	55.6	51.7	54.1	42.3	68.3
HC85-767	51.4	28.8	58.0	72.0	55.1	46.7	53.8	32.3	64.4
HC85-2206	57.6	37.4	68.9	65.3	57.4	50.6	55.6	51.2	74.4
HC85-6004	51.7	35.5	58.0	68.0	50.2	53.1	51.3	38.0	59.8
HC85-6508	55.1	37.2	63.4	61.3	56.1	58.5	52.4	43.1	68.9
HC85-6606	52.7	41.6	61.5	61.6	51.4	48.3	56.6	40.0	60.8
HC85-6612	56.1	40.9	64.0	67.0	55.5	56.2	58.0	41.7	65.2
HC86-2950	45.8	27.2	59.6	34.8	48.5	55.6	46.0	30.5	64.3
HC86-4394	49.0	29.0	55.3	51.5	56.4	47.2	48.1	44.4	60.3
HC86-4899	55.1	41.1	62.3	64.1	50.6	57.2	58.2	36.5	70.5
HC87-3212	57.4	35.5	61.9	75.9	56.2	59.8	57.6	41.7	70.8
Ky85-1273	51.6	37.0	62.1	62.5	50.2	52.0	50.3	34.9	63.6
U893025	52.0	30.9	65.5	64.8	55.4	49.9	52.5	37.1	60.2
U893029	56.6	38.7	67.7	70.0	50.0	58.1	57.1	41.5	69.4
C.V. (%)		11.0	6.8	11.9	6.3	10.2	5.8	12.4	6.8
L.S.D. (5%)		8.2	8.6	14.9	6.8	9.6	6.6	9.4	9.1
Row Sp. (In.)		30	30	24	30	30	30	30	7
Rows/Plot		4	4	4	4	4	4	4	8
Reps		2	2	2	2	2	2	2	2

PRELIMINARY TEST IVB, 1990

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	Charle ston OH
Flyer (E)	15	14	5	31	19	3	4	18	18
Pennyrile (L)	13	17	23	6	31	14	1	14	30
Spencer (IV)	3	7	7	14	15	2	8	19	3
K1186	16	11	11	26	12	3	8	30	12
K1187	23	25	12	25	29	7	5	32	18
K1188	16	11	8	27	3	18	2	26	11
K1189	19	5	28	17	23	16	7	11	23
K1190	4	14	3	10	1	12	11	23	1
K1191	8	10	30	19	14	1	3	3	21
Ky85-2094	30	21	32	23	32	23	30	15	32
Ky85-2118	20	26	6	9	21	22	6	24	25
Ripley (dtl)	5	1	1	16	18	9	17	16	6
C1785	13	2	17	4	24	23	19	20	17
HC Elf-EB	21	27	22	29	20	6	25	2	13
HC84-2051	29	22	29	24	17	26	31	28	31
HC85-35	31	29	25	30	13	30	28	29	22
HC85-161	6	3	10	3	16	28	15	5	7
HC85-276	10	9	15	11	7	5	18	20	24
HC85-282	16	19	16	22	8	21	21	7	10
HC85-767	27	31	26	2	11	32	22	27	15
HC85-2206	1	16	1	12	2	25	20	1	1
HC85-6004	25	23	26	7	26	19	26	13	29
HC85-6508	11	18	14	21	6	10	24	6	9
HC85-6606	22	4	21	20	21	29	16	12	26
HC85-6612	9	7	13	8	9	15	12	8	14
HC86-2950	32	32	24	32	30	17	32	31	16
HC86-4394	28	30	31	28	3	31	29	4	27
HC86-4899	11	6	17	15	24	13	10	22	5
HC87-3212	2	23	20	1	5	8	13	8	4
Ky85-1273	26	20	19	18	26	20	27	25	20
U893025	24	28	9	13	10	27	23	17	28
U893029	6	13	4	5	28	11	14	10	8

PRELIMINARY TEST IVB, 1990

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	Charle ston OH
Flyer (E)	-3.1	0	-5	-3	-2	-7	-2	-2	-4
Pennyrile (L)	5.4	F	7	4	5	5	4	6	7
Spencer (IV)	10/03	10/05	10/01	10/18	09/29	10/04	10/02	10/01	09/30
K1186	2.6	7	2	0	4	1	1	4	2
K1187	-0.9	2	1	-4	-1	-2	0	-1	-2
K1188	-0.3	0	-1	-1	2	-1	2	-1	-2
K1189	1.0	5	-1	0	2	-1	1	1	1
K1190	-1.0	4	-4	0	-2	-2	-1	-1	-2
K1191	5.4	7	5	1	5	6	2	7	10
Ky85-2094	2.6	7	6	-2	2	-1	4	2	3
Ky85-2118	0.3	7	-1	-2	-1	-1	0	1	-1
Ripley (dtl)	0.3	7	-3	1	-3	-1	-1	1	1
C1785	0.1	7	-2	-3	-3	-1	0	0	3
HC Elf-EB	-2.6	0	-7	-1	-1	-4	-1	-1	-6
HC84-2051	-0.6	4	-1	-2	1	-2	0	-2	-3
HC85-35	-3.4	0	-4	-3	-1	-7	-2	-4	-6
HC85-161	-1.6	0	-7	2	0	-2	0	-2	-4
HC85-276	0.0	7	-4	2	2	-1	0	-3	-3
HC85-282	-0.8	4	-3	1	1	-4	0	-2	-3
HC85-767	-4.5	0	-9	-4	-1	-7	0	-4	-11
HC85-2206	-1.1	0	-3	-2	0	-4	0	0	0
HC85-6004	-3.8	0	-6	-3	0	-7	0	-3	-11
HC85-6508	1.6	8	2	0	1	-1	0	1	2
HC85-6606	-3.1	0	-5	-5	0	-7	0	0	-8
HC85-6612	0.3	7	-2	0	2	-2	0	0	-3
HC86-2950	-1.5	8	-4	-2	1	-6	0	-4	-5
HC86-4394	-1.0	0	-3	0	1	-2	0	-1	-3
HC86-4899	-2.1	0	-4	-2	0	-7	0	-1	-3
HC87-3212	0.3	7	-4	1	1	-3	0	0	0
Ky85-1273	0.3	7	-5	-3	-3	-1	0	3	4
U893025	-0.5	0	-2	0	1	-2	1	-1	-1
U893029	-2.9	0	-3	0	-2	-7	0	-3	-8
Date Planted	05/28	06/22	05/01	06/26	05/29	05/25	06/05	05/24	05/01
Days to Mature	128.5	105	153	114	123	132	119	130	152

PRELIMINARY TEST IVB, 1990

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	Charle ston OH
Flyer (E)	1.3	1.0	1.0	1.0	1.0	1.5	2.5	1.0	1.5
Pennyrile (L)	1.7	1.5	2.0	2.0	2.0	1.5	2.5	1.0	1.3
Spencer (IV)	1.4	1.0	1.0	1.3	1.0	2.2	2.5	1.0	1.5
K1186	1.3	1.0	1.0	1.0	1.0	1.5	2.5	1.0	1.3
K1187	1.6	1.0	2.0	1.0	1.5	2.3	2.8	1.0	1.5
K1188	2.2	2.0	3.0	1.3	2.0	2.8	2.8	1.0	2.8
K1189	2.2	1.0	2.5	1.8	2.5	3.0	3.3	1.1	2.0
K1190	1.9	1.3	2.0	1.8	2.0	2.0	3.3	1.0	2.0
K1191	1.7	1.0	1.5	1.3	2.0	1.8	2.8	1.0	2.0
Ky85-2094	2.3	1.3	2.5	2.5	2.5	3.5	2.8	1.1	2.5
Ky85-2118	2.2	1.3	2.5	2.0	1.5	3.8	3.0	1.0	2.5
Ripley (dtl)	1.4	1.0	1.5	1.5	1.0	2.0	2.0	1.0	1.5
C1785	1.8	1.5	1.0	1.3	1.0	4.2	2.3	1.0	1.8
HC Elf-EB	1.5	1.0	1.0	1.3	1.0	3.5	1.8	1.0	1.0
HC84-2051	1.3	1.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0
HC85-35	1.3	1.0	1.0	1.0	1.0	2.3	2.0	1.0	1.0
HC85-161	1.8	1.0	1.0	3.0	1.0	4.0	2.0	1.0	1.5
HC85-276	1.4	1.0	1.0	1.5	1.0	3.0	1.8	1.0	1.0
HC85-282	1.4	1.0	1.0	1.0	1.0	3.3	1.8	1.0	1.0
HC85-767	1.2	1.0	1.0	1.0	1.0	2.0	1.8	1.0	1.0
HC85-2206	1.4	1.0	1.0	1.0	1.0	3.3	1.5	1.1	1.5
HC85-6004	1.3	1.0	1.0	1.0	1.0	2.5	2.0	1.0	1.0
HC85-6508	1.3	1.0	1.0	1.0	1.0	2.2	2.0	1.0	1.0
HC85-6606	1.4	1.0	1.0	1.0	1.0	3.5	2.0	1.0	1.0
HC85-6612	1.4	1.0	1.0	1.3	1.0	2.5	2.0	1.0	1.0
HC86-2950	1.2	1.0	1.0	1.0	1.0	1.8	2.0	1.0	1.0
HC86-4394	1.4	1.0	1.0	1.0	1.0	3.3	2.0	1.0	1.0
HC86-4899	1.3	1.0	1.0	1.0	1.0	2.2	1.8	1.0	1.0
HC87-3212	1.5	1.0	1.0	2.0	1.0	3.3	1.8	1.0	1.0
Ky85-1273	1.4	1.0	1.0	1.3	1.0	2.8	1.8	1.0	1.5
U893025	1.6	1.0	1.0	1.8	1.0	3.5	2.3	1.0	1.3
U893029	1.5	1.0	1.5	1.0	1.0	2.3	2.5	1.0	1.8

PRELIMINARY TEST IVB, 1990

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	Charle ston OH
Flyer (E)	33	31	38	31	36	31	34	26	33
Pennyrile (L)	41	37	51	40	44	38	42	30	43
Spencer (IV)	35	33	45	32	38	34	35	22	38
K1186	30	25	35	33	33	26	32	20	33
K1187	34	31	39	41	37	32	36	23	36
K1188	34	36	40	33	37	33	35	23	33
K1189	34	30	44	35	37	30	37	25	35
K1190	35	36	45	33	38	34	34	23	35
K1191	35	31	42	33	38	32	37	26	37
Ky85-2094	43	42	53	39	44	43	46	34	45
Ky85-2118	35	33	40	36	41	36	38	26	33
Ripley (dtl)	25	23	30	27	25	28	21	19	29
C1785	31	31	37	29	31	31	28	25	34
HC Elf-EB	22	19	24	25	23	24	16	20	21
HC84-2051	22	21	21	26	24	25	18	16	21
HC85-35	23	21	25	21	27	28	17	19	22
HC85-161	23	25	25	22	25	26	21	20	23
HC85-276	21	21	24	20	21	25	19	19	21
HC85-282	21	23	22	20	22	23	19	18	21
HC85-767	22	20	22	26	23	24	19	17	23
HC85-2206	23	23	26	21	24	25	18	20	24
HC85-6004	23	22	24	25	25	29	20	18	22
HC85-6508	23	21	23	21	23	27	20	21	26
HC85-6606	23	23	27	26	22	28	20	18	22
HC85-6612	23	22	24	23	25	26	20	18	24
HC86-2950	20	19	22	19	20	25	15	17	20
HC86-4394	20	19	21	19	23	22	18	18	18
HC86-4899	21	20	22	24	21	24	17	17	22
HC87-3212	25	25	28	28	25	27	21	20	26
Ky85-1273	27	25	31	32	28	31	21	22	28
U893025	25	24	29	29	23	28	24	21	23
U893029	31	31	35	36	33	32	29	25	29

PRELIMINARY TEST IVB, 1990

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	Charle ston OH
Flyer (E)	1.4	1.0	1.5	1.0	2.0	2.0	1.0	1.0	
Pennyrile (L)	1.6	2.0	1.5	1.0	2.0	2.0	1.8	1.0	
Spencer (IV)	1.6	2.0	1.5	1.0	2.0	2.0	1.3	1.1	
K1186	1.6	2.0	1.5	1.5	3.0	1.0	1.3	1.0	
K1187	1.4	1.0	1.5	1.0	2.0	2.0	1.0	1.0	
K1188	1.3	1.0	1.8	1.0	2.0	1.0	1.0	1.1	
K1189	1.3	1.0	1.8	1.0	2.0	1.0	1.3	1.0	
K1190	1.7	2.0	1.8	1.0	2.0	2.0	1.8	1.1	
K1191	1.4	1.0	1.5	1.0	3.0	1.0	1.0	1.0	
Ky85-2094	1.7	2.0	1.8	1.0	2.0	3.0	1.0	1.0	
Ky85-2118	1.4	1.0	1.5	1.0	2.0	2.0	1.3	1.0	
Ripley (dtl)	1.4	1.0	1.5	1.0	2.0	2.0	1.0	1.0	
C1785	1.3	1.0	1.5	1.0	1.0	2.0	1.3	1.0	
HC Elf-EB	1.6	1.0	1.5	1.0	2.0	2.0	2.3	1.4	
HC84-2051	1.6	1.0	1.5	1.5	2.0	2.0	2.0	1.3	
HC85-35	1.8	2.0	1.5	1.5	2.0	3.0	1.5	1.0	
HC85-161	1.5	1.0	1.5	1.0	1.0	3.0	1.3	1.5	
HC85-276	1.7	2.0	1.5	1.0	2.0	2.0	1.8	1.6	
HC85-282	1.5	2.0	1.5	1.0	2.0	2.0	1.3	1.0	
HC85-767	2.6	3.0	2.3	1.5	3.0	3.0	2.8	2.7	
HC85-2206	1.6	1.0	1.5	1.0	2.0	3.0	2.0	1.0	
HC85-6004	1.6	2.0	1.5	1.5	2.0	1.0	1.5	1.5	
HC85-6508	1.5	2.0	1.5	1.0	2.0	2.0	1.3	1.0	
HC85-6606	1.9	2.0	1.5	1.5	3.0	2.0	2.0	1.3	
HC85-6612	1.7	1.0	1.9	1.5	2.0	2.0	1.8	1.4	
HC86-2950	1.7	2.0	1.8	1.0	2.0	2.0	1.8	1.0	
HC86-4394	1.4	1.0	1.5	1.0	2.0	2.0	1.0	1.0	
HC86-4899	1.9	2.0	1.8	1.0	3.0	2.0	2.5	1.1	
HC87-3212	1.7	2.0	1.5	1.0	2.0	2.0	2.0	1.4	
Ky85-1273	1.3	2.0	1.8	1.0	1.0	1.0	1.0	1.0	
U893025	1.5	2.0	1.5	1.0	2.0	2.0	1.0	1.0	
U893029	1.8	2.0	1.5	1.0	3.0	2.0	1.5	1.5	

PRELIMINARY TEST IVB, 1990

SEED SIZE (g/100)

Strain	Mean 7 Tests	Belle-ville IL	Urbana IL	Vin-cennes IN	Man-hattan KS	Lexing-ton KY	Queens-town MD	Mt. Orab OH	Charle ston OH
Flyer (E)	15.2	13.9	14.6	15.7	13.6	18.1	16.7	14.0	
Pennyrile (L)	17.6	16.7	17.7	18.3	15.7	18.4	19.3	16.9	
Spencer (IV)	18.2	18.4	17.6	19.2	16.6	17.4	19.1	19.1	
K1186	16.7	15.9	17.7	16.0	16.1	18.1	17.5	15.5	
K1187	15.2	14.7	15.2	16.1	14.6	15.8	15.8	14.4	
K1188	17.7	17.7	18.6	19.0	16.7	17.8	18.9	15.5	
K1189	15.5	14.7	15.8	16.7	15.4	15.5	16.9	13.7	
K1190	18.3	17.1	19.0	19.9	16.0	19.8	19.0	17.0	
K1191	17.2	17.5	15.9	18.6	15.2	17.8	19.1	16.0	
Ky85-2094	17.5	17.0	17.6	21.3	15.8	16.6	17.6	16.3	
Ky85-2118	17.1	17.5	17.2	18.8	14.9	17.4	17.5	16.3	
Ripley (dtl)	14.2	14.4	14.0	16.5	12.1	14.8	14.6	13.0	
C1785	16.3	15.7	16.6	18.6	15.2	15.8	17.0	15.5	
HC Elf-EB	17.0	16.3	15.9	18.4	16.4	15.3	19.4	17.0	
HC84-2051	16.8	15.6	17.3	18.6	15.8	18.7	17.3	14.6	
HC85-35	15.1	14.7	13.9	16.4	14.7	15.4	14.9	16.0	
HC85-161	17.1	15.7	16.3	17.7	16.4	18.2	17.7	17.8	
HC85-276	18.9	17.5	18.7	19.8	18.1	20.5	18.9	18.8	
HC85-282	17.7	15.8	17.7	19.3	17.6	19.0	17.4	17.1	
HC85-767	15.9	15.6	15.4	17.1	15.8	14.5	15.8	17.4	
HC85-2206	20.1	18.7	19.9	21.4	20.4	20.6	20.0	19.7	
HC85-6004	17.8	15.3	17.8	19.3	17.3	19.1	17.4	18.3	
HC85-6508	14.4	13.8	14.3	17.5	13.1	14.7	14.6	13.1	
HC85-6606	17.3	17.1	16.1	18.9	16.5	17.6	17.5	17.4	
HC85-6612	17.3	16.7	16.6	18.4	16.5	18.6	18.1	16.5	
HC86-2950	17.0	17.1	15.9	19.2	16.8	18.1	17.0	15.0	
HC86-4394	17.1	15.4	16.3	17.9	17.1	19.2	16.2	17.3	
HC86-4899	16.4	16.5	15.6	18.5	11.6	18.6	18.3	15.7	
HC87-3212	19.1	17.6	17.1	21.0	19.4	19.5	20.3	18.5	
Ky85-1273	13.4	13.8	12.4	15.8	14.6	12.1	13.7	11.2	
U893025	17.8	16.1	16.6	18.9	18.2	19.6	16.8	18.2	
U893029	20.1	17.8	19.5	21.5	20.0	20.2	20.8	21.2	

PRELIMINARY TEST IVB, 1990

PROTEIN (%)

Strain	Mean 4 Tests	Urbana IL	Lexington KY	Queenstown MD	Mt. Orab OH
Flyer (E)	40.9	41.3	39.6	40.3	42.3
Pennyrile (L)	41.4	42.3	41.2	40.7	41.3
Spencer (IV)	40.9	41.1	40.7	39.9	41.9
K1186	39.2	40.2	39.0	38.7	39.0
K1187	42.0	42.9	42.1	41.5	41.3
K1188	40.7	41.8	40.7	40.2	40.2
K1189	40.9	42.0	39.0	39.9	42.6
K1190	39.6	41.2	38.2	38.3	40.6
K1191	40.5	42.5	39.5	39.3	40.7
Ky85-2094	41.4	42.6	40.0	40.8	42.3
Ky85-2118	41.0	41.0	40.3	40.8	42.0
Ripley (dtl)	39.4	39.0	39.1	39.1	40.5
C1785	41.9	42.3	40.8	40.3	44.0
HC Elf-EB	41.2	42.3	39.1	40.5	42.8
HC84-2051	39.6	39.4	39.0	38.5	41.3
HC85-35	39.2	39.7	38.6	38.1	40.2
HC85-161	40.3	40.9	39.0	39.5	41.9
HC85-276	41.3	41.7	39.8	40.3	43.2
HC85-282	41.9	42.0	41.1	40.6	43.8
HC85-767	38.8	39.9	37.0	37.2	41.2
HC85-2206	41.4	42.1	40.1	40.8	42.5
HC85-6004	39.9	40.0	39.5	38.4	41.5
HC85-6508	41.2	41.4	39.9	40.9	42.5
HC85-6606	42.0	43.3	40.9	40.9	43.0
HC85-6612	41.4	41.5	41.1	41.0	42.0
HC86-2950	42.4	43.1	41.3	41.6	43.5
HC86-4394	39.0	38.8	39.0	37.0	41.3
HC86-4899	42.3	43.8	40.2	42.2	43.1
HC87-3212	40.2	40.6	39.5	39.3	41.2
Ky85-1273	39.9	40.2	37.9	39.7	41.8
U893025	40.5	39.7	40.8	39.7	41.9
U893029	40.5	40.8	39.7	39.5	42.1

PRELIMINARY TEST IVB, 1990

OIL (%)

Strain	Mean 4 Tests	Urbana IL	Lexington KY	Queenstown MD	Mt. Orab OH
Flyer (E)	21.2	21.4	21.8	21.0	20.5
Pennyrile (L)	20.9	20.6	21.0	21.0	20.9
Spencer (IV)	21.2	21.4	20.8	21.6	21.1
K1186	21.5	21.4	21.6	21.3	21.8
K1187	20.9	20.7	21.1	20.9	20.8
K1188	21.0	20.6	21.1	21.1	21.0
K1189	20.8	20.6	21.6	21.1	19.9
K1190	21.3	20.8	21.8	21.8	20.9
K1191	20.6	19.7	21.8	20.7	20.1
Ky85-2094	20.5	19.4	21.1	20.7	20.7
Ky85-2118	20.9	20.9	21.4	20.7	20.5
Ripley (dtl)	20.8	21.3	21.0	20.5	20.3
C1785	21.8	21.5	22.3	21.8	21.5
HC Elf-EB	20.8	20.0	22.2	20.7	20.2
HC84-2051	22.2	22.4	22.7	22.1	21.6
HC85-35	21.9	21.4	22.4	21.9	21.9
HC85-161	21.5	21.0	22.6	21.1	21.3
HC85-276	21.4	21.3	22.0	21.6	20.8
HC85-282	21.2	21.2	21.7	21.1	20.6
HC85-767	21.7	20.8	22.2	22.1	21.5
HC85-2206	21.5	21.2	22.5	21.2	21.1
HC85-6004	21.4	20.9	22.4	21.3	21.1
HC85-6508	21.2	21.3	21.9	20.9	20.7
HC85-6606	20.7	20.1	21.3	21.0	20.5
HC85-6612	21.3	21.4	21.3	21.2	21.4
HC86-2950	20.5	20.0	21.3	20.4	20.1
HC86-4394	22.0	22.5	22.0	22.1	21.4
HC86-4899	20.5	19.7	21.5	20.4	20.3
HC87-3212	22.2	22.1	23.0	22.0	21.7
Ky85-1273	19.2	19.1	20.4	19.6	17.7
U893025	21.4	21.3	21.7	21.3	21.4
U893029	21.0	20.5	21.4	21.0	20.9