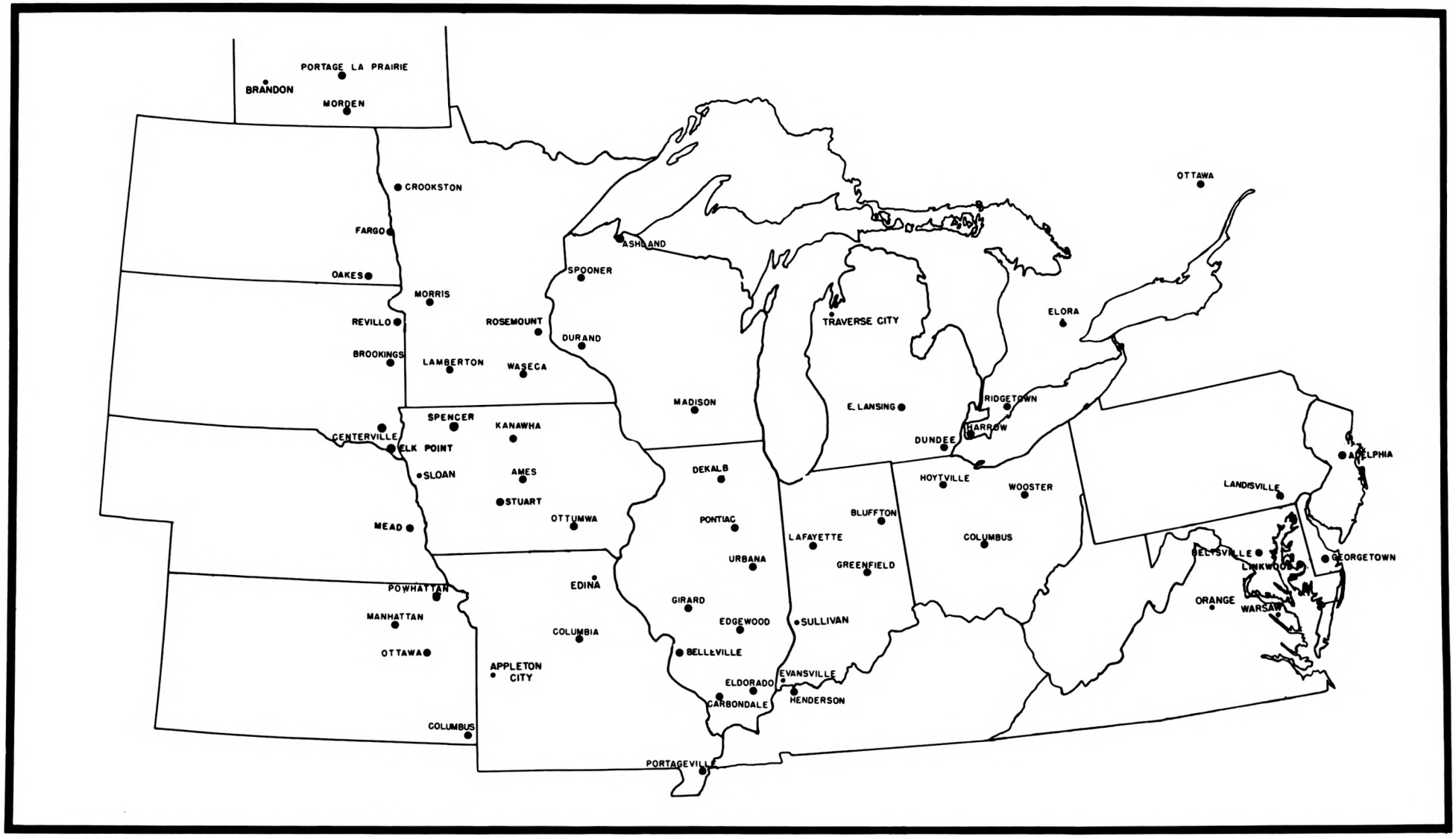

LOCATIONS OF UNIFORM SOYBEAN TESTS, NORTHERN STATES, 1974

THE UNIFORM SOYBEAN TESTS

NORTHERN STATES

1974

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INTRODUCTION

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

Unreleased strains in this report are not available for general distribution. For further information on them contact the originating agencies listed on Page 6.

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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. Regional Soybean Laboratory. They indicate the location of the originating agencies as follows:

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.
K	Kansas A.E.S.
L	Illinois A.E.S.
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 Experiment Farm, Ottawa, Ontario
O	Research Station, Harrow, Ontario
OAC	University of Guelph, Guelph, Ontario
Ok	Oklahoma A.E.S.
PI	Plant Introduction, Germplasm Resources Laboratory, U.S.D.A., Beltsville, I
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.

Uniform Tests are usually planted in four-row plots with three replications or three-row plots with four replications and the center one or two rows are harvested. Preliminary Tests are usually planted in three-row plots (the center row harvested) with two replications. More rows are desirable where unusually narrow (under 30 inch) row spacing is used. Usually 18 to 20 feet of row are planted and 16 feet harvested, to eliminate end-of-row effects. Seeds are packeted at approximately 180 viable seeds per packet for each row.

Parentage. Parent strains other than named varieties are identified on page 12.

Generation Composited is the generation after the final single-plant selection.

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

Yield is measured after the seeds have been dried to a uniform moisture content and is recorded in bushels (60 pounds) per acre. (To convert to kilograms per are (or quintals per hectare) multiply by .6725; 1 kg/are = 1.487 bu/acre.)

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	Swift	-5 to +3	Altona (00)	Steele (I)
I	Steele	-3 to +5	Swift (0)	Corsoy (II)
II	Corsoy	-3 to +5	Hark (I)	Wayne (III)
III	Wayne	-4 to +4	Beeson (II)	Cutler 71 (IV)
IV	Cutler 71	-4 to +7	Williams (III)	Essex (V)

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 cost (growth cracks), greenishness, and moldy or rotten seeds. (Threshing or handling damage is not considered, nor is mottling or other pigment.)

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

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

Seed Composition is measured on samples submitted to the 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: 1234 567, abbreviated as underlined below:

1 = Flower Color: Purple, White
2 = Pubescence Color: Tawny, Gray, Light tawny
3 = Pubescence Type: Normal, Appressed, Semi-appressed
4 = Pod Color: Brown, Tan
5 = Seed Coat Luster: Dull, Shiny, Intermediate
6 = Seed Coat Color: Yellow, Gray, Light gray, Green
7 = 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.

Peroxidase Activity: H = High, L = low activity in seed coat.

Fluorescent Light Response: E = early flowering (about 35 days), L = late flowering (about 70 days) under 20 hour cool white fluorescent photoperiod.

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, on germination at 25°C (a critical temperature for differentiating strains).

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 o (absent). Purple seed stain, pod and stem blight and seed mottling follow the disease severity class rating:

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

An additional classification to describe the extent of seedcoat mottling as M (mild), E (extensive), or S (severe), is included. 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 glycinea*
BBV	Bud blight	Tobacco ringspot virus
BP	Bacterial pustule	*Xanthomonas phaseoli* var. *sojensis*
BS	Brown spot	*Septoria glycines*
BSR	Brown stem rot	*Cephalosporium gregatum*
CN	Cyst nematode	*Heterodera glycines*
CR	Charcoal rot	*Macrophomina phaseoli*
DM	Downy mildew	*Peronospora manshurica*
FE_1, FE_2	Frogeye race 1, 2	*Cercospora sojina*
PM	Powdery mildew	*Microsphaera diffusa*
PR	Phytophthora rot	*Phytophthora sojae*
PS	Purple stain	*Cercospora kikuchii*
PSB	Pod and stem blight	*Diaporthe phaseolorum* var. *sojae*
Pyd	Pythium root rot	*Pythium debaryanum*
Pyu	Pythium root rot	*Pythium ultimum*
RK	Root knot nematode	*Meloidogyne spp.*
RR	Rhizoctonia root rot	Rhizoctonia solani
SB	Sclerotial blight	*Sclerotium rolfsii*
SC	Stem canker	*Diaporthe phaseolorum* var *caulivora*
SMV	Soybean mosaic	*Soja* virus 1
TS	Target spot	*Corynespora cassiicola*
WF	Wildfire	*Pseudomonas tabaci*
YMV	Yellow mosaic	*Phaseolus* virus 2

Ratings for BB, BP, BS, 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.

Additional data on seed quality is included under the section: Seed Quality Data for Uniform Test Entries, Pages 126-130.

UNIFORM TEST LOCATIONS--1974

Location*		Tests Conducted by	Uniform Tests						Preliminary Tests				
			00	0	I	II	III	IV	0	I	II	III	IV
Pa.	Landisville	R. H. Cole				x	x	x				x	
N.J.	Adelphia I	J. R. Justin				x	x	x			x		
Del.	Georgetown I	E. L. Wisk					x	x					x
Md	Beltsville	R. C. Leffel				x	x	x					x
Va.	Orange	G. D. Jones						x					
	Warsaw	H. M. Camper Jr.						x					
Ont.	Ottawa	L. S. Donovan	x										
	Elora	J. W. Tanner	x	x									
	Ridgetown	D. A. Littlejohns		x	x	x			x	x			
	Harrow	L. T. Anderson			x	x					x		
Ohio	Hoytville	P. E. Smith			x	x	x			x	x		
	Wooster	"			x	x	x						
	Columbus	"			x	x	x	x				x	x
Mich.	Traverse City	T. J. Johnston	o	o					o				
	E. Lansing	"		x	x	x				x	x		
	Dundee	"			x	x				x			
Ind	Bluffton	J. R. Wilcox &				x	x				x		
	Lafayette	R. J. Martin			x	x	x	x			x	x	
	Greenfield	"				x	x						
	Sullivan	"				x	x	x				x	x
	Evansville	"					x	x					x
Ky	Henderson	D. B. Egli					x	x					
Wis.	Ashland	G. H. Tenpas	x										
	Spooner	C. O. Rydberg		x					x				
	Durand	E. S. Oplinger		x	x								
	Madison	Z. Arawinko			x	x				x	x		
Ill.	Dekalb	R. L. Cooper			x	x				x			
	Pontiac	"			x	x					x		
	Urbana	R. L. Bernard				x	x				x	x	
	Girard	"				x	x					x	
	Brownstown	"				x	x	x					
	Belleville	"					x	x					
	Eldorado	"					x	x					x
	Carbondale	D. R. Browning					x	x					x
Minn.	Crookston	J. W. Lambert	x										
	Morris	"	x	x					x				
	Rosemount	"	x	x					x				
	Lamberton	"			x	x				x			
	Waseca	"			x	x				x			
Iowa	Spencer	R. C. Clark			x					x			
	Kanasha	"			x					x			
	Ames	R. C. Clark				x					x		
	Sloan	"				x					x		
	Stuart	"					x	x				x	x
	Ottumwa						x	x				x	x

Location*		Tests Conducted by	Uniform Tests 00	0	I	II	III	IV	Preliminary Tests 0	I	II	III	IV
Mo.	Edina	V. D. Luedders				x	x	x					
	Columbia	"				o	o	o			o	o	o
	Appleton City	"					x	x					
	Portageville I**	J. G. Shannon						~~x~~ AB					~~x~~ A
Man.	Portage la Prairie	J. E. Giesbrecht	x										
	Morden	"	x										
	Brandon	R. I. Hamilton	x										
N.D.	Fargo	D. A. Whited	o	o					o				
	Oakes I	"			x								
S.D.	Revillo	A. O. Lunden		x	x				x	x			
	Brookings	"			x	x				x			
	Centerville	"				x					x		
	Elk Point	"					x					x	
Neb.	Mead I	J. H. Williams			x	x	x	x			x	x	
Kansas	Powhattan	C. D. Nickell					x	x					
	Manhattan I	"					x	x				x	x
	Ottawa	"					x	x					
	Columbus	L. J. Meyer						x					
Texas	Lubbock I	R. D. Bringam						x					
Cal.	Davis	B. H. Beard	o		o		o						
No. of Locations with agronomic date (x,x)			9	8	20	28	28	27	5	12	13	11	11
No. with seed composition data (x)			4	5	8	12	15	11	3	4	4	4	6

1974 Disease and Shattering Tests

				U.T.	P.T.
Ont.	Harrow	PM, Peroxidas, Fluorescent Light	R. I. Buzzell	00-IV	---
Ind.	Lafayette	FE_2, BSR, PR	F. A. Laviolette	00-IV	0-IV
	Sullivan	DM	& K. A. Athow	00-IV	0-IV
	Lafayette	PS, SMV	T. S. Abney &	00-IV	0-IV
	Lafayette	PSB	T. L. Richards	00-I	0-II
	Sullivan	PSB	"	II-IV	III-IV
Ill.	Urbana	BSR	D.W. Chamberlain	II-IV	II-IV
Minn.	St. Paul	BSR	J. W. Lambert	00-IV	---
	Crookston	Chlorosis	"	00-IV	---
	Lamberton	"	"	00-IV	---
Iowa	Ames	BSR, PR	H. Tachibana & L. Card	00-IV	0-IV
	"	Chlorosis	W.R. Fehr, J. Freed	00-IV	0-IV
	"	Hypocotyl	& J. Bahrenfus	00-IV	---
Kansas	Manhattan	Shattering	C. D. Nickell	00-IV	0-III
	"	SMV	"	III-IV	III-IV
Texas	Lubbock	Shattering	R. D. Brigham	III-IV	---

* I = irrigated

** A= Tiptonville Silt Loan
B= Portageville Clay

IDENTIFICATION OF PARENT STRAINS

Strain	Parentage or Source	Uniform Testing
Chippewa-Rps rxp (L10)	(Chippewa^{8} x CNS et al) x (Chippewa^{10} x Blackhawk)	65 I
Chippewa-Rpm Rps rxp (SL7)	L10^{8} x Kanrich	70 I
Chippewa-I r Rps rxp (L16)	L10^{6} x Clark-I r (L11)	67 I
Clark-I r (L11)	I(Clark^{6} x T 201) x r(Clark^{6} x T145)	65 IV
Clark-I r Rps rxp (L12)	Clark 63 x L11	65-66 IV
Harosoy-Rps rxp (L2)	Harosoy 63 x (Harosoy BC$_5$ with rxp from CNS)	62-63, 65-66 II
Kent-Rps	Kent BC with resistance to PR from Mukden	---
Lindarin-Rps rxp (SL6)	(Lindarin BC$_7$ with Rps from Mukden) x (Lindarin BC$_5$ with rxp from CNS)	65-66 II
Wayne-I r Rps (L67-3542)	Wayne BC with PR resistance and yellow hilum from Clark- I r Rps rxp (L12)	69 P III
Wayne-I r Rpm Rps (SL12)	Wayne-I r Rps x (Wayne^{10} x Kanrich)	71 III
Wayne-Rps (L15)	Wayne^{6} x Clark 63	67-68 III
II-54-139	Renville x Capital	---
II-54-240	(Lincoln^{2} x Richland) x Korean	---
A59-850	A50-6838 (Ottawa Mandarin x Kanro) x A50-7537 (Richland x Jogun)	---
AX56P64-1	Progenitor of Amsoy	61-63 II
C1070	Lincoln x Ogden; From same F$_3$ plant as Kent	53 P IV
C1079	" " " " "	54-56 IV
C1128	Wabash x Hawkeye	54-58 II, 58 & 62 III
C1223	C1070 x Adams; from same F$_2$ plant as Adelphia	60-61 III
C1253	Blackhawk x Harosoy. PR resistant	64 P II
C1265	Harosoy x C1079	62-63 II
C1266	"	62-63 IV
C1317-71	C1223^{8} x Mukden	64 III
C1426	C1253 x Kent	67-69 II
C1430	"	67 II
C1432	"	67 III
C1436	"	---
C1453	C1266R x C1253	68-70 II
C1457	"	68 IV
C1483	C1266 x C1265	71 IV
D49-2491	S100 x CNS, Sib of Lee	52-53 VI
D64-3077	D49-2491^{5} x Hawkeye	66 P IV S
D64-3146	"	66, 67, IV S
IVR Ex212	Corsoy x[(Provar x (A59-850 x Magna)]	---
IVR Ex4311	Hark x Wayne	---
IVR Ex4426	Amsoy x "	---
IVR Ex4428	Corsoy x Wayne	---
IVR Ex4731	Amsoy x "	---
IVR Ex5003	Provar x (AX56P64-1 x PI 91.110-1)	---

L4	C1128 BC with resistance to PR from Monroe and to pustule from CNS	62 III
L49-4091	(F_3 Lincoln^2 x Richland) x(F_1 Lincoln x CNS)	51 IV, 52-53 III
L57-0034	Clark$_3$ x Adams	60-61 IV
L61-1112	Clark^7 x T117 ($\underline{Dt_2}$)	64-65 III
L62-1926	Clark-$\underline{e_2}$ (early) from Clark^6 x T245	---
L63-1212	Harosoy-$\underline{In}$ (Narrow leaf) from Harosoy^6 x T204	---
L65-1324	Wayne^2 x Clark-$\underline{e_2}$ (L62-1926)	68 P II
L65-1342	"	69-70 I
L66-1359	Wayne x L57-0034	70-74 IV
L66L-137	"	70 III
L66L-144	"	70-71 IV
M10	Lincoln^2 x Richland	49-51 I
M59-120	II-54-240 x II-54-139	68-70 I
M61-20	Merit x Comet	---
M62-263	Grant x M319W	71-72 I
M62-275	Norchief x Harosoy	71 I
M63-17	M402 x M406	71 I
M319	Lincoln x Hawkeye	58-61 I
M372	M10 x PI 180.501	61 I
M384	Capital x Renville	63-66 00
M402	Renville x Capital	63-64 II
M406	Harosoy x Norchief	64-65 0
M433	Acme x Chippewa	64 0, 65 00
Md66-1258	2nd Cycle intermates	71-72 IV
O-52-903	Strain 753-1 from Sven A Holmberg, Norrkoping, Sweden, same as PI 194.654 from Pagoda-2 x Fiskeby III	60-61 00
OX383	Corsoy x Harosoy 63	70 P II
PI191.110-1	From Manchuria, China in 1931	---
PI180.501	Strain No. 18 from Frankfurt, Germany, in 1949; from a Manchurian strain x PI 54.616.	---

UNIFORM TEST OO, 1974

Strain	Parentage	Previous Testing*	Line
1. Altona	0-52-903(Holmberg 753-1) x Flambeau	10	F_5
2. Norman	Acme x Hardome	9	"
3. Portage	Acme x Comet	14	"
4. M64-105	Chippewa 64 x M433(Acme x Chippewa)	2	"
5. M65-217	M433(Acme x Chippewa) x Hark	1	"

*Number of years in this test.

Regional data for the past 10 years shows that the varieties Altona, Norman, and Portage are very similar in yield and differ in maturity by about 5 days. Tests over the past 3 years have shown that M64-105 is similar in yield to the check varieties and is about the same maturity as Altona. During the past 2 years the entry M65-217 has been considerably higher in yield than the other entries in the test and has very good lodging resistance. However, it is susceptible to phytophthora root rot.

Disease Data

Strain	DM Sull. Ind. n	FE_2 Laf. Ind. a	PM Har. Ont. a	BSR Laf. St. Paul Ind. n %	BSR Minn. n %	BSR Ames Iowa n % Stems	BSR Ames Iowa n % Plants	PSB Laf. Ind. n	PS Laf. Ind. a	SMV Laf. Ind. n Seed	PR Laf. Ind. a	PR Ames Iowa a
Altona	1	4	R	5	40	10	10	5	3	5E	R	R
Norman	1	5	S	30	40	64	30	3	5	4M	S	S
Portage	2	5	S	5	50	24	80	4	4	5E	S	S
M64-105	2	4	R	15	45	25	80	5	3	2M	R	R
M65-217	2	4	S	10	25	27	70	5	4	4E	S	S

Strain	Descriptive Code		Chlorosis Crkstn. Minn.	Chlorosis Lamb. Minn.	Chlorosis Ames Iowa	Fluor-escent Light	Hypo-cotyl	Perox-idase	Shattering Manhattan Kansas
Altona	PTNBr	SYBl	2.5	2.5	2	E	1	H	3.0
Norman	PGNBr	SYY	1.0	3.5	2	E	1	H	2.0
Portage	PGNBr	D+SYY	2.0	3.5	4	E	1	H	5.0
M64-105	PTNBr	SYBr	1.5	2.5	2	E	1	L	2.0
M65-217	PGNBr	DYY	1.5	2.0	2	E	1	H	2.0

UNIFORM TEST OO, 1974

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
1974									
No. of Tests	9	9	8	9	9	9	8	5	5
Altona	29.9	3	+5.6	2.4	27	2.3	17.7	42.0	18.5
Norman	28.7	5	+4.0	1.9	28	2.2	16.2	41.9	18.8
Portage	28.9	4	9-9.4†	1.2	26	2.2	17.2	40.5	18.6
M64-105	30.6	2	+4.6	1.3	28	1.7	15.7	41.4	18.9
M65-217	34.5	1	+6.8	1.7	29	2.1	14.7	40.3	18.9
1973-74, 2-year mean									
No. of Tests	17	17	16	16	17	17	16	11	11
Altona	34.6	2	+6.2	2.4	28	2.6	19.0	41.8	19.7
Norman	33.0	4	+3.9	2.2	28	2.3	17.3	41.6	19.8
Portage	31.7	5	9-6.5†	1.3	26	2.4	18.4	40.6	20.0
M64-105	33.8	3	+5.4	1.6	29	2.0	16.8	41.6	19.9
M65-217	38.2	1	+5.6	1.7	28	2.0	15.6	40.4	19.9
1972-74, 3-year average									
No. of Tests	26	26	25	23	24	26	25	16	16
Altona	35.2	1	+6.1	2.6	28	2.4	19.0	41.3	19.9
Norman	33.6	3	+3.2	2.4	29	2.3	17.3	41.2	20.0
Portage	32.4	4	9-9.3†	1.3	27	2.4	18.3	40.1	20.3
M64-105	34.1	2	+5.3	1.7	30	2.0	16.7	41.1	20.1
1965-74, 10-year average									
No. of Tests	91	91	83	75	87	84	79	54	54
Altona	31.4	1	+5.1	2.5	29	2.5	18.5	40.7	19.9
Norman	30.4	2	+2.9	2.3	29	2.1	17.1	40.4	20.0
Portage	29.3	3	9-11.7†	1.5	27	2.3	18.0	39.6	20.1

† 105 days after planting

† 107 days after planting

† 109 days after planting

† 113 days after planting

Strain	Mean	Ontario Ottawa	Ontario Elora	Wis. Ashland	Minnesota Crookston	Minnesota Morris	Minnesota Rosemount	Manitoba Portage la Prairie	Manitoba Morden	Manitoba Brandon
	9 Tests			1974 YIELD (bu/a)						
Altona	29.9	38.1	24.2	27.2	29.9	28.1	34.5	39.0	29.0	18.7
Norman	28.7	38.0	22.3	28.3	27.5	26.2	32.6	34.0	30.0	19.6
Portage	28.9	34.5	23.9	26.4	30.7	27.4	31.3	38.0	29.0	18.5
M64-105	30.6	36.0	24.5	28.2	32.7	28.5	34.3	43.0	29.0	19.3
M65-217	34.5	42.2	29.3	35.1	32.6	33.4	40.3	39.0	36.0	22.4
C.V. (%)		5.2	7.0		14.9	11.7	7.0	7.7	6.2	10.6
L.S.D. (5%)		3.0	2.7	2.5	8.6	6.4	4.5	4.5	2.8	3.9
Row Spacing (In.)		30	12	24	22	30	30	30	30	30
Rows/Plot		3	4	1	4	4	4	3	3	4
Reps.		4	4	4	3	3	3	4	4	3
				YIELD RANK						
Altona	3	2	3	4	4	3	2	2	3	4
Norman	5	3	5	2	5	5	4	5	2	2
Portage	4	5	4	5	3	4	5	4	3	5
M64-105	2	4	2	3	1	2	3	1	3	3
M65-217	1	1	1	1	2	1	1	2	1	1
	17 Tests			1973-74, 2-YEAR MEAN YIELD						
Altona	34.6	46.9	33.0		27.5	34.4	35.1	41.6	36.6	
Norman	33.0	45.5	30.6		25.4	32.5	34.0	38.2	35.8	
Portage	31.7	41.2	33.4		26.6	31.1	30.8	37.8	32.4	
M64-105	33.8	42.3	33.7		29.8	33.4	34.9	41.6	33.2	
M65-217	38.2	52.2	37.7		29.6	38.5	40.2	43.6	35.8	
				YIELD RANK						
Altona	2	2	4		3	2	2	2	1	
Norman	4	3	5		5	4	4	4	2	
Portage	5	5	3		4	5	5	5	5	
M64-105	3	4	2		1	3	3	2	4	
M65-217	1	1	1		2	1	1	1	2	

Strain	Mean	Ontario Ottawa	Ontario Elora	Wis. Ashland	Minnesota Crookston	Minnesota Morris	Minnesota Rosemount	Manitoba Portage la Prairie	Manitoba Morden	Manitoba Bra don
	8 Tests			MATURITY (relative date)						
				*						
Altona	+5.6	+4	+4		+4	+6	+4	+6	+10	+7
Norman	+4.0	+4	+6		+4	+4	+4	+2	+5	+3
Portage†	9-9.4	9-16	9-10		9-10	8-26	8-31	9-23	9-13	9-6
M64-105	+4.6	+4	+2		+10	+4	+3	+2	+8	+4
M65-217	+6.8	+5	0		+10	+8	+7	+7	+10	+7
Clay (0)			+7		+10	+11	+9			
Date Plant	5-28	6-3	5-27	5-28	5-29	5-17	5-22	5-30	6-4	5-26
†Da. to mat.	105	106	106		104	101	101	116	101	105
	9 Tests			LODGING (score)						
Altona	2.4	1.6	1.0	1.0	2.3	4.0	3.0	4.3	3.0	1.0
Norman	1.9	1.4	1.0	1.0	2.3	3.3	2.3	2.8	1.8	1.0
Portage	1.2	1.0	1.0	1.0	1.3	1.0	1.3	2.0	1.0	1.0
M64-105	1.3	1.1	1.0	1.0	1.3	2.0	1.7	2.0	1.0	1.0
M65-217	1.7	1.1	1.0	1.0	2.0	1.8	2.0	3.5	2.3	1.0
	9 Tests			PLANT HEIGHT (inches)						
Altona	27	30	18	21	27	26	27	37	38	2
Norman	28	32	19	25	28	24	27	36	36	2
Portage	26	29	18	23	26	24	25	36	34	2
M64-105	28	34	20	25	27	25	28	37	36	2
M65-217	29	32	19	25	30	26	29	40	37	2

* Not included in the mean

Strain	Mean	Ontario Ottawa	Ontario Elora	Wisc. Ashland	Minnesota Crookston	Minnesota Morris	Minnesota Rosemount	Manitoba Portage la Prairie	Manitoba Morden	Manitoba Brandon
	9 Tests			SEED QUALITY (score)						
Altona	2.3	2.0	3.0	2.0	3.0	3.0	2.7	1.0	1.5	2.1
Norman	2.2	1.5	3.0	3.0	2.0	2.8	2.0	1.5	1.3	2.3
Portage	2.2	1.5	3.0	3.0	3.0	2.3	2.0	1.8	1.5	2.1
M64-105	1.7	1.0	2.0	2.0	2.0	2.0	1.8	1.3	1.0	1.8
M65-217	2.1	1.0	2.5	2.0	3.0	2.8	1.8	1.8	1.8	2.4
	8 Tests			SEED SIZE (g/100)						
Altona	17.7	19.9	17.1		19.2	16.2	15.8	18.5	18.2	16.8
Norman	16.2	17.7	15.6		18.7	15.4	14.7	16.8	15.8	14.5
Portage	17.2	18.8	14.7		18.7	17.2	15.9	19.5	16.9	16.2
M64-105	15.7	17.2	14.1		16.2	15.7	13.8	17.5	16.2	15.1
M65-217	14.7	15.0	13.7		15.0	14.9	13.5	15.8	15.8	14.2
	5 Tests			PROTEIN (%)						
Altona	42.0	40.8	43.2		41.4	41.1			43.3	
Norman	41.9	40.6	43.9		42.2	40.0			42.7	
Portage	40.5	39.2	42.5		39.6	39.1			41.9	
M64-105	41.4	41.5	43.9		38.2	39.7			43.9	
M65-217	40.3	39.1	41.9		40.9	38.2			41.5	
	5 Tests			OIL (%)						
Altona	18.5	19.9	19.1		17.4	19.5			16.5	
Norman	18.8	19.8	19.2		17.7	20.4			17.1	
Portage	18.6	19.1	18.7		18.2	19.8			17.0	
M64-105	18.9	19.4	19.0		19.3	19.8			16.8	
M65-217	18.9	20.3	19.2		16.9	21.0			17.0	

Strain	Parentage	Previous Testing*	Line
1. Clay	Capital x Renville	7	F_5
2. Evans (M61-96)	Merit x Harosoy	4	"
3. Swift	II-54-240 [(Lincoln^2 x Richland) x Korean] x II-54-139(Renville x Capital)	6	"
4. M64-157	Merit x Amsoy	1	"
5. M65-94	M384 (Capital x Renville) x Corsoy	1	"
6. M65-207	Clay x Mark	PO	"
7. M65-270	"	PO	"
8. M65-295	Anoka x Magna	PO	"

*Number of years in this test or name of 1973 test.

The regional 5-year mean shows that Evans is higher yielding and has better seed quality than either Clay or Swift. Two-year test data does not show any distinct advantage of M64-157 or M65-94 over the check varieties.

Three entries were new in the test this year, M65-207, M65-270, and M65-295. None of them show any superiority over the check varieties or over previous entries in the test, and all are susceptible to phytophthora root rot.

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Disease Data

Strain	DM Sull. Ind. n	FE_2 Laf. Ind. a	PM Har. Ont. a	BSR Laf. Ind. n %	BSR St. Paul Minn. n %	BSR Ames Iowa n % Stem	BSR Ames Iowa n % Plants	PSB Laf. Ind. n	PS Laf. Ind. a	SMV Laf. Ind. n Seed	PR Laf. Ind. a	PR Ames Iowa a
Clay	4	4	S	40	80	26	50	4	5	5E	S	S
Evans	5	5	R	45	65	35	60	4	5	2M	R	R
Swift	3	4	R	35	30	42	60	4	5	5M	S	S
M64-157	4	5	S	40	50	45	50	5	5	3M	R	R
M65-94	5	5	S	10	30	43	80	4	5	5E	S	S
M65-207	4	5	S	5	85	36	50	4	5	5E	S	S
M65-270	4	4	R	35	75	42	50	3	5	5E	S	S
M65-295	3	4	H	40	90	41	60	5	5	2M	S	S

Descriptive and Other Data

Strain	Descriptive Code		Chlorosis Crkstn. Minn.	Chlorosis Lamb. Minn.	Chlorosis Ames Iowa	Fluor-escent Light	Hypo-cotyl	Perox-idase	Shattering Manhattan Kansas
Clay	PGNBr	SYY	1.5	2.0	4	E	1	L+H	2.0
Evans	WGNBr	DYY	1.5	2.5	4	E+L	1	H	3.0
Swift	WTNBr	DYBl	1.0	1.0	2	E	4	H	5.0
M65-157	WGNBr	DYY	1.0	2.0	3	E	1	H	2.0
M65-94	WGNBr	DYY	1.5	1.5	4	E	1	H	2.0
M65-207	PGNBr	DYY	1.0	2.0	4	L	1	L	5.0
M65-270	PGNBr	SYY	3.0	2.5	4	E+L	3	H	2.0
M65-295	PTNBr	DYTn	3.5	2.5	3	E	1	L	2.0

UNIFORM TEST O, 1974

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
1974									
No. of tests	8	8	7	8	8	5	6	5	5
Clay	31.9	6	-7.4	1.4	22	1.5	15.4	40.9	20.9
Evans	34.5	1	-1.9	1.6	30	1.5	14.8	40.0	20.8
Swift	32.4	4	9-21.6†	1.8	31	1.9	14.8	39.3	19.6
M64-157	33.6	2	-1.7	1.2	26	1.6	15.3	39.3	20.6
M65-94	32.4	4	-5.4	1.1	24	2.0	15.7	39.7	20.9
M65-207	31.6	8	-4.7	1.2	23	1.6	15.2	40.9	20.7
M65-270	32.5	3	-1.6	1.4	24	1.8	17.1	41.7	20.2
M65-295	31.9	6	+ .6	1.5	26	2.7	20.1	38.3	18.9

† 122 days after planting

1973-74, 2-year mean									
No. of tests	14	14	12	14	14	11	12	11	11
Clay	35.9	5	-7.6	1.4	24	1.9	15.8	40.5	22.2
Evans	37.4	1	-2.0	1.6	32	1.6	15.1	40.0	21.9
Swift	36.4	3	9-18.0†	2.1	32	2.1	15.0	39.2	21.0
M64-157	36.6	2	-1.2	1.2	28	1.7	15.6	39.4	21.7
M65-94	36.4	3	-5.6	1.2	25	2.2	16.2	39.7	21.8

† 121 days after planting

1970-74, 5-year mean									
No. of tests	38	38	33	36	37	32	34	28	28
Clay	35.7	3	-7.2	1.5	26	2.3	16.4	40.8	21.9
Evans	37.7	1	-1.7	1.8	33	1.7	15.4	39.8	21.8
Swift	36.2	2	9-20.7†	2.4	34	2.1	15.4	39.0	21.3

† 122 days after planting

Strain	Mean	Ontario Elora	Ontario Ridge-town	Michigan East Lansing	Wisconsin Spooner	Wisconsin Durand	Minnesota Morris	Minnesota Rose-mount	S.D. Revillo
	8 Tests		1974 YIELD (bu/a)						
Clay	31.9	26.8	44.7	29.0	27.7	30.7	37.2	39.8	19.3
Evans	34.5	27.8	49.6	37.6	30.1	28.8	37.4	40.8	23.7
Swift	32.4	24.5	49.2	34.2	30.7	24.3	35.8	37.1	23.2
M64-157	33.6	26.4	49.6	36.6	29.6	28.0	36.5	38.0	23.7
M65-94	32.4	27.2	46.2	30.4	27.5	27.9	37.9	40.1	21.6
M65-207	31.6	25.5	48.8	31.8	27.2	25.2	33.4	39.0	21.5
M65-270	32.5	26.5	47.9	30.7	26.7	27.1	36.5	43.3	21.4
M65-295	31.9	20.5	48.2	35.7	30.7	29.7	28.6	34.5	27.3
C.V. (%)		11.3	5.1	16.0			7.0	7.8	11.3
L.S.D. (5%)		4.3	3.6	8.7		4.0	4.3	5.4	n.s.
Row Spacing (In.)		12	24	30	36	38	30	30	30
Rows/Plot		4	4	4	1	1	4	4	4
Reps.		4	4	3	4	4	3	3	3
				YIELD RANK					
Clay	6	3	8	8	5	1	3	4	8
Evans	1	1	1	1	3	3	2	2	2
Swift	4	7	3	4	1	8	6	7	4
M64-157	2	5	1	2	4	4	4	6	2
M65-94	4	2	7	7	6	5	1	3	5
M65-207	8	6	4	5	7	7	7	5	6
M65-270	3	4	6	6	8	6	4	1	7
M65-295	6	8	5	3	1	2	8	8	1
	14 Tests		1973-74, 2-YEAR MEAN YIELD						
Clay	35.9	35.7	47.4		30.2		41.8	38.8	25.2
Evans	37.4	37.5	50.6		34.4		43.4	39.2	26.0
Swift	36.4	32.0	50.0		36.5		42.4	38.0	28.4
M64-157	36.6	33.0	48.7		33.6		41.4	40.0	26.7
M65-94	36.4	36.1	46.7		29.0		41.1	38.3	29.0
				YIELD RANK					
Clay	5	3	4		4		3	3	5
Evans	1	1	1		2		1	2	4
Swift	3	5	2		1		2	5	2
M64-157	2	4	3		3		4	1	3
M65-94	3	2	5		5		5	4	1

Strain	Mean	Ontario Elora	Ontario Ridge-town	Michigan East Lansing	Wisconsin Spooner	Wisconsin Durand	Minnesota Morris	Minnesota Rose-mount	S.D. Revillo
	7 Tests		MATURITY (relative date)						
Clay	-7.4	-10	-10	-5	-4	*	-10	-10	-3
Evans	-1.9	-5	-2	-2	+3		-4	-2	-1
Swift†	9-21.6	9-27	9-20	9-23	9-19		9-17	9-18	9-27
M64-157	-1.7	-6	0	-3	+1		-2	-1	-1
M65-94	-5.4	-11	-4	-1	-4		-8	-8	-2
M65-207	-4.7	-9	-8	-2	-3		-5	-3	-3
M65-270	-1.6	-6	-2	0	0		-1	-2	0
M65-295	+0.6	+3	0	-2	+3		0	-1	+1
Altona (00)		-13	-9				-20	-13	
Steele (I)			-1	+3			+1	+5	+5
Date Planted	5-23	5-27	5-21	5-21	5-28	6-6	5-17	5-22	5-24
† Days to Mat.	122	123	122	125	114		123	119	126
	8 Tests		LODGING (score)						
Clay	1.4	1.0	1.0	1.0	1.0	2.5	1.7	1.7	1.5
Evans	1.6	1.0	1.0	1.2	1.0	3.0	1.7	2.0	1.5
Swift	1.8	1.0	1.2	2.5	1.0	2.5	2.7	2.7	1.0
M64-157	1.2	1.0	1.0	1.0	1.0	2.3	1.0	1.0	1.0
M65-94	1.1	1.0	1.0	1.0	1.0	1.0	1.7	1.3	1.0
M65-207	1.2	1.0	1.2	1.2	1.0	1.3	2.0	1.3	1.0
M65-270	1.4	1.0	1.0	1.3	1.0	1.8	2.0	1.7	1.0
M65-295	1.5	1.0	1.1	1.0	1.0	2.5	1.3	2.0	2.0
	8 Tests		PLANT HEIGHT (inches)						
Clay	22	18	21	22	22	28	23	27	18
Evans	30	20	30	32	31	37	29	35	22
Swift	31	24	32	34	32	41	32	35	21
M64-157	26	18	28	24	27	34	25	30	21
M65-94	24	18	22	26	24	31	23	29	21
M65-207	23	17	22	29	23	27	21	28	18
M65-270	24	18	22	30	23	28	23	27	17
M65-295	26	20	27	28	27	32	25	30	31

*Not included in the mean.

Strain	Mean	Ontario Elora	Ontario Ridge-town	Michigan East Lansing	Wisconsin Spooner	Wisconsin Durand	Minnesota Morris	Minnesota Rose-mount	S.D. Revillo
	5 Tests			SEED QUALITY (score)					
Clay	1.5	2.0			1.0		2.3	1.0	1.2
Evans	1.5	2.5			1.5		1.7	1.0	1.0
Swift	1.9	4.0			1.5		1.7	1.3	1.0
M64-157	1.6	3.5			1.0		1.7	1.0	1.0
M65-94	2.0	3.0			1.0		3.0	1.0	2.0
M65-207	1.6	3.0			1.0		1.7	1.3	1.2
M65-270	1.8	3.5			1.0		1.7	1.0	2.0
M65-295	2.7	5.0			1.5		3.0	2.3	1.5
	6 Tests			SEED SIZE (g/100)					
Clay	15.4	14.6		18.1		15.1	16.4	14.7	13.4
Evans	14.8	14.3		17.2		13.7	14.6	12.9	16.2
Swift	14.8	15.4		18.2		13.9	13.9	11.8	15.6
M64-157	15.3	14.3		18.5		14.1	16.1	13.4	15.2
M65-94	15.7	14.1		18.8		14.2	16.7	15.2	15.0
M65-207	15.2	13.6		17.5		13.5	16.1	13.7	16.7
M65-270	17.1	14.9		22.0		15.2	17.3	14.6	18.4
M65-295	20.1	21.3		25.1		13.9	20.9	19.2	20.1
	5 Tests			PROTEIN (%)					
Clay	40.9	41.9			42.2		40.8	40.6	38.9
Evans	40.0	41.9			40.4		39.3	40.0	38.3
Swift	39.3	41.3			40.7		37.6	38.7	38.1
M64-157	39.3	40.6			40.8		38.2	39.5	37.4
M65-94	39.7	40.8			40.5		39.5	38.6	39.2
M65-207	40.9	42.2			42.0		39.6	41.2	39.4
M54-270	41.7	41.1			43.1		41.7	41.2	41.2
M65-295	38.3	40.9			39.4		37.5	36.7	36.8
	5 Tests			OIL (%)					
Clay	20.9	21.1			18.4		21.3	21.1	22.5
Evans	20.8	21.0			19.4		21.4	20.2	22.2
Swift	19.6	20.0			17.7		20.7	19.5	20.0
M64-157	20.6	21.1			18.4		21.1	19.7	22.5
M65-94	20.9	21.4			18.7		21.3	21.6	21.5
M65-207	20.7	21.2			18.8		21.6	20.6	21.2
M65-270	20.2	21.3			17.7		20.2	20.5	21.4
M65-295	18.9	18.9			16.7		19.5	19.3	20.0

Strain	Parentage	Line
1. Clay		
2. Swift		
3. M66-18	Clay x Altona	F_5
4. M66-30	Magna x M61-20 (Merit x Comet)	"
5. M68-2	Wilkin x M59-120 (II-54-240 x II-54-139)	"
6. M68-37	Evans x "	"
7. SD73-10	(Adams x Capital) x Grant	F_7
8. SD73-11	Colchicine treated Renville	F_{11}
9. SD73-13	(Adams x Capital) x Blackhawk	F_7

None of the new strains show any yield advantage over Swift. Two entries, M68-2 and M68-37, are equal to Swift in yield and the entry M66-18 is nearly as early but shows no yield advantage over Clay. All four Minnesota strains have good lodging resistance. Entries M68-37, SD73-10, SD73-11 have as good shattering resistance as Clay. The entries M68-2 and M68-37, which show some promise, are resistant to Phytophthora root rot. It appears as though an error has been made in the parentage of strains SD73-10 and SD73-11. Both are resistant to Phytophthora root rot, yet all the parents of these strains are susceptible to this disease.

Disease Data

Strain	DM Sull. Ind. n	FE2 Laf. Ind. a	BSR Laf. Ind. n %	BSR Ames Iowa n % stem	BSR Ames Iowa n % plants	PSB Laf. Ind. n	PS Laf. Ind. a	SMV Laf. Ind. n seed	PR Laf. Ind. a	PR Ames Iowa a
Clay	4	4	40	40	80	4	5	5E	S	S
Swift	3	4	35	57	50	4	5	5E	S	S
M66-18	4	5	40	50	70	4	5	4M	R	R
M66-30	4	4	55	44	40	4	5	2E	S	S
M68-2	4	5	45	40	50	4	5	4E	R	H
M68-37	3	5	50	52	20	5	5	1	R	H
SD73-10	2	4	50	51	50	4	5	5E	R	R
SD73-11	3	4	55	47	30	3	5	5E	R	R
SD73-13	3	5	80	40	70	3	5	5E	S	S

Descriptive and Other Data

Strain	Descriptive Code		Chlorosis Ames Iowa	Shattering Manhattan Kansas
Clay	PGNBr	SYY	3.0	2.0
Swift	WTNBr	DYBl	2.0	5.0
M66-18	PGNBr	SYBf	3.0	4.0
M66-30	PGNBr	DYY	5.0	4.0
M68-2	WGNBr	DYY	1.0	3.0
M68-37	WGNBr	DYBr	3.0	2.0
SD73-10	PTNBr	DYY	3.0	2.0
SD73-11	PTNBr	D+SYY	3.0	2.0
SD73-13	WTNBr	SYBl	5.0	5.0

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
				1974					
No. of Tests	6	6	6	6	6	5	5	3	3
Clay	34.8	5	-6.7	1.4	22	1.7	16.1	40.0	20.9
Swift	37.4	2	9-19.8	2.1	31	1.6	15.6	39.1	19.3
M66-18	34.1	7	-5.0	1.2	23	1.6	16.9	40.4	19.8
M66-30	35.7	4	+1.0	1.1	27	2.0	21.2	41.2	18.9
M68-2	37.2	3	-1.5	1.2	28	1.4	16.8	40.7	19.4
M68-37	37.5	1	+1.3	1.2	27	1.6	17.0	40.2	20.2
SD73-10	32.6	9	-0.7	2.4	34	1.6	14.6	42.6	18.0
SD73-11	33.7	8	+0.8	2.6	36	1.6	14.9	41.4	18.4
SD73-13	34.3	6	-0.2	1.9	27	1.6	14.9	42.3	18.4

Strain	Mean	Ontario Ridgetown	Michigan East Lansing	Wisc. Spooner	Minnesota Morris	Minnesota Rosemount	S.D. Revillo
	6 Tests		1974 YIELD (bu/a)				
Clay	34.8	47.5	38.2	26.4	32.6	41.0	23.1
Swift	37.4	49.9	37.8	28.5	37.0	40.7	30.3
M66-18	34.1	46.0	34.3	26.3	33.2	38.6	26.0
M66-30	35.7	48.9	38.7	32.1	34.8	37.6	22.1
M68-2	37.2	54.8	36.5	31.6	34.8	41.4	23.9
M68-37	37.5	50.1	39.8	29.3	36.2	40.2	29.2
SD73-10	32.6	48.2	33.8	26.8	31.6	30.8	24.5
SD73-11	33.7	51.5	35.9	28.7	31.7	29.0	25.6
SD73-13	34.3	48.6	37.6	28.6	35.0	31.2	24.8
C.V. (%)		3.8	8.3		9.4	5.7	9.0
L.S.D. (5%)		4.4	7.6		7.4	4.8	n.s.
Row Spacing (In.)		24	30	36	30	30	30
Rows/Plot		4	4	1	2	2	4
Reps.		2	2	2	2	2	2
			YIELD RANK				
Clay	5	8	3	8	7	2	8
Swift	2	4	4	6	1	3	1
M66-18	7	9	8	9	6	5	3
M66-30	4	5	2	1	4	6	9
M68-2	3	1	6	2	4	1	7
M68-37	1	3	1	3	2	4	2
SD73-10	9	7	9	7	9	8	6
SD73-11	8	2	7	4	8	9	4
SD73-13	6	6	5	5	3	7	5

Strain	Mean	Ontarion Ridgetown	Michigan E. Lansing	Wisc. Spooner	Minnesota Morris	Minnesota Rosemount	S.D. Revillo
	6 Tests		MATURITY (relative date)				
Clay	-6.7	-8	-5	-3	-13	-7	-4
Swift	9-19.8	9-18	9-23	9-18	9-16	9-17	9-27
M66-18	-5.0	-7	0	-3	-9	-7	-4
M66-30	+1.0	-5	+2	+5	+2	+4	-2
M68-2	-1.5	-2	+1	+2	-5	-2	-3
M68-37	+1.3	-1	+5	+6	0	0	-2
SD73-10	-0.7	-5	+1	0	0	+1	-1
SD73-11	+0.8	-2	+4	+2	+2	+1	-2
SD73-13	-0.2	-4	+1	+3	+1	+1	-3
Altona (OO)		-7			-19	-12	
Steele (I)	+3	+1	+3		+2	+6	+4
Date Plntd.	5-22	5-21	5-21	5-28	5-17	5-22	5-24

Strain	Parentage	Previous Testing*	Line
L. Hark	Hawkeye x Harosoy	10	F_9
2. Hodgson(M63-217Bf)	Corsoy x M372(M10 x PI 180.501)	2	F_5
3. Steele	Blackhawk x Harosoy	6	"
4. A72-102	Corsoy x Wayne	PI	"
5. A72-106	" "	PI	"
6. A72-107	"	PI	"
7. A72-125	Amsoy x Wayne	PI	'
8. M65-69	M384(Renville x Capital) x Corsoy	1	"
9. M65-115	Anoka x Amsoy	1	"
10. M65-122	"	1	"
11. M65-442	"	PI	"
12. OX643 Harlon	Blackhawk x Harosoy 63	1	"

*Number of years in test or name of 1973 test.

Regional data for the past 3 years shows that the variety Hodgson which is 5 days earlier than Hark in maturity is 2 bushels higher yielding. Hodgson is similar in maturity to Steele and is 3.5 bushels higher yielding. However, it is susceptible to phytophthora root rot. Hodgson averaged 1.6% higher in oil and was only moderately lower in protein.

During the past 2 years none of the strains showed any yield advantage over Hodgson but M65-69, M65-115, and M65-122 showed a 1 to 2 bushel yield advantage over Hark and Steele. The strain OX643 was lowest yielding, was 4 days earlier in maturity than Steele, and is phytophthora root rot resistant. The strains M65-115 and M65-122 have higher oil contents than other strains in the test.

The five new entries in 1974 showed no distinct advantage over Hodgson for any characteristic evaluated.

Disease Data

Strain	DM Sull. Ind. n	FE_2 Laf. Ind. a	PM Har. Ont. a	BSR Laf. Ind. n %	BSR St. Paul Minn. n %	BSR Ames Iowa n % Stems	BSR Ames Iowa n % Plants	PSB Laf. Ind. n	PS Laf. Ind. a	SMV Laf. Ind. n Seed	PR Laf. Ind. a	PR Ames Iowa a
Hark	4	3	S	75	55	64	90	5	5	5E	S	S
Hodgson	4	5	S	75	80	48	60	5	5	3E	S	S
Steele	5	5	S	75	25	38	40	5	5	3E	R	R
A72-102	4	4	R	70	65	37	50	5	4	5E	S	S
A72-106	5	4	R	95	50	35	50	5	5	5E	S	S
A72-107	4	4	H	85	70	42	40	5	4	5E	S	S
A72-125	5	3	S	70	70	59	60	5	5	5E	S	S
M65-69	5	5	S	80	70	48	40	5	5	5M	S	S
M65-115	3	4	R	50	50	52	20	5	5	4M	S	S
M65-122	2	4	S	35	80	47	50	4	5	4M	S	S
M65-442	2	4	R	85	45	59	30	5	5	4M	S	S
OX-643	5	5	R	100	80	56	90	4	4	2M	R	R

Descriptive and Other Data

Strain	Descriptive Code	Chlorosis Crkstn. Minn.	Chlorosis Lamb. Minn.	Chlorosis Ames Iowa	Fluor-escent Light	Hypo-coytl	Perox-idase	Shattering Manhattan Kansas
Hark	PGNBr DYY	3.0	5.0	5	L	1	H	4.0
Hodgson	PGNBr DYBf	1.0	2.5	3	L	3	H	3.0
Steele	PGNBr DYY	2.5	3.0	4	E	2	L	3.0
A72-102	WGNBr SYY	3.0	4.5	5	L	1	H	5.0
A72-106	PT+GNBr DYY+G	2.5	3.0	4	L	2	H	5.0
A72-107	WTNBr SYY+G	4.0	5.0	5	L	1	H	5.0
A72-125	WGNTn SYBf	3.0	4.0	5	L	2	L	5.0
M65-69	WGNBr DYY	1.0	3.0	5	E	2	H	3.0
M65-115	PGNTn SYIb	1.0	3.0	5	E	2	H	3.0
M65-122	PGNTn SYIb+Bf	1.0	1.0	1	E	5	H	4.0
M65-442	PGNTn SYY	3.0	4.5	5	E	5	L	3.0
OX-643	WGNBr DYY	1.0	2.5	2	E	1	L	4.0

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
				1974					
No. of Tests	18	18	15	20	19	14	18	8	8
Hark	33.3	9	+4.7	1.5	31	1.6	15.6	41.9	19.8
Hodgson	37.5	1	+0.7	1.3	29	1.5	16.3	38.8	21.7
Steele	34.3	5	9-19.2†	1.5	31	1.4	16.9	40.0	20.5
A72-102	34.0	7	+1.1	1.5	30	1.6	17.3	40.5	20.8
A72-106	33.2	11	+1.7	1.2	29	1.6	17.4	42.7	19.7
A72-107	32.7	12	+0.3	1.8	29	1.7	18.6	42.1	19.6
A72-125	33.4	8	+3.0	1.6	29	2.0	16.1	39.9	20.3
M65-69	35.9	3	+2.3	1.7	30	1.7	15.4	38.3	21.3
M65-115	35.6	4	+1.1	1.5	30	1.7	16.3	37.8	23.0
M65-122	34.3	5	+0.6	1.1	28	1.5	18.0	39.8	22.4
M65-442	36.8	2	-0.2	1.2	27	1.7	16.6	38.3	22.4
OX643	33.3	9	-3.3	1.5	30	1.6	16.4	37.9	22.2

† 119 Days after planting

				1973-74, 2-year mean					
No. of Tests	31	31	27	33	32	26	30	17	17
Hark	38.2	5	+5.0	1.7	34	1.4	16.2	42.0	20.8
Hodgson	41.0	1	+0.2	1.6	32	1.6	16.8	39.2	22.6
Steele	38.0	6	9-16.8†	1.8	34	1.4	17.2	40.3	21.2
M65-69	40.6	2	+2.8	2.1	33	1.6	16.0	38.9	22.2
M65-115	39.8	3	+0.3	1.7	32	1.8	17.0	38.5	23.6
M65-122	39.4	4	-0.1	1.2	31	1.6	18.8	40.3	23.4
OX643	37.2	7	-3.8	1.6	32	1.6	16.8	38.8	22.8

† 118 Days after planting

				1972-74, 3-year mean					
No. of Tests	47	47	41	49	47	40	44	28	28
Hark	40.1	2	+5.0	1.8	36	1.5	16.5	42.2	20.8
Hodgson	42.6	1	-0.3	1.8	33	1.7	17.0	39.5	22.6
Steele	38.9	3	9-18.2†	2.0	35	1.6	17.4	40.4	21.2

† 119 Days after planting

Strain	Mean	Ontario Ridge-town	Ontario Harrow	Ohio Hoyt-ville*	Ohio Wooster	Ohio Colum-bus	Michigan East Lansing	Michigan Dun-dee	Ind. Laf-ayette	Wisconsin Durand	Wisconsin Madiso
	18 Tests			1974 YIELD (bu./a.)							
Hark	33.3	51.7	24.9	20.6	27.7	19.0	42.3	44.7	44.0	18.3	35.3
Hodgson	37.5	52.3	32.4	19.4	30.6	37.8	40.9	45.0	46.1	25.5	37.1
Steele	34.3	49.7	32.2	17.6	28.4	20.7	39.2	40.6	46.0	21.9	33.6
A72-102	34.0	50.9	30.9	18.8	25.0	18.4	39.7	39.0	46.6	25.1	33.9
A72-106	33.2	49.5	30.3	21.6	24.9	23.6	36.3	38.7	42.3	26.1	36.0
A72-107	32.7	48.8	28.9	20.7	26.5	19.0	34.9	37.6	42.0	18.9	36.9
A72-125	33.4	51.0	27.4	20.6	28.8	18.0	42.1	36.4	44.4	19.7	34.3
M65-69	35.9	52.8	29.3	17.9	26.5	28.6	40.2	39.7	46.8	21.7	37.1
M65-115	35.6	55.8	29.7	17.8	24.2	17.8	38.2	40.9	43.0	27.3	36.7
M65-122	34.3	50.9	31.6	20.9	29.5	18.8	35.3	37.1	45.0	27.1	34.5
M65-442	36.8	51.3	28.0	18.8	28.4	19.3	37.3	41.3	46.3	28.7	34.4
OX643	33.3	48.4	27.6	8.3	29.1	16.8	38.0	37.7	45.6	21.1	34.2
C.V.%		7.0	7.0				13.4	9.8			
L.S.D.(5%)		5.1	3.5				6.8	5.1		4.4	3.9
Row Sp.(in.)		24	24	32	32	28	30	30	30	38	36
Rows/Plot		4	4	3	3	3	4	4	4	1	1
Reps.		4	3	4	4	4	3	3	3	4	4
				YIELD RANK							
Hark	9	4	12	4	7	6	1	2	9	12	6
Hodgson	1	3	1	6	1	1	3	1	4	5	1
Steele	5	9	2	11	5	4	6	5	5	7	12
A72-102	7	7	4	7	10	9	5	7	2	6	11
A72-106	11	10	5	1	11	3	10	8	11	4	5
A72-107	12	11	8	3	8	6	12	10	12	11	3
A72-125	8	6	11	4	4	10	2	12	8	10	9
M65-69	3	2	7	9	8	2	4	6	1	8	1
M65-115	4	1	6	10	12	11	7	4	10	2	4
M65-122	5	7	3	2	2	8	11	11	7	3	7
M65-442	2	5	9	7	5	5	9	3	3	1	8
OX643	9	12	10	12	3	12	8	9	6	9	10

* Not included in the mean.

Illinois		Minnesota		Iowa		North Dakota	South Dakota		Neb.
Dekalb	Pontiac	Lamberton	Waseca	Spencer	Kanawha	Oakes I	Revillo	Brookings	Mead I
				1974 YIELD(bu./a.)					
						*			
40.9	23.7	26.3	31.5	34.8	32.3	26.6	22.4	35.7	44.7
40.6	25.4	32.4	38.5	39.6	31.5	43.7	25.4	42.1	51.3
37.1	23.7	29.2	37.4	37.7	31.8	34.9	23.6	38.5	46.8
34.1	23.0	30.5	35.3	37.9	30.2	35.2	22.6	38.8	50.4
36.4	20.6	28.5	33.8	34.8	31.1	39.6	21.4	34.6	47.8
36.8	24.9	28.6	28.5	35.5	30.0	38.0	24.6	35.7	51.1
40.2	26.1	28.8	30.0	31.7	28.2	38.4	23.4	38.4	51.6
42.0	28.4	33.9	32.1	36.2	31.2	43.4	28.1	45.2	45.6
36.1	22.9	32.8	39.0	37.7	35.2		28.7	44.6	49.6
34.7	21.4	32.4	34.8	34.9	34.2	52.0	25.4	42.8	47.6
39.6	28.4	32.3	43.9	38.8	35.9	45.4	28.1	44.4	56.9
35.2	23.5	29.1	35.7	36.5	32.0	48.8	23.1	42.5	44.0
4.2	14.3	9.2	11.5	6.7	8.2	14.5	13.6	5.6	9.2
2.7	5.9	4.7	6.8	3.3	3.6	8.6	3.5	4.0	7.6
30	38	30	30	27	27	12	30	30	30
4	4	4	4	4	4	3	4	4	4
3	3	3	3	4	4	4	3	3	3
				YIELD RANK					
2	6	12	10	10	4	11	11	10	11
3	4	3	3	1	7	4	4	6	3
6	6	7	4	4	6	10	7	8	9
12	9	6	6	3	10	9	10	7	5
8	12	11	8	10	9	6	12	12	7
7	5	10	12	8	11	8	6	10	4
4	3	9	11	12	12	7	8	9	2
1	1	1	9	7	8	5	2	1	10
9	10	2	2	4	2		1	2	6
11	11	3	7	9	3	1	4	4	8
5	1	5	1	2	1	3	2	3	1
10	8	8	5	6	5	2	9	5	12

* Not included in the mean.

Strain	Mean	Ontario		Ohio			Michigan	Indiana
		Ridgetown	Harrow	Hoytville	Wooster	Columbus	Dundee	Lafayette
	31 Tests			1973-74, 2-YEAR MEAN YIELD				
				*				
Hark	38.2	49.4	32.6	20.2	28.4	28.4	47.6	45.8
Hodgson	41.0	54.3	37.1	19.1	29.7	38.8	47.0	43.5
Steele	38.0	49.6	36.1	16.5	26.6	25.7	43.2	43.0
M65-69	40.6	52.7	36.8	19.0	26.6	35.4	44.2	47.8
M65-115	39.8	54.6	36.2	17.3	26.0	22.2	44.3	40.4
M65-122	39.4	52.0	38.5	18.6	29.7	26.2	44.0	42.9
OX643	37.2	51.4	33.6	10.8	29.6	27.0	41.2	42.0
				YIELD RANK				
Hark	5	7	7	1	4	3	1	2
Hodgson	1	2	2	2	1	1	2	3
Steele	6	6	5	6	5	6	6	4
M65-69	2	3	3	3	5	2	4	1
M65-115	3	1	4	5	7	7	3	7
M65-122	4	4	1	4	1	5	5	5
OX643	7	5	6	7	3	4	7	6
	47 Tests			1972-74, 3-YEAR MEAN YIELD				
Hark	40.1	49.3	36.7	25.5	28.2	29.4	47.7	44.1
Hodgson	42.6	55.9	38.2	23.5	31.8	36.9	47.5	43.4
Steele	38.9	48.0	35.3	20.7	25.3	27.1	43.7	42.1
				YIELD RANK				
Hark	2	2	2	1	2	2	1	1
Hodgson	1	1	1	2	1	1	2	2
Steele	3	3	3	3	3	3	3	3

*Not included in the mean

Illinois		Minnesota		Iowa		South Dakota		Neb.
Dekalb	Pontiac	Lamberton	Waseca	Spencer	Kanawha	Revillo	Brookings	Mead I
1973-74, 2-YEAR MEAN YIELD								
44.3	33.3	35.3	41.2	39.4	39.1	25.8	30.6	44.5
44.8	33.8	42.7	46.9	42.1	38.2	30.5	34.8	45.4
41.0	33.1	35.4	45.0	39.1	37.6	28.0	32.1	45.0
45.3	38.7	41.9	42.2	39.4	38.4	32.8	36.4	43.4
41.6	31.7	41.5	46.9	41.4	41.4	35.3	35.7	42.[illegible]
40.4	31.6	41.8	43.7	38.5	39.8	29.8	35.6	47.1
37.6	31.6	36.5	43.8	39.6	34.8	27.8	34.4	42.4
YIELD RANK								
3	3	7	7	4	3	7	7	4
2	2	1	1	1	5	3	4	2
5	4	6	3	6	6	5	6	3
1	1	2	6	4	4	2	1	5
4	5	4	1	2	1	1	2	6
6	6	3	5	7	2	4	3	1
7	6	5	4	3	7	6	5	6
1972-74, 3-YEAR MEAN YIELD								
45.0	36.5	34.5	40.0	44.3	42.5	25.8	31.3	45.2
46.5	36.1	42.5	43.4	44.2	41.6	26.9	36.4	46.1
42.2	35.4	34.1	40.2	41.8	39.4	26.0	32.9	45.3
YIELD RANK								
2	1	2	3	1	1	3	3	3
1	2	1	1	2	2	1	1	1
3	3	3	2	3	3	2	2	2

UNIFORM TEST I, 1974

Strain	Mean	Ontario Ridge-town	Ontario Harrow	Ohio Hoyt-ville	Ohio Wooster	Ohio Col-umbus	Mich. E.Lan-sing	Mich. Dun-dee	Ind. Laf-ayette	Wisconsin Durand *	Wisconsin Madison
	15 Tests			MATURITY (relative date)							
Hark	+4.7	+8	+6	+5	+6	+4	+2	+1	+2		+7
Hodgson	+0.7	0	-1	+5	+7	0	+1	-1	-1		0
Steele†	9-19.2	9-20	9-13	9-16	9-10	9-21	9-26	9-23	9-23		9-16
A72-102	+1.1	+4	+2	-1	-1	+4	0	-2	+1		-1
A72-106	+1.7	+2	+4	-1	+5	+3	-1	0	0		0
A72-107	+0.3	+2	+1	-6	0	+5	-2	-2	0		-1
A72-125	+3.0	+5	+2	+4	+10	+4	-2	-2	+1		+2
M65-69	+2.3	+5	+3	+2	+10	+6	0	0	-1		+3
M65-115	+1.1	+4	-1	+3	+10	+2	-3	-1	-1		+1
M65-122	+0.6	+1	0	-2	+10	+2	-2	-2	-2		-2
M65-442	-0.2	+1	-1	-7	+4	+1	-2	-2	0		-1
OX643	-3.3	0	-3	-7	-3	0	-2	-3	-3		-6
Swift (O)		-2	-5				-3	-7			
Corsoy II		+ 11	+5	+4	+12	+6	+10	+7	+4		+9
Date Plantd	5-26	5-21	6-4	5-28	5-17	5-17	5-21	5-23	6-11	6-6	5-23
†Da. to Mat.	119	122	101	111	116	127	128	123	104		116
	20 Tests			LODGING (score)							
Hark	1.5	1.2	1.0	1.0	1.0	1.0	1.3	2.0	1.5	1.8	1.0
Hodgson	1.3	1.1	1.0	1.0	1.0	1.0	1.0	2.0	1.5	2.0	1.0
Steele	1.5	1.0	1.0	1.0	1.0	1.0	1.5	2.0	1.3	2.5	1.0
A72-102	1.5	1.1	1.0	1.0	1.0	1.0	1.0	1.5	1.5	3.0	1.0
A72-106	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.5	1.0
A72-107	1.8	1.2	1.0	1.0	1.0	1.0	1.0	2.0	2.0	4.0	1.3
A72-125	1.6	1.5	1.0	1.0	1.0	1.0	1.0	1.5	1.7	3.8	1.0
M65-69	1.7	1.5	1.0	1.0	1.0	1.0	1.0	2.3	1.5	2.3	1.0
M65-115	1.5	1.4	1.0	1.0	1.0	1.0	1.0	1.5	1.5	2.8	1.0
M65-122	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
M65-442	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.2	1.5	1.0
OX643	1.5	1.1	1.0	1.0	1.0	1.0	1.0	1.3	1.8	2.8	1.0

* Not included in the mean.

Illinois		Minnesota		Iowa		North Dakota	South Dakota		Neb.
Dekalb	Pontiac	Lamberton	Waseca	Spencer	Kanawha	Oakes I	Revillo	Brookings	Mead I
MATURITY (relative date)									
	*	*		*		*			
+5			+4		+6		+3	+5	+7
0			+1		-2		+1	-1	+2
9- 23			9-18		9-12		10-2	9-23	9-12
+2			+2		0		+2	+2	+3
+2			+3		+2		+1	+1	+4
0			+2		0		+2	0	+3
+7			+2		0		+4	+2	+6
0			+1		+1		+2	0	+2
+1			+1		0		+1	-1	0
+1			+1		-1		+2	+4	-1
0			+1		+1		-1	+1	+2
-4			-3		-6		0	-7	-2
-3			-2				-4	-6	
			+5		+8		+4	+4	+11
5-31	6-29	5-24	5-7	5-20	5-22	5-24	5-24	5-28	5-15
115			134		113		131	118	120
LODGING (score)									
1.0	1.0	1.3	1.8	2.6	2.3	1.8	1.0	1.0	3.3
1.0	1.0	1.0	2.0	2.1	1.8	1.0	1.0	1.2	1.7
1.0	1.0	1.3	2.0	2.4	2.4	2.5	1.0	1.0	1.8
1.0	1.0	1.7	2.3	2.6	2.7	1.5	1.0	1.5	2.0
1.0	1.0	1.0	1.3	2.2	1.9	1.5	1.0	1.0	1.3
1.2	1.0	2.3	3.0	2.7	2.2	2.7	1.3	1.5	2.3
1.2	1.0	1.0	3.0	2.6	1.6	1.7	1.0	1.2	3.0
1.2	1.0	1.7	3.0	2.9	2.3	3.0	1.5	2.0	2.7
1.0	1.0	1.3	2.7	2.6	2.5		1.0	1.0	2.0
1.0	1.0	1.0	1.7	1.8	1.4	1.3	1.0	1.2	1.3
1.0	1.0	1.0	2.0	2.3	2.1	1.0	1.0	1.0	1.0
1.0	1.0	1.7	2.0	2.2	1.8	2.5	1.3	1.2	1.7

Illinois		Minnesota		Iowa		North Dakota	South Dakota		Neb.
Dekalb	Pontiac	Lamb-erton	Waseca	Spencer	Kanawha	Oakes I	Revillo	Brookings	Mead I
PLANT HEIGHT (inches)									
26	25	35	36	39	39	45 *	26	31	45
27	25	32	32	35	33	38	24	28	36
26	29	34	32	37	39	43	26	30	38
25	28	35	34	38	38	42	24	21	41
25	24	34	32	36	36	43	24	26	42
25	27	34	30	36	36	44	27	29	41
26	26	34	32	35	33	40	24	30	40
27	26	35	30	37	36	45	26	30	39
25	24	33	32	34	36		24	27	36
24	23	32	32	35	34	41	25	28	35
27	26	33	32	33	36	41	23	26	35
28	29	33	29	34	36	49	24	29	41
SEED QUALITY (score)									
1.7	1.8	2.0	2.7		1.0		1.1	1.2	1.8
1.7	2.2	1.3	2.0		1.0		1.0	1.0	1.2
1.5	1.8	1.0	2.0		1.0		1.1	1.0	1.5
1.8	2.0	2.0	2.3		1.0		1.1	1.2	1.5
1.8	1.8	2.0	2.7		1.5		1.2	1.5	1.5
2.0	2.2	2.3	3.0		1.0		1.2	1.0	1.6
2.2	2.0	2.0	2.0		1.0		1.1	1.5	2.0
1.7	2.0	2.0	2.0		1.4		1.2	1.0	2.2
1.7	2.0	2.0	1.7		1.0		1.1	1.2	1.0
2.0	2.3	1.7	1.7		1.0		1.0	1.0	1.5
1.7	2.7	2.3	1.3		1.0		1.0	1.0	1.8
1.5	2.5	2.7	1.7		1.0		1.0	1.0	1.6
SEED SIZE (g/100)									
14.3	13.3	11.7	12.0		16.1		15.3	13.4	16.5
15.2	13.6	14.1	13.9		14.3		16.3	14.8	17.0
15.0	12.6	14.6	14.0		16.4		17.3	15.3	17.9
15.4	14.1	13.9	13.5		16.9		17.9	16.2	19.1
16.2	15.1	14.2	13.5		16.2		17.4	15.2	18.2
16.9	15.8	15.8	15.0		18.2		20.2	16.6	21.1
14.5	13.2	12.9	11.9		14.8		16.4	14.4	19.5
13.5	12.6	12.7	12.5		15.4		15.8	13.0	17.2
15.3	13.5	14.1	13.8		15.0		16.7	14.3	15.6
15.9	14.5	15.3	14.6		16.9		18.7	15.8	18.4
15.2	14.3	12.8	14.0		16.1		15.8	15.2	18.3
15.3	13.4	15.6	13.5		14.4		16.2	16.1	17.9

* Not included in the mean.

Strain	Mean	Ontario Ridge-town	Ontario Harrow	Ohio Hoyt-ville	Ohio Wooster	Ohio Col-umbus	Michigan East Lansing	Michigan Dundee	Ind. Laf-ayette	Wisconsin Durand	Wisconsin Madison
	19 Tests			PLANT HEIGHT (inches)							
Hark	31	36	25	21	19	20	34	36	32	36	31
Hodgson	29	33	25	20	22	21	31	34	29	37	29
Steele	31	33	29	20	21	21	34	34	31	38	31
A72-102	30	34	25	19	21	21	33	36	31	38	28
A72-106	29	31	24	21	19	22	25	31	28	36	29
A72-107	29	32	26	19	22	19	28	32	30	37	30
A72-125	29	33	23	19	20	21	28	31	30	36	29
M65-69	30	36	25	18	21	23	26	34	30	37	30
M65-115	30	34	26	19	23	20	24	32	28	37	31
M65-122	28	31	25	19	20	19	25	30	28	36	30
M65-442	27	29	23	18	19	20	22	29	28	33	28
OX643	30	35	25	16	21	22	31	36	31	37	29
	14 Tests			SEED QUALITY (score)							
Hark	1.6	2.0	1.3	1.0	1.5	1.3			1.5		
Hodgson	1.5	2.0	1.3	1.7	1.5	2.0			1.0		
Steele	1.4	2.0	1.0	1.5	1.7	2.0			1.0		
A72-102	1.6	3.0	1.7	1.0	1.5	1.8			1.0		
A72-106	1.6	2.0	1.3	1.0	1.2	1.3			1.5		
A72-107	1.7	2.0	1.3	1.0	1.0	2.3			1.5		
A72-125	2.0	3.0	3.0	1.3	1.7	3.0			1.5		
M65-69	1.7	2.0	1.7	1.7	2.5	2.0			1.0		
M65-115	1.7	2.0	1.7	2.0	2.2	3.3			1.0		
M65-122	1.5	2.0	2.0	1.0	1.5	1.5			1.0		
M65-442	1.7	2.0	2.0	1.3	1.7	2.8			1.0		
OX643	1.6	2.0	1.7	2.0	1.5	1.5			1.0		
	18 Tests			SEED SIZE (g/100)							
Hark	15.6	17.0	16.2	18.2	15.2	18.5	17.6	19.6	15.5	13.5	17.6
Hodgson	16.3	16.7	16.2	18.8	17.8	19.8	17.0	18.6	17.3	14.5	17.9
Steele	16.9	16.8	17.5	19.3	18.1	20.0	18.3	19.8	18.2	13.6	18.8
A72-102	17.3	19.6	18.2	17.8	17.2	20.0	19.2	21.4	17.4	14.9	18.0
A72-106	17.4	18.1	18.3	19.2	19.1	20.8	19.2	21.1	18.6	14.2	18.9
A72-107	18.6	18.8	19.2	20.1	17.4	22.7	21.4	22.3	18.8	15.5	19.4
A72-125	16.1	16.5	15.9	19.4	16.8	19.0	17.6	19.5	17.2	13.1	17.5
M65-69	15.4	16.3	15.2	17.5	16.9	19.5	17.2	17.6	14.9	12.7	16.4
M65-115	16.3	17.4	15.0	18.2	16.6	18.8	19.2	19.8	16.4	14.6	19.2
M65-122	18.0	20.1	17.4	19.4	19.6	21.3	20.6	20.8	17.9	16.0	19.9
M65-442	16.6	17.9	15.4	16.0	16.7	21.5	19.9	20.5	16.8	14.6	17.5
OX643	16.4	17.1	16.7	16.1	17.1	20.2	18.8	19.4	16.9	13.4	16.8

Strain	Mean	Ont. Ridge-town	Ohio Col-umbus	Ind. Lafay-ette	Ill. De-kalb	Minn. Wa-seca	Iowa Kan-awha	S. Dak. Brook-ings	Neb. Mead I
	8 Tests			PROTEIN (%)					
Hark	41.9	43.3	44.6	41.8	39.7	41.2	39.6	42.9	41.9
Hodgson	38.8	41.1	40.8	38.3	37.4	38.8	35.5	39.3	38.9
Steele	40.0	42.0	42.2	40.9	38.3	39.9	36.4	40.5	39.9
A72-102	40.5	42.6	44.6	40.9	37.9	39.5	36.2	42.1	40.3
A72-106	42.7	44.1	46.1	43.1	41.1	42.3	38.9	43.3	42.6
A72-107	42.1	43.2	45.7	42.0	39.4	41.6	39.5	42.9	42.8
A72-125	39.9	41.9	43.0	39.8	37.9	40.3	34.8	40.0	41.8
M65-69	38.3	40.3	41.9	37.9	37.1	38.1	35.0	39.0	37.1
M65-115	37.8	39.6	43.0	37.0	36.5	38.4	33.6	38.0	36.6
M65-122	39.8	41.3	43.4	39.5	38.5	39.4	36.2	40.1	40.1
M65-442	38.3	40.5	41.2	37.5	36.1	39.0	35.6	38.1	38.3
OX643	37.9	40.4	41.9	38.8	36.2	37.6	32.3	38.3	38.0
	8 Tests			OIL (%)					
Hark	19.8	19.1	19.4	20.5	21.0	19.2	19.7	18.8	20.7
Hodgson	21.7	19.6	21.9	22.3	22.8	20.6	21.9	20.9	23.4
Steele	20.5	19.5	21.8	20.5	21.1	19.5	20.9	19.0	22.0
A72-102	20.8	19.8	19.7	21.7	22.0	20.2	22.2	18.7	22.3
A72-106	19.7	18.8	19.5	20.0	20.7	18.6	20.3	18.3	21.1
A72-107	19.6	18.9	18.9	19.3	20.8	19.0	20.1	18.2	21.5
A72-125	20.3	19.8	22.2	20.3	20.8	18.2	21.9	19.3	20.0
M65-69	21.3	20.1	20.8	21.4	22.5	20.7	21.7	19.8	23.2
M65-115	23.0	21.0	24.8	23.7	23.0	21.4	24.1	21.5	24.9
M65-122	22.4	21.6	21.6	22.8	23.1	21.9	22.5	21.3	24.1
M65-442	22.4	21.8	23.6	23.6	22.7	20.8	22.0	21.3	23.5
OX643	22.2	21.2	21.3	22.4	23.1	21.4	24.1	20.2	24.0

PRELIMINARY TEST I, 1974

Strain		Parentage	Line
1.	Hark		
2.	Steele		
3.	A73-106	Hark x [Provar x (Magna x Disoy)]	F_5
4.	A73-109	Amsoy x "	"
5.	A73-128	Hark x "	"
6.	A73-139	Hark x "	"
7.	A73-11004	SL12 (Wayne-I r Rps) x Anoka	F_4
8.	A73-15028	M63-17 (M402 x M406) x C1453 (C1266R x C1253)	"
9.	A73-18084	IVR Ex5003 x Dunn	"
10.	A73-19009	" x Beeson	"
11.	A73-19068	" x Wells	"
12.	A73-19084	" x "	"
13.	A73-20048	" x L66L-144 (Wayne x L57-0034)	"
14.	A73-20059	" x "	"
15.	A73-21030	L65-1342 ($Wayne^2$ x L62-1926) x IVR Ex4311	"
16.	A73-22031	M62-263 (Grant x M319W) x IVR Ex4426	"
17.	A73-22032	" "	"
18.	A73-22056	Corsoy x IVR Ex4426	"
19.	A73D7	Hark x Provar	F_6
20.	A73D16	" x Wayne	"
21.	L71-2033	L4 (C1128-Rps rxp) x Harosoy-Rps rxp (L2)	"
22.	L72-607	Chippewa BC: SL7 x [L16 x (L10 x Merit)]	F_5
23.	M68-48	Evans x M59-120	"
24.	M68-49	"	"
25.	M68-94	M59-120 x Amsoy 71	"
26.	M68-99	" "	"
27.	SD73-2	Harosoy x Grant	F_6
28.	SD73-5	Blackhawk x Capital	F_9
29.	SD73-14	"	"
30.	SD73-16	"	"

The 18 A entries have five strains: A73-128, A73-19068, A73-19084, A73-20059, and A73D16 which have a regional mean yield equal to Hark, or two bushels better than Hark. The five strains are one to two days earlier maturing than Hark and of these, A73-19068 and A73-19084 are Phytophthora root rot resistant. In the test, A73-19084 had the highest mean yield.

The strains M68-48 and M68-49 are Phytophthora root rot resistant and are slightly better yielding than Hark. The strain M68-49 has very good lodging resistance and is five days earlier than Hark, has high oil content, but is low in protein.

PRELIMINARY TEST I, 1974

Disease Data

Strain	DM	FE_2	BSR			PSB	PS	SMV	PR	
	Sull.	Laf.	Laf.	Ames		Laf.	Laf.	Laf.	Laf.	Ames
	Ind.	Ind.	Ind.	Iowa		Ind.	Ind.	Ind.	Ind.	Iowa
	n	a	n	n % stem	n % plants	n	a	n	a	a
			%					seed		
Hark	4	3	75	24	40	4	5	5E	S	S
Steele	5	5	45	36	40	5	5	4M	R	R
A73-106	4	5	75	20	30	5	5	5E	S	S
A73-109	4	4	70	41	50	5	5	5E	S	S
A73-128	4	5	95	31	30	5	4	5E	S	S
A73-139	4	4	80	38	30	5	5	5E	S	S
A73-11004	3	5	85	64	40	3	4	5M	R	R
A73-15028	5	5	75	32	60	5	5	3M	R	R
A73-18084	2	5	80	43	50	2	4	5E	S	S
A73-19009	2	5	70	46	70	4	5	5E	S	S
A73-19068	5	5	55	51	50	4	5	4E	R	R
A73-19084	3	2	95	38	60	4	5	5E	R	R
A73-20048	5	3	80	75	50	5	5	5E	S	S
A73-20059	3	4	85	45	90	4	2	5E	S	S
A73-21030	5	2	85	56	50	5	5	5E	S	H
A73-22031	5	5	90	31	40	5	5	3E	S	S
A73-22032	5	5	45	21	60	5	5	5E	S	S
A73-22056	5	5	75	25	50	5	5	5E	S	S
A73D7	4	4	80	44	20	4	5	5E	S	S
A73D16	4	5	75	31	20	4	5	5E	S	S
L71-2033	3	5	25	35	30	5	5	5E	R	R
L72-607	2	4	80			3	5	3E	R	
M68-48	3	5	75	48	60	5	5	1	R	R
M68-49	3	5	45	56	90	5	5	1	R	R
M68-94	4	4	100	56	60	4	5	5E	R	R
M68-99	5	5	80	53	70	3	5	5E	R	R
SD73-2	2	5	80	37	90	4	5	4E	S	S
SD73-5	5	5	60	62	100	3	4	1	R	R
SD73-14	2	5	100	61	100	4	4	2M	S	S
SD73-16	3	5	60	71	90	3	4	1	H	R

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Descriptive and Other Data

Strain	Descriptive Code		Chlorosis Ames Iowa	Shattering Manhattan Kansas
Hark	PGNBr	DYY	5	4.0
Steele	PGNBr	DYY	4	3.0
A73-106	PGNBr	DYY	2	5.0
A73-109	PGNBr	SYBf	2	4.0
A73-128	PGNBr	DYY	2	5.0
A73-139	PGNBr	DYY	3	5.0
A73-11004	PTNBr	SYBl	3	3.0
A73-15028	PGNBr	DYY	2	3.0
A73-18084	PGNBr	SYIb	3	2.0
A73-19009	PGNBr	DYG+Ib	2	2.0
A73-19068	PGNBr	DYBr	4	2.0
A73-19084	PGNBr	DYIb	1	3.0
A73-20048	PGNTn	SYG	1	5.0
A73-20059	P+WTNBr	DYBl	2	3.0
A73-21030	WTNBr	SYBl	5	5.0
A73-22031	PG+TNBr	DYIb+Bf	5	1.0
A73-22032	PGNBr	SYY	3	3.0
A73-22056	PGNBr	DYY	4	3.0
A73D7	PTNBr	DYG	5	3.0
A73D16	P+WGNBr	DYY	4	3.0
L71-2033	PGNTn	DYY	4	3.0
L72-607	PTNBr	SYIb	2	
M68-48	WGNBr	DYIb	3	3.0
M68-49	WGNBr	DYY	2	5.0
M68-94	WGNTn	DYY	2	3.0
M68-99	PGNBr	DYY	2	3.0
SD73-2	P+WTNBr	SYBl	2	5.0
SD73-5	PTNBr	DYG	4	3.0
SD73-14	PGNBr	DYY	3	2.0
SD73-16	PGNBr	DYY	4	2.0

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Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
No. of Tests	12	12	8	12	12	8	11	4	4
Hark	36.2	7	+4.8	1.4	32	1.6	15.4	41.4	19.6
Steele	34.8	17	9-21.4	1.4	30	1.3	16.8	39.1	20.2
A73-106	34.2	20	+3.0	1.6	30	1.5	19.1	39.9	19.3
A73-109	33.6	24	+1.4	1.3	26	1.7	19.9	38.0	20.3
A73-128	37.8	2	+3.9	1.9	33	1.8	17.3	40.2	19.4
A73-139	35.8	13	+1.1	1.4	31	1.4	17.0	41.1	19.4
A73-11004	33.6	24	0	1.9	32	1.6	17.1	39.8	19.8
A73-15028	36.1	9	+3.4	1.5	33	1.8	14.9	40.3	20.0
A73-18084	34.3	19	+1.2	1.3	30	1.6	17.3	41.4	20.0
A73-19009	31.4	30	+5.9	2.1	30	2.2	16.6	40.5	20.4
A73-19068	36.4	5	+3.1	1.4	28	1.8	14.9	39.9	19.9
A73-19084	38.5	1	+2.4	1.6	32	1.7	13.6	39.6	20.6
A73-20048	34.4	18	+2.5	1.4	26	1.7	16.9	39.4	20.4
A73-20059	36.7	4	+2.6	1.6	28	1.7	15.5	39.3	20.9
A73-21030	34.0	22	-0.2	1.4	28	1.7	15.5	40.2	19.8
A73-22031	36.1	9	+2.2	1.4	26	1.8	17.0	38.2	20.6
A73-22032	35.9	11	+2.0	1.4	27	1.8	18.4	39.0	19.6
A73-22056	35.6	14	+3.5	1.8	30	1.8	15.7	39.4	19.7
A73D7	34.2	20	+5.9	1.7	31	1.9	15.7	40.4	19.2
A73D16	36.2	7	+2.1	1.3	33	1.6	15.3	40.0	19.2
L71-2033	35.6	14	+4.6	1.8	36	1.9	16.8	40.2	20.2
L72-607	35.0	16	+2.6	1.4	33	1.7	14.6	39.2	20.2
M68-48	37.5	3	+2.0	1.6	30	1.6	18.2	38.6	20.3
M68-49	36.3	6	+0.2	1.2	28	1.4	19.1	37.8	22.0
M68-94	35.9	11	+2.5	1.4	33	1.5	16.8	38.9	21.0
M68-99	33.5	26	+3.5	1.4	32	1.5	16.9	39.2	20.2
SD73-2	33.9	23	-1.5	1.8	32	1.6	16.0	41.3	18.9
SD73-5	32.1	28	+4.8	2.4	33	1.6	14.8	39.4	19.8
SD73-14	32.0	29	+0.9	1.6	29	1.6	13.9	38.0	20.3
SD73-16	32.9	27	+2.6	1.7	32	1.5	15.8	39.2	19.7

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Strain	Mean	Ontario Ridgetown	Ohio Hoytville	Michigan E.Lansing	Michigan Dundee	Wisconsin Madison
	12 Tests		YIELD (bu/a)			
Hark	36.2	57.0	22.4	45.7	43.8	35.2
Steele	34.8	52.4	21.9	45.5	40.1	30.4
A73-106	34.2	50.7	22.8	33.1	38.1	32.2
A73-109	33.6	50.4	19.5	40.3	32.9	30.0
A73-128	37.8	53.1	29.8	44.9	44.3	36.7
A73-139	35.8	49.3	20.6	47.5	40.5	33.3
A73-11004	33.6	50.5	26.8	37.2	39.2	32.4
A73-15028	36.1	54.9	32.0	45.9	48.8	34.9
A73-18084	34.3	52.5	29.2	39.6	41.7	31.7
A73-19009	31.4	49.4	29.2	36.6	46.8	32.8
A73-19068	36.4	50.6	26.2	47.7	48.6	33.6
A73-19084	38.5	53.3	32.0	45.5	47.4	40.2
A73-20048	34.4	52.4	18.6	39.8	33.1	33.6
A73-20059	36.7	48.3	31.2	41.4	44.8	37.7
A73-21030	34.0	48.5	23.6	43.7	35.6	30.8
A73-22031	36.1	51.8	28.2	42.8	44.8	38.6
A73-22032	35.9	56.1	22.8	43.6	41.0	35.7
A73-22056	35.6	53.2	29.6	40.3	43.4	35.8
A73D7	34.2	48.6	27.8	43.3	45.5	33.5
A73D16	36.2	46.5	30.8	40.8	44.3	36.1
L71-2033	35.6	48.7	32.8	44.8	42.5	30.8
L72-607	35.0	54.9	30.7	45.3	40.1	30.7
M68-48	37.5	53.0	24.8	45.3	39.5	32.3
M68-49	36.3	56.8	23.8	38.5	40.1	31.1
M68-94	35.9	46.5	26.0	43.5	41.0	31.3
M68-99	33.5	52.9	24.0	42.7	39.4	29.5
SD73-2	33.9	55.8	20.8	39.2	35.0	31.2
SD73-5	32.1	46.8	28.5	37.8	36.1	26.1
SD73-14	32.0	55.0	22.0	37.4	33.1	27.9
SD73-16	32.9	53.0	19.4	36.5	35.2	27.9
C.V. (%)		6.4		11.2	12.6	
L.S.D. (5%)		6.6		8.5	7.1	4.7
Row Spacing (in.)		24	32	30	30	36
Rows/Plot		4	3	4	4	1
Reps.		2	2	2	3	2

Illinois	Minnesota		Iowa		South Dakota	
Dekalb	Lamberton	Waseca	Spencer	Kanawa	Revillo	Brookings
			YIELD (bu/a)			
40.8	27.6	34.4	33.0	35.6	23.2	35.4
38.3	28.2	34.2	34.6	34.4	20.4	36.9
40.0	28.6	37.9	34.2	36.9	19.7	36.8
34.4	26.4	36.2	37.5	33.7	24.9	37.6
40.4	28.7	38.6	40.2	36.0	24.6	36.2
41.6	26.0	41.3	37.9	34.7	18.4	38.1
41.2	27.1	28.8	31.4	30.3	24.3	34.0
44.7	28.2	19.6	30.0	34.3	25.2	35.0
43.5	23.0	35.6	31.2	28.4	21.8	33.1
40.9	23.0	9.6	27.4	28.3	21.4	31.3
42.9	30.6	27.0	33.3	34.1	25.0	36.9
47.2	31.1	31.8	34.4	35.5	25.6	38.3
32.1	31.7	36.8	34.0	35.0	23.1	42.7
43.6	30.0	30.6	34.0	32.1	28.5	38.4
36.3	30.5	36.8	32.8	31.9	21.3	36.5
38.2	33.4	12.2	36.4	41.2	23.3	42.2
36.5	33.3	23.7	38.3	36.0	25.3	38.2
45.1	27.4	15.4	34.3	36.7	29.3	36.8
39.4	24.7	38.5	30.8	31.3	16.7	30.4
44.5	27.0	40.0	33.1	34.0	24.0	33.2
43.1	27.0	31.4	33.0	34.1	24.4	34.3
41.3	28.4	30.2	29.8	31.5	22.9	33.7
38.7	32.4	41.6	38.4	38.2	25.0	40.5
32.1	36.2	41.3	34.0	37.7	25.1	38.5
42.1	32.0	37.5	33.1	33.7	23.7	40.6
35.2	28.8	32.4	31.5	30.5	22.1	33.4
37.4	27.4	35.4	32.3	30.9	24.6	37.2
37.9	28.4	27.8	29.6	28.0	21.2	37.3
33.3	29.6	34.0	29.9	29.4	22.2	30.8
40.5	26.2	37.6	29.1	25.8	28.3	35.5
5.7	8.4	11.5	7.8	6.8	11.0	6.6
4.6	5.0	7.5	5.1	4.5	5.3	4.9
30	30	30	27	27	30	30
4	2	2	4	4	4	4
2	2	2	2	2	2	2

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Strain	Mean	Ont. Ridge-town	Ohio Hoyt-ville	Michigan E.Lan-sing	Michigan Dun-dee	Wis. Mad-ison	Ill. De-kalb	Minnesota Lamb-erton	Minnesota Wa-seca	Iowa Spen-cer	Iowa Kana-wha	S.Dakota Rev-illo	S.Dakota Brook-ings
	12 Tests					YIELD RANK							
Hark	7	1	23	4	10	8	14	19	15	17	8	18	20
Steele	17	15	25	5	17	25	20	17	16	7	12	27	13
A73-106	20	18	21	30	23	17	17	14	7	10	4	28	15
A73-109	24	21	28	19	30	26	27	25	12	5	17	10	10
A73-128	2	10	7	9	8	4	16	13	5	1	6	11	18
A73-139	13	23	27	2	16	13	10	27	2	4	11	29	9
A73-11004	24	20	14	27	22	15	12	22	23	22	25	14	23
A73-15028	9	6	2	3	1	9	3	17	27	25	13	6	21
A73-18084	19	14	9	22	13	18	6	29	13	23	27	23	27
A73-19009	30	22	9	28	4	14	13	29	30	30	28	24	28
A73-19068	5	19	15	1	2	10	8	8	25	14	14	8	13
A73-19084	1	8	2	5	3	1	1	7	19	8	9	4	7
A73-20048	18	15	30	21	28	10	29	6	10	11	10	19	1
A73-20059	4	27	4	17	6	3	5	10	21	11	19	2	6
A73-21030	22	26	20	11	25	22	25	9	10	19	20	25	17
A73-22031	9	17	12	15	6	2	21	2	29	6	1	17	2
A73-22032	11	3	21	12	14	7	24	3	26	3	6	5	8
A73-22056	14	9	8	19	11	6	2	20	28	9	5	1	15
A73D7	20	25	13	14	5	12	18	28	6	24	22	30	30
A73D16	7	29	5	18	8	5	4	23	4	15	16	15	26
L71-2033	14	24	1	10	12	22	7	23	20	17	14	13	22
L72-607	16	6	6	7	17	24	11	15	22	27	21	20	24
M68-48	3	11	17	7	20	16	19	4	1	2	2	8	4
M68-49	6	2	19	24	17	21	29	1	2	11	3	7	5
M68-94	11	29	16	13	14	19	9	5	9	15	17	16	3
M68-99	26	13	18	16	21	27	26	12	18	21	24	22	25
SD73-2	23	4	26	23	27	20	23	20	14	20	23	11	12
SD73-5	28	28	11	25	24	30	22	15	24	28	29	26	11
SD73-14	29	5	24	26	28	28	28	11	17	26	26	21	29
SD73-16	27	11	29	29	26	28	15	26	8	29	30	3	19

Strain	Mean	Ont. Ridge-town	Ohio Hoyt-ville	Michigan E.Lan-sing	Michigan Dun dee	Wis. Mad-ison	Ill. De-kalb	Minnesota Lamb-erton	Minnesota Wa-seca	Iowa Spen-cer	Iowa Kana-wha	S.Dakota Rev-illo	S.Dakota Brook-ings
	8 Tests			MATURITY (relative date)									
						*	*	*		*			
Hark	+4.8	+5	+9	+2	+2				+5		+7	+2	+6
Steele	9-21.4	9-20	9-16	9-26	9-23		9-23		9-17		9-14	10-3	9-22
A73-106	+3.0	+10	+4	+1	+1		+2		+3		+2	-1	+4
A73-109	+1.4	+1	+4	+2	+2				+2		-2	0	+2
A73-128	+3.9	+1	+9	+3	+5				+3		+4	+1	+5
A73-139	+1.1	+8	-3	-2	+1		+2		+3		+1	-1	+2
A73-11004	0	+1	0	-2	0		0		+2		-1	-1	+1
A73-15028	+3.4	+2	+4	+3	0		+3		+5		+6	+1	+6
A73-18084	+1.2	-1	+4	-2	+2				+5		-2	+1	+3
A73-19009	+5.9	+6	+9	+5	+6		+2		+7		+6	+4	+4
A73-19068	+3.1	+9	+6	0	-1				+5		0	+2	+4
A73-19084	+2.4	+6	+6	+1	-1		+3		+3		+1	0	+3
A73-20048	+2.5	+10	+9	-2	-2		+2		+3		-2	+1	+3
A73-20059	+2.6	+11	+6	-3	-1		+2		+4		-2	+2	+4
A73-21030	-0.2	-1	+4	-2	-2		+1		+3		-4	0	0
A73-20031	+2.2	+9	+10	-2	-2		+1		+5		-2	-1	+1
A73-20032	+2.0	+10	+6	-1	-1		+2		+3		-4	+2	+1
A73-20056	+3.5	+3	+6	+2	+2		+3		+7		+4	+1	+3
A73D7	+5.9	+6	+9	+5	+7				+7		+6	+2	+5
A73D16	+2.1	-4	+4	0	+2		+2		+5		+6	+2	+2
L71-2033	+4.6	+8	+6	+5	+4		0		+4		+5	+2	+3
L72-607	+2.6	+9	+9	-2	0		+1		+1		0	+1	+3
M68-48	+2.0	+2	+4	+2	+3		0		+3		+4	-1	-1
M68-49	+0.2	+8	0	-1	+1		-2		0		-4	+1	-3
M68-94	+2.5	+6	+4	0	+1		+3		+5		+2	0	+2
M68-99	+3.5	+8	+6	+1	+2				+6		0	+2	+3
SD73-2	-1.5	+3	-5	-2	-1		-2		-1		-3	-1	-2
SD73-5	+4.8	+11	+6	+4	+3		+2		+4		+4	+3	+3
SD73-14	+0.9	+2	+6	-3	+1		+1		+2		-2	0	+1
SD73-16	+2.6	+8	0	-2	+2		+1		+5		+4	+1	+3
Swift (O)	-4	-2		-3	-7		-3		-1			-6	-6
Corsoy (II)	+7	+11	+4	+10	+7				+6		+8		+5
Date Plntd.		5-22	5-21	5-28	5-21	5-23	5-23	5-31	5-24	5-7	5-20	5-24	5-28

* Not included in the mean

Strain		Parentage	Previous Testing*	Line
1.	Amsoy 71	Amsoy^{8} x C1253 (Blackhawk x Harosoy)	5	4 F_3
2.	Beeson	C1253 x Kent	7	F_7
3.	Corsoy	Harosoy x Capital	10	F_9
4.	Wells	C1266R (Harosoy x C1079) x C1253	5	F_7
5.	A72-522	Hark x Wayne	PIII	F_5
6.	A72-523	"	PIII	"
7.	L70D6-16	L63-1212 (Harosoy-ln) x C1426	PII	F_3
8.	OX-271 Harcor	Corsoy x OX-383 (Corsoy x Harosoy 63)	PII	F_4

* Number of years in test or name of 1973 test.

The six year regional mean for the four check varieties shows less than a bushel difference in yield, although Corsoy and Wells are three to four days earlier in maturity than Amsoy 71 and Beeson. Wells is outstanding in lodging resistance and is slightly higher in protein. Corsoy is susceptible to Phytophthora root rot.

The strain OX-271 is the highest yielding in the 1974 test, is the same maturity as Wells, and is Phytophthora root rot resistant. The other strains; A72-522, A72-523, and L70D6-16 are four to six days later than Corsoy in maturity. The strains A72-522 and A72-523 are Phytophthora root rot susceptible, and this disease severely reduced the yield of these strains at some test locations causing their regional mean yield to be low in this test. Where Phytophthora root rot is not a factor, they have good yield potential.

Disease Data

Strain	BP Urb. Ill. a	DM Sull. Ind. n	FE_2 Laf. Ind. a	PM Har. Ont. a	BSR Laf. Ind. n %	BSR Urb. Ill. n %	BSR St.Paul Minn. n %	BSR Ames Iowa n % Stems	BSR Ames Iowa n % Plants
Amsoy 71	3	2	4	S	35	80	45	56	90
Beeson	1	2	1	R	75	80	80	43	100
Corsoy	2	3	5	S	30	20	60	60	100
Wells	1	4	1	S	45	50	30	66	100
A72-522	2	4	3	S	35	50	55	44	100
A72-523	1	5	3	S	25	100	45	58	90
L70D6-16	1	3	4	S	70	80	90	78	100
OX-271	1	4	4	S	80	60	50	71	100

Strain	PSB Sull. Ind. n	PS Laf. Ind. a	SMV Laf. Ind. n Seed	PR Laf. Ind. a	PR Ames Iowa a
Amsoy 71	4	5	5E	R	R
Beeson	5	5	1	R	R
Corsoy	5	5	5E	S	S
Wells	4	5	4E	R	R
A72-522	5	5	5E	S	S
A72-523	4	3	5E	S	S
L70D6-16	5	5	5E	R	R
OX-271	5	5	5E	R	R

Descriptive and Other Data

Strain	Descriptive Code	Chlorosis Crkstn. Minn.	Chlorosis Lamb. Minn.	Chlorosis Ames Iowa	Fluor-escent Light	Hypo-cotyl	Perox-idase	Shattering Manhattan Kansas
Amsoy 71	PGNTn SYY	1.5	3.0	4	L	4	H	2.0
Beeson	PGNBr SYIb	3.0	4.5	4	L	3	L	3.0
Corsoy	PGNBr DYY	1.5	4.5	4	E	1	H	2.0
Wells	PGNBr DYIb	3.0	2.5	5	L	2	L	3.0
A72-522	PTNBr DYBl	2.5	4.0	5	L	2	L	2.0
A72-523	PTNBr SYBl	2.0	1.0	5	L	4	L	1.0
L70D6-16	PGNBr D+SYG+Y+Ib	2.0	2.5	3	L	1	L	4.0
OX-271	PGNBr SYY	2.0	3.0	5	E	1	H	2.0

UNIFORM TEST II, 1974

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
No. of Tests	28	28	21	27	27	24	26	12	12
			1974						
Amsoy 71	38.1	2	+2.8	1.9	35	2.0	17.3	39.6	20.8
Beeson	37.4	5	+3.6	1.7	33	2.0	18.9	41.7	19.4
Corsoy	37.8	3	9-25.6†	2.1	32	1.8	15.7	40.4	20.4
Wells	37.2	6	+0.6	1.2	32	2.0	16.2	41.9	20.3
A72-522	36.0	8	+5.2	2.0	35	2.0	17.0	40.1	20.7
A72-523	36.6	7	+6.4	2.1	38	1.9	16.4	40.2	20.6
L70D6-16	37.5	4	+4.1	1.8	34	2.0	17.5	40.9	19.7
OX-271	39.1	1	+0.9	2.4	33	1.7	15.2	40.4	20.1

† 119 days after planting

			1969-74, 6-year mean						
No. of Tests	165	165	133	158	162	143	134	85	85
Amsoy 71	43.9	2	+3.1	2.3	41	2.2	17.2	39.7	22.4
Beeson	43.6	3	+4.0	2.0	39	2.2	19.0	40.7	21.3
Corsoy	44.0	1	9-20.1†	2.5	38	2.0	15.8	40.3	21.8
Wells	43.4	4	-0.4	1.5	37	2.2	16.1	41.3	21.7

† 118 days after planting

Strain	Mean	Penn. Landis-ville	N.J. Adel-phia I	Md. Belts-ville	Ontario Ridge-town	Ontario Harrow	Ohio Hoyt-ville	Ohio Woos-ter	Ohio Col-umbus
	28 Tests			1974 YIELD (bu/a)					
Amsoy 71	38.1	52.5	49.2	43.3	46.9	28.2	24.8	34.4	36.2
Beeson	37.4	57.4	44.9	47.7	47.2	25.1	26.6	34.6	42.1
Corsoy	37.8	49.0	42.1	41.5	50.0	34.1	21.9	31.6	39.9
Wells	37.2	52.4	42.3	40.4	52.7	30.2	23.1	34.7	27.3
A72-522	36.0	64.2	42.6	44.4	39.4	32.0	27.9	40.7	27.2
A72-523	36.6	63.2	43.9	50.6	39.4	32.1	27.8	37.4	35.5
L70D6-16	37.5	54.0	45.9	43.5	51.3	27.8	20.9	37.8	28.6
OX-271	39.1	50.4	41.1	45.6	53.1	31.9	20.8	38.6	40.7
C.V. (%)		10.9	7.0	9.3	7.8	10.3			
L.S.D. (5%)		8.9	6.1	n.s.	5.5	5.4			
Row Spacing (in.)		30	30	40	24	24	32	32	28
Rows/Plot		3	3	4	4	4	3	3	3
Reps		4	4	3	4	3	4	4	4
				YIELD RANK					
Amsoy 71	2	5	1	6	6	6	4	7	4
Beeson	5	3	3	2	5	8	3	6	1
Corsoy	3	8	7	7	4	1	6	8	3
Wells	6	6	6	8	2	5	5	5	7
A72-522	8	1	5	4	7	3	1	1	8
A72-523	7	2	4	1	7	2	2	4	5
L70D6-16	4	4	2	5	3	7	7	3	6
OX-271	1	7	8	3	1	4	8	2	2
	165 Tests			1969-74, 6-YEAR MEAN YIELD					
Amsoy 71	43.9				54.6	37.0	31.4	32.1	46.1
Beeson	43.6				51.0	37.0	30.7	33.7	47.8
Corsoy	44.0				56.2	39.0	28.6	29.3	40.7
Wells	43.4				53.2	39.5	31.3	31.5	43.0
				YIELD RANK					
Amsoy 71	2				3	3	1	2	2
Beeson	3				4	3	3	1	1
Corsoy	1				1	2	4	4	4
Wells	4				2	1	2	3	3

Strain	Michigan East Lansing	Michigan Dundee	Indiana Bluffton	Indiana Lafayette	Indiana Greenfield	Indiana Sullivan	Wis. Madison	Illinois Dekalb	Illinois Pontiac	Illinois Urbana
1974 YIELD (bu/a)										
Amsoy 71	44.6	39.6	42.3	50.9	42.1	37.8	35.5	42.1	27.7	48.5
Beeson	38.1	43.1	42.8	47.9	39.6	37.2	37.1	42.2	26.4	46.8
Corsoy	43.6	41.6	39.1	43.5	21.7	35.8	35.3	46.7	24.6	50.2
Wells	46.1	41.5	38.6	47.7	33.7	31.0	32.4	44.5	25.9	44.4
A72-522	46.1	32.0	42.1	40.8	24.1	31.1	33.3	40.3	28.5	49.7
A72-523	45.2	39.4	44.3	43.2	29.9	32.3	32.6	35.7	26.7	46.3
L70D6-16	40.4	37.9	38.8	51.5	37.3	38.1	37.8	45.1	24.7	47.4
OX-271	44.6	40.2	37.3	52.2	35.9	37.3	37.2	46.0	27.8	49.6
C.V. (%)	11.4	11.3	6.8	15.1	11.9	9.4		4.5	13.4	5.9
L.S.D. (5%)	8.9	6.0	n.s.	n.s.	6.9	n.s.	5.1	3.4	6.2	4.9
Row Spacing (in.)	30	30	30	30	30	30	30	30	38	30
Rows/Plot	4	4	4	4	4	4	1	4	4	4
Reps	3	3	3	3	3	3	4	3	3	3
YIELD RANK										
Amsoy 71	4	5	3	3	1	2	4	6	3	4
Beeson	8	1	2	4	2	4	3	5	5	6
Corsoy	6	2	5	6	8	5	5	1	8	1
Wells	1	3	7	5	5	8	8	4	6	8
A72-522	1	8	4	8	7	7	6	7	1	2
A72-523	3	6	1	7	6	6	7	8	4	7
L70D6-16	7	7	6	2	3	1	1	3	7	5
OX-271	4	4	8	1	4	3	2	2	2	3
1969-74, 6-YEAR MEAN YIELD										
		69,71-74					69-72,74			
Amsoy 71		43.1	48.8	53.2	43.2		37.6	50.1	37.5	51.3
Beeson		45.3	49.0	50.7	43.6		40.9	49.5	38.8	52.6
Corsoy		47.5	46.8	50.4	34.3		38.4	51.1	38.7	54.2
Wells		44.1	47.8	51.0	39.5		40.2	49.4	39.3	50.9
YIELD RANK										
Amsoy 71		4	2	1	2		4	2	4	3
Beeson		2	1	3	1		1	3	2	2
Corsoy		1	4	4	4		3	1	3	1
Wells		3	3	2	3		2	4	1	4

Illinois		Minnesota		Iowa		Mo.	South Dakota		Neb.
Girard	Brownstown	Lamberton	Waseca	Ames	Sloan	Edina	Brookings	Centerville	Mead I
				1974 YIELD (bu/a)					
46.4	37.8	19.9	23.8	46.9	30.2	30.8	29.1	31.8	42.3
44.3	37.8	17.4	22.6	50.0	30.5	27.1	24.5	27.8	37.6
41.2	36.4	27.1	31.1	47.0	32.5	23.5	37.5	34.3	54.4
42.7	39.8	25.2	31.0	48.8	32.1	24.7	33.7	31.4	43.4
49.4	34.5	17.7	12.0	50.0	35.8	25.7	20.1	27.8	49.2
48.4	34.5	16.2	10.7	49.2	32.5	30.6	18.1	33.3	46.0
47.4	37.8	23.6	24.2	46.6	26.7	26.6	29.7	29.4	49.2
44.1	34.5	26.2	30.2	50.2	29.4	31.1	34.8	31.9	51.8
7.4	6.6	7.9	15.8	5.6	9.2	14.0	8.2	11.7	14.7
5.9	4.2	3.0	6.4	3.6	4.0	6.5	4.3	n.s.	12.0
36	30	30	30	27	27	30	30	30	30
4	4	4	4	4	4	2	4	4	4
3	3	3	3	4	4	3	2	3	3
				YIELD RANK					
4	2	5	5	7	6	2	5	4	7
5	2	7	6	2	5	4	6	7	8
8	5	1	1	6	2	8	1	1	1
7	1	3	2	5	4	7	3	5	6
1	6	6	7	2	1	6	7	7	3
2	6	8	8	4	2	3	8	2	5
3	2	4	4	8	8	5	4	6	3
6	6	2	3	1	7	1	2	3	2
				1969-74, 6-YEAR MEAN YIELD					
								70-74	70-74
48.5		37.2	36.1	49.4			27.2	34.0	43.9
46.6		35.9	37.1	50.4			26.8	32.9	43.0
50.1		43.4	40.2	51.5			33.6	36.5	48.2
48.6		38.6	39.8	49.7			30.9	33.9	44.9
				YIELD RANK					
3		3	4	4			3	2	3
4		4	3	2			4	4	4
1		1	1	1			1	1	1
2		2	2	3			2	3	2

Strain	Mean	Penn. Landis-ville	N.J. Adel-phia I	Md. Belts-ville	Ontario Ridge-town	Harrow	Ohio Hoyt-ville	Wooster	Col-umbus
	21 Tests	MATURITY (relative date)							
Amsoy 71	+2.8	+4	+3	0	-1	+3	+4	-2	+4
Beeson	+3.6	+3	+4	0	+3	+2	+5	+5	+4
Corsoy†	9-25.6	9-20	9-22	9-29	10-1	9-18	9-20	9-22	9-27
Wells	+0.6	0	0	-3	-3	+1	+4	-1	+4
A72-522	+5.2	+8	+5	+5	+9	+6	+7	+7	+8
A72-523	+6.4	+9	+5	+6	+10	+6	+7	+8	+8
L70D6-16	+4.1	+10	+4	+4	+1	+5	+5	+3	+11
OX-271	+0.9	+2	+2	+2	+3	+1	+1	-2	+1
Hark (I)	-2				-4	+1	+1	-6	-3
Wayne (III)	+7		+7	+6	+8	+6	+4	+13	+9
Date Planted	5-30	5-21	5-30	6-7	5-21	6-4	5-28	5-17	5-17
† Days to Mat.	119	122	115	114	132	106	115	128	133
	27 Tests	LODGING (score)							
Amsoy 71	1.9	2.9	2.9	2.7	2.0	1.0	1.0	1.0	1.0
Beeson	1.7	2.5	2.4	2.0	2.5	1.0	1.0	1.0	1.0
Corsoy	2.1	4.0	3.1	2.7	2.3	1.7	1.0	1.0	1.0
Wells	1.2	1.4	2.0	1.0	1.0	1.0	1.0	1.0	1.0
A72-522	2.0	3.0	3.1	2.0	2.5	1.3	1.0	1.0	1.0
A72-523	2.1	3.6	2.9	2.0	3.0	1.0	1.0	1.0	1.0
L70D6-16	1.8	2.1	2.8	2.0	2.0	1.0	1.0	1.0	1.0
OX-271	2.4	4.4	3.9	3.0	3.0	2.0	1.0	1.0	1.0
	27 Tests	PLANT HEIGHT (inches)							
Amsoy 71	35	39	41	34	44	31	22	28	23
Beeson	33	38	37	36	42	29	23	25	24
Corsoy	32	39	34	34	42	32	23	24	23
Wells	32	37	36	29	42	29	22	25	20
A72-522	35	39	39	37	44	33	26	29	25
A72-523	38	41	43	39	46	33	26	33	26
L70D6-16	34	40	41	36	40	30	22	27	24
OX-271	33	38	37	36	44	34	21	26	25

Michigan		Indiana				Wis.	Illinois				
East Lansing	Dun-dee	Bluff-ton	Green-field	Laf-ayette	Sull-ivan	Mad-ison	De-kalb	Pon-tiac	Ur-bana	Girard	Browns-town
				MATURITY (relative date)							
	*					*	*	*			
+3		+2	+4	+6	+4	+2			+4	+5	+4
+2		+1	+11	+7	+2	+5			+4	+6	+4
10-6		10-4	9-22	9-27	10-1	9-25			9-27	9-14	10-5
+2		+1	+3	+3	-1	+2			0	+1	+1
+4		0	+5	+7	+2				+5	+8	+2
+5		+1	+10	+8	+3				+6	+11	+3
+2		+2	+9	+6	+3	+6			+4	+6	+5
+1		0	+2	0	+1	+6			0	+2	0
-11				-2		-2			0	-3	-1
		+2	+11	+7	+6				+6	+13	+5
5-21	5-23	5-31	5-28	6-11	6-17	5-23	5-31	6-29	6-4	5-20	7-2
138		126	117	108	106	125			115	117	95
				LODGING (score)							
1.5		3.3	2.0	2.5	2.0	1.3	1.0	1.0	2.0	3.2	3.7
2.0		3.2	1.2	2.5	1.7	1.0	1.3	1.0	1.9	1.7	1.8
3.5		3.7	1.3	1.5	1.8	1.5	2.2	1.0	1.9	3.2	3.5
1.5		1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.2	1.6
2.5		3.2	1.2	2.5	1.7	1.0	1.7	1.3	2.8	2.7	2.7
3.0		3.2	1.5	2.5	2.0	1.3	1.8	1.3	3.6	3.0	2.5
2.0		2.2	1.3	2.5	2.0	1.0	1.2	1.0	2.1	2.0	2.8
4.5		3.5	1.8	2.3	2.3	1.5	1.7	1.2	2.1	2.8	3.2
				PLANT HEIGHT (inches)							
40		29	31	39	36	37	31	32	38	38	36
38		26	28	34	33	35	31	30	36	35	33
40		27	21	30	30	33	31	29	35	34	32
40		24	24	32	31	32	27	27	33	34	33
46		31	24	34	34	37	34	33	38	39	34
54		32	29	38	34	39	37	34	40	42	37
38		26	30	38	36	35	33	31	38	37	35
38		26	29	35	31	34	31	31	35	34	33

Strain	Minnesota		Iowa		Mo.	South Dakota		Neb.
	Lamberton	Waseca	Ames	Sloan	Edina	Brookings	Centerville	Mead I
MATURITY (relative date)								
	*			*	*			
Amsoy 71		+2	+2			+4	+2	+1
Beeson		+2	+2			+2	+1	+5
Corsoy		9-22	9-25			9-27	9-26	9-23
Wells		+1	-1			+1	0	0
A72-522		+2	+7			+6	+2	+5
A72-523		+2	+8			+6	+4	+8
L70D6-16		0	+2			+3	+1	+1
OX-271		0	+1			+2	+1	-2
Hark (I)		+1	-4			+1	-2	-4
Wayne (III)		+8	+9				+7	+6
Date Planted	5-24	5-7	5-25	5-17	6-18	5-28	5-22	5-15
Days to Mat.		138	123			122	127	131
LODGING (score)								
Amsoy 71	1.7	2.3	1.8	1.6	1.0	1.0	1.5	2.5
Beeson	1.7	1.5	1.4	1.4	1.0	1.0	2.0	2.3
Corsoy	1.7	2.7	2.1	2.2	1.0	1.5	1.7	2.8
Wells	1.0	1.0	1.3	1.3	1.0	1.0	1.0	1.7
A72-522	1.7	2.2	1.9	1.5	1.0	1.3	1.7	3.2
A72-523	2.3	3.0	2.0	1.5	1.1	1.3	1.5	3.0
L70D6-16	3.3	2.5	2.0	1.7	1.0	1.3	1.5	2.7
OX-271	3.0	3.0	2.3	2.1	1.0	1.3	1.7	3.2
PLANT HEIGHT (inches)								
Amsoy 71	38	37	41	41	29	34	29	52
Beeson	39	34	39	36	27	32	26	51
Corsoy	38	34	39	36	26	30	27	46
Wells	36	34	38	41	24	31	26	46
A72-522	39	35	41	39	28	36	28	53
A72-523	40	36	42	43	34	36	31	57
L70D6-16	40	34	42	39	27	33	29	49
OX-271	37	34	40	40	25	32	28	48

Strain	Mean	Penn. Landisville	N.J. Adelphia I	Md. Beltsville	Ontario Ridgetown	Ontario Harrow	Ohio Hoytville	Ohio Wooster	Ohio Columbus
	24 Tests		SEED QUALITY (score)						
Amsoy 71	2.0	4.1	2.0	3.0	2.0	2.7	1.0	1.0	2.7
Beeson	2.0	2.6	2.0	3.0	3.0	1.3	1.0	1.0	1.5
Corsoy	1.8	2.8	1.8	3.0	3.0	1.3	1.3	1.0	2.0
Wells	2.0	3.7	2.0	3.0	2.0	1.3	1.0	1.0	3.0
A72-522	2.0	2.1	1.5	2.0	3.0	2.7	1.0	1.0	1.5
A72-523	1.9	2.1	1.8	2.0	3.0	2.7	1.0	1.0	1.2
L70D6-16	2.0	3.6	2.0	2.7	3.0	2.0	1.0	1.0	2.7
OX-271	1.7	2.8	1.5	3.0	2.0	1.3	1.5	1.0	2.2
	26 Tests		SEED SIZE (g/100)						
Amsoy 71	17.3	21.7	22.2	21.3	16.2	15.2	20.4	17.3	20.3
Beeson	18.9	23.9	24.0	23.4	17.5	16.1	23.2	19.6	23.1
Corsoy	15.7	19.1	18.0	19.3	16.2	14.4	17.4	16.1	18.5
Wells	16.2	20.4	19.4	18.6	15.2	14.8	18.6	16.2	19.2
A72-522	17.0	21.8	20.3	20.9	17.0	18.1	20.8	18.9	22.3
A72-523	16.4	20.7	18.4	20.0	16.2	17.5	20.3	19.1	22.3
L70D6-16	17.5	22.3	23.4	20.7	17.6	16.6	19.6	18.9	21.1
OX-271	15.2	17.9	17.7	18.8	15.9	14.1	17.4	15.7	18.5
	12 Tests		PROTEIN (%)						
Amsoy 71	39.6			39.9		41.6			43.7
Beeson	41.7			42.8		42.3			44.5
Corsoy	40.4			41.5		42.2			43.4
Wells	41.9			41.7		44.0			45.8
A72-522	40.1			39.9		42.6			41.6
A72-523	40.2			41.0		42.5			41.9
L70D6-16	40.9			42.4		43.1			45.0
OX-271	40.4			41.4		42.0			44.5
	12 Tests		OIL (%)						
Amsoy 71	20.8			22.4		21.2			20.9
Beeson	19.4			20.7		19.0			18.5
Corsoy	20.4			22.8		20.5			19.3
Wells	20.3			21.5		19.6			21.0
A72-522	20.7			23.6		19.9			20.6
A72-523	20.6			22.6		20.1			20.1
L70D6-16	19.7			19.6		19.8			17.8
OX-271	20.1			21.6		20.0			19.0

Strain	Michigan East Lansing	Michigan Dundee	Indiana Bluffton	Indiana Greenfield	Indiana Lafayette	Indiana Sullivan	Wis. Madison	Illinois Dekalb	Illinois Pontiac	Illinois Urbana
SEED QUALITY (score)										
Amsoy 71			1.5	2.0	1.5	2.0		3.2	2.2	1.3
Beeson			1.5	2.0	1.0	1.5		2.8	2.5	1.3
Corsoy			2.0	1.5	1.0	1.5		1.7	1.8	1.1
Wells			1.5	1.5	1.0	2.0		2.7	2.2	1.3
A72-522			1.0	1.0	1.0	2.0		3.2	2.5	1.2
A72-523			1.0	1.0	1.0	1.5		3.3	2.5	1.1
L70D6-16			1.5	1.5	1.5	1.5		2.8	2.3	1.2
OX-271			1.5	2.0	1.0	1.5		2.3	2.0	1.0
SEED SIZE (g/100)										
Amsoy 71	17.6	20.0	21.8	20.2	17.0	19.6	17.2	13.6	12.8	17.2
Beeson	17.8	21.1	23.6	22.2	19.5	16.8	18.2	15.1	14.9	17.9
Corsoy	16.3	17.6	19.2	17.2	15.6	12.9	15.8	13.8	13.1	15.9
Wells	15.1	18.7	20.7	18.2	16.0	18.2	16.0	13.2	11.8	14.6
A72-522	16.9	18.8	20.2	18.5	17.8	13.0	16.1	13.4	11.7	17.0
A72-523	15.4	18.5	19.0	17.8	16.1	12.9	15.5	12.4	12.4	17.1
L70D6-16	17.5	20.2	21.4	20.0	18.2	14.4	17.7	14.8	12.9	16.4
OX-271	15.9	17.1	17.6	17.1	15.4	12.7	15.3	13.4	13.0	14.8
PROTEIN (%)										
Amsoy 71			42.5		38.9			36.7		38.2
Beeson			43.8		41.7			38.4		40.7
Corsoy			42.8		39.4			38.4		38.6
Wells			43.5		41.5			38.9		39.9
A72-522			42.2		39.0			36.7		38.8
A72-523			41.7		38.6			37.1		38.3
L70D6-16			43.2		40.8			37.4		39.3
OX-271			43.1		39.2			36.9		38.1
OIL (%)										
Amsoy			20.4		20.7			20.6		21.8
Beeson			19.0		20.3			20.0		20.2
Corsoy			20.6		21.5			19.9		21.4
Wells			19.7		20.3			20.6		20.7
A72-522			20.8		21.6			20.9		21.8
A72-523			20.8		21.2			19.4		21.4
L70D6-16			19.6		19.5			21.0		20.5
OX-271			19.5		20.5			20.2		21.4

Illinois		Minnesota		Iowa		Mo.	South Dakota		Neb.
Girard	Brownstown	Lamberton	Waseca	Ames	Sloan	Edina	Brookings	Centerville	Mead I
				SEED QUALITY (score)					
2.8	1.1	2.3	3.3	1.0		2.5	1.3	1.0	1.0
3.0	1.2	3.0	3.7	1.1		1.8	1.5	1.7	2.3
4.2	1.3	2.0	2.0	1.0		2.0	1.1	1.2	1.6
3.8	1.3	2.0	3.0	1.0		2.0	1.5	1.5	2.0
1.7	1.2	4.0	4.0	1.2		3.0	2.0	1.5	2.0
1.7	1.2	4.0	4.0	1.0		2.7	1.8	1.5	2.0
2.8	1.3	2.7	2.7	1.5		2.5	1.5	1.0	2.3
3.3	1.1	2.0	2.0	1.0		2.0	1.3	1.2	1.0
				SEED SIZE (g/100)					
18.6	14.7	11.4	11.5	18.2			12.5	13.4	17.4
22.7	16.8	12.4	12.3	19.8			13.5	16.2	20.0
15.5	14.9	11.1	11.1	16.7			12.5	13.0	17.6
17.2	15.0	11.8	11.4	17.4			12.3	13.7	17.9
18.0	14.3	11.5	11.3	16.8			13.6	13.8	18.5
18.0	14.1	11.3	11.3	16.9			13.3	13.7	17.2
18.3	16.0	12.2	11.0	18.1			13.3	14.4	18.5
15.6	14.1	10.8	10.7	16.5			11.0	11.9	17.1
				PROTEIN (%)					
		38.3		38.5		38.6		39.1	39.6
		39.1		41.3		41.6		42.1	42.6
		38.4		40.8		39.3		39.6	40.4
		39.9		42.6		41.4		41.3	42.2
		38.6		39.6		39.3		43.1	39.7
		38.5		39.6		40.0		42.2	40.7
		37.9		41.6		39.9		40.7	39.9
		38.6		41.0		39.9		40.7	39.9
				OIL (%)					
		20.3		20.2		20.4		20.7	20.5
		19.1		18.5		18.7		19.1	20.0
		19.1		19.6		20.8		20.6	19.3
		20.2		19.4		19.9		20.3	20.4
		20.0		19.9		20.3		18.3	21.0
		20.4		20.0		20.0		19.7	21.2
		20.1		18.6		20.1		19.2	21.0
		19.8		18.4		19.5		19.3	21.8

Strain	Parentage	Line
1. Beeson		
2. Corsoy		
3. A73-137	Hark x Provar x (Magna x Disoy)	F_5
4. A73-221	Amsoy x "	"
5. A73-225	"	"
6. A73-227 Marion	"	"
7. A73-229	"	"
8. A73-13078	M62-263 (Grant x M319W) x Amsoy 71	F_4
9. A73-14028	M62-275 (Norchief x Harosoy) x Beeson	"
10. A73-22039	M62-263 x IVR Ex4426	"
11. A73-22051	Corsoy x "	"
12. A73-22065	"	"
13. A73-24033	IVR Ex212 x Swift	"
14. A73-24036	"	"
15. A73-25042	" x Cutler 71	"
16. A73-25050	M59-120(II-54-240 x II-54-139) x IVR Ex4731	"
17. A73-25088	" "	"
18. A73D2	Hark x Provar	F_6
19. A73D13	Hark x Wayne	"
20. L70-2891	Wayne-Rps(L15) x Amsoy 71	F_5
21. L70-3127	Corsoy x Wayne-I r Rpm Rps	F_4
22. L71-2003	Chippewa-I r Rps rxp x Custer	F_5
23. L71-2011	"	"
24. L71-2071	Merit x Wayne-I r Rpm Rps	F_4
25. L71-2322	Beeson x "	F_5
26. L71-2340	"	"
27. L71-2431	Corsoy x "	"
28. L71-2855	Beeson x "	"
29. L72A-14	Calland x Amsoy	F_6
30. L72A-18	"	"
31. M68-96	M59-120(II-54-240 x II-54-139) x Amsoy 71	F_5
32. SD73-1	Hawkeye x Capital	F_8
33. SD73-9	(Adams x Clark) x Blackhawk	F_6
34. U10112	C1432 (C1253 x Kent) x C1430(C1253 x Kent)	F_7
35. U10148	Calland x C1436(C1253 x Kent)	"
36. U10840	C1253(Blackhawk x Harosoy) x Wayne	F_5

Of the 34 strains in the 1974 test, only A73-25050 and A73-229 were higher yielding than both check varieties in regional mean yield, but they were almost one day later than Beeson and four days later than Corsoy. Both strains are susceptable to Phytophthora root rot. The strain A73-25050 has moderate shattering resistance and A73-229 has poor shattering resistance. There are several strains which are intermediate between Beeson and Corsoy for mean yield and maturity, but show no distinct advantage over Beeson in any characteristic evaluated.

PRELIMINARY TEST II, 1974

Disease Data

Strain	BP	DM	FE_2	BSR				PSB	PS	SMV	PR	
	Urb. Ill. a	Sull. Ind. n	Laf. Ind. a	Laf. Ind. n %	Urb. Ill. n %	Ames Iowa n % stem	Ames Iowa n % plants	Laf. Ind. n	Laf. Ind. a	Laf. Ind. n seed	Laf. Ind. a	Ames Iowa a
Beeson	1	2	1	75	60	67	100	4	5	2M	R	R
Corsoy	1	3	5	30	80	84	100	2	5	5E	S	S
A73-137	1	5	4	60	40	70	100	3	5	5E	S	S
A73-221	4	3	5	85	100	68	100	4	5	5E	S	S
A73-225	1	3	4	65	100	80	100	3	5	5E	S	S
A73-227 Marion	1	2	5	70	80	72	100	5	5	5E	S	S
A73-229	1	3	4	80	100	72	100	4	5	4E	S	S
A73-13078	2	3	5	80	100	81	100	2	3	1	R	R
A73-14028	3	4	3	90	80	69	100	3	5	4E	R	R
A73-22039	1	3	4	55	100	74	100	2	4	1	S	S
A73-22051	2	3	5	90	100	69	100	4	5	5E	S	S
A73-22065	1	3	2	75	100	76	100	4	3	4M	S	S
A73-24033	3	5	4	55	100	73	100	4	5	5E	S	S
A73-24036	2	5	5	85	100	81	100	2	5	5E	S	S
A73-25042	1	4	2	60	80	70	100	5	5	5E	H	R
A73-25050	1	1	2	75	70	72	100	4	4	5E	S	S
A73-25088	1	5	5	90	100	69	100	1	2	5E	S	S
A73D-2	3	5	5	80	60	63	100	4	5	5E	S	S
A73D-13	2	4	5	60	80	82	100	4	5	5E	S	S
L70-2891	2	4	5	60	80	95	100	4	5	5E	R	R
L70-3127	1	4	5	35	60	67	100	5	4	5E	R	R
L71-2003	1	5	5	80	80	66	100	1	5	5E	R	H
L71-2011	1	5	3	95	100	53	100	2	3	3M	R	H
L71-2071	1	5	5	80	100	40	100	2	5	1	R	R
L71-2322	1	2	2	85	80	53	100	3	4	5E	R	R
L71-2340	1	1	1	100	80	53	80	3	5	2E	R	R
L71-2431	1	1	5	50	80	30	80	5	5	5E	R	H
L71-2855	1	1	5	50	100	49	100	4	5	5E	R	R
L72A-14		3	4	100		55	90	2	5	1	R	R
L72A-18		3	3	75		54	100	3	5	3M	R	R
M68-96	2	4	4	70	100	41	100	4	5	5E	R	R
SD73-1	3	5	5	75	100	43	100	4	3	1	S	S
SD73-9	3	4	5	40	100	51	100	4	5	4M	S	S
U10112		4	4	40		69	100	5	5	5E	R	R
U10148		5	4	75		67	100	5	4	5E	R	R
U10840	3	5	5	70	100	63	100	5	4	5E	R	R

Strain	Descriptive Code		Chlorosis Ames Iowa	Shattering Manhattan Kansas
Beeson	PGNBr	SYIb	3	3.0
Corsoy	PGNBr	DYY	4	2.0
A73-137	PGNTn	DYIb	3	2.0
A73-221	PGNBr	SYY+Bf	2	5.0
A73-225	PGNBr	SYBf	2	4.0
A73-227 Marion	PGNTn	SYBf	3	2.0
A73-229	PGNTn	SYBf	2	5.0
A73-13078	PGNBr	SYG	4	4.0
A73-14028	PGNBr	DYG	4	4.0
A73-22039	PGNBr	SYBf	3	1.0
A73-22051	PGNBr	DYY	4	1.0
A73-22065	WGNBr	DYY	4	2.0
A73-24033	PGNBr	DYIb	4	1.0
A73-24036	PTNBr	DYBl	5	2.0
A73-25042	PTNBr	SYBl	5	1.0
A73-25050	WTNBr	SYBr	3	2.0
A73-25088	WTNBr	SYIb	1	1.0
A73D-2	PGNBr	DYIb	5	2.0
A73D-13	P+WGNBr	DYY	5	1.0
L70-2891	P+WTNBr	SYG+Bl	3	5.0
L70-3127	WGNBr	DYY	5	4.0
L71-2003	PGNBr	SYBf	2	5.0
L71-2011	PTNBr	SYIb	2	5.0
L71-2071	WGNBr	DYY	2	4.0
L71-2322	PGNBr	SYG	5	5.0
L71-2340	WGNBr	SYY	5	5.0
L71-2431	WTNBr	DYY	5	3.0
L71-2855	WTNBr	SYIb	4	4.0
L72A-14	PGNBr	DYIb	3	5.0
L72A-18	PGNBr	SYBf	4	3.0
M68-96	WTNBr	DYBr	3	5.0
SD73-1	PTNBr	SYBl	4	5.0
SD73-9	PTNBr	DYY	3	2.0
U10112	PTNBr	DYBl	5	4.0
U10148	PTNBr	DYBl	3	3.0
U10840	PGNBr	SYBl	5	2.0

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
No. of Tests	12	12	9	12	12	10	11	4	4
Beeson	40.1	3	+3.8	1.8	33	1.6	19.8	41.3	19.6
Corsoy	38.9	14	9-25.4	2.2	33	1.5	16.6	40.2	20.6
A73-137	36.0	33	-1.2	1.4	27	1.3	19.1	42.2	20.8
A73-221	37.3	27	+4.3	1.8	34	1.7	19.2	39.9	20.0
A73-225	39.3	9	+2.1	1.9	32	1.5	18.8	39.0	20.6
A73-227 Marion	38.5	17	+2.4	1.3	28	1.7	22.0	38.6	20.2
A73-229	40.7	2	+4.2	2.3	35	1.6	19.7	39.8	20.3
A73-13078	39.7	5	+1.8	1.9	31	1.6	18.6	38.4	21.3
A73-14028	38.4	18	+0.3	1.6	34	1.8	19.6	40.1	20.0
A73-22039	37.6	25	+4.6	2.0	33	1.7	17.6	39.5	19.8
A73-22051	39.5	7	+3.1	2.2	34	1.4	17.9	39.8	19.9
A73-22065	39.3	9	+5.6	1.5	31	1.6	16.1	39.9	20.7
A73-24033	37.5	26	+1.8	1.5	30	1.5	18.3	39.8	20.0
A73-24036	37.2	28	+0.7	1.7	31	1.5	18.6	40.2	19.9
A73-25042	37.2	28	+3.6	1.6	32	1.8	18.5	40.8	20.2
A73-25050	41.1	1	+4.6	2.2	33	1.7	16.6	39.5	21.0
A73-25088	39.9	4	+2.3	2.2	36	1.4	15.5	38.0	21.0
A73D-2	38.4	18	+1.2	1.4	27	1.4	19.4	41.1	20.3
A73D-13	39.5	7	+2.4	1.7	32	1.6	17.7	40.9	19.8
L70-2891	37.9	22	+0.2	1.6	33	1.7	18.1	41.6	19.6
L70-3127	38.7	16	-1.3	1.9	31	1.5	16.1	40.5	20.5
L71-2003	35.0	34	+0.8	1.7	32	1.6	16.6	38.7	20.2
L71-2011	36.2	32	+0.1	1.9	34	1.6	15.0	37.9	20.6
L71-2071	39.7	5	-0.3	2.2	34	1.3	15.1	39.8	20.6
L71-2322	39.1	11	+1.2	2.1	33	1.6	20.5	41.7	19.9
L71-2340	37.8	23	+0.3	1.5	33	1.6	19.3	42.1	19.3
L71-2431	38.8	15	+0.1	2.5	37	1.7	15.9	40.4	19.2
L71-2855	39.0	12	+3.3	1.7	33	1.5	21.1	42.0	20.0
L72A-14	38.4	18	+3.7	1.4	32	1.9	19.0	40.5	19.6
L72A-18	38.3	21	+4.1	1.7	33	1.7	19.4	40.8	19.2
M68-96	39.0	12	-1.6	1.4	29	1.4	20.0	38.8	21.1
SD73-1	34.7	35	-0.2	1.8	36	1.7	18.4	41.6	19.2
SD73-9	31.5	36	-7.0	2.4	32	1.5	15.0	43.1	18.3
U10112	37.7	24	+3.8	1.6	32	1.6	18.6	41.3	19.4
U10148	36.9	31	+6.4	1.2	32	1.8	19.4	42.6	18.2
U10840	37.0	30	+6.2	1.8	38	1.6	16.7	41.8	19.1

Strain	Mean	New Jersey Adelphia I	Ont. Harrow	Ohio Hoytville	Indiana Bluffton	Indiana Lafayette	Wisconsin Madison
	12 Tests		YIELD (bu/a)				
Beeson	40.1	57.6	43.8	26.3	44.3	44.2	36.3
Corsoy	38.9	48.9	40.5	27.8	36.1	43.7	38.0
A73-137	36.0	45.2	38.8	16.4	38.9	35.5	35.6
A73-221	37.3	51.6	39.3	25.9	41.8	33.5	37.3
A73-225	39.3	53.5	35.8	26.4	44.4	43.8	35.0
A73-227	38.5	51.7	38.8	25.6	41.4	36.6	36.5
A73-229	40.7	60.8	40.0	30.1	42.6	47.4	37.1
A73-13078	39.7	47.9	41.4	30.1	39.7	49.0	38.6
A73-14028	38.4	55.8	38.5	25.6	36.4	45.4	38.8
A73-22039	37.6	49.6	37.2	19.9	46.4	42.0	31.8
A73-22051	39.5	52.8	43.4	26.2	37.3	50.0	33.9
A73-22065	39.3	49.6	37.6	29.9	39.4	48.4	34.7
A73-24033	37.5	46.5	39.2	20.0	38.3	44.5	34.6
A73-24036	37.2	46.9	39.4	25.8	46.0	45.5	34.4
A73-25042	37.2	38.4	43.1	26.2	45.0	44.5	39.1
A73-25050	41.1	54.2	39.4	32.8	44.8	45.6	36.5
A73-25088	39.9	52.7	38.7	33.0	43.3	50.8	32.4
A73D-2	38.4	44.6	39.2	24.6	38.9	45.9	36.7
A73D-13	39.5	49.2	38.6	25.8	45.1	48.2	37.8
L70-2891	37.9	46.7	35.7	23.8	41.4	48.5	35.4
L70-3127	38.7	50.3	34.5	27.0	38.9	43.6	35.1
L71-2003	35.0	41.9	35.8	23.2	37.4	41.7	30.7
L71-2011	36.2	43.6	34.4	29.2	36.5	46.9	32.1
L71-2071	39.7	50.0	37.1	26.5	42.2	49.7	36.4
L71-2322	39.1	46.8	39.0	29.2	40.2	48.3	38.0
L71-2340	37.8	49.0	42.7	23.1	37.6	46.1	34.1
L71-2431	38.8	45.0	39.8	22.7	39.0	51.5	34.6
L71-2855	39.0	47.2	41.8	23.1	42.7	50.2	37.6
L72A-14	38.4	44.7	36.0	26.2	46.6	47.7	35.3
L72A-18	38.3	51.4	39.9	28.5	47.2	47.0	34.1
M68-96	39.0	44.7	37.6	26.5	43.6	49.5	34.3
SD73-1	34.7	48.0	36.3	20.8	36.0	44.9	34.5
SD73-9	31.5	39.1	33.8	19.8	31.0	37.1	30.0
U10112	37.7	49.6	39.0	24.3	39.1	49.0	32.8
U10148	36.9	53.0	38.8	26.7	40.2	46.7	23.6
U10840	37.0	54.0	36.6	27.0	41.3	53.3	28.5
C.V. (%)		10.3	7.6		8.6	15.2	
L.S.D. (5%)		10.3	n.s.		7.1	n.s.	4.0
Row Spacing (in.)		30	24	32	30	30	36
Rows/Plot		3	4	3	3	3	1
Reps		2	2	2	2	2	2

Illinois		Iowa		South Dakota	Nebraska
Pontiac	Urbana	Ames	Sloan	Centerville	Mead I
		YIELD bu/a)			
25.0	47.8	51.7	31.2	28.1	45.2
25.9	48.7	48.8	30.3	26.3	52.3
20.6	38.2	40.5	33.9	32.7	55.5
19.4	48.1	46.3	32.8	27.9	44.1
27.4	50.5	50.4	31.1	28.1	44.8
24.2	48.8	51.0	28.6	32.7	46.6
23.0	50.0	49.1	31.5	29.5	47.1
23.2	45.0	49.0	34.7	34.0	44.0
22.4	45.3	46.0	31.2	33.7	41.3
22.0	43.7	46.4	38.3	29.8	44.2
27.5	48.2	42.9	30.9	28.9	52.5
24.5	46.3	53.1	32.3	28.2	47.1
24.3	43.4	44.4	29.0	34.8	51.4
23.3	43.8	45.4	32.5	29.4	33.9
18.1	44.3	43.5	31.2	30.1	43.0
24.4	49.1	55.5	33.2	32.5	45.2
21.6	49.3	51.3	30.5	31.2	43.8
26.0	47.5	42.6	35.1	30.5	48.8
21.1	45.9	51.8	33.0	32.2	45.6
25.1	46.5	45.9	36.6	26.2	42.7
23.8	45.4	50.5	34.1	29.8	51.4
21.8	43.5	43.3	30.5	27.8	42.0
22.2	40.7	42.7	29.3	28.8	48.3
27.2	46.7	52.6	30.6	31.8	45.2
25.5	48.1	48.9	33.5	30.5	41.2
26.2	47.7	44.5	29.6	29.8	43.1
29.3	47.6	47.7	31.4	29.6	47.0
28.0	48.2	47.6	29.7	29.6	42.6
23.3	45.3	51.9	36.2	26.2	41.8
21.8	45.5	49.7	31.8	26.2	36.3
26.1	45.2	47.6	31.8	28.9	52.8
23.4	41.7	36.8	28.4	27.1	38.5
19.8	36.8	35.5	29.1	26.4	40.1
23.1	46.8	48.7	28.5	28.4	43.4
19.1	42.1	48.4	33.2	30.1	40.7
21.6	47.2	43.9	24.8	28.3	37.6
1.1	5.2	7.3	9.9	10.8	10.8
5.3	4.8	6.9	6.3	n.s.	9.5
38	30	27	27	30	30
4	4	4	4	4	4
2	2	2	2	2	2

Strain	Mean	New Jersey Adelphia I	Ont. Harrow	Ohio Hoytville	Indiana Bluffton	Indiana Lafayette	Wisconsin Madison
	12 Tests		YIELD RANK				
Beeson	3	2	1	16	9	27	14
Corsoy	14	20	7	9	34	29	4
A73-137	33	28	18	36	25	35	15
A73-221	27	11	13	20	15	36	8
A73-225	9	6	31	15	8	28	19
A73-227	17	10	18	23	16	34	11
A73-229	2	1	8	3	13	15	9
A73-13078	5	22	6	3	21	8	3
A73-14028	18	3	23	23	33	23	2
A73-22039	25	15	26	34	3	31	32
A73-22051	7	8	2	17	31	5	28
A73-22065	9	15	24	5	22	11	20
A73-24033	26	27	14	33	28	25	21
A73-24036	28	24	11	21	4	22	24
A73-25042	28	36	3	17	6	25	1
A73-25050	1	4	11	2	7	21	11
A73-25088	4	9	21	1	11	3	30
A73D-2	18	32	14	25	25	20	10
A73D-13	7	18	22	21	5	13	6
L70-2891	22	26	33	27	16	10	16
L70-3127	16	13	34	10	25	30	18
L71-2003	34	34	31	28	30	32	33
L71-2011	32	33	35	6	32	17	31
L71-2071	5	14	27	13	14	6	13
L71-2322	11	25	16	6	19	12	4
L71-2340	23	19	4	29	29	19	26
L71-2431	15	29	10	31	24	2	21
L71-2855	12	23	5	29	12	4	7
L72A-14	18	30	30	17	2	14	17
L72A-18	21	12	9	8	1	16	26
M68-96	12	30	24	13	10	7	25
SD73-1	35	21	29	32	35	24	23
SD73-9	36	35	36	35	36	33	34
U10112	24	15	16	26	23	8	29
U10148	31	7	18	12	19	18	36
U10840	30	5	28	10	18	1	35

Illinois		Iowa		South Dakota	Nebraska
Pontiac	Urbana	Ames	Sloan	Centerville	Mead I
		YIELD RANK			
12	11	6	19	26	14
9	6	15	27	32	4
32	35	34	7	4	1
34	9	22	12	28	19
4	1	10	22	26	17
16	5	8	33	4	12
23	2	12	17	18	9
21	26	13	5	2	20
24	23	23	19	3	29
26	29	21	1	13	18
3	7	31	23	20	3
13	19	2	14	25	9
15	31	27	32	1	5
19	28	25	13	19	36
36	27	29	19	12	24
14	4	1	9	6	14
29	3	7	25	9	21
8	14	33	4	10	7
31	20	5	11	7	13
11	18	24	2	33	25
17	22	9	6	13	5
27	30	30	25	29	27
25	34	32	30	22	8
5	17	3	24	8	14
10	9	14	8	10	30
6	12	26	29	13	23
1	13	18	18	16	11
2	7	19	28	16	26
19	23	4	3	33	28
27	21	11	15	33	35
7	25	19	15	20	2
18	33	35	35	30	33
33	36	36	31	31	32
22	16	16	34	23	22
35	32	17	9	12	31
29	15	28	36	24	34

PRELIMINARY TEST II, 1974

Strain	Mean	New Jersey Adelphia I	Ont. Harrow	Ohio Hoytville	Indiana Bluffton	Indiana Lafayette	Wisconsin Madison
	9 Tests	MATURITY (relative date)					
							*
Beeson	+3.8	+2	+5	+5	+2	+5	
Corsoy	9-25.4	9-24	9-22	9-22	10-6	9-28	
A73-137	-1.2	-1	-6	-2	0	-2	
A73-221	+4.3	+3	+9	0	+2	+8	
A73-225	+2.1	+1	+2	+2	0	+3	
A73-227	+2.4	+1	+1	+2	0	+6	
A73 229	+4.2	+2	+6	+5	+2	+4	
A73-13078	+1.8	+1	+2	+2	-2	+4	
A73-14028	+0.3	-2	-2	+2	+1	0	
A73-22039	+4.6	+4	+4	+3	+2	+4	
A73-22051	+3.1	+4	+5	+2	+1	+3	
A73-22065	+5.6	+5	+4	+3	+2	+5	
A73-24033	+1.8	+2	+1	+2	0	0	
A73-24036	+0.7	0	0	+2	0	-1	
A73-25042	+3.6	+3	+2	+5	+2	+6	
A73-25050	+4.6	+2	+5	+4	+2	+6	
A73-25088	+2.3	+2	+4	+2	-2	+2	
A73D-2	+1.2	+1	+1	+2	0	-1	
A73D-13	+2.4	+2	+3	+2	+2	+1	
L70-2891	+0.2	+1	0	-2	-2	0	
L70-3127	-1.3	-3	-2	-2	0	-4	
L71-2003	+0.8	0	+2	+2	0	0	
L71-2011	+0.1	0	+1	+2	0	-1	
L71-2071	-0.3	-1	+1	+2	-4	0	
L71-2322	+1.2	0	0	+2	-2	+2	
L71-2340	+0.3	-3	+1	+2	0	+1	
L71-2431	+0.1	0	+1	-2	-2	-2	
L71-2855	+3.3	+1	+2	+8	+4	+4	
L72A-14	+3.7	+2	+2	+5	0	+5	
L72A-18	+4.1	+2	+4	+5	+2	+4	
M68-96	-1.6	-4	-2	-2	-4	-1	
SD73-1	-0.2	-1	+3	0	+2	-2	
SD73-9	-7.0	-11	-6	-9	-9	-8	
U10112	+3.8	+3	+2	+3	+2	+6	
U10148	+6.4	+6	+7	+8	+1	+8	
U10840	+6.2	+4	+8	+3	0	+8	
Hark (I)	-1.7		-2	-1		-3	
Wayne (III)	+5.1	+5	+8	+2	0	+6	
Date Planted	5-29	5-29	6-4	5-28	5-31	6-11	5-23

*Not included in the mean

Illinois		Iowa		South Dakota	Nebraska
Pontiac	Urbana	Ames	Sloan	Centerville	Mead I
		MATURITY (realtive date)			
*			*		
	+5	+3		+3	+4
	9-26	9-25		9-25	9-21
	-1	-1		-1	+3
	+5	+3		+2	+7
	+2	+3		+1	+5
	+3	+3		+1	+5
	+4	+5		+3	+7
	+3	+3		-1	+4
	+2	-1		0	+3
	+4	+7		+4	+9
	+3	+3		+2	+5
	+6	+7		+7	+11
	+3	+2		0	+6
	+1	+2		+1	+1
	+5	+2		+1	+6
	+5	+5		+5	+7
	+3	+3		+2	+5
	+2	0		+2	+4
	+2	+2		+3	+5
	0	0		+3	+2
	-1	-1		+1	0
	+1	-1		+2	+1
	0	-1		-1	+1
	+1	-2		+1	-1
	+3	+2		0	+4
	+1	+1		-2	+2
	0	+1		+2	+3
	+3	+1		+2	+5
	+5	+5		+2	+7
	+6	+5		+3	+6
	0	-3		+2	0
	0	-3		0	-1
	-7	-9		+1	-5
	+5	+4		+4	+5
	+8	+5		+6	+9
	+6	+8		+6	+13
	+1	-4		-1	-2
	+7	+9		+1	+8
6-29	6-6	5-25	5-17	5-22	5-15

Strain	Parentage	Previous Testing*	Line
1. Calland	C1253 (Blackhawk x Harosoy) x Kent	7	F_7
2. Wayne	L49-4091 x Clark	13	F_5
3. SL11	Wayne-I r Rps x (Wayne^{10} x Kanrich)	2	3 F_4
4. Williams	Wayne x L57-0034 (Clark x Adams)	5	F_6
5. Woodworth(L66L-172)	Wayne x L57-0034	4	F_6
6. A72-507	Amsoy x Wayne	PIII	"5
7. A72-509	Amsoy x Wayne	"	"
8. A72-510	"	"	"
9. A72-513	Hark x Wayne	"	"
10. A72-520	"	"	"
11. A72-525	"	"	"
12. C1508	C1317-71(C 1223^8 x Mukden) x C1253	1	F_7
13. C1515	C1432(C1253 x Kent) x C1430(C1253 x Kent)	PIII	F_5
14. L70T-543	Wayne-Rps (L15) x Amsoy 71	PII	

* Number of years in test or name of 1973 test.

The 5-year Central mean shows that Woodworth and Williams are equal in yield and superior to both Calland and Wayne. Woodworth is 3.5 days earlier than Williams, and in other characteristics these two varieties are very similar.

In the 2-year Central mean, SL11 (BC Wayne with resistance to downy mildew, and Phytophthora root rot) and C1508 are two bushel lower yielding than Woodworth and have the same maturity as Woodworth. C1508 also has excellent lodging resistance.

In the 1974 Central mean, the strain L70T-543 is one-bushel better in yield and is three days earlier in maturity than Woodworth. However, it does not have as good lodging resistance as Woodworth. The strain L70T-543 is Phytophthora root rot resistant and where Phytophthora rot was a factor, it was noticeably superior in yield. It was segregating for pubescence and hilum color. The remaining seven new entries showed no distinct advantage over Woodworth for any characteristic evaluated.

The 2-year East Coast mean shows C1508 to be slightly superior in yield, has the same maturity and better lodging resistance than Woodworth. C1508 is also Phytophthora root rot resistant.

The 1974 East Coast results showed that yields of L70T-543 and C1508 were equal and slightly below the yield of Woodworth. L70T-543 matures one day earlier than C1508 and Woodworth. The seven other entries do not appear to have any distinct advantage over the check varieties.

Disease Data

Strain	BP Urb. Ill. a	DM Sull. Ind. n	FE_2 Laf. Ind. a	PM Har. Ont. a	BSR Laf. Ind. n %	BSR Urb. Ill. n %	BSR St. Paul Minn. n %	BSR Ames Iowa n Stems %	BSR Ames Iowa n Plants %	PSB Sull. Ind. n	PS Laf. Ind. a	SMV Laf. Ind. n Seed	SMV Man. Kan. n Seed	PR Laf. Ind. a	PR Ames Iowa a
Calland	2	3	4	R	45	90	85	66	100	3	4	5E	2.2	R	R
Wayne	1	4	2	R	65	80	65	74	100	4	4	5E	2.2	S	S
SL11	1	2	2	R	35	100	75	60	90	5	3	5E	1.8	R	R
Williams	1	3	3	R	40	30	50	62	100	4	3	5E	1.4	S	S
Woodworth	2	3	5	R	50	60	80	72	100	4	3	5E	2.1	S	S
A72-507	3	4	4	S	70	70	35	68	100	3	5	4M	2.1	S	S
A72-509	3	4	4	S	70	50	70	62	100	3	4	5S	2.2	S	S
A72-510	4	4	4	S	70	30	60	56	100	4	5	5E	2.1	S	S
A72-513	3	3	5	R	60	60	65	68	100	5	4	5E	1.8	S	S
A72-520	3	3	5	S	70	80	55	57	100	3	5	5E	2.4	S	S
A72-525	1	5	5	R	50	60	70	69	100	5	5	5E	1.1	S	S
C1508	2	4	5	R	65	80	80	76	100	4	4	5E	1.3	R	R
C1515	3	4	4	R	80	60	65	64	100	4	4	5E	1.7	R	R
L70T-543	1	4	5	S	55	80	70	87	100	4	5	5E	1.5	R	R

Descriptive and Other Data

Strain	Descriptive Code		Chlorosis Crstn. Minn.	Chlorosis Lamb. Minn.	Chlorosis Ames Iowa	Fluor-escent Light	Hypo-coytl	Perox-idase	Shattering Manhat. Kan.	Shattering Lubb. Tex.
Calland	PTNBr	DYBl	3.0	1.5	3	L	1	L	2.0	1.5
Wayne	WTNBr	SYBl	3.5	5.0	5	L	1	L	1.0	2.5
SL11	WTNBr	SYBr	4.0	4.0	5	L	1	L	1.0	2.5
Williams	WTNTn	SYBl	3.0	3.0	3	L	5	H	1.0	1.7
Woodworth	WTNTn	DYBl	3.0	2.5	5	L	5	L	1.0	2.2
A72-507	P+WGNBr	SYY	4.0	5.0	5	L	1	H	1.0	2.0
A72-509	P+WGNBr	SYY	4.0	5.0	5	L	2	H	1.0	1.7
A72-510	P+WGNBr	SYY	4.0	5.0	5	L	2	H	2.0	2.0
A72-513	WTNBr	D+SYBr	4.0	5.0	5	L	4	L	4.0	3.0
A72-520	WTNBr	SYBr	4.0	5.0	5	L	1	H	1.0	1.7
A72-525	WGNBr	DYBf	3.5	5.0	5	L	1	L	1.0	3.0
C1508	PGNTn	SYIb	3.0	4.0	4	L	5	L	2.0	1.5
C1515	PTNBr	DYBl	3.0	4.0	5	L	4	H	3.0	2.2
L70T-543	WT+GNBr	SYBr+Bf	3.0	4.5	4	L	1	L	1.0	2.2

UNIFORM TEST III, 1974

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
1974, Central									
No. of Tests	23	23	20	24	24	23	21	13	13
Calland	38.0	7	+3.8	2.2	35	2.0	18.2	40.9	19.4
Wayne	37.5	10	9-31.0†	2.3	34	2.0	17.2	41.6	19.9
SL11	37.0	11	+0.4	2.4	35	1.9	17.5	42.5	19.3
Williams	39.6	3	+4.6	1.8	35	1.6	17.5	41.3	20.0
Woodworth	39.8	2	+0.7	1.9	34	1.7	16.0	40.4	20.4
A72-507	39.0	4	+2.6	2.0	33	2.3	17.8	41.3	20.6
A72-509	37.0	11	+2.2	2.0	32	1.8	17.7	41.0	20.5
A72-510	37.9	8	+2.2	1.9	32	2.3	17.7	40.8	21.0
A72-513	36.0	14	-1.4	1.6	29	2.1	16.6	41.3	20.5
A72-520	39.0	4	+3.8	2.3	35	2.0	16.9	40.8	20.0
A72-525	36.4	13	-2.1	2.1	29	2.1	16.8	39.7	20.5
C1508	37.8	9	+1.1	1.6	34	1.9	17.5	40.1	20.4
C1515	38.6	6	+0.2	1.5	33	1.9	18.6	41.2	20.4
L70T-543	40.5	1	-2.3	2.3	36	2.0	18.5	40.3	21.1

† 125 days after planting

1973-74, 2-year mean, Central									
No. of Tests	45	45	39	46	46	45	40	26	26
Calland	41.6	3	+3.0	2.2	38	2.1	17.2	40.6	20.6
Wayne	41.0	6	9-27.6†	2.2	38	2.0	17.0	41.5	21.2
SL11	41.3	5	+0.7	2.5	39	2.0	17.4	42.4	20.8
Williams	43.7	1	+4.6	1.8	38	1.6	17.3	41.0	21.4
Woodworth	43.4	2	+0.8	1.8	37	1.7	15.4	40.1	21.6
C1508	41.4	4	+0.8	1.6	37	2.0	17.4	39.6	21.8

† 122 days after planting

1972-74, 3-year mean, Central									
No. of Tests	64	64	54	65	64	64	56	38	38
Calland	42.8	4	+2.7	2.3	40	2.3	17.9	40.4	21.0
Wayne	42.8	4	9-26.1†	2.4	39	2.2	17.3	41.5	21.6
SL11	43.2	3	+0.8	2.5	40	2.2	17.7	42.2	21.2
Williams	45.5	1	+4.2	1.9	40	1.7	17.7	40.8	21.9
Woodworth	44.9	2	+0.4	1.9	38	1.9	15.7	39.9	22.0

† 124 days after planting

UNIFORM TEST III, 1974

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
1970-74, 5-year mean, Central									
No. of Tests	109	109	93	106	108	105	92	63	63
Calland	43.8	3	+2.4	2.2	41	2.2	17.8	40.1	20.9
Wayne	43.3	4	9-24.3†	2.4	40	2.2	17.3	41.4	21.5
Williams	45.5	1	+4.0	1.8	40	1.8	17.5	40.7	22.0
Woodworth	45.4	2	+0.5	1.8	39	1.9	15.4	39.8	22.0

† 123 days after planting

1974, East Coast									
No. of Tests	4	4	3	4	4	4	4	2	2
Calland	45.9	12	+2.3	2.6	38	2.6	21.6	42.8	19.6
Wayne	45.0	13	9-30.0†	2.6	37	2.6	20.3	43.9	20.4
SL11	44.7	14	+1.0	2.6	38	2.7	21.5	44.4	20.4
Williams	48.8	5	+2.3	1.8	36	2.0	21.6	43.0	21.6
Woodworth	50.6	1	+0.7	2.1	35	2.5	18.8	41.9	20.6
A72-507	47.1	9	+2.0	2.0	36	2.9	21.3	41.7	20.9
A72-509	48.2	7	+1.3	2.1	35	2.8	20.8	42.0	21.0
A72-510	47.0	11	+1.3	1.8	35	2.9	21.2	41.7	21.3
A72-513	47.1	9	0	1.6	32	2.6	19.3	42.8	21.0
A72-520	49.3	4	+2.7	2.6	39	2.4	19.1	42.6	20.3
A72-525	48.6	6	0	2.4	34	2.5	18.2	41.2	20.4
C1508	49.8	2	+1.3	1.7	38	2.6	20.7	41.4	20.1
C1515	47.2	8	+1.3	1.3	37	2.6	22.4	43.2	20.2
L70T-543	49.8	2	0	2.3	39	2.7	22.4	42.1	22.2

† 122 days after planting

1973-74, 2-year mean, East Coast									
No. of Tests	9	9	8	9	9	9	9	4	4
Calland	44.2	5	+2.2	2.4	38	2.6	19.0	41.9	20.2
Wayne	44.8	4	9-26.2†	2.4	38	2.4	18.2	43.4	21.0
SL11	44.0	6	+1.3	2.6	38	2.5	19.2	43.5	21.0
Williams	46.2	3	+2.6	1.7	36	2.0	19.2	42.8	21.6
Woodworth	46.8	2	+0.6	1.8	36	2.3	16.6	41.2	21.2
C1508	47.0	1	+0.4	1.5	38	2.5	18.3	40.4	21.3

† 115 days after planting

Strain	East Coast Mean	Penn. Landisville	N.J. Adelphia I	Del. Georgetown I	Md. Beltsville	Central Mean	Ohio Hoytville	Ohio Wooster	Ohio Columbus
	4 Tests		1974 YIELD (bu/a)			23 Tests			
Calland	45.9	48.9	47.0	44.8	42.9	38.0	27.3	42.2	40.2
Wayne	45.0	52.3	40.9	43.1	43.7	37.5	35.5	36.0	38.9
SL11	44.7	48.2	42.5	44.2	43.9	37.0	34.0	42.8	32.8
Williams	48.8	51.8	45.7	48.3	49.6	39.6	30.8	42.7	45.3
Woodworth	50.6	58.1	45.0	49.4	49.9	39.8	31.1	45.4	38.1
A72-507	47.1	48.2	41.6	51.8	46.8	39.0	32.9	43.2	26.0
A72-509	48.2	51.8	45.7	51.5	43.8	37.0	31.8	40.9	20.5
A72-510	47.0	48.0	44.9	51.7	43.3	37.9	31.8	39.8	25.4
A72-513	47.1	47.2	41.2	51.8	48.3	36.0	29.5	35.0	31.9
A72-520	49.3	53.0	46.8	50.7	46.7	39.0	38.2	42.5	27.1
A72-525	48.6	50.6	44.5	50.7	48.7	36.4	28.4	31.6	25.7
C1508	49.8	50.1	48.1	49.4	51.7	37.8	27.4	43.8	30.9
C1515	47.2	46.0	49.7	45.1	48.2	38.6	28.4	39.9	40.0
L70T-543	49.8	49.3	47.8	50.2	52.0	40.5	35.2	44.1	40.5
C.V. (%)		8.3	6.1	9.3	4.7				
L.S.D. (5%)		6.0	5.5	n.s.	3.8				
Row Spacing (In.)		30	30	30	40		32	32	28
Rows/Plot		3	3	4	4		1	3	3
Reps.		4	4	3	3		4	4	4
			YIELD RANK						
Calland	12	9	4	12	14	7	14	8	3
Wayne	13	3	14	14	12	10	2	12	5
SL11	14	10	11	13	10	11	4	5	7
Williams	5	4	6	10	4	3	9	6	1
Woodworth	1	1	8	8	3	2	8	1	6
A72-507	9	10	12	1	8	4	5	4	11
A72-509	7	4	6	4	11	11	6	9	14
A72-510	11	12	9	3	13	8	6	11	13
A72-513	9	13	13	1	6	14	10	13	8
A72-520	4	2	5	5	9	4	1	7	10
A72-525	6	6	10	5	5	13	11	14	12
C1508	2	7	2	8	2	9	13	3	9
C1515	8	14	1	11	7	6	11	10	4
L70T-543	2	8	3	7	1	1	3	2	2

* Not included in the mean

Indiana					Ky.	Illinois					
Bluff-ton	Lafay-ette	Green-field	Sulli-van	Evans-ville	Hen-erson	Urbana	Gir-ard	Browns-town	Belle-ville	Eldor-ado	Carbon-dale
					1974 YIELD (bu/a)						
											*
40.8	39.3	39.9	36.0	44.4	58.6	38.3	45.7	30.2	42.1	51.0	26.2
45.1	41.8	36.4	36.3	40.8	48.0	41.8	48.2	33.1	41.3	47.0	22.8
43.9	42.4	41.3	35.9	40.7	49.9	40.5	47.8	32.2	41.0	47.4	25.3
44.5	41.9	32.8	39.0	43.7	50.1	41.6	50.5	36.2	45.4	51.7	34.0
44.6	46.1	32.4	38.9	44.2	54.5	43.6	46.1	37.6	46.5	48.0	28.3
41.1	45.6	34.4	42.1	38.1	53.5	43.5	50.5	39.1	46.0	47.5	24.6
37.9	45.2	34.7	34.6	35.0	49.4	43.9	46.1	34.4	45.4	44.9	26.8
45.5	44.8	33.0	34.4	37.8	56.5	44.1	46.1	36.7	45.4	46.4	19.9
43.0	45.2	26.5	34.6	43.0	47.3	43.7	49.0	34.0	38.6	43.6	22.1
44.2	44.3	28.8	39.1	48.6	56.6	43.9	50.0	35.2	43.2	50.6	29.3
40.4	46.9	33.4	32.6	35.4	57.6	50.2	43.4	32.2	44.4	43.2	18.4
41.6	47.0	39.5	35.0	42.1	54.6	46.8	47.6	35.0	47.7	48.2	27.3
41.1	45.6	42.2	38.5	43.4	54.9	44.3	48.0	34.7	44.4	48.4	19.6
45.0	49.1	46.3	40.6	48.0	61.5	47.0	46.1	36.6	46.0	42.9	32.9
12.8	3.7	7.5	9.7	12.2		3.8	5.2	7.2	6.6	6.4	
n.s.	2.8	4.5	n.s.	n.s.		2.8	4.2	4.2	6.3	5.1	
30	30	30	30	30	30	30	36	30	30	30	30
4	4	4	4	4	3	4	4	4	4	4	4
3	3	3	3	3	4	3	3	3	3	3	3
					YIELD RANK						
											*
12	14	4	8	3	2	14	13	14	11	2	7
2	13	6	7	9	13	11	5	11	12	9	10
7	11	3	9	10	11	13	7	12	13	8	8
5	12	11	4	5	10	12	1	5	5	1	1
4	4	12	5	4	8	9	9	2	2	6	4
10	5	8	1	11	9	10	1	1	3	7	9
14	7	7	11	14	12	6	9	9	5	11	6
1	9	10	13	12	5	5	9	3	5	10	12
8	7	14	11	7	14	8	4	10	14	12	11
6	10	13	3	1	4	6	3	6	10	3	3
13	3	9	14	13	3	1	14	12	8	13	14
9	2	5	10	8	7	3	8	7	1	5	5
10	5	2	6	6	6	4	6	8	8	4	13
3	1	1	2	2	1	2	9	4	3	14	2

Strain	Iowa Stuart	Iowa Ottumwa	Missouri Edina	Missouri Appleton City	S.D. Elk Point	Neb. Mead I	Kansas Pow-hattan	Kansas Man-hattan I	Kansas Ot-tawa
				1974 YIELD (bu/a)					
Calland	30.8	42.4	31.7	30.0	25.3	36.0	27.5	43.5	31.3
Wayne	34.0	45.7	32.2	24.6	28.5	39.6	25.9	36.8	24.2
SL11	33.5	40.7	32.8	26.1	23.1	31.3	25.2	40.8	25.0
Williams	35.8	44.0	32.5	31.8	23.2	34.4	30.1	49.4	32.4
Woodworth	37.6	45.8	29.8	31.4	26.7	41.2	28.7	47.8	29.2
A72-507	36.5	46.3	27.0	32.2	31.2	35.9	29.0	47.3	28.1
A72-509	36.7	44.5	29.7	27.4	27.6	35.2	31.5	45.0	29.3
A72-510	37.5	46.4	25.5	26.8	25.6	39.7	28.3	47.2	27.0
A72-513	31.0	47.7	25.4	20.7	28.0	42.5	22.8	44.2	20.1
A72-520	36.3	43.3	30.8	29.4	26.9	39.9	29.3	44.6	24.8
A72-525	36.1	48.7	25.3	21.9	28.2	41.9	25.4	42.8	22.6
C1508	34.2	44.1	27.6	27.4	22.1	35.4	25.6	43.8	21.7
C1515	36.8	45.0	29.8	23.6	23.9	38.5	22.4	50.1	25.0
L70T-543	37.5	46.8	33.4	24.8	23.2	40.8	25.3	50.1	20.8
C.V. (%)	7.6	6.8	10.0	13.0	14.5	12.7	6.1	10.1	7.9
L.S.D. (5%)	3.4	3.9	5.2	6.2	n.s.	3.1	2.7	n.s.	3.4
Row Spacing(in.)	27	27	30	30	30	30	30	30	30
Rows/Plot	4	4	2	1	4	4	4	4	4
Reps.	4	4	3	3	3	3	3	3	3
				YIELD RANK					
Calland	14	13	5	4	9	9	7	11	2
Wayne	11	7	4	11	2	7	8	14	10
SL11	12	14	2	9	13	14	12	13	7
Williams	9	11	3	2	11	13	2	3	1
Woodworth	1	6	7	3	7	3	5	4	4
A72-507	6	5	11	1	1	10	4	5	5
A72-509	5	9	9	6	5	12	1	7	3
A72-510	2	4	12	8	8	6	6	6	6
A72-513	13	2	13	14	4	1	13	9	14
A72-520	7	12	6	5	6	5	3	8	9
A72-525	8	1	14	13	3	2	10	12	11
C1508	10	10	10	6	14	11	9	10	12
C1515	4	8	7	12	10	8	14	1	7
L70T-543	2	3	1	10	11	4	11	1	13

Strain	East Coast Mean	Penn. Landisville	N.J. Adelphia I	Del. Georgetown I	Md. Beltsville	Central Mean	Ohio Hoytville	Ohio Wooster	Ohio Columbus
	9 Tests	1973-74, 2-YEAR MEAN YIELD				45 Tests			
Calland	44.2	47.5	40.1		48.0	41.6	25.0	39.0	41.0
Wayne	44.8	50.4	38.7		46.2	41.0	31.4	39.5	40.7
SL11	44.0	46.0	38.2		47.1	41.3	31.5	40.7	36.0
Williams	46.2	49.6	39.4		51.7	43.7	29.0	39.9	42.3
Woodworth	46.8	52.8	40.1		50.8	43.4	27.6	41.4	41.0
C1508	47.0	47.8	43.8		52.3	41.4	25.0	39.9	36.8
			YIELD RANK						
Calland	5	5	2		4	3	5	6	2
Wayne	4	2	5		6	6	2	5	4
SL11	6	6	6		5	5	1	2	6
Williams	3	3	4		2	1	3	3	1
Woodworth	2	1	2		3	2	4	1	2
C1508	1	4	1		1	4	5	3	5
	23 Tests	1970-74, 5-YEAR MEAN YIELD				109 Tests			
Calland	42.9	46.9	38.3			43.8	26.1		48.1
Wayne	40.5	47.2	34.9			43.3	31.3		46.7
Williams	43.4	46.8	38.7			45.5	31.3		49.4
Woodworth	42.0	47.8	36.1			45.4	28.8		44.7
			YIELD RANK						
Calland	2	3	2			3	4		2
Wayne	4	2	4			4	1		3
Williams	1	4	1			1	1		1
Woodworth	3	1	3			2	3		4
	3 Tests	MATURITY (relative date)				20 Tests			
Calland	+2.3	*	+4	+1	+2	+3.8	+6	+5	+4
Wayne	†9-30.0		9-29	9-26	10-5	9-31.0	9-24	10-5	10-6
SL11	+1		+1	+1	+1	+0.4	0	-2	0
Williams	+2.3		+4	+1	+2	+4.6	+8	+5	+4
Woodworth	+0.7		0	+1	+1	+0.7	+1	-2	+4
A72-507	+2.0		+4	+1	+1	+2.6	+1	-4	-1
A72-509	+1.3		+3	0	+1	+2.2	0	-4	0
A72-510	+1.3		+4	-1	+1	+2.2	+1	-4	+4
A72-513	0		-1	0	+1	-1.4	0	-8	+3
A72-520	+2.7		+4	+2	+2	+3.8	+8	+5	+4
A72-525	0		0	0	0	-2.1	0	-8	-1
C1508	+1.3		+2	+1	+1	+1.1	+3	-4	-1
C1515	+1.3		+3	0	+1	+0.2	+1	-4	+1
L70T-543	0		-1	0	+1	-2.3	0	-8	+6
Beeson (II)	-4.5		-3		-6	-4.3	+1	-8	-5
Cutler 71 (IV)	+4.7		+10	+1	+3	+7.3			+9
Date Planted	5-31	5-21	5-30	5-25	6-7	5-29	5-28	5-17	5-17
†Days to Mat.	122		122	124	120	125	119	141	142

Strain	Indiana Bluffton	Indiana Lafayette	Indiana Greenfield	Indiana Sullivan	Indiana Evansville	Ky. Henderson	Illinois Urbana	Illinois Girard	Illinois Brownstown	Illinois Belleville
1973-74, 2-YEAR MEAN YIELD										
Calland	46.2	44.2	47.0		44.3	58.9	46.2	42.2		48.6
Wayne	49.6	47.9	41.6		40.1	50.0	46.6	46.8		49.6
SL11	51.0	46.5	45.7		44.2	52.4	48.6	46.0		49.8
Williams	50.4	49.4	41.4		43.3	52.0	49.2	48.0		52.5
Woodworth	48.5	50.5	42.1		41.9	55.0	49.2	45.0		52.0
C1508	49.6	49.0	43.9		41.1	54.8	52.0	44.0		52.0
YIELD RANK										
Calland	6	6	1		1	1	6	6		6
Wayne	3	4	5		6	6	5	2		5
SL11	1	5	2		2	4	4	3		4
Williams	2	2	6		3	5	2	1		1
Woodworth	5	1	4		4	2	2	4		2
C1508	3	3	3		5	3	1	5		2
1970-74, 5-YEAR MEAN YIELD										
Calland	48.7	44.1	43.6		43.1	54.8	50.3	43.7		48.0[a]
Wayne	49.3	47.4	38.7		41.4	50.1	48.8	48.8		47.7
Williams	49.5	48.9	40.5		44.2	53.5	53.0	48.7		51.2
Woodworth	49.6	49.5	40.6		40.4	52.9	53.5	47.5		50.3
YIELD RANK										
Calland	4	4	1		2	1	3	4		3
Wayne	3	3	4		3	4	4	1		4
Williams	2	2	3		1	2	2	2		1
Woodworth	1	1	2		4	3	1	3		2
MATURITY (relative date)										
Calland	+1	+2	+4	+1	+6	*	+1	+3	+7	+7
Wayne	10-6	10-4	10-3	10-7	10-2		10-3	9-27	10-10	10-3
SL11	+1	0	0	+1	+3		0	0	+1	0
Williams	+1	+3	+5	+3	+6		+3	+4	+6	+6
Woodworth	+1	0	+2	-1	+3		0	+1	0	+2
A72-507	+1	+2	+2	+2	+4		+1	+4	+5	+3
A72-509	-1	+2	+3	0	+5		+1	+4	+4	+1
A72-510	+1	+3	+2	0	+4		+2	+4	+4	+2
A72-513	0	-1	-1	-3	+1		-2	-2	0	0
A72-520	+2	+3	+3	+2	+5		+1	+5	+1	+4
A72-525	0	-1	0	-3	-4		-2	-3	-2	-1
C1508	+3	+1	+3	-1	+4		0	+1	0	+4
C1515	+1	+1	+1	0	+2		-1	-2	+3	+4
L70T-543	-1	0	0	-1	-5		-1	-4	-1	-1
Beeson (II)	-1	0	0	-4			-2	-7	-1	+2
Cutler 71 (IV)		+3		+4			+3	+8	+8	+8
Date Planted	5-31	6-11	5-28	6-17	6-18	5-21	6-6	5-20	7-2	6-11
† Days to Mat.	128	115	128	112	106		119	130	100	114

[a] Trenton in 1970

Illinois		Iowa		Missouri		S.D.	Neb.	Kansas		
Eldor-ado	Carbon-dale	Stuart	Ottum-wa	Edina	Appleton City	Elk Point	Mead I	Pow-hattan	Man-hattan I	Otta-wa
1972-1974, 2-YEAR MEAN YIELD										
42.2	32.2	33.3	44.4			32.8	41.9	33.6	49.6	29.4
38.6	25.8	36.9	44.6			34.9	40.7	34.8	42.9	28.6
37.9	29.4	36.6	44.0			29.6	36.0	34.4	45.8	27.0
44.4	35.4	38.0	48.2			31.3	40.2	39.4	54.6	31.7
38.6	29.2	39.4	47.6			35.7	45.2	36.8	52.0	30.4
38.0	27.4	37.5	45.6			30.4	40.2	35.4	48.0	26.8
YIELD RANK										
2	2	6	5			3	2	6	3	3
3	6	4	4			2	3	4	6	4
6	3	5	6			6	6	5	5	5
1	1	2	1			4	4	1	1	1
3	4	1	2			1	1	2	2	2
5	5	3	3			5	4	3	4	6
1970-74, 5-YEAR MEAN YIELD										
48.9	41.3	36.7	44.9			32.7	43.9	39.4	64.0	36.9
43.9	35.1	37.9	46.2			34.1	45.2	38.3	56.6	37.8
50.3	43.9	39.6	48.3			30.3	42.1	42.3	64.4	39.6
46.2	39.0	40.1	48.6			35.7	46.0	40.3	64.7	39.2
YIELD RANK										
2	2	4	4			3	3	3	3	4
4	4	3	3			2	2	4	4	3
1	1	2	2			4	4	1	2	1
3	3	1	1			1	1	2	1	2
MATURITY (relative date)										
			*	*	*					
+8	+4	+1				+3	+4	+5	-1	+4
9-21	9-18	9-30				10-10	10-6	9-21	9-24	9-30
+2	-1	+1				+2	-2	+3	-1	+1
+7	+6	+3				+5	+4	+4	+5	+5
+2	+1	+1				+3	-4	+2	-1	-1
+5	+2	+3				+3	+6	+4	+4	+4
+3	+2	+3				+4	+6	+3	+5	+2
+4	+1	+3				+2	+5	+3	+2	+1
0	-3	-5				-2	-4	-1	-2	+2
+9	+5	+3				+3	+5	+5	+1	+1
-1	-3	-4				-1	-7	+1	-2	0
+2	0	0				+1	-1	+5	0	+2
+1	-3	0				0	-2	+3	-2	+1
-2	-5	-3				-2	-7	-7	-2	-2
-3		-4				-4	-8	-12	-10	-12
+12		+6					+8	+11	+8	+7
5-28	6-4	5-24	6-4	6-18	5-29	5-23	5-15	5-14	5-7	5-21
116	106	129				140	144	130	140	132

Strain	East Coast Mean	Penn. Landisville	N.J. Adelphia I	Del. Georgetown I	Md. Beltsville	Central Mean	Ohio Hoytville	Ohio Wooster	Ohio Columbus
	4 Tests		LODGING (score)			24 Tests			
Calland	2.6	2.9	2.3	2.3	2.7	2.2	1.0	1.0	1.0
Wayne	2.6	2.5	2.5	2.2	3.0	2.3	1.0	1.0	1.0
SL11	2.6	3.1	2.5	2.0	3.0	2.4	1.0	1.0	1.0
Williams	1.8	1.1	1.9	1.8	2.3	1.8	1.0	1.0	1.0
Woodworth	2.1	1.5	2.0	2.0	3.0	1.9	1.0	1.0	1.0
A72-507	2.0	1.8	2.1	1.7	2.3	2.0	1.0	1.0	1.0
A72-509	2.1	1.8	2.4	1.8	2.3	2.0	1.0	1.0	1.0
A72-510	1.8	1.3	2.0	2.0	2.0	1.9	1.0	1.0	1.0
A72-513	1.6	1.1	1.8	1.7	2.0	1.6	1.0	1.0	1.0
A72-520	2.6	2.8	2.5	2.3	2.7	2.3	1.0	1.0	1.0
A72-525	2.4	2.1	2.6	2.0	2.7	2.1	1.0	1.0	1.0
C1508	1.7	1.0	1.8	1.7	2.3	1.6	1.0	1.0	1.0
C1515	1.3	1.2	1.3	1.3	1.3	1.5	1.0	1.0	1.0
L70T-543	2.3	2.0	2.4	1.8	3.0	2.3	1.0	1.0	1.0
	4 Tests		PLANT HEIGHT (inches)			24 Tests			
Calland	38	35	38	41	39	35	26	31	29
Wayne	37	37	38	35	37	34	27	31	27
SL11	38	36	40	37	38	35	28	30	26
Williams	36	34	38	37	37	35	27	30	27
Woodworth	35	33	36	35	37	34	27	31	29
A72-507	36	33	38	36	36	33	27	29	21
A72-509	35	35	36	35	34	32	26	25	20
A72-510	35	34	38	33	34	32	27	27	22
A72-513	32	30	35	30	33	29	22	23	25
A72-520	39	38	39	39	40	35	28	31	28
A72-525	34	33	34	33	35	29	24	24	23
C1508	38	38	39	37	40	34	27	30	24
C1515	37	37	38	36	38	33	25	27	26
L70T-543	39	37	40	38	40	36	26	29	28

Indiana					Ky.	Illinois					
Bluff-ton	Lafay-ette	Green-field	Sulli-van	Evans-ville	Hender-son	Ur-bana	Gir-ard	Browns-town	Belle-ville	Eldor-ado	Carbon-dale
					LODGING (score)						
3.2	3.3	1.7	2.5	3.5	4.5	3.6	1.8	3.3	2.2	1.7	1.0
3.0	3.5	2.0	2.3	2.7	5.0	3.0	2.9	2.8	1.8	2.6	1.0
3.5	3.3	2.3	2.5	3.5	5.0	2.9	2.9	3.2	2.2	2.7	1.0
1.7	2.7	1.2	2.7	2.0	4.4	2.1	1.7	1.9	1.8	1.5	1.0
2.7	2.2	1.5	2.3	2.2	4.8	2.9	2.0	1.4	1.4	1.6	1.0
2.3	2.0	1.0	2.2	1.3	5.0	2.4	3.3	2.0	1.9	2.7	1.0
2.0	2.2	1.2	2.0	1.7	5.0	2.2	3.2	1.6	1.7	2.6	1.0
2.7	1.5	1.0	1.5	1.3	5.0	2.0	3.5	1.7	1.9	2.4	1.0
2.2	1.2	1.2	1.2	1.7	5.0	1.3	1.6	1.5	1.4	1.2	1.0
3.5	2.8	1.5	2.2	4.3	4.9	2.8	3.0	3.0	1.7	2.8	1.0
3.8	1.7	1.8	1.8	2.0	4.6	1.9	2.7	2.3	2.3	2.1	1.0
1.8	1.2	1.0	1.3	1.2	4.4	2.0	1.4	2.0	1.2	1.1	1.0
2.0	1.5	1.2	1.8	1.8	3.9	1.7	1.3	1.6	1.0	1.0	1.0
3.2	2.7	2.8	2.3	3.2	4.5	2.8	2.6	2.7	1.9	2.6	1.0
					PLANT HEIGHT (inches)						
33	39	34	38	39	43	38	42	34	38	38	22
31	38	29	35	34	50	40	41	33	34	36	22
30	39	31	37	36	50	41	42	36	35	38	23
32	41	31	37	34	48	43	42	33	37	38	21
30	37	29	36	32	48	40	41	31	34	35	22
28	37	24	34	30	47	40	40	30	32	35	18
24	35	26	32	32	47	38	38	31	32	33	19
29	35	26	30	29	46	38	38	32	31	33	18
26	35	22	31	30	44	35	35	26	28	31	15
31	41	28	36	38	52	41	42	36	33	37	21
27	34	25	31	29	43	35	35	27	28	30	17
29	38	30	36	33	49	38	40	37	34	34	19
27	38	21	39	35	49	38	36	36	35	34	17
31	43	37	39	41	48	42	42	38	36	35	21

Strain	Iowa Stuart	Iowa Ottumwa	Missouri Edina	Missouri Appleton City	S.D. Elk Point	Neb. Mead I	Kansas Powhattan	Kansas Manhattan	Kansas Ottawa
				LODGING (score)					
Calland	2.3	3.0	1.1	1.5	1.1	3.3	1.0	3.7	1.0
Wayne	2.4	3.5	1.0	1.5	1.5	3.3	1.0	4.1	1.0
SL11	2.6	3.8	1.3	1.7	1.7	2.8	1.0	3.8	1.0
Williams	1.9	3.3	1.0	1.0	1.2	2.7	1.0	2.1	1.0
Woodworth	2.2	3.3	1.0	1.5	1.0	2.2	1.0	2.8	1.0
A72-507	2.2	3.3	1.0	1.0	1.5	2.2	1.0	3.6	1.0
A72-509	2.5	3.3	1.0	1.4	1.5	2.5	1.0	3.5	1.0
A72-510	2.4	3.2	1.0	1.5	1.5	2.2	1.0	3.4	1.0
A72-513	1.8	2.6	1.0	1.0	1.0	2.3	1.0	2.7	1.0
A72-520	2.2	3.8	1.0	1.7	1.0	2.8	1.0	4.0	1.0
A72-525	2.7	3.7	1.1	1.7	1.5	3.8	1.0	4.0	1.0
C1508	2.4	2.9	1.0	1.1	1.1	2.8	1.0	2.3	1.0
C1515	2.2	2.2	1.1	1.3	1.5	1.8	1.0	1.9	1.0
L70T-543	2.6	2.9	1.5	1.5	1.5	3.8	1.0	4.0	1.0
				PLANT HEIGHT (inches)					
Calland	34	42	28	26	37	45	28	43	27
Wayne	34	42	33	25	36	41	29	44	26
SL11	36	42	31	26	36	44	28	45	26
Williams	35	43	31	27	36	48	28	48	26
Woodworth	36	41	30	26	37	43	26	43	28
A72-507	36	42	29	25	37	45	31	46	28
A72-509	36	43	29	24	38	41	30	46	27
A72-510	35	43	24	24	32	44	29	45	27
A72-513	30	41	24	22	31	40	24	40	21
A72-520	36	44	34	27	38	47	30	43	28
A72-525	31	37	26	22	34	38	27	34	26
C1508	32	42	30	25	38	47	31	45	27
C1515	32	43	31	24	31	44	28	43	24
L70T-543	36	47	33	24	37	48	32	39	27

Strain	East Coast Mean	Penn. Landisville	N.J. Adelphia I	Del. Georgetown I	Md. Beltsville	Central Mean	Ohio Hoytville	Ohio Wooster	Ohio Columbus
	4 Tests	SEED QUALITY (score)				23 Tests			
Calland	2.6	2.2	2.8	2.3	3.0	2.0	1.5	1.0	1.7
Wayne	2.6	2.6	2.5	2.5	3.0	2.0	1.0	1.0	1.7
SL11	2.7	2.6	2.5	2.8	3.0	1.9	1.0	1.0	1.5
Williams	2.0	1.9	2.0	2.0	2.0	1.6	1.0	1.0	1.0
Woodworth	2.5	2.7	2.8	2.5	2.0	1.7	1.0	1.0	2.5
A72-507	2.9	3.3	2.5	2.7	3.0	2.3	1.0	1.0	2.7
A72-509	2.8	3.5	2.3	2.5	3.0	1.8	1.3	1.2	2.2
A72-510	2.9	3.6	2.5	2.5	3.0	2.3	1.0	1.5	3.0
A72-513	2.6	2.8	2.0	2.5	3.0	2.1	1.8	1.0	2.2
A72-520	2.4	2.4	1.8	2.5	3.0	2.0	1.0	1.0	1.7
A72-525	2.5	2.6	2.3	2.0	3.0	2.1	1.3	1.0	3.0
C1508	2.6	2.9	2.0	2.7	3.0	1.9	1.0	1.0	1.7
C1515	2.6	3.1	2.3	2.2	3.0	1.9	1.0	1.0	1.5
L70T-543	2.7	3.2	2.0	2.7	3.0	2.0	1.0	1.0	2.5
	4 Tests	SEED SIZE (g/100)				21 Tests			
Calland	21.6	21.3	22.2	21.2	21.9	18.2	21.6	18.6	22.5
Wayne	20.3	20.0	20.9	19.5	20.8	17.2	19.1	18.6	20.2
SL11	21.5	22.2	21.4	21.0	21.5	17.5	19.1	19.1	20.1
Williams	21.6	21.8	22.6	19.6	22.6	17.5	18.0	18.3	21.1
Woodworth	18.8	19.1	19.2	17.3	19.5	16.0	18.2	16.8	19.2
A72-507	21.3	23.0	21.3	20.9	20.1	17.8	19.7	19.4	20.2
A72-509	20.8	21.7	21.1	20.6	20.0	17.7	19.6	18.9	20.1
A72-510	21.2	23.0	22.4	19.5	19.9	17.7	19.6	18.9	20.3
A72-513	19.3	18.9	20.1	18.5	19.6	16.6	19.0	16.2	19.0
A72-520	19.1	19.6	18.8	18.2	19.7	16.9	18.4	17.1	20.1
A72-525	18.2	18.1	19.3	16.2	19.3	16.8	19.0	18.0	20.1
C1508	20.7	21.3	21.7	19.4	20.3	17.5	18.6	17.6	19.7
C1515	22.4	23.5	23.7	20.7	21.8	18.6	21.0	19.3	21.0
L70T-543	22.4	21.3	25.0	20.5	22.9	18.5	19.3	19.5	21.2

Strain	Indiana					Ky.	Illinois			
	Bluff-ton	Lafay-ette	Green-field	Sulli-van	Evans-ville	Hen-derson	Ur-bana	Gir-ard	Browns-town	Belle-ville
					SEED QUALITY (score)					
Calland	1.5	1.5	1.5	1.5	1.5	4.0	2.3	2.5	1.7	2.5
Wayne	1.0	1.0	1.5	2.0	2.0	5.0	2.0	2.0	1.8	2.0
SL11	1.0	1.0	1.5	2.0	2.0	4.0	1.7	2.0	1.7	2.3
Williams	1.0	1.5	1.5	1.5	1.5	3.0	1.8	1.3	1.3	1.5
Woodworth	1.0	1.0	1.0	1.5	1.5	5.0	1.0	1.7	1.2	1.8
A72-507	1.5	1.5	1.5	2.0	2.0	5.0	2.0	2.5	2.0	2.8
A72-509	1.5	1.5	1.5	1.5	2.0	5.0	2.0	2.2	1.7	2.5
A72-510	1.5	1.5	1.5	2.0	2.5	5.0	1.8	2.0	1.5	2.5
A72-513	1.5	1.0	1.5	1.5	1.5	5.0	1.5	2.5	1.7	2.0
A72-520	1.0	1.5	1.5	1.5	1.5	5.0	2.0	1.5	1.8	2.0
A72-525	1.5	1.0	2.0	2.0	1.5	4.0	1.2	3.2	1.5	2.3
C1508	1.0	1.5	1.0	1.5	1.5	4.0	2.0	2.2	1.7	2.0
C1515	1.5	1.5	1.0	1.5	1.5	5.0	1.8	2.0	1.7	2.0
L70T-543	1.5	1.5	1.5	1.5	1.5	4.0	1.5	3.5	1.3	2.3
					SEED SIZE (g/100)					
Calland	19.4	15.6	20.2	15.0	18.1	21.0	15.6	18.5	15.5	17.1
Wayne	18.4	15.9	18.6	13.3	15.7	20.0	15.5	19.1	14.0	16.9
SL11	19.4	16.0	19.3	14.7	17.0	19.8	15.4	19.4	14.3	18.2
Williams	17.6	15.7	17.6	14.9	17.8	21.3	14.9	18.8	15.2	17.5
Woodworth	17.6	14.5	16.6	13.2	14.2	18.0	14.5	17.7	12.9	15.7
A72-507	19.9	15.1	19.3	14.4	16.3	19.0	15.8	22.0	14.2	17.4
A72-509	20.1	15.6	18.5	14.4	16.2	19.6	15.8	20.4	14.6	17.8
A72-510	20.8	15.6	19.0	13.2	15.9	18.4	16.0	20.5	14.2	18.4
A72-513	20.2	15.8	17.4	12.5	15.1	19.1	15.3	17.9	14.0	17.6
A72-520	18.4	15.0	18.0	14.0	17.4	20.0	15.3	19.0	14.4	16.6
A72-525	19.5	14.1	17.9	11.8	14.2	15.9	14.9	18.0	13.1	16.7
C1508	19.6	16.5	19.1	13.7	15.9	20.1	15.0	20.6	14.3	18.4
C1515	20.2	17.1	20.4	15.6	18.2	20.2	17.2	20.9	16.2	17.5
L70T-543	21.8	17.7	21.2	15.1	16.9	21.8	18.4	20.6	14.5	17.4

Illinois		Iowa		Missouri		S.D.	Neb.	Kansas		
Eldor-ado	Carbon-dale	Stuart	Ottum-wa	Edina	Appleton City	Elk Point	Mead I	Pow-hattan	Man-hattan I	Ot-tawa
				SEED QUALITY (score)						
2.7	2.0		2.4	3.0	2.7	1.2	2.0	1.9	1.9	1.9
2.8	2.0		1.5	2.7	3.2	1.2	2.3	1.7	2.3	2.2
2.8	2.0		2.0	2.2	3.0	1.2	2.0	1.7	2.0	2.0
1.5	2.0		2.0	2.3	2.3	1.2	2.0	1.5	1.6	1.7
1.8	2.0		1.3	2.6	2.8	1.5	1.7	1.3	1.7	1.7
2.5	3.0		2.0	3.0	3.0	1.5	3.0	2.5	2.6	3.1
2.5	3.0		2.0	3.0	3.0	1.5	3.0	2.0	2.7	3.4
2.5	2.0		2.0	3.0	4.0	1.5	3.0	2.1	2.5	3.1
3.0	3.0		1.8	2.7	3.5	1.7	2.0	1.7	2.0	2.7
2.2	3.0		1.9	3.0	3.4	2.0	1.7	1.7	2.2	2.5
2.8	3.0		1.3	1.8	3.5	1.2	1.7	1.9	2.2	3.4
2.7	3.0		1.3	2.2	3.5	1.5	2.0	1.8	1.5	2.5
2.5	2.0		1.5	3.0	3.0	1.5	2.0	1.6	2.1	2.0
3.5	2.0		1.2	2.2	3.2	1.2	1.3	1.7	2.0	2.5
				SEED SIZE (g/100)						
17.8	16.6		18.4			16.0	17.7	18.5	15.9	23.4
16.6	15.9		17.0			15.0	17.4	16.3	16.2	22.1
17.3	15.4		17.9			13.9	17.3	16.5	15.8	21.9
17.3	15.5		17.5			15.4	16.5	17.4	16.4	22.9
15.4	14.9		15.3			13.5	17.2	15.0	15.3	20.3
17.8	14.8		17.8			15.6	16.0	18.3	16.8	23.0
17.5	16.5		16.7			15.1	17.0	17.7	16.7	23.4
16.0	16.9		17.5			15.9	17.2	17.5	16.3	24.1
16.5	13.8		16.2			15.1	16.9	15.4	15.1	19.6
15.9	16.0		16.8			14.8	16.5	16.6	15.1	20.2
17.4	16.4		15.2			16.9	17.6	16.5	18.0	21.4
19.0	16.6		18.3			13.9	16.4	16.3	17.7	20.0
18.3	16.2		19.8			16.2	19.2	17.1	16.9	22.2
19.1	15.8		19.8			17.1	17.7	15.8	17.5	20.2

Strain	East Coast Mean	N.J. Adelphia I	Md. Beltsville	Central Mean	Ohio Columbus	Indiana Lafayette	Indiana Sullivan	Ky. Henderson
	2 Tests			13 Tests		PROTEIN (%)		
Calland	42.8	42.8	42.9	40.9	42.3	41.8	41.6	42.3
Wayne	43.9	43.8	44.0	41.6	43.3	41.3	41.4	45.9
SL11	44.4	44.5	44.4	42.5	43.7	42.6	43.4	44.9
Williams	43.0	42.4	43.6	41.3	43.1	41.8	42.0	42.7
Woodworth	41.9	41.2	42.6	40.4	43.6	41.1	40.6	44.3
A72-507	41.7	42.3	41.1	41.3	43.4	41.7	40.8	46.1
A72-509	42.0	42.9	41.2	41.0	42.6	42.0	40.2	44.7
A72-510	41.7	42.4	41.0	40.8	43.1	41.6	40.6	45.0
A72-513	42.8	42.7	42.8	41.3	43.7	41.4	41.1	44.3
A72-520	42.6	42.2	42.9	40.8	44.0	41.1	40.9	44.7
A72-525	41.2	40.6	41.7	39.7	43.3	38.8	40.7	41.7
C1508	41.4	41.6	41.1	40.1	42.5	40.1	39.1	41.1
C1515	43.2	43.1	43.3	41.2	45.4	41.6	40.8	43.2
L70T-543	42.1	41.5	42.7	40.3	42.3	40.2	40.8	42.9
	2 Tests			13 Tests		OIL (%)		
Calland	19.6	19.6	19.7	19.4	18.0	18.3	18.4	20.5
Wayne	20.4	20.5	20.4	19.9	19.0	18.9	19.2	23.1
SL11	20.4	19.6	21.2	19.3	18.4	18.2	18.4	23.3
Williams	21.6	21.6	21.5	20.0	19.2	18.1	19.9	22.0
Woodworth	20.6	20.8	20.4	20.4	21.3	18.7	19.9	20.9
A72-507	20.9	20.7	21.1	20.6	21.0	18.8	19.9	26.5
A72-509	21.0	21.1	20.9	20.5	19.9	19.0	19.7	25.2
A72-510	21.3	20.6	22.0	21.0	20.6	18.8	19.9	26.1
A72-513	21.0	21.7	20.3	20.5	18.8	19.6	19.2	23.6
A72-520	20.3	20.5	20.1	20.0	18.6	18.1	19.0	22.0
A72-525	20.4	20.3	20.4	20.5	20.1	19.7	18.5	23.5
C1508	20.1	20.1	20.1	20.4	20.3	19.1	20.0	23.1
C1515	20.2	20.5	19.9	20.4	20.0	20.0	19.8	23.8
L70T-543	22.2	22.1	21.4	21.1	20.5	19.5	19.8	23.5

Illinois			Iowa	Mo.	S.D.	Neb.	Kansas	
Urbana	Belleville	Eldorado	Ottumwa	Edina	Elk Point	Mead I	Powhattan	Manhattan I
			PROTEIN (%)					
40.1	40.1	41.3	41.5	41.3	38.0	42.7	37.9	41.3
39.9	40.7	42.3	41.5	41.5	39.7	42.7	38.4	42.1
41.6	42.2	43.1	42.7	42.8	40.9	43.1	38.9	42.9
39.9	40.9	41.8	42.0	41.9	40.5	41.7	37.8	40.5
39.8	39.5	41.0	40.7	41.9	37.3	39.6	35.7	40.2
40.4	39.1	41.6	42.0	41.4	38.9	42.3	37.3	41.7
39.7	39.4	40.7	41.1	41.4	38.8	42.8	37.5	42.3
39.2	39.2	39.8	41.2	42.2	38.5	41.3	37.4	41.3
39.9	40.4	41.1	40.7	41.2	40.4	41.7	38.8	42.6
39.5	40.1	41.0	39.8	40.5	39.0	41.5	36.8	41.8
37.8	39.5	41.2	39.8	39.9	38.1	39.8	34.9	40.2
38.4	40.1	40.8	41.0	41.7	39.1	39.7	37.1	41.3
40.2	40.8	42.5	39.8	41.2	39.6	41.7	38.2	41.1
38.3	39.0	41.4	40.1	40.7	39.2	39.4	37.9	41.2
			OIL (%)					
19.0	20.6	20.6	18.9	18.9	20.2	18.0	21.7	19.3
19.9	21.2	21.0	18.1	18.5	19.4	18.7	21.0	20.1
19.5	19.8	20.8	17.6	18.1	19.0	16.9	20.5	20.4
19.6	20.1	21.4	17.9	18.6	19.2	19.6	21.7	22.1
19.7	20.5	22.3	18.7	18.8	20.1	19.5	23.5	21.3
19.1	21.4	21.0	18.4	20.0	19.9	18.5	22.2	20.8
19.9	21.6	22.2	19.2	19.1	20.6	18.2	21.7	20.3
21.0	23.5	22.6	19.3	19.0	20.1	19.0	21.9	21.1
20.5	23.1	21.7	19.7	18.4	20.0	19.7	22.5	20.0
20.0	21.0	21.7	19.2	18.3	20.0	18.3	22.8	20.5
21.0	21.1	21.2	18.7	19.8	19.8	18.6	23.3	21.3
20.2	19.9	21.9	18.8	19.4	20.3	19.0	22.2	20.8
20.4	20.2	21.0	18.1	18.8	21.0	19.4	22.2	21.1
21.4	22.5	22.9	19.6	19.9	20.0	20.3	22.3	21.6

Strain		Parentage	Line
1.	Wayne		
2.	Williams		
3.	A73-314	Amsoy x [Provar x (Magna x Disoy)]	F_5
4.	A73-316	" "	"
5.	A73-328	Hark x "	"
6.	A73-336	Amsoy x "	"
7.	A73-10079	Williams x Wirth	F_4
8.	A73-12013	L66L-144 (Wayne x L57-0034) x Dunn	"
9.	A73-15059	Beeson x L66-1359 (Wayne x L57-0034)	"
10.	A73-22015	M62-263 (Grant x M319W) x IVR Ex4426	"
11.	A73-23066	IVR Ex4428 x Md66-1258 (2nd cycle intermates)	"
12.	A73-23093	"	"
13.	A73-25084	M59-120 (II-54-240 x II-54-139) x IVR Ex4731	"
14.	L69U16-15-2	L15 (Wayne-Rps) x Amsoy	F_5
15.	L69U19-16-2	" x Beeson	"
16.	L69U37-17-5	Calland x Corsoy	"
17.	L69U40-19-1	" x Amsoy	"
18.	L69U72-3-4	Cutler x A100	"
19.	L69U72-7-1	"	"
20.	L69U84-5-4	" x Beeson	"
21.	L70-2345	Lindarin-Rps rxp x Custer	F_4
22.	L70D6-11-3	L63-1212 (Harosoy-ln) x C1426 (C1253 x Kent)	F_5
23.	L70D6-11-5	"	"
24.	L70U49-1-3	C1457 (C1266R x C1253) x L15 (Wayne-Rps)	"
25.	L71-2435	Corsoy x Wayne-I r Rpm Rps	"
26.	L71-2954	"	"
27.	L71-3008	"	"
28.	L71-3067	Cutler x "	"
29.	L71L-59	Wayne-Rps x Custer	"
30.	L71L-93	"	"
31.	L71L-282	Lindarin-Rps rxp x Custer	"
32.	L71L-458	Clark-I r Rps rxp x "	"
33.	L72A-80	Cutler x Beeson	F_6
34.	U10113	C1432 (C1253 x Kent) x C1430 (C1253 x Kent)	F_7
35.	U10132	Amsoy x Wayne	F_5
36.	U10339	C1430 x C1436 (C1253 x Kent)	F_7

This test has several strains outyielding the checks. Of these, A73-12013, and L70D6-11-5 matured three days earlier than Wayne and had good to excellent lodging resistance. Several other strain were three to four days later in maturity and higher yielding than Wayne and should merit further testing.

Disease Data

Strain	BP Urb. Ill. a	DM Sull. Ind. n	FE_2 Laf. Ind. n	BSR Laf. Ind. n %	BSR Urb. Ill. n %	BSR Ames Iowa n % stem	BSR Ames Iowa n % plants	PSB Sull. Ind. n	PS Laf. Ind. a	SMV Laf. Ind. n seed	SMV Man. Kan. n seed	PR Laf. Ind. a	PR Ames Iowa a
Wayne	1	4	2	65	50	58	90	4	3	5E	1.5	S	S
Williams	1	3	3	40	100	53	100	2	4	5E	1.6	S	S
A73-314	3	3	4	80	90	57	100	4	5	4M	1.2	S	S
A73-316	2	3	5	85	100	72	100	2	5	4M	1.1	S	S
A73-328	3	3	5	25	100	64	100	5	4	5E	1.5	S	S
A73-336	2	2	5	75	50	62	100	4	5	3M	1.3	S	S
A73-10079	3	4	4	70	70	75	100	3	4	5E	1.7	S	S
A73-12013	1	4	4	10	50	66	100	5	3	5E	1.7	S	S
A73-15059	1	4	2	40	50	69	100	2	5	4M	1.0	R	R
A73-22015	3	5	5	25	90	59	100	4	4	5M	1.4	S	S
A73-23066	1	4	5	30	50	58	100	5	5	5E	1.3	S	S
A73-23093	2	3	4	55	90	64	90	4	4	5E	1.6	S	S
A73-25084	2	4	3	75	60	79	100	5	3	5E	1.3	S	S
L69U16-15-2	2	5	3	50	50	68	100	2	5	5E	2.5	R	R
L69U19-16-2	1	3	2	45	10	63	100	3	5	4E	1.2	R	R
L69U37-17-5	2	3	5	40	40	50	100	4	5	5E	1.3	S	S
L69U40-19-1	1	2	5	60	100	67	90	4	4	5S	2.1	R	R
L69U72-3-4	1	4	4	70	90	66	100	4	4	5E	2.0	S	S
L69U72-7-1	2	4	5	70	70	66	100	4	3	4M	1.8	S	S
L69U84-5-4	2	3	5	65	80	71	100	3	4	5E	1.8	R	R
L70-2345	1	4	5	65	70	69	100	5	3	4M	1.2	R	R
L70D6-11-3	1	3	5	80	30	70	100	4	5	5E	1.3	R	R
L70D6-11-5	1	2	5	60	30	67	100	5	5	5E	1.6	R	H
L70U49-1-3	1	2	5	75	90	83	100	3	3	4E	1.3	R	R
L71-2435		3	5	45		72	100	5	5	5E	1.2	R	S
L71-2954	1	4	5	55	10	72	100	5	5	5E	1.3	R	H
L71-3008	2	4	5	25	50	68	100	5	5	5E	1.2	R	H
L71-3067	1	2	5	60	80	72	100	4	5	4E	1.3	H	H
L71L-59	2	1	5	60	70	76	100	3	4	4E	1.1	R	H
L71L-93	2	4	5	30	90	77	100	4	3	5E	1.2	R	R
L71L-282	2	4	5	20	20	77	100	5	5	5E	1.1	R	H
L71L-458	2	3	3	80	100	83	100	2	3	5M	1.1	R	R
L72A-80	2	4	1	75	80	60	100	3	1	5E	1.5	S	H
U10113	2	3	5	60	50	71	100	2	4	5E	1.9	R	R
U10132	2	3	4	40	100	77	100	4	5	4E	1.2	S	S
U10339	3	3	5	85	100	71	100	3	5	5E	2.0	R	R

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Descriptive and Other Data

Strain	Descriptive Code		Chlorosis Ames Iowa	Shattering Manhattan Kansas
Wayne	WTNBr	SYBl	5	2.0
Williams	WTNTn	SYBl	5	1.0
A73-314	PGNBr	SYIb+Y	3	5.0
A73-316	PGNBr	DYIb	3	2.0
A73-328	PGNTn	DYY	3	4.0
A73-336	PGNBr	SYBf	3	3.0
A73-10079	WTNBr	SYBl	3	1.0
A73-12013	PTNBr	DYBl	4	2.0
A73-15059	PGNTn	SYIb	5	1.0
A73-22015	PGNBr	DYBr	4	1.0
A73-23066	PGNBr	DYY	4	1.0
A73-23093	PTNBr	SYBl+Bf	2	1.0
A73-25084	WTNBr	DYBr	3	2.0
L69U16-15-2	WTNBr	SYG	2	1.0
L69U19-16-2	WT+GNBr	SYBl+Bf	3	1.0
L69U37-17-5	PGNB	DYBf	5	2.0
L69U40-19-1	PTNBr	DYG	2	2.0
L69U72-3-4	PTNBr	SYBl	1	1.0
L69U72-7-1	PGNBr	SYIb	3	1.0
L69U84-5-4	PGNBr	SYIb+Bf	3	2.0
L70-2345	PGNBr	DYBf	4	2.0
L70D6-11-3	PGNBr	DYIb	3	3.0
L70D6-11-5	PGNBr	S+DYBf	2	4.0
L70U49-1-3	WGNBr	SYBr	5	2.0
L71-2435	WTNBr	DYTn	5	4.0
L71-2954	PGNBr	DYY	5	2.0
L71-3008	PGNBr	SYY		4.0
L71-3067	PTNBr	SYBl	5	2.0
L71L-59	PGNBr	SYBf	3	2.0
L71L-93	P+WGNBr	SYBf+Bl		1.0
L71L-282	PGNBr	SYBf	4	5.0
L71L-458	PGNBr	SYBf	3	2.0
L72A-80	PTNBr	SYBl	2	1.0
U10113	PTNBr	DYBl	5	2.0
U10132	PGNBr	SYBf	4	3.0
U10339	PTNBr	SYBl	5	3.0

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
No. of Tests	11	11	9	10	11	10	10	4	4
Wayne	43.2	12	10-2	2.7	38	1.7	17.2	42.0	19.6
Williams	42.6	16	+4.7	2.0	40	1.7	17.3	41.0	20.0
A73-314	43.7	8	-1.4	1.6	35	1.8	20.2	40.0	20.8
A73-316	42.2	22	-2.1	2.7	37	1.8	21.5	41.1	21.0
A73-328	37.9	32	-4.7	1.6	28	2.1	20.1	42.1	20.2
A73-336	41.9	24	+0.8	3.4	39	2.0	20.2	41.1	20.8
A73-10079	43.4	10	+1.4	2.2	40	1.7	16.0	39.5	20.7
A73-12013	44.8	2	-3.3	2.2	36	1.7	17.2	40.2	20.8
A73-15059	40.6	26	+2.3	3.4	38	1.8	18.2	40.2	18.8
A73-22015	42.5	18	+1.2	2.9	35	1.5	16.5	40.7	18.9
A73-23066	43.6	9	-4.2	2.7	35	1.9	17.0	40.4	20.6
A73-23093	40.3	28	+4.0	3.4	40	2.0	15.8	42.4	18.8
A73-25084	43.9	6	-0.3	3.4	40	1.8	16.9	40.2	20.4
L69U16-15-2	42.6	16	+3.9	3.5	41	2.0	14.7	41.3	19.8
L69U19-16-2	44.1	5	+3.6	2.3	40	1.8	18.3	42.0	19.2
L69U37-17-5	45.3	1	+3.2	2.5	39	2.1	18.3	41.4	19.1
L69U40-19-1	44.4	4	+2.7	2.9	42	1.9	18.8	40.9	19.6
L69U72-3-4	43.8	7	+2.8	2.6	39	1.6	18.6	42.0	19.4
L69U72-7-1	42.8	14	+4.3	2.0	37	1.5	16.9	40.6	19.9
L69U84-5-4	40.6	26	+5.8	2.9	43	1.6	16.6	41.4	19.6
L70-2345	36.5	33	+3.1	3.5	41	1.7	13.6	38.6	19.6
L70D6-11-3	43.1	13	-0.8	1.6	40	1.7	19.1	44.0	18.8
L70D6-11-5	44.6	3	-2.8	1.5	37	2.0	19.9	42.2	19.8
L70U49-1-3	43.4	10	+5.1	2.7	43	1.7	16.0	41.4	19.2
L71-2435	42.3	19	-5.4	2.8	36	2.5	17.6	40.4	20.0
L71-2954	42.3	19	-3.2	2.9	40	1.6	18.3	42.1	18.9
L71-3008	42.7	15	-4.3	3.1	37	1.8	17.7	42.5	19.6
L71-3067	42.2	22	+3.4	2.3	41	1.7	19.0	43.0	19.0
L71L-59	32.2	36	+6.9	3.0	44	2.0	13.8	40.1	19.2
L71L-93	36.1	34	+4.2	3.1	43	1.9	14.8	38.0	19.6
L71L-282	38.6	30	-4.9	2.7	39	1.8	15.6	39.7	20.6
L71L-458	33.9	35	+5.7	2.1	42	1.8	15.1	38.7	18.9
L72A-80	40.1	29	+5.1	2.8	42	1.7	18.2	42.4	19.5
U10113	42.3	19	+3.4	2.2	38	1.7	18.8	41.8	20.7
U10132	41.2	25	+5.3	2.8	42	2.1	15.1	41.2	19.6
U10339	38.0	31	+4.8	2.7	39	1.8	16.1	42.8	20.1

Strain	Mean	Pennsylvania Landisville	Ohio Columbus	Indiana Lafayette	Indiana Sullivan	Illinois Urbana	Illinois Girard
	11 Tests		YIELD (bu/a)				
Wayne	43.2	51.6	61.6	48.9	35.8	45.1	51.1
Williams	42.6	60.2	46.6	42.3	34.3	41.0	52.5
A73-314	43.7	57.2	39.0	39.4	43.2	48.2	47.4
A73-316	42.2	54.4	48.2	42.3	39.9	44.4	44.9
A73-328	37.9	50.6	26.6	42.3	28.6	48.1	42.8
A73-336	41.9	55.4	36.6	48.3	35.7	46.6	47.8
A73-10079	43.4	58.4	44.9	43.4	37.7	46.2	49.9
A73-12013	44.8	61.1	47.8	47.0	37.0	52.1	49.1
A73-15059	40.6	54.1	28.5	46.2	32.3	42.2	47.3
A73-22015	42.5	54.5	44.5	38.0	31.6	46.4	50.6
A73-23066	43.6	56.7	36.6	49.4	35.2	55.1	44.8
A73-23093	40.3	49.4	44.6	39.9	35.8	42.3	47.0
A73-25084	43.9	52.2	47.9	51.1	38.0	51.5	47.5
L69U16-15-2	42.6	53.8	41.4	41.8	40.2	46.5	49.6
L69U19-16-2	44.1	59.6	41.8	45.9	39.8	48.1	53.1
L69U37-17-5	45.3	56.4	26.1	53.1	44.5	52.7	51.1
L69U40-19-1	44.4	58.4	47.1	39.8	37.6	45.0	53.2
L69U72-3-4	43.8	58.8	44.6	52.8	40.6	45.1	49.4
L69U72-7-1	42.8	63.0	35.6	43.2	36.4	49.1	53.1
L69U84-5-4	40.6	56.2	46.7	46.0	38.7	40.2	47.4
L70-2345	36.5	48.5	42.0	37.9	34.1	38.7	43.9
L70D6-11-3	43.1	49.4	40.1	48.0	38.4	49.6	46.9
L70D6-11-5	44.6	50.9	44.4	51.9	40.2	51.9	46.3
L70U49-1-3	43.4	59.4	48.5	46.2	41.3	45.1	49.5
L71-2435	42.3	56.0	38.4	41.1	38.0	50.2	42.3
L71-2954	42.3	55.8	32.3	46.2	36.3	49.6	45.7
L71-3008	42.7	51.8	35.4	47.7	36.2	48.6	45.2
L71-3067	42.2	52.9	44.0	40.6	39.4	46.2	49.6
L71L-59	32.2	42.0	38.8	31.8	35.3	28.8	43.2
L71L-93	36.1	46.8	36.9	37.3	34.2	35.3	43.4
L71L-282	38.6	44.0	32.1	44.3	40.1	45.4	42.9
L71L-458	33.9	46.7	33.2	31.2	31.0	33.3	46.5
L72A-80	40.1	48.8	40.2	38.6	36.0	42.5	50.0
U10113	42.3	53.2	36.1	40.0	38.4	41.8	50.7
U10132	41.2	52.6	34.1	46.8	41.7	40.8	49.3
U10339	38.0	48.2	45.2	33.6	34.7	36.3	45.9
C.V. (%)		7.8		9.9	9.9	5.2	3.5
L.S.D. (5%)		n.s.		8.7	n.s.	4.7	3.4
Row Spacing (In.)		30	28	30	30	30	36
Rows/Plot		3	3	3	3	4	4
Reps.		2	2	2	2	2	2

Iowa		South Dakota	Nebraska	Kansas
Stuart	Ottumwa	Elk Point	Mead I	Manhattan I
		YIELD (bu/a)		
42.6	42.1	22.7	33.0	40.8
44.0	41.6	25.4	38.0	43.0
45.1	40.6	28.4	45.8	46.7
42.5	44.4	22.6	35.9	44.9
36.1	47.3	18.7	37.1	38.3
42.7	39.5	28.4	41.6	38.6
45.9	44.2	31.1	38.0	37.4
43.1	44.8	27.9	38.3	44.5
42.9	45.1	26.0	35.0	46.5
43.4	43.0	28.2	40.0	47.7
41.4	45.4	29.5	41.5	44.1
43.6	38.6	24.4	37.2	40.4
43.8	44.3	26.3	34.5	46.0
42.1	44.3	19.5	41.2	48.7
41.8	44.3	29.1	37.6	44.4
43.6	50.7	28.9	42.6	48.4
46.1	49.4	26.3	39.2	45.8
40.8	48.1	24.2	39.8	37.2
41.8	41.0	29.3	40.6	37.3
40.9	43.2	19.0	36.2	32.3
36.6	38.7	22.6	24.8	34.1
35.8	48.2	26.4	39.9	51.0
41.4	44.8	30.3	41.2	46.9
44.8	42.9	22.1	33.6	44.2
39.4	46.9	30.3	43.4	38.9
41.0	46.4	22.9	45.0	44.3
38.8	49.1	28.1	44.5	43.8
45.1	43.6	25.1	41.6	35.8
31.7	33.5	15.7	21.8	31.1
37.2	39.0	17.1	32.9	36.6
35.4	38.6	24.3	35.4	42.2
37.9	37.9	12.6	29.0	33.4
39.7	42.3	23.4	37.6	41.9
42.9	44.3	26.8	42.8	47.8
42.4	42.0	21.2	35.9	46.1
39.5	33.9	20.7	38.4	41.1
7.4	6.7	14.5	9.6	10.3
6.2	5.9	7.3	7.1	8.8
27	27	30	30	30
4	4	4	4	4
2	2	2	2	2

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Strain	Mean	Penn. Landis-ville	Ohio Colum-bus	Indiana Lafay-ette	Indiana Sulli-van	Ill. Urb-ana	Ill. Gir-ard	Iowa Stuart	Iowa Ottum-wa	S.D. Elk Point	Neb. Mead I	Kan. Manhat-tan I
	11 Tests				YIELD RANK							
Wayne	12	25	1	6	24	20	5	15	24	25	32	23
Williams	16	3	7	20	30	29	4	6	26	18	19	19
A73-314	8	9	21	29	2	11	19	3	28	8	1	7
A73-316	22	17	3	20	9	24	29	16	13	26	26	12
A73-328	32	27	35	20	36	12	35	33	6	33	24	27
A73-336	24	15	25	7	26	14	17	14	29	8	7	26
A73-10079	10	7	10	18	17	17	10	2	18	1	19	28
A73-12013	2	2	5	10	19	3	16	11	11	12	18	13
A73-15059	26	18	34	12	33	27	21	12	10	17	29	8
A73-22015	18	16	13	31	34	16	8	10	21	10	13	5
A73-23066	9	10	25	5	28	1	30	21	9	4	9	17
A73-23093	28	28	11	27	24	26	22	8	32	20	23	24
A73-25084	6	23	4	4	15	5	18	7	14	15	30	10
L69U16-15-2	16	19	18	23	6	15	11	18	14	31	10	2
L69U19-16-2	5	4	17	16	10	12	2	19	14	6	21	14
L69U37-17-5	1	11	36	1	1	2	5	8	1	7	6	3
L69U40-19-1	4	7	6	28	18	23	1	1	2	15	16	11
L69U72-3-4	7	6	11	2	5	20	14	25	5	22	15	30
L69U72-7-1	14	1	28	19	20	9	2	19	27	5	12	29
L69U84-5-4	26	12	8	15	12	31	19	24	20	32	25	35
L70-2345	33	31	16	32	32	32	31	32	31	26	35	33
L70D6-11-3	13	28	20	8	13	7	23	34	4	14	14	1
L70D6-11-5	3	26	14	3	6	4	25	21	11	2	10	6
L70U49-1-3	10	5	2	12	4	20	13	5	22	28	31	16
L71-2435	19	13	23	24	15	6	36	28	7	2	4	25
L71-2954	19	14	32	12	21	7	27	23	8	24	2	15
L71-3008	15	24	29	9	22	10	28	29	3	11	3	18
L71-3067	22	21	15	25	11	17	11	3	19	19	7	32
L71L-59	36	36	22	35	27	36	33	36	36	35	36	36
L71L-93	34	33	24	33	31	34	32	31	30	34	33	31
L71L-282	30	35	33	17	8	19	34	35	32	21	28	20
L71L-458	35	34	31	36	35	35	24	30	34	36	34	34
L72A-80	29	30	19	30	23	25	9	26	23	23	21	21
U10113	19	20	27	26	13	28	7	12	14	13	5	4
U10132	25	22	30	11	3	30	15	17	25	29	26	9
U10339	31	32	9	34	29	33	26	27	35	30	17	22

Strain	Mean	Penn. Landisville	Ohio Columbus	Indiana Lafayette	Indiana Sullivan	Illinois Urbana	Illinois Girard	Iowa Stuart	Iowa Ottumwa	S.D. Elk Point	Neb. Mead I	Kan. Manhattan I
	9 Tests	*	MATURITY (relative date)						*			
Wayne	10-2		10-9	10-4	10-6	10-3	9-27	10-2		10-10	10-1	9-23
Williams	+4.7		+6	+2	+4	+3	+4	+2		+5	+12	+4
A73-314	-1.4		-4	0	+2	-1	-1	-4		-1	-1	-3
A73-316	-2.1		-3	+2	+2	-2	-4	-3		-2	-3	-6
A73-328	-4.7		-3	-4	-4	-3	-5	-9		-3	-2	-9
A73-336	+0.8		-2	0	0	-1	-1	-4		+3	0	-2
A73-10079	+1.4		+6	0	+1	0	0	-2		+6	+1	+1
A73-12013	-3.3		-3	-3	-2	-2	-5	-10		-1	-3	-1
A73-15059	+2.3		0	+2	+2	+3	+2	0		+4	+4	+4
A73-22015	+1.2		-4	+1	0	0	+1	0		+7	+6	0
A73-23066	-4.2		-4	-6	-4	-3	-7	-7		-3	-3	-1
A73-23093	+4.0		+6	+2	+2	+3	+4	+2		+4	+11	+2
A73-25084	-0.3		+6	0	0	0	0	-3		-1	-2	-3
L69U16-15-2	+3.9		+6	+1	+2	+2	+4	0		+7	+10	+3
L69U19-16-2	+3.6		+6	0	0	+1	+3	0		+7	+10	+5
L69U37-17-5	+3.2		+6	0	+1	+1	+2	0		+6	+10	+3
L69U40-19-1	+2.7		+6	+2	+3	+3	+3	0		+2	+4	+1
L69U72-3-4	+2.8		+6	0	+2	+1	+2	+1		+5	+8	0
L69U72-7-1	+4.3		+6	+2	+1	+3	+5	+3		+6	+10	+3
L69U84-5-4	+5.8		+6	+2	+4	+4	+6	+4		+7	+12	+7
L70-2345	+3.1		+6	+2	0	+1	+1	+3		+8	+3	+4
L70D6-11-3	-0.8		+6	0	-1	0	-2	-10		+4	0	-4
L70D6-11-5	-2.8		-3	0	0	-3	-4	-6		-1	-3	-5
L70U49-1-3	+5.1		+6	+2	+3	+3	+6	+2		+5	+10	+9
L71-2435	-5.4		-11	-4	-3	-3	-7	-9		-5	-4	-3
L71-2954	-3.2		-10	-1	-2	-2	-5	-6		+3	-2	-4
L71-3008	-4.3		-13	-2	-2	-2	-4	-8		0	-3	-5
L71-3067	+3.4		+6	0	+2	+2	+2	0		+7	+11	+1
L71L-59	+6.9		+6	+4	+4	+5	+7	+6		+11	+11	+8
L71L-93	+4.2		+6	+2	0	+2	+4	+3		+6	+8	+7
L71L-282	-4.9		-4	-2	-6	-3	-7	-9		-3	-4	-6
L71L-458	+5.7		+6	+2	+2	+3	+5	+3		+12	+11	+7
L72A-80	+5.1		+6	+2	+6	+2	+6	+3		+7	+12	+2
U10113	+3.4		+6	0	+2	+1	+3	-2		+6	+15	0
U10132	+5.3		+6	+2	+2	+2	+6	+4		+9	+10	+7
U10339	+4.8		+6	+2	+2	+3	+5	+2		+3	+11	+9
Beeson (II)	-4.5		-8	-1	-3	-2	-7	-4		-4	-6	-9
Cutler (IV)	+6.3		+6	+3	+4	+3	+8	+4			+13	+9
Date Planted		5-21	5-17	6-11	6-17	6-6	5-20	5-24	6-4	5-23	5-15	5-7

Strain	Parentage	Previous Testing*	Line
1. Bonus	C1266R (Harosoy x C1079) x C1253 (Blackhawk x Harosoy)	5	F_6
2. Cutler 71	Cutler^4 x Kent-Rps rxp (SL5)	5	6 F_3
3. Kent	Lincoln x Ogden	20	F_7
4. A72-409	Corsoy x Wayne	PIV	"5
5. A72-511	Amsoy x Wayne	PIV	"
6. A72-512	"	PIV	F_4
7. K1004	C1266 x C1265 (Harosoy x C1079)	1	F_6
8. L66-1359	Wayne x L57-0034 (Clark x Adams)	4	F_4
9. L70-4180	Clark 63-I r (L12) x (Clark 63 x Kanrich)	1	"5
10. L70L-2912	Wayne-Rps (L15) x D64-3077(D49-2491^{5}x Hawkeye)	PIV	"
11. L70L-2947	Clark 63-I r (L12) x "	PIV	F_3
12. S7	L61-1112 x [Wayne^4 x(Clark^3 x Kanrich)]	PIV	

* Number of years in test or name of 1973 test.

In the 5-year Central mean the strain L66-1359 had a mean yield two bushels better, and had the same maturity as Bonus. L66-1359 is lower in Protein than Bonus and is Phytophthora root rot susceptable.

The 2-year Central mean again shows L66-1359 the best yielding. The strain L70-4180 is equal in yield to Bonus and is four days later in maturity than Bonus.

The strain A72-512 is the highest yielding in the Central 1974 test, and matures 1.5 days earlier than Cutler 71, but is not as lodging resistant as most other entries in the test. Two other new strains to the 1974 test, L70L-2947 and L70L-2912 were slightly higher yielding than Cutler 71, were two to four days earlier maturing, and were similar to Cutler 71 in most other characteristics. Pomona, four days later than Cutler 71, may have had its yield reduced at most locations due to the early frost.

The 1974 East Coast mean shows the strain A72-512 superior to the checks in yield. The strains A72-511, L66-1359, and L70L-2947 are also higher yielding than the checks with A72-511, and L66-1359 having good lodging resistance and L70L-2947 being resistant to Phytophthora root rot.

Disease Data

Strain	BP Urb. Ill. a	DM Sull. Ind. n	FE_2 Laf. Ind. n	PM Har. Ont. a	BSR Laf. Ind. n %	BSR Urb. Ill. n %	BSR St. Paul Minn. n %	BSR Ames Iowa n % stem	BSR Ames Iowa n % plants
Bonus	1	3	3	S	50	80	45	70	100
Cutler 71	3	5	1	R	50	20	65	56	90
Kent	2	3	1	R	55	80	75	41	100
A72-409	1	3	5	S	20	90	65	52	100
A72-511	3	5	3	R	70	10	50	53	100
A72-512	2	3	2	R	30	40	65	36	90
K1004	3	3	1	R	45	80	55	55	100
L66-1359	1	3	3	R	20	30	65	62	100
L70-4180	1	4	5	R	55	50	85	76	100
L70L-2912	2	2	3	R	30	60	65	66	100
L70L-2947	1	4	5	R	50	100	85	67	100
S7	3	3	5	R	45	50	75	64	100

Strain	PSB Sull. Ind. n	PS Laf. Ind. a	SMV Laf. Ind. n seed	SMV Manhat. Kan. n seed	PR Laf. Ind. a	PR Ames Iowa a
Bonus	5	5	4E	1.5	R	R
Cutler 71	5	3	5E	1.6	R	R
Kent	5	3	5E	2.0	S	S
A72-409	5	5	5S	4.2	S	S
A72-511	5	4	5E	2.2	S	S
A72-512	5	5	3E	1.4	S	S
K1004	5	3	5E	1.9	S	S
L66-1359	5	2	5E	4.0	S	S
L70-4180	4	4	5E	2.2	H	H
L70L-2912	4	3	5E	2.1	R	R
L70L-2947	5	2	5E	1.4	R	R
S7	5	3	5E	2.2	S	S

Descriptive and Other Data

Strain	Descriptive Code		Chlorosis Crstn. Minn.	Chlorosis Lamb. Minn.	Chlorosis Ames Iowa	Fluor-escent Light	Hypo-cotyl	Perox-idase	Shattering Manhattan Kansas
Bonus	PGNBr	DYIb	3.0	3.0	1	L	5	L	3.0
Cutler 71	PTNBr	SYBl	3.0	3.5	2	L	5	L+H	1.0
Kent	PTNBr	IYBl	3.0	3.5	5	L	2	H	2.0
A72-409	P+WGNBr	DYY	3.5	5.0	5	L	5	L	2.0
A72-511	PGNTn	DYIb	2.5	3.5	5	L	5	L	1.0
A72-512	WGNTn	DYBf	3.0	2.0	3	L	5	L	2.0
K1004	PTNBr	DYBl	3.0	3.5	4	L	2	H	1.0
L66-1359	WTNTn	DYBl	3.5	4.5	4	L	1	L	1.0
L70-4180	PTNBr	DYBl	3.0	3.0	3	L	5	L	1.0
L70L-2912	WTNTn	SYBl	3.0	4.5	3	L	3	L	1.0
L70L-2947	P+WTNTn	DYBl	3.0	2.5	4	L	2	L	2.0
S7	WTNBr	SYBl	3.0	5.0	5	L	2	L	1.0

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
				1974 East Coast					
No. of Tests	6	6	4	6	6	6	6	2	2
Bonus 37.3	45.2	6	-1.0	1.8	39	2.0	19.1	44.8	20.6
Cutler 71 38.4	45.7	5	10-1.2†	2.2	40	2.1	20.2	43.7	20.2
Kent 37.1	43.0	11	+2.2	1.7	38	2.0	19.7	43.2	20.4
A72-409	43.3	10	-1.5	1.5	34	2.5	18.9	43.2	21.1
A72-511	46.3	2	+0.2	1.6	36	2.7	18.8	43.8	19.7
A72-512	51.0	1	-0.5	2.9	38	2.4	17.8	42.5	21.1
K1004 37.4	44.5	9	+2.0	1.9	38	2.1	20.2	43.4	21.0
L66-1359 39.2	46.1	4	-2.2	1.9	34	2.4	21.7	42.0	22.3
L70-4180 37.8	44.6	8	+2.5	2.5	38	2.7	20.0	42.6	20.7
L70L-2912	45.2	6	-2.2	2.3	37	2.1	16.6	44.6	19.5
L70L-2947	46.3	2	-0.2	2.5	38	2.3	17.3	42.2	20.7
S7	42.3	12	-0.5	2.2	32	2.4	15.9	43.4	20.1

† 126 days after planting

UNIFORM TEST IV, 1974

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
1974 Central									
No. of Tests	20	20	14	21	21	20	16	9	9
Bonus	34.7	10	-4.4	1.9	35	2.0	16.7	43.6	20.3
Cutler 71	35.9	5	10-4.6†	2.2	35	2.0	17.8	41.1	20.0
Kent	35.1	8	+3.8	2.0	35	2.0	17.4	40.8	20.3
A72-409	34.3	12	-3.1	1.7	31	2.6	16.7	41.5	20.3
A72-511	35.6	6	-1.7	1.8	35	2.3	16.3	41.3	20.3
A72-512	37.7	1	-1.5	2.6	36	1.9	14.9	39.7	20.9
K1004	35.0	9	+4.2	2.1	35	1.9	17.4	41.2	19.9
L66-1359	36.9	2	-3.5	2.0	33	2.1	18.1	39.9	20.9
L70-4180	35.6	6	+0.1	2.3	35	2.0	16.7	40.7	20.3
L70L-2912	36.0	4	-3.9	2.2	35	1.8	13.9	42.1	19.0
L70L-2947	36.3	3	-2.1	2.3	35	1.9	14.6	39.9	20.1
S7	34.4	11	-1.5	1.9	29	1.9	13.5	40.6	19.5

† 128 days after planting.

1973-74, 2-year mean, Central									
No. of Tests	33	33	25	34	34	33	27	19	19
Bonus	39.8	2	-3.5	2.0	41	2.0	16.6	43.4	21.3
Cutler 71	38.7	6	10-2.2†	2.1	40	2.0	17.6	41.0	21.2
Kent	39.8	2	+4.3	1.8	38	2.0	17.1	40.6	21.5
K1004	39.4	5	+4.3	1.9	38	2.0	17.2	40.8	21.3
L66-1359	41.4	1	-3.0	1.9	37	2.0	17.8	39.7	22.2
L70-4180	39.8	2	+0.4	2.3	39	2.0	16.6	40.6	21.5

† 127 days after planting

1970-74, 5-year mean, Central									
No. of Tests	87	87	73	86	87	87	73	51	51
Bonus	42.7	2	-3.2	2.1	44	2.1	16.8	43.0	21.8
Cutler 71	42.0	3	9-29.1†	2.2	42	2.2	17.6	41.0	21.7
Kent	41.7	4	+4.8	1.9	40	2.2	17.3	40.6	22.0
L66-1359	44.4	1	-3.2	2.0	39	2.2	17.9	39.9	22.9

† 129 days after planting

Strain	East Coast Mean	Penn. Landis-ville	N.J. Adel-phia I	Del. George-town I	Maryland Belts-ville	Maryland Link-wood	Virginia Orange	Virginia Warsaw
	6 Tests		1974 YIELD (bu/a)			*		
Bonus	45.2	49.8	42.4	40.8	45.5	25.1	48.6	44.1
Cutler 71	45.7	48.9	49.2	38.5	45.4	22.4	49.2	42.8
Kent	43.0	45.8	40.8	35.0	40.6	20.9	54.0	41.6
A72-409	43.3	45.2	39.9	43.4	40.7	24.0	46.3	44.1
A72-511	46.3	47.2	50.8	45.3	44.0	26.9	45.4	45.0
A72-512	51.0	54.1	54.8	52.0	46.2	25.3	55.8	42.8
K1004	44.5	48.4	45.6	35.6	40.5	25.8	52.8	44.0
L66-1359	46.1	51.2	47.2	47.3	47.0	24.8	41.0	42.9
L70-4180	44.6	47.6	42.8	43.1	42.3	21.2	47.4	44.5
L70L-2912	45.2	47.8	43.2	42.4	44.3	26.0	49.3	44.0
L70L-2947	46.3	52.4	43.6	44.4	43.8	22.0	50.3	43.3
S7	42.3	45.6	36.5	45.4	44.0	25.9	42.2	40.0
C.V. (%)		7.9	7.6	8.2	5.5	21.4	7.6	4.4
L.S.D. (5%)		n.s.	6.7	4.9	4.1	n.s.	6.3	n.s.
Row Spacing (in.)		30	30	30	40	30	30	36
Rows/Plot		3	3	4	4	4	3	4
Reps		4	4	3	3	3	3	3
				YIELD RANK				
Bonus	6	4	9	9	3	6	7	3
Cutler 71	5	5	3	10	4	9	6	9
Kent	11	10	10	12	11	12	2	11
A72-409	10	12	11	6	10	8	9	3
A72-511	2	9	2	4	6	1	10	1
A72-512	1	1	1	1	2	5	1	9
K1004	9	6	5	11	12	4	3	5
L66-1359	4	3	4	2	1	7	12	8
L70-4180	8	8	8	7	9	11	8	2
L70L-2912	6	7	7	8	5	2	5	5
L70L-2947	2	2	6	5	8	10	4	7
S7	12	11	12	3	6	3	11	12

* Not included in the mean

Central Mean	Ohio Columbus	Indiana Lafayette	Indiana Sullivan	Indiana Evansville	Ky. Henderson	Illinois Brownstown	Illinois Belleville	Illinois Eldorado	Illinois Carbondale	Iowa Stuart	Iowa Ottumwa
20 Tests				1974 YIELD (bu/a)							
34.7	28.4	35.4	33.1	37.5	55.3	30.9	43.6	51.1	26.0	32.9	33.9
35.9	18.9	34.9	31.7	42.4	49.3	28.9	43.3	51.4	26.9	35.0	37.4
35.1	35.7	24.6	26.6	39.2	53.0	26.9	39.2	54.9	25.5	28.4	32.4
34.3	35.9	38.2	31.7	35.8	46.8	31.6	36.9	45.5	19.6	34.0	39.5
35.6	24.6	40.8	39.8	41.6	49.1	33.4	44.6	52.2	25.2	28.9	40.6
37.7	34.4	37.9	35.1	36.9	49.7	34.5	43.7	54.1	27.5	35.5	43.0
35.0	38.5	24.7	26.2	40.4	45.0	25.7	39.9	51.7	25.1	30.0	32.3
36.9	31.5	41.7	33.9	44.8	48.3	36.3	46.3	50.4	23.9	35.1	43.9
35.6	29.6	28.8	34.7	42.8	59.9	27.8	43.0	51.7	28.2	27.1	34.9
36.0	27.0	34.7	30.5	42.8	53.8	34.1	44.2	51.1	29.1	28.7	40.0
36.3	38.7	31.2	31.7	45.1	49.7	33.6	45.2	51.2	19.8	27.8	37.6
34.4	38.0	34.6	31.6	33.8	42.7	30.3	37.7	46.6	19.2	28.4	36.9
		5.1	11.3	7.7		6.6	7.3	5.3		7.6	6.8
		3.0	6.2	5.2		3.5	5.2	4.6		3.4	3.9
	28	30	30	30	30	30	30	30	30	27	27
	3	4	4	4	3	4	4	4	4	4	4
	4	3	3	3	4	3	3	3	3	4	4
				YIELD RANK							
10	9	5	5	9	2	7	6	8	5	5	10
5	12	6	6	5	7	9	7	6	4	3	7
8	5	12	11	8	4	11	10	1	6	9	11
12	4	3	6	11	10	6	12	12	11	4	5
6	11	2	1	6	8	5	3	3	7	7	3
1	6	4	2	10	5	2	5	2	3	1	2
9	2	11	12	7	11	12	9	4	8	6	12
2	7	1	4	2	9	1	1	10	9	2	1
6	8	10	3	3	1	10	8	4	2	12	9
4	10	7	10	3	3	3	4	8	1	8	4
3	1	9	6	1	6	4	2	7	10	11	6
11	3	8	9	12	12	8	11	11	12	9	8

Strain	Missouri Edina	Appleton City	Portage-ville AI	Portage-ville BI	Neb. Mead I	Kansas Pow-hattan	Man-hattan I	Ottawa	Colum-bus	Texas Lub-bock I
				1974 YIELD (bu/a)						
Bonus	29.8	20.4	36.9	* 19.3	30.0	25.4	45.4	29.7	29.6	38.9
Cutler 71	33.4	31.9	35.1	27.7	32.0	28.9	43.4	35.1	33.2	45.6
Kent	32.6	35.7	36.7	22.2	25.8	28.2	38.2	33.8	35.0	49.5
A72-409	21.0	26.9	48.3	18.2	23.0	29.2	41.9	30.3	31.2	38.0
A72-511	29.6	18.8	43.1	12.7	17.4	29.1	40.8	35.6	31.3	45.7
A72-512	30.5	20.8	42.8	20.0	36.5	32.7	52.9	32.2	30.9	42.6
K1004	30.0	30.4	40.4	21.5	25.8	30.4	41.2	36.0	36.3	50.7
L66-1359	30.0	34.7	40.7	25.5	26.9	26.4	45.3	29.5	31.2	36.3
L70-4180	29.8	26.2	44.6	23.7	25.3	28.1	43.8	30.2	28.9	46.0
L70L-2912	33.7	26.5	38.7	25.6	31.4	31.1	40.5	29.3	28.8	44.6
L70L-2947	30.0	29.1	46.7	23.0	28.6	30.0	45.4	30.0	32.5	42.7
S7	27.0	25.8	44.7	11.9	33.4	32.8	44.6	30.4	28.3	40.7
C.V. (%)	12.0	17.0	15.5	30.8	13.7	6.5	7.0	11.1	8.9	6.9
L.S.D. (5%)	6.1	8.2	12.3	10.9	6.4	3.2	5.2	n.s.	4.7	5.4
Row Spac. (in.)	30	30	30	30	30	30	30	30	30	40
Rows/Plot	2	1	3	3	4	4	4	4	4	4
Reps.	3	3	3	3	3	3	3	3	3	3
				YIELD RANK						
Bonus	8	11	10	9	5	12	2	10	9	10
Cutler 71	2	3	12	1	3	8	7	3	3	5
Kent	3	1	11	6	8	9	12	4	2	2
A72-409	12	6	1	10	11	6	8	7	6	11
A72-511	10	12	5	11	12	7	10	2	5	4
A72-512	4	10	6	8	1	2	1	5	8	8
K1004	5	4	8	7	8	4	9	1	1	1
L66-1359	5	2	7	3	7	11	4	11	6	12
L70-4180	8	8	4	4	10	10	6	8	10	3
L70L-2912	1	7	9	2	4	3	11	12	11	6
L70L-2947	5	5	2	5	6	5	2	9	4	7
S7	11	9	3	12	2	1	5	6	12	9

A = Tiptonville Silt Loam
B = Portageville Clay

Strain	East Coast Mean	Penn. Landis-ville	N.J. Adel-phia I	Del. George-town I	Maryland Belts-ville	Maryland Link-wood	Virginia Orange	Virginia Warsaw
	13 Tests	1973-74, 2-YEAR MEAN YIELD						
Bonus	43.8	42.8		44.0	49.1	36.4		
Cutler 71	43.6	43.2		42.1	49.6	37.0		
Kent	41.7	40.8		39.2	46.0	32.0		
K1004	42.8	43.7		40.7	46.0	36.4		
L66-1359	45.6	46.6		47.9	49.9	37.4		
L70-4180	43.8	41.4		45.8	47.0	35.9		
			YIELD RANK					
Bonus	2	4		3	3	3		
Cutler 71	4	3		4	2	2		
Kent	6	6		6	5	6		
K1004	5	2		5	5	3		
L66-1359	1	1		1	1	1		
L70-4180	2	5		2	4	5		
	4 Tests	MATURITY (relative date)						
		*				*	*	
Bonus	-1.0		-4	0	-1	-2		+1
Cutler 71†	10-1.2		10-9	9-27	10-9	9-25		9-20
Kent	+2.2		+2	+2	+2	0		+3
A72-409	-1.5		-3	-1	-2	-3		0
A72-511	+0.2		-1	+1	-1	-1		+2
A72-512	-0.5		-3	+1	-2	-1		+2
K1004	+2.0		+2	+1	+2	+3		+3
L66-1359	-2.2		-5	-1	-2	-2		-1
L70-4180	+2.5		+3	+3	+1	0		+3
L70L-2912	-2.2		-4	-1	-3	-2		-1
L70L-2947	-0.2		-2	+1	0	-1		0
S7	-0.5		-1	0	-1	0		0
Williams (III)	-2.5		-6	0	-1	-8		-3
Essex (IV)					+13	+8		
Date Planted	5-28	5-21	5-30	5-25	6-7	6-10	5-22	5-20
†Days to Mat.	126		132	125	124	107		123

Strain	Central Mean	Ohio Columbus	Indiana Lafayette	Indiana Sullivan	Indiana Evansville	Ky. Henderson	Illinois Brownstown	Illinois Belleville	Illinois Eldorado	Illinois Carbondale
	33 Tests		1973-74, 2-YEAR MEAN YIELD							
Bonus	39.8	35.6	43.4		45.5	54.9		49.6	39.5	31.3
Cutler 71	38.7	32.7	43.8		42.8	54.8		49.6	41.4	31.8
Kent	39.8	39.2	36.3		35.0	52.7		49.7	45.0	32.4
K1004	39.4	37.2	36.3		34.9	50.8		49.0	43.6	32.7
L66-1359	41.4	38.6	47.1		45.0	55.2		52.8	41.0	31.4
L70-4180	39.8	37.4	41.9		44.1	60.8		50.8	41.6	32.8
					YIELD RANK					
Bonus	2	5	3		1	3		4	6	6
Cutler 71	6	6	2		4	4		4	4	4
Kent	2	1	5		5	5		3	1	3
K1004	5	4	5		6	6		6	2	2
L66-1359	1	2	1		2	2		1	5	5
L70-4180	2	3	4		3	1		2	3	1
	87 Tests		1970-74, 5-YEAR MEAN YIELD							
Bonus	42.7	45.6	42.7		45.2	51.5		49.4	46.0	40.7
Cutler 71	42.0	41.2	45.9		45.0	51.6		49.1	47.7	40.3
Kent	41.7	46.7	40.2		39.6	49.2		49.0	49.9	40.5
L66-1359	44.4	42.5	47.5		46.3	52.5		51.3	47.8	41.8
					YIELD RANK					
Bonus	2	2	3		2	3		2	4	2
Cutler 71	3	4	2		3	2		3	3	4
Kent	4	1	4		4	4		4	1	3
L66-1359	1	3	1		1	1		1	2	1
	14 Tests		MATURITY (relative date)							
		*	*		*	*				
Bonus	-4.4		0	-3			-2	-4	-5	-8
Cutler 71†	10-4.6		10-7	10-11			10-18	10-11	10-3	9-30
Kent	+3.8		0	+3			+9	+4	+4	+3
A72-409	-3.1		0	-2			-3	-2	-5	-8
A72-511	-1.7		0	+1			0	-2	-1	-5
A72-512	-1.5		0	-1			-1	-2	-1	-7
K1004	+4.2		0	+4			+9	+3	+3	+4
L66-1359	-4.2		-1	-3			-5	-5	-6	-9
L70-4180	+0.1		+1	+2			+4	0	+2	-3
L70L-2912	-3.9		0	-3			-2	-3	-2	-8
L70L-2947	-2.1		+1	0			-1	-1	-2	-8
S7	-1.5		0	-2			-1	-1	-2	-7
Williams(III)	-3.8		0	-1			-2	-2	-5	
Essex (IV)	+10.2							+16	+12	
Date Plntd.	5-30	5-17	6-11	6-17	6-18	5-21	7-2	6-11	5-28	6-4
† Days to Mat.	128		118	116			107	122	128	118

Iowa		Missouri				Neb.	Kansas				Texas
Stuart	Ottumwa	Edina	Appleton City	Portageville AI	Portageville BI	Mead I	Powhattan	Manhattan I	Ottawa	Columbus	Lubbock I
				1973-74, 2-YEAR MEAN YIELD							
34.2	40.4					39.0	36.2	51.8	30.5	18.4	45.8
36.5	41.4					35.1	35.4	47.8	30.6	19.8	48.0
33.4	41.2					31.1	36.9	47.8	32.0	21.8	51.4
33.0	40.2					30.8	37.2	47.8	33.4	22.4	51.9
37.8	45.9					37.0	36.8	49.6	29.5	20.0	42.6
32.8	41.8					34.6	34.8	48.3	26.0	17.1	50.4
				YIELD RANK							
3	5					1	4	1	4	5	5
2	3					3	5	4	3	4	4
4	4					5	2	4	2	2	2
5	6					6	1	4	1	1	1
1	1					2	3	2	5	3	6
6	2					4	6	3	6	6	3
71-74	71-74			1970-74, 5-YEAR MEAN YIELD							70,72-74
34.8	44.2						38.8	61.8	38.3	22.1	45.3
36.4	42.7						38.9	58.4	36.2	20.6	46.6
34.4	40.6						39.6	56.1	37.0	21.9	49.7
38.4	44.9						40.0	61.4	40.0	22.8	43.3
				YIELD RANK							
3	2						4	1	2	2	3
2	3						3	3	4	4	2
4	4						2	4	3	3	1
1	1						1	2	1	1	4
				MATURITY (relative date)							
-4	*	*	*	-3	-4	-7	-6	-3	-2	-4	-6
10-6				9-29	10-1	10-14	10-2	10-3	10-7	10-8	9-12
+1				+2	+2	+2	+3	+3	+4	+5	+8
-3				-3	-3	0	-4	+2	-2	-5	-6
-3				-3	-3	+1	-3	0	-2	-2	-2
-2				0	-2	-1	-3	+2	0	-2	-1
+1				+1	+4	+1	+4	+6	+5	+3	+11
-3				-4	-4	-5	-6	0	-2	-3	-3
-2				-1	-1	-1	-2	-1	-1	0	+5
-4				-7	-6	-6	-6	-1	-2	-3	-1
-1				-2	-4	-4	-4	0	-1	-2	+1
-1				-3	-2	-2	0	-2	+5	-1	-2
-3						-5	-7	-4	-3		-6
				+14	+9						+28
5-24	6-4	6-18	5-29	5-21	5-28	5-23	5-14	5-7	5-21	6-17	5-15
135				131	126	144	141	149	139	113	120

Strain	East Coast Mean	Pennsylvania Landisville	New Jersey Adelphia I	Delaware Georgetown I	Maryland Beltsville	Maryland Linkwood	Virginia Orange	Virginia Warsaw
	6 Tests		LODGING (score)			*		
Bonus	1.8	2.0	2.4	2.0	2.0	1.0	1.0	1.1
Cutler 71	2.2	3.0	2.3	2.2	3.0	1.0	1.0	1.7
Kent	1.7	1.9	2.0	1.8	2.0	1.0	1.0	1.4
A72-409	1.5	1.8	1.6	1.7	1.3	1.0	1.3	1.3
A72-511	1.6	1.5	1.6	2.0	2.3	1.0	1.0	1.3
A72-512	2.9	3.9	3.5	2.5	3.0	1.0	2.0	2.6
K1004	1.9	2.0	2.3	2.2	2.3	1.0	1.0	1.4
L66-1359	1.9	2.9	1.9	1.8	2.3	1.0	1.0	1.3
L70-4180	2.5	3.4	2.6	2.5	3.0	1.0	1.0	2.3
L70L-2912	2.3	3.3	2.6	2.3	3.0	1.0	1.0	1.7
L70-2947	2.5	3.6	2.9	2.2	3.7	1.0	1.0	1.5
S7	2.2	3.3	2.4	2.0	2.7	1.0	1.0	1.5
	6 Tests		PLANT HEIGHT (inches)			*		
Bonus	39	42	44	38	42	25	38	31
Cutler 71	40	41	45	37	43	24	39	34
Kent	38	41	41	36	39	23	39	33
A72-409	34	34	37	33	33	23	34	31
A72-511	36	39	41	38	35	25	33	32
A72-512	38	40	41	37	39	24	37	33
K1004	38	39	42	35	40	27	40	31
L66-1359	34	37	37	33	38	22	31	27
L70-4180	38	40	41	36	39	24	37	32
L70L-2912	37	39	40	34	40	24	35	33
L70L-2947	38	40	42	36	38	20	42	32
S7	32	34	36	29	36	22	30	28

Central Mean	Ohio Columbus	Indiana Lafayette	Indiana Sullivan	Indiana Evansville	Ky. Henderson	Illinois Brownstown	Illinois Belleville	Illinois Eldorado	Illinois Carbondale	Iowa Stuart	Iowa Ottumwa
21 Tests				LODGING (score)							
1.9	1.0	3.2	1.7	1.8	4.9	2.7	1.5	2.2	1.0	2.1	3.4
2.2	1.0	3.3	2.3	3.8	4.6	3.3	2.4	2.2	1.0	2.8	3.7
2.0	1.0	3.3	2.5	3.7	4.6	2.8	1.8	1.9	1.0	2.6	3.6
1.7	1.0	2.7	1.8	1.7	3.6	1.3	1.6	1.7	1.0	2.1	3.4
1.8	1.0	3.0	2.5	1.5	4.1	1.6	1.5	1.9	1.0	2.0	3.8
2.6	1.0	3.8	2.7	4.0	5.0	3.2	2.7	3.5	1.0	3.0	4.0
2.1	1.0	3.5	2.7	3.7	4.7	3.0	1.9	2.0	1.0	2.0	3.5
2.0	1.0	3.2	2.8	2.8	5.0	1.6	1.6	2.0	1.0	2.3	3.2
2.3	1.0	3.5	3.0	4.2	4.9	3.5	2.5	2.5	1.0	2.2	3.8
2.2	1.0	3.3	2.7	4.2	4.8	2.8	2.2	2.5	1.0	2.1	3.6
2.3	1.0	3.7	2.7	3.7	4.6	2.2	2.1	2.6	1.0	2.6	4.1
1.9	1.0	2.0	2.7	3.0	5.0	2.8	1.9	2.2	1.0	2.3	3.4
21 Tests				PLANT HEIGHT (inches)							
35	25	44	39	38	54	40	40	44	21	37	48
35	26	43	39	41	51	37	41	44	24	38	46
35	30	40	39	39	50	35	40	44	24	37	41
31	23	39	33	31	48	31	31	35	18	34	41
35	28	44	37	34	50	32	37	43	22	41	46
36	28	45	37	37	53	35	37	41	22	40	46
35	31	38	40	39	48	36	40	43	24	37	42
33	30	39	39	36	45	32	37	39	20	36	45
35	31	42	39	38	53	36	39	42	22	35	44
35	25	43	38	40	52	38	39	40	22	38	45
35	31	42	38	37	52	35	37	40	20	39	43
29	29	35	32	30	42	27	27	30	17	36	36

Strain	Missouri Edina	Appleton City	Portage-ville AI	Portage-ville BI	Neb. Mead I	Kansas Pow-hattan	Man-hattan I	Ottawa	Colum-bus	Texas Lub-bock I
				LODGING (score)						
Bonus	1.2	1.3	1.2	1.0	1.7	1.0	2.7	1.0	1.0	2.0
Cutler 71	1.2	1.6	1.2	1.0	2.3	1.0	2.6	1.0	1.2	3.0
Kent	1.3	1.5	1.2	1.0	1.5	1.0	1.9	1.0	1.0	2.5
A72-409	1.0	1.2	1.0	1.0	1.8	1.0	3.1	1.0	1.0	1.3
A72-511	1.0	1.3	1.8	1.0	2.0	1.0	2.2	1.0	1.0	1.5
A72-512	2.0	1.7	3.0	1.0	3.5	1.0	4.3	1.0	1.0	3.0
K1004	1.5	2.0	1.3	1.0	2.3	1.0	2.0	1.0	1.2	2.5
L66-1359	1.3	1.3	1.2	1.0	1.8	1.0	3.4	1.0	1.0	2.3
L70-4180	1.3	1.0	2.0	1.0	2.5	1.0	3.8	1.0	1.0	2.3
L70L-2912	1.3	1.1	1.3	1.0	2.3	1.0	3.7	1.0	1.0	2.3
L70L-2947	1.0	1.5	1.8	1.0	3.0	1.0	4.1	1.0	1.0	2.5
S7	1.0	1.0	1.3	1.0	2.0	1.0	1.9	1.0	1.0	1.5
				PLANT HEIGHT (inches)						
Bonus	35	28	29	19	44	29	50	27	25	21
Cutler 71	33	29	30	26	45	29	47	27	26	22
Kent	34	30	29	22	44	29	47	27	26	25
A72-409	25	27	30	19	42	29	48	28	24	21
A72-511	34	27	35	20	45	29	53	28	27	23
A72-512	31	31	34	21	46	30	55	30	26	21
K1004	35	30	29	21	45	27	46	26	27	25
L66-1359	33	29	28	23	39	29	45	27	24	22
L70-4180	35	29	31	23	40	29	46	27	24	23
L70L-2912	37	28	28	22	44	30	51	25	24	24
L70L-2947	32	29	31	23	44	30	48	29	25	25
S7	27	25	25	16	39	30	39	26	20	19

Strain	East Coast Mean	Pennsylvania Landisville	New Jersey Adelphia I	Delaware Georgetown I	Maryland Beltsville	Maryland Linkwood	Virginia Orange	Virginia Warsaw
	6 Tests		SEED QUALITY (score)			*		
Bonus	2.0	1.7	2.0	2.0	3.0	2.0	1.0	2.5
Cutler 71	2.1	2.1	2.0	2.2	3.0	2.0	1.0	2.1
Kent	2.0	1.6	1.8	2.4	3.0	2.0	1.0	2.3
A72-409	2.5	2.9	2.0	2.2	3.0	2.0	1.0	4.0
A72-511	2.7	2.9	2.0	2.6	3.0	2.0	2.0	3.8
A72-512	2.4	2.5	2.0	2.6	2.0	2.0	1.3	4.0
K1004	2.1	1.9	1.8	2.5	3.0	2.0	1.0	2.3
L66-1359	2.4	2.4	2.0	2.3	3.0	2.0	1.0	3.5
L70-4180	2.7	2.7	2.3	3.0	3.0	2.0	1.2	3.8
L70L-2912	2.1	1.8	2.0	2.3	3.0	2.0	1.0	2.5
L70L-2947	2.3	2.1	2.0	2.3	3.0	2.0	1.0	3.2
S7	2.4	2.2	2.0	2.3	3.0	2.0	1.2	3.5
	6 Tests		SEED SIZE (g/100)			*		
Bonus	19.1	19.7	21.5	18.0	20.6	16.7	17.0	18.0
Cutler 71	20.2	20.1	22.5	19.2	22.0	18.4	18.0	19.7
Kent	19.7	20.1	21.2	18.9	20.9	17.9	18.3	18.9
A72-409	18.9	17.9	19.5	19.0	18.9	16.0	17.0	21.1
A72-511	18.8	17.6	20.8	18.7	19.2	16.6	17.0	19.2
A72-512	17.8	17.6	19.9	16.8	18.3	15.1	16.0	18.2
K1004	20.2	21.4	21.9	18.8	20.7	18.4	18.0	20.5
L66-1359	21.7	20.4	24.8	21.2	22.4	19.1	18.7	22.4
L70-4180	20.0	19.7	21.4	19.5	20.7	16.9	18.0	20.7
L70L-2912	16.6	15.8	17.8	16.2	17.8	15.2	14.3	17.8
L70L-2947	17.3	15.5	19.0	16.3	19.6	16.1	15.7	17.6
S7	15.9	15.0	17.0	15.1	17.6	15.4	14.7	16.2

Strain	Central Mean	Ohio Columbus	Indiana Lafayette	Indiana Sullivan	Indiana Evansville	Ky. Henderson	Illinois Brownstown	Illinois Belleville	Illinois Eldorado	Illinois Carbondale
	20 Tests			SEED QUALITY (score)						
Bonus	2.0	1.0	1.5	1.5	1.5	3.0	1.3	1.7	2.2	2.0
Cutler 71	2.0	1.2	1.0	1.5	1.5	4.0	1.3	2.2	2.5	1.0
Kent	2.0	1.5	1.5	1.5	1.5	4.0	1.2	2.5	2.2	2.0
A72-409	2.6	1.5	1.5	1.5	1.5	5.0	1.7	3.3	2.3	3.0
A72-511	2.3	1.0	1.5	1.5	1.5	5.0	1.3	2.0	2.7	2.0
A72-512	1.9	1.0	1.0	1.5	1.0	4.0	1.0	1.5	1.8	2.0
K1004	1.9	1.0	1.0	1.5	1.5	3.0	2.2	2.5	2.2	2.0
L66-1359	2.1	1.0	1.0	1.5	1.5	4.0	1.5	2.2	2.0	1.0
L70-4180	2.0	1.0	1.0	1.5	1.5	4.0	1.5	1.8	2.8	2.0
L70L-2912	1.8	1.0	1.0	1.5	1.5	3.0	1.3	1.7	1.8	2.0
L70L-2947	1.9	1.0	1.0	1.5	1.5	2.0	1.5	1.5	2.7	3.0
S7	1.9	1.0	1.0	1.5	1.5	2.0	1.5	1.8	2.2	2.0
	16 Tests			SEED SIZE (g/100)						
Bonus	16.7	18.4	15.4	14.4	16.7	18.6	14.8	16.6	16.8	14.4
Cutler 71	17.8	20.4	16.2	14.9	18.6	20.6	15.8	17.2	18.7	16.5
Kent	17.4	20.6	14.3	15.0	17.9	20.0	15.3	16.8	18.5	15.8
A72-409	16.7	19.2	15.6	14.6	16.2	17.8	14.3	16.9	15.7	14.8
A72-511	16.3	18.0	15.5	21.9	15.6	17.6	15.0	15.5	15.6	15.8
A72-512	14.9	15.3	14.4	11.7	14.0	17.8	13.6	13.7	14.3	13.2
K1004	17.4	21.2	15.2	15.8	17.4	19.0	15.4	15.8	18.3	15.7
L66-1359	18.1	21.1	18.2	14.8	17.5	19.4	15.9	18.1	18.1	16.3
L70-4180	16.7	19.6	14.5	14.4	16.9	20.1	14.0	16.2	17.6	15.0
L70L-2912	13.9	15.9	12.6	11.7	14.0	16.6	12.0	13.2	14.3	12.1
L70L-2947	14.6	16.2	14.4	11.4	14.6	16.6	12.8	13.2	15.2	13.2
S7	13.5	15.4	10.6	11.4	12.7	14.4	11.2	12.8	13.5	12.3

Iowa		Missouri				Neb.	Kansas				Texas
Stuart	Ottumwa	Edina	Appleton City	Portage-ville AI	Portage-ville BI	Mead I	Pow-hattan	Man-hattan I	Ottawa	Colum-bus	Lub-bock I
				SEED QUALITY (score)							
2.8		2.2	2.0	3.0	3.5	1.7	1.5	1.4	1.8	1.2	3.5
2.7		2.6	1.8	3.0	3.0	1.5	1.6	1.5	1.6	1.0	3.2
2.7		2.7	1.8	2.5	2.8	1.5	1.5	1.4	1.7	1.3	2.7
2.1		3.0	2.5	3.0	4.0	4.0	1.9	2.4	2.4	1.7	3.2
2.8		2.3	2.7	3.0	3.7	2.5	2.1	2.0	2.3	1.2	3.3
1.5		2.0	2.0	3.0	4.0	1.3	1.5	1.2	1.6	1.3	4.0
2.3		2.7	2.0	2.0	2.8	1.7	1.5	1.6	1.7	1.0	2.5
2.0		3.0	2.3	3.0	4.0	1.7	1.6	1.5	1.5	1.2	4.0
2.1		2.5	2.4	3.0	4.0	1.5	1.4	1.6	1.6	1.0	2.5
1.5		2.3	2.1	2.5	3.7	2.0	1.5	1.4	1.4	1.0	2.7
2.0		2.3	1.8	2.5	3.7	1.5	1.5	1.5	1.7	1.2	3.0
2.0		2.6	2.0	2.5	3.5	1.5	1.4	1.4	1.5	1.0	3.2
				SEED SIZE (g/100)							
15.9						14.4	16.6	16.3	21.6	17.0	18.7
16.5						15.2	18.0	17.0	22.5	18.7	18.8
17.1						15.2	17.8	15.9	21.6	18.2	18.8
15.9						12.9	18.5	16.5	21.4	17.4	18.8
15.9						13.7	18.8	15.2	20.3	17.6	18.3
13.2						14.1	15.8	14.7	19.4	14.8	18.9
16.6						14.0	18.7	15.8	21.7	18.3	19.6
18.9						16.1	17.0	18.6	19.9	19.5	20.4
15.1						13.8	15.2	16.7	20.4	18.0	19.1
12.7						12.4	13.1	13.6	17.0	14.5	15.9
13.8						12.5	13.5	14.1	16.7	14.6	15.8
11.8						12.2	15.6	13.7	18.0	14.5	16.3

Strain	East Coast Mean	Delaware Georgetown I	Maryland Beltsville	Central Mean	Ohio Columbus	Indiana Evansville	Kentucky Henderson
	2 Tests	PROTEIN (%)		9 Tests			
Bonus	44.8	44.2	45.4	43.6	44.6	43.6	44.0
Cutler 71	43.7	43.2	44.2	41.1	41.1	41.2	45.0
Kent	43.2	43.0	43.4	40.8	42.4	41.0	41.1
A72-409	43.2	42.7	43.6	41.5	43.9	39.8	43.0
A72-511	43.8	43.2	44.4	41.3	43.7	39.6	43.7
A72-512	42.5	42.5	42.5	39.7	40.3	39.5	41.9
K1004	43.4	42.8	43.9	41.2	41.6	41.6	41.2
L66-1359	42.0	40.8	43.3	39.9	41.7	39.7	41.4
L70-4180	42.6	41.1	44.1	40.7	41.3	40.2	42.9
L70L-2912	44.6	44.2	45.2	42.1	42.5	43.1	44.2
L70L-2947	42.2	41.4	42.9	39.9	40.3	39.9	41.7
S7	43.4	42.9	43.9	40.6	41.2	40.8	41.5
	2 Tests	OIL (%)		9 Tests			
Bonus	20.6	21.4	19.8	20.3	19.1	19.5	25.9
Cutler 71	20.2	21.2	19.3	20.0	19.3	19.7	21.2
Kent	20.4	21.0	19.9	20.3	19.5	20.7	21.6
A72-409	21.1	21.9	20.3	20.3	19.3	21.5	21.2
A72-511	19.7	20.5	18.9	20.3	18.3	20.7	22.0
A72-512	21.1	21.6	20.6	20.9	20.2	20.4	23.6
K1004	21.0	21.7	20.3	19.9	20.1	19.8	21.6
L66-1359	22.3	23.0	21.6	20.9	19.7	21.1	23.3
L70-4180	20.7	22.3	19.1	20.3	19.9	20.5	21.9
L70L-2912	19.5	20.1	18.9	19.0	18.6	18.1	20.0
L70L-2947	20.7	21.6	19.8	20.1	19.6	19.2	21.0
S7	20.1	20.9	19.3	19.5	19.3	19.3	20.4

Illinois		Iowa	Missouri	Kansas	
Belleville	Eldorado	Ottumwa	Edina	Powhattan	Manhattan I
		PROTEIN (%)			
42.5	44.5	44.4	43.8	41.1	43.8
39.7	43.1	40.8	41.4	36.9	40.4
40.0	42.0	40.1	41.6	38.4	40.8
40.9	40.9	41.5	42.3	38.0	42.9
39.5	41.1	41.3	41.4	39.5	42.0
39.7	40.4	39.8	40.2	35.3	40.3
40.3	42.9	40.7	42.2	39.5	40.9
38.7	39.8	41.1	41.6	35.2	40.3
40.2	43.0	40.4	41.5	35.6	40.8
41.2	43.4	42.1	42.3	37.6	42.6
37.8	41.9	40.0	40.8	36.0	40.7
39.9	41.7	40.7	40.9	37.5	41.4
		OIL (%)			
20.4	20.7	18.2	18.2	21.1	19.7
19.8	19.8	19.0	18.8	21.9	20.3
20.3	20.1	19.3	18.4	22.1	20.7
19.9	21.8	19.4	18.1	22.4	18.7
20.1	21.5	18.3	18.5	21.6	20.1
21.7	21.8	18.6	19.0	22.9	20.1
19.9	20.4	19.1	19.2	18.9	20.5
21.5	22.3	17.9	19.3	22.3	21.0
20.1	20.0	18.6	18.9	22.3	20.9
18.7	19.8	17.2	19.2	20.2	18.8
20.3	20.4	18.6	19.5	22.1	19.8
19.3	20.4	17.8	19.1	20.2	20.1

Strain		Parentage	Line
1.	Cutler 71		
2.	Kent		
3.	A73-13001	C1483 (C1266 x C1265) x Rampage	F_4
4.	A73-15055	Beeson x L66-1359 (Wayne x L57-0034)	"
5.	A73-15089	"	"
6.	A73-17060	L66L-137 (Wayne x L57-0034) x Calland	"
7.	A73-18036	Woodworth x Calland	"
8.	A73-23088	IVR Ex4428 x Md66-1258 (2nd cycle intermates)	"
9.	A73-25003	IVR Ex212 x Cutler 71	"
10.	A73-25043	"	"
11.	A73-26024	IVR Ex 4731 x Wirth	"
12.	C1518	Amsoy x Cutler	F_7
13.	C1519	"	"
14.	C1520	Bonus x Cutler	"
15.	C1521	"	"
16.	K1011	Cutler x Kent-Rps	F_4
17.	K1012	"	"
18.	K1013	"	"
19.	K1014	"	"
20.	K1015	"	"
21.	L69U74-2-1	Cutler x Hawk	F_5
22.	L69U79-3-3	" x Corsoy	"
23.	L70L-2887	Wayne-Rps x D64-3077 (D49-2491[5] x Hawkeye)	"
24.	L70L-3048	" x D64-3146 (")	"
25.	L70L-3077	Clark I r Rps rxp (L12) x D64-3146	"
26.	L70L-3205	L4 (C1128-Rps rxp) x Kent-Rps rxp (SL5)	"
27.	L71-504	Wayne-I r Rps[3] x Merit	F_3
28.	L71L-506	Harosoy-Rps rxp x Wayne-I r Rpm Rps	F_5
29.	L71L-525	"	"
30.	L71L-554	Cutler x "	"
31.	L71L-556	"	"
32.	L72A-89	" x Beeson	F_6
33.	Md67-4550-3	Intercross program, 8 lines **	
34.	Md68-1766-2	"	
35.	Md70-1212	3rd Cycle Intercrosses, 8 lines **	F_5
36.	Md70-1428	"	"

** Adams, Lincoln, Perry, Wabash, C799, C985, L46-1503, FC33.243

The mean of the eleven locations shows C1520 to be three bushels better yielding, and maturing 1½ days earlier than Cutler 71. The strains C1518, L71L,554, L71L,556, and L72A-89 outyielded Cutler 71 and were from one day earlier to two days later than Cutler 71 in maturity. L71L-554 and L71L-556 had 44.0 and 43.3 percent protein respectively. The strain L71L-554 is heterogenous and L71L-556 is resistant to Phythophthora root rot. Both strains carry resistance to Bacterial pustule and Frogeye race 2.

An early frost may have cut the yields of some of the later strains at some locations in the test.

PRELIMINARY TEST IV, 1974

Disease Data

Strain	BP Urb. Ill. a	DM Sull. Ind. n	FE_2 Laf. Ind. a	BSR Laf. Ind. n %	BSR Urb. Ill. n %	BSR Ames Iowa n % stem	BSR Ames Iowa n % plants	PSB Sull. Ind. n	PS Laf. Ind. a	SMV Laf. Ind. n seed	SMV Man. Kan. n seed	PR Laf. Ind. a	PR Ames Iowa a
Cutler 71	2	5	1	50	90	65	100	5	3	5E	1.7	R	R
Kent	3	3	1	55	90	78	100	5	3	5E	1.6	S	S
A73-13001	4	5	2	55	80	86	100	3	1	5E	3.2	S	S
A73-15055	1	5	3	55	50	67	100	4	3	5E	1.6	S	S
A73-15089	4	4	4	80	60	78	100	5	2	5E	1.5	S	S
A73-17060	4	5	4	80	50	74	100	4	2	5E	4.0	S	S
A73-18036	4	5	5	95	80	75	100	5	3	5E	2.5	S	H
A73-23088	1	4	5	90	80	71	100	5	2	5E	3.2	S	S
A73-25003	3	5	2	100	90	73	100	5	4	5E	1.5	S	S
A73-25043	3	3	5	50	80	62	100	5	4	2M	1.0	R	R
A73-26024	4	3	5	90	70	55	100	4	2	5E	3.9	S	S
C1518	3	3	5	55	80	66	90	5	4	5E	2.5	S	S
C1519	3	4	1	90	70	58	100	5	2	5E	1.9	S	S
C1520	2	4	4	65	60	72	100	5	3	5E	2.5	R	R
C1521	2	5	1	65	80	70	90	4	3	4M	1.2	R	R
K1011	2	4	1	85	100	57	90	5	1	5E	2.1	R	R
K1012	1	3	1	40	90	54	80	5	2	5E	1.9	R	R
K1013	1	4	1	75	100	58	100	4	2	5E	1.9	R	R
K1014	2	3	1	50	60	67	90	5	2	5E	2.0	R	R
K1015	1	4	1	65	60	56	100	5	1	5E	1.6	R	R
L69U74-2-1	3	4	4	50	20	55	60	4	2	5E	1.9	S	S
L69U79-3-3	2	4	2	55	50	55	100	5	2	5E	1.9	S	S
L70L-2887	1	4	5	40	40	53	90	4	3	5E	1.8	S	S
L70L-3048	1	4	3	70	50	64	100	5	2	3M	1.3	S	S
L70L-3077	3	4	4	45	40	66	100	4	1	5E	2.0	R	R
L70L-3205	2	3	2	40	60	46	80	4	3	1	1.0	R	R
L71-504	3	4	4	25	50	68	100	5	5	3M	1.1	R	R
L71L-506	1	1	5	35	60	59	100	5	4	5E	2.4	R	R
L71L-525	1	2	5	50	90	70	100	5	4	5E	2.3	R	R
L71L-554	1	1	4	75	60	58	90	5	3	5E	1.6	H	H
L71L-556	1	1	3	70	70	58	100	4	2	5E	1.7	R	R
L72A-89	3	3	4	70	100	38	90	5	5	5E	1.9	R	R
Md67-4550-3	1	5	4	30	100	51	100	5	1	5E	2.9	S	S
Md68-1766-2	4	4	5	25	50	63	90	4	1	5E	1.8	S	S
Md70-1212	4	4	4	40	60	77	100	4	2	5E	2.9	S	S
Md70-1428	4	3	1	85	100	73	100	3	2	1	1.0	S	S

PRELIMINARY TEST IV, 1974

Descriptive and Other Data

Strain	Descriptive Code		Chlorosis Ames Iowa
Cutler 71	PTNBr	SYBl	4
Kent	PTNBr	IYBl	4
A73-13001	PTNBr	SYBr	2
A73-15055	WGNTn	DYBf	5
A73-15089	PTNBr	SYBl	5
A73-17060	PTNBr	DYBl	4
A73-18036	WTNBr	DYBl	1
A73-23088	WTNBr	SYBl	3
A73-25003	PTNBr	SYBr	4
A73-25043	PGNBr	SYBf	3
A73-26024	PTNBr	SYBl	3
C1518	PGNBr	SYY	3
C1519	PGNBr	SYBf	4
C1520	PTNBr	SYBl	1
C1521	PGNBr	IYIb	5
K1011	PTNBr	SYBl	4
K1012	PTNBr	SYBl	4
K1013	PTNBr	SYBl	4
K1014	PTNBr	SYBl	2
K1015	PTNBr	SYBl	4
L69U74-2-1	PGNBr	IYBf	3
L69U79-3-3	PTNBr	SYBl	3
L70L-2887	PTNTn	SYBl	4
L70L-3048	WGNTn	SYBf	5
L70L-3077	PTNTn	SYY	3
L70L-3205	PTNBr	SYIb	5
L71-504	WTNBr	SYY	5
L71L-506	WGNBr	SYY	5
L71L-525	PGNBr	DYY	4
L71L-554	PTNTn	SYBl	5
L71L-556	P+WTNTn	SYBl	5
L72A-89	PTNBr	SYBl	3
Md67-4550-3	PTNBr	SYBl+Br	3
Md68-1766-2	P+WGNBr	DYY	4
Md70-1212	WTNBr	DYG	4
MD70-1428	WG+TNBr	SYBl+Bf	4

Regional Summary

Strain	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Seed Composition Protein	Seed Composition Oil
No. of Tests	11	11	8	11	11	10	9	6	6
Cutler 71	40.9	6	+4.1	2.5	40	2.0	18.3	42.3	20.0
Kent	38.8	18	+3.8	2.3	38	2.0	18.1	41.9	20.6
A73-13001	34.6	34	+2.0	2.3	40	1.8	15.6	42.5	18.5
A73-15055	40.0	12	+0.8	2.8	39	1.7	17.1	41.2	19.7
A73-15089	38.6	20	+0.6	2.1	39	1.9	17.8	41.4	19.8
A73-17060	36.7	26	+3.8	2.5	41	1.8	16.9	40.6	19.8
A73-18036	40.7	8	-1.6	3.0	42	2.0	19.0	39.8	20.8
A73-23088	38.1	21	+1.5	2.5	42	1.9	16.0	41.6	19.8
A73-25003	39.2	14	+3.5	2.4	41	2.0	18.5	42.9	19.6
A73-25043	40.8	7	+1.8	3.4	44	2.0	16.4	41.5	20.0
A73-26042	37.1	25	-2.2	2.9	43	2.0	15.0	41.5	20.2
C1518	41.5	4	+0.1	2.8	41	2.3	15.6	39.7	20.1
C1519	38.8	18	+4.4	2.7	45	2.2	17.2	41.1	19.9
C1520	43.7	1	-1.6	2.5	39	2.0	17.3	42.3	19.7
C1521	39.0	16	-0.1	2.3	38	1.9	16.8	43.3	18.8
K1011	34.9	33	+5.5	2.5	43	1.9	17.4	43.0	19.3
K1012	37.2	24	+5.6	2.4	43	1.9	17.7	42.9	19.4
K1013	35.5	31	+5.2	2.4	42	2.1	18.0	43.1	19.2
K1014	35.6	30	+5.1	2.5	42	1.9	17.7	42.5	19.6
K1015	33.7	36	+5.2	2.4	43	2.0	17.4	42.7	19.4
L69U74-2-1	37.7	23	+0.9	1.6	35	2.1	16.9	40.6	20.2
L69U79-3-3	39.0	16	-0.1	2.2	37	2.0	18.1	42.1	19.8
L70L-2887	40.1	10	+0.4	2.8	40	1.8	16.5	42.3	19.8
L70L-3048	40.6	9	+0.6	2.4	36	1.9	15.9	41.4	19.8
L70L-3077	39.5	13	+3.6	3.1	41	2.1	16.3	42.1	19.3
L70L-3205	36.0	29	+4.9	2.3	42	1.8	14.7	41.4	19.6
L71-504	36.4	28	-1.2	2.3	39	2.2	17.2	41.0	21.0
L71L-506	40.1	10	+1.2	3.1	40	1.7	16.5	42.8	18.9
L71L-525	38.0	22	-0.5	2.7	41	2.3	17.6	41.8	19.6
L71L-554	41.5	4	+1.6	2.6	40	1.8	17.6	44.0	18.8
L71L-556	41.9	2	+2.6	2.5	38	1.7	17.4	43.3	19.4
L72A-89	41.7	3	-1.4	2.6	39	1.8	18.2	41.8	19.8
Md67-4550-3	36.6	27	-1.9	2.2	28	1.9	14.2	43.0	20.3
Md68-1766-2	35.2	32	+2.8	2.6	43	2.0	15.5	40.8	20.2
Md70-1212	39.1	15	+3.0	2.9	41	1.9	17.8	38.9	21.6
Md70-1428	34.4	35	+6.5	2.1	38	1.9	16.5	41.0	19.8

Strain	Mean	Delaware Georgetown I	Maryland Beltsville	Ohio Columbus	Indiana Sullivan	Indiana Evansville
	11 Tests		YIELD (bu/a)			
Cutler 71	40.9	39.6	43.2	38.6	28.3	43.7
Kent	38.8	37.0	41.7	34.9	23.9	48.5
A73-13001	34.6	30.9	37.9	23.6	35.0	44.3
A73-15055	40.0	42.2	42.7	39.6	40.5	43.8
A73-15089	38.6	36.6	38.8	39.7	32.4	42.3
A73-17060	36.7	39.6	34.2	29.3	37.5	40.9
A73-18036	40.7	45.6	46.0	22.8	33.7	47.2
A73-23088	38.1	33.5	40.1	36.3	29.0	39.7
A73-25003	39.2	29.3	41.6	36.9	35.8	41.8
A73-25043	40.8	39.8	41.8	50.5	29.8	46.1
A73-26024	37.1	31.5	35.7	40.4	33.5	43.5
C1518	41.5	38.5	47.1	39.9	38.2	42.8
C1519	38.8	36.9	38.3	40.6	35.2	43.0
C1520	43.7	37.9	45.6	43.7	37.2	46.9
C1521	39.0	39.5	40.1	33.7	38.2	46.7
K1011	34.9	38.3	36.4	34.8	35.8	38.8
K1012	37.2	38.8	37.7	33.7	35.5	41.2
K1013	35.5	36.0	34.0	37.3	30.2	43.5
K1014	35.6	32.2	35.2	37.4	31.2	37.9
K1015	33.7	33.0	33.9	35.9	26.3	42.5
L69U74-2-1	37.7	33.1	43.2	28.2	31.9	39.0
L69U79-3-3	39.0	30.7	45.0	32.4	37.5	42.0
L70L-2887	40.1	40.3	47.3	39.0	36.0	43.2
L70L-3048	40.6	39.8	42.2	36.4	37.8	45.0
L70L-3077	39.5	41.1	38.8	41.6	33.1	44.4
L70L-3205	36.0	38.4	32.4	36.1	31.3	39.9
L71-504	36.4	39.0	43.1	34.1	27.8	37.6
L71L-506	40.1	38.1	39.6	34.9	38.9	42.7
L71L-525	38.0	29.3	39.4	32.1	35.7	42.9
L71L-554	41.5	42.1	46.5	31.8	35.7	49.3
L71L-556	41.9	46.5	50.0	36.2	32.3	47.7
L72A-89	41.7	39.4	47.3	37.1	28.7	44.4
Md67-4550-3	36.6	38.6	39.7	30.5	25.4	40.7
Md68-1766-2	35.2	43.1	32.4	32.8	30.3	40.5
Md70-1212	39.1	41.5	41.2	44.4	37.6	44.3
Md70-1428	34.4	37.4	35.0	27.5	33.8	42.9
C.V. (%)		13.8	8.6		10.6	9.3
L.S.D. (5%)		n.s.	7.1		7.2	n.s.
Row Spacing (inches)		30	40	28	30	30
Rows/Plot		3	3	3	3	3
Reps.		2	2	2	2	2

Illinois		Iowa		Missouri	Kansas
Eldorado	Carbondale	Stuart	Ottumwa	Portageville AI	Manhattan I
		YIELD (bu/a)			
55.1	29.7	40.2	38.3	48.4	44.3
54.2	35.6	35.7	34.5	36.9	44.0
46.2	34.6	30.4	25.8	37.4	34.3
46.4	33.9	39.1	32.1	44.9	34.4
47.9	33.5	38.2	34.1	41.7	39.9
53.3	30.0	26.7	25.2	47.2	39.4
56.2	30.0	40.9	35.1	51.6	38.8
50.4	26.3	39.0	37.4	46.8	40.2
53.0	32.9	39.8	33.6	43.9	43.0
55.9	30.2	32.5	29.5	42.3	50.8
49.7	31.0	35.6	29.0	39.9	38.0
55.3	26.8	41.4	38.5	44.9	43.0
56.5	31.0	33.9	27.8	48.7	35.0
53.7	33.8	44.3	42.7	45.7	49.1
52.6	25.6	38.9	32.5	39.5	41.8
52.7	29.9	20.2	22.5	35.8	38.9
55.9	29.3	24.3	24.7	49.6	38.7
51.8	26.4	28.9	22.7	41.3	38.3
54.4	35.5	27.6	22.4	40.1	38.1
49.6	24.0	25.4	21.2	42.9	35.7
49.4	26.0	40.4	36.7	43.6	43.1
53.9	26.3	44.2	37.8	39.6	40.1
56.9	22.5	33.9	35.1	44.5	42.4
54.8	28.9	35.9	37.9	42.6	45.1
49.6	29.3	29.8	28.0	50.7	48.1
47.6	38.3	30.9	20.9	48.0	32.1
44.3	27.5	37.4	34.3	40.1	35.3
49.8	27.5	38.4	36.6	49.8	44.8
51.7	32.2	36.5	36.4	43.1	39.1
56.1	30.9	37.9	34.4	49.1	43.0
57.0	31.2	39.4	36.5	42.3	42.0
56.5	26.6	42.2	41.1	46.8	49.1
47.1	25.3	36.5	32.5	37.7	48.9
49.5	26.3	26.8	24.6	43.6	37.2
52.0	23.5	30.7	29.1	47.5	38.0
46.8	28.3	25.8	22.1	41.0	37.7
5.3		8.1	6.2	12.5	7.4
5.6		5.7	4.0	11.1	6.1
30	30	27	27	30	30
4	4	4	4	3	4
2	2	2	2	2	2

Strain	Mean	Del. George-town I	Md. Belts-ville	Ohio Colum-bus	Indiana Sulli-van	Indiana Evans-ville	Illinois Eldo-rado	Illinois Carbon-dale	Iowa Stuart	Iowa Ottum-wa	Mo. Portage-ville I	Kansas Man hattan I
	11 Tests				YIELD RANK							
Cutler 71	6	11	10	11	32	14	10	16	7	4	7	8
Kent	18	24	15	21	36	2	13	2	20	14	35	9
A73-13001	34	33	26	35	17	11	35	4	27	27	34	35
A73-15055	12	4	12	9	1	13	34	5	10	21	14	34
A73-15089	20	26	23	8	22	24	30	7	14	17	25	19
A73-17060	26	11	32	32	7	28	16	14	32	28	10	20
A73-18036	8	2	6	36	19	4	5	14	5	12	1	23
A73-23088	21	28	19	17	30	32	23	24	11	7	11	17
A73-25003	14	35	16	15	11	26	17	8	8	18	17	11
A73-25043	7	9	14	1	29	7	7	13	24	22	23	1
A73-26024	25	32	29	6	20	15	25	11	21	24	30	27
C1518	4	18	4	7	3	21	9	21	4	3	14	11
C1519	18	25	25	5	16	18	3	11	22	26	6	33
C1520	1	22	7	3	9	5	15	6	1	1	13	2
C1521	16	13	18	25	3	6	19	26	12	19	32	16
K1011	33	20	28	23	11	34	18	15	36	32	36	22
K1012	24	16	27	26	15	27	7	17	35	29	4	24
K1013	31	27	33	13	28	15	21	23	29	31	26	25
K1014	30	31	30	12	26	35	12	3	30	33	28	26
K1015	36	30	34	20	34	23	26	28	34	35	21	31
L69U74-2-1	23	29	9	33	24	33	29	25	6	8	18	10
L69U79-3-3	16	34	8	28	7	25	14	24	2	6	31	18
L70L-2887	10	8	2	10	10	17	2	30	22	12	16	14
L70L-3048	9	9	13	16	5	8	11	18	19	5	22	6
L70L-3077	13	7	24	4	21	9	26	17	28	25	2	5
L70L-3205	29	19	35	19	25	31	31	1	25	36	8	36
L71-504	28	15	11	24	33	36	36	20	16	16	28	32
L71L-506	10	21	21	21	2	22	24	20	13	9	3	7
L71L-525	22	35	22	29	13	19	22	9	17	11	20	21
L71L-554	4	5	5	30	13	1	6	12	15	15	5	11
L71L-556	2	1	1	18	23	3	1	10	9	10	23	15
L72A-89	3	14	3	14	31	9	3	22	3	2	11	2
Md67-4550-3	27	17	20	31	35	29	32	27	17	19	33	4
Md68-1766-2	32	3	36	27	27	30	28	24	31	30	18	30
Md70-1212	15	6	17	2	6	11	20	29	26	23	9	27
Md70-1428	35	23	31	34	18	19	33	19	33	34	27	29

Strain	Mean	Del George-town	Md. Belts-ville I	Ohio Colum-bus	Indiana Sulli-van	Indiana Evans-ville	Illinois Eldo-rado	Illinois Carbon-dale	Iowa Stuart	Iowa Ottum-wa	Mo. Portage-ville I	Kansas Man-hattan I
	8 Tests			MATURITY (relative date)								
				*		*				*		
Cutler 71	10-4.1	9-28	10-10	10-15	10-10		10-4	10-4	10-6		9-28	10-3
Kent	+3.8	+1	+2	0	+10		+3	+3	+2		+3	+6
A73-13001	+2.0	+2	0	+1	+6		0	+1	+4		-2	+5
A73-15055	+0.8	-1	+1	0	+2		-3	-3	0		0	+10
A73-15089	+0.6	-1	0	0	+2		-2	-1	+2		-3	+8
A73-17060	+3.8	+4	+2	0	+5		+2	+2	+4		+2	+9
A73-18036	-1.6	0	-1	0	0		-2	-1	-1		-3	-5
A73-23088	+1.5	+1	+2	0	+2		-1	0	+1		-1	+8
A73-25003	+3.5	+2	+1	0	+8		+4	+2	0		+5	+6
A73-25043	+1.8	-2	0	0	+2		+3	0	+2		+2	+7
A73-26024	-2.2	-1	0	0	+1		-4	-5	0		-6	-3
C1518	+0.1	+1	0	0	+4		-1	-2	0		0	-1
C1519	+4.4	+3	+4	0	+9		+4	+3	0		+4	+8
C5120	-1.6	-1	-1	0	0		-4	-5	-2		0	0
C1521	-0.1	-1	0	0	+2		0	-4	0		+1	-1
K1011	+5.5	+4	+2	0	+8		+5	+3	+6		+5	+11
K1012	+5.6	+3	+3	0	+8		+5	+4	+5		+5	+12
K1013	+5.2	+3	+2	0	+9		+5	+2	+4		+5	+12
K1014	+5.1	+3	+3	0	+7		+5	+3	+4		+5	+11
K1015	+5.2	+7	+2	0	+10		+5	-1	+3		+5	+11
L69U74-2-1	+0.9	-2	0	0	+4		-4	-1	-4		+2	+12
L69U79-3-3	-0.1	-1	0	0	+3		-1	0	-2		0	0
L70L-2887	+0.4	-1	0	0	+2		-1	0	+2		-2	+3
L70L-3048	+0.6	+1	+2	0	+2		-1	0	0		0	+1
L70L-3077	+3.6	+2	+2	0	+6		+3	+3	+3		+2	+8
L70L-3205	+4.9	+3	+2	0	+8		+5	+3	+4		+4	+10
L71-504	-1.2	-1	-1	0	0		-4	-1	-2		-4	+3
L71L-506	+1.2	+2	+1	0	+2		0	-5	0		+1	+9
L71L-525	-0.5	+1	0	0	0		-3	-8	-2		+4	+4
L71L-554	+1.6	-1	+2	0	+6		0	-3	0		+2	+7
L71L-556	+2.6	+1	+2	0	+6		+1	+1	-1		+1	+10
L72A-89	-1.4	-1	-1	0	-1		-3	-2	-2		-1	0
Md67-4550-3	-1.9	-1	0	0	-2		-2	-1	0		-3	-6
Md68-1766-2	+2.8	+5	+1	0	+8		+3	-5	+2		+2	+6
Md70-1212	+3.0	+4	+2	0	+6		+1	-6	+4		+3	+10
Md70-1428	+6.5	+5	+2	0	+15		+5	+1	+4		+7	+13
Williams (III)	-3.6	-1	-2	-4	0		-6	-10	-2			-4
Essex (V)	+13		+12				+11				+15	
Date Planted	5-28	5-25	6-7	5-17	6-17	6-18	5-28	6-5	5-24	6-4	5-21	5-7

* Not included in the mean

SEED QUALITY DATA FOR UNIFORM TEST ENTRIES

Soybean seed germination (petri plates), emergence (sand bench), and infection with microorganisms of uniform group strains harvested at maturity and 4-weeks later, Lafayette, Indiana, 1974 [a]

Strain	Germination		Emergence		Diaporthe		Purple Stain		Miscellaneous	
	Mature	Late	Mature	Late	Mature	Late	Mature	Late	Mature	Late
(Uniform Test 00)										
Altona	94	57	92	86	8	34	1	2	4	38
Norman	80	70	79	97	0	9	4	2	5	49
Portage	77	55	80	93	0	9	3	9	8	42
M64-105	94	61	90	80	5	30	1	1	7	25
M65-217	98	71	95	93	1	25	8	5	2	22
(Uniform Test 0)										
Clay	94	61	81	75	1	24	6	2	1	22
Evans	94	71	88	85	1	10	4	2	3	6
Swift	93	51	80	87	8	22	3	1	2	10
M64-157	94	74	90	90	8	21	0	1	3	22
M65-94	85	75	91	93	7	7	0	4	5	14
M65-207	94	95	96	97	3	3	3	2	2	2
M65-270	95	83	95	86	5	10	1	1	1	3
M65-295	85	84	88	92	12	5	1	2	6	11
(Preliminary Test 0)										
M66-18	96	75	89	92	3	11	4	6	0	31
M66-30	82	39	90	88	4	10	3	2	2	6
M68-2	88	73	86	91	1	9	0	3	3	19
M68-37	89	48	76	83	12	20	6	3	0	21
SD73-10	96	82	90	91	3	8	2	0	1	10
SD73-11	96	76	91	92	4	13	2	3	3	11
SD73-13	99	90	94	93	1	7	2	2	0	4
(Uniform Test I)										
Hark	100	94	97	93	0	0	0	0	1	2
Hodgson	96	79	90	88	3	17	2	4	0	6
Steele	95	71	87	90	2	19	6	1	0	4
A72-102	90	78	90	92	2	11	0	7	1	11
A72-106	91	68	89	86	3	18	1	6	1	4
A72-107	92	63	94	80	3	10	0	0	3	8
A72-125	87	84	84	97	8	10	3	1	0	5
M65-69	87	91	89	95	9	2	6	3	2	5
M65-115	98	79	94	85	2	12	6	4	0	11
M65-122	95	84	91	90	1	10	1	5	1	17
M65-442	97	84	89	60	1	6	7	8	1	10
OX643	96	87	95	92	3	6	1	3	1	27

Strain	Germination		Emergence		Diaporthe		Purple Stain		Miscellaneous	
	Mature	Late	Mature	Late	Mature	Late	Mature	Late	Mature	Late
(Preliminary Test I)										
A73-106	96	89	96	92	0	2	4	2	1	1
A73-109	94	68	83	80	5	13	0	3	0	11
A73-128	96	91	88	93	2	5	2	0	0	1
A73-139	91	80	87	82	9	12	0	3	0	11
A73-11004	96	84	90	93	3	12	1	1	3	12
A73-15028	97	95	90	97	0	2	0	3	0	5
A73-18084	99	96	98	94	1	1	0	1	0	2
A73-19009	96	92	96	94	2	2	1	0	4	0
A73-19068	96	96	84	96	3	2	3	3	0	3
A73-19084	96	95	90	96	1	3	0	0	1	3
A73-20048	95	96	75	90	2	3	3	1	0	6
A73-20059	94	91	88	97	1	3	2	0	0	0
A73-21030	91	71	64	79	5	14	2	2	2	21
A73-22031	90	85	98	90	6	7	3	4	2	5
A73-22032	97	63	92	83	4	25	2	4	1	22
A73-22056	95	91	88	89	4	4	4	1	3	14
A73D7	97	97	95	96	2	3	0	2	0	1
A73D16	85	73	93	93	3	7	5	1	2	3
L71-2033	76	78	80	93	5	3	5	1	2	5
L72-607	98	91	96	85	0	1	0	2	0	3
M68-48	76	73	91	86	11	11	2	4	1	10
M68-49	84	91	82	91	7	9	6	4	5	23
M68-94	89	90	93	94	4	4	1	2	5	4
M68-99	97	86	91	95	2	7	2	1	0	16
SD73-2	90	86	84	79	1	8	1	3	1	28
SD73-5	88	84	81	89	3	16	0	3	1	24
SD73-14	85	69	74	76	2	25	3	3	2	13
SD73-16	94	69	84	89	2	18	0	2	3	23
(Uniform Test II)										
Amsoy 71	95	91	89	92	3	1	3	4	0	1
Beeson	97	93	85	94	0	1	0	0	1	5
Corsoy	97	96	92	98	1	0	1	3	2	3
Wells	93	89	95	92	1	0	0	0	2	3
A72-522	93	91	94	95	3	5	1	1	1	8
A72-523	93	95	94	91	2	4	1	2	2	9
L70D6-16	96	92	97	86	2	15	1	2	2	20
OX271	93	94	87	97	3	1	3	2	3	2
(Preliminary Test III)										
A73-137	90	93	89	93	5	6	4	1	2	6
A73-221	97	90	91	82	1	5	2	1	0	19
A73-225	94	90	83	96	1	5	0	1	4	0
A73-227	93	60	72	73	4	23	2	2	2	4
A73-229	98	91	86	85	0	7	5	1	2	17

Strain	Germination		Emergence		Diaporthe		Purple Stain		Miscellaneous	
	Mature	Late	Mature	Late	Mature	Late	Mature	Late	Mature	Late
(Preliminary Test III)										
A73-13078	96	91	96	97	0	1	0	0	0	0
A73-14028	92	83	89	94	0	1	3	0	0	2
A73-22039	96	95	95	96	1	5	2	3	1	3
A73-22051	91	94	92	96	4	3	2	0	1	3
A73-22065	94	92	92	92	0	5	0	0	1	6
A73-24033	91	89	93	89	2	3	1	4	3	4
A73-24036	89	85	89	88	3	0	0	0	1	3
A73-25042	95	89	94	84	0	13	1	2	2	9
A73-25050	97	89	97	96	0	3	1	0	0	12
A73-25088	100	91	99	92	0	1	0	0	1	0
A73D2	96	91	97	93	1	5	1	1	0	3
A73D13	88	75	96	90	1	0	1	0	0	4
L70-2891	86	71	80	81	8	6	4	0	2	2
L70-3127	92	95	98	98	3	1	2	2	1	5
L71-2003	93	41	93	93	0	4	1	0	0	16
L71-2011	99	90	100	86	0	2	0	0	1	4
L71-2071	95	95	95	86	1	0	2	0	1	2
L71-2322	93	88	98	90	0	2	5	1	1	32
L71-2340	92	83	94	92	0	0	1	0	0	1
L71-2431	77	69	85	83	19	19	5	2	10	8
L71-2855	95	81	98	95	0	0	4	1	1	5
L72A-14	97	85	92	92	0	3	0	0	0	31
L72A-18	86	88	94	95	0	3	0	0	1	35
M68-96	89	61	86	94	0	1	1	2	2	6
SD73-1	87	71	96	82	3	1	0	0	2	3
SD73-9	98	71	91	71	2	1	0	0	0	10
U10112	97	90	97	94	2	4	0	0	0	10
U10148	95	90	93	95	3	3	1	0	2	19
U10840	95	90	98	97	0	2	1	0	1	28
(Uniform Test III)										
Calland	82	95	95	95	1	0	0	0	2	3
Wayne	94	95	99	94	1	5	0	1	1	7
SL11	93	98	90	94	1	5	1	1	0	10
Williams	93	96	97	91	2	1	0	0	2	4
A72-507	92	92	97	94	0	1	1	2	0	13
A72-509	96	90	96	97	0	1	1	0	2	20
A72-510	98	92	98	96	1	3	0	1	0	17
A72-513	93	88	89	89	3	5	1	0	0	0
A72-520	98	93	94	97	1	6	0	1	1	3
A72-525	95	92	97	92	5	5	1	5	2	25
C1508	97	91	90	93	0	6	0	1	1	15
C1515	93	98	89	94	1	5	0	0	1	8
L66L-172	93	93	99	95	0	2	0	0	0	5
L70T-543	94	94	98	89	4	7	0	1	1	8

Strain	Germination		Emergence		Diaporthe		Purple Stain		Miscellaneous	
	Mature	Late	Mature	Late	Mature	Late	Mature	Late	Mature	Late
(Preliminary Test III)										
A73-314	96	86	92	79	1	15	0	4	0	42
A73-316	90	83	89	85	2	0	0	0	0	36
A73-328	91	92	99	91	0	10	0	0	0	17
A73-336	96	96	96	92	0	1	1	1	0	16
A73-10079	99	96	97	99	0	4	0	0	0	7
A73-12013	93	90	94	99	4	8	2	3	2	12
A73-15059	98	91	86	98	0	10	0	2	0	10
A73-22015	98	92	100	98	1	3	0	0	1	8
A73-23066	92	97	92	97	2	0	0	1	2	2
A73-23093	89	92	88	95	1	1	1	0	2	8
A73-25084	92	67	92	86	3	2	0	0	1	13
L69U16-15-2	97	86	97	93	2	8	2	1	0	15
L69U19-16-2	98	97	96	96	0	0	1	1	1	9
L69U37-17-5	90	96	96	93	1	4	0	0	1	18
L69U40-19-1	93	90	95	81	3	6	0	1	2	13
L69U72-3-4	91	87	87	64	1	10	0	0	0	11
L69U72-7-1	94	97	84	58	0	2	0	0	1	6
L69U84-5-4	93	93	94	70	1	3	0	1	1	13
L70-2345	96	87	96	63	0	10	0	6	1	36
L70D6-11-3	93	90	99	76	0	10	0	1	1	16
L70D6-11-5	93	89	97	80	5	17	1	3	1	35
L70U49-1-3	86	91	95	88	2	3	0	0	1	28
L71-2435	83	73	95	78	2	0	1	0	2	12
L71-2954	85	97	94	79	1	6	1	5	3	18
L71-3008	92	90	96	84	1	1	0	0	0	2
L71-3067	91	89	100	75	0	4	0	1	1	10
L71L-59	98	89	97	76	0	4	0	0	2	13
L71L-93	94	87	96	63	3	3	1	1	4	29
L71L-282	94	88	89	82	0	1	2	0	1	7
L71L-458	96	88	97	67	0	2	0	0	0	6
L72A-80	96	93	96	67	1	2	1	0	1	7
U10113	86	83	87	84	4	5	0	0	2	5
U10132	93	89	85	58	2	2	1	2	1	8
U10339	96	93	97	91	0	4	0	0	2	2
(Uniform Test IV)										
Bonus	92	92	93	88	1	4	1	0	1	14
Cutler 71	93	92	86	50	0	4	0	1	2	9
Kent	91	93	92	79	0	0	0	0	2	4
A72-409	83	81	78	73	1	2	1	0	2	11
A72-511	93	91	89	56	0	0	2	0	2	7
A72-512	97	92	88	64	1	4	1	1	0	7
K1004	97	94	96	94	0	1	0	0	2	11
L66-1359	97	93	95	89	0	7	0	3	0	7
L70-4180	88	97	92	61	0	3	0	1	2	1
L70L-2912	95	93	98	90	1	2	0	0	0	9
L70L-2947	100	79	97	86	0	2	0	0	1	11
S7	97	88	97	88	1	2	0	0	1	11

Strain	Germination		Emergence		Diaporthe		Purple Stain		Miscellaneous	
	Mature	Late	Mature	Late	Mature	Late	Mature	Late	Mature	Late
(Preliminary Test IV)										
A73-13001	95	91	91	77	0	1	1	0	0	6
A73-15055	98	93	88	87	0	2	0	0	0	4
A73-15089	93	93	86	73	0	1	0	0	1	15
A73-17060	92	90	96	91	0	1	0	0	1	6
A73-18036	80	93	86	87	0	0	0	0	3	3
A73-23088	95	90	66	61	0	5	0	0	0	26
A73-25003	81	88	80	77	2	14	0	0	1	26
A73-25043	96	92	85	57	1	2	0	0	0	34
A73-26024	96	99	83	72	4	2	1	1	1	6
C1518	95	97	85	67	0	1	1	1	9	13
C1519	98	91	87	74	0	6	0	0	4	38
C1520	97	95	93	87	1	1	0	0	2	7
C1521	99	97	79	69	0	1	0	0	0	7
K1011	96	99	79	74	1	3	0	0	0	21
K1012	97	90	89	81	0	1	0	0	1	16
K1013	97	93	74	82	0	5	0	1	1	18
K1014	92	96	82	80	0	2	0	0	2	9
K1015	95	98	82	67	0	1	0	0	2	29
L69U74-2-1	90	94	80	68	1	1	0	0	5	12
L69U79-3-3	89	99	69	59	0	0	0	0	3	2
L70L-2887	95	93	90	64	0	1	0	0	0	6
L70L-3048	95	94	96	84	0	1	0	0	1	7
L70L-3077	99	92	91	80	0	2	0	0	0	6
L70L-3205	94	95	90	83	1	3	0	2	1	22
L71-504	92	94	93	74	1	4	1	0	0	11
L71L-506	97	92	95	87	0	3	0	1	1	17
L71L-525	94	81	86	67	0	3	1	2	3	17
L71L-554	90	92	84	77	0	2	0	1	0	10
L71L-556	86	94	93	70	1	3	0	1	0	12
L72A-89	98	97	80	81	0	0	0	0	0	3
Md67-4550-3	97	96	96	85	0	1	0	0	0	11
Md68-1766-2	91	89	86	74	0	1	0	0	0	16
Md70-1212	87	94	87	68	0	0	0	1	3	3
Md70-1428	96	92	92	76	0	7	0	1	0	20

[a] All figures based on 100 randomly selected seeds at each harvest.
[1] 13% hard seed
[2] 15% hard seed