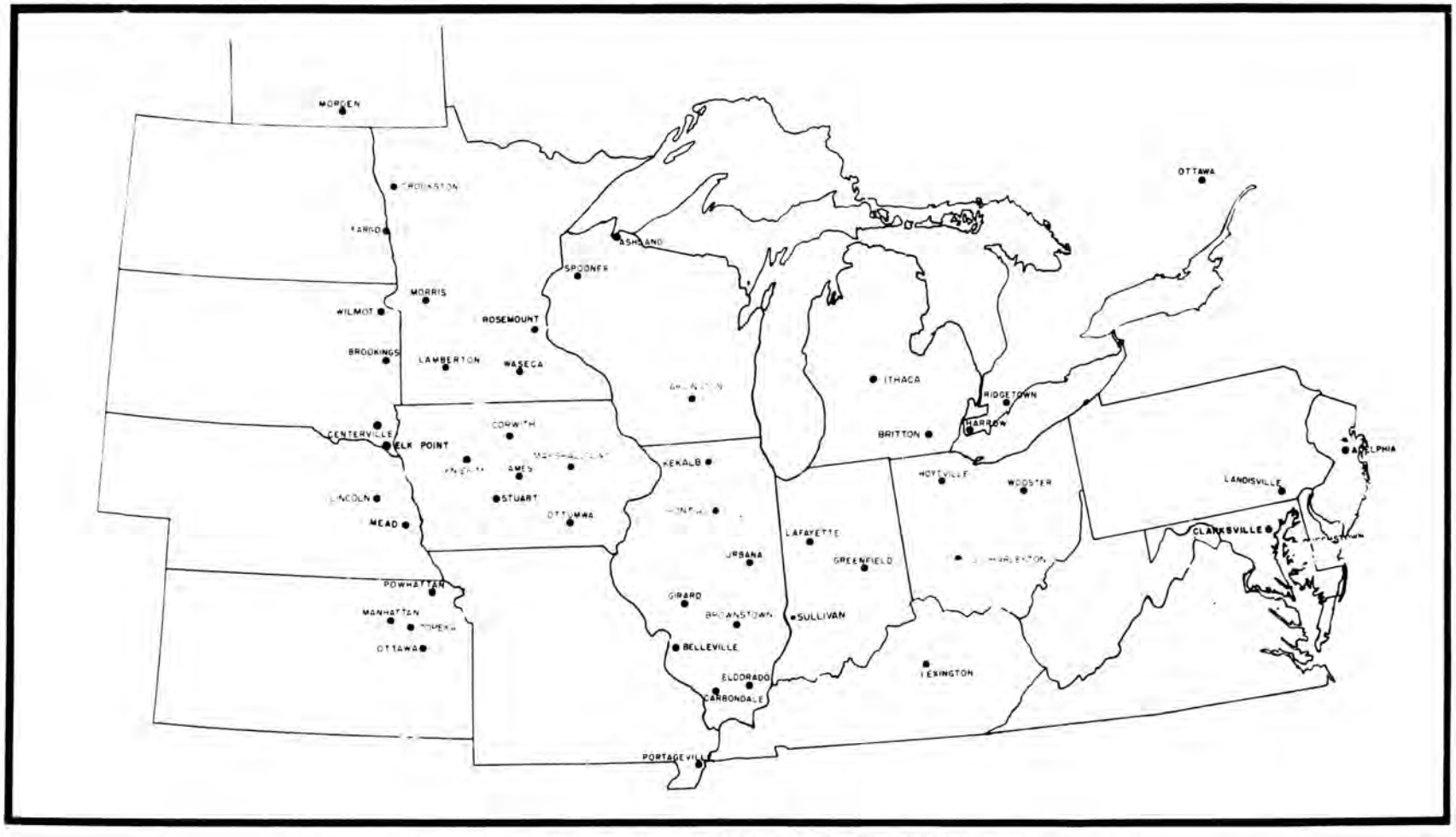

LOCATIONS OF UNIFORM SOYBEAN TESTS, NORTHERN STATES, 1981

THE UNIFORM SOYBEAN TESTS

NORTHERN STATES

1981

Compiled by:

J. R. Wilcox, USDA-ARS
Agronomy Department
Rm 2-307 Lilly Hall, Purdue University
West Lafayette, Indiana 47907
Tel. 317-494-8074

TABLE OF CONTENTS

Acknowledgements

The cooperation of Dr. Robert Kleiman and James F. Cavins, Horticultural Crops Laboratory, Northern Regional Research Center, Peoria, Illinois, in their analyses of Uniform Test samples for protein and oil content of the seeds is gratefully acknowledged. The assistance of Gary Nowling, Michael Roach, Jeffrey Meyer, Michael May, and Gary Brossman in packeting and distributing seed for the Uniform Tests and in data summarization is sincerely appreciated.

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 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 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 screen the experimental strains for maturity and general agronomic performance for one year before they are entered in the Uniform Tests.

Experimental lines entered in the uniform tests should be labelled "Experimental Line" and not identified by code numbers when grown in demonstration plots or when the uniform tests are shown on field days or farm tours.

Seed of experimental lines entered in the uniform tests should not be sent to non participants. Requests for seed of unreleased lines or experimental strains should be referred to the breeder or agency originating the strain, listed on page 6.

The Uniform 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.

UNIFORM TEST PARTICIPANTS--1981

G. R. Ablett
Ridgetown College of
Agricultural Technology
Ridgetown, Ontario, Canada
Ph. 519-674-5456 Ext. 242

T. S. Abney, USDA-ARS
Department of Botany
and Plant Pathology
Purdue University
W. Lafayette, IN 47907
Ph. 317-494-4650

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

K. L. Athow
Department of Botany
and Plant Pathology
Purdue University
W. Lafayette, IN 47907
Ph. 317-474-4648

R. L. Bernard, USDA-ARS
Turner Hall - Agronomy
1102 S. Goodwin
University of Illinois
Urbana, IL 61801
Ph. 217-333-4639

W. D. Beversdorf
Crop Science Department
University of Guelph
Guelph, Ontario, Canada
Ph. 519-842-4120 ext. 3596

J. J. Bonneman
Plant Science Department
Box 2207A
South Dakota State University
Brookings, S.D. 57007
Ph. 605-688-5121

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

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

R. L. Cooper, SEA, USDA
Department of Agronomy
OARDC
Wooster, OH 44691
Ph. 216-264-1021 ext. 191

T. E. Devine
USDA-ARS-NER
Room 218, Building 001
BARC-West
Beltsville, MD 20705

J. M. Dunleavy
417 Bessey Hall
Iowa State University
Ames, IA 50011
Ph. 515-294-1741

W. R. Fehr
Department of Agronomy
Iowa State University
Ames, IA 50011
Ph. 515-294-~~3110~~ 9818
FTS 865-2072

E. T. Gritton
Rm. 245, Moore Hall
Department of Agronomy
University of Wisconsin
Madison, WI 53706
Ph. 608-262-9539

UNIFORM TEST PARTICIPANTS--1981

J. R. Justin
Department of Soils and Crops
Lipman Hall
Cook College
Box 231
New Brunswick, NJ 08903
Ph. 201-932-9872

W. J. Kenworthy
Department of Agronomy
University of Maryland
College Park, MD 20742
Ph. 301-454-4695

F. Kiehn
Research Station
P.O. Box 3001
Morden, Manitoba
Canada ROG IJO
Ph. 204-822-4471

J. W. Lambert
Department of Agronomy
University of Minnesota
St. Paul, MN 55108
Ph. 612-373-1516 Lab.
0867 Office

F. A. Laviolette
Department of Botany
and Plant Pathology
Purdue University
W. Lafayette, IN 47907
Ph. 317-474-4649

V. D. Luedders, SEA, USDA
Department of Agronomy
University of Missouri
Columbia, MO 65201
Ph. 314-882-2405
FTS 276-3218

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

C. D. Nickell
Department of Agronomy
S-308 Turner Hall
University of Illinois
Urbana, IL 61801
Ph. 217-333-1279

J. H. Orf
Department of Agronomy
University of Minnesota
St. Paul, MN 55108
Ph. 612-373-0856/

F. W. Pearsall
Crop and Soeial Sciences
Michigan State University
East Lansing, MI 48824
Ph. 517-355-0262

W. T. Schapaugh, Jr.
Department of Agronomy
Throckmorton Hall
Kansas State University
Manhattan, KS 66506
Ph. 913-532-6101

A. F. Schmitthenner
Ohio Agricultural Center
Department of Plant Pathology
Wooster, OH 44691
Ph. 614-422-1865

H. Tachibana, USDA-ARS
Department of Botany
and Plant Pathology
Iowa State University
Ames, IA 50011
Ph. 515-294-3660

H. D. Voldeng
Research Branch
Ontario Region
Ottawa Research Station Bldg. 12
Ottawa, Ontario
Canada, KIA OC6
Ph. 613-966-3919

UNIFORM TEST PARTICIPANTS--1981

A. K. Walker
Department of Agronomy
OARDC
Wooster, OH 44691
Ph. 216-264-1021 ext. 191

D. A. Whited
Department of Agronomy
Walster Hall
North Dakota State University
Fargo, ND 58105
Ph. 701-237-8167

J. R. Wilcox, USDA-ARS
Department of Agronomy
Purdue University
W. Lafayette, IN 47907
Ph. 317-494-8074 Office
583-2952 Lab.

J. H. Williams
319 Keim Hall
East Campus
University of Nebraska
Lincoln, NE 68583
Ph. 402-472-1537

E. L. Wisk
University of Delaware
Substation
R.D. 2, Box 47
Georgetown, DE 19947
Ph. 302-856-5254

~~J. M. Wood~~
~~Department of Agronomy~~
~~N-122 Ag. Science Bldg. North~~
~~Lexington, KY 40546-0091~~
~~Ph. 606-258-2993~~

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

T. G. Isleib
Department of Crop and Soil Sciences
Soil Science Building
Michigan State University
East Lansing, Michigan 48824

T. W. Pfeiffer
Department of Agronomy
N106
Ag. Science Bldg. North
Lexington, KY 40546
Ph. 606-258-2713

R. H. Leep
Upper Peninsula Extension Center
1850 Presque Isle
Marquette, MI 49855
Ph. 906-228-4830

STRAIN DESIGNATION

Experimental (i.e., unreleased) strains are identified by a number with a code letter prefix. The code letters have been agreed upon in meetings of experiment station agronomists cooperating with the U. S. Department of Agriculture.

A	Iowa A.E.S.
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, HW - A. K. Walker)
K	Kansas A.E.S.
Ky	Kentucky A.E.S.
L	Illinois A.E.S. (L - R. L. Bernard, LN - C. D. Nickell)
La	Louisiana A.E.S.
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.
O	Central Experimental Farm, Ottawa, Ontario
OX	Research Station, Harrow, Ontario
OAC	University of Guelph, Guelph, Ontario
Ok	Oklahoma A.E.S.
PI	Plant Introduction, Germplasm Resources Laboratory Beltsville, Md.
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.R.L.
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 - 1981

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 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 O for Uniform Test O, 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 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	Portage	-2 to +6		Clay (0)
0	Evans	-5 to +3	McCall (00)	Hodgson 78 (I)
I	Hodgson 78	-3 to +5	Evans (0)	Corsoy 79 (II)
II	Corsoy 79	-3 to +5	Hardin (I)	Pella (III)
III	Cumberland	-5 to +3	Century (II)	Union (IV)
IV	Union	-3 to +8	Williams 79 (III)	

These maturity group ranges are based on long-time means over many locations. When using data from other environments, the interval between reference varieties may vary, and the division between maturity groups should be estimated in proportion to the above figures.

Lodging is rated at maturity according to the following scores:

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

Height is the average length in inches of plants from the ground to the tip of the main stem at the time of maturity. (To convert to centimeters, multiply by 2.54).

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

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

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

Seed Composition is measured on sample submitted to the Laboratory. A 60 to 70-gram sample of clean seeds is prepared by taking an equal volume or weight of seeds 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, Shiney, 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 was measured at Ames, Iowa by germination at 25° c. (a critical temperature for differentiating strains). Four replications of 25 seeds/entry are planted in a 5-inch plastic pot, at a 4 1/2 - inch depth in sand. Only the seedlings which have emerged by 12 days after planting are counted. Emergence score in relation to % of seeds which germinate and emerge are as follows:

1 $\geq$ 85%
2 $\pm$ 70 - 84%
3 = 45 - 69%
4 = 20 - 44%
5 = 0 - 19%

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%	4-19%	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 ("d") delayed 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 glycines
BBV	Bud blight	Tobacco ringspot virus
BP	Bacterial pustule	Xanthomonas phaseoli var. sojensis
BS	Brown spot	Septoria glycines
BSR	Brown stem rot	Phialophora gregatum
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^1	Powdery mildew	Microsphaera diffusa
PR	Phytophthora rot	Phytophthora megasperma f. sp. glycinea
PS	Purple stain	Cercespora 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	Disporthe phaseolorum var. caulivora
SMV	Soybean mosaic	Soja virus 1
TS	Target spot	Corynespora cassilicola
WF	Wildfire	Pseudomonas tabaci
YMV	Yellow mosaic	Phaeseolus virus 2

Ratings for BB, BP, DM, FE_2, and PM were based on leaf symptoms; those for BSR on percent of plants with stem browning, or percent of stem length browned, and those for PR on seedling rotting and/or stunting. Tolerance ratings with PR races 1 and 3 present are: 1=none-trace dead plants; 2=up to 2% dead plants, no stunting or chlorosis; 3=up to 10% dead plants, slight stunting or chlorosis; 4=up to 50% dead plants, moderate stunting and chlorosis; 5=over 50% dead plants, severe stunting and chlorosis.

POLICY ON 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 Agricultural Research, Science and Education Administration, 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 more replications than the PT. 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 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 policy, for use in making crosses. 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 R. C. Leffel, Oilseed Specialist, National Program Staff, Room 304, Bldg. 005, Beltsville Agricultural Research Center West, Beltsville, Maryland, 20705. 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 1981

Variety	Experimental Designation	Uniform Test Evaluations	Release date	Releasing States	Foundation Seed Production
Fayette	L78-1444 (L77-994)	UT III 1981 (UT III 1980)	Sept. 30, 1981	Ill., Kan., Mo.	1981
Hobbit	HW74-3385	UT III, 1978-1981, UP III, 1977	Sept. 30, 1981	Ill., Ind., Ohio, Neb.	1981
Lakota	A77-112023	UT I 1979-1981, UP I 1978	Aug. 14, 1981	Ia., Mich., S.D.	1981
Lawrence	L74L-125	UT IV, 1978-1981, UP IV, 1977	Sept. 30, 1981	Ill., Ind., Mo.	1981
Mead	U36276	UT III, 1979-1980, UP III, 1978	Mar. 15, 1981	Neb.	1980
Sparks	Kl041	UT IV, 1979-1981, UP III, 1978	Sept. 1, 1981	Kan., Ohio	1981
Vinton 81	———	———	Aug. 14, 1981	Ia., Ohio	1981
Williams 82	L24 A	UT III 1980-1981	Sept. 30, 1981	Ill., Ind., Ia., Kan., Mo.	1981

UNIFORM TEST LOCATIONS - 1981

Location		Tests Conducted by	Uniform Tests						Preliminary Tests					
			00	0	I	II	III	IV	I	IIA	IIB	IIIA	IIIB	IV
Ill.	Belleville	R. L. Bernard					x	x						
	Brownstown	C. D. Nickell					x	x						
	Carbondale	O. Meyers, Jr.						x						
	DeKalb	C. D. Nickell			x	x				x	x			
	Eldorado	R. L. Bernard					x	x						x
	Girard	"				x	x							
	Pontiac	C. D. Nickell				x	x							
	Urbana	"								x	x	x	x	
	"	R. L. Bernard				x	x							
Ind.	Greenfield	J. R. Wilcox				x	x							
	Lafayette	"			x	x	x	x		x	x	x	x	
	Sullivan	"						x						x
Ia.	Ames	W. R. Fehr				x				x	x			
	Corwith	"			x				x					
	Knierim	"			x				x					
	Marshalltown	"				x				x	x			
	Ottumwa	"					x					x	x	
	Stuart	"					x					x	x	
Kan.	Ashland	W. T. Shapaugh, Jr.					x	x				x	x	x
	Ottawa	"						x						
	Powhattan	"					x							
	Topeka	"					x							
Ken.	Lexington	J. M. Wood					x	x				x	x	x
Man.	Morden	F. Kiehn	x											
Md.	Clarksville	W. J. Kenworthy					x							
	Queenstown	& P. B. Creegan						x						x
Mich.	Britton	T. J. Johnston			x	x			x					
	Ithaca	"		x	x	x			x					
Minn.	Crookston	J. W. Lambert	x											
	Lamberton	& J. H. Orf			x	x			x					
	Morris	"	x	x										
	Rosemount	"	x	x										
	Waseca	"			x	x			x					
Mo.	Portageville	S. Anand												
	Clay	"						x						
	Loam	"						x						x
Neb.	Lincoln	J. H. Williams						x						
	Mead	"			x	x	x			x	x	x	x	

UNIFORM TEST LOCATIONS - 1981

Location		Tests Conducted by	Uniform Tests						Preliminary Tests					
			OO	O	I	II	III	IV	I	IIA	IIB	IIIA	IIIB	IV
N.J.	Adelphia	J. R. Justin				x	x	x		x	x			
N.D.	Fargo	D. A. Whited	x	x										
Ohio	Hoytville	A. K. Walker				x	x			x	x	x	x	
	S. Charleston	R. L. Cooper						x					x	
	Wooster	A. K. Walker				x	x							
Ont.	Harrow	R. I. Buzzell				x								
	Ottawa	H. D. Voldent	x	x										
	Ridgetown	G. R. Ablett			x	x			x					
Penn.	Landisville	J. O. Yocum				x	x	x						
S.D.	Brookings	J. J. Bonneman			x	x			x					
	Centerville	"				x				x	x			
	Elk Point	"					x					x	x	
	Wilmot	"		x	x									
Wis.	Arlington	E. T. Gritton			x	x			x	x	x			
	Ashland	"	x											
	Spooner	"		x										
No. Locations with agronomic data (x)			7	7	13	22	21	16	9	10	10	9	10	6
No. with seed composition data (x)			4	4	4	6	4	4	-	3	4	4	4	4

1981 Disease, Shattering, and Descriptive Data

Location		Test Conducted by	Test	U.T.	P.T.
Ill.	Belleville	R. L. Bernard	BP, DM	IV	
	Eldorado	"	SMV	III, IV	
	"	"	DM		IV
	Urbana	"	BP, DM	II, III	
	"	"	BSR		III
	Carbondale	O. Meyers, Jr.	Shattering	IV	
Ind.	Lafayette	K. L. Athow and F. A. Laviolette	BSR, FE_2, PR_1	OO-IV	I-IV
	"	T. S. Abney and T. L. Richards	Germ, PS, PSB, SMV	OO-IV	I-IV
Ia.	Ames	J. Dunleavy	BST	OO-IV	
	"	W. R. Fehr	Chlorosis	OO-IV	I-IV
	"	"	Emergence	OO-IV	
	"	H. Tachibana	BSR, PR_1	OO-IV	I-IV
Kan.	Manhattan	W. T. Schapaugh, Jr.	Shattering	OO-IV	I-IV
Minn.	Lamberton	J. Lambert	Chlorosis, BSR	OO-IV	
Ohio	Vickery	F. Schmitthenner	PR Tol.	II-IV	II-IV

Strain	Parentage or Source
A72-507	Amsoy x Wayne
A72-512	Amsoy x Wayne
A73-19084	IVR Ex5003 x Wells
A74-102011	M62-263 x IVR Ex4426
A74-204034	[Grant x (Lincoln x Hawkeye)] x [Amsoy[8] x (Blackhawk x Harosoy)]
A75-101022	IVR Ex5003 x Wells[2]
A75-105021	Corsoy[2] x (Mack x L65-1342 or Anoka)
A75-203036	IVR Ex4428 x Woodworth
A75-204018	IVR Ex4731 x Wirth
A75-306005	IVR Ex5003 x SL12
A75-332035	L15 x AP68-1016
A76-304020	(Beeson x AP68-1016) x (L15 x Calland)
AP68-1016	Clark[5] x PI84.946-2
AP68-1022	Clark[5] x PI84.946-2
Asgrow A2440	Corsoy x PI28019
Asgrow A3300	Beeson x Calland
Asgrow XP1564	Hark x C1453
AX56p64-1	Amsoy(Adams x Harosoy)
AX900-4-3	CX407BC$_7$-255 x AP68-1022
AX901-40-2	Beeson x AP68-1022
C1069	Lincoln x Ogden
C1070	Ogden x Kent
C1079	Lincoln x Ogden
C1223	C1070 x Adams
C1253	Blackhawk x Harosoy
C1266R	Harosoy x C1079
C1311	Wabash x C1069
C1317	C1223[8] x Mukden
C1421	Adelphia[8] x Mukden
C1426	(Blackhawk x Harosoy) x Kent
C1453	C1266R x C1253
C1477	Amsoy 71(Amsoy[8] x C1253)
C1508	C1317-71 x C1253
C1520	Bonus x Cutler
C1523	Beeson x L63-1397
C1524	Beeson x L63-1397
C1528	Calland x L63-1397
CX407BC$_7$-255	Amsoy x C1253

Strain	Parentage or Source
CX463-3	Cutler x C1311
CX521-71	Hawkeye x Harly
CX557	Beeson x PI68.788
D49-2510	S100 x CNS
D49-2573	Roanoke x (Ogden x CNS)
D60-9647	FC31745 x D49-2510
D63-6100	Hill[4] x PI171.442
D64-3077	D49-2491(S100 x CNS)[5] x Hawkeye
D66-12392	D63-6100 x Dyer
IVR Ex4426	Amsoy x Wayne
IVR Ex5003	Provar x (AX56P64-1 x PI19110-1)
K1028	Williams x Calland
L12	[(Clark x CNS) x (Clark[8] x Blackhawk)] x [(Clark[6] x T201) x (Clark[6] x T145)] I r Rps, rxp
L15	Wayne x Clark 63 ($\underline{Rps}_1$)
L21	Williams[5] x SL11
L57-0034	Clark x Adams
L61-344	Harosoy[6] x T117 ($\underline{Dt}_2$)
L62-361	Harosoy[6] x T117 ($\underline{Dt}_2$)
L62-535	Harosoy[6] x T145
L62-973	Harosoy[6] x PI86024 ($\underline{dt}_1$)
L62-1547	Clark[6] x T204
L63-1397	Harosoy[6] x T207
L65-1342	Wayne[2] x Clark $\underline{e}_2$
L65-4050	Wayne[6] x Clark 63
L66-531	(Clark[6] x T245)$\underline{dt}_1\underline{e}_2$ x (Clark[6] x T175)$\underline{E}_1$ t
L66-1362	(Hawkeye x Lee)[2]
L66L-137	Wayne x L57-0034
L69L-3	Clark $\underline{dt}_1$ $\underline{E}_1$ t $\underline{e}_2$ x Harosoy $\underline{dt}_1$
L69U40-16-4	Calland x Amsoy
L70-2283	Chippewa 64 x Custer
L70D6-16	Harosoy ln x (C1253 x Kent)
L70L-2912	L15 x D64-3077
L70T-543	L15 x Amsoy 71
L71-3628	L66-1322 x L62-535
L72D-549	Clark $\underline{dt}_1$ x Rampage
L72U-640	L66-531 x C1426
L72U-2567	Williams x Ransom
L73-4124	D66-12392 x L69L-3

Strain	Parentage or Source
L73-6626	R62-659 x L66-531
L74D-619	Williams x Ransom
L74D-678	Amsoy 71 x Ransom
L75-8016	Williams x L70-2283
L75-8020	Williams x L70-2283
L78-8202	L73-6626 x Essex
LL4102	[Wayne x (Clark x Adams)] x Cutler
M10	Lincoln^2 x Richland
M387	Capital x Renville
M406	Harosoy x Norchief
M53-117	M10 x PI180.501
M54-139	Renville x Capital
M54-240	(Lincoln^2 x Richland) x Korean
M59-120	M54-240 x M54-139
M61-224	Merit x Harosoy
M62-173	M387 x M406
M62-263	Grant x M319W
M63-194	Corsoy x PI132207
M63-217Y	Corsoy x M53-117
M64-157	Merit x Amsoy
M65-442	Anoka x Amsoy
M66-18	Clay x Altona
M68-2	Wilkin x M59-120
M68-48	Evans x (M54-240 x M54-139)
M68-49	Evans x M59-120
M68-96	M59-120 x Amsoy 71
M68-256	Evans x Steele
Mitchell	Amsoy x Wayne
N45-1497	Ralsoy x Ogden
Pride B-216	Corsoy x Wayne
R54-168	D49-2573 x N45-1497
R62-659	(R54-168 x Hill) x (Lee x Dortchsoy 10)
SL12	[(Wayne^6 x Clark 63) x (Wayne^4 x L11)] x (Wayne x Kanrich)
V68-1034	York x PI71506
V68-1038	York x PI71506
827-4	Introduction from Holmberg, Sweden
840-70-3	Strain from Sven A. Holmberg, Sweden

UNIFORM TEST OO, 1981

Strain	Parentage	Previous Testing*	Generation Composited
1. Clay (O)	Capital x Renville	4	F_5
2. Maple Arrow	Harosoy 63 x 840-70-3	4	F_5
3. Maple Presto	(Amsoy x Portage) x 840-70-3	3	F_5
4. McCall	(Acme x Chippewa) x Hark	8	F_5
5. Portage (OO)	Acme x Comet	21	F_5
6. M71-148	Clay x Evans	1	F_5
7. OT80-1	840-70-3 x (Harosoy 63 x Altona)	1	F_6
8. OT80-2	Maple Presto x Evans	1	F_5
9. OT80-16	(PI194.641 x Harosoy e_2e_3) x Harosoy e_2e_3	-	F_5
10. OT80-18	(M62-173 x 827-4) x (Evans x CM145)	-	F_5

*Number of years in test or name of 1980 test.

Descriptive and Other Data

Strain	Descriptive Code	Lamberton Chlorosis	Ames Chlorosis	Ames Emergence	Manhattan Shattering 2 Weeks
		score	score	score	score
Clay (O)	PGBr SYY I	2.0	2.8	1	1
Maple Arrow	PTBr DYBr I	3.5	3.0	1	2
Maple Presto	PTBr DYG I	4.3	3.5	1	1
McCall	PGBr DYY I	4.0	2.8	1	1
Portage (OO)	PGBr DYY I	3.2	3.0	1	1
M71-148	WGBr SYY I	3.0	3.2	1	1
OT80-1	PTBr DYBr I	5.0	4.0	1	1
OT80-2	PGBr DYY I	3.6	3.3	1	1
OT80-16	PTBr SYBr I	5.0	3.2	1	1
OT80-18	PTBr SYY I	3.2	2.3	1	1

UNIFORM TEST OO, 1981

Disease Data

Strain	BSR Ames Plant	BSR Ames Stem	BSR Lafayette Stem	BSR Lamberton Stem	PR_1 Lafayette	PR_1 Ames	FE_2 Lafayette	BTS Ames	PS	PSB Lafayette	SMY Lafayette	Germ*
	n %	n %	n %	n %	a Reaction	a Reaction	a score	a score	a %	n %	a score	%
Clay (O)	100	83	40	70	S	S	5	5	81	23	4E	67
Maple Arrow	100	45	0	75	R	R	4	4	43	29	3E	71
Maple Presto	60	19	0	0	R	R	3	2	55	42	5E	48
McCall	100	52	100	70	S	S	5	3	76	17	3M	75
Portage (OO)	100	55	80	50	S	S	5	3	89	10	3E	68
M71-148	100	67	100	70	R	R	5	3	61	19	2M	60
OT80-1	100	36	60	50	R	R	5	2	50	38	4E	59
OT80-2	70	26	60	25	S	S	5	3	56	50	2M	43
OT80-16	100	59	80	65	H	S	4	3	70	25	5E	69
OT80-18	100	53	40	50	S	S	2	4	25	28	2M	70

*Petri dish germination on potato dextrose agar

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
N. of Tests	7	7	7	7	7	7	7	4	4
	bu/a	No.	date	score	in.	score	g/100	%	%
Clay (O)	46.1	3	+13	1.9	30	2.1	16.6	42.6	19.4
Maple Arrow	40.6	6	+11	1.7	30	2.0	17.8	42.9	18.8
Maple Presto	29.7	10	- 7	1.1	23	2.7	14.9	39.6	19.8
McCall	46.9	2	+ 7	1.5	31	1.6	15.3	41.9	18.8
Portage (O)	38.8	8	9-3*	1.4	28	1.9	18.4	40.7	18.8
M71-148	47.2	1	+10	1.5	31	1.8	15.1	41.2	19.5
OT80-1	40.0	7	+ 1	1.6	28	1.7	16.0	43.5	19.3
OT80-2	38.8	8	- 3	1.1	25	1.5	14.5	41.0	19.4
OT80-16	41.7	5	+ 1	1.7	26	2.2	18.0	40.2	19.3
OT80-18	43.4	4	+ 8	1.3	28	1.8	16.8	40.3	19.5

*111 days after planting

UNIFORM TEST OO, 1981

1980-1981, 2-year mean

OO Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	14	14	14	14	14	14	14	9	9
	bu/a	No.	Date	score	in.	score	g/100	%	%
Clay (O)	42.4	3	+ 11	2.2	30	2.3	16.8	42.2	19.7
Maple Arrow	38.8	4	+ 10	1.9	30	2.1	18.2	41.5	19.5
Maple Presto	27.4	8	- 7	1.2	23	3.0	15.3	39.4	20.3
McCall	43.0	2	+ 6.5	1.8	30	2.0	15.4	41.3	18.9
Portage (OO)	35.6	6	9-4*	1.6	28	2.2	18.3	40.1	19.1
M71-148	43.2	1	+ 9.5	1.9	30	2.0	14.9	41.2	19.8
OT80-1	37.0	5	0	1.8	28	2.0	16.2	42.4	20.0
OT80-2	35.1	7	- 4.5	1.3	24	1.7	14.6	40.5	20.1

*112 days after planting

1978-1981, 4-year mean

No. of Tests	31	31	31	31	31	31	31	19	19
Clay (O)	40.1	2	+11.8	1.9	28	2.3	16.5	41.1	19.9
Maple Arrow	36.2	3	+ 8.7	1.8	30	1.9	17.9	40.9	19.7
Maple Presto	26.8	5	- 8.0	1.2	24	2.9	15.3	39.2	20.1
McCall	40.2	1	+ 5.1	1.7	29	2.0	15.2	40.3	19.1
Portage (OO)	33.4	4	9-5.3*	1.6	28	1.8	17.3	39.8	19.2

*109 days after planting

McCall has been the highest yielding Group OO variety in this test. The strain M71-148 has averaged 9 to 10 days later in maturity than Portage and continued evaluation should be in the Group O test.

UNIFORM TEST OO, 1981

Strain	Mean 7 Tests	Ont. Ottawa	Wis. Ashland	Man. Morden
		YIELD (bu/a)		
Clay (O)	46.1	58.3	31.7	65.4
Maple Arrow	40.6	59.0	23.6	55.8
Maple Presto	29.7	44.2	24.2	33.9
McCall	46.9	61.4	33.6	66.7
Portage	38.8	53.5	25.5	44.4
M71-148	47.2	59.1	38.4	66.0
OT80-1	40.0	60.4	27.6	41.9
OT80-2	38.8	56.6	28.4	45.4
OT80-16	41.7	58.9	28.0	45.0
OT80-18	43.4	64.5	30.8	58.4
C.V. (%)		6.8	11.5	-
L.S.D. (5%)		3.8	6.0	-
Row sp. (in)		10	30	-
Rows/plot		4	4	4
Reps		4	3	4
		YIELD RANK		
Clay (O)	3	7	3	3
Maple Arrow	6	5	10	5
Maple Presto	10	10	9	10
McCall	2	2	2	1
Portage (OO)	8	9	8	8
M71-148	1	4	1	2
OT80-1	7	3	7	9
OT80-2	8	8	5	6
OT80-16	5	6	6	7
OT80-18	4	1	4	4
		MATURITY (date)		
Clay (O)	+13	+17	+13	+22
Maple Arrow	+11	+12	+ 6	+22
Maple Presto	- 7	- 8	-10	- 6
McCall	+ 7	+12	+ 6	+ 6
Portage (OO)	9-3	9-7	9-11	9-2
M71-148	+10	+16	+ 9	+11
OT80-1	+ 1	+ 7	- 3	+ 2
OT80-2	- 3	- 4	- 2	- 1
OT80-16	+ 1	+ 8	- 2	+ 2
OT80-18	+ 8	+12	+ 6	+ 6
Date planted	5-14	5-22	5-21	5-12
Days to mature	111	108	113	113

UNIFORM TEST OO, 1981

Minnesota			N.D.
Crookston	Morris	Rosemount	Fargo
	YIELD (bu/a)		
47.2	44.4	40.3	36.0
42.1	30.8	42.8	29.9
37.3	17.0	23.4	27.6
49.7	38.0	42.1	36.5
46.7	31.1	37.4	33.3
46.4	39.8	46.7	34.1
45.4	30.6	39.7	34.4
42.2	30.2	34.9	33.6
47.4	35.8	41.8	35.2
44.1	32.0	41.5	32.6
8.2	8.5	6.2	6.3
6.3	4.8	4.2	3.6
12	30	30	18
8	4	4	4
3	3	3	3
	YIELD RANK		
3	1	6	2
9	7	2	9
10	10	10	10
1	3	3	1
4	6	8	7
5	2	1	5
6	8	7	4
8	9	9	6
2	4	4	3
7	5	5	8
	MATURITY (date)		
+12	+ 9	+ 8	+12
+ 9	+ 9	+ 7	+10
- 9	- 9	- 6	- 3
+ 5	+ 7	+ 6	+ 5
9-6	8-24	8-31	8-28
+ 8	+ 9	+ 6	+ 9
0	+ 1	+ 2	- 1
- 3	- 3	- 3	- 2
0	0	+ 2	- 2
+ 5	+ 9	+ 6	+10
5-15	5-7	5-15	5-7
114	109	108	113

UNIFORM TEST OO, 1981

Strain	Mean 7 Tests	Ont. Ottawa	Wis. Ashland	Man. Morden
		LODGING (score)		
Clay (O)	1.9	2.0	2.0	2.0
Maple Arrow	1.7	1.8	2.0	2.0
Maple Presto	1.1	1.0	2.0	1.0
McCall	1.5	2.0	1.0	1.5
Portage (OO)	1.4	1.0	2.0	2.0
M71-148	1.5	1.2	2.0	1.5
OT80-1	1.6	1.5	2.0	1.0
OT80-2	1.1	1.0	1.0	1.0
OT80-16	1.7	2.0	2.0	1.0
OT80-18	1.3	1.8	1.0	1.0
		PLANT HEIGHT (inches)		
Clay(O)	30	29	30	33
Maple Arrow	30	32	21	32
Maple Presto	23	27	17	23
McCall	31	32	26	30
Portage (OO)	28	29	29	29
M71-148	31	33	25	32
OT80-1	28	32	25	29
OT80-2	25	27	21	24
OT80-16	26	30	22	24
OT80-18	28	30	27	26
		SEED QUALITY (score)		
Clay (O)	2.1	1.5	5.0	1.5
Maple Arrow	2.0	1.0	2.0	2.5
Maple Presto	2.7	2.5	3.0	2.5
McCall	1.6	1.2	2.0	1.0
Portage (OO)	1.9	1.8	2.0	2.0
M71-148	1.8	2.0	3.0	1.5
OT80-1	1.7	1.0	1.0	2.0
OT80-2	1.5	1.0	2.0	1.0
OT80-16	2.2	1.2	2.0	2.5
OT80-18	1.8	1.5	2.0	2.0

UNIFORM TEST OO, 1981

Minnesota			N.D.
Crookston	Morris	Rosemount	Fargo
	LODGING (score)		
2.5	2.0	2.0	1.0
2.3	1.0	2.0	1.0
1.0	1.0	1.0	1.0
2.3	1.3	1.7	1.0
2.0	1.0	2.0	1.0
2.0	1.3	1.7	1.0
2.0	1.7	2.0	1.0
1.7	1.0	1.3	1.0
2.0	1.7	2.3	1.0
2.0	1.0	1.0	1.0
	PLANT HEIGHT (inches)		
32	29	31	27
37	26	34	30
24	20	24	25
35	28	34	30
32	22	32	25
35	27	34	29
30	25	32	26
28	21	30	24
29	24	31	25
32	24	31	24
	SEED QUALITY (score)		
1.7	1.7	2.3	1.1
2.3	2.7	2.3	1.2
3.3	2.7	3.0	1.6
1.7	1.7	2.3	1.0
2.3	2.7	1.7	1.0
1.7	1.3	1.7	1.1
2.0	2.3	2.3	1.1
1.7	1.7	2.0	1.0
2.7	2.7	3.3	1.1
2.7	1.7	1.3	1.2

UNIFORM TEST OO, 1981

Strain	Mean 7 Tests	Ont. Ottawa	Wis. Ashland	Man. Morden
		SEED SIZE (g/100)		
Clay (O)	16.6	17.2	18.9	17.6
Maple Arrow	17.8	18.8	16.6	22.0
Maple Presto	14.9	14.5	15.3	15.8
McCall	15.3	15.8	15.9	17.0
Portage (OO)	18.4	18.2	19.8	19.2
M71-148	15.1	15.2	14.9	16.9
OT80-1	16.0	16.8	15.7	18.4
OT80-2	14.5	14.5	14.2	15.5
OT80-16	18.0	18.0	17.8	19.9
OT80-18	16.8	18.0	16.4	17.7

Strain	Minnesota Crookston	Minnesota Morris	Minnesota Rosemount	N.D. Fargo
		SEED SIZE (g/100)		
Clay (O)	16.1	16.5	16.3	13.4
Maple Arrow	16.9	17.2	19.1	14.3
Maple Presto	16.2	13.1	15.5	13.9
McCall	14.7	14.5	16.8	12.2
Portage (OO)	20.0	16.1	20.6	15.1
M71-148	16.2	15.2	16.0	11.5
OT80-1	15.6	14.6	16.8	14.4
OT80-2	13.8	14.6	15.4	13.7
OT80-16	17.5	17.6	19.4	16.2
OT80-18	17.4	17.0	17.2	14.1

UNIFORM TEST OO, 1981

Strain	Mean 4 Tests	Minnesota		Wis.	Man.
		Crookston	Rosemount	Ashland	Morden
		PROTIEN (%)			
Clay (O)	42.6	43.0	43.4	42.1	42.0
Maple Arrow	42.9	44.5	45.4	40.2	41.4
Maple Presto	39.6	39.2	40.5	40.6	38.2
McCall	41.9	44.6	41.9	40.5	40.7
Portage (OO)	40.7	42.5	41.5	41.3	37.4
M71-148	41.2	42.3	43.4	41.8	37.3
OT80-1	43.5	43.7	45.6	43.7	41.1
OT80-2	41.0	44.0	43.0	40.5	36.5
OT80-16	40.2	41.4	40.7	40.9	37.8
OT80-18	40.3	42.5	42.1	40.6	36.0
		OIL (%)			
Clay (O)	19.4	19.2	19.8	18.1	20.6
Maple Arrow	18.8	18.5	19.0	17.6	20.1
Maple Presto	19.8	20.0	20.6	18.2	20.2
McCall	18.8	18.2	19.0	17.5	20.2
Portage (OO)	18.8	18.4	19.2	17.4	20.0
M71-148	19.5	19.6	19.6	17.4	21.3
OT80-1	19.3	18.3	19.8	18.5	20.6
OT80-2	19.4	19.1	20.1	17.6	20.8
OT80-16	19.3	19.7	19.3	17.9	20.4
OT80-18	19.5	19.6	19.6	17.4	21.4

UNIFORM TEST O, 1981

Strain	Parentage	Previous Testings	Generation Composited
1. Evans (O)	Merit x Harosoy	11	F_5
2. Hodgson 78 (I)	Hodgson[7] x Merit	4	F_5
3. McCall (OO)	(Acme x Chippewa) x Hark	1	F_5
4. A80-143008	(Corsoy x Wayne) x A75-332035	-	F_4
5. M70-128E	Evans x M63-217Y	-	F_5
6. M70-153	Steele x Hodgson	3	F_5
7. M71-25	Clay x Evans	1	F_5
8. M71-43	Wilkin x M63-217Y	2	F_5
9. M72-107	Wilkin x M63-194	1	F_5
10. M72-127	Evans x "unknown"	-	F_5
11. M72-136	M63-194[2] x M61-224	-	F_5
12. M73-62	M61-224 x Nag. Feher	1	F_5
13. M73-71	Evans x M66-18	-	F_5
14. M74-12	Evans x Peterson 85	-	F_5
15. M74-23	M68-2 x Hodgson	-	F_5
16. M74-155	Evans x M65-442	-	F_5
17. ND801	Merit x L62-973	-	F_3
18. ND803	Wilkin x L62-361	-	F_3

Descriptive and Other Data

Strain	Descriptive Code	Chlorosis score		Emergence score	Shattering
		Ames	Lamberton	Ames	Manhattan 2 Weeks
Evans (O)	WGBr DYY I	2.8	3.2	1	1
Hodgson 78 (I)	PGBr DYBf I	3.3	2.5	5	1
McCall (OO)	PGBr DYY I	3.3	4.0	1	1
A80-143008	WTBr SYBr I	4.5	4.6	1	1
M70-128E	PGBr DYY I	2.5	1.5	1	1
M70-153	PGBr DYBf I	3.5	4.3	2	1
M71-25	WGBr DYY I	3.3	3.0	1	1
M71-43	PGBr DYY I	2.8	1.0	3	1
M72-107	PGBr DYY I	3.3	4.0	1	1
M72-127	WGT+BrDYY I	3.3	3.5	1	1
M72-136	PGBr DYY+bfI	3.0	3.0	1	1
M73-62	WGT DYY I	2.8	3.2	2	1
M73-71	PGBr DYIb I	2.8	3.5	1	1
M74-12	PGBr DYIb I	3.2	3.0	1	1
M74-23	PGBr DYBf I	2.8	1.5	1	1
M74-155	WGT DYY I	2.2	1.0	1	1
ND801	WGBr DYBf D	2.7	1.5	1	1
ND803	WGBr DYY SD	2.2	2.2	1	1

UNIFORM TEST O, 1981

Disease Data

Strain	BSR				PR_1	
	Ames		Lafayette	Lamberton		
	Plant	Stem	Stem	Stem	Ames	Lafayette
	n %	n %	n %	n %	a Reaction	a
Evans (O)	100	91	100	60	R	R
Hodgson 78 (I)	100	80	80	70	R	R
McCall (OO)	100	39	100	70	S	S
A80-143008	100	93	100	75	S	S
M70-128E	100	71	80	70	H	R
M70-153	100	95	60	75	R	R
M71-25	100	93	100	75	R	R
M71-43	100	92	80	75	R	R
M72-107	100	84	80	75	R	R
M72-127	100	95	100	70	R	R
M72-136	100	83	100	70	R	R
M73-62	100	93	80	100	S	R
M73-71	100	58	100	100	R	R
M74-12	100	72	80	80	H	H
M74-23	100	81	100	75	S	S
M74-155	100	53	80	60	R	R
ND801	100	90	100	70	S	S
ND803	100	66	100	60	H	R

UNIFORM TEST O, 1981

Disease Data

Strain	FE2 Lafayette	BTS Ames	PS	PSB	SMV Lafayette	Germ*
	a score	a score	a %	n %	a score	%
Evans (O)	5	4	89	12	1	88
Hodgson 78 (I)	5	4	71	9	2M	81
McCall (OO)	5	3	73	21	3	61
A80-143008	3	4	75	14	5E	79
M70-128E	5	2	86	4	1	92
M70-153	5	3	83	13	1	72
M71-25	5	3	--	20	1	78
M71-43	5	1	68	23	1	72
M72-107	5	2	77	13	1	85
M72-127	4	3	90	1	1	78
M72-136	5	3	95	2	1	95
M73-62	5	3	85	9	1	75
M73-71	5	4	69	24	3E	62
M74-12	5	3	99	2	3E	93
M74-23	5	4	58	27	1	72
M74-155	5	3	83	5	1	81
ND801	5	4	32	17	1	67
ND803	5	3	47	33	2M	55

*Petri dish germination on potato dextrose agar

Two strains, M71-25 and M73-43 have performed very well in this test. Both strains mature earlier than Evans, the Group O check, have excellent lodging resistance, and are similar in reaction to the disease for which they have been evaluated. M72-127, a new entry in 1981, was the highest yielding strain in the test.

UNIFORM TEST O, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	7	7	7	7	7	6	7	4	4
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Evans (O)	43.0	12	9-20*	2.2	36	1.5	15.8	41.6	19.2
Hodgson 78 (I)	44.7	7	+ 6	2.1	38	1.5	16.3	41.6	18.9
McCall (OO)	38.9	16	-12	2.0	32	1.8	14.9	41.0	18.7
A80-143008	40.8	15	+ 8	3.3	35	2.1	15.2	43.2	17.9
M70-128E	45.5	2	+ 1	2.0	36	1.7	15.8	41.5	19.1
M70-153	42.1	14	+ 2	1.6	33	1.8	15.2	41.0	19.2
M71-25	45.4	3	- 1	1.6	34	1.8	16.6	40.6	19.8
M71-43	44.9	5	- 3	1.5	34	1.7	17.0	42.7	18.7
M72-107	43.3	10	+ 2	1.4	35	1.8	17.2	42.2	19.0
M72-127	46.4	1	+ 4	2.2	36	2.0	17.3	42.8	18.3
M72-136	44.1	8	+ 2	2.1	35	1.8	16.3	41.7	18.6
M73-62	43.3	10	+ 2	1.6	31	1.8	15.4	41.3	19.0
M73-71	42.5	13	- 3	1.5	33	1.7	15.6	41.4	19.8
M74-12	44.9	5	+ 3	1.5	33	2.1	16.7	42.0	18.5
M74-23	45.0	4	- 1	1.6	33	1.5	15.8	42.4	19.2
M74-155	44.1	8	+ 4	1.9	36	2.0	17.0	41.2	18.8
ND801	28.7	18	+ 5	1.1	21	2.0	17.6	43.7	18.6
ND803	38.3	17	+ 1	2.8	35	1.9	15.6	41.4	18.2

*124 days after planting

1980-1981 2-year mean

No. of Tests	15	15	14	15	15	13	14	9	9
Evans (O)	42.3	7	9-20.0*	2.4	37	1.8	16.1	41.7	19.5
Hodgson 78 (I)	43.8	3	+7.0	2.5	39	1.9	17.0	41.1	19.0
McCall (OO)	37.4	8	-11.5	2.0	31	1.9	14.9	40.4	19.1
M70-153	42.8	6	+3.0	2.0	34	1.9	16.0	41.9	19.3
M71-25	44.6	1	-1.0	1.9	33	2.1	17.3	40.9	20.1
M71-43	44.2	2	-3.0	1.5	33	1.9	16.8	42.4	19.0
M72-107	43.0	4	+2.0	1.7	36	2.1	17.6	41.8	19.3
M73-62	42.9	5	+2.0	1.8	30	1.9	16.2	41.9	19.2

* 124 days after planting

1979-1981 3-year mean

No. of Tests	22	22	21	22	21	19	21	13	13
Evans (O)	41.6	4	9-21.6*	2.1	37	1.9	16.2	41.2	19.3
Hodgson 78 (I)	43.5	1	+7.5	2.4	39	2.0	17.0	40.8	19.0
M70-153	42.7	3	+2.9	2.2	34	1.9	16.0	41.4	19.3
M71-43	42.9	2	-2.6	1.5	33	1.9	17.1	42.0	19.0

* 123 days after planting

Strain	Mean 7 Tests	Ont. Ottawa	Mich. Ithaca	Wis. Spooner
		YIELD (bu/a)		
Evans (O)	43.0	67.6	43.3	27.4
Hodgson 78 (I)	44.7	65.4	53.0	21.7
McCall (OO)	38.9	65.1	40.5	22.6
A80-143008	40.8	46.1	51.6	26.6
M70-128E	45.5	71.2	46.5	32.4
M70-153	42.1	62.2	35.9	26.0
M71-25	45.4	74.2	44.7	31.3
M71-43	44.9	73.0	48.0	27.4
M72-107	43.3	68.6	43.9	22.1
M72-127	46.4	72.1	50.8	31.4
M72-136	44.1	64.9	47.8	30.7
M73-62	43.3	66.2	36.9	26.5
M73-71	42.5	67.8	42.1	28.8
M74-12	44.9	71.4	46.4	26.4
M74-23	45.0	69.2	41.1	29.4
M74-155	44.1	64.2	44.5	27.4
ND801	28.7	56.6	10.9	23.3
ND803	38.3	51.8	42.6	25.9
C.V. (%)		7.3	10.4	13.7
L.S.D. (5%)		6.7	7.4	5.9
Row sp. (in)		10	30	36
Rows/plot		4	4	4
Reps		4	3	3
		YIELD RANK		
Evans (O)	12	9	11	7
Hodgson 78 (I)	7	11	1	18
McCall (OO)	16	12	15	16
A80-143008	15	18	2	10
M70-128E	2	5	6	1
M70-153	14	15	17	13
M71-25	3	1	8	3
M71-43	5	2	4	7
M72-107	10	7	10	17
M72-127	1	3	3	2
M72-136	8	13	5	4
M73-62	10	10	16	11
M73-71	13	8	13	6
M74-12	5	4	7	12
M74-23	4	6	14	5
M74-155	8	14	9	7
ND801	18	16	18	15
ND803	17	17	12	14

UNIFORM TEST O, 1981

Minnesota		N.D.	S.D.
Morris	Rosemount	Fargo	Wilmot
		YIELD (bu/a)	
51.1	44.5	40.6	26.5
49.5	47.1	42.2	34.2
40.0	41.1	37.7	25.3
45.3	42.2	38.2	35.6
48.2	45.0	45.2	29.9
51.7	45.3	43.6	30.2
48.5	45.3	39.2	34.5
45.7	45.8	43.0	31.5
52.3	45.0	41.2	29.8
53.1	46.0	41.5	30.2
50.2	47.9	39.3	27.7
52.9	50.0	38.8	31.8
49.2	40.7	39.4	29.2
51.7	46.2	38.5	33.4
51.2	48.2	41.2	34.5
50.9	43.9	39.9	37.8
40.3	20.2	33.2	16.6
45.9	37.8	37.4	27.0
5.7	6.6	9.8	12.4
4.5	4.8	NS	6.2
30	30	18	40
4	4	4	4
3	3	3	3
		YIELD RANK	
7	12	8	16
10	4	4	5
18	15	16	17
16	14	15	2
13	10	1	11
4	8	2	10
12	8	12	3
15	7	3	8
3	10	6	12
1	6	5	9
9	3	11	14
2	1	13	7
11	16	10	13
4	5	14	6
6	2	6	4
8	13	9	1
17	18	18	18
14	17	17	15

Strain	Mean 7 Tests	Ont. Ottawa	Mich. Ithaca	Wis. Spooner
		MATURITY (date)		
Evans (O)	9-20	10-8	9-23	9-18
Hodgson 78 (I)	+ 6	+ 5	+ 4	+ 1
McCall (OO)	-12	-19	-14	- 1
A80-143008	+ 8	+ 5	+ 4	+ 9
M70-128E	+ 1	+ 2	- 4	0
M70-153	+ 2	- 3	- 3	+ 4
M71-25	- 1	- 6	- 3	0
M71-43	- 3	- 6	- 8	- 4
M72-107	+ 2	+ 4	+ 1	0
M72-127	+ 4	+ 4	+ 3	+ 5
M72-136	+ 2	+ 4	- 2	+ 1
M73-62	+ 2	- 1	- 4	+13
M73-71	- 3	- 5	- 4	- 1
M74-12	+ 3	- 4	- 5	+ 2
M74-23	- 1	- 5	- 2	0
M74-155	+ 4	+ 4	+ 4	+ 1
ND801	+ 5	+ 4	0	+ 5
ND803	+ 1	+ 5	- 3	+ 2
Date planted	5-19	5-22	5-27	5-18
Days to mature	124	139	119	123
		LODGING (score)		
Evans (o)	2.2	2.3	2.5	3.0
Hodgson 78 (I)	2.1	2.5	2.7	2.0
McCall (OO)	2.0	2.2	2.3	4.0
A80-143008	3.3	5.0	2.8	4.0
M70-128E	2.0	2.7	2.3	2.0
M70-153	1.6	1.2	1.7	2.0
M71-25	1.6	1.5	1.5	2.0
M71-43	1.5	1.2	1.7	2.0
M72-107	1.4	1.4	1.8	1.0
M72-127	2.2	2.5	2.0	4.0
M72-136	2.1	2.7	2.7	2.0
M73-62	1.6	1.2	1.5	3.0
M73-71	1.5	1.5	1.5	1.0
M74-12	1.5	1.8	2.2	1.0
M74-23	1.6	1.8	2.0	1.0
M74-155	1.9	2.0	2.0	2.0
ND801	1.1	2.0	1.0	1.0
ND803	2.8	2.8	1.7	5.0

Minnesota		N.D.	S.D.
Morris	Rosemount	Fargo	Wilmot
		MATURITY (date)	
9-11	9-17	9-17	9-17
+ 7	+10	+ 9	+ 5
-11	- 9	-15	-12
+11	+12	+11	+ 6
+ 1	+ 2	+ 1	+ 2
+ 4	+ 4	+ 4	+ 4
- 1	- 2	+ 3	0
- 1	- 2	0	- 1
+ 3	+ 2	+ 1	+ 3
+ 3	+ 7	+ 6	+ 2
+ 4	+ 6	+ 2	0
+ 2	+ 1	+ 1	+ 1
- 1	- 3	- 2	- 5
+ 2	+ 3	+ 3	+ 1
+ 1	+ 4	- 5	- 1
+ 5	+ 7	+ 3	+ 5
+ 3	+ 7	+ 8	+ 5
+ 4	0	+ 3	- 4
5-7	5-15	5-7	6-4
127	125	133	105
		LODGING (score)	
2.0	2.7	1.0	2.0
2.3	2.0	1.0	2.3
1.0	2.0	1.0	1.3
3.3	2.2	2.5	3.0
2.0	2.0	1.0	2.3
1.7	1.3	1.0	2.0
1.3	2.0	1.0	1.7
1.0	2.0	1.0	1.7
1.3	1.7	1.0	1.7
2.0	2.0	1.0	2.0
2.3	2.0	1.0	1.7
1.3	2.0	1.0	1.3
1.7	2.0	1.0	1.7
1.0	2.0	1.0	1.7
1.7	2.0	1.0	2.0
2.3	1.7	1.0	2.0
1.0	1.0	1.0	1.0
3.7	2.7	1.5	2.3

Strain	Mean 7 Tests	Ont. Ottawa	Mich. Ithaca	Wis. Spooner
		PLANT HEIGHT (in)		
Evans (O)	36	40	30	34
Hodgson 78 (I)	38	41	35	35
McCall (OO)	32	34	26	33
A80-143008	35	37	33	34
M70-128E	36	41	33	35
M70-153	33	37	25	30
M71-25	34	37	27	36
M71-43	34	39	31	35
M72-107	35	39	29	33
M72-127	36	39	31	32
M72-136	35	37	30	34
M73-62	31	32	22	34
M73-71	33	37	25	32
M74-12	33	37	26	32
M74-23	33	37	26	34
M74-155	36	41	28	30
ND801	21	32	11	24
ND803	35	39	28	33

		SEED QUALITY (score)		
Evans (O)	1.5	2.0		1.0
Hodgson 78 (I)	1.5	1.8		1.0
McCall (OO)	1.8	2.0		3.0
A80-143008	2.1	2.5		3.0
M70-128E	1.7	2.0		2.0
M70-153	1.8	1.5		2.0
M71-25	1.8	1.8		2.0
M71-43	1.7	1.2		2.0
M72-107	1.8	1.8		1.0
M72-127	2.0	2.0		2.0
M72-136	1.8	1.8		1.0
M73-62	1.8	1.5		2.0
M73-71	1.7	1.5		1.0
M74-12	2.1	2.0		1.0
M74-23	1.5	1.8		1.0
M74-155	2.0	2.0		2.0
ND801	2.0	2.0		2.0
ND803	1.9	2.0		2.0

Minnesota		N.D.	S.D.
Morris	Rosemount	Fargo	Wilmot
		PLANT HEIGHT (in)	
36	42	38	33
38	42	41	33
31	36	31	34
39	38	41	31
33	41	36	34
32	38	41	31
31	36	36	32
31	35	36	32
34	39	38	32
37	40	40	32
36	39	37	35
29	35	33	29
36	35	36	32
32	38	33	31
31	38	32	30
36	42	43	33
22	16	22	23
32	38	42	33
		SEED QUALITY (score)	
1.3	1.7	1.0	2.0
1.7	1.3	1.1	2.0
1.3	1.7	1.0	2.0
2.0	2.0	1.0	2.0
1.3	1.7	1.1	2.0
1.7	1.3	1.1	3.0
2.0	2.0	1.0	2.0
2.0	2.0	1.0	2.0
2.3	2.3	1.2	2.0
2.7	2.0	1.1	2.0
2.3	2.3	1.1	2.0
1.7	2.3	1.0	2.0
2.7	2.0	1.1	2.0
2.7	2.7	1.1	3.0
2.0	2.0	1.1	1.0
2.7	2.0	1.0	2.0
2.3	1.7	1.2	3.0
2.7	1.7	1.2	2.0

Strain	Mean 7 Tests	Ont. Ottawa	Mich. Ithaca	Wis. Spooner
		SEED SIZE (g/100)		
Evans (O)	15.8	17.0	16.8	15.3
Hodgson 78 (I)	16.3	17.8	16.8	16.7
McCall (OO)	14.9	15.6	15.8	16.2
A80-143008	15.2	15.9	14.7	16.2
M70-128E	15.8	17.2	18.6	16.6
M70-153	15.2	15.9	13.9	16.5
M71-25	16.6	18.6	15.8	16.9
M71-43	17.0	17.5	17.6	17.7
M72-107	17.2	17.8	18.2	17.4
M72-127	17.3	18.2	16.9	19.1
M72-136	16.3	17.8	16.3	18.5
M73-62	15.4	15.4	15.1	16.5
M73-71	15.6	17.0	16.2	16.6
M74-12	16.7	17.5	15.6	16.5
M74-23	15.8	16.9	15.1	17.0
M74-155	17.0	18.5	16.5	17.3
ND801	17.6	16.6	19.1	17.7
ND803	15.6	16.9	15.8	16.5

Strain	Minnesota Morris	Minnesota Rosemount	N.D. Fargo	S.D. Wilmot
		SEED SIZE (g/100)		
Evans (O)	15.7	16.1	15.2	14.5
Hodgson 78 (I)	16.4	17.7	13.4	15.2
McCall (OO)	15.0	15.9	12.3	13.7
A80-143008	15.2	16.5	13.8	14.3
M70-128E	15.2	16.0	14.1	13.2
M70-153	16.1	15.1	14.2	14.4
M71-25	17.3	17.6	14.1	15.6
M71-43	17.7	17.6	15.0	15.8
M72-107	17.8	17.8	14.8	16.7
M72-127	18.3	18.2	15.5	14.9
M72-136	16.2	17.9	13.2	14.2
M73-62	15.8	16.6	14.3	14.1
M73-71	16.2	15.2	13.6	14.5
M73-12	18.0	17.2	15.4	16.7
M74-23	16.2	16.6	14.1	14.6
M74-155	17.3	16.7	15.0	17.5
ND801	16.8	17.5	16.4	19.1
ND803	15.8	16.2	13.4	14.8

UNIFORM TEST O, 1981

Strain	Mean 4 Tests	Wis. Spooner	Minn. Rosemount	Ont. Ottawa	S.D. Wilmot
		PROTEIN (%)			
Evans (O)	41.6	39.8	42.9	42.0	41.8
Hodgson 78 (I)	41.6	40.2	44.0	41.5	40.8
McCall (OO)	41.0	41.5	40.5	41.0	40.9
A80-143008	43.2	40.1	46.1	43.8	43.0
M70-128E	41.5	41.2	43.1	40.4	41.3
M70-153	41.0	41.8	41.7	40.9	39.8
M71-25	40.6	41.0	42.1	39.8	39.7
M71-43	42.7	43.8	45.2	42.7	39.2
M72-107	42.2	39.8	43.9	41.9	43.3
M72-127	42.8	41.6	45.3	42.7	41.4
M72-136	41.7	41.3	43.1	42.6	39.9
M73-62	41.3	40.8	41.9	42.2	40.4
M73-71	41.4	41.0	45.0	42.0	37.6
M74-12	42.0	41.3	44.1	42.3	40.3
M74-23	42.4	42.3	44.2	42.5	40.7
M74-155	41.2	40.9	44.1	40.6	39.4
ND801	43.7	44.2	43.6	42.2	44.9
ND803	41.4	40.5	42.4	42.6	40.2
		OIL (%)			
Evans (O)	19.2	18.9	18.6	19.6	19.9
Hodgson 78 (I)	18.9	18.1	18.6	19.2	19.7
McCall (OO)	18.7	17.6	19.0	18.7	19.6
A80-143008	17.9	17.2	17.9	18.2	18.3
M70-128E	19.1	17.8	19.0	19.8	19.9
M70-153	19.2	17.7	18.9	19.6	20.8
M71-25	19.8	19.2	19.3	20.2	20.7
M71-43	18.7	17.3	18.4	19.4	19.7
M72-107	19.0	18.1	18.8	19.0	20.0
M72-127	18.3	17.2	18.1	18.5	19.3
M72-136	18.6	17.5	18.5	18.4	19.8
M73-62	19.0	17.5	19.0	19.0	20.7
M73-71	19.8	19.3	18.6	20.1	21.3
M74-12	18.5	17.8	17.9	19.1	19.2
M74-23	19.2	18.5	18.2	19.7	20.3
M74-155	18.8	17.7	18.6	19.3	19.5
ND801	18.6	17.6	18.7	18.8	19.3
ND803	18.2	17.2	17.7	18.2	19.8

UNIFORM TEST I, 1981

Strain	Parentage	Previous Testing	Generation Composited
1. Corsoy 79 (II)	Corsoy[6] x Lee 68	2	F_3
2. Evans (O)	Merit x Harosoy	4	F_5
3. Hodgson 78 (I)	Hodgson[7] x Merit	7	F_5
4. Lakota	AP6M(S1)C1	2	F_4
5. A78-121014	Pride B-216 x Hodgson	1	F_4
6. A78-123018	Pride B-216 x Hodgson	1	F_4
7. A79-134008	AP6(1YT)(F_4)C2	PI	F_4
8. A79-135010	Pride B-216 x Cumberland	PI	F_4
9. A79-136012	Pride B-216 x LL4102	PI	F_4
10. A75D29	Hark x Harosoy Dt_2 (L61-344)	PII	F_6
11. M72-79	M62-263 x Wells	PI	F_5
12. M73-80	M64-157 x M63-217Y	PI	F_5

Descriptive and Other Data

Strain	Descriptive Code	Chlorosis Score		Hypocotyl Score	Shattering
		Ames	Lamberton	Ames	Manhattan 2 Weeks
Corsoy 79 (II)	PGBr DYY I	4.0	3.5	1	1
Evans (O)	WGBr DYY I	3.2	3.2	1	1
Hodgson 78 (I)	PGBr DYBf I	3.2	2.5	5	1
Lakota	PTT DYBl I	3.0	1.2	2	1
A78-121014	PGBr DYBf I	4.0	4.6	2	1
A78-123018	PGBr DYBf I	3.7	4.6	1	1
A79-134008	WGBr DYBf I	2.8	1.0	1	1
A79-135010	WTT DYBl I	4.3	5.0	1	2
A79-136012	WTBr DYBr I	4.0	3.0	5	1
A75D29	PGBr DYY SD	4.0	4.0	2	1
M72-79	WGBr SYBf I	3.2	3.2	1	1
M73-80	PGBr DYG I	3.5	3.5	1	1

UNIFORM TEST I, 1981

Disease Data

Strain	BSR				PR_1	
	Ames		Lafayette	Lamberton		
	Plant	Stem	Stem	Stem	Ames	Lafayette
	n %	n %	n %	n %	a Reaction	a
Corsoy 79 (II)	90	70	80	60	R	R
Evans (O)	100	74	100	60	R	R
Hodgson 78 (I)	80	74	80	70	R	R
Lakota	100	75	60	95	R	R
A78-121014	100	73	80	60	-	S
A78-123018	100	90	100	70	S	S
A79-134008	100	78	100	100	S	S
A79-135010	100	79	100	55	S	S
A79-136012	100	83	80	70	H	S
A75D29	100	60	40	65	S	S
M72-79	100	79	60	70	R	R
M73-80	100	72	100	60	H	H

Strain	FE_2	BTS	PS	PSB	SMV	Germ*
	Lafayette	Ames	Lafayette			
	a score	a score	a %	n %	a score	%
Corsoy 79 (II)	5	2	51	33	5E	65
Evans (O)	5	4	81	58	1	65
Hodgson 78 (I)	5	4	76	33	2M	62
Lakota	5	3	52	17	3E	80
A78-121014	5	3	57	33	1	61
A78-123018	5	3	57	8	1	87
A79-134008	5	4	76	30	3M	66
A79-135010	4	4	40	13	5E	84
A79-136012	3	4	68	29	5E	69
A75D29	4	2	78	16	5E	83
M72-79	5	3	79	5	4M	93
M73-80	5	3	11	15	1	82

*Petri dish germination on potato dextrose agar

UNIFORM TEST I, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	13	13	12	13	13	10	12	4	4
	bu/a	no.	date	score	in.	score	g/100	%	%
Corsoy 79 (II)	49.0	4	+ 9	2.8	40	1.8	15.8	42.5	18.1
Evans (O)	37.2	12	- 6	1.9	31	2.5	15.8	41.0	19.3
Hodgson 78 (I)	43.7	10	9-15*	2.2	34	2.2	16.8	42.4	18.8
Lakota	45.3	9	+ 2	3.3	40	2.2	16.1	44.8	17.2
A78-121014	48.3	6	+ 2	2.2	32	2.4	17.4	43.8	18.2
A78-123018	50.3	3	+ 3	2.2	32	2.2	15.8	43.1	18.4
A79-134008	48.6	5	+ 3	2.0	38	2.9	16.2	43.6	18.3
A79-135010	51.7	1	+ 2	2.3	36	2.3	17.2	43.3	18.2
A79-136012	50.4	2	+ 4	2.4	35	2.3	17.7	44.6	18.1
A75D29	46.0	7	+ 6	2.0	33	2.1	17.2	42.8	17.6
M72-79	46.0	7	+ 2	1.5	31	2.7	17.1	43.5	18.3
M73-80	40.8	11	- 2	1.7	30	2.3	18.4	43.0	18.7

*120 days after planting

1980-1981 2-year mean

No. of Tests	26	26	23	25	26	20	22	9	9
Corsoy 79 (II)	46.1	4	+8.5	2.8	40	2.0	15.5	42.6	19.0
Evans (O)	37.5	6	-7.0	1.9	31	2.4	15.7	41.1	20.5
Hodgson 78 (I)	42.8	5	9-16.0*	2.2	34	2.1	16.6	42.0	19.9
Lakota	46.5	3	+2.0	3.1	41	2.2	16.5	44.5	18.6
A78-121014	48.5	2	+2.0	2.2	33	2.2	17.9	43.6	19.3
A78-123018	49.4	1	+3.5	2.2	32	2.1	15.7	42.5	19.3

*122 days after planting

Three Iowa strains, A78-121014 and A78-123018 (2-year mean) and A79-135010 have consistently yielded more than the named varieties in this test. All three entries are equal to or superior to the named varieties in lodging resistance, but all three are susceptible to PR_1.

UNIFORM TEST I, 1981

Strain	Mean 13 Tests	Ont. Ridge-town	Mich. Britton	Mich. Ithaca	Ind. Lafay-ette	Ill. DeKalb	Wis. Arlington
		YIELD (bu/a)					
Corsoy 79 (II)	49.0	60.4	48.5	51.7	47.0	65.4	41.1
Evans (O)	37.2	45.5	37.2	44.5	17.4	42.9	40.0
Hodgson 78 (I)	43.7	52.5	40.6	50.7	35.6	58.3	34.6
Lakota	45.3	53.5	48.8	50.9	43.2	57.0	26.6
A78-121014	48.3	56.0	49.4	50.4	48.2	62.2	33.6
A78-123018	50.3	59.6	52.2	47.8	52.8	66.5	41.2
A79-134008	48.6	55.2	49.2	53.4	50.8	61.0	33.8
A79-135010	51.7	61.6	46.7	52.8	51.6	62.4	42.8
A79-136012	50.4	58.2	51.8	53.5	47.6	65.7	37.6
A75D29	46.0	58.5	44.7	46.8	38.4	62.4	37.9
M72-79	46.0	54.5	43.1	46.5	39.6	63.2	34.2
M73-80	40.8	51.6	36.4	45.7	28.0	51.6	28.3
C.V. (%)		6.7	10.3	7.6	11.9	4.5	10.7
L.S.D. (5%)		5.3	8.0	6.4	8.4	4.6	5.7
Row sp. (in.)		24	30	30	24	30	30
Rows/plot		4	4	4	4	4	4
Reps.		4	3	3	3	3	3

		YIELD RANK					
	Mean 13 Tests						
Corsoy 79 (II)	4	2	6	4	6	3	3
Evans (O)	12	12	11	12	12	12	4
Hodgson 78 (I)	10	10	10	6	10	9	7
Lakota	9	9	5	5	7	10	12
A78-121014	6	6	3	7	4	8	10
A78-123018	3	3	1	8	1	1	2
A79-134008	5	7	4	2	3	7	9
A79-135010	1	1	7	3	2	5	1
A79-136012	2	5	2	1	5	2	6
A75D29	7	4	8	9	9	5	5
M72-79	7	8	9	10	8	4	8
M73-80	11	11	12	11	11	11	11

UNIFORM TEST I, 1981

Minnesota		Iowa		S.D.		Neb.
Lamberton	Waseca	Corwith	Knierim	Brookings	Wilmot	Mead
			YIELD (bu/a)			
44.7	58.0	45.3	43.5	44.8	32.7	54.2
33.8	43.6	40.0	35.1	40.5	27.2	36.3
42.4	55.5	40.9	41.4	37.6	30.6	47.2
38.3	47.9	44.8	50.7	43.5	30.5	52.8
44.9	56.7	45.4	48.9	44.2	30.3	57.3
47.2	57.5	48.1	48.8	42.1	29.5	60.4
45.5	52.5	46.5	47.9	46.5	32.9	57.1
47.0	64.6	52.3	52.8	47.5	30.3	59.2
49.3	59.0	51.8	52.4	41.9	30.2	56.3
43.3	54.8	44.8	48.3	37.2	28.9	51.5
44.0	47.7	48.0	46.4	47.6	30.6	52.8
42.9	48.4	44.8	40.0	39.9	28.7	43.6
8.0	7.6	6.4	6.8	7.1	13.1	7.8
5.9	7.0	4.2	4.5	5.2	NS	6.9
30	30	27	27	30	40	30
4	4	4	4	4	4	4
3	3	4	4	3	3	3
			YIELD RANK			
6	3	7	9	4	2	6
12	12	12	12	9	12	12
10	6	11	10	11	3	10
11	10	8	3	6	5	7
5	5	6	4	5	6	3
2	4	3	5	7	9	1
4	8	5	7	3	1	4
3	1	1	1	2	7	2
1	2	2	2	8	8	5
8	7	8	6	12	10	9
7	11	4	8	1	4	8
9	9	8	11	10	11	11

UNIFORM TEST I, 1981

Strain	Mean 12 Tests	Ont. Ridge-town	Mich. Britton	Mich. Ithaca	Ind. Lafay-ette	Ill. DeKalb	Wis. Arling-ton
		MATURITY (date)					
Corsoy 79 (II)	+ 9	+ 6	+ 4	+10	+10	+ 7	+18
Evans (O)	- 6	-11	-12	- 2	- 8	- 7	- 5
Hodgson 78 (I)	9-15	9-21	9-14	9-25	9-4	9-16	9-10
Lakota	+ 2	+ 2	- 2	+ 4	+ 5	0	+ 3
A78-121014	+ 2	- 2	- 2	0	+ 5	+ 1	+ 3
A78-123018	+ 3	0	- 1	+ 2	+ 7	+ 2	+ 5
A79-134008	+ 3	0	- 4	+ 2	+ 3	+ 3	+ 9
A79-135010	+ 2	+ 2	- 2	+ 4	+ 6	+ 3	+ 6
A79-136012	+ 4	+ 1	- 2	+ 3	+ 5	+ 3	+ 5
A75D29	+ 6	+ 2	0	+ 6	+ 6	+ 2	+12
M72-79	+ 2	- 6	- 4	+ 3	+ 2	+ 1	+ 3
M73-80	- 2	- 7	- 6	0	- 2	- 1	+ 1
Date planted	5-18	5-20	5-8	5-27	5-23	5-18	5-7
Days to mature	120	125	129	121	119	121	126

Strain	Mean 13 Tests	LODGING (score)					
Corsoy 79 (II)	2.8	3.5	2.3	3.7	2.7	2.5	3.5
Evans (O)	1.9	4.2	1.0	2.2	1.0	1.5	2.0
Hodgson 78 (I)	2.2	3.2	1.2	2.2	1.7	2.3	2.5
Lakota	3.3	4.5	2.0	3.0	3.5	3.5	3.5
A78-121014	2.2	2.0	1.0	2.3	1.8	2.2	2.0
A78-123018	2.2	2.8	1.2	2.5	1.8	2.2	2.5
A79-134008	2.0	2.8	1.0	2.0	1.5	1.8	1.5
A79-135010	2.3	3.5	1.0	2.3	1.8	2.3	3.0
A79-136012	2.4	3.8	1.2	2.5	2.0	2.3	2.5
A75D29	2.0	2.0	1.0	2.5	1.0	2.2	2.5
M72-79	1.5	1.5	1.0	1.7	1.0	1.5	2.0
M73-80	1.7	2.5	1.0	2.0	1.2	1.7	1.5

UNIFORM TEST I, 1981

Minnesota		Iowa		S.D.		Neb.
Lamberton	Waseca	Corwith	Knierim	Brookings	Wilmot	Mead
		MATURITY (date)				
+16	+ 8	+11		+ 9	+ 5	+ 6
- 1	-13	- 4		- 5	- 4	- 5
9-5	9-23	9-10		9-18	9-21	9-9
+ 1	+ 1	+ 6		+ 5	0	+ 4
+ 6	+ 2	+ 5		+ 3	+ 1	+ 3
+ 4	+ 4	+ 6		+ 5	0	+ 4
+ 3	+ 2	+ 3		+ 5	+ 1	+ 3
+ 7	+ 6	+ 8		+ 7	+ 3	+ 5
+ 9	+ 6	+ 8		+ 6	- 1	+ 5
+ 9	+ 8	+ 9		+ 7	+ 3	+ 4
+ 7	+ 4	+ 3		+ 5	- 1	+ 4
- 1	- 2	- 2		- 1	- 1	- 1
5-5	5-13	5-16	5-15	5-26	6-4	5-25
123	133	117	---	115	109	107

		LODGING (score)				
2.7	2.3	3.2	4.3	1.7	1.7	2.6
1.0	2.0	2.4	3.8	1.3	1.3	1.2
2.0	2.0	2.5	3.8	1.3	2.3	1.7
3.0	4.0	3.6	4.2	3.0	2.7	2.8
2.7	2.3	3.1	3.3	1.7	3.0	1.8
2.3	2.0	2.5	3.5	2.0	1.7	1.8
2.3	2.3	2.6	3.2	1.7	2.0	1.8
2.7	2.0	2.7	3.2	1.7	1.7	2.2
2.3	2.0	2.7	3.5	2.0	1.7	2.7
2.0	2.0	2.3	3.6	1.7	1.7	1.3
1.0	1.8	2.2	2.9	1.0	1.0	1.3
1.0	1.8	2.0	3.3	1.0	1.7	1.0

UNIFORM TEST I, 1981

Strain	Mean 13 Tests	Ont. Ridge-town	Michigan Britton	Michigan Ithaca	Ind. Lafay-ette	Ill. DeKalb	Wis. Arling-ton
		PLANT HEIGHT (in.)					
Corsoy 79 (II)	40	40	39	44	37	35	40
Evans (O)	31	36	24	34	21	26	30
Hodgson 78 (I)	34	38	30	36	27	30	32
Lakota	40	44	39	43	38	38	37
A78-121014	32	30	28	33	28	29	30
A78-123018	32	30	28	33	30	31	27
A79-134008	38	38	33	40	35	37	33
A79-135010	36	33	30	35	35	33	36
A79-136012	35	32	31	34	31	33	35
A75D29	33	33	27	33	21	32	31
M72-79	31	30	26	30	27	29	29
M73-80	30	31	21	33	22	27	29

Strain	Mean 10 Tests					
		SEED QUALITY (score)				
Corsoy 79 (II)	1.8	2.0		1.0	2.0	3.0
Evans (O)	2.5	4.0		2.0	2.0	5.0
Hodgson 78 (I)	2.2	3.0		2.0	1.4	4.0
Lakota	2.2	3.0		1.5	1.6	3.0
A78-121014	2.4	2.0		1.5	1.8	5.0
A78-123018	2.2	2.0		2.5	2.0	3.0
A79-134008	2.9	4.0		2.0	2.3	4.0
A79-135010	2.3	2.0		1.5	1.3	4.0
A79-136012	2.3	3.0		1.5	1.5	4.0
A75D29	2.1	2.0		1.5	1.5	4.0
M72-79	2.7	3.0		1.0	2.2	3.0
M73-80	2.3	3.0		1.5	1.8	4.0

UNIFORM TEST I, 1981

Minnesota		Iowa		S.D.		Neb.
Lamberton	Waseca	Corwith	Knierim	Brookings	Wilmot	Mead
		PLANT HEIGHT (in.)				
41	47	44	42	35	33	42
30	40	38	33	31	32	26
33	38	34	37	34	33	34
36	47	43	46	36	36	43
32	39	38	34	33	33	35
33	38	34	36	32	31	34
38	43	43	42	38	32	38
37	42	41	40	34	31	38
35	42	40	42	35	32	38
38	39	34	38	36	37	28
29	36	35	36	33	31	30
32	36	34	33	32	31	27
		SEED QUALITY (score)				
2.3	2.3	1.3		1.0	1.0	2.0
3.3	2.3	1.9		1.0	2.0	1.7
2.0	3.0	1.5		1.0	2.0	1.8
2.7	3.0	1.5		2.0	2.0	2.0
3.0	3.3	1.5		2.0	2.0	2.2
3.0	3.3	1.6		1.0	2.0	2.0
4.0	4.3	2.0		2.0	2.0	2.7
3.3	3.0	1.4		2.0	2.0	2.2
2.3	2.0	1.8		2.0	3.0	1.8
3.0	1.7	1.4		2.0	2.0	1.7
3.3	4.3	2.5		2.0	3.0	2.8
2.7	2.3	1.5		2.0	2.0	2.5

UNIFORM TEST I, 1981

Strain	Mean 12 Tests	Ont. Ridge-town	Michigan Britton	Michigan Ithaca	Ind. Lafay-ette	Ill. DeKalb	Wis. Arling-ton
		SEED SIZE (g/100)					
Corsoy 79 (II)	15.8	17.3	15.2	15.4	15.5	19.1	14.0
Evans (O)	15.8	16.9	17.3	18.4	13.7	17.4	13.9
Hodgson 78 (I)	16.8	19.5	17.4	14.4	15.7	20.1	14.6
Lakota	16.1	17.9	15.3	16.2	14.2	20.0	13.6
A78-121014	17.4	19.3	18.3	16.9	17.0	20.6	13.8
A78-123018	15.8	16.9	16.5	16.2	15.7	17.6	13.5
A79-134008	16.2	17.9	16.3	17.0	15.3	18.8	14.2
A79-135010	17.2	18.2	16.2	16.8	16.3	19.3	16.4
A79-136012	17.7	20.5	16.5	17.1	16.3	20.2	16.0
A75D29	17.2	17.9	16.6	15.4	16.4	19.0	16.9
M72-79	17.1	17.2	16.2	14.4	14.2	19.6	15.2
M73-80	18.4	19.5	19.4	15.8	16.5	21.2	16.4

Strain	Minnesota Lamber-ton	Minnesota Waseca	Iowa Corwith	Iowa Knierim	S.D. Brook-ings	S.D. Wilmot	Neb. Mead
			SEED SIZE (g/100)				
Corsoy 79 (II)	15.7	17.5	15.2		13.6	13.8	17.4
Evans (O)	14.1	17.4	15.1		14.1	14.7	16.6
Hodgson 78 (I)	16.0	19.0	16.1		14.9	15.1	18.3
Lakota	14.8	17.7	16.4		14.0	13.8	19.2
A78-121014	15.7	19.8	17.8		15.3	16.0	18.7
A78-123018	15.5	17.5	15.4		14.1	13.1	17.8
A79-134008	15.3	16.7	15.2		13.3	15.9	18.9
A79-135010	16.0	20.1	18.7		14.6	14.1	19.5
A78-136012	16.5	19.6	19.2		15.3	15.3	20.0
A75D29	16.9	19.9	18.0		15.1	14.2	19.7
M72-79	15.7	22.4	16.7		16.4	16.3	20.5
M73-80	18.0	20.3	17.6		17.5	16.9	21.1

UNIFORM TEST I, 1981

Strain	Mean 4 Tests	Wis. Arlington	Minn. Waseca	Iowa Corwith	S.D. Brookings
		PROTEIN (%)			
Corsoy 79 (II)	42.5	43.6	42.3	40.9	43.2
Evans (O)	41.0	38.7	42.8	40.0	42.7
Hodgson 78 (I)	42.4	42.9	41.9	41.7	43.2
Lakota	44.8	45.7	43.9	44.8	44.7
A78-121014	43.8	43.6	44.5	43.1	43.9
A78-123018	43.1	42.8	45.1	42.6	41.8
A79-134008	43.6	43.9	44.7	42.6	43.1
A79-135010	43.3	43.8	43.7	43.1	42.5
A79-136012	44.6	43.4	45.7	44.2	45.0
A75D29	42.8	42.5	44.8	41.3	42.7
M72-79	43.5	42.8	44.8	43.3	43.1
M73-80	43.0	43.2	43.7	41.7	43.3
		OIL (%)			
Corsoy 79 (II)	18.1	17.9	17.7	18.7	18.2
Evans (O)	19.3	19.2	19.3	20.1	18.7
HOdgson 78 (I)	18.8	17.9	18.6	19.3	19.3
Lakota	17.2	16.2	17.9	17.7	17.2
A78-121014	18.2	17.7	18.1	18.2	18.6
A78-123018	18.4	17.4	18.5	18.8	19.0
A79-134008	18.3	17.8	18.0	18.4	19.0
A79-135010	18.2	17.3	18.9	19.0	17.6
A79-136012	18.1	17.7	17.8	18.2	18.6
A75D29	17.6	16.1	17.3	19.5	17.6
M72-79	18.3	17.5	19.3	17.5	18.9
M73-80	18.7	18.0	18.8	19.0	19.0

PRELIMINARY TEST I, 1981

Strain	Parentage	Generation Composited
1. Corsoy 79 (II)	Corsoy[6] x Lee 68	F_3
2. Evans (O)	Merit x Harosoy	F_5
3. Hodgson 78 (I)	Hodgson[7] x Merit	F_5
4. Lakota	AP6M(S1)C1	F_4
5. A80-143015	A75-204018 x Weber	F_4
6. A80-143019	(Corsoy x Wayne) x Asgrow x P1564	F_4
7. A80-144004	(Corsoy x Wayne) x A75-204018	F_4
8. A80-144006	(Corsoy x Wayne) x L69U40-16-4	F_4
9. A80-144007	(Corsoy x Wayne) x A75-332035	F_4
10. A80-144018	Asgrow XP1564 x Century	F_4
11. A80-144024	Weber x L69U40-16-4	F_4
12. A80-144029	A75-204018 x A75-101022	F_4
13. A80-145015	(Corsoy x Wayne) x Peterson 118-11	F_4
14. A80-146003	A75-203036 x L21	F_4
15. A80-146004	(Corsoy x Wayne) x A75-306005	F_4
16. A80-146008	Asgrow XP1564 x Century	F_4
17. A80-146032	A75-204018 x Weber	F_4
18. A80-147003	(Corsoy x Wayne) x Pella	F_4
19. A80-147005	(Corsoy x Wayne) x A75-204018	F_4
20. HC78-614	Hodgson x Elf	F_5
21. HC78-836	L70T-543G x L74D-619	F_5
22. HC78-837	L70T-543G x L74D-619	F_5
23. M70-187	Merit x SS65-5702	F_5
24. M72-133	M63-194[2] x M61-224	F_5
25. M73-130	M68-49 x Hodgson	F_5
26. M74-18	M64-157 x Peterson 85	F_5
27. M74-38	M68-49 x Hodgson	F_5
28. M74-42	M68-49 x Hodgson	F_5
29. M74-55	M68-96 x Hodgson	F_5
30. M74-62	M68-256 x Hodgson	F_5
31. M74-68	M68-256 x Hodgson	F_5
32. M74-69	M68-256 x Hodgson	F_5

PRELIMINARY TEST I, 1981

Descriptive and Other Data

Strain	Descriptive Code	Chlorosis Score Ames	Shattering Manhattan 2 Weeks
Corsoy 79 (II)	PGBr DYY I	4.0	1
Evans (O)	WGBr DYY I	3.2	1
Hodgson 78 (I)	PGBr DYBf I	3.2	1
Lakota	PTT DYBl I	3.0	1
A80-143015	WTBr SYBl I	2.3	1
A80-143019	WGBr DYY I	4.0	1
A80-144004	WTBr DYBr I	4.7	2
A80-144006	PGBr DYBf I	3.8	1
A80-144007	WTBr DYBr I	3.8	1
A80-144018	PGBr DYY I	2.8	1
A80-144024	PGT DYG I	3.3	1
A80-144029	PTBr DYBr I	2.8	1
A80-145015	PT+GBr DYBr I	4.2	1
A80-146003	WGT DYY I	4.0	1
A80-146004	PTBr SYBr I	4.5	1
A80-146008	PGBr DYG I	3.2	1
A80-146032	WTBr DYBr I	2.8	1
A80-147003	WTT DYBr I	4.2	1
A80-147005	WGB DYBf I	4.0	2
HC78-614	PTT DYBr D	3.0	1
HC78-836	WTT SYBl D	3.5	2
HC78-837	WTT SYBl D	3.3	1
M70-187	WGBr DYBf SD	3.0	1
M72-133	WGBr DYBf I	2.8	1
M73-130	PGBr DYY I	2.8	1
M74-18	PGBr DYIb I	3.7	1
M74-38	WGBr DYBf I	3.2	1
M74-42	PGBr DYBf I	3.3	1
M74-55	WTT DYBr I	3.5	1
M74-62	WGBr DYY I	3.5	1
M74-68	PGBr DYY+Bf I	2.8	1
M74-69	WGBr DYY I	2.7	1

PRELIMINARY TEST I, 1981

Disease Data

Strain	BSR			PR-Race 1		FE_2	PS	PSB	SMV	Germ*
	Ames		Lafay-ette		Lafay-	Lafay-	Lafayette			
	Plant	Stem	Stem	Ames	ette	ette				
	n	n	n	a	a	a	a	n	a	
	%	%	%	Reaction		score	%	%	score	%
Corsoy 79 (II)	100	68	80	R	R	5	51	33	5E	65
Evans (O)	100	91	100	R	R	5	81	58	1	65
Hodgson 78 (I)	100	100	80	R	R	5	76	33	2M	62
Lakota	100	78	60	R	R	5	52	17	3E	80
A80-143015	100	87	80	S	S	2	15	6	5E	92
A80-143019	100	66	40	H	S	2	84	13	5E	86
A80-144004	100	73	100	H	S	5	27	21	5S	75
A80-144006	100	64	40	R	R	5	86	16	5E	80
A80-144007	100	45	60	H	S	5	52	15	5S	85
A80-144018	100	57	100	R	R	4	61	10	5E	89
A80-144024	100	75	60	S	S	4	48	16	3M	81
A80-144029	50	21	60	R	R	5	46	2	5E	98
A80-145015	100	68	60	S	S	5	60	8	4M	91
A80-146003	100	69	60	R	R	4	52	9	5E	87
A80-146004	100	54	100	S	S	5	52	22	5E	71
A80-146008	100	40	60	R	R	4	57	17	5E	83
A80-146032	100	91	80	S	S	5	27	13	5E	85
A80-147003	100	69	20	R	R	4	46	20	5E	79
A80-147005	100	84	80	S	S	5	52	17	5E	76
HC78-614	100	91	40	S	S	1	35	8	1	91
HC78-836	100	97	80	R	R	1	45	14	5E	86
HC78-837	100	90	60	R	R	2	53	15	5E	83
M70-187	100	90	60	R	R	3	62	13	1	78
M72-133	100	78	100	R	R	4	62	7	1	84
M73-130	100	96	60	R	H	5	31	8	1	84
M74-18	100	96	100	R	R	5	86	28	1	72
M74-38	90	42	40	R	R	5	78	55	2E	40
M74-42	100	86	80	R	R	5	90	20	1	72
M74-55	100	69	80	R	R	5	24	15	4E	83
M74-62	100	100	100	R	R	5	52	13	1	86
M74-68	100	66	100	S	S	5	76	25	1	70
M74-69	100	85	80	R	R	5	88	19	1	79

*Petri dish germination on potato dextrose agar

PRELIMINARY TEST I, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size
No. of Tests	9	9	8	9	9	6	8
	bu/a	no.	date	score	in.	score	g/100
Corsoy 79 (II)	50.8	5	+ 9	2.7	42	2.2	16.1
Evans (O)	37.6	32	+ 7	2.1	32	3.2	15.4
Hodgson 78 (I)	45.4	21	9-16*	2.2	34	2.3	16.5
Lakota	43.6	23	+ 3	3.1	40	2.3	16.2
A80-143015	48.6	9	+ 4	2.4	36	2.0	16.2
A80-143019	47.7	13	+ 5	2.3	36	2.5	17.0
A80-144004	51.3	3	+ 5	2.6	37	2.2	16.9
A80-144006	50.2	6	+ 8	2.4	39	2.1	18.9
A80-144007	48.5	10	+ 6	2.7	35	2.3	16.6
A80-144018	47.5	15	+ 6	2.1	37	2.0	18.8
A80-144024	49.7	7	+ 3	1.9	34	3.0	16.6
A80-144029	46.4	20	+ 4	2.7	36	2.2	17.2
A80-145015	49.5	8	+ 6	2.9	36	2.5	15.6
A80-146003	47.2	16	+ 8	2.0	39	2.3	14.3
A80-146004	47.9	12	+ 5	2.9	35	2.3	16.7
A80-146008	51.0	4	+ 9	2.4	39	2.4	18.6
A80-146032	48.1	11	+ 5	1.9	36	2.6	14.2
A80-147003	51.7	2	+ 8	2.6	37	2.3	17.6
A80-147005	52.5	1	+ 7	2.2	35	2.5	17.8
HC78-614	43.1	25	+ 6	1.6	22	2.1	15.3
HC78-836	42.2	26	+ 4	1.6	23	2.1	16.4
HC78-837	41.1	29	+ 4	1.4	22	2.3	17.1
M70-187	39.1	31	+ 2	2.7	34	2.1	14.7
M72-133	47.1	17	+ 6	2.6	35	2.3	18.2
M73-130	46.8	18	+ 4	2.1	34	1.9	18.8
M74-18	40.4	30	- 1	1.7	32	2.9	17.8
M74-38	41.4	28	0	1.9	32	2.5	19.8
M74-42	43.2	24	0	1.9	30	2.5	18.7
M74-55	47.7	13	+ 5	2.1	35	2.1	19.2
M74-62	46.8	18	+ 2	2.2	35	2.2	18.3
M74-68	44.3	22	0	1.7	31	2.2	16.0
M74-69	42.0	27	0	1.7	31	2.2	16.3

*124 days after planting

The highest yielding lines in this test, A80-147003 and A80-147005 should be moved to U.T. II for further testing. A80-144004 ranks high in yield but has only average lodging resistance. M70-187 is resistant to race 3 of the SCN and to PR_1.

PRELIMINARY TEST I, 1981

Strain	Mean 9 Tests	Ont. Ridge-	Mich. Britton	Mich. Ithaca	Wis. Arlington
		YIELD (bu/a)			
Corsoy 79 (II)	50.8	59.7	48.6	55.6	42.5
Evans (0)	37.6	46.8	29.8	45.9	29.8
Hodgson 78(I)	45.4	55.5	47.3	52.8	37.7
Lakota	43.6	53.2	33.3	52.6	35.0
A80-143015	48.6	51.0	50.8	51.5	44.3
A80-143019	47.7	57.7	37.5	46.9	44.3
A80-144004	51.3	68.0	46.9	56.8	40.9
A80=144006	50.2	63.0	52.9	53.2	43.5
A80-144007	48.5	54.7	46.2	50.4	36.6
A80=144018	47.5	59.4	39.7	46.9	41.8
A80-144024	49.7	58.3	46.5	54.2	47.3
A80-144029	46.4	54.1	41.7	43.4	39.1
A80-145015	49.5	56.9	42.9	55.8	48.3
A80-146003	47.2	54.0	45.5	47.2	42.6
A80-146004	47.9	60.9	44.3	54.6	42.1
A80-146008	51.0	61.4	50.5	54.9	41.3
A80-146032	48.1	58.6	45.3	46.5	43.1
A80-147003	51.7	57.6	48.3	51.0	46.9
A80-147005	52.5	66.3	51.3	59.4	46.1
HC78-614	43.1	52.0	43.6	46.6	35.1
HC78-836	42.2	55.4	43.9	40.6	34.2
HC78-837	41.1	62.1	34.7	42.5	33.5
M70-187	39.1	44.9	34.0	43.3	34.0
M72-133	47.1	61.9	43.3	49.9	45.6
M73-130	46.8	56.5	38.5	57.8	43.6
M74-18	40.4	51.4	29.4	46.7	35.4
M74-38	41.4	57.8	33.3	53.9	37.0
M74-42	43.2	56.7	29.4	52.0	38.6
M74-55	47.7	57.0	46.3	52.9	42.3
M74-62	46.8	57.9	50.8	54.3	36.1
M74-68	44.3	53.7	46.4	49.0	35.1
M74-69	42.0	47.8	31.8	52.8	36.8
C.V. (%)		7.7	10.0	8.7	10.0
L.S.D. (5%)		8.9	8.6	8.9	7.7
Row sp. (in.)		24	30	30	30
Rows/plot		4	4	4	4
Reps		2	2	2	2

PRELIMINARY TEST I, 1981

S.D.	Minn.		Iowa	
Brookings	Lamberton	Waseca	Corwith	Knierim
		YIELD (bu/a)		
41.8	55.3	55.0	48.9	50.1
33.1	34.6	34.6	43.0	40.8
38.6	47.4	47.8	40.6	41.0
43.8	45.9	33.4	48.5	46.3
45.1	47.8	50.0	47.6	49.5
44.7	48.8	50.3	49.3	49.9
43.6	53.0	50.8	48.0	53.8
47.1	50.8	42.9	49.9	48.6
43.6	48.4	47.3	54.0	54.9
45.4	49.5	49.1	50.0	45.6
50.9	50.3	48.9	45.6	45.5
45.1	47.4	52.4	47.5	47.2
40.6	52.8	47.6	50.6	49.6
41.1	50.4	49.8	47.2	46.7
44.0	46.3	39.0	48.8	51.4
42.4	55.4	56.4	48.5	47.8
43.9	42.3	57.5	50.8	44.7
47.7	62.0	52.6	50.5	49.0
45.7	51.6	49.4	50.0	52.8
38.6	37.7	48.2	42.0	44.2
36.5	25.4	53.4	41.1	49.2
33.9	27.3	45.8	42.6	47.2
36.6	39.8	35.1	41.7	42.4
39.0	47.0	46.5	47.2	43.4
42.5	44.5	48.3	46.8	43.1
34.3	38.8	42.6	43.4	41.2
33.8	38.8	37.5	41.6	39.2
37.7	41.4	45.8	46.4	40.6
36.1	50.8	50.2	46.9	47.1
41.2	50.2	37.3	49.1	44.2
43.9	42.5	40.0	44.3	44.0
33.9	40.2	46.0	44.7	44.1
4.5	9.8	10.2	6.3	4.1
5.5	9.1	9.7	6.0	3.8
30	30	30	27	27
4	2	2	4	4
2	2	2	2	2

PRELIMINARY TEST I, 1981

Strain	Mean 9 Tests	Ont. Ridge-town	Mich. Britton	Mich. Ithaca	Wis. Arlington
			YIELD RANK		
Corsoy 79 (II)	5	8	6	5	12
Evans (0)	32	31	30	28	32
Hodgson 78 (I)	21	20	8	14	20
Lakota	23	26	27	15	28
A80-143015	9	29	4	17	6
A80-143019	13	14	24	24	6
A80-144004	3	1	9	3	17
A80-144006	6	3	1	11	9
A80-144007	10	22	13	19	23
A80-144018	15	9	22	23	15
A80-144024	7	11	10	9	2
A80-144029	20	23	21	29	18
A80-145015	8	17	20	4	1
A80-146003	16	25	14	22	11
A80-146004	12	7	16	7	14
A80-146008	4	6	5	6	16
A80-146032	11	10	15	27	10
A80-147003	2	15	7	18	3
A80-147005	1	2	2	1	4
HC78-614	25	27	18	26	26
HC78-836	26	21	17	32	29
HC78-837	29	4	25	31	31
M70-187	31	32	26	30	30
M72-133	17	5	19	20	5
M73-130	18	19	23	2	8
M74-18	30	28	31	25	25
M74-38	28	13	28	10	21
M74-42	24	18	32	16	19
M74-55	13	16	12	12	13
M74-62	18	12	3	8	23
M74-68	22	24	11	21	26
M74-69	27	30	29	13	22

PRELIMINARY TEST I, 1981

S.D.	Minn.		Iowa	
Brookings	Lamberton	Waseca	Corwith	Knierim
		YIELD RANK		
17	3	3	10	5
32	30	31	26	30
22	16	17	32	29
12	20	32	12	17
7	15	10	15	8
8	13	8	8	6
13	4	7	14	2
3	7	24	7	11
14	14	19	1	1
5	12	13	5	18
1	10	14	22	19
6	16	6	16	13
20	5	18	3	7
19	9	11	17	6
9	19	27	11	4
16	2	2	12	12
11	23	1	2	20
2	1	5	4	10
4	6	12	5	3
23	29	16	28	21
26	32	4	31	9
30	31	22	27	13
25	26	30	29	27
21	18	20	17	25
15	21	15	20	26
28	27	25	25	28
31	27	28	30	32
24	24	22	21	31
27	7	9	19	15
18	11	29	9	21
10	22	26	24	24
29	25	21	23	23

PRELIMINARY TEST I, 1981

Strain	Mean 8 Tests	Ont. Ridge-town	Mich. Britton	Mich. Ithaca	Wis. Arlington
		MATURITY DATE			
Corsoy 79 (II)	+ 9	+ 6	+ 7	+ 7	+18
Evans (0)	+ 7	-10	- 7	-12	- 7
Hodgson 78 (I)	9-16.2	9-20	9-11	9-28	9-12
Lakota	+ 3	+ 2	+ 2	+ 1	+ 8
A80-143015	+ 4	+ 4	+ 1	- 2	+ 7
A80-143019	+ 5	+ 5	+ 2	+ 1	+10
A80-144004	+ 5	+ 4	+ 3	+ 2	+ 9
A80-144006	+ 8	+ 5	+ 6	+ 5	+10
A80-144007	+ 6	+ 4	+ 3	+ 2	+ 9
A80-144018	+ 6	+ 3	+ 2	+ 3	+11
A80-144024	+ 3	- 4	+ 2	- 1	+ 6
A80-144029	+ 4	- 2	+ 2	+ 1	+ 2
A80-145015	+ 6	+ 5	+ 4	+ 5	+10
A80-146003	+ 8	+ 6	+ 6	+ 1	+11
A80-146004	+ 5	+ 2	+ 2	+ 2	+ 7
A80-146008	+ 9	+ 6	+ 5	+ 6	+18
A80-146032	+ 5	+ 4	+ 5	- 1	+ 8
A80-147003	+ 8	+ 6	+ 5	+ 5	+13
A80-147005	+ 7	+ 6	+ 5	+ 4	+ 5
HC78-614	+ 6	+ 6	+ 8	+ 4	+ 5
HC78-836	+ 4	+ 4	+ 2	+ 4	+ 3
HC78-837	+ 4	+ 4	+ 2	+ 3	+ 3
M70-187	+ 2	- 3	+ 1	- 2	+ 1
M72-133	+ 6	+ 4	+ 3	+ 5	+10
M73-130	+ 4	+ 2	+ 2	+ 1	+ 7
M74-18	- 1	- 6	- 2	- 5	+ 2
M74-38	0	- 2	- 2	- 2	+ 4
M74-42	0	- 6	0	- 1	+ 2
M74-55	+ 5	+ 5	+ 5	+ 3	+ 9
M75-62	+ 2	+ 2	+ 1	- 1	+ 1
M74-68	0	- 4	+ 1	- 3	- 1
M74-69	0	- 4	0	- 2	+ 4
Date planted	5-15	5-20	5-8	5-27	5-7
Days to mature	124	123	126	124	128

PRELIMINARY TEST I, 1981

S.D.	Minn.		Iowa	
Brookings	Lamberton	Waseca	Corwith	Knierim
		MATURITY DATE		
+ 8	+ 8	+10	+10	
- 6	- 3	- 6	- 5	
9-20	9-6	9-22	9-11	
+ 4	+ 3	+ 2	+ 5	
+ 4	+ 4	+ 6	+ 6	
+ 4	+ 6	+ 6	+ 8	
+ 4	+ 5	+ 8	+ 6	
+ 7	+ 8	+ 9	+10	
+ 6	+ 7	+ 8	+10	
+ 6	+ 8	+ 7	+ 7	
+ 4	+ 6	+ 3	+ 5	
+ 3	+ 6	+ 8	+ 8	
+ 6	+ 5	+ 8	+ 9	
+ 8	+ 8	+10	+12	
+ 5	+ 5	+ 8	+10	
+ 8	+ 8	+10	+10	
+ 4	+ 3	+ 8	+ 8	
+ 6	+ 9	+10	+10	
+ 6	+ 3	+10	+ 9	
+ 5	+ 4	+ 8	+ 8	
+ 5	+ 2	+ 8	+ 6	
+ 4	0	+ 8	+ 7	
+ 2	+ 4	+ 8	+ 4	
+ 5	+ 6	+ 8	+ 4	
+ 2	+ 6	+ 4	+ 4	
- 1	- 2	+ 4	- 1	
- 1	+ 4	+ 2	- 2	
+ 2	0	+ 2	0	
+ 2	+ 4	+ 8	+ 6	
+ 2	+ 3	+ 5	+ 3	
+ 2	0	+ 2	- 1	
0	- 2	+ 1	0	
5-27	5-5	5-13	5-16	5-15
116	124	132	118	---

PRELIMINARY TEST I, 1981

Strain	Mean 9 Tests	Ont. Ridge-town	Mich. Britton	Mich. Ithaca	Wis. Arlington
		LODGING (score)			
Corsoy 79 (II)	2.7	3.0	2.0	3.3	3.0
Evans (0)	2.1	3.5	1.0	2.3	2.0
Hodgson 78 (I)	2.2	3.0	1.0	2.5	2.0
Lakota	3.1	3.5	1.8	3.8	2.5
A80-143015	2.4	4.0	1.5	3.0	2.0
A80-143019	2.3	3.5	1.3	2.3	2.0
A80-144004	2.6	3.0	1.3	2.5	2.5
A80-144006	2.4	3.0	1.0	2.8	2.5
A80-144007	2.7	4.0	2.0	3.0	3.0
A80-144018	2.1	2.5	1.0	2.5	1.5
A80-144024	1.9	1.5	1.0	2.5	2.0
A80-144029	2.7	4.5	1.3	3.0	3.0
A80-145015	2.9	4.0	1.3	3.5	3.0
A80-146003	2.0	3.0	1.0	2.3	2.0
A80-146004	2.9	3.0	1.3	3.3	3.0
A80-146008	2.4	2.5	1.5	2.5	2.5
A80-146032	1.9	2.5	1.0	2.0	1.5
A80-147003	2.6	4.0	2.0	3.3	2.5
A80-147005	2.2	2.5	1.3	2.5	2.5
HC78-614	1.6	2.0	1.0	1.3	2.0
HC78-836	1.6	2.0	1.5	1.3	2.5
HC78-837	1.4	1.5	1.0	1.0	2.0
M70-187	2.7	4.0	1.0	2.5	3.0
M72-133	2.6	4.0	1.0	3.0	2.5
M73-130	2.1	3.0	1.0	2.8	2.0
M74-18	1.7	2.5	1.0	1.8	1.5
M74-38	1.9	2.5	1.0	2.8	1.5
M74-42	1.9	2.5	1.0	2.3	1.5
M74-55	2.1	2.0	1.0	2.5	1.5
M74-62	2.2	3.5	1.0	3.0	2.0
M74-68	1.7	2.0	1.0	2.3	1.5
M74-69	1.7	2.0	1.0	1.5	1.5

PRELIMINARY TEST I, 1981

S.D.	Minn.		Iowa	
Brookings	Lamberton	Waseca	Corwith	Knierim
		LODGING (score)		
2.0	1.5	2.5	2.7	4.2
1.0	1.5	2.0	2.2	3.8
2.0	1.5	2.0	2.4	3.6
2.5	2.5	4.0	3.5	4.1
1.5	1.5	2.0	2.2	3.5
2.0	2.0	2.0	2.6	3.1
2.0	2.5	3.0	3.4	3.2
2.0	2.0	2.5	2.8	3.4
1.5	3.0	2.0	2.7	3.4
2.0	1.5	2.0	2.3	3.2
1.0	1.0	2.5	2.0	3.2
2.0	2.0	2.5	2.7	3.6
3.0	2.5	3.0	2.6	3.5
1.0	1.5	2.0	2.3	3.0
2.5	3.0	3.0	3.1	3.6
2.0	2.5	2.0	2.5	3.3
1.0	1.5	2.0	2.4	3.2
2.0	2.0	2.0	2.7	3.3
2.0	1.0	2.0	2.4	3.4
1.0	1.5	1.0	1.8	2.5
1.0	1.0	1.0	1.8	2.3
1.0	1.0	1.0	1.7	2.1
3.0	2.0	2.0	3.0	4.0
2.5	2.0	2.0	2.6	3.8
1.5	1.5	2.0	1.9	3.5
1.0	1.0	1.5	1.8	3.2
1.5	1.0	2.0	1.9	3.1
2.0	1.0	2.0	1.9	3.3
2.0	2.0	2.0	2.4	3.2
1.5	1.5	2.0	2.3	3.2
1.0	1.0	2.0	1.8	2.9
1.0	1.0	2.0	2.2	2.9

PRELIMINARY TEST I, 1981

Strain	Mean 9 Tests	Ont. Ridge-town	Mich. Britton	Mich. Ithaca	Wis. Arlington
		PLANT HEIGHT (inches)			
Corsoy 78 (II)	42	41	38	44	38
Evans (0)	32	34	20	32	29
Hodgson 78 (I)	34	34	28	40	34
Lakota	40	39	35	46	38
A80-143015	36	35	30	37	35
A80-143019	36	34	29	38	34
A80-144004	37	37	30	40	34
A80-144006	39	36	33	41	38
A80-144007	35	29	29	36	32
A80-144018	37	37	31	39	36
A80-144024	34	31	27	33	33
A80-144029	36	36	31	36	32
A80-145015	36	34	31	37	35
A80-146003	39	36	30	40	41
A80-146004	35	32	27	37	34
A80-146008	39	38	37	42	39
A80-146032	36	36	29	37	35
A80-147003	37	33	32	40	34
A80-147005	35	33	31	38	32
HC78-614	22	25	17	23	21
HC78-836	23	26	19	21	20
HC78-837	22	25	13	19	20
M70-187	34	32	26	37	29
M72-133	35	36	30	39	34
M73-130	34	32	26	37	33
M74-18	32	32	20	32	28
M74-38	32	31	21	36	35
M74-42	30	30	20	33	27
M74-55	35	34	29	39	33
M74-62	35	33	27	36	31
M74-68	31	29	26	30	27
M74-69	31	33	22	31	29

PRELIMINARY TEST I, 1981

S.D.	Minn.		Iowa	
Brookings	Lamberton	Waseca	Corwith	Knierim
		PLANT HEIGHT (inches)		
35	42	45	48	46
29	30	39	38	34
33	34	38	37	32
35	38	46	44	38
34	38	40	40	38
35	35	42	40	40
32	36	40	43	40
37	38	43	46	42
33	35	40	42	40
35	36	42	40	38
35	31	38	39	38
35	34	40	42	38
35	34	39	40	38
37	36	42	44	44
34	32	40	38	40
35	38	42	39	42
35	34	40	40	38
35	36	41	42	44
35	35	40	36	38
24	16	26	23	25
23	15	30	22	28
27	18	26	20	26
32	32	40	40	38
33	32	40	36	36
34	32	39	36	37
32	31	39	36	34
32	29	38	35	32
32	28	38	32	31
34	32	40	37	39
35	34	40	40	35
32	30	36	36	34
32	28	39	35	32

PRELIMINARY TEST I, 1981

Strain	Mean 6 Tests	Ont. Ridge-town	Mich. Britton	Mich. Ithaca	Wis. Arlington
		SEED QUALITY (score)			
Corsoy 79 (II)	2.2	2.0			2.0
Evans (0)	3.2	4.0			4.0
Hodgson 78 (I)	2.3	2.0			3.0
Lakota	2.3	2.0			2.0
A80-143015	2.0	2.0			2.0
A80-143019	2.5	2.0			4.0
A80-144004	2.2	2.0			2.0
A80-144006	2.1	2.0			3.0
A80-144007	2.3	2.0			3.0
A80-144018	2.0	2.0			2.0
A80-144024	3.0	3.0			3.0
A80-144029	2.2	2.0			2.0
A80-145015	2.5	3.0			2.0
A80-146003	2.3	2.0			3.0
A80-146004	2.3	2.0			2.0
A80-146008	2.4	2.0			3.0
A80-146032	2.6	2.0			2.0
A80-147003	2.3	2.0			3.0
A80-147005	2.5	2.0			3.0
HC78-614	2.1	2.0			2.0
HC78-836	2.1	2.0			2.0
HC78-837	2.3	2.0			2.0
M70-187	2.1	2.0			2.0
M72-133	2.3	3.0			2.0
M73-130	1.9	2.0			2.0
M74-18	2.9	2.0			4.0
M74-38	2.5	3.0			2.0
M74-42	2.5	2.0			3.0
M74-55	2.1	2.0			2.0
M74-62	2.2	2.0			3.0
M74-68	2.2	2.0			3.0
M74-69	2.2	2.0			3.0

PRELIMINARY TEST I, 1981

S.D.	Minn.		Iowa	
Brookings	Lamberton	Waseca	Corwith	Knierim
		SEED QUALITY (score)		
2.0	2.5	3.0	1.5	
3.0	3.5	3.0	1.8	
2.0	2.5	3.0	1.4	
3.0	3.0	2.5	1.4	
2.0	2.5	2.0	1.4	
1.0	3.0	3.0	1.9	
3.0	3.0	2.0	1.4	
2.0	3.0	1.5	1.3	
3.0	2.0	2.0	1.7	
2.0	2.0	2.5	1.6	
3.0	3.5	3.5	2.1	
2.0	3.0	2.5	1.5	
3.0	3.0	2.5	1.5	
2.0	3.0	2.0	1.6	
3.0	3.0	2.0	1.9	
3.0	2.5	2.0	1.7	
4.0	3.0	2.5	1.8	
3.0	2.5	2.0	1.4	
3.0	2.5	2.5	2.0	
2.0	3.0	2.5	1.3	
3.0	2.5	1.5	1.5	
4.0	2.5	1.5	1.6	
2.0	3.0	2.0	1.8	
2.0	2.5	2.5	1.6	
2.0	2.0	2.0	1.3	
3.0	3.5	2.5	2.2	
3.0	2.5	3.0	1.5	
2.0	3.0	3.5	1.5	
2.0	2.5	2.5	1.4	
2.0	2.0	2.5	1.5	
2.0	2.0	2.5	1.4	
2.0	2.5	2.5	1.5	

PRELIMINARY TEST I, 1981

Strain	Mean 8 Tests	Ont. Ridge-	Mich.		Wis.
			Britton	Ithaca	Arlington
		SEED SIZE (g/100)			
Corsoy 79 (II)	16.1	17.7	16.0	16.6	15.0
Evans (0)	15.4	16.4	16.0	15.9	14.6
Hodgson 78 (I)	16.5	18.4	16.2	16.5	15.1
Lakota	16.2	17.2	15.2	16.7	15.9
A80-143015	16.2	18.2	15.7	14.5	15.8
A80-143019	17.0	18.9	16.4	17.3	17.8
A80-144004	16.9	20.2	16.9	16.1	14.7
A80-144006	18.9	21.3	18.0	19.5	19.3
A80-144007	16.6	18.1	14.9	16.6	15.6
A80-144018	18.8	21.7	17.7	18.4	18.9
A80-144024	16.6	16.2	16.0	16.1	16.2
A80-144029	17.2	19.8	15.8	15.7	14.9
A80-145015	15.6	18.0	15.9	15.8	14.8
A80-146003	14.3	15.3	14.2	12.9	13.4
A80-146004	16.7	19.0	15.5	15.8	17.2
A80-146008	18.6	19.4	18.0	17.7	17.3
A80-146032	14.2	15.5	13.7	14.0	12.8
A80-147003	17.6	19.8	17.5	17.7	17.1
A80-147005	17.8	20.0	18.0	16.8	16.5
HC78-614	15.3	16.4	16.1	16.3	13.0
HC78-836	16.4	17.6	16.5	17.4	13.5
HC78-837	17.1	18.7	15.9	18.5	13.8
M70-187	14.7	16.7	14.5	14.4	13.8
M72-133	18.2	22.4	17.0	17.8	17.3
M73-130	18.8	20.3	18.3	19.6	18.5
M74-18	17.8	19.1	17.0	17.1	16.8
M74-38	19.8	22.4	20.5	19.9	19.8
M74-42	18.7	21.2	18.9	19.0	16.5
M74-55	19.2	21.8	18.7	19.2	18.9
M74-62	18.3	18.8	18.3	18.6	16.2
M74-68	16.0	16.9	16.4	15.4	14.5
M74-69	16.3	16.9	16.0	17.1	15.7

PRELIMINARY TEST I, 1981

S.D.	Minn.		Iowa	
Brookings	Lamberton	Waseca	Corwith	Knierim
		SEED SIZE (g/100)		
14.7	15.9	18.0	15.1	
14.9	13.6	16.5	15.3	
14.7	15.8	19.6	15.8	
15.2	15.0	17.6	16.6	
15.1	15.7	19.0	15.3	
15.1	15.9	17.7	16.5	
15.2	15.3	19.6	17.0	
17.3	17.8	19.6	18.6	
15.5	15.4	19.5	17.6	
17.2	17.6	20.2	18.4	
16.2	15.9	20.1	16.2	
16.2	16.1	20.6	18.2	
13.5	14.7	17.2	15.2	
13.3	14.0	16.6	14.4	
15.3	15.4	18.4	17.0	
18.0	18.8	20.7	18.8	
13.3	13.8	16.4	14.2	
15.0	17.1	19.5	17.2	
18.0	16.7	18.6	17.7	
14.7	15.2	16.5	14.0	
15.3	15.1	19.0	17.0	
15.8	16.0	20.5	17.4	
13.9	14.6	15.9	14.1	
17.5	16.8	20.2	16.8	
17.5	17.6	21.2	17.1	
17.6	17.0	20.0	17.7	
17.6	19.1	20.4	18.8	
16.9	17.1	22.2	18.0	
17.0	17.9	21.1	18.7	
17.2	17.0	22.2	18.4	
14.7	15.4	18.3	16.1	
15.3	15.2	18.4	15.8	

UNIFORM TEST II, 1981

Strain	Parentage	Previous Testing*	Generation Composited
1. Century	Calland x Bonus	4	F_6
2. Corsoy 79 (II)	Corsoy[6] x Lee 68	3	F_3
3. Gnome	Williams x Ransom	-	F_4
4. Lakota (I)	AP6M(S1)(C1)	-	F_4
5. Pella (III)	L66L-137 x Calland	2	F_4
6. A78-125029	Pride B-216 x AX900-4-3	1	F_4
7. A78-227013	Pride B-216 x AX901-40-2	1	F_4
8. A78-227015	Pride B-216 x AX901-40-2	1	F_4
9. A78-227016	Pride B-216 x AX901-40-2	1	F_4
10. A79-133019	AP6(2YT)(F)C1	PI	F_4
11. A79-138014	NKS1492 x Asgrow A3300	PI	F_4
12. A79-138024	A74-102011 x C1523	PI	F_4
13. A79-236003	Pride B-216 x Cumberland	PII	F_4
14. HC77-951	Woodworth x V68-1038	PII	F_5
15. U56355	C1477 x C1421	1	F_5
16. U59218	Williams x Amsoy 71	PII	F_4

*Number of years in this test or name of 1980 test

Descriptive and Other Data

Strain	Descriptive Code			Chlorosis Score Ames	Chlorosis Score Lamb-erton	Emergence Ames Score	Shattering Manhattan 2 Weeks
Century	PTBr	DYBl	I	2.8	3.0	3	2
Corsoy 79 (II)	PGBr	DYY	I	3.7	3.5	1	1
Gnome	PTT	SYBl	D	3.2	2.0	1	1
Lakota (I)	PTT	DYBl	I	2.7	1.2	2	1
Pella (III)	PTT	DYBl	I	3.5	3.5	2	2
A78-125029	WGBr	DYBf	I	3.2	3.2	1	1
A78-227013	WGBr	DYBf	I	3.7	3.5	3	2
A78-227015	WGT	DYBf	I	3.2	4.2	1	2
A78-227016	WGT	DYBf	I	4.0	3.7	3	2
A79-133019	PTBr	SYBl	I	3.7	4.2	5	1
A79-138014	PTBr	SYBr	I	4.2	5.0	1	2
A79-138024	PGBr	DYGr	I	3.2	3.0	1	2
A79-236003	WTBr	DYBr	I	3.8	5.0	1	3
HC77-951	WTT	DYBl	D	3.7	3.5	1	1
U56355	PGBr	SYY	I	3.2	4.0	5	2
U59218	PGT	SYY	I	3.0	3.0	5	1

UNIFORM TEST II, 1981

Disease Data

Strain	BSR Ames Plant	BSR Ames Stem	BSR Lafayette Stem	BSR Lamberton Stem	PR_1 Ames	PR_1 Lafayette	PR Tol. Vickery	FE_2 Lafayette
	n %	n %	n %	n %	a Reaction	a Reaction	n score	a score
Century	98	81	100	75	R	R	3.5	4
Corsoy 79 (II)	99	89	80	60	R	R	3.7	5
Gnome	97	90	60	65	S	S	3.5	1
Lakota (I)	98	82	60	95	R	R	3.0	5
Pella (III)	93	75	0	50	R	R	3.1	2
A78-125029	93	62	40	50	S	R	4.5	4
A78-227013	69	21	40	20	R	R	3.2	5
A78-227015	98	63	60	50	R	R	3.0	5
A78-227016	97	64	80	55	S	S	4.0	5
A79-133019	98	82	100	75	H	S	3.5	5
A79-138014	98	77	100	75	H	S	3.5	5
A79-138024	91	70	80	55	H	S	3.0	5
A79-236003	96	78	100	95	S	S	3.5	4
HC77-951	92	87	60	70	S	S	4.0	1
U56355	88	76	100	40	R	R	4.0	4
U59218	97	68	80	60	H	R	3.5	3

	BP Urbana	BTS Ames	DM Urbana	PS Lafayette	PSB Lafayette	SMV Lafayette	Germ*
	n score	a score	n score	a %	n %	a score	%
Century	2.6	3	3.3	61	5	5E	91
Corsoy 79 (II)	4.0	2	2.7	74	10	5E	87
Gnome	1.0	3	1.2	11	0	1	99
Lakota (I)	1.3	3	3.7	51	10	5E	85
Pella (III)	3.3	4	3.2	58	7	5E	92
A78-125029	1.0	4	4.3	66	8	5E	91
A78-227013	1.0	4	2.7	78	16	3E	80
A78-227015	1.0	4	3.8	71	21	3E	75
A78-227016	1.0	3	3.5	92	4	4E	89
A79-133019	1.0	3	2.2	92	6	5E	90
A79-138014	2.8	3	4.0	60	10	5E	86
A79-138024	3.7	3	3.5	39	38	5E	48
A79-236003	1.0	4	4.7	45	32	5E	64
HC77-951	1.0	2	1.0	83	2	1E	95
U56355	1.0	3	3.7	78	7	5E	88
U59218	3.5	3	3.2	93	18	5E	82

*Petri dish germination on potato dextrose agar

UNIFORM TEST II, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	22	22	21	22	22	19	21	6	6
	bu/a	no.	date	score	in.	score	g/100	%	%
Century	47.7	5	+ 3	1.8	36	1.9	18.2	42.2	18.7
Corsoy 79 (II)	46.4	9	9-18*	2.6	37	1.6	15.4	42.3	19.2
Gnome	45.0	12	+ 6	1.6	23	1.5	16.1	42.6	19.0
Lakota (I)	42.3	16	- 6	3.1	38	2.0	15.6	43.4	18.7
Pella (III)	50.0	1	+ 6	2.0	38	1.8	19.6	40.2	20.0
A78-125029	44.6	13	- 1	1.8	34	1.8	12.6	41.2	19.9
A78-227013	47.2	6	+ 1	2.4	34	1.8	15.6	42.2	18.7
A78-227015	46.7	7	+ 2	2.2	31	2.0	17.5	42.9	18.5
A78-227016	46.3	10	+ 3	1.9	30	2.1	15.7	42.1	18.9
A79-133019	49.3	3	0	2.0	31	1.8	17.4	40.1	19.6
A79-138014	46.5	8	- 2	1.8	31	1.7	18.4	43.5	19.2
A79-138024	49.4	2	0	2.0	32	2.4	19.4	40.4	19.0
A79-236003	49.1	4	+ 1	2.5	33	1.9	15.7	40.2	19.7
HC77-951	43.4	15	+ 3	1.3	24	1.5	14.6	38.9	20.0
U56355	45.8	11	+ 1	1.6	33	1.9	15.9	40.4	19.4
U59218	44.4	14	0	1.8	33	1.8	16.1	40.3	19.6

*123 days after planting

1980-1981 2-year mean

No. of Tests	44	44	42	43	44	38	40	11	11
Century	47.6	2	+3.5	1.8	36	2.0	18.3	42.5	19.7
Corsoy 79 (II)	46.4	6	9-20.0*	2.6	38	1.8	15.4	41.8	20.6
Pella (III)	48.0	1	+6.0	1.9	38	1.9	19.5	39.8	21.0
A78-125029	45.6	7	-1.5	1.8	35	1.9	13.5	41.2	21.5
A78-227013	47.2	5	+0.5	2.3	34	1.9	15.8	42.0	19.9
A78-227015	47.6	2	+2.0	2.1	32	2.0	17.6	43.0	19.7
A78-227016	47.5	4	+2.5	1.9	31	2.1	15.9	42.4	20.2
U56355	45.2	8	+1.5	1.6	34	2.0	15.9	41.2	20.4

*124 days after planting

Three strains, A79-133019, A79-138024, and A79-236003 were the highest yielding Group II strains in the test and the first two have very good lodging resistance. All are susceptible to PR_1 and the latter two were somewhat susceptible to shattering at Manhatten.

UNIFORM TEST II, 1981

Strain	Mean 22 Tests	N.J. Adel-phia	Penn. Landis-ville	Ont. Ridge-town	Ont. Harrow	Ohio Hoyt-ville	Ohio Wooster
		YIELD (bu/a)					
Century	47.7	34.4	33.7	54.9	56.0	33.6	41.7
Corsoy 79 (II)	46.4	34.4	31.8	57.2	54.4	29.8	44.6
Gnome	45.0	34.8	25.6	56.3	52.6	35.1	42.9
Lakota (I)	42.3	35.0	29.7	53.0	51.5	30.4	35.6
Pella (III)	50.0	32.5	37.9	60.0	62.8	36.3	47.8
A78-125029	44.6	37.0	28.6	55.3	52.6	25.4	32.1
A78-227013	47.2	36.1	30.9	57.2	57.4	35.0	40.7
A78-227015	46.7	39.2	30.0	57.2	54.4	31.4	40.6
A78-227016	46.3	25.2	29.5	60.9	55.6	25.2	38.1
A79-133019	49.3	35.9	30.6	57.4	56.3	30.7	43.9
A79-138014	46.5	36.1	32.1	56.9	54.8	25.2	40.5
A79-138024	49.4	40.5	30.4	62.5	62.2	29.4	44.1
A79-236003	49.1	38.5	35.4	62.2	61.2	28.3	40.7
HC77-951	43.4	31.8	28.3	55.4	51.0	32.8	44.3
U56355	45.8	36.9	29.4	53.6	53.9	30.1	35.9
U59218	44.4	35.7	27.8	58.1	57.4	26.1	36.4
C.V. (%)		5.8	14.2	6.9	6.5	11.4	6.5
L.S.D. (5%)		3.9	NS	5.6	5.2	5.7	4.4
Row sp. (in.)		30	24	24	24	30	30
Rows/plot		3	4	4	4	4	4
Reps		4	3	4	4	3	3
		YIELD RANK					
Century	5	12	3	14	7	4	7
Corsoy 79 (II)	9	13	5	7	10	10	2
Gnome	12	11	16	11	13	2	6
Lakota (I)	16	10	10	16	15	8	15
Pella (III)	1	14	1	4	1	1	1
A78-125029	13	4	13	13	13	14	16
A78-227013	6	7	6	7	5	3	8
A78-227015	7	2	9	7	10	6	10
A78-227016	10	16	11	3	8	15	12
A79-133019	3	8	7	6	6	7	5
A79-138014	8	6	4	10	9	15	11
A79-138024	2	1	8	1	2	11	4
A79-236003	4	3	2	2	3	12	8
HC77-951	15	15	14	12	16	5	3
U56355	11	5	12	15	12	9	14
U59218	14	9	15	5	4	13	13

UNIFORM TEST II, 1981

Strain	Michigan		Indiana		Illinois			
	Britton	Ithaca	Green-field	Lafay-ette	DeKalb	Girard	Pontiac	Urbana
	YIELD (bu/a)							
Century	54.2	49.3	43.2	45.8	62.0	47.7	49.1	56.1
Corsoy 79 (II)	55.7	50.9	31.6	45.1	59.7	36.1	46.5	55.0
Gnome	42.4	33.1	24.6	35.4	64.6	47.9	53.8	59.5
Lakota (I)	45.1	49.9	36.2	35.5	53.6	37.7	42.9	47.8
Pella (III)	54.9	54.5	49.6	48.8	69.6	48.0	49.8	53.1
A78-125029	45.3	46.6	31.7	38.1	57.9	44.2	51.2	49.8
A78-227013	56.1	44.8	34.2	40.0	61.2	40.8	59.2	58.7
A78-227015	50.2	42.3	28.2	42.2	63.3	44.2	52.0	57.8
A78-227016	48.5	39.9	35.4	38.8	67.2	50.2	48.2	52.7
A79-133019	53.4	52.7	32.7	40.4	67.1	48.6	49.2	62.2
A79-138014	50.8	48.3	33.8	42.5	60.3	44.6	44.5	57.0
A79-138024	56.6	51.5	35.8	49.7	63.7	42.4	53.5	60.2
A79-236003	52.7	46.7	36.8	42.6	62.8	43.9	56.2	55.6
HC77-951	43.4	45.3	32.1	20.7	64.6	47.0	53.7	52.4
U56355	49.9	48.6	35.3	40.0	64.4	50.0	47.5	55.0
U59218	46.1	45.9	27.1	39.9	62.8	41.6	49.2	49.7
C.V. (%)	5.4	6.5	14.5	15.9	4.0	3.1	9.0	5.7
L.S.D. (5%)	5.6	5.0	8.3	10.6	4.1	2.3	7.4	5.2
Row sp. (in.)	--	30	30	24	30	30	30	30
Rows/plot	4	4	3	4	4	4	4	4
Reps	2	3	3	3	3	3	3	3
	YIELD RANK							
Century	5	6	2	3	11	6	11	7
Corsoy 79 (II)	3	4	13	4	14	15	14	9
Gnome	16	17	16	15	4	5	3	3
Lakota (I)	14	5	4	14	16	15	16	16
Pella (III)	4	1	1	2	1	4	8	11
A78-125029	13	10	12	13	15	9	7	14
A78-227013	2	13	8	9	12	14	1	4
A78-227015	9	15	14	7	8	9	6	5
A78-227016	11	16	6	12	2	1	12	12
A79-133019	6	2	10	8	3	3	9	1
A79-138014	8	8	9	6	13	8	15	6
A79-138024	1	3	5	1	7	12	3	2
A79-236003	7	9	3	5	9	11	2	8
HC77-951	15	12	11	16	4	7	4	13
U56355	10	7	7	9	6	2	13	9
U59218	12	11	15	11	9	13	9	15

UNIFORM TEST II, 1981

Wis.	Minnesota		Iowa		South Dakota		Neb.
Arlington	Lamberton	Waseca	Ames	Marshalltown	Brookings	Centerville	Mead
			YIELD (bu/a)				
42.6	45.0	55.3	49.3	55.3	43.8	40.3	55.5
40.3	46.2	59.9	48.7	56.9	41.7	41.9	52.6
45.7	41.0	53.5	45.8	60.3	39.5	42.9	51.6
33.3	42.5	45.7	44.6	51.8	44.5	35.7	48.9
44.0	50.1	53.7	53.6	57.4	44.7	41.2	49.7
42.2	47.2	53.5	48.9	55.3	44.1	38.5	54.8
43.0	44.9	62.1	49.0	60.8	40.7	36.6	50.0
44.7	48.5	60.1	50.9	57.2	39.7	38.1	55.5
55.5	52.6	56.0	50.1	60.3	39.6	38.3	51.6
54.0	51.8	58.0	51.8	62.9	49.3	39.4	57.3
53.1	48.2	52.0	42.0	57.8	48.8	45.9	47.9
53.0	49.8	58.3	47.3	57.2	44.0	43.4	52.3
48.4	47.9	59.5	48.9	59.8	49.6	48.0	54.5
41.0	42.2	53.5	42.0	56.6	38.8	35.2	43.6
41.0	47.7	58.3	48.0	56.1	39.9	35.6	51.2
46.0	45.7	53.3	44.2	55.8	42.0	33.7	52.6
6.0	8.1	7.1	7.2	6.3	4.7	8.0	5.7
4.4	6.4	6.6	5.0	4.4	3.4	5.3	4.8
30	30	30	27	27	30	30	30
4	4	4	4	4	4	4	4
3	3	3	4	4	3	3	3
			YIELD RANK				
11	12	9	5	14	8	7	3
15	10	3	9	10	10	5	6
7	16	11	12	3	15	4	9
16	14	16	13	16	5	13	14
9	3	10	1	7	4	6	13
12	9	11	7	14	6	9	4
10	13	1	6	2	11	12	12
8	5	2	3	8	13	11	2
1	1	8	4	3	14	10	10
2	2	7	2	1	2	8	1
3	6	15	15	6	3	2	15
4	4	5	11	8	7	3	8
5	7	4	7	5	1	1	5
13	15	11	15	11	16	15	16
13	8	5	10	12	12	14	11
6	11	14	14	13	9	16	7

UNIFORM TEST II, 1981

Strain	Mean 21 Tests	N.J. Adel-phia	Penn. Landis-ville	Ont. Ridge-town	Ont. Harrow	Ohio Hoyt-ville	Ohio Wooster
		MATURITY (date)					
Century	+ 3	+ 3	+ 3	- 1	+ 2	+ 3	+ 3
Corsoy 79 (II)	9-18	9-10	9-8	9-28	10-1	9-14	9-11
Gnome	+ 6	+ 4	+ 3	+ 4	+ 3	+ 5	+ 3
Lakota (I)	- 6	- 8	- 5	-10	- 9	- 5	- 4
Pella (III)	+ 6	+ 5	+ 6	+ 3	+ 6	+ 6	+ 4
A78-125029	- 1	0	- 3	- 5	- 3	- 3	- 2
A78-227013	+ 1	+ 3	0	- 1	0	+ 2	+ 1
A78-227015	+ 2	+ 4	0	- 2	- 1	+ 2	+ 1
A78-227016	+ 3	+ 1	0	+ 3	+ 1	+ 1	+ 1
A79-133019	0	+ 2	0	- 4	- 3	+ 1	+ 1
A79-138014	- 2	- 1	- 5	- 4	- 3	- 4	- 2
A79-138024	0	+ 2	0	- 1	0	+ 1	0
A79-236003	+ 1	+ 1	+ 3	- 2	- 1	+ 1	+ 2
HC77-951	+ 3	0	+ 3	- 1	- 1	+ 5	+ 2
U56355	+ 1	0	- 4	- 4	- 2	+ 1	- 2
U59218	0	0	- 4	- 2	- 2	+ 3	- 1
Date planted	5-19	5-27	5-21	5-20	6-1	5-21	5-8
Days to mature	123	106	110	131	122	116	126
		LODGING (score)					
	Mean 22 Tests						
Century	1.8	1.0	1.0	2.8	2.0	1.5	1.4
Corsoy 79 (II)	2.6	1.2	1.3	3.2	3.0	1.5	1.6
Gnome	1.6	1.0	1.3	2.5	1.0	1.6	2.0
Lakota (I)	3.1	2.5	2.0	4.0	4.0	1.6	2.7
Pella (III)	2.0	1.0	1.2	2.2	2.0	1.5	1.6
A78-125029	1.8	1.0	1.0	2.0	2.0	1.3	1.2
A78-227013	2.4	1.0	1.3	3.5	3.0	1.5	1.4
A78-227015	2.2	1.0	1.0	3.2	3.0	1.5	1.2
A78-227016	1.9	1.0	1.0	1.5	2.0	1.4	1.2
A79-133019	2.0	1.0	1.2	3.5	3.0	1.5	1.3
A79-138014	1.8	1.0	1.5	2.5	2.0	1.5	1.2
A79-138024	2.0	1.0	1.0	3.0	2.0	1.4	1.3
A79-236003	2.5	1.8	1.8	3.5	3.0	1.6	1.4
HC77-951	1.3	1.0	1.3	1.0	1.0	1.4	1.3
U56355	1.6	1.0	1.0	1.0	2.0	1.4	1.0
U59218	1.8	1.0	1.3	2.5	2.0	1.4	1.1

UNIFORM TEST II, 1981

Michigan		Lafayette		Illinois			
Britton	Ithaca	Greenfield	Lafayette	DeKalb	Girard	Pontiac	Urbana
			MATURITY (date)				
+ 3	+ 4	+ 2	+ 1	+ 7	+ 2	+ 6	+ 4
9-18	10-7	9-29	9-14	9-20	9-7	9-24	9-11
+ 3	+ 3	+ 4	+13	+12	+12	+10	+10
- 6	- 8	- 6	- 7	- 4	- 3	- 3	- 5
+ 2	+ 5	+ 4	+ 4	+11	+ 7	+ 7	+10
- 3	- 1	- 4	0	+ 2	- 3	+ 2	- 1
+ 1	+ 2	0	+ 2	+ 4	- 1	+ 3	+ 2
+ 2	0	0	+ 2	+ 9	+ 1	+ 4	+ 5
+ 2	+ 3	+ 1	+ 2	+ 9	+ 1	+ 5	+ 8
- 3	0	+ 2	+ 2	+ 1	+ 2	+ 1	+ 2
- 4	- 4	- 4	- 2	- 2	- 1	+ 1	- 2
- 3	+ 3	- 1	- 1	+ 2	0	+ 3	- 1
- 2	+ 1	+ 1	+ 2	+ 4	+ 3	+ 2	+ 3
+ 3	+ 4	+ 1	+ 1	+10	+ 5	+ 3	+ 5
0	0	0	+ 1	+ 2	+ 2	+ 3	+ 3
0	- 1	0	+ 2	+ 4	0	+ 2	+ 1
5-8	5-27	6-11	5-23	5-18	5-27	6-4	5-8
133	133	110	114	125	103	112	126
			LODGING (score)				
2.0	2.3	1.5	1.5	1.3	2.0	2.5	2.3
2.3	2.7	2.8	2.7	2.3	4.4	3.3	4.1
1.0	1.7	1.5	1.5	2.3	2.4	2.0	1.4
2.5	3.0	2.8	2.3	3.0	4.3	3.7	4.5
2.0	2.3	1.5	1.7	1.8	1.7	2.8	2.9
1.5	2.2	1.8	1.7	1.8	2.4	2.5	2.8
2.0	3.2	1.8	2.0	2.2	3.5	2.3	3.8
1.3	2.5	1.7	1.8	2.3	2.9	3.3	3.2
1.0	2.2	1.7	2.2	2.0	2.4	2.7	3.2
2.0	2.2	1.8	1.8	1.8	2.3	3.2	2.4
1.5	2.2	1.7	2.2	1.5	1.7	2.3	2.2
1.5	2.5	2.0	2.0	2.0	3.0	2.7	2.7
2.0	2.7	2.0	2.5	2.2	3.0	3.5	3.8
1.0	1.8	1.5	1.5	1.3	1.1	1.0	1.2
1.3	2.2	1.7	1.5	1.3	1.8	2.3	2.2
1.3	2.2	1.5	2.0	1.7	2.8	2.2	3.3

UNIFORM TEST II, 1981

Strain	Wis.	Minnesota		Iowa		South Dakota		Neb.
	Arling-ton	Lamb-erton	Waseca	Ames	Marshall-town	Brook-ings	Center-ville	Mead
		MATURITY (date)						
Century	+ 1	+13	+ 3	+ 3		+ 5	+ 4	- 1
Corsoy 79 (II)	9-30	9-15	10-2	9-16		9-28	9-14	9-16
Gnome	- 1	+ 9	+ 3	+ 7		+ 3	+ 9	+ 3
Lakota (I)	-13	- 6	- 8	- 5		- 4	- 6	- 6
Pella (III)	+ 3	+13	+ 3	+ 9		+ 5	+11	+ 5
A78-125029	- 6	- 1	+ 1	- 2		- 2	+ 4	0
A78-227013	- 5	0	+ 1	+ 2		- 1	+ 6	+ 1
A78-227015	- 1	+ 9	+ 2	+ 4		+ 3	+ 5	+ 2
A78-227016	0	+ 9	+ 2	+ 3		+ 3	+10	+ 2
A79-133019	- 6	+ 1	- 1	+ 1		- 2	+ 4	0
A79-138014	0	- 1	- 2	- 2		- 1	+ 5	- 4
A79-138024	- 4	+ 5	- 1	0		- 2	+ 1	- 1
A79-236003	- 4	0	0	+ 5		0	+ 7	0
HC77-951	- 3	+ 5	+ 2	+ 5		0	+ 5	+ 1
U56355	- 3	+ 8	+ 2	+ 4		+ 2	+ 5	0
U59218	- 6	+ 3	+ 1	- 1		- 1	+ 1	0
Date planted	5-7	5-5	5-13	5-6	5-8	5-27	5-21	5-22
Days to mature	145	133	142	133	---	124	116	117
		LODGING (score)						
Century	3.0	1.3	2.3	1.8	1.9	1.7	2.0	1.2
Corsoy 79 (II)	3.5	2.7	2.3	1.9	3.8	2.3	2.7	1.8
Gnome	2.5	1.0	1.0	1.6	1.9	1.0	1.0	1.0
Lakota (I)	4.0	3.0	3.8	1.9	4.0	3.0	2.7	2.0
Pella (III)	3.0	2.3	3.2	1.9	1.9	1.3	2.7	1.3
A78-125029	2.0	1.0	2.7	1.5	2.2	1.7	2.0	1.2
A78-227013	4.0	2.7	2.7	1.8	3.3	2.3	3.0	1.2
A78-227015	3.0	1.3	2.3	1.9	2.9	2.0	2.7	1.5
A78-227016	2.5	2.0	3.2	1.7	2.7	1.3	2.7	1.2
A79-133019	3.5	1.0	2.0	1.9	3.0	1.0	2.0	1.2
A79-138014	2.5	1.3	2.0	1.7	2.0	1.7	2.3	1.2
A79-138024	3.0	1.7	1.8	1.6	2.0	2.0	2.3	1.0
A79-236003	2.5	3.0	3.3	2.2	2.7	2.0	3.3	1.7
HC77-951	2.0	1.0	1.0	1.4	1.7	1.7	1.0	1.0
U56355	1.5	1.0	2.0	1.6	1.8	1.7	2.3	1.0
U59218	2.5	1.0	2.0	1.7	2.2	1.3	1.7	1.3

UNIFORM TEST II, 1981

Mean 22 Tests	N.J. Adelphia	Pa. Landisville	Ont. Ridgetown	Ont. Harrow	Ohio Hoytville	Ohio Wooster
		PLANT HEIGHT (inches)				
36	30	28	40	35	24	31
37	32	29	39	37	26	32
23	23	20	27	21	21	23
38	37	32	43	37	27	33
38	30	29	40	37	26	32
34	29	25	36	34	22	28
34	30	26	36	31	24	28
31	28	22	28	30	22	24
30	26	21	31	27	19	24
31	26	23	32	30	23	25
31	29	25	32	32	24	26
32	32	24	32	30	22	29
33	32	27	34	35	21	29
24	21	22	27	21	22	24
33	28	24	34	30	24	26
33	29	26	36	30	26	26
		SEED QUALITY (score)				
Mean 19 Tests						
1.9	2.0	3.0	2.0	1.0	1.2	1.3
1.6	2.0	2.0	2.0	1.0	1.3	1.2
1.5	1.0	2.0	2.0	2.0	1.1	1.1
2.0	1.2	2.5	2.0	1.0	3.0	1.3
1.8	1.5	2.5	2.0	2.0	1.2	1.3
1.8	1.5	2.0	2.0	2.0	2.5	1.3
1.8	1.8	2.0	2.0	2.0	1.7	1.3
2.0	1.8	2.0	2.0	2.0	1.6	1.5
2.1	2.0	2.0	2.0	2.0	1.5	1.8
1.8	1.2	2.0	2.0	2.0	1.3	1.3
1.7	1.8	2.0	2.0	2.0	1.2	1.4
2.4	2.2	2.0	2.0	3.0	2.0	1.5
1.9	2.0	2.5	2.0	1.0	1.3	1.6
1.5	1.0	2.0	2.0	1.0	1.1	1.2
1.9	1.2	2.0	2.0	1.0	1.2	1.5
1.8	2.0	2.0	2.0	1.0	1.4	1.4

UNIFORM TEST II, 1981

Strain	Michigan		Indiana		Illinois			
	Britton	Ithaca	Green-field	Lafay-ette	DeKalb	Girard	Pontiac	Urbana
	PLANT HEIGHT (inches)							
Century	37	40	29	35	34	39	39	40
Corsoy 79 (II)	38	44	32	41	33	41	43	41
Gnome	22	25	16	15	21	23	25	22
Lakota (I)	39	43	35	37	36	42	44	40
Pella (III)	38	41	33	37	37	41	41	44
A78-125029	31	40	29	34	33	38	40	37
A78-227013	34	38	28	30	31	36	37	38
A78-227015	28	33	24	30	30	35	36	38
A78-227016	27	32	25	30	28	35	32	35
A79-133019	30	34	25	32	30	36	34	37
A79-138014	30	36	25	32	30	34	34	35
A79-138024	30	37	26	34	31	35	38	38
A79-236003	31	36	27	34	33	36	38	38
HC77-951	21	26	18	16	23	22	24	20
U56355	30	37	28	30	31	39	37	40
U59218	29	36	27	32	32	40	36	38
	SEED QUALITY (score)							
Century			1.0	1.0	1.4	2.0	1.3	2.2
Corsoy 79 (II)			1.0	1.0	1.6	2.0	1.4	1.8
Gnome			1.0	1.0	1.2	1.3	1.2	1.3
Lakota (I)			1.0	1.5	1.4	2.5	1.6	2.5
Pella (III)			1.0	1.0	1.3	2.8	1.4	2.2
A78-125029			1.0	1.0	1.2	1.7	1.5	2.2
A78-227013			1.0	1.0	1.2	2.2	1.6	1.8
A78-227015			1.0	1.0	1.4	2.5	2.0	2.5
A78-227016			1.5	1.5	1.5	2.7	1.4	2.3
A79-133019			1.0	1.0	1.3	2.5	1.2	2.7
A79-138014			1.5	1.5	1.4	2.5	1.5	2.5
A79-138024			2.0	1.5	2.3	3.2	2.3	2.8
A79-236003			1.0	1.0	1.4	2.0	1.5	2.3
HC77-951			1.0	2.0	1.2	1.8	1.2	1.2
U56355			1.5	1.0	2.0	2.3	1.5	2.5
U59218			1.5	1.5	1.5	1.8	1.4	3.0

UNIFORM TEST II, 1981

Wisc.	Minnesota		Iowa		South Dakota		Neb.
Arlington	Lamberton	Waseca	Ames	Marshaltown	Brookings	Centerville	Mead
			PLANT HEIGHT (inches)				
42	39	48	33	46	37	41	33
38	41	44	33	50	33	40	37
21	28	27	22	28	29	27	20
42	37	47	32	49	35	37	39
41	40	49	37	49	38	43	34
38	36	42	29	46	38	40	33
35	35	41	32	44	35	41	32
30	33	40	28	45	34	37	32
32	38	37	28	41	34	36	30
30	32	37	30	40	33	28	30
32	33	39	26	41	35	35	28
32	34	39	28	37	35	34	33
34	33	39	28	42	35	37	33
24	24	30	25	30	33	28	19
36	40	42	30	44	38	30	32
37	36	39	29	47	34	36	35
			SEED QUALITY (score)				
2.0	2.7	2.7	1.8		1.0	2.0	2.3
1.0	2.3	2.3	1.8		1.0	2.0	2.3
1.0	2.7	1.3	1.5		1.0	3.0	1.2
3.0	3.0	2.7	1.9		2.0	1.0	2.0
1.0	3.3	2.0	1.6		1.0	2.0	2.3
1.0	2.7	2.7	1.4		2.0	2.0	1.8
2.0	2.0	2.0	1.6		2.0	2.0	2.2
2.0	2.7	3.3	1.7		2.0	2.0	2.3
3.0	3.0	2.7	1.9		3.0	2.0	2.3
1.0	2.3	2.0	1.9		3.0	3.0	2.2
1.0	2.3	2.0	1.8		1.0	1.0	2.0
2.0	3.0	3.3	2.1		2.0	3.0	3.5
4.0	3.0	2.0	1.4		2.0	3.0	1.8
2.0	2.3	1.7	1.7		2.0	1.0	1.5
3.0	2.3	3.3	2.0		2.0	2.0	2.2
1.0	3.3	1.7	1.5		2.0	2.0	2.5

UNIFORM TEST II, 1981

Strain	Mean 21 Tests	N.J. Adel-phia	Penn. Landis-ville	Ont. Ridge-town	Ont. Harrow	Ohio Hoyt-ville	Ohio Wooster
		SEED SIZE (g/100)					
Century	18.2	16.0	17.8	19.6	19.1	16.1	16.5
Corsoy 79 (II)	15.4	14.0	14.3	17.8	15.8	14.0	13.3
Gnome	16.1	14.0	15.0	16.8	17.3	13.7	14.0
Lakota (I)	15.6	16.0	13.7	17.1	14.4	13.6	13.6
Pella (III)	19.6	16.0	18.3	21.1	20.1	19.4	18.0
A78-125029	12.6	13.0	12.7	14.3	12.8	10.8	11.2
A78-227013	15.6	15.0	14.2	16.8	16.0	13.6	12.7
A78-227015	17.5	17.0	15.5	20.1	17.8	14.6	15.0
A78-227016	15.7	15.0	14.3	16.5	15.3	13.6	13.6
A79-133019	17.4	15.0	14.0	19.7	17.1	14.7	15.2
A79-138014	18.4	17.0	16.6	20.3	18.2	14.6	15.1
A79-138024	19.4	16.0	17.3	23.3	19.7	18.5	16.7
A79-236003	15.7	13.0	14.5	17.6	16.5	12.7	13.9
HC77-951	14.6	13.0	13.7	15.2	15.4	12.3	13.7
U56355	15.9	15.0	14.4	16.2	16.1	14.7	14.1
U59218	16.1	15.0	14.7	17.7	15.5	14.7	14.6

Strain	Mean 6 Tests	Ohio Hoyt-ville	Ind. Lafay-ette	Ill. DeKalb	Iowa Ames	S.D. Center-ville	Neb. Mead
		PROTEIN (%)					
Century	42.2	40.1	40.6	42.5	44.8	42.1	43.4
Corsoy 79 (II)	42.3	41.0	40.2	43.0	43.8	42.7	43.1
Gnome	42.6	41.6	42.6	43.0	43.8	43.2	41.7
Lakota (I)	43.4	45.2	42.7	42.2	44.2	43.2	42.8
Pella (III)	40.2	41.5	39.2	38.4	40.5	41.4	40.1
A78-125029	41.2	39.7	41.4	41.2	42.0	42.1	40.8
A78-227013	42.2	42.5	41.0	42.5	43.8	41.8	41.4
A78-227015	42.9	41.1	41.9	43.8	46.4	42.7	41.7
A78-227016	42.1	39.9	41.2	43.7	43.5	41.5	42.8
A79-133019	40.1	42.1	35.9	39.9	42.2	41.5	39.0
A79-138014	43.5	40.8	42.7	42.2	44.0	45.6	45.9
A79-138024	40.4	39.4	40.0	40.7	41.6	40.2	40.6
A79-236003	40.2	38.9	39.3	40.5	41.0	41.8	39.7
HC77-951	38.9	39.5	38.5	38.4	39.0	39.5	38.3
U56355	40.4	36.9	40.4	41.1	41.3	42.4	40.0
U59218	40.3	41.0	38.3	43.4	41.2	40.0	38.0

UNIFORM TEST II, 1981

Michigan		Indiana		Illinois			
Britton	Ithaca	Green-field	Lafay-ette	DeKalb	Girard	Pontiac	Urbana
			SEED SIZE (g/100)				
16.9	18.3	19.8	15.0	20.9	16.6	19.8	17.1
16.0	15.6	15.5	13.7	19.0	11.3	16.2	15.5
16.5	16.7	17.8	18.2	17.6	14.3	19.1	16.8
16.2	15.7	16.4	13.2	19.6	12.2	17.7	15.4
18.8	18.3	21.5	19.1	22.7	16.7	22.2	19.9
12.7	12.7	13.9	11.8	15.8	11.1	16.3	13.3
14.8	15.7	16.8	14.7	18.2	12.0	18.5	17.4
17.2	16.4	18.7	16.4	20.9	14.8	21.0	18.7
15.4	15.1	16.1	15.4	18.7	13.5	17.9	16.0
16.2	18.6	18.3	16.2	20.9	14.6	20.5	16.6
18.7	18.0	18.0	16.8	22.5	15.3	21.1	18.9
17.6	19.4	21.0	17.9	24.3	14.8	22.0	18.8
16.0	15.0	16.5	14.7	18.7	12.5	18.6	15.6
14.8	15.8	14.6	14.2	16.4	11.8	16.5	14.0
15.9	15.8	16.4	15.4	19.3	13.5	17.6	15.3
14.7	15.8	17.1	15.2	18.9	12.9	17.6	16.4

Mean	Ohio	Ind.	Ill.	Iowa	S.D.	Neb.
6 Tests	Hoyt-ville	Lafay-ette	DeKalb	Ames	Center-ville	Mead
			OIL (%)			
18.7	19.1	19.0	18.1	18.3	18.5	19.0
19.2	20.6	20.0	18.9	19.2	18.1	18.6
19.0	20.0	18.7	18.6	19.1	18.6	18.9
18.7	19.3	19.2	18.7	17.8	18.4	18.9
20.0	21.0	20.5	19.1	19.5	19.6	20.3
19.9	20.2	20.9	19.6	19.7	18.7	20.1
18.7	19.5	19.0	18.1	18.7	18.4	18.7
18.5	19.9	19.1	17.9	18.1	17.9	18.3
18.9	20.4	19.3	18.3	18.1	18.7	18.8
19.6	19.5	20.4	20.0	18.6	19.6	19.6
19.2	19.8	19.6	18.5	18.7	18.8	19.6
19.0	20.4	19.4	18.5	18.8	18.3	18.9
19.7	20.2	20.0	19.0	19.8	19.5	19.8
20.0	21.2	20.4	19.6	19.7	19.2	20.0
19.4	20.7	19.7	18.8	19.1	18.8	19.6
19.6	19.6	20.9	18.8	19.1	19.4	19.7

UNIFORM TEST II, 1981

Strain	Wis.	Minnesota		Iowa		South Dakota		Neb.
	Arling-ton	Lamb-erton	Waseca	Ames	Marshal-town	Brook-ings	Center-ville	Mead
			SEED SIZE (g/100)					
Century	19.4	18.6	20.9	21.6		16.6	16.7	18.8
Corsoy 79 (II)	15.5	15.7	17.7	17.7		14.4	13.3	16.6
Gnome	16.8	15.6	17.8	16.4		13.9	14.6	18.1
Lakota (I)	14.4	15.4	17.1	19.7		14.5	13.7	18.0
Pella (III)	19.7	20.0	21.2	22.2		16.9	18.6	20.0
A78-125029	12.3	13.3	16.6	16.7		12.9	12.6	14.9
A78-227013	14.7	15.8	18.5	18.0		13.6	13.4	17.2
A78-227015	17.7	17.4	20.3	19.9		16.0	14.9	17.9
A78-227016	16.6	15.9	18.2	17.6		14.0	14.1	16.8
A79-133019	19.1	16.8	21.8	20.6		16.8	15.8	17.9
A79-138014	20.6	17.6	22.0	21.6		17.7	16.7	19.7
A79-138024	20.7	18.9	22.2	22.8		19.3	16.4	19.8
A79-236003	15.4	15.6	18.2	18.3		15.3	14.9	16.5
HC77-951	14.7	13.8	16.7	15.2		13.5	13.3	17.9
U56355	16.7	16.6	18.3	17.5		15.3	12.7	16.5
U59218	16.4	16.4	18.6	17.9		15.4	13.9	17.7

PRELIMINARY TEST IIA, 1981

Strain	Parentage	Generation Composited
1. Century	Calland x Bonus	F_6
2. Corsoy 79 (II)	Corsoy[6] x Lee 68	F_3
3. Lakota (I)	AP6M(S1)C1	F_4
4. Pella (III)	L66L-137 x Calland	F_4
5. A80-147002	(Corsoy x Wayne) x Pella	F_5
6. A80-244003	(Corsoy x Wayne) x Pella	F_4
7. A80-244014	A75-204018 x Weber	F_4
8. A80-244031	(Corsoy x Wayne) x L69U40-16-4	F_4
9. A80-244035	(Corsoy x Wayne) x Pella	F_4
10. A80-244036	A74-204034 x Cumberland	F_4
11. A80-245022	(Corsoy x Wayne) x Weber	F_4
12. A80-245023	A75-332035 x Weber	F_4
13. A80-245032	A75-203036 x A75-204018	F_4
14. A80-247003	(Corsoy x Wayne) x A75-204018	F_4
15. A80-247007	A75-204018 x Weber	F_4
16. A80-247008	A75-204018 x Asgrow A2440	F_4
17. A80-249016	L69U40-16-4 x A76-304020	F_4
18. A80-249032	A75-332035 x A75-204018	F_4
19. A80-250034	A75-204018 x Pella	F_4
20. C1590	Beeson x CX407BC_7-255	F_6
21. C1591	Woodworth x C1508	F_5
22. C1592	C1524 x CX521-71	F_5
23. HW8008	L69U40-16-4 x Century	F_5
24. HW8028	A75-105021 x Century	F_5
25. HW8039	Weber x Pella	F_5

PRELIMINARY TEST IIA, 1981

Descriptive and Other Data

Strain	Descriptive Code			Chlorosis Score Ames	Shattering Manhattan 2 Weeks
Century	PTBr	DYBl	I	2.8	2
Corsoy 79 (II)	PGBr	DYY	I	3.7	1
Lakota (I)	PTT	DYBl	I	2.7	1
Pella (III)	PTT	DYBl	I	3.5	2
A80-147002	WT+GT	DYBr	I	4.2	2
A80-244003	PTBr+T	DYBl	I	4.2	2
A80-244014	WTBr	DYBr	I	2.7	-
A80-244031	PGT	DYBr	I	3.8	2
A80-244035	WGT	SYBf	I	4.2	1
A80-244036	PTT	SYBl	I	3.7	1
A80-245022	WTBr	DYBr	I	3.5	3
A80-245023	WTBr	SYBl	I	3.0	3
A80-245032	WTBr	DYBl	I	2.5	1
A80-247003	WGBr	DYBf	I	3.2	2
A80-247007	WTBr	DYBr	I	2.3	1
A80-247008	WGBr	DYBf	I	3.2	1
A80-249016	PGT	DYIb	I	2.8	1
A80-249032	WTBr	DYBr	I	3.0	1
A80-250034	P+WTBr	DYBr	I	3.0	1
C1590	PGBr	SYY	I	2.8	1
C1591	PTT	SYBl	I	2.8	1
C1592	PGBr	DYBr	I	3.3	1
HW8008	PTT	DYBl+Br	I	3.2	1
HW8028	PTBr	DYBl+Br	I	3.3	1
HW8039	PTBr	DYBl	I	3.2	1

PRELIMINARY TEST IIA, 1981

Disease Data

Strain	BSR			PR_1		P.R. Tol.
	Ames		Lafay-ette	Ames	Lafay-ette	Vickery
	Plant	Stem	Stem			
	n %	n %	n %	a Reaction	a	a score
Century	100	76	100	R	R	3.5
Corsoy 79 (II)	100	96	80	R	R	3.7
Lakota (I)	100	57	60	R	R	3.0
Pella (III)	100	56	0	R	R	3.1
A80-147002	100	89	60	R	R	2.8
A80-244003	100	84	80	R	H	3.0
A80-244014	100	100	20	H	S	4.3
A80-244031	90	82	80	R	H	3.0
A80-244035	100	96	80	R	R	3.3
A80-244036	100	96	60	R	R	3.7
A80-245022	90	77	80	S	S	2.7
A80-245023	80	22	20	H	S	4.0
A80-245032	100	96	100	S	S	3.0
A80-247003	100	95	80	S	S	4.0
A80-247007	100	75	60	S	S	3.0
A80-247008	100	91	20	S	S	3.0
A80-249016	50	27	0	R	R	2.7
A80-249032	100	21	100	H	H	2.7
A80-250034	100	92	0	H	S	3.0
C1590	100	66	100	R	R	5.0
C1591	100	75	60	H	H	4.0
C1592	100	71	40	R	R	4.5
HW8008	100	100	60	R	R	3.1
HW8028	100	67	60	R	R	2.4
HW8039	100	95	60	S	S	3.3

PRELIMINARY TEST IIA, 1981

Disease Data

Strain	FE_2	PS	PSB	SMV	Germ*
	Lafayette				
	a score	a %	n %	a score	%
Century	4	61	5	5E	91
Corsoy 79 (II)	5	74	10	5E	87
Lakota (I)	5	51	10	5E	85
Pella (III)	2	58	7	5E	92
A80-147002	3	43	23	5E	73
A80-244003	5	45	7	5E	91
A80-244014	2	24	19	5E	81
A80-244031	4	72	31	5E	64
A80-244035	5	57	8	5E	93
A80-244036	2	34	7	5E	92
A80-245022	3	44	5	5E	95
A80-245023	3	64	9	5E	90
A80-245032	4	25	6	5E	92
A80-247003	4	29	9	5E	90
A80-247007	4	24	12	5E	85
A80-247008	5	50	25	5E	74
A80-249016	3	95	8	5E	88
A80-249032	3	96	11	5E	83
A80-250034	2	47	6	5E	89
C1590	1	96	11	5E	82
C1591	5	67	3	5E	91
C1592	4	77	2	5E	96
HW8008	4	85	14	4E	82
HW8028	5	63	25	5E	76
HW8039	2	22	38	5E	58

*Petri dish germination on potato dextrose agar

PRELIMINARY TEST IIA, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	10 bu/a	10 no.	9 date	10 score	10 in.	9 score	9 g/100	3 %	3 %
Century	48.6	19	+ 3	1.8	36	2.1	18.2	44.2	18.1
Corsoy 79 (II)	49.1	17	9-17*	2.3	38	1.6	16.0	43.3	18.4
Lakota (I)	41.4	25	- 7	3.0	38	2.2	16.2	45.2	17.9
Pella (III)	51.9	7	+ 4	1.8	38	1.6	20.6	40.6	18.8
A80-147002	52.2	4	+ 1	2.2	33	2.6	16.8	41.8	18.4
A80-244003	52.2	4	+ 1	2.2	39	1.7	17.3	41.2	18.6
A80-244014	49.2	15	+ 2	2.5	33	1.5	15.9	39.5	19.1
A80-244031	48.7	18	+ 2	2.3	36	2.4	16.5	40.5	18.4
A80-244035	50.1	12	0	1.8	34	1.9	18.4	42.5	18.9
A80-244036	51.6	8	+ 1	2.7	33	1.7	20.4	39.8	19.3
A80-245022	52.8	1	+ 4	2.3	40	1.9	14.3	41.5	18.3
A80-245023	50.1	12	+ 5	2.7	39	1.7	15.6	42.0	17.8
A80-245032	47.6	21	+ 6	2.4	39	1.9	14.6	41.9	18.9
A80-247003	47.9	20	+ 3	2.3	33	1.8	15.8	40.2	18.6
A80-247007	52.3	3	+ 4	2.9	39	1.7	15.8	39.6	18.9
A80-247008	52.4	2	+ 6	2.7	42	1.9	14.6	39.8	18.6
A80-249016	51.0	10	+ 3	2.2	37	2.0	18.8	42.4	18.1
A80-249032	52.1	6	+ 7	2.5	38	2.2	15.1	40.3	18.4
A80-250034	50.0	14	+ 1	2.3	38	1.9	21.0	41.9	19.0
C1590	44.2	24	+ 4	1.9	43	2.5	18.5	42.2	18.2
C1591	44.4	23	+ 2	2.1	42	1.7	15.9	40.9	18.3
C1592	44.8	22	+ 1	2.5	42	1.9	18.2	43.7	17.6
HW8008	49.2	15	- 1	1.6	34	1.9	18.5	42.3	18.8
HW8028	50.3	11	+ 4	2.4	40	2.0	20.2	44.5	17.9
HW8039	51.2	9	+ 3	1.9	35	1.9	18.6	41.4	18.8

*123 days after planting

Several Iowa strains exceeded the yield of both the Group II and Group III check varieties, however, the three highest yielding strains are Group III maturity. Two strains, A80-147002 and A80-244003 exceeded the yield of the checks, had good lodging resistance, and carried resistance to PR_1. Both strains were very susceptible to iron chlorosis.

PRELIMINARY TEST IIA, 1981

Strain	Mean 10 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		YIELD (bu/a)				
Century	48.6	33.5	32.4	42.1	66.4	57.8
Corsoy 79 (II)	49.1	38.6	28.8	48.6	65.5	53.0
Lakota (I)	41.4	30.4	28.9	33.0	59.0	47.1
Pella (III)	51.9	31.4	39.0	49.5	73.3	55.9
A80-147002	52.2	35.7	32.3	53.7	68.7	59.6
A80-244003	52.2	34.9	36.0	50.2	78.1	61.4
A80-244014	49.2	29.6	34.7	31.9	76.3	61.9
A80-244031	48.7	34.8	31.9	41.3	73.3	55.3
A80-244035	50.1	36.1	31.6	48.4	72.4	53.4
A80-244036	51.6	38.3	33.1	46.9	69.6	60.6
A80-245022	52.8	36.9	35.6	45.2	71.0	62.3
A80-245023	50.1	36.2	31.9	55.4	69.1	59.4
A80-245032	47.6	28.7	33.3	40.3	70.1	62.6
A80-247003	47.9	34.5	27.6	41.9	68.7	56.9
A80-247007	52.3	32.5	32.6	62.6	73.1	65.7
A80-247008	52.4	33.6	35.1	53.4	73.3	63.4
A80-249016	51.0	37.9	34.5	61.0	68.4	55.1
A80-249032	52.1	37.8	38.2	59.4	72.2	63.2
A80-250034	50.0	25.5	32.2	47.1	78.1	64.1
C1590	44.2	32.2	10.8	44.2	68.0	55.7
C1591	44.4	30.8	16.6	43.7	65.3	54.0
C1592	44.8	32.3	23.8	46.4	64.5	57.6
HW8008	49.2	34.5	33.0	38.5	69.6	57.3
HW8028	50.3	36.3	40.2	45.8	67.7	61.2
HW8039	51.2	35.7	32.7	49.7	75.2	58.4
C.V. (%)		10.5	13.2	13.1	4.5	5.7
L.S.D. (5%)		7.1	8.4	10.8	6.4	6.8
Row sp. (in.)		30	30	24	30	30
Rows/plot		3	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIA, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		YIELD (bu/a)		
44.6	55.7	54.4	59.3	40.1
46.9	53.4	60.3	51.6	44.6
31.8	44.9	52.1	45.0	41.8
54.9	56.6	58.5	54.3	45.3
53.6	52.9	61.6	57.6	46.0
43.3	60.1	61.7	52.6	43.8
50.5	51.0	61.9	51.6	43.2
46.7	55.2	54.1	53.2	41.3
50.0	51.4	56.2	52.4	48.4
41.0	58.0	63.4	57.3	48.0
48.8	59.4	56.2	61.4	51.3
47.7	49.9	56.3	49.6	45.6
43.0	49.1	54.0	54.7	40.6
49.8	49.8	52.4	55.3	41.7
40.6	53.7	59.0	58.0	44.7
44.7	58.3	58.3	57.1	46.8
42.0	52.7	63.1	55.6	40.1
46.6	53.9	58.6	49.9	41.5
41.3	57.6	59.5	55.4	39.6
44.4	51.2	52.4	48.8	34.6
46.8	49.9	54.8	47.4	34.5
38.8	48.2	53.2	45.1	38.4
55.7	56.8	56.1	54.2	36.7
43.2	55.2	54.1	51.1	48.1
47.8	56.5	58.9	55.6	41.2
10.9	7.0	6.8	5.4	8.2
10.3	7.2	7.6	5.9	7.0
30	27	27	30	30
4	4	4	4	4
2	2	2	2	2

PRELIMINARY TEST IIA, 1981

Strain	Mean 10 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		YIELD RANK				
Century	19	16	14	19	21	14
Corsoy 79 (II)	17	1	21	10	22	24
Lakota (I)	25	22	20	24	25	25
Pella (III)	7	20	2	9	5	18
A80-147002	4	10	15	5	16	11
A80-244003	4	11	4	7	1	8
A80-244014	15	23	7	25	4	7
A80-244031	18	12	17	21	5	18
A80-244035	12	8	19	11	9	23
A80-244036	8	2	10	13	13	10
A80-245022	1	5	5	16	11	6
A80-245023	12	7	17	4	15	12
A80-245032	21	24	9	22	12	5
A80-247003	20	13	22	20	16	17
A80-247007	3	17	13	1	8	1
A80-247008	2	15	6	6	5	3
A80-249016	10	3	8	2	18	21
A80-249032	6	4	3	3	10	4
A80-250034	14	25	16	12	2	2
C1590	24	19	25	17	19	20
C1591	23	21	24	18	23	22
C1592	22	18	23	14	24	15
HW8008	15	14	11	23	13	16
HW8028	11	6	1	15	20	8
HW8039	9	9	12	8	3	13

PRELIMINARY TEST IIA, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		YIELD RANK		
15	9	18	2	20
10	14	6	18	10
25	25	25	25	13
2	7	11	12	8
3	15	5	4	6
17	1	4	15	11
4	19	3	17	12
12	10	19	14	16
5	17	13	16	2
22	4	1	5	4
7	2	15	1	1
9	20	13	21	7
19	23	21	11	18
6	22	23	10	14
23	13	8	3	9
14	3	12	6	5
20	16	2	8	19
13	12	10	20	15
21	5	7	9	21
16	18	23	22	24
11	20	17	23	25
24	24	22	24	22
1	6	16	13	23
18	10	19	19	3
8	8	9	7	17

PRELIMINARY TEST IIA, 1981

Strain	Mean 9 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		MATURITY (date)				
Century	+ 3	+ 5	+ 4	- 1	+ 4	+ 3
Corsoy 79 (II)	9-17	9-10	9-13	9-16	9-24	9-13
Lakota (I)	- 7	- 8	- 4	- 7	- 9	- 8
Pella (III)	+ 4	+ 4	+ 7	+ 4	+ 6	+ 9
A80-147002	+ 1	+ 4	+ 3	+ 1	+ 2	- 1
A80-244003	+ 1	0	+ 3	0	+ 2	+ 1
A80-244014	+ 2	+ 2	+ 4	- 4	+ 3	+ 2
A80-244031	+ 2	+ 4	+ 3	0	+ 3	0
A80-244035	0	+ 2	- 2	- 2	+ 2	0
A80-244036	+ 1	0	+ 3	0	+ 3	+ 1
A80-245022	+ 4	+ 2	+ 4	0	+ 4	+ 3
A80-245023	+ 5	+ 3	+ 2	+ 4	+ 4	+ 5
A80-245032	+ 6	+ 2	+ 8	0	+ 6	+ 7
A80-247003	+ 3	+ 3	+ 2	0	+ 5	+ 4
A80-247007	+ 4	+ 4	+ 4	+ 4	+ 4	+ 5
A80-247008	+ 6	+ 4	+ 6	+ 7	+ 7	+ 4
A80-249016	+ 3	+ 4	+ 3	+ 4	+ 4	+ 1
A80-249032	+ 7	+ 7	+ 5	+ 8	+ 7	+10
A80-250034	+ 1	0	+ 2	0	+ 3	+ 1
C1590	+ 4	+ 4	0	+ 4	+ 5	+ 4
C1591	+ 2	+ 1	+ 1	- 2	+ 2	+ 3
C1592	+ 1	+ 3	0	- 3	+ 2	0
HW8008	- 1	+ 1	- 2	- 4	+ 1	0
HW8028	+ 4	+ 2	+ 5	+ 4	+ 5	+ 1
HW8039	+ 3	+ 4	+ 4	+ 4	+ 4	+ 5
Dated planted	5-18	5-27	5-21	5-23	5-18	5-8
Days to mature	123	106	115	116	129	128

PRELIMINARY TEST IIA, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		MATURITY (date)		
+ 3	+ 4		+ 1	+ 1
9-27	9-17		9-16	9-16
- 8	- 6		- 5	- 7
+ 6	+ 6		+ 7	+ 9
- 1	+ 2		+ 1	0
+ 3	+ 2		0	+ 1
+ 2	+ 3		+ 3	+ 2
- 2	+ 6		+ 4	- 1
- 2	+ 1		+ 1	0
- 4	+ 3		+ 1	+ 1
+ 3	+ 4		+ 4	+ 8
+ 6	+ 6		+ 4	+ 9
+ 9	+ 7		+ 5	+ 8
+ 5	+ 4		+ 3	+ 3
+ 4	+ 5		+ 3	+ 4
+ 5	+ 8		+ 5	+ 6
+ 3	+ 2		+ 2	0
+ 4	+ 8		+ 7	+11
- 3	+ 2		+ 1	0
+ 5	+ 6		+ 4	+ 5
+ 3	+ 2		+ 1	+ 4
- 5	0		0	- 5
+ 2	- 4		0	+ 8
+ 4	+ 6		+ 2	+ 4
- 2	+ 6		+ 3	0
5-7	5-6	5-8	5-22	5-21
143	134	---	117	118

PRELIMINARY TEST IIA, 1981

Strain	Mean 10 Tests	N.J. Adephia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		LODGING (score)				
Century	1.8	1.0	1.6	1.5	2.0	2.0
Corsoy 79 (II)	2.3	2.0	1.4	2.5	2.8	3.0
Lakota (I)	3.0	2.0	1.5	3.5	3.3	4.0
Pella (III)	1.8	1.0	1.6	1.8	1.8	2.0
A80-147002	2.2	1.0	1.5	2.3	2.8	3.5
A80-244003	2.2	1.0	1.7	2.0	2.8	3.0
A80-244014	2.5	1.5	1.4	3.0	2.5	4.0
A80-244031	2.3	1.0	1.6	2.8	2.8	4.0
A80-244035	1.8	1.0	1.5	1.8	2.3	1.8
A80-244036	2.7	2.0	1.6	2.8	3.8	4.0
A80-245022	2.3	1.0	1.5	2.3	2.8	3.5
A80-245023	2.7	1.0	1.5	2.5	3.3	3.5
A80-245032	2.4	1.0	1.7	2.0	2.5	3.0
A80-247003	2.3	1.0	1.5	2.8	2.5	3.5
A80-247007	2.9	1.5	1.6	3.5	3.8	4.0
A80-247008	2.7	1.5	1.6	2.8	2.8	4.0
A80-249016	2.2	1.0	1.5	2.5	2.8	2.5
A80-249032	2.5	1.5	1.7	2.5	3.0	3.0
A80-250034	2.3	1.5	1.6	2.5	2.3	3.0
C1590	1.9	1.0	1.4	1.8	2.0	3.0
C1591	2.1	1.0	1.3	2.0	2.5	2.5
C1592	2.5	2.5	1.3	2.0	3.9	3.0
HW8008	1.6	1.0	1.4	1.5	1.8	1.3
HW8028	2.4	2.0	1.7	2.0	2.8	3.0
HW8039	1.9	1.0	1.4	1.8	2.3	2.0

PRELIMINARY TEST IIA, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		LODGING (score)		
3.0	1.9	2.0	1.3	2.0
3.5	1.9	4.0	1.8	3.0
4.0	1.9	3.9	1.8	3.0
3.0	1.8	2.0	1.3	2.0
3.0	1.6	2.6	1.0	2.5
3.0	1.9	3.0	1.3	2.5
3.5	2.0	3.1	1.3	3.0
2.5	1.9	2.8	1.5	2.5
2.5	1.7	1.9	1.5	2.0
3.0	1.8	3.1	1.5	3.0
3.0	2.0	2.5	1.3	3.0
4.0	2.2	3.2	1.8	3.5
4.0	2.5	2.4	2.0	2.5
3.0	2.0	2.8	1.3	3.0
3.5	2.4	3.5	2.0	3.0
3.0	2.3	3.7	2.3	3.0
3.0	1.8	2.9	1.0	2.5
3.0	2.5	3.0	1.8	3.0
3.0	1.8	3.1	1.3	2.5
3.0	1.9	2.3	1.3	1.5
3.0	1.9	2.8	1.5	3.0
4.0	1.7	3.2	1.5	2.0
2.5	1.8	1.9	1.3	1.5
3.5	2.2	2.4	1.8	2.5
2.5	1.9	1.9	1.3	2.5

PRELIMINARY TESTS IIA, 1981

Strain	Mean 10 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		PLANT HEIGHT (inches)				
Century	36	27	22	36	34	40
Corsoy 79 (II)	38	30	26	37	36	44
Lakota (I)	38	34	26	40	35	40
Pella (III)	38	29	26	33	38	46
A80-147002	33	28	24	36	33	39
A80-244003	39	30	26	38	39	43
A80-244014	33	26	22	34	32	37
A80-244031	36	28	28	36	36	42
A80-244035	34	28	24	33	35	39
A80-244036	33	30	22	34	33	35
A80-245022	40	34	27	42	38	45
A80-245023	39	34	26	40	42	43
A80-245032	39	28	27	40	38	45
A80-247003	33	29	20	34	33	37
A80-247007	39	30	25	40	38	43
A80-247008	42	38	28	42	44	47
A80-249016	37	30	24	38	35	44
A80-249032	38	30	29	41	40	44
A80-250034	38	38	28	40	38	44
C1590	43	36	23	44	44	49
C1591	42	36	26	42	42	45
C1592	42	40	27	42	41	50
HW8008	34	28	23	33	32	39
HW8028	40	36	32	37	42	44
HW8039	35	30	24	36	34	41

PRELIMINARY TEST IIA, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		PLANT HEIGHT (inches)		
40	34	48	33	44
43	33	49	35	42
40	34	48	37	41
42	36	50	36	42
33	26	44	31	38
40	38	52	37	45
34	30	42	31	40
37	33	44	32	45
34	34	46	32	39
37	30	44	32	36
42	36	50	38	44
48	36	46	34	42
41	39	48	37	43
37	32	44	33	34
41	38	48	35	47
39	38	56	40	46
39	35	48	34	39
40	34	48	35	41
38	36	48	36	34
46	44	54	40	47
44	44	53	41	48
44	38	51	43	45
35	32	45	32	37
41	40	48	35	42
36	34	44	35	37

PRELIMINARY TEST IIA, 1981

Strain	Mean 9 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		SEED QUALITY (score)				
Century	2.1	2.5	1.4	1.0	1.2	2.0
Corsoy 79 (II)	1.6	1.5	1.3	1.0	2.3	2.0
Lakota (I)	2.2	1.5	2.0	1.5	1.4	2.0
Pella (III)	1.6	2.0	1.3	1.0	1.5	1.8
A80-147002	2.6	2.0	1.6	1.5	2.3	3.0
A80-244003	1.7	1.0	1.4	1.0	1.4	1.8
A80-244014	1.5	1.0	1.4	1.0	1.7	1.8
A80-244031	2.4	1.5	1.4	1.5	1.5	2.5
A80-244035	1.9	1.5	1.6	1.0	1.5	2.0
A80-244036	1.7	1.0	1.4	1.0	1.4	2.3
A80-244022	1.9	1.5	1.4	1.0	1.2	1.8
A80-245023	1.7	1.0	1.5	1.0	1.2	1.5
A80-245032	1.9	1.5	1.4	1.0	1.2	1.8
A80-247003	1.8	1.5	1.6	1.0	1.2	2.0
A80-247007	1.7	1.5	1.3	1.0	1.4	1.8
A80-247008	1.9	1.0	1.5	1.0	1.7	1.2
A80-249016	2.0	2.0	1.6	1.0	1.8	2.0
A80-249032	2.2	2.0	1.3	1.0	1.4	2.0
A80-250034	1.9	2.0	1.9	1.5	1.8	2.0
C1590	2.5	3.0	2.2	1.5	2.5	2.8
C1591	1.7	1.5	2.4	1.5	1.2	1.8
C1592	1.9	1.5	1.5	1.0	1.5	1.4
HW8008	1.9	2.5	2.5	1.0	1.4	1.8
HW8028	2.0	1.5	2.0	1.0	2.0	2.3
HW8039	1.9	1.5	1.8	1.0	1.4	2.0

PRELIMINARY TEST IIA, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		SEED QUALITY (score)		
4.0	1.4		2.0	3.0
2.0	1.5		2.5	2.0
4.0	1.9		2.3	3.0
2.0	1.5		2.5	1.0
5.0	2.0		2.3	4.0
2.0	2.0		1.8	3.0
2.0	1.4		2.0	3.0
5.0	1.5		3.5	3.0
4.0	1.4		2.3	2.0
2.0	1.8		2.5	2.0
3.0	1.6		1.8	4.0
2.0	1.4		2.0	4.0
3.0	1.3		2.0	4.0
3.5	1.5		2.3	2.0
3.0	1.5		2.0	2.0
3.0	1.4		2.3	4.0
2.0	1.7		2.8	3.0
4.0	1.7		2.3	4.0
1.0	1.8		2.5	3.0
2.0	3.0		3.5	2.0
1.0	1.6		2.3	2.0
3.0	1.4		2.5	3.0
2.0	1.7		2.0	2.0
3.0	1.9		2.5	2.0
3.0	1.8		2.0	3.0

PRELIMINARY TEST IIA, 1981

Strain	Mean 9 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		SEED SIZE (g/100)				
Century	18.2	18.0	16.4	15.8	20.2	19.7
Corsoy 79 (II)	16.0	15.0	14.7	15.5	19.1	16.2
Lakota (I)	16.2	15.0	14.0	14.9	19.2	17.3
Pella (III)	20.6	18.0	18.2	20.2	23.4	22.9
A80-147002	16.8	16.0	13.0	17.2	19.7	17.7
A80-244003	17.3	16.0	13.9	17.6	21.6	19.1
A80-244014	15.9	14.0	14.5	13.4	19.4	17.1
A80-244031	16.5	16.0	13.1	16.6	20.5	18.6
A80-244035	18.4	18.0	15.0	17.3	21.2	19.6
A80-244036	20.4	17.0	17.8	20.2	26.0	22.8
A80-245022	14.3	12.0	12.6	13.5	16.5	15.5
A80-245023	15.6	14.0	13.2	15.8	17.6	16.8
A80-245032	14.6	12.0	13.7	13.8	17.6	16.1
A80-247003	15.8	15.0	12.9	15.7	17.6	17.4
A80-247007	15.8	13.0	14.1	15.6	19.8	16.9
A80-247008	14.6	13.0	13.1	13.8	18.2	15.3
A80-249016	18.8	18.0	15.0	19.0	22.6	20.8
A80-249032	15.1	15.0	13.1	15.1	18.0	15.6
A80-250034	21.0	18.0	18.3	21.7	25.8	23.8
C1590	18.5	17.0	15.3	18.1	21.8	20.5
C1591	15.9	15.0	13.7	16.3	18.2	17.8
C1592	18.2	17.0	15.9	18.3	22.1	18.9
HW8008	18.5	17.0	15.5	17.2	22.1	19.2
HW8028	20.2	19.0	19.0	19.6	23.5	21.5
HW8039	18.6	16.0	16.3	18.9	22.0	19.7

PRELIMINARY TEST IIA, 1981

Wia.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		SEED SIZE (g/100)		
17.8	21.1		19.1	15.4
16.3	17.4		16.9	12.7
14.1	19.1		19.3	13.3
22.8	22.0		20.4	17.8
16.6	20.0		17.1	14.0
17.5	19.0		17.0	14.3
16.2	17.6		17.3	13.3
17.0	19.6		17.5	13.1
18.6	21.2		18.7	15.9
19.0	22.7		20.4	17.6
14.2	16.2		15.3	12.6
16.5	16.3		17.3	12.8
15.4	15.3		15.5	12.3
16.8	17.3		16.2	13.6
15.9	16.6		16.7	13.2
14.8	16.0		15.1	12.3
17.0	20.4		20.3	16.0
14.9	15.2		16.5	12.1
18.3	24.6		21.9	16.9
18.7	20.8		18.5	15.8
15.1	17.8		16.4	12.7
16.4	20.4		18.9	16.1
21.0	21.1		18.6	14.6
19.0	22.4		20.6	17.1
19.2	20.6		18.8	15.5

PRELIMINARY TEST IIA, 1981

Strain	Mean 3 Tests	Wis. Arlington	Iowa Ames	Neb. Mead
		PROTEIN (%)		
Century	44.2	44.8	44.4	43.5
Corsoy 79 (II)	43.3	45.1	42.6	42.1
Lakota (I)	45.2	45.2	46.0	44.5
Pella (III)	40.6	40.0	40.7	41.2
A80-147002	41.8	41.7	43.9	39.8
A80-244003	41.2	42.4	42.8	38.4
A80-244014	39.5	39.8	39.7	38.9
A80-244031	40.5	41.2	40.6	39.8
A80-244035	42.5	41.6	44.5	41.5
A80-244036	39.8	40.9	40.2	38.2
A80-245022	41.5	43.2	42.0	39.2
A80-245023	42.0	42.0	42.9	41.0
A80-245032	41.9	44.6	41.9	39.3
A80-247003	40.2	40.2	41.3	39.2
A80-247007	39.6	40.2	40.0	38.5
A80-247008	39.8	42.2	39.7	37.4
A80-249016	42.4	43.9	42.0	41.4
A80-249032	40.3	41.8	39.6	39.5
A80-250034	41.9	41.3	44.2	40.1
C1590	42.2	41.1	42.9	42.7
C1591	40.9	40.5	40.6	41.6
C1592	43.7	43.0	45.5	42.7
HW8008	42.3	42.6	43.3	41.0
HW8028	44.5	44.2	45.3	44.1
HW8038	41.4	41.6	42.2	40.3

PRELIMINARY TEST IIA, 1981

Mean 3 Tests	Wis. Arlington	Iowa Ames	Neb. Mead
		OIL (%)	
18.1	17.0	18.3	19.1
18.4	17.4	18.8	19.1
17.9	16.8	18.6	18.4
18.8	17.9	19.2	19.3
18.4	17.0	19.0	19.3
18.6	17.8	18.8	19.3
19.1	17.5	19.5	20.2
18.4	17.6	18.8	18.8
18.9	17.2	19.5	19.9
19.3	18.6	19.8	19.6
18.3	17.0	18.7	19.1
17.8	16.9	18.0	18.5
18.9	16.9	19.4	20.4
18.6	17.8	19.0	19.0
18.9	16.9	19.8	19.9
18.6	17.5	18.8	19.6
18.1	17.0	18.6	18.7
18.4	18.1	18.5	18.7
19.0	17.8	19.5	19.8
18.2	17.2	18.4	19.0
18.3	17.2	19.0	18.8
17.6	16.9	17.6	18.4
18.8	17.4	19.4	19.6
17.9	16.6	18.1	18.9
18.8	17.3	19.4	19.6

PRELIMINARY TEST IIB, 1981

Strain	Parentage	Generation Composited
1. Century	Calland x Bonus	F_6
2. Corsoy 79 (II)	Corsoy[6] x Lee 68	F_3
3. Lakota (I)	AP6M(S1)C1	F_4
4. Pella (III)	L66L-137 x Calland	F_4
5. Gnome	Williams x Ransom	F_5
6. HC78-523	Harcor x Elf	F_5
7. HC78-660	Essex x L74D-619	F_5
8. HC78-679	L70T543G x L74D-619	F_5
9. HC78-689	A72-512 x L74D-619	F_5
10. HC78-826	Hodgson x L74D-619	F_5
11. HC78-840	A72-512 x L74D-619	F_5
12. HC78-1565	L72U2567 x Evans	F_5
13. HC78-1605	L72U2567 x Hodgson	F_5
14. HC78-2021	L72D-549 x Essex	F_5
15. HC78-2026	L72D-549 x Essex	F_5
16. L78-8202	L73-6626 x Essex	F_4
17. L78-9204	L73-6626 x Elf	F_4
18. L78-1491	Williams[2] x PI88.788	F_4
19. L78-1738	L75-8016 x (Williams x PI88.788)	F_4
20. L78-896	L70T-543G x C1528	F_5
21. LN78-1136	L70T-543G x K1028	F_5
22. LN78-2678	Evans x K1028	F_5
23. U75616	(Beeson x L15) x Amsoy 71	F_5
24. U75633	(Beeson x L15) x Amsoy 71	F_5
25. U75680	(Beeson x L15) x Amsoy 71	F_5
26. U75681	(Beeson x L15) x Amsoy 71	F_5

PRELIMINARY TEST IIB, 1981

Descriptive and Other Data

Strain	Descriptive Code			Chlorosis Score Ames	Shattering Manhattan 2 Weeks
Century	PTBr	DYBl	I	2.8	2
Corsoy 79 (II)	PGBr	DYY	I	3.7	1
Lakota (I)	PTT	DYBl	I	2.7	1
Pella (III)	PTT	DYBl	I	3.5	1
Gnome	PTT	SYBl	D	3.2	1
HC78-523	PTT	SYBl	D	3.5	1
HC78-660	PTT	DYBl	D	2.7	1
HC78-679	PTT	SYBl	D	2.8	1
HC78-689	PTT	SYBl	D	3.3	1
HC78-826	PTT	SYBl	D	3.0	1
HC78-840	PTT	SYBl	D	3.2	1
HC78-1565	PTT+Br	SYGr	D	3.2	1
HC78-1605	PTT	SYBl	D	3.3	1
HC78-2021	PTBr	DYBr	D	3.2	3
HC78-2026	PTBr	DYBr	D	3.0	1
L78-8202	PTT	DYBl	D	3.0	1
L78-9204	PTT	SYBl	D	3.2	1
L78-1491	WTT	SYBl	I	3.5	1
L78-1738	WGT	SYBf	I	3.8	2
LN78-896	WGBr	DYBf	SD	3.2	1
LN78-1136	WGT	SYBf	I	3.7	1
LN78-2678	WTBr	DYG	I	2.5	1
U75616	PGT	DYY	I	2.8	1
U75633	WTT	SYBr	I	3.3	2
U75680	PGT+Br	SYBf	I	3.8	1
U75681	PTT	SYBr	I	3.2	1

PRELIMINARY TEST IIB, 1981

Disease Data

Strain	BSR			PR1		PR Tol.	FE2	PS	PSB	SMV	Germ*
	Plant	Stem	Lafayette Stem	Ames	Lafayette	Vickery	Lafayette				
	n %	n %	n %	a Reaction	a Reaction	n score	a score	a %	n %	a score	%
Century	100	99	100	R	R	3.5	4	61	5	5E	91
Corsoy 79 (II)	100	99	80	R	R	3.7	5	74	10	5E	87
Lakota (I)	100	89	60	R	R	3.0	5	51	10	5E	85
Pella (III)	100	78	0	R	R	3.1	2	58	7	5E	92
Gnome	100	95	60	S	S	3.5	1	11	0	1	99
HC78-523	100	89	100	R	R	3.7	2	23	2	4E	96
HC78-660	100	51	100	S	S	3.3	1	20	1	1	94
HC78-679	100	91	60	S	S	3.5	4	32	1	5E	98
HC78-689	100	100	80	S	S	3.5	4	15	3	5E	91
HC78-826	100	98	80	S	S	4.0	1	20	1	3E	97
HC78-840	100	98	80	S	S	4.0	5	26	7	4E	91
HC78-1565	100	100	60	R	R	5.0	1	23	4	3M	95
HC78-1605	90	89	60	S	S	5.0	1	43	3	1	94
HC78-2021	100	87	60	S	S	4.5	1	9	2	1	95
HC78-2026	100	100	80	S	S	4.5	2	5	10	1	89
L78-8202	90	80	80	S	S	3.5	1	16	0	3M	97
L78-9204	100	97	60	S	S	3.0	4	18	6	4M	94
L78-1491	100	93	40	S	S	3.7	2	90	7	5E	93
L78-1738	100	100	0	S	S	3.0	5	61	3	2M	95
LN78-896	100	96	0	S	S	4.5	4	51	15	5E	79
LN78-1136	100	87	0	R	R	4.5	5	88	23	5E	75
LN78-2678	100	100	80	R	R	5.0	5	97	10	1	80
U75616	100	81	20	R	R	4.5	4	90	6	5E	81
U75633	100	96	20	S	S	3.3	5	83	9	4E	89
U75680	100	81	60	R	R	3.0	4	95	6	3E	94
U75681	100	92	40	H	H	3.0	5	95	3	4E	93

*Petri dish germination on potato dextrose agar

PRELIMINARY TEST IIB, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	10	10	9	10	10	9	9	4	4
	bu/a	no.	date	score	in.	score	g/100	%	%
Century	48.4	4	+ 2	1.8	36	1.6	18.4	42.0	18.8
Corsoy 79 (II)	48.1	5	9-17*	2.7	39	1.8	15.7	41.0	19.1
Lakota (I)	44.3	15	- 5	3.0	38	1.8	17.1	43.1	18.7
Pella (III)	51.0	1	+ 7	1.9	38	1.6	19.9	39.3	19.4
Gnome	47.8	8	+ 5	1.6	22	1.7	16.6	41.9	19.2
HC78-523	44.2	16	+ 2	1.6	21	1.7	14.4	41.6	19.2
HC78-660	43.6	17	+ 4	1.6	21	1.6	17.8	44.0	19.2
HC78-679	47.9	7	+ 8	1.4	24	1.9	16.4	41.4	19.5
HC78-689	37.9	26	+ 3	1.5	23	1.7	17.3	41.2	19.3
HC78-826	47.1	9	+ 4	1.6	25	1.7	16.6	42.3	18.7
HC78-840	42.1	21	+ 3	1.6	23	1.7	16.5	40.7	19.4
HC78-1565	43.6	17	+ 4	1.7	26	1.8	15.4	42.6	18.6
HC78-1605	41.3	23	+ 3	1.5	20	1.8	15.7	43.0	18.3
HC78-2021	40.2	24	+ 4	1.5	21	1.8	14.7	43.6	18.5
HC78-2026	39.2	25	+ 4	1.4	22	1.7	14.9	43.4	18.9
L78-8202	42.3	20	+ 8	1.8	31	1.8	15.7	42.6	19.4
L78-9204	46.2	11	+ 7	1.9	31	1.7	17.1	41.3	19.3
L78-1491	42.7	19	+ 5	2.1	37	1.6	14.6	42.1	19.4
L78-1738	44.9	14	+ 4	2.4	38	1.6	14.2	43.9	18.5
LN78-896	45.8	13	- 4	1.9	30	1.9	16.8	40.3	19.6
LN78-1136	49.6	2	+ 1	1.4	32	2.0	17.5	39.7	20.1
LN78-2678	41.6	22	- 7	1.3	28	2.3	17.3	42.6	19.4
U75616	46.1	12	- 2	1.7	35	2.2	18.3	37.7	20.4
U75633	48.8	3	+ 5	2.5	42	1.5	18.8	40.3	20.2
U75680	47.1	9	+ 2	1.7	36	2.4	18.6	39.2	19.8
U75681	48.0	6	+ 4	2.2	34	1.9	20.5	39.9	20.0

*123 days after planting

One strain in this test, LN78-1136, exceeded the yield of the Group II varieties and was within the Group II maturity range. This strain had excellent lodging resistance and was resistant to PR_1. Two strains, L78-1491 and L78-1738 are resistant to SCN races 3 and 4.

PRELIMINARY TEST IIB, 1981

Strain	Mean 10 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		YIELD (bu/a)				
Century	48.4	40.2	36.2	42.1	68.2	56.2
Corsoy 79 (II)	48.1	40.2	32.1	48.6	65.7	50.2
Lakota	44.3	34.4	34.1	33.0	57.9	51.6
Pella (III)	51.0	35.2	39.6	49.5	72.4	58.7
Gnome	47.8	39.8	33.9	32.4	67.0	61.7
HC78-523	44.2	44.2	34.6	19.8	67.6	56.0
HC78-660	43.6	42.9	30.6	23.9	66.9	55.4
HC78-679	47.9	37.8	34.2	36.5	70.2	63.8
HC78-689	37.9	36.5	36.7	11.9	61.6	44.8
HC78-826	47.1	40.3	35.0	39.7	66.8	59.6
HC78-840	42.1	35.9	35.9	15.0	67.8	55.6
HC78-1565	43.6	38.7	28.2	28.8	63.8	56.4
HC78-1605	41.3	35.3	21.0	16.5	64.9	60.5
HC78-2021	40.2	34.0	31.0	14.9	68.4	52.2
HC78-2026	39.2	36.4	30.7	15.0	64.8	50.0
L78-8202	42.3	31.8	37.6	39.4	54.8	47.7
L78-9204	46.2	29.8	37.6	52.1	64.2	54.3
						54.3
L78-1491	42.7	39.0	30.4	43.7	58.4	47.4
L78-1738	44.9	40.0	29.8	46.0	61.0	52.6
LN78-896	45.8	45.8	27.2	43.8	68.1	56.5
LN78-1136	49.6	45.1	31.7	49.2	65.7	55.7
LN78-2678	41.6	36.3	17.0	37.0	62.8	55.2
U75616	46.1	40.9	28.3	40.1	64.8	51.9
U75633	48.8	38.7	29.7	46.1	74.3	61.5
U75680	47.1	34.9	30.5	45.8	66.2	58.1
U75681	48.0	40.0	30.5	41.6	68.7	58.8
C.V. (%)		8.2	9.5	13.1	4.3	7.1
L.S.D. (5%)		6.3	6.0	10.8	5.8	8.0
Row sp. (in.)		30	30	24	30	30
Rows/plot		3	4	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST IIB, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		YIELD (bu/a)		
42.4	55.7	54.4	48.5	40.4
40.3	53.4	60.3	51.1	38.6
50.7	44.9	52.1	48.4	35.9
42.6	56.6	58.5	55.8	41.1
42.7	51.2	56.7	50.1	42.4
32.9	52.1	57.6	35.1	41.6
37.5	43.1	59.1	42.2	34.6
38.9	49.4	55.7	49.8	43.0
38.7	37.3	51.1	33.3	27.4
45.0	44.3	53.9	46.4	39.9
47.6	42.9	55.5	34.8	29.9
38.5	42.9	52.4	40.5	45.7
45.0	49.9	59.7	35.6	24.3
39.3	48.8	60.2	19.4	33.4
38.1	46.2	60.5	22.3	28.2
34.7	48.0	50.2	45.9	32.9
38.5	47.4	49.6	49.5	38.5
41.5	46.2	47.8	39.7	32.5
36.4	47.4	56.0	43.1	37.0
37.7	49.9	50.6	49.6	28.5
43.6	54.0	63.9	50.0	37.3
35.4	44.7	52.4	45.5	29.9
43.3	53.0	55.9	48.4	33.9
41.6	57.6	50.2	50.9	37.3
40.0	52.7	53.0	44.9	45.0
41.6	52.4	52.7	53.6	40.2
12.6	7.0	6.8	10.9	10.4
10.2	7.2	7.6	9.8	7.5
30	27	27	30	30
4	4	4	4	4
2	2	2	2	2

PRELIMINARY TEST IIB, 1981

Strain	Mean 10 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		YIELD RANK				
Century	4	7	5	10	6	11
Corsoy 79 (II)	5	8	12	4	14	22
Lakota (I)	15	23	10	17	25	21
Pella (III)	1	21	1	2	2	7
Gnome	8	11	11	18	10	2
HC78-523	16	3	8	21	8	12
HC78-660	17	4	16	20	11	15
HC78-679	7	15	9	16	3	1
HC78-689	26	16	4	26	22	26
HC78-826	9	6	7	13	12	5
HC78-840	21	19	6	23	9	13
HC78-1565	17	13	23	19	20	10
HC78-1605	23	20	25	22	16	4
HC78-2021	24	24	14	25	5	19
HC78-2026	25	17	15	23	17	23
L78-8202	20	25	2	14	26	24
L78-9204	11	26	2	1	19	17
L78-1491	19	12	19	9	24	25
L78-1738	14	10	20	6	23	18
LN78-896	13	1	24	8	7	9
LN78-1136	2	2	13	3	14	13
LN78-2678	22	18	26	15	21	16
U75616	12	5	22	12	17	20
U75633	3	14	21	5	1	3
U75680	9	22	17	7	13	8
U75681	6	9	17	11	4	6

PRELIMINARY TEST IIB, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		YIELD RANK		
9	3	14	10	6
13	5	3	3	9
1	20	20	11	14
8	2	7	1	5
7	10	9	5	3
26	9	8	22	4
22	23	6	18	16
16	13	12	7	2
17	26	21	24	25
3	22	15	13	8
2	24	13	23	21
18	24	18	19	1
3	11	5	21	26
15	14	4	26	18
20	18	2	25	24
25	15	23	14	19
18	16	25	9	10
12	18	26	20	20
23	16	10	17	13
21	11	22	8	23
5	4	1	6	11
24	21	18	15	22
6	6	11	12	17
10	1	23	4	12
14	7	16	16	15
10	8	17	2	7

PRELIMINARY TEST IIB, 1981

Strain	Mean 9 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		MATURITY (date)				
Century	+ 2	0	+ 5	- 1	+ 1	+ 3
Corsoy 79 (II)	9-17	9-10	9-12	9-16	9-26	9-13
Lakota (I)	- 5	- 6	- 3	- 7	-11	- 6
Pella (III)	+ 7	+ 5	+ 8	+ 4	+ 5	+ 9
Gnome	+ 5	+ 3	+ 6	+ 8	+ 5	+ 8
HC78-523	+ 2	+ 4	+ 5	+ 4	+ 3	+ 4
HC78-660	+ 4	+ 6	+ 8	+ 7	+ 5	+ 5
HC78-679	+ 8	+ 4	+10	+ 8	+ 7	+13
HC78-689	+ 3	+ 1	+ 6	+ 3	+ 2	+ 1
HC78-826	+ 4	+ 4	+ 6	+ 5	+ 3	+ 5
HC78-840	+ 3	+ 2	+ 5	+ 4	+ 3	+ 2
HC78-1565	+ 4	+ 4	+ 5	+ 3	+ 5	+ 4
HC78-1605	+ 3	+ 4	+ 2	+ 6	+ 3	+ 6
HC78-2021	+ 4	+ 4	+ 6	+ 4	+ 5	+ 6
HC78-2026	+ 4	+ 4	+ 5	+ 4	+ 3	+ 3
L78-8202	+ 8	+ 5	+13	+ 6	+ 7	+ 6
L78-9204	+ 7	+ 4	+ 7	+ 7	+ 7	+ 2
L78-1491	+ 5	+ 4	+ 5	+ 6	+ 3	+ 5
L78-1738	+ 4	+ 4	+ 4	+ 5	+ 4	+ 2
LN78-896	- 4	0	- 2	- 4	- 3	- 6
LN78-1136	+ 1	+ 4	+ 4	+ 2	+ 3	+ 1
LN78-2678	- 7	- 4	- 3	- 7	- 8	- 8
U75616	- 2	+ 1	0	- 2	- 3	- 2
U75633	+ 5	+ 4	+ 6	+ 3	+ 5	+ 5
U75680	+ 2	+ 1	+ 4	- 1	+ 1	+ 1
U75681	+ 4	+ 3	+ 4	+ 3	+ 3	+ 2
Date planted	5-17	5-27	5-21	5-23	5-18	5-8
Days to mature	123	106	114	116	131	128

PRELIMINARY TEST IIB, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		MATURITY (date)		
+ 3	+ 4		+ 2	+ 3
9-27	9-17		9-15	9-14
+ 4	- 6		- 6	- 6
+ 4	+ 6		+ 9	+12
- 3	+ 6		+ 5	+ 9
- 6	+ 2		+ 2	+ 4
- 3	+ 6		- 4	+ 6
- 2	+10		+ 8	+10
- 3	+ 6		+ 2	+ 6
- 2	+ 4		+ 4	+ 7
- 4	+ 6		+ 3	+ 6
+ 1	+ 3		+ 2	+ 7
- 3	+ 5		+ 2	+ 6
- 4	+ 6		+ 2	+ 6
- 2	+ 6		+ 1	+ 8
+ 4	+10		+ 8	+10
+ 6	+ 8		+ 8	+12
+ 6	+ 5		+ 5	+ 4
+ 5	+ 6		+ 5	+ 3
-12	- 4		- 2	- 7
- 4	+ 1		+ 3	- 2
-15	- 7		- 7	- 7
- 7	- 3		+ 1	- 4
+ 3	+ 6		+ 5	+10
+ 3	0		+ 1	+ 4
+ 4	+ 6		+ 4	+ 6
5-7	5-6	5-8	5-22	5-21
143	134	---	116	116

PRELIMINARY TEST IIB, 1981

Strain	Mean 10 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		LODGING (score)				
Century	1.8	1.0	1.5	1.5	2.0	2.0
Corsoy 79 (II)	2.7	3.0	1.3	2.5	3.3	3.5
Lakota (I)	3.0	4.0	1.5	3.5	3.5	4.0
Pella (III)	1.9	1.5	1.4	1.8	1.5	2.5
Gnome	1.6	1.0	1.4	1.5	2.3	1.0
HC78-523	1.6	1.5	1.4	1.5	2.8	1.0
HC78-660	1.6	1.5	1.4	1.5	2.3	1.0
HC78-679	1.4	1.0	1.5	1.5	1.5	1.0
HC78-689	1.5	1.0	1.4	1.5	2.3	1.0
HC78-826	1.6	1.5	1.5	1.5	2.5	1.0
HC78-840	1.6	2.0	1.5	1.5	2.0	1.0
HC78-1565	1.7	1.5	1.3	1.5	3.3	1.0
HC78-1605	1.5	1.5	1.4	1.5	2.0	1.0
HC78-2021	1.5	1.0	1.5	1.5	1.8	1.0
HC78-2026	1.4	1.0	1.4	1.5	1.8	1.0
L78-8202	1.8	1.5	1.4	2.0	2.3	1.0
L78-9204	1.9	1.0	1.5	2.3	2.3	1.0
L78-1491	2.1	1.5	1.5	1.5	2.3	2.5
L78-1738	2.4	1.5	1.3	2.0	2.5	2.0
LN78-896	1.9	1.5	1.4	1.5	2.8	2.0
LN78-1136	1.4	1.0	1.3	1.5	1.5	1.0
LN78-2678	1.3	1.0	1.2	1.5	1.5	1.0
U75616	1.7	1.0	1.5	1.8	2.3	2.0
U75633	2.5	3.0	1.5	2.0	2.8	3.5
U75680	1.7	1.0	1.4	1.8	2.8	1.5
U75681	2.2	1.5	1.5	1.8	2.5	3.0

PRELIMINARY TEST IIB, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		LODGING (score)		
3.0	1.9	2.0	1.0	2.0
3.0	1.9	4.0	2.3	2.5
3.0	1.9	3.9	2.0	2.5
2.5	1.8	2.0	1.5	2.5
3.0	1.8	1.9	1.0	1.0
2.5	1.7	1.9	1.0	1.0
3.0	1.5	2.0	1.0	1.0
1.5	1.7	1.8	1.0	1.0
2.0	1.5	1.9	1.0	1.0
2.0	1.8	1.9	1.0	1.0
2.5	1.6	1.9	1.0	1.0
2.5	1.7	1.9	1.0	1.0
2.0	1.8	1.9	1.0	1.0
2.0	1.9	1.9	1.0	1.5
1.5	1.6	1.8	1.0	1.0
2.5	1.9	2.1	1.3	2.0
3.0	1.9	2.1	1.0	2.5
3.5	2.3	2.2	1.5	2.0
3.5	2.2	3.0	2.5	3.0
2.5	2.0	2.3	1.0	2.0
1.5	1.5	1.8	1.0	1.5
1.5	1.4	1.9	1.0	1.0
2.0	1.9	2.5	1.3	1.0
2.5	2.0	3.0	1.5	3.0
2.5	1.8	1.9	1.0	1.5
3.5	1.9	2.5	1.3	2.5

PRELIMINARY TEST IIB, 1981

Strain	Mean 10 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		PLANT HEIGHT (inches)				
Century	36	34	26	36	36	44
Corsoy 79 (II)	39	38	24	37	38	45
Lakota (I)	38	40	26	40	38	41
Pella (III)	38	33	24	38	35	47
Gnome	22	23	20	15	23	22
HC78-523	21	22	20	13	23	20
HC78-660	21	26	23	13	28	26
HC78-679	24	24	18	15	28	20
HC78-689	23	26	20	10	26	22
HC78-826	25	25	22	19	25	25
HC78-840	23	28	22	10	28	23
HC78-1565	26	28	23	16	33	24
HC78-1605	20	21	16	12	22	20
HC78-2021	21	22	20	12	23	21
HC78-2026	22	24	20	13	24	21
L78-8202	31	30	24	30	31	29
L78-9204	31	31	24	32	33	29
L78-1491	37	30	27	37	34	43
L78-1738	38	32	26	40	36	42
LN78-896	30	32	21	26	32	28
LN78-1136	32	32	22	29	33	37
LN78-2678	28	28	16	28	27	31
U75616	35	31	24	34	34	39
U75633	42	40	26	41	41	48
U75680	36	31	24	35	37	43
U75681	34	33	21	31	31	40

PRELIMINARY TEST IIB, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		PLANT HEIGHT (inches)		
38	34	48	31	37
42	33	49	38	41
37	34	48	38	37
40	36	50	38	42
22	24	26	20	25
20	24	26	17	22
25	24	30	21	28
21	28	28	19	28
23	26	32	15	25
25	26	30	20	29
26	22	30	18	23
23	25	32	19	33
20	23	25	18	22
22	23	30	15	25
23	24	28	15	26
32	32	40	28	34
33	32	36	25	37
43	37	48	35	36
43	36	46	34	45
30	28	40	25	39
31	29	44	30	34
29	27	40	24	29
34	34	48	34	34
39	42	54	39	46
42	32	46	36	32
37	30	42	33	40

PRELIMINARY TEST IIB, 1981

Strain	Mean 9 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		SEED QUALITY (score)				
Century	1.6	1.0	1.3	1.0	1.2	1.5
Corsoy 79 (II)	1.8	1.0	1.8	1.0	2.3	1.5
Lakota (I)	1.8	1.0	2.3	1.5	1.8	1.8
Pella (III)	1.6	1.5	1.4	1.0	1.4	1.8
Gnome	1.7	1.0	1.3	1.0	1.2	1.4
HC78-523	1.7	1.5	1.2	1.0	1.2	1.3
HC78-660	1.6	1.0	1.3	1.0	1.4	1.4
HC78-679	1.9	1.0	1.8	1.0	1.4	1.4
HC78-689	1.7	1.0	1.6	1.5	1.2	1.5
HC78-826	1.7	1.0	1.3	1.0	1.2	1.2
HC78-840	1.7	1.0	1.7	1.0	1.2	1.2
HC78-1565	1.8	1.0	1.8	1.0	1.2	1.2
HC78-1605	1.8	1.0	1.6	1.0	1.2	1.2
HC78-2021	1.8	1.0	1.5	1.5	1.2	1.2
HC78-2026	1.7	1.0	1.3	1.0	1.2	1.4
L78-8202	1.8	1.0	1.2	1.0	1.5	1.2
L78-9204	1.7	1.5	1.2	1.0	1.2	1.2
L78-1491	1.6	1.0	1.1	1.0	1.2	1.4
L78-1738	1.6	1.0	1.1	1.0	1.2	1.4
LN78-896	1.9	1.0	1.6	1.0	2.0	2.0
LN78-1136	2.0	1.0	1.7	1.0	1.4	2.8
LN78-2678	2.3	1.0	1.6	1.5	2.5	1.5
U75616	2.2	1.5	1.8	1.0	2.0	2.5
U75633	1.5	1.0	1.6	1.0	1.2	1.4
U75680	2.4	1.5	1.6	1.0	2.5	2.3
U75681	1.9	2.0	1.3	1.0	2.0	2.3

PRELIMINARY TEST IIB, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		SEED QUALITY (score)		
3.0	1.4		2.3	2.0
3.0	1.5		2.3	2.0
2.0	1.9		2.0	2.0
3.0	1.5		2.0	1.0
2.0	1.7		1.8	4.0
3.0	1.8		2.0	2.0
3.0	1.4		1.5	2.0
3.0	1.9		2.0	4.0
3.0	1.5		2.0	2.0
3.0	1.9		1.8	3.0
2.0	1.4		2.0	4.0
2.0	1.9		2.0	4.0
2.0	1.8		2.3	4.0
2.0	1.7		2.0	4.0
2.0	1.8		2.0	4.0
3.0	1.5		1.5	4.0
3.0	1.5		1.8	3.0
2.0	1.4		2.0	3.0
2.0	1.6		1.8	3.0
2.0	2.0		2.3	3.0
3.0	1.7		2.8	3.0
4.0	2.0		2.3	4.0
3.0	1.8		3.0	3.0
2.0	1.4		2.3	2.0
4.0	1.9		3.0	4.0
2.0	1.5		2.8	2.0

PRELIMINARY TEST IIB, 1981

Strain	Mean 9 Tests	N.J. Adelphia	Ohio Hoyt-ville	Ind. Lafay-ette	Illinois DeKalb	Illinois Urbana
		SEED SIZE (g/100)				
Century	18.4	17.0	17.1	15.8	20.7	20.2
Corsoy 79 (II)	15.7	14.0	14.5	15.5	19.5	16.3
Lakota (I)	17.1	14.0	14.4	14.9	20.2	17.5
Pella (III)	19.9	18.0	18.1	20.2	23.3	23.2
Gnome	16.6	15.0	13.5	19.7	18.0	18.6
HC78-523	14.4	14.0	13.4	16.5	15.5	15.4
HC78-660	17.8	16.0	17.1	20.3	19.1	19.7
HC78-679	16.4	14.0	14.0	18.9	17.2	18.9
HC78-689	17.3	13.0	19.3	19.3	18.2	18.5
HC78-826	16.6	15.0	14.9	18.5	18.0	17.0
HC78-840	16.5	13.0	14.4	18.0	18.1	18.7
HC78-1565	15.4	14.0	14.1	17.5	17.0	17.4
HC78-1605	15.7	14.0	13.5	19.6	16.8	16.2
HC78-2021	14.7	12.0	13.1	16.5	15.7	15.6
HC78-2026	14.9	13.0	12.7	16.9	15.9	15.8
L78-8202	15.7	13.0	14.6	15.9	18.4	17.5
L78-9204	17.1	14.0	14.7	18.5	19.2	19.0
L78-1491	14.6	15.0	12.6	14.9	15.9	16.3
L78-1738	14.2	14.0	13.6	14.8	15.8	15.5
LN78-896	16.8	16.0	16.0	17.1	20.8	17.2
LN78-1136	17.5	17.0	16.4	17.5	21.0	18.9
LN78-2678	17.3	15.0	15.2	18.1	22.0	19.0
U75616	18.3	17.0	16.9	18.0	22.2	19.7
U75633	18.8	17.0	18.5	18.3	23.2	20.8
U75680	18.6	17.0	18.1	19.4	21.6	20.6
U75681	20.5	19.0	18.7	20.3	23.4	23.1

PRELIMINARY TEST IIB, 1981

Wis.	Iowa		Neb.	S.D.
Arlington	Ames	Marshalltown	Mead	Centerville
		SEED SIZE (g/100)		
18.4	21.1		18.6	16.5
14.6	17.4		16.5	13.2
21.6	19.1		18.3	13.9
18.1	22.0		19.6	17.0
15.1	16.1		18.7	14.9
10.9	15.2		17.4	11.4
16.0	17.7		19.5	14.7
16.1	16.2		18.0	14.3
15.2	16.6		18.7	16.9
15.9	16.0		18.8	15.3
14.7	16.8		18.8	16.0
13.8	14.7		15.7	14.1
13.1	15.4		18.8	14.3
13.2	14.4		17.9	13.7
13.0	15.4		17.9	13.6
15.9	16.6		16.4	12.9
16.2	18.2		20.1	13.8
15.3	15.0		14.3	11.9
13.0	14.2		14.9	11.8
13.6	19.7		18.0	12.8
15.1	19.4		18.3	14.2
14.7	19.8		18.3	13.6
16.7	20.2		18.7	15.3
17.9	19.8		18.3	15.4
15.9	21.6		18.2	15.3
21.2	22.6		19.9	16.2

PRELIMINARY TEST IIB, 1981

Strain	Mean 4 Tests	Ohio Hoytville	Indiana Lafayette	Iowa Ames	Neb. Mead
		PROTEIN (%)			
Century	42.0	40.8	41.6	44.4	41.1
Corsoy 79 (II)	41.0	39.5	39.3	42.6	42.7
Lakota (I)	43.1	43.8	40.2	46.0	42.3
Pella (III)	39.3	37.7	38.3	40.7	40.5
Gnome	41.9	40.7	42.3	42.7	41.9
HC78-523	41.6	40.8	40.1	43.3	42.2
HC78-660	44.0	43.2	44.7	44.5	43.4
HC78-679	41.4	37.7	41.0	42.6	44.4
HC78-689	41.2	40.2	40.6	41.9	42.2
HC78-826	42.3	39.6	42.0	44.8	42.7
HC78-840	40.7	40.7	39.5	41.3	41.3
HC78-1565	42.6	40.0	42.3	42.7	45.5
HC78-1605	43.0	39.6	44.7	43.5	44.2
HC78-2021	43.6	40.6	42.8	45.9	45.2
HC78-2026	43.4	41.0	43.3	44.8	44.4
L78-8202	42.6	41.0	43.0	44.5	41.8
L78-9204	41.3	39.7	41.1	42.0	42.4
L78-1491	42.1	42.5	41.4	42.3	42.1
L78-1738	43.9	43.8	42.8	43.9	45.0
LN78-896	40.3	41.5	37.1	42.3	40.1
LN78-1136	39.7	40.3	36.6	41.5	40.2
LN78-2678	42.6	41.7	42.6	42.8	43.3
U75616	37.7	38.0	35.8	39.4	37.5
U75633	40.3	37.7	40.4	41.8	41.3
U75680	39.2	38.1	37.5	41.4	39.9
U75681	39.9	37.7	37.9	42.6	41.4

PRELIMINARY TEST IIB, 1981

Mean 4 Tests	Ohio Hoytville	Indiana Lafayette	Iowa Ames	Neb. Mead
		OIL (%)		
18.8	20.2	18.4	18.3	18.2
19.1	19.7	19.4	18.8	18.4
18.7	19.0	18.6	18.6	18.5
19.4	21.1	19.6	19.2	19.4
19.2	20.2	18.7	18.6	19.3
19.2	19.8	19.1	19.1	18.6
19.2	19.8	18.6	19.2	19.2
19.5	20.5	19.1	19.4	19.1
19.3	20.4	19.0	18.8	18.8
18.7	19.6	18.6	18.4	18.3
19.4	20.5	19.1	18.8	19.1
18.6	18.4	18.7	18.2	17.9
18.3	19.2	18.6	17.5	17.9
18.5	19.3	19.2	17.9	17.7
18.9	19.3	20.2	17.9	18.2
19.4	20.5	19.5	18.8	18.8
19.3	20.2	19.2	18.9	19.0
19.4	19.9	19.3	19.0	19.2
18.5	19.3	18.7	17.7	18.1
19.6	20.4	19.9	19.1	18.8
20.1	20.4	20.9	19.3	19.8
19.4	19.4	19.9	19.0	19.4
20.4	21.0	20.8	19.5	20.4
20.2	21.5	20.2	19.6	19.4
19.8	20.7	19.8	19.0	19.7
20.0	21.4	20.8	18.9	18.8

Strain	Parentage	Previous Testing*	Generation Composited
1. Century (II)	Calland x Bonus	2	F6
2. Cumberland (III)	Corsoy x Williams	5	F_4
3. Pella	L66L-137 x Calland	5	F_4
4. Union (IV)	Williams[5] x SL12 (Wayne Rpm, Rps)	3	F3
5. Williams 79	Williams[6] x Lee 68	4	10F3
6. A79-232005	AP6TW 2YTC (F_4)Cl	P II	F_4
7. A79-232026	AP6TW 2YTC (F_4)Cl	P II	F_4
8. A79-236002	Pride B-216 x Cumberland	P II	F_4
9. A79-238034	M68-48 x Pride B-216	P II	F_4
10. A79-334010	Pride B-216 x LL4102	P III	F_4
11. A79-336014	Pride B-216 x Oakland	P III	F_4
12. HC77-1418	L72U-640 x Essex	P III	F_5
13. HW74-3385 Hobbit	Williams x Ransom	3	F_5
14. HW79015	A72-512 x Oakland (Ax-1733E-18)	P II	F_5
15. HW79054	Cumberland x Pella (AX-176M-86)	P II	F_5
16. HW79149	(A72-507[6] x A1) x (A75-507[5] x PI82.263-2)	P III	F3
17. L24A Williams 82	Williams[7] x Kingwa	1	4F3
18. L25A	Williams[6] x PI96.983	1	4F3
19. L78-1444 Fayette	Williams[2] x PI88.788	-	F3
20. LN78-575	Union x K1028	P III	F_5
21. U57139	Beeson x Clark 63	P III, 1979	F_4

*Number of years in this test or name of 1980 test

Descriptive and Other Data

Strain	Descriptive Code			Chlorosis Score Ames	Chlorosis Score Lamberton	Emergence Score Ames	Shattering Manhattan 2 Weeks
Century (II)	PTBr	DYBl	I	3.0	3.0	3	2
Cumberland (III)	PGBr	SYIb	I	3.5	5.0	5	1
Pella	PTT	DYBl	I	3.8	3.5	3	1
Union (IV)	WTT	SYBl	I	3.3	3.5	3	1
Williams 79	WTT	SYBl	I	3.5	4.7	3	1
A79-232005	PGBr	DYGr	I	3.2	4.4	1	1
A79-232026	WTBr	SYY	I	3.0	3.0	1	1
A79-236002	P+WTBr	DYY	I	3.3	5.0	1	1
A79-238034	WGBr	DYBf	I	4.0	5.0	1	1
A79-334010	PGBr	DYIb	I	4.0	4.6	4	1
A79-336014	PTBr	SYBl	I	3.3	3.5	5	1
HC77-1418	PGT	DYIb	D	3.0	3.5	1	1
HW74-3385 Hobbit	WTT	SYBl	D	2.8	3.5	1	1
HW79015	PGBr	DYIb	I	3.2	4.0	5	2
HW79054	PTT	DYBl	I	3.7	4.0	5	1
HW79149	WGT	SYBf	I	4.0	5.0	1	1
L24A	WTT	SYBl	I	3.2	4.2	3	1
L25A	WTT	SYBl	I	3.2	4.2	1	1
L78-1444	WTT	SYBl	I	3.2	3.5	2	1
LN78-575	PTT	SYBl	I	3.5	4.6	2	1
U57139	PGBr	DYIb	I	2.8	4.3	5	1

Disease Data

Strain	BSR Ames Plant	BSR Ames Stem	BSR Lafayette Stem	BSR Lamberton Stem	PR1 Ames	PR1 Lafayette	PR Tol. Vickery	FE2 Lafayette
	n %	n %	n %	n %	a Reaction	a Reaction	n score	a score
Century (II)	100	92	100	75	R	R	3.5	4
Cumberland (III)	100	92	60	30	H	S	3.2	3
Pella	100	81	0	50	R	R	3.1	2
Union (IV)	S	S	40	80	R	R	3.5	3
Williams 79	S	S	80	60	R	R	2.4	4
A79-232005	100	91	20	65	R	R	2.5	4
A79-232006	100	98	80	65	S	S	3.5	4
A79-236002	100	100	60	60	R	R	3.0	2
A79-238034	100	97	100	70	S	S	3.0	4
A79-334010	100	77	60	15	S	S	3.1	3
A79-336014	---	--	60	15	H	S	3.0	4
HC77-1418	100	84	60	45	S	S	3.3	2
HW74-3385 Hobbit	90	82	80	60	S	S	3.4	4
HW79015	100	79	60	40	H	S	3.1	4
HW79054	100	86	40	65	R	R	3.8	3
HW79149	100	78	60	45	R	R	2.7	4
L24A	100	93	20	60	R	R	2.2	4
L25A	100	89	60	50	S	S	2.5	4
L78-1444	100	68	0	45	H	S	3.0	4
LN78-575	100	93	80	60	R	R	3.5	5
U57139	100	98	100	70	R	R	3.5	1

Strain	BP Urbana	BTS Ames	DM Urbana	Mottling Eldorado	SMV Lafayette	PS Lafayette	PSB Lafayette	Germ*
	n score	a score	n score	n score	a score	a %	n %	%
Century (II)	2.6	3	3.3	3.0	5E	61	5	91
Cumberland (III)	1.0	3	2.3	2.3	5E	75	18	79
Pella	3.3	4	3.2	3.0	5E	58	7	92
Union (IV)	1.0	4	1.0	2.0	4E	51	6	90
Williams 79	1.0	3	3.2	2.0	5M	43	7	94
A79-232005	1.0	3	3.3	4.3	1	84	11	81
A79-232006	1.0	3	3.7	4.0	1	92	3	94
A79-236002	1.0	4	3.2	4.7	4E	65	10	79
A79-238034	3.0	4	2.8	3.0	1	87	10	89
A79-334010	1.0	4	3.7	3.3	5E	81	22	76
A79-336014	1.0	4	2.7	2.7	5E	39	1	95
HC77-1418	1.0	3	3.2	2.3	1	50	5	93
HW74-3385 Hobbit	1.0	3	2.3	1.0	1	28	0	98
HW79015	1.0	3	3.2	2.0	2E	60	5	72
HW79054	3.5	4	2.0	4.0	5E	78	10	89
HW79149	1.0	3	3.5	4.0	5E	91	1	91
L24A	1.0	3	3.3	2.0	5M	49	0	97
L25A	1.0	3	3.7	2.0	2M	51	2	93
L78-1444	1.0	4	1.9	3.0	5E	63	2	92
LN78-575	1.0	3	4.0	2.3	5E	78	1	91
U57139	3.1	3	3.3	2.0	3M	75	1	94

UNIFORM TEST III, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	20	20	17	19	20	19	19	4	4
	bu/a	no.	date	score	in.	score	g/100	%	%
Century (II)	43.7	20	- 6	1.5	33	1.9	18.0	42.1	19.4
Cumberland (III)	46.5	8	9-26*	1.8	35	1.9	18.1	40.2	20.2
Pella	47.4	5	- 3	1.6	36	2.0	19.3	38.8	20.2
Union (IV)	45.3	13	+ 5	2.5	42	1.7	18.9	42.0	19.0
Williams 79	46.2	9	+ 3	2.0	39	1.7	17.8	41.1	19.0
A79-232005	45.8	11	- 3	2.3	32	2.1	14.6	40.4	19.7
A79-232026	45.0	16	- 4	2.0	32	1.8	15.3	39.3	20.1
A79-236002	47.7	3	- 5	1.9	35	2.1	17.1	40.1	19.2
A79-238034	45.2	15	- 3	2.1	32	2.0	14.0	40.2	20.0
A79-334010	46.7	7	- 1	2.5	36	2.0	15.0	43.0	19.2
A79-336014	48.3	1	0	1.5	36	1.9	19.4	41.0	19.2
HC77-1418	41.8	21	0	1.4	25	1.5	15.4	43.6	18.8
HW74-3385 Hobbit	45.3	13	0	1.3	22	1.6	16.4	40.1	20.2
HW79015	47.1	6	- 4	1.7	36	1.9	17.0	41.3	20.0
HW79054	46.1	10	- 5	1.4	33	2.0	19.0	40.4	20.8
HW79149	48.0	2	+ 3	2.5	37	2.1	16.9	42.1	19.4
L24A Williams 82	47.6	4	+ 4	1.9	38	1.7	17.5	41.7	19.3
L25A	44.5	18	+ 3	2.1	37	1.7	17.3	42.2	19.7
L78-1444 Fayette	45.4	12	+ 5	2.0	40	1.6	16.3	42.8	19.4
LN78-575	44.8	17	- 1	1.6	36	1.7	19.0	41.5	19.4
U57139	42.7	19	+ 3	1.6	36	1.8	16.5	41.4	19.5

*126 days after planting

1980-1981 2-year mean

No. of Tests	43	43	37	41	43	40	40	9	9
	bu/a	no.	date	score	in.	score	g/100	%	%
Century (II)	42.5	8	-6.0	1.6	33	2.2	17.7	42.4	20.2
Cumberland (II)	46.1	1	9-24.3*	1.9	36	2.0	17.8	40.8	21.4
Pella	44.9	3	-2.5	1.5	36	2.1	18.7	39.6	21.1
Union (IV)	42.9	7	+5.0	2.3	43	1.8	18.3	42.7	19.8
Williams 79	44.5	4	+1.9	1.9	40	1.8	17.2	41.4	19.9
HW74-3385 Hobbit	43.4	6	+0.5	1.2	21	1.6	16.0	40.2	21.5
L24A Williams 82	45.3	2	+2.9	1.8	39	1.8	16.9	41.8	20.4
L25A	43.9	5	+2.5	2.0	38	1.8	16.9	41.7	20.5

*126 days after planting

Strain	Mean 20 Tests	Md. Clarksville	N.J. Adelphia	Penn. Landisville	Ohio Hoytville	Ohio Wooster	Indiana Greenfield	Indiana Lafayette
				YIELD (bu/a)				
Century (II)	43.7	39.8	40.7	28.6	33.5	45.4	45.8	45.1
Cumberland (III)	46.5	46.0	34.8	31.8	38.6	49.1	46.3	46.4
Pella	47.4	45.5	37.3	33.7	39.5	43.8	49.9	49.0
Union (IV)	45.3	44.8	30.1	33.6	45.3	50.2	44.2	46.1
Williams 79	46.2	47.1	31.4	28.7	46.6	45.5	40.5	55.2
A79-232005	45.8	41.0	34.8	26.4	34.7	46.6	39.5	48.8
A79-232026	45.0	40.7	40.5	33.0	31.9	46.0	43.5	38.4
A79-236002	47.7	42.9	36.3	32.5	38.0	41.7	41.1	45.3
A79-238034	45.2	36.5	38.8	28.3	32.7	46.4	42.0	46.9
A79-334010	46.7	43.5	35.6	34.6	39.4	45.0	36.3	49.9
A79-336014	48.3	42.1	36.6	32.1	45.4	45.9	48.1	50.0
HC77-1418	41.8	40.1	38.4	29.5	37.8	44.7	33.3	48.9
HW74-3385 Hobbit	45.3	39.5	37.4	27.3	39.8	45.8	40.3	49.1
HW79015	47.1	40.2	40.6	34.2	39.7	43.4	42.1	49.9
HW79054	46.1	42.4	38.4	32.5	29.3	44.1	48.9	46.6
HW79149	48.0	41.6	35.2	29.9	47.5	47.4	44.6	54.4
L24A	47.6	44.7	33.1	33.4	48.2	46.4	44.8	46.6
L25A	44.5	41.9	32.3	30.0	40.5	46.0	45.8	52.4
L78-1444	45.4	44.7	37.1	36.4	48.1	46.2	38.8	58.9
LN78-575	44.8	38.4	38.9	29.7	37.7	44.5	45.6	52.0
U57139	42.7	37.1	26.0	30.5	41.5	49.0	36.9	43.1
C.V. (%)		9.76	5.8	13.3	7.9	6.2	11.6	11.2
L.S.D. (5%)		NS	4.0	NS	5.1	4.7	7.9	8.8
Row sp. (in.)		30	30	24	30	30	30	24
Rows/plot		4	3	4	4	4	3	4
Reps		3	4	3	3	3	3	3
				YIELD RANK				
Century (II)	20	17	1	18	18	14	5	19
Cumberland (III)	8	2	16	11	13	2	4	16
Pella	5	3	9	4	11	19	1	10
Union (IV)	13	4	20	5	6	1	10	17
Williams 79	9	1	19	17	4	13	15	2
A79-232005	11	13	15	21	17	5	17	12
A79-232026	16	14	3	7	20	9	11	21
A79-236002	3	8	12	8	14	21	14	18
A79-238034	15	21	5	19	19	6	13	13
A79-334010	7	7	13	2	12	17	20	7
A79-336014	1	10	11	10	5	11	3	6
HC77-1418	21	16	6	16	15	15	21	11
HW74-3385 Hobbit	13	18	8	20	9	12	16	9
HW79015	6	15	2	3	10	20	12	14
HW79054	10	9	7	8	21	18	2	14
HW79149	2	12	14	14	3	4	9	3
L24A	4	5	17	6	1	6	8	14
L25A	18	11	18	13	8	9	6	4
L78-1444	12	5	10	1	2	8	18	1
LN78-575	17	19	4	15	16	16	17	5
U57139	19	20	21	12	7	3	19	20

Strain	Ky. Lex-* ington	Illinois Belle-ville	Brown-town	Eldo-rado	Girard	Pontiac	Urbana
			YIELD (bu/a)				
Century (II)	37.8	49.3	31.6	45.9	47.7	45.9	56.1
Cumberland (III)	42.2	57.5	20.5	50.6	48.6	46.4	56.3
Pella	37.7	55.7	36.0	50.2	48.0	48.7	53.1
Union (IV)	39.8	54.7	27.1	50.9	44.1	46.1	50.9
Williams 79	39.9	53.6	44.2	46.8	44.7	49.1	53.4
A79-232005	40.2	56.1	35.8	47.2	47.2	48.3	47.6
A79-232026	44.0	55.5	7.1	49.2	43.2	49.4	49.2
A79-236002	37.5	57.4	39.8	48.7	45.3	54.6	57.0
A79-238034	42.7	52.9	25.2	47.5	49.4	46.3	54.8
A79-334010	34.2	53.5	30.5	48.1	47.8	47.5	53.2
A79-336014	39.6	57.6	30.5	51.6	49.7	51.3	56.0
HC77-1418	41.4	47.7	15.1	47.5	47.0	48.0	55.2
HW74-3385 Hobbit	42.4	56.2	22.5	53.0	49.5	54.0	59.8
HW79015	38.3	57.3	25.7	50.0	48.4	51.8	56.2
HW79054	41.9	56.4	41.7	49.4	47.6	47.9	53.4
HW79149	41.5	56.3	39.9	44.5	52.5	47.3	56.1
L24A	42.0	56.4	43.9	48.4	47.7	47.6	51.3
L25A	39.5	55.6	31.9	49.2	44.5	46.7	51.3
L78-1444	38.8	50.8	31.5	46.5	46.8	49.1	50.2
LN78-575	34.3	52.6	35.4	47.2	45.3	49.9	55.6
U57139	33.8	53.0	32.3	47.1	44.2	39.2	46.3
C.V. (%)	6.8	3.9	29.9	3.5	4.0	7.0	7.3
L.S.D. (5%)	4.4	3.5	14.9	2.8	3.1	5.6	6.4
Row sp. (in.)	30	30	30	30	30	30	30
Rows/plot	4	4	4	4	4	4	4
Reps	3	3	3	3	3	3	3
			YIELD RANK				
Century (II)	16	20	11	20	9	21	5
Cumberland (III)	4	2	19	4	5	18	3
Pella	17	10	6	5	7	9	14
Union (IV)	11	13	15	3	20	20	17
Williams 79	10	14	1	18	17	7	11
A79-232005	9	9	7	15	12	10	20
A79-232026	1	12	21	8	21	6	19
A79-236002	18	3	5	10	15	1	2
A79-238034	2	17	17	13	4	19	10
A79-334010	20	15	13	12	8	15	13
A79-336014	12	1	13	2	2	4	7
HC77-1418	8	21	20	13	13	11	9
HW74-3385 Hobbit	3	8	18	1	3	2	1
HW79015	15	4	6	6	6	3	4
HW79054	6	5	3	7	11	12	11
HW79149	7	7	4	21	1	15	5
L24A	5	6	2	11	9	14	15
L25A	13	11	10	8	18	17	15
L78-1444	14	19	12	19	14	7	18
LN78-575	19	18	8	15	15	5	8
U57139	21	16	9	17	19	12	21

*Not included in the mean

Iowa		Kansas			Neb.	S.D.
Ottumwa	Stuart	Manhattan	Powhatten	Topeka	Mead	Elkpoint
			YIELD (bu/a)			
52.2	52.8	49.6	33.9	21.9	59.7	49.3
57.5	52.3	53.9	42.4	50.8	51.8	48.5
58.5	55.3	56.3	44.3	40.0	54.4	48.6
51.1	50.9	54.5	42.3	51.6	45.6	42.3
55.2	50.3	49.2	43.4	47.2	51.1	41.7
53.4	54.4	62.5	43.0	45.5	54.3	48.4
53.3	59.2	72.2	41.6	48.8	53.7	42.8
60.1	57.8	55.7	43.0	49.3	55.3	51.8
56.2	54.1	52.4	38.4	50.6	56.3	49.0
53.7	49.2	65.5	45.5	49.0	56.1	49.5
59.6	56.0	64.8	29.6	52.3	55.9	51.5
52.5	52.6	33.0	43.8	19.8	56.9	43.6
59.7	61.0	38.1	37.9	29.0	56.7	49.8
53.8	54.6	55.7	38.5	48.2	62.8	49.4
60.7	59.7	52.8	28.0	40.2	53.2	48.5
60.3	51.5	58.4	44.7	49.0	51.9	46.7
58.4	45.7	64.1	45.5	51.3	50.8	43.6
51.3	47.1	57.7	21.9	48.1	50.6	45.2
55.4	47.1	44.3	32.6	56.2	49.9	36.6
51.9	51.1	53.1	21.1	51.3	52.4	43.1
50.0	46.4	53.0	43.7	42.9	51.5	39.6
7.0	6.6	18.0	21.8	11.6	6.0	7.8
5.4	5.0	15.5	13.8	8.2	5.3	6.0
27	27	30	30	30	30	30
4	4	4	4	4	4	4
4	4	3	3	3	3	3
			YIELD RANK			
17	10	17	16	20	2	6
8	12	12	10	5	15	10
6	6	8	4	18	9	8
20	15	11	11	2	21	18
11	16	18	7	13	17	19
14	8	5	8	15	10	11
15	3	1	12	10	11	17
3	4	9	8	7	8	1
9	9	16	14	6	5	7
13	17	2	1	8	6	4
5	5	3	18	1	7	2
16	11	21	5	21	3	14
4	1	20	15	19	4	3
12	7	9	13	11	1	5
1	2	15	19	17	12	9
2	13	6	3	8	14	12
7	21	4	1	3	18	15
19	18	7	20	12	19	3
10	18	19	17	14	20	21
18	14	13	21	3	13	16
21	20	14	6	16	16	20

Strain	Mean 17 Tests	Md. Clarksville	N.J. Adelphia	Penn. Landisville	Ohio Hoytville	Ohio Wooster	Indiana Greenfield	Indiana Lafayette
			MATURITY (date)					
Century (II)	- 6	- 5	- 4	- 7	- 9	- 6	- 1	- 9
Cumberland (III)	9-26	10-10	9-16	9-21	9-24	9-20	10-6	9-24
Pella	- 3	- 2	- 2	- 5	- 4	- 4	- 1	- 5
Union (IV)	+ 5	+ 3	+ 9	+ 7	+ 5	+ 5	+ 4	+ 4
Williams 79	+ 3	0	+ 4	0	+ 4	+ 3	+ 1	+ 4
A79-232005	- 3	- 6	- 4	- 7	- 5	- 5	- 2	0
A79-232026	- 4	- 5	- 2	- 7	- 5	- 5	- 2	- 3
A79-236002	- 5	- 7	- 4	- 7	- 6	- 6	- 2	- 6
A79-238034	- 3	- 6	- 2	- 5	- 6	- 5	- 1	- 2
A79-334010	- 1	- 3	- 2	- 2	0	0	- 1	0
A79-336014	0	+ 1	+ 2	- 2	+ 2	- 1	- 1	- 1
HC77-1418	0	0	+ 6	- 2	+ 4	+ 1	+ 1	+ 1
HW74-3385 Hobbit	0	+ 1	0	- 7	0	- 2	+ 1	+ 3
HW79015	- 4	- 6	- 3	- 7	- 7	- 7	- 1	- 3
HW79054	- 5	- 6	- 3	- 7	-10	- 7	- 2	- 5
HW79149	+ 3	+ 1	+ 5	0	+ 4	+ 2	+ 2	+ 4
L24A	+ 4	0	+ 5	+ 2	+ 6	+ 4	+ 2	+ 4
L25A	+ 3	0	+ 2	0	+ 3	+ 2	+ 2	+ 1
L78-1444	+ 5	+ 2	+ 8	+ 7	+ 5	+ 6	+ 3	+ 9
LN78-575	- 1	- 1	+ 3	- 5	0	- 3	0	0
U57139	+ 3	+ 3	+ 6	+ 7	+ 5	+ 7	+ 4	+ 4
Date planted	5-26	6-17	5-28	5-21	5-21	5-8	6-11	5-23
Days to mature	123	115	111	123	126	135	117	124
			LODGING (score)					
	Mean 19 Tests							
Century (II)	1.5	2.0	1.0	1.0	1.2	1.4	1.7	1.5
Cumberland (III)	1.8	2.0	1.8	1.5	1.5	1.5	2.0	2.0
Pella	1.6	2.2	1.2	1.0	1.3	1.5	1.8	2.2
Union (IV)	2.5	2.8	2.8	1.5	1.5	2.5	3.2	3.0
Williams 79	2.0	2.5	2.0	1.5	1.4	1.8	2.2	2.2
A79-232005	2.3	1.5	1.5	1.0	1.3	1.5	2.0	3.8
A79-232026	2.0	1.8	2.0	1.5	1.3	1.5	1.8	2.5
A79-236002	1.9	2.0	1.5	1.5	1.3	1.5	2.8	2.3
A79-238034	2.1	1.6	2.5	1.0	1.3	1.3	2.3	2.3
A79-334010	2.5	2.1	2.0	1.0	1.4	1.7	2.8	3.2
A79-336014	1.5	1.6	1.0	1.0	1.3	1.5	1.7	1.8
HC77-1418	1.4	1.6	1.5	1.0	1.4	1.6	1.5	1.3
HW74-3385 Hobbit	1.3	1.6	1.0	1.5	1.4	1.5	1.5	1.0
HW79015	1.7	1.8	1.2	1.5	1.4	1.3	1.7	1.7
HW79054	1.4	1.0	1.0	1.0	1.2	1.2	2.0	1.5
HW79149	2.5	2.8	1.2	1.5	1.3	1.8	2.8	3.5
L24A	1.9	2.5	2.0	1.5	1.4	1.7	2.0	2.3
L25A	2.1	2.1	2.0	1.5	1.4	1.8	2.5	2.2
L78-1444	2.0	2.5	1.5	1.5	1.4	1.9	2.7	2.7
LN78-575	1.6	2.0	1.0	1.5	1.3	1.4	2.3	1.7
U57139	1.6	1.8	1.5	1.0	1.4	1.6	1.8	1.8

Ky.	Illinois					
Lexington*	Belleville	Browntown	Eldorado	Girard	Pontiac	Urbana
			MATURITY (date)			
- 7	- 5		- 9	- 9	- 2	-11
9-21	10-1		9-28	9-18	10-4	9-26
- 4	0		- 3	- 4	- 1	- 5
+ 7	+ 4		+ 7	+ 7	+ 4	+ 5
0	+ 1		+ 1	+ 4	+ 3	+ 2
- 7	- 2		- 3	- 1	0	- 4
- 7	- 4		- 3	- 5	- 1	- 8
- 7	- 3		- 5	- 7	- 2	- 6
- 7	- 3		- 2	0	- 2	- 5
- 7	- 3		- 4	0	0	- 2
0	+ 1		+ 1	0	0	- 1
0	- 3		- 5	- 5	+ 2	- 3
0	+ 1		- 2	+ 1	+ 1	+ 1
- 7	- 4		- 5	- 6	- 2	-10
- 7	- 2		- 3	- 5	- 2	- 9
+ 3	+ 1		+ 2	+ 5	+ 3	+ 1
+ 3	+ 1		+ 3	+ 5	+ 5	+ 4
0	+ 1		+ 1	+ 4	+ 6	+ 2
+ 7	+ 3		+ 3	+ 6	+ 5	+ 3
- 7	- 1		- 3	- 1	+ 1	- 1
0	+ 4		+ 1	+ 6	+ 2	+ 3
6-11	6-16	6-18	6-15	5-27	6-4	5-8
102	107	---	105	114	122	141
			LODGING (score)			
1.0	1.0	1.0	1.1	2.0	2.3	2.3
1.0	1.2	1.0	1.4	2.6	3.3	3.4
1.2	1.1	1.0	1.2	1.7	2.5	2.9
1.8	1.8	1.3	2.7	3.9	3.2	4.1
1.3	1.3	1.0	2.1	2.7	2.5	2.8
1.2	1.4	1.3	2.7	3.6	3.7	4.2
1.2	1.7	1.0	2.0	3.8	2.8	2.5
1.5	1.5	1.2	1.9	2.8	3.2	3.2
1.7	1.6	1.2	2.1	3.1	3.5	3.2
1.3	1.8	1.3	2.3	3.2	3.7	4.5
1.2	1.0	1.2	1.1	1.4	2.3	2.1
1.0	1.0	1.0	1.1	1.8	2.7	1.8
1.0	1.4	1.0	1.5	1.5	1.5	1.2
1.0	1.3	1.2	1.7	2.3	3.0	2.7
1.0	1.1	1.0	1.4	2.1	2.3	2.2
1.3	1.9	1.2	3.9	3.3	3.3	4.0
1.3	1.3	1.2	2.0	2.3	2.3	2.8
1.0	2.2	1.0	3.0	2.9	3.2	3.4
1.3	1.5	1.3	1.9	2.2	2.7	2.9
1.0	1.2	1.0	1.6	2.1	2.5	2.1
1.0	1.1	1.0	1.8	2.2	2.2	2.1

*Not included in the mean

	Iowa		Kansas			Neb.	S.D.
Strain	Ottumwa	Stuart	Manhattan	Powhatten	Topeka	Mead	Elkpoint
			MATURITY (date)				
Century (II)		- 6	- 3		- 3	- 7	- 4
Cumberland (III)		9-22	9-18		9-24	9-24	10-3
Pella		- 3	- 2		- 4	- 2	- 1
Union (IV)		+ 7	+ 3		+ 8	+ 6	+ 5
Williams 79		+ 6	+ 3		+ 4	+ 4	+ 3
A79-232005		- 3	- 2		0	- 3	- 3
A79-232026		- 4	0		- 2	- 3	- 3
A79-236002		- 6	- 1		- 4	- 3	- 3
A79-238034		- 2	0		- 2	- 1	- 2
A79-334010		- 1	- 1		- 1	- 2	+ 1
A79-336014		- 1	- 1		0	+ 2	+ 2
HC77-1418		0	- 1		- 2	0	0
HW74-3385 Hobbit		0	+ 1		0	+ 1	0
HW79015		- 5	0		- 3	- 4	- 2
HW79054		- 6	- 2		- 4	- 2	- 2
HW79149		+ 6	+ 2		0	+ 3	+ 2
L24A		+ 7	+ 4		+ 8	+ 4	+ 3
L25A		+ 6	+ 4		+ 5	+ 3	+ 3
L78-1444		+ 7	+ 2		+ 2	+ 5	+ 4
LN78-575		- 2	+ 1		- 1	0	+ 2
U75139		+ 7	-13		+ 2	+ 4	+ 2
Date planted	5-28	5-11	5-15	5-30	5-22	5-22	5-22
Days to mature	---	134	126	---	125	125	134
			LODGING (score)				
Century (II)	2.0	2.8	1.3	1.0	1.0	1.0	1.0
Cumberland (III)	2.8	3.1	1.5	1.0	1.0	1.3	1.3
Pella	2.3	2.8	1.2	1.0	1.0	1.3	2.0
Union (IV)	2.8	4.0	1.8	1.0	1.0	2.2	2.3
Williams 79	2.1	3.5	1.7	1.0	1.3	1.8	2.3
A79-232005	3.3	4.7	2.5	1.0	1.8	2.0	2.3
A79-232026	2.6	4.1	2.0	1.0	1.8	1.5	1.0
A79-236002	2.9	3.1	1.5	1.0	1.2	1.3	1.7
A79-238034	2.5	4.7	1.8	1.0	2.0	1.3	2.3
A79-334010	3.3	4.5	2.5	1.7	3.0	2.3	2.3
A79-336014	2.1	2.3	1.5	1.0	1.0	1.5	1.7
HC77-1418	1.6	2.4	1.0	1.0	1.0	1.0	1.0
HW74-3385 Hobbit	1.6	1.3	1.0	1.0	1.0	1.0	1.0
HW79015	2.3	2.7	1.5	1.0	1.2	1.0	2.0
HW79054	2.0	2.4	1.3	1.0	1.0	1.2	1.0
HW79149	3.1	4.7	2.5	1.0	1.7	2.5	2.0
L24A	2.1	3.5	1.3	1.0	1.0	1.5	1.7
L25A	2.4	3.8	1.7	1.0	1.0	2.0	1.7
L78-1444	2.4	3.3	1.5	1.0	1.3	2.0	2.0
LN78-575	2.1	2.6	1.3	1.0	1.0	1.3	2.0
U57139	2.0	2.6	1.8	1.0	1.2	1.5	1.3

Mean 20 Tests	Md. Clarksville	N.J. Adelphia	Penn. Landisville	Ohio Hoytville	Ohio Wooster	Indiana Greenfield	Indiana Lafayette
			PLANT HEIGHT (inches)				
33	29	36	28	21	30	32	38
35	28	34	27	27	31	32	41
36	30	37	30	25	31	37	39
42	35	44	33	31	41	39	43
39	32	38	30	31	34	38	46
32	24	28	24	23	29	30	34
32	26	32	26	21	30	30	32
35	28	34	24	23	31	35	38
32	24	33	23	21	29	31	35
36	29	36	28	25	31	32	37
36	27	31	26	25	29	31	39
25	26	30	26	22	28	26	25
22	22	25	21	22	23	19	18
36	29	38	29	24	32	34	40
33	27	33	27	20	29	34	33
37	30	37	29	28	35	36	41
38	31	38	30	30	35	35	42
37	28	38	29	28	34	35	43
40	33	41	32	30	35	35	44
36	28	40	30	23	31	35	36
36	26	37	29	25	34	34	39
			SEED QUALITY (score)				
Mean 19 Tests							
1.9	2.2	1.5	2.0	1.3	1.2	1.0	1.0
1.9	1.8	1.0	2.0	1.1	1.3	1.0	2.0
2.0	2.0	1.2	2.0	1.2	1.4	1.5	1.0
1.7	1.3	1.2	1.5	1.1	1.3	1.0	1.0
1.7	2.0	1.0	2.0	1.1	1.2	1.5	1.0
2.1	2.0	1.0	2.0	1.4	1.3	1.0	1.5
1.8	1.5	1.0	2.0	1.5	1.5	1.0	2.0
2.1	1.7	1.5	2.0	1.7	1.5	1.0	1.0
2.0	2.0	1.0	2.0	2.1	1.8	1.0	1.5
2.0	2.5	1.0	2.0	1.4	1.3	1.0	1.5
1.9	1.8	1.5	2.0	1.2	1.1	1.0	1.5
1.5	1.2	1.0	1.5	1.2	1.2	1.0	1.0
1.6	1.8	1.0	2.0	1.5	1.3	1.0	1.0
1.9	1.5	1.0	1.5	1.7	1.3	1.0	1.0
2.0	1.7	1.0	2.5	1.2	1.3	1.5	1.0
2.1	1.7	1.0	2.0	2.4	1.2	1.0	1.5
1.7	2.0	1.2	1.5	1.2	1.3	1.0	1.0
1.7	1.8	1.0	1.5	1.2	1.1	1.0	1.0
1.6	1.0	1.8	2.0	1.1	1.1	1.0	1.0
1.7	1.7	1.0	2.0	1.2	1.2	1.5	1.0
1.8	2.0	1.2	2.0	1.2	1.5	1.0	1.5

Strain	Ky.	Illinois					
	Lex-* ington	Belle- ville	Brown- town	Eldo- rado	Girard	Pontiac	Urbana
		PLANT HEIGHT (inches)					
Century (II)	30	27	25	29	39	40	40
Cumberland (III)	33	30	21	30	39	38	44
Pella	33	32	26	33	41	41	44
Union (IV)	39	39	32	43	45	47	54
Williams 79	34	33	31	36	42	43	49
A79-232005	29	28	21	28	37	34	36
A79-232026	29	29	17	29	37	37	34
A79-236002	32	33	30	34	41	40	45
A79-238034	32	28	24	27	37	39	36
A79-334010	30	31	24	34	42	40	47
A79-336014	27	29	22	31	39	37	43
HC77-1418	28	19	16	22	28	30	26
HW74-3385 Hobbit	23	23	17	23	23	25	22
HW79015	32	33	24	34	41	43	42
HW79054	31	32	26	31	39	38	40
HW79149	35	30	27	32	41	39	46
L24A	33	32	29	34	43	41	48
L25A	31	33	21	35	42	43	46
L78-1444	34	35	28	39	44	56	50
LN78-575	30	32	27	32	40	43	44
U57139	32	30	23	33	40	39	43
		SEED QUALITY (score)					
Century (II)	3.0	2.5	1.7	3.3	2.0	1.3	2.2
Cumberland (III)	1.0	2.3	1.8	3.3	2.7	1.3	1.5
Pella	3.0	2.3	1.6	3.3	2.8	1.3	2.2
Union (IV)	3.0	2.0	1.4	2.8	1.8	1.2	1.7
Williams 79	2.0	1.8	1.6	2.7	1.5	1.2	1.5
A79-232005	1.0	2.5	1.8	3.3	2.3	1.5	2.2
A79-232026	1.0	1.8	1.7	2.8	2.0	1.2	2.2
A79-236002	3.0	2.2	1.9	3.0	2.3	1.8	2.0
A79-238034	2.0	2.3	1.9	2.8	1.8	1.5	1.7
A79-334010	3.0	2.0	1.8	2.7	2.8	1.4	2.2
A79-336014	3.0	2.0	1.5	3.5	1.7	1.2	2.0
HC77-1418	1.0	1.5	1.6	2.3	1.5	1.2	1.5
HW74-3385	3.0	1.7	1.3	1.7	1.3	1.2	1.2
HW79015	2.0	2.0	1.8	3.0	2.3	1.3	2.0
HW79054	3.0	2.2	1.8	3.3	3.0	1.2	2.3
HW79149	1.0	3.0	2.0	3.3	2.0	1.2	2.3
L24A	2.0	1.5	1.3	2.7	1.7	1.2	1.7
L25A	2.0	1.7	1.3	2.3	1.8	1.2	1.2
L78-1444	2.0	2.0	1.4	3.0	1.3	1.3	1.3
LN78-575	2.0	2.0	1.7	2.7	2.2	1.2	1.7
U57139	2.0	2.0	1.8	2.3	2.2	1.2	1.8

*Not included in the mean

Iowa		Kansas			Neb.	S.D.
Ottumwa	Stuart	Manhattan	Powhatten	Topeka	Mead	Elkpoint
			PLANT HEIGHT (inches)			
40	49	39	29	23	33	41
41	45	40	34	31	37	41
44	49	44	33	27	38	43
49	56	51	41	35	40	47
49	50	45	37	36	42	47
40	45	40	31	32	34	39
42	47	41	25	26	34	37
43	46	41	31	26	36	42
38	47	40	30	26	35	43
42	52	44	35	33	38	43
40	45	41	30	29	33	41
30	34	17	24	14	25	34
27	22	16	20	16	22	27
45	49	44	34	28	36	40
40	44	38	32	24	37	41
45	52	47	35	32	41	46
44	49	43	37	35	41	46
43	50	48	35	35	39	41
48	50	44	39	32	43	48
41	46	38	33	30	39	43
41	48	45	35	32	39	45
			SEED QUALITY (score)			
1.7		2.0	3.0	4.0	2.0	1.0
1.5		1.5	3.0	1.5	2.3	3.0
1.8		1.5	3.5	3.5	2.3	1.0
1.6		1.0	3.0	1.5	2.0	3.0
1.4		1.0	3.5	1.5	2.0	2.0
2.0		2.0	4.5	2.0	2.0	3.0
1.9		1.0	2.5	1.5	2.0	3.0
1.4		3.5	4.5	2.5	2.2	2.0
1.4		2.0	4.5	3.0	2.0	2.0
1.8		2.5	3.5	3.0	2.0	2.0
1.6		1.5	4.5	2.5	2.3	2.0
1.4		1.5	2.0	2.0	1.7	2.0
1.6		2.0	2.0	2.0	1.5	3.0
1.6		2.0	2.0	3.5	2.2	2.0
1.9		1.0	5.0	2.0	2.3	2.0
1.4		2.0	4.0	4.0	2.8	2.0
1.4		1.0	4.0	1.5	2.0	3.0
1.4		1.5	4.5	2.0	2.1	3.0
1.6		1.5	2.5	1.5	2.0	3.0
1.7		1.0	4.0	1.5	2.2	2.0
1.5		1.5	2.5	2.5	1.6	2.0

Strain	Mean 19 Tests	Md. Clarksville	N.J. Adelphia	Penn. Landisville	Ohio Hoytville	Ohio Wooster	Indiana Greenfield	Indiana Lafayette
		SEED SIZE (g/100)						
Century (II)	18.0	18.0	17.0	16.9	16.7	16.5	18.9	16.9
Cumberland (III)	18.1	19.6	14.0	19.6	18.5	17.1	18.7	16.8
Pella	19.3	19.6	16.0	19.0	18.5	17.9	20.5	18.0
Union (IV)	18.9	19.5	16.0	21.2	18.6	20.7	20.7	17.5
Williams 79	17.8	18.5	15.0	19.4	18.2	16.5	18.6	18.5
A79-232005	14.6	14.1	14.0	13.3	14.2	12.7	14.9	13.5
A79-232026	15.3	15.6	14.0	14.0	14.7	14.2	16.6	14.3
A79-236002	17.1	16.3	16.0	16.3	15.2	15.5	20.7	15.1
A79-238034	14.0	12.2	12.0	13.5	12.7	11.8	16.3	12.8
A79-334010	15.0	14.3	13.0	15.3	14.6	13.3	15.3	14.8
A79-336014	19.4	20.6	17.0	21.0	18.8	17.3	20.3	18.5
HC77-1418	15.4	14.3	14.0	15.1	14.0	13.5	15.2	15.3
HW74-3385 Hobbit	16.4	16.0	13.0	15.8	16.7	15.5	17.6	15.8
HW79015	17.0	16.9	16.0	16.2	18.0	14.1	17.1	16.8
HW79054	19.0	18.5	18.0	18.6	16.5	17.0	20.2	18.6
HW79149	16.9	16.4	16.0	17.5	19.5	15.3	17.1	17.1
L24A	17.5	17.7	16.0	18.7	18.7	17.8	17.7	15.9
L25A	17.3	17.2	15.0	18.3	17.9	16.6	18.5	17.8
L78-1444	16.3	17.7	15.0	17.9	17.6	16.8	17.7	16.7
LN78-575	19.0	19.4	17.0	18.1	19.4	17.7	18.8	17.9
U57139	16.5	18.5	13.0	17.2	16.8	15.8	16.9	15.8

	Mean 4 Tests	Ohio Hoytville	Ill. Eldorado	Iowa Ottumwa	S.D. Elkpoint
		PROTEIN (%)			
Century (II)	42.1	40.9	42.9	43.1	41.6
Cumberland (III)	40.2	38.0	41.1	40.5	41.0
Pella	38.8	36.5	39.3	41.2	38.3
Union (IV)	42.0	39.9	43.5	40.7	43.7
Williams 79	41.1	42.1	41.2	40.9	40.1
A79-232005	40.4	37.9	40.9	41.3	41.7
A79-232026	39.3	38.8	39.5	39.6	39.3
A79-236002	40.1	39.2	41.4	40.1	39.6
A79-238034	40.2	40.2	40.6	40.2	39.6
A79-334010	43.0	41.0	44.2	45.5	41.4
A79-336014	41.0	38.6	41.8	42.8	40.8
HC77-1418	43.6	41.4	44.6	44.8	43.5
HW74-3385 Hobbit	40.1	38.4	41.8	40.3	39.8
HW79015	41.3	41.5	42.8	41.4	39.5
HW79054	40.4	39.1	42.6	40.6	39.3
HW79149	42.1	43.9	41.9	42.2	40.4
L24A	41.7	41.6	42.9	40.5	41.8
L25A	42.2	41.2	42.4	42.6	42.8
L78-1444	42.8	42.3	44.0	42.4	42.4
LN78-575	41.5	40.5	41.4	42.9	41.2
U57139	41.4	38.4	41.9	43.3	41.9

Ky.	Illinois					
Lexington*	Belleville	Browntown	Eldorado	Girard	Pontiac	Urbana
			SEED SIZE (g/100)			
15.1	18.5	16.0	16.7	16.6	20.2	17.1
15.2	18.8	15.6	16.1	15.8	20.8	19.2
16.0	19.9	18.8	17.4	16.7	22.1	19.9
16.8	19.0	19.1	17.6	15.5	20.8	17.7
14.8	16.8	16.9	15.3	14.5	20.3	17.9
12.1	14.5	12.6	13.0	12.6	17.6	14.8
12.8	14.7	13.2	12.5	12.4	18.1	15.5
13.5	17.5	15.4	15.4	14.3	20.9	17.2
11.6	13.5	11.6	11.9	11.2	15.4	14.4
12.2	14.0	12.7	13.8	13.1	17.2	15.3
16.0	18.9	17.3	17.3	15.7	21.1	19.2
13.2	15.1	14.0	14.2	12.9	17.1	15.9
13.5	16.2	13.2	14.6	13.9	18.4	17.1
14.0	17.1	15.0	14.5	14.3	20.1	17.6
15.1	19.5	18.0	17.8	16.2	21.5	18.1
14.2	16.4	16.5	14.6	14.6	18.7	16.8
15.7	17.4	16.5	15.3	15.0	19.6	17.1
14.2	16.5	15.8	14.8	13.8	19.8	17.5
14.5	16.2	15.4	14.5	13.1	17.2	14.9
15.0	19.0	18.2	17.2	16.2	22.4	19.4
14.0	17.2	16.4	15.0	13.8	17.0	16.3

*Not included in the mean

Mean	Ohio	Ill.	Iowa	S.D.
4 Tests	Hoytville	Eldorado	Ottumwa	Elkpoint
			OIL (%)	
19.4	19.8	20.4	18.7	18.7
20.2	22.0	20.5	20.1	18.4
20.2	21.3	20.3	19.6	19.4
19.0	19.8	18.9	18.9	18.4
19.0	19.3	19.0	19.0	18.5
19.7	21.0	20.1	19.2	18.5
20.1	20.3	20.0	19.8	20.4
19.2	20.2	20.0	18.9	17.8
20.0	21.5	20.0	19.8	18.9
19.2	20.0	19.4	19.1	18.2
19.2	20.3	19.4	19.0	18.3
18.8	20.3	19.1	18.1	17.8
20.2	21.1	20.7	19.4	19.7
20.0	20.9	21.3	19.9	17.9
20.8	21.7	20.3	20.8	20.2
19.4	20.1	19.6	19.3	18.4
19.3	19.2	19.7	19.4	18.8
19.7	21.2	20.4	18.8	18.3
19.4	20.2	19.7	18.6	19.1
19.4	20.4	20.2	19.1	18.1
19.5	20.9	20.1	18.7	18.4

	Iowa		Kansas			Neb.	S.D.
Strain	Ottumwa	Stuart	Manhattan	Powhattan	Topeka	Mead	Elkpoint
			SEED SIZE (g/100)				
Century (II)	19.0		18.3	19.3	18.5	19.3	20.9
Cumberland (III)	19.3		18.4	17.8	19.5	18.8	19.7
Pella	21.3		20.4	20.3	19.5	20.3	21.1
Union (IV)	20.0		19.1	17.8	18.4	19.1	19.9
Williams 79	19.0		18.2	17.9	18.5	19.3	18.6
A79-232005	15.4		16.4	15.6	16.6	15.9	16.5
A79-232026	16.1		17.3	17.6	16.8	16.8	16.1
A79-236002	18.6		18.7	15.6	17.8	18.3	19.9
A79-238034	14.4		15.5	22.5	14.5	14.7	14.6
A79-334010	16.6		17.4	15.0	16.5	16.3	16.9
A79-336014	20.8		19.9	22.5	21.0	20.2	21.2
HC77-1418	15.6		18.0	18.6	15.9	16.6	18.1
HW74-3385 Hobbit	17.4		17.7	18.4	16.3	19.1	18.1
HW79015	17.0		17.7	17.7	17.7	19.3	20.0
HW79054	21.0		19.6	21.2	19.4	19.8	21.0
HW79149	17.6		16.4	17.6	17.6	17.7	18.4
L24A	18.8		17.6	17.5	18.4	18.3	18.1
L25A	17.1		18.6	18.0	18.4	18.4	19.2
L78-1444	17.2		18.1	14.8	15.7	16.6	17.1
LN78-575	20.3		19.6	19.4	20.5	19.7	20.4
U57139	17.0		16.8	16.8	16.7	17.7	18.3

PRELIMINARY TEST IIIA, 1981

Strain	Parentage	Generation Composited
1. Century (II)	Calland x Bonus	F_6
2. Cumberland (III)	Corsoy x Williams	F_4
3. Union (IV)	William [5] x SL12 (Wayne Rpm, Rps)	F_3
4. A79-231010	AX900-4-3 x [(Harosoy x Norchief) x Beeson]	F_4
5. A80-344003	A75-332035 x Century	F_4
6. A80-344006	(Corsoy x Wayne) x Pella	F_4
7. A80-344007	(Corsoy x Wayne) x Pella	F_4
8. A80-344014	L21 x A75-204018	F_4
9. A80-345005	(Corsoy x Wayne) x A75-204018	F_4
10. A80-346005	(Corsoy x Wayne) x A75-204018	F_4
11. A80-346013	L21 x A75-204018	F_4
12. A80-346024	A75-332035 x A75-204018	F_4
13. A80-346026	A75-332035 x A75-204018	F_4
14. A80-346029	A75-204018 x BSR301	F_4
15. A80-346031	A75-204018 x BSR301	F_4
16. A80-347013	L21 x (Corsoy x Wayne)	F_4
17. HC78-218	L72U2567 x L72U640	F_5
18. HC78-349	L72U2567 x Essex	F_5
19. HC78-350	L72U2567 x Essex	F_5
20. HC78-352	L72U2567 x Essex	F_5
21. HC78-353	L72U2567 x Essex	F_5
22. HC78-531	Elf x L74D-619	F_5
23. HC78-674	L70T-543G x L74D-619	F_5
24. HC78-676	L70T-543G x L74D-619	F_5
25. HC78-681	L70T-543G x L74D-619	F_5
26. HC78-1631	L72U-2567 x Hodgson	F_5
27. HW74-3385	Williams x Ransom	F_5
28. L78-8716	L71-3628 x Elf	F_4
29. L78-9236	L73-6626 x Elf	F_4

PRELIMINARY TEST IIIA, 1981

Descriptive and Other Data

Strain	Descriptive Code			Chorosis Score Ames	Shattering Manhattan 2 Weeks
Century (II)	PTBr	DYBl	I	3.0	3
Cumberland (III)	PGBr	SYIb	I	3.5	1
Union (IV)	WTT	SYBl	I	3.3	1
A79-231010	WGBr	DYBf	I	3.3	1
A80-344003	WTBr	DYBr	I	2.3	1
A80-344006	WTBr	DYBr	I	3.7	2
A80-344007	WTBr	DYBl	I	3.5	1
A80-344014	WTBr	DYBl+Br	I	2.7	1
A80-345005	WTBr	DYBr	I	3.0	2
A80-346005	WTBr	DYBr	I	3.2	1
A80-346013	WTBr	SYGr+Y	I	3.0	1
A80-346024	WTBr	SYBr	I	3.3	1
A80-346026	WTBr	SYBr	I	2.5	1
A80-346029	WTBr	DYBr	I	3.8	1
A80-346031	WTBr	DYBr	I	2.7	1
A80-347013	WGBr	DYBf	I	3.3	1
HC78-218	PTT	DYBl	D	3.3	1
HC78-349	PTT	DYBl	D	2.5	1
HC78-350	PTT	DYBl	D	2.5	1
HC78-352	PTT	DYBl	D	3.0	1
HC78-353	PTT	DYBl	D	2.7	1
HC78-531	PTT	SYBl	D	3.2	1
HC78-674	PTBr	SYBr	D	3.0	1
HC78-676	PTBr	SYBr	D	3.0	1
HC78-681	PTT	SYBl	D	3.0	1
HC78-1631	PGT	DYBf+Ib	D	3.7	2
HW74-3385 Hobbit	WTT	SYBl	D	3.2	1
L78-8716	PTBr	DYBr	D	2.8	1
L78-9236	PTT	DYBl	D	2.8	1

PRELIMINARY TEST IIIA, 1981

Disease Data

Strain	BSR				PR_1		PR Tol.
	Ames Plant	Ames Stem	Lafayette Stem	Urbana Leaf	Ames	Lafayette	Vickery
	n %	n %	n %	n score	a Reaction	a Reaction	n score
Century (II)	100	81	100	4.5	R	R	3.5
Cumberland (III)	100	62	60	4.9	S	S	3.2
Union (IV)	100	73	40	4.2	R	R	3.5
A79-231010	70	17	40	1.0	S	S	3.0
A80-344003	40	14	40	1.0	R	R	2.7
A80-344006	100	93	80	4.2	R	-	2.5
A80-344007	100	88	40	4.2	S	-	3.0
A80-344014	100	56	0	3.5	H	R	3.0
A80-345005	90	73	20	4.0	H	S	2.7
A80-346005	100	81	40	4.0	H	S	2.5
A80-346013	100	89	40	3.7	S	S	3.9
A80-346024	70	31	20	1.0	R	R	4.0
A80-346026	100	99	60	3.8	H	H	3.3
A80-346029	100	58	40	1.0	H	H	3.0
A80-346031	100	82	40	1.5	S	S	3.0
A80-347013	100	83	60	3.9	R	S	3.9
HC78-218	100	100	40	1.0	R	R	3.3
HC78-349	100	71	40	1.0	S	S	3.0
HC78-350	100	76	80	1.0	H	S	3.3
HC78-352	100	77	60	1.0	S	S	4.0
HC78-353	100	76	60	1.0	S	S	3.5
HC78-531	100	100	0	1.0	S	S	3.5
HC78-674	100	100	60	1.7	R	R	4.0
HC78-676	100	100	40	1.5	R	R	4.0
HC78-681	100	100	100	1.2	S	S	3.6
HC78-1631	100	100	60	2.0	S	S	4.5
HW74-3385	100	81	80	3.2	S	S	3.4
L78-8716	100	69	40	1.0	S	S	3.5
L78-9236	100	97	40	1.0	S	S	4.0

PRELIMINARY TEST IIIA, 1981

Disease Data

Strain	FE_2	PS	PSB	SMV	Germ*
	Lafayette				
	n score	a %	n %	a score	%
Century (II)	4	61	5	5E	91
Cumberland (III)	3	75	18	5E	79
Union (IV)	3	51	6	5E	90
A79-231010	3	65	7	4E	85
A80-344003	1	80	6	5E	92
A80-344006	2	73	18	5E	71
A80-344007	5	59	12	5E	82
A80-344014	3	65	4	5E	89
A80-345005	4	33	4	5E	75
A80-346005	3	37	6	5E	91
A80-346013	5	33	7	5E	83
A80-346024	3	24	20	5E	78
A80-346026	2	32	9	5E	88
A80-346029	2	72	6	5E	90
A80-346031	2	40	10	5E	84
A80-347013	3	40	9	5E	82
HC78-218	1	70	3	5E	73
HC78-349	1	10	1	3E	93
HC78-350	1	8	1	4M	92
HC78-352	1	9	0	4M	99
HC78-353	1	15	2	4M	94
HC78-531	1	33	0	5E	98
HC78-674	1	87	3	1	90
HC78-676	1	73	2	1	88
HC78-681	1	27	2	1	92
HC78-1631	2	49	3	3E	95
HW74-3385	5	37	3	1	96
L78-8716	1	30	3	5E	88
L78-9236	1	32	6	5E	92

*Petri dish germination on potato dextrose agar

PRELIMINARY TEST III, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	8	8	7	8	8	7	7	4	4
	bu/a	no.	date	score	in.	score	g/100	%	%
Century (II)	45.8	21	- 9	2.0	37	1.8	17.4	42.8	19.5
Cumberland (III)	49.5	9	9-25*	2.3	40	1.8	18.0	41.1	20.3
Union (IV)	47.3	14	+ 6	2.7	47	2.3	18.6	41.8	19.5
A79-231010	51.5	4	- 1	1.9	40	1.7	18.7	43.4	19.1
A80-344003	53.4	1	+ 3	1.7	37	2.1	17.6	42.1	19.1
A80-344006	47.6	12	- 3	2.6	41	1.9	16.7	39.3	19.8
A80-344007	46.5	19	- 3	2.7	43	2.0	17.0	41.2	20.0
A80-344014	47.4	13	+ 2	2.1	42	1.9	17.0	41.2	19.5
A80-345005	52.0	3	+ 1	2.6	41	1.6	15.2	38.7	20.8
A80-346005	49.2	10	+ 4	2.5	42	1.8	15.5	42.8	19.3
A80-346013	47.0	16	+ 2	2.5	46	1.7	15.9	38.7	20.0
A80-346024	51.2	5	+ 4	2.4	42	1.9	15.6	40.9	20.5
A80-346026	44.5	25	+ 3	2.6	42	1.9	13.9	38.9	20.7
A80-346029	52.6	2	+ 4	1.9	37	1.8	16.4	37.4	20.2
A80-346031	50.9	6	+ 7	2.6	44	1.9	17.1	39.6	19.9
A80-347013	46.5	19	+ 5	2.7	47	1.5	16.6	40.2	19.8
HC78-218	37.9	29	- 1	1.2	27	2.0	20.0	43.1	18.7
HC78-349	45.0	24	+ 4	1.2	22	2.0	19.6	45.9	19.9
HC78-350	46.9	17	+ 5	1.2	22	2.4	19.6	44.7	20.2
HC78-352	45.5	23	+ 4	1.4	23	1.8	19.1	44.5	19.7
HC78-353	45.8	21	+ 5	1.2	21	2.1	20.0	44.4	19.8
HC78-531	46.8	18	+ 1	1.2	24	1.7	17.5	42.3	18.4
HC78-674	47.3	14	0	1.3	22	1.9	18.0	42.1	18.4
HC78-676	48.7	11	+ 1	1.3	23	1.9	16.5	42.6	18.9
HC78-681	41.5	27	0	1.2	22	1.9	17.5	42.8	19.6
HC78-1631	40.4	28	- 2	1.4	22	2.0	15.9	41.6	19.9
HW74-3385 Hobbit	50.8	7	+ 1	1.3	24	1.9	17.1	40.6	20.4
L78-8716	49.8	8	+ 5	2.0	32	1.7	17.9	40.2	19.4
L78-9236	43.5	26	+ 4	1.9	35	1.8	17.9	40.6	19.9

*128 days after planting

Several strains were superior in performance to the named varieties in this test. A78-344003 was the highest yielding strain in the test and had excellent lodging resistance. This strain was resistant to PR_1, to FE_2, and had the highest level of resistance to BSR of any entry in the test. Hobbit was the highest yielding determinate entry in the test.

PRELIMINARY TEST IIIA, 1981

Strain	Mean 8 Tests	Ohio Hoytville	Indiana Lafayette	KY. Lexington*	Ill. Urbana
		YIELD (bu/a)			
Century (II)	45.8	32.7	32.9	40.4	29.7
Cumberland (III)	49.5	36.1	47.3	46.7	30.5
Union (IV)	47.3	46.6	51.5	39.6	32.7
A79-231010	51.5	43.4	56.0	38.6	45.5
A80-344003	53.4	36.1	56.5	40.5	48.8
A80-344006	47.6	38.9	41.4	36.0	27.3
A80-344007	46.5	32.2	47.6	42.5	31.0
A80-344014	47.4	33.5	52.0	40.3	29.7
A80-345005	52.0	35.2	49.6	35.8	40.5
A80-346005	49.2	43.1	52.8	34.7	30.0
A80-346013	47.0	32.6	55.6	44.1	38.0
A80-346024	51.2	30.1	61.9	35.9	44.4
A80-346026	44.5	33.3	41.7	40.5	27.7
A80-346029	52.6	34.8	60.9	39.3	46.8
A80-346031	50.9	50.4	54.5	44.0	43.0
A80-347013	46.5	34.7	50.3	45.6	35.1
HC78-218	37.9	36.9	32.9	42.6	49.8
HC78-349	45.0	41.3	41.6	48.6	55.5
HC78-350	46.9	44.4	47.5	53.5	52.6
HC78-352	45.5	39.1	40.4	45.9	54.3
HC78-353	45.8	41.3	43.7	45.9	54.2
HC78-531	46.8	29.7	48.7	42.7	48.3
HC78-674	47.3	23.2	54.3	42.7	52.8
HC78-676	48.7	25.5	56.8	43.4	52.5
HC78-681	41.5	27.5	36.3	46.9	51.6
HC78-1631	40.4	30.9	38.4	45.5	51.9
HW74-3385 Hobbit	50.8	39.6	52.0	40.7	46.4
L78-8716	49.8	38.1	57.3	45.1	49.1
L78-9236	43.5	33.1	54.2	47.6	41.2
C.V. (%)		13.1	9.6	7.8	5.2
L.S.D. (5%)		9.4	9.3	6.6	4.6
Row sp. (in.)		30	24		30
Rows/plot		4	4	4	4
Reps		2	2	2	2

*Not included in the mean

PRELIMINARY TEST IIIA, 1981

Iowa		Kan.	Neb.	S.D.
Ottumwa	Stuart	Ashland	Mead	Elkpoint
		YIELD (bu/a)		
50.6	57.1	55.7	54.0	53.4
62.6	56.2	56.3	56.9	50.5
51.6	52.3	54.6	46.6	42.1
54.2	53.4	54.6	55.2	49.8
62.3	55.4	55.2	58.1	54.8
54.4	56.9	55.0	56.4	50.8
49.3	54.4	54.2	55.4	48.0
54.2	49.1	56.0	55.9	48.4
61.4	55.6	59.0	59.4	54.9
54.9	49.1	55.7	54.0	54.3
53.7	49.2	54.4	47.2	45.4
52.9	58.9	57.6	52.8	51.1
50.2	50.8	58.9	48.0	45.7
59.0	57.4	52.6	56.6	52.5
53.0	49.1	56.0	52.0	49.3
49.3	47.3	63.1	50.2	42.0
52.6	55.0	17.0	20.0	39.1
51.8	62.6	20.9	39.0	47.6
56.3	60.0	27.2	37.7	49.8
56.0	58.9	26.4	40.8	47.8
54.8	58.9	26.6	41.3	45.6
52.6	60.2	35.5	52.4	47.0
55.8	63.7	28.8	51.6	48.1
57.7	60.5	45.3	39.6	51.4
55.7	58.3	19.8	37.6	45.0
46.8	56.8	16.8	36.5	45.0
58.5	61.3	40.4	54.1	54.1
52.9	50.1	59.6	49.5	41.5
43.5	40.2	52.9	49.8	32.8
7.1	6.0	8.8	9.3	5.7
7.5	6.5	8.2	9.2	5.6
27	27	30	30	30
4	4	4	4	4
2	2	2	2	2

PRELIMINARY TEST IIIA, 1981

Strain	Mean 8 Tests	Ohio Hoytville	Indiana Lafayette	Ky. Lexington*	Ill Urbana
		YIELD RANK			
Century (II)	21	21	28	21	26
Cumberland (III)	9	13	20	5	24
Union (IV)	14	2	14	23	22
A79-231010	4	4	6	25	15
A80-344003	1	13	5	20	11
A80-344006	12	10	24	26	29
A80-344007	19	23	18	17	23
A80-344014	13	18	12	22	26
A80-345005	3	15	16	28	19
A80-346005	10	5	11	29	25
A80-346013	16	22	7	11	20
A80-346024	5	25	1	27	16
A80-346026	25	19	22	19	28
A80-346029	2	16	2	24	13
A80-346031	6	1	8	12	17
A80-347013	19	17	15	8	21
HC78-218	29	12	28	16	9
HC78-349	24	6	23	2	1
HC78-350	17	3	19	1	5
HC78-352	23	9	25	6	2
HC78-353	21	6	21	7	3
HC78-531	18	26	17	15	12
HC78-674	14	29	9	14	4
HC78-676	11	28	4	13	6
HC78-681	27	27	27	4	8
HC78-1631	28	24	26	9	7
HW74-3385 Hobbit	7	8	12	18	14
L78-8716	8	11	3	10	10
L78-9236	26	20	10	3	18

*Not included in the mean

PRELIMINARY TEST IIIA, 1981

Iowa		Kan.	Neb.	S.D.
Ottumwa	Stuart	Ashland	Mead	Elkpoint
		YIELD RANK		
24	12	9	10	5
1	15	6	3	10
23	21	13	21	25
14	20	13	8	11
2	17	11	2	2
13	13	12	5	9
26	19	16	7	16
14	25	7	6	14
3	16	3	1	1
11	25	9	11	3
16	24	15	20	22
18	7	5	12	8
25	22	4	19	20
4	11	18	4	6
17	25	7	14	13
26	28	1	16	26
20	18	28	29	28
22	2	26	25	18
7	6	23	26	12
8	7	25	23	17
12	7	24	22	21
20	5	21	13	19
9	1	22	15	15
6	4	19	24	7
10	10	27	27	24
28	14	29	28	23
5	3	20	9	4
18	23	2	18	27
29	29	17	17	29

PRELIMINARY TEST IIIA, 1981

Strain	Mean 7 Tests	Ohio Hoytville	Indiana Lafayette	Ky. Lexington*	Ill. Urbana
		MATURITY (date)			
Century (II)	- 9	-10	-10	- 7	- 9
Cumberland (III)	9-25	9-26	9-25	9-21	9-25
Union (IV)	+ 6	+ 3	+ 6	+ 7	+ 6
A79-231010	- 1	- 1	0	0	+ 4
A80-344003	+ 3	- 2	+ 4	+ 3	+ 7
A80-344006	- 3	- 4	- 3	0	- 3
A80-344007	- 3	- 6	- 3	+ 3	- 2
A80-344014	+ 2	- 1	+ 1	+ 3	+ 3
A80-345005	+ 1	- 2	+ 1	+ 3	+ 3
A80-346005	+ 4	+ 1	+ 4	+ 3	+ 5
A80-346013	+ 2	- 1	+ 2	+ 3	+ 3
A80-346024	+ 4	- 2	+ 6	+ 3	+ 7
A80-346026	+ 3	0	+ 1	+ 3	+ 4
A80-346029	+ 4	+ 1	+ 4	+ 3	+ 9
A80-346031	+ 7	+ 3	+ 8	+ 7	+11
A80-347013	+ 5	+ 3	+ 4	+ 7	+ 5
HC78-218	- 1	- 5	+ 1	- 7	+ 4
HC78-349	+ 4	- 1	+ 6	+ 3	+ 9
HC78-350	+ 5	+ 1	+ 7	+ 3	+ 9
HC78-352	+ 4	0	+ 7	+ 3	+ 9
HC78-353	+ 5	+ 2	+ 7	+ 3	+10
HC78-531	+ 1	- 5	+ 4	0	+ 7
HC78-674	0	- 5	+ 2	- 7	+ 6
HC78-676	+ 1	- 6	+ 2	- 7	+ 5
HC78-681	0	- 6	+ 1	- 7	+ 3
HC78-1631	- 2	- 8	- 2	- 7	0
HW74-3385 Hobbit	+ 1	0	+ 3	- 7	+ 1
L78-8716	+ 5	0	+ 7	+ 3	+ 1
L78-9236	+ 4	+ 2	+ 8	+ 3	+ 7
Date planted	5-21	5-21	5-23	6-11	5-26
Days to mature	128	128	125	102	122

*Not included in the mean

PRELIMINARY TEST IIIA, 1981

Iowa		Kan.	Neb.	S.D.
Ottumwa	Stuart	Ashland	Mead	Elkpoint
		MATURITY (date)		
	- 6	-11	- 9	- 5
	9-22	9-18	9-26	10-3
	+ 8	+ 8	+ 4	+ 5
	- 2	- 2	- 3	- 3
	+ 4	+ 2	+ 3	+ 2
	- 3	- 2	- 4	- 5
	- 4	- 1	- 4	- 2
	+ 4	+ 4	+ 2	+ 2
	+ 1	+ 2	0	- 1
	+ 8	+ 5	0	+ 2
	+ 6	+ 2	+ 1	0
	+ 4	+ 6	+ 1	+ 3
	+ 6	+ 7	+ 1	+ 1
	+ 6	+ 1	+ 3	+ 1
	+ 8	+10	+ 3	+ 3
	+ 8	+10	+ 3	+ 3
	- 4	+ 6	- 2	- 6
	+ 6	+ 6	+ 4	+ 1
	+ 6	+ 6	+ 5	+ 1
	+ 6	+ 3	+ 4	0
	+ 6	+ 5	+ 3	+ 1
	0	+ 4	0	- 1
	0	+ 4	- 3	- 1
	+ 1	+ 5	- 2	- 1
	- 1	+ 3	- 3	0
	- 4	+ 5	- 4	- 4
	- 2	+ 4	0	- 2
	+ 6	+17	+ 2	+ 1
	+ 6	+ 2	+ 3	+ 1
5-28	5-11	5-15	5-22	5-22
---	134	126	127	134

PRELIMINARY TEST IIIA, 1981

Strain	Mean 8 Tests	Ohio Hoytville	Indiana Lafayette	Ky. Lexington*	Ill. Urbana
		LODGING (score)			
Century (II)	2.0	1.4	1.5	1.0	3.7
Cumberland (III)	2.3	1.3	2.3	1.5	4.0
Union (IV)	2.7	1.7	2.8	2.0	4.4
A79-231010	1.9	1.5	2.0	1.3	2.2
A80-344003	1.7	1.3	2.0	1.0	1.5
A80-344006	2.6	1.5	3.0	2.5	4.3
A80-344007	2.7	1.5	3.5	2.0	4.3
A80-344014	2.1	1.5	2.3	1.0	3.2
A80-345005	2.6	1.4	3.0	1.0	4.1
A80-346005	2.5	1.3	2.5	1.0	4.4
A80-346013	2.5	1.5	2.8	2.3	4.0
A80-346024	2.4	1.4	3.0	1.3	2.4
A80-346026	2.6	1.3	2.5	1.3	4.1
A80-346029	1.9	1.3	2.5	1.0	2.1
A80-346031	2.6	1.4	3.3	1.3	2.2
A80-347013	2.7	1.4	3.0	1.8	3.7
HC78-218	1.2	1.3	1.1	1.5	1.2
HC78-349	1.2	1.3	1.3	1.3	1.1
HC78-350	1.2	1.5	1.3	1.0	1.0
HC78-352	1.4	1.4	1.3	1.0	1.1
HC78-353	1.2	1.3	1.3	1.3	1.2
HC78-531	1.2	1.2	1.5	1.5	1.2
HC78-674	1.3	1.4	1.3	2.8	1.4
HC78-676	1.3	1.3	1.5	2.0	1.8
HC78-681	1.2	1.2	1.5	1.5	1.4
HC78-1631	1.4	1.4	1.5	1.8	1.5
HW74-3385 Hobbit	1.3	1.5	1.5	1.0	1.6
L78-8716	2.0	1.9	2.3	2.5	2.7
L78-9236	1.9	1.4	2.0	1.7	2.1

*Not included in the mean

PRELIMINARY TEST IIIA, 1981

Iowa		Kan.	Neb.	S.D.
Ottumwa	Stuart	Ashland	Mead	Elkpoint
		LODGING (score)		
2.3	3.3	1.3	1.0	1.5
2.5	3.2	1.8	1.5	2.0
2.8	3.5	2.0	2.0	2.0
2.0	2.8	1.5	1.3	1.5
2.3	2.3	2.0	1.0	1.5
3.0	3.5	2.3	1.5	2.0
3.3	3.5	1.5	1.8	2.0
2.3	2.5	2.0	1.0	2.0
3.0	3.8	2.0	1.5	2.0
2.8	3.8	2.0	1.3	2.0
2.3	3.0	2.0	2.0	2.0
2.0	3.8	2.3	1.8	2.5
2.8	4.5	2.3	1.3	2.0
2.3	2.8	2.0	1.0	1.5
2.8	4.8	2.8	1.5	2.0
3.0	4.0	2.8	1.8	2.0
1.5	1.3	1.0	1.0	1.0
1.5	1.5	1.0	1.0	1.0
1.5	1.3	1.0	1.0	1.0
1.5	2.8	1.0	1.0	1.0
1.5	1.3	1.0	1.0	1.0
1.5	1.3	1.0	1.0	1.0
1.5	1.8	1.0	1.0	1.0
1.5	1.5	1.0	1.0	1.0
1.5	1.3	1.0	1.0	1.0
1.5	2.0	1.0	1.0	1.0
1.5	1.3	1.0	1.0	1.0
2.5	2.5	1.0	1.0	2.0
1.8	3.8	1.3	1.0	2.0

PRELIMINARY TEST IIIA, 1981

Strain	Mean 8 Tests	Ohio Hoytville	Indiana Lafayette	Ky. Lexington*	Ill. Urbana
		PLANT HEIGHT (inches)			
Century (II)	37	25	33	31	45
Cumberland (III)	40	26	42	34	45
Union (IV)	47	35	46	38	56
A79-231010	40	27	41	31	49
A80-344003	37	23	36	28	43
A80-344006	41	25	39	34	45
A80-344007	43	28	41	34	50
A80-344014	42	28	44	32	47
A80-345005	41	24	40	30	47
A80-346005	42	30	39	28	45
A80-346013	46	29	46	38	51
A80-346024	42	26	44	33	48
A80-346026	42	26	40	32	53
A80-346029	37	24	36	27	39
A80-346031	44	27	42	33	51
A80-347013	47	28	45	37	58
HC78-218	27	23	55	26	26
HC78-349	22	23	16	24	23
HC78-350	22	22	18	22	22
HC78-352	23	24	17	24	24
HC78-353	21	23	15	22	22
HC78-531	24	18	18	22	24
HC78-674	22	18	18	26	28
HC78-676	23	16	21	26	27
HC78-681	22	20	16	26	24
HC78-1631	22	24	16	26	25
HW74-3385 Hobbit	24	28	19	24	25
L78-8716	32	29	31	32	33
L78-9236	35	25	31	35	37

*Not included in the mean

PRELIMINARY TEST IIIA, 1981

Iowa		Kan.	Neb.	S.D.
Ottumwa	Stuart	Ashland	Mead	Elkpoint
		PLANT HEIGHT (inches)		
38	45	38	31	40
44	45	40	38	41
50	56	52	37	47
40	48	42	35	39
41	46	40	33	37
42	49	43	37	45
44	52	45	39	43
45	49	46	35	45
46	48	44	35	42
46	47	46	35	45
52	55	49	41	44
46	51	48	29	42
46	48	48	35	41
40	46	38	32	38
48	60	44	38	40
52	56	45	40	48
27	30	12	19	25
24	26	15	19	29
21	28	13	18	30
22	33	15	19	31
22	27	15	19	28
26	29	16	29	28
24	29	14	20	27
26	31	16	19	26
26	28	16	18	24
22	30	12	20	24
25	28	18	20	27
36	39	24	25	36
36	41	29	37	45

PRELIMINARY TEST IIIA, 1981

Strain	Mean 7 Tests	Ohio Hoytville	Indiana Lafayette	Ky. Lexington*	Ill. Urbana
		SEED QUALITY (score)			
Century (II)	1.8	1.6	1.0	3.0	2.3
Cumberland (III)	1.8	1.2	1.0	1.0	2.3
Union (IV)	2.3	1.2	2.0	2.0	1.8
A79-231010	1.7	1.5	1.0	1.0	2.0
A80-344003	2.1	2.4	1.0	2.0	2.3
A80-344006	1.9	1.9	1.0	2.0	2.5
A80-344007	2.0	1.5	1.0	2.0	2.5
A80-344014	1.9	1.3	1.0	2.0	2.0
A80-345005	1.6	1.4	1.5	2.0	1.8
A80-346005	1.8	1.3	1.5	2.0	2.0
A80-346013	1.7	1.3	1.0	2.0	1.5
A80-346024	1.9	1.3	1.0	2.0	1.8
A80-346026	1.9	1.3	2.0	2.0	2.3
A80-346029	1.8	1.7	1.0	2.0	1.8
A80-346031	1.9	1.4	2.0	2.0	1.5
A80-347013	1.5	1.4	1.0	2.0	1.5
HC78-218	2.0	1.4	1.0	1.0	2.0
HC78-349	2.0	1.7	1.5	1.0	2.0
HC78-350	2.4	1.5	1.0	2.0	1.8
HC78-352	1.8	1.5	1.0	1.0	1.8
HC78-353	2.1	1.6	1.5	1.0	1.5
HC78-531	1.7	1.3	1.0	2.0	1.3
HC78-674	1.9	2.0	1.0	1.0	1.8
HC78-676	1.9	1.7	1.0	1.0	1.8
HC78-681	1.9	1.4	1.0	1.0	1.5
HC78-1631	2.0	1.4	1.0	1.0	1.3
HW74-3385 Hobbit	1.9	1.4	1.0	1.0	1.8
L78-8716	1.7	1.4	1.0	2.0	1.5
L78-9236	1.8	1.3	1.0	2.0	1.8

*Not included in the mean

PRELIMINARY TEST IIIA, 1981

Iowa		Kan.	Neb.	S.D.
Ottumwa	Stuart	Ashland	Mead	Elkpoint
		SEED QUALITY (score)		
1.7		3.0	1.8	1.0
1.6		2.5	1.8	2.0
1.8		4.0	2.5	3.0
1.8		2.0	1.8	2.0
1.5		3.0	2.8	2.0
1.6		3.0	1.5	2.0
1.7		3.0	2.3	2.0
1.8		3.0	2.3	2.0
1.5		1.5	1.5	2.0
1.7		1.0	2.0	3.0
1.9		1.5	1.5	3.0
1.8		3.0	1.5	3.0
1.7		1.5	1.5	3.0
1.5		1.5	2.3	3.0
1.7		2.0	1.5	3.0
1.4		2.0	1.5	2.0
1.6		5.0	1.3	2.0
1.9		1.5	2.5	3.0
1.5		5.0	2.8	3.0
1.5		2.5	1.5	3.0
1.9		5.0	1.5	2.0
1.5		2.0	2.0	3.0
1.9		4.0	1.5	1.0
1.8		4.5	1.3	1.0
1.5		4.0	1.8	2.0
1.6		5.0	1.5	2.0
1.4		3.5	1.3	3.0
1.5		2.0	1.8	3.0
1.4		2.5	1.5	3.0

PRELIMINARY TEST IIIA, 1981

Strain	Mean 7 Tests	Ohio Hoytville	Indiana Lafayette	Ky. Lexington*	Ill. Urbana
		SEED SIZE (g/100)			
Century (II)	17.4	16.2	14.6	15.2	15.6
Cumberland (III)	18.0	17.2	17.1	16.1	16.9
Union (IV)	18.6	17.8	17.6	16.7	16.6
A79-231010	18.7	18.1	19.2	14.7	18.9
A80-344003	17.6	16.3	16.9	13.8	18.3
A80-344006	16.7	16.1	16.6	13.7	15.1
A80-344007	17.0	15.2	16.7	13.8	16.2
A80-344014	17.0	15.5	16.4	14.6	15.0
A80-345005	15.2	14.2	14.5	12.2	14.3
A80-346005	15.5	14.8	15.2	12.4	14.0
A80-346013	15.9	15.2	15.5	14.5	14.9
A80-346024	15.6	14.2	15.5	13.2	15.3
A80-346026	13.9	13.6	12.0	12.2	12.2
A80-346029	16.4	15.2	16.6	13.6	17.5
A80-346031	17.1	16.6	15.9	14.2	17.3
A80-347013	16.6	14.9	15.6	14.7	15.3
HC78-218	20.0	16.9	20.4	15.9	19.3
HC78-349	19.6	16.9	21.3	15.4	18.8
HC78-350	19.6	16.7	20.1	15.9	17.8
HC78-352	19.1	16.1	20.4	15.3	18.4
HC78-353	20.0	17.4	19.8	16.2	18.8
HC78-531	17.5	14.2	17.7	14.1	17.0
HC78-674	18.0	15.4	18.0	13.1	17.0
HC78-676	16.5	13.7	16.4	13.1	15.6
HC78-681	17.5	14.7	18.2	13.8	16.3
HC78-1631	15.9	12.5	17.2	11.7	14.6
HW74-3385 Hobbit	17.1	15.0	16.4	13.2	15.9
L78-8716	17.9	15.6	18.6	16.9	18.5
L78-9236	17.9	14.6	17.6	16.4	17.9

*Not included in the mean

PRELIMINARY TEST IIIA, 1981

Iowa		Kan.	Neb.	S.D.
Ottumwa	Stuart	Ashland	Mead	Elkpoint
		SEED SIZE (g/100)		
18.8		18.0	18.5	20.3
19.7		17.0	18.8	19.7
19.8		20.0	18.2	20.4
18.7		18.0	18.6	19.5
18.8		17.0	18.2	17.4
18.0		16.2	17.7	17.4
18.1		17.0	17.5	18.2
18.3		18.2	17.4	18.0
15.6		16.0	16.2	15.8
16.3		16.0	16.6	15.8
16.6		16.0	16.0	16.9
16.0		16.0	16.4	15.9
15.1		14.8	15.3	14.2
16.9		15.3	16.8	16.8
17.3		19.0	16.1	17.2
17.9		19.0	16.6	16.9
20.2		20.7	23.2	19.1
19.6		21.4	20.6	18.3
20.2		22.9	20.8	18.4
19.9		20.0	20.2	18.8
20.4		23.0	22.2	18.3
18.3		19.3	18.8	17.0
17.6		21.0	19.4	17.4
16.6		19.4	17.3	16.6
17.5		21.0	17.2	17.6
14.4		19.6	18.1	14.8
16.8		17.9	19.3	18.4
19.6		17.0	18.7	17.3
18.6		20.6	18.2	17.5

PRELIMINARY TEST IIIA, 1981

Strain	Mean 4 Tests	Ohio Hoytville	Iowa Ottumwa	Indiana Lafayette	Ill. Urbana
		PROTEIN (%)			
Century (II)	42.8	40.9	45.6	39.4	45.4
Cumberland (III)	41.1	39.4	40.4	40.1	44.3
Union (IV)	41.8	40.8	42.2	39.8	44.3
A79-231010	43.4	40.7	41.9	44.0	46.9
A80-344003	42.1	40.7	42.4	40.5	44.8
A80-344006	39.3	36.9	39.0	38.1	43.0
A80-344007	41.2	37.8	42.8	39.3	45.0
A80-344014	41.2	37.8	41.2	39.6	46.1
A80-345005	38.7	35.6	39.6	36.8	42.9
A80-346005	42.8	41.0	42.9	42.0	45.4
A80-346013	38.7	36.1	39.3	36.6	42.7
A80-346024	40.9	35.6	41.2	41.9	44.7
A80-346026	38.9	35.0	40.2	37.9	42.5
A80-346029	37.4	38.8	39.3	36.3	45.1
A80-346031	39.6	36.4	40.4	39.7	41.8
A80-347013	40.2	37.4	41.0	39.9	42.4
HC78-218	43.1	41.7	44.1	41.2	45.3
HC78-349	45.9	44.5	46.2	46.0	46.9
HC78-350	44.7	43.0	46.1	43.8	46.0
HC78-352	44.5	43.3	45.3	45.2	44.4
HC78-353	44.4	43.0	45.6	42.9	46.2
HC78-531	42.3	38.7	43.5	43.1	43.7
HC78-674	42.1	40.5	44.3	40.2	43.5
HC78-676	42.6	41.6	42.8	40.3	45.7
HC78-681	42.8	41.3	43.3	41.0	45.4
HC78-1631	41.6	39.7	41.1	41.7	43.9
HW74-3385 Hobbit	40.6	39.7	40.7	39.3	42.8
L78-8716	40.2	37.7	42.7	39.0	41.4
L78-9236	40.6	37.4	41.7	38.3	44.8

PRELIMINARY TEST IIIA, 1981

Mean 4 Tests	Ohio Hoytville	Iowa Ottumwa	Indiana Lafayette	Ill. Urbana
		OIL (%)		
19.5	20.3	19.7	19.7	18.4
20.3	21.6	19.5	20.8	19.2
19.5	20.6	18.3	20.5	18.4
19.1	19.8	18.8	19.7	18.0
19.1	20.6	18.5	19.2	18.0
19.8	20.0	19.8	20.5	19.0
20.0	20.5	19.9	20.6	18.9
19.5	20.0	19.2	19.9	18.7
20.8	22.2	20.0	21.2	19.9
19.3	20.1	18.2	20.3	18.6
20.0	20.8	19.5	19.9	19.6
20.5	22.3	19.5	20.6	19.6
20.7	22.2	19.4	21.1	20.0
20.2	21.6	19.8	20.5	18.7
19.9	21.8	18.8	19.7	19.4
19.8	21.4	18.7	20.4	18.8
18.7	19.6	18.3	18.6	18.4
19.9	20.6	19.2	20.2	19.5
20.2	20.7	19.6	20.3	20.0
19.7	20.1	19.5	20.0	19.3
19.8	21.0	18.9	19.8	19.4
18.4	19.3	18.2	18.6	17.6
18.4	20.2	17.7	18.3	17.4
18.9	20.6	18.2	18.7	18.0
19.6	20.4	19.2	19.8	18.8
19.9	21.0	19.6	19.7	19.1
20.4	21.1	20.4	20.3	19.7
19.4	20.6	18.9	19.5	18.5
19.9	20.7	19.8	19.8	19.1

PRELIMINARY TEST IIIB, 1981

Strain	Parentage	Generation Composited
1. Century (II)	Calland x Bonus	F_6
2. Cumberland (III)	Corsoy x Williams	F_4
3. Union (IV)	Williams^5 x SL12(Wayne Rpm, Rps)	F_3
4. A80-347019	$L21_x$ A75-204018	F_4
5. A80-350008	AP6 2YTS(S3)C1	S_3
6. C1593	CX557 x CX407 BC_7-255	F_6
7. C1594	Woodworth x Hodgson	F_5
8. C1595	A100 x Woodworth	F_5
9. C1596	Woodworth x C1524	F_5
10. C1597	Woodworth x C1524	F_5
11. HW8033	Cumberland x Pella	F_5
12. HW8067	A72-512 x Pella	F_5
13. HW8071	Cumberland x Pella	F_5
14. K1070	Tracy x Bonus	F_5
15. K1071	Union x C1528	F_5
16. K1072	Union x K1028	F_5
17. K1073	Union x K1028	F_5
18. K1074	Tracy x Williams	F_5
19. L77-468	Union x L75-8020	F_4
20. L77-542	Union x L75-8020	F_4
21. L77-565	Union x L75-8020	F_4
22. L77-8106	Williams x Mitchell	F_5
23. L77-8290	Williams x Mitchell	F_5
24. L78-1418	Williams^2 x PI88.788	F_4
25. LN78-257	Union x C1528 (Calland x Harosoy Dt_2)	F_5
26. LN1064	Tracy x Williams	F_5
27. LN1065	Tracy x Pomona	F_5
28. U66750	Williams x (L65-4050 x L62-1547)	F_4
29. V78-1175	Essex x Williams	F_5
30. V78-1199	Essex x Williams	F_5

PRELIMINARY TEST IIIB, 1981

Descriptive and Other Data

Strain	Descriptive Code			Chlorosis Score Ames	Shattering Manhattan 2 Weeks
Century (II)	PTBr	DYBl	I	3.0	2
Cumberland (III)	PGBr	SYIb	I	3.5	1
Union (IV)	WTT	SYBl	I	3.3	1
A80-347019	WTT+Br	DYBr	I	2.8	2
A80-350008	PGBr	DYBl	I	2.8	1
C1593	P+WGT	DYBf	D	2.7	2
C1594	PGBr	DYIb	I	2.8	1
C1595	WTT	SYBl	I	3.3	1
C1596	P+WGT	DYBf	SD	3.2	1
C1597	WGT	DYBf	I	3.2	1
HW8033	PGBr	DYIb	I	3.2	1
HW8067	WGBr	SYBf	I	3.8	1
HW8071	PGBr	DYIb	I	3.3	1
K1070	PGBr	DYIb	I	3.7	1
K1071	PGBr	DYIb	SD	3.2	1
K1072	WTT	DYBl	I	3.3	1
K1073	PTT	DYBl	I	3.5	1
K1074	WTT	SYBl	D	3.3	1
L77-468	WTT	SYBl+Bf	I	3.7	1
L77-542	WTT	SYBl	I	3.2	1
L77-565	WTT	SYBl	I	3.2	1
L77-8106	WTT	SYBl	I	3.7	2
L77-8290	WTT	SYBl	I	3.2	1
L78-1418	WTT	SYBl	I	2.8	2
LN78-257	WGT	SYBf	SD	3.8	1
LN1064	WTT	DYBl	I	3.2	1
LN1065	P+WTT	DYBl+Br	I	3.0	1
U66750	PTBr	DYBl	I	3.7	1
V78-1175	P+WTT	DYBl	I	3.2	1
V78-1199	P+WTT	DYBl	I	3.5	1

PRELIMINARY TEST IIIB, 1981

Disease Data

Strain	BSR Ames Plant	BSR Ames Stem	BSR Lafayette Stem	BSR Urbana Leaf	PR_1 Ames	PR_1 Lafayette	PR Tol. Vickery	FE_2	PS	PSB	SMV	Germ*
								Lafayette				
	n %	n %	n %	n score	a Reaction	a Reaction	n score	a score	a %	n %	a score	%
Century (II)	100	100	100	4.2	R	R	3.5	4	61	5	5E	91
Cumberland (III)	100	85	60	4.5	S	S	3.2	3	75	18	5E	79
Union (IV)	100	79	40	3.5	R	R	3.5	3	51	6	5E	90
A80-347019	100	100	20	4.5	R	H	3.0	4	34	6	5E	91
A80-350008	100	89	80	4.2	R	H	2.7	4	68	11	5S	80
C1593	100	86	0	2.5	S	S	5.0	1	28	6	5E	93
C1594	100	100	20	4.2	S	S	3.0	4	88	10	1	69
C1595	90	55	40	3.0	S	S	3.5	4	77	9	3E	82
C1596	100	57	80	2.9	R	R	4.2	5	86	1	4E	85
C1597	100	68	60	4.2	S	S	4.0	3	91	16	5E	78
HW8033	100	52	40	2.5	R	H	3.8	1	55	14	5M	79
HW8067	100	82	60	4.0	H	S	3.0	2	63	12	2M	84
HW8071	100	90	60	4.0	R	R	2.7	5	80	25	4M	65
K1070	100	89	100	3.5	R	R	2.3	4	65	8	5M	85
K1071	100	96	20	4.2	R	R	3.5	4	53	14	5E	82
K1072	100	93	60	2.7	R	R	3.6	4	35	14	5E	81
K1073	100	80	20	2.3	R	R	3.5	5	63	4	5E	90
K1074	100	72	20	2.0	R	R	2.6	5	69	1	5E	95
L77-468	100	99	100	4.3	H	H	4.5	5	67	3	5E	95
L77-542	100	89	20	3.4	S	S	3.5	3	62	7	5E	78
L77-565	100	84	40	3.2	S	S	4.3	4	58	6	5E	87
L77-8106	100	84	40	3.7	S	S	2.7	2	83	2	5E	87
L77-8290	100	76	20	3.0	S	H	3.1	4	42	6	5E	90
L78-1418	100	86	20	1.0	R	S	3.7	3	33	3	5E	87
LN78-257	100	92	40	2.5	R	R	3.0	4	85	11	5E	86
LN1064	100	86	20	3.0	R	R	2.5	3	45	2	5E	84
LN1065	100	78	60	2.9	R	R	2.3	3	90	4	5E	88
U66750	100	75	0	3.5	S	S	5.0	4	83	7	5E	90
V78-1175	100	81	20	3.5	S	S	3.0	3	11	3	1	94
V78-1199	90	63	20	2.0	S	S	2.8	4	43	9	1	84

*Petri dish germination on potato dextrose agar

PRELIMINARY TEST IIIB, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Size	Composition	
							Size	Protein	Oil
No. of Tests	9	9	8	9	9	8	8	4	4
	bu/a	no.	date	score	in.	score	g/100	%	%
Century (II)	46.8	18	- 8	1.8	36	1.9	18.0	41.2	19.5
Cumberland (III)	51.1	3	9-25*	2.2	39	2.0	18.4	39.9	20.4
Union (IV)	46.7	19	+ 5	2.5	45	1.7	18.8	40.5	18.8
A80-347019	48.9	7	+ 4	2.3	46	2.0	18.4	40.0	20.5
A80-350008	48.3	11	+ 1	2.5	45	1.9	19.9	42.3	19.2
C1593	38.0	30	+ 1	1.4	27	1.5	12.6	45.7	16.6
C1594	47.8	14	- 4	2.0	40	1.7	15.3	40.0	20.4
C1595	47.0	17	- 2	2.1	42	1.6	16.2	39.7	20.0
C1596	48.7	8	0	2.1	39	1.7	17.5	39.0	19.1
C1597	46.7	19	+ 2	2.6	47	1.7	16.1	39.6	20.5
HW8033	51.8	1	- 2	2.1	39	1.8	19.8	39.9	20.5
HW8067	51.4	2	+ 1	1.9	36	1.6	16.1	39.6	20.8
HW8071	48.7	8	+ 1	2.3	42	2.0	20.2	40.2	20.4
K1070	44.4	25	+ 6	2.6	41	1.6	18.6	44.7	18.2
K1071	45.6	23	+ 5	2.3	36	1.9	16.0	40.7	18.9
K1072	48.4	10	- 2	1.9	41	1.6	18.6	40.3	20.0
K1073	48.0	13	- 2	1.5	36	1.7	19.5	42.3	19.4
K1074	50.8	4	+ 2	1.5	26	1.5	17.2	44.0	18.1
L77-468	44.9	24	+ 3	2.3	41	1.6	15.9	39.4	20.0
L77-542	44.2	26	+ 3	2.3	42	1.6	18.3	40.3	19.7
L77-565	40.7	29	+ 2	2.1	40	1.5	17.1	38.0	20.7
L77-8106	49.1	6	+ 5	2.3	43	1.6	19.2	40.3	20.2
L77-8290	50.8	4	+ 4	1.9	41	1.5	15.5	39.8	19.8
L78-1418	47.3	16	+ 3	1.9	42	1.4	16.2	44.4	19.0
LN78-257	42.5	27	- 3	1.4	31	1.5	18.4	38.5	20.2
LN1064	42.5	27	+ 3	2.2	40	1.8	19.5	43.2	18.5
LN1065	46.2	21	+ 3	2.1	40	1.7	15.2	41.7	18.2
U66750	47.7	15	+ 1	2.3	41	1.5	15.3	40.8	20.0
V78-1175	45.7	22	+ 5	2.6	43	1.7	17.0	43.0	19.6
V78-1199	48.2	12	+ 5	2.1	40	1.7	17.2	43.4	19.5

*128 days after planting

Two entries in this test, HW8033 and HW8067 were superior in performance to the check variety Cumberland. The strains L77-468, L77-542, and L77-565 are all resistant to race 3 of the SCN. The strain L78-1418 is resistant to races 3 and 4 of the SCN.

PRELIMINARY TEST IIIB, 1981

Strain	Mean 9 Tests	Ohio		Indiana	Ky.
		Hoytville	S. Charleston	Lafayette	Lexington*
		YIELD (bu/a)			
Century (II)	46.8	23.8	58.6	47.6	40.1
Cumberland (III)	51.1	32.3	65.5	50.4	43.6
Union (IV)	46.7	38.7	61.0	44.4	44.9
A80-347019	48.9	36.4	62.6	52.4	39.7
A80-350008	48.3	30.6	63.4	56.4	38.9
C1593	38.0	21.7	44.4	44.9	33.7
C1594	47.8	30.6	55.6	55.6	42.5
C1595	47.0	32.8	53.9	58.8	42.1
C1596	48.7	27.5	55.2	56.5	45.7
C1597	46.7	28.4	57.3	65.2	42.6
HW8033	51.8	29.1	56.6	62.1	41.0
HW8067	51.4	32.2	60.5	49.2	48.2
HW8071	48.7	33.5	65.1	47.6	50.5
K1070	44.4	41.4	57.0	45.2	37.3
K1071	45.6	38.3	58.0	52.0	43.0
K1072	48.4	27.2	59.2	49.7	41.7
K1073	48.0	24.5	50.8	57.3	33.7
K1074	50.8	39.3	58.3	53.6	37.6
L77-468	44.9	31.4	65.4	45.4	43.5
L77-542	44.2	30.1	58.3	50.6	40.7
L77-565	40.7	28.0	52.3	44.9	43.8
L77-8106	49.1	40.5	63.1	51.1	46.2
L77-8290	50.8	40.1	58.5	59.7	48.2
L78-1418	47.3	32.7	55.6	49.6	40.4
LN78-257	42.5	27.1	50.6	47.7	40.5
LN1064	42.5	40.2	60.1	53.7	42.6
LN1065	46.2	47.2	55.9	50.1	33.3
U66750	47.7	23.7	59.4	55.2	31.0
V78-1175	45.7	40.1	52.4	57.3	40.2
V78-1199	48.2	39.1	55.4	50.2	44.0
C.V. (%)		14.6	8.4	14.8	12.0
L.S.D. (5%)		9.8	NS	15.5	9.9
Row sp. (in.)		30	30	24	30
Rows/plot		4	4	4	4
Reps		2	2	2	2

*Not included in the mean

PRELIMINARY TEST IIIB, 1981

Ill.	Iowa		Kan.	Neb.	S.D.
Urbana	Ottumwa	Stuart	Ashland	Mead	Elkpoint
		YIELD (bu/a)			
34.7	50.6	57.1	50.3	52.2	46.3
31.6	62.6	56.2	57.9	55.0	48.0
33.1	51.6	52.3	55.3	44.9	38.9
27.3	51.1	49.9	60.2	57.2	43.4
28.4	51.3	47.4	59.8	52.7	44.8
29.7	45.5	41.6	38.0	42.5	33.6
38.4	54.5	52.2	43.8	53.8	45.9
37.1	46.1	50.3	49.3	48.8	46.0
39.0	55.5	53.5	50.3	52.8	48.2
33.8	50.9	51.0	49.6	46.6	37.3
42.9	55.5	56.7	53.3	57.3	52.5
40.7	56.1	61.5	54.4	56.9	51.5
33.5	53.4	53.0	53.7	52.3	46.5
31.6	45.1	48.8	52.2	45.6	33.1
30.8	51.7	50.6	44.0	45.8	39.0
41.1	55.6	52.4	50.8	52.5	47.5
38.4	51.9	53.7	52.4	53.7	48.9
42.1	55.3	63.1	51.2	50.4	40.8
26.9	47.8	51.7	49.0	47.6	38.9
30.6	48.5	49.4	46.9	42.9	40.2
27.8	41.6	44.6	39.0	45.7	42.7
30.2	54.9	54.8	53.3	53.3	40.3
37.9	55.2	50.4	55.9	54.0	45.2
44.6	52.2	50.9	47.8	48.5	43.8
37.3	54.4	51.9	18.4	52.6	42.5
40.9	54.2	52.8	48.7	53.9	44.9
32.3	49.5	47.4	49.8	49.0	34.6
34.0	52.1	50.5	56.2	52.4	46.1
30.1	51.3	49.3	51.3	44.4	35.4
42.0	53.3	51.8	51.2	50.3	40.1
8.6	7.1	6.0	9.8	7.7	8.5
6.1	7.5	6.5	9.4	8.0	7.4
30	27	27	30	30	30
4	4	4	4	4	4
2	2	2	2	2	2

PRELIMINARY TEST IIIB, 1981

Strain	Mean 9 Tests	Ohio		Indiana	Ky.
		Hoytville	S. Charleston	Lafayette	Lexington*
		YIELD RANK			
Century (II)	18	28	12	24	22
Cumberland (III)	3	15	1	17	9
Union (IV)	19	9	7	30	6
A80-347019	7	11	6	13	23
A80-350008	11	18	4	8	24
C1593	30	30	30	28	27
C1594	14	18	21	9	14
C1595	17	13	25	4	15
C1596	8	24	24	7	5
C1597	19	22	17	1	13
HW8033	1	21	19	2	17
HW8067	2	16	8	22	3
HW8071	8	12	3	24	1
K1070	25	2	18	27	26
K1071	23	10	16	14	11
K1072	10	25	11	20	16
K1073	13	27	28	5	28
K1074	4	7	14	12	25
L77-468	24	17	2	26	10
L77-542	26	20	14	16	18
L77-565	29	23	27	28	8
L77-8106	6	3	5	15	4
L77-8290	4	5	13	3	2
L78-1418	16	14	21	21	20
LN78-257	27	26	29	23	19
LN1064	27	4	9	11	12
LN1065	21	1	20	19	29
U66750	15	29	10	10	30
V78-1175	22	5	26	5	21
V78-1199	12	8	23	18	7

*Not included in the mean

PRELIMINARY TEST IIIB, 1981

Ill.	Iowa		Kan.	Neb.	S.D.
Urbana	Ottumwa	Stuart	Ashland	Mead	Elkpoint
			YIELD RANK		
14	23	3	16	16	8
20	1	5	3	4	5
18	18	12	6	27	25
29	21	23	1	2	16
27	19	27	2	11	14
26	28	30	29	30	29
9	9	13	26	7	11
13	27	22	20	20	10
8	4	8	16	10	4
16	22	17	19	23	26
2	4	4	9	1	1
7	2	2	7	3	2
17	12	9	8	15	7
20	29	26	12	26	30
22	17	19	25	24	23
5	3	11	15	13	6
9	16	7	11	8	3
3	6	1	27	17	19
30	26	16	21	22	24
23	25	24	24	29	21
28	30	29	28	25	17
24	8	6	9	9	20
11	7	21	5	5	12
1	14	18	23	21	15
12	10	14	30	12	18
6	11	10	22	6	13
19	24	27	18	19	28
15	15	20	4	14	9
25	19	25	13	28	27
4	13	15	14	18	22

PRELIMINARY TEST IIIB, 1981

Strain	Mean 8 Tests	Ohio		Indiana	Ky.
		Hoytville	S. Charleston	Lafayette	Lexington*
		MATURITY (date)			
Century (II)	- 8	- 9	- 8	- 2	- 4
Cumberland (III)	9-25	9-25	9-26	9-25	9-21
Union (IV)	+ 5	+ 3	+ 7	+ 3	+ 7
A80-347019	+ 4	+ 2	+ 8	+ 2	+ 7
A80-350008	+ 1	- 3	+ 2	+ 4	+ 3
C1593	+ 1	- 1	+ 4	- 1	+ 3
C1594	- 4	- 8	- 3	- 1	- 4
C1595	- 2	- 5	0	- 2	- 4
C1596	0	- 7	+ 3	- 1	- 4
C1597	+ 2	- 5	+ 4	0	+ 3
HW8033	- 2	- 4	- 2	+ 2	0
HW8067	+ 1	+ 1	+ 2	+ 1	0
HW8071	+ 1	- 3	+ 4	- 1	+ 3
K1070	+ 6	+ 3	+12	+ 4	+ 9
K1071	+ 5	+ 3	+12	+ 3	+ 9
K1072	- 2	- 6	+ 2	- 5	0
K1073	- 2	- 7	0	- 1	0
K1074	+ 2	+ 2	+ 5	- 1	+ 7
L77-468	+ 3	+ 1	+ 5	+ 5	+ 3
L77-542	+ 3	+ 1	+ 6	+ 7	+ 7
L77-565	+ 2	0	+ 3	- 1	+ 3
L77-8106	+ 5	+ 3	+ 6	+ 5	+ 3
L77-8290	+ 4	+ 3	+ 6	+ 5	+ 7
L78-1418	+ 3	+ 2	+ 4	+ 3	+ 7
LN78-257	- 3	- 3	- 1	- 3	0
LN1064	+ 3	+ 3	+ 4	+ 4	+ 7
LN1065	+ 3	+ 3	+ 6	+ 3	+ 3
U66750	+ 1	+ 1	+ 2	0	0
V78-1175	+ 5	+ 4	+ 8	+ 7	+ 3
V78-1199	+ 5	+ 3	+ 7	+ 3	+ 3
Date planted	5-20	5-21	5-22	5-23	6-11
Days to mature	128	127	127	125	102

*Not included in the mean

PRELIMINARY TEST IIIB, 1981

Ill.	Iowa		Kan.	Neb.	S.D.
Urbana	Ottumwa	Stuart	Ashland	Mead	Elkpoint
		MATURITY (date)			
-10		- 6	-13	-10	- 5
9-26		9-22	9-14	9-27	10-3
+ 7		+ 8	+ 2	+ 2	+ 5
+ 4		+ 8	+ 3	+ 3	+ 1
0		+ 2	+ 2	0	+ 1
+ 2		+ 6	- 1	- 3	+ 1
- 4		- 2	- 1	- 6	- 4
0		0	0	- 3	- 2
+ 2		+ 4	0	0	+ 1
+ 2		+ 6	+ 1	+ 1	+ 4
- 1		- 2	0	- 4	- 2
- 1		+ 4	+ 1	0	+ 2
+ 1		+ 4	+ 1	- 1	- 1
+ 8		+10	+ 3	+ 4	+ 2
+ 4		+ 8	+ 1	+ 4	+ 4
0		- 3	- 1	+ 1	- 1
0		- 2	- 1	- 1	0
+ 5		+ 6	0	0	+ 1
0		+ 7	+ 2	+ 1	0
+ 4		+ 7	0	+ 1	+ 1
+ 3		+ 4	+ 3	+ 2	+ 1
+ 4		+ 6	+ 6	+ 3	+ 3
+ 5		+ 5	+ 2	+ 2	+ 2
+ 7		+ 6	+ 1	+ 1	+ 2
- 4		- 4	- 1	- 5	- 1
+ 7		+ 4	0	+ 2	- 1
+ 4		+ 4	+ 2	+ 2	+ 2
+ 3		+ 4	0	- 1	+ 2
+ 7		+ 7	+ 4	+ 3	+ 3
+ 8		+ 8	+ 2	+ 3	+ 3
5-26	5-28	5-11	5-15	5-22	5-22
123	---	134	127	128	134

PRELIMINARY TEST IIIB, 1981

Strain	Mean 9 Tests	Ohio		Indiana	Ky.
		Hoytville	S. Charleston	Lafayette	Lexington
		LODGING (score)			
Century (II)	1.8	1.3	1.0	1.8	1.0
Cumberland (III)	2.2	1.4	1.5	1.8	1.0
Union (IV)	2.5	1.6	1.8	2.8	3.3
A80-347019	2.3	1.4	1.5	2.3	1.3
A80-350008	2.5	1.3	1.8	3.0	1.7
C1593	1.4	1.4	1.2	1.5	2.5
C1594	2.0	1.4	1.0	2.3	1.3
C1595	2.1	1.3	1.8	1.8	1.5
C1596	2.1	1.5	1.5	3.0	1.7
C1597	2.6	1.4	2.0	2.3	1.7
HW8033	2.1	1.4	1.2	2.5	1.3
HW8067	1.9	1.3	1.2	1.8	1.0
HW8071	2.3	1.3	1.8	2.5	1.7
K1070	2.6	1.6	2.0	3.0	1.7
K1071	2.3	1.7	2.2	2.5	1.7
K1072	1.9	1.4	1.0	2.0	1.5
K1073	1.5	1.3	1.0	1.8	1.0
K1074	1.5	1.5	1.0	1.8	3.5
L77-468	2.3	1.5	1.5	2.5	1.7
L77-542	2.3	1.4	2.2	3.0	1.7
L77-565	2.1	1.4	1.5	2.3	1.3
L77-8106	2.3	1.4	1.8	2.5	1.3
L77-8290	1.9	1.7	1.2	3.0	1.3
L78-1418	1.9	1.5	1.2	1.8	1.5
LN78-257	1.4	1.3	1.0	1.8	1.0
LN1064	2.2	1.6	1.5	2.3	1.7
LN1065	2.1	1.7	1.5	2.0	1.7
U66750	2.3	1.4	1.8	2.3	1.0
V78-1175	2.6	1.5	2.0	2.3	1.3
V78-1199	2.1	1.6	1.5	2.0	1.5

PRELIMINARY TEST IIIB, 1981

Ill.	Iowa		Kan.	Neb.	S.D.
Urbana	Ottumwa	Stuart	Ashland	Mead	Elkpoint
		LODGING (score)			
3.1	2.3	3.3	1.3	1.0	1.0
4.2	2.5	3.2	1.5	1.5	2.0
4.3	2.8	3.5	2.0	1.8	2.0
3.5	2.3	3.5	2.0	1.8	2.0
4.0	3.3	3.3	2.0	1.5	2.0
2.2	1.5	2.0	1.0	1.0	1.0
2.7	2.5	3.5	1.3	1.3	2.0
3.5	2.5	3.3	1.8	1.5	1.5
2.7	1.8	3.0	1.5	1.8	2.5
4.0	3.8	4.5	2.0	1.5	2.0
3.0	3.5	2.5	1.5	1.0	2.0
3.6	2.3	2.8	1.3	1.5	1.5
3.6	2.5	3.8	1.8	1.3	2.0
4.0	3.0	3.8	2.0	2.3	2.0
3.4	2.3	3.0	1.0	2.3	2.0
3.4	2.0	2.3	1.3	1.5	2.0
2.0	2.0	2.0	1.5	1.0	1.0
2.5	1.5	2.5	1.0	1.0	1.0
3.6	2.0	3.0	1.8	2.0	2.5
2.9	2.5	3.0	1.5	1.8	2.0
3.0	2.0	3.5	1.5	1.8	2.0
2.8	2.5	3.3	2.3	2.0	2.0
2.1	2.3	2.0	1.5	1.5	2.0
2.1	2.0	2.8	1.5	2.0	2.0
1.9	1.5	2.0	1.0	1.0	1.5
3.1	2.3	2.8	1.8	2.5	2.0
2.7	2.0	3.3	1.5	2.3	2.0
3.6	2.0	4.0	1.8	1.8	2.0
3.7	2.8	3.8	2.5	2.8	2.0
2.8	2.5	3.3	1.8	1.5	1.5

PRELIMINARY TEST IIIB, 1981

Strain	Mean 9 Tests	Ohio		Indiana	Ky.
		Hoytville	S. Charleston	Lafayette	Lexington*
		PLANT HEIGHT (inches)			
Century (II)	36	20	33	36	27
Cumberland (III)	39	26	35	35	28
Union (IV)	45	32	38	42	41
A80-347019	46	28	38	45	36
A80-350008	45	27	41	44	38
C1593	27	24	22	25	32
C1594	40	27	36	45	30
C1595	42	26	35	40	34
C1596	39	25	33	46	39
C1597	47	28	40	46	40
HW8033	39	23	33	43	30
HW8067	36	22	31	42	26
HW8071	42	26	38	43	40
K1070	41	28	36	42	35
K1071	36	27	36	39	34
K1072	41	25	38	36	35
K1073	36	22	31	32	28
K1074	26	24	25	30	30
L77-468	41	25	36	42	33
L77-542	42	29	38	39	38
L77-565	40	28	38	46	34
L77-8106	43	31	38	44	36
L77-8290	41	27	38	39	34
L78-1418	42	27	36	42	36
LN78-257	31	21	29	34	30
LN1064	40	28	37	42	36
LN1065	40	30	36	42	29
U66750	41	27	35	42	26
V78-1175	43	31	40	43	34
V78-1199	40	24	38	41	33

*Not included in the mean

PRELIMINARY TEST IIIB, 1981

Ill.	Iowa		Kan.	Neb.	S.D.
Urbana	Ottumwa	Stuart	Ashland	Mead	Elkpoint
		PLANT HEIGHT (inches)			
44	38	45	33	31	41
46	44	45	40	38	42
54	50	56	47	41	49
58	51	57	45	43	46
51	53	55	48	44	43
28	32	35	18	21	34
43	46	49	39	36	42
46	48	54	43	39	43
39	40	48	34	36	48
51	54	58	52	41	49
45	44	46	41	32	42
42	34	44	31	34	43
48	44	54	43	37	42
51	46	53	37	36	42
40	40	36	25	35	46
50	46	50	40	40	41
42	44	44	37	35	38
30	28	31	14	22	34
48	42	51	40	38	44
50	46	50	40	41	46
48	42	51	37	32	41
52	50	50	44	40	42
47	46	48	44	37	43
47	45	53	41	40	44
35	34	38	20	26	39
44	46	46	37	40	43
47	42	44	37	38	41
47	46	52	44	38	40
50	48	51	44	40	44
48	44	47	40	40	41

PRELIMINARY TEST IIIB, 1981

Strain	Mean 8 Tests	Ohio		Indiana	Ky.
		Hoytville	S. Charleston	Lafayette	Lexington*
		SEED QUALITY (score)			
Century (II)	1.9	2.0	1.5	1.5	3.0
Cumberland (III)	2.0	1.2	1.5	1.5	1.0
Union (IV)	1.7	1.2	1.0	1.5	1.0
A80-347019	2.0	1.4	2.0	1.5	2.0
A80-350008	1.9	1.3	2.0	1.0	2.0
C1593	1.5	1.1	1.5	1.0	1.0
C1594	1.7	1.4	1.0	1.5	2.0
C1595	1.6	1.3	1.0	1.5	1.0
C1596	1.7	1.3	2.0	1.0	2.0
C1597	1.7	1.3	1.5	1.0	2.0
HW8033	1.8	1.4	1.5	1.0	2.0
HW8067	1.6	1.6	1.0	1.5	1.0
HW8071	2.0	1.6	1.5	1.0	2.0
K1070	1.6	1.5	1.5	1.0	2.0
K1071	1.9	1.5	1.5	1.0	1.0
K1072	1.6	1.2	1.5	1.0	3.0
K1073	1.7	1.3	1.0	1.5	2.0
K1074	1.5	1.1	1.0	1.0	2.0
L77-468	1.6	1.3	1.0	1.0	1.0
L77-542	1.6	1.1	1.0	1.0	2.0
L77-565	1.5	1.1	1.0	1.0	2.0
L77-8106	1.6	1.8	1.0	1.0	2.0
L77-8290	1.5	1.3	1.5	1.0	2.0
L78-1418	1.4	1.1	1.0	1.0	2.0
LN78-257	1.5	1.2	1.0	1.5	1.0
LN1064	1.8	1.4	1.5	1.5	3.0
LN1065	1.7	1.2	1.0	1.5	3.0
U66750	1.5	1.2	1.0	1.0	2.0
V78-1175	1.7	1.2	1.5	1.0	1.0
V78-1199	1.7	1.4	1.0	1.0	1.0

*Not included in the mean

PRELIMINARY TEST IIIB, 1981

Ill.	Iowa		Kan.	Neb.	S.D.
Urbana	Ottumwa	Stuart	Ashland	Mead	Elkpoint
		SEED QUALITY (score)			
3.0	1.7		1.5	2.0	2.0
2.8	1.6		1.5	2.8	3.0
1.8	1.8		1.0	2.0	3.0
2.3	1.8		2.0	1.8	3.0
2.5	1.9		2.0	2.3	2.0
1.3	1.5		1.0	1.5	3.0
3.0	1.9		2.5	2.8	1.0
1.5	1.4		2.0	2.3	1.0
1.5	1.5		2.0	2.0	2.0
2.0	1.4		1.5	2.5	2.0
2.5	1.8		1.5	2.5	2.0
1.5	1.5		1.5	2.0	2.0
3.3	1.8		2.0	2.5	2.0
2.5	1.6		1.0	2.0	2.0
3.0	1.9		1.5	2.5	2.0
2.3	1.7		1.0	2.0	2.0
2.3	1.9		1.0	2.3	2.0
1.8	1.4		1.0	1.8	3.0
2.5	1.7		1.5	2.0	2.0
2.5	1.5		1.0	2.5	2.0
2.0	1.6		1.0	2.3	2.0
1.8	1.7		1.5	2.3	2.0
1.5	1.7		1.0	1.8	2.0
1.5	1.4		1.0	1.8	2.0
2.3	1.5		1.5	1.8	1.0
2.5	1.8		1.5	2.0	2.0
3.0	1.6		1.5	1.5	2.0
2.3	1.6		1.0	2.0	2.0
2.0	1.4		1.5	2.0	3.0
1.8	1.8		2.0	2.3	2.0

PRELIMINARY TEST IIIB, 1981

Strain	Mean 8 Tests	Ohio		Indiana	Ky.
		Hoytville	S. Charleston	Lafayette	Lexington*
		SEED SIZE (g/100)			
Century (II)	18.0	16.1	17.7	17.1	15.8
Cumberland (III)	18.4	15.9	19.0	19.0	16.4
Union (IV)	18.8	17.4	20.9	19.8	19.1
A80-347019	18.4	17.4	20.3	18.6	16.6
A80-350008	19.9	16.3	21.4	20.0	16.5
C1593	12.6	12.3	13.5	13.4	11.4
C1594	15.3	13.5	15.2	15.7	12.2
C1595	16.2	14.2	17.0	17.0	13.7
C1596	17.5	14.9	18.2	18.8	13.9
C1597	16.1	13.8	17.4	17.4	14.9
HW8033	19.8	16.8	18.8	21.6	17.5
HW8067	16.1	14.1	16.3	15.1	14.7
HW8071	20.2	18.1	22.0	20.9	19.4
K1070	18.6	18.1	19.6	19.0	18.8
K1071	16.0	15.6	18.6	16.4	15.6
K1072	18.6	15.9	19.8	19.5	15.2
K1073	19.5	17.2	19.5	20.6	15.2
K1074	17.2	16.9	17.1	17.6	14.0
L77-468	15.9	13.8	17.1	16.6	14.3
L77-542	18.3	13.3	20.5	20.7	17.5
L77-565	17.1	15.0	18.5	16.3	15.4
L77-8106	19.2	15.2	16.5	15.7	15.7
L77-8290	15.5	15.4	16.4	16.1	13.5
L78-1418	16.2	14.8	16.2	17.0	14.9
LN78-257	18.4	13.6	14.7	15.0	11.9
LN1064	19.5	18.9	20.2	19.5	15.4
LN1065	15.2	15.9	15.9	15.8	12.6
U66750	15.3	15.3	16.1	14.7	12.6
V78-1175	17.0	16.4	17.4	16.9	14.1
V78-1199	17.2	15.7	17.4	18.1	15.2

*Not included in the mean

PRELIMINARY TEST IIIB, 1981

Ill.	Iowa		Kan.	Neb.	S.D.
Urbana	Ottumwa	Stuart	Ashland	Mead	Elkpoint
		SEED SIZE (g/100)			
16.6	18.8		18.0	19.3	20.1
17.1	19.7		18.1	18.4	20.3
17.1	19.8		18.0	17.8	19.9
15.7	19.4		19.0	17.8	18.9
16.8	21.8		21.7	19.7	21.1
11.7	12.4		11.5	12.9	13.2
14.1	15.2		16.7	16.5	15.7
14.4	16.5		16.7	17.0	17.1
15.6	18.0		19.1	18.5	17.1
13.8	17.1		15.1	16.8	17.1
20.6	20.5		19.0	19.9	21.2
15.5	16.8		16.1	16.7	17.9
18.1	21.0		18.9	20.4	22.5
16.9	19.6		18.6	17.5	19.1
13.7	17.2		14.2	16.0	16.3
17.9	19.0		18.5	18.4	19.9
19.1	20.4		18.9	19.4	20.5
16.4	17.6		17.8	17.0	16.8
14.4	16.4		15.0	16.9	17.0
16.5	20.2		17.6	17.8	19.8
15.7	18.3		16.0	17.2	19.6
12.9	16.2		14.6	16.2	16.1
14.5	15.8		14.9	15.2	15.6
17.2	16.5		16.5	16.0	17.6
14.1	14.3		16.2	16.3	15.7
18.1	20.2		19.4	19.3	20.1
14.0	15.7		15.4	15.2	15.9
13.7	15.6		15.5	15.9	15.6
15.8	18.4		17.7	17.0	16.1
17.6	17.2		17.6	16.4	17.5

PRELIMINARY TEST IIIB, 1981

Strain	Mean 4 Tests	Ohio		Iowa	Indiana
		Hoytville	S. Charleston	Ottumwa	Lafayette
		PROTEIN (%)			
Century (II)	41.2	38.3	41.4	45.6	39.6
Cumberland (III)	39.9	38.7	42.2	40.4	38.1
Union (IV)	40.5	38.6	41.9	42.2	39.2
A80-347019	40.0	38.8	42.3	40.1	38.8
A80-350008	42.3	42.1	43.3	43.2	40.5
C1593	54.7	45.0	47.1	46.5	44.0
C1594	40.0	40.1	42.0	39.4	38.4
C1595	39.7	37.5	41.8	40.0	39.5
C1596	39.0	37.6	39.9	40.4	38.2
C1597	39.6	36.0	42.3	40.5	38.6
HW8033	39.9	37.9	41.6	41.0	38.9
HW8067	39.6	37.7	41.2	42.2	37.3
HW8071	40.2	40.2	43.2	40.6	36.9
K1070	44.7	45.3	46.6	45.7	41.2
K1071	40.7	39.6	41.9	43.8	37.4
K1072	40.3	38.2	41.1	43.3	38.7
K1073	42.3	43.2	43.3	42.3	40.5
K1074	44.0	44.8	46.5	44.6	42.5
L77-468	39.4	38.8	43.2	39.2	36.5
L77-542	40.3	37.4	42.8	41.8	39.1
L77-565	38.0	35.0	40.2	39.6	37.3
L77-8106	40.3	40.1	42.8	39.7	38.4
L77-8290	39.8	36.6	40.6	42.8	39.2
L78-1418	44.4	44.1	45.1	44.9	43.4
LN78-257	38.5	33.5	41.1	41.5	37.9
LN1064	43.2	41.5	45.8	44.3	41.0
LN1065	41.7	42.4	44.0	41.0	39.2
U66750	40.8	40.1	43.3	41.8	38.0
V78-1175	43.0	42.2	45.3	42.4	42.2
V78-1199	43.4	42.1	44.4	44.8	42.2

PRELIMINARY TEST IIIB, 1981

	Ohio		Iowa	Indiana
4 Tests	Hoytville	S. Charleston	Ottumwa	Lafayette
		OIL (%)		
19.5	21.4	17.8	19.7	19.2
20.4	22.3	18.8	19.5	20.9
18.8	20.1	17.6	18.3	19.0
20.5	21.7	20.1	19.6	20.7
19.2	20.3	18.8	18.4	19.2
16.6	17.9	15.9	15.9	16.5
20.4	21.7	19.8	19.8	20.1
20.0	21.1	19.5	19.1	20.3
19.1	20.0	19.3	18.4	18.7
20.5	21.8	20.1	19.6	20.4
20.5	21.3	19.6	20.1	21.0
20.8	21.7	20.4	19.9	21.3
20.4	21.8	19.2	19.8	20.6
18.2	19.2	17.3	16.6	19.5
18.9	20.2	18.6	17.8	19.1
20.0	20.9	19.1	19.6	20.3
19.4	20.1	19.4	18.7	19.2
18.1	18.7	18.0	17.6	18.1
20.0	21.1	18.9	19.5	20.6
19.7	21.5	18.9	18.8	19.7
20.7	21.6	20.6	20.1	20.3
20.2	21.1	19.5	19.5	20.6
19.8	20.6	19.2	19.3	19.9
19.0	19.6	18.7	18.2	19.4
20.2	21.3	19.4	19.7	20.4
18.5	19.0	18.0	17.4	19.5
18.?	18.1	17.9	17.7	18.9
20.0	20.3	19.3	19.5	20.8
19.6	20.0	18.8	19.3	20.3
19.5	20.3	16.7	18.5	20.3

UNIFORM TEST IV, 1981

Strain	Parentage	Previous Testing*	Generation Composited
1. Douglas	Williams x Calland	3	F_5
2. Franklin	L12 x Custer	2	F_3
3. Pixie	Williams[5] x Ransom	4	F_5
4. Union (IV)	Williams[5] x SL12 (Wayne Rpm, Rps)	5	F_3
5. Williams 79 (III)	Williams[6] x Lee 68	2	$_{10}F_3$
6. HC76-4449	L72U2567 x Essex	P IV	F_5
7. K1041 Sparks	Williams x Calland	2	F_6
8. K1044	Tracy x Williams	1	F_5
9. K1058	Tracy x Bonus	P III	F_5
10. K1061	Tracy x Columbus	P IV	F_5
11. K1062	Tracy x Williams	P IV	F_5
12. Ky78-1214	EMS treated Williams	P IV	F_3
13. L74L-125 Lawrence	Calland x Williams	3	F_6
14. L77-515	Union x L75-8020	P IV	F_4
15. L77-8043	Williams x Mitchell	P IV	F_5
16. LN1053	Tracy x Pomona	P IV	F_5
17. LN1059	Williams x D60-9647	P IV	F_5

*Number of years in this test or name of 1980 test

Descriptive and Other Data

				Chorosis		Emergence	Shattering	
				Ames	Lamberton	Ames	Manhattan	Carbondale
Strain	Descriptive	Code		score	score	score	2 Weeks	4 Weeks
Douglas	WTBr	DYBl	I	2.7	2.5	5	1	1
Franklin	PGBr	DYIb	I	2.8	3.0	1	1	2
Pixie	PTT	SYBl	D	3.0	4.0	1	1	1
Union (IV)	WTT	SYBl	I	3.2	3.5	2	1	1
Williams 79 (III)	WTT	SYBl	I	3.5	4.7	3	1	1
HC76-4449	PTT	DYBl	D	2.5	3.5	1	1	1
K1041 Sparks	WTT	DYBl	I	3.0	3.5	4	1	1
K1044	WTT	SYBl	I	3.8	5.0	1	1	1
K1058	P+WG+TT	DYIb	I	3.7	4.5	1	2	2
K1061	WTT	SYBl	I	3.2	4.0	3	1	1
K1062	WTT	DYBl	I	3.3	4.0	2	1	1
Ky78-1214	WTT	SYBl	I	3.5	3.0	1	1	1
L74L-125 Lawrence	PTT	DYBl	I	2.5	1.5	4	1	1
L77-515	WGT	SYBf	I	3.7	4.0	5	1	1
L77-8043	WTT	SYBr	I	3.8	5.0	1	1	1
LN1053	WTBr	DYBl	D	3.2	4.6	1	1	2
LN1059	WTBr	DYBl	I	2.8	3.5	1	1	1

UNIFORM TEST IV, 1981

Disease Data

Strain	BSR Ames Plant	BSR Ames Stem	BSR Lafayette Stem	BSR Lamberton Stem	PR_1 Ames	PR_1 Lafayette	PR Tol. Vickery
	n %	n %	n %	n score	a Reaction	a Reaction	a score
Douglas	100	82	60	70	R	R	3.0
Franklin	100	98	20	80	R	R	3.0
Pixie	90	90	0	65	S	S	3.5
Union (IV)	100	100	40	80	R	R	3.5
Williams 79 (III)	100	83	80	60	R	R	2.4
HC76-4449	90	89	20	55	S	S	3.2
K1041	100	67	80	15	R	R	2.8
K1044	100	79	40	60	R	R	3.5
K1058	100	53	20	65	R	H	2.3
K1061	100	85	100	50	R	R	2.6
K1062	100	99	20	25	R	R	3.1
Ky78-1214	100	90	80	30	S	S	3.0
L74L-125	100	77	40	70	S	S	3.4
L77-515	100	79	100	50	S	S	3.0
L77-8043	100	96	60	40	H	S	2.6
LN1053	100	97	60	35	R	R	2.5
LN1059	100	87	80	55	R	R	2.3

Strain	FE_2 Lafayette	DM Belleville	BP Belleville	BTS Ames	Mottle Eldorado	PS Lafayette	PSB Lafayette	SMV Lafayette	Germ* Lafayette
	n score	n score	n score	a score	n score	a %	n %	a score	%
Douglas	4	3.3	1.0	2	1.7	34	3	3M	87
Franklin	5	3.0	1.0	4	1.7	65	10	2M	89
Pixie	1	1.8	1.0	2	2.0	4	0	5E	97
Union (IV)	3	3.3	1.0	4	2.0	51	6	5E	90
Williams 79 (III)	4	3.1	1.0	3	2.0	43	7	5M	94
HC76-4449	1	2.9	1.0	3	2.3	6	1	3E	97
K1041	5	3.1	1.0	3	2.7	31	5	5E	95
K1044	4	1.0	1.0	3	2.0	19	5	5E	92
K1058	4	1.0	1.0	3	2.0	41	12	4E	82
K1061	4	2.6	1.0	3	2.3	76	7	5E	92
K1062	4	3.2	1.0	3	3.7	45	9	5E	91
Ky78-1214	4	3.0	1.0	3	2.7	26	7	5E	91
L74L-125	4	2.9	1.0	3	2.7	19	22	5E	74
L77-515	5	3.2	1.0	3	1.0	78	14	3M	80
L77-8043	1	2.7	1.0	3	3.0	16	7	5E	92
LN1053	4	1.0	1.0	3	3.0	25	3	4E	82
LN1059	3	2.9	1.0	3	5.0	11	1	5S	88

*Petri dish germination on potato dextrose agar

UNIFORM TEST IV, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition Protein	Composition Oil
No. of Tests	16 bu/a	16 no.	15 date	16 score	16 in.	16 score	16 g/100	4 %	4 %
Douglas	41.4	13	+ 5	1.7	33	2.6	17.9	40.9	20.0
Franklin	36.0	17	+ 1	2.0	40	2.2	14.4	38.5	20.4
Pixie	40.8	15	- 1	1.3	22	1.6	16.1	42.4	19.3
Union (IV)	43.7	5	9-27*	2.1	39	2.0	17.9	41.4	19.7
Williams 79 (III)	42.4	9	- 3	1.7	36	1.7	16.6	40.6	19.9
HC76-4449	41.7	12	+ 2	1.0	22	1.6	15.2	44.7	19.7
Kl041 Sparks	44.7	1	+ 1	2.3	38	2.1	16.4	39.0	20.2
Kl044	42.7	6	+ 6	1.7	36	1.5	15.0	43.4	18.4
Kl058	43.8	4	0	2.2	35	2.2	18.0	42.5	19.2
Kl061	42.1	10	+ 5	1.7	32	1.6	15.7	42.1	19.0
Kl062	42.5	8	+ 4	2.0	36	1.8	17.5	40.1	19.2
Ky78-1214	42.7	6	+ 5	1.9	38	1.9	15.6	40.6	20.3
L74L-125 Lawrence	40.9	14	- 1	1.4	34	2.2	16.7	42.1	19.9
L77-515	40.3	16	- 3	1.9	34	1.7	14.6	39.4	20.5
L77-8043	44.7	1	+ 1	2.0	39	2.1	14.6	38.9	20.2
LN1053	42.1	10	+ 2	1.5	24	1.7	16.0	43.6	19.4
LN1059	44.3	3	+ 1	1.9	34	2.3	19.4	41.7	19.5

*122 days after planting

1980-1981, 2-year mean

No. of Tests	34	34	32	36	37	35	33	9	9
Douglas	39.5	4	+5.5	1.7	34	2.7	17.5	41.7	19.5
Franklin	33.9	8	+2.0	1.9	41	2.2	14.3	39.1	20.1
Pixie	38.4	7	-1.0	* 1.3	20	1.7	16.0	42.1	19.2
Union(IV)	40.0	2	9-26.5	2.0	39	2.0	17.3	42.3	19.4
Williams 79 (III)	39.0	6	-3.5	1.7	36	1.9	16.1	41.9	19.6
Kl041 Sparks	41.6	1	+1.0	2.1	37	2.2	16.1	40.2	19.6
Kl044	39.8	3	+8.0	1.6	37	1.7	14.9	43.6	18.0
L74L-125 Lawrence	39.3	5	-0.5	1.4	35	2.3	16.6	42.3	19.4

* 124 days after planting

1979-1981, 3-year mean

No. of Tests	57	57	51	59	60	58	52	14	14
Douglas	40.8	4	+5.6	1.8	34	2.6	17.8	41.0	20.0
Franklin	35.5	7	+2.2	2.0	41	2.2	14.5	37.8	20.5
Lawrence	41.0	3	0.0	1.5	35	2.3	17.2	41.9	19.7
Pixie	40.3	6	+0.1	1.4	21	1.8	16.2	41.8	19.7
Sparks	42.6	1	+1.1	* 2.1	38	2.2	16.5	39.9	20.1
Union	41.3	2	9-27.0	2.1	39	2.1	17.7	42.1	19.6
Williams 79	40.6	5	-3.6	1.7	36	1.9	16.6	41.5	20.0

* 126 days after planting

UNIFORM TEST IV, 1981

Strain	Mean 16 Tests	Md. Queens-town	N.J. Adel-phia	Penn. Landis-ville	Ohio S. Charles-ton	Indiana Lafay-ette	Indiana Sull-ivan	Ky. Lexing-ton	Ill. Belle-ville
				YIELD (bu/a)					
Douglas	41.4	50.1	30.0	34.2	44.0	50.7	24.2	42.7	53.2
Franklin	36.0	48.6	19.5	27.3	48.5	36.7	16.7	35.6	52.3
Pixie	40.8	49.4	34.3	32.2	63.2	46.5	18.5	45.6	49.0
Union (IV)	43.7	53.3	32.7	29.9	61.2	50.9	33.6	46.4	54.7
Williams 79 (III)	42.4	52.0	30.6	28.4	61.5	52.4	29.4	40.5	53.6
HC76-4449	41.7	44.0	36.6	29.3	62.6	56.5	19.8	42.2	56.2
K1041	44.7	54.1	37.9	32.9	68.2	54.5	28.1	43.5	55.8
K1044	42.7	53.5	33.7	34.1	49.8	46.9	25.6	42.5	52.0
K1058	43.8	51.9	33.1	32.2	55.3	54.9	24.7	41.3	53.3
K1061	42.1	48.1	30.2	32.1	53.6	45.2	28.2	39.7	49.0
K1062	42.5	51.0	30.4	31.9	60.5	47.2	24.8	41.8	54.3
Ky78-1214	42.7	53.5	23.4	32.7	57.7	50.7	30.5	39.5	53.3
L74L-125	40.9	52.9	30.2	31.9	60.8	53.0	20.3	43.2	54.9
L77-515	40.3	45.8	21.1	28.3	64.5	41.9	21.9	41.5	51.2
L77-8043	44.7	57.0	29.8	34.7	64.1	53.4	36.7	39.6	56.2
LN1053	42.1	46.0	25.9	33.4	62.0	43.3	25.4	41.8	54.6
LN1059	44.3	52.3	32.6	36.8	60.3	55.4	30.6	42.5	51.3
C.V. (%)		8.0	10.9	12.2	6.8	8.4		6.5	3.7
L.S.D. (5%)		6.8	6.5	NS	6.6	6.7		0.5	3.3
Row sp. (in.)		30	30	24	30	24	30	30	30
Rows/plot		4	3	4	4	4	3	4	4
Reps		3	4	3	3	3	3	3	3
				YIELD RANK					
Douglas	13	11	12	3	17	9	12	5	11
Franklin	17	13	17	17	16	17	17	17	12
Pixie	15	12	3	8	4	13	16	2	16
Union (IV)	5	5	6	13	8	8	2	1	5
Williams 79 (III)	9	8	8	15	7	7	5	13	8
HC76-4449	12	17	2	14	5	1	15	8	1
K1041	1	2	1	6	1	4	7	3	3
K1044	6	3	4	4	15	11	8	7	13
K1058	4	9	5	8	13	3	11	12	9
K1061	10	14	10	10	14	14	6	14	16
K1062	8	10	9	11	10	12	10	10	7
Ky78-1214	6	3	15	7	12	9	4	16	9
L74L-125	14	6	11	11	9	6	14	4	4
L77-515	16	16	16	16	2	16	13	11	15
L77-8043	1	1	13	2	3	5	1	15	1
LN1053	10	15	14	5	6	15	9	9	6
LN1059	3	7	7	1	11	2	3	6	14

UNIFORM TEST IV, 1981

Strain	Illinois			Mo.		Kansas		Neb.
	Browns-town	Carbon-dale	Eldo-rado	Portageville Clay	Loam	Ash-land	Ottawa	Lincoln
				YIELD (bu/a)				
Douglas	34.3	41.1	49.5	27.6	41.8	47.9	43.9	47.8
Franklin	40.4	30.9	42.0	20.9	30.1	43.4	37.8	44.6
Pixie	27.2	43.9	52.1	22.9	29.0	23.2	45.7	70.3
Union (IV)	39.1	36.3	50.9	29.4	31.1	50.4	45.4	54.3
Williams 79 (III)	38.4	38.4	46.8	28.5	30.8	45.4	45.1	56.5
HC76-4449	30.4	36.6	53.0	24.5	24.0	40.1	48.4	62.8
K1041	39.8	36.5	48.9	26.3	31.4	50.1	47.1	60.0
K1044	49.8	37.3	44.5	29.4	38.4	48.2	43.7	53.6
K1058	52.9	34.9	49.3	27.3	32.7	49.7	49.0	58.1
K1061	45.3	44.0	45.6	28.6	34.3	46.9	45.2	57.8
K1062	47.3	36.7	49.9	27.5	37.6	50.0	47.1	42.4
Ky78-1214	39.8	39.5	48.6	28.0	40.8	51.0	46.7	48.0
L74L-125	26.7	30.3	50.7	25.2	27.8	45.8	47.6	53.7
L77-515	28.6	41.0	47.2	24.3	36.8	50.6	44.2	55.5
L77-8043	41.1	39.4	48.9	25.8	32.7	52.8	46.5	56.9
LN1053	47.4	37.5	47.9	20.8	31.3	47.2	42.9	66.9
LN1059	49.4	42.2	48.4	25.6	36.3	45.9	50.7	48.0
C.V. (%)	22.6	11.4	5.4	10.0	11.0	12.3	5.2	10.8
L.S.D. (5%)	14.3	7.3	4.3	4.3	6.1	9.1	4.0	9.9
Row Sp. (in.)	30	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
				YIELD RANK				
Douglas	13	4	6	6	1	9	14	15
Franklin	8	16	17	16	14	15	17	16
Pixie	16	2	2	15	15	17	9	1
Union (IV)	11	14	3	1	12	4	10	10
Williams 79 (III)	12	8	14	4	13	14	12	8
HC76-4449	14	12	1	13	17	16	3	3
K1041	9	13	8	9	10	5	5	4
K1044	2	10	16	1	3	8	15	12
K1058	1	15	7	8	9	7	2	5
K1061	6	1	15	3	7	11	11	6
K1062	5	11	5	7	4	6	5	17
Ky78-1214	9	6	10	5	2	2	7	13
L74L-125	17	17	4	12	16	13	4	11
L77-515	15	5	13	14	5	3	13	9
L77-8043	7	7	8	10	8	1	8	7
LN1053	4	9	12	17	11	10	16	2
LN1059	3	3	11	11	6	12	1	14

UNIFORM TEST IV, 1981

Strain	Mean 15 Tests	Md. Queens-town	N.J. Adel-phia	Penn. Landis-ville	Ohio S. Charles-ton	Indiana Lafay-ette	Indiana Sull-ivan	Ky. Lexing-ton	Ill. Belle-ville
				MATURITY (date)					
Douglas	+ 5	- 1	+ 4	+ 6	+12	+ 4	+ 2	+ 3	+ 7
Franklin	+ 1	- 1	+ 1	+ 2	+ 3	0	0	+ 3	+ 1
Pixie	- 1	- 1	- 2	- 3	+ 1	+ 3	0	0	+ 1
Union (IV)	9-27	9-27	9-26	9-28	10-3	9-30	10-5	9-28	10-5
Williams 79 (III)	- 3	0	- 4	- 3	- 2	0	- 1	- 4	- 3
HC76-4449	+ 2	+ 1	+ 5	+ 2	+ 3	+ 3	+ 1	+ 3	+ 3
K1041	+ 1	0	0	0	0	0	+ 1	+ 3	+ 4
K1044	+ 6	+ 5	+ 4	0	+ 5	+ 3	+ 2	+ 3	+ 6
K1058	0	0	+ 1	0	+ 1	+ 1	0	+ 3	+ 1
K1061	+ 5	0	+ 3	+10	+ 9	+ 3	+ 2	+ 3	+ 5
K1062	+ 4	+ 1	+ 3	+ 6	+ 3	+ 2	+ 2	+ 3	+ 4
Ky78-1214	+ 5	- 1	+ 2	+10	+ 7	+ 3	+ 2	+ 3	+ 8
L74L-125	- 1	0	- 3	0	0	- 1	0	0	+ 1
L77-515	- 3	- 1	- 4	- 3	- 1	- 2	- 1	- 4	- 2
L77-8043	+ 1	0	- 1	+ 2	0	+ 1	+ 1	0	+ 1
LN1053	+ 2	- 1	- 2	0	+ 3	+ 1	+ 3	+ 3	+ 4
LN1059	+ 1	0	-11	+ 2	+ 1	+ 3	- 1	0	0
Date planted	5-28	5-27	5-28	5-21	5-22	5-23	6-9	6-11	6-16
Days to mature	122	123	121	130	134	130	118	109	111
				LODGING (score)					
	16 Tests								
Douglas	1.7	2.2	1.2	1.5	3.0	3.2	1.5	2.2	1.3
Franklin	2.0	3.0	1.7	1.5	2.5	2.5	1.2	2.7	1.9
Pixie	1.3	2.0	1.0	1.5	2.0	1.2	1.0	2.0	1.1
Union (IV)	2.1	3.3	2.7	2.0	2.3	2.2	1.5	2.3	1.8
Williams 79 (III)	1.7	3.5	1.5	2.0	1.5	2.3	1.2	1.3	1.3
HC76-4449	1.0	1.0	1.0	1.0	1.2	1.3	1.0	1.0	1.1
K1041	2.3	3.7	2.5	2.0	2.2	3.3	1.5	2.0	2.6
K1044	1.7	2.0	2.0	1.5	2.7	2.7	1.2	1.7	1.1
K1058	2.2	3.0	3.0	2.0	2.0	2.3	1.5	3.0	2.5
K1061	1.7	3.3	2.0	2.0	2.0	2.8	1.3	1.3	1.2
K1062	2.0	3.2	2.0	2.0	2.2	3.3	1.5	2.3	1.7
Ky78-1214	1.9	3.0	1.2	1.0	2.0	3.0	1.3	2.2	1.6
L74L-125	1.4	2.3	1.0	1.5	1.2	1.7	1.0	1.2	1.0
L77-515	1.9	3.2	1.7	2.0	1.8	2.3	1.0	1.8	2.3
L77-8043	2.0	3.2	2.2	1.5	1.8	2.3	1.0	2.0	2.7
LN1053	1.5	2.0	2.0	1.5	2.0	1.3	1.7	2.8	1.7
LN1059	1.9	3.2	2.0	1.5	1.8	3.3	1.2	1.7	1.9

UNIFORM TEST IV, 1981

Strain	Illinois			Montana		Kansas		Neb.
	Brown-town	Carbon-dale	Eldo-rado	Portageville Clay	Loam	Ash-land	Ottawa	Lincoln
MATURITY (date)								
Douglas	+ 5	+ 4	+ 3	+ 4	+11	+ 6		+11
Franklin	+ 2	- 1	+ 2	+ 1	0	+ 6		+ 1
Pixie	- 5	0	0	- 5	- 6	+ 4		- 5
Union (IV)	9-28	9-28	10-2	9-11	9-11	9-22		10-6
Williams 79 (III)	- 4	- 4	- 3	- 5	- 2	- 1		- 5
HC76-4449	+ 2	+ 5	+ 1	0	+ 1	+ 3		0
K1041	+ 2	+ 2	+ 2	0	- 3	+ 1		0
K1044	+ 6	+ 6	+ 5	+14	+16	+10		+ 8
K1058	+ 1	0	- 1	- 4	- 4	+ 1		0
K1061	+ 5	+ 7	+ 6	+ 7	+ 6	+ 6		+ 3
K1062	+ 5	+ 5	+ 2	+ 6	+ 2	+ 6		+ 5
Ky78-1214	+ 4	+ 5	+ 3	+ 7	+14	+10		+ 2
L74L-125	- 2	+ 1	0	- 4	- 5	0		- 2
L77-515	- 4	- 3	- 2	- 4	- 4	0		- 3
L77-8043	+ 2	0	+ 2	+ 2	+ 1	+ 4		+ 1
LN1053	+ 4	+ 3	+ 1	+ 4	+ 2	+ 3		- 3
LN1059	+ 2	+ 2	- 2	+ 5	+ 1	+ 5		+ 2
Date planted	6-8	6-13	6-15	5-7	5-6	5-15		5-12
Days to mature	112	107	109	127	128	130		147
LODGING (score)								
Douglas	1.3	1.2	1.3	1.0	1.5	1.3	2.0	2.0
Franklin	1.2	1.0	2.5	1.5	2.5	1.8	2.3	3.3
Pixie	1.2	1.0	1.1	1.0	1.0	1.0	1.2	1.3
Union (IV)	1.3	1.0	2.7	1.5	2.0	1.3	2.0	3.2
Williams 79 (III)	1.1	1.0	2.1	1.5	2.0	1.2	1.7	2.2
HC76-4449	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0
K1041	2.0	1.3	2.3	2.0	2.5	1.3	2.0	3.2
K1044	1.3	1.0	1.3	1.5	2.0	1.5	1.5	2.0
K1058	1.8	1.0	1.8	1.5	2.5	1.7	2.2	2.8
K1061	1.3	1.3	1.4	1.0	1.5	1.5	1.5	2.2
K1062	1.5	1.0	1.5	1.5	2.0	1.7	1.8	3.2
Ky78-1214	1.3	1.0	2.1	1.5	2.0	1.7	2.0	3.0
L74L-125	1.2	1.0	1.1	1.5	1.5	1.0	1.7	1.8
L77-515	1.3	1.0	2.3	1.5	2.5	1.2	1.7	3.0
L77-8043	1.3	1.0	2.5	2.0	2.0	1.5	2.2	2.8
LN1053	1.3	1.0	1.4	1.0	1.5	1.0	1.2	1.2
LN1059	1.5	1.2	2.1	1.5	2.0	1.5	2.0	2.5

UNIFORM TEST IV, 1981

Strain	Mean 16 Tests	Md. Queens-town	N.J. Adel-phia	Penn. Landis-ville	Ohio S. Charles-ton	Indiana Lafay-ette	Indiana Sull-ivan	Ky. Lexing-ton	Ill. Belle-ville
			PLANT HEIGHT (inches)						
Douglas	33	33	37	29	40	40	25	36	33
Franklin	40	44	43	30	40	45	26	44	39
Pixie	22	21	24	25	25	18	12	24	18
Union (IV)	39	40	44	32	41	41	29	43	39
Williams 79 (III)	36	38	38	31	39	45	27	32	33
HC76-4449	22	21	28	22	27	23	15	24	23
K1041	38	39	45	34	40	43	29	44	39
K1044	36	38	38	29	37	36	31	34	32
K1058	35	35	40	29	38	43	25	38	34
K1061	32	35	36	30	38	35	25	29	29
K1062	36	35	38	30	38	41	30	38	36
Ky78-1214	38	41	40	28	41	46	26	38	35
L74L-125	34	35	37	27	38	41	24	35	32
L77-515	34	35	34	29	38	41	22	33	33
L77-8043	39	39	40	34	40	49	31	36	37
LN1053	24	20	30	26	28	24	16	31	25
LN1059	34	33	38	30	36	42	27	33	33
			SEED QUALITY (score)						
	Mean 16 Tests								
Douglas	2.6	2.3	2.0	3.0	3.0	1.5	2.0	2.0	2.3
Franklin	2.2	2.5	1.2	2.0	1.5	1.0	2.0	2.0	1.8
Pixie	1.6	1.8	1.2	2.0	1.0	1.0	1.5	2.0	1.5
Union (IV)	2.0	1.8	1.5	2.0	1.5	1.0	1.5	2.0	2.0
Williams 79)III)	1.7	1.8	1.0	2.0	1.5	1.0	2.0	2.0	1.8
HC76-4449	1.6	1.8	1.2	2.0	1.5	1.0	1.0	2.0	1.0
K1041	2.1	2.8	2.0	3.0	1.5	1.0	2.0	3.0	2.0
K1044	1.5	1.7	1.0	2.0	1.5	1.0	1.0	2.0	1.0
K1058	2.2	2.2	2.0	2.5	1.5	1.0	2.0	2.0	2.2
K1061	1.6	1.5	1.0	2.0	1.0	1.0	1.5	3.0	1.5
K1062	1.8	1.7	1.0	2.5	1.5	1.0	1.5	3.0	1.7
Ky78-1214	1.9	2.0	1.0	2.0	1.5	1.5	2.0	2.0	1.7
L74L-125	2.2	2.0	2.0	2.5	1.5	1.0	2.5	2.0	2.7
L77-515	1.7	2.0	1.0	2.0	1.0	1.0	2.0	2.0	1.5
L77-8043	2.1	2.7	1.8	2.0	1.5	1.0	2.0	3.0	1.5
LN1053	1.7	2.0	1.0	2.5	1.5	1.0	1.0	2.0	1.5
LN1059	2.3	2.3	1.5	2.0	2.0	1.0	3.0	4.0	2.3

UNIFORM TEST IV, 1981

Strain	Illinois			Montana		Kansas		Neb.
	Browns-town	Carbon-dale	Eldo-rado	Portageville Clay	Loam	Ash-land	Ottawa	Lincoln
	PLANT HEIGHT (inches)							
Douglas	24	33	33	26	30	36	40	39
Franklin	30	35	42	30	45	47	46	52
Pixie	16	20	22	16	17	15	21	51
Union (IV)	30	33	43	34	38	49	44	49
Williams 79 (III)	27	33	36	30	30	43	40	46
HC76-4449	17	20	23	17	20	20	23	22
K1041	32	35	41	25	32	43	43	50
K1044	28	33	35	32	41	47	40	45
K1058	32	27	37	26	36	42	39	40
K1061	27	30	33	27	27	40	37	37
K1062	31	32	36	31	39	43	39	42
Ky78-1214	27	35	38	28	41	49	45	49
L74L-125	24	26	35	27	39	44	40	47
L77-515	23	31	35	28	37	43	41	46
L77-8043	29	32	38	31	41	48	42	51
LN1053	22	23	25	19	17	25	27	21
LN1059	26	30	33	30	33	40	37	38
	SEED QUALITY (score)							
Douglas	2.3	2.0	3.8	4.0	4.0	2.0	3.0	2.8
Franklin	1.6	1.0	2.8	4.0	4.0	2.0	3.0	2.5
Pixie	1.2	1.0	1.8	2.0	3.0	2.0	1.0	1.7
Union (IV)	1.5	2.0	2.8	4.0	3.0	1.5	1.0	2.7
Williams 79 (III)	1.7	1.0	2.7	2.0	2.0	2.0	1.0	2.3
HC76-4449	1.6	1.0	2.2	3.0	3.0	1.0	1.0	1.7
K1041	1.4	1.0	3.0	3.0	3.0	1.0	1.5	2.2
K1044	1.3	1.0	2.0	2.0	2.0	2.0	1.0	1.5
K1058	1.7	1.5	3.0	4.0	3.0	1.5	3.5	2.0
K1061	1.3	1.0	1.7	2.0	2.0	2.0	1.0	1.8
K1062	1.6	1.0	2.5	4.0	2.0	1.0	1.0	2.3
Ky78-1214	1.4	1.0	2.8	2.0	2.0	2.5	2.5	2.2
L74L-125	1.6	1.5	3.0	4.0	3.0	2.0	1.0	2.2
L77-515	1.4	1.0	2.2	3.0	2.0	1.5	1.0	2.1
L77-8043	1.2	1.5	2.8	4.0	3.0	2.0	1.3	2.3
LN1053	1.4	1.0	2.3	3.0	3.0	2.0	1.0	1.7
LN1059	2.0	1.5	2.5	3.0	3.0	3.0	1.5	2.7

UNIFORM TEST IV, 1981

Strain	Mean 16 Test	Md. Queens-town	N.J. Adel-phia	Penn. Landis-ville	Ohio S. Charles-ton	Indiana Lafay-ette	Indiana Sull-ivan	Ky. Lexing-ton	Ill. Belle-ville
				SEED SIZE (g/100)					
Douglas	17.9	16.3	17.0	19.5	20.0	18.0	19.6	17.0	19.1
Franklin	14.4	15.8	12.0	14.2	16.0	13.4	14.0	14.4	16.2
Pixie	16.1	16.8	14.0	16.2	18.1	19.1	16.0	15.6	16.9
Union (IV)	17.9	18.6	17.0	19.4	20.0	18.6	18.5	16.6	19.0
Williams 79 (III)	16.6	18.4	15.0	17.3	19.3	18.4	16.2	15.0	16.8
HC76-4449	15.2	16.6	15.0	15.8	17.3	17.2	13.7	13.8	15.2
K1041	16.4	16.9	15.0	15.3	18.4	17.8	18.6	17.8	17.8
K1044	15.0	16.0	15.0	17.2	15.4	15.5	15.8	13.9	15.6
K1058	18.0	19.3	17.0	19.0	19.3	19.5	17.9	18.5	18.6
K1061	15.7	15.4	14.0	15.6	17.6	15.5	16.9	15.3	16.5
K1062	17.5	18.3	16.0	19.3	18.8	17.9	19.2	16.6	18.4
Ky78-1214	15.6	15.6	15.0	17.3	18.0	16.5	16.8	13.9	15.9
L74L-125	16.7	18.5	16.0	15.4	18.7	18.8	16.7	16.0	17.6
L77-515	14.6	15.1	14.0	14.8	16.9	15.3	13.8	14.6	15.3
L77-8043	14.6	16.4	14.0	15.9	16.4	15.3	14.4	13.5	14.7
LN1053	16.0	15.5	14.0	16.8	17.8	15.9	16.8	15.1	17.6
LN1059	19.4	18.7	17.0	22.1	22.6	21.6	19.7	18.3	20.4

Strain	Mean 4 Tests	Md. Queenstown	Indiana Lafayette	Ill. Eldorado	Mo. (Loam) Portageville
			PROTEIN (%)		
Douglas	40.9	41.3	38.7	42.9	40.6
Franklin	38.5	39.2	36.4	41.0	37.2
Pixie	42.4	42.1	41.6	41.4	44.3
Union (IV)	41.4	41.5	39.3	43.5	41.4
Williams 79 (III)	40.6	41.4	39.5	42.2	39.4
HC76-4449	44.7	43.7	44.8	44.4	45.9
K1041	39.0	38.0	35.2	40.8	41.8
K1044	43.4	44.2	41.0	44.9	43.5
K1058	42.5	44.4	40.1	43.8	41.8
K1061	42.1	44.4	38.4	43.4	42.1
K1062	40.1	41.5	39.4	41.9	37.5
Ky78-1214	40.6	42.7	39.1	41.6	38.8
L74L-125	42.1	43.9	40.3	43.4	40.9
L77-515	39.4	40.6	37.3	40.3	39.4
L77-8043	38.9	40.0	37.1	40.0	38.3
LN1053	43.6	46.1	40.8	44.2	43.1
LN1059	41.7	43.0	41.0	42.5	40.3

UNIFORM TEST IV, 1981

Strain	Illinois			Montana		Kansas		Neb.
	Browns-town	Carbon-dale	Eldo-rado	Portageville Clay	Loam	Ash-land	Ottawa	Lincoln
	SEED SIZE (g/100)							
Douglas	18.0	15.1	17.8	15.2	16.0	19.6	18.2	19.4
Franklin	16.6	11.8	15.0	10.8	12.9	16.5	15.0	15.6
Pixie	14.5	13.8	15.7	12.7	12.7	19.3	16.5	19.3
Union (IV)	19.0	16.0	17.6	13.8	15.0	19.0	18.1	19.9
Williams 79 (III)	16.2	14.6	15.3	13.4	13.2	18.5	17.9	19.4
HC76-4449	15.0	10.8	13.9	12.5	14.3	17.2	15.9	18.6
K1041	16.6	13.6	16.9	12.5	14.0	17.7	15.7	17.4
K1044	16.6	12.6	14.5	11.6	14.7	15.2	14.7	16.3
K1058	19.9	14.5	17.4	14.1	15.3	19.0	19.2	18.9
K1061	17.0	13.3	15.3	13.6	14.7	17.1	15.6	17.2
K1062	18.8	14.8	17.2	13.6	15.6	19.8	17.9	17.4
Ky78-1214	15.6	13.1	15.1	12.1	14.4	16.9	16.4	17.5
L74L-125	17.2	14.2	16.2	13.7	13.7	18.3	17.7	18.1
L77-515	14.1	12.1	14.3	10.6	11.9	16.5	16.1	17.4
L77-8043	14.8	12.6	13.9	12.2	12.9	15.5	14.6	16.8
LN1053	17.3	12.4	15.8	13.4	14.2	16.7	17.3	18.7
LN1059	21.9	15.8	18.6	16.0	16.8	20.7	20.2	19.9

Strain	Mean 4 Tests	Md.	Indiana	Ill.	Mo. (Loam)
		Queenstown	Lafayette	Eldorado	Portageville
			OIL (%)		
Douglas	20.0	20.0	20.3	19.3	20.5
Franklin	20.4	20.0	20.9	19.5	21.3
Pixie	19.3	20.0	18.8	19.7	18.7
Union (IV)	19.7	19.3	20.7	18.9	19.7
Williams 79 (III)	19.9	20.6	19.4	19.9	19.8
HC76-4449	19.7	20.5	19.2	19.4	19.6
K1041	20.2	20.3	20.6	19.8	20.1
K1044	18.4	19.1	18.2	17.6	18.6
K1058	19.2	19.9	18.8	18.0	19.9
K1061	19.0	19.0	19.9	17.6	19.5
K1062	19.2	20.3	18.9	18.0	19.6
Ky78-1214	20.3	20.6	20.2	18.9	21.3
L74L-125	19.9	20.3	20.4	18.9	19.9
L77-515	20.5	19.9	20.5	20.1	21.3
L77-8043	20.2	21.0	19.8	19.3	20.8
LN1053	19.4	18.8	20.2	18.8	19.6
LN1059	19.5	20.0	18.7	19.6	19.8

PRELIMINARY TEST IV, 1981

Strain	Parentage	Generation Composited
1. Douglas	Williams x Calland	F_5
2. Pixie	Williams x Ransom	F_5
3. Union (IV)	Williams[5] x SL12 (Wayne Rpm, Rps)	F_3
4. Williams 79	Williams[6] x Lee 68	$10F_3$
5. A80-347008	(Corsoy x Wayne) x A75-204018	F_4
6. A80-347026	A75-203036 x (Corsoy x Wayne)	F_4
7. A80-349012	L69U40-16-4 x A76-304020	F_4
8. C1598	Wells x CX463-3	F_5
9. HC77-2204	Hodgson x V68-1034	F_5
10. HC78-261	L72U-2567 x Essex	F_5
11. HC78-265	L72U-2567 x Essex	F_5
12. HC78-279	L72U-2567 x Essex	F_5
13. HC78-356	L72U-2567 x Essex	F_5
14. HC78-535	Elf x L74D-619	F_5
15. HC78-570	Essex x Elf	F_5
16. HC78-595	Elf x L74D-678	F_5
17. HC78-806	Essex x Elf	F_5
18. K1075	Tracy x Bonus	F_5
19. K1076	Tracy x Williams	F_5
20. K1077	Tracy x Williams	F_5
21. K1078	L70T-543G x K1028	F_5
22. K1079	Tracy x Williams	F_5
23. K1080	Tracy x Bonus	F_5
24. Ky79-447	Williams x Essex	F_5
25. Ky79-1332	Essex x Wayne	F_5
26. L76-4026	Williams[2] x Raiden (PI360.844)	F_3
27. L76-4050	Williams x Raiden (PI360.844)	F_3
28. L77-8039	Williams x Mitchell	F_5
29. L78-8138	L73-4124 x Essex	F_4
30. L78-8237	L73-6626 x Essex	F_4
31. LN78-1627	L70L-2912 x C1520	F_5
32. LN1066	Williams x L79D6-16	F_5
33. LN1067	Tracy x Williams	F_5
34. LN1068	Tracy x Williams	F_5

PRELIMINARY TEST IV, 1981

Descriptive and other Data

Strain	Descriptive Code			Chlorosis Ames score	Shattering Manhattan 2 Weeks
Douglas	WTBr	DYBl	I	2.7	1
Pixie	PTT	SYBl	D	3.0	1
Union (IV)	WTT	SYBl	I	3.2	1
Williams 79 (III)	WTT	DYBr	I	3.5	1
A80-347008	WTBr	DYBr	I	4.0	1
A80-347026	WGBr	DYBf	I	4.2	1
A80-349012	PGT	DYG	I	3.2	1
C1598	PGBr	DYIb	I	3.3	1
HC77-2204	PGT	SYBf	D	3.5	1
HC78-261	PTT	DYBl	D	2.5	1
HC78-265	PTT	DYBl	D	2.2	1
HC78-279	PTT	DYBl	D	2.7	1
HC78-356	PGT	DYIb	D	2.3	1
HC78-535	PTT	SYBl	D	3.5	1
HC78-570	PTT	SYBr	D	3.2	1
HC78-595	PTT	SYBl	D	3.2	1
HC78-806	PTT	DYBl	D	3.2	1
K1075	PG+TT	DYIb	I	3.7	1
K1076	WTT	DYBl	I	4.0	1
K1077	WTBr	DYBl	I	2.8	1
K1078	WTT	DYBl	I	3.3	1
K1079	WTT	SYBl	D	3.7	1
K1080	WGT	DYBf	I	3.0	1
Ky79-447	WGT	DYBf	D	3.7	1
Ky79-1332	WTT	SYBl	I	4.3	1
L76-4026	WTT	SYBr+Bl	I	3.7	1
L76-4050	WTT	DYG+Bl	I	3.3	2
L77-8039	P+WTT	SYBl	I	3.3	1
L78-8138	PGT	DYIb	D	3.0	1
L78-8237	PTBr	DYBr+Bl	D	3.2	1
LN78-1627	PTT	SYBl	I	3.0	1
LN1066	PTT	DYBl	I	3.8	1
LN1067	WTT	DYBl	D	2.5	1
LN1068	WTT	SYBl	D	4.3	1

PRELIMINARY TEST IV, 1981

Disease Data

Strain	BSR			PR[1]		PR Tol.
	Ames		Lafayette		Lafayette	
	Plant	Stem	Stem	Ames		Vickery
	n %	n %	n %	a Reaction	a	n score
Douglas	100	82	60	R	R	3.0
Pixie	100	92	0	S	S	3.5
Union (IV)	100	100	40	R	R	3.5
Williams 79 (III)	100	83	80	R	R	2.4
A80-347008	100	100	60	H	S	2.8
A80-347026	100	94	40	H	S	3.0
A80-349012	60	48	80	R	R	3.5
C1598	100	86	60	R	R	2.7
HC77-2204	100	100	60	R	H	3.2
HC78-261	90	71	100	S	S	3.5
HC78-265	100	96	40	S	S	3.1
HC78-279	100	96	20	S	W	3.4
HC78-356	100	86	20	W	W	3.6
HC78-535	100	95	40	S	S	3.5
HC78-570	100	100	80	S	W	4.7
HC78-595	100	97	80	H	S	3.8
HC78-806	100	85	80	S	S	3.8
K1075	100	75	80	R	R	2.3
K1076	100	85	100	R	R	2.1
K1077	100	64	40	S	S	2.7
K1078	100	79	80	S	S	3.5
K1079	100	64	40	R	R	3.0
K1080	100	100	80	R	R	2.7
Ky79-447	100	89	100	S	S	2.5
Ky79-1332	100	66	60	S	S	2.8
L76-4026	100	92	40	S	S	2.6
L76-4050	100	59	60	-	H	2.6
L77-8039	90	69	80	S	S	2.8
L78-8138	100	76	60	S	S	3.0
L78-8237	100	79	60	S	S	2.5
LN78-1627	100	96	100	R	R	3.2
LN1066	100	75	100	R	R	2.7
LN1067	-	-	100	R	R	2.3
LN1068	100	86	80	R	R	3.0

PRELIMINARY TEST IV, 1981

Disease Data

Strain	FE_2 Lafayette	DM Eldorado	PS	PSB	SMV	Germ*
			Lafayette			
	a score	n score	a %	n %	score	%
Douglas	4	4.2	34	3	3M	87
Pixie	1	3.3	4	0	5E	97
Union (IV)	3	3.3	51	6	4E	90
Williams 79 (III)	4	4.0	43	7	5M	94
A80-347008	3	3.2	41	1	5E	95
A80-347026	4	4.0	75	2	4E	95
A80-349012	4	3.2	72	7	5E	88
C1598	1	3.5	37	6	5E	87
HC77-2204	1	2.9	3	0	1	99
HC78-261	1	3.9	14	1	5E	95
HC78-265	1	3.7	57	0	4E	98
HC78-279	1	3.9	9	0	5E	94
HC78-356	1	3.7	22	2	1	96
HC78-535	1	3.7	37	2	1	94
HC78-570	1	4.0	24	0	1	97
HC78-595	1	3.9	19	2	1	95
HC78-806	3	3.5	16	2	3E	95
K1075	4	2.0	68	9	5E	86
K1076	4	3.5	41	9	5E	86
K1077	4	3.7	30	9	5E	90
K1078	4	1.0	43	4	5E	92
K1079	3	3.0	48	0	5E	96
K1080	4	4.0	71	18	4M	80
Ky79-447	4	4.0	17	2	1	97
Ky79-1332	3	3.9	37	2	1	98
L76-4026	4	3.9	23	12	3E	82
L76-4050	3	3.3	33	3	5E	92
L77-8039	4	3.5	68	5	5E	94
L78-8138	3	3.2	5	3	1	95
L78-8237	1	3.4	12	12	5E	83
LN78-1627	5	4.2	49	12	5E	84
LN1066	4	2.9	54	4	5S	91
LN1067	3	3.7	49	3	5E	92
LN1068	3	1.0	12	2	5E	93

*Petri dish germination on potato dextrose agar

PRELIMINARY TEST IV, 1981

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Plant Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	6	6	6	6	6	6	6		
	bu/a	no.	date	score	in.	score	g/100	%	%
Douglas	40.0	10	+ 4	1.6	33	2.9	17.6	41.6	19.7
Pixie	32.0	27	- 2	1.3	18	1.6	16.0	42.7	19.9
Union (IV)	38.5	12	9-26*	2.1	39	2.2	17.6	42.6	19.6
Williams 79 (III)	42.1	3	- 3	1.7	36	1.9	15.6	42.0	19.9
A80-347008	40.1	8	- 2	1.6	35	2.5	15.4	38.5	20.9
A80-347026	37.8	14	- 1	2.3	37	2.3	13.5	39.5	20.4
A80-349012	42.7	2	+ 3	1.7	36	2.4	17.5	41.5	19.2
C1598	41.0	4	+ 2	1.5	37	3.2	17.5	41.7	19.3
HC77-2204	40.4	6	- 1	1.1	21	1.9	13.0	41.4	19.7
HC78-261	30.5	31	0	1.2	17	2.5	17.8	45.3	20.1
HC78-265	29.4	33	- 2	1.0	18	2.5	17.7	45.8	19.9
HC78-279	37.6	15	- 2	1.0	17	2.0	17.7	45.9	20.1
HC78-356	31.8	28	- 2	1.0	17	2.7	17.8	44.6	20.2
HC78-535	31.8	28	- 3	1.1	19	1.9	16.0	43.2	19.9
HC78-570	26.6	34	- 2	1.0	15	1.9	14.5	44.5	18.6
HC78-595	35.9	22	- 2	1.6	24	2.2	16.9	43.1	19.6
HC78-806	32.2	26	- 2	1.2	19	2.3	16.2	45.3	18.8
K1075	40.3	7	+ 1	1.9	31	2.7	19.3	44.2	18.7
K1076	41.0	4	+ 5	2.0	36	2.2	16.6	44.7	18.2
K1077	36.9	19	+ 2	1.9	36	2.0	15.7	41.2	19.6
K1078	34.4	24	- 1	1.6	33	2.2	17.0	44.1	18.9
K1079	33.8	25	- 1	1.6	27	2.0	13.9	42.0	18.6
K1080	36.6	21	0	1.5	33	2.1	16.5	42.3	19.3
Ky79-447	39.2	11	+ 8	2.2	33	1.7	12.2	42.5	19.1
Ky79-1332	36.9	19	- 1	2.2	30	2.1	13.7	42.1	19.8
L76-4026	35.5	23	0	2.1	31	2.2	16.4	43.1	19.2
L76-4050	37.3	17	+ 2	1.6	35	2.9	18.1	42.8	19.6
L77-8039	43.1	1	+ 2	1.7	35	2.3	15.5	41.4	19.9
L78-8138	37.5	16	+ 1	1.4	26	1.7	13.1	41.7	19.9
L78-8237	38.1	13	+ 7	1.5	32	1.8	15.2	41.0	19.2
LN78-1627	30.7	30	- 4	1.6	33	2.1	14.1	42.1	19.8
LN1066	37.1	18	+ 1	1.2	30	2.4	14.6	42.0	19.0
LN1067	40.1	8	+ 4	1.9	28	2.4	16.0	43.7	18.3
LN1068	29.7	32	- 2	1.3	21	2.4	15.4	42.1	19.2

*119 days after planting

PRELIMINARY TEST IV, 1981

Strain	Mean 6 Tests	Md. Queens-town	Ind. Sull-ivan	Ky. Lexing-ton	Ill. Eldo-rado	Mo. Portage-ville	Kan. Man-hattan
		YIELD (bu/a)					
Douglas	40.0	48.7	26.5	42.4	48.4	37.0	37.1
Pixie	32.0	29.9	29.7	40.4	50.0	27.1	14.7
Union (IV)	38.5	41.4	31.2	40.3	47.2	27.6	43.0
Williams 79 (III)	42.1	47.2	38.2	41.1	48.2	31.1	46.9
A80-347008	40.1	43.9	24.7	36.8	48.1	30.7	56.3
A80-347026	37.8	44.4	29.1	37.3	38.8	31.5	45.9
A80-349012	42.7	48.3	33.6	41.5	46.4	32.7	53.7
C1598	41.0	47.9	25.5	42.2	45.9	32.8	51.7
HC77-2204	40.4	41.3	24.3	48.2	50.0	29.4	46.8
HC78-261	30.5	35.2	17.4	46.6	53.0	17.5	13.2
HC78-265	29.4	32.3	24.4	40.3	46.8	20.7	12.1
HC78-279	37.6	39.9	20.5	42.8	51.1	25.6	18.6
HC78-356	31.8	31.3	25.1	48.0	47.3	23.2	15.7
HC78-535	31.8	38.2	17.2	46.2	48.9	21.1	18.9
HC78-570	26.6	27.2	11.9	40.2	36.9	23.9	19.5
HC78-595	35.9	41.8	19.0	43.5	51.3	25.1	34.9
HC78-806	32.2	30.9	27.5	37.5	50.4	30.7	16.4
K1075	40.3	43.0	30.4	43.8	47.9	37.4	39.5
K1076	41.0	45.8	27.2	37.9	44.5	36.0	54.4
K1077	36.9	40.7	21.2	36.6	46.9	32.3	43.7
K1078	34.4	37.7	19.1	39.1	44.2	26.0	40.2
K1079	33.8	34.6	18.7	41.3	39.5	26.8	41.6
K1080	36.6	41.4	23.8	36.3	43.9	31.5	42.9
Ky79-447	39.2	46.1	32.0	34.3	43.5	40.3	38.7
Ky79-1332	36.9	44.8	10.7	39.5	42.7	30.5	52.9
L76-4026	35.5	35.0	21.4	42.0	46.3	41.6	26.8
L76-4050	37.3	35.2	35.3	38.7	45.1	29.9	39.4
L77-8039	43.1	45.1	28.7	44.2	48.5	36.7	55.5
L78-8138	37.5	44.0	19.5	43.6	43.4	25.7	49.0
L78-8237	38.1	43.3	12.5	39.1	45.7	30.9	56.8
LN78-1627	30.7	35.8	17.3	36.9	41.9	29.2	23.1
LN1066	37.1	36.8	30.8	39.5	42.4	33.9	38.9
LN1067	40.1	38.4	34.5	41.6	43.2	35.8	47.2
LN1068	29.7	22.7	20.5	37.2	44.9	22.7	30.2
C.V.(%)		10.3	26.8	10.1	6.6	13.0	12.5
L.S.D. (5%)		8.3	13.3	8.2	6.1	6.6	12.2
Row sp. (in.)		30	30	30	30	30	30
Rows/plot		4	3	4	4	4	4
Reps		2	2	2	2	3	2

PRELIMINARY TEST IV, 1981

Strain	Mean 6 Tests	Md. Queens-town	Ind. Sull-ivan	Ky. Lexing-ton	Ill. Eldo-rado	Mo. Portage-ville	Kan. Man-hattan
			YIELD RANK				
Douglas	10	1	14	10	9	4	22
Pixie	27	32	9	17	5	23	32
Union (IV)	12	15	6	18	14	22	14
Williams 79 (III)	3	4	1	16	10	14	10
A80-347008	8	11	17	31	11	16	2
A80-347026	14	9	10	28	33	12	12
A80-349012	2	2	4	14	17	10	5
C1598	4	3	15	11	19	9	7
HC77-2204	6	17	19	1	5	20	11
HC78-261	31	25	29	3	1	34	33
HC78-265	33	29	18	19	16	33	34
HC78-279	15	19	23	9	3	27	29
HC78-356	28	30	16	2	13	30	31
HC78-535	28	21	31	4	7	32	28
HC78-570	34	33	33	20	34	29	27
HC78-595	22	14	27	8	2	28	23
HC78-806	26	31	12	27	4	16	30
K1075	7	13	8	6	12	3	18
K1076	4	6	13	26	23	6	4
K1077	19	18	22	32	15	11	13
K1078	24	22	26	24	24	25	17
K1079	25	28	28	15	32	24	16
K1080	21	15	20	33	25	12	15
Ky79-447	11	5	5	34	26	2	21
Ky79-1332	19	8	34	21	29	18	6
L76-4026	23	27	21	12	18	1	25
L76-4050	17	25	2	25	21	19	19
L77-8039	1	7	11	5	8	5	3
L78-8138	16	10	25	7	27	26	8
L78-8237	13	12	32	23	20	15	1
LN78-1627	30	24	30	30	31	21	26
LN1066	18	23	7	22	30	8	20
LN1067	8	20	3	13	28	7	9
LN1068	32	34	23	29	22	31	24

PRELIMINARY TEST IV, 1981

Strain	Mean 6 Tests	Md. Queens-town	Ind. Sull-ivan	Ky. Lexing-ton	Ill. Eldo-rado	Mo. Portage-ville	Kan. Man-hattan
		MATURITY (date)					
Douglas	+ 4	+ 4	+ 1	0	+ 2	+ 8	+ 6
Pixie	- 2	0	- 2	- 7	0	- 3	+ 2
Union (IV)	9-26	9-26	10-5	10-1	10-2	9-8	9-22
Williams 79 (III)	- 3	0	- 1	-10	- 3	- 2	- 2
A80-347008	- 2	0	- 2	- 7	- 2	0	+ 1
A80-347026	- 1	+ 1	- 1	- 7	- 4	+ 2	+ 4
A80-349012	+ 3	+ 3	+ 1	+ 1	+ 2	+ 4	+ 5
C1598	+ 2	+ 2	+ 1	0	0	+ 4	+ 3
HC77-2204	- 1	0	0	- 3	- 1	- 3	- 1
HC78-261	0	+ 1	0	- 3	+ 1	- 1	+ 3
HC78-265	- 2	0	- 1	- 7	- 2	- 3	+ 3
HC78-279	- 2	0	- 2	- 7	- 1	- 3	+ 2
HC78-356	- 2	0	- 1	- 7	- 2	- 3	+ 1
HC78-535	- 3	0	- 2	-10	- 4	- 3	+ 2
HC78-570	- 2	0	- 2	-10	- 2	- 2	+ 3
HC78-595	- 2	0	- 2	- 3	- 3	- 3	- 2
HC78-806	- 2	0	- 2	- 7	- 2	- 2	+ 2
K1075	+ 1	0	+ 1	0	+ 3	+ 1	+ 2
K1076	+ 5	+ 3	+ 3	0	+ 5	+ 9	+ 7
K1077	0	0	- 1	- 7	+ 1	+ 2	+ 2
K1078	- 1	+ 1	- 1	- 3	0	- 1	0
K1079	- 1	0	- 2	- 3	- 2	0	0
K1080	0	0	- 1	- 3	- 1	+ 2	+ 2
Ky79-447	+ 8	+12	+ 3	Frost	+ 6	+10	+11
K79-1332	- 1	+ 1	- 1	- 7	- 2	0	+ 1
L76-4026	0	0	- 2	- 3	+ 1	+ 3	+ 3
L76-4050	+ 2	0	- 1	0	+ 1	+ 6	+ 4
L77-8039	+ 2	0	+ 1	- 3	+ 2	+ 5	+ 7
L78-8138	+ 1	+ 2	+ 1	0	+ 2	- 3	+ 1
L78-8237	+ 7	+11	+ 2	Frost	+11	+ 6	+ 4
LN78-1627	- 4	0	- 2	-10	- 5	- 3	- 2
LN1066	+ 1	0	0	- 3	+ 2	+ 6	+ 2
LN1067	+ 4	+ 4	0	- 3	+ 1	+17	+ 6
LN1068	- 2	0	- 2	- 3	- 1	- 1	- 3
Date planted	5-30	6-1	6-9	6-11	6-15	5-6	5-15
Days to mature	119	117	118	114	109	125	130

PRELIMINARY TEST IV, 1981

Strain	Mean 6 Tests	Md. Queens-town	Ind. Sull-ivan	Ky. Lexing-ton	Ill. Eldo-rado	Mo. Portage-ville	Kan. Man hattan
		LODGING (score)					
Douglas	1.6	2.5	1.3	1.5	1.5	1.5	1.3
Pixie	1.3	2.0	1.0	1.3	1.3	1.0	1.0
Union (IV)	2.1	2.0	1.5	2.3	2.8	2.5	1.3
Williams 79 (III)	1.7	2.0	1.0	1.5	2.6	2.0	1.0
A80-347008	1.6	1.3	1.0	1.0	2.9	2.0	1.3
A80-347026	2.3	2.0	1.5	2.3	3.0	2.5	2.3
A80-349012	1.7	1.7	1.0	1.5	2.2	2.0	1.5
C1598	1.5	1.8	1.3	1.3	1.6	1.5	1.3
HC77-2204	1.1	1.0	1.0	1.3	1.3	1.0	1.0
HC78-261	1.2	2.0	1.0	1.0	1.1	1.0	1.0
HC78-265	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC78-279	1.0	1.0	1.0	1.0	1.2	1.0	1.0
HC78-356	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC78-535	1.1	1.5	1.0	1.3	1.3	1.0	1.0
HC78-570	1.0	1.0	1.0	1.0	1.0	1.0	1.0
HC78-595	1.6	1.5	1.0	3.7	1.5	1.0	1.0
HC78-806	1.2	1.0	1.0	1.3	1.4	1.5	1.0
K1075	1.9	2.0	1.5	2.3	2.2	2.0	1.3
K1076	2.0	2.5	1.5	2.0	2.1	2.5	1.5
K1077	1.9	2.5	1.5	1.3	2.4	2.0	1.5
K1078	1.6	2.0	1.3	1.7	2.2	1.5	1.0
K1079	1.6	2.0	1.3	2.5	1.5	1.5	1.0
K1080	1.5	2.0	1.0	1.0	2.0	1.5	1.5
Ky79-447	2.2	2.5	1.0	3.3	3.0	1.5	1.8
Ky79-1332	2.2	2.5	1.3	2.3	2.9	2.5	1.5
L76-4026	2.1	2.5	1.3	2.3	2.5	2.5	1.3
L76-4050	1.6	2.0	1.3	1.5	1.8	2.0	1.0
L77-8039	1.7	2.0	1.5	1.5	1.9	2.0	1.5
L78-8138	1.4	2.0	1.0	1.7	1.1	1.0	1.3
L78-8237	1.5	2.0	1.0	2.5	1.7	1.0	1.0
LN78-1627	1.6	2.0	1.3	1.5	2.3	1.5	1.0
LN1066	1.2	1.5	1.0	1.0	1.0	1.5	1.0
LN1067	1.9	2.0	1.5	2.8	2.7	1.5	1.0
LN1068	1.3	1.5	1.0	1.7	1.2	1.5	1.0

PRELIMINARY TEST IV, 1981

Strain	Mean 6 Tests	Md. Queens-town	Ind. Sull-ivan	Ky. Lexing-ton	Ill. Eldo-rado	Mo. Portage-ville	Kan. Man-hattan
		PLANT HEIGHT (inches)					
Douglas	33	33	28	34	35	36	32
Pixie	18	19	13	25	22	17	14
Union (IV)	39	37	33	40	40	41	45
Williams 79 (III)	36	33	29	34	36	40	42
A80-347008	35	35	24	32	36	40	44
A80-347026	37	36	27	36	37	39	49
A80-349012	36	34	27	34	40	34	46
C1598	37	35	29	35	38	37	47
HC77-2204	21	21	13	27	23	17	25
HC78-261	17	17	12	22	21	15	15
HC78-265	18	20	14	19	19	17	16
HC78-279	17	17	12	21	20	18	14
HC78-356	17	15	13	21	20	15	15
HC78-535	19	20	15	24	21	19	17
HC78-570	15	15	8	20	15	15	17
HC78-595	24	24	16	31	29	20	21
HC78-806	19	19	16	21	20	21	16
K1075	31	33	26	37	35	20	33
K1076	36	35	27	33	37	37	46
K1077	36	36	26	33	39	36	45
K1078	33	28	30	34	34	26	38
K1079	27	26	21	36	26	27	24
K1080	33	35	23	31	34	33	43
Ky79-447	33	32	24	34	36	32	38
Ky79-1332	30	31	20	32	30	30	37
L76-4026	31	34	26	33	36	41	41
L76-4050	35	36	33	29	33	35	42
L77-8039	35	35	29	32	37	36	42
L78-8138	26	27	18	33	25	23	31
L78-8237	32	32	23	37	37	28	37
LN78-1627	33	32	24	35	33	33	40
LN1066	30	33	21	29	30	31	37
LN1067	28	26	25	33	30	25	27
LN1068	21	19	15	27	24	19	20

PRELIMINARY TEST IV, 1981

Strain	Mean 6 Tests	Md. Queens-town	Ind. Sull-ivan	Ky. Lexing-ton	Ill. Eldo-rado	Mo. Portage-ville	Kan. Man hattan
		SEED QUALITY (score)					
Douglas	2.9	3.0	3.0	2.0	3.5	3.0	3.0
Pixie	1.6	2.0	1.5	1.0	2.0	2.0	1.0
Union (IV)	2.2	2.0	2.5	2.0	2.8	2.0	2.0
Williams 79 (III)	1.9	2.0	2.0	1.0	2.3	2.0	2.0
A80-347008	2.5	2.3	2.5	3.0	2.0	3.0	2.0
A80-347026	2.3	2.0	2.0	2.0	3.0	2.0	3.0
A80-349012	2.4	2.3	2.0	2.0	4.0	3.0	2.0
C1598	3.2	2.3	2.0	3.0	3.8	4.0	4.0
HC77-2204	1.9	1.8	1.5	1.0	1.8	3.0	2.0
HC78-261	2.5	2.0	2.0	2.0	2.8	3.0	3.0
HC78-265	2.5	2.3	2.0	2.0	2.5	3.0	3.0
HC78-279	2.0	1.5	1.5	2.0	2.8	3.0	1.0
HC78-356	2.7	2.3	2.0	1.0	3.0	3.0	5.0
HC78-535	1.9	2.3	1.5	1.0	2.0	2.0	2.5
HC78-570	1.9	2.0	1.5	1.0	2.3	2.0	2.5
HC78-595	2.2	2.3	2.0	1.0	3.0	3.0	2.0
HC78-806	2.3	2.3	1.0	2.0	2.3	3.0	3.0
K1075	2.7	2.0	2.0	2.0	3.3	4.0	3.0
K1076	2.2	2.0	1.5	3.0	2.5	2.0	2.0
K1077	2.0	1.5	2.0	2.0	2.3	2.0	2.0
K1078	2.2	2.0	2.0	1.0	3.0	3.0	2.2
K1079	2.0	2.3	2.0	1.0	2.0	2.0	2.5
K1080	2.1	2.0	1.5	2.0	3.3	2.0	1.5
Ky79-447	1.7	2.3	1.5	1.0	2.0	2.0	1.5
Ky79-1332	2.1	2.0	2.0	1.0	2.3	3.0	2.5
L76-4026	2.2	2.0	2.0	2.0	3.3	2.0	2.0
L76-4050	2.9	2.0	3.0	3.0	3.3	3.0	3.0
L77-8039	2.3	2.0	3.0	2.0	3.0	2.0	1.5
L78-8138	1.7	1.3	2.0	1.0	1.5	3.0	1.5
L78-8237	1.8	1.5	1.5	2.0	2.0	2.0	1.5
LN78-1627	2.1	2.5	2.0	1.0	2.3	3.0	2.0
LN1066	2.4	2.3	2.5	3.0	3.0	2.0	1.5
LN1067	2.4	1.8	2.0	2.0	2.3	3.0	3.0
LN1068	2.4	2.5	1.5	3.0	2.3	3.0	2.2

PRELIMINARY TEST IV, 1981

Strain	Mean 6 Tests	Md. Queens-town	Ind. Sull-ivan	Ky. Lexing-ton	Ill. Eldo-rado	Mo. Portage-ville	Kan. Man hattan
		SEED SIZE (g/100)					
Douglas	17.6	17.6	18.7	16.7	17.2	16.2	19.4
Pixie	16.0	16.6	16.5	15.5	15.3	11.8	20.0
Union (IV)	17.6	18.5	19.0	18.1	17.4	14.6	18.2
Williams 79 (III)	15.6	14.5	17.2	15.1	15.7	13.1	17.9
A80-347008	15.4	16.4	16.9	14.3	14.2	12.9	17.8
A80-347026	13.5	14.5	14.0	12.2	13.4	11.5	15.3
A80-349012	17.5	19.5	18.8	17.7	17.3	14.4	17.5
C1598	17.5	18.7	19.7	15.6	17.0	15.7	18.5
HC77-2204	13.0	15.2	13.7	12.2	12.8	9.9	14.3
HC78-261	17.8	19.6	18.4	15.7	16.9	12.3	24.0
HC78-265	17.7	19.2	18.4	16.6	16.9	12.9	21.9
HC78-279	17.7	19.5	19.6	16.6	17.0	13.3	20.0
HC78-356	17.8	19.1	19.7	16.8	16.7	12.6	21.9
HC78-535	16.0	17.0	15.5	14.3	15.1	11.7	22.6
HC78-570	14.5	16.0	14.2	13.2	13.5	11.5	18.5
HC78-595	16.9	18.3	17.5	16.1	15.9	13.4	20.0
HC78-806	16.2	17.1	14.9	13.8	14.3	13.1	23.7
K1075	19.3	20.3	19.8	18.4	19.5	17.2	20.3
K1076	16.6	18.0	17.5	16.2	15.6	14.7	17.5
K1077	15.7	17.0	16.6	15.8	15.1	13.7	16.1
K1078	17.0	17.8	16.1	16.9	18.0	14.6	18.4
K1079	13.9	14.5	14.4	13.5	12.6	12.6	16.0
K1080	16.5	17.4	19.0	15.7	15.6	13.6	17.5
Ky79-447	12.2	12.9	11.9	11.3	11.5	11.1	14.6
Ky79-1332	13.7	15.0	15.3	12.4	13.1	10.8	15.7
L76-4026	16.4	17.5	18.1	16.3	15.5	13.4	17.8
L76-4050	18.1	18.5	19.5	18.3	17.8	14.7	19.7
L77-8039	15.5	16.5	15.9	14.9	15.2	13.7	16.5
L78-8138	13.1	14.1	13.6	12.1	12.6	11.8	14.1
L78-8237	15.2	17.1	14.4	14.6	14.7	13.7	16.5
LN78-1627	14.1	15.1	15.8	12.4	13.2	11.1	16.8
LN1066	14.6	15.7	15.2	14.7	14.5	12.7	14.5
LN1067	16.0	16.1	16.3	14.5	14.8	15.9	18.4
LN1068	15.4	15.2	17.4	14.6	15.3	12.5	17.4

PRELIMINARY TEST IV, 1981

Strain	Mean 4 Tests	Md. Queenstown	Ind. Sullivan	Ill. Eldorado	Mo. Portageville
		PROTEIN (%)			
Douglas	41.6	41.1	43.0	42.9	39.2
Pixie	42.7	41.9	41.5	43.4	44.1
Union (IV)	42.6	42.4	41.5	43.8	42.7
Williams 79 (III)	42.0	41.5	42.3	42.2	42.1
A80-347008	38.5	39.4	37.3	39.6	37.7
A80-347026	39.5	40.9	39.2	42.6	35.3
A80-349012	41.5	41.3	42.2	44.3	38.3
C1598	41.7	40.8	42.0	44.8	39.3
HC77-2204	41.4	41.1	39.9	40.7	43.7
HC78-261	45.3	45.0	44.6	45.4	46.0
HC78-265	45.8	45.3	43.9	46.7	47.2
HC78-279	45.9	44.5	46.8	44.3	47.8
HC78-356	44.6	42.6	44.0	44.6	47.1
HC78-535	43.2	42.9	41.4	43.4	45.1
HC78-570	44.5	45.1	43.2	43.9	45.6
HC78-595	43.1	43.2	41.6	43.5	44.0
HC78-806	45.3	45.3	44.6	45.2	46.0
K1075	44.2	45.1	45.1	45.0	41.4
K1076	44.7	45.5	44.1	43.8	45.5
K1077	41.2	40.9	41.9	42.0	40.1
K1078	44.1	45.7	41.2	45.7	43.8
K1079	42.0	43.3	39.9	42.7	41.9
K1080	42.3	42.4	43.4	44.1	39.3
Ky79-447	42.5	41.6	42.5	44.9	41.1
Ky79-1332	42.1	42.8	41.8	43.0	40.6
L76-4026	43.1	43.4	44.4	43.3	41.2
L76-4050	42.8	42.4	42.6	44.4	41.8
L77-8039	41.4	43.3	40.5	44.2	37.7
L78-8138	41.7	41.8	41.5	43.6	40.0
L78-8237	41.0	42.1	37.9	43.2	40.6
LN78-1627	42.1	42.7	42.2	43.0	40.3
LN1066	42.0	43.2	41.4	43.0	40.2
LN1067	43.7	41.9	44.0	44.7	44.1
LN1068	42.1	43.1	40.5	42.0	42.9

PRELIMINARY TEST IV, 1981

Strain	Mean 4 Tests	Md. Queenstown	Ind. Sullivan	Ill. Eldorado	Mo. Portageville
		OIL (%)			
Douglas	19.7	20.4	18.8	19.3	20.4
Pixie	19.9	20.3	19.9	19.6	19.6
Union (IV)	19.6	19.5	19.5	19.3	19.9
Williams 79 (III)	19.9	20.1	19.4	19.9	20.2
A80-347008	20.9	20.3	20.2	20.8	22.2
A80-347026	20.4	20.1	20.3	19.7	21.5
A80-349012	19.2	20.1	18.3	18.6	19.6
C1598	19.3	20.4	18.8	18.2	19.8
HC77-2204	19.7	19.7	19.6	19.9	19.5
HC78-261	20.1	20.7	20.0	20.4	19.4
HC78-265	19.9	20.1	19.9	20.5	19.0
HC78-279	20.1	20.8	20.1	20.3	19.2
HC78-356	20.2	20.9	19.8	20.3	19.8
HC78-535	19.9	20.2	20.5	19.2	19.7
HC78-570	18.6	18.9	18.7	18.6	18.1
HC78-595	19.6	20.2	19.8	19.1	19.1
HC78-806	18.8	18.5	18.7	19.2	18.6
K1075	18.7	19.7	17.9	17.4	19.6
K1076	18.2	19.3	17.0	17.4	19.1
K1077	19.6	19.8	19.1	18.8	20.8
K1078	18.9	18.5	19.9	17.8	19.2
K1079	18.6	18.7	18.5	18.3	18.8
K1080	19.3	19.5	17.1	19.5	21.0
Ky79-447	19.1	20.3	18.3	17.6	20.0
Ky79-1332	19.8	19.8	19.1	19.1	21.1
L76-4026	19.2	19.3	18.8	18.3	20.2
L76-4050	19.6	20.0	18.5	19.5	20.4
L77-8039	19.9	20.4	19.2	19.5	20.6
L78-8138	19.9	19.8	19.3	20.1	20.2
L78-8237	19.2	19.1	19.2	18.2	20.3
LN78-1627	19.8	20.3	18.8	19.5	20.7
LN1066	19.0	18.8	18.4	18.6	20.2
LN1067	18.3	19.1	17.4	17.8	19.0
LN1068	19.2	19.9	18.7	19.2	19.1