

1979

The Uniform Soybean Tests: Northern States 1979

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THE UNIFORM SOYBEAN TESTS

NORTHERN STATES

1979

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TABLE OF CONTENTS

Introduction -----	2
Uniform Test Participants-1979 -----	3
Strain Designation -----	6
Methods-1979 -----	7
Disease -----	10
Policy on Testing and Release of Strains -----	12
Uniform Test Strains Released in 1979 -----	15
Uniform Test Locations-1979 -----	16
Identification of Parent Strains -----	18
Uniform Test 00 -----	21
Uniform Test 0 -----	32
Uniform Test I -----	41
Preliminary Test I -----	52
Uniform Test II -----	72
Preliminary Test II -----	100
Uniform Test III -----	120
Preliminary Test III -----	148
Uniform Test IV -----	168
Preliminary Test IV -----	183

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appreciated.

INTRODUCTION

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

A test is established for each of ten maturity groups. Uniform Test 00 includes maturity Group 00 strains for the northern fringe of the present area of soybean production. Uniform Tests 0 through IV include later strains adapted to locations progressively 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.

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

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

The Uniform Test Report is a progress report containing statements which may or may not be verified by subsequent experiments. Statements or data in the report, therefore, should not be published unless permission has been obtained previously by those concerned.

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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. Department of Agriculture.

A	Iowa A.E.S.
Ar	Arizona A.E.S.
Au	Alabama A.E.S.
B	California
C	Purdue (Indiana) A.E.S.
CM	Canada Dept. of Agriculture, Morden, Manitoba
D	Mississippi A.E.S.
E	Michigan A.E.S.
F	Florida A.E.S.
FC	Forage and Range Research Branch, U.S.D.A.
Ga	Georgia A.E.S.
H	Ohio A.R.D.C. (HC - R.L. Cooper, HW - AK Walker)
Ky → K	Kansas A.E.S. <i>(Kentucky A.E.S.)</i>
LN → L	Illinois A.E.S. <i>(Illinois - C.D. Stubbelt)</i>
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
OX	Research Station, Harrow, Ontario
OAC	University of Guelph, Guelph, Ontario
Ok	Oklahoma A.E.S.
PI	Plant Introduction, Germplasm Resources Laboratory, Beltsville, Md.
R	Arkansas A.E.S.
S	Missouri A.E.S.
SC	South Carolina A.E.S.
SD	South Dakota A.E.S.
SL	Two or more states cooperatively
Ts	Texas A.E.S.
T	Soybean Genetic Type Collection, U.S.R.L.
U	Nebraska A.E.S.
UD	Delaware A.E.S.
UM	University of Manitoba, Winnipeg, Manitoba
UT	Tennessee A.E.S.
V	Virginia A.E.S.
W	Wisconsin A.E.S.

METHODS - 1979

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

Generation Compositoid is the generation after the final single-plant selection in which the line is compositoid.

Previous Testing. The number of pervious 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 multiply by 67.25).

Maturity is the date when 95% of the pods have ripened. Delayed leaf drop and green stems are not considered in assigning maturity. Maturity is expressed as days earlier (-) or later (+) than the average date of the reference variety. To aid in maturity group classification, one earlier and one later "tie" variety are given on the maturity table for each test. Current reference and tie varieties and the maturity group limits relative to the reference varieties are:

Group	Reference	Range	Early Tie	Late Tie
00	Portage	-2 to +6	<i>McCull</i>	Clay (0)
0	Evans	-5 to +3	Altona (00)	Hodgson 78 (I)
I	Hodgson 78	-3 to +5	Evans (0)	Corsoy (II) 77
II	Corsoy 79	-3 to +5	<i>Harbin</i> Weber (I)	Pella (III)
III	Cumberland	-5 to +3	Century (II)	Union (IV)
IV	Union	-3 to +8	Williams 79 (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 coat (growth cracks), greenishness, and moldy or rotten seeds. (Threshing or handling damage is not considered, nor is mottling or other pigment.)

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

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

Seed Composition is measured on sample submitted to the Laboratory. A 60 to 70-gram sample of clean seeds is prepared by taking an equal volume or weight of seeds from each replication. Protein and oil percentages are measured using Infrared reflectance.

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

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

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

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

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

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

- 1 > 85%
- 2 = 70 - 84%
- 3 = 45 - 69%
- 4 = 20 - 44%
- 5 = 0 - 19%

DISEASE

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

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

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

Abbreviation	Disease	Pathogen
BB	Bacterial blight	<u>Pseudomonas glycines</u>
BBV	Bud blight	Tobacco ringspot virus
BP	Bacterial pustule	<u>Xanthomonas phaseoli</u> var. <u>sojensis</u>
BS	Brown spot	<u>Septoria glycines</u>
BSR	Brown stem rot	<i>Phialophora</i> <u>Cephalosporium gregatum</u> ^a
CN	Cyst nematode	<u>Heterodera glycines</u>
CR	Charcoal rot	<u>Macrophomina phaseolina</u>
DM	Downy mildew	<u>Peronospora manshurica</u>
FE ₁ , FE ₂	Frogeye race 1, 2	<u>Cercospora sojina</u>
PM	Powdery mildew	<u>Microsphaera diffusa</u>
PR	Phytophthora rot	<i>Phytophthora</i> <u>Phytophthora sojae</u> ^b sp. <i>sp. cf. sojae</i>
PS	Purple stain	<i>megasperma</i> <u>Cercospora kikuchii</u>
PSB	Pod & stem blight	<u>Diaporthe phaseolorum</u> var. <u>sojae</u>
Pyd	Pythium root rot	<u>Pythium debaryanum</u>
Pyu	Pythium root rot	<u>Pythium ultimum</u>
RK	Root knot nematode	<u>Meloidogyne spp.</u>
RP	Rhizoctonia root rot	<u>Rhizoctonia solani</u>
SB	Sclerotial blight	<u>Sclerotium rolfsii</u>
SC	Stem canker	<u>Diaporthe phaseolorum</u> var. <u>caulivora</u>
SMV	Soybean mosaic	<u>Soja virus 1</u>
TS	Target spot	<u>Corynespora cassilicola</u>
WF	Wiltfire	<u>Pseudomonas tabaci</u>
YMV	Yellow mosaic	<u>Phaseolus virus 2</u>

Ratings for BB, BP, DM, FE₂, and PM were based on leaf symptoms; those for BSR on percent of plants with stem browning, or percent of stem length browned, and those for PR on seedling rotting and/or stunting. Tolerance ratings with PR races 1 and 3 present are: 1=none-trace dead plants; 2=up to 2% dead plants, no stunting or chlorosis; 3=up to 10% dead plants, slight stunting or chlorosis; 4= up to 50% dead plants, moderate stunting and chlorosis; 5=over 50% dead plants, severe stunting and chlorosis.

POLICY ON TESTING AND RELEASE OF STRAINS

This policy on testing and release of soybean strains evaluated in the Uniform Soybean Tests, Northern States, has been agreed upon by public soybean breeders. The policy was developed to assist breeders in preparing schedules for seed increases and to assist individuals and committees responsible for approving releases. The policy will aid private breeders in the U.S. and in foreign countries to understand how releases will be made that may affect their programs.

Development and release of soybean strains is carried out by many public institutions. The programs at these institutions operate independently until strains are available for advanced testing in the Uniform Soybean Tests. The Uniform Soybean Tests are coordinated by Agricultural Research, Science and Education Administration, U.S. Department of Agriculture. The tests are divided into those in the Northern States, for strains in maturity groups 00 to IV and those in the Southern States for strains in maturity groups V to VIII. Group IV maturity strains are divided into a IV N test for the northern states and a IV S test for the southern states.

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

Strains are evaluated for one year in the Preliminary Tests (PT) which are conducted at eight or more locations in several states. When the tests are completed, each public breeder is given an opportunity to review the results and to decide which strains merit further testing. In instances where there is little concensus among the breeders on the merits of a strain, the originator of the strain generally makes the final decision.

Strains that merit further testing are evaluated in the Uniform Tests (UT) conducted at more locations and with more replications than the PT. Lines developed by four or more backcrosses to a released cultivar may be entered directly in the UT without prior evaluation in the PT.

Strains may be considered for release after they have been evaluated for two years in the UT. Exceptions to this are special purpose strains or strains derived from four or more backcrosses to a released cultivar; these may be considered for release after one year in the UT. Consideration for release of any strains in the UT

may be requested by any institution or breeder participating in the Uniform Soybean Tests, however it is generally initiated by the institution that developed the strain.

A strain should be released only if it is distinctly superior to existing varieties in one or more characteristics important for the crop, or it is superior in overall performance in areas where adapted. A single major production hazard which a new cultivar can overcome, e.g. a highly destructive disease, may become the overriding consideration in releasing a variety. Strains with a very limited range in adaptation should not be released unless performance in that limited range is outstandingly superior, or the strain possesses important use values not otherwise available, including diversification of the germplasm base for the species.

Where a decision has been made to multiply a strain for release, the originating institution will inform other UT participants of the decision by February 15. This will give each UT participant the opportunity to participate in the multiplication and release of the strains. By March 15 all institutions intending to participate in the multiplication of the strain must notify the originating institution of their intent. A final decision to participate in the release of the strain may be delayed until an additional year's data are available for review. By April 1 the originating institution should notify all UT participants what states will be participating in the multiplication and are considering participating in the release of the strain. Breeder seed is distributed to foundation seed organizations in participating states for production during the summer. At this time, if a final decision to release has been made, a sample of seed may be distributed to non-participants in the UT, including private soybean breeders, in accordance with a state experiment station policy, for use in making crosses. This distribution is made only by the originating institution.

A release notice to soybean seed producers listing all institutions participating in the release of the cultivar is prepared by the originating institutions. This notice is circulated for signature by all participating institutions. Assistance in the preparation and circulation of this release notice may be obtained from R.C. Leffel, Oilseed Specialist, National Program Staff, Room 322, Bldg. 005, Beltsville Agricultural Research Center West, Beltsville, Maryland, 20705. The date for simultaneous publicity release on the new cultivar by participating states usually is August 1, but the date may be delayed until April 1 of the following year if additional UT data are being reviewed and a final decision to release has not been made.

If an additional year of UT data are being reviewed prior to a final decision on release, states producing foundation seed must notify the originating state by February 15 of their intent to participate in the release of the cultivar. The release notice to soybean seed producers should be distributed for signature by the participating institutions by April 1.

Foundation seed under the name of the new cultivar is distributed to qualified certified seed producers in states releasing the new cultivar by April 1. At this time a sample of seed may be distributed to non-participants in the UT including private plant breeders, for testing and for crossing if this distribution has not been made previously.

UNIFORM TEST STRAINS RELEASED IN 1979

Variety	Experimental Designation	Uniform Test Evaluations	Release		Releasing States	Foundation Seed Production
			Date			
Maple Presto	BD2117	00 1978-1979	Mar. 30, 1979		Manitoba, Canada	1979
Weber	A75-102032	UP I 1976; UT I 1977-1979	Aug. 31, 1979		Ia., Mich., Minn., S.D.	1979
Amcor	L73D-195	UP II 1975; UT II 1976-1979	Aug. 1, 1979		Oh., Penn., S.D.	1979
Beeson 80	C Beeson PR3	UT II 1978-1979	Aug. 1, 1979		Ill., Ind., Neb., Oh., Wis.	1979
Century	C1545	UP II 1976; UT II 1977-1979	Aug. 1, 1979		Ill., Ind., Ia., Mich., Neb., S.D., Wis.	1979
Corsoy 79	L75-3674	UP II 1977; UT II 1978-1979	Oct. 31, 1979		Ill., Mich., Minn., Neb., S.D., Wis.	1979
Gnome	HW74-618	UP III 1977; UT II 1978-1979	Aug. 1, 1979		Ill., Ind., Neb., Oh., S.D.	1979
Nebsoy	U11406	UP II 1976; UT II 1977-1979	Jan. 15, 1979		Ill., Ind., Mich., Neb., Wis.	1979
BSR 301	A75-302005	UP III 1976; UT III 1977-1978	Aug. 31, 1979		Ia.	1979
Pella	A74-302012	UP II 1975; UT III 1976-1979	Aug. 31, 1979		Ill., Ind., Ia., Ky.	1979
Will	L22	UP III 1976; UT III 1977-1979	Oct. 31, 1979		Ill., Ind., Mo., Neb., S.D.	1979
Williams 79	L23	UT III 1977-1979	Oct. 31, 1979		Ill., Ind., Kan., Mo., Neb., Oh.	1979
DeSoto	K1024	UP IV 1976; UT IV 1977-1979	July, 1979		Ill., Kan., Ky., Mo.	1980

UNIFORM TEST LOCATIONS - 1979

Location	Tests Conducted by	Uniform Tests						Preliminary Tests				
		00	0	I	II	III	IV	I	II	III	IV	
Del.	Georgetown	E. L. Wisk					x					x
Ill.	Belleville	R. L. Bernard				x	x					<u>x</u>
	Brownstown	"				x	x					
	Eldorado	"				x	<u>x</u>					<u>x</u>
	Girard	"				x	x				x	
	Urbana	Bernard Nickell				x	<u>x</u>		<u>x</u>	<u>x</u>		
	Dekalb	"		x	<u>x</u>				x			
	Pontiac	"				x	x					
	Carbondale	O. Myers, Jr.					x					
Ind.	Bluffton	J. R. Wilcox				x						
	Greenfield	"				x	x					
	Lafayette	"		x	<u>x</u>	<u>x</u>	<u>x</u>		<u>x</u>	<u>x</u>		
	Sullivan	"				x	x					<u>x</u>
Ia.	Ames	W. R. Fehr				<u>x</u>			<u>x</u>			
	Corwith	"		x				x				
	Knierim	"		<u>x</u>				<u>x</u>				
	Marshalltown	"				x			x			
	Ottumwa	"					<u>x</u>				<u>x</u>	
	Stuart	"					x				x	
Kan.	Columbus	W.T. Schapaugh, Jr.										x
	Manhattan	"					<u>x</u>	<u>x</u>				
	Ottawa	"					x	x				
	Powhattan	"						x			<u>x</u>	
Ken.	Lexington	J. H. Orf				x	x			x	x	
Man.	Brandon	R. I. Hamilton	<u>x</u>									
	Morden	M. D. Stauffer	x									
Md.	Clarksville	W. J. Kenworthy					x					
	Queenstown	& P. B. Cregan										<u>x</u>
Mich.	Dundee	T. J. Johnston			x				x			
	Gaylord	"	x									
	Ithaca	"		x	x	x			x			
Minn.	Crookston	J. W. Lambert	<u>x</u>									
	Lamberton	"			x	<u>x</u>		x	x			
	Morris	"	x	<u>x</u>								
	Rosemount	"	<u>x</u>	<u>x</u>								
	Waseca	"			<u>x</u>	x			<u>x</u>			
Mo.	Clinton	V. D. Luedders										x
	Columbia	"					x	x				
	Novelty	"					x	x				
	Portageville	S. Anand										
	Clay	"										x
	Loam	"									<u>x</u>	
Neb.	Lincoln	J. H. Williams										x
	Mead	"			x	<u>x</u>	x			<u>x</u>	x	

UNIFORM TEST LOCATIONS - 1979

Location	Tests Conducted by	Uniform Tests						Preliminary Tests				
		00	0	I	II	III	IV	I	II	III	IV	
N.J.	Adelphia	J. R. Justin				x	x	x			x	
N.D.	Fargo	D. A. Whited	x	x								
	Oakes	"			x							
Ohio	S. Charleston	R. L. Cooper					<u>x</u>	x			<u>x</u>	
	Wheelersburg	"					x	x				x
	Hoytville	A. K. Walker					<u>x</u>	x			<u>x</u>	
	Wooster	"					x	x				
Ont.	Harrow	R. I. Buzzell					x					
	Ottawa	H. D. Voldeng	x									
	Ridgetown	A. D. McLaren		x	<u>x</u>	x				<u>x</u>		
Penn.	Landisville	J. O. Yocum				x	x	x				
S.D.	Brookings	J. J. Bonneman			<u>x</u>	x				<u>x</u>		
	Centerville	"				x				x		
	Elk Point	"					x				x	
	Reville	"										
Tex.	Lubbock	R. D. Brigham		<u>x</u>	x							x
Wis.	Arlington	E. T. Gritton			<u>x</u>	x				<u>x</u>	x	
	Ashland	"	<u>x</u>									
	Spooner	"		<u>x</u>								
No. locations with agronomic data (x, <u>x</u>)			9	7	14	22	25	24	9	11	10	8
No. with seed composition data (<u>x</u>)			4	4	5	6	5	5	5	5	5	5

1979 Disease and Shattering Tests

Location	Tests Conducted by	Test	U.T.	P.T.
Ill.	Girard	R. L. Bernard	BP	II, III
	Eldorado	"	DM	III, IV
Ind.	Lafayette	K. L. Athow and F. A. Laviolette	FE ₂ , PR ₁ , BSR	00-IV I-IV
	Lafayette	T. S. Abney and T. L. Richards	Germ, PSB, SMV PS	00-IV I-IV 00-I I
Ia.	Ames	W. R. Fehr	Chlorosis Hypocotyl	00-IV I-IV 00-IV I-IV
		H. Tachibana	PR ₁ , BSR	00-IV I-IV
Kan.	Manhattan	W.T. Schapaugh, Jr.		00-IV I-IV
Minn.	St. Paul	J. W. Lambert	BSR	00-IV
Ohio	Vickery	A. F. Schmitthenner	PR Tolerance	00-III I-III
Tex.	Lubbock	R. D. Brigham	Shattering	III, IV

IDENTIFICATION OF PARENT STRAINS

Strain	Parentage or Source
A72-507	Amsoy x Wayne
A72-512	Amsoy x Wayne
A73-19084	IVR Ex 5003 x Wells
A73-21030	L65-1342 x IVR Ex 4311
AP68-315	Clark ⁵ x PI84946-2
AP68-1016	Clark ⁵ x PI84946-2
AP68-1022	Clark ⁵ x PI84946-2
AX56 P64-1	Adams x Harosoy
AX896-67-3	AP68-315 x C1423
AX900-4-3	CX407BC7-255 x AP68-1022
AX901-40-2	Beeson x AP68-1022
C1079	Lincoln x Ogden
C1253	Blackhawk x Harosoy
C1264	Harosoy x C1079
C1265	Harosoy x C1079
C1266R	Harosoy x C1079
C1317	[(Lincoln x Ogden) x Adams] ⁸ x Mukden
C1421	Adelphia ⁸ x Mukden
C1423	C1266R x C1253
C1430	C1253 x Kent
C1432	C1253 x Kent
C1453	C1266R x C1253
C1477	Amsoy ⁸ x C1253
C1483	C1266 x C1265
C1515	C1432 x C1430
C1520	Bonus x Cutler
CX258	PI65338 x Kent
CX322	Lindarin x CX258
CX323	Lindarin x L9-4196-12
CX407 BC7-255	Amsoy ⁸ x C1253

IDENTIFICATION OF PARENT STRAINS

Strain	Parentage or Source
D49-2491	S-100 x CNS
D54-2437	N48-1394 x L46-5679
D64-3146	D49-2491 x Hawkeye
D67-3297	Hill ² x PI171450
IVR Ex4311	Hark x Wayne
IVR Ex5003	Provar x (AX56 P64-1 x PI191110-1)
K1003	C1266 x C1264
L9-4196-2	(Lincoln x Richland) x (Lincoln x CNS)
L12	[(Clark ⁸ xCNS)x(Clark ⁸ xBlackhawk)]x[(Clark ⁶ xT201)xClark ⁶ xT145] (<u>I</u> <u>r</u> <u>Rps</u> ₁)
L15	Wayne ⁶ x Clark 63 (<u>Rps</u> ₁)
L46-5679	Lincoln x Richland
L56-0034	Clark x Adams
L57-9819	Hawkeye x Lee
L61-344	Harosoy ⁶ x T117 (Dt ₂)
L62-1547	Clark ⁶ x T204
L62-1926	Clark ⁶ x T245 (<u>e</u> ₂ early)
L63-3534	(Clark ⁶ x T201) x (Clark ⁶ x T145) (<u>I</u> , <u>P</u> ₁ , <u>r</u>)
L65-1342	Wayne ² x L62-1926
L65-4050	Wayne ⁶ x Clark 63
L66-531	Clark <u>dt</u> ₁ <u>E</u> ₁ <u>e</u> ₂
L66-1359	Wayne x L57-0034
L66L-137	Wayne x L57-0034
L66L-140	Wayne x L57-0034
L66L-154	Wayne x L57-0034
L66L-177	Wayne x L57-9819
L68-4096	(L15 ⁵ x L63-3534) x (Wayne ¹⁰ x Kanrich) <u>r</u> <u>Rpm</u> <u>Rps</u>
L69-5343	L12 ⁶ x Hawkeye (<u>Ir</u> <u>Im</u>)
L70-2283	Chippewa x Custer
L70-2450	Wayne x Custer
L70-6494	Harosoy ⁵ x D54-2437 (<u>Rps</u> ₂)
L70T-543	L15 x Amsoy 71
L70U-2173	Provar x Disoy

IDENTIFICATION OF PARENT STRAINS

Strain	Parentage or Source
L72-844C-1	Williams ⁵ x L68-4096
L72D-549	L62-3297 (Clark <u>dt₁</u>) x Rampage
L72U-41	Amsoy 71 x Ransom
L72U-758	Miller 67 x L62-1686 (Clark <u>Pd</u>)
L72U-2567	Williams x Ransom
L72U-3331	Amsoy 71 x Ransom
M10	Lincoln ² x Richland
M384	Renville x Capital
M53-117	M10-x PI180501
M54-110	Harosoy x Norchief
M54-139	Renville x Capital
M54-240	(Lincoln ² x Richland) x Korean
M59-120	M54-240 x M54-139
M61-224	Merit x Harosoy
M62-93	Merit x M54-110
M62-263	Grant x M319W
M62-275	Norchief x Harosoy
M62-345	M319W x Harosoy
M63-217Y	Corsoy x M53-117
M63-194	Corsoy x PI132207
M64-3	Traverse x Takachi Nagaha
M65-69	M384 x Corsoy
M65-442	Anoka x Amsoy
M67-141	Corsoy x Wayne
M68-49	Evans x M59-120
M319W	Lincoln x Hawkeye
N45-745	Ogden x CNS
N48-1394	Roanoke x N45-745
O-52-903	Strain 753-1 from Sven A. Holmberg, Sweden
OX383	Corsoy x Harosoy 63
827-4	Strain from Sven A. Holmberg, Sweden
840-7-3	Strain from Sven A. Holmberg, Sweden

UNIFORM TEST 00, 1979

Strain	Parentage	Previous Testing*	Generation Compositied
Altona	0-52-903 x Flambeau	15	F ₅
Clay (0)	Capital x Renville	2	F ₅
Maple Arrow	Harosoy 63 x 840-7-3	2	F ₅
McCall (M65-217)	(Acme x Chippewa) x Hark	6	F ₅
Portage (00)	Acme x Comet	19	F ₅
OAC-22-815	Harosoy 63 x Fiskeby V	—	F ₆
BC 1413	(Amsoy x Portage) x 827-4	1	F ₆
Maple Presto(BD2117)	(Amsoy x Portage) x 840-7-3	1	F ₅
M70-411	M64-3 x M63-217Y	—	F ₅
M71-17	Clay x Evans	—	F ₅
M71-25	Clay x Evans	—	F ₅
M71-38	Wilkins x M62-263	—	F ₅
M71-39	Wilkins x M62-275	—	F ₅

*Number of years in this test, or name of 1978 test.

The regional data show that McCall is the highest yielding Group 00 variety in the test. All of the Minnesota strains are considerably later than the Group 00 check varieties and should be classified as Group 0 strains. The strain M71-38 had a low iron chlorosis score, was resistant to shattering, and was also resistant to race 1 of phytophthora root rot.

UNIFORM TEST 00, 1979

Descriptive and Other Data

Strain	Descriptive Code		Chlorosis	Hypocotyl	Shattering
			Score	Score	Manhattan
			Ames	Ames	3 Weeks
Altona	PTBr	SYB1	3	3	2
Clay (0)	PGBr	SY Y	3	2	2
Maple Arrow	PTBr	SYBr	3	4	5
McCall	PGBr	DYY	3	1	2
Portage (00)	PGBr	SY Y	3	1	5
OAC-22-815	PTBr	DYBr	2	2	4
BC 1413	PTBr	SYBr	4	4	5
Maple Presto	PTBr	DYG	4	3	3
M70-411	WTBr	DYY	3	2	2
M71-17	PGBr	SY Y	2	2	2
M71-25	WGBr	DYY	3	1	2
M71-38	WGBr	SYBf	2	2	1
M71-39	P+WGBr	DYY	2	4	2

Disease Data

Strain	FE ₂		BSR		GERM	SMV	PSB	PS	PR	PR	Race 1
	Laf.	Laf.	Ames	Ames							
	Ind.	Ind.	Minn.	Ia.	*	Lafayette, IN	Ohio	Laf.	Ames		
score		%	%	Reac.	%	score	%	score	-----Reaction-----		
Altona	4	0	50	S	59	5E	38	5E	4.2	R	R
Clay (0)	5	20	75	S	74	5E	41	5S	5.0	S	S
Maple Arrow	1	40	50	S	32	4E	25	5S	4.3	R	R
McCall	5	80	70	S	40	4M	46	5S	5.0	S	S
Portage (00)	5	100	55	S	78	5E	9	5S	4.4	S	S
OAC-22-815	1	40	90	S	37	5E	57	4S	4.6	Seg.	H
BC1413	3	100	45	S	32	5M	43	5S	4.2	S	S
Maple Presto	3	40	0	S	20	5E	48	3S	—	R	R
M70-411	1	80	80	S	45	5E	37	5S	4.8	S	S
M71-17	5	20	85	S	48	1	33	5S	4.6	R	R
M71-25	5	80	70	S	64	2M	23	5S	4.5	R	R
M71-38	5	60	45	S	45	1	38	5S	4.7	R	R
M71-39	5	20	75	S	50	2M	59	5S	4.6	R	R

* Petri dish germination on potato dextrose agar.

UNIFORM TEST 00, 1979

Regional Summary

Strain	Yield	Rank	Matu- rity	Lodg- ing	Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
No. of Tests	9	9	9	9	9	8	9	4	4
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Altona	36.4	8	+4.1	1.9	29	2.3	17.7	40.7	18.4
Clay (0)	37.2	5	+10.3	1.5	29	2.2	15.5	39.4	19.0
Maple Arrow	35.4	9	+7.3	1.8	30	1.7	17.7	40.4	19.4
McCall (M65-217)	38.9	3	+3.9	1.5	29	2.0	14.6	39.0	19.0
Portage (00)	33.6	11	9/12*	1.6	28	2.3	16.7	39.4	18.9
OAC-22-815	34.8	10	+5.3	1.8	27	2.7	17.5	40.3	18.9
BC 1413	33.1	12	-3.2	1.5	27	2.5	18.3	38.8	19.5
Maple Presto	25.7	13	-8.4	1.1	25	3.0	15.7	38.8	19.5
M70-411	39.9	1	+11.2	1.4	29	2.1	16.5	39.6	19.1
M71-17	36.6	7	+11.4	1.5	30	2.3	16.7	40.7	18.8
M71-25	39.6	2	+14.8	1.4	31	2.2	16.3	39.4	19.0
M71-38	38.8	4	+11.4	1.4	30	1.9	14.7	39.0	19.0
M71-39	36.7	6	+10.7	1.3	29	2.1	15.4	39.2	18.5

*107 days after planting

1978-1979, 2-year mean

No. of Tests	17	17	17	17	17	16	17	10	10
Altona	35.6	3	+5.4	2.0	29	2.2	18.1	41.2	18.8
Clay (0)	38.2	1	+12.5	1.6	28	2.2	16.3	40.2	20.0
Maple Arrow	34.0	4	+7.6	1.7	29	1.8	17.7	40.5	20.0
Maple Presto	26.3	7	-8.9	1.2	25	2.9	15.3	39.0	19.9
McCall (M65-217)	37.8	2	+3.9	1.5	29	2.0	15.0	39.4	19.3
Portage (00)	31.7	5	9/7*	1.5	28	2.2	16.5	39.6	19.3
BD1413	31.5	6	-2.8	1.6	27	2.4	17.9	38.7	20.2

*106 days after planting

1977-1979, 3-year mean

No. of Tests	24	24	23	25	25	24	25	14	14
Altona	35.6	3	+5.8	2.2	28	2.2	18.0	41.3	18.3
Clay (0)	37.0	2	+12.7	1.7	28	2.3	16.3	40.5	19.4
Maple Arrow	34.3	4	+7.9	1.8	29	1.8	17.5	40.3	19.8
McCall (M65-217)	37.6	1	+4.7	1.6	28	2.1	15.0	39.3	19.3
Portage (00)	31.7	5	9/5*	1.5	27	2.2	16.8	39.5	18.9

*107 days after planting

UNIFORM TEST 00, 1979

Strain	Mean 9 Tests	<u>Ont.</u>	<u>Wisc.</u>	<u>N.D.</u>
		Ottawa	Ashland	Fargo
<u>YIELD (bu/a)</u>				
Altona	36.4	53.2	34.2	33.2
Clay (0)	37.2	55.9	38.8	39.0
Maple Arrow	35.4	56.1	34.2	30.0
McCall	38.9	57.8	40.3	34.0
Portage (00)	33.6	48.3	35.5	28.9
OAC-22-815	34.8	48.8	35.0	33.1
BC 1413	33.1	50.1	32.3	24.6
BD 2117	25.7	40.9	24.9	21.5
M70-411	39.9	56.1	45.2	43.2
M71-17	36.6	50.6	36.7	37.2
M71-25	39.6	57.6	45.6	44.6
M71-38	38.8	57.6	39.2	40.3
M71-39	36.7	54.0	38.5	40.6
C.V. (%)		10.0	8.1	7.7
L.S.D. (5%)		7.7	5.0	3.8
Row sp (in.)		10"	24"	28"
Rows/plot		4	4	3
Reps		4	3	4

Strain	9 Tests	<u>YIELD RANK</u>		
		Ottawa	Ashland	Fargo
Altona	8	8	10	8
Clay (0)	5	6	5	5
Maple Arrow	9	4	10	10
McCall	3	1	3	7
Portage (00)	11	12	8	11
OAC-22-815	10	11	9	9
BC 1413	12	10	12	12
BD 2117	13	13	13	13
M70-411	1	5	2	2
M71-17	7	9	7	6
M71-25	2	2	1	1
M71-38	4	3	4	4
M71-39	6	7	6	3

UNIFORM TEST 00, 1979

Minn.			Man.		Mich.
Crookston	Morris	Rosemount	Morden	Brandon	Gaylord
<u>YIELD (bu/a)</u>					
35.4	42.6	31.0	52.5	29.5	16.0
34.5	42.3	35.3	50.1	25.9	12.8
28.7	36.1	39.7	49.8	28.7	15.4
37.2	49.4	36.4	47.9	28.5	18.9
28.1	38.9	31.2	46.5	27.3	17.4
28.0	37.7	32.1	47.8	33.2	17.2
34.2	41.2	28.4	40.2	29.9	17.1
27.5	32.9	12.2	34.8	26.1	10.6
24.3	45.8	38.6	60.6	25.8	19.3
30.3	46.1	38.3	49.1	27.9	12.9
33.8	46.5	39.9	54.6	18.6	14.8
33.4	44.3	35.5	52.1	30.0	16.6
27.6	44.6	34.1	51.5	26.5	13.1
11.9	5.5	10.1	—	9.0	13.8
6.2	3.9	5.6	—	4.2	3.6
22"	30"	30"	12"	9"	30"
4	4	4	4	4	2
3	3	3	4	3	3

<u>YIELD RANK</u>					
2	7	11	3	4	7
3	8	7	6	11	12
8	12	2	7	5	8
1	1	5	9	6	2
9	10	10	11	8	3
10	11	9	10	1	4
4	9	12	12	3	5
12	13	13	13	10	13
13	4	3	1	12	1
7	3	4	8	7	11
5	2	1	2	13	9
6	6	6	4	2	6
11	5	8	5	9	10

UNIFORM TEST 00, 1979

Strain	Mean 9 Tests	<u>Ont.</u>	<u>Wisc.</u>	<u>N.D.</u>
		Ottawa	Ashland	Fargo
<u>MATURITY (date)</u>				
Altona	+4.1	+3	+2	+5
Clay (0)	+10.3	+9	+11	+13
Maple Arrow	+7.3	+7	+3	+12
McCall	+3.9	+4	+6	+6
Portage (00)*	9/12	9/16	9/17	9/5
OAC-22-815	+5.3	+4	+1	+6
BC 1413	-3.2	-2	-3	0
BD 2117	-8.4	-12	-10	-6
M70-411	+11.2	+8	+10	+12
M71-17	+11.4	+9	+12	+15
M71-25	+14.8	+13	+15	+18
M71-38	+11.4	+9	+11	+13
M71-39	+10.7	+9	+9	+14
Date Planted	5/27	5/23	5/25	5/24
*Days to maturity	107	116	114	104

Strain	9 Tests	<u>LODGING (score)</u>		
		Ottawa	Ashland	Fargo
Altona	1.9	2.5	1.0	2.0
Clay (0)	1.5	2.2	1.0	1.0
Maple Arrow	1.8	2.5	1.3	2.0
McCall	1.5	2.2	1.7	2.0
Portage (00)	1.6	2.0	1.3	1.5
OAC-22-815	1.8	2.3	1.5	1.5
BC 1413	1.5	2.2	0.7	1.5
BD 2117	1.1	1.1	0.5	1.0
M70-411	1.4	2.2	1.2	1.5
M71-17	1.5	2.0	1.3	1.0
M71-25	1.4	2.0	1.3	1.0
M71-38	1.4	2.1	0.8	1.5
M71-39	1.3	1.7	0.5	1.5

UNIFORM TEST 00, 1979

Minn.			Man.		Mich.
Crookston	Morris	Rosemount	Morden	Brandon	Gaylord
<u>MATURITY (date)</u>					
0	+7	+5	+8	+5	-2
+7	+13	+7	+13	+14	+6
+3	+11	+8	+11	+8	+3
-1	+4	+6	+5	+3	+2
9/19	9/1	8/30	9/10	9/20	9/23
+4	+9	+6	+7	+5	0
-9	+1	0	-2	0	-4
-11	-5	-5	-10	-10	-7
+10	+13	+10	+16	+18	+4
+10	+12	+9	+14	+15	+7
+11	+17	+12	+21	+18	+8
+9	+16	+10	+14	+15	+6
+8	+14	+11	+14	+11	+6
5/29	5/24	5/19	5/28	5/31	6/12
113	100	103	105	112	103

<u>LODGING (score)</u>					
1.3	4.0	3.0	1.5	1.0	1.0
1.3	2.3	2.0	2.0	1.0	1.0
1.0	3.7	1.7	2.0	1.0	1.0
1.3	2.0	1.3	1.0	1.0	1.0
1.0	2.7	1.3	2.5	1.0	1.0
1.3	3.7	2.3	2.0	1.0	1.0
1.0	2.7	2.3	1.5	1.0	1.0
1.0	2.0	1.3	1.0	1.0	1.0
1.3	2.0	1.3	1.0	1.0	1.0
1.0	2.7	1.3	2.0	1.0	1.0
1.0	2.7	1.0	1.5	1.0	1.0
1.3	2.0	1.0	2.0	1.0	1.0
1.0	2.0	1.0	2.0	1.0	1.0

UNIFORM TEST 00, 1979

Strain	Mean 9 Tests	<u>Ont.</u>	<u>Wisc.</u>	<u>N.D.</u>
		Ottawa	Ashland	Fargo
<u>HEIGHT (inches)</u>				
Altona	29	30	31	30
Clay (0)	29	30	29	30
Maple Arrow	30	34	28	31
McCall	29	30	33	29
Portage (00)	28	30	33	27
OAC-22-815	27	28	26	26
BC 1413	27	30	26	27
BD 2117	25	29	28	28
M70-411	29	32	28	33
M71-17	30	31	29	31
M71-25	31	32	27	35
M71-38	30	32	31	33
M71-39	29	30	29	32

Strain	Mean 8 Tests	<u>QUALITY (score)</u>		
		Ottawa	Ashland	Fargo
Altona	2.3	2.0	2.3	2.0
Clay (0)	2.2	1.0	3.3	1.0
Maple Arrow	1.7	2.0	1.0	1.0
McCall	2.0	2.0	2.3	1.0
Portage (00)	2.3	2.0	3.3	1.0
OAC-22-815	2.7	2.0	2.0	4.0
BC 1413	2.5	2.0	1.7	2.0
BD 2117	3.0	3.0	3.7	2.0
M70-411	2.1	2.0	2.7	1.0
M71-17	2.3	1.0	4.0	1.0
M71-25	2.2	1.0	3.3	1.0
M71-38	1.9	1.0	1.7	1.0
M71-39	2.1	1.0	3.0	1.0

UNIFORM TEST 00, 1979

Minn.			Man.		Mich.
Crookston	Morris	Rosemount	Morden	Brandon	Gaylord
<u>HEIGHT (inches)</u>					
29	37	27	33	22	20
34	33	27	33	22	21
34	36	31	32	23	23
31	37	28	30	20	23
29	32	26	30	22	23
29	34	25	30	22	20
28	32	24	29	22	22
22	27	19	29	21	19
32	35	30	33	21	20
31	37	28	34	24	23
34	40	30	35	25	24
34	35	29	35	21	22
33	35	28	33	19	19

<u>QUALITY (score)</u>					
3.0	2.7	2.0	2.5	2.0	
3.3	2.7	2.0	1.0	3.0	
3.0	2.0	2.3	1.0	1.0	
2.7	2.3	2.3	1.0	2.0	
2.7	2.7	2.7	2.0	2.0	
3.0	3.0	2.7	2.5	2.0	
3.5	2.7	3.0	3.0	2.0	
3.3	3.3	4.0	2.5	2.0	
3.0	2.3	2.0	1.0	3.0	
3.0	2.7	2.3	1.0	3.0	
3.3	2.3	2.0	1.0	4.0	
3.0	2.3	2.0	1.5	3.0	
2.7	2.7	2.0	2.5	2.0	

UNIFORM TEST 00, 1979

Strain	Mean 9 Tests	<u>Ont.</u>	<u>Wisc.</u>	<u>N.D.</u>
		Ottawa	Ashland	Fargo
<u>SEED SIZE (g/100)</u>				
Altona	17.7	22.2	20.0	14.1
Clay (0)	15.5	19.9	17.1	13.5
Maple Arrow	17.7	22.1	21.2	14.5
McCall	14.6	19.3	16.8	11.2
Portage (00)	16.7	21.2	18.3	13.3
OAC-22-815	17.5	20.9	20.0	14.3
BC 1413	18.3	22.9	19.6	15.7
BD 2117	15.7	18.7	16.8	15.2
M70-411	16.5	20.2	18.9	15.0
M71-17	16.7	20.4	19.4	15.0
M71-25	16.3	21.5	18.0	15.1
M71-38	14.7	19.2	17.1	14.2
M71-39	15.4	19.5	17.1	14.0

Strain	Mean 4 Tests	<u>Wisc.</u>	<u>Minn.</u>		<u>Man.</u>
		Ashland	Crookston	Rosemount	Brandon
<u>% PROTEIN</u>					
Altona	40.7	41.7	42.6	40.4	38.2
Clay (0)	39.4	40.9	41.1	39.3	36.5
Maple Arrow	40.4	42.9	41.0	40.4	37.5
McCall	39.0	41.0	39.6	39.2	36.4
Portage (00)	39.4	40.3	39.3	39.7	38.5
OAC-22-815	40.3	39.0	42.1	41.4	38.6
BC 1413	38.8	39.1	40.5	40.2	35.5
BD 2117	38.8	39.1	38.2	40.0	37.7
M70-411	39.6	40.3	40.9	39.9	37.1
M71-17	40.7	42.8	43.0	40.3	36.8
M71-25	39.4	40.6	41.4	39.3	36.1
M71-38	39.0	41.8	39.2	39.2	35.6
M71-39	39.2	41.8	39.2	39.4	36.2

UNIFORM TEST 00, 1979

Minn.		Man.			Mich.
Crookston	Morris	Rosemount	Morden	Brandon	Gaylord
<u>SEED SIZE (g/100)</u>					
19.0	19.3	16.1	17.2	16.6	15.0
17.0	15.8	15.5	15.7	15.1	10.1
17.9	18.9	16.2	17.2	16.5	15.0
15.9	16.3	13.0	14.5	13.3	11.0
19.5	18.7	16.1	16.7	15.0	11.1
20.0	19.0	15.4	17.5	16.4	13.8
19.4	19.4	17.3	18.0	15.7	16.8
18.9	16.0	14.2	14.7	13.5	13.2
18.6	16.7	14.5	16.6	15.8	12.6
20.7	16.5	16.1	14.9	15.2	11.9
18.9	16.4	15.2	15.8	16.5	9.0
15.7	16.4	13.4	14.7	12.8	9.1
17.5	18.0	15.5	15.1	12.5	9.5

Mean 4 Tests	Ashland	Crookston	Rosemount	Brandon
<u>% OIL</u>				
18.4	17.3	18.8	18.6	19.1
19.0	18.4	18.3	19.4	19.8
19.4	18.2	20.1	18.5	20.8
19.0	17.8	19.2	19.4	19.5
18.9	18.1	19.2	18.8	19.6
18.9	19.0	18.4	19.2	19.0
19.5	18.6	19.8	19.1	20.5
19.5	19.0	19.3	20.4	19.2
19.1	18.3	19.4	18.6	20.0
18.8	17.3	18.4	20.1	19.2
19.0	17.6	19.4	18.9	20.2
19.0	18.3	18.9	19.4	19.5
18.5	17.1	18.7	18.5	19.7

UNIFORM TEST 0, 1979

Strain	Parentage	Previous Testing*	Generation Compositd
Altona (00)	0-52-903 x Flambeau	2	F ₅
Clay	Capital x Renville	12	F ₅
Evans (0)	Merit x Harosoy	9	F ₅
Hodgson 78 (I)	Hodgson ⁷ x Merit	2	F ₅
M70-153	Steele x Hodgson	1	F ₅
M70-334	M62-93 x M64-3	1	F ₅
M70-368	M64-3 x M63-217Y	—	F ₅
M71-43	Wilkin x M63-217Y	—	F ₅
M71-52	Evans x M62-345	—	F ₅
M71-54	Evans x M62-345	—	F ₅
M71-57	Evans x M63-217Y	—	F ₅
M71-65	Steele x M63-194	—	F ₅
M71-99	M61-224 x M63-217Y	—	F ₅
M71-107	M61-224 x M63-217Y	—	F ₅
M72-3	Evans x Hodgson	—	F ₅

*Number of years in this test or name of 1978 test

Several strains in this test were superior to the check variety Evans. M70-153, the highest yielding Group 0 strain in the test the past two years, was resistant to shattering and to race 1 of phytophthora root rot, and had very good lodging resistance. M71-65 was similar in maturity to Evans, was about two bushels higher in yield than Evans, was resistant to race 1 of phytophthora root rot and to shattering. M72-3 is a late maturing strain in this test and should be moved to Group I for additional testing.

UNIFORM TEST 0, 1979

Descriptive and Other Data

Strain	Descriptive Code		Chlorosis	Hypocotyl	Shattering
			<u>Score</u> Ames	<u>Score</u> Ames	Manhattan 3 Weeks
Altona (00)	PTBr	SYB1	3	3	2
Clay	PGBr	SY Y	3	2	2
Evans (0)	WGBr	DYY	3	2	2
Hodgson 78 (I)	PGBr	DYBf	3	4	1
M70-153	PGBr	DYBf	3	1	1
M70-334	WGBr	DYY	3	4	1
M70-368	PTBr	DYY	3	2	3
M71-43	PGBr	DYY	2	5	1
M71-52	WGBr	SY Y	3	4	1
M71-54	WGBr	SY Y	3	4	2
M71-57	WGBr	DYY	3	2	2
M71-65	PGBr	DYY	4	3	1
M71-99	PGBr	DYY	3	1	1
M71-107	WGBr	DYY	2	5	1
M72-3	WGBr	DYBf	2	1	2

UNIFORM TEST 0, 1979

Disease Data

Strain	<u>FE₂</u>		<u>BSR</u>		<u>GERM*</u>	<u>SMV</u>	<u>PSB</u>	<u>PS</u>	<u>PR</u>	<u>PR</u>	<u>Race 1</u>
	Laf. Ind.	Laf. Ind.	Minn.	Ia.	Lafayette, IN				Vickery Ohio	Laf. Ind.	Ames Ia.
	a	n	n	n	d	a	d	a	a	a	a
	score	%	%	Reac.	%	score	%	score	-----Reaction-----		
Altona (00)	4	0	50	S	59	5E	38	5E	3.8	R	R
Clay	5	20	75	S	74	5E	41	5S	5.0	S	S
Evans (0)	5	60	75	S	57	1	32	5S	5.0	R	R
Hodgson 78 (I)	5	80	35	S	68	3M	13	4E	4.2	R	R
M70-153	5	20	70	S	49	1	8	5S	4.4	R	H
M70-334	5	20	40	S	66	1	6	5E	4.8	S	S
M70-368	5	20	45	S	78	5E	6	5E	4.8	S	S
M71-43	5	0	60	S	36	1	31	5S	4.8	R	R
M71-52	5	60	85	S	32	1	32	5E	4.8	R	R
M71-54	5	60	100	S	61	2M	25	5S	4.8	R	R
M71-57	5	80	90	S	73	1	11	5E	5.0	R	R
M71-65	5	40	60	S	46	5E	30	5S	4.7	R	H
M71-99	5	20	45	S	92	1	6	5E	4.6	S	S
M71-107	4	20	40	S	71	2M	11	4E	4.6	S	S
M72-3	5	60	55	S	76	1	6	5E	4.4	Seg.	H

*Petri dish germination on potato dextrose agar

UNIFORM TEST 0, 1979

Regional Summary

Strain	Yield	Rank	Matu- rity	Lodg- ing	Height	Seed Quality	Seed Size	Composition	
No. of Tests	7	7	7	7	6	6	7	4	4
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Altona (00)	31.7	15	-9.4	2.6	30	2.1	18.3	41.6	18.2
Clay	37.4	14	-4.9	1.8	29	2.0	16.6	40.2	18.9
Evans (0)	40.3	9	9/23*	1.7	35	2.2	16.5	39.9	18.9
Hodgson 78 (I)	42.9	1	+8.4	2.0	37	2.1	17.0	40.2	18.9
M70-153	42.5	2	+2.8	1.5	33	2.1	15.9	40.2	19.3
M70-334	41.6	5	+3.3	1.3	29	1.8	18.4	40.4	18.4
M70-368	40.5	8	+2.7	1.5	35	2.4	16.6	39.9	19.3
M71-43	40.0	10	-1.3	1.6	33	1.9	17.6	41.0	18.8
M71-52	41.6	5	+5.5	2.1	34	2.2	20.5	40.8	18.6
M71-54	39.9	11	0	1.8	35	2.0	17.6	41.4	19.3
M71-57	41.2	7	+6.4	1.6	34	2.0	18.0	41.7	18.4
M71-65	42.1	4	+0.1	2.3	34	2.1	20.0	40.5	19.0
M71-99	39.4	13	+4.7	1.5	34	2.1	16.4	41.5	18.7
M71-107	39.9	11	+4.3	1.5	38	2.0	18.3	41.2	18.2
M72-3	42.4	3	+6.9	1.9	37	2.3	16.2	40.1	18.9

*121 days after planting

1978-1979, 2-year mean

No. of Tests	15	15	15	15	14	13	15	9	9
Altona (00)	28.7	6	-8.6	2.0	27	2.5	18.2	41.9	18.9
Clay	34.1	5	-5.2	1.5	26	2.5	16.4	41.2	20.2
Evans (0)	36.8	4	9/19.8*	1.4	32	2.3	16.4	40.3	20.2
Hodgson 78 (I)	39.9	1	+7.8	1.7	35	2.2	17.3	40.1	20.5
M70-153	39.9	1	+2.8	1.2	31	2.3	16.2	40.2	20.8
M70-334	37.8	3	+3.6	1.1	28	2.2	18.1	40.2	20.4

*118 days after planting

UNIFORM TEST 0, 1979

Strain	Mean 7 Tests	Ont.	Mich.	Wisc.	Minn.		N.D.	S.D.
		Ridge- town	Ithaca	Spooner	Mor- ris	Rose- mount	Fargo	Re- villo
<u>YIELD (bu/a)</u>								
Altona (00)	31.7	28.8	31.1	29.4	37.5	34.3	34.8	25.9
Clay	37.4	35.6	37.8	35.6	45.8	37.0	41.9	28.4
Evans (0)	40.3	37.2	43.5	37.0	47.0	41.2	44.1	32.3
Hodgson 78 (I)	42.9	47.2	42.0	43.8	47.4	49.9	38.9	31.2
M70-153	42.5	42.1	45.7	43.2	47.4	44.1	42.3	32.8
M70-334	41.6	39.1	41.8	39.6	46.7	42.9	46.4	34.7
M70-368	40.5	43.0	44.4	40.1	41.8	42.4	40.2	31.3
M71-43	40.0	39.2	38.3	42.3	47.6	41.3	42.5	28.6
M71-52	41.6	41.8	41.0	40.7	51.4	42.9	40.0	33.6
M71-54	39.9	40.7	41.6	37.2	45.6	42.7	42.9	28.6
M71-57	41.2	41.5	42.0	45.0	44.6	41.0	41.0	33.6
M71-65	42.1	41.4	45.9	39.8	45.3	43.3	44.6	34.7
M71-99	39.4	41.1	42.4	37.4	42.5	39.6	40.8	31.7
M71-107	39.9	41.2	45.4	38.2	43.0	44.7	37.1	29.6
M72-3	42.4	45.4	47.3	43.6	42.1	44.0	41.1	33.6
C.V. (%)		7.8	9.5	8.1	7.2	9.3	5.1	9.1
L.S.D. (5%)		4.5	6.6	3.0	5.4	6.5	3.0	4.1
Row sp (in.)		24"	—	36"	30"	30"	28"	38"
Rows/plot		4	—	4	4	4	3	3
Reps.		4	—	3	3	3	4	4

Strain	7 Tests	<u>YIELD RANK</u>						
		Ont.	Mich.	Wisc.	Minn.	N.D.	S.D.	
Altona (00)	15	15	15	15	15	15	15	15
Clay	14	14	14	14	7	14	7	14
Evans (0)	9	13	6	13	5	11	3	7
Hodgson 78 (I)	1	1	8	2	3	1	13	10
M70-153	2	4	3	4	3	3	6	6
M70-334	5	12	10	9	6	6	1	2
M70-368	8	3	5	7	14	9	11	9
M71-43	10	11	13	5	2	10	5	13
M71-52	5	5	12	6	1	6	12	5
M71-54	11	10	11	12	8	8	4	12
M71-57	7	6	8	1	10	12	9	3
M71-65	4	7	2	8	9	5	2	1
M71-99	13	9	7	11	12	13	10	8
M71-107	11	8	4	10	11	2	14	11
M72-3	3	2	1	3	13	4	8	4

UNIFORM TEST 0, 1979

Strain	Mean 7 Tests	Ont.	Mich.	Wisc.	Minn.		N.D.	S.D.
		Ridge- town	Ithaca	Spooner	Mor- ris	Rose- mount	Fargo	Re- villo
<u>MATURITY (relative date)</u>								
Altona (00)	-9.4	-13	-7	-4	-11	-13	-9	-9
Clay	-4.9	-9	-6	-6	+6	-10	-2	-7
Evans (0)*	9/23	9/18	9/25	9/20	9/19	9/19	9/25	10/3
Hodgson 78 (I)	+8.4	+7	+7	+13	+9	+7	+7	+9
M70-153	+2.8	-1	+2	+2	+5	+4	0	+5
M70-334	+3.3	+2	+7	+7	+6	+4	+4	-7
M70-368	+2.7	+1	+3	+2	+4	+4	+1	+4
M71-43	-1.3	-2	-1	-4	0	-1	-1	+1
M71-52	+5.5	+7	+5	+11	+4	+4	0	+2
M71-54	0	0	-1	0	0	0	-1	+2
M71-57	+6.4	+7	+3	+12	+9	+5	+5	+4
M71-65	+0.1	-2	+1	-1	+1	+1	-2	+3
M71-99	+4.7	+2	+3	+4	+7	+6	+6	+5
M71-107	+4.3	+1	+1	+5	+6	+6	+5	+6
M72-3	+6.9	+4	+7	+12	+7	+7	+6	+5
Date planted	5-24	5-18	—	5-24	5-24	5-19	5-24	6-4
*Days to maturity	121	123		119	118	123	124	121

Strain	7 Tests	<u>LODGING (score)</u>						
		Ont.	Mich.	Wisc.	Minn.	N.D.	S.D.	
Altona (00)	2.6	1.8	1.7	2.3	4.0	2.7	5.0	1.0
Clay	1.8	1.0	1.0	2.7	2.0	1.7	3.0	1.0
Evans (0)	1.7	1.0	1.0	1.3	2.7	1.7	3.0	1.0
Hodgson 78 (I)	2.0	1.0	1.8	1.7	2.7	3.0	3.0	1.0
M70-153	1.5	1.0	1.0	1.7	2.0	1.7	2.0	1.0
M70-334	1.3	1.0	1.0	1.0	1.7	1.7	2.0	1.0
M70-368	1.5	1.0	1.0	1.7	2.0	2.0	2.0	1.0
M71-43	1.6	1.0	1.0	1.7	1.7	1.7	3.0	1.0
M71-52	2.1	1.0	1.0	1.7	3.7	2.0	4.0	1.0
M71-54	1.8	1.0	1.3	2.0	3.0	1.3	3.0	1.0
M71-57	1.6	1.0	1.0	1.7	2.7	2.0	2.0	1.0
M71-65	2.3	1.0	1.7	2.3	4.3	2.0	4.0	1.0
M71-99	1.5	1.0	1.3	2.0	2.3	2.0	1.0	1.0
M71-107	1.5	1.0	1.3	1.3	2.0	2.7	1.0	1.0
M72-3	1.9	1.0	1.7	2.0	2.7	2.7	2.0	1.0

UNIFORM TEST 0, 1979

Strain	Mean 6 Tests	Ont.	Mich.	Wisc.	Minn.		N.D.	S.D.
		Ridge- town	Ithaca	Spooner	Mor- ris	Rose- mount	Fargo	Re- villo
<u>HEIGHT (inches)</u>								
Altona (00)	30	21	32		35	28	32	29
Clay	29	22	29		35	27	31	27
Evans (0)	35	25	38		44	36	34	32
Hodgson 78 (I)	37	32	40		44	38	34	36
M70-153	33	25	36		41	34	31	33
M70-334	29	24	30		33	26	29	32
M70-368	35	28	40		39	33	35	32
M71-43	33	25	37		37	32	35	30
M71-52	34	26	37		40	33	36	33
M71-54	35	27	35		42	36	35	34
M71-57	34	28	32		42	34	33	35
M71-65	34	25	38		41	32	36	33
M71-99	34	28	37		36	34	34	34
M71-107	38	30	40		45	39	37	35
M72-3	37	31	41		43	38	35	35

Strain	6 Tests		<u>SEED QUALITY (score)</u>				
	1	2	1	2	3	4	5
Altona (00)	2.1	2.0	1.7	3.0	3.0	2.0	1.0
Clay	2.0	2.0	1.7	2.7	2.3	1.0	2.0
Evans (0)	2.2	2.0	2.7	2.7	2.7	1.0	2.0
Hodgson 78 (I)	2.1	2.0	2.3	2.0	2.0	2.0	2.0
M70-153	2.1	2.0	1.7	2.7	2.3	2.0	2.0
M70-334	1.8	2.0	1.7	2.3	2.0	1.0	2.0
M70-368	2.4	2.0	2.7	2.7	2.7	2.0	2.0
M71-43	1.9	2.0	2.0	2.3	2.3	1.0	2.0
M71-52	2.2	2.0	2.0	3.0	2.3	2.0	2.0
M71-54	2.0	2.0	1.7	3.0	3.0	1.0	1.0
M71-57	2.0	2.0	1.7	2.7	2.3	1.0	2.0
M71-65	2.1	2.0	1.7	3.0	3.0	1.0	2.0
M71-99	2.1	2.0	2.3	2.3	2.7	1.0	2.0
M71-107	2.0	2.0	1.7	2.7	2.7	1.0	2.0
M72-3	2.3	2.0	1.7	2.7	2.3	3.0	2.0

UNIFORM TEST 0, 1979

Mean 7 Tests	Ont.	Mich.	Wisc.	Minn.		N.D.	S.D.
	Ridge- town	Ithaca	Spooner	Morris	Rose- mount	Fargo	Re- villo
<u>SEED SIZE (g/100)</u>							
18.3	18.8	18.9	21.0	19.8	16.3	14.8	18.7
16.6	16.9	19.0	17.2	16.5	17.0	13.2	16.7
16.5	17.5	19.6	19.0	15.2	15.4	13.7	14.8
17.0	18.5	18.5	19.1	16.0	16.0	13.7	16.9
15.9	16.0	17.7	18.0	16.1	15.4	12.7	15.4
18.4	18.3	20.9	20.0	17.4	17.6	15.8	18.9
16.6	17.9	18.9	19.2	15.5	15.7	13.1	15.6
17.6	17.9	21.4	18.8	16.5	16.0	14.8	17.7
20.5	20.8	22.5	23.5	20.1	19.7	16.2	20.8
17.6	18.4	19.6	19.8	15.7	15.6	15.1	18.8
18.0	19.0	19.3	20.0	17.7	17.1	14.7	17.9
20.0	20.2	22.3	21.4	20.0	19.0	16.1	21.3
16.4	16.4	17.4	18.6	16.0	15.3	14.0	17.1
18.3	19.6	21.5	20.4	17.9	17.5	13.6	17.9
16.2	17.7	18.2	18.7	15.5	14.7	13.2	15.7

UNIFORM TEST 0, 1979

Strain	Mean 4 Tests	Wisc.	Minn.		S.D.
		Spooner	Morris	Rose- mount	Revilla
<u>% PROTEIN</u>					
Altona (00)	41.6	42.5	42.0	41.2	40.7
Clay	40.2	40.1	39.6	42.5	38.4
Evans (0)	39.9	41.0	40.1	40.2	38.3
Hodgson 78 (I)	40.2	40.9	39.7	41.4	38.7
M70-153	40.2	41.4	40.3	40.4	38.9
M70-334	40.4	40.0	40.5	42.3	38.6
M70-368	39.9	41.4	39.7	39.9	38.6
M71-43	41.0	40.4	41.5	40.5	41.6
M71-52	40.8	41.7	42.3	40.1	39.0
M71-54	41.4	40.8	41.3	42.5	41.0
M71-57	41.7	42.3	41.6	40.3	42.6
M71-65	40.5	39.3	40.8	42.0	39.8
M71-99	41.5	41.1	40.8	42.6	41.5
M71-107	41.2	42.0	41.0	42.2	39.5
M72-3	40.1	40.8	41.4	39.7	38.5

Strain	4 Tests	<u>% OIL</u>			
		Wisc.	Minn.	Rose- mount	S.D.
Altona (00)	18.2	17.9	18.0	18.3	18.5
Clay	18.9	18.8	18.6	18.8	19.5
Evans (0)	18.9	18.9	18.3	19.9	19.3
Hodgson 78 (I)	18.9	18.3	19.0	18.7	19.6
M70-153	19.3	18.6	18.5	19.6	20.5
M70-334	18.4	17.6	18.3	18.5	19.1
M70-368	19.3	18.4	18.6	19.9	20.4
M71-43	18.8	18.8	18.7	18.8	19.1
M71-52	18.6	18.1	18.1	18.8	19.6
M71-54	19.3	19.2	19.4	19.4	19.3
M71-57	18.4	19.2	17.5	18.7	18.3
M71-65	19.0	19.9	18.6	18.9	18.8
M71-99	18.7	19.0	18.4	18.3	19.2
M71-107	18.2	18.0	18.2	18.2	18.5
M72-3	18.9	18.6	18.0	19.2	19.7

UNIFORM TEST I, 1979

Strain	Parentage	Previous Testing*	Generation Compositied
Corsoy (II)	Harosoy x Capital	2	F ₉
Evans (0)	Merit x Harosoy	2	F ₅
Hodgson 78 (I)	Hodgson ⁷ x Merit	5	F ₅
<i>Weber</i> <i>Hardin</i> A75-102032	C1453 x Swift	2	F ₅
A76-102009	Corsoy ³ x Cutler 71	1	F ₃
A76-103002	AP6 (40 lines intermated 3 times)	1	F ₆
A77-112008	Washington x A72-512	PI	F ₄
A77-112023	AP6M(S1)C1	PI	F ₄
L74-3897	Williams x Beeson	PI	F ₆
L75-3632	Corsoy ⁶ x Lee 68	PI	F ₃
M70-128	Evans x M63-217Y	PI	F ₅
M70-260	M62-93 x M63-217Y	PI	F ₅

*Number of years in this test or name of 1978 test.

The strain A76-103002 has been the highest yielding entry in this test the past two years. It is resistant to shattering and to race 1 of phytophythora root rot but has only moderate lodging resistance. Two additional strains, A76-103002 (susceptible to phytophthora) and A77-112023 (resistant to race 1 of phytophthora) were higher yielding than the check variety Weber. M70-260 matured nearly 3 days earlier than Hodgson 78, was very resistant to lodging, and was resistant to races 1 of phytophthora. L75-3632, resistant to races 1, 2, 3, 6, 7, 8, and 9 of phytophthora, did not yield as well as the check varieties in these tests.

UNIFORM TEST I, 1979

Descriptive and Other Data

Strain	Descriptive Code		Chlorosis	Hypocotyl	Shattering
			Score Ames	Score Ames	Manhattan 2 Weeks
Corsoy (II)	PGBr	SY Y	5	1	2
Evans (0)	WGBr	DY Y	3	2	2
Hodgson 78 (I)	PGBr	DYBf	3	4	1
A75-102032	WTBr	DYB1	3	2	2
A76-102009	PGBr	DY Y	4	1	1
A76-103002	WTBr	SY G	4	2	1
A77-112008	PGT	DY Y	4	2	1
A77-112023	PTT	DYB1	2	1	1
L74-3897	PGT	SYB1+Ib	4	2	2
L75-3632	PGBr	SY Y	4	1	1
M70-128	PGBr	DY Y	3	2	1
M70-260	P+WGBr	DY Y	3	1	1

Disease Data

Strain	FE ₂	BSR		GERM*		PS	PSB	SMV	PR	PR	Race 1
	Laf. Ind. a	Laf. Ind. n	Ames Ia. n	Minn. n	Lafayette, IN d	a	d	a	Vickery Ohio a	Laf. Ind. a	Ames Ia. a
	score	%	Reac.	%	%	score	%	score	----Reaction----		
Corsoy (II)	5	100	S	25	93	3E	4	5S	4.6	S	S
Evans (0)	5	60	S	75	57	5S	32	1	4.7	R	R
Hodgson 78 (I)	5	80	S	35	68	4E	13	3M	3.8	R	R
A75-102032	2	60	S	60	88	2E	2	5E	3.8	S	S
A76-102009	4	100	S	40	87	3E	3	5E	4.6	R	H
A76-103002	5	60	S	75	88	4E	9	5E	4.8	S	S
A77-112008	4	80	S	50	71	4E	9	5S	4.8	S	S
A77-112023	3	0	S	65	83	4E	1	5E	4.1	R	H
L74-3897	4	40	S	80	84	3E	1	2M	4.2	S	S
L75-3632	5	60	S	40	65	4E	26	5S	2.9	R	R
M70-128	5	80	S	60	71	4E	12	1	4.5	R	R
M70-260	5	40	S	90	75	5E	15	1	4.3	R	R

*Petri dish germination on potato dextrose agar.

UNIFORM TEST I, 1979

Regional Summary

Strain	Yield	Rank	Matu-	Lodg-	Height	Seed	Seed	Composition	
			rity	ing		Quality	Size	Protein	Oil
No. of Tests	14	14	12	13	13	11	12	5	5
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Corsoy (II)	45.5	4	+5.0	2.7	41	1.8	16.5	39.1	19.4
Evans (0)	39.9	12	-5.0	1.9	33	1.8	16.3	40.2	20.2
Hodgson 78 (I)	43.7	8	9/24*	2.3	37	1.8	17.4	40.5	20.1
Weber	45.1	6	+2.8	2.6	38	2.0	14.0	40.6	19.6
<i>Hardin</i> A76-102009	47.7	1	+3.3	2.5	38	1.8	16.2	40.0	19.6
A76-103002	45.8	3	+2.2	2.6	39	2.3	16.8	41.5	19.0
A77-112008	44.6	7	+3.6	1.8	34	2.3	19.5	42.0	18.7
A77-112023	46.5	2	+0.9	3.1	42	2.5	16.0	42.4	18.4
L74-3897	45.4	5	+3.3	1.6	34	2.0	19.0	40.8	19.3
L75-3632	42.9	11	+2.1	2.4	38	2.0	16.2	40.2	19.2
M70-128	43.1	9	-2.3	2.0	34	1.9	16.8	39.9	20.4
M70-260	43.1	9	-2.8	1.9	35	2.0	18.7	40.1	19.6

* 126 days after planting

1978-1979, 2-year mean

No. of Tests	27	27	24	26	25	20	24	11	11
Corsoy (II)	43.1	4	+6.4	2.4	39	2.1	16.4	40.4	20.0
Evans (0)	37.5	6	-5.6	1.6	32	2.3	16.2	40.3	21.3
Hodgson 78 (I)	42.7	5	9/22*	1.9	36	2.0	17.5	39.9	21.2
Weber	44.0	3	+3.5	2.2	37	2.1	13.8	40.8	20.6
<i>Hardin</i> A76-102009	46.3	1	+3.4	2.2	37	2.0	16.0	40.5	20.4
A76-103002	44.7	2	+1.9	2.2	38	2.5	17.0	41.3	20.2

*122 days after planting

UNIFORM TEST I, 1979

Strain	Mean 14 Tests	Ont.	Mich.		Ind.	Wisc.
		Ridge- town	Dundee	Ithaca	Lafay- ette	Arling- ton
<u>YIELD (bu/a)</u>						
Corsoy (II)	45.5	46.0	56.0	49.3	40.3	46.3
Evans (0)	39.9	31.5	46.5	46.6	33.5	40.0
Hodgson 78 (I)	43.7	43.7	55.0	48.0	39.8	42.9
A75-102032	45.1	43.9	59.9	45.0	43.3	45.9
A76-102009	47.7	41.0	60.1	52.2	47.3	46.1
A76-103002	45.8	42.6	53.4	45.6	47.2	48.1
A77-112008	44.6	42.0	50.0	42.8	48.4	47.0
A77-112023	46.5	40.3	50.4	42.4	40.4	43.9
L74-3897	45.4	42.2	49.5	49.7	45.1	47.9
L75-3632	42.9	42.9	54.4	43.9	30.3	43.9
M70-128	43.1	39.1	53.6	47.3	33.6	42.5
M70-260	43.1	40.0	52.4	45.2	33.4	40.3
C.V. (%)		9.4	8.2	6.1	14.4	4.4
L.S.D. (5%)		5.6	7.5	4.8	9.3	3.0
Row sp. (in.)		24"	30"	—	30"	30"
Rows/plot		4	2	—	4	4
Reps.		4	3	—	3	3

	Mean 14 Tests	<u>YIELD RANK</u>				
Corsoy (II)	4	1	3	3	7	14
Evans (0)	12	12	12	6	10	12
Hodgson 78 (I)	8	3	4	4	8	9
A75-102032	6	2	2	9	5	6
A76-102009	1	8	1	1	2	5
A76-103002	3	5	7	7	3	1
A77-112008	7	7	10	11	1	3
A77-112023	2	9	9	12	6	7
L74-3897	5	6	11	2	4	2
L75-3632	11	4	5	10	12	7
M70-128	9	11	6	5	9	10
M70-260	9	10	8	8	11	11

UNIFORM TEST I, 1979

<u>Ill.</u>	<u>Minn.</u>		<u>Iowa</u>		<u>N.D.</u>	<u>S.D.</u>		<u>Neb.</u>
<u>Dekalb</u>	<u>Waseca</u>	<u>Lamber-</u> <u>ton</u>	<u>Knierim</u>	<u>Cor-</u> <u>with</u>	<u>Oakes</u>	<u>Revilla</u>	<u>Brook-</u> <u>ings</u>	<u>Mead</u>
<u>YIELD (bu/a)</u>								
45.9	51.1	40.4	44.0	35.6	52.4	35.7	37.0	57.0
29.8	44.6	39.2	36.3	34.4	55.2	29.4	49.6	41.9
40.5	49.4	38.0	40.4	36.6	52.1	31.3	44.7	49.8
42.3	47.3	39.9	41.3	40.8	52.3	35.6	42.1	52.1
45.1	51.1	41.0	48.8	35.4	59.6	36.5	48.3	55.2
43.1	51.6	42.3	45.6	37.4	55.3	34.2	42.4	52.5
45.5	47.7	43.5	49.9	41.7	44.0	34.7	37.5	49.9
41.7	55.6	44.3	45.1	40.6	69.4	36.6	49.4	50.3
46.8	47.1	42.1	48.1	38.0	52.0	34.6	41.6	51.2
42.9	48.9	42.5	44.0	30.3	48.5	34.0	49.3	44.3
35.3	47.0	39.8	40.3	32.9	60.3	36.6	49.2	45.5
33.8	50.7	38.2	38.6	39.0	57.7	38.8	46.6	48.2
7.9	10.8	9.1	5.3	12.9	—	8.8	10.0	7.7
5.5	9.0	6.3	3.2	6.7	—	4.4	6.5	6.5
30"	30"	30"	27"	27"	12"	38"	30"	30"
4	4	4	4	4	4	3	3	4
3	3	3	4	4	3	4	4	3
<u>YIELD RANK</u>								
2	3	7	6	8	7	5	12	1
12	12	10	12	10	6	12	1	12
9	6	12	9	7	9	11	7	8
7	9	8	8	2	8	6	9	4
4	3	6	2	9	3	4	5	2
5	2	4	4	6	5	9	8	3
3	8	2	1	1	12	7	11	7
8	1	1	5	3	1	3	2	6
1	10	5	3	5	10	8	10	5
6	7	3	6	12	11	10	3	11
10	11	9	10	11	2	2	4	10
11	5	11	11	4	4	1	6	9

UNIFORM TEST I, 1979

Strain	Mean 12 Tests	Ont.	Mich.		Ind.	Wisc.
		Ridge- town	Dundee	Ithaca	Lafay- ette	Arling- ton
<u>MATURITY (date)</u>						
Corsoy (II)	+5.0	+6	+6	+6	+3	+4
Evans (0)	-5.0	-6	-7	-7	-4	+12
Hodgson 78 * (I)	9/24	9/22	9/26	10/2	9/6	9/25
A75-102032	+2.8	+3	-3	+2	+1	0
A76-102009	+3.3	+4	+4	+3	+1	+3
A76-103002	+2.2	+2	-2	+1	0	+2
A77-112008	+3.6	+7	-1	+2	+2	+1
A77-112023	+0.9	+2	-3	0	-1	-1
L74-3897	+3.3	+2	-1	+2	0	0
L75-3632	+2.1	+4	-1	+2	0	+3
M70-128	-2.3	-1	-3	-1	-1	-3
M70-260	-2.8	-3	-6	-2	-1	-3
Date planted	5-20	5-18	5-16	—	5-17	5-15
*Days to Maturity	126	127	133	—	112	133
<u>LODGING (score)</u>						
	<u>13 Tests</u>					
Corsoy (II)	2.7	1.0	3.6	3.7	2.8	3.0
Evans (0)	1.9	1.0	3.0	1.3	2.0	3.0
Hodgson 78 (I)	2.3	1.0	3.1	2.5	2.7	3.0
A75-102032	2.6	1.0	3.3	3.2	3.7	3.0
A76-102009	2.5	1.2	3.2	3.0	2.8	3.0
A76-103002	2.6	1.5	3.1	2.7	3.5	3.0
A77-112008	1.8	1.5	2.6	1.7	1.5	2.0
A77-112023	3.1	2.2	3.4	3.8	4.3	3.0
L74-3897	1.6	1.2	2.0	1.0	1.2	2.0
L75-3632	2.4	1.2	3.6	3.0	3.0	3.0
M70-128	2.0	1.0	2.8	2.0	2.0	2.7
M70-260	1.9	1.0	2.6	2.2	1.5	3.0

UNIFORM TEST I, 1979

<u>Ill.</u>	<u>Minn.</u>		<u>Iowa</u>		<u>N.D.</u>	<u>S.D.</u>		<u>Neb.</u>
<u>Dekalb</u>	<u>Waseca</u>	<u>Lamber-</u> <u>ton</u>	<u>Knierim</u>	<u>Cor-</u> <u>with</u>	<u>Oakes</u>	<u>Revilla</u>	<u>Brook-</u> <u>ings</u>	<u>Mead</u>
<u>MATURITY (date)</u>								
+6	+5	+7	+8			+3	+3	+3
-7	-9	-4	-4			-8	-9	-7
9/24	9/24	9/19	9/8			10/12	10/4	9/21
+5	+6	+3	+5			+6	+2	+1
+4	+5	+4	+6			+2	+1	+3
+4	+5	+2	+5			0	+1	0
+1	+5	+5	+7			+4	+7	+3
+2	+3	+1	+4			+1	+1	0
0	+5	+3	+7			+5	+5	+2
+4	+4	+2	+3			-1	0	+1
-3	+1	-3	-1			-3	-8	-1
-3	+1	-3	-2			-3	-6	-2
5-16	5-23	5-17	5-12	—	—	6-4	5-29	5-23
131	124	125	119	—	—	130	128	129
<u>LODGING (score)</u>								
2.3	3.3	3.3	3.0	4.0	4.0	1.0	1.0	1.7
1.8	1.3	1.7	2.6	3.2	3.0	1.0	1.0	1.0
2.2	2.0	2.0	2.4	3.3	4.0	1.0	1.0	1.3
2.3	3.0	3.0	3.0	3.2	4.0	1.0	1.0	1.2
2.2	2.7	2.7	2.6	3.4	4.0	1.0	1.0	1.5
2.2	3.0	3.0	3.0	3.2	4.0	1.0	1.0	1.5
1.5	2.0	2.3	2.0	2.4	3.0	1.0	1.0	1.0
3.5	4.0	3.7	3.6	4.3	4.0	1.0	1.0	1.5
1.5	1.8	1.7	1.8	2.5	2.0	1.0	1.0	1.2
2.3	3.0	3.0	2.8	3.3	2.0	1.0	1.0	1.3
1.8	2.0	2.3	2.3	3.1	3.0	1.0	1.0	1.1
1.7	1.7	2.0	2.2	3.2	3.0	1.0	1.0	1.0

UNIFORM TEST I, 1979

Strain	Mean 13 Tests	Ont.	Mich.		Ind.	Wisc.
		Ridge- town	Dundee	Ithaca	Lafay- ette	Arling- ton
<u>HEIGHT (inches)</u>						
Corsoy (II)	41	33	41	45	39	41
Evans (0)	33	24	34	38	32	32
Hodgson 78 (I)	37	30	39	42	37	35
A75-102032	38	28	39	43	40	37
A76-102009	38	28	39	45	38	36
A76-103002	39	29	42	46	39	38
A77-112008	34	27	34	39	34	28
A77-112023	42	34	40	48	44	42
L74-3897	34	25	33	38	35	32
L75-3632	38	33	40	44	43	37
M70-128	34	25	35	39	38	32
M70-260	35	25	34	42	33	31

	<u>QUALITY (score)</u>					
	<u>11 Tests</u>					
Corsoy (II)	1.8	2.0			1.0	3.3
Evans (0)	1.8	2.0			1.0	2.0
Hodgson 78 (I)	1.8	2.0			1.0	2.0
A75-102032	2.0	2.0			1.5	1.7
A76-102009	1.8	2.0			1.0	2.0
A76-103002	2.3	2.0			1.5	2.0
A77-112008	2.3	2.0			1.5	2.3
A77-112023	2.5	2.0			1.0	2.0
L74-3897	2.0	2.0			1.5	2.0
L75-3632	2.0	2.0			1.5	2.7
M70-128	1.9	2.0			2.0	2.3
M70-260	2.0	2.0			1.5	3.0

UNIFORM TEST I, 1979

<u>Ill.</u>	<u>Minn.</u>		<u>Iowa</u>		<u>N.D.</u>	<u>S.D.</u>		<u>Neb.</u>
<u>Dekalb</u>	<u>Waseca</u>	<u>Lamber-</u> <u>ton</u>	<u>Knierim</u>	<u>Cor-</u> <u>with</u>	<u>Oakes</u>	<u>Revilla</u>	<u>Brook-</u> <u>ings</u>	<u>Mead</u>
<u>HEIGHT (inches)</u>								
33	42	45	40	38	64	36	40	35
26	38	35	30	33	46	34	35	27
32	41	37	36	36	54	34	39	30
31	42	37	37	37	56	36	42	31
30	42	41	38	36	56	34	41	31
34	48	41	41	38	41	38	41	32
27	40	38	33	31	46	36	39	27
35	43	43	41	40	61	37	43	34
32	38	35	35	30	42	36	37	29
32	43	41	40	32	46	33	41	31
28	39	38	34	32	41	35	39	27
27	41	37	34	37	51	36	38	28

QUALITY (score)

1.3	2.0	2.3	1.4	1.0	1.0	2.0	2.5
1.5	2.3	2.3	1.8	1.0	2.0	2.0	2.2
1.6	2.3	2.3	1.5	1.0	2.0	2.0	2.2
1.2	2.3	2.0	1.3	2.0	2.0	4.0	2.3
1.2	2.7	2.3	1.4	1.0	1.0	2.0	2.7
1.5	3.0	3.0	1.5	3.0	2.0	4.0	2.3
1.5	3.0	3.0	1.7	2.0	2.0	3.0	3.0
1.9	3.0	3.0	2.1	3.0	3.0	4.0	2.5
1.4	2.7	2.0	1.4	2.0	2.0	3.0	2.3
1.2	2.7	2.3	1.5	1.0	2.0	2.0	3.0
1.2	2.7	2.3	1.7	1.0	2.0	2.0	2.0
1.4	2.3	2.3	1.8	1.0	2.0	2.0	2.2

UNIFORM TEST I, 1979

Strain	Mean 12 Tests	Ont.	Mich.		Ind.	Wisc.
		Ridge- town	Dundee	Ithaca	Lafay- ette	Arling- ton
<u>SIZE (g/100)</u>						
Corsoy (II)	16.5	15.8	18.4	17.4	16.4	15.2
Evans (0)	16.3	16.3	16.9	18.0	16.5	14.8
Hodgson 78 (I)	17.4	18.0	19.3	18.7	17.2	15.3
A75-102032	14.0	13.9	14.8	15.9	13.7	13.6
A76-102009	16.2	15.3	17.6	17.1	16.0	14.7
A76-103002	16.8	15.3	17.3	17.5	17.1	16.8
A77-112008	19.5	19.1	21.2	19.3	20.2	17.9
A77-112023	16.0	16.1	17.1	17.2	15.0	14.4
L74-3897	19.0	18.7	19.7	18.8	19.5	17.8
L75-3632	16.2	15.5	17.9	17.4	16.5	15.4
M70-128	16.8	16.8	18.4	19.7	15.6	14.6
M70-260	18.7	18.8	20.6	21.4	18.5	15.9

Strain	Mean 5 Tests	Ont.	Wisc.	Minn.	Iowa	S.D.
		Ridgetown	Arlington	Waseca	Knierim	Brookings
<u>% PROTEIN</u>						
Corsoy (II)	39.1	33.4	43.1	39.1	40.5	39.5
Evans (0)	40.2	38.9	42.2	38.7	40.0	41.3
Hodgson 78 (I)	40.5	40.4	43.2	38.8	40.3	39.8
A75-102032	40.6	38.4	44.5	39.3	40.4	40.4
A76-102009	40.0	38.1	41.2	39.8	40.1	40.8
A76-103002	41.5	39.3	44.6	40.5	41.4	41.8
A77-112008	42.0	42.0	43.4	39.4	42.4	43.0
A77-112023	42.4	42.3	45.2	39.6	42.6	42.4
L74-3897	40.8	39.1	41.1	40.5	41.1	42.3
L75-3632	40.2	38.3	43.0	39.1	40.2	40.2
M70-128	39.9	39.1	41.0	38.9	39.6	40.8
M70-260	40.1	39.6	41.3	40.0	38.4	41.2

UNIFORM TEST I, 1979

<u>Ill.</u>	<u>Minn.</u>		<u>Iowa</u>		<u>N.D.</u>	<u>S.D.</u>		<u>Neb.</u>
Dekalb	Waseca	Lamber- ton	Knierim	Cor- with	Oakes	Revilla	Brook- ings	Mead
<u>SIZE (g/100)</u>								
18.6	17.2	16.2	15.0		16.8	14.7	15.9	16.8
17.2	16.7	15.9	14.9		16.2	15.8	15.6	16.8
17.9	17.2	16.3	16.2		17.3	17.1	17.6	18.7
14.4	14.0	13.0	12.9		12.7	14.0	14.0	14.6
17.3	17.4	16.2	16.4		16.1	14.8	16.0	15.6
17.8	16.6	15.8	17.3		15.7	16.3	17.9	16.7
21.4	20.4	20.2	19.8		15.2	18.5	19.6	20.8
17.9	16.4	15.2	15.9		16.2	14.0	14.7	17.4
19.8	19.5	16.7	19.5		18.8	18.6	20.2	18.9
17.1	16.1	15.9	15.2		16.1	15.3	16.4	15.7
18.0	17.4	15.0	15.1		17.8	16.7	16.6	17.0
19.9	19.0	16.8	17.0		18.6	19.4	19.4	18.3

Mean	<u>Ont.</u>	<u>Wisc.</u>	<u>Minn.</u>	<u>Iowa</u>	<u>S.D.</u>
5 Tests	Ridgetown	Arlington	Waseca	Knierim	Brookings
<u>% OIL</u>					
19.4	19.6	18.6	19.4	20.7	18.5
20.2	20.1	19.9	19.5	22.2	19.2
20.1	20.3	19.4	20.0	21.4	19.2
19.6	19.7	18.7	19.2	21.8	18.7
19.6	19.9	19.2	19.5	21.1	18.5
19.0	19.3	18.8	18.3	20.7	17.9
18.7	18.6	18.4	19.1	19.6	17.8
18.4	18.0	17.8	18.3	20.1	17.8
19.3	19.7	19.1	19.3	20.6	17.8
19.2	20.0	18.5	18.5	20.7	18.1
20.4	20.2	20.1	20.4	22.5	19.0
19.6	18.5	20.3	18.9	21.3	18.9

PRELIMINARY TEST I, 1979

Strain	Parentage	Generation Compositd
Corsoy (II)	Harosoy x Capital	F ₉
Evans (O)	Merit x Harosoy	F ₅
Hodgson 78 (I)	Hodgson ⁷ x Merit	F ₃
A73D16-2	Hark x Wayne	F ₆
A73D2876	Amsoy x L61-344	F ₆
A75-102032	C1453 x Swift	F ₅
A78-121007	A73-19084 x Pride B-216	F ₄
A78-121014	Pride B-216 x Hodgson	F ₄
A78-122008	Pride B-216 x M68-49	F ₄
A78-122030	Hodgson x L70T-543	F ₄
A78-122031	SRF 350 x Pride B-216	F ₄
A78-123002	C1520 x Coles	F ₄
A78-123005	A73-19084 x A72-512	F ₄
A78-123009	Agripro 25 x Pride B-216	F ₄
A78-123018	Pride B-216 x Hodgson	F ₄
A78-124004	Pride B-216 x L66-1359	F ₄
A78-124018	Pride B-216 x M65-442	F ₄
A78-124020	A73-19084 x Pride B-216	F ₄
A78-124023	AP61YT(S3)C1 2-219-2	F ₃
A78-125008	Pride B-216 x AX901-40-2	F ₄
A78-125029	Pride B-216 x AX900-4-3	F ₄
C1584	L72-844 _c -1 x Wells	F ₅
L76-187	Beeson x L70-2450	F ₅
M70-376	M64-3 x Clay	F ₅
M70-388	M64-3 x Corsoy	F ₅
M70-390	M64-3 x Corsoy	F ₅
M70-422	M64-3 x M63-217Y	F ₅
M70-571	Evans x M64-3	F ₅
M70-597	Steele x AP68-1016	F ₅
M71-80	Merit x M62-263	F ₅
M71-100	M61-224 x M63-217Y	F ₅
M75-2	Hodgson ⁴ x [M67-141 x (Chippewa x Higan)]	F ₅

PRELIMINARY TEST I, 1979

Descriptive and Other Data

Descriptive Code		Chlorosis Score Ames	Shattering Manhattan 2 Weeks
PGBr	DYY	5	1
WGBr	DYY	3	2
PGBr	DYBf	3	2
WGBr	DYY	4	1
PGTn	SYI	3	2
WTBr	DYBl	3	1
PGBr	DYBf	3	2
PGBr	DYBf	4	1
WGBr	DYBf	4	2
P+WTBr	SYBr	3	2
WGTn	DYBf	4	2
PTBr	DYBl+Bf+Y	3	2
PGBr	DYBf	3	3
PGBr	DYBf	3	1
PGBr	DYBf	4	2
WTBr	DYBr	5	2
WGT	DYBf+Y	3	2
WGBr	DYBf	4	1
PTTn	DYBf	4	2
PGBr	DYIb	4	1
WGBr	DYBf	4	2
P+WGTn	SYIb+Bf	4	1
PGTn	SYIb	4	2
PTBr	SYI	3	2
WGBr	DYY	3	2
WGBr	DYY	3	2
WGBr	DYY	3	1
PGBr	DYY	3	2
WG+TBr	DYBl	2	1
WGBr	DYY	3	2
PGBr	DYBf	2	1

PRELIMINARY TEST I, 1979

Disease Data

Strain	FE ₂	BSR		GERM*	PS	PSB	SMV	PR	PR	Race 1
	Laf. Ind. a	Laf. Ind. n	Ames Ia. n	Lafayette, d	a	d	a	Vickery Ohio n	Laf. Ind. a	Ames Ia. a
	Score	%		%	Reac.	%	Reac.	----Reaction-----		
Corsoy (II)	5	100	S	93	3E	4	5S	4.2	S	S
Evans (0)	5	60	S	57	5S	32	1	4.6	R	R
Hodgson 78 (I)	5	80	S	68	4E	13	3M	4.6	R	R
A73D16-2	4	0	S	74	4E	12	5S	4.8	S	S
A73D2876	4	40	S	93	4E	1	5S	4.4	S	S
A75-102032	—	—	S	88	2E	2	5E	4.7	S	S
A78-121007	4	40	S	81	5E	9	4S	3.1	R	H
A78-121014	5	60	S	73	5E	14	1	4.2	S	S
A78-122008	5	40	S	82	5E	6	5S	4.1	S	S
A78-122030	5	40	S	81	4E	0	5M	3.9	R	H
A78-122031	2	80	S	90	3E	6	4E	3.3	Seg	H
A78-123002	3	80	S	75	—	8	5E	3.9	Seg	H
A78-123005	1	80	S	77	4E	7	4E	4.7	S	S
A78-123009	3	0	S	71	2E	1	3M	4.0	Seg	S
A78-123018	4	60	S	87	3E	6	1	4.3	S	S
A78-124004	3	80	S	83	3E	2	4S	4.3	S	S
A78-124018	4	20	S	83	4E	8	5E	4.3	S	S
A78-124020	1	100	S	96	3E	3	5E	4.0	R	R
A78-124023	2	100	S	89	3E	1	1	5.0	S	S
A78-125008	4	80	I	63	4E	6	5M	4.1	R	R
A78-125029	5	60	R	90	4E	3	3E	4.1	S	S
C1584	1	60	S	82	3E	7	3E	2.9	R	R
L76-187	2	0	S	81	4E	6	2M	5.0	R	H
M70-376	5	20	S	85	4E	3	5E	4.6	S	S
M70-388	5	20	S	88	4E	8	5M	4.8	S	S
M70-390	5	20	S	90	4E	7	5M	4.6	S	S
M70-422	5	20	S	65	5E	23	2E	4.6	S	S
M70-571	5	20	S	70	5E	14	1	4.5	S	S
M70-597	4	0	R	88	4E	4	3E	4.2	R	H
M71-80	5	20	S	80	4E	8	2M	4.7	R	H
M71-100	5	0	S	70	4E	9	1	4.5	S	S
M75-2	5	60	S	67	5E	11	1	3.6	R	R

*Petri dish germination on potato dextrose agar.

PRELIMINARY TEST I, 1979

Regional Summary

No. of Tests	Yield 8	Rank 8	Matu- rity 7	Lodg- ing 8	Height 8	Seed Quality 6	Seed Size 7	Composition	
								Protein 5	Oil 5
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
	44.0	4	+5.1	2.8	41	2.1	16.0	40.7	19.1
	40.3	23	-8.3	1.8	35	2.3	15.4	40.2	20.0
	40.8	20	9/23*	2.0	37	1.9	16.7	40.7	19.8
	41.2	16	+2.5	1.7	37	2.8	16.6	40.7	18.7
	39.5	26	+6.1	2.4	39	2.7	18.8	40.4	19.3
	43.8	6	+3.0	2.6	40	2.1	14.1	40.6	19.3
	42.8	11	+2.8	1.8	34	2.4	16.6	41.1	19.8
	43.3	8	+0.8	2.0	34	2.2	17.8	41.3	19.0
	41.2	16	+6.0	2.2	36	2.6	17.5	41.2	19.3
	41.7	14	+4.9	2.3	39	2.3	17.2	41.4	19.3
	44.7	2	+6.1	2.4	35	2.2	17.1	41.3	19.2
	44.4	3	+6.3	2.8	38	2.4	17.6	42.2	18.7
	39.3	28	+5.9	2.5	38	2.8	16.1	41.4	19.1
	41.7	14	+8.7	2.3	35	2.3	18.4	40.2	19.0
	44.9	1	+3.8	2.1	35	2.1	16.0	40.6	19.3
	43.4	7	+4.9	1.7	36	2.2	18.2	41.4	19.2
	42.2	12	+8.1	2.3	39	2.7	16.6	41.1	19.3
	42.9	10	+8.3	2.1	38	2.8	17.6	42.2	19.2
	38.8	29	+4.6	2.6	39	2.6	18.2	42.7	18.3
	43.2	9	+5.4	2.3	36	2.6	15.7	39.5	19.5
	43.9	5	+7.3	1.9	39	2.4	15.5	41.7	18.9
	38.1	30	+6.1	2.4	42	2.6	16.9	41.1	19.0
	36.6	32	+3.3	1.7	35	2.9	17.5	39.9	19.3
	39.9	24	+1.7	2.1	36	2.4	17.3	40.3	19.6
	40.4	22	+2.3	2.1	34	1.9	16.1	39.9	20.0
	39.4	27	0	1.8	39	2.1	15.5	39.7	20.0
	39.8	25	-3.5	1.7	33	2.3	16.6	39.4	20.2
	41.2	16	+5.3	3.1	44	2.3	15.7	40.2	19.5
	37.9	31	+4.8	2.1	37	2.4	19.4	42.6	18.5
	40.5	21	-0.5	1.9	36	2.2	17.9	40.0	19.6
	41.9	13	-0.1	2.1	40	2.0	18.3	40.6	19.8
	40.9	19	-1.3	2.0	35	2.4	16.9	40.8	19.8

The strain A78-123018 was the highest yielding entry in this test, exceeding the yield of Weber by 1 bushel and of Hodgson 78 by 4 bushels per acre. This strain had good lodging resistance but was susceptible to races 1 and 2 of phytophthora root rot. All of the other strains that exceeded the yield of Weber are too late in maturity for continued evaluation in Group I tests. The cyst nematode race 3 resistant strain L76-189 did not yield well but had good lodging resistance and was resistant to races 1 and 2 of phytophthora root rot.

PRELIMINARY TEST I, 1979

Strain	Mean 8 Tests	Ont.	Mich.	Wisc.
		Ridge- town	Ithaca	Arling- ton
<u>YIELD (bu/a)</u>				
Corsoy (II)	44.0	49.2	39.3	49.1
Evans (0)	40.3	39.5	33.9	40.9
Hodgson 78 (I)	40.8	46.9	29.7	45.9
A73D16-2	41.2	43.4	38.4	46.0
A73D2876	39.5	45.3	34.8	41.7
A75-102032	43.8	47.8	37.2	47.0
A78-121007	42.8	46.6	35.1	46.5
A78-121014	43.3	47.4	37.4	45.6
A78-122008	41.2	47.4	37.3	47.4
A78-122030	41.7	45.0	38.8	39.3
A78-122031	44.7	45.6	41.5	46.9
A78-123002	44.4	47.1	35.9	45.5
A78-123005	39.3	47.0	29.9	44.5
A78-123009	41.7	47.2	31.9	47.6
A78-123018	44.9	46.1	39.4	44.7
A78-124004	43.4	42.6	40.9	44.7
A78-124018	42.2	44.4	40.7	50.4
A78-124020	42.9	47.0	44.9	45.8
A78-124023	38.8	43.1	35.4	46.5
A78-125008	43.2	45.5	38.6	48.6
A78-125029	43.9	44.5	39.6	45.4
C1584	38.1	42.2	35.0	39.4
L76-187	36.6	28.6	30.3	39.3
M70-376	39.9	41.8	34.1	40.7
M70-388	40.4	43.2	33.7	42.4
M70-390	39.4	42.8	36.0	39.0
M70-422	39.8	43.4	37.2	41.2
M70-571	41.2	43.0	34.6	41.0
M70-597	37.9	40.0	31.6	37.4
M71-80	40.5	39.6	36.1	42.6
M71-100	41.9	46.4	39.0	45.8
M75-2	40.9	46.9	30.7	45.1
C.V. (%)		7.4	9.6	5.6
L.S.D. (5%)		6.7	7.0	5.0
Row sp. (in.)		24"	—	30"
Rows/plot		4	—	4
Reps		2	2	2

PRELIMINARY TEST I, 1979

Minn.		Iowa		S.D.
Waseca	Lamberton	Knierim	Corwith	Brookings
<u>YIELD (bu/a)</u>				
43.2	44.2	40.7	44.0	42.0
46.8	37.8	35.2	34.3	53.8
46.4	36.9	39.8	36.7	44.3
38.4	40.6	41.2	42.3	39.1
41.6	37.8	42.1	38.6	34.1
43.2	44.6	41.4	45.0	44.2
47.1	38.4	42.9	40.5	45.2
41.2	40.4	46.2	43.6	44.5
36.4	39.8	40.8	43.3	37.4
54.0	39.2	40.2	44.2	32.5
48.6	42.4	49.3	46.7	36.8
47.0	45.7	49.0	46.0	39.1
33.9	41.8	45.5	36.6	35.0
45.9	38.4	44.1	43.5	35.1
48.6	43.0	42.7	42.8	52.0
47.2	45.0	42.0	45.0	39.4
41.0	41.2	48.8	42.4	29.0
46.6	45.6	46.9	41.0	25.3
35.1	37.6	38.6	40.4	33.4
46.2	46.0	46.8	44.7	28.9
41.6	46.5	48.1	46.1	39.2
43.7	30.0	42.2	36.4	36.0
39.6	36.7	41.5	39.4	37.4
44.4	38.6	39.0	38.8	41.5
39.3	40.4	38.3	35.4	50.3
45.0	32.9	39.3	37.7	42.5
43.8	35.0	35.9	35.1	46.4
45.8	36.0	36.9	45.0	46.9
41.0	37.3	40.7	38.2	36.9
51.9	34.0	37.6	36.2	46.1
40.9	38.2	41.4	37.3	46.2
51.0	37.4	39.3	34.9	42.0
12.8	7.4	4.5	6.9	10.9
11.5	6.0	3.8	5.7	7.2
30"	30"	27"	27"	30"
2	2	4	4	3
2	2	2	2	3

PRELIMINARY TEST I, 1979

Strain	Mean 8 Tests	Ont.	Mich.	Wisc.
		Ridge- town	Ithaca	Arling- ton
<u>YIELD RANK</u>				
Corsoy (II)	4	1	7	2
Evans (O)	23	31	25	26
Hodgson 78 (I)	20	9	32	11
A73D16-2	16	20	11	10
A73D2876	26	16	22	23
A75-102032	6	2	14	6
A78-121007	11	11	20	8
A78-121014	8	3	12	14
A78-122008	16	3	13	5
A78-122030	14	17	9	29
A78-122031	2	14	2	7
A78-123002	3	6	18	15
A78-123005	28	7	31	20
A78-123009	14	5	27	4
A78-123018	1	13	6	18
A78-124004	7	26	3	18
A78-124018	12	19	4	1
A78-124020	10	7	1	12
A78-124023	29	23	19	8
A78-125008	9	15	10	3
A78-125029	5	18	5	16
C1584	30	27	21	28
L76-187	32	32	30	29
M70-376	24	28	24	27
M70-388	22	22	26	22
M70-390	27	25	17	31
M70-422	25	20	14	24
M70-571	16	24	23	25
M70-597	31	29	28	32
M71-80	21	30	16	21
M71-100	13	12	8	12
M75-2	19	9	29	17

PRELIMINARY TEST I, 1979

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

PRELIMINARY TEST I, 1979

Strain	Mean 7 Tests	Ont.	Mich.	Wisc.
		Ridge- town	Ithaca	Arling- ton
<u>MATURITY DATE</u>				
Corsoy (II)	+5.1	+7	+4	+4
Evans (0)	-8.3	-6	-8	-18
Hodgson 78*(I)	9/23	9/21	10/1	9/30
A73D16-2	+2.5	+3	+2	0
A73D2876	+6.1	+9	+4	+2
A75-102032	+3.0	+1	0	-3
A78-121007	+2.8	+3	-1	0
A78-121014	+0.8	-1	+1	-6
A78-122008	+6.0	+7	+5	+2
A78-122030	+4.9	+5	+3	-1
A78-122031	+6.1	+4	+4	+4
A78-123002	+6.3	+7	+1	0
A78-123005	+5.9	+7	+3	+1
A78-123009	+8.7	+10	+2	0
A78-123018	+3.8	+3	+3	0
A78-124004	+4.9	+5	+2	+2
A78-124018	+8.1	+7	+4	+4
A78-124020	+8.3	+10	+4	+5
A78-124023	+4.6	+7	+2	+2
A78-125008	+5.4	+3	+3	-3
A78-125029	+7.3	+7	+4	+1
C1584	+6.1	+7	+4	+4
L76-187	+3.3	+1	+1	0
M70-376	+1.7	+3	+1	-1
M70-388	+2.3	+3	+2	-3
M70-390	0	+3	-3	-5
M70-422	-3.5	0	-4	-11
M70-571	+5.3	+7	+5	+1
M70-597	+4.8	+7	0	0
M71-80	-0.5	+1	0	-5
M71-100	-0.1	+1	-1	-5
M75-2	-1.3	-1	-2	-1
Date planted	5-19	5-18	—	5-15
*Days to maturity	126	126	—	138

PRELIMINARY TEST I, 1979

Minn.		Iowa		S.D.
Waseca	Lamberton	Knierim	Corwith	Brookings
<u>MATURITY DATE</u>				
+5	+5	+8		+3
-8	-4	-4		-10
9/24	9/19	9/6		10/3
+4	+1	+4		+1
+6	+7	+10		+5
+6	+5	+6		+3
+2	+2	+5		+6
+4	+2	+5		0
+8	+6	+9		+5
+8	+5	+6		+8
+9	+6	+10		+6
+8	+5	+10		+7
+6	+7	+8		+9
+10	+8	+12		+10
+6	+4	+6		+1
+9	+5	+8		+3
+12	+9	+11		+10
+10	+8	+12		+9
+9	+3	+4		+5
+10	+7	+10		+8
+12	+7	+12		+8
+6	+5	+10		+7
+5	+3	+5		+5
+6	+1	+4		-2
+8	+3	+5		-2
+4	-1	+4		-2
+3	-3	-2		-4
+8	+4	+7		0
+4	+4	+5		+4
+4	0	0		-2
+5	+1	+1		-3
+2	-2	0		-4
5-23	5-17	5-12	5-21	5-29
124	125	117	—	125

PRELIMINARY TEST I, 1979

Strain	Mean 8 Tests	Ont.	Mich.	Wisc.
		Ridge- town	Ithaca	Arling- ton
<u>LODGING (score)</u>				
Corsoy (II)	2.8	1.5	1.8	3.0
Evans (0)	1.8	1.0	1.0	3.0
Hodgson 78 (I)	2.0	1.0	1.0	3.0
A73D16-2	1.7	1.0	1.0	3.0
A73D2876	2.4	1.0	1.3	3.0
A75-102032	2.6	1.0	1.8	3.0
A78-121007	1.8	1.5	1.0	2.5
A78-121014	2.0	1.0	1.8	2.5
A78-122008	2.2	1.0	1.3	3.0
A78-122030	2.3	1.5	1.8	2.5
A78-122031	2.4	1.0	1.5	3.0
A78-123002	2.8	2.0	1.5	3.0
A78-123005	2.5	1.5	1.0	3.0
A78-123009	2.3	2.0	1.0	2.8
A78-123018	2.1	1.0	1.5	3.0
A78-124004	1.7	1.0	1.0	2.2
A78-124018	2.3	1.0	1.0	3.0
A78-124020	2.1	1.5	1.0	2.8
A78-124023	2.6	2.0	2.0	3.0
A78-125008	2.3	1.0	1.8	2.5
A78-125029	1.9	1.0	1.0	2.2
C1584	2.4	1.5	1.8	3.0
L76-187	1.7	1.0	1.0	3.0
M70-376	2.1	1.0	1.0	3.0
M70-388	2.1	1.0	1.0	3.0
M70-390	1.8	1.0	1.0	3.0
M70-422	1.7	1.0	1.0	3.0
M70-571	3.1	1.5	3.3	3.5
M70-597	2.1	1.0	1.0	3.0
M71-80	1.9	1.0	1.0	3.0
M71-100	2.1	1.5	1.0	3.0
M75-2	2.0	1.0	1.0	3.0

PRELIMINARY TEST I, 1979

Minn.		Iowa		S.D.
Waseca	Lamberton	Knierim	Corwith	Brookings
<u>LODGING (score)</u>				
3.5	4.0	2.8	4.4	1.0
1.0	2.0	2.4	3.2	1.0
2.0	2.5	2.2	3.4	1.0
1.5	2.0	2.0	2.3	1.0
2.5	3.5	3.4	3.8	1.0
3.0	4.0	3.0	3.9	1.0
2.0	2.5	1.8	2.1	1.0
2.0	2.5	2.1	3.2	1.0
3.2	2.5	3.0	2.9	1.0
3.0	3.0	2.0	3.2	1.0
2.5	4.0	2.9	3.2	1.0
3.5	3.5	3.8	3.7	1.0
3.0	4.0	3.2	3.1	1.0
2.5	3.5	2.8	3.1	1.0
2.5	3.0	2.2	2.2	1.0
2.0	3.0	1.8	1.7	1.0
3.0	3.5	2.8	2.7	1.0
3.0	3.0	2.7	2.0	1.0
2.5	3.5	2.7	4.0	1.0
3.0	3.5	2.8	2.4	1.0
2.0	3.5	2.6	2.2	1.0
2.2	4.0	2.6	3.4	1.0
2.0	2.0	1.6	2.2	1.0
2.0	3.0	2.5	3.0	1.0
2.5	3.0	2.2	3.2	1.0
1.5	2.0	2.4	2.7	1.0
1.5	2.0	1.5	2.6	1.0
3.5	4.0	4.0	4.0	1.0
2.0	3.5	2.4	2.7	1.0
2.0	2.0	1.8	3.2	1.0
2.2	3.0	2.6	2.8	1.0
2.0	3.0	2.2	2.6	1.0

PRELIMINARY TEST I, 1979

Strain	Mean 8 Tests	Ont.	Mich.	Wisc.
		Ridge- town	Ithaca	Arling- ton
<u>HEIGHT (inches)</u>				
Corsoy (II)	41	41	40	41
Evans (O)	35	30	33	34
Hodgson 78 (I)	37	35	36	39
A73D16-2	37	32	38	36
A73D2876	39	36	38	33
A75-102032	40	34	40	38
A78-121007	34	28	31	32
A78-121014	34	30	34	30
A78-122008	36	30	35	34
A78-122030	39	34	38	41
A78-122031	35	30	33	31
A78-123002	38	34	35	38
A78-123005	38	34	38	37
A78-123009	35	30	31	33
A78-123018	35	31	37	32
A78-124004	36	28	34	33
A78-124018	39	28	38	38
A78-124020	38	31	36	37
A78-124023	39	33	41	37
A78-125008	36	26	35	34
A78-125029	39	32	38	36
C1584	42	34	43	42
L76-187	35	22	35	32
M70-376	36	29	35	33
M70-388	34	26	36	31
M70-390	39	32	39	36
M70-422	33	30	33	31
M70-571	44	40	44	45
M70-597	37	32	34	35
M71-80	36	32	34	33
M71-100	40	36	39	38
M75-2	35	31	34	35

PRELIMINARY TEST I, 1979

Minn.		Iowa		S.D.
Waseca	Lamberton	Knierim	Corwith	Brookings
<u>HEIGHT (inches)</u>				
40	44	38	42	38
41	38	30	36	35
42	35	35	34	38
41	38	36	37	39
43	45	40	36	37
43	42	40	40	42
41	34	34	36	38
37	37	36	35	35
40	36	36	34	40
42	40	42	38	38
41	39	37	33	35
42	40	42	36	38
42	40	40	38	38
38	38	38	36	36
40	36	36	32	36
42	40	38	35	39
43	48	39	37	40
42	42	40	36	40
44	40	40	39	38
40	44	36	36	35
44	44	40	40	40
47	45	42	38	42
38	40	38	36	37
44	36	38	36	37
41	36	34	30	36
45	40	40	38	40
38	34	33	31	37
52	48	42	42	42
42	42	36	35	37
43	41	36	32	38
44	42	39	38	41
42	36	34	35	36

PRELIMINARY TEST I, 1979

Strain	Mean 6 Tests	Ont.	Mich.	Wisc.
		Ridge- town	Ithaca	Arling- ton
<u>QUALITY (score)</u>				
Corsoy (II)	2.1	2.0		3.0
Evans (O)	2.3	3.0		1.5
Hodgson 78 (I)	1.9	2.0		1.5
A73D16-2	2.8	3.0		2.0
A73D2876	2.7	2.0		3.5
A75-102032	2.1	2.0		1.5
A78-121007	2.4	2.0		2.0
A78-121014	2.2	2.0		1.0
A78-122008	2.6	2.0		2.0
A78-122030	2.3	2.0		1.5
A78-122031	2.2	2.0		1.5
A78-123002	2.4	2.0		2.0
A78-123005	2.8	2.0		3.0
A78-123009	2.3	2.0		1.5
A78-123018	2.1	2.0		2.5
A78-124004	2.2	2.0		2.0
A78-124018	2.7	2.0		2.5
A78-124020	2.8	2.0		3.0
A78-124023	2.6	2.0		2.0
A78-125008	2.6	2.0		2.5
A78-125029	2.4	2.0		1.5
C1584	2.6	2.0		3.0
L76-187	2.9	3.0		2.5
M70-376	2.4	2.0		2.5
M70-388	1.9	2.0		1.0
M70-390	2.1	2.0		1.5
M70-422	2.3	3.0		2.0
M70-571	2.3	2.0		2.5
M70-597	2.4	2.0		3.0
M71-80	2.2	2.0		1.0
M71-100	2.0	2.0		1.0
M75-2	2.4	3.0		2.5

PRELIMINARY TEST I, 1979

Minn.		Iowa		S.D.
Waseca	Lamberton	Knierim	Corwith	Brookings
<u>QUALITY (score)</u>				
2.5	2.0	1.3		2.0
2.5	2.0	2.6		2.0
2.5	2.0	1.4		2.0
3.0	3.0	2.5		3.0
3.0	3.5	1.9		2.0
2.0	2.5	1.4		3.0
3.0	2.5	2.0		3.0
2.5	3.0	1.6		3.0
3.0	3.0	2.6		3.0
3.0	3.0	1.5		3.0
3.0	3.0	1.4		2.0
3.5	3.0	1.8		2.0
3.5	3.0	2.2		3.0
2.5	3.0	2.8		2.0
2.0	2.5	1.6		2.0
2.5	2.5	1.4		3.0
3.0	3.0	1.4		4.0
3.0	3.5	1.3		4.0
3.5	2.5	1.8		4.0
3.0	3.0	2.0		3.0
2.0	3.0	1.6		4.0
3.0	2.5	1.9		3.0
3.5	3.5	2.8		2.0
3.0	3.0	1.8		2.0
3.0	2.5	1.7		1.0
2.5	3.0	1.6		2.0
2.5	2.0	2.2		2.0
2.5	3.0	1.6		2.0
3.0	3.0	1.4		2.0
3.5	3.0	1.5		2.0
3.0	2.5	1.7		2.0
3.0	2.5	1.6		2.0

PRELIMINARY TEST I, 1979

Strain	Mean 7 Tests	Ont.	Mich.	Wisc.
		Ridge- town	Ithaca	Arling- ton
<u>SIZE (g/100)</u>				
Corsoy (II)	16.0	16.4	15.8	17.1
Evans (O)	15.4	16.5	17.0	14.1
Hodgson 78 (I)	16.7	17.5	17.0	16.1
A73D16-2	16.6	16.6	16.8	16.8
A73D2876	18.8	19.1	17.5	18.9
A75-102032	14.1	14.3	15.4	14.9
A78-121007	16.6	16.4	16.2	17.8
A78-121014	17.8	17.2	15.9	17.5
A78-122008	17.5	16.8	18.1	17.0
A78-122030	17.2	18.0	14.7	18.3
A78-122031	17.1	16.5	16.2	18.7
A78-123002	17.6	17.8	13.5	17.9
A78-123005	16.1	15.9	17.0	16.0
A78-123009	18.4	19.1	16.0	20.2
A78-123018	16.0	15.4	16.1	15.4
A78-124004	18.2	17.4	16.0	19.5
A78-124018	16.6	16.4	16.3	17.4
A78-124020	17.6	18.0	18.8	17.8
A78-124023	18.2	18.9	13.7	19.9
A78-125008	15.7	15.4	12.7	15.7
A78-125029	15.5	14.2	18.2	14.3
C1584	16.9	16.7	16.3	17.1
L76-187	17.5	17.9	15.2	17.6
M70-376	17.3	17.4	16.0	17.7
M70-388	16.1	16.4	17.3	16.7
M70-390	15.5	15.9	15.7	15.4
M70-422	16.6	18.2	19.0	15.9
M70-571	15.7	16.9	17.4	14.7
M70-597	19.4	20.1	18.6	20.2
M71-80	17.9	17.5	16.8	18.4
M71-100	18.3	19.2	13.1	18.9
M75-2	16.9	18.6	14.6	16.8

PRELIMINARY TEST I, 1979

Minn.		Iowa		S.D.
Waseca	Lamberton	Knierim	Corwith	Brookings
<u>SIZE (g/100)</u>				
16.5	15.2	14.9		15.8
15.3	14.9	15.1		14.6
17.0	16.0	15.4		17.6
18.0	15.9	15.9		16.4
20.0	19.9	17.3		18.9
14.4	13.0	12.4		14.4
16.6	16.2	15.3		17.7
19.5	18.3	17.7		18.3
18.0	16.5	17.0		18.8
18.5	17.4	16.0		17.6
17.3	16.7	16.7		17.4
18.9	17.8	17.3		19.8
16.2	16.0	14.6		17.0
19.5	17.2	17.3		19.6
17.5	15.6	15.3		16.4
20.0	18.5	18.5		17.5
18.5	17.3	16.5		14.1
18.6	18.2	17.6		14.3
19.5	18.0	18.0		19.3
17.2	16.4	15.4		16.8
15.9	15.4	14.5		15.7
18.2	16.3	17.1		16.7
18.3	17.2	17.8		18.5
18.8	17.9	15.7		17.4
17.5	14.5	14.4		15.8
16.0	14.1	13.9		17.3
16.5	15.0	14.3		17.6
16.1	15.3	14.4		15.1
20.0	19.7	18.6		18.4
19.6	16.3	16.6		20.0
20.2	18.4	18.6		19.4
19.0	16.0	16.0		17.1

PRELIMINARY TEST I, 1979

Strain	Mean 5 Tests	Ont.	S.D.	Wisc.	Minn.	Iowa
		Ridge- town	Brook- ings	Arling- ton	Waseca	Knierim
% PROTEIN						
Corsoy (II)	40.7	40.2	40.6	42.4	37.7	42.5
Evans (0)	40.2	38.4	41.2	42.6	38.7	40.2
Hodgson 78 (I)	40.7	38.9	41.5	42.6	39.1	41.5
A73D16-2	40.7	38.8	41.6	42.7	39.5	41.1
A73D2876	40.4	40.4	39.8	42.0	39.4	40.4
A75-102032	40.6	40.2	40.6	43.1	40.2	38.9
A78-121007	41.1	39.5	43.4	42.8	40.1	39.9
A78-121014	41.3	40.0	41.7	43.7	40.2	41.1
A78-122008	41.2	40.6	39.2	43.5	39.8	43.1
A78-122030	41.4	39.3	41.9	43.4	40.6	41.6
A78-122031	41.3	39.9	42.7	41.7	41.5	40.9
A78-123002	42.2	42.1	42.0	44.5	40.0	42.5
A78-123005	41.4	40.2	40.5	44.7	39.5	42.0
A78-123009	40.2	39.2	40.6	41.6	39.9	39.9
A78-123018	40.6	39.2	40.2	41.4	40.3	42.0
A78-124004	41.4	39.9	41.7	44.9	40.1	40.4
A78-124018	41.1	38.2	41.1	42.7	41.0	42.6
A78-124020	42.2	41.5	43.1	44.2	40.4	41.7
A78-124023	42.7	42.9	40.8	45.4	41.1	43.2
A78-125008	39.5	39.4	38.5	41.2	39.9	38.3
A78-125029	41.7	39.7	40.9	44.3	42.2	41.5
C1584	41.1	40.3	40.4	43.2	40.1	41.6
L76-187	39.9	39.5	40.2	42.5	39.1	38.3
M70-376	40.3	39.6	39.5	42.7	40.3	39.2
M70-388	39.9	39.2	39.8	42.3	39.7	38.5
M70-390	39.7	40.0	39.9	42.6	38.1	37.9
M70-422	39.4	37.9	40.5	40.8	39.4	38.5
M70-571	40.2	38.6	38.9	42.2	40.9	40.4
M70-597	42.6	41.3	43.4	45.2	40.7	42.2
M71-80	40.0	39.2	39.6	42.2	39.8	39.4
M71-100	40.6	37.8	41.5	42.2	40.3	41.1
M75-2	40.8	39.0	40.9	42.5	41.0	40.8

PRELIMINARY TEST I, 1979

Mean	<u>Ont.</u>	<u>S.D.</u>	<u>Wisc.</u>	<u>Minn.</u>	<u>Iowa</u>
5 Tests	Ridgetown	Brookings	Arling- ton	Waseca	Knierim
	<u>% OIL</u>				
19.1	19.0	18.1	19.1	19.5	20.0
20.0	20.1	19.2	20.0	19.9	21.0
19.8	21.1	18.1	19.1	19.3	21.3
18.7	18.5	17.9	18.3	18.5	20.2
19.3	19.3	17.8	19.2	19.7	20.7
19.3	19.0	18.6	18.8	19.2	20.7
19.8	20.0	17.7	19.8	19.7	21.6
19.0	18.8	18.1	18.8	19.3	19.8
19.3	19.8	18.1	19.5	19.6	19.7
19.3	20.0	18.5	19.1	18.6	20.3
19.2	19.4	17.6	19.1	19.1	20.9
18.7	18.1	18.0	19.0	19.1	19.2
19.1	19.6	18.0	18.5	19.1	20.5
19.0	19.1	18.4	19.1	18.6	19.9
19.3	20.4	18.1	19.3	18.8	20.0
19.2	19.5	18.2	18.7	18.6	20.9
19.3	19.5	17.9	19.6	19.1	20.5
19.2	18.8	18.6	19.6	18.9	20.3
18.3	18.1	17.8	18.1	18.3	19.4
19.5	19.3	18.9	19.6	19.4	20.3
18.9	19.7	18.0	18.5	17.8	20.6
19.0	18.9	17.9	18.7	19.0	20.3
19.3	19.5	17.7	18.6	19.0	21.7
19.6	19.8	19.1	19.1	19.6	20.4
20.0	20.7	18.4	19.2	19.4	22.3
20.0	20.1	18.8	19.1	20.3	21.9
20.2	21.5	19.0	19.7	18.8	21.8
19.5	19.4	19.3	19.2	18.4	21.2
18.5	18.9	17.0	18.2	18.8	19.7
19.6	19.4	18.8	19.5	18.6	21.6
19.8	20.6	18.5	19.9	19.3	20.5
19.8	19.9	19.1	19.6	19.3	21.1

UNIFORM TEST II, 1979

Strain	Parentage	Previous Testing *	Generation Compositied
Beeson	C1253 x Kent	12	F7
Corsoy (II)	Harsoy x Capital	15	F9
Harcor	Corsoy x OX383	5	F4
Weber (A75-102032) (I)	C1453 x Swift	UTI	F5
Nebsoy	C1432 x C1430	2	F7
Wells II	Wells ⁸ x Arksoy	1	F3
Pella (A74-302012) (III)	L66L-137 x Calland	UTIII	F4
A77-211021	Beeson x A72-507	PII	F4
A77-212006	Hodgson x M65-69	PII	F4
Beeson 80 (C Beeson PR3)	Beeson ⁸ x Arksoy	1	F3
C1545	Calland x Bonus	2	F6
Gnome (HW74-618)	Williams x Ransom	1	F5
H75-5605	Woodworth x V68-1034	PIII	F5
H7703	Beeson x Wells	PII	F5
Amcor (L73D-195)	C1477 x Corsoy	3	F6
L73-4673	Corsoy x L66L-154	PII	F5
L75-3674	Corsoy ⁶ x Lee 68	1	F3
U11239	Amsoy x Wayne	PII	F4
U20325	C1317-71 x C1253	PII	F5

*Number of years in this test or name of 1978 test.

UNIFORM TEST II, 1979

Descriptive and Other Data

Descriptive Code		Chlorosis <u>Score</u> Ames	Hypocotyl <u>Score</u> Ames	<u>Shattering</u> Manhattan 2 Weeks
PGBr	SYIb	3	5	2
PGBr	DYY	5	1	2
PGBr	SYY	4	1	2
WTBr	DYB1	3	2	2
WGBr	SYBf	4	4	2
PGBr	DYIb	4	5	1
PTTn	DYB1	3	3	1
WGBr	DYBf	4	1	3
WGBr	DYBf	3	3	3
PGBr	DYIb	3	5	2
PTBr	DYB1 B/	3	4	2
PTTn	SYB1	4	1	2
WTTn	DYB1	3	5	1
PGBr	DYY	3	1	3
PGBr	SYY	3	1	2
PGTn	DYY	4	2	2
PGBr	DYY	4	1	2
PTBr	DYB1	4	5	2
PGBr	SYIb	3	1	3

UNIFORM TEST II, 1979

Disease Data

	<u>FE₂</u>	<u>BP</u>	<u>BSR</u>		<u>GERM*</u>	<u>PSB</u>	<u>SMV</u>	<u>PR</u>	<u>PR</u>	<u>Race 1</u>	
	Laf. Ind. a	Girard Ill. n	Laf. Ind. n	Ames Ia. n	Minn. Lafayette, IN d	d	IN Ohio a	Vickery Ohio n	Laf. Ind. a	Ames Ia. a	
	score	score	%	Reac.	%	%	%	Reac.	-----	Reaction-----	
Beeson	1	3	80	S	70	68	11	3M	3.2	R	R
Corsoy (II)	5	4	100	S	25	93	4	5S	4.0	S	S
Harcor	5	3	80	S	35	87	3	5E	3.9	R	H
A75-102032 (I)	2	4	60	S	60	88	2	5E	3.7	S	S
Nebsoy	4	3	40	S	45	79	7	1	3.4	R	R
Wells II	1	2.9	20	S	65	88	6	5E	2.9	R	R
A74-302012 (III)	3	3.5	60	S	30	92	1	5E	3.5	R	R
A77-211021	5	3	100	S	45	47	4	5M	3.7	R	R
A77-212006	5	4	100	S	75	72	9	5E	5.0	S	S
C Beeson PR3	1	3	80	S	40	90	3	3M	2.4	R	R
C1545	5	3.5	100	S	40	92	2	5E	2.7	R	R
HW74-618	1	1	20	S	35	93	0	1	3.4	S	S
H75-5605	1	1	20	S	45	95	0	5E	3.7	S	S
H7703	4	3	80	S	75	70	8	5E	2.6	R	H
L73D-195	5	3	60	S	20	91	0	5S	3.5	R	R
L73-4673	5	1	80	S	10	97	2	4M	4.2	S	S
L75-3674	5	3.5	80	—	20	97	1	5E	3.2	R	—
U11239	4	3.5	40	S	45	66	6	5E	4.4	R	R
U20325	5	4	80	S	60	83	9	1	3.6	R	R

*Petri dish germination on potato dextrose agar.

UNIFORM TEST II, 1979

Regional Summary

No. of Tests	Yield	Rank	Matu- rity	Lodg- ing	Height	Seed Quality	Seed Size	Composition	
	22	22	21	22	22	20	21	6	6
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
	45.4	17	+4.2	2.3	40	2.1	19.9	41.5	19.7
	48.1	7	9/24*	2.6	39	1.9	16.5	40.7	20.2
	47.9	8	+1.0	2.7	40	1.8	15.9	40.2	20.2
	46.4	11	-3.6	2.5	37	1.7	14.3	39.1	20.5
	46.4	11	+1.5	1.6	37	2.3	18.1	40.0	19.8
	45.5	16	-1.3	1.7	38	2.5	17.0	41.1	19.9
	49.4	1	+6.0	2.0	40	1.9	20.2	39.1	20.3
	48.8	3	+1.5	2.7	41	2.5	19.7	39.9	19.9
	46.7	10	+3.2	2.8	43	2.1	17.2	39.5	20.4
	46.1	13	+2.8	2.3	39	2.2	19.8	41.6	19.6
	48.4	6	+4.0	2.0	40	1.9	19.4	41.5	19.5
	48.8	3	+6.2	1.9	26	1.6	16.9	41.2	19.6
	45.9	14	+5.4	1.9	29	1.5	14.1	40.4	19.4
	45.7	15	+3.5	2.8	40	2.5	18.7	40.1	19.6
	49.2	2	+5.2	2.9	44	2.3	17.6	39.2	20.0
	48.7	5	+4.6	2.3	39	1.7	17.4	40.6	19.4
	47.4	9	+0.5	2.5	40	1.9	16.2	40.0	20.4
	44.4	18	+1.8	2.1	37	2.1	20.1	43.0	19.8
	43.8	19	+4.2	2.1	39	2.0	18.3	40.5	19.7

*127 days after planting

Amcor has consistently been the highest yielding strain classified as a Group II strain, however, it matures about 1 day late for this maturity group. Gnome has also consistently matured 1 to 2 days late for this maturity group. The two year means show the similarity in performance of Corsoy and Corsoy 79. Beeson 80 appears to have a slight yield advantage and has consistently matured about a day earlier than Beeson.

Of the new entries in the test in 1979, A77-211021 is the only one that has yielded well compared to the check varieties. It is resistant to races 1 and 2 of phytophthora root rot but is more susceptible to shattering than the check varieties.

UNIFORM TEST II, 1979

Regional Summary

Strain	Yield bu/a	Rank No.	Matu- rity Date	Lodg- ing Score	Height In.	Seed Quality Score	Seed Size g/100	Composition	
								Protein %	Oil %
<u>1978-1979, 2-year mean</u>									
No. of Tests	43	43	41	43	42	37	40	14	14
Amcor	47.8	1	+4.9	2.8	43	2.3	17.4	39.7	20.9
Beeson	44.0	10	+3.6	2.3	39	2.3	19.6	42.0	20.1
Beeson 80	45.9	7	+2.4	2.2	38	2.2	19.7	42.0	20.1
Corsoy (II)	46.5	5	9/23*	2.5	38	2.0	16.4	40.9	20.8
Corsoy 79	46.5	5	+0.1	2.4	39	2.0	16.2	40.5	20.9
Century	47.0	2	+4.0	1.9	38	2.1	19.3	42.6	19.7
Gnome	46.6	4	+5.1	1.8	26	1.6	16.6	42.4	20.1
Harcor	46.8	3	+1.0	2.6	39	1.9	15.9	40.8	20.5
Nebsoy	44.6	9	+1.4	1.6	36	2.3	17.9	40.9	20.1
Wells II	44.8	8	-0.6	1.7	38	2.5	17.0	42.1	20.4

*122 days after planting

<u>1977-1979, 3-year mean</u>									
No. of Tests	65	65	60	65	64	58	61	23	23
Amcor	47.7	1	+5.5	2.8	41	2.4	17.0	39.1	20.6
Beeson	44.2	7	+3.8	2.2	37	2.4	19.4	41.1	20.2
Century	47.3	2	+4.3	1.9	37	2.2	19.0	41.7	20.0
Corsoy (II)	45.7	4	9/22.3*	2.5	38	2.2	16.1	40.0	20.9
Harcor	46.9	3	+1.5	2.7	39	2.1	15.6	39.8	20.6
Nebsoy	45.1	5	+1.6	1.6	35	2.5	17.2	40.0	20.2
Wells II	44.8	6	-1.9	1.8	37	2.6	16.6	41.2	20.7

*123 days after planting

UNIFORM TEST II, 1979

Strain	Mean 22 Tests	N.J.	Penn.	Ont.		Ohio	
		Adel- phia	Landis- ville	Ridge- town	Harrow	Wooster	Hoyt- ville
		YIELD (bu/a)					
Beeson	45.4	37.8	44.9	45.0	47.0	40.0	55.0
Corsoy (II)	48.1	33.5	47.0	52.8	51.0	39.2	55.8
Harcor	47.9	37.6	43.2	49.9	50.3	38.3	62.6
A75-102032 (I)	46.4	36.0	39.5	49.3	50.9	37.7	60.7
Nebsoy	46.4	36.1	38.4	45.0	51.6	38.3	54.9
Wells II	45.5	34.4	28.6	45.3	46.3	31.8	61.8
A74-302012 (III)	49.4	40.4	44.8	45.4	54.0	43.7	60.7
A77-211021	48.8	34.4	40.3	49.8	53.3	38.3	62.6
A77-212006	46.7	32.2	37.2	47.4	48.9	37.6	53.8
C Beeson PR3	46.1	35.4	46.6	45.9	46.7	39.9	54.7
C1545	48.4	37.8	44.0	46.0	47.6	39.8	60.6
HW74-618	48.8	38.6	50.7	42.3	48.4	46.1	65.8
H75-5605	45.9	33.0	50.7	42.2	47.4	42.3	54.4
H7703	45.7	32.2	45.6	44.4	46.4	36.3	57.1
L73D-195	49.2	44.2	47.2	45.8	50.6	44.8	63.0
L73-4673	48.7	36.2	43.4	47.6	45.2	38.8	58.5
L75-3674	47.4	33.2	36.8	45.4	55.2	34.2	59.4
U11239	44.4	33.2	33.6	42.7	51.0	33.4	57.9
U20325	43.8	37.2	42.0	41.0	47.0	38.7	55.2
C.V. (%)		7.5	8.6	6.6	9.3	6.2	6.7
L.S.D. (5%)		5.4	6.1	4.3	N.S.	3.9	6.4
Row sp (in.)		30"	30"	24"	24"	30"	30"
Rows/plot		3	4	4	4	4	4
Reps		4	3	4	4	3	3

UNIFORM TEST II, 1979

Strain	Mich.	Ind.			Wisc.	Ill.	
	Ithaca	Bluff- ton	Lafay- ette	Green- field	Arling- ton	Urbana	Dekalb
	<u>YIELD (bu/a)</u>						
Beeson	31.8	48.5	37.3	47.7	38.9	49.3	43.0
Corsoy (II)	41.1	44.4	48.6	51.1	40.3	53.5	47.3
Harcor	38.3	47.4	46.2	51.6	40.6	53.9	42.5
A75-102032 (I)	42.3	52.7	41.6	48.0	39.2	47.4	45.4
Nebsoy	33.8	51.1	47.6	48.9	41.1	51.4	46.5
Wells II	38.2	49.4	47.7	46.5	40.3	50.1	47.9
A74-3C2012 (III)	36.1	55.3	47.8	52.8	41.1	54.2	49.9
A77-211021	41.2	48.5	31.3	54.2	46.5	55.2	46.1
A77-212006	39.1	44.0	41.9	50.6	38.2	50.6	50.0
C Beeson PR3	36.9	49.6	44.4	52.8	40.5	49.3	43.7
C1545	40.4	47.0	48.0	53.8	41.7	53.6	50.9
HW74-618	33.8	46.8	48.0	45.9	38.9	57.0	46.6
H75-5605	28.9	48.2	50.6	45.7	34.5	52.0	47.8
H7703	32.7	43.0	44.1	48.9	38.9	47.7	50.9
L73D-195	38.7	45.5	41.3	48.3	43.7	55.7	48.4
L73-4673	38.7	48.7	50.8	49.1	36.7	55.3	52.3
L75-3674	43.4	50.7	46.6	41.3	41.9	51.3	52.7
U11239	34.3	47.2	46.3	44.7	37.6	48.5	43.8
U20325	33.4	47.6	40.5	51.9	36.0	46.9	43.2
C.V. (%)	7.9	10.9	15.5	10.5	10.7	5.6	6.0
L.S.D. (5%)	4.9	8.6	11.3	8.5	7.0	6.4	4.7
Row sp (in.)	—	30"	30"	30"	30"	30"	30"
Rows/plot	—	3	4	3	4	4	4
Reps	—	3	3	3	3	3	3

UNIFORM TEST II, 1979

Ill.		Minn.		Iowa		Neb.	S.D.	
Pontiac	Girard	Waseca	Lamber- ton	Marshall- town	Ames	Mead	Brook- ings	Center- ville
<u>YIELD (bu/a)</u>								
40.3	45.9	43.8	47.5	60.3	57.8	53.5	33.6	49.4
44.6	36.9	48.5	51.4	55.1	61.2	51.7	49.9	53.1
43.3	43.8	46.4	49.6	58.6	59.7	49.1	43.5	57.3
41.8	33.3	46.3	49.6	56.9	55.0	52.0	45.6	50.5
43.2	43.1	41.5	52.3	59.2	57.5	49.1	33.6	50.9
42.6	44.0	41.8	54.2	54.0	54.0	48.9	38.9	55.0
42.5	52.1	51.6	52.9	58.8	62.1	49.2	37.1	54.9
43.9	42.9	53.6	56.0	58.9	61.7	50.4	48.9	55.8
43.6	49.8	53.0	51.3	57.9	59.3	50.3	35.7	55.5
41.0	48.3	46.0	51.3	57.0	56.2	49.5	29.7	49.8
43.8	41.8	47.7	61.6	58.9	60.7	49.6	34.0	55.1
49.2	45.6	44.5	54.3	60.9	61.5	53.7	39.8	54.3
45.1	46.8	34.8	46.0	59.5	57.7	50.2	39.6	52.3
40.4	49.6	41.5	53.5	58.7	57.9	45.2	36.5	53.7
40.6	52.6	47.1	54.5	56.7	60.9	51.9	46.4	54.6
44.6	46.4	46.1	50.8	58.5	64.5	57.1	43.7	58.7
43.2	44.7	51.2	55.4	57.4	57.4	45.6	43.0	53.7
44.4	32.7	47.6	54.1	53.7	57.6	44.4	37.4	50.8
39.7	39.3	41.8	48.9	53.7	56.4	49.5	28.4	45.0
6.2	9.3	12.9	13.0	5.7	5.0	7.4	15.6	11.1
4.4	9.2	10.7	11.2	4.7	4.1	6.0	8.7	N.S.
30"	30"	30"	30"	27"	27"	30"	30"	30"
4	4	4	4	4	4	4	3	3
3	3	3	3	4	4	3	4	4

UNIFORM TEST II, 1979

Strain	Mean 22 Tests	N.J.	Penn.	Ont.		Ohio	
		Adel- phia	Landis- ville	Ridge- town	Harrow	Wooster	Hoyt- ville
<u>YIELD RANK</u>							
Beeson	17	4	9	13	14	5	15
Corsoy (II)	7	14	5	1	5	8	13
Harcor	8	6	13	2	9	11	3
A75-102032 (I)	11	10	16	4	7	14	6
Nebsoy	11	9	17	13	4	13	16
Wells II	16	12	21	12	18	19	5
A74-302012 (III)	1	2	10	10	2	3	6
A77-211021	3	12	15	3	3	11	3
A77-212006	10	18	18	6	10	15	19
C Beeson PR3	13	11	6	8	16	6	17
C1545	6	4	11	7	12	7	8
HW74-618	3	3	1	17	11	1	1
H75-5605	14	17	1	18	13	4	18
H7703	15	18	7	15	17	16	12
L73D-195	2	1	4	9	8	2	2
L73-4673	5	8	12	5	19	9	10
L75-3674	9	15	19	10	1	17	9
U11239	18	15	20	16	5	18	11
U20325	19	7	14	19	14	10	14

UNIFORM TEST II, 1979

Mich.	Ind.		Wisc.	Ill.				
Ithaca	Bluff- ton	Lafay- ette	Green- field	Arling- ton	Urbana	Dekalb	Pon- tiac	Girard
<u>YIELD RANK</u>								
18	8	18	14	12	14	18	18	8
4	17	3	7	9	8	10	3	17
9	12	11	6	7	6	19	9	12
2	2	15	13	11	18	14	10	18
15	3	8	11	5	10	12	12	13
10	6	7	15	9	13	8	13	11
12	1	6	3	5	5	6	14	2
3	9	19	1	1	4	13	6	14
6	18	14	8	15	12	5	8	3
11	5	12	3	8	14	16	15	5
5	14	4	2	4	7	3	7	15
14	15	4	16	12	1	11	1	9
19	10	2	17	9	9	9	2	6
17	19	13	10	12	17	3	17	4
7	16	16	12	2	2	7	16	1
7	7	1	9	17	3	2	4	7
1	4	9	19	3	11	1	10	10
13	13	10	18	16	16	15	5	19
16	11	17	5	18	19	17	19	16

UNIFORM TEST II, 1979

Strain	Minn.		Iowa		Neb.	S.D.	
	Was- eca	Lamber- ton	Marshall- town	Ames	Mead	Brook- ings	Center- ville
	<u>YIELD RANK</u>						
Beeson	14	18	2	11	3	17	18
Corsoy (II)	5	11	16	5	6	1	12
Harcor	9	15	9	8	14	6	2
A75-102032 (I)	10	15	14	18	4	4	16
Nebsoy	17	10	4	14	14	11	14
Wells II	15	6	17	19	16	10	6
A74-302012 (III)	3	9	7	2	13	13	7
A77-211021	1	2	5	3	7	2	3
A77-212006	2	12	11	9	8	15	4
C Beeson PR3	12	12	13	17	11	18	17
C1545	6	1	5	7	10	16	5
HW74-618	13	5	1	4	2	8	9
H75-5605	19	19	3	12	9	9	13
H7703	17	8	8	10	18	14	10
L73D-195	8	4	15	6	5	3	8
L73-4673	11	14	10	1	1	5	1
L75-3674	4	3	12	15	17	7	11
U11239	7	7	18	13	19	12	15
U20325	15	17	18	16	12	19	19

UNIFORM TEST II, 1979

Strain	Mean 21 Tests	N.J.	Penn.	Ont.		Ohio	
		Adel- phia	Landis- ville	Ridge- town	Harrow	Wooster	Hoyt- ville
<u>MATURITY (date)</u>							
Beeson	+4.2	+3	0	+2	+1	+4	+6
Corsoy (II)*	9/24	9/25	9/26	9/30	10/3	9/23	9/18
Harcor	+1.0	+1	-8	-1	+3	+2	+3
A75-102032 (I)	-3.6	-6	-12	-4	-7	-4	-3
Nebsoy	+1.5	-4	-10	-2	+4	+1	+3
Wells II	-1.3	-5	-10	-4	-3	-2	0
A74-302012 (III)	+6.0	+5	+3	+3	+4	+6	+7
A77-211021	+1.5	-3	-2	-1	+6	-1	+2
A77-212006	+3.2	+4	-2	+2	+4	+3	+4
C Beeson PR3	+2.8	+1	-5	0	-1	+2	+3
C1545	+4.0	+5	-5	+2	-1	+4	+5
HW74-618	+6.2	+7	+2	+5	+5	+5	+6
H75-5605	+5.4	+4	+2	+6	+5	+3	+6
H7703	+3.5	0	-5	+2	+2	+2	+4
L73D-195	+5.2	+4	0	+2	+7	+3	+6
L73-4673	+4.6	+4	0	+3	7	+4	+2
L75-3674	+0.5	0	-5	-1	0	0	+3
U11239	+1.8	0	-5	0	-2	+2	+2
U20325	+4.2	+1	-5	+2	+3	+3	+5
Date planted	5/19	6/6	5/22	5/18	5/22	5/14	5/7
*Days to maturity	127	111	127	135	134	132	134

UNIFORM TEST II, 1979

Strain	Mich.	Ind.			Wisc.	Ill.	
	Ithaca	Bluff- ton	Lafay- ette	Green- field	Arling- ton	Urbana	Dekalb
	<u>MATURITY (date)</u>						
Beeson	+4	+2	+2	+1	0	+8	+2
Corsoy (II)*	10/7	9/24	9/12	9/21	10/3	9/9	10/1
Harcor	+1	0	+1	+3	0	+3	0
A75-102032 (I)	-2	-1	-4	-3	-7	-1	-3
Nebsoy	0	0	+1	-1	0	+4	0
Wells II	-1	0	0	-2	-2	+3	-4
A74-302012 (III)	+2	+4	+4	-5	+4	+11	+5
A77-211021	0	+1	+7	0	-1	+6	-1
A77-212006	+3	+2	+2	+2	+2	+5	+1
C Beeson PR3	+2	+1	+2	+1	+1	+6	+1
C1545	+2	+2	+4	+2	+5	+7	+1
HW74-618	+4	+5	+5	+5	+3	+13	+3
H75-5605	+2	+4	+5	+5	+2	+12	+2
H7703	+4	+1	0	+1	-2	+7	+1
L73D-195	+4	+3	+4	+5	+6	+6	+2
L73-4673	+1	+2	+3	+3	+5	+9	+2
L75-3674	0	0	0	+2	+1	+2	0
U11239	-1	+2	+1	+1	0	+4	-1
U20325	+6	+2	+2	+2	+4	+8	+1
Date planted	—	5/22	5/17	5/29	5/15	5/11	5/16
Days to Maturity*	—	125	118	115	141	121	138

UNIFORM TEST II, 1979

Ill.		Minn.		Iowa		Neb.	S.D.	
Pontiac	Girard	Waseca	Lamber- ton	Marshall- town	Ames	Mead	Brook- ings	Center- ville
<u>MATURITY (date)</u>								
-1	+6	+8	+4		+8	+5	+8	+6
9/24	9/6	9/30	9/27		9/14	9/24	10/8	9/24
-1	+1	+3	-1		+2	0	+2	+3
-6	-2	+1	-4		-3	-3	-1	-1
+3	+1	+6	+3		0	+2	+5	+8
+1	+3	+2	-2		0	0	+3	+3
+3	+12	+10	+6		+11	+7	+10	+13
-2	+1	+4	+2		+2	+2	+4	+2
+1	+5	+8	+3		+3	+5	+5	+6
+1	+4	+9	+3		+6	+4	+9	+6
+3	+5	+9	+5		+7	+5	+9	+7
+3	+11	+9	+8		+11	+5	+7	+8
+3	+11	+9	+7		+10	+4	+5	+7
0	+6	+7	+4		+6	+6	+8	+9
+3	+5	+9	+6		+10	+5	+7	+7
+2	+6	+9	+6		+8	+5	+5	+6
-2	+1	+5	-2		0	0	+2	0
+2	+2	+5	+2		+2	+5	+7	+4
+3	+4	+9	+7		+8	+5	+9	+9
5/23	5/19	5/23	5/17	5/10	5/9	5/23	5/29	5/24
124	110	130	133	—	128	124	132	123

UNIFORM TEST II, 1979

Strain	Mean 22 Tests	N.J.	Penn.	Ont.		Ohio	
		Adel- phia	Landis- ville	Ridge- town	Harrow	Wooster	Hoyt- ville
<u>LODGING (score)</u>							
Beeson	2.3	3.0	2.3	1.5	2.5	2.0	3.7
Corsoy (II)	2.6	4.0	2.2	2.2	3.0	2.1	3.0
Harcor	2.7	4.1	2.3	1.8	3.0	2.4	4.0
A75-102032 (I)	2.5	4.1	2.2	1.5	3.0	1.7	3.6
Nebsoy	1.6	2.3	1.5	1.0	1.0	1.6	1.9
Wells II	1.7	2.8	1.3	1.2	1.5	1.4	2.3
A74-302012 (III)	2.0	2.6	1.7	1.0	2.0	1.6	2.6
A77-211021	2.7	3.8	2.7	2.8	3.5	1.6	3.8
A77-212006	2.8	3.5	2.2	2.2	4.0	1.6	3.7
C Beeson PR3	2.3	2.5	1.8	1.5	3.0	1.6	3.5
C1545	2.0	2.4	1.5	1.2	2.0	1.8	2.9
HW74-618	1.9	3.5	2.3	1.2	2.0	1.5	2.2
H75-5605	1.9	3.2	2.2	2.5	1.5	1.7	1.9
H7703	2.8	4.0	2.5	2.2	3.5	2.1	3.6
L73D-195	2.9	4.2	2.3	2.0	4.0	2.4	4.0
L73-4673	2.3	4.0	1.7	1.8	3.0	1.8	2.5
L75-3674	2.5	3.8	2.3	1.8	3.0	1.8	3.6
U11239	2.1	3.5	2.2	1.8	2.0	1.9	3.2
U20325	2.1	2.5	2.3	1.5	2.0	1.6	3.0

UNIFORM TEST II, 1979

Mich.	Ind.		Wisc.		Ill.			
Ithaca	Bluff- ton	Lafay- ette	Green- field	Arling- ton	Urbana	Dekalb	Pon- tiac	Girard
<u>LODGING (score)</u>								
2.5	2.0	2.3	1.7	3.2	2.7	2.3	2.5	1.8
2.7	2.7	3.0	2.0	3.0	2.6	3.0	3.3	2.0
3.0	2.5	3.2	2.3	3.5	2.9	2.7	3.3	1.8
2.3	2.5	3.7	2.3	3.2	2.0	2.8	3.3	1.3
1.8	1.8	2.0	1.7	2.2	1.3	1.7	2.0	1.1
1.2	1.5	1.8	1.7	2.2	1.2	1.7	2.8	1.2
1.7	1.8	2.0	1.5	2.8	2.8	2.3	2.5	1.3
2.2	2.3	2.1	2.5	3.2	1.9	3.0	4.3	2.2
3.0	2.8	3.0	2.8	3.7	2.3	3.2	3.2	2.0
2.3	2.5	2.0	1.8	3.0	2.2	2.3	3.2	1.8
1.7	1.7	2.0	1.5	2.7	1.5	2.0	2.8	1.3
2.0	1.7	1.5	1.3	3.0	1.3	2.2	1.5	1.3
2.7	1.8	1.5	1.2	2.8	1.2	2.0	1.5	1.2
2.8	2.8	3.2	1.3	3.0	3.7	3.3	3.3	2.6
3.0	3.3	3.8	2.3	3.5	2.4	3.2	3.5	2.1
2.2	1.8	2.0	1.7	3.3	1.6	2.7	2.5	1.4
2.2	3.0	3.5	2.5	3.0	2.0	3.0	2.8	2.1
1.7	1.7	2.5	1.8	3.0	1.4	2.2	2.3	1.3
2.3	2.3	2.3	1.7	2.5	2.1	2.2	1.8	1.1

UNIFORM TEST II, 1979

Strain	Minn.		Iowa		Neb.	S.D.	
	Was- eca	Lamber- ton	Marshall- town	Ames	Mead	Brook- ings	Center- ville
	<u>LODGING (score)</u>						
Beeson	2.7	4.0	3.2	2.0	1.3	1.0	1.0
Corsoy (II)	3.3	4.0	3.1	2.8	2.0	1.0	1.0
Harcor	3.0	4.0	3.2	2.7	1.7	1.0	1.0
A75-102032 (I)	2.3	3.7	3.4	2.8	1.5	1.0	1.0
Nebsoy	1.7	2.7	2.1	1.6	1.2	1.0	1.0
Wells II	1.8	2.7	2.7	1.6	1.0	1.0	1.0
A74-302012 (III)	3.0	3.7	2.4	2.2	1.5	1.0	1.0
A77-211021	3.0	4.0	3.5	3.0	1.3	1.0	1.0
A77-212006	3.0	4.3	3.5	3.1	2.0	1.0	1.0
C Beeson PR 3	3.0	4.0	3.0	2.0	1.3	1.0	1.0
C1545	2.7	4.0	2.8	1.8	1.2	1.0	1.0
HW74-618	2.3	4.0	2.0	1.6	1.0	1.0	1.0
H75-5605	2.0	4.0	2.0	1.5	1.0	1.0	1.0
H7703	3.3	4.0	3.6	2.9	1.2	1.0	1.0
L73D-195	4.0	4.0	3.2	2.8	2.0	1.0	1.0
L73-4673	2.7	4.0	3.4	2.3	1.7	1.0	1.0
L75-3674	3.0	3.3	2.8	2.6	1.7	1.0	1.0
U11239	2.0	3.3	2.7	1.6	1.5	1.0	1.0
U20325	3.0	4.0	2.4	1.8	1.0	1.0	1.0

UNIFORM TEST II, 1979

Strain	Mean 22 Tests	N.J.	Penn.	Ont.		Ohio	
		Adel- phia	Landis- ville	Ridge- town	Harrow	Wooster	Hoyt- ville
		<u>HEIGHT (inches)</u>					
Beeson	40	39	36	34	44	29	42
Corsoy (II)	39	45	33	39	41	31	38
Harcor	40	44	35	36	43	29	47
A75-102032 (I)	37	39	32	34	41	29	45
Nebsoy	37	36	30	31	41	27	42
Wells II	38	36	27	33	42	26	44
A74-302012 (III)	40	40	33	33	45	31	41
A77-211021	41	39	34	38	43	30	46
A77-212006	43	44	32	38	47	34	47
C Beeson PR3	39	38	32	33	39	29	43
C1545	40	40	30	33	43	28	45
HW74-618	26	26	26	23	28	21	30
H75-5605	29	32	28	30	30	24	29
H7703	40	41	34	37	41	29	43
L73D-195	44	50	37	38	46	33	46
L73-4673	39	36	32	34	44	30	39
L75-3674	40	45	33	37	44	29	44
U11239	37	38	28	32	41	28	39
U20325	39	39	32	33	44	28	44

UNIFORM TEST II, 1979

Strain	Mich.	Ind.			Wisc.	Ill.	
	Ithaca	Bluff- ton	Lafay- ette	Green- field	Arling- ton	Urbana	Dekalb
	<u>HEIGHT (inches)</u>						
Beeson	42	44	42	37	43	42	35
Corsoy (II)	43	41	42	41	44	34	34
Harcor	45	44	48	40	45	39	33
A75-102032 (I)	41	40	40	39	38	32	30
Nebsoy	38	40	40	37	37	36	34
Wells II	38	44	43	37	36	40	35
A74-302012 (III)	42	47	46	39	39	43	37
A77-211021	43	46	30	40	40	38	35
A77-212006	44	46	48	43	48	42	39
C Beeson PR3	43	43	44	38	40	39	34
C1545	42	43	43	38	42	41	37
HW74-618	27	23	26	23	26	25	19
H75-5605	33	31	28	26	31	25	22
H7703	44	44	40	37	41	39	34
L73D-195	46	45	47	46	52	42	36
L73-4673	42	44	40	36	39	38	33
L75-3674	43	44	44	41	43	38	32
U11239	37	44	42	39	38	37	32
U20325	41	42	42	42	41	39	34

UNIFORM TEST II, 1979

Ill.		Minn.		Iowa		Neb.	S.D.	
Pontiac	Girard	Waseca	Lamber- ton	Marshall- town	Ames	Mead	Brook- ings	Center- ville
HEIGHT (inches)								
38	37	44	50	38	41	37	39	37
43	32	43	46	38	38	33	40	39
45	32	44	44	40	39	35	39	38
41	29	43	41	38	38	32	41	34
38	31	42	42	40	38	32	39	34
42	34	45	42	40	40	31	40	37
44	39	43	47	42	43	37	40	38
44	32	48	52	42	39	35	40	39
48	35	49	54	45	43	39	41	39
42	36	44	51	39	40	35	42	36
42	33	46	47	44	42	34	40	39
23	18	31	37	28	26	24	33	30
27	22	34	40	31	28	26	35	33
38	37	43	52	38	43	37	39	41
47	37	49	54	45	44	39	42	40
41	32	44	50	40	41	35	42	36
44	34	47	44	40	39	34	40	36
38	33	44	46	40	40	31	39	37
42	31	44	46	44	39	36	38	39

UNIFORM TEST II, 1979

Strain	Mean 20 Tests	N.J.	Penn.	Ont.		Ohio	
		Adel- phia	Landis- ville	Ridge- town	Harrow	Wooster	Hoyt- ville
		<u>QUALITY (score)</u>					
Beeson	2.1	2.0	2.2	2.0	1.0	2.0	2.0
Corsoy (II)	1.9	2.0	2.6	2.0	2.0	2.0	2.0
Harcor	1.8	2.0	2.7	2.0	2.0	1.3	2.0
A75-102032 (I)	1.7	2.0	2.0	2.0	1.0	1.3	1.3
Nebsoy	2.3	2.0	2.8	2.0	2.0	2.0	2.0
Wells II	2.5	3.0	3.8	2.0	3.0	2.7	2.3
A74-302012 (III)	1.9	2.0	2.7	2.0	2.0	2.0	1.7
A77-211021	2.5	2.2	3.2	2.0	3.0	2.7	2.7
A77-212006	2.1	3.0	3.2	2.0	2.0	2.0	2.0
C Beeson PR3	2.2	2.0	2.2	2.0	2.0	2.0	2.0
C1545	1.9	2.0	2.5	2.0	2.0	2.3	2.0
HW74-618	1.6	2.5	1.0	2.0	1.0	1.0	1.7
H75-5605	1.5	1.8	1.5	2.0	1.0	1.0	1.7
H7703	2.5	3.0	3.2	2.0	2.0	3.0	3.7
L73D-195	2.3	2.2	2.8	2.0	4.0	2.0	2.7
L73-4673	1.7	2.0	2.7	2.0	2.0	1.0	2.0
L75-3674	1.9	2.0	2.8	2.0	1.0	1.7	2.0
U11239	2.1	2.2	2.3	2.0	1.0	2.0	3.0
U20325	2.0	2.0	1.5	2.0	2.0	2.0	2.0

UNIFORM TEST II, 1979

Mich.	Ind.		Wisc.	Ill.				
Ithaca	Bluff- ton	Lafay- ette	Green- field	Arling- ton	Urbana	Dekalb	Pontiac	Girard
<u>QUALITY (score)</u>								
	2.0	1.5	1.5	1.3	3.5	1.3	1.8	3.2
	1.5	2.0	1.0	1.3	2.0	1.2	1.3	1.5
	1.0	1.0	1.0	1.3	2.0	1.3	1.5	2.2
	1.0	1.0	1.5	1.7	1.7	1.3	1.5	2.3
	1.5	2.5	1.5	2.0	2.8	1.9	1.5	2.7
	2.0	3.0	2.0	1.7	2.7	1.7	1.6	3.0
	1.5	1.0	2.0	2.7	2.5	1.4	1.4	2.2
	1.5	2.5	1.5	1.3	3.2	1.7	1.5	2.7
	2.0	1.5	1.5	1.7	1.7	1.4	1.3	2.3
	2.0	1.5	2.0	2.0	2.8	1.3	1.5	3.0
	1.5	1.5	1.5	2.3	2.3	1.5	1.4	2.5
	1.0	1.0	1.0	2.7	1.5	1.2	1.2	1.5
	1.0	1.0	1.0	2.7	1.0	1.2	1.2	1.0
	1.5	3.0	1.5	2.0	2.7	2.2	1.7	2.5
	1.5	2.0	1.5	2.7	2.0	1.5	1.5	2.3
	1.0	1.0	1.0	2.3	1.8	1.3	1.2	1.3
	2.0	1.0	1.5	1.3	2.0	1.5	1.2	1.7
	2.0	2.0	2.0	1.7	2.3	1.6	1.7	2.7
	1.5	2.5	1.5	2.3	2.8	1.5	1.3	2.2

UNIFORM TEST II, 1979

Strain	Minn.		Iowa		Neb.	S.D.	
	Was- eca	Lamber- ton	Marshall- town	Ames	Mead	Brook- ings	Center- ville
	<u>QUALITY (score)</u>						
Beeson	2.3	2.7		1.6	3.3	2.0	2.0
Corsoy (II)	2.3	2.7		1.4	2.3	2.0	2.0
Harcor	2.0	2.3		1.5	2.7	1.0	3.0
A75-102032 (I)	2.3	2.3		1.3	2.0	2.0	2.0
Nebsoy	3.0	3.3		2.0	2.8	3.0	3.0
Wells II	3.0	3.0		1.8	2.5	2.0	3.0
A74-302012 (III)	2.3	2.7		1.3	2.5	2.0	1.0
A77-211021	3.0	4.0		2.7	3.3	2.0	3.0
A77-212006	2.7	2.7		1.4	2.3	3.0	3.0
C Beeson PR3	3.0	2.7		1.6	2.7	3.0	2.0
C1545	2.3	2.3		1.4	2.5	2.0	1.0
HW74-618	2.0	2.3		2.0	2.0	2.0	2.0
H75-5605	2.3	2.3		1.6	1.6	2.0	2.0
H7703	3.0	3.0		2.8	3.7	1.0	3.0
L73D-195	2.7	3.0		1.7	3.0	2.0	2.0
L73-4673	2.0	2.3		1.3	2.2	2.0	2.0
L75-3674	2.0	2.0		1.5	2.3	3.0	3.0
U11239	2.3	2.7		1.7	2.5	2.0	2.0
U20325	2.3	2.3		2.1	2.8	2.0	2.0

UNIFORM TEST II, 1979

Strain	Mean 21 Tests	N.J.	Penn.	Ont.		Ohio	
		Adel- phia	Landis- ville	Ridge- town	Harrow	Wooster	Hoyt- ville
<u>SIZE (g/100)</u>							
Beeson	19.9	22.0	22.1	20.0	22.4	19.7	20.1
Corsoy (II)	16.5	17.0	18.0	16.1	17.9	15.6	17.6
Harcor	15.9	16.0	17.1	15.2	17.4	14.9	16.1
A75-102032 (I)	14.3	15.0	15.4	14.1	15.3	13.6	15.2
Nebsoy	18.1	18.0	19.7	17.2	19.6	17.7	19.8
Wells II	17.0	16.0	17.8	16.3	19.9	15.2	18.0
A74-302012 (III)	20.2	21.0	21.0	18.3	23.1	19.4	20.8
A77-211021	19.7	20.0	22.2	18.6	22.1	18.6	20.0
A77-212006	17.2	20.0	17.6	16.3	18.2	16.0	17.2
C Beeson PR3	19.8	21.0	21.4	19.1	22.9	18.6	19.7
C1545	19.4	21.0	20.7	19.1	22.0	18.3	21.1
HW74-618	16.9	18.0	19.5	16.1	18.4	18.1	18.3
H75-5605	14.1	16.0	15.9	14.1	15.8	14.8	14.1
H7703	18.7	19.0	20.2	18.2	20.2	16.9	20.0
L73D-195	17.6	18.0	19.1	16.3	18.8	16.6	19.0
L73-4673	17.4	17.0	17.8	16.7	18.3	16.1	17.4
L75-3674	16.2	16.0	16.1	14.8	18.3	15.5	17.7
U11239	20.1	21.0	21.0	20.4	23.5	18.5	20.3
U20325	18.3	20.0	19.8	17.9	20.8	15.5	18.5

UNIFORM TEST II, 1979

Strain	Mich.	Ind.			Wisc.	Ill.	
	Ithaca	Bluff- ton	Lafay- ette	Green- field	Arling- ton	Urbana	Dekalb
SIZE (g/100)							
Beeson	17.2	21.3	19.8	20.4	19.0	18.8	22.8
Corsoy (II)	16.5	18.2	16.5	15.9	15.3	16.3	18.6
Harcor	15.1	17.6	15.8	16.5	14.3	15.8	17.5
A75-102032 (I)	14.3	14.7	14.3	14.2	13.9	13.6	14.8
Nebsoy	15.7	19.2	18.6	17.5	17.5	17.3	19.1
Wells II	16.4	16.9	18.7	16.4	16.8	15.7	17.2
A74-302012 (III)	16.0	22.6	19.3	21.6	19.6	18.5	23.3
A77-211021	17.4	21.9	19.8	20.5	18.4	20.4	20.1
A77-212006	17.7	18.2	16.7	16.8	15.4	16.9	18.7
C Beeson PR3	16.6	20.2	19.9	21.4	18.6	18.7	22.9
C1545	15.9	21.4	17.9	20.7	20.1	17.7	20.8
HW74-618	17.3	16.6	16.2	16.6	15.2	16.0	18.2
H75-5605	16.1	14.3	14.0	14.4	13.9	12.7	16.3
H7703	18.4	19.5	18.9	19.6	17.1	17.9	22.0
L73D-195	17.5	18.2	17.0	18.0	16.2	16.7	19.8
L73-4673	14.9	18.2	17.8	17.6	16.3	17.3	19.0
L75-3674	17.7	17.9	16.0	15.4	14.7	16.1	18.3
U11239	14.1	22.8	20.1	21.3	20.2	18.4	22.1
U20325	15.8	20.4	17.9	19.5	17.5	18.0	21.1

UNIFORM TEST II, 1979

Ill.		Minn.		Iowa		Neb.	S.D.	
Pontiac	Girard	Waseca	Lamber- ton	Marshall- town	Ames	Mead	Brook- ings	Center- ville
<u>SIZE (g/100)</u>								
19.6	17.3	19.6	19.2		20.3	19.4	14.4	22.9
15.0	13.7	17.0	16.0		16.5	16.1	16.0	17.1
14.9	15.2	16.8	15.8		15.8	14.6	14.6	17.9
13.6	12.8	14.2	12.5		13.2	14.4	13.6	16.7
17.8	16.8	17.6	18.3		18.0	17.9	15.5	21.9
17.7	15.4	16.8	16.7		17.5	16.1	15.1	20.9
20.3	18.4	22.4	19.2		21.4	18.8	15.9	24.1
18.0	19.5	20.4	19.0		19.7	18.7	16.4	22.1
15.9	16.6	17.0	15.8		17.4	16.4	14.3	21.3
19.3	18.0	21.7	19.5		19.5	19.0	15.1	22.5
19.5	15.9	19.3	19.4		19.2	18.6	16.3	22.8
16.2	14.9	16.7	16.9		15.7	16.7	14.7	18.5
13.5	12.7	12.9	12.0		13.4	14.1	11.0	15.0
18.1	16.6	18.0	18.2		18.6	18.4	14.8	22.3
16.9	17.3	17.1	17.3		17.5	17.5	14.2	21.3
17.2	16.7	17.9	16.9		17.7	17.4	16.3	20.1
14.7	15.0	16.5	15.5		16.1	15.5	14.0	18.4
20.3	16.6	21.3	20.3		19.8	18.4	18.3	23.5
18.0	16.3	18.2	17.0		18.3	18.7	12.8	22.6

UNIFORM TEST II, 1979

Strain	Mean 6 Tests	Ont.	Ohio	Ind.	Ill.	Minn.	Iowa	Neb.
		Ridge- town	Hoyt- ville	Lafay- ette	DeKalb	Lamber- ton	Ames	Mead
% PROTEIN								
Beeson	41.5		42.3	41.6	42.0	41.9	40.4	40.7
Corsoy (II)	40.7		42.4	41.3	39.8	39.3	41.4	39.8
Harcor	40.2		40.0	40.0	39.4	40.2	42.2	39.5
A75-102032 (I)	39.1		36.8	41.7	38.7	39.8	40.7	36.8
Nebsoy	40.0		40.1	39.5	40.1	40.0	41.0	39.3
Wells II	41.1		40.3	42.1	38.7	41.6	42.8	41.3
A74-302012 (III)	39.1		42.0	39.7	36.8	39.5	38.1	38.5
A77-211021	39.9		38.9	39.1	38.5	41.7	41.6	39.3
A77-212006	39.5		40.2	39.6	39.5	39.5	40.6	37.6
C Beeson PR3	41.6		38.9	41.3	42.5	41.2	42.9	42.8
C1545	41.5		40.0	41.9	41.9	40.5	42.8	42.1
FW74-618	41.2		42.3	42.3	40.4	40.8	39.0	42.6
H75-5605	40.4		40.8	40.5	41.1	38.8	42.7	38.7
H7703	40.1		39.9	40.3	40.0	38.7	39.8	41.9
L73D-195	39.2		40.3	39.7	38.9	37.7	40.4	38.1
L73-4673	40.6		38.0	42.6	41.8	39.4	42.2	39.7
L75-3674	40.0		41.1	39.9	39.2	39.3	41.7	38.9
U11239	43.0		41.2	42.5	44.2	41.9	43.7	44.2
U20325	40.5		42.7	40.5	39.6	39.5	39.0	41.4

UNIFORM TEST II, 1979

	<u>Ohio</u>	<u>Ind.</u>	<u>Ill.</u>	<u>Minn.</u>	<u>Iowa</u>	<u>Neb.</u>
Mean	Hoytville	Lafayette	DeKalb	Lamberton	Ames	Mead
6 Tests						
	<u>% OIL</u>					
19.7	20.9	19.1	19.6	18.3	20.2	20.2
20.2	20.9	20.6	19.6	19.1	20.4	20.6
20.2	20.2	21.2	19.6	19.0	20.5	20.5
20.5	20.7	20.2	21.1	18.5	20.5	22.0
19.8	20.6	20.2	19.6	18.0	19.8	20.7
19.9	19.5	19.5	20.9	18.2	20.5	20.6
20.3	19.9	20.2	20.7	18.5	21.5	21.0
19.9	20.7	19.4	20.4	18.8	19.8	20.3
20.4	19.5	20.8	20.3	18.9	20.9	22.1
19.6	20.8	20.1	20.2	17.7	19.8	19.0
19.5	19.5	19.4	19.4	18.3	19.8	20.3
19.6	19.4	20.1	20.0	18.6	19.5	19.9
19.4	19.6	19.5	19.2	18.0	20.1	20.2
19.6	20.1	20.2	19.7	18.4	20.0	18.9
20.0	19.5	20.7	19.9	18.7	20.2	21.0
19.4	19.6	19.8	19.6	18.1	19.4	19.7
20.4	19.3	21.0	20.2	18.7	21.4	21.9
19.8	20.3	19.9	19.4	18.8	21.0	19.6
19.7	20.1	19.7	19.7	18.2	20.1	20.1

PRELIMINARY TEST II, 1979

Strain	Parentage	Generation Compositd
Corsoy (II)	Waynes x Capital	F ₉
A75-102032 (I)	CL513 x Self	F ₅
A74-302012 (III)	L46L-137 (Wayne x L57-0034) x Calland	F ₄
CL545	Calland x Beans	F ₆
A73D16-3	Mark x Wayne	F ₆
A78-122028	Hodgson x Sloan	F ₄
A78-223022	AP514T (S ₃) CL	S ₃
A78-225032	CL515 x Coles	F ₄
A78-227012	Bride B-216 x AX901-40-2	F ₄
A78-227013	Bride B-216 x AX901-40-2	F ₄
A78-227015	Bride B-216 x AX901-40-2	F ₄
A78-227016	Bride B-216 x AX901-40-2	F ₄
A78-321009	Williams x Sloan	F ₄
A78-321011	Bride B-216 x Harpore 25	F ₄
CL580	Beeson x CL407207-255	F ₆
CL581	Beeson x CL407207-255	F ₆
HC75-6369	N65-115 x L72D-549	F ₄
HC76-644	L66-531 x Williams	F ₄
HC76-710	Wells x Mark	F ₄
HC76-1010	Woodworth x L72D-758	F ₄
HC76-3790	L72N2367 x L72U-3331	F ₄
HC76-4373	L72N2367 x Williams	F ₄
L75-8033	Williams x L70-2283 (Chippewa x Custer)	F ₄
L75-8460	Beeson x L70-2450 (Wayne x Custer)	F ₄
L75-10513	Beeson x L70-2494 x Wells)	F ₄
L76-129	Beeson x L70-2403 (Chippewa x Custer)	F ₅
L76-136	Beeson x L70-2203 (Chippewa x Custer)	F ₅
L76-140	Beeson x L70-2283 (Chippewa x Custer)	F ₅
L76-143	Beeson x L70-2403 (Chippewa x Custer)	F ₅
L77-176	Williams x L70-2203 (Chippewa x Custer)	F ₆
U48762	Williams x Sloan 71	F ₅
U56355	CL477 x CL471	F ₅
U56491	Adelphia x Clark 60	F ₄
U57141	Calland x Guler	F ₄
U59297	Williams x Ansoy 71	F ₄
U59296	Williams x Ansoy 71	F ₄

PRELIMINARY TEST II, 1979

Descriptive and Other Data

Strain	Descriptive Code		Chlorosis	Shattering
			Score Ames	Manhattan 2 Weeks
Corsoy (II)	PGBr	DYY	5	2
A75-102032 (I)	WTBr	DYB1	3	2
A74-302012 (III)	PTTn	DYB1	3	2
C1545	PTBr	DYB1	3	2
A73D16-3	PGBr	DYY	4	1
A78-122028	WGBr	SYBf	3	2
A78-223022	PTBr	SYG	3	2
A78-225002	P+WGBr	DYG	4	3
A78-227012	P+WGTn	DYIb	4	2
A78-227013	WGBr	DYBf	5	2
A78-227015	WGTn	DYBf	4	2
A78-227016	WGTn	DYBf	4	2
A78-321009	WTTn	SYB1	3	2
A78-321011	WGBr	SYBf	5	3
C1580	PGBr	SYI	3	2
C1581	PGBr	SYI	3	2
HC75-6399	WTTn	DYB1+Br	3	1
HC76-644	WTTn	DYB1	3	2
HC76-710	PGBr	SYIb	3	2
HC76-1010	WTTn	SYBr	4	1
HC76-3790	PTTn	DYG	4	2
HC76-4373	PTTn	DYB1	2	2
L75-8033	WGTn	SYBf	3	2
L75-8460	WGBr	SYBf	4	2
L75-10513	PGBr	SYIb	4	1
L76-129	PGBr	SYBf	3	2
L76-136	PGBr	SYIb	3	3
L76-140	PGBr	SYIb	3	2
L76-141	PGBr	SYBf	3	2
L77-176	WGTn	SYBf	4	1
U46762	PGTn	SYI	3	2
U56355	PGBr	SYI	3	2
U56491	WTTn	SYB1	3	2
U57141	PTBr	DYB1	2	3
U59207	WGTn	SYI	3	2
U59236	WTTn	SYBr	3	2

PRELIMINARY TEST II, 1979

	Disease Data								
	FE ₂	BSR		GERM*	PSB	SMV	PR	PR	Race 1
	Laf.	Laf.	Ames				Vickery	Laf.	Ames
	Ind.	Ind.	Ia.	Lafayette,	IN		Ohio	Ind.	Ia.
a	n	n	d	d	a	n	a	a	
Score	%	Reac.	%	%	Reac.	-----Reaction-----			
Corsoy (II)	5	100	S	93	4	5S	3.8	S	S
A75-102032 (I)	2	60	S	88	2	5E	3.9	S	S
A74-302012 (III)	3	60	S	93	1	5E	3.9	R	R
C1545	5	100	S	92	2	5E	2.4	R	R
A73D16-3	5	80	S	90	4	5E	5.0	S	S
A78-122028	4	0	S	90	0	4M	4.6	S	S
A78-223022	4	20	S	78	7	5S	4.0	S	S
A78-225002	4	20	S	97	1	5E	3.7	S	S
A78-227012	4	100	S	98	0	5E	3.7	S	H
A75-227013	5	20	R	90	2	3E	2.9	R	R
A78-227015	5	60	S	95	4	4E	2.8	R	R
A78-227016	5	20	S	85	7	4E	4.2	S	R
A78-321009	4	40	S	92	2	5S	4.8	S	S
A78-321011	5	20	S	95	1	5S	4.4	S	H
C1580	2	60	S	89	0	5S	4.8	R	R
C1581	1	100	S	87	0	5S	4.4	R	R
HC75-6399	5	60	S	88	0	3M	4.6	S	S
HC76-644	5	80	S	89	0	5E	4.6	S	S
HC76-710	2	0	S	95	3	5M	4.3	S	S
HC76-1010	5	0	S	98	0	5E	4.3	S	S
HC76-3790	4	80	S	93	0	3M	4.6	S	S
HC76-4373	5	80	S	97	2	5E	4.2	S	S
L75-8033	5	20	S	83	0	3M	5.0	S	S
L75-8460	2	40	S	74	2	3M	4.3	R	H
L75-10513	1	40	S	69	9	5E	4.2	R	R
L76-129	4	40	S	81	3	3M	4.8	R	H
L76-136	2	60	S	72	3	4M	4.2	R	H
L76-140	1	60	S	82	2	1	4.2	R	H
L76-141	1	80	S	79	2	4M	4.5	R	H
L77-176	5	0	S	95	1	3M	4.8	S	S
U46762	5	20	S	80	3	5E	3.5	R	H
U56355	5	100	S	79	0	5E	3.3	R	R
U56491	5	20	S	95	1	5E	4.0	S	S
U57141	5	40	S	93	1	5E	2.5	Seg	S
U59207	5	40	S	87	1	5E	3.2	Seg	H
U59236	5	40	S	87	8	5E	3.5	Seg	S

*Petri dish germination on potato dextrose agar.

PRELIMINARY TEST II, 1979

Regional Summary

No. of Tests	Yield	Rank	Maturity	Lodging	Height	Seed Quality	Seed Size	Composition	
								Protein	Oil
	11	11	10	11	11	10	10	5	5
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
	50.9	12	9/22*	2.9	37	1.8	17.0	39.8	20.9
	49.2	21	-3.9	2.8	36	1.5	14.5	39.5	21.1
	53.0	1	+8.5	2.6	41	1.9	21.3	39.3	20.8
	51.4	9	+5.4	2.2	39	1.9	19.7	41.0	20.0
	50.1	17	-1.4	2.4	39	2.3	17.3	39.9	20.1
	51.7	5	+0.1	3.3	40	2.2	16.1	38.1	21.3
	50.2	16	+2.7	2.7	37	2.4	20.7	38.2	21.0
	51.0	10	+5.1	2.1	38	2.5	20.8	41.8	19.4
	52.9	2	+6.5	2.6	36	2.1	16.3	41.6	19.8
	51.6	7	+3.3	2.9	37	1.8	16.9	41.4	20.0
	51.6	7	+4.0	2.5	34	2.1	19.3	41.2	20.1
	51.9	4	+4.4	2.3	34	2.0	17.3	40.5	19.8
	50.6	14	+6.2	2.9	43	1.8	17.1	39.0	21.1
	52.4	3	+6.0	2.4	37	1.8	17.9	41.7	19.8
	48.5	24	+6.9	2.4	47	2.9	19.3	41.9	19.9
	50.5	15	+6.0	2.8	50	2.7	18.8	39.9	20.1
	51.0	10	+6.8	1.9	29	1.8	15.6	37.2	21.6
	42.0	36	+6.8	1.6	26	1.9	16.8	40.7	19.8
	42.6	35	+7.6	2.3	35	2.4	16.0	43.4	18.7
	49.5	18	+5.2	1.5	25	2.2	19.0	41.0	19.6
	49.2	21	+9.0	1.9	26	2.1	17.2	41.4	20.2
	47.0	27	+7.6	1.7	27	2.2	14.8	42.7	19.8
	48.4	25	+6.6	1.9	38	2.0	19.4	41.4	20.0
	46.9	28	-1.2	2.2	37	2.1	17.4	37.9	21.0
	48.4	25	+4.1	2.0	39	2.4	19.2	40.8	20.2
	46.2	30	+4.8	2.5	39	2.3	17.6	40.2	19.7
	44.8	33	+0.2	2.2	36	2.3	18.1	41.0	19.6
	44.6	34	-1.8	2.1	37	1.9	17.6	39.0	20.8
	45.4	32	-1.4	2.0	37	2.3	18.0	38.7	21.1
	45.7	31	+1.5	2.1	37	2.1	17.2	40.8	20.2
	49.4	20	+5.1	2.7	44	2.4	18.6	39.8	20.7
	51.7	5	+3.7	2.0	38	2.3	17.1	41.1	20.2
	46.9	28	+5.5	2.6	40	1.7	18.1	40.3	20.4
	49.5	18	+8.1	2.4	38	1.8	20.8	41.5	20.1
	49.2	21	+7.4	2.3	39	2.0	19.5	41.2	20.2
	50.9	12	+7.2	2.6	43	1.9	19.4	40.6	20.8

*128 days after planting

Several strains in this test were superior in yield to the Group II check varieties. A78-122028, A78-227013, A78-227015, A78-227016, and U56355 all were higher yielding than Century, and all but A78-227016 were resistant to races 1 and 2 of phytophthora root rot in both Lafayette and Ames tests. None of the cyst nematode, race 3, resistant strains, L75-8033, L75-8460, L76-129 to L77-176 were competitive in yield with the check varieties. The Indiana and Ohio entries and some of the Iowa entries are too late in maturity for continued evaluation in Group II tests.

PRELIMINARY TEST II, 1979

Strain	Mean 11 Tests	Mn.	N.J.	Ohio	Ind.	Wisc.
		Lamber- ton	Adel- phia	Hoyt- ville	Lafay- ette	Arling- ton
		YIELD (bu/a)				
Corsoy (II)	50.9	57.3	29.4	62.2	50.3	50.1
A75-102032 (I)	49.2	52.9	30.6	56.9	48.5	45.1
A74-302012 (III)	53.0	62.0	37.4	59.7	47.7	47.8
C1545	51.4	60.0	34.0	58.4	49.1	38.3
A73D16-3	50.1	54.2	31.4	59.3	50.8	40.3
A78-122028	51.7	58.5	42.0	62.5	50.4	39.3
A78-223022	50.2	57.0	30.0	61.0	50.6	39.3
A78-225002	51.0	57.3	29.7	57.5	57.2	41.0
A78-227012	52.9	56.4	32.3	57.8	51.8	42.4
A78-227013	51.6	60.8	37.0	61.5	47.8	40.9
A78-227015	51.6	61.0	32.6	60.2	47.2	41.2
A78-227016	51.9	57.6	33.4	57.9	56.3	47.3
A78-321009	50.6	48.8	30.1	56.6	49.8	39.8
A78-321011	52.4	59.8	33.3	56.7	50.0	44.6
C1580	48.5	55.2	34.6	63.0	44.3	37.5
C1581	50.5	68.4	32.2	56.4	47.7	37.5
HC75-6399	51.0	51.4	32.4	58.4	53.2	43.7
HC76-644	42.0	50.8	23.4	54.3	44.5	30.2
HC76-710	42.6	44.4	23.5	48.8	44.8	29.6
HC76-1010	49.5	53.8	27.6	67.4	44.6	42.1
HC76-3790	49.2	55.6	31.8	61.6	52.0	38.3
HC76-4373	47.0	50.9	29.1	60.0	49.0	32.2
L75-8033	48.4	57.8	32.0	56.2	48.9	35.9
L75-8460	46.9	51.3	33.6	53.0	45.5	42.0
L75-10513	48.4	56.0	30.2	52.6	55.3	39.8
L76-129	46.2	49.2	36.9	55.0	47.8	36.8
L76-136	44.8	49.4	32.2	52.0	44.3	36.9
L76-140	44.6	48.8	29.8	51.4	42.0	40.5
L76-141	45.4	46.2	30.8	50.8	43.1	39.1
L77-176	45.7	50.4	25.5	51.0	42.8	41.0
U46762	49.4	59.4	32.2	53.7	49.1	43.2
U56355	51.7	57.4	33.4	60.8	49.0	40.2
U56491	46.9	55.4	21.2	55.4	46.5	41.3
U57141	49.5	59.4	22.2	55.7	47.0	40.9
U59207	49.2	52.4	22.0	58.6	44.2	38.4
U59236	50.9	60.6	25.9	56.8	51.1	41.9
C.V. (%)		7.7	20.0	5.8	6.2	6.3
L.S.D. (5%)		8.6	12.5	6.6	6.1	5.0
Row sp (in.)		30"	30"	30"	30"	30"
Rows/plot		2	3	4	4	4
Reps		2	2	2	2	2

PRELIMINARY TEST II, 1979

Strain	Iowa		Neb.	Ill.		S.D.
	Marshall- town	Ames	Mead	Dekalb	Urbana	Center- ville
	<u>YIELD (bu/a)</u>					
Corsoy (II)	59.7	59.8	44.8	48.3	45.3	53.2
A75-102032 (I)	61.8	59.6	42.3	47.4	42.8	53.6
A74-302012 (III)	66.1	60.5	44.0	49.8	51.8	56.2
C1545	63.6	62.0	44.1	49.9	48.7	57.4
A73D16-3	56.3	63.1	43.1	48.7	44.9	59.3
A78-122028	64.5	57.4	45.2	48.1	42.9	57.4
A78-223022	60.1	60.9	40.1	46.6	44.6	61.6
A78-225002	59.5	58.1	45.5	49.2	49.1	56.5
A78-227012	68.1	58.3	50.3	48.6	53.2	63.0
A78-227013	66.4	57.3	43.7	45.8	45.7	61.1
A78-227015	66.5	59.1	50.6	49.5	49.0	50.6
A78-227016	64.7	49.6	47.6	51.6	46.8	57.7
A78-321009	67.1	59.9	47.8	45.8	46.8	63.7
A78-321011	60.0	57.9	47.7	53.7	51.6	61.2
C1580	54.9	59.0	43.9	29.5	48.5	63.2
C1581	60.4	58.2	45.3	47.6	46.2	55.7
HC75-6399	63.8	59.9	41.0	49.1	48.8	59.5
HC76-644	49.1	48.2	24.8	42.2	41.6	53.3
HC76-710	47.4	46.9	40.5	40.9	37.0	65.0
HC76-1010	66.6	59.0	40.2	45.9	42.7	54.2
HC76-3790	59.1	62.0	36.5	42.8	47.8	53.2
HC76-4373	56.4	57.9	36.3	47.0	41.6	56.4
L75-8033	55.3	56.6	41.9	46.2	46.7	55.3
L75-8460	58.7	56.1	41.3	44.8	39.0	50.4
L75-10513	60.5	52.5	45.2	41.6	43.7	55.1
L76-129	54.5	54.3	43.8	41.9	38.1	50.0
L76-136	56.8	53.9	38.7	39.1	38.8	50.7
L76-140	51.2	52.7	41.2	40.1	39.9	52.7
L76-141	55.1	47.8	44.5	41.3	40.5	60.3
L77-176	55.8	52.9	39.2	43.3	39.9	61.2
U46762	52.9	57.8	42.9	44.6	48.3	58.9
U56355	55.5	61.6	44.4	49.9	55.7	61.0
U56491	57.0	55.4	45.2	43.5	43.6	51.6
U57141	57.8	57.6	45.1	50.7	46.4	61.5
U59207	60.7	58.7	44.7	50.3	50.4	61.2
U59236	57.9	60.5	44.6	48.8	48.4	63.7
C.V. (%)	4.8	4.7	7.4	7.2	5.3	13.1
L.S.D. (5%)	5.8	5.5	6.4	6.5	4.7	N.S.
Row sp (in.)	27"	27"	30"	30"	30"	30"
Rows/plot	4	4	4	4	4	3
Reps	2	2	2	2	2	3

PRELIMINARY TEST II, 1979

Strain	Mean 11 Tests	Mn.	N.J.	Ohio	Ind.	Wisc.
		Lamber- ton	Adel- phia	Hoyt- ville	Lafay- ette	Arling- ton
<u>YIELD RANK</u>						
Corsoy (II)	12	14	27	4	11	1
A75-102032 (I)	21	24	21	19	19	4
A74-302012 (III)	1	2	2	11	22	2
C1545	9	6	6	14	14	27
A73D16-3	17	22	19	12	8	19
A78-122028	5	10	1	3	10	23
A78-223022	16	16	24	7	9	23
A78-225002	10	14	26	18	1	14
A78-227012	2	17	13	17	6	8
A78-227013	7	4	3	6	20	16
A78-227015	7	3	11	9	24	13
A78-227016	4	12	8	16	2	3
A78-321009	14	33	23	22	13	21
A78-321011	3	7	10	21	12	5
C1580	24	21	5	2	31	29
C1581	15	1	14	23	22	29
HC75-6399	10	26	12	14	4	6
HC76-644	36	29	33	28	30	35
HC76-710	35	36	32	36	28	36
HC76-1010	18	23	29	1	29	9
HC76-3790	21	19	18	5	5	27
HC76-4373	27	28	28	10	16	34
L75-8033	25	11	17	24	18	33
L75-8460	28	27	7	30	27	10
L75-10513	25	18	22	31	3	22
L76-129	30	32	4	27	20	32
L76-136	33	31	14	32	31	31
L76-140	34	33	25	33	36	18
L76-141	32	35	20	35	34	25
L77-176	31	30	31	34	35	14
U46762	20	8	14	29	14	7
U56355	5	13	8	8	16	20
U56491	28	20	36	26	26	12
U57141	18	8	34	25	25	16
U59207	21	25	35	13	33	26
U59236	12	5	30	20	7	11

PRELIMINARY TEST II, 1979

Strain	Iowa		Neb.	Ill.		S.D.
	Marshall- town	Ames	Mead	Dekalb	Urbana	Center- ville
	<u>YIELD RANK</u>					
Corsoy (II)	17	10	12	14	20	30
A75-102032 (I)	11	11	24	17	27	27
A74-302012 (III)	6	6	18	7	3	22
C1545	10	2	17	5	9	18
A73D16-3	26	1	22	12	21	15
A78-122028	8	23	8	15	26	19
A78-223022	15	5	31	19	22	6
A78-225002	18	18	6	9	6	20
A78-227012	1	16	2	13	2	5
A78-227013	5	24	21	22	19	11
A78-227015	4	12	1	8	7	34
A78-227016	7	33	5	2	14	17
A78-321009	2	8	3	22	14	2
A78-321011	16	19	4	1	4	8
C1580	31	13	19	36	10	4
C1581	14	17	7	16	18	23
HC75-6399	9	8	28	10	8	14
HC76-644	35	34	36	29	28	28
HC76-710	36	36	29	33	36	1
HC76-1010	3	13	30	21	27	26
HC76-3790	19	2	34	28	13	29
HC76-4373	25	19	35	18	28	21
L75-8033	29	25	25	20	16	24
L75-8460	20	26	26	24	33	35
L75-10513	13	32	8	31	24	25
L76-129	32	28	20	30	35	36
L76-136	24	29	33	35	34	33
L76-140	34	31	27	34	31	31
L76-141	30	35	15	32	30	13
L77-176	27	30	32	27	31	10
U46762	33	21	23	25	12	16
U56355	28	4	16	5	1	12
U56491	23	27	8	26	25	32
U57141	22	22	11	3	17	7
U59207	12	15	13	4	5	9
U59236	21	6	14	11	11	3

PRELIMINARY TEST II, 1979

Strain	Mean 10 Tests	<u>Mn.</u>	<u>N.J.</u>	<u>Ohio</u>	<u>Ind.</u>	<u>Wisc.</u>
		Lamber- ton	Adel- phia	Hoyt- ville	Lafay- ette	Arling- ton
		<u>MATURITY (date)</u>				
Corsoy (II)*	9/22	9/25	10/1	9/18	9/13	10/4
A75-102032 (I)	-3.9	-3	-3	-2	-5	-8
A74-302012 (III)	+8.5	+9	+5	+9	+7	+8
C1545	+5.4	+7	-3	+5	+5	+8
A73D16-3	-1.4	0	-11	0	-2	+4
A78-122028	+0.1	+3	-5	0	0	-1
A78-223022	+2.7	+3	-4	0	+3	+2
A78-225002	+5.1	+6	-1	+5	+5	+6
A78-227012	+6.5	+9	-4	+6	+5	+8
A78-227013	+3.3	+6	-5	+4	+1	+2
A78-227015	+4.0	+7	-6	+4	+3	0
A78-227016	+4.4	+7	-6	+5	+5	+2
A78-321009	+6.2	+7	+2	+6	+4	+5
A78-321011	+6.0	+7	-1	+8	+6	+7
C1580	+6.9	+10	+1	+6	+6	+7
C1581	+6.0	+7	0	+6	+6	+4
HC75-6399	+6.8	+11	-3	+7	+5	0
HC76-644	+6.8	+11	-2	+6	+5	+6
HC76-710	+7.6	+14	-1	+6	+5	+10
HC76-1010	+5.2	+6	-3	+6	+3	0
HC76-3790	+9.0	+14	+4	+8	+7	+2
HC76-4373	+7.6	+13	+3	+10	+7	+4
L75-8033	+6.6	+7	0	0	+5	+9
L75-8460	-1.2	0	-6	-2	-3	-5
L75-10513	+4.1	+4	+1	+4	+3	+5
L76-129	+4.8	+7	-3	+6	+4	+8
L76-136	+0.2	+1	-4	+1	+1	-2
L76-140	-1.8	+1	-7	0	-1	-4
L76-141	-1.4	-1	-9	0	-2	0
L77-176	+1.5	+1	-4	+2	+3	0
U46762	+5.1	+5	+1	+6	+4	+5
U56355	+3.7	+7	-4	+2	+5	+4
U56491	+5.5	+8	-1	+4	+5	0
U57141	+8.1	+10	0	+8	+5	+4
U59207	+7.4	+9	+1	+7	+6	+11
U59236	+7.2	+10	+5	+6	+5	+4
Date planted	5/17	5/17	6/6	5/7	5-17	5/15
*Days to maturity	128	131	117	134	119	142

PRELIMINARY TEST II, 1979

Strain	Iowa		Neb.	Ill.		S.D.
	Marshall- town	Ames	Mead	Dekalb	Urbana	Center- ville
	<u>MATURITY (date)</u>					
Corsoy (II)*		9/14	9/21	10/2	9/8	9/24
A75-102032 (I)		-2	0	-2	-7	-3
A74-302012 (III)		+10	+9	+5	+10	+13
C1545		+10	+6	+2	+9	+5
A73D16-3		-2	+2	-2	-1	+1
A78-122028		+2	+3	0	-2	+1
A78-223022		+3	+5	+1	+7	+4
A78-225002		+6	+8	+2	+9	+5
A78-227012		+8	+7	+10	+11	+5
A78-227013		+4	+8	0	+6	+4
A78-227015		+6	+5	+2	+10	+5
A78-227016		+8	+7	+2	+10	+4
A78-321009		+10	+9	+2	+11	+6
A78-321011		+6	+8	+3	+11	+5
C1580		+11	+6	+1	+10	+11
C1581		+10	+5	+1	+8	+7
HC75-6399		+10	+5	+10	+10	+6
HC76-644		+8	+8	+7	+9	+10
HC76-710		+10	+8	+4	+9	+11
HC76-1010		+8	+8	+3	+9	+7
HC76-3790		+12	+9	+11	+14	+9
HC76-4373		+13	+7	+10	+10	-1
L75-8033		+7	+8	+2	+9	+6
L75-8460		+2	+3	-3	+2	+1
L75-10513		+3	+6	0	+7	+4
L76-129		+8	+5	+1	+7	+5
L76-136		0	+3	-1	+1	+2
L76-140		0	0	-2	0	+2
L76-141		0	+1	-2	+1	+2
L77-176		0	+6	-2	+3	+3
U46762		+10	+6	+1	+8	+5
U56355		+8	+6	-1	+5	+5
U56491		+8	+7	+4	+9	+6
U57141		+8	+9	+10	+11	+8
U59207		+8	+9	+6	+11	+6
U59236		+10	+9	+5	+11	+7
Date planted	5/10	5/9	5/23	5/16	5/8	5/24
*Days to maturity	—	128	121	139	126	123

PRELIMINARY TEST II, 1979

Strain	Mean 11 Tests	Mn.	N.J.	Ohio	Ind.
		Lamberton	Adelphia	Hoytville	Lafayette
<u>LODGING (score)</u>					
Corsoy (II)	2.9	4.0	4.0	3.5	2.8
A75-102032 (I)	2.8	3.0	3.5	3.9	3.3
A74-302012 (III)	2.6	3.5	3.0	4.2	2.3
C1545	2.2	3.0	2.5	2.7	1.8
A73D16-3	2.4	3.0	3.0	3.8	2.0
A78-122028	3.3	4.0	4.0	4.4	3.8
A78-223022	2.7	4.0	3.0	3.8	2.0
A78-225002	2.1	2.5	2.5	3.0	2.0
A78-227012	2.6	3.0	3.5	3.6	3.5
A78-227013	2.9	3.5	3.0	4.8	3.3
A78-227015	2.5	3.5	4.0	3.8	3.3
A78-227016	2.3	3.5	3.0	2.5	2.8
A78-321009	2.9	4.0	3.0	3.2	3.5
A78-321011	2.4	4.0	2.5	3.4	2.5
C1580	2.4	4.0	2.5	3.0	2.8
C1581	2.8	4.0	2.5	4.0	3.5
HC75-6399	1.9	3.5	3.5	1.7	1.5
HC76-644	1.6	3.5	2.0	1.5	1.5
HC76-710	2.3	3.5	3.0	2.3	2.0
HC76-1010	1.5	3.0	1.5	1.4	1.5
HC76-3790	1.9	4.0	3.0	1.5	1.5
HC76-4373	1.7	3.5	2.5	1.9	1.5
L75-8033	1.9	3.0	2.0	2.0	2.0
L75-8460	2.2	3.0	2.0	3.4	2.3
L75-10513	2.0	3.0	2.0	3.1	2.0
L76-129	2.5	4.0	2.5	3.9	2.8
L76-136	2.2	3.0	3.5	4.0	2.3
L76-140	2.1	3.5	1.5	3.7	3.3
L76-141	2.0	3.0	2.0	2.7	2.5
L77-176	2.1	2.5	3.0	2.7	2.3
U46762	2.7	3.0	3.5	4.2	3.5
U56355	2.0	3.0	2.5	2.2	2.0
U56491	2.6	3.0	3.0	3.4	3.0
U57141	2.4	3.0	3.0	4.3	2.0
U59207	2.3	3.0	3.0	3.5	2.8
U59236	2.6	3.5	3.0	3.8	2.8

PRELIMINARY TEST II, 1979

<u>Wisc.</u>	<u>Iowa</u>		<u>Neb.</u>	<u>Ill.</u>		<u>S.D.</u>
<u>Arlington</u>	<u>Marshalltown</u>	<u>Ames</u>	<u>Mead</u>	<u>Dekalb</u>	<u>Urbana</u>	<u>Centerville</u>
<u>LODGING (score)</u>						
3.0	3.1	3.4	1.8	3.0	2.5	1.0
3.0	3.2	3.4	1.3	2.8	2.8	1.0
2.8	2.8	2.2	1.5	2.0	2.8	1.0
2.8	2.7	2.7	1.3	2.0	1.8	1.0
3.0	2.7	2.2	1.3	2.3	2.0	1.0
2.0	3.8	4.0	2.3	3.8	3.5	1.0
2.8	3.8	2.7	1.8	2.0	2.8	1.0
2.2	2.6	1.8	1.3	2.0	2.0	1.0
2.2	2.4	2.6	1.0	3.0	2.8	1.0
2.8	3.2	3.7	1.3	3.0	2.8	1.0
1.2	2.6	1.8	1.0	2.5	2.8	1.0
2.0	2.4	2.6	1.0	2.8	1.5	1.0
1.7	3.6	3.8	1.8	3.3	2.5	1.0
2.5	2.4	2.2	1.3	2.3	2.3	1.0
2.8	3.0	2.4	1.0	2.3	2.0	1.0
3.0	3.0	3.4	1.3	2.8	2.8	1.0
2.2	1.9	1.6	1.0	2.0	1.0	1.0
2.0	1.4	1.1	1.0	1.8	1.0	1.0
3.0	3.6	2.1	1.3	2.5	1.5	1.0
2.0	1.7	1.2	1.0	1.5	1.0	1.0
2.5	2.1	1.6	1.0	2.0	1.0	1.0
2.0	1.4	1.3	1.0	2.0	1.0	1.0
2.5	2.4	1.6	1.0	2.0	1.5	1.0
2.8	2.2	2.2	1.5	2.0	2.0	1.0
2.5	2.3	1.6	1.0	1.8	2.0	1.0
1.6	2.7	2.6	1.8	2.0	2.2	1.0
1.6	2.4	1.8	1.0	2.0	1.5	1.0
1.4	2.0	1.6	1.3	2.3	1.8	1.0
3.0	2.0	1.6	1.0	1.8	1.3	1.0
3.0	2.4	1.4	1.3	2.3	1.5	1.0
1.9	3.6	2.6	1.0	2.8	3.0	1.0
2.5	1.9	1.6	1.0	2.3	1.5	1.0
1.7	3.6	3.0	1.3	2.8	3.0	1.0
3.2	2.2	2.2	1.0	2.0	3.0	1.0
1.6	2.8	2.6	1.3	2.0	2.0	1.0
1.6	3.3	2.6	1.5	2.5	2.8	1.0

PRELIMINARY TEST II, 1979

Strain	Mean 11 Tests	Mn.	N.J.	Ohio	Ind.
		Lamberton	Adelphia	Hoytville	Lafayette
<u>HEIGHT (inches)</u>					
Corsoy (II)	37	40	30	42	40
A75-102032 (I)	36	40	32	50	34
A74-302012 (III)	41	43	34	44	45
C1545	39	41	32	44	45
A73D16-3	39	44	35	45	45
A78-122028	40	48	36	44	46
A78-223022	37	44	29	40	43
A78-225002	38	40	31	46	41
A78-227012	36	39	28	40	42
A78-227013	37	47	31	41	36
A78-227015	34	39	30	40	35
A78-227016	34	43	28	38	38
A78-321009	43	46	36	46	53
A78-321011	37	42	30	39	44
C1580	47	54	46	50	53
C1581	50	52	46	52	60
HC75-6399	29	39	28	29	29
HC76-644	26	37	25	29	25
HC76-710	35	44	31	36	35
HC76-1010	25	37	22	28	21
HC76-3790	26	36	24	29	23
HC76-4373	27	37	24	27	27
L75-8033	38	46	32	42	41
L75-8460	37	38	32	41	41
L75-10513	39	48	35	44	43
L76-129	39	48	34	38	43
L76-136	36	40	33	42	38
L76-140	37	37	32	42	40
L76-141	37	36	32	44	42
L77-176	37	39	28	44	44
U46762	44	42	37	49	49
U56355	38	46	30	44	43
U56491	40	40	28	44	44
U57141	38	42	26	42	42
U59207	39	46	24	42	46
U59236	43	52	28	44	50

PRELIMINARY TEST II, 1979

<u>Wisc.</u>	<u>Iowa</u>		<u>Neb.</u>	<u>Ill.</u>		<u>S.D.</u>
<u>Arlington</u>	<u>Marshalltown</u>	<u>Ames</u>	<u>Mead</u>	<u>Dekalb</u>	<u>Urbana</u>	<u>Centerville</u>
<u>HEIGHT (inches)</u>						
39	39	38	33	35	38	37
38	36	39	30	33	34	35
40	42	42	36	39	45	37
41	43	44	30	37	40	37
37	42	40	32	33	37	38
44	38	43	30	37	36	38
36	37	39	28	33	41	35
33	42	40	29	34	41	37
36	36	40	27	32	36	35
39	40	39	31	31	37	36
29	36	36	27	32	37	35
32	35	36	26	32	37	33
52	48	44	31	37	45	35
36	40	39	30	34	41	35
49	46	47	37	41	51	43
55	46	54	39	46	53	45
28	31	31	24	20	30	32
25	28	25	17	21	25	33
36	37	36	28	29	33	35
24	28	25	19	19	22	30
24	30	26	17	17	25	32
25	30	28	18	19	27	32
37	41	41	29	35	41	38
38	35	39	30	34	37	37
36	42	39	33	33	42	39
46	38	38	31	33	40	36
40	36	36	28	29	38	33
41	37	36	33	31	37	36
40	38	38	32	33	38	38
36	38	38	29	33	40	34
51	52	44	35	39	45	41
37	40	40	29	35	40	38
42	42	44	34	37	45	37
41	42	42	30	34	41	35
40	41	42	32	36	46	38
48	45	44	36	37	46	41

PRELIMINARY TEST II, 1979

Strain	Mean 10 Tests	Mn.	N.J.	Ohio	Ind.
		Lamberton	Adelphia	Hoytville	Lafayette
<u>QUALITY (score)</u>					
Corsoy (II)	1.8	2.0	2.0	2.0	2.0
A75-102032 (I)	1.5	2.0	1.5	1.5	1.0
A74-302012 (III)	1.9	2.0	2.0	2.0	1.0
C1545	1.9	2.5	2.0	2.0	1.0
A73D16-3	2.3	3.0	2.5	2.0	2.0
A78-122028	2.2	3.5	2.0	2.0	2.0
A78-223022	2.4	3.5	2.0	2.5	1.0
A78-225002	2.5	3.0	3.0	2.0	2.0
A78-227012	2.1	2.0	2.5	2.0	1.5
A78-227013	1.8	2.5	2.0	2.0	1.5
A78-227015	2.1	3.0	2.0	2.0	2.0
A78-227016	2.0	2.5	2.5	2.0	1.5
A78-321009	1.8	2.0	2.5	1.5	1.5
A78-321011	1.8	2.0	2.0	2.0	1.5
C1580	2.9	2.5	3.0	3.5	2.5
C1581	2.7	2.5	3.5	2.5	2.5
HC75-6399	1.8	2.0	1.5	2.0	1.5
HC76-644	1.9	2.5	2.0	2.0	1.5
HC76-710	2.4	3.5	3.0	2.0	1.5
HC76-1010	2.2	3.0	2.5	2.5	1.5
HC76-3790	2.1	3.0	2.5	2.5	1.0
HC76-4373	2.2	3.5	2.0	2.0	1.0
L75-8033	2.0	3.0	2.0	2.0	1.5
L75-8460	2.1	2.5	2.0	2.5	1.5
L75-10513	2.4	3.0	2.5	2.5	2.5
L76-129	2.3	2.0	2.0	2.5	2.5
L76-136	2.3	3.0	2.5	3.0	2.0
L76-140	1.9	3.0	2.0	2.0	1.5
L76-141	2.3	3.0	2.0	2.5	1.5
L77-176	2.1	3.0	2.0	2.5	2.0
U46762	2.4	2.5	3.5	2.5	1.5
U56355	2.3	2.5	2.0	3.0	2.0
U56491	1.7	2.5	2.0	2.0	1.0
U57141	1.8	2.5	2.0	2.0	1.0
U59207	2.0	3.0	2.5	2.0	1.0
U59236	1.9	2.5	3.0	2.0	1.0

PRELIMINARY TEST II, 1979

<u>Wisc.</u>	<u>Iowa</u>	<u>Neb.</u>	<u>Ill.</u>	<u>S.D.</u>		
Arlington	Marshalltown	Ames	Mead	Dekalb	Urbana	Centerville
<u>QUALITY (score)</u>						
1.5		1.4	2.5	1.2	2.0	1.0
1.5		1.4	2.3	1.2	1.4	1.0
2.5		1.4	3.3	1.5	1.6	2.0
2.0		1.5	3.0	1.5	2.0	1.0
2.5		1.9	2.5	1.5	1.6	3.0
2.5		2.0	2.5	1.8	1.6	2.0
3.5		2.4	2.3	1.5	1.9	3.0
3.5		2.0	3.5	1.7	1.9	2.0
3.5		1.6	2.5	1.6	1.8	2.0
2.0		1.4	2.5	1.5	1.7	1.0
2.0		1.9	2.3	1.5	1.9	2.0
2.0		1.6	2.5	1.6	1.9	2.0
2.0		1.5	2.5	1.4	1.4	2.0
2.0		1.5	2.8	1.4	1.9	1.0
3.0		2.9	3.8	1.9	2.2	4.0
2.5		2.1	3.3	2.3	2.3	3.0
3.0		1.3	2.0	1.2	1.5	2.0
3.0		1.4	1.8	1.2	1.6	2.0
3.0		1.7	2.8	1.3	1.9	3.0
2.0		1.6	2.3	1.4	1.7	3.0
2.0		1.9	2.0	1.2	1.8	3.0
4.0		2.0	2.3	1.4	1.4	2.0
2.0		1.4	2.8	1.4	1.9	2.0
2.5		1.7	2.5	1.6	1.9	2.0
2.0		2.4	3.0	1.6	2.0	2.0
3.0		1.5	3.0	1.3	1.9	3.0
2.0		1.8	2.8	1.5	1.9	2.0
1.5		1.5	2.5	1.4	1.7	2.0
2.5		1.9	2.8	1.7	1.8	3.0
2.0		1.4	2.8	1.5	1.5	2.0
2.5		1.6	3.0	1.7	2.0	3.0
3.0		1.8	3.2	1.5	1.5	2.0
2.5		1.4	2.3	1.2	1.4	1.0
2.5		1.4	2.8	1.6	1.6	1.0
3.0		1.5	2.8	1.4	1.7	1.0
2.5		1.6	2.5	1.4	1.5	1.0

PRELIMINARY TEST II, 1979

Strain	Mean 10 Tests	Mn.	N.J.	Ohio	Ind.
		Lamberton	Adelphia	Hoytville	Lafayette
<u>SIZE (g/100)</u>					
Corsoy (II)	17.0	15.3	17.0	18.1	17.0
A75-102032 (I)	14.5	12.6	16.0	15.1	14.2
A74-302012 (III)	21.3	20.4	21.0	22.3	20.9
C1545	19.7	19.4	21.0	19.9	17.3
A73D16-3	17.3	16.0	18.0	17.5	16.6
A78-122028	16.1	14.4	17.0	18.8	15.1
A78-223022	20.7	20.2	20.0	20.6	20.0
A78-225002	20.8	19.5	23.0	20.8	21.2
A78-227012	16.3	14.8	17.0	16.6	15.6
A78-227013	16.9	16.8	18.0	17.7	17.3
A78-227015	19.3	18.3	20.0	19.0	19.0
A78-227016	17.3	17.0	18.0	17.3	16.8
A78-321009	17.1	15.4	19.0	17.5	15.7
A78-321011	17.9	17.1	17.0	18.8	17.8
C1580	19.3	18.0	21.0	20.9	18.5
C1581	18.8	17.3	20.0	19.1	18.8
HC75-6399	15.6	14.5	15.0	16.8	14.8
HC76-644	16.8	16.4	16.0	17.2	16.5
HC76-710	16.0	15.1	17.0	17.5	16.1
HC76-1010	19.0	17.4	19.0	19.6	17.5
HC76-3790	17.2	16.1	20.0	18.7	15.5
HC76-4373	14.8	14.0	15.0	17.9	13.4
L75-8033	19.4	18.2	22.0	18.9	19.5
L75-8460	17.4	15.7	21.0	16.9	15.8
L75-10513	19.2	18.0	21.0	18.8	18.4
L76-129	17.6	15.6	20.0	17.4	16.6
L76-136	18.1	16.6	21.0	17.5	17.7
L76-140	17.6	15.7	19.0	17.4	17.4
L76-141	18.0	16.0	18.0	18.7	17.5
L77-176	17.2	16.2	16.0	17.0	18.2
U46762	18.6	15.9	20.0	19.1	17.7
U56355	17.1	17.1	17.0	17.2	16.1
U56491	18.1	17.6	18.0	18.7	17.8
U57141	20.8	19.3	21.0	21.3	19.9
U59207	19.5	18.0	24.0	19.7	18.0
U59236	19.4	20.1	18.0	20.8	18.1

PRELIMINARY TEST II, 1979

<u>Wisc.</u>	<u>Iowa</u>		<u>Neb.</u>	<u>Ill.</u>		<u>S.D.</u>
<u>Arlington</u>	<u>Marshalltown</u>	<u>Ames</u>	<u>Mead</u>	<u>Dekalb</u>	<u>Urbana</u>	<u>Centerville</u>
<u>SIZE (g/100)</u>						
16.0		16.9	16.6	19.4	15.3	18.4
14.4		14.1	15.4	15.1	12.7	15.3
20.0		21.2	19.4	24.2	20.0	23.5
18.9		19.2	19.3	21.2	17.8	22.7
16.4		17.4	16.9	18.3	16.1	19.8
13.5		15.6	16.6	17.5	14.1	18.6
20.8		20.6	20.4	22.6	18.6	23.0
20.0		20.6	18.7	22.8	19.5	21.8
15.6		15.7	16.6	18.2	14.7	17.8
14.7		17.0	17.0	20.0	16.0	14.4
18.0		18.6	19.7	22.2	17.6	20.9
15.0		16.8	17.3	19.8	16.2	18.8
15.4		17.1	17.3	19.0	15.7	19.1
17.5		17.2	16.1	19.8	17.4	20.5
18.6		19.2	17.9	19.5	17.7	21.8
16.1		19.5	17.5	21.3	16.5	21.7
14.3		15.5	15.9	17.1	15.2	16.9
13.5		15.4	17.8	17.9	15.9	21.7
14.9		15.4	15.0	16.5	13.5	18.6
17.2		17.5	19.9	20.7	16.9	23.9
14.9		16.6	17.6	17.7	16.1	19.1
12.6		14.0	15.4	15.7	13.3	17.2
16.7		18.6	19.4	20.4	18.6	22.0
15.3		17.3	18.7	17.8	16.2	19.0
16.7		19.6	19.8	19.8	17.4	22.7
15.8		16.9	17.8	19.6	15.4	20.8
16.0		17.6	18.5	19.2	15.7	21.4
15.8		18.0	17.4	19.3	15.6	20.6
17.2		16.9	18.5	19.7	16.1	21.4
16.0		16.7	17.3	18.8	15.7	20.0
17.5		18.7	17.7	21.0	17.0	21.0
16.7		17.7	16.9	18.2	16.0	18.0
16.5		18.0	18.2	19.7	16.4	20.5
19.9		20.2	20.6	23.2	18.6	23.6
16.6		19.7	18.1	21.1	18.4	20.9
18.0		19.8	18.6	20.7	17.3	22.9

PRELIMINARY TEST II, 1979

Strain	Mean 5 Tests	Ohio	Ind.	Ill.	Iowa	Neb.
		Hoyt- ville	Lafay- ette	Urbana	Ames	Mead
% PROTEIN						
Corsoy (II)	39.8	38.9	39.0	40.0	42.0	39.1
A75-102032 (I)	39.5	39.0	38.7	41.0	41.3	37.7
A74-302012 (III)	39.3	38.9	38.6	40.1	40.5	38.3
C1545	41.0	39.6	41.3	39.3	42.9	42.0
A73D16-3	39.9	40.6	38.1	39.5	41.7	39.5
A78-122028	38.1	39.8	35.7	40.2	38.5	36.5
A78-223022	38.2	35.6	37.9	41.3	38.1	38.3
A78-225002	41.8	40.1	41.6	41.9	42.9	42.7
A78-227012	41.6	40.6	40.3	43.4	42.4	41.3
A78-227013	41.4	42.6	39.1	42.6	42.4	40.5
A78-227015	41.2	37.9	40.6	44.4	43.0	40.2
A78-227016	40.5	41.4	39.3	40.8	40.9	40.0
A78-321009	39.0	38.9	37.8	40.5	41.5	36.2
A78-321011	41.7	38.8	41.7	43.3	43.8	40.9
C1580	41.9	42.1	40.8	43.0	43.0	40.8
C1581	39.9	41.0	38.6	39.7	39.8	40.3
HC75-6399	37.2	38.2	36.2	37.8	39.1	34.9
HC76-644	40.7	36.7	40.9	42.3	42.3	41.4
HC76-710	43.4	42.1	42.9	44.7	45.1	42.4
HC76-1010	41.0	42.9	38.9	41.0	42.6	39.4
HC76-3790	41.4	40.0	41.5	42.1	42.3	41.2
HC76-4373	42.7	42.4	41.8	42.1	44.9	42.1
L75-8033	41.4	40.5	40.2	44.1	42.1	40.2
L75-8460	37.9	39.0	35.7	39.4	37.7	37.6
L75-10513	40.8	37.7	41.4	42.4	42.7	40.0
L76-129	40.2	42.4	38.1	40.4	40.8	39.4
L76-136	41.0	39.2	39.7	42.4	42.4	41.1
L76-140	39.0	41.0	37.5	39.0	39.5	38.1
L76-141	38.7	38.9	36.5	39.3	39.2	39.4
L77-176	40.8	39.6	38.3	40.2	46.8	39.2
U46762	39.8	39.3	38.3	41.7	41.0	38.8
U56355	41.1	41.3	40.1	41.7	42.6	39.8
U56491	40.3	38.8	39.2	42.0	41.8	39.9
U57141	41.5	41.3	41.3	41.3	42.7	41.1
U59207	41.2	39.8	40.5	42.7	42.9	40.2
U59236	40.6	40.3	39.9	41.1	42.4	39.5

PRELIMINARY TEST II, 1979

Mean 5 Tests	<u>Ohio</u>	<u>Ind.</u>	<u>Ill.</u>	<u>Iowa</u>	<u>Neb.</u>
	Hoytville	Lafayette	Urbana	Ames	Mead
	<u>% OIL</u>				
20.9	20.8	21.2	20.6	20.6	21.3
21.1	20.1	21.6	20.8	20.4	22.4
20.8	20.6	21.1	21.2	20.5	20.6
20.0	19.8	20.3	20.0	19.9	20.0
20.1	19.4	20.9	20.1	19.5	20.6
21.3	19.3	22.0	21.9	21.1	22.4
21.0	21.5	20.9	20.0	21.4	21.4
19.4	20.0	19.4	20.0	19.3	18.4
19.8	19.8	19.7	19.6	19.7	20.0
20.0	19.3	20.9	20.1	19.6	19.9
20.1	20.5	20.5	19.6	19.4	20.3
19.8	19.0	20.2	20.4	19.7	19.8
21.1	20.5	21.8	21.5	20.1	21.6
19.8	20.6	19.5	19.7	19.2	19.9
19.9	20.2	19.7	20.6	18.6	20.6
20.1	19.4	20.4	20.8	19.8	20.2
21.6	20.8	22.2	22.0	20.3	22.6
19.8	21.1	19.4	19.8	19.1	19.4
18.7	19.8	18.9	18.4	17.5	19.0
19.6	18.4	20.1	20.7	19.0	19.8
20.2	19.5	20.5	20.5	20.1	20.3
19.8	19.4	19.9	20.9	19.2	19.8
20.0	20.2	20.0	20.0	19.4	20.2
21.0	19.6	21.6	21.5	20.9	21.5
20.2	21.0	19.9	20.2	19.7	20.0
19.7	19.1	20.1	20.4	18.9	19.8
19.6	19.4	19.9	19.7	19.4	19.7
20.8	19.5	21.3	21.1	21.0	21.2
21.1	20.5	22.0	21.5	20.9	20.4
20.2	20.7	21.2	21.3	16.8	20.8
20.7	20.4	21.5	20.6	20.4	20.8
20.2	19.2	20.3	21.3	19.6	20.6
20.4	20.5	20.4	20.9	19.8	20.5
20.1	19.5	20.3	20.5	19.5	20.7
20.2	20.4	20.0	20.2	19.4	20.8
20.8	20.2	20.7	21.8	20.0	21.2

UNIFORM TEST III, 1979

Strain	Parentage	Previous Testing*	Generation Compositd
Century (C1545) (II)	Calland x Bonus	UTII	F ₆
Cumberland (III)	Corsoy x Williams	3	F ₄
Elf	Williams x Ransom	3	F ₅
Union (IV)	Williams ⁵ x SL12 (Wayne <u>Rpm</u> <u>Rps</u>)	1	F ₃
Pella (A74-302012)	L66L-137 x Calland	3	F ₄
<i>BSR 302</i> A75-305022	Wye x IVR Ex 4731	2	F ₄
A76-304019	(Beeson x AP68-1016)x(L15xCalland)	1	F ₄
A77-214022	L70T-543 x Harcor	PII	F ₄
A77-214035	AP6 (40 lines intermated 3 times)	PII	S ₄
A77-311031	AP6 (40 lines intermated 3 times)	PIII	S ₄
A77-314013	A73-21030 x Williams	PIII	F ₄
A77-314017	Coles x A72-507	PIII	F ₄
A77-315024	A72-152 x Agripro Ex 50734	PIII	F ₄
C1566	Beeson x PI 68788	PII	F ₇
H74-3382	Williams x Ransom	PIII	F ₅
<i>sprite</i> HW74-3384	Williams x Ransom	1	F ₅
HW74-3385	Williams x Ransom	1	F ₅
Will (L22)	Williams ⁶ x (Clark ⁶ x T117)	2	4F ₃
Williams 79 (L23)	Williams ⁶ x Lee 68	2	6F ₃
L74L-71	Calland x Williams	1	F ₆
L75-8388	Williams x L70-2450	PIII	F ₄
U10727	Wayne x C1317-71	1	F ₄
U36276	Bonus x Wayne	PIII	F ₄
U37219	C1430 x Calland	PIII	F ₄

*Number of years in this test or name of 1978 test.

UNIFORM TEST III, 1979
Descriptive and Other Data

Descriptive Code		Chlorosis	Hypocotyl	Shattering	
		<u>Score</u> Ames	<u>Score</u> Ames	Texas Lubbock	Manhattan 2 Weeks
PTBr	DYBl	3	4	2.5	2
PGBr	SYIb	4	4	1.7	2
PTTn	SYBl	3	1	2.5	1
WTTn	SYBl	3	3	1.5	2
PTTn	DYBl	3	3	2.0	2
WTBr	SYBr	3	5	2.0	2
PTBr	DYBl	4	1	4.0	3
P+WG+TBr	SYy	4	1	3.2	2
WGBr	DYy	4	5	3.8	2
WTBr	DYg	3	1	3.5	2
WTBr	SYBl	2	5	2.0	1
WGBr	SYy	3	5	2.0	2
WTBr	SYBl	3	5	2.5	2
PGBr	SYIb	3	4	3.0	2
PTTn	SYBl	3	1	2.2	2
WTTn	DYBl	3	1	1.7	1
WTTn	DYBl	3	1	1.7	2
WTTn	SYBl	4	4	2.5	2
WTTn	SYBl	3	2	1.7	1
PTBr	DYBl	3	2	1.5	2
P+WTTn	SYBl	3	4	4.0	3
WGT+Tn	SYBf	4	2	3.0	2
PTBr	SYBl	3	5	2.2	2
PTBr	DYBl	3	5	2.0	2

UNIFORM TEST III, 1979

Disease Data

Strain	FE ₂	BP	BSR		DM	GERM*	PSB	SMV	PR	PR	Race 1	
	Laf. Ind.	Gir-ard Ill.	Laf. Ind.	Minn.	Ames Ia.	Eldo-rado Ill.	Lafayette, IN	Ohio	Vick-ery	Laf. Ind.	Ames Ia.	
	a	n	n	n	n	n	d	d	a	n	a	a
	score	score	%	%		score	%	%	Reac.	----Reaction----		
C1545 (II)	5	3.5	100	40	S	1.3	92	2	5E	2.6	R	R
Cumberland (III)	4	1	60	35	S	2.8	92	2	5E	3.3	S	S
Elf	1	1	100	30	S	1.3	85	0	5M	4.2	S	S
Union (IV)	4	1	40	40	S	1.0	95	0	5E	2.9	R	R
A74-302012	3	3.5	60	65	S	1.7	88	2	5E	3.1	R	R
A75-305022	5	1	20	15	S	2.5	97	0	1	3.0	Seg	S
A76-304019	5	1	20	0	R	1.3	96	2	5E	2.6	R	H
A77-214022	5	1	100	15	S	2.7	89	1	5E	4.1	R	H
A77-214035	3	1	20	5	S	2.5	89	4	4M	2.9	Seg	H
A77-311031	5	3	20	55	S	3.0	95	0	5E	2.9	Seg	S
A77-314013	5	1	100	10	S	3.4	97	0	5E	2.6	Seg	H
A77-314017	5	3.5	80	25	S	3.2	90	2	5S	3.6	S	S
A77-315024	1	1	100	55	S	2.2	94	0	5E	3.3	Seg	S
C1566	2	2	80	45	S	1.9	89	0	5E	3.3	R	R
H74-3382	5	1	60	40	S	1.0	97	0	1	4.3	S	S
HW74-3384	4	1	40	55	S	1.0	93	0	1	3.7	S	S
HW74-3385	5	1	60	25	S	1.0	98	0	2E	4.6	S	S
L22	4	1	40	35	S	3.1	94	3	5M	4.6	S	S
L23	4	1	60	35	S	3.3	92	0	5M	2.6	R	R
L74L-71	5	1	0	15	S	2.6	96	2	5E	3.4	S	S
L75-8388	3	1	80	80	S	3.7	97	0	5E	4.8	S	S
U10727	5	1	100	55	S	2.5	89	0	3M	3.9	R	S
U36276	5	3	100	40	S	3.1	96	1	5E	3.4	Seg	R
U37219	5	3	100	30	S	2.2	99	0	5E	3.3	R	No Seed

*Petri dish germination on potato dextrose agar.

UNIFORM TEST III, 1979

Regional Summary

Strain	Yield	Rank	Matu- rity	Lodg- ing	Height	Seed Quality	Seed Size	Composition	
No. of Tests	24	24	21	24	24	22	21	5	5
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
C1545 (II)	43.6	22	-6.1	1.7	36	2.3	18.5	42.2	19.5
Cumberland (III)	49.1	1	9/26*	2.2	37	2.1	18.7	40.5	21.3
Elf	45.8	13	+3.9	1.5	23	1.8	17.0	42.7	19.7
Union (IV)	45.7	14	+5.1	2.6	45	1.9	18.5	41.4	19.9
Pella (A74-302012)	48.2	3	-2.7	1.9	39	2.3	20.1	39.4	20.8
A75-305022	48.1	4	+0.6	1.9	39	2.0	15.1	40.7	20.4
<i>BSR 302</i> A76-304019	45.1	16	+3.6	3.2	43	2.4	17.5	40.8	19.7
A77-214022	46.0	12	-3.3	2.7	42	2.2	14.4	41.1	20.1
A77-214035	46.8	7	-2.3	2.7	39	2.1	17.2	41.0	20.1
A77-311031	44.1	20	-2.5	2.2	35	2.4	15.9	40.6	20.4
A77-314013	48.0	5	+1.0	2.0	42	2.1	18.4	41.6	20.4
A77-314017	45.0	17	+1.5	3.2	44	2.4	17.4	41.2	20.5
A77-315024	46.6	8	+2.5	3.1	42	2.1	15.6	41.5	20.0
C1566	42.7	23	-5.6	2.5	33	2.4	17.5	40.5	20.7
H74-3382	46.3	9	+1.5	1.5	25	1.6	16.2	39.4	21.3
<i>Sprite</i> HW74-3384	47.1	6	-0.3	1.5	23	1.8	18.3	39.9	21.4
HW74-3385	48.9	2	+0.5	1.4	24	1.9	16.3	40.5	20.8
Will (L22)	45.2	15	-2.4	1.7	33	1.9	16.8	41.6	20.2
Williams 79 (L23)	46.1	11	+1.7	2.2	41	2.0	17.6	41.1	20.6
L74L-71	46.2	10	-1.0	1.8	41	2.1	19.6	41.4	20.6
L75-8388	43.9	21	-2.7	2.0	38	2.2	17.3	40.8	19.9
U10727	42.1	24	-3.1	1.8	36	2.4	17.0	41.3	19.9
U36276	44.2	19	-2.6	1.7	33	2.2	15.3	43.2	19.2
U37219	44.4	18	+0.9	1.8	38	2.3	19.0	41.7	20.0

* 128 days after planting

Cumberland was the highest yielding entry in this test in 1979 and in the three-year average yields for this test. The determinate strain HW74-3385 ranked second in yield in 1979 and ranked first in the 1978-1979 average yields. The cyst nematode race 3 resistant strain L75-8388 was only slightly lower yielding than the check varieties, matured three days earlier than Cumberland, and was susceptible to phytophthora root rot.

UNIFORM TEST III, 1979

Regional Summary

Strain	bu/a	No.	Maturity		In.	Seed Quality Score	Seed Size Composition		
			Rank	Lodging			Height	Seed g/100	Protein %
<u>1978-1979, 2-year mean</u>									
No. of Tests	50	50	44	47	50	47	41	20	20
— Cumberland (III)	45.5	3	9/24.2*	2.2	36	2.1	18.2	41.4	21.5
Elf	44.1	8	+3.6	1.5	22	1.8	16.4	42.9	20.0
Pella	45.3	4	-2.2	1.9	38	2.2	19.5	40.3	21.1
Union	44.2	7	+4.9	2.5	43	1.8	18.4	42.3	20.4
Will	43.4	9	-2.5	1.7	32	1.8	16.4	42.3	20.7
Williams 79	44.3	6	+1.5	2.1	40	1.8	17.1	42.2	20.6
— A75-305022	45.6	2	+1.0	2.0	38	1.9	14.8	41.5	21.2
BSR 302 sprite A76-304019	42.8	10	+2.5	3.1	42	2.3	17.0	42.1	19.8
HW74-3384	45.1	5	-0.5	1.5	22	1.9	17.7	40.4	22.3
— HW74-3385	46.9	1	-0.1	1.4	23	1.8	16.0	40.0	21.9
U10727	40.7	11	-3.0	1.8	35	2.3	16.3	41.5	20.4

* 124 days after planting

1977-1979, 3-year mean

No. of Tests	71	71	62	69	72	67	58	31	31
Cumberland	46.3	1	9/24.4*	2.1	36	2.2	18.4	40.4	22.1
Elf	44.3	4	+3.2	1.4	22	1.8	16.5	41.8	20.2
Pella	45.9	2	-2.2	1.9	38	2.3	19.8	39.3	21.6
Will	44.3	4	-2.5	1.6	32	1.8	16.5	41.3	21.0
Williams 79	45.0	3	+1.2	2.1	40	1.9	17.4	41.2	20.9

* 126 days after planting

UNIFORM TEST III, 1979

Strain	Mean 24 Tests	N.J.	Penn.	Md.	Ohio		
		Adel- phia	Landis- ville	Clarks- ville	Woos- ter	Hoyt- ville	S. Charles- ton
YIELD (bu/a)							
C1545 (II)	43.6	23.2	50.8	38.9	44.5	58.9	52.4
Cumberland (III)	49.1	28.6	47.0	43.1	43.4	56.2	53.8
Elf	45.8	26.6	50.2	42.7	34.8	57.7	50.7
Union (IV)	45.7	29.8	44.6	41.7	40.8	51.2	52.1
A74-302012	48.2	35.6	47.8	39.5	47.4	61.2	55.4
A75-305022	48.1	29.8	52.1	45.6	37.3	53.7	54.3
A76-304019	45.1	30.6	47.3	41.5	37.9	49.7	53.2
A77-214022	46.0	33.4	44.9	44.2	40.8	55.2	52.9
A77-214035	46.8	27.9	43.9	40.9	43.9	55.8	53.7
A77-311031	44.1	29.1	43.8	39.4	40.3	57.5	57.3
A77-314013	48.0	23.2	43.5	40.6	41.7	54.5	51.2
A77-314017	45.0	25.7	45.3	36.5	39.7	49.6	51.0
A77-315024	46.6	29.7	43.4	39.4	39.4	53.4	53.8
C1566	42.7	31.1	42.4	37.5	39.8	52.5	42.2
H74-3382	46.3	23.8	54.2	45.5	37.9	59.1	56.5
HW74-3384	47.1	30.7	56.6	45.0	42.5	62.6	53.1
HW74-3385	48.9	27.2	57.6	45.7	42.4	58.9	56.3
L22	45.2	27.3	41.0	37.9	38.2	50.8	50.8
L23	46.1	26.3	39.7	41.1	37.5	57.4	48.1
L74L-71	46.2	27.9	46.6	38.0	40.6	54.7	51.6
L75-8388	43.9	27.3	45.3	34.5	36.3	52.2	47.2
U10727	42.1	22.2	44.3	36.9	35.7	50.6	45.7
U36276	44.2	23.5	36.7	39.7	42.2	57.4	47.4
U37219	44.4	32.3	46.3	39.0	35.6	57.4	52.8
C.V. (%)		12.6	9.3	6.3	7.1	6.5	7.6
L.S.D. (5%)		7.0	7.1	4.2	4.7	5.9	8.4
Row sp (in.)		30"	30"	30"	30"	30"	30"
Rows/plot		3	4	4	4	4	4
Reps		4	3	3	3	3	3

UNIFORM TEST III, 1979

Strain	Ohio	Ky.	Ind.			Ill.		
	Wheeler- burg*	Lexing- ton	Lafay- ette	Green- field	Sull- ivan	Ur- bana	Gir- ard	Browns- town
	<u>YIELD (bu/a)</u>							
C1545 (II)	25.0	43.7	43.5	50.8	34.7	53.6	41.8	34.6
Cumberland (III)	25.6	53.5	47.9	52.3	45.7	54.2	57.3	53.1
Elf	39.4	51.5	49.7	43.8	22.2	51.0	52.1	50.9
Union (IV)	29.4	49.0	44.9	54.2	46.4	52.5	51.7	47.1
A74-302012	35.8	52.7	51.7	47.6	49.5	54.2	52.1	47.1
A75-305022	35.0	48.3	48.3	55.6	41.4	51.2	54.7	49.9
A76-304019	28.7	39.6	50.8	47.5	42.8	60.7	48.8	32.3
A77-214022	21.1	45.9	43.7	48.8	47.0	56.4	54.4	53.0
A77-214035	12.3	58.3	48.2	50.9	27.3	59.9	51.5	43.1
A77-311031	20.3	43.6	42.7	51.4	25.6	50.1	48.3	41.1
A77-314013	26.4	53.5	46.7	52.0	49.4	56.5	59.3	50.4
A77-314017	25.3	36.7	44.7	48.4	44.6	53.6	47.5	47.4
A77-315024	33.8	45.5	51.0	51.0	29.9	56.3	57.9	—
C1566	10.2	40.2	42.4	48.8	46.4	49.3	50.4	40.6
H74-3382	17.8	52.1	45.4	41.4	25.7	52.9	51.5	51.2
HW74-3384	26.8	49.1	52.6	50.6	34.9	60.2	49.3	31.9
HW74-3385	29.9	47.2	49.4	47.8	45.2	57.6	52.0	39.8
L22	30.4	45.5	49.4	49.6	38.6	53.2	53.9	44.6
L23	32.3	42.0	42.4	49.9	49.3	54.8	58.9	50.4
L74L-71	40.7	52.2	44.1	53.4	45.4	50.3	56.1	51.5
L75-8388	28.6	50.8	43.0	46.9	38.5	49.1	50.9	42.2
U10727	24.8	52.4	43.6	52.3	31.6	45.1	52.9	40.2
U36276	18.6	49.6	38.1	48.3	41.2	47.2	50.9	40.4
U37219	24.9	48.3	50.9	48.9	37.7	47.3	52.1	39.6
C.V. (%)	19.0	13.4	11.5	11.1	31.0	5.8	6.9	10.7
L.S.D. (5%)	8.8	10.6	8.5	9.0	20.0	5.1	6.0	7.9
Row sp (in.)	30"	30"	30"	30"	30"	30"	30"	30"
Rows/plot	4	4	4	3	3	4	4	4
Reps	3	3	3	3	3	3	3	3

*Not included in mean due to severe Mexican Bean Beetle Damage

UNIFORM TEST III, 1979

Ill.			Iowa		Mo.		S.D.	Kans.		Neb.
Belle- ville	Pon- tiac	Eldo- rado	Stuart	Ottum- wa	Novel- ty	Colum- bia	Elk Point	Man- hattan	Otta- wa	Mead
YIELD (bu/a)										
49.1	42.1	48.6	42.5	54.4	50.3	28.6	41.1	49.5	19.8	48.6
55.7	49.8	57.4	46.7	57.8	50.4	36.2	38.8	62.0	36.6	51.1
50.5	50.9	50.5	41.7	57.1	42.8	38.3	45.4	54.5	35.3	48.9
50.6	42.8	54.8	38.6	53.0	48.2	34.6	37.8	54.4	35.6	40.8
51.9	44.8	53.5	44.1	56.1	52.2	37.4	43.1	56.5	30.6	45.8
56.9	50.1	53.2	44.7	52.6	54.2	35.7	44.9	54.2	38.6	48.2
46.7	50.8	52.2	46.6	64.1	48.0	30.6	40.7	51.1	30.4	37.8
49.8	46.4	54.2	39.5	53.7	50.4	35.8	40.5	47.5	25.6	41.0
55.8	49.2	53.2	46.9	65.3	56.4	32.2	36.0	51.4	27.3	45.3
51.2	43.7	49.7	45.9	55.8	47.3	27.0	39.2	51.9	26.3	49.2
57.6	49.5	54.7	44.0	52.2	52.8	36.4	37.9	59.6	35.3	49.9
55.0	45.3	55.0	40.1	58.2	47.4	35.2	42.8	55.1	32.5	43.5
54.7	49.8	53.8	43.8	56.2	43.6	36.1	44.5	59.1	34.5	44.8
49.5	41.2	47.0	41.1	52.0	47.0	28.8	40.4	45.1	29.6	40.5
51.5	45.2	56.6	42.3	57.3	47.3	34.7	42.9	56.6	33.5	46.7
39.8	47.4	52.9	45.7	62.5	50.5	36.8	41.2	53.6	34.9	45.8
49.6	49.4	58.7	47.3	63.1	48.0	35.2	45.6	55.8	38.4	55.6
48.4	47.9	49.3	44.5	54.3	46.3	35.2	39.7	56.8	33.2	47.6
52.9	46.1	53.9	42.4	54.8	50.3	35.3	41.4	54.7	33.8	43.7
48.8	44.6	53.3	41.6	53.9	47.6	35.0	42.4	56.5	31.7	41.2
49.9	44.3	53.8	40.2	50.0	45.9	32.3	39.2	53.6	32.3	47.1
42.1	43.8	48.7	40.2	51.0	46.2	30.4	33.1	52.2	28.7	39.8
50.3	44.7	51.5	44.7	53.7	45.0	36.2	—	53.1	32.5	41.6
50.1	43.1	49.3	42.5	51.8	46.4	31.5	35.4	55.3	32.1	40.9
7.4	7.5	6.6	4.3	5.9	9.8	10.1	13.1	7.1	7.7	6.8
6.2	5.7	5.8	2.5	4.5	6.7	4.8	N.S.	6.4	4.1	5.0
30"	30"	30"	27"	27"	30"	30"	30"	30"	30"	30"
4	4	4	4	4	2	2	3	4	4	4
3	3	3	4	4	4	4	4	3	3	3

UNIFORM TEST III, 1979

Strain	Mean 24 Tests	N.J.	Penn.	Md.	Ohio		
		Adel- phia	landis- ville	Clarks- ville	Woos- ter	Hoyt- ville	S. Charles- ton
		<u>YIELD RANK</u>					
C1545 (II)	22	22	5	18	2	4	13
Cumberland (III)	1	11	9	6	4	11	6
Elf	13	17	6	7	24	6	19
Union (IV)	14	7	15	8	9	20	14
A74-302012	3	1	7	14	1	2	4
A75-305022	4	7	4	2	20	16	5
A76-304019	16	6	8	9	17	23	9
A77-214022	12	2	14	5	9	13	11
A77-214035	7	12	17	11	3	12	8
A77-311031	20	10	18	15	12	7	1
A77-314013	5	22	19	12	8	15	16
A77-314017	17	19	12	23	14	24	17
A77-315024	8	9	20	15	15	17	6
C1566	23	4	21	21	13	18	24
H74-3382	9	20	3	3	17	3	2
HW74-3384	6	5	2	4	5	1	10
HW74-3385	2	16	1	1	6	4	3
L22	15	14	22	20	16	22	18
L23	11	18	23	10	19	8	20
L74L-71	10	12	10	19	11	14	15
L75-8388	21	14	12	24	21	19	22
U10727	24	24	16	22	22	21	23
U36276	19	21	24	13	7	8	21
U37219	18	3	11	17	23	8	12

UNIFORM TEST III, 1979

Ohio	Ky.	Ind.			Ill.				
Wheeler- burg*	Lexing- ton	Lafay- ette	Green- field	Sulli- van	Ur- bana	Gir- ard	Browns- town	Belle- ville	Pon- tiac
<u>YIELD RANK</u>									
16	19	19	10	18	11	24	21	19	23
14	2	11	4	7	9	4	1	4	4
2	8	6	23	24	17	10	5	12	1
9	12	14	2	5	15	14	9	11	22
3	4	2	20	1	9	10	9	8	15
4	14	9	1	13	16	6	8	2	3
10	23	5	21	11	1	21	22	22	2
19	16	17	15	4	6	7	2	16	11
23	1	10	9	21	3	15	13	3	8
20	20	21	7	23	19	22	15	10	20
13	3	12	6	2	5	1	6	1	6
15	24	15	17	10	11	23	11	5	13
5	17	3	8	20	7	3	—	6	4
24	22	22	15	5	20	19	16	18	24
22	7	13	24	22	14	15	4	9	14
12	11	1	11	17	2	20	23	24	10
8	15	7	19	9	4	13	19	17	7
7	18	7	13	14	13	8	12	21	9
6	21	22	12	3	8	2	6	7	12
1	6	16	3	8	18	5	3	20	17
11	9	20	22	15	21	17	14	15	18
18	5	18	4	19	24	9	18	23	19
21	10	24	18	12	23	17	17	13	16
17	13	4	14	16	22	10	20	14	21

*Not included in mean due to severe Mexican Bean Beetle damage.

UNIFORM TEST III, 1979

Strain	Ill.	Iowa		Mo.	S.D.	Kans.		Neb.	
	Eldo- rado	Stu- art	Ottum- wa	Novel- ty	Colum- bia	Elk Point	Man- hattan	Ott- awa	Mead
	YIELD RANK								
C1545 (II)	23	13	13	8	23	11	22	24	6
Cumberland (III)	2	3	6	6	5	18	1	3	2
Elf	18	17	8	24	1	2	12	5	5
Union (IV)	5	24	18	10	16	20	13	4	21
A74-302012	11	10	10	4	2	5	6	17	11
A75-305022	13	7	19	2	9	3	14	1	7
A76-304019	16	4	2	11	20	12	21	18	24
A77-214022	7	23	16	6	8	13	23	23	19
A77-214035	13	2	1	1	18	21	20	21	13
A77-311031	19	5	11	15	24	16	19	22	4
A77-314013	6	11	20	3	4	19	2	5	3
A77-314017	4	22	5	14	11	7	10	12	16
A77-315024	9	12	9	23	7	4	3	8	14
C1566	24	19	21	17	22	14	24	19	22
H74-3332	3	16	7	15	15	6	5	10	10
HW74-3384	15	6	4	5	3	10	15	7	12
HW74-3385	1	1	3	11	11	1	8	2	1
L22	20	9	14	19	11	15	4	11	8
L23	8	15	12	8	10	9	11	9	15
L74L-71	12	18	15	13	14	8	6	16	18
L75-8388	9	20	24	21	17	17	15	14	9
U10727	22	20	23	20	21	23	18	20	23
U36276	17	7	16	22	5	—	17	12	17
U37219	20	13	22	18	19	22	9	15	20

UNIFORM TEST III, 1979

Strain	Mean 21 Tests	Ohio					
		N.J. Adel- phia	Penn. Landis- ville	Md. Clarks- ville	Woos- ter	Hoyt- ville	S. Charles- ton
		<u>MATURITY (date)</u>					
C1545 (II)	-6.1	-9	-10	-2	-5	-6	-4
Cumberland(III)*	9/26	10/7	10/6	10/16	10/1	10/1	9/22
Elf	+3.9	+7	+3	+2	+4	+2	+7
Union (IV)	+5.1	+6	+4	+3	+4	+4	+15
A74-302012	-2.7	-3	-8	-1	-3	-3	-3
A75-305022	+0.6	0	-3	+1	-3	-2	+1
A76-304019	+3.6	+2	+2	+2	+4	+3	+12
A77-214022	-3.3	-4	-8	+1	-3	-4	-5
A77-214035	-2.3	-5	-5	0	-2	-2	-3
A77-311031	-2.5	-1	+1	0	-3	-4	-1
A77-314013	+1.0	-1	0	0	0	0	+2
A77-314017	+1.5	0	+2	+2	+3	+1	+2
A77-315024	+2.5	0	0	0	+2	+1	+3
C1566	-5.6	-7	-8	-4	-4	-7	-7
H74-3382	+1.5	0	+2	+1	+3	+1	+4
HW74-3384	-0.3	0	0	+1	0	-2	0
HW74-3385	+0.5	0	+2	+2	+1	-1	+2
L22	-2.4	0	-6	-1	-1	-3	-4
L23	+1.7	-2	+1	+2	+2	+1	+3
L74L-71	-1.0	-1	-3	+1	0	-2	-1
L75-8388	-2.7	-4	-5	+1	-3	-3	-2
U10727	-3.1	-7	-6	-2	-3	-2	-3
U36276	-2.6	-5	-7	0	-4	-3	-3
U37219	+0.9	-2	+2	+3	-1	-2	+1
Date of Planting	5/21	6/7	5/22	6/13	5/14	5/7	5/2
*Days to Maturity	128	122	137	125	140	147	143

UNIFORM TEST III, 1979

Strain	Ohio	Ky.	Ind.			Ill.		
	Wheeler- burg*	Lexing- ton	Lafay- ette	Green- field	Sulli- van	Ur- bana	Gir- ard	Browns- town
	<u>MATURITY (date)</u>							
C1545(II)	-4	-4	-5	-4	-2	-9	-9	-7
Cumberland(III)*	9/20	9/23	9/20	9/29	9/22	9/25	9/20	9/20
Elf	+13	+6	+6	+1	+2	+4	+4	+5
Union (IV)	+11	+8	+6	+6	+3	+6	+5	+4
A74-302012	-2	-1	-2	-3	-2	-5	-2	+2
A75-305022	+6	+3	+2	+2	+2	0	+1	+2
A76-304019	+12	+10	+6	+4	0	+7	+1	-1
A77-214022	+1	+1	-1	0	-3	-5	-4	-3
A77-214035	-4	+2	-2	+3	-1	-2	-3	-2
A77-311031	-2	+3	-3	0	-2	-3	-3	-2
A77-314013	0	+4	+2	0	0	+1	0	+2
A77-314017	+1	+9	+1	+3	-2	+2	0	+2
A77-315024	+12	+8	+4	+4	+2	+4	+2	+3
C1566	-4	-6	-3	-5	-3	-6	-6	-5
H74-3382	+8	+3	0	+1	0	+1	+1	+1
HW74-3384	+6	-2	-2	-2	+2	0	0	+1
HW74-3385	+9	+1	-1	+1	+1	+1	0	0
L22	+3	-2	-1	-1	-2	-3	-2	-2
L23	+4	+4	+1	+1	+2	+2	+3	+2
L74L-71	+3	+3	-2	-2	-2	-3	-1	0
L75-8388	-1	-2	-1	-1	-2	-3	-4	-3
U10727	-3	-2	-3	-3	-1	-3	-4	-3
U36276	0	+12	-4	-2	-2	-4	-3	-2
U37219	-3	+5	+2	+1	-1	0	-2	+1
Date of planting	4/29	5/23	5/17	5/29	5/18	5/11	5/19	5/23
*Days to maturity	144	123	126	123	127	137	124	120

*Not included in mean due to severe Mexican Bean Beetle Damage

UNIFORM TEST III, 1979

Ill.		Iowa		Mo.		S.D.	Kans.		Neb.	
Belle- ville	Pon- tiac	Eldo- rado	Stu- art	Ottum- wa	Novel- ty	Colum- bia	Elk Point	Man- hattan	Ott- awa	Mead
<u>MATURITY (date)</u>										
-7	-6	-8	-5			-5	-8	-11		-2
9/22	10/2	9/14	9/19			9/13	10/9	9/23		10/2
+3	+4	+6	+4			+3	+3	+2		+4
+7	+4	+1	+3			+2	+6	+5		+5
-4	-4	-3	-3			+2	-2	-5		0
+1	+5	+1	0			0	0	-3		-1
+1	+4	0	+6			0	-2	-1		+4
-4	-2	-4	-3			-3	-7	-3		-1
-4	+4	-2	-2			-6	-8	-4		0
-3	-3	-3	-2			-7	-5	-6		-1
-1	+4	0	+2			-1	-1	-1		+1
-3	-1	-2	+3			0	+2	+2		+1
+2	+2	+1	+3			+1	-1	+2		+2
-6	-6	-8	-1			-4	-8	-12		-2
+2	+1	0	+3			+3	-1	0		-2
0	0	+1	+1			+3	-4	-1		0
0	0	-1	+3			+2	-4	-2		0
-4	+2	-2	-2			-2	-3	-7		-2
0	+4	0	+2			-1	+2	+1		+2
-2	+3	-2	-2			0	+1	-4		+1
-5	+3	-3	-4			-6	-5	-4		-1
-4	-1	-3	-1			-2	-3	-5		0
-5	-1	-3	-2			-2	—	-9		-1
+1	+7	-1	0			0	0	-2		+3
5/26	5/23	5/22	5/16	5/15	6/6	5/15	5/25	5/16	5/29	5/23
119	132	115	126	—	—	121	137	130	—	132

UNIFORM TEST III, 1979

Strain	Mean 24 Tests	LODGING (score)					
		N.J. Adel- phia	Penn. Landis- ville	Md. Clarks- ville	Woos- ter	Ohio Hoyt- ville	S. Charles- ton
C1545 (II)	1.7	2.9	2.0	3.0	1.5	2.8	2.8
Cumberland (III)	2.2	3.4	2.8	3.3	2.1	2.3	3.3
Elf	1.5	2.9	2.0	3.3	1.6	2.1	2.3
Union (IV)	2.6	3.1	3.3	3.5	2.3	3.8	3.8
A74-302012	1.9	2.5	2.0	3.3	1.6	2.8	3.0
A75-305022	1.9	2.1	2.7	3.0	1.7	2.3	2.6
A76-304019	3.2	3.0	3.7	3.5	3.9	4.2	4.5
A77-214022	2.7	3.8	3.0	3.5	2.2	3.2	3.2
A77-214035	2.7	4.0	3.3	3.5	2.5	4.7	3.3
A77-311031	2.2	3.3	2.7	3.3	1.7	3.4	3.2
A77-314013	2.0	1.9	2.2	3.2	2.0	3.7	2.3
A77-314017	3.2	3.9	3.3	3.5	3.4	3.9	3.8
A77-315024	3.1	3.5	3.7	3.5	3.2	3.9	4.3
C1566	2.5	3.3	3.3	3.5	1.6	3.5	4.0
H74-3382	1.5	2.9	2.0	2.7	1.5	1.8	2.2
HW74-3384	1.5	2.8	2.8	3.0	1.4	2.0	1.8
HW74-3385	1.4	2.9	2.2	3.0	1.4	1.6	2.2
L22	1.7	2.6	2.2	2.8	1.8	2.1	2.3
L23	2.2	2.8	2.7	3.2	2.3	3.9	3.2
L74L-71	1.8	1.6	2.2	3.2	2.0	2.5	2.2
L75-8388	2.0	3.0	2.5	3.3	1.9	2.8	3.0
U10727	1.8	1.6	2.5	3.2	1.5	2.0	2.5
U36276	1.7	2.8	1.5	2.2	1.5	2.4	2.2
U37219	1.8	2.6	2.2	3.7	1.5	3.0	2.3

UNIFORM TEST III, 1979

Ohio	Ky.	Ind.			Ill.				
Wheeler- burg*	Lexing- ton	Lafay- ette	Green- field	Sulli- van	Ur- bana	Gir- ard	Browns- town	Belle- ville	Pon- tiac
<u>LODGING (score)</u>									
2.7	1.0	1.8	1.5	1.2	1.5	1.3	1.0	1.4	2.5
4.5	2.0	2.5	1.8	1.8	3.0	2.2	1.0	2.1	3.5
2.7	1.0	1.5	1.3	1.0	1.4	1.2	1.0	1.1	1.5
4.7	3.0	3.0	2.3	1.7	3.5	2.8	1.2	2.3	2.8
3.3	1.0	2.5	1.8	2.2	2.8	1.3	1.0	1.9	2.2
3.8	1.0	2.7	1.7	1.5	1.9	1.7	1.1	1.6	2.7
5.0	3.0	3.7	2.7	2.2	4.3	3.6	1.6	3.6	3.5
4.2	2.0	3.8	2.5	2.3	4.0	2.3	1.2	2.7	2.7
4.8	2.0	3.5	2.0	2.0	2.0	2.6	1.1	2.5	3.3
4.7	3.0	2.3	2.0	1.8	2.2	1.7	1.0	1.9	2.8
4.3	1.0	2.5	1.5	1.8	2.2	1.5	1.0	1.9	2.7
4.3	3.0	3.5	2.3	2.5	4.4	3.8	1.4	3.8	4.0
4.5	3.0	3.5	2.2	2.5	3.7	3.2	1.2	2.9	3.3
5.0	2.0	3.5	2.0	2.2	2.7	2.1	1.0	2.2	4.2
4.3	1.0	1.5	1.2	1.2	1.5	1.2	1.0	1.1	1.5
1.7	1.0	1.5	1.3	1.3	1.7	1.2	1.0	1.1	1.5
1.5	1.0	1.5	1.2	1.2	1.2	1.2	1.0	1.0	1.3
3.0	2.0	1.8	1.5	1.3	1.6	1.4	1.1	1.6	2.5
3.5	2.0	2.5	1.8	2.0	2.1	1.7	1.2	1.6	2.7
2.5	1.0	2.2	1.5	2.2	2.7	1.5	1.1	1.5	2.5
3.8	1.0	2.7	1.7	1.7	2.0	1.4	1.1	2.2	2.5
3.2	1.0	1.7	1.5	1.8	1.6	1.5	1.0	3.3	2.2
3.2	2.0	1.8	1.3	1.3	1.4	1.3	1.0	2.8	2.0
4.2	2.0	1.7	1.5	1.7	1.3	1.3	1.0	2.7	2.3

*Not included in mean due to severe Mexican Bean Beetle Damage

UNIFORM TEST III, 1979

Strain	Ill.	Iowa		Mo.	S.D.	Kans.		Neb.	
	Eldo- rado	Stu- art	Ottum- wa	Novel- ty	Colum- bia	Elk Point	Man- hattan	Otta- wa	Mead
	<u>LODGING (score)</u>								
C1545(II)	1.0	1.6	3.3	1.4	1.0	1.0	1.2	1.0	1.2
Cumberland (III)	1.4	1.6	3.8	2.1	1.3	1.0	2.3	1.2	1.2
Elf	1.0	1.7	1.2	1.5	1.0	1.0	1.0	1.0	1.5
Union (IV)	2.6	2.0	3.8	2.6	2.0	1.0	2.5	1.3	2.0
A74-302012	1.2	1.6	2.7	2.0	1.0	1.0	1.8	1.2	1.5
A75-305022	1.7	1.6	3.4	1.9	1.3	1.0	1.8	1.5	1.5
A76-304019	4.4	2.7	3.6	2.8	3.3	1.0	3.3	2.7	2.7
A77-214022	3.2	2.8	3.9	1.9	3.3	1.0	1.8	2.7	2.0
A77-214035	2.6	2.6	4.2	2.6	2.4	1.0	3.0	1.8	2.2
A77-311031	1.8	1.5	3.6	1.8	2.3	1.0	2.3	1.2	1.7
A77-314013	1.3	1.8	3.2	2.1	1.5	1.0	2.0	1.2	1.3
A77-314017	4.0	3.0	4.0	2.6	2.6	1.0	3.2	2.2	3.2
A77-315024	3.5	2.8	4.5	2.6	3.3	1.0	2.8	2.5	3.0
C1566	2.2	2.4	4.8	1.6	1.3	1.0	2.2	1.2	1.3
H74-3382	1.0	1.6	1.7	1.6	1.0	1.0	1.0	1.0	1.3
HW74-3384	1.0	1.6	1.6	1.7	1.0	1.0	1.5	1.0	1.0
HW74-3385	1.0	1.5	1.2	1.5	1.0	1.0	1.0	1.0	1.0
L22	1.2	1.5	3.4	1.6	1.0	1.0	1.0	1.0	1.3
L23	1.6	1.6	3.2	2.3	1.7	1.0	2.2	1.0	1.8
L74L-71	1.6	1.6	2.8	1.8	1.3	1.0	1.7	1.0	1.5
L75-8388	1.3	2.0	3.2	1.9	1.5	1.0	2.0	1.0	1.7
U10727	1.2	1.7	2.5	1.9	1.0	1.0	1.8	1.0	1.3
U36276	1.0	1.3	2.5	1.9	1.0	—	1.3	1.0	1.2
U37219	1.1	1.4	2.2	2.0	1.0	1.0	1.5	1.2	1.5

UNIFORM TEST III, 1979

Mean 24 Tests	N.J.	Penn.	Md.	Ohio			
	Adel- phia	Landis- ville	Clarks- ville	Woos- ter	Hoyt- ville	S. Charles- ton	Wheelers- burg*
	HEIGHT (inches)						
36	32	34	37	33	45	39	32
37	32	31	36	33	41	36	36
23	23	26	28	25	26	27	26
45	35	35	40	37	61	46	38
39	36	32	40	34	46	40	39
39	35	36	39	34	45	40	38
43	35	36	41	37	58	46	40
42	34	35	45	35	47	40	46
39	35	36	42	33	51	39	37
35	31	28	37	30	40	38	36
42	35	30	38	35	49	42	41
44	38	36	36	40	49	46	41
42	34	31	39	37	47	46	40
33	30	32	35	31	37	33	34
25	25	26	28	27	27	28	25
23	26	25	25	23	27	24	20
24	23	25	28	26	27	28	26
33	29	28	33	33	34	36	33
41	35	32	38	34	48	42	33
41	35	34	38	36	46	43	37
38	30	29	35	31	44	39	36
36	29	31	36	31	43	38	37
33	28	26	31	30	40	36	33
38	31	34	43	31	43	39	40

*Not included in mean due to severe Mexican Bean Beetle Damage

UNIFORM TEST III, 1979

Strain	Ky.		Ind.		Ill.			
	Lexing- ton	Lafay- ette	Green- field	Sulli- van	Ur- bana	Gir- ard	Browns- town	Belle- ville
	<u>HEIGHT (inches)</u>							
C1545 (II)	35	41	41	29	41	33	30	37
Cumberland (III)	35	44	38	32	44	37	34	41
Elf	23	28	26	14	24	21	17	18
Union (IV)	44	51	48	42	55	47	43	51
A74-302012	39	46	43	35	43	39	33	43
A75-305022	38	45	41	36	44	40	38	41
A76-304019	42	49	43	39	55	42	39	46
A77-214022	42	47	45	43	45	43	42	45
A77-214035	36	44	43	34	41	39	35	41
A77-311031	33	40	37	33	41	37	33	38
A77-314013	43	48	43	42	48	43	41	47
A77-314017	43	53	46	40	54	40	42	46
A77-315024	38	50	43	33	54	47	40	48
C1566	27	41	38	29	37	32	27	31
H74-3382	25	28	26	18	26	21	18	19
HW74-3384	24	28	24	20	26	22	17	16
HW74-3385	24	27	25	20	26	21	15	19
L22	31	42	38	25	36	32	27	34
L23	42	49	42	42	48	43	39	43
L74L-71	41	48	44	40	46	44	39	46
L75-8388	40	47	38	35	43	38	35	39
U10727	35	46	38	29	42	35	33	38
U36276	31	41	33	30	39	33	29	34
U37219	36	45	40	34	44	38	32	40

UNIFORM TEST III, 1979

Ill.	Iowa	Mo.	S.D.	Kans.	Neb.				
Pontiac	Eldo- rado	Stuart	Ottum- wa	Novel- ty	Colum- bia	Elk Point	Man- hattan	Ottawa	Mead
<u>HEIGHT (inches)</u>									
42	32	35	45	34	23	35	38	36	34
39	40	36	42	36	26	36	46	36	36
23	16	25	27	22	17	30	24	20	26
46	48	40	51	38	34	42	52	42	41
43	40	37	45	36	28	37	48	37	38
41	38	36	43	35	26	39	44	37	37
48	48	42	50	38	31	35	51	39	39
47	42	42	50	39	31	40	44	43	39
43	39	38	46	36	26	35	47	36	37
38	36	33	42	33	24	35	41	35	33
46	43	41	48	39	28	38	49	41	39
50	47	43	52	36	29	43	54	42	40
46	46	40	50	36	33	37	51	44	37
39	30	36	40	35	23	36	33	33	31
23	20	28	28	26	18	31	25	23	24
21	18	26	27	24	18	29	24	23	23
24	19	28	29	26	17	28	23	21	24
40	29	36	38	33	24	34	34	33	33
43	43	38	46	36	29	38	47	39	38
45	45	38	47	38	28	38	48	38	38
42	40	38	45	32	25	36	45	38	37
39	35	37	44	34	24	34	43	35	35
34	33	30	38	30	24	—	40	31	30
43	36	36	44	35	27	35	45	37	36

UNIFORM TEST III, 1979

Strain	Mean 22 Tests	N.J.	Penn.	Md.	Ohio		
		Adel- phia	Landis- ville	Clarks- ville	Woos- ter	Hoyt- ville	S. Charles- ton
		<u>QUALITY (score)</u>					
C1545 (II)	2.3	2.2	2.5	3.8	2.3	2.0	2.0
Cumberland (III)	2.1	2.8	2.5	3.3	2.0	1.3	1.5
Elf	1.8	1.5	1.8	2.3	1.0	1.0	1.5
Union(IV)	1.9	2.0	2.0	2.8	1.0	1.0	1.5
A74-302012	2.3	2.5	2.5	3.7	2.0	2.0	1.5
A75-305022	2.0	2.0	2.3	2.8	1.0	1.7	1.5
A76-304019	2.4	2.0	2.3	3.0	2.0	2.0	1.5
A77-214022	2.2	3.0	2.2	3.2	2.0	2.0	2.0
A77-214035	2.1	2.5	2.2	3.7	1.0	1.3	2.0
A77-311031	2.4	3.0	2.7	4.0	1.3	2.0	2.0
A77-314013	2.1	2.2	2.5	3.3	2.0	2.0	1.5
A77-314017	2.4	3.0	3.5	3.7	2.7	2.3	2.0
A77-315024	2.1	2.5	2.7	3.3	2.0	1.3	1.5
C1566	2.4	2.2	2.3	3.2	2.0	2.0	2.0
H74-3382	1.6	1.8	1.3	2.3	1.0	1.0	1.0
HW74-3384	1.8	2.8	1.8	2.2	1.0	1.0	1.0
HW74-3385	1.9	2.5	1.8	2.5	1.0	1.7	1.5
L22	1.9	2.0	2.3	3.2	2.0	2.0	1.5
L23	2.0	2.0	2.3	3.0	2.0	2.0	1.0
L74L-71	2.1	2.5	2.5	3.8	1.0	2.0	1.5
L75-8388	2.2	2.5	2.0	3.5	1.0	1.7	1.5
U10727	2.4	2.0	2.5	3.0	2.0	2.0	2.0
U36276	2.2	2.2	2.7	2.8	2.0	2.0	1.5
U37219	2.3	2.5	2.3	3.3	2.0	1.3	2.0

UNIFORM TEST III, 1979

Ohio	Ky.	Ind.	Ill.						
Wheeler- burg*	Lexing- ton	Lafay- ette	Green- field	Sulli- van	Ur- bana	Gir- ard	Browns- town	Belle- ville	Pon- tiac
QUALITY (score)									
4.5	1.0	1.5	1.5	1.5	2.3	2.5	2.8	2.5	1.2
3.0	2.0	1.0	1.0	1.5	2.5	1.8	2.8	1.8	1.5
1.5	1.0	1.0	1.0	1.5	2.2	1.7	1.7	1.5	1.3
1.5	3.0	1.0	1.0	1.0	2.3	1.7	2.7	2.5	1.3
2.5	3.0	1.0	1.5	1.5	2.5	2.2	2.8	2.3	1.4
2.0	2.0	1.5	1.5	1.5	2.5	2.0	2.2	1.7	1.4
2.0	3.0	1.0	1.5	1.5	2.5	3.5	3.7	2.7	1.4
3.5	3.0	1.0	1.5	1.5	2.5	2.0	2.3	1.8	1.3
4.5	2.0	1.5	1.5	1.5	2.5	2.5	3.2	2.2	1.3
3.0	3.0	1.5	1.0	2.0	2.2	2.5	2.8	2.5	1.3
2.0	2.0	1.0	1.5	2.0	2.5	1.5	2.7	2.0	1.7
3.0	3.0	1.5	2.0	2.5	2.5	1.7	2.5	2.2	1.3
2.0	3.0	1.0	1.0	1.5	2.2	2.2	3.0	1.8	1.3
4.0	3.0	1.0	2.0	1.5	2.5	2.8	3.8	3.3	1.5
2.0	1.0	1.0	1.5	1.5	2.0	1.2	1.5	1.5	1.2
2.0	2.0	1.0	1.0	1.5	2.5	2.0	2.2	1.3	1.2
2.5	2.0	1.0	1.5	2.0	2.3	1.7	2.3	1.5	1.3
1.5	2.0	1.0	1.5	1.5	2.3	1.3	2.2	1.2	1.4
1.5	3.0	1.5	1.5	1.5	2.5	1.5	2.2	1.3	1.5
2.0	3.0	1.5	1.5	1.5	2.5	1.8	2.7	2.2	1.2
2.0	2.0	1.5	1.5	1.5	2.3	2.2	2.5	2.2	1.3
2.5	2.0	1.5	1.5	2.0	2.5	3.0	2.5	3.3	1.5
2.5	3.0	1.0	1.5	1.5	2.5	2.5	3.2	2.8	1.6
3.5	3.0	1.5	1.5	1.5	2.3	2.3	3.2	2.7	1.7

*Not included in mean due to severe Mexican Bean Beetle Damage

UNIFORM TEST III, 1979

Strain	<u>Ill.</u>	<u>Iowa</u>		<u>Mo.</u>		<u>S.D.</u>	<u>Kans.</u>		<u>Neb.</u>
	<u>Eldo- rado</u>	<u>Stu- art</u>	<u>Ottum- wa</u>	<u>Novel- ty</u>	<u>Colum- bia</u>	<u>Elk Point</u>	<u>Man- hattan</u>	<u>Ott- awa</u>	<u>Mead</u>
	<u>QUALITY (score)</u>								
C1545 (II)	2.0	1.9	2.5	3.2	4.0	2.5	1.5	2.0	
Cumberland (III)	2.8	1.8	2.0	2.4	3.0	2.5	1.5	2.5	
Elf	1.7	1.4	2.0	3.5	4.0	2.0	1.5	1.7	
Union (IV)	2.2	1.6	2.5	2.5	4.0	2.5	1.5	2.0	
A74-302012	2.8	1.9	2.5	3.0	4.0	2.5	2.0	2.3	
A75-305022	2.0	1.9	2.0	3.0	4.0	2.5	1.5	2.2	
A76-304019	3.7	1.7	2.3	3.5	4.0	2.5	2.0	2.3	
A77-214022	2.7	1.9	2.3	3.0	3.0	3.0	1.5	2.7	
A77-214035	2.7	1.7	2.3	3.0	2.0	2.0	2.0	2.3	
A77-311031	2.5	1.8	2.5	3.2	4.0	2.5	2.0	2.8	
A77-314013	2.7	1.8	2.5	2.5	3.0	2.0	1.5	1.8	
A77-314017	2.0	1.8	2.3	2.5	3.0	2.5	2.0	2.5	
A77-315024	2.5	1.5	2.3	3.2	3.0	2.5	2.0	1.8	
C1566	3.3	1.7	2.3	2.8	3.0	2.0	2.0	2.7	
H74-3382	1.5	1.5	2.0	2.5	3.0	2.0	1.5	1.7	
HW74-3384	2.2	1.4	2.0	3.5	3.0	1.5	1.5	1.7	
HW74-3385	1.7	1.4	2.5	2.8	3.0	2.0	2.0	1.7	
L22	1.5	1.4	2.2	2.8	4.0	2.0	1.5	1.6	
L23	1.8	1.8	2.3	2.5	4.0	2.0	1.5	1.8	
L74L-71	2.8	1.9	2.0	3.0	3.0	2.0	1.5	2.0	
L75-8388	2.7	1.8	2.5	3.0	4.0	2.5	2.0	2.2	
U10727	3.5	1.7	2.8	3.2	3.0	2.5	1.5	3.3	
U36276	2.8	2.2	2.5	3.2	—	3.0	1.5	2.2	
U37219	2.7	1.6	2.5	3.2	4.0	2.5	1.5	2.8	

UNIFORM TEST III, 1979

Mean 21 Tests	N.J.	Penn.	Md.	Ohio			
	Adel- phia	Landis- ville	Clarks- ville	Woos- ter	Hoyt- ville	S. Charles- ton	Wheeler- burg*
	<u>SIZE (g/100)</u>						
18.5	21.0	20.5	19.5	19.0	19.9	19.0	12.9
18.7	19.0	19.4	19.8	18.9	19.8	19.2	14.7
17.0	17.0	20.2	19.4	17.6	17.5	16.2	13.0
18.5	18.0	19.5	19.9	19.3	19.8	18.8	14.8
20.1	22.0	21.7	20.6	20.8	22.9	21.1	16.5
15.1	15.0	17.6	16.2	15.0	16.3	16.0	12.2
17.5	18.0	20.4	19.5	18.5	19.6	18.0	14.6
14.4	15.0	15.1	14.4	13.4	14.5	13.7	10.6
17.2	16.0	18.1	18.1	16.1	17.0	17.8	12.0
15.9	18.0	18.8	17.5	15.4	17.0	17.8	11.5
18.4	18.0	18.9	18.9	20.0	20.5	17.5	14.8
17.4	18.0	18.5	16.2	18.8	19.9	17.8	13.2
15.6	16.0	17.1	16.1	16.3	17.3	15.9	12.1
17.5	20.0	18.2	18.2	17.6	17.9	19.0	13.7
16.2	16.0	18.8	17.2	17.8	17.1	15.2	11.8
18.3	18.0	21.8	20.0	18.6	19.0	17.7	13.8
16.3	18.0	18.8	17.1	17.4	18.6	16.7	11.6
16.8	17.0	17.9	17.8	16.1	17.2	17.1	12.8
17.6	17.0	19.1	19.2	17.3	19.0	17.6	13.4
19.6	20.0	21.0	19.6	18.1	21.9	21.0	16.8
17.3	19.0	18.1	17.6	16.1	18.2	16.8	13.7
17.0	16.0	18.1	17.4	16.0	18.2	18.6	13.4
15.3	16.0	17.1	16.5	16.4	18.3	15.5	10.5
19.0	20.0	22.9	20.5	19.4	20.5	19.3	13.5

*Not included in mean due to severe Mexican Bean Beetle damage

UNIFORM TEST III, 1979

Strain	Ky.	Ind.			Ill.			
	Lexing- ton	Lafay- ette	Green- field	Sulli- van	Ur- bana	Gir- ard	Browns- town	Belle- ville
<u>SIZE (g/100)</u>								
C1545 (II)	18.0	17.5	20.4	19.8	17.7	15.9	16.9	16.8
Cumberland (III)	18.5	17.9	20.4	19.9	17.5	18.7	17.1	16.9
Elf	18.2	16.1	16.9	16.4	15.5	16.4	15.2	14.9
Union (IV)	19.4	18.9	20.3	19.0	17.6	17.0	15.6	17.4
A74-302012	19.6	19.6	21.3	20.5	18.5	18.4	19.6	17.6
A75-305022	14.7	15.3	17.1	15.1	14.4	13.1	13.3	14.2
A76-304019	18.5	17.2	19.9	17.3	16.6	15.9	14.9	15.1
A77-214022	13.8	14.2	15.5	14.6	14.0	13.0	13.8	13.2
A77-214035	17.4	16.9	19.2	17.5	18.0	17.1	15.3	15.6
A77-311031	15.9	14.6	18.3	15.8	15.3	14.1	14.2	14.4
A77-314013	19.4	17.4	20.6	17.9	17.8	16.6	16.6	16.4
A77-314017	17.9	16.9	18.7	17.6	16.5	15.9	14.3	16.8
A77-315024	16.2	15.7	17.6	15.9	14.3	14.9	13.7	14.4
C1566	15.4	18.2	18.6	18.1	16.9	17.1	16.5	16.0
H74-3382	18.1	15.2	16.4	15.7	14.1	14.9	15.2	14.5
HW74-3384	18.1	17.4	18.5	18.6	17.3	16.5	18.7	16.7
HW74-3385	16.3	14.2	16.3	16.8	15.4	15.6	16.3	14.1
L22	16.5	16.6	17.2	17.1	16.9	15.8	15.1	14.8
L23	17.9	16.4	19.1	17.8	16.5	15.9	15.3	15.6
L74L-71	20.7	18.9	21.6	20.4	17.6	18.5	16.5	16.9
L75-8388	18.2	16.2	18.0	17.5	16.4	15.7	15.1	15.6
U10727	18.0	16.4	17.4	17.7	16.4	16.4	16.2	15.7
U36276	17.0	13.2	16.5	15.6	14.6	13.4	14.2	13.8
U37219	19.4	20.2	21.1	17.8	17.4	17.1	16.4	17.2

UNIFORM TEST III, 1979

Ill.		Iowa	Mo.		S.D.	Kans.	Neb.	
Pon- tiac	Eldo- rado	Ottum- Stuart wa	Novel- ty	Colum- bia	Elk Point	Man- hattan	Ottawa Mead	
SIZE (g/100)								
18.8	16.4	19.7			19.6	18.7	13.5	19.0
20.5	16.0	20.0			18.9	20.1	15.7	18.5
17.7	15.1	16.8			17.6	19.2	15.2	17.4
19.4	16.1	19.9			19.1	19.1	17.7	17.3
21.1	17.6	20.9			23.0	20.6	15.4	19.0
16.7	12.9	15.8			15.9	14.7	12.8	15.7
18.6	15.1	18.7			16.2	17.7	15.7	16.3
15.1	12.7	14.6			17.0	15.6	14.7	14.4
19.0	15.9	18.7			18.4	17.3	15.0	16.2
17.0	13.3	16.4			14.7	17.5	12.7	15.4
21.3	15.4	19.7			20.1	19.4	16.7	17.7
17.7	15.6	19.6			17.2	18.4	16.2	16.8
16.0	13.2	16.4			15.0	16.5	13.3	16.0
19.3	16.0	18.6			18.0	18.7	13.5	16.4
16.1	13.8	17.0			18.8	17.0	14.5	16.7
18.8	16.4	18.6			20.4	20.3	14.9	18.0
16.5	14.2	17.1			17.3	16.7	12.9	17.0
19.3	14.4	17.5			18.7	18.1	16.1	16.2
19.7	15.0	19.2			18.4	19.3	16.7	18.0
22.0	16.8	22.5			21.6	21.2	17.8	17.8
19.0	15.6	18.4			19.3	19.6	14.7	18.6
18.0	15.9	18.3			17.8	18.6	14.0	15.2
16.1	13.7	15.4			—	15.4	12.6	15.4
20.6	16.2	20.2			20.0	19.8	15.3	17.2

UNIFORM TEST III, 1979

Strain	Mean 5 Tests	Ohio	Ind.	Ill.	Iowa	Kans.
		S. Charles- ton	Lafay- ette	Urbana	Ottumwa	Man- hattan
<u>% PROTEIN</u>						
C1545 (II)	42.2	42.4	42.0	42.4	42.3	41.9
Cumberland (III)	40.5	42.5	39.1	40.0	40.6	40.5
Elf	42.7	42.7	42.5	41.6	44.2	42.7
Union (IV)	41.4	41.7	41.1	39.5	41.5	43.2
A74-302012	39.4	39.6	40.2	38.2	38.9	40.3
A75-305022	40.7	43.1	40.7	40.0	39.8	40.1
A76-304019	40.8	40.0	40.6	40.9	40.5	41.9
A77-214022	41.1	41.8	41.4	39.3	40.5	42.3
A77-214035	41.0	41.5	41.1	40.6	42.0	40.0
A77-311031	40.6	42.2	40.9	40.9	39.1	40.1
A77-314013	41.6	43.2	41.5	40.7	40.7	42.0
A77-314017	41.2	42.0	41.5	39.1	41.0	42.4
A77-315024	41.5	42.5	41.8	39.0	39.6	44.4
C1566	40.5	39.0	42.4	39.7	40.6	40.8
H74-3382	39.4	41.0	39.3	38.6	39.5	38.6
HW74-3384	39.9	40.1	39.8	40.6	40.5	38.6
HW74-3385	40.5	43.2	40.2	42.0	40.0	37.2
L22	41.6	41.7	41.5	40.7	41.6	42.3
L23	41.1	41.1	40.1	41.1	42.0	41.0
L74L-71	41.4	42.1	40.1	42.4	41.1	41.3
L75-8388	40.8	40.7	39.8	40.8	40.5	42.2
U10727	41.3	42.9	40.6	41.0	40.7	41.5
U36276	43.2	44.6	42.9	41.7	43.3	43.3
U37219	41.7	40.5	41.4	40.7	42.6	43.2

UNIFORM TEST III, 1979

Mean 5 Tests	Ohio	Ind.	Ill.	Iowa	Kans.
	S. Charleston	Lafayette	Urbana	Ottumwa	Manhattan
	<u>% OIL</u>				
19.5	18.9	19.7	19.2	19.7	19.9
21.3	20.3	21.3	21.7	21.1	22.0
19.7	18.7	19.7	19.5	20.1	20.6
19.9	19.4	19.9	20.5	19.4	20.5
20.8	20.6	20.2	21.0	21.3	20.7
20.4	19.0	20.8	20.9	20.4	20.9
19.7	20.7	19.7	20.2	19.1	19.0
20.1	19.3	19.1	21.1	20.5	20.4
20.1	19.9	20.0	20.2	20.1	20.3
20.4	20.3	20.0	19.9	20.9	20.6
20.4	19.9	20.2	20.6	20.4	20.9
20.5	19.6	20.1	21.5	20.2	21.3
20.0	19.7	19.8	20.5	20.2	20.0
20.7	20.9	20.0	21.5	20.8	20.1
21.3	21.0	21.0	21.3	21.4	21.7
21.4	20.8	22.0	21.1	21.4	21.8
20.8	20.0	21.4	19.5	20.9	22.3
20.2	19.4	20.0	20.5	20.6	20.5
20.6	21.3	20.4	20.7	20.2	20.4
20.6	19.5	20.6	20.8	21.1	21.0
19.9	19.0	20.3	19.8	19.9	20.6
19.9	19.4	19.9	19.7	19.8	20.6
19.2	19.1	19.2	19.3	19.1	19.5
20.0	20.8	19.8	20.7	19.1	19.8

PRELIMINARY TEST III, 1979

Strain	Parentage	Generation Compositd
Century (C1545) (II)	Calland x Bonus	F ₆
Cumberland (III)	Corsoy x Williams	F ₄
Union (IV)	Williams ⁵ x SL12 (Wayne <u>Rpm</u> <u>Rps</u>)	F ₃
Pella (A74-302012)	L66L-137 x Calland	F ₄
A78-322024	Williams x Sloan	F ₄
A78-323011	Coles x Agripro Ex7710	F ₄
A78-323019	A72-512 x NK S1346	F ₄
A78-323031	Sloan x C1520	F ₄
A78-324002	A72-512 x Pride B-216	F ₄
A78-325033	AP6 (1YT) S ₃ C1	S ₃
A78-326026	Pride B-216 x AX896-67-3	F ₄
A78-326032	BSR intermating of 9 parents	F ₄
C1583	M61-224 x Williams	F ₇
HC76-3710	L72U-2567 x Williams	F ₅
HC76-3715	L72U-2567 x Williams	F ₅
HC76-4030	L72U-2567 x Essex	F ₅
HC76-4054	L72U-2567 x L72U-41	F ₅
HC76-4092	Williams x L72U-41	F ₅
HW7847	Evnas x Williams	F ₅
HW7867	IVR4311 x C1483	F ₅
K1047	Tracy x Bonus	F ₄
L75-8121	Williams x L70-2283	F ₄
L75-8209	Williams L70-2450	F ₄
L75-12061	Wells x Williams	F ₅
L75-12341	Wells x Williams	F ₅
L75-12050	Wells x Williams	F ₅
L75-12386	Wells x Williams	F ₅
L77-178	Williams x L70-2283	F ₆
U20109	Amsoy x Wayne	F ₅
U46192	Amsoy x Cutler	F ₆
U46682	L65-4050 x Adelpia	F ₅
U57073	Wayne x Cutler	F ₄
U57139	Beeson x Clark 63	F ₄
U57162	Wayne x Calland	F ₄
U57250	Adelpia x Amsoy	F ₄
U59245	Williams x Amsoy 71	F ₄

PRELIMINARY TEST III, 1979

Descriptive and Other Data

Descriptive Code		Chlorosis Score Ames	Shattering Manhattan 2 Weeks
PTBr	DYB1	3	3
PGBr	SYIb	4	2
WTTn	SYB1	3	2
PTTn	DYB1	3	2
WTBr	SYBr	2	2
PTBr	DYB1	2	3
PGBr	SYBf	4	1
WTBr	SYB1	3	3
WGBr	DYBf	4	2
PTBr	DYBr	3	2
P+WGBr	DYY	4	1
PGBr	DYIb	4	2
WGBr	DYY	3	2
PTTn	SYB1	2	2
PTTn	SYB1	3	2
PTTn	DYB1	3	2
PTTn	SYBr	3	2
WTTn	SYGr	3	2
WTBr	DYB1	4	2
WGBr	DYY	4	2
WGTn	SYBf	3	2
P+WGTn	SYBf+Ib	4	2
P+WTTn	SYB1	3	2
PG+TBr	SYB1	4	2
WGBr	SYBf	3	1
WTTn	SYB1	4	1
PGTn	DYIb	3	2
WGTn	SYBf	3	2
PGBr	SYIb	4	1
PTBr	SYBf	3	1
WTBr	DYB1	3	1
PTBr	SYB1	3	2
PGBr	DYIb	3	1
PTBr	SYB1	3	1
WGTn	SYBf	2	2
PTTn	SYBr	3	2

PRELIMINARY TEST III, 1979

Strain	Disease Data								
	FE ₂	BSR		GERM*	PSB	SMV	PR	PR	Race 1
	Laf. Ind. a	Laf. Ind. n	Ames Ia. n	Lafayette, IN d	Lafayette, IN d	Lafayette, IN a	Vick-ery Ohio n	Laf. Ind. a	Ames Ia. a
Score	%	Reac.	%	%	Reac.	-----Reaction-----			
C1545 (II)	5	100	S	92	2	5E	—	R	R
Cumberland(III)	4	60	S	92	2	5E	3.6	S	S
Union (IV)	4	40	S	95	0	5E	3.8	R	R
A74-302012	3	60	S	88	2	5E	4.1	R	R
A78-322024	2	80	S	96	3	5S	3.6	S	S
A78-323011	5	100	S	98	0	5S	4.2	S	S
A78-323019	2	100	S	98	1	5E	2.6	S	S
A78-323031	4	100	S	83	1	5E	3.8	S	S
A78-324002	4	80	S	94	2	5E	3.6	S	S
A78-325033	4	20	S	93	3	5S	3.6	S	S
A78-326026	5	80	R	91	1	5S	3.9	S	S
A78-326032	4	100	R	100	0	1	3.1	S	S
C1583	5	0	S	98	0	5M	—	R	R
HC76-3710	5	20	S	99	0	5E	3.8	S	S
HC76-3715	5	100	S	95	0	5E	4.1	S	S
HC76-4030	1	100	S	99	0	1	3.6	S	S
HC76-4054	5	100	S	91	1	5E	5.0	S	S
HC76-4092	5	0	S	94	1	5S	4.2	S	S
HW7847	5	20	S	100	0	1	2.5	Seg	S
HW7867	2	60	S	95	1	5E	4.5	Seg	S
K1047	5	80	S	100	0	5E	2.6	R	H
L75-8121	5	80	S	96	0	3M	4.6	Seg	H
L75-8209	5	100	S	90	5	5E	5.0	S	S
L75-12061	5	100	S	90	0	5E	3.6	R	H
L75-12341	1	100	S	99	0	1	3.0	R	H
L75-12050	5	100	S	99	0	5E	4.0	Seg	H
L75-12386	4	0	S	97	1	1	4.6	S	S
L77-178	5	100	S	97	0	2M	4.6	Seg	H
U20109	4	100	S	99	0	5E	3.7	S	S
U46192	5	100	S	97	0	5E	2.9	S	S
U46682	3	80	S	88	4	5E	4.3	S	S
U57073	1	80	S	98	0	5E	3.2	S	S
U57139	1	80	S	99	0	4M	2.9	R	R
U57162	5	100	S	96	0	5E	3.6	R	R
U57250	4	60	S	79	5	1	2.8	S	S
U59245	4	0	S	95	1	5E	3.2	R	H

*Petri dish germination on potato dextrose agar.

PRELIMINARY TEST III, 1979

Regional Summary

No. of Tests	Yield 10	Rank 10	Matu- Lodg-		Seed Height 10	Seed Quality 9	Seed Size 9	Composition	
			rity 8	ing 10				Protein 5	Oil 5
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
	48.5	9	-6.0	1.6	37	2.3	19.1	42.8	19.7
	51.8	2	9/26*	2.3	37	2.1	19.4	39.9	20.5
	46.9	16	+4.9	2.6	45	2.0	18.6	41.7	19.4
	50.3	5	-3.3	1.8	40	2.4	20.6	39.6	20.7
	50.6	4	+0.3	2.8	46	2.4	18.6	42.9	20.0
	47.1	15	-2.6	2.1	39	2.3	18.9	41.0	19.5
	48.7	8	+2.0	2.6	42	2.0	13.8	40.6	20.3
	49.3	6	-2.4	2.4	36	2.4	17.4	41.5	19.7
	51.4	3	+3.5	2.8	43	1.8	14.9	41.6	19.5
	40.7	36	+5.1	2.9	46	2.2	16.1	41.0	19.5
	47.5	12	+5.5	2.6	44	2.3	14.8	40.7	20.1
	48.2	10	+4.9	2.9	39	2.0	16.7	41.8	19.5
	48.8	7	-0.9	2.1	43	2.0	17.8	40.6	20.0
	45.3	23	+0.9	1.2	27	1.5	14.8	42.5	19.4
	47.8	11	+1.1	1.2	26	1.8	16.2	41.8	19.5
	52.1	1	+3.4	1.2	25	1.8	15.6	43.5	19.5
	45.1	27	-0.7	1.3	26	1.9	16.7	42.8	19.7
	43.0	35	-1.6	1.1	24	2.0	17.4	41.8	19.4
	45.3	23	+1.8	2.7	46	1.9	18.5	41.0	20.8
	45.8	22	-2.9	1.4	35	2.9	17.9	42.1	19.6
	46.3	18	+3.1	1.8	33	1.5	15.8	44.7	18.8
	47.4	13	+3.4	2.3	43	1.9	16.6	39.2	19.9
	43.4	34	+2.4	2.3	41	2.2	18.4	40.4	20.7
	46.2	19	+5.6	2.5	50	2.5	16.7	41.3	19.8
	44.8	29	+5.7	2.6	48	2.6	17.2	42.0	19.6
	44.3	32	+3.9	2.3	48	2.2	16.8	41.5	19.6
	44.7	30	+1.0	1.8	42	1.7	15.6	41.3	19.9
	44.2	33	0	1.8	43	2.1	17.3	38.8	20.0
	45.2	26	+0.8	2.2	38	2.4	18.7	40.1	19.8
	46.5	17	+5.3	2.9	45	2.3	17.9	41.1	19.1
	46.1	21	+1.3	2.4	41	2.0	15.2	41.6	19.5
	47.4	13	+4.7	2.0	42	2.2	17.6	43.1	19.2
	45.0	28	+4.3	2.0	39	2.2	17.0	40.2	19.9
	45.3	23	+5.1	2.7	47	2.3	18.0	41.0	19.9
	44.5	31	+3.3	1.7	38	2.2	17.1	41.3	19.3
	46.2	19	-3.0	2.1	37	3.0	20.1	41.2	20.1

*132 days after planting

One strain, the determinate HC76-4030, was higher yielding than the check variety Cumberland. This strain had excellent lodging resistance and very good seed quality. The cyst nematode race 3 resistant strains L75-8121, L75-8209, and L77-178 were not equal in yield to the check varieties, but were very good in other agronomic characteristics. K1047 was not equal in yield to the Group III check varieties but it was resistant to lodging and to races 1, 3, 4, 5 and 6 of phytophthora root rot. The strain H7847 had very good tolerance to phytophthora root rot in the PR test at Vickery, Ohio.

PRELIMINARY TEST III, 1979

Strain	Mean 10 Tests	Ohio	Ind.	Ill.	
		S. Charleston	Lafayette	Urbana	Girard
YIELD (bu/a)					
C1545 (II)	48.5	58.8	46.4	55.5	49.5
Cumberland (III)	51.8	62.1	56.6	57.3	58.4
Union (IV)	46.9	58.5	49.2	52.7	55.0
A74-302012	50.3	55.9	49.0	58.8	53.9
A78-322024	50.6	61.9	49.1	61.1	57.6
A78-323011	47.1	59.0	49.3	56.2	48.7
A78-323019	48.7	55.3	53.1	59.1	57.1
A78-323031	49.3	59.7	47.8	58.4	58.1
A78-324002	51.4	57.0	52.5	63.6	61.7
A78-325033	40.7	47.2	39.1	44.2	49.3
A78-326026	47.5	55.7	51.7	57.1	55.9
A78-326032	48.2	51.1	55.7	56.4	52.7
C1583	48.8	58.1	51.1	55.3	56.5
HC76-3710	45.3	53.2	46.9	52.9	53.3
HC76-3715	47.8	59.4	53.8	54.9	56.8
HC76-4030	52.1	60.3	60.4	62.3	57.0
HC76-4054	45.1	55.6	53.0	53.8	43.3
HC76-4092	43.0	57.3	53.7	56.7	32.9
HW7847	45.3	61.4	37.4	55.4	53.1
HW7867	45.8	56.8	50.6	51.8	52.3
K1047	46.3	58.8	53.3	54.4	50.9
L75-8121	47.4	61.4	50.4	51.7	55.8
L75-8209	43.4	50.2	38.9	48.4	50.8
L75-12061	46.2	52.1	43.9	51.4	57.7
L75-12341	44.8	53.4	49.9	49.6	53.2
L75-12050	44.3	53.5	45.8	50.4	50.2
L75-12386	44.7	47.3	50.1	45.1	52.4
L77-178	44.2	49.3	37.5	46.8	52.7
U20109	45.2	45.8	45.6	51.1	54.1
U46192	46.5	57.3	48.3	48.1	57.0
U46682	46.1	53.1	48.6	50.9	55.8
U57073	47.4	53.2	52.2	48.1	55.7
U57139	45.0	53.1	43.6	47.8	56.7
U57162	45.3	54.3	46.2	52.2	56.0
U57250	44.5	49.9	45.2	43.6	51.3
U59245	46.2	54.7	48.7	52.3	52.7
C.V. (%)		7.6	7.1	4.7	5.1
L.S.D. (5%)		8.4	6.9	5.1	5.5
Row sp (in.)		30"	30"	30"	30"
Rows/plot		4	4	4	4
Reps		2	2	2	2

PRELIMINARY TEST III, 1979

Iowa		S.D.	Neb.	Kans.	Ky.
Stuart	Ottumwa	Elk Point	Mead	Powhattan	Lexington
<u>YIELD (bu/a)</u>					
44.5	53.2	44.8	44.7	33.4	54.4
47.0	53.9	44.7	48.6	32.0	57.5
36.7	49.0	38.3	37.5	40.0	51.6
46.5	54.2	43.8	47.4	41.7	52.2
44.7	54.4	40.1	43.6	38.1	55.3
38.4	55.0	37.6	38.9	35.2	52.2
47.6	53.1	41.7	45.1	27.1	47.6
46.3	56.5	36.9	47.6	30.1	51.4
51.9	55.6	30.8	48.4	39.0	53.8
35.1	46.0	35.7	36.1	35.4	38.4
41.3	51.4	42.1	35.7	36.0	48.4
47.3	57.8	36.3	42.6	35.1	47.2
42.0	52.6	37.9	42.1	37.3	55.1
42.3	50.8	47.1	33.7	28.7	43.7
41.0	54.5	43.0	36.6	29.4	48.8
48.3	56.5	45.4	46.2	30.1	54.6
41.9	55.0	45.1	36.5	24.3	42.5
46.3	57.4	45.9	27.1	10.8	42.3
36.7	47.7	40.4	40.6	25.7	54.9
43.1	55.5	32.9	37.7	29.8	47.7
41.8	49.3	41.1	40.7	27.8	45.3
39.7	45.1	41.2	41.7	37.0	50.1
39.3	46.4	35.3	37.9	34.3	52.3
35.3	48.9	38.6	41.6	40.8	51.4
37.4	44.8	36.8	36.5	38.9	47.4
37.1	47.3	37.3	35.0	36.9	49.9
38.5	43.5	35.2	43.7	36.5	54.5
39.1	48.3	37.3	39.2	35.0	56.6
44.1	45.8	41.8	42.7	35.1	45.4
38.9	48.4	39.8	47.5	30.1	49.5
41.1	53.5	36.8	39.2	31.7	49.9
42.1	47.0	42.0	43.9	36.5	53.1
40.7	49.1	36.4	44.5	32.8	45.6
41.8	49.5	36.7	35.4	32.8	48.4
40.2	48.0	42.7	42.9	33.9	47.3
42.7	50.0	39.5	43.1	30.9	46.9
5.0	5.9	11.1	10.2	15.0	10.0
4.3	6.1	7.2	8.4	10.0	10.1
27"	27"	30"	30"	30"	30"
4	4	3	4	4	4
2	2	3	2	2	3

PRELIMINARY TEST III, 1979

Strain	Mean 10 Tests	Ohio	Ind.	Ill.		
		S. Charleston	Lafayette	Urbana	Girard	
		<u>YIELD RANK</u>				
C1545 (II)	9	9	26	12	32	
Cumberland (III)	2	1	2	7	2	
Union (IV)	16	11	18	19	17	
A74-302012	5	17	20	5	19	
A78-322024	4	2	19	3	5	
A78-323011	15	8	17	11	34	
A78-323019	8	20	7	4	6	
A78-323031	6	6	24	6	3	
A78-324002	3	15	9	1	1	
A78-325033	36	35	33	35	33	
A78-326026	12	18	11	8	13	
A78-326032	10	30	3	10	23	
C1583	7	12	12	14	11	
HC76-3710	23	25	25	18	20	
HC76-3715	11	7	4	15	9	
HC76-4030	1	5	1	2	7	
HC76-4054	27	19	8	17	35	
HC76-4092	35	13	5	9	36	
HW7847	23	3	35	13	22	
HW7867	22	16	13	22	27	
K1047	18	9	6	16	29	
L75-8121	13	3	14	23	14	
L75-8209	34	31	34	29	30	
L75-12061	19	29	31	24	4	
L75-12341	29	24	16	28	21	
L75-12050	32	23	28	27	31	
L75-12386	30	34	15	34	26	
L77-178	33	33	36	33	23	
U20109	26	36	29	25	18	
U46192	17	13	23	30	7	
U46682	21	27	22	26	14	
U57073	13	25	10	30	16	
U57139	28	27	32	32	10	
U57162	23	22	27	21	12	
U57250	31	32	30	36	28	
U59245	19	21	21	20	23	

PRELIMINARY TEST III, 1979

Iowa		S.D.	Neb.	Kans.	Ky.
Stuart	Ottumwa	Elk Point	Mead	Powhattan	Lexington
<u>YIELD RANK</u>					
10	14	5	8	19	8
5	12	6	1	23	1
33	23	21	27	3	14
6	11	7	5	1	12
9	10	17	12	6	3
30	7	23	24	14	13
3	15	13	7	33	25
7	3	26	3	26	15
1	5	36	2	4	9
36	32	32	31	13	36
20	17	10	32	12	22
4	1	31	16	15	28
16	16	22	17	7	4
14	18	1	35	31	33
22	9	8	28	30	21
2	3	3	6	26	6
17	7	4	30	35	34
7	2	2	36	36	35
33	28	16	21	34	5
12	6	35	26	29	24
18	21	15	20	32	32
25	34	14	18	8	17
26	31	33	25	18	11
35	24	20	19	2	16
31	35	27	29	5	26
32	29	25	34	9	18
29	36	34	11	10	7
27	26	24	22	17	2
11	33	12	15	15	31
28	25	18	4	26	20
21	13	28	23	24	19
15	30	11	10	10	10
23	22	30	9	21	30
18	20	29	33	21	23
24	27	9	14	20	27
13	19	19	13	25	29

PRELIMINARY TEST III, 1979

Strain	Mean 10 Tests	Ohio	Ind.	Ill.	
		S. Charleston	Lafayette	Urbana	Girard
<u>MATURITY (date)</u>					
C1545 (II)	-6.0	-5	-6	-10	-9
Cumberland (III)*	9/26	9/22	9/24	9/27	9/20
Union (IV)	+4.9	+10	+3	+4	+5
A74-302012	-3.3	-1	-6	-6	-3
A78-322024	+0.3	0	+1	0	-1
A78-323011	-2.6	-2	-4	-3	-2
A78-323019	+2.0	+3	0	-1	+1
A78-323031	-2.4	-2	-4	-4	-2
A78-324002	+3.5	+6	+1	+3	+2
A78-325033	+5.1	+12	+4	+3	+6
A78-326026	+5.5	+8	+4	+4	+4
A78-326032	+4.9	+7	+3	+4	+3
C1583	-0.9	0	-2	-5	-2
HC76-3710	+0.9	0	-4	-2	+4
HC76-3715	+1.1	+2	-2	+1	+1
HC76-4030	+3.4	+4	+2	+3	+4
HC76-4054	-0.7	-2	-4	-2	+2
HC76-4092	-1.6	-1	-5	-2	-2
HW7847	+1.8	+2	-1	-1	+2
HW7867	-2.9	-4	-6	-6	-2
K1047	+3.1	+4	+2	+1	0
L75-8121	+3.4	+6	+2	+2	-1
L75-8209	+2.4	+2	0	0	-1
L75-12061	+5.6	+6	+3	+3	+5
L75-12341	+5.7	+6	+4	+3	+6
L75-12050	+3.9	+4	+2	+2	+4
L75-12386	+1.0	+2	0	0	+2
L77-178	0	-2	-1	-4	-2
U20109	+0.8	+3	+1	0	-2
U46192	+5.3	+12	+2	+2	+4
U46682	+1.3	+3	0	-1	-1
U57073	+4.7	+6	+3	+2	+4
U57139	+4.3	+8	+2	+2	+5
U57162	+5.1	+8	+2	+5	+4
U57250	+3.3	+4	0	+1	+2
U59245	-3.0	-2	-4	-5	-4
Date planted	5-19	5-2	5-17	5-11	5-19
*Days to maturity	132	143	130	139	124

PRELIMINARY TEST III, 1979

Iowa		S.D.	Neb.	Kans.	Ky.
Stuart	Ottumwa	Elk Point	Mead	Powhattan	Lexington
<u>MATURITY (date)</u>					
-4		-6	-4		-4
9/18		10/7	10/3		9/23
+6		+6	-4		+9
-2		0	-2		-3
+4		-1	+1		-2
-1		-3	-3		0
+6		+2	-1		+4
-2		-4	+1		-2
+4		+4	+1		+7
+5		+4	-1		+8
+6		+5	+3		+10
+8		+5	+1		+8
+2		-1	+1		+1
+4		-1	-2		+7
+2		+2	-1		+4
+6		0	+2		+3
+1		0	-2		+2
+2		-1	-2		-2
+4		+6	-2		+4
-2		-3	-2		+2
+5		+3	-1		+8
+6		+3	+1		+8
+2		+5	0		+4
+6		+8	0		+8
+6		+7	0		+8
+6		+7	+1		+5
+2		+3	-4		0
+4		+4	+1		0
0		+2	-3		+4
+6		+7	+1		+8
+2		+1	-2		+7
+6		+5	0		+7
+5		+4	-1		+9
+6		+7	+1		+8
+6		+5	0		+2
-2		-2	-1		-4
5-16	5-15	5-25	5-23	6-19	5-23
125	—	135	133	—	123

PRELIMINARY TEST III, 1979

Strain	Mean 10 Tests	Ohio	Ind.	Ill.	
		S. Charleston	Lafayette	Urbana	Girard
<u>LODGING (score)</u>					
C1545 (II)	1.6	2.2	1.8	1.9	1.2
Cumberland (III)	2.3	3.5	2.5	3.0	2.6
Union (IV)	2.6	4.0	2.8	3.4	3.0
A74-302012	1.8	2.8	2.0	2.6	1.3
A78-322024	2.8	3.5	3.3	4.0	2.6
A78-323011	2.1	2.8	2.3	3.9	2.0
A78-323019	2.6	3.8	3.0	3.6	2.5
A78-323031	2.4	3.8	2.0	2.8	2.5
A78-324002	2.8	4.0	3.8	3.4	3.2
A78-325033	2.9	4.2	2.8	3.7	3.0
A78-326026	2.6	3.2	3.3	3.9	2.8
A78-326032	2.9	4.2	3.8	3.8	3.6
C1583	2.1	2.2	2.5	2.8	2.0
HC76-3710	1.2	1.5	1.5	1.3	1.1
HC76-3715	1.2	1.5	1.5	1.2	1.1
HC76-4030	1.2	1.5	1.5	1.2	1.2
HC76-4054	1.3	1.8	1.5	1.3	1.1
HC76-4092	1.1	1.0	1.3	1.0	1.0
HW7847	2.7	3.5	3.5	3.4	3.0
HW7867	1.4	1.8	1.5	1.6	1.2
K1047	1.8	2.2	2.0	1.7	1.4
L75-8121	2.3	3.0	2.8	3.4	2.1
L75-8209	2.3	3.2	2.8	3.8	2.2
L75-12061	2.5	3.8	3.0	3.3	2.8
L75-12341	2.6	3.8	3.3	3.7	1.9
L75-12050	2.3	3.5	2.5	3.1	2.5
L75-12386	1.8	2.8	2.0	2.5	1.5
L77-178	1.8	2.5	2.3	2.6	2.0
U20109	2.2	3.5	2.8	3.1	2.2
U46192	2.9	4.5	2.8	3.8	3.3
U46682	2.4	3.8	3.0	3.7	2.2
U57073	2.0	3.2	2.5	2.4	1.8
U57139	2.0	2.8	2.5	3.1	1.8
U57162	2.7	3.5	3.5	3.6	3.0
U57250	1.7	2.2	1.8	3.0	1.8
U59245	2.1	3.2	2.8	2.8	1.6

PRELIMINARY TEST III, 1979

Iowa		S.D.	Neb.	Kans.	Ky.
Stuart	Ottumwa	Elk Point	Mead	Powhattan	Lexington
<u>LODGING (score)</u>					
1.7	2.8	1.0	1.3	1.0	1.0
1.8	3.6	1.0	1.5	1.0	2.0
2.4	3.8	1.0	1.5	1.0	3.0
1.7	2.6	1.0	1.8	1.0	1.0
2.8	4.6	1.0	2.8	1.0	2.0
2.0	2.6	1.0	2.3	1.0	1.0
2.4	3.3	1.0	2.5	1.0	3.0
2.4	4.1	1.0	1.8	1.0	3.0
2.7	3.8	1.0	2.0	1.0	3.0
3.5	4.7	1.0	2.5	1.0	3.0
2.8	3.2	1.0	2.0	1.0	3.0
2.6	3.4	1.0	2.0	1.0	4.0
2.7	3.3	1.0	1.5	1.0	2.0
1.6	1.2	1.0	1.0	1.0	1.0
1.6	1.1	1.0	1.0	1.0	1.0
1.7	1.0	1.0	1.0	1.0	1.0
1.5	1.3	1.0	1.0	1.0	1.0
1.7	1.2	1.0	1.0	1.0	1.0
3.0	3.6	1.0	1.5	1.0	3.0
1.5	2.2	1.0	1.0	1.0	1.0
2.2	2.5	1.0	1.8	1.0	2.0
2.2	2.6	1.0	1.8	1.0	3.0
2.1	3.6	1.0	1.5	1.0	2.0
2.6	3.2	1.0	2.0	1.3	2.0
3.0	3.3	1.0	1.5	1.0	3.0
2.3	3.8	1.0	1.5	1.0	2.0
1.7	1.9	1.0	1.5	1.0	2.0
1.9	2.6	1.0	1.5	1.0	1.0
2.0	3.2	1.0	1.5	1.0	2.0
3.0	4.3	1.0	2.0	1.3	3.0
2.4	3.2	1.0	1.5	1.0	2.0
1.8	2.4	1.0	1.8	1.3	2.0
1.6	2.2	1.0	1.8	1.0	2.0
2.4	3.4	1.0	2.5	1.0	3.0
1.4	1.8	1.0	1.5	1.0	1.0
2.0	3.4	1.0	1.5	1.0	2.0

PRELIMINARY TEST III, 1979

Strain	Mean 10 Tests	Ohio	Ind.	Ill.	
		S. Charleston	Lafayette	Urbana	Girard
<u>HEIGHT (inches)</u>					
C1545 (II)	37	42	42	42	36
Cumberland (III)	37	38	43	42	35
Union (IV)	45	50	52	54	47
A74-302012	40	44	50	44	40
A78-322024	46	48	59	63	44
A78-323011	39	40	48	45	40
A78-323019	42	43	46	49	42
A78-323031	36	40	41	42	37
A78-324002	43	43	49	51	43
A78-325033	46	46	59	53	49
A78-326026	44	48	48	49	47
A78-326032	39	38	42	46	40
C1583	43	45	50	46	42
HC76-3710	27	28	27	26	22
HC76-3715	26	28	26	28	24
HC76-4030	25	24	26	26	23
HC76-4054	26	29	22	29	23
HC76-4092	24	30	25	25	18
HW7847	46	48	57	53	48
HW7867	35	36	41	41	32
K1047	33	36	33	33	29
L75-8121	43	48	49	46	45
L75-8209	41	44	48	47	41
L75-12061	50	55	60	55	54
L75-12341	48	51	58	54	47
L75-12050	48	48	57	57	51
L75-12386	42	44	48	50	45
L77-178	43	46	52	47	44
U20109	38	38	46	46	40
U46192	45	48	51	53	46
U46682	41	45	49	46	44
U57073	42	46	47	50	44
U57139	39	42	46	44	41
U57162	47	49	63	54	47
U57250	38	45	45	43	40
U59245	37	39	42	44	38

PRELIMINARY TEST III, 1979

Iowa		S.D.	Neb.	Kans.	Ky.
Stuart	Ottumwa	Elk Point	Mead	Powhattan	Lexington
HEIGHT (inches)					
36	44	35	32	28	35
34	44	37	32	27	38
42	48	42	39	32	41
39	46	37	36	28	38
42	51	39	38	29	47
36	46	36	34	30	39
42	50	40	35	30	39
35	42	33	31	26	37
42	50	43	38	30	40
43	54	46	38	34	42
42	49	43	39	32	39
37	46	39	36	28	41
45	52	43	39	30	41
29	30	31	21	24	27
28	28	30	22	20	25
26	29	30	22	20	25
28	32	29	23	18	27
28	28	28	20	13	27
46	52	45	43	25	47
34	40	32	30	28	32
37	38	34	28	28	31
40	48	40	36	33	45
38	48	38	34	29	41
48	57	42	43	35	51
49	54	43	42	36	46
47	50	45	43	35	48
40	46	39	34	30	41
40	46	42	36	30	43
38	40	39	33	25	33
42	52	41	41	33	45
38	46	41	34	29	41
38	46	39	36	28	42
37	44	42	31	29	35
44	50	44	39	32	44
36	43	36	34	25	37
34	42	36	30	26	39

PRELIMINARY TEST III, 1979

Strain	Mean 9 Tests	Ohio	Ind.	Ill.	
		S. Charleston	Lafayette	Urbana	Girard
		<u>QUALITY (score)</u>			
C1545 (II)	2.3	2.0	1.5	3.0	2.3
Cumberland (III)	2.1	1.5	1.0	2.8	2.5
Union (IV)	2.0	1.5	1.5	2.3	2.0
A74-302012	2.4	2.5	1.5	2.3	2.3
A78-322024	2.4	2.0	1.0	2.8	2.5
A78-323011	2.3	1.5	1.5	2.5	2.8
A78-323019	2.0	1.5	1.0	2.0	2.0
A78-323031	2.4	2.0	1.5	3.0	2.8
A78-324002	1.8	1.0	1.5	2.0	2.3
A78-325033	2.2	2.0	1.5	2.5	2.0
A78-326026	2.3	2.0	1.5	2.8	2.3
A78-326032	2.0	2.0	1.5	2.5	2.5
C1583	2.0	2.0	1.5	2.3	2.3
HC76-3710	1.5	1.0	1.0	1.3	1.3
HC76-3715	1.8	1.0	1.0	1.5	1.8
HC76-4030	1.8	1.0	1.0	2.3	1.5
HC76-4054	1.9	1.5	1.0	1.8	2.0
HC76-4092	2.0	1.0	1.0	2.0	2.3
HW7847	1.9	1.0	1.0	2.3	2.3
HW7867	2.9	3.0	2.5	3.3	2.8
K1047	1.5	1.0	1.0	1.8	1.8
L75-8121	1.9	1.5	1.5	1.5	2.3
L75-8209	2.2	1.0	1.5	2.5	2.5
L75-12061	2.5	2.0	1.5	2.5	2.8
L75-12341	2.6	2.5	1.0	3.0	3.0
L75-12050	2.2	1.5	1.0	2.3	2.3
L75-12386	1.7	1.5	1.0	1.8	1.5
L77-178	2.1	1.5	2.0	2.8	2.5
U20109	2.4	2.0	1.5	2.8	3.3
U46192	2.3	2.5	2.0	2.8	2.5
U46682	2.0	1.5	1.5	2.5	2.3
U57073	2.2	1.5	1.0	2.3	2.3
U57139	2.2	1.0	1.5	2.5	2.5
U57162	2.3	1.5	1.0	2.5	2.8
U57250	2.2	1.5	1.5	2.3	1.8
U59245	3.0	3.0	2.0	3.8	3.0

PRELIMINARY TEST III, 1979

Iowa		S.D.	Neb.	Kans.	Ky.
Stuart	Ottumwa	Elk Point	Mead	Powhattan	Lexington
<u>QUALITY (score)</u>					
	1.6	4.0	2.3	2.0	2.0
	1.6	4.0	3.0	1.5	1.0
	1.5	3.0	2.5	2.0	2.0
	1.8	4.0	2.5	2.0	3.0
	2.1	3.0	2.8	2.5	3.0
	1.8	3.0	2.5	2.0	3.0
	2.1	2.0	2.5	2.5	2.0
	1.9	3.0	2.3	3.0	2.0
	1.4	2.0	2.0	2.0	2.0
	1.4	3.0	2.0	1.5	4.0
	1.4	2.0	3.3	2.0	3.0
	1.3	2.0	2.5	2.0	2.0
	1.8	3.0	2.3	1.5	1.0
	1.5	2.0	1.8	2.0	2.0
	1.8	4.0	1.5	2.5	1.0
	1.4	4.0	1.5	2.5	1.0
	1.4	3.0	2.0	2.5	2.0
	1.5	3.0	2.3	2.0	3.0
	1.3	3.0	1.8	2.5	2.0
	2.4	4.0	3.3	2.5	2.0
	1.4	2.0	1.8	2.0	1.0
	1.4	3.0	2.0	2.5	1.0
	1.5	4.0	2.3	2.5	2.0
	1.9	4.0	2.0	2.5	3.0
	2.7	3.0	2.3	2.5	3.0
	1.6	3.0	2.8	2.0	3.0
	1.4	3.0	2.0	2.0	1.0
	1.5	3.0	2.5	2.5	1.0
	1.4	4.0	2.3	2.0	2.0
	1.6	3.0	2.3	2.0	2.0
	1.4	3.0	2.0	2.0	2.0
	1.5	4.0	2.5	2.0	3.0
	1.6	3.0	2.0	2.5	3.0
	1.8	3.0	2.3	2.5	3.0
	1.9	4.0	2.5	2.0	2.0
	2.5	4.0	2.5	2.5	4.0

PRELIMINARY TEST III, 1979

Strain	Mean 9 Tests	Ohio	Ind.	Ill.	
		S. Charleston	Lafayette	Urbana	Girard
<u>SIZE (g/100)</u>					
C1545 (II)	19.1	19.3	18.8	17.9	17.8
Cumberland (III)	19.4	19.7	19.5	18.5	18.4
Union (IV)	18.6	18.4	19.4	18.8	17.8
A74-302012	20.6	21.3	20.5	18.6	19.7
A78-322024	18.6	19.6	19.0	18.6	17.8
A78-323011	18.9	19.3	20.1	19.1	17.3
A78-323019	13.8	12.5	13.6	13.1	12.3
A78-323031	17.4	17.8	17.0	16.9	16.7
A78-324002	14.9	15.9	14.7	14.8	14.5
A78-325033	16.1	16.8	14.7	14.9	15.0
A78-326026	14.8	15.7	15.4	13.8	13.0
A78-326032	16.7	17.5	17.7	18.2	15.1
C1583	17.8	18.2	18.5	18.1	16.9
HC76-3710	14.8	14.7	13.5	12.7	13.7
HC76-3715	16.2	16.8	16.0	14.4	15.4
HC76-4030	15.6	16.4	16.3	15.0	15.2
HC76-4054	16.7	18.6	15.1	15.0	15.8
HC76-4092	17.4	16.7	17.1	16.7	17.2
HW7847	18.5	19.3	16.3	17.7	17.0
HW7867	17.9	19.2	18.2	17.1	17.5
K1047	15.8	16.0	17.0	15.7	14.9
L75-8121	16.6	16.7	17.0	15.6	14.7
L75-8209	18.4	17.3	17.2	17.9	17.0
L75-12061	16.7	16.2	16.2	15.5	16.3
L75-12341	17.2	17.8	17.5	16.0	16.7
L75-12050	16.8	15.8	16.2	16.1	15.8
L75-12386	15.6	15.4	14.9	14.4	13.8
L77-178	17.3	15.5	17.8	16.1	15.8
U20109	18.7	19.0	19.2	19.8	17.5
U46192	17.9	18.9	17.8	17.4	16.9
U46682	15.2	15.3	15.6	14.8	15.1
U57073	17.6	18.2	18.1	17.0	15.5
U57139	17.0	16.5	16.6	16.5	16.0
U57162	18.0	17.1	16.7	17.4	17.1
U57250	17.1	16.3	16.5	16.4	15.8
U59245	20.1	21.2	20.5	18.5	18.8

PRELIMINARY TEST III, 1979

Iowa		S.D.	Neb.	Kans.	Ky.
Stuart	Ottumwa	Elk Point	Mead	Powhattan	Lexington
<u>SIZE (g/100)</u>					
	19.4	19.8	18.8	21.1	18.6
	20.1	18.9	18.7	20.8	19.7
	19.5	18.1	16.7	18.4	20.5
	20.7	21.5	19.1	23.0	21.0
	19.4	19.0	17.7	17.9	18.8
	19.3	19.8	17.5	18.7	19.0
	13.8	14.6	15.0	14.4	14.5
	18.1	17.4	16.6	18.2	17.7
	15.5	13.4	14.3	15.0	16.3
	16.5	17.2	15.2	17.1	17.1
	14.8	15.8	14.5	14.6	15.4
	16.7	17.4	15.3	15.8	16.8
	18.8	18.1	16.7	17.3	17.3
	14.8	16.5	16.1	14.7	16.2
	15.4	17.3	16.3	15.7	18.5
	14.2	16.7	15.4	14.4	16.6
	17.3	19.4	17.1	17.1	14.8
	16.8	21.5	17.3	17.3	15.6
	19.8	19.2	18.5	19.8	19.3
	17.4	17.4	17.8	18.4	17.9
	14.7	16.2	14.8	15.6	17.0
	18.4	15.4	16.5	17.6	17.3
	20.2	19.0	18.6	18.6	19.5
	18.0	16.6	15.8	18.1	17.9
	18.1	17.7	16.8	17.6	16.6
	17.0	17.8	16.2	18.9	17.8
	16.0	16.2	15.9	17.4	16.0
	18.2	17.8	17.1	18.9	18.8
	19.7	17.9	17.5	19.4	18.7
	18.3	16.9	17.7	18.4	18.6
	15.3	15.1	14.1	16.2	15.4
	18.1	17.3	16.8	18.0	19.0
	16.5	17.3	17.1	18.4	17.9
	19.1	18.8	17.0	20.1	19.1
	17.5	18.1	16.0	18.6	18.4
	21.0	19.8	20.8	22.0	18.6

PRELIMINARY TEST III, 1979

Strain	Mean 5 Tests	Ind.	Ill.	Iowa	Kans.	Ohio
		Lafayette	Urbana	Ottumwa	Powhattan	S. Charles- ton
<u>% PROTEIN</u>						
C1545 (II)	42.8	41.8	43.1	42.9	45.4	41.0
Cumberland (III)	39.9	38.4	39.2	40.9	39.5	41.3
Union (IV)	41.7	40.4	42.8	41.8	42.9	40.5
A74-302012	39.6	38.2	39.6	38.0	40.7	41.4
A78-322024	42.9	41.0	45.9	43.1	42.4	41.9
A78-323011	41.0	40.4	43.3	39.4	42.2	39.9
A78-323019	40.6	40.0	41.2	40.4	39.9	41.3
A78-323031	41.5	40.1	41.2	41.0	42.0	43.0
A78-324002	41.6	41.7	43.5	39.4	42.0	41.6
A78-325033	41.0	39.0	42.1	40.4	42.7	40.8
A78-326026	40.7	39.7	41.4	41.7	39.9	41.0
A78-326032	41.8	40.7	41.9	41.5	43.2	41.8
C1583	40.6	38.8	41.9	40.5	40.1	41.6
HC76-3710	42.5	41.1	43.3	43.9	41.2	43.2
HC76-3715	41.8	40.7	41.1	42.0	42.8	42.6
HC76-4030	43.5	44.1	43.1	43.6	44.8	42.1
HC76-4054	42.8	41.2	43.2	44.6	42.6	42.5
HC76-4092	41.8	41.0	42.3	41.1	42.3	42.3
HW7847	41.0	37.8	42.1	41.4	41.4	42.2
HW7867	42.1	41.2	42.4	41.2	43.1	42.5
K1047	44.7	43.3	44.8	45.0	45.6	44.8
L75-8121	39.2	39.4	38.0	39.9	39.4	39.2
L75-8209	40.4	37.9	42.8	40.4	40.2	40.9
L75-12061	41.3	40.8	42.9	41.4	40.7	40.9
L75-12341	42.0	41.5	43.3	41.7	42.2	41.1
L75-12050	41.5	40.8	40.7	41.3	42.9	41.7
L75-12386	41.3	39.8	41.9	42.1	39.7	43.0
L77-178	38.8	37.2	39.3	38.9	38.9	39.7
U20109	40.1	37.8	41.2	41.0	38.4	41.9
U46192	41.1	39.0	42.0	43.5	40.6	40.5
U46682	41.6	40.0	43.5	41.0	40.5	43.0
U57073	43.1	42.5	44.2	41.7	43.5	43.5
U57139	40.2	39.1	41.1	40.7	38.6	41.4
U57162	41.0	41.0	40.7	41.5	40.7	41.2
U57250	41.3	41.4	41.4	41.7	39.5	42.4
U59245	41.2	40.4	42.5	40.1	42.1	41.0

PRELIMINARY TEST III, 1979

Mean 5 Tests	Ind.	Ill.	Iowa	Kans.	Ohio
	Lafayette	Urbana	Ottumwa	Powhattan	S. Charleston
	<u>% OIL</u>				
19.7	19.5	19.1	20.2	19.2	20.5
20.5	21.0	20.2	20.2	21.4	19.7
19.4	19.6	18.9	19.5	18.8	20.2
20.7	20.7	20.0	21.6	20.6	20.5
20.0	20.2	19.4	20.2	20.5	19.8
19.5	20.2	18.6	20.1	19.2	19.6
20.3	20.3	19.6	20.2	21.0	20.3
19.7	20.2	19.0	20.1	19.7	19.3
19.5	19.3	18.7	20.4	19.6	19.7
19.5	20.4	18.8	19.7	19.2	19.5
20.1	20.5	19.1	20.4	20.6	20.1
19.5	19.8	19.3	19.8	19.5	19.1
20.0	20.8	19.4	20.3	20.2	19.4
19.4	19.7	18.9	19.3	19.9	19.4
19.5	19.3	19.3	19.4	19.8	19.7
19.5	19.1	19.1	19.9	19.4	19.8
19.7	20.1	19.2	19.4	20.2	19.7
19.4	20.1	18.9	19.9	19.4	18.8
20.8	21.8	19.9	20.6	20.2	21.4
19.6	20.4	19.1	19.2	19.7	19.8
18.8	19.3	18.4	19.6	18.2	18.6
19.9	19.5	20.2	20.0	19.7	20.3
20.7	21.8	19.9	20.3	21.0	20.4
19.8	19.8	19.0	20.3	19.5	20.2
19.6	19.7	19.0	20.1	19.4	19.7
19.6	19.6	19.1	19.9	19.0	20.2
19.9	20.3	18.9	20.2	20.5	19.8
20.0	20.7	19.0	20.3	19.7	20.1
19.8	20.6	19.2	20.0	20.3	18.8
19.1	19.6	18.6	18.4	19.2	19.8
19.5	20.0	18.6	20.1	19.5	19.3
19.2	19.3	18.3	20.6	18.5	19.1
19.9	20.2	18.9	19.9	20.9	19.4
19.9	19.6	19.4	20.6	19.5	20.3
19.3	19.0	19.3	19.5	19.6	18.9
20.1	20.4	19.3	20.7	19.6	20.3

UNIFORM TEST IV, 1979

Strain	Parentage	Previous Testing*	Generation Compositd
Crawford	Williams x Columbus	UT IV 1976	F ₅
Essex (V)	Lee x S5-7075	2	F ₆
Franklin	L12 x Custer	IVs 1975	F ₅
Union (IV)	Williams ⁵ x SL11 (Wayne <u>Rpm Rps</u>)	3	F ₃
Williams 79(L23)(III)	Williams ⁶ x Lee 68	UT III	10F ₃
A77-314014	Coles x A72-507	P IV	F ₄
C1573	C1421 x Williams	P IV	F ₇
Desoto (K1024)	L66L-140 x Columbus	2	F ₄
<i>Douglas</i> K1033	Williams x Calland	1	F ₅
K1041	Williams x Calland	P III	F ₆
K1042	L66L-140 x Cutler 71	P IV	F ₃
L70L-3048	L15 x D64-3146	4	F ₇
<i>Pixie</i> L74D-609	Williams x Ransom	2	F ₅
L74L-125	Calland x Williams	1	F ₆
L74L-497	Wayne <u>Ir</u> x Coker Hampton 266A	P IV	F ₅
L75-8381	Williams x L70-2450	P IV	F ₄
S76-2109	D67-3297 x Essex	P IV	F ₄

*Number of years in this test or name of 1978 test.

Descriptive and Other Data

Strain	Descriptive Code	Chlorosis Hypocotyl		Shattering	
		Score Ames	Score Ames	Texas Lubbock	Manhattan 2 Weeks
Crawford	PTTn SYB1	4	2	1.5	1
Essex (V)	PTTn DYBf	3	1	1	1
Franklin	PGBr SYIb	2	1	4.5	1
Union (IV)	WTTn SYB1	3	3	1.5	2
L23 (III)	WTTn SYB1	3	5	1.5	1
A77-314014	WGBr SYB1	4	5	2.2	1
C1573	WTTn SYB1	3	1	2.5	1
K1024	PTBr SYB1	3	4	2	1
K1033	WTBr DYIb	3	5	1.5	1
K1041	WTTn DYB1	3	1	2.5	1
K1042	WTTn SYB1	3	2	1.7	1
L70L-3048	WGTh SYBf	3	5	1.5	1
L74D-609	PTTn SYB1	3	1	2	1
L74L-125	PTBr SYB1	3	1	1.7	1
L74L-497	PTBr SYBf+B1	4	1	1.5	2
L75-8381	WTTn SYB1	3	1	2	2
S76-2109	WTTn SYBf	3	1	1	1

UNIFORM TEST IV, 1979

Disease Data

<u>FE₂</u>	<u>BSR</u>			<u>DM</u>	<u>GERM*</u>	<u>PSB</u>	<u>SMV</u>	<u>PR</u>	<u>Race 1</u>
Laf. Ind. a	Laf. Ind. n	Minn. n	Ames Ia. n	Eldo- rado Ill. n	Lafayette, d	IN d	a	Laf. Ind. a	Ames Ia. a
score	%	%	Reac.	Score	%	%	-----Reaction-----		
5	100	40	S	3	97	2	5E	S	S
1	100	45	S	2.1	92	0	1	S	S
5	100	35	S	3.1	97	2	4M	R	R
4	40	40	S	1	95	0	5E	R	R
4	60	35	S	3.3	96	0	5E	R	R
4	0	20	S	3.1	97	0	5S	Seg	S
5	0	5	S	3	98	0	5M	R	H
3	20	50	S	2.8	99	0	5E	S	S
4	20	55	S	3.4	98	2	4M	R	H
5	80	35	S	2.6	96	2	5E	R	R
2	100	55	S	3.1	99	0	5E	R	R
1	80	40	S	3.2	99	0	4M	S	S
1	40	40	S	1	98	0	5E	S	S
4	0	25	S	3	97	0	5E	S	S
3	80	40	S	1.7	98	0	5E	S	S
5	60	50	S	4	97	0	5E	S	H
4	80	70	S	2.3	97	0	3E	S	H

*Petri dish germination on potato dextrose agar.

The strain K1033 was the highest yielding entry in 1978 and 1979 in this test and is resistant to races 1 and 2 of phytophthora root rot. L74-125 ranked second in yield in 1979, had the highest two-year mean yield, and has excellent resistance to lodging. The cyst nematode race 3 resistant strain L75-8381 was about 2 bushels higher in yield, 4 days earlier in maturity, and was slightly more resistant to lodging than Franklin.

UNIFORM TEST IV, 1979

Regional Summary

Strain	Yield	Rank	Matu-		Lodg-	Seed	Seed	Composition	
			rity	ing				Height	Quality
No. of Tests	23	23	19	23	23	23	19	5	5
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Crawford	37.7	16	+8.2	2.2	40	1.9	15.5	41.3	19.8
Essex (V)	37.3	17	+15.1	2.3	34	1.7	12.5	42.4	18.8
Franklin	37.9	15	+2.5	2.2	40	2.2	15.1	37.9	21.1
Union (IV)	43.1	4	9/28*	2.2	39	2.2	18.1	41.7	20.0
L23 (III)	43.0	5	-3.6	1.7	36	2.0	17.5	40.7	21.0
A77-314014	43.0	5	+3.4	2.2	38	2.8	17.0	42.4	19.4
C1573	41.9	9	+4.0	2.2	39	2.0	16.5	40.6	20.1
K1024	41.1	11	+3.0	1.9	36	2.1	16.3	40.8	20.4
K1033	42.6	8	+5.7	1.9	35	2.6	18.4	39.6	20.8
K1041	44.1	1	+1.4	2.2	39	2.3	17.4	39.3	20.9
K1042	41.2	10	+0.8	1.6	37	2.2	18.8	40.2	21.6
L70L-3048	43.4	3	+2.7	2.1	37	2.2	15.8	39.9	21.0
<i>Pixie</i> L74D-609	43.0	5	+1.8	1.5	21	1.9	16.8	41.5	20.5
L74L-125	43.6	2	+0.7	1.5	35	2.3	18.1	41.1	20.2
L74L-497	40.9	12	+7.7	1.9	38	2.2	16.1	40.7	20.1
L75-8381	39.7	14	-2.1	1.9	35	2.0	14.8	39.5	20.9
S76-2109	40.0	13	+14.1	1.7	33	1.8	11.6	40.3	19.1

*129 days after planting

1978-1979, 2-year mean

No. of Tests	46	46	39	43	46	46	39	14	14
Desoto (K1024)	40.6	6	+2.7	2.0	37	2.0	16.2	41.2	20.7
Essex (V)	37.7	7	+17.1	2.3	34	1.8	12.6	42.5	19.8
Union (IV)	42.4	4	9/25.9*	2.3	40	2.1	18.0	42.2	20.6
K1033	42.8	1	+6.8	2.0	36	2.6	18.2	41.3	20.9
L70L-3048	42.5	3	+2.9	2.2	38	2.2	15.6	41.2	21.3
<i>Pixie</i> L74D-609	42.3	5	+1.5	1.5	21	1.8	16.6	42.3	21.0
L74L-125	42.8	1	+0.5	1.5	36	2.2	17.6	41.8	20.6

*125 days after planting

1977-1979, 3-year mean

No. of Tests	66	66	58	66	69	67	57	24	24
Desoto (K1024)	41.4	4	+2.9	2.0	37	2.2	16.7	40.7	20.7
Essex (V)	38.5	5	+17.3	2.3	33	1.9	13.0	41.9	20.1
Union (IV)	42.3	2	9/25.7*	2.3	39	2.3	18.4	41.7	20.7
L70L-3048	42.5	1	+2.7	2.2	38	2.5	15.8	40.9	21.5
<i>Pixie</i> L74D-609	41.6	3	+1.2	1.4	20	1.9	16.8	41.7	21.2

*126 days after planting

UNIFORM TEST IV, 1979

Strain	Mean 23 Tests	Del.	N.J.	Md.	Pa.	Ohio	
		George- town	Adel- phia	Queens- town	Landis- ville	S. Charles- ton	Wheelers- burg*
<u>YIELD (bu/a)</u>							
Crawford	37.7	36.6	21.7	38.8	41.7	39.6	33.8
Essex (V)	37.3	30.7	14.0	37.1	44.1	39.9	33.0
Franklin	37.9	44.6	22.1	44.8	40.5	43.7	18.2
Union (IV)	43.1	36.3	34.0	50.5	43.4	54.3	38.7
L23 (III)	43.0	37.9	32.3	48.4	42.2	53.8	29.4
A77-314014	43.0	40.1	28.7	47.7	43.4	56.5	19.9
C1573	41.9	27.2	29.6	48.2	46.4	44.3	31.1
K1024	41.1	21.6	26.4	43.3	40.9	42.6	33.7
K1033	42.6	27.6	26.3	52.1	47.8	53.7	30.8
K1041	44.1	37.8	34.8	52.7	45.6	57.8	37.7
K1042	41.2	30.0	27.5	49.9	47.9	49.0	21.2
L70L-3048	43.4	37.2	31.5	51.7	44.1	54.0	29.8
L74D-609	43.0	43.0	35.4	52.9	53.4	58.3	44.8
L74L-125	43.6	28.9	33.1	51.4	48.5	45.2	29.0
L74L-497	40.9	24.6	22.6	42.4	48.6	44.2	40.9
L75-8381	39.7	36.8	26.1	47.6	42.2	41.3	23.4
S76-2109	40.0	40.3	18.5	43.4	42.5	45.8	35.6
C.V. (%)		14.8	10.0	5.2	11.3	8.5	28.0
L.S.D. (5%)		3.7	5.5	4.1	N.S.	6.8	14.3
Row sp (in.)		30"	30"	30"	30"	30"	30"
Rows/plot		4	3	4	4	4	4
Reps		2	4	3	3	3	3
<u>YIELD RANK</u>							
Crawford	16	9	15	16	15	17	6
Essex (V)	17	11	17	17	8	16	8
Franklin	15	1	14	12	17	13	16
Union (IV)	4	10	3	6	10	4	3
L23 (III)	5	5	5	8	13	6	12
A77-314014	5	4	8	10	10	3	15
C1573	9	15	7	9	6	11	9
K1024	11	17	10	14	16	14	7
K1033	8	14	11	3	5	7	10
K1041	1	6	2	2	7	2	4
K1042	10	12	9	7	4	8	14
L70L-3048	3	7	6	4	8	5	11
L74D-609	5	2	1	1	1	1	1
L74L-125	2	13	4	5	3	10	13
L74L-497	12	16	13	15	2	12	2
L75-8381	14	8	12	11	13	15	13
S76-2109	13	3	16	13	12	19	5

*Not included in mean due to Mexican bean beetle damage

UNIFORM TEST IV, 1979

Strain	Neb.	Ky.	Ind.		Ill.			
	Lincoln	Lexington	Lafayette	Sullivan	Browns- town	Belle- ville	Carbon- dale	Eldo- rado
	<u>YIELD (bu/a)</u>							
Crawford	43.5	48.8	42.6	48.3	40.3	45.3	39.5	48.5
Essex (V)	31.6	44.9	40.5	40.7	38.7	46.3	45.7	53.3
Franklin	42.2	41.4	45.4	40.0	43.0	40.6	42.0	44.6
Union (IV)	46.2	50.3	54.7	54.4	47.1	50.6	48.1	54.8
L23 (III)	42.3	54.7	53.8	55.5	50.4	52.9	49.9	53.9
A77-314014	47.2	51.3	48.8	47.0	52.1	53.1	49.8	55.1
C1573	46.6	54.7	46.3	43.1	46.4	51.5	51.2	51.9
K1024	45.6	55.2	46.5	44.2	43.1	50.8	49.4	54.2
K1033	48.3	52.7	50.1	37.4	45.9	50.6	55.0	51.4
K1041	49.2	53.4	51.2	44.9	47.1	50.3	51.7	56.6
K1042	49.7	59.9	46.7	38.3	48.1	50.0	50.7	50.6
L70L-3048	50.8	54.8	50.7	50.2	49.9	49.7	48.6	53.1
L74D-609	37.0	55.4	65.9	43.0	51.6	54.4	50.1	54.3
L74L-125	45.2	53.3	53.3	39.1	53.4	52.5	56.6	55.3
L74L-497	44.6	48.3	50.3	47.5	47.9	47.8	48.1	53.1
L75-8381	50.1	51.7	40.7	37.5	45.5	46.1	46.4	49.8
S76-2109	45.2	48.8	44.4	34.0	40.7	52.1	45.2	52.6
C.V. (%)	9.8	9.8	12.5	28.1	7.3	8.2	8.5	6.4
L.S.D. (5%)	7.2	8.4	10.0	20.2	5.7	6.8	6.8	5.6
Row sp (in.)	30"	30"	30"	30"	30"	30"	30"	30"
Rows/plot	4	4	4	3	4	4	4	4
Reps	3	3	3	3	3	3	3	3

	<u>YIELD RANK</u>							
Crawford	13	13	15	4	16	16	17	16
Essex (V)	17	16	17	11	17	14	14	8
Franklin	15	17	13	12	14	17	16	17
Union (IV)	8	12	2	2	8	8	12	4
L23 (III)	14	5	3	1	4	4	7	7
A77-314014	6	11	9	6	2	2	8	3
C1573	7	6	12	9	10	6	4	12
K1024	9	3	11	8	13	7	9	6
K1033	5	9	8	16	11	8	2	13
K1041	4	7	5	7	8	10	3	1
K1042	3	1	10	14	6	11	5	14
L70L-3048	1	4	6	3	5	12	10	9
L74D-609	16	2	1	10	3	1	6	5
L74L-125	11	8	4	13	1	5	1	2
L74L-497	12	15	7	5	7	13	11	9
L75-8381	2	10	16	15	12	15	13	15
S76-2109	10	14	14	7	15	3	15	11

UNIFORM TEST IV, 1979

Novel- ty	Mo.			Kan.				Tex.	
	Colum- bia	Clin- ton	Portageville Loam Clay	Pow- hatten	Man- hattan	Otta- wa	Colum- bus	Lub- bock	
<u>YIELD (bu/a)</u>									
44.2	41.4	46.3	36.8	17.8	34.4	43.7	30.6	33.1	44.7
26.2	38.2	42.7	33.7	20.5	—	48.2	29.6	30.1	43.0
44.4	36.6	40.2	30.6	14.6	32.5	43.6	26.8	28.8	38.1
52.9	35.3	44.3	22.8	19.0	39.8	50.5	34.0	32.2	35.6
47.7	35.3	39.7	22.5	22.3	43.6	47.2	31.6	34.3	37.2
45.3	31.8	44.0	28.2	19.2	42.9	50.0	34.7	32.8	39.2
47.3	38.6	42.1	29.7	20.6	39.2	53.5	34.1	34.6	37.7
46.8	37.2	41.3	34.8	15.0	37.7	55.6	38.1	34.9	39.0
47.1	42.5	41.4	34.6	17.7	28.6	58.9	36.1	31.9	41.5
51.8	34.2	39.2	26.4	19.6	43.7	52.0	33.6	37.3	44.5
51.3	33.2	39.6	22.9	16.5	36.6	49.4	34.4	33.4	31.6
48.6	34.8	44.7	26.6	16.2	41.7	50.9	35.5	34.6	38.6
48.6	37.1	39.1	17.2	10.9	36.0	39.7	37.5	33.4	35.6
52.4	35.8	45.8	27.5	20.6	41.1	48.8	38.4	36.7	39.2
39.4	38.2	50.7	30.8	19.9	35.7	52.1	30.5	33.4	40.8
52.4	31.9	30.9	26.6	19.9	42.6	50.0	31.0	32.8	33.2
35.3	38.8	45.2	28.9	20.3	—	51.8	34.7	31.3	41.1
11.4	10.1	8.8	10.5	14.8	10.6	7.3	7.2	6.3	—
7.5	5.3	5.0	4.9	4.5	6.0	6.0	4.1	3.5	—
30"	30"	30"	38"	38"	30"	30"	30"	30"	40"
2	2	2	3	3	4	4	4	4	4
4	4	4	3	3	3	3	3	3	3
<u>YIELD RANK</u>									
14	2	2	1	11	13	15	14	10	1
17	5	8	4	4	—	13	16	16	3
13	9	12	6	16	14	16	17	17	11
1	11	6	15	10	7	8	10	13	14
8	11	13	16	1	2	14	12	6	13
12	17	7	9	9	3	9	6	11	8
9	4	9	7	3	8	3	9	4	12
11	7	11	2	15	9	2	2	3	9
10	1	10	3	12	15	1	4	14	4
4	14	15	13	8	1	5	11	1	2
5	15	14	14	13	10	11	8	7	17
6	13	5	11	14	5	7	5	4	10
6	8	16	17	17	11	17	3	7	15
2	10	3	10	2	6	12	1	2	7
15	5	1	5	6	12	4	15	7	6
2	16	17	12	6	4	9	13	11	16
16	3	4	8	5	—	6	7	15	5

UNIFORM TEST IV, 1979

Strain	Mean 19 Tests	Del.	N.J.	Md.	Penn.	Ohio	
		George- town	Adel- phia	Queens- town	Landis- ville	S. Charles- ton	Wheelers- burg*
<u>MATURITY (date)</u>							
Crawford	+8.2	+4	+10	+7	+11	+14	
Essex (V)	+15.1	+15	+15	+12	+14	+21	
Franklin	+2.5	+1	-1	0	+1	+7	
Union (IV)*	9/28	10/5	10/9	10/3	10/11	9/30	
L23 (III)	-3.6	—	-6	-4	-8	-5	
A77-314014	+3.4	+4	-1	0	+5	+3	
C1573	+4.0	—	+4	+5	+8	+8	
K1024	+3.0	+1	+3	+1	+5	0	
K1033	+5.7	+4	+3	+7	+11	+8	
K1041	+1.4	+3	+2	+2	+1	-2	
K1042	+0.8	+2	-4	+1	+1	+1	
L70L-3048	+2.7	—	-1	0	+5	+6	
L74D-609	+1.8	+3	+6	+2	+8	+6	
L74L-125	+0.7	—	+1	-4	+2	+1	
L74L-497	+7.7	+4	+7	0	+12	+12	
L75-8381	-2.1	—	-5	-3	-3	-3	
S76-2109	+14.1	+12	+16	+11	+14	+25	
Date of planting	5-24	6-8	6-6	5-29	5-22	5-2	4-9
*Days to maturity	129	119	125	127	142	151	—

Strain	23 Tests		<u>LODGING (score)</u>				
	Mean	19 Tests	Del.	N.J.	Md.	Penn.	Ohio
Crawford	2.2	1.8	2.8	3.3	3.2	4.5	4.5
Essex (V)	2.3	1.5	2.5	3.2	3.7	4.2	4.5
Franklin	2.2	2.0	2.8	3.0	3.3	4.3	4.7
Union (IV)	2.2	1.5	3.5	3.2	3.3	4.2	4.5
L23 (III)	1.7	1.8	3.5	2.7	2.5	3.2	3.8
A77-314014	2.2	1.0	3.4	3.0	2.7	3.8	5.0
C1573	2.2	1.0	2.9	3.0	2.3	4.5	5.0
K1024	1.9	1.5	2.1	2.7	2.7	3.5	3.5
K1033	1.9	1.0	2.8	2.8	2.3	3.0	4.2
K1041	2.2	1.8	3.0	3.0	3.0	4.0	4.7
K1042	1.6	1.0	2.4	2.5	2.2	3.0	4.3
L70L-3048	2.1	1.5	3.1	3.2	2.5	4.2	4.7
L74D-609	1.5	2.0	3.0	2.2	2.2	3.0	3.7
L74L-125	1.5	1.0	2.8	2.0	2.0	3.0	4.0
L74L-497	1.9	1.3	2.1	2.5	2.7	3.7	4.5
L75-8381	1.9	1.3	2.8	2.7	2.5	3.7	4.8
S76-2109	1.7	1.3	2.3	2.5	2.7	4.2	3.0

*Not included in mean due to Mexican bean beetle damage

UNIFORM TEST IV, 1979

<u>Neb.</u>	<u>Ky.</u>	<u>Ind.</u>		<u>Ill.</u>			<u>Mo.</u>		
<u>Lin-</u> <u>coln</u>	<u>Lexing-</u> <u>ton</u>	<u>Lafay-</u> <u>ette</u>	<u>Sulli-</u> <u>van</u>	<u>Browns-</u> <u>town</u>	<u>Belle-</u> <u>ville</u>	<u>Carbon-</u> <u>dale</u>	<u>Eldo-</u> <u>rado</u>	<u>Novel-</u> <u>ty</u>	<u>Colum-</u> <u>bia</u>
<u>MATURITY (date)</u>									
+9	—	+6	+5	+7	+9	+4	+12		+11
+13	—	F	F	+16	+16	+13	+22		—
+2	+9	+2	0	+1	-3	0	+1		+7
10/3	10/1	9/26	9/27	9/24	9/29	9/25	9/21		9/16
-3	-1	-2	-3	-2	-7	-1	-7		-3
+5	+9	-1	+2	0	-1	+9	+2		+4
+5	+9	+1	+1	+3	+4	+3	+3		+5
+5	+7	0	0	+2	+1	0	+2		+7
+8	—	+3	+6	+3	+5	+4	+4		+10
+4	+4	-1	-2	+1	-2	0	-1		+4
+5	0	0	0	0	-3	+2	-3		+3
0	+4	0	0	+1	-1	+2	0		+4
-2	+2	-2	+1	+1	+2	0	+2		+4
+5	+4	0	-1	+1	-3	+1	-1		+4
+8	—	+4	+5	+6	+8	+9	+11		+14
+1	+2	-2	-2	-1	-6	-1	-3		-3
+11	—	F	F	+15	+14	+13	+17		—
5-15	5-23	5-17	5-18	5-23	5-26	5-19	5-22	6-6	5-15
141	131	132	132	124	126	129	122	—	124

<u>LODGING (score)</u>									
2.0	3.0	2.7	1.7	1.9	2.9	2.7	2.2	2.6	1.0
3.0	3.0	3.0	2.2	1.5	3.1	2.7	1.9	3.8	1.0
1.5	3.0	3.0	2.7	1.4	2.6	2.2	3.1	2.6	1.0
1.8	3.0	3.0	2.5	1.2	2.3	1.5	2.6	2.6	1.0
1.7	1.0	1.8	2.3	1.2	1.6	1.5	1.6	2.0	1.0
1.5	4.0	3.0	2.7	1.1	3.2	1.8	2.5	2.5	1.0
1.7	3.0	3.0	2.2	1.5	2.5	2.8	2.7	2.8	1.0
1.5	3.0	3.0	2.0	1.4	2.0	1.7	2.2	2.4	1.0
2.0	3.0	3.0	2.1	1.2	1.8	2.0	2.1	2.4	1.0
1.7	3.0	3.7	2.7	1.1	2.5	1.7	2.8	2.5	1.0
1.3	2.0	2.5	2.3	1.0	1.4	1.3	1.4	2.0	1.0
1.3	3.0	2.8	2.3	1.2	2.2	2.0	2.9	2.3	1.0
1.2	2.0	1.5	1.0	1.0	1.2	1.0	1.0	1.8	1.0
1.7	2.0	1.7	1.5	1.0	1.6	1.3	1.2	1.9	1.0
2.3	2.0	2.5	1.8	1.4	2.0	1.7	2.2	2.6	1.0
1.3	3.0	2.7	2.2	1.3	2.3	1.7	2.0	2.3	1.0
1.8	1.0	2.8	1.7	1.2	1.6	1.7	1.2	2.9	1.0

UNIFORM TEST IV, 1979

Strain	Mo.		Kans.				Tex.	
	Clin- ton	Portageville Loam Clay	Pow- hatten	Man- hatten	Otta- wa	Colum- bus	Lub- bock	
	<u>MATURITY (date)</u>							
Crawford	+15	+5		+7		+5	+7	
Essex (V)	+18	+13		+12		+10	+17	
Franklin	0	0		+3		0	+3	
Union (IV)*	9/17	10/3		9/30		9/26	9/17	
L23 (III)	0	0		-1		-1	0	
A77-314014	0	+3		+5		0	+3	
C1573	+2	+3		+5		+1	+2	
K1024	+1	+1		+3		0	+3	
K1033	+6	+4		+6		+2	+8	
K1041	0	+4		0		+1	+5	
K1042	+1	+2		0		0	+2	
L70L-3048	0	0		0		0	+4	
L74D-609	-1	-1		-1		0	+1	
L74L-125	0	+1		-1		0	+1	
L74L-497	+11	+4		+5		+5	+6	
L75-8381	0	-1		0		-1	-2	
S76-2109	+15	+12		+10		+10	+16	
Date of planting	5-25	5-10	6-11	6-19	5-16	5-29	6-15	5-19
*Days to maturity	—	130	114	—	137	—	103	134

Strain	<u>LODGING (score)</u>							
	Clin- ton	Portageville Loam Clay	Pow- hatten	Man- hatten	Otta- wa	Colum- bus	Lub- bock	Tex.
Crawford	1.6	2.6	1.8	1.2	2.0	1.8	1.2	2.0
Essex (V)	1.9	1.3	1.5	—	1.8	1.3	1.1	1.5
Franklin	1.9	1.6	1.2	1.2	2.3	1.5	1.4	1.5
Union (IV)	1.5	1.5	1.8	1.0	2.2	1.7	1.6	1.7
L23 (III)	1.1	1.3	1.5	1.0	2.2	1.3	1.4	1.7
A77-314014	1.9	1.3	1.8	1.0	2.2	1.8	1.7	1.2
C1573	1.6	1.5	1.8	1.2	2.5	1.7	1.7	1.7
K1024	1.0	1.5	1.7	1.2	2.2	1.3	1.0	1.7
K1033	1.8	1.5	1.5	1.0	1.7	1.3	1.0	1.2
K1041	2.1	1.6	1.8	1.5	2.3	1.3	1.4	1.7
K1042	1.3	1.5	1.3	1.0	1.5	1.0	1.0	1.5
L70L-3048	2.1	1.3	1.5	1.0	2.0	1.3	1.3	1.2
L74D-609	1.0	1.0	1.0	1.0	1.0	1.0	1.8	1.5
L74L-125	1.0	1.3	1.0	1.0	2.0	1.0	1.0	1.2
L74L-497	1.5	1.5	1.7	1.0	1.8	1.3	1.2	1.7
L75-8381	1.3	1.3	1.5	1.2	2.2	1.5	1.2	1.5
S76-2109	1.1	1.0	1.5	—	1.0	1.2	1.1	1.0

UNIFORM TEST IV, 1979

Mean 23 Tests	Del.	N.J.	Md.	Penn.	Ohio	
	George- town	Adel- phia	Queens- town	Landis- ville	S. Charles- ton	Wheelers- burg*
	<u>HEIGHT (inches)</u>					
40	28	39	45	38	47	44
34	25	38	35	35	43	36
40	30	42	44	41	47	47
39	25	46	40	38	47	47
36	27	37	37	35	45	42
38	25	37	43	37	42	48
39	22	42	42	38	48	49
36	21	36	41	35	43	47
35	21	37	37	36	47	39
39	27	43	43	38	49	30
37	25	40	39	37	47	42
37	26	39	40	35	45	41
21	21	27	20	27	26	23
35	21	38	35	30	43	39
38	24	40	38	37	46	40
35	25	40	40	38	43	44
33	27	36	33	33	43	38

23 Tests	<u>QUALITY (score)</u>					
1.9	2.5	1.5	2.5	2.0	1.5	1.5
1.7	2.0	1.8	2.0	2.0	1.0	1.5
2.2	3.0	2.2	3.0	2.5	1.0	1.5
2.2	3.3	1.8	2.5	2.3	1.0	1.5
2.0	3.0	1.8	2.3	2.0	1.0	1.5
2.8	3.5	2.0	3.3	3.0	2.0	2.0
2.0	2.5	1.5	3.0	2.2	1.5	2.0
2.1	2.8	1.5	2.5	2.2	1.0	1.5
2.6	2.8	2.0	3.0	2.5	1.5	2.5
2.3	3.5	2.0	3.0	2.8	1.0	2.5
2.2	3.5	2.2	3.3	2.2	1.0	2.5
2.2	3.0	2.8	3.0	2.5	1.0	2.0
1.9	3.0	1.0	2.0	2.2	1.0	1.5
2.3	3.5	1.8	3.0	2.3	1.5	1.5
2.2	3.0	1.8	3.0	2.3	2.0	1.5
2.0	2.3	2.0	3.0	2.3	1.0	2.5
1.8	1.5	2.0	2.0	2.0	1.5	1.0

*Not included in mean due to Mexican bean beetle damage

UNIFORM TEST IV, 1979

Strain	Neb.	Ky.	Ind.		Ill.			Eldo- rado
	Lin- coln	Lexing- ton	Lafay- ette	Sulli- van	Browns- town	Belle- ville	Carbon- dale	
	<u>HEIGHT (inches)</u>							
Crawford	41	36	50	47	47	49	49	48
Essex (V)	39	40	42	38	35	37	38	36
Franklin	43	46	48	42	45	46	48	45
Union (IV)	39	43	50	44	43	51	44	48
L23 (III)	34	44	48	41	39	43	41	43
A77-314014	39	41	48	41	43	45	45	46
C1573	41	46	50	39	43	49	50	46
K1024	34	39	45	44	39	45	41	45
K1033	35	44	47	33	38	43	42	41
K1041	37	46	52	38	40	47	47	48
K1042	35	45	49	39	39	46	44	43
L70L-3048	35	44	47	41	40	47	41	44
L74D-609	18	27	28	20	19	21	20	19
L74L-125	36	40	47	37	37	43	42	43
L74L-497	39	46	49	42	42	45	44	45
L75-8381	40	43	47	38	43	46	44	44
S76-2109	38	36	39	37	32	36	36	33

	<u>QUALITY (score)</u>							
Crawford	2.5	2.0	1.0	1.5	1.8	2.0	1.0	1.8
Essex (V)	2.0	1.0	1.0	2.0	2.0	1.8	1.0	2.0
Franklin	2.5	1.0	1.0	1.5	3.2	3.7	2.0	3.3
Union (IV)	2.5	4.0	1.0	1.0	2.7	2.5	1.0	2.2
L23 (III)	2.0	3.0	1.5	1.5	2.2	1.3	1.0	1.8
A77-314014	3.2	4.0	2.0	1.5	2.8	3.2	3.0	2.8
C1573	2.5	2.0	1.0	1.5	1.7	2.0	1.0	2.2
K1024	2.7	3.0	1.5	1.0	2.2	1.5	1.0	2.3
K1033	2.0	4.0	1.5	2.0	2.3	3.3	2.0	3.3
K1041	2.3	4.0	1.5	1.5	2.3	2.2	1.0	2.7
K1042	2.1	4.0	1.5	1.0	2.8	1.5	1.0	2.3
L70L-3048	1.8	3.0	1.0	1.5	3.0	2.5	1.0	2.7
L74D-609	2.0	2.0	1.0	1.0	2.7	2.2	1.0	2.2
L74L-125	2.7	3.0	1.5	1.5	2.3	2.3	1.0	2.7
L74L-497	2.2	4.0	1.5	2.0	2.7	2.3	1.0	2.5
L75-8381	2.0	3.0	1.5	1.5	2.2	1.7	1.0	2.0
S76-2109	1.7	1.0	1.5	1.0	3.0	2.0	1.0	2.3

UNIFORM TEST IV, 1979

		Mo.				Kans.				Tex.
Novel-	Colum-	Clin-	Portageville		Pow-	Man-	Otta-	Colum-	Lub-	
ty	bia	ton	Loam	Clay	hatten	hatten	wa	bus	bock	
<u>HEIGHT (inches)</u>										
39	30	35	38	30	33	50	39	31	28	
38	31	30	24	22	—	38	33	27	23	
42	33	37	32	22	31	53	42	33	28	
39	28	37	30	25	29	50	42	32	25	
35	27	31	28	24	30	44	38	29	23	
38	28	38	31	22	31	53	40	33	26	
41	30	36	30	24	30	54	42	32	27	
37	29	34	33	21	28	49	37	30	24	
38	27	35	29	23	28	45	36	26	23	
38	30	36	29	25	31	53	43	33	27	
39	27	35	28	22	32	47	41	31	25	
38	29	36	32	21	31	49	41	32	25	
26	17	17	10	12	19	23	23	23	11	
35	26	32	31	23	29	42	35	27	24	
39	30	33	31	25	32	44	39	30	26	
37	29	31	29	24	29	48	39	29	25	
37	30	31	19	21	—	40	32	26	20	
<u>QUALITY (score)</u>										
2.5	2.0	2.0	2.0	2.0	1.5	2.0	1.5	2.0	1.5	
2.0	2.3	2.0	2.0	1.5	—	2.0	1.5	1.5	1.5	
2.0	2.8	2.0	2.5	2.0	2.0	2.0	1.5	1.5	2.0	
2.5	2.3	2.5	3.0	2.0	2.0	2.0	2.0	1.5	2.5	
2.7	2.5	2.0	3.5	2.0	2.0	1.5	2.0	2.0	2.0	
2.0	2.8	3.0	3.5	2.5	2.5	3.0	2.5	2.0	4.0	
2.0	2.3	2.0	2.5	2.0	2.0	2.0	1.5	2.0	2.2	
2.3	3.0	2.5	3.0	2.0	2.0	2.0	2.0	1.5	2.5	
2.5	3.0	2.7	3.5	3.0	2.0	2.5	2.5	2.0	3.0	
2.5	2.5	2.0	3.5	2.5	2.0	2.0	2.0	2.0	2.5	
2.3	2.5	2.0	4.0	2.5	2.0	1.5	1.5	1.5	2.5	
2.0	2.5	2.3	3.0	2.5	1.5	2.0	2.5	1.5	2.5	
2.3	2.5	2.2	2.5	2.0	1.5	1.5	2.0	1.5	2.0	
2.5	3.0	2.3	3.5	2.0	2.0	2.0	2.0	2.0	2.5	
2.3	2.5	2.3	2.5	2.0	1.5	2.5	2.0	2.0	1.5	
2.3	2.2	2.0	3.0	2.0	1.5	2.0	1.5	2.0	2.0	
2.0	2.0	2.0	1.5	2.0	—	2.0	1.5	1.5	1.5	

UNIFORM TEST IV, 1979

Strain	Mean 19 Tests	Del.	N.J.	Md.	Penn.	Ohio	
		George- town	Adel- phia	Queens- town	Landis- ville	S. Charles- ton	Wheelers- burg*
<u>SIZE (g/100)</u>							
Crawford	15.5		16.0	13.7	17.9	15.3	12.5
Essex (V)	12.5		14.0	9.6	14.0	11.3	9.8
Franklin	15.1		18.0	15.5	16.1	15.3	11.6
Union (IV)	18.1		22.0	19.3	20.3	17.5	15.7
L23 (III)	17.5		21.0	17.2	18.2	17.2	13.9
A77-314014	17.0		16.0	16.4	18.8	17.8	11.4
C1573	16.5		18.0	17.1	19.3	16.2	13.1
K1024	16.3		19.0	15.3	18.4	16.3	13.5
K1033	18.4		22.0	17.5	21.7	18.5	13.9
K1041	17.4		20.0	18.6	21.3	18.0	14.1
K1042	18.8		19.0	19.4	21.3	18.1	13.9
L70L-3048	15.8		17.0	16.7	18.3	15.3	12.2
L74D-609	16.8		21.0	17.1	20.7	17.3	14.1
L74L-125	18.1		20.0	17.7	18.7	18.6	13.0
L74L-497	16.1		15.0	14.9	19.5	15.7	13.0
L75-8381	14.8		18.0	15.4	17.2	13.5	12.2
S76-2109	11.6		11.0	10.2	13.0	10.8	9.5

*Not included in mean due to Mexican bean beetle damage

Strain	Mean 5 Tests	Md.	Ind.	Ill.	Mo.	Kans.
		Queens- town	Lafay- ette	Eldo- rado	Portageville	Man- hatten
<u>% PROTEIN</u>						
Crawford	41.3	41.4	42.9	41.3	39.6	41.4
Essex (V)	42.4	44.1	41.9	42.2	41.4	42.6
Franklin	37.9	37.4	38.5	39.6	36.5	37.5
Union (IV)	41.7	41.7	41.6	41.9	39.5	43.9
L23 (III)	40.7	41.0	40.6	38.8	39.7	43.2
A77-314014	42.4	42.0	43.2	42.2	40.4	44.2
C1573	40.6	41.9	39.7	42.0	38.4	40.9
K1024	40.8	41.4	42.8	40.8	38.9	40.0
K1033	39.6	39.2	39.7	38.7	39.5	40.7
K1041	39.3	41.2	37.9	40.1	38.1	39.1
K1042	40.2	40.4	41.2	37.5	41.3	40.7
L70L-3048	39.9	40.3	40.0	40.2	37.8	41.0
L74D-609	41.5	40.8	41.6	43.3	40.3	41.6
L74L-125	41.1	41.9	41.3	40.4	40.4	41.4
L74L-497	40.7	39.9	43.0	38.7	39.7	42.1
L75-8381	39.5	39.8	40.1	38.3	38.6	40.8
S76-2109	40.3	40.8	41.3	40.2	39.4	39.9

UNIFORM TEST IV, 1979

<u>Neb.</u>	<u>Ky.</u>	<u>Ind.</u>		<u>Ill.</u>			
<u>Lin-</u>	<u>Lexing-</u>	<u>Lafay-</u>	<u>Sulli-</u>	<u>Browns-</u>	<u>Belle-</u>	<u>Carbon-</u>	<u>Eldo-</u>
<u>coln</u>	<u>ton</u>	<u>ette</u>	<u>van</u>	<u>town</u>	<u>ville</u>	<u>dale</u>	<u>rado</u>
<u>SIZE (g/100)</u>							
15.8	16.7	14.8	16.0	13.0	14.2	15.0	14.0
12.9	14.6	11.3	13.8	10.4	11.6	11.8	11.7
15.3	16.0	15.0	15.0	12.8	14.9	15.1	13.6
17.8	18.5	18.9	19.0	15.6	17.4	16.3	16.1
17.4	18.6	18.0	18.4	15.3	15.6	18.5	15.0
14.8	17.0	17.6	17.8	14.9	17.0	17.4	15.5
15.8	18.2	16.7	16.8	14.2	15.7	15.0	15.3
16.4	16.8	15.8	16.7	13.8	15.1	15.3	14.7
17.3	18.7	17.7	19.2	14.0	17.6	17.4	15.9
16.7	17.5	17.7	16.1	15.4	15.8	17.9	16.1
18.4	19.4	18.4	18.0	17.6	16.8	18.9	16.9
15.5	16.5	15.2	17.0	12.9	14.7	18.7	14.3
17.0	18.6	17.4	17.0	14.2	14.6	16.1	15.9
16.8	19.1	18.0	18.8	16.2	16.6	19.1	16.5
16.0	17.3	15.4	17.1	13.4	15.0	16.7	15.5
15.5	15.7	15.0	14.1	12.1	12.7	14.1	13.0
12.9	12.9	12.0	12.3	9.6	10.7	12.3	10.1

<u>Mean</u>	<u>Del.</u>	<u>Ind.</u>	<u>Ill.</u>	<u>Mo.</u>	<u>Kans.</u>
<u>5 Tests</u>	<u>Queenstown</u>	<u>Lafayette</u>	<u>Eldorado</u>	<u>Portageville</u>	<u>Manhattan</u>
<u>% OIL</u>					
19.8	19.8	18.3	19.0	21.5	20.4
18.8	18.0	18.1	18.4	20.0	19.6
21.1	21.4	19.9	19.6	23.0	21.5
20.0	19.6	20.4	19.2	21.1	19.5
21.0	20.6	20.4	21.6	21.8	20.7
19.4	19.6	18.9	18.5	20.9	19.1
20.1	19.9	19.8	19.0	21.8	19.8
20.4	19.6	19.7	20.9	21.2	20.8
20.8	20.6	20.1	20.5	22.7	20.3
20.9	20.5	20.7	21.7	21.1	20.5
21.6	21.6	20.4	22.5	22.2	21.1
21.0	20.9	20.2	20.9	22.6	20.4
20.5	20.8	19.9	20.3	21.3	20.4
20.2	20.0	20.2	20.4	20.6	19.7
20.1	20.5	17.8	20.5	21.8	19.8
20.9	20.6	20.7	21.5	21.9	19.8
19.1	18.9	17.3	19.6	20.5	19.4

UNIFORM TEST IV, 1979

Strain	Mo.				Kans.			Tex.		
	Novel- ty	Colum- bia	Clin- ton	Portageville Loam Clay	Pow- hattan	Man- hattan	Otta- wa	Colum- bus	Lub- bock	
<u>SIZE (g/100)</u>										
Crawford				15.4	15.7	15.4	16.6	16.9	15.1	17.6
Essex (V)				12.5	12.0	—	13.0	12.2	15.6	13.1
Franklin				14.0	14.1	14.5	15.7	14.4	13.9	17.5
Union (IV)				16.7	17.4	18.1	19.4	17.1	16.4	21.0
L23 (III)				16.1	17.9	17.4	19.0	15.8	15.6	20.5
A77-314014				16.8	17.9	16.5	18.5	16.1	15.1	21.0
C1573				14.6	16.6	15.3	18.6	17.1	14.5	18.7
K1024				16.3	15.3	15.8	17.4	16.4	14.9	19.9
K1033				17.5	17.8	18.3	19.2	19.2	17.9	21.5
K1041				16.4	16.4	16.6	19.0	15.7	15.8	20.0
K1042				18.7	19.0	20.3	20.8	17.4	15.8	22.1
L70L-3048				13.9	14.9	15.6	16.8	15.2	13.9	17.6
L74D-609				14.3	15.5	15.3	17.9	15.5	14.1	19.5
L74L-125				16.5	17.0	19.2	18.5	18.4	16.8	21.0
L74L-497				15.9	15.3	15.2	17.8	17.4	14.6	17.7
L75-8381				14.0	14.3	15.8	16.7	14.0	13.4	17.2
S76-2109				11.8	11.4	—	12.4	12.4	10.2	12.4

PRELIMINARY TEST IV, 1979

Strain	Parentage	Generation Composited
Essex (V)	Lee x S5-7075	F ₆
Union (IV)	Williams ⁵ x SL11 (Wayne <u>Rpm</u> <u>Rps</u>)	F ₃
Williams (III)	Wayne x L57-003 ⁴	F ₆
A78-325028	A72-512 x Williams	F ₄
A78-325031	AP6 (1 YT) S ₃ C1	S ₃
A78-326024	Pride B-216 x AX896-67-3	F ₄
C1582	M61-224 x Williams	F ₇
HC76-3840	L720-2567 x Hodgson	F ₅
HC76-3914	L70U-2173 x L72U-2567	F ₅
HC76-4091	Williams x L72U-41	F ₅
HC76-4455	L72U-2567 x Ransom	F ₅
K1043	Tracy x Williams	F ₅
K1044	Tracy x Williams	F ₅
K1045	Tracy x Williams	F ₅
K1046	Tracy x Williams	F ₅
K1048	Tracy x Bonus	F ₅
K1049	Tracy x K1003	F ₅
K1051	Tracy x Williams	F ₆
Ky75-101-18	Wayne x Cutler 71	—
Ky75-146-74	L66-1359 x Columbus	—
L73-318	Williams ² x L69-5343 (L6- <u>Ir</u> <u>Im</u>)	F ₃
L74L-55	Calland x Williams	F ₆
L74L-358	L68-4096 x L66L-177	F ₆
L75-8004	Williams L70-2283	F ₄
L75-8013	Williams x L70-2283	F ₄
L75-11730	L70-6494 x Williams	F ₅
L75-11806	L70-6494 x Williams	F ₅
L75-12593	Bonus x Williams	F ₅

PRELIMINARY TEST IV, 1979

Descriptive and Other Data

Strain	Descriptive Code		Chlorosis	Shattering
			Score Ames	Manhattan 2 Weeks
Essex (V)	PTTn	DYBf	3	1
Union (IV)	WTTn	SYB1	3	2
Williams (III)	WTTn	SYB1	3	2
A78-325028	WTBr	SYBf	3	2
A78-325031	PGTn	DYBf	3	1
A78-326024	P+WGBr	DYBf	4	1
C1582	WTBr	DYGr	3	2
HC76-3840	PTTn	SYBr	3	1
HC76-3914	PTTn	SYBr+Y	2	2
HC76-4091	WTBr	SY	3	3
HC76-4455	PTTn	SYB1	3	1
K1043	WTTn	DYB1	3	1
K1044	WTTn	SYB1	3	1
K1045	WTTn	SYB1	4	2
K1046	P+WGTn	DYBf+B1+Ib	3	1
K1048	P+WGTn	DYBf+B1+Ib	3	1
K1049	PGTn	DYBf	4	1
K1051	WTTn	SYB1	3	1
Ky75-101-18	WTBr	DYBf+B1	3	1
Ky75-146-74	P+WTBr	DYB1	3	1
L73-318	WTBr	SYBf+Y	3	1
L74L-55	WTTn	SYB1	3	1
L74L-358	WTTn	DYY	3	1
L75-8004	P+WGTn +Br	SYBf+Ib	4	1
L75-8013	PG+TBr	SYB1+Ib	3	1
L75-11730	PGBr	DYBf+B1+Ib	4	1
L75-11806	PGTn	SYIb	3	1
L75-12593	WG+TTn	DYBf+B1	4	1

PRELIMINARY TEST IV, 1979

Disease Data

FE ₂	BSR		GERM*	PSB	SMV	PR	Race 1	
	Laf.	Ames					Laf.	Ames
Ind.	Ind.	Ia.	Lafayette,		IN	Ind.	Ia.	
a	n	n	d	d	a	a	a	
Score	%	Reac.	%	%	Reac.	-----Reaction-----		
1	100	S	92	0	1	S	S	
4	40	S	95	0	5M	R	R	
5	100	S	97	0	5M	S	S	
5	40	S	92	2	5M	S	R	
5	40	S	97	0	3E	S	S	
5	80	R	98	0	5E	S	S	
5	0	S	98	0	5E	Seg	H	
5	100	S	93	0	2M	S	S	
1	80	S	86	1	1	S	S	
5	80	S	93	0	5E	S	H	
3	0	S	95	0	5E	S	S	
5	60	S	98	1	4E	R	R	
3	20	S	98	0	5E	R	R	
4	20	S	96	1	5E	R	R	
5	20	S	98	0	5E	R	H	
5	20	S	97	0	5E	R	H	
4	20	S	96	0	5E	R	R	
5	40	S	96	2	5M	R	R	
4	80	S	98	0	3E	S	S	
4	40	S	99	0	5E	S	H	
5	80	S	100	0	1	R	R	
5	80	S	96	1	5E	S	R	
3	40	S	100	0	5E	S	R	
4	40	S	98	2	4M	S	H	
5	100	S	98	1	4E	Seg	H	
1	80	S	97	2	5E	Seg	H	
4	40	S	99	0	3M	R	R	
5	100	S	98	2	5E	S	R	

*Petri dish germination on potato dextrose agar.

PRELIMINARY TEST IV, 1979

Regional Summary

Strain	Yield	Rank	Matu- rity	Lodg- ing	Height	Seed Quality	Seed Size	Composition	
No. of Tests	7	7	7	7	7	7	6	5	5
	bu/a	No.	Date	Score	In.	Score	g/100	%	%
Essex (V)	38.7	19	+15.4	2.5	33	1.8	11.7	42.3	19.3
Union (IV)	42.1	7	9/28*	2.4	39	2.4	17.4	42.4	19.8
Williams (III)	40.9	12	-2.8	1.6	36	2.3	16.1	40.6	20.4
A78-325028	43.0	5	-3.5	2.8	38	2.2	16.4	42.4	20.2
A78-325031	40.5	15	-1.0	2.4	35	2.4	17.1	41.6	20.2
A78-326024	37.0	23	-2.0	2.0	34	2.6	14.5	40.3	20.8
C1582	40.9	12	-3.7	1.6	35	2.9	15.5	40.9	20.4
HC76-3840	32.7	27	+0.6	1.4	17	2.5	17.2	41.4	20.2
HC76-3914	33.7	26	-2.0	1.2	17	2.9	21.2	42.6	19.7
HC76-4091	28.1	28	-3.2	1.2	19	3.4	17.9	42.7	20.1
HC76-4455	35.7	25	-1.8	1.3	19	2.1	14.9	41.1	20.5
K1043	41.1	10	+8.0	2.4	40	2.0	16.7	43.8	18.2
K1044	43.0	5	+6.0	1.8	36	1.8	13.6	43.0	18.6
K1045	43.4	2	+3.2	2.8	42	2.3	15.9	41.9	19.1
K1046	46.0	1	+5.2	2.6	42	2.1	16.7	42.8	19.0
K1048	39.0	17	+6.3	1.4	24	2.0	13.3	41.7	19.3
K1049	40.9	12	+3.2	1.6	26	2.2	14.7	42.8	18.9
K1051	38.0	21	+0.3	2.0	24	2.2	15.2	44.8	18.2
Ky75-101-18	39.0	17	+4.2	2.0	39	2.6	16.0	39.9	20.9
Ky75-146-74	41.9	8	+2.5	2.0	35	2.6	15.2	41.5	20.1
L73-318	43.3	3	+3.5	2.2	40	2.3	16.8	40.6	20.5
L74L-55	38.5	20	-0.5	1.9	37	2.0	14.1	41.4	20.1
L74L-358	43.3	3	+0.8	2.3	38	2.6	15.1	40.4	20.7
L75-8004	36.9	24	+0.6	1.9	35	2.4	14.3	39.6	20.7
L75-8013	37.2	22	+1.0	2.1	39	2.2	14.4	39.1	20.5
L75-11730	39.5	16	+0.8	2.3	42	2.2	14.8	40.6	20.5
L75-11806	41.6	9	+0.2	1.8	35	2.3	15.6	41.8	20.1
L75-12593	41.1	10	+1.4	1.7	39	2.2	16.0	44.2	19.4

*126 days after planting

Several strains in this test ranged from 1 to 4 bushels higher in yield than Union. Of these, K1044 and K1046 are resistant to races 1, 3, 4, and 5 of phytophthora root rot and K1046 is resistant to races 1, 3, 4, 5, and 6 of this pathogen. A78-325028 was higher yielding than the check varieties and matured very early for a Group IV strain. The determinate strains from Kansas and Ohio did not yield as well as the check varieties in this test. The cyst nematode race 3 resistant strains L75-8004 and L75-8013 were 3 to 4 bushels lower in yield than the check varieties.

PRELIMINARY TEST IV, 1979

Strain	Mean 7 Tests	M.D.	Ohio
		Queenstown	Wheelersburg*
YIELD (bu/a)			
Essex (V)	38.7	16.9	32.0
Union (IV)	42.1	23.9	41.1
Williams (III)	40.9	30.3	34.7
A78-325028	43.0	29.7	33.1
A78-325031	40.5	26.6	23.5
A78-326024	37.0	13.3	12.4
C1582	40.9	26.3	19.6
HC76-3840	32.7	35.3	36.1
HC76-3914	33.7	32.3	30.1
HC76-4091	28.1	15.6	26.6
HC76-4455	35.7	32.2	31.0
K1043	41.1	25.4	25.6
K1044	43.0	28.4	41.9
K1045	43.4	26.6	20.8
K1046	46.0	32.3	43.5
K1048	39.0	19.0	19.5
K1049	40.9	25.7	23.9
K1051	38.0	23.1	16.1
Ky 75-101-18	39.0	32.1	25.9
Ky 75-146-74	41.9	25.2	25.0
L73-318	43.3	31.9	34.2
L74L-55	38.5	21.8	29.1
L74L-358	43.3	27.1	39.2
L75-8004	36.9	22.6	11.8
L75-8013	37.2	21.0	27.3
L75-11730	39.5	29.6	22.6
L75-11806	41.6	31.4	24.7
L75-12593	41.1	24.2	23.4
C.V. (%)		13.6	25.3
L.S.D. (5%)		9.8	14.2
Row sp. (in.)		30"	30"
Rows/plot		4	4
Reps		2	2

* Not included in mean due to Mexican Bean Beetle damage

PRELIMINARY TEST IV, 1979

Strain	Ind.	Ill.		Mo.	Del.	Ky.
	Sullivan	Belle- ville	Eldo- rado	Portageville Loam	George- town	Lexing- ton
	YIELD (bu/a)					
Essex (V)	35.8	46.5	51.1	35.9	44.6	39.9
Union (IV)	50.8	53.5	50.3	28.7	38.2	49.5
Williams (III)	34.1	52.5	53.7	27.6	34.4	53.7
A78-325028	47.7	53.9	54.7	28.1	36.0	50.6
A78-325031	47.8	49.2	52.1	25.9	29.3	52.4
A78-326024	32.7	52.2	52.7	26.3	32.6	49.3
C1582	40.1	53.8	55.6	20.4	38.0	51.8
HC76-3840	29.3	20.4	40.4	10.8	34.8	57.8
HC76-3914	29.0	36.5	40.8	19.5	26.3	51.4
HC76-4091	34.3	15.1	33.6	11.3	35.0	51.6
HC76-4455	34.0	36.3	49.4	13.0	36.5	48.6
K1043	47.6	44.7	49.5	39.4	34.8	53.4
K1044	49.3	52.7	52.9	37.5	31.5	49.0
K1045	56.5	50.1	54.4	28.5	37.0	50.4
K1046	55.5	53.3	53.6	34.8	41.5	51.0
K1048	45.3	46.9	56.2	19.5	35.2	50.9
K1049	51.9	46.4	54.0	24.5	29.7	54.4
K1051	45.2	42.3	57.1	14.4	36.6	47.0
Ky75-101-18	32.5	49.7	47.3	29.8	33.0	48.6
Ky75-146-74	54.5	49.7	51.4	26.7	36.1	49.8
L73-318	52.2	52.1	48.7	29.3	38.0	51.2
L74L-55	43.1	51.1	49.7	26.9	26.1	50.5
L74L-358	52.5	52.5	52.5	35.1	33.4	50.2
L75-8004	32.2	45.0	48.9	20.8	38.1	50.8
L75-8013	36.8	48.9	45.1	25.7	35.0	48.2
L75-11730	53.2	44.0	48.7	23.3	27.9	49.5
L75-11806	52.5	50.7	51.1	22.6	33.4	49.2
L75-12593	39.2	51.4	49.5	33.3	40.1	49.9
C.V. (%)	27.2	10.3	6.2	15.0	18.6	7.9
L.D.D. (5%)	23.7	9.8	6.3	8.0	10.6	8.1
Row sp (in.)	30"	30"	30"	38"	30"	30"
Rows/plot	3	4	4	3	2	4
Reps	2	2	2	3	2	3

PRELIMINARY TEST IV, 1979

	Md.	Ohio	Ind.	Ill.		Mo.	Del.	Ky.
Mean	Queens-	Wheeler-	Sulli-	Belle-	Eldo-	Portageville	George-	Lexing-
7 Tests	town	burg*	van	ville	rado	Loam	town	ton
	<u>YIELD RANK</u>							
19	26	9	20	19	14	3	1	28
7	20	3	9	3	16	9	4	20
12	8	6	22	6	7	12	18	3
5	9	8	12	1	4	11	12	13
15	13	20	11	16	12	16	25	5
23	28	27	24	8	10	15	22	21
12	15	24	17	2	3	22	6	6
27	1	5	27	27	27	28	16	1
26	2	11	28	25	26	23	27	8
28	27	14	21	28	28	27	15	7
25	4	10	23	26	20	26	10	24
10	17	16	13	22	18	1	17	4
5	11	2	10	5	9	2	23	23
2	13	23	1	13	5	10	8	15
1	2	1	2	4	8	5	2	10
17	25	25	14	18	2	24	13	11
12	16	19	8	20	6	18	24	2
21	21	26	15	24	1	25	9	27
17	5	15	25	14	24	7	21	25
8	18	17	3	14	13	14	11	18
3	6	7	7	9	22	8	7	9
20	23	12	16	11	17	13	28	14
3	12	4	6	6	11	4	19	16
24	22	28	26	21	21	21	5	12
22	24	13	19	17	25	17	14	26
16	10	22	4	23	22	19	26	19
9	7	18	5	12	14	20	20	22
10	19	21	18	10	18	6	3	17

*Not included in mean due to Mexican bean beetle damage

PRELIMINARY TEST IV, 1979

Strain	Mean 7 Tests	Md.	Ohio	Ind.
		Queenstown	Wheelersburg*	Sullivan
<u>MATURITY (date)</u>				
Essex (V)	+15.4	+7		—
Union (IV)*	9/28	10/8		9/26
Williams (III)	-2.8	-3		-2
A78-325028	-3.5	-6		0
A78-325031	-1.0	-3		0
A78-326024	-2.0	-8		-2
C1582	-3.7	-3		-4
HC76-3840	+0.6	-1		0
HC76-3914	-2.0	0		-2
HC76-4091	-3.2	-6		-4
HC76-4455	-1.8	0		-5
K1043	+8.0	0		+6
K1044	+6.0	-1		+6
K1045	+3.2	-1		+4
K1046	+5.2	0		+4
K1048	+6.3	-1		+6
K1049	+3.2	0		+2
K1051	+0.3	0		0
Ky75-101-18	+4.2	0		0
Ky75-146-74	+2.5	0		0
L73-318	+3.5	0		0
L74L-55	-0.5	0		0
L74L-358	+0.8	-3		0
L75-8004	+0.6	-3		0
L75-8013	+1.0	-3		-2
L75-11720	+0.8	-3		+2
L75-11806	+0.2	0		+1
L75-12593	+1.4	-3		0
Date of planting	5-22	6-8	4-29	5-18
*Days to maturity	126	122	—	131

PRELIMINARY TEST IV, 1979

<u>Ill.</u>		<u>Mo.</u>	<u>Del.</u>	<u>Ky.</u>
<u>Belleville</u>	<u>Eldorado</u>	<u>Portageville</u>	<u>Georgetown</u>	<u>Lexington</u>
		<u>Loam</u>		
<u>MATURITY (date)</u>				
+17	+24	+18	+11	—
9/27	9/21	9/18	10/7	10/1
-4	-4	-1	—	0
-2	-4	0	-2	0
-2	+1	-1	-2	+1
-1	0	-2	-2	+2
-6	-6	-1	-2	0
+2	+4	-1	-1	0
-3	0	-2	-1	0
-3	-2	-2	-2	0
-2	0	-2	-2	+2
+8	+9	+14	+3	—
+7	+9	+16	+3	+2
+5	+5	+3	+3	—
+5	+6	+4	+2	+10
+5	+12	+14	+2	—
+3	+2	+1	+3	+8
-3	+2	0	-2	+4
+2	+2	+3	+2	+12
0	+1	+2	-1	+8
+1	+1	+3	—	+9
-1	-1	+1	-1	0
+1	+2	+2	-1	+4
+1	+2	0	-1	+4
0	+2	0	-2	+10
+1	-1	0	-2	+8
0	-1	+1	-2	+2
-1	+1	0	+2	+8
5-26	5-22	5-10	6-8	5-23
124	122	131	121	131

PRELIMINARY TEST IV, 1979

Strain	Mean 7 Tests	Md.	Ohio	Ind.
		Queenstown	Wheelersburg*	Sullivan
<u>LODGING (score)</u>				
Essex (V)	2.5	2.8	5.0	2.3
Union (IV)	2.4	2.5	4.5	2.3
Williams (III)	1.6	2.3	3.0	1.5
A78-325028	2.8	2.8	5.0	3.0
A78-325031	2.4	2.0	5.0	2.0
A78-326024	2.0	2.0	4.8	1.5
C1582	1.6	2.0	4.2	2.0
HC76-3840	1.4	2.0	1.5	1.3
HC76-3914	1.2	2.0	1.5	1.5
HC76-4091	1.2	1.5	2.0	1.3
HC76-4455	1.3	2.0	2.0	1.3
K1043	2.4	3.0	5.0	2.0
K1044	1.8	2.3	4.0	1.8
K1045	2.8	3.0	5.0	3.0
K1046	2.6	3.0	4.5	3.3
K1048	1.4	2.0	2.0	1.8
K1049	1.6	3.0	2.5	2.3
K1051	2.0	3.5	5.0	2.3
Ky75-101-18	2.0	2.3	5.0	1.8
Ky75-146-74	2.0	2.3	4.8	2.0
L73-318	2.2	2.0	4.5	2.3
L74L-55	1.9	2.3	4.8	2.0
L74L-358	2.3	2.8	4.8	2.3
L75-8004	1.9	2.0	5.0	1.8
L75-8013	2.1	2.5	4.8	1.8
L75-11730	2.3	3.0	5.0	2.3
L75-11806	1.8	2.3	4.2	2.3
L75-12593	1.7	2.5	2.0	2.0

*Not included in mean due to Mexican bean beetle damage

PRELIMINARY TEST IV, 1979

<u>Ill.</u>		<u>Mo.</u>	<u>Kans.</u>	<u>Ky.</u>
Belleville	Eldorado	Portageville Loam	Georgetown	Lexington
<u>LODGING (score)</u>				
3.2	2.7	1.5	2.2	3.0
2.0	3.3	1.6	2.0	3.0
1.3	1.5	1.3	1.5	2.0
3.3	3.9	1.8	2.0	3.0
3.3	4.0	1.3	1.3	3.0
2.1	3.5	1.5	1.3	2.0
1.2	1.8	1.3	1.7	1.0
1.0	1.0	1.0	1.5	2.0
1.1	1.0	1.0	1.0	1.0
1.1	1.0	1.0	1.5	1.0
1.1	1.1	1.0	1.7	1.0
2.4	2.9	1.8	2.0	3.0
1.3	1.7	1.5	1.7	2.0
2.6	3.8	1.8	2.3	3.0
1.8	3.4	1.8	2.0	3.0
1.2	1.2	1.0	1.5	1.0
1.2	1.5	1.0	1.5	1.0
1.9	2.3	1.0	2.2	1.0
2.0	2.0	1.5	1.7	3.0
1.7	2.0	1.3	1.8	3.0
2.1	2.9	1.5	1.5	3.0
1.3	1.7	1.5	1.3	3.0
2.0	3.5	1.5	1.3	3.0
1.7	1.9	1.3	1.5	3.0
1.6	2.8	1.5	1.8	3.0
2.2	3.5	1.0	1.3	3.0
1.9	2.1	1.0	1.3	2.0
1.4	1.2	1.3	1.5	2.0

PRELIMINARY TEST IV, 1979

Strain	Mean 7 Tests	Md.	Ohio	Ind.
		Queenstown	Wheelersburg*	Sullivan
<u>HEIGHT (inches)</u>				
Essex (V)	33	29	34	35
Union (IV)	39	31	41	41
Williams (III)	36	32	37	35
A78-325028	38	33	36	40
A78-325031	35	34	36	36
A78-326024	34	23	40	33
C1582	35	30	37	36
HC76-3840	17	23	21	14
HC76-3914	17	20	23	16
HC76-4091	19	18	27	18
HC76-4455	19	21	23	19
K1043	40	35	33	36
K1044	36	30	39	38
K1045	42	33	39	43
K1046	42	36	41	50
K1048	24	22	29	25
K1049	26	29	31	28
K1051	24	26	32	26
Ky75-101-18	39	33	39	38
Ky75-146-74	35	29	40	38
L73-318	40	27	42	45
L74L-55	37	28	37	37
L74L-358	38	32	38	39
L75-8004	35	27	37	37
L75-8013	39	29	46	38
L75-11730	42	37	43	43
L75-11806	35	30	37	34
L75-12593	39	33	35	41

*Not included in mean due to Mexican bean beetle damage

PRELIMINARY TEST IV, 1979

<u>Ill.</u>		<u>Mo.</u>	<u>Del.</u>	<u>Ky.</u>
<u>Belleville</u>	<u>Eldorado</u>	<u>Portageville</u> <u>Loam</u>	<u>Georgetown</u>	<u>Lexington</u>
<u>HEIGHT (inches)</u>				
35	38	29	26	39
48	49	31	28	45
44	45	31	23	41
46	48	30	25	43
43	43	28	23	39
45	48	28	24	40
43	44	26	26	41
12	15	11	18	25
16	17	12	17	22
14	18	12	21	32
16	19	12	19	24
48	51	34	29	45
41	46	34	26	39
49	55	36	30	51
48	51	36	31	45
25	31	14	24	27
25	32	19	23	29
27	29	13	23	27
50	45	31	28	45
39	45	29	26	42
48	53	33	30	46
47	49	30	23	43
47	50	35	26	37
43	45	28	26	41
50	50	31	30	46
50	54	31	31	47
40	47	26	23	43
45	50	36	30	40

PRELIMINARY TEST IV, 1979

Strain	Mean 7 Tests	QUALITY (score)		
		Md. Queenstown	Ohio Wheelersburg*	Ind. Sullivan
Essex (V)	1.8	2.0	1.0	1.5
Union (IV)	2.4	3.0	1.0	1.0
Williams (III)	2.3	3.0	1.5	1.0
A78-325028	2.2	2.5	2.0	1.0
A78-325031	2.4	3.0	4.0	1.5
A78-326024	2.6	4.0	4.0	1.5
C1582	2.9	3.5	4.0	1.5
HC76-3840	2.5	3.0	1.5	1.5
HC76-3914	2.9	3.0	2.0	2.0
HC76-4091	3.4	4.0	2.0	2.0
HC76-4455	2.1	2.5	1.5	1.0
K1043	2.0	2.8	1.5	1.5
K1044	1.8	3.0	1.5	1.0
K1045	2.3	3.0	1.5	1.5
K1046	2.1	3.0	1.5	1.0
K1048	2.0	3.0	1.5	1.0
K1049	2.2	3.0	2.0	1.0
K1051	2.2	3.0	2.0	1.0
Ky75-101-18	2.6	3.0	2.0	1.5
Ky75-146-74	2.6	2.8	2.0	1.5
L73-318	2.3	2.5	1.5	1.5
L74L-55	2.0	2.3	1.5	1.0
L74L-358	2.6	3.3	2.0	1.5
L75-8004	2.4	2.0	1.5	1.5
L75-8013	2.2	2.3	1.5	1.5
L75-11730	2.2	2.3	2.0	1.5
L75-11806	2.3	2.0	1.5	1.5
L75-12593	2.2	2.5	1.5	1.5

*Not included in mean due to Mexican bean beetle damage

PRELIMINARY TEST IV, 1979

<u>Ill.</u>		<u>Mo.</u>	<u>Del.</u>	<u>Ky.</u>
<u>Belleville</u>	<u>Eldorado</u>	<u>Portageville</u> <u>Loam</u>	<u>Georgetown</u>	<u>Lexington</u>
<u>QUALITY (score)</u>				
1.8	2.3	2.0	2.0	1.0
2.0	2.8	2.8	3.3	2.0
1.8	2.0	3.0	3.3	2.0
1.8	2.3	2.5	3.2	2.0
2.5	2.3	2.5	3.3	2.0
2.0	2.8	2.5	3.3	2.0
2.8	2.5	3.5	3.7	3.0
1.8	2.8	4.0	3.3	1.0
2.0	3.5	4.0	2.8	3.0
3.3	3.0	5.0	3.7	3.0
2.0	1.5	3.0	2.7	2.0
1.8	2.0	2.5	2.5	1.0
1.8	1.5	2.0	2.3	1.0
2.3	2.5	2.0	2.7	2.0
2.0	2.0	2.0	3.0	2.0
2.0	1.3	2.0	2.5	2.0
1.5	2.0	3.0	2.8	2.0
1.8	1.8	3.0	2.8	2.0
2.8	3.5	2.5	3.2	2.0
2.0	2.8	3.0	3.0	3.0
2.0	2.5	3.0	3.5	1.0
1.8	2.3	2.5	3.2	1.0
2.8	2.8	2.5	3.5	2.0
2.0	2.5	3.0	2.8	3.0
2.3	2.8	2.5	2.8	1.0
2.3	2.3	2.5	3.3	1.0
2.0	2.0	3.0	3.7	2.0
2.3	1.8	3.0	3.3	1.0

PRELIMINARY TEST IV, 1979

Strain	Mean 6 Tests	SIZE (g/100)		
		Md. Queenstown	Ohio Wheelersburg*	Ind. Sullivan
Essex (V)	11.7	6.6	9.2	13.2
Union (IV)	17.4	14.1	14.8	18.1
Williams (III)	16.1	13.8	13.2	17.7
A78-325028	16.4	13.6	13.7	18.1
A78-325031	17.1	12.3	15.2	19.4
A78-326024	14.5	9.8	10.4	15.7
C1582	15.5	12.8	12.6	16.7
HC76-3840	17.2	14.7	14.3	18.9
HC76-3914	21.2	18.3	18.6	20.1
HC76-4091	17.9	13.3	13.4	19.3
HC76-4455	14.9	13.0	11.4	15.1
K1043	16.7	13.9	14.2	17.3
K1044	13.6	11.6	12.7	14.3
K1045	15.9	12.9	11.9	17.0
K1046	16.7	14.4	15.2	17.1
K1048	13.3	9.3	10.3	13.4
K1049	14.7	11.6	11.8	14.7
K1051	15.2	12.1	13.2	15.1
Ky75-101-18	16.0	15.0	13.9	14.9
Ky75-146-74	15.2	12.9	13.4	15.8
L73-318	16.8	13.1	14.4	18.5
L74L-55	14.1	12.1	11.5	15.3
L74L-358	15.1	11.9	13.4	15.8
L75-8004	14.3	11.5	10.0	15.1
L75-8013	14.4	11.7	11.6	15.1
L75-11730	14.8	11.4	11.9	16.1
L75-11806	15.6	13.1	13.4	17.1
L75-12593	16.0	12.5	12.2	17.2

*Not included in mean due to Mexican bean beetle damage

PRELIMINARY TEST IV, 1979

Ill.		Mo.	Del.	Ky.
Belleville	Eldorado	Portageville Loam	Georgetown	Lexington
<u>SIZE (g/100)</u>				
11.3	13.0	12.6		13.7
16.8	19.1	17.5		18.9
15.0	16.0	15.7		18.3
16.4	15.6	15.8		18.6
17.5	18.1	16.5		18.9
14.4	14.6	16.4		16.3
15.2	16.0	14.7		17.3
17.2	18.4	16.6		17.6
20.0	23.9	20.0		24.6
18.6	18.1	18.9		19.1
14.7	16.0	14.3		16.5
16.5	16.1	17.7		18.9
12.2	14.0	14.1		15.2
15.4	15.2	16.9		17.9
15.9	17.1	17.0		18.9
13.1	13.2	15.9		15.0
13.9	15.1	16.2		16.9
14.2	15.6	16.0		18.0
16.4	15.1	15.6		18.8
15.0	15.2	15.6		16.6
16.7	16.1	17.1		19.0
13.4	13.2	14.1		16.2
14.9	15.8	15.1		17.2
14.2	14.9	13.9		16.4
14.6	14.7	14.2		16.0
14.2	14.1	15.1		17.8
15.4	15.5	15.1		17.1
14.9	15.5	16.6		19.0

PRELIMINARY TEST IV, 1979

Strain	Mean 5 Tests	<u>% PROTEIN</u>				
		Queens- town	Ind. Sulli- van	Ill. Eldo- rado	Belle- ville	Mo. Portageville Loam
Essex (V)	42.3	41.1	41.5	43.5	44.0	41.5
Union (IV)	42.4	43.3	41.7	42.3	43.0	41.8
Williams (III)	40.6	39.6	40.5	41.2	41.3	40.5
A78-325028	42.4	42.3	43.3	41.8	44.7	39.8
A78-325031	41.6	41.2	42.3	42.7	43.7	38.1
A78-326024	40.3	42.1	38.3	41.7	41.6	37.6
C1582	40.9	39.9	41.4	39.7	42.3	41.0
HC76-3840	41.4	42.4	41.5	40.5	41.7	41.1
HC76-3914	42.6	40.3	42.3	42.8	44.3	43.3
HC76-4091	42.7	40.5	42.8	41.1	44.9	44.2
HC76-4455	41.1	39.7	39.1	41.4	43.9	41.3
K1043	43.8	45.2	43.8	43.3	43.6	43.1
K1044	43.0	39.8	44.8	43.2	44.1	42.9
K1045	41.9	43.0	41.9	41.1	43.0	40.5
K1046	42.8	43.6	42.7	42.4	42.9	42.2
K1048	41.7	42.5	41.2	39.4	43.6	41.8
K1049	42.8	43.0	41.6	42.5	44.1	42.9
K1051	44.8	44.5	45.0	43.8	46.7	43.9
Ky75-101-18	39.9	40.1	38.2	42.0	42.9	36.1
Ky75-146-74	41.5	41.7	42.2	42.0	42.6	39.0
L73-318	40.6	39.4	42.2	39.7	42.3	39.5
L74L-55	41.4	42.3	41.1	40.4	43.7	39.3
L74L-358	40.4	41.8	40.9	41.6	41.9	36.0
L75-8004	39.6	41.3	37.8	40.5	40.5	37.7
L75-8013	39.1	38.4	39.0	40.2	41.5	36.5
L75-11730	40.6	40.5	40.4	40.2	41.6	40.4
L75-11806	41.8	41.9	42.8	41.2	44.6	38.3
L75-12593	44.2	44.7	46.3	42.3	45.5	42.0

PRELIMINARY TEST IV, 1979

Mean 5 Tests	Md.	Ind.	Ill.		Mo.
	Queens- town	Sulli- van	Eldo- rado	Belle- ville	Portageville Loam
	<u>% OIL</u>				
19.3	19.7	20.2	18.8	18.0	19.9
19.8	19.1	19.8	19.6	19.5	20.9
20.4	20.0	20.8	20.0	19.9	21.2
20.2	19.7	19.4	20.4	19.2	22.5
20.2	19.3	18.8	20.4	19.1	23.4
20.8	18.8	21.8	19.9	20.5	22.9
20.4	20.4	20.7	20.4	19.9	20.8
20.2	19.3	19.7	20.0	20.7	21.1
19.7	20.0	18.6	20.1	19.0	21.0
20.1	19.6	19.3	19.8	19.1	22.7
20.5	20.9	20.9	19.9	19.5	21.2
18.2	17.4	18.1	17.7	17.9	19.8
18.6	19.6	18.3	18.3	18.2	18.7
19.1	18.2	18.4	18.6	19.0	21.2
19.0	18.4	18.6	19.2	19.0	19.8
19.3	19.3	18.9	19.4	18.8	20.1
18.9	18.4	18.6	18.9	19.2	19.5
18.2	18.0	18.1	18.0	17.8	19.2
20.9	20.4	21.8	20.0	20.0	22.4
20.1	19.2	19.6	19.7	19.6	22.5
20.5	20.4	19.5	20.5	20.0	22.1
20.1	19.6	20.3	20.3	19.2	21.2
20.7	19.9	20.3	19.7	20.9	22.8
20.7	19.6	21.3	19.9	20.4	22.1
20.5	20.0	21.3	19.6	19.6	22.0
20.5	20.0	19.9	20.9	19.7	21.9
20.1	19.6	19.5	20.2	19.0	22.1
19.4	19.3	18.3	19.9	18.7	20.7



