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Evaluation of the USDA Soybean Germplasm Collection: Maturity Groups 000–IV (FC 01.547–PI 266.807) United States
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ABSTRACT

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This publication consolidates information on the origin, descriptive characteristics, agronomic performance, seed composition, and disease reaction of over 2,000 soybean [Glycine max (L.) Merrill] germplasm accessions in maturity groups 000-IV from the USDA Soybean Germplasm Collection. These accessions were introduced into the United States by 1960. Publicly developed cultivars from the United States and Canada released by 1966 were also included. The data reported here were collected in three tests: maturity groups 000 to 0 at St. Paul, MN, in 1964; maturity groups I and II at Urbana, IL, in 1964, and maturity groups III and IV at Urbana, IL, in 1965 and 1966.

Keywords: agronomic characteristics, cultivar, evaluation, fatty acids, *Glycine max*, methionine, origin, *Phythophthora sojae*, seed composition, seed yield, soybean, soybean germplasm, soybean oil, soybean protein.

While supplies last, single copies of this publication may be obtained from the USDA Soybean Germplasm Collection, 1101 West Peabody Drive, University of Illinois, Urbana, IL 61801.

Copies of this publication may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161; telephone (703) 487–4650.

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EVALUATION OF THE USDA SOYBEAN GERMPLASM COLLECTION: MATURITY GROUPS 000 TO IV (FC 01.547 TO PI 266.807)

R.L. Bernard, C.R. Cremeens, R.L. Cooper, F.I. Collins, O.A. Krober, K.L. Athow, F.A. Laviolette, C.J. Coble and R.L. Nelson

INTRODUCTION

This publication consolidates information contained in U.S. Regional Soybean Laboratory Manuals 223 (July 1965), 230 (September 1966) and 238 (April 1969) on the origin, descriptive characteristics, agronomic performance, seed composition and disease reaction data of soybean (Glycine max (L.) Merrill) germplasm accessions FC 01.547 to PI 266.807 in maturity groups 000 through IV. Also included are cultivars, in these same maturity groups, developed at public institutions in the United States and Canada, and released by 1966. The data presented in Tables 3 and 4 are the same as in the original publications except that units on weight and height have been changed to metric and some maturity groups have been changed. In Table 1, some changes have been made for accession name and country of origin based on more recent information. The pedigrees of domestic cultivars are not included but are available in USDA Technical Bulletin 1746. Some origin details for named cultivars and FC accessions were removed but are available in the USDA Soybean Germplasm Collection Inventory, Volume 1, INTSOY Series Number 30. In Table 2, data on stem termination was added, the information on pubescence was expanded and some descriptions have been updated. These data can also be obtained through the Germplasm Resources Information Network (GRIN), Database Management Unit, USDA-ARS, BARC West, Beltsville, MD 20705. Evaluation publications for PI numbers higher than PI 266.807 can be obtained from the Curator, USDA Soybean Germplasm Collection, USDA-ARS, 1101 West Peabody Drive, University of Illinois, Urbana, IL 61801.1

The accessions were evaluated in three separate tests, based on maturity groups, and grown as follows:

Maturity groups 000 to 0: Descriptive data were obtained from observations of plants and seeds at Urbana, and a chlorosis score obtained from single-row plots grown in a high-lime field near Lamberton, Minnesota, in 1964. Performance data were gathered from a test grown in 1963 at St. Paul, MN (45°0′ N. lat.). Maturity group 000 had not yet been designated when this evaluation was conducted, so accessions were tested as Groups 00 and 0. Two replications of each maturity group were grown in plots two rows wide and 2.4 m long, with 90 cm between rows.

Maturity groups I and II: Data were gathered from a test planted on the Agronomy South Farm, University of Illinois, Urbana (40° 8' N. lat.) on May 15, 1964. Two replications of each maturity group were grown in plots two rows wide and 2.4 m long, with 100 cm between rows.

¹USDA Technical Bulletins 1760, 1726, 1718 and 1802. Each report also includes U.S. and Canadian cultivars of the corresponding period.

Maturity groups III and IV: In this test, the seed was planted on May 20, 1965, and May 26-27, 1966, on the Agronomy South Farm, University of Illinois, Urbana (40° 8' N. lat.). The plots were two rows wide and 2.4 m long, with 100 cm between rows.

Because the plots were not end trimmed at maturity, plots were considered to be 3.1 meters long when original yield data for maturity groups I to IV were converted to a per acre value. Yield values reported for maturity groups earlier than I are slightly inflated because this method of compensation was not used for that test. All original yield per acre values have been converted to megagrams per hectare at 13 percent moisture. Since there were no border rows in any of the tests, all tests were blocked by maturity group to minimize competition effects, but data are reported in PI-number order. Only accession means are reported.

A composite sample from the two replications was used to obtain seed composition data. Protein percentages were obtained using the Kjeldahl method. Oil percentages of groups 000 to II were determined by the extraction method, whereas nuclear magnetic resonance was the method used to determine oil percentage for groups III and IV.

For all tests, methionine values were obtained using Krober's modification of the McCarthy-Sullivan colorimetric method using enzymatic hydrolysis. Fatty acid composition for maturity groups 000 to II was obtained using the spectrophotometric method of Collins and Sedgwick. Gas-liquid chromatography was used to obtain these percentages for maturity groups III and IV.

ABOUT THE TABLES

Explanations of the data categories and abbreviations used are as follows:

Table 1:

FC number:

Serial numbers assigned by the former Forage Crops Section of the USDA, Beltsville, MD. This series was used until approximately 1957.

PI number:

Serial numbers assigned by the Plant Introduction Office, Germplasm Introduction and Evaluation Laboratory, USDA-ARS, BARC-West, Beltsville, MD 20705.

Accession name:

Accession names are reported as received. No attempt was made to change transliterations or translations done by others. When heterogeneous introductions were received, two or more sublines were preserved and are distinguished by a letter (A, B, C, etc.) or number (-1, -2, etc.) suffixed to the PI number. Any name or number received with the original sample is enclosed in parentheses for sublines designated "A" or for those without a numeric suffix. In some cases, all sublines were given a numeric suffix and the identification of "-1" is not enclosed in parentheses.

Country of acquisition:

This is the country from which the seeds were obtained.

Country of origin:

This is the country from which the accession originated, based upon information received from the country of acquisition.

Year of introduction or release:

This is the year in which cultivars from the United States or Canada were officially released, or the year in which introductions were assigned PI numbers (usually the year of introduction).

Maturity group:

Classification of relative maturity based on time of maturity at Urbana, IL.

Table 2:

Stem termination:

D = determinate (stem termination score < 2.0)

N = indeterminate (stem termination score > = 2.5)

S = semi-determinate (stem termination score > 2.0 and < 2.5)

Flower color:

P = purple, Dp = dark purple, Lp = light purple, Pth = purple throat (all petals are white except for the base of the standard), NW = near white (very slight purple tinge), W = white.

Pubescence color:

T = tawny, Lt = light tawny, G = gray, Ng = near gray, - = not recorded when pubescence form = C or pubescence density = G.

Pubescence form:

A = appressed on leaf surface

C = curly (twisted and appressed)

E = erect on leaf surface

I = irregular (slightly curly or twisted)

Sa = semiappressed on leaf surface

Pubescence density:

Dn = dense

G = glabrous (no pubescence)

N = normal density

Sdn = semidense

Sp = sparse

Ssp = semisparse (slightly reduced density, most noticeable on the pulvinus)

Pod color:

Bl = black, Br = brown, Dbr = dark brown, Lbr = light brown, Tn = Tan.

Seedcoat luster:

B = bloom, D = dull, I = intermediate (between shiny and dull),

S = shiny.

Seedcoat and hilum color:

Bf = buff Gn = green

Bl = black Gnbr = green brown
Blbr = black hilum with brown outer ring Rbr = red brown

Gnbr = green brown

Rbr = red brown

Br = brown Tn = tan Y = yellow

Dark or light shades of these colors are indicated by prefixing the abbreviations with D or L (eg. Lbr = light brown).

Other traits, seed:

Abh = imperfect abscission of hilum

Def = defective seedcoat (irregular splitting of the seedcoat)

Fleck = brown flecks on black seedcoat

Gncot = green cotyledon

Mih = minute hilum

Net = splitting of the outer layer of the seedcoat, which produces a netted appearance on the sides of the seeds

Saddle = saddle-shaped dark pigment on seedcoat encompassing the hilum

Sph = spread hilum (slight, regular extension of hilum pigment beyond hilum boundary)

St = black stripes (rings) on seedcoat

Also see "Mottling" in Table 3.

Other traits, leaf:

4lft or 5lft = 4 or 5 leaflets frequent

Cup = margins of leaf turn upward; upper leaf surface concave

Dab = delayed abscission of leaves

Na = narrow leaflet

Wa = wavy leaflet margin

Other traits, plant:

Cd = chlorophyll deficient

Fechlor = chlorosis due to iron deficiency (these data gathered in previous tests in Illinois, Indiana and Minnesota)

Fasc = flattened or ribbon-like stem

Sw = semi-wild

Ysdlg = yellow seedling

Slight or some expression of any of these "Other traits" is indicated by prefixing the abbreviation with S (eg. Sna = Slight narrow leaf).

Table 3:

Flowering:

50% of the plants have flowered (month - day).

Maturity:

95% of the pods have reached final color (month - day).

Lodging:

Scored 1 (erect) to 5 (prostrate).

Height:

Length of stem from ground to stem tip, in centimeters, at maturity.

Stem termination:

Scored 1 (very determinate) to 5 (very indeterminate).

Branching:

Scored 1 (rarely branching) to 5 (profusely branching).

Shattering:

Scored at harvest based on percentage of open pods as follows: 1 = no shattering, 2 = 1 to 10 percent, 3 = 10 to 25 percent, 4 = 25 to 50 percent, 5 = >50 percent.

Seed quality:

Scored 1 (good) to 5 (poor), considering wrinkling, defective seedcoat, greenish or diseased seeds.

Mottling:

Score based on percentage of seedcoat with dark pigment as follows: 1 = no mottling, 2 = 1 to 10%, 3 = 10 to 25%, 4 = 25 to 50%, 5 = >50%. A dash (-) indicates that the seedcoat was normally dark pigmented.

Seed weight:

Centigrams per seed based on a 100-seed sample.

Seed vield:

Megagrams per hectare at 13 percent moisture.

Table 4:

Seed composition:

Protein and oil: percentage of dry weight of seed.

Methionine: percentage of total protein.

- = dark seedcoat interferes with methionine determination Fatty acids (palmitic, stearic, oleic, linoleic, linolenic): Percentage of total fatty acids.

Disease reaction:

PR = Phytophthora rot caused by *Phytophthora megasperma* var. sojae. (Inoculum used was maintained as race 1 at Purdue University, Lafayette, Indiana at the time these tests were conducted.)

PY = Pythium rot caused by Pythium ultimum.

R = resistant, S = susceptible, H = hetereogeneous (R+S). (Data were obtained from artificial inoculations conducted at Purdue University, Lafayette, Indiana.)

Missing data are indicated by a double dash (--).

Table 1.0 Identification and origin information for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
PI No.	name	acquisition	origin	or released	group
	Acme	Canada	Canada	1054	00
		United States		1954 1937	00 00
	Agate		Japan		
	Capital	Canada	Canada	1944	0
	Comet	Canada	Canada	1953	0
	Crest	Canada	Canada	1957	00
	Early White Eyebrow	United States	China	By 1940	000
	Flambeau	United States	Russia	1944	00
	Goldsoy	Canada	Canada	By 1940	0
	Grant	United States	United States	1955	0
	Hardome	Canada	Canada	1953	0
	Hidatsa	United States	Japan	1941	000
	Kabott	Canada	China	1939	0
	Mandarin (Ottawa)	Canada	Canada	1934	0
	Manitoba Brown	Canada	Unknown	By 1939	00
	Merit	Canada	Canada	1959	0
	Minsoy	United States	France	1923	0
	Norchief	United States	United States	1954	0
	Ogemaw	United States	United States	1902	00
	Pagoda	Canada	Canada	1939	00
	Pando	United States	Rep. of Korea	1949	000
	Poland Yellow	Canada	Unknown	By 1932	0
	Sioux	United States	Japan	1939	000
C 21.340	Siodx	United States	United States	1932	0
C 30.683		Canada	Canada	1932	0
C 30.684		Canada	China	1939	0
	Cha luma kalea				-
	Cha kura kake	Canada	Japan	1939	00
	Kosodiguri Extra Early	Canada	Japan	1939	000
	Selection No. 9	Canada	Canada	1939	00
C 30.691		Canada	Canada	1939	00
C 30.692		Canada	China	1939	0
C 30.694		United States	United States	1939	00
	Brown Derby No. 1	United States	United States	1954	0
	Early Sunrise	United States	United States	1954	0
54.855		China	China	1922	00
68.722		China	China	1926	0
70.242-4		China	China	1926	0
79.739		China	China	1929	0
89.001		China	China	1930	0
32.203		Netherlands	Netherlands	1939	00
32.204		Netherlands	Netherlands	1939	0
32.205		Netherlands	Netherlands	1939	0
32.207		Netherlands	Netherlands	1939	0
32.214		Netherlands	Netherlands	1939	00
32.217		Netherlands	Netherlands	1939	00
51.249	Soja Brun Harif U 486	Belgium	Belgium	1945	00
52.361	Hybrid No. 398-97	Sweden	Sweden	1945	0
52.573	,5.14 140. 000-07	United Kingdom	United Kingdom	1945	00
53.203	U486	_	_		
		Belgium Belgium	Belgium	1946	00
53.208	Lisbon	Belgium	Portugal	1946	00
153.209	Grignon 32	Belgium	France	1946	0
153.210	Grignon 39	Belgium	France	1946	00
153.211	Cheron Early	Belgium	Belgium	1946	00
153.212		Belgium	Lithuania	1946	00
153.213		Belgium	Belgium	1946	0
153.216		Belgium	Belgium	1946	00

Table 2.0
Descriptive data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

	14.4			<u>Pubes</u>	cence			Seedo	oat		Other tra	its
	Matu- rity	Stem	Flower				Pod			Hilum		
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf Pla
A	00	A.1		•	_	A.I	D	•	v	Y		
Acme	00 00	N D	P W	G T	E E	N N	Br Br	S S	Y Y	۲ Rbr	Saddle	
Agate Canital	0	N	P	†	E	N	Br	D	Y		Saddle	
Capital Camat	0	N	P	G	E	N	Br	S	Ϋ́	Tn Y		
Comet	00		P	G	E			S	Ϋ́			
Crest		N				N	Br D-	S D		Y		
Early W. Eyebrow	000	N	P	G	E	N	Br		Y	Y		
Flambeau	00	N	P	T	E	N	Br	S	Y	BI		
Goldsoy	0	N	P	G	E	N	Br	S	Y	Y		
Grant	0	N	W	Lt	E	N	Br	S	Y	BI		
Hardome	0	N	P	G	E	N	Br	S	Y	G		
Hidatsa	000	D	P	T	E	N	Br	S	Gn	ВІ		
Kabott	0	N	P	G	E	N	Br	S	Y	Υ		
Mandarin(Ottawa)	0	N	Р	G	E	N	Br	D	Υ	Υ		
Manitoba Brown	00	s	W	T	Ε	N	Br	S	Rbr	Rbr		
Merit	0	N	W	G	E	N	Br	D	Υ	Bf		
Minsoy	0	N	Р	T	E	N	Tn	S	Υ	Br	Abh	Dab
Norchief	0	N	Р	Т	Ε	N	Br	S	Υ	ВІ		
Ogemaw	00	D	W	Т	E	N	Br	S	Rbr	Rbr		
Pagoda	00	N	Р	G	Ε	N	Br	S	Υ	Υ		
Pando	000	D	Р	Т	Ε	N	Br	S	Gn	BI		
Poland Yellow	0	N	Р	G	Ε	N	Br	D	Υ	Υ		
Sioux	000	D	Р	T	Ε	N	Br	S	Gn	BI		
FC 21.340	0	N	W	Т	Ε	Ssp	Br	D	ы	BI		
FC 30.683	0	N	P	Т	Ε	N	Tn	S	Br	Br		
FC 30.684	0	N	Р	T	Ε	N	Tn	D	Υ	Tn		
FC 30.685	00	D	W	T	Ε	N	Br	S	Υ	Rbr	Saddle	
FC 30.687	000	D	Р	Т	Ε	N	Br	l	Gn	ы		
FC 30.689	00	D	W	Т	Ε	Ssp	Br	s	Υ	Υ		
FC 30.691	00	D	W	Т	Ε	N	Br	S	Υ	Υ		
FC 30.692	0	N	W	Т	E	N	Br	D	Br	Br		
FC 30.694	00	N	Р	G	E	Ssp	Br	D	Υ	Υ		
FC 32.033	0	N	Р	Т	Е	N .	Br	s	Br	Br	Abh	
FC 32.141	0	N	P	G	E	N	Br	S	Y	Y		
54.855	00	s	w	Ť	Sa	N	Br	S	Rbr	Rbr		
68.722	0	N	P	T	E	N	Br	D	Υ	BI		
70.242-4	Ö	N	Р	Ġ	Ē	N	Br	s	Ÿ	Bf		
79.739	Ö	N	P	G	E	N	Br	s	Ý	Y		
89.001	Ö	N	P	G	Ē	N	Br	S	Ý	Ý		
132.203	00	s	w	T	E	N	Br	S	Rbr	Rbr		
132.204	0	N	P	Ť	Ē	Ssp	Br	S	BI	ВІ	Fleck	
132.205	ŏ	N	Р	Ť	Ē	Ssp	Br	s	BI	BI	Fleck	
132.207	Ö	N	Р	Ġ	Ē	N	Br	S	Y Y	Ϋ́	7 100K	
132.214	00	s	w	T	Ē	N	Br	s	Rbr	Rbr		
132.217	00	s	w	Ť	Ē	N	Br	S	Rbr	Rbr		
151.249	00	S	w	Ť	E	N	Br	S	Rbr	Rbr		
	0	N	VV P	Ť	E	N	Tn		Y	Br		
152.361	00		W	Ť	E	N	Br	S	r Rbr			
152.573		D						S		Rbr		
153.203	00	S	W	T	Sa	Ssp	Br D-	S	Rbr	Rbr		
153.208	00	S	W	T	Sa	N	Br	s	Rbr	Rbr		
153.209	0	N	P	T	E	N	Br	S	Br	Br		Dab
153.210	00	N	W	T	E	N	Br	S	Br	Br		
153.211	00	S	W	Т	Ε	N	Br	S	Rbr	Rbr		
153.212	00	S	W	T	Ε	N	Br	S	Rbr	Rbr		
153.213	0	N	Р	T	Ε	N	Tn	D	Br	Br		
153.216	00	S	W	T	Ε	N	Br	S	Rbr	Rbr		

Table 3.0 Agronomic data for USDA soybean germplasm collection in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Shat- tering (score)	Chlorois (score)	Seed Quality (score)	Weight (cg/sd)	Yield (Mg/ha)
Acme	701	909	2.5	81	3.0	1.0	3.0	3.5	24.0	1.29
Agate	703	902	2.5	56	1.0	1.0	2.5	3.0	27.8	1.16
Capital	709	916	3.5	89	3.5	1.0	3.0	3.0	13.1	2.29
Comet	707	916	3.0	91	3.0	1.0	4.0	3.0	18.8	1.72
Crest	701	908	3.0	76	3.0	1.0	2.0	4.0	23.1	1.76
E.W. Eyebrow	705	912	3.0	79	3.0	1.0	2.5	3.5	18.5	1.60
Flambeau	628	901	3.5	81	3.0	1.0	2.5	2.5	19.0	2.21
Goldsoy	708	909	3.5	76	3.0	1.0	3.0	3.0	22.3	1.86
Grant	702	916	3.0	84	3.0	1.0	3.0	2.5	18.1	2.66
Hardome	708	915	3.5	94	3.0	1.0	3.0	3.5	17.3	1.84
Hidatsa	705	831	2.0	46	1.0	2.0	2.5	3.5	18.4	0.69
Kabott	701	912	2.5	79	3.0	1.0	3.0	2.5	27.0	1.66
Mandarin (Ott.)	702	918	2.0	84	3.0	1.0	3.5	3.0	21.8	1.63
Manitoba Brown		905	2.0	66	2.0	1.0	3.0	3.0	22.3	1.21
Merit	70 3 706	910	3.0	91	3.0	1.0	2.0	2.0	14.8	2.47
Minsoy	708	908	4.0	71	3.0	1.0	2.0	2.0	12.2	1.94
Norchief	701	909	2.0	81	3.0	1.0	1.5	2.5	17.4	2.06
Ogemaw	708	906	2.5	64	1.5	2.0	1.5	3.5	22.5	1.10
Pagoda	703	912	3.0	76	3.0	1.0	4.5	4.0	19.5	0.94
ragoda Pando	703	827	2.0	48	1.0	1.0	2.5	3.5	17.9	0.68
Poland Yellow	703 707	912	3.5	7 6	3.0	1.0	3.0	3.5	20.6	2.04
Sioux	703	902	2.0	51	1.0	2.0	2.5	3.5	19.9	0.63
FC 21.340	703 715	923	3.5	74	2.5	2.0	2.0	2.0	28.4	1.65
		918		97	3.5		3.5			
FC 30.683	713		5.0	97 84		1.0 1.0		2.0 3.0	15.3	1.26
FC 30.684	701 704	914 907	3.0	48	3.0	1.0	3.0 3.0	3.5 3.5	19.7	1.71
FC 30.685	704 704	830	2.0 2.5	53	1.0 1.0	3.0	3.0 3.0	3.5 3.5	31.6 17.9	0.83 0.62
FC 30.687										
FC 30.689	709 708	911	1.5	61 58	1.5	1.0 1.0	3.0 1.5	3.0 4.0	22.7 25.1	0.69
FC 30.691	708	913	1.5		1.5					0.54
FC 30.692	708	913	2.5	76 71	3.0	1.0	2.0	2.5	19.8	1.46
FC 30.694	704	910	2.5	71	3.0	1.0	3.0	4.0	23.4	1.56
FC 32.033	704	913	3.5	91	4.0	1.0	3.5	2.0	13.6	2.45
FC 32.141	710	923	3.5	104	4.5	1.0	2.0	3.0	18.1	1.41
54.855	709	907	2.0	69	2.0	2.0	4.5	3.5	20.7	0.80
68.722	707	909	2.5	64	3.0	1.0	2.0	2.5	18.8	2.13
70.242-4	702	914	3.0	74	3.0	1.0	4.5	2.0	19.6	1.92
79.739	702	915	2.5	74	3.0	1.0	2.5	2.5	20.8	1.96
89.001	704	917	2.0	74 64	3.0	1.0	2.5	3.0	23.8	1.93
132.203	708 710	906	2.0	64	2.0	1.5	1.5	3.0	18.4	0.93
132.204	710	913	3.5	99	4.5	1.0	3.5	2.0	12.1	1.78
132.205	713	912	3.5	99	4.5	1.0	3.5	2.0	12.4	1.82
132.207	704	912	2.5	79 66	3.0	1.0	2.0	2.5	22.2	1.65
132.214	709	904	3.0	66	2.0	1.0	1.5	3.0	22.9	1.12
132.217	708	903	1.0	66	2.0	2.0	1.5	3.0	17.2	0.93
151.249	709	903	2.5	69	2.0	1.0	3.0	3.5	21.4	1.19
152.361	709	910	4.0	81	3.0	2.0	1.5	2.5	15.5	1.56
152.573	711	910	2.5	61	1.0	1.5	2.5	3.5	20.7	0.69
153.203	708	910	2.0	69	2.0	1.5	5.0	3.5	21.2	0.69
153.208	708	904	2.0	61	2.0	2.0	4.0	3.0	20.0	0.94
153.209	701	910	2.5	84	3.0	1.0	3.0	2.5	15.5	1.59
153.210	708	904	4.0	84	2.5	1.0	5.0	3.5	23.4	1.53
153.211	709	905	3.0	64	2.0	1.5	1.0	3.0	20.3	1.33
153.212	707	905	3.0	69	2.0	2.0	1.5	3.5	21.0	1.08
153.213	708	915	5.0	102	3.5	1.0	2.0	2.5	15.4	1.59
153.216	708	905	2.5	69	2.0	1.5	1.5	3.5	18.4	0.75

Table 4.0 Seed composition data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

				Protein		
			mposition	composition	Oil comp	
Entry	Maturity group	Oil (%)	Protein (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)
Acme	00	19.7	43.8	1.17	37.1	6.3
Agate	00	17.8	46.9		52.6	7.2
Capital	0	20.4	42.0	1.34	47.6	8.0
Comet	0	19.8	41.7	1.26	43.7	7.5
Crest	00	20.7	43.0	1.29	41.7	8.2
Early White Eyebrow	000	18.8	45.3	1.16	43.6	8.4
Flambeau	00	19.5	44.0	1.16	43.6	7.6
Goldsoy	0	19.5	44.1	1.17	47.1	8.1
Grant	0	20.6	40.9	1.08	47.1	8.8
Hardome	0	19.8	42.4	1.29	46.9	7.5
Hidatsa	000	16.3	50.9		45.3	7.2
Cabott	0	18.7	44.5	1.18	43.9	7.5
Mandarin (Ottawa)	0	20.3	43.3	1.11	43.5	7.7
Manitoba Brown	00	17.6	43.1	-	41.8	7.6
Merit	0	21.9	39.3	1.10	45.6	7.6
Minsoy	0	19.7	39.4	1.12	48.0	8.2
Norchief	0	20.9	41.6	1.13	46.0	7.5
Ogemaw	00	17.5	44.3	•	42.0	7.6
Pagoda	00	18.4	44.3	•	37.2	5.6
Pando	000	15.5	52.2	•	45.5	7.6
Poland Yellow	0	19.0	44.0	•	47.9	7.6
Sioux	000	15.9	52.2	-	46.0	7.6
FC 21.340	0	19.1	40.3	•	45.9	9.0
FC 30.683	0	17.7	45.8	-	45.3	8.0
FC 30.684	0	18.3	47.3	-	46.8	7.4
FC 30.685	00	18.0	45.9	-	44.7	6.9
FC 30.687	000	15.7	51.2	-	45.0	7.4
FC 30.689	00	17.3	42.5	-	41.3	7.3
FC 30.691	00	17.0	47.3	1.13	42.9	9.1
FC 30.692	0	17.7	45.6	-	41.0	8.4
FC 30.694	00	19.5	45.1	1.32	43.3	5.8
FC 32.033	0	19.8	41.3	-	44.2	7.1
FC 32.141	0	19.5	44.0	1.10	44.0	8.3
54.855	00	17.3	45.8	-	39.3	6.8
68.722	0	19.3	44.7	1.06	42.3	7.1
70.242-4	ō	19.0	40.3	1.33	48.1	7.7
79.739	Ō	19.1	44.3	1.03	45.3	7.2
89.001	Ö	19.5	43.6	1.02	46.9	7.9
132.203	00	18.0	44.8	-	42.6	6.8
132.204	0	16.8	45.9		46.4	8.1
132.205	Ö	16.8	45.6	-	47.1	8.1
132.207	Ö	17.2	46.8	1.08	40.1	7.9
132.214	00	17.7	44.3		38.0	7.4
132.217	00	17.7	44.9	-	40.8	7.2
151.249	00	17.6	46.0	-	38.8	6.7
152.361	0	18.5	42.8	1.29	44.5	8.6
152.573	00	16.4	44.9	1.20	44.0	7.6
153.203	00	17.0	45.4	_	51.6	7.6 7.6
				-	41.7	
153.208	00	17.6	44.5	-		7.4
153.209	0	17.1	41.9	•	45.8 42.1	7.2
153.210	00	16.6	45.9	-	42.1	7.5
153.211	00	16.9	44.3	•	42.2	7.7
153.212	00	17.1	45.0	-	42.5	7.1
153.213	0	17.7	44.3	-	48.9	8.1
153.216	00	15.9	45.1	-	42.4	7.4

Table 1.0 Identification and origin information for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

		Country	Country	Year	Matur-
	Accession	of	of	introduced	ity
PI No.	name	acquisition	origin	or released	group
153.217	Manitoba Brown	Belgium	Belgium	1946	00
153.218	Brown C	Belgium	United Kingdom	1946	00
53.219	Platter Early Brown	Belgium	Belgium	1946	00
53.221	Tideto. Larry Library.	Belgium	Belgium	1946	00
53.222		Belgium	Switzerland	1946	00
53.223	Ras 20	Belgium	Netherlands	1946	00
53.225	1146 20	Belgium	Belgium	1946	00
53.230		Belgium	Germany	1946	00
53.233	Ras 89	Belgium	Netherlands	1946	0
	Nas 09		Netherlands	1946	00
53.234	0	Belgium			
53.235	Grignon 1	Belgium	France	1946	0
53.237	Grignon 23	Belgium	France	1946	0
53.239	Desme 1	Belgium	Belgium	1946	0
53.240	Rouest 250	Belgium	France	1946	0
53.241	Rouest Yellow	Belgium	France	1946	0
53.242	Weinsoy	Belgium	Belgium	1946	0
53.245	Dieckmann Green-yellow	Belgium	Germany	1946	0
53.246		Belgium	Belgium	1946	0
53.249		Belgium	Belgium	1946	0
53.251		Belgium	Belgium	1946	0
53.252	Kesteley	Belgium	Hungary	1946	00
53.259		Belgium	Belgium	1946	0
53.261		Belgium	Belgium	1946	0
53.262		Belgium	Belgium	1946	0
53.265	Grignon 10	Belgium	France	1946	0
53.270	C.B.	Belgium	Belgium	1946	0
53.272	Villaneuve	Belgium	France	1946	Ö
53.273	Delitzsch	Belgium	Germany	1946	Ö
153.275	Domeson	Belgium	Belgium	1946	Ö
53.277	U487	Belgium	Belgium	1946	Ö
153.278	Hsachich	Belgium	France	1946	Ö
153.276 153.281	nsachien	•	Belgium	1946	0
	Noir de Toulouse	Belgium Belgium	_	1946	0
153.284	Tokio Nain Noir	Belgium Belgium	France		
153.286	TOKIO Nain Noir	Belgium	France	1946	0
153.293		Belgium	Belgium	1946	000
153.296		Belgium	Belgium	1946	000
153.297	D: 1 0	Belgium	Belgium	1946	00
153.299	Dieckmann Green	Belgium	Germany	1946	00
53.300		Belgium	Belgium	1946	0
153.301		Belgium	Belgium	1946	00
53.302		Belgium	Belgium	1946	00
53.303		Belgium	Belgium	1946	00
153.304	Grignon 37	Belgium	France	1946	0
153.305	Petit Jaune de Hongrie	Belgium	France	1946	0
153.306	Rouest 29	Belgium	France	1946	0
53.314	Kong Fou Tseu	France	France	1946	00
53.317	Onze Novembre	France	France	1946	0
53.318	Sun	France	France	1946	Ō
153.319	Tohang	France	France	1946	Ö
153.320	Tokio Jaune d'Aubignun	France	France	1946	Ö
154.189	Tokio oddile a Adbigliali	Netherlands	Netherlands	1946	0
		Netherlands Netherlands	Netherlands Netherlands	1946	00
154.190					
154.191		Netherlands	Netherlands	1946	0
154.192		Netherlands	Netherlands	1946	0
154.193		Netherlands	Netherlands	1946	00

Table 2.0
Descriptive data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

	M -4			<u>Pubes</u>	cence			Seedc	oat		Other tr	aits	
	Matu- rity	Stom	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plant
153.217	00	S	w	Т	Sa	Ssp	Br	s	Rbr	Rbr			
153.218	00	s	W	Т	Ε	N .	Br	S	Rbr	Rbr			
153.219	00	S	W	T	E	N	Br	S	Rbr	Rbr			
153.221	00	s	W	Т	Ε	N	Br	S	Rbr	Rbr			
153.222	00	S	W	T	E	N	Br	S	Rbr	Rbr			
153.223	00	S	W	T	Sa	Ssp	Br	S	Rbr	Rbr			
153.225	00	S	W	T	Sa	N	Br	S	Rbr	Rbr			
153.230	00	N	W	Т	Ε	Ssp	Br	S	Rbr	Rbr			
153.233	0	N	Р	G	Ε	N	Br	S	Υ	Υ			
153.234	00	N	Р	G	E	N	Br	S	Υ	Υ			
153.235	0	N	Р	Т	E	N	Br	D	Υ	ВІ			
153.237	0	N	Р	Т	Ε	N	Br	D	Υ	Br			
153.239	0	N	Р	Т	Ε	N	Tn	S	Υ	Br	Abh	Dab	
153.240	0	N	P	G	E	N	Br	D	Υ	Bf	Abh		
153.241	0	N	P	Т	E	N	Br	I	Υ	Br			
153.242	0	N	P	Т	Ε	N	Tn	S	Υ	Br	Abh	Dab	
153.245	0	N	P	Т	E	N	Tn	S	Lg	G			
153.246	0	N	P	G	Ε	N	Br	S	Υ	Υ			
153.249	0	N	P	G	E	N	Br	S	Υ	Υ			
153.251	0	D	P	G	Ε	N	Br	D	Υ	Υ			
153.252	00	N	P	T	E	N	Tn	S	Υ	Br	Abh	Dab	
153.259	0	D	P	G	E	N	Br	S	Y	Υ			
153.261	0	D	P	G	Ε	N	Br	D	Υ	Υ			
153.262	0	S	Р	Т	E	N	Tn	S	Y	Br	Abh		
153.265	0	S	Р	T	Ε	N	Tn	D	ВІ	BI	Abh		
153.270	0	N	W	T	Ε	N	Br	D	ВІ	ВІ			
153.272	0	N	W	T	Ε	N	Br	D	ВІ	ВІ			
153.273	0	N	W	T	Ε	Ssp	Br	D	ВІ	BI			
153.275	0	N	W	T	E	N	Br	D	Bí	BI			
153.277	0	N	W	T	E	Ssp	Br	D	BI	BI			
153.278	0	N	W	T	E	Ssp	Br	D	BI	BI			
153.281	0	N	P	T	E	N	Br	S	BI	BI	Fleck		
153.284	0	N	W	T	E	Ssp	Br	D	BI	BI			
153.286	0	N	W	T -	E	Ssp	Br	D	ВІ	BI			
153.293	000	D	P	T -	E	N	Br	S	Gn	BI			
153.296	000	D	P	T -	E	N	Br	S	Gn	BI			
153.297	00	D	P	T	E	Ssp	Br	S	Gn	BI			
153.299	00	N	P	T	E	N	Br Tn	S	Lg v	G Br	ALL	DL	
153.300	0	N	P	T T	E	N N	Tn Br	S	Y	Br Bl	Abh	Dab	
153.301	00	D	P P	Ť	E E	N N	Br Br	s s	Gn Gn	BI BI			
153.302	00 00	D S	W	Ť	E Sa	N N	Br Br	ı	Gn Rbr	Rbr			
153.303 153.304	0	S N	vv P	Ť	Sa E	N N	Br Br	S	Y	Br			
							Tn	S			A h.h.	Dob	
153.305	0	N	P	T T	E E	N N		S	Y Y	Br	Abh	Dab	
153.306	0	N	P	Ť		N N	Br Br		Y	BI B-			
153.314	00	N N	P	Ť	E E	N N	Br Br	D S	Y	Br Br			
153.317	0	N N	P				Br Br			Br Bf	1 L L		
153.318	0	N N	P	G	E	N N	Br Dr	D	Y Y	Bf	Abh		
153.319	0	N	P	G	E	N	Br	S		lb Bt	A L.L		
153.320	0	N	P	G	E	N	Br B-	D	Y	Bf T∽	Abh		
154.189	0	S	W	T	E	N Son	Br B-	S	Υ	Tn			
154.190	00	S	W	T	E	Ssp	Br T	S	Gn C-	BI C=			
154.191	0	S	P	T	E	N	Tn D-	S	Gn C	Gn C=			
154.192	0	S	P	T T	E	N	Br	D	Gn	Gn			
154.193	00	N	W	T	Ε	N	Br	D	Υ	Υ			

Table 3.0 Agronomic data for USDA soybean germplasm collection in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

Entry	Flowering <u>date</u> (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Shat- tering (score)	Chlorois (score)	Seed Quality (score)	Weight (cg/sd)	Yield (Mg/ha)
153.217	708	905	2.5	66	2.0	1.0	1.0	3.0	21.8	1.30
153.218	709	907	2.5	61	2.0	1.0	2.0	3.5	23.7	0.98
153.219	708	906	2.0	71	2.0	1.5	2.0	2.5	19.0	1.07
153.221	708	908	2.5	69	2.0	1.5	4.5	4.0	22.0	0.75
153.222	708	906	2.0	61	2.0	3.5	3.5	3.5	23.2	0.82
153.223	708	906	2.5	56	2.0	1.0	1.5	3.0	24.7	0.88
153.225	708	907	2.0	61	2.0	1.0	1.5	3.5	23.0	1.16
153.230	709	905	1. 3	66	2.5	1.0	2.0	3.5	18.5	0.69
153.233	710	919	4.0	91	4.0	1.0	3.0	3.0	18.7	2.08
153.234	703	914	2.5	74	3.0	1.0	3.5	3.0	22.4	1.45
153.235	705	908	2.5	69	3.0	1.0	1.0	3.0	17.6	2.14
153.237	701	910	4.5	66	3.0	1.0	2.5	2.5	16.6	1.89
153.239	703	907	3.5	71	3.0	1.0	1.5	2.0	11.0	2.01
153.240	709	913	3.5	71	3.0	2.0	3.0	2.0	18.0	2.03
153.241	701	910	4.5	76	3.0	1.5	2.5	2.0	14.7	2.43
153.242	708	908	3.5	74	3.0	1.5	1.5	2.5	11.2	1.92
153.245	702	914	3.5	89	3.0	1.0	3.5	3.0	17.3	2.70
153.246	702	915	3.5	76	3.0	1.0	1.5	2.5	23.5	2.33
153.249	702	917	3.5	79	3.0	1.0	2.0	2.5	19.0	2.78
153.251	709	913	2.0	51	1.0	1.0	3.0	2.5	18.5	1.09
53.252	707	909	4.0	81	3.0	1.0	3.0	3.0	11.2	2.27
153.259	708	915	2.0	56	1.0	1.0	2.0	3.0	18.3	1.37
53.261	709	916	2.0	53	1.0	1.0	2.0	3.0	19.8	1.34
153.262	707	911	3.0	64	2.0	1.0	2.5	2.0	10.2	1.80
53.265	705	913	2.0	53	2.0	1.0	2.5	2.0	18.9	1.36
53.270	705	913	3.5	94	4.0	1.0	1.5	2.5	14.6	1.92
153.272	708	914	3.0	97	3.5	1.0	2.0	2.5	14.3	2.02
153.273	708	913	4.0	91	4.0	1.0	2.0	2.5	14.1	1.59
153.275	708	913	2.5	99	4.0	1.0	1.0	2.5	14.1	1.76
53.277	709	913	3.0	99	4.5	1.0	2.0	2.5	14.9	1.84
153.278	708	913	3.5	94	4.0	1.0	2.5	3.0	13.8	2.00
153.281	707	913	3.5	99	5.0	1.0	2.0	2.5	13.2	2.06
153.284	709	913	3.0	94	4.0	1.0	2.0	2.5	14.2	2.09
153.286	705	910	3.0	94	4.0	1.0	3.0	2.5	14.7	2.15
153.293	703	824	1.5	51	1.0	2.0	2.5	3.5	17.8	0.73
153.296	702	831	2.0	56	1.0	2.0	3.0	4.0	19.3	0.68
153.297	710	905	2.0	64	1.0	1.5	2.0	4.0	17.8	0.48
153.299	628	904	4.0	86	4.0	1.0	3.0	4.0	14.9	2.66
153.300	702	908	3.5	69	3.0	1.0	1.5	2.5	11.2	2.21
153.301	709	905	1.5	58	1.0	1.5	3.0	4.0	18.5	0.52
153.302	709	906	1.5	53	1.0	1.5	2.0	4.0	18.5	0.49
153.303	709	907	3.0	66	2.0	2.0	3.0	4.0	21.4	0.92
153.304	702	910	4.0	76	3.0	1.0	2.5	2.0	14.3	2.58
53.305	705	909	4.0	74	3.0	1.0	2.5	2.0		
	709		4.0 4.5	7 4 99			2.5 2.5		12.1	2.04
53.306 53.314		924			3.5	1.0		3.0	20.3	2.86
	702 704	907	2.5	74 74	3.0	1.0	1.0	3.0	22.3	2.19
153.317	704 709	909	4.0	74 60	3.0	1.0	1.5	3.0	20.0	1.61
153.318	709	908	3.5	69	3.0	1.5	3.5	2.5	17.7	1.83
153.319	703	911	4.0	76	3.0	1.0	2.0	3.0	17.4	2.49
153.320	701	909	3.0	76	3.0	1.0	3.5	2.5	17.1	2.06
154.189	716	915	4.0	76	2.0	1.0	3.5	2.5	14.8	1.51
154.190	713	908	3.0	61	2.0	1.0	1.5	3.5	15.9	1.09
154.191	707	909	2.0	56	2.0	1.0	2.0	3.0	15.7	1.05
154.192	706	911	2.0	56	2.0	1.0	2.5	3.0	19.3	1.59
154.193	712	907	3.0	71	3.0	1.0	2.0	3.0	14.0	1.31

Table 4.0 Seed composition data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to Pl 266.807, grown at St. Paul, MN $\,$

				Protein		
			mposition	<u>composition</u>	Oil comp	
_	Maturity	Oil	Protein	Methionine	Linoleic	Linolenic
Entry	group	(%)	(%)	(% protein)	(%)	(%)
153.217	00	16.6	44.7	-	41.3	7.2
153.218	00	17.1	45.4	<u>-</u>	41.9	7.0
153.219	00	17.6	43.5	_	43.8	7.0 7.0
				•		
153.221	00	17.0	45.4	-	41.4	7.3
53.222	00	16.8	45.6	•	41.1	6.7
153.223	00	17.4	44.4	•	39.5	7.1
153.225	00	17.6	44.9	•	41.2	7.6
153.230	00	18.0	43.9	•	44.0	7.2
153.233	0	21.2	40.4	1.21	44.6	7.3
153.234	00	17.1	47.0	1.15	45.2	7.6
153.235	0	19.0	43.8	1.16	46.7	7.6
153.237	0	18.4	42.6	1.18	44.5	8.4
153.239	0	19.0	40.0	1.19	45.6	8.2
153.240	0	20.2	39.5	1.22	42.2	7.7
153.241	Ö	19.3	41.0	1.32	45.2	9.5
153.242	0	20.6	36.6	1.14	45.1	8.5
153.242 153.245	0	20.6	40.4	1.15	43.1	10.5
153.246 153.246	Ö	20.0	42.9	1.10	43.3	7.9
153.249	0	20.0	41.6	1.35	42.8	8.9
153.251	0	20.0	41.1	1.38	47.9	7.5
153.252	00	19.6	40.3	1.39	47.0	8.3
153.259	0	20.4	41.9	1.15	49.0	6.7
153.261	0	20.0	41.6	1.29	49.1	7.6
153.262	0	19.2	39.8	1.32	47.1	8.7
153.265	0	20.7	38.6	-	49.6	8.7
153.270	0	19.6	40.8	-	48.1	8.1
153.272	0	18.9	41.8	•	48.3	8.2
153.273	0	18.6	41.8	•	48.1	7.6
153.275	0	18.5	41.3		46.2	8.1
153.277	0	18.7	41.1	-	46.6	8.3
153.278	Ō	18.9	41.2	•	47.7	8.1
153.281	o	16.8	46.1		47.4	8.3
153.284	Ö	19.3	42.2		44.4	8.0
153.286	0		41.0	•	46.0	7.7
		18.5		4 40		
153.293	000	15.8	51.1	1.19	45.5	7.0
153.296	000	15.1	52.9	-	44.9	6.9
153.297	00	14.8	51.0	-	43.2	6.6
153.299	00	20.6	43.1	1.13	47.1	8.6
153.300	0	18.6	38.3	1.38	39.9	8.1
153.301	00	14.7	50.8	1.12	44.2	7.3
153.302	00	15.8	50.7	-	43.3	7.1
153.303	00	17.1	45.2	-	40.8	7.8
153.304	0	18.7	40.6	1.22	43.8	9.8
153.305	0	19.4	40.1	1.23	45.4	9.1
153.306	0	20.0	39.1	1.38	41.8	9.5
153.314	00	18.2	47.0	1.18	42.4	7.3
153.317	0	18.3	45.8	1.26	43.0	7.8
153.318	Ö	20.9	40.3	1.37	42.5	7.9
153.319	Ö	20.8	38.9	1.32	44.5	7.3 7.7
	0					7.7 7.8
153.320		21.7	40.4	1.26	45.5 47.0	
154.189	0	18.6	41.6		47.9	8.0
154.190	00	17.9	43.8	1.26	47.7	8.9
154.191	0	18.8	43.5	1.10	49.0	8.2
154.192	0	19.2	42.3	1.06	48.0	7.6
154.193	00	18.2	43.2	1.23	46.3	7.4

Table 1.0 Identification and origin information for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
PI No.	name	acquisition	origin	or released	group
154.194		Netherlands	Netherlands	1946	0
154.196		Netherlands	Netherlands	1946	0
154.197		Netherlands	Netherlands	1946	00
154.198		Netherlands	Netherlands	1946	00
154.199		Netherlands	Netherlands	1946	00
54.200		Netherlands	Netherlands	1946	00
59.764		Rep. of Korea	Rep. of Korea	1947	00
61.431A	Fiskeby II	Sweden	Sweden	1947	00
61.431B	(Fiskeby II)	Sweden	Sweden	1947	000
61.988	Giesseler	Austria	Germany	1948	00
61.989	Wolfsthaler	Austria	Germany	1948	0
79.822	Wachenheimer Glebe	Germany	Germany	1949	0
80.499		Germany	Germany	1949	00
80.501		Germany	Germany	1949	0
80.502		Germany	Germany	1949	00
80.507		Germany	Germany	1949	00
80.508		Germany	Germany	1949	00
80.509		Germany	Germany	1949	00
80.516		Germany	Germany	1949	00
80.517		Germany	Germany	1949	00
80.519		Germany	Germany	1949	000
80.521		Germany	Germany	1949	000
80.524		•	•		
		Germany	Germany	1949	00
80.525		Germany	Germany	1949	000
80.529		Germany	Germany	1949	0
80.530		Germany	Germany	1949	0
80.532		Germany	Germany	1949	0
81.531		Japan	Japan	1949	0
81.571		Japan	Japan	1949	0
84.047	Rana Br. 442	Yugoslavia	Yugoslavia	1949	0
89.857	Grignon 17	France	France	1950	0
89.859	Light Brown	France	France	1950	0
89.860	Starackramiskaya	France	France	1950	00
89.861	Grignon 18	France	France	1950	0
89.862	Brun Matif Rouest	France	France	1950	0
89.866		France	France	1950	o
89.867	Vilnensis	France	France	1950	00
89.868	Grignon 19	France	France	1950	000
89.869	Grignon 39	France	France	1950	000
89.870	Grignon 3	France	France	1950	0
89.871	Grignon 15	France		1950	0
	Commercial Huilerie Nord		France		
89.872		France	France	1950	0
89.873	Miko Saumon	France	France -	1950	0
89.874	Ochroleuca	France	France	1950	00
89.875	Kamianetz Graine Jaune Unie	France	France	1950	00
89.876	Weka	France	France	1950	0
89.877	SS	France	France	1950	00
89.878	Mandchourie	France	France	1950	00
89.879	Tulowka	France	France	1950	00
89.880	Bitterhof	France	Germany	1950	00
89.882	Dieckmanns Hellgelb	France	Germany	1950	0
89.883	Dieckmanns Fruhelgelbe	France	Germany	1950	Ö
89.885	Hatto Jaune	France	France	1950	0
89.886	Jaune de Desme				
	Junio de Desilia	France	France	1950	00

Table 2.0
Descriptive data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

154.194	Seed	Leaf Pi	Plant
154.194	Seed	Leaf Pi	Plant
154.196 O D P T E N Br D Gn BI 154.198 OO D P T Sa N Br S Y BI 154.198 OO D P T E N Br S Gn BI 154.199 OO S P T E N Br S Rbr Rbr 154.200 OO D P T E N Br S Rbr Rbr 154.200 OO D P T E N Br S Rbr Br 154.200 OO D P T E N Br S Gn BI 161.983 OO N P T E N Br S Y Br 161.989 O N P T E			
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154.197 OO D P T Sa N Br S Y BI 154.199 OO S P T E N Br S Rbr Rbr 154.199 OO D P T E N Br S Rbr Rbr 154.199 OO D P T E N Br S Rbr Rbr 154.199 OO D P T E N Br S Rbr Rbr 159.764 OO D P T E N Br S Gn BI 161.431B OO S W T E N Br S Y Br 161.989 O N P T E N Br S Y Br 179.822 O N P T E			
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189.859 O N P T E N Tn D Br Br 189.860 OO N P T E Ssp Br S Rbr Rbr 189.861 O N P T E N Tn S Rbr Rbr	Abh		
189.860			
189.861 O N P T E N Tn S Rbr Rbr			
	Abh	Dab	
189.862 O S P T E N Br D Rbr Rbr			
189.866 O N P T A N BI S Br Br			Sv
189.867 OO S W T E Ssp Br S Rbr Rbr			
189.868			
189.869 OOO S W T E Ssp Br S Br Br			
189.870 O S W T E N Br S Rbr Rbr			
189.871 O S W T E N Br D Br Br			
189.872 O N W T E N Br S Br Br			
189.873 O N W T E Ssp Bl D Rbr Rbr			
189.874 OO D W T E N Br S Rbr Rbr			
189.875 OO N P G E Ssp Br S Y Y			
189.876			
189.877 OO D P G E N Br D Y Y			
189.878			
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189.883 O N P G E N Br S Y G	A L-I		
189.885 O N P G E N Br D Y Bf	Abh		
189.886 OO N P G E N Br S Y Y			
189.893 O N P T E N Br D Y Br			

Table 3.0 Agronomic data for USDA soybean germplasm collection in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Shat- tering (score)	Chlorois (score)	Seed Quality (score)	Weight (cg/sd)	Yield (Mg/ha)
154.194	709	911	2.0	48	1.5	1.0	3.5	3.0	21.8	1.31
154.196	712	914	2.0	66	1.5	1.0	3.5	3.0	15.2	1.29
154.197	707	907	2.0	51	1.0	1.0	3.0	4.0	16.7	0.87
154.198	707	904	2.0	51	1.0	1.5	2.5	4.5	19.3	0.69
154.199	707	906	1.5	66	2.0	1.0	2.5	3.5	17.0	0.85
154.200	630	905	1.5	51	1.0	1.0	2.5	4.0	20.4	0.86
159.764	702	903	1.5	51	1.0	1.5	2.5	4.0	20.0	0.67
161.431A	702	903	2.5	64	2.0	1.0	1.5	2.5	18.6	1.26
161.431B	630	828	3.0	58	2.0	1.0	3.0	2.5	15.0	1.01
161.988	702	907	3.5	79	3.0	1.0	3.0	3.0	11.5	2.13
161.989	709	910	3.5	79	3.0	1.0	3.0	2.5	15.9	2.19
179.822	702	910	2.5	79	3.0	1.0	3.0	2.5	16.5	2.23
180.499	628	904	2.5	76	3.0	1.0	4.0	3.0	16.2	2.70
180.501	701	908	3.0	76	3.0	1.0	4.0	2.0	14.9	2.26
180.502	628	907	3.0	76	3.0	1.0	4.0	4.0	15.0	2.35
180.507	628	905	2.5	76	3.0	1.0	3.0	4.5	17.6	2.29
180.508	708	907	3.5	69	3.0	1.0	1.0	2.0	19.4	1.99
180.509	710	908	5.0	81	3.0	1.0	1.0	3.0	17.3	1.72
180.516	711	906	5.0	86	2.5	1.0	1.5	3.0	16.9	1.60
180.517	711	907	5.0	79	2.5	1.0	1.5	3.5	18.1	1.78
180.519	702	828	4.0	64	2.5	1.0	2.5	4.0	16.6	1.32
	702 702	828	4.0	74	2.5	1.0	2.5	3.5	17.5	1.53
180.521	702 707	904	3.5	69	3.0	1.0	3.0	3.0	19.6	2.06
180.524	707 706	829	3.5 3.5	76	3.0	1.0	2.5	3.5	18.3	2.03
180.525	701	910	3.5	71	3.0	1.0	3.5	2.5	16.8	1.84
180.529	701 701	908	4.5	84	3.5	1.0	3.0	3.0	13.9	1.65
180.530	701 701	911	3.5	7 9	3.0	1.0	3.0	3.0	20.4	2.09
180.532	711	922	3.0	79	2.0	1.5	2.5	3.0	28.5	1.15
181.531	711 726	925	4.0	7 5 76	2.5	2.0	3.0	2.5	12.8	1.45
181.571	726 702	908	3.5	81	3.0	1.0	2.5	2.5	13.1	1.96
184.047 189.857	702 706	914	2.5	81	3.0	1.0	3.0	3.0	24.4	1.46
		916	5.0	89	3.5	1.0	3.0	3.0	15.2	1.14
189.859	707 702	909	3.0	76	3.0	1.0	3.0	3.0	15.5	1.61
189.860	702 708	906	4.0	71	3.0	1.0	2.5	3.0	10.7	1.90
189.861	708 709	911	2.0	51	2.0	1.0	3.0	3.0	21.6	1.93
189.862 189.866	70 3 723	912	5.0	71	3.0	1.0	2.5	3.0	4.0	0.93
189.867	723 708	907	2.0	58	2.0	1.0	2.0	2.5	24.8	1.20
189.868	706 706	826	3.0	58	2.0	3.5	3.0	3.0	24.6	1.00
189.869	708	829	3.0	58	2.0	3.0	3.0	3.5	19.5	0.95
189.870	716	911	4.0	66	2.0	1.0	2.5	3.0	22.2	1.26
	713	917	2.5	71	2.0	1.0	2.0	3.0	22.8	1.80
189.871	713 703	916	2.5	89	3.0	1.0	3.0	2.5	16.6	1.78
189.872	703 703	911	3.0	69	3.0	1.5	3.0	3.5	24.4	1.43
189.873				66	1.5	2.0	2.0	3.0	19.0	0.32
189.874	709	907	2.5		3.0	1.0	4.0	4.0	23.0	1.46
189.875	630	908	2.5	69 56						
189.876	708	915	2.0	56	1.5	1.0	3.5	3.0	18.5 25.1	1.49
189.877	707	909	2.0	48	1.0	1.0	4.0	3.5	25.1	1.06
189.878	629	910	3.5	81	3.0	1.0	3.5	3.0	24.6	2.06
189.879	705	912	2.0	51	1.0	1.5	4.0	3.5	27.1	0.79
189.880	629	910	3.0	81	3.0	1.0	3.0	3.0	22.1	1.62
189.882	703	909	3.5	86	3.0	1.0	3.0	2.5	17.9	2.50
189.883	701	912	4.0	86	3.0	1.0	3.5	3.0	16.5	2.64
189.885	7.09	912	4.0	76	3.0	1.0	3.5	2.5	17.4	2.35
189.886	702	913	3.0	76	3.0	1.5	4.0	3.0	21.7	1.76
189.893	701	918	3.5	86	3.0	1.0	3.0	3.0	17.3	2.61

Table 4.0 Seed composition data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

				Protein					
			mposition	composition	Oil composition				
	Maturity	Oil	Protein	Methionine	Linoleic	Linolenic			
Intry	group	(%)	(%)	(% protein)	(%)	(%)			
54.194	0	19.9	41.0	1.17	48.8	8.8			
154.196	Ö	16.0	49.4	1.17	45.2	8.4			
54.197	00	18.4	47.8	•	43.2	6.7			
				•					
54.198	00	17.9	45.6	-	43.2	6.2			
154.199	00	17.4	46.7	-	42.7	6.3			
154.200	00	18.9	47.0	1.17	46.9	6.1			
159.764	00	15.7	52.6	1.01	47.9	7.1			
61.431A	00	17.9	42.4	1.19	43.8	8.2			
161.431B	000	17.1	43.1	1.20	46.7	10.7			
161.988	00	19.3	40.0	1.20	45.6	8.0			
161.989	0	19.1	40.9	1.16	49.8	9.3			
179.822	0	20.6	42.0	1.17	47.7	8.3			
180.499	00	21.8	39.7	1.23	47.6	7.2			
180.501	0	21.3	39.1	1.11	47.8	7.4			
180.502	00	21.4	40.2	1.06	46.8	7.7			
180.507	00	21.5	43.6	1.16	48.3	6.7			
80.508	00	17.5	43.0	1.15	41.4	7.2			
180.509	00	16.9	41.7	1.15	40.9	8.2			
180.516	00	17.0	41.1	1.10	40.3	8.4			
180.517	00	17.0	42.7	1.30	40.3 41.7	8.1			
180.517	000	19.4	46.4	1.16	44.9	5.8			
180.521	000	19.6	44.7	1.16	42.0	5.8			
80.524	00	20.3	40.9	1.20	42.2	5.1			
80.525	000	21.9	39.0	1.22	40.2	7.0			
180.529	0	20.3	43.1	1.31	48.0	8.0			
80.530	0	20.2	43.7	1.19	47.7	8.5			
80.532	0	20.9	41.1	1.30	45.8	7.0			
181.531	0	18.4	40.8	1.16	43.8	7.5			
181.571	0	17.7	48.5	1.24	47.4	10.5			
184.047	0	19.4	41.4	1.22	46.2	8.0			
189.857	0	18.0	44.1	-	42.3	6.9			
189.859	0	17.2	44.4	-	48.8	8.0			
189.860	00	17.9	44.1	<u>-</u>	45.7	6.9			
189.861	0	19.8	38.2	_	47.6	7.6			
189.862	Ö	18.1	43.5	-	48.4	9.6			
189.866	Ö	14.9	44.3	-	49.5	12.9			
189.867	00	17.0	44.5	-	41.7	7.3			
189.868	000	16.8	44.9	<u>-</u>	37.6	7.5			
189.869	000	18.9	45.5	-	41.7	7.0			
189.870	0	17.3	42.3	-	39.4	8.6			
189.871	0	17.0	43.4	_	46.7	10.9			
189.871 189.872	0	18.2	43.8	<u>-</u>	46.7	7.9			
				-					
189.873	0	17.5	42.0	-	42.5	8.1			
189.874	00	16.6	44.3	1 00	37.6	7.4			
89.875	00	17.0	47.3	1.23	42.6	6.4			
89.876	0	18.5	40.7	1.33	44.3	6.9			
189.877	00	17.5	46.4	1.21	39.7	6.3			
189.878	00	17.9	46.4	1.17	43.3	6.2			
189.879	00	17.0	47.1	1.15	41.6	5.6			
189.880	00	17.3	48.9	1.15	44.9	7.0			
189.882	0	20.0	42.3	1.22	47.6	9.8			
189.883	0	20.2	41.1	1.27	48.2	10.5			
189.885	0	20.6	40.5	1.18	46.5	8.1			
189.886	00	16.8	47.0	1.12	42.9	7.9			
189.893	0	20.4	41.0	1.40	46.1	8.9			

Table 1.0 Identification and origin information for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
PINo.	name	acquisition	origin	or released	group
189.894	Dippes Fruhe Gelbe	France	Germany	1950	0
89.897	Rouest 71	France	France	1950	Ö
89.898	Grignon 45	France	France	1950	Ö
89.899	Rouest 104	France	France	1950	0
		France			0
89.900	Grignon 41		France	1950	
89.901	Grignon 21 Kouban 0375	France	France	1950	00
89.903		France	France	1950	0
89.904	Tokio Jaune Oeil Brun	France	France	1950	0
89.906	Halton	France	France	1950	00
89.913	Braungelbe II	France	Germany	1950	0
89.923	Dans Ossijek II	France	France	1950	0
89.932	Rouest 85	France	France	1950	00
89.936	Dr. Brillmeyer	France	France	1950	00
89.937	Semilutea	France	France	1950	00
89.938	Mediascher Braune	France	France	1950	0
89.939	Poppelsdorf 3/1225	France	Germany	1950	0
89.940	Rouest 13 Al 2	France	France	1950	000
89.944	Amourskayachortnaya	France	France	1950	0
89.950	Cosse Lisse	France	France	1950	Ō
89.951	Cosse Velue	France	France	1950	Ō
89.952	Norddeutsche Schwarz Matt	France	Germany	1950	00
89.955	Noir des Freres Dippeo	France	France	1950	0
89.956	14011 des l'ieles Dippeo	France	France	1950	00
89.960	Oscar Dickmann	France	France	1950	0
					0
89.961	Rouest 117	France	France	1950	-
89.963	Geant Vert	France	France	1950	000
89.964		France	France	1950	0
89.965		France	France	1950	0
94.624		Sweden	Sweden	1951	00
94.625		Sweden	Sweden	1951	0
94.626		Sweden	Sweden	1951	00
94.627		Sweden	Sweden	1951	00
94.630		Sweden	Sweden	1951	00
94.631		Sweden	Sweden	1951	00
94.632		Sweden	Sweden	1951	00
94.633		Sweden	Sweden	1951	000
94.634		Sweden	Sweden	1951	000
94.635		Sweden	Sweden	1951	00
94.636		Sweden	Sweden	1951	000
94.638		Sweden	Sweden	1951	00
94.639		Sweden	Sweden	1951	000
94.640		Sweden	Sweden	1951	000
94.641		Sweden	Sweden	1951	000
94.643		Sweden	Sweden	1951	000
				·	
94.644		Sweden	Sweden	1951	000
94.645		Sweden	Sweden	1951	00
94.646		Sweden	Sweden	1951	00
94.647		Sweden	Sweden	1951	00
94.648		Sweden	Sweden	1951	00
94.653		Sweden	Sweden	1951	00
94.654		Sweden	Sweden	1951	00
94.655		Sweden	Sweden	1951	00
94.656		Sweden	Sweden	1951	00
96.485		Sweden	Sweden	1951	000
96.486		- · · · · · · · · · · · ·	21.50011		

Table 2.0
Descriptive data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

	N 4 . A			<u>Pubes</u>	cence			Seedo	oat		Other tra	aits	
Entry	Matu- rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
189.894	0	N	Р	т	E	N	Br	D	Υ	Υ			
189.897	0	N	Р	Т	E	N	Tn	S	Υ	Br			
189.898	0	N	Р	Т	E	N	Tn	S	Υ	ВІ	Abh		
189.899	Ō	N	Р	Т	E	Ssp	Br	S	Υ	G			
189.900	0	N	Р	T	E	N	ВІ	S	Υ	Br			
189.901	00	N	Р	Т	E	Ssp	Br	S	Υ	Υ			
189.903	0	N	Р	G	E	N	Br	S	Υ	lb			
189.904	0	N	Р	Т	E	N	Br	S	Υ	Br			
189.906	00	N	Р	Т	E	N	Br	S	Υ	ВІ			
189.913	0	N	P	T	E	N	Tn	S	Υ	Br	Abh		
189.923	Ö	N	w	Ť	E	Ssp	Tn	D	Ý	Br			
189.932	00	N	w	Ť	Ē	Ssp	Tn	D	Ÿ	Br			
189.936	00	N	P	Ť	Ē	N	Br	D	Ÿ	Br			
189.937	00	N	Р	Ť	Ē	N	Br	D	Ÿ	Br			
189.938	0	N	Р	T	Ē	N	Br	D	Ÿ	Br			
189.939	Ö	N	P	T	E	N	Br	S	BI	BI	Fleck		
189.940	000	S	P	T	Ē	Ssp	Br	D	BI	BI	11000		
189.944	0	N	P	T	E	N	Br	D	BI	BI		Dab	
189.950	0	N	P	Ť	Ā	Sp	Br	В	BI	BI		Dab	Sw
189.951	0	N	P	Ť	Â	Sp	Br	В	BI	BI			Sw
189.952	00	N	w	Ť	Sa	Ssp	Br	D	BI	BI			344
189.955	0	N	W	T	E	Ssp	Br	D	BI	BI			
				Ť	Sa	•		D	BI	BI			
189.956	00	N	W	T T		Ssp	Br Br	D	BI	BI			
189.960	0	N	W		E	Ssp			BI	BI			
189.961	0	N	W	T	E	N	Br D:	S					
189.963	000	D	P	T	E	N C	Br	D	Gn O-	BI			
189.964	0	N	Ρ,	T	E	Ssp	Br	D	Gn	Br			
189.965	0	N	P	T -	E	Ssp	Br	D	G	G			
194.624	00	D	P	T -	E	N	Tn	D	Υ	Br			
194.625	0	N	P	T -	E	N	Br	S	Y	Br	Abh		
194.626	00	S	P	T	E	Ssp	Br	S	Y	Br	Abh		
194.627	00	N	P	G	E	N	Br —	S	Υ	Y			
194.630	00	N	P	T	Sa	N	Tn	D	Y	Y			
194.631	00	N	Р	G	E	N	Tn	S	Υ	G			
194.632	00	N	P	G	E	N	Br	S	Y	Bf			
194.633	000	N	P	Ţ	E	N	Br	S	Lg	Bi			
194.634	000	D	P	T	E	Ssp	Tn -	D	Y	Br			
194.635	00	D	P	T	E	N	Tn	D	Gn	BI			
194.636	000	D	P	T	E	Ssp	Tn	ı	Y	Br	Abh		
194.638	00	D	P	T	E	Ssp	Tn	s	Y	Br	Abh		
194.639	000	D	P	T	E	Ssp	Tn	S	Y	Br	Abh		
194.640	000	D	P	T	E	N	Br	S	Gn	BI			
194.641	000	S	P	<u>T</u>	E	N	Br	S	Gn	ВІ			
194.643	00	N	P	Ţ	E	N	Br	D	Y	Y			
194.644	000	N	P	T	E	N	Br	D	Y	Br			
194.645	00	S	Р	G	E	N	Br	S	Υ	Lbf			
194.646	00	N	Р	G	E	Ssp	Br	D	Y	Bf			
194.647	00	N	Р	G	E	N	Br	D	Υ	Υ	Abh		
194.648	00	N	Р	G	E	N	Br	S	Υ	Bf			
194.653	00	N	Р	G	E	Ssp	Tn	D	Υ	Bf	Abh		
194.654	00	N	Р	G	E	Ssp	Br	D	Υ	Bf	Abh		
194.655	00	N	Р	Т	E	N	Br	D	Υ	Br	Abh		
194.656	00	N	Р	Т	E	N	Br	S	Υ	Br			
196.485	000	S	Р	Т	Ε	Ssp	Tn	s	Υ	Br			
196.486	00	D	P	Ť	E	N	Tn	Ī	Υ	Br			

Table 3.0 Agronomic data for USDA soybean germplasm collection in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Shat- tering (score)	Chlorois (score)	Seed Quality (score)	Weight (cg/sd)	Yield (Mg/ha)
189.894	711	914	4.0	79	3.0	1.0	3.0	2.5	19.5	1.55
189.897	701	911	4.5	74	3.0	1.0	3.5	2.5	17.2	2.43
189.898	701	909	5.0	74 74	3.0	1.0	2.5	2.5	18.7	2.43 2.19
189.899	711	916	2.5	7 9	3.0	1.0	2.0	2.5	20.4	1.78
189.900	701	910	4.0	69	3.0	1.0	3.0	2.5	14.2	1.78
189.901		913				1.0		4.0		
189.903	705 702	910	3.5 2.0	84 66	3.0 3.0	1.0	2.0 2.5	3.0	20.8 17.8	1.24 2.02
189.904	702 704	909		71	3.0	1.0	1.0	2.5	19.2	1.85
	70 4 705	907	2.5 3.5	66	2.5	1.0	1.5	3.5	20.0	1.86
189.906	703 701	909	3.5	81	3.5	1.0	2.0	2.0	12.7	1.93
189.913	701 701	908	3.5 2.5	69	3.0	1.0	2.5		18.7	
189.923			3.0					2.5		2.00
189.932	702	911		58	3.0	1.0	3.0	2.5	20.8	1.92
189.936	628	907	4.0	79 70	3.0	1.0	2.0	3.0	20.5	2.35
189.937	628	907	4.0	79 76	3.0	1.0	2.0	2.5	20.6	2.35
189.938	701	907	3.0	76	3.0	1.0	1.0	3.0	19.8	1.92
189.939	709	915	5.0	94 66	3.5	1.0	2.5	2.5	15.2	2.20
89.940	628	901	1.5	66	2.0	1.0	3.5	2.5	26.9	1.56
89.944	702	910	4.0	86	3.0	1.0	2.0	2.0	14.0	1.92
189.950	725	924	4.5	64	2.5	1.0	1.5	3.0	6.1	1.08
89.951	728	926	4.5	61	2.5	1.5	1.5	2.0	6.1	1.73
89.952	629	909	3.5	89	3.5	1.0	4.0	3.0	14.5	2.28
89.955	704	912	3.0	99	4.5	1.0	1.0	2.0	13.8	2.35
89.956	708	913	2.5	91	4.0	1.0	3.0	2.0	13.1	2.15
89.960	708	913	3.0	99	4.0	1.0	2.0	2.0	14.1	2.00
89.961	701	911	2.5	91	4.0	1.0	1.5	2.0	15.8	2.54
89.963	703	901	2.0	48	1.0	2.0	3.0	4.0	18.3	0.80
89.964	703	915	2.5	76	3.0	1.0	1.0	3.0	17.6	1.47
189.965	712	922	3.5	94	3.5	1.0	2.0	3.0	13.1	2.30
194.624	703	906	1.5	64	1.5	3.0	1.5	3.5	22.5	0.84
194.625	712	916	4.0	84	3.0	1.0	1.5	3.0	23.5	1.98
194.626	708	916	3.5	66	2.0	1.0	1.5	3.0	33.8	1.94
194.627	628	903	2.0	79	3.0	1.0	3.0	3.0	21.9	1.72
194.630	701	906	2.0	74	3.0	1.0	1.5	4.0	18.5	1.18
194.631	707	906	3.0	71	3.0	1.0	1.0	4.0	22.8	1.00
194.632	707	905	2.5	66	2.5	1.0	2.5	3.5	19.3	1.02
194.633	630	814	3.0	56	2.5	1.5	1.5	3.5	16.0	1.00
194.634	628	828	2.5	51	1.0	3.5	2.0	3.0	24.2	0.96
194.635	708	906	2.5	66	1.5	1.0	2.0	4.0	21.7	0.93
194.636	628	825	2.0	38	1.0	1.0	2.0	3.0	25.0	1.08
194.638	701	907	2.0	43	1.0	1.0	2.0	3.0	26.8	0.89
194.639	630	826	3.0	43	1.0	2.0	2.0	3.5	25.0	0.95
194.640	629	814	1.0	36	1.5	2.0	2.5	3.5	14.8	0.77
194.641	629	814	2.0	43	2.0	1.5	3.0	4.0	13.2	0.78
194.643	628	904	2.0	79	3.0	1.0	1.0	3.0	20.4	1.51
194.644	628	902	3.0	74	2.5	1.0	3.0	3.0	23.2	1.55
94.645	702	906	3.0	69	2.0	1.0	2.0	3.0	20.6	1.53
194.646	706	914	3.0	84	3.0	1.0	3.0	4.0	22.1	1.16
194.647	705	909	3.0	84	3.0	1.5	2.5	3.5	29.3	1.60
194.648	709	911	4.0	86	3.5	1.0	2.5	3.0	21.2	1.48
194.653	706	911	3.5	74	2.5	1.0	3.0	3.5	22.9	0.94
194.654	702	908	3.0	76	3.0	1.0	2.5	3.0	24.8	1.74
194.655	704	906	3.0	81	3.0	1.0	2.0	3.0	22.8	1.43
194.656	628	906	3.0	79	3.0	1.5	1.5	3.0	22.8	1.67
196.485	628	825	3.0	58	2.0	2.5	2.0	2.5	20.7	1.35
96.486	630	907	1.5	48	1.0	1.5	1.0	3.0	28.5	0.71

Table 4.0 Seed composition data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

				Protein		
			mposition	<u>composition</u>	Oil comp	
_	Maturity	Oil	Protein	Methionine	Linoleic	Linolenic
ntry	group	(%)	(%)	(% protein)	(%)	(%)
89.894	0	18.4	44.0	1.30	46.5	8.5
189.897	Ö	18.6	41.9	1.25	46.2	9.7
189.898	Ö	19.9	40.1	1.45	45.8	8.9
189.899	Ö	18.7	44.0	1.25	46.0	8.9
189.900	0	18.5	41.6	1.31	45.4	8.9
				1.21		
189.901	00	17.1	47.6		46.6	8.6
89.903	0	20.8	41.7	1.34	45.8	7.3
189.904	0	18.7	46.1	1.30	44.4	6.9
189.906	00	18.8	45.6	1.31	46.7	7.4
189.913	0	19.2	40.8	1.25	45.6	8.3
189.923	0	18.5	41.6	1.44	43.7	8.7
189.932	00	19.3	40.5	1.25	44.7	7.4
89.936	00	18.7	43.4	1.27	43.1	7.1
189.937	00	19.3	43.7	1.23	42.7	7.4
89.938	0	19.9	43.7	1.31	42.2	8.2
189.939	0	18.3	41.8	-	47.0	6.9
189.940	000	19.5	45.2	-	42.1	8.1
189.944	0	18.3	43.6		45.3	11.6
189.950	Ö	14.3	44.7	_	44.9	11.4
189.951	Ö	15.2	42.6		49.6	7.2
	00			•		
189.952		20.7	40.6	•	44.5	7.8
89.955	0	18.7	42.6	•	46.8	7.7
189.956	00	18.5	41.2	-	46.2	7.8
189.960	0	19.3	40.9	-	47.4	7.7
189.961	0	21.2	37.9	•	49.0	6.8
189.963	000	15.8	50.4	-	43.6	6.9
189.964	0	20.1	41.9	1.14	46.5	8.4
189.965	0	19.2	42.5	•	46.9	9.0
194.624	00	18.5	41.9	1.21	50.6	5.8
194.625	0	17.6	41.3	1.21	46.1	7.8
194.626	00	18.9	40.4	1.20	44.2	7.2
194.627	00	19.6	42.8	1.11	38.4	6.2
194.630	00	19.5	41.7	•	36.1	5.4
194.631	00	19.0	44.0	1.21	42.2	8.4
194.632	00	18.9	46.6	1.24	39.8	7.6
	000	17.9	47.1	1.20	42.1	7.9
194.633						
194.634	000	18.4	44.8	1.21	43.0	6.5
194.635	00	17.5	46.7	4.05	43.0	6.3
194.636	000	20.8	43.3	1.25	45.1	6.1
194.638	00	20.6	40.8	1.34	42.9	5.7
194.639	000	20.3	40.8	1.38	40.9	6.0
194.640	000	19.2	45.3	1.24	46.0	7.2
194.641	000	19.3	44.5	1.22	45.7	6.8
194.643	00	20.3	44.5	1.28	41.6	6.8
94.644	000	18.5	43.4	1.34	41.0	6.1
194.645	00	18.7	44.1	1.24	40.1	5.9
194.646	00	17.5	39.7	1.11	36.1	6.0
194.647	00	17.5	42.5	1.26	35.9	6.2
194.648	00	18.7	40.7	1.23	35.5	6.3
194.653	00	17.5	42.4	1.14	37.5	7.9
194.654	00	20.1	41.8	1.09	40.3	6.7
194.655	00	20.6	42.1	1,31	41.6	6.2
194.656	00	19.9	42.1	1.13	37.8	5.9
196.485	000	20.0	41.4	1.19	42.7	6.8
196.486	00	19.5	43.6	1.13	40.4	5.2

Table 1.0 Identification and origin information for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to Pl 266.807 $\,$

		Country	Country	Year	Matur-
	Accession	of	of 	introduced	ity
Pl No.	name	acquisition	origin	or released	group
196.491		Sweden	Sweden	1951	000
196.501		Sweden	Sweden	1951	000
96.502		Sweden	Sweden	1951	000
96.504		Sweden	Sweden	1951	000
96.525		Sweden	Sweden	1951	00
96.526		Sweden	Sweden	1951	00
96.527		Sweden	Sweden	1951	00
96.528		Sweden	Sweden	1951	000
96.529		Sweden	Sweden	1951	000
96.530		Sweden	Sweden	1951	000
98.067	Ugra Saja	Sweden	Sweden	1951	000
200.595	Morlanvia	Belgium	China	1952	0
04.652	Von Burklin-Wolf's Wachenheimer	-		1952	0
		Germany	Germany		
205.090	Sango waso	Israel	Japan	1953	000
227.323	Kairyo No. 1	Japan	Japan	1955	0
227.326	Kokuiku No. 44	Japan	Japan	1955	0
227.327	Kokuso	Japan	Japan	1955	00
27.330	Murasakibana No. 1	Japan	Japan	1955	0
27.565	Wasehadaka	Japan	Japan	1955	0
229.330	Kanegawawase	Japan	Japan	1955	0
231.172	Fiskeby No. 843-15-5	Sweden	Sweden	1956	000
232.899	Iregszemcsei Corona	Hungary	Hungary	1956	0
232.900	Iregszemcsei Nagyszemu Feher	Hungary	Hungary	1956	0
32.901	lregszemcsei Szurkebarat	Hungary	Hungary	1956	0
32.902	Iregszemcsei Universal	Hungary	Hungary	1956	0
32.994		Germany	Germany	1956	0
32.995		Germany	Germany	1956	0
32.996		Germany	Germany	1956	Ō
32.997		Germany	Germany	1956	00
32.998		Germany	Germany	1956	000
232.999		Germany	Germany	1956	00
238.920	Brillmayerova Giesenska	Czechoslovakia	Czechoslovakia	1957	00
238.921	Diekman Black	Czechoslovakia	Czechoslovakia	1957	0
238.923	Giesenska Early Yellow	Czechoslovakia			
	•		Czechoslovakia	1957	00
238.924	Kirches Stamm 2008	Czechoslovakia	Czechoslovakia	1957	0
238.925	Roudnicka Black	Czechoslovakia	Czechoslovakia	1957	0
40.079	T	Japan	Japan	1957	00
243.547	Toyo naga	Japan	Japan	1957	0
243.550	Yoshioka	Japan	Japan	1957	0
48.395	Bijeljina	Yugoslavia	Yugoslavia	1958	0
248.399	Italian Early	Yugoslavia	Yugoslavia	1958	0
248.401	Krizevacka No. 3	Yugoslavia	Yugoslavia	1958	0
248.403	Mautner	Yugoslavia	Yugoslavia	1958	0
48.404	Novosadska Bela	Yugoslavia	Yugoslavia	1958	0
48.405	Novosadska Rana	Yugoslavia	Yugoslavia	1958	000
48.408	Stara Pazova	Yugoslavia	Yugoslavia	1958	0
48.512	Hokkaido Akita No. 2	Japan	Japan	1958	Ō
50.002	Bydgoska 0 52	Poland	Poland	1958	00
57.428	-,-g 	Germany	Germany	1959	0
257.429					
257.429 257.430		Germany	Germany	1959	000
		Germany	Germany	1959	000
257.431		Germany	Germany	1959	000
57.432		Germany	Germany	1959	0
257.433		Germany	Germany	1959	0
257.434		Germany	Germany	1959	0

Table 2.0
Descriptive data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

				Pubes	cence			Seedc	oat		Other t	raits	
	Matu- rity	Stam	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plant

196.491	000	S	Р	T	Ε	Ssp	Tn	D	Υ	Br	Abh		
196.501	000	S	Р	T	Ε	Ssp	Tn	S	Υ	Br	Abh		
196.502	000	S	Р	Т	Ε	Ssp	Br	S	Υ	Br			
196.504	000	S	P	T	E	Ssp	Tn	D	Υ	Br			
196.525	00	N	Р	T	Ε	N	Br	S	Υ	Br			
196.526	00	S	Р	T	E	N	Br	D	Υ	Br			
196.527	00	N	W	Т	E	Ssp	Br	S	Υ	Br			
196.528	000	S	Р	T	E	N	Tn	ı	Gn	Br			
196.529	000	S	Р	Т	Ε	Ssp	Br	S	Υ	Br			
196.530	000	D	Р	T	Ε	Ssp	Br	D	Υ	ы			
198.067	000	D	Р	T	Sa	N	Tn	S	Rbr	Rbr			
200.595	0	N	Р	G	Ε	N	Br	D	Υ	Υ			
204.652	0	N	Р	T	Ε	N	Br	S	Lg	G			
205.090	000	D	P	T	Ε	N	Br	D	ВІ	BI			
227.323	0	N	Р	G	Ε	N	Br	S	Υ	Υ			
227.326	0	N	W	G	Ε	N	Br	S	Υ	Υ			
227.327	00	N	Р	G	Ε	Ssp	Br	S	Υ	Υ			
227.330	0	N	Р	G	Ε	N	Br	D	Υ	Υ			
227.565	0	S	Р	-	-	G	Tn	S	Υ	Br			
229.330	0	N	W	G	Α	Ssp	Br	D	Υ	Bf			
231.172	000	N	Р	Т	Ε	Ssp	Br	D	Υ	Br			
232.899	0	N	Р	Т	E	Ssp	Br	S	Υ	G			
232.900	0	N	Р	G	Ε	N	Tn	S	Υ	G			
232.901	0	N	W	Т	Ε	N	Tn	S	Lg	BI			
232.902	0	N	Р	Т	Ε	N	Br	S	Υ	G			
232.994	0	N	Р	Т	Ε	N	Br	S	Υ	Br			
232.995	0	N	Р	T	E	Ssp	Br	S	Υ	Tn			
232.996	0	N	W	Т	E	N	Tn	S	Υ	Br			
232.997	00	N	Р	Т	Ε	Ssp	Br	D	Υ	Br			
232.998	000	N	Р	Т	Ε	Ssp	Br	S	Υ	Br			
232.999	00	N	Р	Т	Ε	N	Tn	S	Υ	Br			
238.920	00	N	Р	Т	Ε	N	Br	S	Lgn	Br	Abh		
238.921	0	N	W	Т	Ε	N	Br	s	ВІ	ВІ			
238.923	00	N	Р	Т	Ε	Ssp	Tn	D	Υ	Br			
238.924	0	N	Р	G	Ε	N	ВІ	S	Υ	G			
238.925	0	N	W	T	Ε	Ssp	Br	D	ВІ	ВІ			
240.079	00	S	W	G	Ε	N	Br	S	Υ	Bf			
243.547	0	S	Р	T	Ε	Ssp	Br	ı	Υ	Br			
243.550	0	S	Р	Т	Ε	N	Br	S	Gn	ВІ			
248.395	0	N	Р	T	Ε	N	Tn	S	Υ	Br	Abh		
248.399	0	N	Р	Т	Ε	N	Tn	S	Υ	Br	Abh	Sda	b
248.401	0	N	Р	T	Ε	N	Br	D	Υ	Br	Abh		
248.403	0	N	P	G	Ε	N	Tn	S	Υ	G			
248.404	0	N	Р	G	Ε	N	Br	S	Υ	Υ			
248.405	000	s	Р	Т	Ε	N	Tn	D	Υ	Br	Abh		
248.408	0	N	Р	T	Ε	N	Tn	S	Υ	Br	Abh	Sda	b
248.512	0	s	Р	Т	Ε	Ssp	Br	S	Υ	Br			
250.002	00	N	Р	Т	Ε	N	Br	S	Lgn	Br	Abh		
257.428	0	N	Р	Т	Ε	N	Tn	S	Υ	Br			
257.429	000	N	W	T	Ε	N	Tn	S	Υ	Br			
257.430	000	N	Р	Т	Ε	Ssp	Br	S	Υ	Br			
257.431	000	N	P	T	E	Ssp	Br	S	Y	Br			
257.432	0	N	Р	T	E	N	Tn	s	Y	Br			
257.433	Ö	N	Р	Ť	Ē	N	Tn	S	Ÿ	Br			

Table 3.0 Agronomic data for USDA soybean germplasm collection in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Shat- tering (score)	Chlorois (score)	Seed Quality (score)	Weight (cg/sd)	Yield (Mg/ha)
106 401	620	000	2.5	E 2	2.0	1.5	2.0	2 5	22.0	1 10
196.491	629	828 902	2.5 3.0	53 58	2.0 2.0	1.0	1.0	3.5 2.0	23.8 22.7	1.12 1.54
196.501 196.502	628 629	821	2.5	48	2.0	1.5	1.5	4.0	22.7	0.75
	701	828	4.5	58	2.0	1.5		2.5	16.4	1.29
196.504	706	909	3.5	76	2.5		1.0	2.5		
196.525		903		61	2.0	2.0	1.0		20.8	1.70
196.526	628		3.0			1.0	1.5	3.0	25.4	0.75
196.527	707	908	5.0	89	3.0	1.5	2.5	2.5	18.2	1.94
196.528	628	820	3.5	48 56	2.0	2.0	1.5	4.0	16.1	0.90
196.529	628	826	2.5	56 56	2.0	3.5	2.5	3.0	16.6	0.75
196.530	628	828	3.0	56 51	1.0	1.0	2.0	3.5	17.9	0.90
198.067	629	827	2.0	51	1.0	1.0	1.5	3.0	15.1	0.77
200.595	701	911	2.0	71	3.0	1.0	3.0	2.5	18.7	2.03
204.652	703	908	2.5	84	3.0	1.0	2.0	3.0	15.2	2.56
205.090	704	901	1.5	41	1.0	2.0	3.0	3.0	18.9	0.34
227.323	701 700	910	3.0	89	3.5	1.0	2.0	2.5	19.8	1.92
227.326	708	911	3.0	71	3.0	1.0	2.0	3.0	18.5	2.15
27.327	704	907	2.5	71	3.0	1.0	3.5	3.5	21.3	1.49
227.330	701	912	2.5	74	3.0	1.0	1.0	3.0	16.8	1.76
227.565	724	926	1.5	41	2.0	1.0	1.5	4.0	17.9	0.20
229.330	728	926	4.0	76	2.5	1.0	1.5	2.5	10.3	1.47
231.172	630	824	3.5	61	2.5	2.0	2.0	3.0	20.0	1.06
232.899	706	909	2.5	89	4.0	1.0	2.0	3.0	14.4	1.99
232.900	705	914	4.0	91	3.5	1.0	1.0	2.5	16.6	2.39
232.901	706	908	3.5	79	3.0	1.0	2.5	3.0	14.6	2.52
232.902	703	909	2.5	94	4.0	1.0	2.5	2.5	14.6	2.19
232.994	701	909	3.5	97	3.5	1.0	3.0	2.0	15.3	2.35
232.995	702	909	3.5	102	3.5	1.0	3.0	2.5	15.2	1.97
232.996	709	916	4.0	102	4.5	1.0	3.0	3.5	16.8	2.17
232.997	708	904	3.5	89	4.0	1.0	3.5	2.5	18.6	2.21
232.998	706	828	5.0	89	4.0	1.0	4.0	3.0	17.4	1.59
232.999	628	903	2.5	102	5.0	1.0	3.5	3.0	16.2	2.37
238.920	708	909	3.5	81	3.0	1.5	2.5	2.0	17.2	2.21
238.921	704	912	2.5	94	4.0	1.0	3.0	2.5	16.8	2.39
238.923	707	908	4.0	71	3.0	1.0	2.0	2.5	18.9	1.89
238.924	702	911	2.0	76	3.0	1.0	2.5	3.0	18.0	2.30
238.925	709	912	3.0	97	4.0	1.0	3.0	2.5	13.1	2.06
240.079	704	909	4.0	66	2.0	1.0	2.0	4.0	19.6	1.77
243.547	723	928	4.5	66	2.0	1.5	1.5	3.0	29.4	1.25
243.550	721	920	3.5	69	2.0	1.0	2.0	3.0	25.8	1.02
248.395	704	908	3.0	74	3.0	1.0	1.5	2.5	11.9	2.04
248.399	710	915	3.0	69	3.0	1.0	2.5	2.5	9.5	2.13
248.401	719	914	5.0	81	3.0	1.5	3.0	2.5	11.0	2.27
248.403	706	914	4.5	89	3.0	1.0	2.0	2.5	18.3	2.65
248.404	701	912	3.0	86	3.0	1.0	3.5	3.0	23.1	1.94
248.405	706	829	3.5	69	2.0	1.0	1.0	2.0	16.4	1.41
248.408	701	908	4.0	74	3.0	1.0	1.5	2.5	11.0	1.98
248.512	721	928	5.0	84	2.0	1.0	1.5	3.0	28.6	1.31
250.002	708	909	3.5	84	3.0	1.0	2.0	2.5	15.0	2.37
257.428	701	910	3.5	104	5.0	1.0	2.0	2.5	15.2	2.66
257.429	702	828	3.0	66	2.5	1.0	3.0	3.5	16.8	2.11
257.430	705	828	4.0	79	3.0	1.0	4.0	3.5	17.6	1.64
257.431	706	901	5.0	86	3.0	1.0	2.5	3.0	16.1	1.51
257.432	701	909	3.5	102	5.0	1.0	3.0	2.0	15.4	2.65
257.433	701	908	3.5	102	5.0	1.0	3.0	2.5	14.7	2.33
257.434	712	909	4.0	104	5.0	1.0	3.0	3.5	15.7	2.20

Table 4.0 Seed composition data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

		o ·		Protein	Oil composition			
			mposition	composition				
Entry	Maturity group	Oil (%)	Protein (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)		
196.491	000	19.5	42.3	1.09	39.1	5.1		
196.501	000	20.5	41.2	1.19	40.8	6.8		
196.502	000	20.5	43.4	1.20	38.6	5.9		
196.502	000	18.7	47.7	1.20	46.8	7.7		
196.525	00	19.1	42.4	1.10	44.5	8.3		
196.526	00	17.9	45.4	1.11	37.3	6.0		
196.527	00	18.4	45.8	1.13	47.3	8.1		
196.527	000	18.1	44.2	1.13	40.5	6.3		
	000	18.0	46.4	1.12	38.8	5.8		
196.529	000	19.0	45.4	1.10	43.0			
196.530	000	20.1	43.0	1.10	45.9	6.6 6.4		
198.067	0	19.0	44.0	1.11	43.0	7.3		
200.595 204.652	0	20.4	40.9	1.17	43.0 47.1	7.3 9.9		
	000				47.1 45.5			
205.090	0	20.0	49.7 45.9	1 12		6.9 7.2		
227.323	0	17.8	45.8	1.12	46.1 45.1	7.2		
227.326		20.4	41.6	1.20	45.1 42.7	8.7		
227.327	00	19.4	42.5	1.13	42.7	7.2		
227.330	0	18.6	43.0	1.16	41.9	8.9		
227.565	0	16.5	44.0	-	43.9	9.1		
229.330	0	14.6	46.9	1.31	46.0	11.4		
231.172	000	19.7	41.7	1.36	39.2	6.3		
232.899	0	19.9	42.6	1.16	44.7	8.8		
232.900	0	20.8	40.7	1.13	46.8	9.8		
232.901	0	21.0	39.2	1.25	48.3	8.8		
232.902	0	20.3	41.4	1.15	44.1	9.5		
232.994	0	19.9	39.2	1.25	46.4	7.9		
232.995	0	18.1	42.1	-	47.3	8.5		
232.996	0	20.1	39.7	1.12	47.3	7.9		
232.997	00	21.0	39.9	1.13	42.0	7.1		
232.998	000	20.8	42.5	1.13	43.6	6.6		
232.999	00	20.8	42.4	1.19	46.4	7.0		
238.920	00	19.2	42.4	1.17	45.6	8.5		
238.921	0	21.6	38.6	-	46.9	7.5		
238.923	00	18.4	42.3	1.22	41.7	7.7		
238.924	0	19.5	42.0	1.19	44.9	10.1		
238.925	0	18.9	40.4	•	46.8	8.2		
240.079	00	20.9	40.1	1.35	42.6	8.0		
243.547	0	18.5	40.4	-	41.4	8.3		
243.550	0	18.3	43.2	1.29	42.8	8.6		
248.395	О	19.9	39.5	1.45	42.8	8.1		
248.399	Ο	19.2	40.2	1.12	43.9	8.4		
248.401	0	19.0	37.1	1.28	43.9	9.0		
248.403	0	21.4	39.7	1.13	45.1	10.0		
248.404	0	18.5	43.3	1.11	46.2	7.4		
248.405	000	20.2	42.3	1.07	47.7	8.1		
248.408	0	18.9	41.1	1.11	45.5	8.5		
248.512	0	19.1	40.1	1.17	45.4	8.3		
250.002	00	19.3	41.5	1.32	45.7	9.1		
257.428	0	20.7	40.8	1.34	46.4	7.5		
257.429	000	20.8	41.0	1.17	44.7	7.1		
257.430	000	20.9	41.4	1.20	44.6	7.6		
257.431	000	20.6	40.9	1.31	45.3	7.6		
257.432	0	20.8	40.7	1.12	48.6	7.5		
257.433	0	21.3	40.6	1.18	45.8	7.5		
257.434	0	19.8	41.4	1.15	45.7	8.1		

Table 1.0 Identification and origin information for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity			
PI No.	name	acquisition	origin	or released	group			
257.435		Germany	Germany	1959	0			
257.436		Germany	Germany	1959	0			
257.437		Germany	Germany	1959	0			
257.438		Germany	Germany	1959	0			
257.439		Germany	Germany	1959	0			
258.383	Zlotka	Poland	Poland	1959	000			
258.384	Chorynska R'sd A	Poland	Poland	1959	0			
258.385	Chorynska R'sd 754	Poland	Poland	1959	0			
258.386	Chorynska R'sd 1954	Poland	Poland	1959	00			
258.387	Chorynska R'sd 2054	Poland	Poland	1959	00			
261.469	Wasedaizu No. 1	Japan	Japan	1959	0			
261.475	Zi hua No. 1	Japan	China	1959	0			

Table 2.0
Descriptive data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807

	Matu-			Pubes	cence			Seedc	oat		Other 1	raits	
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
257.435	0	N	Р	т	E	N	Br	1	Υ	G			
257.436	0	N	Dp	Т	Ε	N	Tn	s	Υ	Br			
257.437	0	N	w	Т	Ε	Ssp	Br	s	Υ	Br			
257.438	0	N	W	Т	Ε	Ssp	Br	S	Υ	Br			
257.439	0	N	Р	G	Ε	N	Tn	s	Υ	Bf			
258.383	000	N	Р	Т	Ε	N	Br	S	Υ	G			
258.384	0	N	Р	Т	E	N	Br	D	Υ	Tn			
258.385	0	N	Р	T.	E	N	Br	S	Υ	G			
258.386	00	N	P	Т	E	N	Br	S	Υ	Tn			
258.387	00	N	Р	Т	Ε	Ssp	Br	s	Υ	Υ			
261.469	0	N	W	G	Α	Ssp	Br	D	Υ	Bf			
261.475	0	N	Р	G	Ε	N	Br	s	Υ	Υ			

Table 3.0 Agronomic data for USDA soybean germplasm collection in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

	Flowering	Maturity			Stem term-	Shat-		Seed		
Entry	date (mmdd)	date (mmdd)	Lodging (score)	Height (cm)	ination (score)	tering (score)	Chlorois (score)	Quality (score)	Weight (cg/sd)	Yield (Mg/ha)
257.435	702	910	4.5	91	3.0	1.0	2.5	3.0	15.1	2.19
257.436	701	909	3.5	107	5.0	1.0	3.0	3.0	14.2	2.43
257.437	701	909	2.5	91	4.0	1.0	2.5	2.0	14.2	2.06
257.438	701	910	2.5	89	3.5	1.0	2.5	2.0	16.0	1.95
257.439	710	912	4.0	91	3.5	1.0	2.5	3.0	16.8	2.08
258.383	628	901	3.5	74	3.0	1.0	1.5	3.0	16.8	2.50
258.384	702	910	3.5	86	3.0	1.0	3.0	3.0	18.1	1.84
258.385	701	903	2.5	79	3.0	1.0	2.5	3.0	15.7	1.75
258.386	628	906	2.5	84	3.0	1.0	3.0	3.0	16.9	2.00
258.387	628	903	2.0	74	3.0	1.0	3.0	3.0	16.0	2.09
261.469	725	922	4.0	81	3.0	1.0	2.5	3.0	11.6	1.16
261.475	701	913	2.5	76	3.0	1.0	1.5	2.5	17.2	1.98

Table 4.0 Seed composition data for USDA soybean germplasm in maturity groups 000 to 0, FC 01.547 to PI 266.807, grown at St. Paul, MN

Entry		Seed co	mposition	composition	Oil composition		
	Maturity group	Oil (%)	Protein (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	
						·	
257.435	0	19.1	46.3	1.18	45.8	7.8	
257.436	0	21.1	40.6	1.23	46.8	7.3	
257.437	0	20.2	40.1	1.30	45.1	7.4	
257.438	0	20.3	41.6	1.40	45.1	7.7	
257.439	0	20.4	38.5	1.34	44.2	7.7	
258.383	000	21.4	41.7	1.33	43.3	8.1	
258.384	0	20.0	43.1	1.22	46.3	6.8	
258.385	0	20.8	40.2	1.42	44.7	8.3	
258.386	00	19.3	43.3	1.21	45.4	7.5	
258.387	00	20.1	42.8	1.12	46.9	8.1	
261.469	0	19.5	48.8	1.11	49.0	10.5	
261.475	0	19.0	45.0	1.11	44.5	8.7	

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Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807 $\,$

	A	Country	Country	Year	Maturity group	
	Accession	of · · · ·	of .	introduced		
No.	name	acquisition	origin	or released		
	Aksarben	United States	China	By 1923	11	
	Amsoy	United States	United States	1962)) }	
	Bansei	United States	Japan States	1936	ii	
	Black Eyebrow	United States	China	1918	ii	
	Blackhawk	United States	United States	1950	ï	
	Burwell	Unknown	Unknown	By 1933	i	
	Cayuga	United States	China	1933	i	
	Chippewa	United States	United States	1954	i	
	Chippewa 64	United States	United States	1964	i	
	Earlyana	United States	United States	1943	i	
	Elton	United States	Russia	1910	ì	
	Etum	United States	Japan	By 1941	II.	
	Funman	United States	United States	By 1938	II	
	Giant Green	United States	Japan	1938	1	
	Goku	United States	Japan	1936	11	
	Habaro	United States	Russia	1910	1	
	Hakote	United States	Japan	1936	II	
	Harly	Canada	Canada	1948	1	
	Harosoy	Canada	Canada	1951	11	
	Harosoy 63	United States	United States	1963	11	
	Hawkeye	United States	United States	1947	11	
	Hawkeye 63	United States	United States	1963	11	
	Henry	United States	United States	1960	11	
	Hoosier	United States	China	By 1923	1	
	Kagon	United States	United States	By 1944	1	
	Kanro	United States	D.P.R. of Korea	1936	П	
	Kanum	United States	Rep. of Korea	By 1941	11	
	Korean	Canada	China	By 1928	11	
	Lindarin	United States	United States	1958	11	
	Lindarin 63	United States	United States	1964	II	
	Linman 533	United States	United States	By 1939	П	
	Manchu 3	United States	United States	By 1940	11	
	Manchu 606	United States	United States	By 1940	11	
	Manchu [Madison]	United States	United States	1951	11	
	Manchu Hudson	Canada	Canada	By 1939	11	
	Manchu Montreal	Canada	Canada	By 1944	<u>.</u>	
	Manchukota	United States	United States	1943	ll .	
	Manchuria	United States	China	By 1912	l '	
	Mandarin 507	United States	China	By 1920	!	
	Mandarin 507	United States	United States	By 1943	I I	
	Medium Green	United States	Japan Bon of Koros	By 1903	 	
	Mendota Mensos	United States	Rep. of Korea	By 1944	 	
	Monroe	United States	United States	1948	 	
	Mukden	United States	China	1932	II I	
	Norsoy	United States	United States	By 1944		
	OAC 211 Ontario	Canada United States	Canada China	By 1928	 	
	Portugal		China	1941 By 1949	1	
	•	Unknown	Unknown	By 1949	1	
	Renville Richland	United States	United States China	1952 1938	11	
		United States			11	
	Sac	United States	Japan China	1941	1 11	
	Seneca	United States United States	China Ispan	1939		
	Sousei		Japan Italy	1936 By 1922	II I	
	Soysota	Italy	Italy	By 1923	ı	

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Matu-			Pubescence				Seedcoat			Other traits		
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
Aksarben	П	N	Р	G	Ε	N	Tn	D	Υ	Υ			
Amsoy	II	N	Р	G	Ε	N	Tn	S	Υ	Υ			
Bansei	П	D	Р	G	Ε	N	Br	D	Υ	Υ			
Black Eyebrow	II	N	W	Т	Ε	N	Br	S	Br	ВІ	Sado	lle	
Blackhawk	1	N	W	G	Ε	N	Br	S	Υ	Bf			
Burwell	1	D	Р	Т	Ε	Ssp	Br	D	ВІ	ВІ			
Cayuga	1	N	W	Т	Ε	Ssp	Br	D	ВІ	ВІ			
Chippewa	1	N	Р	Т	Ε	N .	Br	S	Υ	ВІ			
Chippewa 64	1	N	Р	Т	Ε	N	Br	S	Υ	ВІ			
Earlyana	1	N	Р	Т	Ε	N	Br	D	Υ	Tn			
Elton	1	N	Р	G	Ε	N	Br	S	Υ	Υ			
Etum	П	D	Р	G	Ε	N	Br	D	Υ	Υ			
Funman	II	N	P	T	Ε	N	Br	S	Y	ВІ			
Giant Green	Ī	D	P	T	E	N	Br	D	Gn	ВІ			
Goku	ii	D	w	Ġ	E	N	Tn	D	Y	Bf			
Habaro	ï	N	P	G	E	N	Br	S	Ÿ	Y			
Hakote	ii	D	w	T	E	Ssp	Br	S	Gn	BI		5Lf	t
Harly	ï	N	P	G	E	N	Br	D	Y	Y.			-
Harosov	ii .	N	Р	G	Ē	N	Br	Ď	Ÿ	Ý			
Harosoy 63	11	N	P	Ğ	Ē	N	Br	D	Y	Ý			
Hawkeye	 II	N	P	G	E	N	Br	D	Ÿ	Ib			
Hawkeye 63	ii	N	P	G	E	N	Br	D	Ÿ	lb			
Henry	ii	N	P	G	E	N	Br	D	Ÿ	G			
Hoosier	ï	N	Р	T	E	N	Br	D	Ÿ	Tn			
Kagon	i	N	Р	Ġ	E	N	Br	D	Ÿ	Y			
Kanro	ii	D	P	G	E	N	Br	ĺ	Ÿ	Ý			
Kanum	II	D	P	G	E	N	Br	D	Ϋ́	Ý			
Korean	ii	N	w	Lt	E	N	Br	S	Ϋ́	BI			
Lindarin	ii	N	P	G	E	N	Br	D	Ÿ	Bf			
Lindarin 63	ii	N	P	G	E	N	Br	D	Ÿ	Bf			
Lindarii 63	ii	N	P	T	E	N	Br	S	Ÿ	BI			
Manchu 3	ii	N	P	Ť	E	N	Br	S	Ÿ	BI			
Manchu 606	ii	S	P	Ť	E	N	Br	S	Y	BI			
		N N	P	Ť	E	N	Br	ı	Y	Br			
Manchu [Madison]	'' 	S	P	, T	E	N	Br	S	Y	BI			
Manchu Hudson	!! 	S N	P	Ť	E	N	Br	S	Y	BI			
Manchu Montreal	l II	N S	P	T	E	N N	Br Br	S	Y	BI			
Manchukota Manchuria	"	S	P	G	E	N	BI	S	Y	Lbf			
Mandarin	-	N	P	G	E	N N	Br	S	Ϋ́	Y			
Mandarin Mandarin 507	1	N N	P	G	E	N N	Br Br	S	.Y .Y	Y			
	1	N N	P	G	E	N N		S			Cn-	n t	
Medium Green Mendota	1	N D	P	G	E	N N	Br Br	D D	Gn Y	Bf Y	Gnc	JL	
	1		W	G	E	N N		S	Ϋ́	Ϋ́Υ			
Monroe Mukdon	1	N N	W	G	E	N N	Br Br	S	Ϋ́Υ	Y Bf			
Mukden	II I	N N	VV P	G	E			S D	Ϋ́Υ	Y Y			
Norsoy	1	N N		G		N N	Br Br	S	Ϋ́Υ	Ϋ́Υ			
OAC 211	1		P	G T	E		Br B-	S	Υ Υ				
Ontario	1	D	P		E	N Som	Br B-			BI B-			
Portugal	1	D	P	T	E	Ssp	Br D-	S	Y	Br Df			
Renville	l 	N	W	G	E	N	Br	S	Y	Bf			
Richland	II	S	P	G	E	N	Br	D	Y	G			
Sac	I	D	P	T	E	N	Br	D	Gn	BI			
Seneca	II	N	W	G	Ε	N	ВІ	S	Υ	Bf			
Sousei	II	D	W	G	Ε	N	Tn	S	Υ	Bf			
Soysota	ł	D	Р	Т	Ε	N	Br	S	Br	Br	Abh		
Tastee	П	D	Р	T	Ε	Ssp	Br	S	Gn	BI			

Table 3.1 Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
Aksarben	710	912	2.2	74	2.5	2.0	1.0	2.5	1.0	17.0	2.68
Amsoy	702	916	1.4	102	3.0	2.0	1.0	2.5	1.5	16.7	2.97
Bansei	711	917	1.2	51	1.0	3.0	3.0	2.5	3.0	18.9	2.00
Black Eyebrow	703	904	2.0	99	3.5	2.5	2.0	2.3	-	17.1	1.96
Blackhawk	630	910	1.2	81	3.0	2.0	1.0	2.3	1.0	15.1	2.07
Burwell	707	906	1.3	53	1.0	2.0	2.0	2.3	•	22.7	1.53
Cayuga	630	824	1.1	76	3.0	2.0	1.0	1.5	-	11.3	1.61
Chippewa	630	903	1.2	84	3.0	2.0	1.0	3.0	1.5	13.3	2.37
Chippewa 64	630	903	1.2	86	3.0	2.0	1.0	3.0	1.5	14.3	2.37
Earlyana	702	907	2.2	97	3.0	2.0	3.0	3.0	1.0	14.6	2.31
Elton	705	910	2.4	107	3.5	2.5	1.0	2.5	1.0	14.8	2.35
Etum	709	911	1.4	51	1.0	2.0	5.0	3.8	2.0	22.5	1.74
Funman	707	918	2.3	91	3.0	2.0	1.0	3.8	1.0	16.9	2.60
Giant Green	707	909	1.2	36	1.0	3.0	5.0	2.8	1.0	25.5	
Goku	718	914	2.1	76	1.0	2.5	5.0	2.5	1.5	15.1	1.70
Habaro	705	905	1.8	74	3.0	2.0	2.0	2.5	2.0	15.5	2.33
Hakote	709	919	1.4	48	1.0	2.5	4.0	3.5	2.5	27.9	1.62
Harly	703	904	1.3	107	3.0	2.0	2.0	2.0	1.0	15.2	2.21
Harosoy	701	912	1.5	99	3.0	2.0	1.0	2.5	1.5	16.1	2.66
Harosoy 63	702	912	1.4	99	3.0	2.0	1.0	2.5	1.5	16.2	2.53
Hawkeye	705	917	1.4	94	3.0	2.0	1.0	2.5	1.0	17.7	2.55
Hawkeye 63	705	917	1.4	91	3.0	2.0	1.0	2.5	1.0	17.7	2.47
Henry	704	916	1.4	104	3.5	2.0	1.0	3.0	1.0	17.8	2.40
Hoosier	703	831	2.0	89	3.0	2.0	2.0	2.0	1.5	11.1	2.10
Kagon	630	830	1.7	94	3.0	2.0	2.0	2.3	1.0	14.7	2.12
Kanro	711	913	1.4	61	1.0	2.0	4.0	3.3	2.0	22.4	2.00
Kanum	710	914	1.4	64	1.0	2.0	4.0	3.3	1.5	18.7	2.29
Korean	702	915	1.8	81	2.5	2.0	2.0	3.3	2.5	20.8	2.35
Lindarin	705	913	1.4	86	3.0	2.0	1.0	2.3	1.0	14.6	2.93
Lindarin 63	705	913	1.3	86	3.0	2.0	1.0	2.3	1.0	15.3	2.79
Linman 533	701	912	1.8	84	2.5	2.0	1.0	3.5	1.0	16.9	2.53
Manchu 3	701	910	2.3	99	3.0	2.0	1.0	3.3	1.0	16.9	2.31
Manchu 606	701	910	1.4	76	2.0	2.0	1.0	3.5	1.0	16.8	2.34
Manchu[Madison]	702	911	1.9	91	3.0	2.0	1.0	2.8	2.0	2.5	2.39
Manchu Hudson	701	909	2.0	94	2.0	2.0	3.0	3.0	2.0	5.7	2.33
Manchu Montreal	628	829	1.8	91	3.0	2.0	2.0	2.0	1.0	14.3	2.02
Manchukota	702	909	1.8	81	2.0	2.0	1.0	3.3	1.0	13.3	2.41
Manchuria	630	903	1.2	61	2.0	2.5	1.0	2.5	2.0	13.8	2.13
Mandarin	629	830	1.3	91	3.0	2.0	2.0	2.5	1.5	13.8	1.97
Mandarin 507	629	828	1.7	89	3.0	2.0	1.0	2.8	1.5	14.0	1.94
Medium Green	707	904	1.4	76	3.0	2.0	1.0	2.5	1.0	12.0	1.90
Mendota	708	909	1.5	56	1.0	3.0	5.0	3.3	1.0	16.7	1.94
Monroe	630	906	1.8	99	3.0	2.0	2.0	2.3	1.0	14.2	1.67
Mukden	704	920	1.8	109	3.5	2.0	2.0	3.0	1.0	16.1	2.55
Norsoy	628	826	1.3	69	2.5	2.5	1.0	1.8	1.0	10.7	2.20
OAC 211	705	909	1.6	71	3.0	3.0	1.0	2.8	2.5	16.2	2.22
Ontario	630	906	1.5	66	1.0	2.0	2.0	3.3	1.0	17.9	1.96
Portugal	707	909	1.3	53	1.0	3.0	5.0	3.5	2.5	21.7	1.34
Renville	701	903	1.2	74	3.0	2.0	1.0	3.5	1.0	15.7	2.16
Richland	703	915	1.6	81	2.0	2.0	1.0	2.8	1.5	16.9	2.19
Sac	705	905	1.1	43	1.0	3.5	3.0	2.8	1.0	26.1	1.73
Seneca	706	915	1.9	99	3.5	2.0	2.0	2.8	1.0	14.3	2.75
Sousei	715	913	2.0	71	1.0	3.0	5.0	2.3	2.0	15.8	1.58
Soysota	702	906	3.0	69	1.0	2.5	1.0	2.3	-	11.9	2.45
Tastee	714	917	1.5	48	1.0	3.0	4.0	2.5	1.0	21.7	1.74

Table 4.1 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

		ا	-n-o-!+!	Protein	0:1	r :-		
	Managemine	Seed com		composition Mathianing	Oil compo		Dise	
Emtm.	Maturity	Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	reac PR	
Entry	group	(70)	(70)	(% protein)	(70)	(70)	- rn	Py
Aksarben	11	40.0	19.9	1.2	43.0	7.3	s	
Amsoy	 II	39.5	23.0	1.4	44.0	6.7	s	
Bansei	 II	39.4	19.7	1.5	43.9	7.8	S	
Black Eyebrow	ii	43.0	19.4	1.0	43.5	6.8	S	
Blackhawk	1	39.8	21.3	1.3	44.6	7.4	R	
Burwell	i	41.5	21.5	1.5	44.0	7.0		
Cayuga		40.4	19.9		43.8	6.8	Н	
Chippewa	1	41.0	21.2	1.3	47.1	7.8	S	
• •	1	41.4	21.2	1.3	49.1	7.0 7.0	R	
Chippewa 64								
Earlyana 		41.4	21.6	1.3	48.1	7.4	S	
Elton -	1	40.0	20.4	1.4	45.5	7.6	S	
tum	II 	40.8	19.8	1.1	44.7	7.2	S	
unman	II .	41.9	21.0	1.2	46.9	6.8	S	
Giant Green	l 	40.0	21.3		46.7	6.7	S	
Goku	II	43.4	17.2	1.2	45.8	7.9	R	
Habaro	ŀ	42.0	20.8	1.1	48.0	6.6	R	
-lakote	11	42.6	19.9	1.0	46.6	6.2	Н	
Harly	1	41.6	21.4	1.3	47.3	6.8	R	
Harosoy	II	41.2	21.6	1.3	47.2	6.6	s	
Harosoy 63	11	40.2	22.2	1.3	46.4	6.8	R	
Hawkeye	II	41.5	22.5	1.3	44.9	6.1	s	
Hawkeye 63	11	41.6	22.2	1.3	44.8	6.4	R	
Henry	11	43.0	21.1	1.3	44.0	6.4	R	
Hoosier	ı	40.1	22.2	1.5	48.2	6.7	s	
Cagon	1	42.2	20.6	1.3	46.9	7.1	s	
Canro	11	41.4	19.9	1.3	45.0	6.9	s	
Canum	11	41.7	20.9	1.3	47.0	7.2	s	
Korean	11	41.9	21.7	1.2	45.6	8.4	s	
_indarin	11	39.9	22.2	1.4	47.1	6.9	s	
indarin 63	ii	40.6	22.1	1.3	48.0	6.9	R	
Linman 533	11	41.1	22.2	1.4	49.3	6.9	s	
Manchu 3	ii	40.6	21.7	1.3	49.0	6.8	s	
Manchu 606	ii	40.9	21.4	1.4	48.2	6.9	S	
Manchu (Madison)	ii	43.3	19.8	1.3	49.0	7.5	S	
Manchu (Madison) Manchu Hudson	 	41.4	21.1	1.3	50.0	6.6	S	
Manchu Hudson Manchu Montreal	"	41.4	20.5	1.3	46.7	6.7	S	
Manchukota	i II	42.0	20.8	1.5	50.3	6.9	S	
	" 	42.0	20.5	1.4	48.1	6.8	S	
Manchuria	i i	42.2 43.0					S	
Mandarin	i		19.9	1.2 1.3	47.4 47.0	6.9		
Mandarin 507	•	43.4	19.7		47.0 40.1	6.9	Н	
Medium Green	!	40.4	20.2	1.3	49.1	8.3	S	
Mendota	1	41.6	19.5	1.3	47.6	8.5	Н	
Monroe	1	40.3	21.5	1.4	46.1	7.5	R	
Mükden	11	42.5	20.5	1.3	44.0	7.5	R	
Norsoy	1	43.0	18.4	1.3	47.3	7.6	S	
DAC 211	1	41.2	20.0	1.2	46.7	7.2	S	
Ontario	1	40.8	21.8	1.1	45.7	6.2	S	
Portugal	I	42.1	21.7	1.3	45.0	6.1		
Renville	1	40.9	22.1	1.3	48.8	6.8	S	
Richland	11	41.5	20.9	1.3	44.7	5.8	s	-
Sac	I	39.5	21.4	1.3	45.3	6.1	S	-
Seneca	11	39.4	21.2	1.2	48.6	7.5	R	-
Sousei	II	39.1	17.4	1.3	44.2	7.6	s	
Soysota	1	42.8	21.2	-	43.1	5.9	s	
Tastee	11	42.6	19.6	1.2	43.2	6.1	S	

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	A	Country	Country	Year	Maturita	
	Accession	of	of 	introduced	Maturit	
PI No.	name	acquisition	origin	or released	group	
	Toku	United States	Japan	1936	II	
	Tortoise Egg	United States	Japan	1933	ï	
	Waseda	United States	Japan	1938	i	
	Wea	United States	China	1923	ii	
	Wisconsin Black	France	France	1909	ï	
	Yellow Marvel	United States	Unknown	By 1941	il	
C 01.547	Southern Manchurian Yellow	United States	China	1911	ii	
C 03.609	Courtier Management Concern	United States	China	1920	ï	
C 04.007A		United States	Unknown	1924	iı	
C 19.976	Chusei o saya eda mame	Japan	Japan	1932	ii	
C 29.219	ondoor o daya daa mamo	United States	United States	1935	ii	
C 30.233		Canada	Canada	1938	ï	
C 31.122		United States	United States	1941	i	
C 31.122	ND 1392	United States	United States	1939	iı	
C 31.409	ND 1394	United States	United States	1939	 H	
30.594	Ching tou	China	China	1911	11	
30.59 9	-	China	China	1911	11	
30.600	Chin yuan tou	China	China	1911	11	
	Chin yuan tou	China	China	1913	"	
36.653 17.131		China	China	1919	11	
		China			11	
54.604 54.607		China	China China	1921 1921	11	
54.608		China	China	1921	11	
54.608-1		China	China	1921	II	
54.619		China	China	1921	11	
54.809		China	China	1922	1	
54.818		China	China	1922	!!	
54.834		China	China	1922	!	
54.853		China	China	1922	!	
54.854		China	China	1922	!	
54.857		China	China	1922	l 	
54.859		China	China	1922	II 	
54.862		China	China	1922	11	
54.865		China	China	1922	1	
54.873		China	China	1922	11	
60.279		China	China	1924	11	
60.296-1	(Loh yuih bah)	China	China	1924	11	
63.271		China	China	1925	1	
55.338		China	China	1925	II 	
65.341		China	China	1925	II 	
65.346		China	China	1925	II 	
55.354		China	China	1925	11	
55.388		China	China	1925	II	
58.410		Unknown	Unknown	1926	II	
58.421		China	China	1926	II.	
58.427		China	China	1926	ll .	
58.430		China	China	1926	II	
58.436		China	China	1926	H	
58.439		China	China	1926	II	
58.443		China	China	1926	H	
68.446		China	China	1926	H	
68.448		China	China	1926	II	
68.454		China	China	1926	II	
68.455		China	China	1926	11	
68.457		China	China	1926	II	

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedce	oat		Other traits		
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
Toku	Ш	D	w	G	E	N	Tn	s	Υ	Bf			
Tortoise Egg	i	D	W	G	Ā	N	Br	1	Ÿ	Bf			
Waseda	11	D	P	G	E	N	Br	i	Ÿ	Y Y			
Wea	11	N	w	G	Ē	N	Tn	s	Ÿ	Bf			
Wisconsin Black	1	N	P	T	Ē	N	Br	Ď	BI	BI		Dab	
Yellow Marvel	11	D	w	G	Ē	N	Tn	s	Y	Lbf			
FC 01.547	11	S	W	G	E	N	Br	S	Y	Bf			
FC 03.609	ï	N	P	Ğ	E	N	Br	S	Y	Y			
FC 04.007A	ii .	D	P	Ğ	E	N	Br	s	Ý	Bf			
FC 19.976	11	D	w	Ğ	Ē	N	Tn	Ď	Ý	Y			
FC 29.219	11	D	P	G	E	N	Br	D	Y	Y			
FC 30.233	1	N	P	G	E	N	Br	D	Y	Y			
FC 31.122	i	D	P	G	E	N	Br	S	Y	Y			
FC 31.408	ii	s	P	T	Ē	N	Br	Ď	Ÿ	Br			
FC 31.409	.: II	N	P	Ť	Ē	N	Br	D	Ϋ́	Br			
30.594	ii	N	w	Ť	Ē	Ssp	BI	D	Gn	BI	Gnco	t	
30.599	ii	N	P	Ť	Ē	N	Br	Ī	Y	BI	3 1,00	•	
30.600	ii	D	Р	Ġ	E	N	Br	D	Ÿ	Bf			
36.653	ï	N	P	G	E	N	Br	S	Ÿ	Bf			
47.131	ii	N	, P	T	Ē	N	Br	S	Bi	BI	Fleck	Dab	`
54.604	ii	D	P	Ġ	E	N	Br	S	Gn	Gn	1 1000	Dat	•
54.607	ii	N	w	Lt	E	N	Br	S	Y	BI	Sabh		
54.608	:: !!	N	w	G	E	N	Br	S	Ÿ	Bf	Cabii		
54.608-1	 II	D	P	G	E	Dn	Br	S	Ϋ́	Y			
54.619	ii	S	w	G	E	N	Br	S	Ϋ́	Bf			
54.809	ï	N	P	G	E	N	Br	S	Ϋ́	Y			
54.818	ii	N	w	G	E	N	Br	S	Ϋ́	Bf			
54.834	ï	D	P	T	Ē	N	BI	D	Gn	Tn			
54.853	i	N	P	G	E	N	Br	Ď	G	G			
54.854	i	N	P	T	E	N	Br	D	Br	Br		Dab	,
54.857	i	N	Р	Ť	E	N	Tn	D	Y.	Br	Sadd		•
54.859	ii	N	Р	G	Ē	N	Tn	S	Br	Br	Juuu		
54.862	ii	N	Р	T	Ē	Ssp	Br	S	Br	Br			
54.865	ï	N	w	Ť	Ē	N	Br	D	Br	Br			
54.873	ii	s	P	Ť	Ē	N	Br	ı	Br	Br			
60.279	 II	N	W	Ġ	Ē	N	Br .	s	Y Y	Bf			
60.296-1	11	N	P	T	Ē	N	Br	S	Ÿ	Br			
63.271	ï	N	Р	Lt	Ē	N	BI	S	Br	Br			
65.338	ii	D	Р	G	Ē	N	Br	S	Y	lb			
65.341	11	D	w	G	E	N	Br	s	Ý	Bf			
65.346	ii	D	W	G	E	N	Br	S	Y	Bf			
65.354	11	N	W	T	Ε	N	Br	1	ВІ	ВІ	Gncc	t	
65.388	ii	N	P	Ť	Ā	Ssp	Tn	S	Br	Br			Sw
68.410	II	N	W	G	Ε	N	Br	s	Υ	Bf			
68.421	II	N	Р	Т	Ε	N	ВІ	1	Υ	ВІ			
68.427	ii	D	P	Ġ	E	N	Br	S	Y	lb			
68.430	ii	D	P	G	E	N	Br	D	Ý	Y			
68.436	11	N	P	T	E	N	Br	s	Ÿ	Br			
68.439	 II	N	w	Ġ	Ē	N	Br	s	Ÿ	Bf			
68.443	11	D	P	G	E	N	Br	s	Ÿ	lb			
68.446	ii	D	P	T	E	N	Tn	S	Ÿ	BI			
68.448	ii	D	P	Ġ	E	N	Br	S	Ÿ	lb			
68.454	11	D	P	T	E	N	Br	S	Ÿ	BI			
		S	P	G	E		Br	D	Y	Y			
68.455	II	C.		r2	-	N	R.	1)	~	~			

Table 3.1

Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

					Stem						
	Flowering	Maturity			term-	Branch-	Shat-	Seed			
	date	date	Lodging	Height	ination	ing	tering	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	(score)	(score)	(cg/sd)	(Mg/ha)
Toku	710	915	1.6	51	1.0	3.0	2.0	2.8	2.0	19.5	2.26
Tortoise Egg	709	907	1.8	64	1.0	2.0	3.0	3.0	1.0	24.7	1.22
Waseda	710	912	1.3	53	1.0	3.0	3.0	2.8	2.0	20.0	1.94
Wea	715	920	2.2	99	2.5	2.0	1.0	2.8	1.0	16.0	2.62
Wisconsin Black		911	3.5	109	4.0	2.0	1.0	2.5		12.5	2.23
Yellow Marvel	715	914	2.2	74	1.0	2.0	5.0	2.0	1.5	15.4	1.81
FC 01.547	711	916	1.9	76	2.0	2.0	1.0	2.5	1.0	14.5	2.86
FC 03.609 FC 04.007A	629 705	828 912	1.3 .6	64 71	3.0 1.0	2.0 2.0	1.0 1.0	2.0 2.8	1.5 1.0	13.6 13.6	1.76 2.66
FC 19.976	711	910	.0 1.7	58	1.0	2.0	5.0	2.5	1.5	22.8	1.62
FC 29.219	704	905	1.2	69	1.5	2.0	1.0	2.5	2.0	16.0	2.00
FC 30.233	629	829	1.2	69	3.0	2.0	1.0	2.0	1.0	14.5	1.98
FC 31.122	702	908	2.0	86	1.5	2.0	1.0	2.5	1.0	18.8	1.92
FC 31.408	703	909	2.1	86	2.0	2.5	1.0	2.3	1.5	13.0	2.33
FC 31.409	703	908	2.0	91	2.5	2.5	1.0	2.3	1.5	12.5	2.24
30.594	709	911	2.8	84	4.0	3.0	2.0	2.5	1.5	12.2	1.71
30.599	706	915	2.2	91	3.0	2.5	1.0	2.5	2.0	14.2	2.71
30.600	706	910	2.6	84	1.0	2.5	1.0	2.8	1.0	13.9	2.27
36.653	630	831	1.4	74	2.5	2.0	2.0	1.8	1.0	13.0	2.04
47.131	705	911	4.0	104	3.0	3.0	1.0	2.8	-	11.8	2.31
54.604	714	914	1.8	66	1.0	2.0	1.0	2.8	2.0	16.8	2.09
54.607	708	918	2.5	97	3.0	3.0	1.0	2.8	2.5	19.9	2.72
54.608	708	919	2.1	91	3.0	2.0	1.0	3.0	1.0	19.5	2.70
54.608-1	712	913	1.5	76	1.0	2.0	2.0	3.8	1.0	13.6	2.13
54.619	704	915	2.2	97	2.0	2.0	1.0	2.8	1.0	16.9	2.60
54.809	628	824	1.0	61	3.0	2.0	1.0	2.0	1.0	13.7	1.74
54.818	707	915	2.0	89	2.5	2.0	1.0	3.5	1.0	18.5	2.54
54.834	701	903	1.5	69	1.0	2.0	2.0	2.3	2.0	12.9	2.20
54.853	701	828	1.6	84	2.5	2.0	2.0	2.0	1.5	12.4	1.65
54.854	706	902	2.2	79	3.0	3.0	3.0	1.5	-	11.3	1.85
54.857	629	829	1.2	64	3.0	2.5	1.0	2.3		13.6	2.06
54.859	710	907	2.7	104	4.0	3.0	1.0	2.8	-	12.5	2.23
54.862	706	912	1.9	91	3.0	2.5	1.0	2.3	-	13.6	2.29
54.865	630	830	1.3	74	3.0	2.0	2.0	2.0	-	11.6	2.01
54.873	630	905	3.5	109	2.0	3.0	1.0	2.3		13.2	2.23
60.279	708	913	1.7	81	2.5	2.0	1.0	3.5	1.0	18.7	2.51
60.296-1	704	917	2.3	91	2.5	2.0	1.0	3.3	1.5	20.4	2.62
63.271	702	903	2.7	71	2.5	2.5	1.0	2.3	-	11.0	1.90
65.338	706	909	2.3	74	1.0	2.0	1.0	3.0	1.0	13.2	2.57
65.341	706 707	908	2.1	76	1.5	2.0	1.0	3.3	1.0	17.6	2.31
65.346	707 705	913	2.2	84	1.5	2.0	1.0	3.5	1.0	19.2	2.62
65.354	705 710	906	2.2	86	3.0	3.0	1.0	2.3	-	15.6	1.82
65.388	713	909	3.7	69	4.0	4.0	2.0	2.0		4.8	1.54
68.410	705 702	914	2.0 2.9	91	3.0	2.0	1.0	3.0	1.0	16.6	2.57
68.421		910		89	3.0	2.0	1.0	2.8	1.0	16.1	2.33
68.427	704	909	1.9	66 94	1.0	2.0	1.0	3.0	1.0	13.3	2.55
68.430 68.436	712 705	918 913	2.3 2.6	94 94	1.5 2.5	2.5 2.0	1.0 1.0	2.5 3.0	1.5 2.0	12.8 13.2	2.71 2.47
68.439	708 707	913 917	2.4	9 4 97	2.5 2.5	2.0	1.0	3.0 3.0	1.0	16.2	2.47 2.23
68.443	707 705	908	1.6	74	1.0	2.0	1.0	3.0 2.8			
68.446	708 702	908 906	3.4	74 89	1.0	2.0	1.0	2.8 2.8	1.0 1.0	12.9 15.6	2.38 2.16
68.448	702 706	910	3. 4 1.9	74	1.0	2.0	1.0	2.8 3.0	1.0	13.5	2.16
68.454	700 701	910	2.1	89	1.5	2.0	1.0	3.5 3.5	1.0	16.6	2.87
68.455	701 705	910	2.1	91	2.0	2.0	1.0	3.8 2.8	1.5	16.2	2.31
68.457	706 706	913	1.8	79	1.0	2.0	1.0	3.0	1.0	17.3	2.26 2.62
JO. 4 07	700	913	1.0	, 3	1.0	2.0	1.0	3.0	1.0	17.3	2.02

Table 4.1 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

				Protein				
		Seed com		<u>composition</u>	Oil compo			ease
	Maturity	Protein	Oil	Methionine	Linoleic	Linolenic		ction
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	Py
Toku	11	41.4	19.2	1.1	45.7	6.6	н	
	i'	47.0	16.4	1.1	42.6	6.5		
Tortoise Egg							Н	
Waseda	II 	40.6	19.5	1.0	44.1	6.8		
Wea	II ·	39.3	21.9	1.3	47.5	6.0	S	
Wisconsin Black	<u> </u>	44.7	17.6	-	43.5	6.0	S	
Yellow Marvel	II	43.3	17.1	1.3	46.5	7.9		
FC 01.547	II	42.8	20.0	1.3	44.1	6.4	Н	S
FC 03.609	I	43.2	20.0	1.3	43.3	6.4	S	S
FC 04.007A	II	40.0	21.6	1.2	45.0	6.5	S	S
FC 19.976	II	46.3	16.2	1.2	44.6	7.2	R	S
FC 29.219	II	43.8	19.5	1.2	43.5	6.5	S	S
FC 30.233	1	41.1	20.8	1.2	43.4	6.4	s	S
FC 31.122	1	44.6	17.2	1.4	43.9	6.7	S	S
FC 31.408	II	41.3	19.8	1.3	45.3	7.2	s	S
FC 31.409	II	41.4	19.7	1.3	46.3	7.4	s	s
30.594	II	42.5	19.8	-	47.1	6.5	s	s
30.599	ii	42.2	21.1	1.4	48.4	6.9	s	S
30.600	ii	42.5	20.9	1.4	46.7	7.1	S	s
36.653	ï	44.0	18.5	1.2	46.8	6.6	R	s
47.131	i	41.1	17.7	-	48.7	6.6	S	S
	" 	42.7	19.5	1.3	47.9	7.1	R	S
54.604	 			1.3				S
54.607		41.1	21.6		44.3	6.0	Н	
54.608	II 	39.5	22.2	1.4	41.6	5.6	S	S
54.608-1	II 	41.0	20.3	1.4	47.1	7.5	S	S
54.619	II	40.1	20.9	1.4	45.2	6.1	S	S
54.809	ı	42.8	19.3	1.4	43.3	6.1	S	S
54.818	II	39.7	21.9	1.4	41.0	5.4	S	S
54.834	ı	41.4	20.5	•	46.0	7.3	S	S
54.853	1	42.8	19.1	-	46.9	7.9	S	S
54.854	1	39.6	17.0	-	43.9	7.2	S	S
54.857	1	41.1	20.3	•	49.0	7.2	S	S
54.859	II	38.6	17.6	-	50.0	8.2	S	S
54.862	11	38.3	20.4	-	46.8	7.1	R	s
54.865	1	37.6	20.7	-	47.0	8.6	s	s
54.873	II	36.9	19.3	-	46.8	6.8	s	s
60.279	ii	39.7	22.1	1.3	43.9	7.2	R	s
60.296-1	ii	39.5	21.8	1.3	48.0	7.4	s	_
63.271	ï	42.8	16.0		47.6	8.1	s	s s
65.338	ii	37.2	21.6		48.2	7.6	s	s
65.341	 II	38.4	21.4	_	42.9	5.9	s	s
65.346	" 	37.2	21.9		44.9	6.7	Н	s
	"	41.5	19.4	-	48.8	6.4	S	S
65.354	 	41.5 42.5	15.1	<u>-</u>	48.8 47.9	8.4	S	S
65.388			21.5	-	47. 9 44.7	5. 4 5.9		3
68.410	II 	38.5		-				S
68.421	II 	40.6	20.9	-	47.0	6.3	S	S
68.427	II 	39.5	21.6	1.1	44.8	6.2	Н	s s
68.430	II 	41.4	20.3	1.1	48.4	7.1	S	S
68.436	II .	39.0	21.7	-	47.5	6.9	S	S
68.439	II	40.0	21.5	-	49.5	6.7	S	S
68.443	II	39.3	21.4	-	48.6	7.7	S	s s
68.446	II	42.4	20.8	-	48.7	7.1		S
68.448	II	38.8	21.6	1.2	48.7	7.5	S	S
68.454	II	40.3	21.2	1.2	48.2	7.1	s	s
68.455	ii	43.1	19.9	1.1	47.3	6.9	S	s
68.457	ii	41.1	21.9	1.2	47.2	6.9	S	s

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Maturity	
PI No.	name	acquisition	origin	or released	group	
00 457 4		Ob.in.	Obin-	1000		
8.457-1		China	China	1926	!!	
8.461		China	China	1926	II 	
8.461-1		China	China	1926	11	
8.465		China	China	1926	11	
8.465-1		China China	China	1926	!!	
8.466			China	1926	11	
8.474		China	China	1926 1926	!!	
8.474-2		China	China		1	
8.475		China	China	1926	II II	
8.475-1		China	China	1926	11	
8.480		China	China	1926	11	
8.481		China	China	1926	II 	
88.484-1		China	China	1926	II 	
8.484-4		China	China	1926	II 	
88.488		China	China	1926	II.	
8.500		China	China	1926	II	
88.503		China	China	1926	11	
8.508		China	China	1926	11	
88.516		China	China	1926	II	
88.521		China	China	1926	H	
8.522		China	China	1926	11	
88.526		China	China	1926	11	
8.530		China	China	1926	П	
8.543		China	China	1926	П	
8.551-2		China	China	1926	H	
8.551-3		China	China	1926	1	
8.554		China	China	1926	1	
8.555		China	China	1926	П	
8.562		China	China	1926	П	
8.564		China	China	1926	11	
88.572		China	China	1926	1	
88.576		China	China	1926	1	
88.585		China	China	1926	П	
88.586		China	China	1926	I	
8.587		China	China	1926	П	
8.598		China	China	1926	II	
8.600		China	China	1926	II	
8.604-2		China	China	1926	1	
8.609B		China	China	1926	П	
88.610		China	China	1926	1	
8.622		China	China	1926	11	
8.627		China	China	1926	11	
8.629		China	China	1926	11	
88.639		China	China	1926	11	
8.642		China	China	1926	11	
8.655		China	China	1926	11	
8.658		China	China	1926	ii	
8.661		China	China	1926	ii	
88.663		China	China	1926	 II	
88.666		China	China	1926	ii	
88.670-1		China	China	1926	11	
88.670-2		China	China	1926	11	
88.671		China	China	1926	11	
88.676		China	China	1926	11	

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	A.4 .			<u>Pubes</u>	cence			Seedcoat			Other traits		
	Matu- rity	Stem	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plant
68.457-1	11	N	Р	T	E	N	Br	S	Υ	Br			
68.461	11	D	Р	G	E	N	Br	S	Υ	lb			
68.461-1	II	S	W	G	E	N	Br	S	Υ	Bf			
68.465	II	D	P	G	E	N	Br	S	Υ	lb			
68.465-1	II 	N	P	Lt	E	N	Tn	D	Υ	Br			
68.466	II 	D	P	G	E	N	Br	S	Y	lb			
68.474	II .	D	P	G	E	N	Br	S	Y	lb			
68.474-2	1	N	P	T	E	N	Br	D	Y	Dbr			
68.475 68.475 1	11	D	P	G	E	N	Br Dr	S	Y	lb			
68.475-1	11	N	P	T	E	N	Br D:-	D	Y	Br			
68.480 68.481	11	D	W	G	E	N	Br D:	S	Y	Bf			
68.481	11	N	W	G	E	N	Br	S	Y	Bf			
68.484-1	11	N	P	T	E	N	BI	S	Y	BI			
68.484-4	11	N	P	T	E	N	Br	D	Y	Br			
68.488	11	D	P	G	E	N	Br	S	Y	lb			
68.500	II 	N	W	T	E	N	Br	D	Y	G 			
68.503	II 	D	P	G	E	N	Br	S	Y	lb			
68.508	 	D	W	G	E	N	Br	S	Y	Bf			
68.516	 	N	P	G	E	N	Br	S	Υ	Y			
68.521	11	D	P	G	E	N	Br	S	Υ	lb			
68.522	11	N	W	G	E	N	Br	S	Y	Bf			
68.526	11	D	Р	G	E	N	Br	S	Υ	lb			
68.530	11	N	W	G	E	N	Br	S	Υ	Bf			
68.543	11	D	Р	G	E	N	Br	S	Υ	lb			
68.551-2	11	N	Р	T	E	N	Br	D	Y	Br			
68.551-3	1	S	Р	Т	E	N	Br	S	Υ	ВІ			
68.554	1	N	Р	Т	E	Ssp	Br	D	Υ	ВІ			
68.555	11	D	Р	G	E	N	Br	S	Υ	Bf			
68.562	11	D	Р	G	E	N	Br	S	Υ	lb			
68.564	11	D	Р	G	E	N	Br	S	Υ	lb			
68.572	1	N	Р	T	E	N	Br	D	Υ	Br			
68.576	1	N	Р	Т	E	N	Br	S	Υ	Tn			
68.585	II .	D	Р	G	Ε	N	Br	S	Υ	lb			
68.586	1	D	Р	Т	Ε	N	Br	S	Υ	ВІ			
68.587	II	D	Р	G	E	N	Tn	S	Υ	lb			
68.598	11	N	W	G	Ε	N	Br	S	Υ	Bf			
68.600	II	N	Р	G	E	N	Br	S	Υ	lb			
68.604-2	1	N	Р	Т	E	N	Br	S	Υ	Tn			
68.609B	II	N	Р	Т	E	N	Br	S	Υ	ВІ			
68.610	1	S	Р	Т	E	N	Tn	S	Υ	Br	Def		
68.622	11	S	Р	T	E	Ssp	Br	D	Υ	Br			
68.627	H	D	Р	G	E	N	Br	S	Υ	lb			
68.629	II	D	Р	G	E	N	Br	S	Υ	Bf			
68.639	II	D	Р	G	E	N	Br	S	Υ	lb			
68.642	11	D	W	G	Ε	N	Br	S	Υ	Bf			
68.655	II	S	Р	G	E	N	Br	S	Υ	lb			
68.658	II	S	Р	G	Ε	N	Br	S	Υ	lb			
68.661	II	D	Р	G	Ε	N	Tn	S	Υ	Υ			
68.663	11	N	W	G	Sa	N	Br	s	Υ	Bf			
68.666	11	s	Р	G	E	N	Br	s	Υ	lb			
68.670-1	11	D	Р	Т	E	N	Br	s	Υ	ВІ			
68.670-2	II	N	Р	Т	E	N	Br	D	Υ	Br			
68.671	ii	D	P	G	E	N	Br	S	Y	Lbf			
68.676	ii	D	P	G	E	N	Br	S	Ÿ	Bf			
68.680	 11	N	w	G	Ē	N	Br	S	Ý	Bf			

Table 3.1 Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering <u>date</u> (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
68.457-1	704	913	2.3	89	2.5	2.0	1.0	3.0	1.5	18.4	2.49
68.461	704	907	1.9	76	1.0	2.0	1.0	3.0	1.0	13.0	2.41
68.461-1	706	911	2.2	8 6	2.0	2.0	1.0	3.3	1.0	13.9	2.61
68.465	705	911	1.9	76	1.0	2.0	1.0	3.0	1.0	14.7	2.60
68.465-1	712	907	3.1	94	4.0	3.0	1.0	2.5	1.5	12.2	2.22
68.466	706	911	2.0	79	1.0	2.0	1.0	3.0	1.0	13.8	2.58
68.474	708	914	2.3	81	1.5	2.0	1.0	3.0	1.0	14.8	2.70
68.474-2	702	904	2.3	102	4.0	2.5	2.0	2.0	2.0	14.5	2.03
68.475	706	913	2.2	79	1.5	2.0	1.0	3.0	1.5	15.1	2.65
68.475-1	708	911	2.4	8 9	3.0	2.0	1.0	2.5	2.5	13.6	2.62
68.480	707	911	2.4	84	1.5	2.0	1.0	3.3	1.0	13.6	2.49
68.481	703	912	2.7	86	2.5	2.0	1.0	3.3	1.0	17.0	2.67
68.484-1	702	910	3.3	99	3.5	2.5	1.0	2.5	1.0	16.2	2.29
68.484-4	708	910	2.1	84	3.0	3.0	1.0	2.0	2.0	13.4	2.17
68.488	705	911	2.2	79	1.5	2.0	1.0	2.5	1.0	13.8	2.62
68.500	704	912	1.9	97	4.0	2.5	1.0	2.8	3.0	18.5	2.31
68.503	706	911	2.0	81	1.0	2.0	1.0	3.0	1.0	14.5	2.62
68.508	707	913	2.1	76	1.0	2.0	1.0	2.8	1.0	14.1	2.93
68.516	705	910	1.6	86	3.0	2.0	1.0	2.8	1.0	16.5	2.23
68.521	703	908	2.7	74	1.0	2.0	1.0	2.8	1.0	12.3	2.41
68.522	705	919	2.2	99	3.0	2.5	1.0	2.5	1.0	15.2	2.97
68.526	707	915	1.7	74	1.0	2.0	1.0	3.0	1.0	15.1	2.89
68.530	708	914	2.0	89	2.5	2.0	1.0	3.3	1.0	19.4	2.66
68.543	706	913	1.7	71	1.0	2.5	1.0	2.8	1.0	14.4	2.83
68.551-2	707	915	2.6	97	4.0	3.0	1.0	2.3	2.0	13.3	2.51
68.551-3	701	909	2.0	81	2.0	2.0	2.0	3.3	1.0	15.9	2.29
68.554	702	909	2.2	94	3.0	2.0	1.0	2.5	1.5	14.2	2.36
68.555	707	914	2.3	86	1.0	2.0	1.0	3.0	1.0	13.7	2.67
68.562	705	908	1.4	66	1.0	2.0	1.0	3.0	1.0	13.3	2.25
68.564	707	910	1.7	69	1.0	2.0	1.0	3.3	1.0	10.3	2.37
68.572	702	906	1.9	91	3.0	2.0	2.0	2.5	2.5	13.7	2.13
68.576	703	831	2.7	94	3.0	2.0	1.0	2.8	2.5	15.5	2.02
68.585	708	914	1.8	69	1.0	2.5	1.0	3.0	1.5	15.3	3.11
68.586	701	910	2.3	94	1.0	2.0	1.0	2.5	1.0	14.3	2.44
68.587	708	914	1.7	89	1.5	3.0	1.0	3.0	1.0	15.4	2.67
68.5 9 8	705	913	2.3	94	2.5	2.0	1.0	3.0	1.0	17.9	2.80
68.600	710	912	2.0	94	3.0	2.0	1.0	2.5	1.0	14.3	2.66
68.604-2	704	909	2.4	94	3.0	2.0	1.0	2.5	2.0	15.1	2.36
68.609B	707	917	3.0	91	3.0	2.0	1.0	3.3	1.0	14.7	2.85
68.610	702	908	1.7	81	2.0	2.0	1.0	3.8	1.0	15.4	2.33
68.622	709	919	1.8	86	2.0	3.0	1.0	2.3	1.5	14.3	2.81
68.627	707	918	1.8	79	1.0	2.0	1.0	3.0	1.0	15.5	2.95
68.629	704	913	2.3	71	1.0	2.0	1.0	3.0	1.0	15.3	2.78
68.639	707	911	1.9	69	1.0	2.0	1.0	3.0	1.0	13.3	2.42
68.642	710	914	2.8	84	1.0	2.0	1.0	3.5	1.0	14.1	2.78
68.655	703	909	2.9	91	2.0	2.0	1.0	3.0	1.0	13.2	2.51
68.65 8	704	909	3.0	94	2.0	2.0	1.0	2.8	1.0	13.5	2.62
68.661	704	907	2.4	81	1.0	2.0	1.0	2.8	1.5	16.5	2.29
68.663	716	920	3.3	124	3.5	2.5	1.0	2.5	1.0	15.0	2.58
68.666	703	909	2.7	86	2.0	2.0	1.0	2.5	1.0	13.0	2.37
68.670-1	702	908	1.9	81	1.0	2.0	1.0	2.8	1.0	15.8	2.03
68.670-2	706	916	2.0	102	4.0	3.0	1.0	2.5	1.0	14.3	2.68
68.671	706	913	2.7	79	1.0	2.0	1.0	3.0	1.0	13.7	2.52
68.676	707	915	1.8	76	1.0	2.0	1.0	3.3	1.0	14.9	2.74
68.680	704	913	2.1	97	2.5	2.0	1.0	3.5	1.0	18.8	2.35

Table 4.1 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed co	mposition	Protein composition	Oil comp	osition	Disease		
	Maturity	Protein	Oil	Methionine	Linoleic	Linolenic	reac	tion	
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	Ру	
68.457-1	П	39.8	21.9	1.3	49.4	7.0	s	s	
68.461	il	39.6	22.0	1.1	48.7	7.0	H	s	
68.461-1	ii	40.2	23.0	1.2	44.1	5.9	R	s	
68.465	ii	37.2	22.0	1.3	49.1	7.1	s	s	
68.465-1	ii	42.1	20.1	1.1	50.0	7.4	R	s	
68.466	ii	39.1	22.4	1.1	48.6	7.6	s	s	
68.474	ii	39.4	22.0	1.3	47.9	7.0	s	s	
68.474-2	ĺ	43.3	19.7	1.3	48.8	7.0	S	S	
68.475	II	39.0	22.3	1.4	45.3	7.2	S	s	
68.475-1	II	42.2	20.2	1.3	47.0	7.0	s	S	
68.480	II	38.8	22.2	1.3	46.3	6.3	S	s	
68.481	II	39.8	22.3	1.4	48.4	7.0	Н	S	
68.484-1	II	41.8	20.5	-	46.8	6.7	s	s	
68.484-4	II	41.7	19.8	1.2	47.9	8.3	s	s	
68.488	ii	38.7	22.0	1.3	47.8	7.0	s	s	
68.500	II	41.5	20.5	1.3	47.8	6.5	s	S	
68.503	II	38.9	22.7	1.4	47.8	7.5	S	s	
68.508	II	38.7	21.9	1.4	45.3	6.6	S	s	
68.516	ii	42.5	20.7	1.3	47.3	7.1	s	S	
68.521	Ï	39.6	20.7	1.3	49.0	7.5	S	s	
68.522	ii	38.5	21.3	1.5	44.0	6.7	R	s	
68.526	Ï	39.5	22.7	1.3	46.8	6.9	s	s	
68.530	ii	40.0	22.1	1.2	43.5	6.7	S	s	
68.543	II	39.2	21.7	1.4	47.9	7.4	S	S	
68.551-2	II	43.0	19.6	1.3	48.9	7.8	S	S	
68.551-3	Ï	39.3	21.6	1.4	48.4	7.4	S	s	
68.554	i	41.1	19.9	1.4	50.6	6.2	S	S	
68.555	II	41.6	18.8	1.4	45.6	7.0	s	S	
68.562	ii	39.6	21.5	1.3	47.3	6.7	s	s	
68.564	ii	38.2	22.0	1.4	48.0	7.1	s	s	
68.572	ï	41.9	20.0	1.3	50.4	7.1	s	s	
68.576	i	43.2	20.7	1.3	47.6	5.6	s	s	
68.585	il	41.8	21.4	1.4	48.8	6.7	s	s	
68.586	ï	40.9	20.3	1.4	39.5	6.3	s	s	
68.587	ii	40.6	20.4	1.4	43.9	6.3	s	s	
68.598	II	39.9	21.5	1.4	45.3	6.2	s	s	
68.600	ii	41.6	20.3	1.4	50.8	7.7	R	s	
68.604-2	ï	41.9	21.1	1.4	48.3	6.4	s	s	
68.609B	il	40.8	21.0	1.3	46.5	6.6	s	s	
68.610	ï	43.2	20.6	1.1	44.8	7.0	s	s	
68.622	il	41.5	19.9	1.2	45.9	7.1	s	s	
68.627	ii	39.5	21.9	1.2	47.4	6.6	s	s	
68.629	ii	40.6	21.9	1.2	45.6	6.8	s	s	
68.639	ii	39.5	22.4	1.3	46.7	6.8	s	S	
68.642	ii	38.0	22.6	1.1	47.9	6.5	s	s	
68.655	ii	38.1	21.7	1.3	48.7	6.8	s	s	
68.658	II	38.9	20.5	1.2	48.6	6.9	s	s	
68.661	II	41.3	19.0	1.3	46.9	6.5	s	s	
68.663	II	38.9	21.1	1.3	45.5	7.0	s	s	
68.666	ii	38.8	22.0	1.3	48.5	7.1	s	s	
68.670-1	ii	40.3	21.6	1.3	48.1	6.8	s	s	
68.670-2	ii	39.3	21.0	1.3	47.6	7.8	S	s	
68.671	II	38.4	21.5	1.3	47.3	6.9	S	S	
68.676	" 	39.4	21.3	1.3	47.3 45.9	6.6	S	S	
			£ 1.J	1.0	 U.0	u.u			

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

		Country	Country	Year		
	Accession	of	of 	introduced	Maturit	
No.	name	acquisition	origin	or released	group	
8.680-2		China	China	1926	11	
8.683		China	China	1926	11	
8.685		China	China	1926	H	
8.687		China	China	1926	11	
8.694		China	China	1926	11	
8.696		China	China	1926	11	
8.704		China	China	1926	ii	
8.706		China	China	1926	11	
8.708		China	China	1926	11	
8.709		China	China	1926	11	
8.712		China	China	1926	11	
8.713		China	China	1926	ii	
8.715		China	China	1926	ii	
8.718		China	China	1926	ii	
8.725		China	China	1926	11	
8.728		China	China	1926	11	
8.729		China	China	1926	'' 	
		China	China	1926		
8.732				1926	11	
8.736		China	China		11	
88.741		China	China	1926))	
8.746		China	China	1926	1	
8.748		China	China	1926	11	
8.761		China	China	1926	11	
8.762		China	China	1926	II	
88.763		China	China	1926	11	
88.765		China	China	1926	ii	
88.770		China	China	1926	1	
88.778		China	China	1926	11	
88.788		China	China	1926	11	
8.795		China	China	1926	11	
8.815		China	China	1926	11	
9.500		China	China	1926	11	
9.501		China	China	1926	11	
9.503		China	China	1926	11	
9.507		China	China	1926	1	
9.512		China	China	1926	11	
39.532		China	China	1926	11	
9.533		China	China	1926	1	
9.991		China	China	1926	11	
9.992		China	China	1926	11	
9.996		China	China	1926	II	
0.009		China	China	1926	ii	
70.016		China	China	1926	i	
0.017		China	China	1926	i	
0.021		China	China	1926	il	
0.027		China	China	1926	ï	
0.027		China	China	1926		
					11	
0.077		China	China	1926	11	
0.078		China	China	1926	11	
0.084		China	China	1926	11	
70.087		China	China	1926	1	
0.089		China	China	1926	11	
0.091		China	China	1926	11	
0.197		·China	China	1926	11	
70.224		China	China	1926	11	

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedco	oat		<u>Other</u>	traits	
Entry	rity	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plan
68.680-2	11	D	P	T	E	N	Br	S	Υ	G			
68.683	11	S	Р	Т	Е	N	Br	S	Υ	ВІ			
68.685	11	D	W	G	E	N	Br	S	Υ	Bf			
68.687	11	N	Р	Lt	E	N	Br	S	Υ	ВІ			
8.694	П	N	P	T,	E	N	Br	D	Υ	Tn			
88.696	П	N	Р	Ng	E	N	Br	D	Υ	Br			
88.704	П	D	Р	G	Ε	N	Br	S	Υ	Bf			
88.706	П	D	P	G	Ε	N	Br	S	Υ	lg			
88.708	П	D	Р	G	Ε	N	Br	S	Υ	Bf			
88.709	н	N	Р	Lt	Ε	N	Tn	D	Υ	Br			
88.712	ii	D	W	G	E	N	Br	ī	Ÿ	Y			
88.713	ii	S	w	G	E	N	Br	s	Ÿ	Bf			
88.715	ü	D	P	T	E	N	Br	S	Ϋ́	Br			
58.718	ii	N	P	Ť	E	N	Br	S	Ϋ́	Br			
	11	N	P	Ť	E	N	Br	D	Y				
58.725 59.729										Br B-			
88.728	11	N	P	Lt	E	N	Br	D	Y	Br			
88.729	II	N	P	G	E	N	Br	S	Y	Lbf			
88.732	II 	N	W	Lt	E	N	Br	S	Υ	BI			
88.736	Ш	N	W	T	E	N	Tn	D	Υ	Br	Def		
88.741	Ш	D	W	G	Ε	N	Br	S	Υ	Bf			
88.746	I	S	Р	Т	Ε	N	Br	S	Υ	ВІ			
88.748	П	N	W	G	E	N	Br	S	Υ	Bf			
88.761	II	D	Ρ	G	Ε	N	Br	S	Υ	lb			
8.762	Ш	S	P	T	Ε	N	Br	D	Υ	Br		Dab)
8.763	11	N	Ρ	G	E	N	Br	S	Υ	lb			
8.765	П	N	P	Т	Ε	N	Tn	D	Υ	Υ			
58.770	1	D	P	G	E	N	Br	S	Υ	lb			
58.778	- 11	N	P	G	Ε	N	Br	D	Υ	G			
88.788	ii	D	W	G	E	N	Br	S	Y	Bf			
58.795	ii	D	P	Ğ	Ē	N	Br	S	Ý	lb			
58.815	ii	N	Р	G	E	N	Tn	Ī	Ϋ́	lb			
59.500	ii	N	w	Lt	Ē	N	Br	D D	Ÿ	Br			
59.500 59.501	ii	N	w	G	E	N	Br	S	Ϋ́	Bf			
69.503		N	W	G	E	N	Br B-	S	Y	Bf			
59.507	 	N	P B	T	E	N	Br B-	S	Y	BI			
59.512 50.532	11	N	F	T	E	N	Br B-	S	Y	BI			
59.532 50.533		N	P	G	E	N	Br	S	Y	Y			
69.533	l	D	P	G	E	N	Br	S	Y	lb Df			
59.991	II 	D	W	G	E	N	Br	S	Y	Bf			
59.992	H 	N	W	G	E	N	Br D:	S	Y	Bf			
59.996	Щ	N	W	G	E	N	Br	S	Y	Bf			
70.009	II	N	W	G	E	N	Br	S	Y	Y			
70.016	!	N	P	T	E	N	Br	S	Y	BI			
70.017	ı	S	P	G	E	Ssp	BI	S	Υ	Bf			
70.021	11	N	W	G	Ε	N	Tn	S	Υ	Bf			
70.027	1	N	P	Т	Ε	N	Br	D	Gn	Br			
70.036	Ш	N	W	G	Ε	N	Br	S	Υ	Bf			
70.077	П	N	P	G	Е	N	Br	D	Υ	Bf			
70.078	11	N	W	Т	Ε	Ssp	Br	D	Υ	Br			
70.084	н	D	P	G	Е	N .	Br	D	Υ	Bf			
70.087	Î	N	Р	G	Ε	N	Br	D	Υ	Υ			
70.089	il.	N	W	G	Ε	N	Br	S	Y	Bf			
70.091	ii	D	w	G	Ē	N	Br	s	Ŷ	Bf			
70.197	ï	N	P	T	Ē	N	Br	Ĭ	Ÿ	Rbr			
70.224	ii	N	w	Lt	E	N	Br	s	Ÿ	BI			

Table 3.1
Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

	_				Stem	_					
	Flowering	Maturity			term-	Branch-		Seed			
Entry	<u>date</u> (mmdd)	date (mmdd)	Lodging (score)	Height (cm)	ination (score)	ing (score)	tering (score)	Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
	(minua)	(IIIIIaa)	(30016)	(СП)	(30016)	(300/6/	(300/0/	(300/6)	(30010)	(09/30/	(IVIG/III)
68.680-2	701	908	1.8	74	1.0	2.0	1.0	3.0	1.0	16.6	2.15
68.683	701	915	1.9	89	2.0	2.0	1.0	3.0	1.0	17.9	2.65
68.685	707	911	1.7	76	1.0	2.0	1.0	2.8	1.0	13.8	2.45
68.687	705	909	1.7	89	2.5	2.0	1.0	3.3	1.0	15.5	2.33
68.694	704	912	2.1	89	3.0	2.0	1.0	2.8	2.0	15.5	2.44
68.696	708	917	3.5	112	4.0	3.0	1.0	2.8	2.0	14.7	2.27
68.704	708	915	2.2	79	1.0	2.0	1.0	2.8	1.0	14.3	2.77
68.706	702	914	1.2	74	1.0	2.0	1.0	3.3	1.5	18.9	2.10
68.708	705	914	2.2	64	1.0	2.0	1.0	2.5	1.0	14.0	2.27
68.709	704	911	3.0	104	4.0	2.5	1.0	2.3	2.0	13.7	2.39
68.712	701	911	1.9	79	1.0	2.0	1.0	2.8	2.0	16.4	2.36
68.713	704	911	2.3	86	2.0	2.0	1.0	3.3	1.0	17.8	2.62
68.715	702	907	1.8	79	1.0	2.0	1.0	2.8	1.5	13.8	2.04
68.718	705	913	2.2	94	3.5	3.0	1.0	2.5	1.0	16.2	2.72
68.725	707	913	2.7	94	4.0	3.0	1.0	2.3	1.0	15.4	2.44
68.728	708	909	2.3	76	4.0	3.0	1.0	2.8	2.0	13.2	2.33
68.729	706	913	2.2	89	3.0	2.0	1.0	2.5	1.0	15.4	2.50
68.732	704	912	1.3	81	3.0	2.0	1.0	3.0	1.5	16.1	2.27
68.736	711	918	1.8	104	3.5	2.5	1.0	2.3	2.0	15.3	2.64
68.741	708	914	1.8	79	1.0	2.0	1.0	3.5	1.0	14.9	2.78
68.746	701	908	1.7	84	2.0	2.0	1.0	3.0	1.0	14.2	2.08
68.748	710	917	3.0	91	3.0	2.5	1.0	3.5	2.0	16.5	2.62
68.761	704	909	1.8	74	1.0	2.0	2.0	3.0	1.0	14.6	2.60
68.762	711	920	2.3	79	2.0	2.5	1.0	2.5	2.0	15.4	2.64
68.763	709	912	1.7	76	2.5	3.0	1.0	3.0	2.0	14.7	2.31
68.765	710	913	2.2	102	4.0	3.0	1.0	2.8	2.0	15.6	2.56
68.770	704	907	2.4	76	1.0	2.0	1.0	3.3	1.0	11.7	2.06
68.778	707	910	1.4	79	3.0	2.5	1.0	2.8	1.5	14.0	2.38
68.788	708	914	1.7	79	1.0	2.0	1.0	3.8	1.0	14.6	2.94
68.795	705	911	2.1	74	1.0	2.0	1.0	3.0	1.0	14.2	2.74
68.815	704	907	2.0	89	3.5	3.0	4.0	2.8	1.0	15.6	2.02
69.500	707	918	2.1	91	3.5	3.0	1.0	2.5	1.5	14.6	2.83
69.501	704	914	2.4	104	3.5	2.0	1.0	3.3	1.0	18.9	2.60
69.503	706	910	2.1	81	3.0	2.0	1.0	3.3	1.0	18.5	2.48
69.507	701	908	2.1	84	2.5	2.0	1.0	3.3	1.0	14.7	2.13
69.512	704	911	2.3	89	3.5	3.0	1.0	2.8	1.0	17.6	2.64
69.532	708	912	1.9	81	3.0	2.5	1.0	2.8	1.0	14.4	2.70
69.533	707	910	2.5	81	1.0	2.0	1.0	2.5	1.0	14.7	2.35
69.991	707	912	2.0	69	1.5	2.0	1.0	3.5	1.0	13.6	2.35
69.992	706	912	2.0	86	2.5	2.0	1.0	3.5	1.0	19.2	2.56
69.996	707	914	2.1	86	2.5	2.0	1.0	3.5	1.0	19.0	2.60
70.9	714	922	2.4	94	3.5	3.0	1.0	2.8	2.0	17.0	2.78
70.016	701	908	1.9	84	2.5	2.0	1.0	3.3	1.0	16.6	2.27
70.017	702	908	1.6	81	2.0	2.0	1.0	2.5	2.0	13.9	2.22
70.021	712	913	2.4	97	3.5	2.0	1.0	2.8	1.0	13.2	2.54
70.027	703	830	2.0	84	3.5	2.5	2.0	2.3	3.0	10.6	1.74
70.036	709	915	2.9	104	3.0	2.0	1.0	3.8	1.0	14.8	2.45
70.077	715	921	4.0	91	2.5	3.0	1.0	2.3	3.5	12.9	2.70
70.078	706	904	2.4	86	2.5	2.5	1.0	2.3	1.0	13.0	2.24
70.084	705	909	2.8	89	1.5	2.5	1.0	3.0	1.0	12.6	2.13
70.087	703	909	1.7	84	3.0	2.0	1.0	2.5	1.0	16.0	2.39
70.089	705	909	1.8	81	2.5	2.5	1.0	3.3	1.0	17.8	2.24
70.091	704	905	1.6	74	1.5	2.0	1.0	2.5	1.0	11.9	2.19
70.197	711	917	3.5	99	3.5	3.0	1.0	2.8	2.5	16.6	2.02
70.224	705	912	1.4	84	3.0	3.0	1.0	2.8	2.0	16.9	2.42

Table 4.1
Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

		0		Protein	0.11		ъ.	
	Maturity	Seea co Protein	mposition Oil	<u>composition</u> Methionine	Oil compo Linoleic	Linolenic		9886
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	ction Py
00.000.0		40.1	20.7	1.0	45.0	F 0		
68.680-2	11	42.1 40.0	20.7	1.2 1.2	45.3 48.0	5.9	S	S
68.683	II "		21.7		48.9	6.8	S	S
68.685	II 	38.5	22.6	1.2	48.2	7.6	S	S
68.687	II	40.0	21.7	1.2	46.3	7.0	S	S
68.694	11	41.8	20.3	1.2	43.9	8.2	s	S
68.696	11	41.5	20.6	1.4	45.8	6.4	S	s
68.704	II	39.5	22.0	1.3	48.3	7.8	Н	S
68.706	II	43.5	18.6	1.2	47.9	7.4	R	S
68.708	II	38.6	23.1	1.1	49.1	7.2	s	s
68.709	11	41.1	21.2	1.2	49.0	6.9	S	S
68.712	II	41.7	21.2	1.2	48.0	6.7	S	S
68.713	11	39.9	22.4	1.2	44.9	6.5	s	S
68.715	II	42.0	20.0	1.4	48.3	7.5	s	s
68.718	11	40.2	19.9	1.1	47.5	7.4	s	S
68.725	ii	43.3	19.5	1.2	47.7	7.0	Ř	s
68.728	ii	42.9	19.4	1.3	49.4	6.6	R	s
68.729	ïi	44.0	18.7	1.2	49.8	7.2	s	s
68.732	ii	44.2	20.3	1.3	46.6	6.0	S	s
68.736	" II	44.1	20.3	1.1	48.3	6.3	S	S
68.741	II	39.7	21.9	1.1	48.3	6.4	S	S
68.746	1	39.8	21.2	1.2	43.4	6.9	S	S
68.748	II 	41.4	21.2	• • •	45.2	6.6	S	S
68.761	11	38.8	22.5	1.1	48.6	7.0	s	S
68.762	11	39.0	20.7	1.2	47.4	7.2	S	S
68.763	II	37.9	21.5	1.2	48.2	7.1	s	S
68.765	II	38.6	19.9	1.3	48.1	7.6	R	S
68.770	1	37.2	20.5	1.3	47.6	7.1	S	S
68.778	II	39.2	20.2	1.2	49.2	7.2	s	S
68.788	II	35.3	21.9	1.4	44.1	6.1	Н	s
68.795	II	37.0	22.6	1.4	48.5	6.8	s	s
68.815	ii	37.2	21.0	1.2	47.8	8.0	H	S
69.500	ii	40.4	18.6	1.2	45.7	6.6	s	s
69.501	ii	37.3	21.8	1.3	44.4	6.0	s	Н
69.503	ii	37.5 37.5	21.6	1.2	44.5	6.2	S	s
69.507	ï	36.9	21.0	1.4	48.8	7.2	S	S
	ii						S	S
69.512		39.8	20.7	1.2	47.0	6.6 7.4	_	
69.532	II	40.0	21.0	1.3	47.7		S	S
69.533	1	37.1	22.4	1.3	48.8	6.9	S	S
69.991	II "	36.9	22.0	1.4	47.0	6.7	S	S
69.992	 	37.0	21.4	1.2	46.1	5.8	S	S
69.996	II 	38.4	21.7	1.2	42.2	6.1	S	S
70.009	II ·	37.5	21.9	1.2	44.1	5.9	S	S
70.016	ı	37.0	21.3	1.3	46.0	6.9	S	S
70.017	1	39.2	19.7	1.1	49.3	7.8	S	S
70.021	II	35.8	22.6	1.3	46.7	6.5	S	S
70.027	ı	37.6	19.8	-	48.1	6.5	S	S
70.036	11	37.5	22.1	1.3	44.3	6.5	S	s
70.077	II	37.5	20.7	-	46.6	7.7	s	s
70.078	ii	38.5	19.5	1.2	48.8	7.6	S	s
70.084	ii	39.2	20.0	1.3	48.0	7.4	s	S
70.087	ï	38.5	20.8	1.3	47.8	7. 4 7.9	S	S
70.087	' 11	36.9	22.2	1.3	43.5	6.4	S	S
70.091	II 	39.1	21.3	1.2	47.7	6.9	S	S
70.197	II 	40.6	19.1	-	44.3	7.1	S	S
70.224	II	40.5	20.3	-	44.9	6.4	S	S

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Ai	Country	Country	Year	M -4:*
Pl No.	Accession	of acquisition	of origin	introduced or released	Maturity
1 140.	name	acquisition	Origin	Or released	group
0.228		China	China	1926	Ш
0.241		China	China	1926	ï
0.242		China	China	1926	il
0.251		China	China	1926	11
0.453		China	China	1926	11
0.456		China	China	1926	11
0.457		China	China	1926	11
0.458		China	China	1926	11
0.459		China	China	1926	11
0.460		China	China	1926	11
0.461		China	China	1926	11
0.463		China	China	1926	11
0.473-1		China	China	1926	1
0.476		China	China	1926	П
0.478		China	China	1926	П
0.485		China	China	1926	1
0.495		China	China	1926	П
0.503		China	China	1926	П
0.507		China	China	1926	П
0.516		China	China	1926	II .
0.520		China	China	1926	1
0.561		China	China	1926	II
1.161		China	China	1927	1
1.850		China	China	1927	H
2.328		China	China	1927	11
2.337		China	China	1927	11
2.341		China	China	1927	11
2.342		China	China	1927	11
3.583		China	China	1927	11
73.585		China	China	1927	11
73.587		China	China	1927	II.
73.772		China	China	1927	11
73.780		China	China	1927	11
78.242		Russia	Russia	1928	!
78.243		Russia	Russia	1928	<u> </u>
79.586		China	China	1929	11
79.593		China	China	1929	11
79.596		China	China	1929	11
79.602		China	China	1929	11
79.609		China	China	1929	!!
79.610		China	China	1929	l
79.613		China	China	1929	11
79.617		China	China	1929	1
79.648		China	China	1929	
79.694 79.695		China China	China China	1929	11
79.695 79.699		China China	China China	1929	11
79.703				1929	1
		China China	China China	1929 1929	11
79.712 79.727		China China	China China		11
79.727 79.727		China China	China	1929	1
79.737 79.745		China China	China	1929	II II
79.745 70.746		China China	China	1929	11
79.746		China	China	1929	H
79.747		China	China	1929	!!
79.756		China	China	1929	11

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedo	oat		Other	traits	
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
70.000				_	_		_	_					
70.228 70.241	II .	N	P	T	E	N	Tn	D	Y	Y			
	1	D	W	G	E	N	Br -	S	Y	Bf			
70.242 70.251	II U	N	P	T	E	N	Tn	D	Y	Y			
70.453	II II	D	P	T	E	Ssp	Br	S	Y	BI			
	II II	N	P	T	E	N	Br	S	Y	BI			
70.456	II 	D	P	G	E	N	Br	S	Y	lb			
0.457	 	D	W	G	E	N	Br	S	Υ	Bf			
0.458	II 	D	P	T	E	Ssp	Br	D	Υ	Br			
70.459	II 	N	P	T	E	N	Br	S	Υ	ВІ			
0.460	II 	D	W	T	E	N	Br	S	Υ	ВІ			
0.461	II	N	P	T	E	N	Br	D	Υ	Br			
0.463	II	N	W	G	E	N	Dbr	S	Υ	Bf			
0.473-1	1	N	Р	G	E	N	Tn	S	Υ	Υ			
0.476	II	N	Р	T	Ε	Ssp	ВІ	1	Υ	Br			
70.478	II	D	W	G	Ε	N	Br	S	Υ	Bf			
70.485	1	D	Р	Т	Ε	N	Br	S	Υ	Υ			
0.495	П	N	Р	T	Ε	N	Br	S	Υ	Br			
0.503	11	N	Р	Т	Ε	N	Br	S	Υ	ВІ			
0.507	II	N	Р	Lt	Ε	N	Tn	D	Υ	Br			
0.516	II	N	Р	G	Ε	N	Br	S	Υ	Υ			
0.520	I	N	Р	Т	Ε	N	Br	S	Υ	ВІ			
0.561	II	D	W	G	Ε	N	Br	S	Υ	Bf			
1.161	1	D	P	G	Ε	N	Br	S	Υ	Bf			
1.850	II	D	Р	G	Ε	N	Br	S	Υ	Bf			
2.328	II	S	Р	Т	Ε	Ssp	Br	D	Υ	Br			
2.337	П	N	Р	G	E	N .	Tn	1	Y	Y			
72.341	П	D	Р	G	E	N	Br	S	Y	Bf			
72.342	П	N	Р	G	E	N	Br	S	Ÿ	lb			
3.583	II	D	P	Ğ	Ē	N	Br	S	Ÿ	lb			
3.585	ii	N	P	T	E	N	Br	S	Ÿ	BI			
3.587	ii	N	P	Ť	E	Ssp	Tn	D	Ÿ	Br			
3.772	ii	N	w	G	Ē	N	Br	S	Ϋ́	Bf			
3.780	ii	N	P	G	E	N	Br	S	Ϋ́	lb			
8.242	ï	D	Р	T	Ē	N	Br	S	Ý	BI			
8.243	i	N	Р	Ť	E	N	Br	D	Ÿ	Br			
9.586	ii	N	Р	Lt	E	N	BI	S	BI	BI	Fleck		
9.593	ii	N	P	T	Ā	Ssp	Br	В	BI	BI	FIECK	•	o
9.596	"	D	P	Ġ	Ē	N	Br	D	Y	Bf			Sw
9.602	ii	N	P	T	E	N	Br	S	Y	BI			
9.609	"	N	w	†	E	N	Br	S	т Ві	BI BI	C===		
9.610	'' 	N	P	†	E	Ssp	BI	S			Gnco		
9.613	' 	D	P	G	E	Ssp N	Br	S	Gn v	BI	Gnco	ı	
9.617	1	N	P	T	E	N			Y	lb B-			
	1						Br B-	D	Y	Br			_
9.648 9.694	•	N	W	T	A	Sp	Br D-	В	BI	BI			Sw
	 	N	W	T	A	Ssp	Br D-	В	BI	BI			Sw
9.695	II	D	P	T	E	N	Br	S	Υ	ВІ			
9.699	l 	N	P	G	E	N	Tn	S	Υ	Υ.			
9.703	II 	D	P	G	E	N	Br	S	Y	lb			
9.712	II	D	W	G	E	N	Br	S	Gn	Bf			
9.727	I.	N	Nw	T	Α	Ssp	Br	В	ВІ	ВІ			Sw
9.737	П	D	Р	T	Ε	Ssp	Br	D	Υ	ВІ			
9.745	П	D	W	G	Ε	N	Br	S	Υ	Bf			
9.746	II	N	P	G	Ε	N	Br	D	Υ	lb			
9.747	11	D	Р	.G	E	N	Br	S	Υ	lb			
9.756	II	N	Р	Lt	E	N	ВІ	Ĭ	Br	Br			

Table 3.1 Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
70.228	707	913	1.8	97	3.5	2.0	1.0	2.8	1.5	15.0	2.41
70.241	708	909	1.4	71	1.5	2.0	1.0	3.3	1.0	12.3	2.25
70.242	708	913	2.2	99	3.5	2.5	1.0	2.8	1.5	14.8	2.40
70.251	705	910	1.7	71	1.0	2.0	1.0	2.8	1.5	12.0	2.35
70.453	703	914	2.5	109	4.0	2.0	1.0	4.3	1.5	12.5	2.53
70.456	704	919	2.3	81	1.5	2.0	1.0	3.3	1.0	15.4	2.89
70.457	708	914	1.7	76	1.0	2.0	1.0	3.5	1.0	13.9	2.71
70.458	703	906	2.2	84	1.5	2.0	1.0	2.5	2.0	12.5	2.45
70.459	702	914	2.3	104	2.5	2.0	1.0	3.3	1.0	16.8	2.49
70.460	711	923	2.7	86	1.5	2.0	1.0	3.5	1.0	15.9	2.60
70.461	705	908	2.0	86	3.0	2.0	1.0	2.5	2.0	13.0	2.34
70.463	708	915	1.9	89	2.5	2.5	1.0	3.0	1.0	19.9	2.71
70.473-1	703	903	1.3	66	2.5	2.0	1.0	2.5	1.5	14.7	2.18
70.476	711	911	2.9	91	3.0	3.0	1.0	3.5	2.0	15.1	2.42
70.478	707	910	1.5	81	1.0	2.0	1.0	3.0	1.0	13.6	2.45
70.485	702	904	1.2	71	1.0	2.0	2.0	3.5	2.0	17.2	1.87
70.495	706	913	1.5	91	3.0	2.5	1.0	3.0	1.5	16.8	2.72
70.503	702	911	2.0	97	2.5	2.0	1.0	3.8	1.0	16.0	2.49
70.507	714	913	2.4	99	3.5	3.0	1.0	2.8	1.0	14.0	2.12
70.516	707	913	2.0	91	3.0	3.0	1.0	4.0	1.0	16.2	2.56
70.520	709	901	1.6	81	3.0	2.0	2.0	2.5	1.0	16.5	2.13
70.561	702	912	2.1	89	1.5	2.0	1.0	2.8	1.0	16.7	2.54
71.161	705	912	1.4	71	1.0	2.0	1.0	2.8	1.0	14.1	2.55
71.850	704	912	2.0	69	1.0	2.0	1.0	3.0	1.0	14.5	2.37
72.328	704	910	2.3	89	2.0	3.0	1.0	2.5	2.0	14.3	2.65
72.337	711	917	2.1	79	2.5	3.0	1.0	3.0	2.0	18.0	2.52
72.341	704	915	2.4	71	1.0	2.0	1.0	3.0	1.0	14.3	2.89
72.342	709	914	2.0	91	2.5	2.0	1.0	3.3	1.0	17.4	2.47
73.583	712	921	2.6	84	1.5	2.5	1.0	3.5	1.0	14.8	2.63
73.585	706	920	2.1	97	3.5	2.0	1.0	2.8	2.0	18.3	2.68
73.587	706	913	2.4	91	3.0	3.0	1.0	2.5	1.0	13.8	2.68
73.772	704	916	2.4	99	3.5	2.5	1.0	3.0	1.0	17.8	2.86
73.780	708	913	2.3	97	3.0	2.5	1.0	3.5	1.0	15.6	2.53
78.242	702	905	1.7	69	1.0	2.0	1.0	2.8	1.0	18.3	2.10
78.243	701	902	1.1	74	2.5	2.0	1.0	2.3	1.0	12.7	1.85
79.586	707	906	2.5	99	4.0	3.0	3.0	2.8	-	10.0	1.99
79.593	717	917	4.5	74	4.0	4.0	2.0	2.3	-	6.3	1.80
79.596	706	911	2.4	84	1.5	2.5	1.0	2.8	1.0	13.9	2.31
79.602	708	917	2.8	102	3.5	3.0	1.0	3.3	1.0	16.3	2.74
79.609	712	911	1.5	81	3.0	3.0	2.0	2.5	-	13.2	2.17
79.610	629	829	1.3	61	3.0	2.0	1.0	2.5	1.0	12.8	1.51
79.613	706	912	1.8	76	1.0	2.0	1.0	3.0	1.0	14.0	2.56
79.617	630	909	1.5	89	3.0	2.5	1.0	2.3	1.5	13.1	2.23
79.648	711	906	2.5	56	4.0	4.5	2.0	1.3	-	4.9	1.04
79.694	712	906	2.5	53	4.0	4.5	2.0	1.3	-	4.9	1.19
79.695	701	908	1.5	84	1.5	2.0	1.0	3.0	1.0	16.4	2.20
79.699	703	903	1.3	64	3.0	2.0	1.0	2.8	1.5	15.1	2.06
79.703	704	907	1.4	74	1.0	2.0	1.0	3.0	1.0	12.8	2.54
79.712	715	913	1.7	81	1.5	3.0	2.0	3.0	1.0	18.8	2.68
79.727	704	906	1.7	58	2.5	3.0	2.0	1.3		6.1	1.25
79.737	702	908	1.7	74	1.0	2.0	1.0	2.8	1.0	17.2	2.32
79.745	708	910	1.4	76	1.0	2.0	1.0	2.8	1.0	13.3	2.50
79.746	712	913	2.8	86	2.5	3.0	1.0	2.5	1.0	13.9	2.58
79.747	706	908	1.5	69	1.0	2.0	1.0	2.5	1.0	12.6	2.25
79.756	716	911	2.5	130	5.0	3.0	1.0	3.0	-	12.0	2.33

Table 4.1
Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

				Protein				
		Seed con		<u>composition</u>	Oil compo			ease
	Maturity	Protein	Oil	Methionine	Linoleic	Linolenic	reac	tion
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	Ру
								_
70.228	II	38.4	20.6	1.2	46.2	7.9	Н	S
70.241	1	36.2	21.7	1.2	46.5	7.0	S	S
70.242	II	37.6	19.8	1.2	48.0	7.4	Н	S
70.251	II	37.9	20.9	1.1	49.5	7.9	S	S
70.453	II	35.1	20.1	-	46.9	6.6	s	S
70.456	H	35.1	21.5	1.2	45.8	6.8	S	S
70.457	II	35.6	22.2	1.3	43.2	6.7	S	s
70.458	II	39.2	20.5	1.3	44.0	6.7	S	S
70.459	II	36.6	22.3	1.2	44.5	7.0	S	S
70.460	II	38.6	20.1	1.4	46.2	7.1	s	S
70.461	II	39.3	19.6	-	44.4	6.7	s	s
70.463	II	36.5	22.3	1.4	43.1	5.9	s	s
70.473-1	Î	39.0	19.4	1.3	44.0	7.0	S	S
70.476	il	38.5	20.8	1.3	45.0	6.7	s	s
70.478	ii	36.2	22.1	1.3	47.5	6.8	s	s
70.475 70.485	ï	40.7	19.7	1.0	43.8	6.1	S	s
70.485 70.495	ii	38.5	19.7	1.2	43.2	6.8	S	S
								3
70.503	II 	36.3	21.8	1.5	45.1	6.6	S	S
70.507	II 	39.7	20.2	1.2	44.4	6.7	Н	S
70.516	II	38.2	20.4	1.3	44.3	5.8	S	S
70.520	1	39.2	20.0	-	42.0	5.8	S	S
70.561	II	38.1	20.4	-	44.5	6.2	S	S
71.161		37.4	22.2	1.2	47.9	7.0	S	s
71.850	II	37.6	21.6	1.2	49.3	7.4	S	S
72.328	II	38.5	20.2	1.3	47.1	7.5	S	S
72.337	II	40.2	20.4	-	43.0	6.8	S	s
72.341	II	37.2	22.4	1.2	48.3	7.2	s	s
72.342	II	38.8	21.1	•	41.9	6.1	s	s
73.583	ii	36.7	20.3	-	46.1	6.8	s	s
73.585	ii	38.7	21.0	1.2	46.0	6.4	s	s
73.587	ii	39.1	20.9	1.3	46.0	7.0	s	s
73.772	ii	38.8	20.2	1.1	44.5	6.3	s	s
73.780	 II	38.8	21.1	1.3	47 .0	6.5	S	S
		38.8 37.7			46.3			
78.242 78.243	1		21.0	1.4		5.8	s s	s s
		39.4	20.9	1.4	49.8	7.5		
79.586	II ::	38.5	17.4	-	44.5	6.8	s	S
79.593	II 	41.0	20.4	-	46.2	6.6	R	S
79.596	II 	40.5	20.6	1.3	48.2	7.7	S	S
79.602	II	42.1	19.7	1.3	47.5	7.6	S	S
79.609	II	37.4	19.9	-	43.3	6.7	S	s
79.610	ı	39.4	20.9	-	46.0	7.6	S	s
79.613	II	37.0	22.2	1.4	47.9	7.2	S	S
79.617	I	39.3	20.1	1.4	50.4	6.4	S	S
79.648	l	39.3	15.0	-	46.6	9.2	R	S
79.694	1	40.8	15.0	-	47.9	9.0	R	s
79.695	II	37.1	22.0	1.3	48.2	6.9	s	s
79.699	ı	39.4	19.1	1.3	44.7	6.6	s	s
79.703	II	36.8	21.7	1.3	48.7	7.0	s	s
79.712	ii	38.9	21.4	1.4	43.1	6.1	s	s s s
79.727	ï	41.1	15.9	-	47.9	7. 4	s	s
79.727 79.737	iı	41.9	19.6	1.4	46.5	5.7	S	9
							S	s s s
79.745	II.	36.0	22.1	1.5	46.7	6.4		2
79.746 79.747	II II	38.3 36.3	21.1 22.2	1.4 1.3	44.2 48.6	6.9 7.3	s s	S S

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807 $\,$

	Accession	Country of	Country of	Year introduced	Maturity
PI No.	name	acquisition	origin	or released	group
79.761		China	China	1929	II
79.773		China	China	1929	ii
79.846		China	China	1929	ü
79.848		China	China	1929	H
79.862-1		China	China	1929	H
79.863		China	China	1929	ü
79.870-1		China	China	1929	ı
9.885		China	China	1929	H
30.469	Kuro maru daizu	Japan	Japan	1929	U
0.471	Sousei kuro sakigake	Japan	Japan	1929	11
30.485	Chusei hattoku daizu	Japan	Japan	1929	11
0.488-1	(Eda mame uase chaurame)	Japan	Japan	1929	н
0.494	Tsurunoko daizu	Japan	Japan	1929	II
0.536		Japan	Japan	1929	П
80.671	Sode furi daizu	Japan	Japan	1929	ll
31.029N	(Chuseikurome daizu)	Japan	Japan	1929	11
31.033	Aoshiro daizu	Japan	Japan	1929	1
1.035		Japan	Japan	1929	#
1.037-4	(Kurakake daizu)	Japan	Japan	1929	ı
31.040	Cha mame	Japan	Japan	1929	i
1.763	Moshito	Japan	China	1929	11
1.765	Moshito	Japan	China	1929	ı
1.767	Moshito	Japan	China	1929	11
1.768	Moshito	Japan	China	1929	11
31.770		Japan	China	1929	II
1.771		Japan	China	1929	11
1.772		Japan	China	1929	ı
31.773	Shirosaya	Japan	Japan	1929	II
31.775		Japan	Japan	1929	ı
31.971		Unknown	Unknown	1929	11
32.183	Chonte	Rep. of Korea	Rep. of Korea	1929	ł
32.184	Pepute	Rep. of Korea	Rep. of Korea	1929	Ш
32.263-2	(Pepute No. 2)	Rep. of Korea	Rep. of Korea	1929	ш
32.263-3	(Pepute No. 2)	Rep. of Korea	Rep. of Korea	1929	11
2.532	Oiarukon	Rep. of Korea	Rep. of Korea	1929	H
3.945-3	(Dairyu tsurunoko)	Rep. of Korea	Rep. of Korea	1930	ı
4.580		Rep. of Korea	Rep. of Korea	1930	#
4.609		Rep. of Korea	Rep. of Korea	1930	H
4.637		Rep. of Korea	Rep. of Korea	1930	11
4.665		Rep. of Korea	Rep. of Korea	1930	11
4.666-1		Rep. of Korea	Rep. of Korea	1930	u
4.668		Rep. of Korea	Rep. of Korea	1930	ı
34.668-1		Rep. of Korea	Rep. of Korea	1930	11
34.673		Rep. of Korea	Rep. of Korea	1930	11
4.673-1		Rep. of Korea	Rep. of Korea	1930	11
4.674		Rep. of Korea	Rep. of Korea	1930	l
4.681		Rep. of Korea	Rep. of Korea	1930	Ш
4.683		Rep. of Korea	Rep. of Korea	1930	H
84.683A		Rep. of Korea	Rep. of Korea	1930	Ш
4.686		Rep. of Korea	Rep. of Korea	1930	1
34.750		Rep. of Korea	Rep. of Korea	1930	11
34.810		Rep. of Korea	Rep. of Korea	1930	ı
84.896		Rep. of Korea	Rep. of Korea	1930	11
34.921	Koshurei	Rep. of Korea	Rep. of Korea	1930	II.
34.928	Kanro	Rep. of Korea	Rep. of Korea	1930	11

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Matu-			Pubes	cence			Seedcoat			Other traits		
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
79.761		N	Р	Lt	E	N	Br	D	Υ	Br			
79.773	"	D	P	T	E	N	Br	S	Ϋ́	BI	Sado	ماا	
79.846	ii	N	P	Ť	E	N	Br	ı	Ϋ́	Br	Sauc	116	
79.848	" II	D	w	Ġ	E	N	Br	S	Ϋ́	Lbf			
79.862	" II	D	P	G	E	N	Br	S	Ϋ́	lb			
79.862 79.863	ii	N	P	T	E	N	Br	S	Ϋ́	BI			
79.803 79.870-1	ï	S	w	Ť	E	N	Br	S	Ϋ́	BI			
79.885	i	D	P	Ġ	E	N	Br	S	Ϋ́	Bf			
80.469	ii	N	w	G	E	N	Br	S	Ÿ	Lbf			
80.471	ii	D	w	T	E	Ssp	Tn	D	Ÿ	BI			
80.485	ii	D	w	Ť	E	Ssp	Br	D	Bl	BI			
80.488-1	ii	N	P	Ť	A	Ssp	Br	В	BI	BI			Sw
80.494	ii	D	P	Ġ	Ē	N	Br	D	Y	Y			0
80.536	ii	D	w	G	E	N	Br	Ī	Ϋ́	, Lbf			
80.671	" 	D	P	T	E	N.	Br	D D	Gn	BI			
81.029N	ii	D	P	Ġ	E	N	Br	S	Y	lb			
81.033	ï	D	P	T	E	N	Br	D	Gn	BI			
81.035	ii	D	P	Ť	E	Sp	Br	Ī	Y	Br			
81.037-4	ï	D	P	Ť	E	N	Br	s	Ϋ́	BI			
81.040	i	N	w	T	E	Ssp	Br	S	Br	Br			
81.763	i	N	Nw	T	A	Ssp	Br	S	BI	BI	Fleck	,	Sw
81.765	ï	N	Nw	Ť	Ā	Sp	Br	В	BI	BI	1 1001	`	Sw
81.767	ii	N	Nw	Ť	Â	Ssp	Br	S	Br	Br			Sw
81.768	ii	N	P	T	Ē	Ssp	Tn	В	Br	Br			Sw
81.770	" 	N	P	, T	A	Ssp	Br	S	Br	Br			Sw
81.771	" 	N	P	T	Â	Ssp	Br	S	Br	Br			Sw
81.772	ï	N	w	T	Â	Ssp	Br	В	BI	BI			Sw
81.773	i II	N	P	Ť	Â	Ssp	Br	S	Br	Br			Sw
81.775	ï	N	P	T	Ē	N	Tn	D	Y	Y			044
81.971	İ	N	w	Ġ	E	N	Br	S	Ϋ́	Bf			
82.183	ï	N	P	T	E	N	Tn	D	Ϋ́	Υ .			
82.184	i	S	P	Ġ	E	N	Br	D	Ϋ́	, Ib			
82.263-2	"	D	w	T	E	N	Br	S	Ÿ	BI			
82.263-3	'' 	N	w	T	E	N	Br	S	Lgn	Tn			
82.532	'' 	N	P	T	Ā	Ssp	Br	В	BI	BI			Sw
83.945-3	ï	S	w	Ġ	Ē	Ssp	Dbr	S	Y	Y			3**
84.580	ii	N	w	T	Ē	N	Dbr	s	Gn	Ġ			
84.609	ii	N	P	Ť	Ē	N	Br	В	BI	BI			
84.637	"	N	P	Ť	E	N	Br	D	Y	Br			
84.665	ii	N	Р	Ġ	E	N	Tn	D	Ý	Ϋ́			
84.666-1	ii	N	P	T	E	N	Br	D	Ÿ	BI			
84.668	ï	D	P	Ġ	Ē	N	Br	S	Ÿ	lb			
84.668-1	ii	S	Р	G	E	N	BI	D	Ÿ	Lbf			
84.673	ii	N	w	T	Ē	N	Br	s	BI	BI	Gnc	ot	
84.673-1	ii	D	P	Ġ	Ē	N	Br	s	Y	lb	2		
84.674	ï	N	w	T	Ē	N	BI	D	BI	BI	Gnc	ot	
84.681	il	N	P	Ť	Ē	Ssp	Br	s	Y	BI	2	-	
84.683	ii	N	P	Ť	E	N	Br	s	Ÿ	BI			
84.683A	ii	D	Р	Ġ	E	N	Br	s	Ÿ	lb			
84.686	ï	D	P	G	E	N	Br	s	Ÿ	lb			
84.750	ii	D	w	G	E	Ssp	BI	S	Gn	Gn			
84.810	1	D	P	T	E	N	BI	D	Y	Br			
84.810	' 	D	P	G	E	N	Br	D	Y	Bf			
	II II		W	G	E	N N	Dr Tn	D	Y	Bf			
84.921	11	N D	vv P	G	E	N N	Tn	D	Y	Y			

Table 3.1 Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
79.761	708	913	3.0	102	3.0	3.0	1.0	3.0	2.5	14.8	2.33
79.773	701	907	1.6	79	1.5	2.0	1.0	2.8		15.7	2.15
79.846	708	912	1.7	89	3.0	2.0	1.0	2.8	2.5	14.5	2.53
79.848	708	912	1.6	76	1.0	2.0	1.0	3.0	1.0	14.8	2.64
79.862-1	707	910	2.1	81	1.5	2.0	1.0	2.5	1.0	14.2	2.46
79.863	702	910	1.7	102	3.0	2.5	1.0	2.8	1.0	16.1	2.27
79.870-1	630	906	1.8	99	2.0	2.0	2.0	2.3	1.0	14.7	2.32
79.885	703	911	2.2	71	1.5	2.0	1.0	3.0	1.0	14.2	2.91
80.469	704	913	2.3	97	2.5	2.0	1.0	3.5	1.0	18.7	2.54
80.471	712	913	1.4	66	1.0	3.0	3.0	2.5	2.0	23.3	1.98
80.485	710	916	1.9	48	1.0	3.0	4.0	2.8	-	30.9	1.59
80.488-1	715	914	4.3	71	4.0	4.0	3.0	2.0	-	6.3	1.76
80.494	709	910	1.3	64	1.0	2.0	5.0	2.8	1.5	21.2	1.92
80.536	701	912	1.3	76	1.0	2.0	1.0	2.8	2.0	17.2	2.19
80.671	702	911	1.3	74	1.5	2.0	3.0	3.3	1.5	18.0	2.00
81.029N	706	910	1.7	69	1.0	2.0	1.0	2.8	1.0	14.2	2.52
81.033	704	902	1.2	43	1.0	3.0	2.0	2.8	1.0	24.1	1.53
81.035	708	907	1.9	64	1.0	2.5	5.0	2.8	2.0	21.7	1.26
81.037-4	701	904	1.7	89	1.5	2.0	2.0	3.5	2.0	15.3	1.88
81.040	705	904	1.4	58	2.5	2.0	1.0	2.8	-	20.3	1.81
81.763	713	914	4.0	71	4.0	4.0	2.0	2.0	-	6.6	1.87
81.765	710	910	2.8	66	4.0	4.0	2.0	1.3	-	6.2	1.95
81.767	711	908	4.0	61	3.5	4.5	2.0	2.8	-	5.1	1.41
81.768	717	917	2.0	71	4.0	3.0	1.0	2.5	-	8.6	2.16
81.770	713	911	3.8	81	4.0	4.0	3.0	2.0	•	5.0	1.84
81.771	717	913	4.2	74	4.0	4.0	3.0	2.0	-	5.2	1.38
81.772	705	907	1.5	64	3.0	4.0	2.0	1.3	-	6.1	1.39
81.773	717	914	4.2	71	4.0	4.0	3.0	2.0	-	5.3	1.78
81.775	630	831	1.8	84	3.5	2.5	2.0	2.8	2.0	13.7	2.11
81.971	702	912	2.0	94	3.0	2.0	1.0	2.3	1.0	17.2	2.59
82.183	701	902	1.9	89	3.0	2.0	2.0	2.8	2.0	13.8	2.02
82.184	702	911	1.9	91	2.0	2.0	1.0	3.0	2.0	15.2	2.35
82.263-2	711	912	1.4	56	1.0	2.5	1.0	2.8	2.0	12.0	1.89
82.263-3	706	914	2.0	97	3.0	2.0	4.0	3.0	2.0	19.0	2.51
82.532	715	916	4.3	81	4.0	4.0	2.0	2.0	-	6.2	1.85
83.945-3	701	903	1.8	84	2.0	2.0	1.0	3.3	1.5	15.5	2.07
84.580	707	917	1.9	89	2.5	2.0	1.0	3.3	1.0	17.7	2.33
84.609	713	924	3.1	102	3.5	3.0	1.0	2.5	-	12.7	2.83
84.637	711	915	2.4	84	3.0	2.5	1.0	2.5	2.0	23.5	2.36
84.665	714	913	2.4	89	3.0	2.5	1.0	2.3	2.0	18.4	2.55
84.666-1	708	913	2.5	99	3.0	3.0	2.0	2.8	2.0	16.5	2.17
84.668	706	910	1.8	69	1.0	2.0	1.0	2.8	1.0	12.5	2.39
84.668-1	709	919	2.5	94	2.0	3.0	1.0	3.5	1.5	19.0	2.44
84.673	713	910	1.6	76	3.0	2.5	2.0	2.5		13.3	2.21
84.673-1	703	906	1.4	76	1.0	2.0	1.0	2.3	1.0	12.5	2.66
84.674	707	904	1.4	74	2.5	3.0	1.0	2.3		13.6	1.92
84.681	704	914	2.2	89	3.0	2.5	1.0	3.0	1.0	15.7	2.79
84.683	714	922	2.8	104	3.5	3.0	1.0	3.3	1.0	17.0	2.72
84.683A	706	909	1.7	69	1.0	2.0	1.0	3.5	1.0	13.4	2.23
84.686	704	907	2.0	76	1.0	2.0	1.0	2.0	1.0	12.7	2.45
84.750	716	921	2.5	86	1.0	3.0	1.0	3.5	1.5	16.9	2.39
84.810	701	831	2,6	66	1.0	2.0	2.0	2.3	1.0	10.0	1.78
84.896	718	915	2.4	84	1.0	3.0	3.0	3.0	1.0	20.7	1.78
84.921	705	913	1.9	89	3.0	2.5	1.0	3.3	1.0	17.5	2.49
84.928	705	906	1.4	71	1.5	3.0	1.0	2.8	2.0	14.3	2.24

Table 4.1 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

				Protein				
		Seed con		composition	Oil compo	sition	Dise	ease
	Maturity	Protein	Oil	Methionine	Linoleic	Linolenic	reac	ction
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	Py
70.761	11	38.3	20.7	1.0	40.0	5 0	•	_
79.761 79.773	"		20.7	1.3	46.3	5.8	S	S
		37.1	22.0	-	49.2	7.1	S	s
79.846	!!	39.0	21.2	1.4	48.1	6.6	S	S
79.848	11	35.9	23.3	1.3	46.2	6.5	S	S
79.862-1	!!	35.6	22.5	1.4	48.8	6.9	S	S
79.863	II .	38.0	20.6	1.4	45.6	6.7	S	S
79.870-1	!	37.2	22.1	-	44.7	6.8	S	S
79.885	II 	36.4	23.5	1.4	49.3	6.7	S	S
80.469	II 	38.4	21.5	1.3	45.9	6.2	S	s
80.471	II	40.8	19.4	1.4	44.2	7.0	R	s
80.485	П	40.5	18.9	-	45.9	6.1	S	s
80.488-1	Ш	40.1	15.3	-	47.1	9.2	R	s
80.494	11	37.6	19.6	1.4	44.0	6.9	S	S
80.536	II	39.4	20.4	1.5	47.1	6.2	S	s
80.671	il	38.1	21.8	1.3	48.5	7.5	S	s
81.029N	11	36.8	22.7	1.2	47.4	6.9	S	S
81.033	i	37.3	21.1	1.4	46.8	6.3	S	S
81.035	II .	39.4	20.0	1.2	45.8	6.0	R	S
81.037-4	l	39.8	20.5	1.3	43.4	5.2	s	s
81.040	ı	38.6	19.5	-	43.7	7.0	s	S
81.763	11	41.2	14.7	-	48.9	9.4	R	s
81.765	I	39.6	13.8	-	48.3	9.7	R	s
81.767	II	39.0	13.5	-	46.3	8.5	R	S
81.768	II	39.6	17.0	-	45.6	9.2	R	s
81.770	ii	40.2	16.2	-	48.2	9.2	S	s
81.771	ii	41.7	14.9	-	48.0	9.5	R	s
81.772	ï	41.4	14.9	-	48.1	8.4	s	s
81.773	il	41.2	14.2	_	49.3	9.8	R	s
81.775	ï	41.5	19.0	-	48.1	8.0	s	s
81.971	ii	39.4	20.5	1.4	45.6	6.6	S	R
82.183	ï	42.2	19.5	-	48.3	7.8	S	S
82.184	ii	39.7	19.8	1.2	51.3	7.8 7.2	S	S
82.263-2	ï	39.0	19.5	1.4	47.3	7.0	R	S
82.263-3	ii	39.1	21.1	1.2	49.3	6.3	S	R
82.532	" II	42.3	15.1	1.2	49.3 47.3	8.8	R	S
83.945-3	ii I	42.3 36.8	21.4	1.5	47.3 48.6		n S	S
84.580	i ii	38.3	21.4	-	46.4	7.1 6.1	-	_
84.609		40.5	18.9	-	49.3	7.1	S	S
	11 11	41.2	20.1	1.2			S	S
84.637				1.3	48.1	6.8	R	S
84.665	 	41.2	19.4	1.4	45.0	6.3	S	S
84.666-1	11	44.2	18.9	1.2	45.5	6.9	s	S
84.668	1	37.2	22.2	-	46.5	7.0	S	S
84.668-1	II 	41.0	20.3	1.3	47.3	7.2	S	s s s
84.673	II 	38.5	20.4	-	45.4	6.5	S	S
84.673-1	II	39.7	19.8	1.3	49.1	7.3	S	S
84.674	1	41.6	18.0		45.4	6.1	S	S
84.681	11	39.9	20.9	1.3	49.4	6.9	S	S
84.683	11	43.5	19.3	1.3	48.8	6.5	S	S
84.683A	U	38.5	21.7	1.3	48.5	6.7	S	S
84.686	1	40.1	19.7	1.4	49.0	7.2	S	S
84.750	II	38.8	20.1	-	49.9	7.3	R	S
84.810	I	40.5	18.2	1.4	50.2	7.4	S	s s s
84.896	11	40.5	18.3	1.2	45.6	7.6	s	S
84.921	II	37.1	21.4	1.4	47.0	7.0	s	s
84.928	11	40.5	19.8	1.3	46.9	6.9	s	S

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Accession	Country of	Country of 	Year introduced	Maturity
PI No.	name	acquisition	origin	or released	group
84.954	Hinkon	Rep. of Korea	Rep. of Korea	1930	11
84.964	Manchurian Improved	Japan	Japan	1930	1
84.965	Kwainei	Japan	Japan	1930	11
84.992	Shirobana No. 2	Japan	Japan	1930	11
85.012	Kurozaya kin	Japan	Japan	1930	ü
85.014	Kindaizu	Japan	Japan	1930	11
85.021	Hoten shirome	Rep. of Korea	Rep. of Korea	1930	ii
85.340	Tioton Simonio	Rep. of Korea	Rep. of Korea	1930	
85.492		Rep. of Korea	Rep. of Korea	1930	ii
85.508		Rep. of Korea	Rep. of Korea	1930	ii
85.625		Rep. of Korea	Rep. of Korea	1930	 11
85.671		Japan	China	1930	"
		•		1930	''
86.002	A	Japan	Japan		
86.021	Aoyu	Japan	Japan	1930	1
86.022	Ao tsurunoko	Japan	Japan	1930	
86.023	Goyou kurakake	Japan	Japan	1930	II
86.031	Koshurei marugata daizu	Japan	Japan	1930	H
86.038	Kurodaizu	Japan	Japan	1930	11
86.045	Kokuonshokuzu	Japan	Japan	1930	11
86.050	Rasuto san	Japan	Japan	1930	11
86.069	Datehadakadaizu	Japan	Japan	1930	11
86.089	Daizu hinshu satei	Japan	Japan	1930	11
86.102	Konshurei No. 234	Japan	Japan	1930	11
86.112	Hadakadaizu	Japan	Japan	1930	11
86.113	Oyachi senshitsadairyu	Japan	Japan	1930	II
86.115	Shihyoekuroheso	Japan	Japan	1930	H
86.122	Hata hikari	Japan	Japan	1930	II
86.133	Chusei kurodairyu	Japan	Japan	1930	1
86.137-1	(Chusei kurodaizu)	Japan	Japan	1930	11
86.410	Sodefuri	Japan	Japan	1930	1
86.411	Guiuchi mame	Japan	Japan	1930	1
86.416	Aodairyu	Japan	Japan	1930	1
86.443	Soroshi	Japan	Japan	1930	ll .
86.454	Shokuroheso	Japan	Japan	1930	11
86.463	Bonhaku No. 55	Japan	Japan	1930	11
86.737	Gosha	Japan	Japan	1930	1
86.741	Manshu daizu	Japan	Japan	1930	Н
86.878		Japan	Japan	1930	ll .
86.878-2		Japan	Japan	1930	11
86.972-1	(Pakute)	Rep. of Korea	Rep. of Korea	1930	11
87.065	Urusankon	Rep. of Korea	Rep. of Korea	1930	 II
87.524		Japan	Japan	1930	;;
87.531		Japan	China	1930	ï
87.619-1	(Shiromeshoryu)	Rep. of Korea	Rep. of Korea	1930	11
87.628	Keburi	Japan	Japan	1930	''
87.631	Kindaizu	Japan	Japan	1930	"
88.288	MINGIEU	China	China China	1930	"
88.293		China	China	1930	11
88.293A		China	China	1930	II
88.294		China	China	1930	!!
88.294-1		China	China	1930	II
88.295		China	China	1930	1
88.295-1		China	China	1930	11
88.296		China	China	1930	11
88.298		China	China	1930	11

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

				Pubes	cence			Seedo	oat		Other to	raits	
	Matu- rity		Flower		_		Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plant
84.954	11	D	w	G	E	N	Br	S	Υ	Lbf			
84.964	ï	D	w	G	E	N	Br	i	Ÿ	Lbf			
84.965	11	N	P	G	E	N	Tn	D	Ÿ	Y			
84.992	11	D	w	G	E	N	Tn	D	Ÿ	, Lbf			
85.012	 II	D	w	G	Sa	N	Br	D	Ÿ	Bf			
85.014	 II	D	w	T	A	N	Br	D	Ϋ́	Br			
85.021	ii	N	P	Ġ	E	N	Tn	D	Ÿ	Y.			
85.340	ii	N	Р	T	Ē	N	Br	s	Ÿ	Bl			
85.492	ii	D	w	Ġ	Ē	N	Tn	D	Ÿ	Bf			
85.508	ii	S	w	G	Ē	N	Br	s	Ÿ	Bf			Fechlo
85.625	ii	D	w	G	Ē	N	Tn	Ī	Ϋ́	Bf			1 001110
85.671	ü	N	P	T	Ē	N	Br	S	Ϋ́	BI			
86.002	ii	N	Р	Ť	Ā	Ssp	Br	В	BI	BI			Sw
86.021	ï	D	Р	Ť	E	Ssp	Br	Ď	Gn	Br			•
86.022	11	D	w	G	Sa	Ssp	Tn	D	Y	Bf			
86.023	ii	D	P	T	E	N	Br	D	Gn	BI			
86.031	11	N	w	Ť	E	Ssp	Br	S	BI	BI	Gncot	+	
86.038	ii	D	P	Ť	E	Sp	Br	D	BI	BI	Giloo	•	
86.045	ii	N	P	Ť	Ē	N	Br	S	BI	BI	Fleck	Dah	
86.050	ii	D	P	Ť	Ē	N	Br	D	Y Y	Br	1 look	Dub	
86.069	ii	N	w	Ť	Ē	N	Br	S	BI	BI	Gnco	ł	
86.089	ii	D	w	G	Ē	N	Br	S	Υ	Bf	Cirio Ci	•	
86.102	ii	N	P	G	Ē	N	Tn	Ď	Ÿ	Y.			
86.112	ii	D	w	-	-	G	Tn	S	Ÿ	Ib			
86.113	11	D	P	G	Ε	N	Br	Ď	Ÿ	lb			
86.115	ii	N	w	T	Ē	N	Br	S	Ÿ	BI			
86.122	11	D	P	Ť	Ē	N	Br	Ď	Ý	BI			
86.133	i	D	P	Ť	E	Ssp	Br	D	BI	BI			
86.137-1	11	D	P	Ť	E	Ssp	Br	S	Br	Br			
86.410	ï	D	P	Ť	E	N	Br	D	Gn	BI			
86.411	i	s	P	Ť	E	N	Br	D	Y	Br			
86.416	i	S	P	Ġ	Ē	N	Br	S	Ý	Y			
86.443	II	S	P	G	E	N	Tn	D	Y	Ý			
86.454	II	D	Р	G	E	N	Br	S	Y	lb			
86.463	ii	D	P	G	Α	N	Tn	ı	Y	Bf			
86.737	ï	N	P	Lt	E	N	Br	i	Y	Br			
86.741	II	N	P	T	E	N	Br	İ	Y	Br			
86.878	11	N	Р	G	Ε	N	Tn	S	Υ	Υ			
86.878-2	11	D	Р	Т	E	N	Tn	D	Υ	Υ			
86.972-1	11	N	W	Т	Ε	N	Br	D	Υ	Υ			
87.065	11	N	W	G	Ε	N	Br	S	Υ	Bf			
87.524	11	N	Р	G	Ε	N	Tn	D	Υ	Υ			
87.531	1	S	Р	G	Ε	N	Br	1	Υ	Υ			
87.619-1	11	N	Р	Т	E	Ssp	Br	S	Υ	Υ			
87.628	11	N	W	Т	Ε	N	Br	S	ВІ	ВІ	Gnco	t	
87.631	11	N	Р	Т	Ε	N	Tn	S	Υ	ВІ			
88.288	1	N	Р	Т	Ε	N	Br	D	Br	Br		Dab)
88.293	н	N	Р	G	Ε	N	Tn	D	Υ	Υ			
88.293A	11	D	Р	G	Ε	N	Br	S	Υ	Bf			
88.294	11	N	W	G	Ε	N	Br	S	Υ	Bf			
88.294-1	11	N	W	Т	E	Ssp	Br	D	Υ	Υ			
88.295	Ï	D	W	G	E	N .	Tn	s	Υ	Υ			
88.295-1	II	N	Р	T	E	Ssp	Br	I	Y	Tn			
88.296	ii	D	P	G	E	N	Br	S	Y	lb			
		N	w	G	Ē	N	Br	S	Y	Bf			

Table 3.1
Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

					Stem						
	Flowering	Maturity			term-	Branch-		Seed			
	date	date	Lodging		ination	ing	tering	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	(score)	(score)	(cg/sd)	(Mg/ha)
84.954	702	910	1.7	79	1.5	3.0	1.0	3.3	2.5	19.0	2.35
84.964	704	913	2.2	84	1.5	2.0	1.0	3.3	1.5	19.8	2.60
84.965	714	919	2.9	91	3.0	3.0	1.0	2.8	2.0	18.5	2.45
84.992	716	910	2.3	76	1.0	3.0	5.0	2.5	1.0	15.3	1.51
85.012	724	921	3.8	94	1.0	3.0	5.0	2.3	2.0	12.3	1.40
85.014	721	916	3.4	86	1.0	3.0	4.0	2.3	2.5	10.9	1.82
85.021	713	916	2.4	91	2.5	2.5	1.0	2.5	2.0	19.0	2.49
85.340	708	918	2.8	89	3.5	3.0	1.0	3.3	1.0	16.3	2.65
85.492	722	921	3.3	89	1.0	2.5	4.0	2.3	2.0	12.5	1.76
85.508	704	913	2.2	89	2.0	2.0	1.0	2.8	1.0	17.8	2.70
85.625	720	915	2.4	84	1.0	3.0	5.0	2.8	1.5	16.3	1.82
85.671	707	916	3.3	94	3.5	3.0	2.0	3.5	1.5	14.7	2.82
86.002	716	916	4.5	76	4.5	4.0	3.0	2.0	•	6.2	1.89
86.021	705	909	1.4	51	1.0	3.0	5.0	2.5	1.5	24.0	1.75
86.022	718	918	2.1	84	1.0	2.5	4.0	2.8	1.5	23.5	1.47
86.023	717	910	1.3	64	1.0	3.0	5.0	3.3	1.5	16.8	1.38
86.031	712	911	1.7	81	3.0	3.0	2.0	2.5	-	13.2	2.28
86.038	713	921	1.9	66	1.0	3.0	4.0	3.0	-	25.0	1.96
86.045	705	911	4.3	99	4.0	3.0	2.0	2.8	-	12.3	2.51
86.050	720	922	2.3	69	1.0	3.0	4.0	3.3	1.0	16.8	1.88
86.069	713	910	1.3	81	3.0	3.0	2.0	2.8	•	13.5	2.10
86.089	706	916	1.9	84	1.5	2.0	1.0	3.3	1.0	19.0	2.54
86.102	706	907	1.4	74	2.5	2.0	1.0	2.5	1.5	15.0	2.37
86.112	721	916	2.6	56	1.0	3.0	3.0	2.0	1.5	11.3	1.26
86.113	713	916	1.7	56	1.0	3.0	4.0	3.0	1.0	20.0	2.43
86.115	706	913	1.7	97	3.0	2.0	2.0	2.8	1.0	16.4	2.63
86.122	720	926	2.4	79	1.0	3.0	4.0	2.8	1.0	17.0	2.14
86.133	708	906	1.8	61	1.0	2.0	5.0	2.5	-	23.3	1.62 1.76
86.137-1	716	917	1.4	66	1.0	3.0	4.0	3.0	1.0	28.0 17.9	1.77
86.410	704	908	1.3	48	1.0	3.0	5.0	2.5 2.3	1.0 1.0	12.2	1.96
86.411	701	831	1.3	74	2.0	3.0	1.0	3.0	1.0	13.1	1.86
86.41 6	628	827	1.3	71	2.0	2.0	1.0	2.8	2.0	18.0	2.60
86.443	710	911	2.1	79 71	2.0	2.0 2.0	1.0 1.0	3.3	1.0	13.8	2.26
86.454	707	911	1.9	71 96	1.5	3.0	4.0	2.5	1.0	17.5	1.68
86.463	723	920	2.4 2.5	86 89	1.0 3.0	2.0	1.0	2.3	2.0	13.0	1.61
86.737	630	827	1.8	81	3.0	2.0	2.0	2.5	2.0	13.3	2.23
86.741	629 706	831 909	2.3	104	3.5	3.0	1.0	3.3	1.0	16.4	2.25
86.878	700 701	906	1.4	71	1.0	2.0	2.0	2.8	1.5	15.2	2.51
86.878-2 86.972-1	707	914	2.0	99	3.5	3.0	2.0	2.8	1.0	15.0	2.39
87.065	707	912	1.9	97	3.5	2.5	2.0	3.0	1.0	15.5	2.55
87.524	702	913	2.3	99	3.0	2.0	1.0	2.8	2.0	18.0	2.44
87.531	713	913	2.4	84	2.0	2.0	1.0	2.8	1.0	19.7	1.96
87.619-1	710	917	2.9	99	3.0	2.5	2.0	3.0	2.0	16.9	2.78
87.628	714	912	1.4	81	3.0	3.0	2.0	2.8	-	13.3	2.32
87.631	713	914	1.7	104	4.0	2.5	2.0	2.5	1.5	16.1	2.37
88.288	702	829	2.4	86	3.0	2.0	1.0	1.5	-	11.2	1.90
88.293	705	910	2.3	102	2.5	2.0	1.0	2.8	1.5	15.4	2.39
88.293A	705	912	2.0	74	1.0		2.0	3.0	1.0	13.7	2.54
88.294	703	913	2.3	89	3.0		2.0	2.8	1.0	17.2	2.56
88.294-1	703	915	2.3	91	2.5	2.0	4.0	2.8	1.0	14.2	1.73
88.295	702	904	1.5	79	1.5		1.0	2.8	1.5	15.0	2.37
88.295-1	705	912	1.8	89	3.0		2.0	2.8	2.0	15.4	2.38
88.296	708	915	2.0	76	1.0		1.0	3.0	1.0	15.5	2.46
88.298	704	916	2.2	94	2.5		1.0	3.0	1.0	17.7	2.44
00.200	, 0 +	5.5									

Table 4.1 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

				Protein				
		Seed con		composition	Oil compo			ease
_	Maturity	Protein	Oil	Methionine	Linoleic	Linolenic		ction
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	Ру
84.954	11	39.8	20.8	1.3	48.7	6.6	s	s
84.964	ï	37.1	21.1	1.3	49.4	6.8	S	S
84.965	, 11	40.7	18.6	1.4	45.3	7.0	S	S
84.992	 11	39.8	17.6	1.4	45.9	8.1	S	S
85.012	ii	39.4	16.8	1.4	46.5 44.7	8.0	S	S
85.012 85.014	11	39.9	17.0	1+	45.9	8.3	S	S
85.021	11	40.9	19.2	1.3	45.5 44.9	7.1	S	S
85.340	11	42.3	20.0	1.3	50.5	7.1 7.4		5
85.492	" II	42.3 42.1	15.1	1.3	45.9	7. 4 9.1	S	S
	" "	39.1					R	s s
85.508			20.7	1.3	44.9	6.4	S	5
85.625	11 	40.2	18.3	1.3	45.3	8.0	Н	S
85.671	11 	39.9	20.2	1.4	43.0	6.0	S	S
86.002	!!	40.3	15.2	-	46.7	9.7	R	S
86.021	! "	35.4	20.9	1.3	46.4	6.8	S	S
86.022	II 	41.9	17.1	1.3	45.5	7.5	R	S
86.023	II 	39.6	18.6	1.4	45.4	6.9	S	S
86.031	II 	37.3	21.3	-	46.1	6.4	s	S
86.038	H	40.3	19.5	-	45.4	6.2	S	S
86.045	H	39.5	18.2	-	47.1	6.4	S	S
86.050	11	38.5	20.5	1.4	46.7	5.9	R	s
86.069	H	37.0	21.0	-	45.6	5.6	S	s
86.089	11	35.8	22.8	1.3	47.8	5.8	S	S
86.102	H	38.8	20.0	1.4	47.5	6.0	s	S
86.112	11	38.6	18.0	-	46.7	7.3	s	s
86.113	11	37.0	21.3	-	47.5	6.2	s	s
86.115	II	38.4	20.5	1.4	48.6	6.3	s	s
86.122	11	38.8	20.3	1.4	44.1	5.5	R	s
86.133	1	38.5	20.6	=	46.8	6.3	s	S
86.137-1	11	40.5	19.5	-	46.6	6.3	Н	s
86.410	1	39.4	20.5	1.2	49.0	7.0	R	s
86.411	i	38.0	20.9	1.2	51.0	7.5	s	S
86.416	i	38.7	20.2	1.2	43.5	6.8	s	s
86.443	11	41.0	19.4	1.2	46.9	6.5	S	s
86.454	 II	36.9	21.7	1.2	47.4	6.5	s	s
86.463	 II	41.0	17.0	1.2	46.2	7.4	Н	S
86.737	"	40.4	18.8	1.3	43.0	7. 4 5.7	S	S
86.741	1 	38.7	19.8	1.4	43.0 44.3	5.7 7.6	_	_
86.878	11	38.7 38.7	21.0	1.4	44.3 48.6	6.3	S	S
	" 11	37.4					S	S
86.878-2			21.2	1.3	47.7	6.2	R	S
86.972-1	11	38.4	19.9	1.2	48.4	7.7	R	S
87.065	II 	39.4	19.7	1.1	49.0	7.1	S	S
87.524	II	37.2	20.5	1.2	40.0	5.6	Н	S
87.531	1	38.8	20.1	1.2	45.6	7.1	S	S
87.619-1	II 	39.5	21.0	1.1	45.5	6.5	S	s
37.628	II 	37.5	20.2	-	44.2	6.1	S	S
37.631	 -	38.5	20.1	1.1	46.6	7.0	S	s s s
88.288	1	40.8	17.4	-	45.0	5.9	S	S
88.293	11	39.2	20.2	1.3	46.4	6.3	S	s
88.293A	Ħ	36.9	22.3	1.3	50.1	7.1	S	S
88.294	H	38.8	20.9	1.2	45.3	6.3	s	
88.294-1	11	38.2	19.7	1.2	46.5	6.9	s	s s s
88.295	ł	40.4	21.1	1.2	45.8	6.8	s	S
88.295-1	11	40.8	19.7	1.2	47.2	7.4	s	s
88.296	11	37.5	22.1	1.2	46.2	7.1	s	S
88.298	ii	36.5	22.5	1.2	46.0	6.5	s	s

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Acception	Country	Country	Year	Maturity	
D. M.	Accession	of	of	introduced	Maturity	
PI No.	name	acquisition	origin	or released	group	
88.301		China	China	1930	II	
88.303		China	China	1930	II	
88.304		China	China	1930	II	
88.307		China	China	1930	П	
88.308		China	China	1930	II	
88.309		China	China	1930	ii	
38.311		China	China	1930	ii	
88.313		China	China	1930	 II	
38.351		China	China	1930	 II	
88.352	Kingen	China	China	1930	ii	
	Killgell	China	China	1930	" 	
88.355						
88.356		China	China	1930	11	
88.357		China	China	1930	II	
88.358		China	China	1930	II 	
88.442		China	China	1930	II	
88.443		China	China	1930	I	
88.455		China	China	1930	Ш	
88.468	Iganzu	China	China	1930	II	
88.479	Kungchuling Improved No. 77	China	China	1930	11	
88.484		China	China	1930	ı	
88.495	Knoiku No. 66	China	China	1930	11	
88.497	Taisho 24-9	China	China	1930	1	
88.508	Showa No. 1-4	China	China	1930	II	
88.777		China	China	1930	11	
88.787		China	China	1930	П	
88.797		China	China	1930	İ	
88.798		China	China	1930	II	
88.803		China	China	1930	ii	
88.804		China	China	1930	ï	
88.805-2		China	China	1930	i	
88.805-4		China	China	1930	il	
88.810	Orukon	Rep. of Korea	Rep. of Korea	1930	"	
	Tsurunoko	Rep. of Korea	Rep. of Korea	1930	"	
88.825	rsurunoko	China	China	1930	" II	
88.997						
89.000		China	China	1930	II 	
89.003-1		China	China	1930	II ''	
89.004		China	China	1930	II 	
89.005-5		China	China	1930	 	
89.006-2		China	China	1930	II 	
89.008		China	China	1930	II	
89.012		China	China	1930	11	
89.013		China	China	1930	11	
89.014		China	China	1930	Ш	
89.053		China	China	1930	Ш	
89.055		China	China	1930	1	
89.055-1		China	China	1930	II.	
89.056-3		China	China	1930	1	
89.057		China	China	1930	1	
89.058		China	China	1930	1	
89.059		China	China	1930	il	
89.060		China	China	1930	ï	
89.061-1		China	China	1930	i	
89.063		China China	China China	1930	II II	
89.064		China	China	1930	II 	
89.065		China	China	1930	ll l	

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedo	oat		Other	traits
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf Plar
88.301	11	N	w	G	E	N	Br	s	Υ	Bf		
88.303	ii	D	P	G	Ē	N	Br	S	Ÿ	lb		
88.304	ii	N	w	G	Ē	N	Br	S	Ÿ	Bf		
88.307	ii	N	P	G	Ē	N	Br	S	Ÿ	Y.		
88.308	 11	D	w	T	Ē	Ssp	Br	S	Ÿ	Tn		
88.309	 11	S	P	G	Ē	N	Br	S	Ÿ	lb		
88.311	;; 	N	w	G	E	Ssp	Br	D	Ÿ	Bf		
88.313	 II	D	P	G	E	N	Tn	S	Ϋ́	Y.		
88.351	 11	N	w	G	E	N	Dbr	S	Ϋ́	Lbf		
88.352	;; 	D	w	G	Ē	N	Br Br	S	Ÿ	Bf		
88.355	ii	N	w	G	Ē	N	Br	S	Ÿ	Y.		
88.356	11	S	w	Ğ	E	N	Br	S	Ÿ	Bf		
88.357	;; 	N	w	G	Ē	Ssp	Br	Ĭ	Ϋ́	Bf		
88.358	 II	S	w	G	E	N	Br	s S	Ϋ́	Bf		
88.442	"	S	P	G	Ē	N	Br	D	Ÿ	Y		
88.443	ï	N	P	T	Ē	N	Br	S	Ÿ	Ÿ		
88.455	i	N	w	Ġ	F	N	Br	S	Ϋ́	Lbf		
88.468	11	D	P	T	E	Ssp	Br	S	BI	BI		
88.479	"	S	w	Ġ	E	N	Br	S	Y	Lbf		
88.484	"	N	P	G	E	N	Br	S	Ϋ́	Y		
88.495	, 	D	w	G	E	N	Br	S	Ϋ́	Bf		
88.497	1	D	W	G	E	N	Tn	ı	Ϋ́	Y		
	11	N	P	Lt		N		D	BI	BI		Dab
88.508					E	N	Br.					. Dab
88.777	11	N	W	G T	E		BI	S	Gn	Bf		
88.787	11	N	P		E	Ssp	Br B-	D	Y	Br		
88.797	1	N	P	G	E	N	Br	S S	Y Y	Y		
88.798	11	S	W	Lt G	E	N	Br			BI		
88.803	11	N	W		E	N	BI	S	Y	Bf	N # : L	
88.804	1	D	P	G	E	N	BI B:-	S	Y	Lbf	Mih	
88.805-2	1	S	P	G	E	N	Br D:-	S S	Y Y	lb D		
88.805-4	11	N	P W	Lt T	E	N	Br B-	D	Ϋ́	Br B-		
88.810	11	N D		I G	E	N	Br B-		Y	Br		
88.825	11		P	T	E	N	Br D-	D		Υ		
88.997	11	N	P		E	N	Br D-	D	Y	Br T		
89.000	11	N	P	T	E	N	Br	S	Υ	Tn		
89.003-1	11	N	P	G	E	N	BI D=	D	Br	Br		
89.004 89.005-5	11	D	P VAZ	T	E	N	Br B-	S	Y	BI Bf		
	11	N D	W P	G T	E	N N	Br Bl	S S	Y Y	Bf Br		
89.006-2	11		P	+ T	E E		Bl Dbr	S		BI	Sph	
89.008 89.012	11 11	N N	W	G	E	N N	Br	S	Lgn Y	Bf	əpn	
89.012 89.013	11	N N	vv P	G	E	N N	Br Tn	S D	Y	Br Br		
89.013	11	N	P	T	E	N Ssp	Br	S	Y	Υ		
89.014 89.053	11 11	N N	P	Lt	E	Ssp N	Br Br	S	Y	r Br		
89.053 89.055	11 1	N S	W	G	E	N N	Br Br	S	Y	Υ		
89.055 89.055-1	11	N	VV P	T	E	N	Br	ı	Y	r Br		
89.056-1	11	N D	P	T T	E	Ssp	Br Tn	D	G	G		
	1				E			S	Y	Y		
89.057	1	N	P	G		N N	Tn Br	S		Ϋ́Υ		
89.058	1	D	P	G	E	N	Br Br		Y			
89.059	11	N	W	G	E	N	Br	S	Y	Bf		
89.060	!	S	P	G	E	N Com	BI T	ı	Y	Y		
89.061-1	1	S	P	G	E	Ssp	Tn	S	Y	Y		
89.063	II 	D	P	G	E	N	Tn	S	Y	G		
89.064	11	S	W	G	E	N	Br	S	Y	Bf		
89.065	11	N	W	G	Ε	N	Br	S	Υ	Bf		

Table 3.1 Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
88.301	703	911	1.9	94	2.5	2.0	2.0	2.8	1.0	17.3	2.42
88.303	707	910	2.9	86	1.0	2.0	2.0	2.8	1.0	13.5	2.30
88.304	702	911	2.4	97	3.0	2.0	1.0	2.8	1.0	17.0	2.45
88.307	703	912	2.5	104	3.5	2.0	1.0	3.0	1.5	15.3	2.37
88.308	704	911	2.3	79	1.5	2.0	2.0	3.0	2.0	16.0	2.22
88.309	706	909	2.3	79	2.0	2.0	2.0	3.3	1.0	15.7	2.39
88.311	707	911	2.4	84	3.0	3.0	2.0	3.0	1.0	16.2	2.27
88.313	705	907	2 0	71	1.0	2.0	1.0	2.5	1.5	11.5	2.14
88.351	708	919	2 1	102	3.0	2.5	1.0	3.0	1.0	19.2	2.22
88.352	704	915	1.9	89	1.5	2.0	1.0	3.0	1.0	18.9	2.37
88.355	708	914	2.3	102	2.5	2.5	1.0	3.3	1.5	21.5	2.15
88.3 5 6	703	912	2.2	97	2.0	2.0	2.0	3.0	1.0	17.4	2.45
88. 35 7	707	913	2.6	86	3.0	3.0	2.0	2.8	1.0	17.4	2.41
88.3 5 8	707	913	2.2	97	2.0	2.0	2.0	2.8	1.0	16.8	2.37
88.442	703 702	902	1.5	81	2.0	2.0	1.0	3.0	1.5	18.2	1.91
88.443	629	830	1.7	84	2.5	2.0	1.0	3.3	1.0	14.3	1.93
88.455	704	913	1.7	91	3.0	2.5	1.0	3.3 3.3	2.5	19.8	2.39
88. 46 8	712	911	1.4	51 51	1.0	3.0	2.0	2.5	-	18.6	1.91
				91	2.0		1.0	3.0	1.0	15.7	2.60
88.479	712	916	2.0		4.0	2.5	1.0			13.9	2.18
88.484	629	902	3.4	94		2.0		3.3	1.5		
88.495	703	915	1.9	81	1.5	2.0	1.0	2.8	1.0	19.1	2.47
88.497	702	905	1.9	71	1.0	2.0	1.0	3.3	1.0	16.6	2.34
88.508	713	911	2.5	91	3.0	3.0	2.0	2.5	-	11.5	2.46
88.777	709	914	2.3	89	3.0	2.0	1.0	3.3	1.0	18.7	2.66
88.787	703	911	2.4	89	3.0	2.0	2.0	2.8	1.5	14.3	2.40
88. 797	628	827	1.0	69	3.0	2.0	1.0	2.5	1.5	13.5	1.71
88.798	705	913	2.0	84	2.0	2.0	2.0	2.8	2.5	22.0	2.31
88.803	705	911	1.7	109	4.0	2.0	1.0	3.0	1.5	14.2	2.37
88.804	702	830	1.6	74	1.5	2.0	1.0	3.3	1.5	13.3	2.07
88.805-2	705	904	3.8	8 9	2.0	2.5	2.0	3.0	1.0	13.9	2.13
88.805-4	707	911	3.8	104	3.5	3.0	1.0	3.5	2.0	14.7	2.41
88.810	716	920	3.1	102	3.0	2.5	1.0	2.8	2.0	16.7	2.18
88.825	710	913	1.4	71	1.0	2.5	3.0	3.0	2.0	23.5	2.18
88.997	707	913	2.3	104	3.0	3.0	2.0	2.5	1.5	13.8	2.47
89.0	705	910	2.8	86	3.0	3.0	2.0	3.5	1.5	14.7	2.37
89.003-1	717	919	3.4	150	4.5	3.0	1.0	3.5	-	13.6	2.31
89.004	702	907	1.9	81	1.0	2.∪	1.0	3.3	1.0	17.7	2.29
89.005-5	710	910	2.6	104	3.0	3.0	1.0	3.0	1.0	14.2	1.65
89.006-2	702	907	1.3	79	1.5	2.0	2.0	3.0	1.5	13.3	1.98
89.008	725	924	2.4	104	3.0	3.0	1.0	2.3	1.5	9.7	2.39
89.012	704	915	2.1	99	3.0	2.0	1.0	3.0	1.0	17.5	2.56
89.013	708	915	2.3	91	3.0	3.0	1.0	2.8	1.5	13.3	2.35
89.014	705	911	3.0	89	3.5	2.5	2.0	2.8	1.0	12.5	2.12
89.053	708	919	2.4	107	3.5	2.5	1.0	3.0	1.5	19.7	2.64
89.055	630	828	1.1	66	2.0	2.0	1.0	3.0	1.0	15.9	2.07
89.055-1	703	911	1.8	89	3.0	2.5	2.0	2.8	1.5	13.8	2.26
89.056-3	630	902	1.9	79	1.5	2.0	1.0	2.8	1.5	14.4	2.08
89.057	704	905	1.5	74	3.0	2.0	2.0	2.5	1.0	16.5	2.21
89.058	701	902	1.9	76	1.0	2.0	1.0	3.0	1.0	14.7	2.09
89.059	704	909	1.3	81	2.5	2.0	1.0	2.8	1.0	14.5	2.19
89.060	630	902	1.6	76	2.0	2.0	1.0	4.0	1.0	14.0	2.31
89.061-1	629	831	1.6	79	2.0	2.0	1.0	2.8	1.0	11.5	1.88
89.063	704	913	1.2	61	1.0	2.5	2.0	2.8	1.5	16.2	2.27
89.064	70 4 706	910	1.5	74	2.0	2.5	1.0	2.5 3.5	2.0	14.8	2.08
89.065	703	913	2.1	91	3.0	2.0	2.0	2.8	1.0	17.1	2.39

Table 4.1
Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

		Cd		Protein	0:1	!4!	D :	
	Maturity	Protein	mposition Oil	<u>composition</u> Methionine	Oil comp Linoleic	Linolenic	Disea	
Entry	group	(%)	(%)	(% protein)	(%)	(%)	react PR	Py
88.301	II	38.3	20.8	1.3	44.7	6.3	н	s
88.303	ii	37.9	22.4	1.4	46.8	6.8	S	S
88.304	ii	39.0	20.5	1.5	46.1	6.0	s	s
88.307	ii	39.2	20.4	1.5	47.9	7.3	s	S
88.308	11	38.5	20.3	1.4	48.0	7.0	s	s s
88.309	ii	37.1	22.0	1.5	46.3	6.1	s	s
88.311	ii	37.9	20.6	1.4	46.5	7.0	s	s
88.313	ii	37.3	21.6	1.5	50.8	6.9	S	S
88.351	ii II	37.9	22.1	1.4	46.3	5.8	s	s s
88.352	ii	36.1	22.3	1.3	46.7	5.8	S	s
88.355	ii	37.8	20.5	1.3	47.1	6.8	s	s
88.356	ii	37.8	21.3	1.3	44.7	5.9	s	s
88.357	ii	36.5	20.5	1.3	46.5	6.9	s	s
88.358	ü	37.6	21.5	1.4	46.7	5.9	s	S
88.442	ii	41.3	20.0	1.3	46.5	4.9	S	s
88.443	ï	40.2	20.6	1.3	46.5	7.2	S	S
88.455	iı	38.3	20.6	1.3	47.2	6.5	S	S
88.468	ii	36.8	21.3		47.1	6.3	S	S
88.479	;; 	35.7	22.4	1.3	45.7	6.6	S	s
88.484	ï	38.7	20.3	1.3	48.7	6.5	S	S
88.495	ii	37.4	21.3	1.4	46.0	6.0	S	S
88.497	ï	39.7	20.1	1.4	44.7	5.9	S	S
88.508	iı	40.2	16.8	1.4	50.4	7.3	S	S
88.777	ii	36.7	22.3	1.3	46.8	5.9	S	S
88.787	ii	39.0	20.5	1.1	48.7	6.7	S	S
88.797	ï	39.6	19.2	1.4	46.1	6.9	S	S
88.798	i	38.7	20.5	1.3	45.5	6.0	S	S
88.803	ii	36.4	21.5	1.4	47.8	6.9	R	S
88.804	ï	38.1	20.9	1.4	48.4	6.7	S	9
88.805-2	i	38.5	20.9	1.4	48.4	6.7	S	s s
88.805-4	iı	37.2	20.3	1.4	42.7	4.9	S	S
88.810	11	41.7	18.2	1.5	44.8	4.9 6.5	S	S
88.825	"	37.8	20.1	1.4	44.0	6.9	S	S
88.997	"	37.8 39.7	18.9	1.2	44.0 47.5	6.6	S	S
89.000	ii	39.7 38.7	21.2	1.4		6.0	S	S
			18.6		46.9		S	S
89.003-1 89.004	" 	39.4 37.9	21.9	- 1.4	47.7 47.8	7.3 7.4		
		40.2	20.1	1.3	49.1	7. 4 6.9	s s	s s
89.005-5 89.006-2	II II	39.0	19.8	1.2	49.1	8.4	S	S
89.008	" II	3 9 .0 37.5	17.9	1.3	49.5 47.2	8. 5	S	S
89.012	" "	38.2	20.9	1.4	44.0	6.7	S	S
89.012	ii	38.0	21.4	1.4	47.3	6.8	S	S
89.014	"	40.1	19.1	1.4	48.8	8.6	S	s
89.053	11	39.5	21.1	1.4	47.1	6.7	S	S
89.055	" I	40.3	19.8	1.3	45.1	7.1	S	S
	ii	39.2	20.4	1.3	48.4	6.9	S	S
89.055-1					48.7			
89.056-3 89.057	l I	37.6 38.0	20.6 20.4	1.4	48.7 47.2	6.9 7.5	s s	S
	l 1			1.3				S
89.058	1	39.9	20.2	1.3	46.6	6.5	S	S
89.059	II	36.9	20.9	1.5	46.0	6.6	s	S
89.060	1	38.1	21.1	1.4	47.3	6.5	s	S
89.061-1	! 	37.7	21.8	1.4	50.5	7.2	s	S
89.063	II 	38.2	19.4	1.5	45.7	6.0	s	S
89.064	II 	38.1	20.3	1.4	43.2	5.9	Н	S
89.065	11	37.7	21.0	1.4	45.3	6.1	S	S

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Accession	Country of	Country	Year	Maturity	
DI NI-			of	introduced		
PI No.	name	acquisition	origin	or released	group	
9.065-2		China	China	1930	II	
39.070		China	China	1930	ii	
9.072		China	China	1930	II	
9.073		China	China	1930	ii	
9.075		China	China	1930	ii	
9.138	Zontanorukon	Rep. of Korea	Rep. of Korea	1930	ii	
9.153	Wasenakuta	Rep. of Korea	Rep. of Korea	1930	ii	
9.154	Chirumukon	Rep. of Korea	Rep. of Korea	1930	ii	
9.154-1	(Chirumukon)	Rep. of Korea	Rep. of Korea	1930	ii	
9.156	Chonkon	Rep. of Korea	Rep. of Korea	1930	ii	
9.167	CHORKON	China	China	1930	ii	
9.170		China	China	1930	ii	
9.170 9.171		China	China	1930	"	
9.171 0.180		Unknown	Unknown	1930	"	
0.560		China	China	1930	II .	
0.567		China	China	1930	1	
0.570		China	China	1930	II 	
0.574		China	China	1930	II 	
0.575		China	China	1930	II	
1.091		China	China	1931	II .	
1.102		China	China	1931	H	
1.104		China	China	1931	II	
1.107		China	China	1931	Ш	
1.109		China	China	1931	П	
1.110		China	China	1931	1	
1.110-1		China	China	1931	1	
1.114		China	China	1931	11	
1.115		China	China	1931	II	
1.116		China	China	1931	П	
1.117		China	China	1931	П	
1.119		China	China	1931	H	
1.120		China	China	1931	H	
1.120-2		China	China	1931	П	
1.123		China	China	1931	1	
1.124		China	China	1931	II	
1.126		China	China	1931	ii	
1.129		China	China	1931	ii	
1.132-2		China	China	1931	ii	
1.138		China	China	1931	ii	
1.141		China	China	1931	ii	
1.144		China	China	1931	ii	
1.150		China	China	1931	ij	
1.156		China	China	1931		
1.161		China			II ''	
1.164			China	1931	ii 	
		China	China	1931	 	
1.167		China	China	1931	II	
1.171		China	China	1931	II 	
1.180		China	China	1931	H	
1.557		China	China	1931	H	
1.559		China	China	1931	II	
1.725-3	(Akazu)	Rep. of Korea	Rep. of Korea	1931	II	
1.732-1		China	China	1931	1	
1.732-2		China	China	1931	1	
1.733		China	China	1931	1	
2.109		Unknown	Unknown	1931	H	

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

				<u>Pubes</u>	cence			<u>Seedc</u>	oat		Other	traits	
	Matu- rity	Stem	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plan
		_	_	_	_		_		.,	_			
89.065-2	II 	D	P	T	E	N	Tn D:-	S	Y	Br			
89.070	II 	S	W	G	E	N	Br	S	Y	Lbf			
89.072	II 	N	W	G	E	N	Br D-	S	Y	Bf			
89.073	 	N	W	G	E	N	Br	S	Y	Y			
89.075	 	D	P	G	E	N	Br	s	Y	Bf			
89.138	II 	N	W	T	E	Ssp	Br	S	Y	BI T			
89.153	II 	D	P	T	E	N	Dbr	D	Y	Tn			
89.154	II 	N	P	T	E	N	Br	S	Y	BI			
89.154-1	II 	D	P	G	E	N	Br	S	Y	lb			
89.156	II 	N	P	G	E	Ssp	Br	S	Y	Y			
89.167	II 	N	P	G	E	N	Br	S	Y	Bf			
89.170	II 	N	P	Lt	E	N	Br	I .	Υ	Br			
89.171	II 	N	W	G	E	N	Br	S	Y	Bf			
90.180	II 	D	W	G	E	N	Br	S	Y	Lbf			
90.560	II	N	W	G	E	N	Br	S	Y	Bf			
90.567	!	D	P	G	E	N	Br	S	Y	lb D-			
90.570	II 	N	P	T	E	Ssp	Br	ı	Y	Br			
90.574	II	D	W	G	E	N	Br	D	Y	Lbf			
90.575	II	N	W	G	E	N	Br	S	Υ	Bf			
91.091	Ш	S	W	G	E	N	Tn	S	Υ	Υ			
91.102	II	N	Р	Т	E	N	Dbr	S	Gn	Br	Sph		
91.104	II	N	Р	G	E	N	Br	S	Υ	Bf			
91.107	11	D	Р	G	Ε	N	Br	S	Υ	Bf			
91.109	II	N	Р	G	E	N	Br	S	Υ	lb			
91.110	i	N	Р	G	E	N	Br	S	Υ	Υ			
91.110-1	1	N	Р	T	E	N	Tn	D	Υ	Υ			
91.114	II	D	Р	G	E	N	Br	S	Υ	lb			
91.115	П	D	Р	Т	E	N	Br	S	Υ	ВІ			
91.116	II	N	P	T	Ε	N	Br	D	Υ	Br			
91.117	П	N	Ρ	T	Ε	Ssp	Br	S	ВІ	ВІ			
91.119	II	N	Ρ	T	E	N	Br	1	Υ	Br			
91.120	II	N	Р	G	E	N	Br	S	Υ	Lbf			
91.120-2	H	N	Р	Т	Ε	N	Tn	D	Υ	Br			
91.123	1	S	Р	Т	Ε	N	Tn	S	Υ	Tn			
91.124	II	N	W	G	E	N	Br	S	Υ	Lbf			
91.126	II	D	W	T	E	Ssp	Br	S	Υ	Tn			
91.129	II	D	W	T	E	Ssp	Br	S	Υ	Tn			
91.132-2	II	D	Р	T	E	N	Br	D	Υ	Br			
91.138	II	N	W	T	Ε	N	Br	D	Υ	Br			
91.141	II	s	Р	G	Ε	N	Br	D	Υ	Υ			
91.144	II	N	W	G	Ε	N	Tn	S	Υ	Lbf			
91.150	II	D	Р	G	E	N	Br	S	Υ	lb			
91.156	II	D	W	Т	Ε	Ssp	Br	S	Υ	Tn			
91.161	II	N	W	G	E	N	Tn	S	Υ	Bf			
91.164	II	S	Р	G	E	N	Br	D	Υ	Υ			
91.167	II	N	W	G	E	N	Br	S	Υ	Υ	Sabl	'n	
91.171	II	N	W	G	E	N	ВІ	S	Υ	Bf			
91.180	II	N	W	G	E	N	Tn	D	Υ	Bf			
91.557	II	N	Р	Т	E	Ssp	Br	S	Υ	ВІ			
91.559	II	N	Р	Т	E	N	Br	S	Υ	ВІ			
91.725-3	II	D	W	G	E	Ssp	Tn	D	Υ	Υ			
91.732-1	ı	s	W	Т	E	Ssp	Br	1	Br	Br			
91.732-2	ı	N	W	G	E	N .	ВІ	S	Υ	Tn			
91.733	ĺ	D	W	G	E	N	Br	1	Υ	Υ			
92.109	il	N	P	G	Ē	N	Br	S	Y	Y			

Table 3.1 Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
89.065-2	705	905	1.7	76	1.0	2.0	1.0	2.8	2.0	11.0	1.88
89.070	703	913	1.4	79	2.0	2.0	2.0	2.8	2.0	18.1	2.08
89.072	701	908	1.9	86	3.0	2.0	1.0	2.5	1.0	16.6	2.15
89.073	708	911	1.3	69	2.5	2.0	1.0	2.8	1.0	15.4	2.17
89.075	705	913	1.7	69	1.0	2.0	1.0	3.0	1.0	15.3	2.61
89.138	701	916	2.8	112	4.0	3.0	1.0	2.5	2.0	13.3	2.33
89.153	707	929	2.6	76	1.5	3.0	4.0	2.5	3.0	22.6	2.95
89.154	703	914	2.7	104	3.0	2.0	1.0	3.8	2.0	14.4	2.71
89.154-1	705	908	2.5	84	1.5	2.0	1.0	2.8	1.0	16.6	2.46
89.156	710	919	3.8	114	3.5	3.0	1.0	3.0	2.0	18.3	2.93
89.167	708	923	2.7	107	3.0	3.0	1.0	3.0	1.5	20.6	2.44
89.170	702	913	3.3	109	3.0	2.5	2.0	3.3	1.0	15.6	2.40
89.171	702	912	2.1	97	2.5	2.0	2.0	2.8	1.0	16.9	2.29
90.180	702 702	911	2.0	84	1.5	2.0	1.0	3.3	2.0	19.8	2.29
90.560	702 708	917	2.0	91	3.0	2.0	1.0	3.3 3.5	1.0	18.6	2.48 2.34
90.567	708 705	909	2.1	84	3.0 1.5	2.0	1.0	3.0	1.0		
90.567	706 706	911	2.8 1.8	94	3.0	2.0	2.0	3.0 2.8	1.5	12.1 12.8	2.24 2.54
90.574	703				1.5						
		914	1.9	84		2.0	2.0	3.0	2.0	18.1	2.50
90.575	704	916	1.5	91	2.5	2.0	2.0	3.0	1.0	19.2	2.28
91.091	709	918	1.6	74	2.0	3.0	1.0	3.0	1.5	14.1	2.82
91.102	725	920	2.3	102	4.0	3.0	1.0	2.5	1.0	9.1	2.51
91.104	711	920	2.9	86	3.0	3.0	1.0	3.5	1.0	14.1	2.76
91.107	703	908	1.6	71	1.0	2.0	1.0	2.8	1.0	14.1	2.29
91.109	705	910	2.1	89	2.5	3.0	1.0	3.3	1.0	15.9	2.57
91.110	628	826	1.8	74	3.0	2.0	1.0	2.3	1.0	13.2	1.93
91.110-1	629	826	2.4	81	3.0	2.0	1.0	2.0	1.5	11.4	1.88
91.114	706	909	2.8	79	1.5	2.0	1.0	2.8	1.0	14.7	2.43
91.115	702	907	1.9	84	1.0	2.0	1.0	3.0	1.0	16.6	2.21
91.116	709	915	2.8	107	4.0	3.0	2.0	2.5	2.5	13.4	2.60
91.117	708	904	1.7	94	3.5	2.5	1.0	2.0	-	13.1	2.19
91.119	703	910	1.8	89	3.0	2.5	2.0	2.5	1.5	14.4	2.37
91.120	708	911	1.7	86	3.0	3.0	1.0	2.5	1.0	13.8	2.15
91.120-2	709	912	2.3	99	3.5	2.5	2.0	2.8	1.5	15.3	2.19
91.123	628	829	3.0	76	2.0	2.5	2.0	2.8	1.5	11.5	1.90
91.124	707	919	2.4	104	2.5	2.5	1.0	3.0	1.0	23.1	3.14
91.126	702	909	2.4	81	1.0	2.0	1.0	2.8	1.5	15.9	2.49
91.129	701	911	2.1	84	1.0	2.0	2.0	2.5	2.0	16.1	2.52
91.132-2	701	907	1.5	91	1.5	2.0	2.0	2.8	2.0	15.4	2.25
91.138	716	920	2.9	99	3.5	2.5	1.0	2.8	3.0	16.7	1.94
91.141	705	912	1.5	94	2.0	2.0	2.0	2.8	1.5	17.6	2.33
91.144	704	913	1.9	81	2.5	2.0	2.0	3.0	2.0	16.8	2.29
91.150	705	912	1.2	79	1.0	2.0	2.0	3.0	1.0	14.5	2.56
91.156	703	913	2.1	81	1.0	2.0	2.0	2.8	2.0	15.8	2.31
91.161	705	912	2.1	91	3.0	2.5	2.0	2.8	1.0	16.7	2.53
91.164	707	914	1.8	84	2.0	3.0	2.0	3.0	1.5	15.7	2.87
91.167	702	910	1.4	81	3.0	2.0	1.0	3.3	2.0	19.4	2.30
91.171	707	915	2.3	99	3.5	2.0	1.0	2.8	1.5	14.2	2.45
91.180	707	917	1.6	94	3.5	2.0	1.0	2.5	1.0	17.0	2.25
91.557	703	909	2.1	91	3.0	2.0	2.0	3.0	1.0	16.6	2.25
91.559	703 703	915	2.5	102	3.0	2.0	2.0	4.5	1.5	13.3	2.17
91.725-3	703	914	1.3	61	1.0	2.5	5.0	2.5	1.5	26.1	2.0 4 1.78
91.732-1	630	829	1.3	74	2.0	2.0					
91.732-1	708						1.0	2.0	1 5	11.1	1.94
		910	1.9	97 71	3.0	2.0	1.0	3.5	1.5	15.5	1.99
91.733	701 704	830	1.8	71	1.0	2.0	2.0	3.5	1.5	16.9	2.09
92.109	704	913	2.2	104	4.0	2.0	2.0	3.0	1.5	15.3	2.41

Table 4.1 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed cor	mposition	Protein composition	Oil comp	osition	Dise	986
	Maturity	Protein	Oil	Methionine	Linoleic	Linolenic		ction
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	Ру
89.065-2	II	37.5	20.5	1.3	46.5	7.5	s	s
89.070	ï	39.7	20.2	1.5	44.4	6.2	s	s
89.072	ii	38.0	20.9	1.3	45.7	6.4	H	s
89.073	ii	39.9	19.5	1.3	43.9	6.8	s	s
89.075	ii	38.0	22.1	1.5	47.5	7.0	S	s
89.138	ii	38.6	20.2		48.9	7.1	s	s
89.153	ii	40.9	20.2	_	48.6	6.9	s	s
89.1 5 4	ii	36.9	21.2	-	48.2	7.0	S	s
89.154-1	ii	38.2	20.6	1.3	48.0	6.6	s	s
89.156	ii	39.4	18.5	1.2	43.4	6.1	S	S
89.167	ii	39.8	19.7	1.3	44.5	6.1	S	S
89.170	ii	40.3	19.9	1.4	47.5	6.6	S	s
89.171	ii	38.8	20.9	1.4	47.3 45.7	6.3	S	S
90.180	ii	38.8 37.4	20.9	1.4	48.7 48.3	6.8	S	S
90.180 90.560	" II	37.4 38.1						5
			21.8	1.5	46.4	6.8	S	S
90.567	1	38.3	21.1	1.2	49.1	7.4	S	S
90.570	II 	38.5	20.5	1.2	51.5	8.5	S	S
90.574	II 	38.3	21.9	1.2	47.0	6.4	S	S
90.575	II	37.4	20.8	1.2	45.2	5.8	S	s
91.091	II	38.3	22.3	1.2	46.3	6.4	S	S
91.102	II	37.5	19.0	1.3	47.6	8.0	S	S
91.104	11	37.0	21.1	1.2	47.9	7.3	S	s
91.107	II	37.1	22.0	1.5	48.4	7.0	S	s
91.109	il	39.0	22.1	-	46.9	7.1	S	S
91.110	, I	40.3	20.0	-	45.3	7.4	S	S
91.110-1	1	40.3	18.0	-	47.2	7.8	S	s
91.114	II	37.0	22.0	-	48.6	7.4	S	S
91.115	11	36.8	22.2	=	48.0	7.7	S	S
91.116	II	38.1	20.3	-	50.3	7.8	S	S
91.117	II	39.0	21.1	-	48.5	6.5	S	S
91.119	II	38.0	19.9	1.3	49.7	7.3	S	s
91.120	II	37.4	20.3	1.0	49.7	7.7	S	S
91.120-2	II	39.3	21.3	1.3	48.3	6.0	s	s
91.123	1	38.3	20.1	1.3	48.4	8.0	s	s
91.124	il	37.3	21.2	1.2	47.1	6.9	S	S
91.126	ii	38.6	20.0	1.3	49.0	7.0	S	s
91.129	ii	39.5	20.1	1.3	49.0	6.8	s	s
91.132-2	ii	40.5	18.8	1.3	49.7	6.4	s	s
91.138	ii	41.7	17.8	1.1	46.3	6.6	s	s
91.141	ii	39.4	20.6	1.2	47.5	6.2	s	s
91.144	ii	39.4	21.4	1.1	49.7	6.2	s	s
91.150	ii	38.5	21.4	1.2	49.4	6.8	s	s
91.156	ii	38.1	20.4	1.1	49.4	7.0	S	s
91.161	ii	37.0	22.3	1.2	47.5	6.9	S	s
	ii	37.1	21.2	1.2	46.4	6.4	S	٥
91.164								s s
91.167	ii 	37.3 25.7	22.0	1.1	51.6	6.8	S	S
91.171	II 	35.7	21.3	1.2	46.8	6.6	R	> ^
91.180	II 	37.8	21.3	1.2	46.6	6.5	S	S
91.557	 	37.7	21.9	1.3	48.0	6.8	S	S
91.559	II 	34.8	21.4	1.2	47.8	6.5	S	
91.725-3	II	39.2	18.9	1.1	44.8	6.4	Н	S
91.732-1	I	37.0	19.5	-	49.4	6.4	S	S
91.732-2	1	38.1	20.1	1.2	47.7	6.7	R	S
91.733	l l	38.4	19.6	1.1	46.9	6.4	S	S
92.109	II	36.9	20.6	1.2	48.8	7.5	S	S

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

		Country	Country	Year	
n	Accession	of	of	introduced	Maturity
Pi No.	name	acquisition	origin	or released	group
92.460		Russia	Russia	1931	II
92.464	Kpynyrs No. 9/3 Ceb.Manrmypud	Russia	Russia	1931	ii ii
2.465	Xapsunchoe Onormnoe	Russia	Russia	1931	11
2.468	Xapsunchoe Onormnoe	Russia	Russia	1931	1
2.469	Konyeccur Dpyear	Russia	Russia	1931	1
2.470	Konyeccur Dpyear	Russia	Russia	1931	i
2.561		China	China	1931	11
2.563		China	China	1931	11
2.565		China	China	1931	1
2.569		China	China	1931	n
2.570		China	China	1931	11
2.571		China	China	1931	n
2.572		China	China	1931	П
2.573		China	China	1931	n
2.576		China	China	1931	n
2.580		China	China	1931	n
2.582		China	China	1931	n
2.583		China	China	1931	H
2.589		China	China	1931	11
2.592		China	China	1931	n
2.595		China	China	1931	n
2.596		China	China	1931	11
2.598		China	China	1931	H
2.603		China	China	1931	11
2.607		China	China	1931	n
2.611		China	China	1931	н
2.625		China	China	1931	1
2.627		China	China	1931	n
2.629		China	China	1931	H
2.630		China	China	1931	H
2.633		China	China	1931	Ħ
2.639		China	China	1931	11
92.649		China	China	1931	1
2.660		China	China	1931	H
2.661		China	China	1931	11
2.671		China	China	1931	H
2.677		China	China	1931	H
92.681		China	China	1931	II
2.683		China	China	1931	11
2.684		China	China	1931	11
2.687		China	China	1931	11
2.694		China	China	1931	11
2.696		China	China	1931	11
92.698		China	China	1931	H
2.705		China	China	1931	11
2.706		China	China	1931	1
2.717		China	China	1931	H
2.719		China	China	1931	II
2.733		China	China	1931	11
2.734		China	China	1931	II
2.748		Unknown	Unknown	1931	11
33.217		Unknown	Unknown	1931	11
3.559	Paimei tou	China	China	1931	H
3.560	Paimei tou	China	China	1931	H
93.565		China	China	1931	11

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Matu-			Pubes	cence			Seedce	oat		Other traits		
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
·													
92.460	H	N	Р	G	E	N	Tn	s	Υ	Υ			
92.464	H	N	Р	G	E	N	Tn	S	Υ	Υ			
92.465	11	D	Р	G	E	N	Tn	S	Υ	Bf			
92.468	ı	N	Р	Т	E	N	Br	S	Υ	ы			
2.469	I.	N	P	Т	E	N	Br	D	Υ	Br			
2.470	I	N	Р	G	Ε	N	Br	S	Υ	Υ			
2.561	II	N	Р	G	E	N	Br	S	Gn	Gn			
2.563	П	D	Р	G	E	N .	Br	S	Υ	lb			
2.565	I	D	Р	G	Ε	N	Tn	S	Υ	Υ			
2.569	П	N	W	G	Ε	N	Br	S	Υ	Υ			
2.570	II	N	W	G	E	N	Br	S	Υ	Υ			
2.571	П	N	W	G	E	N	Br	S	Υ	Υ			
2.572	II	N	Р	G	Ε	N	Br	s	Υ	Υ			
2.573	II	N	Р	G	E	N	Br	S	Y	Y			
2.576	ii	S	W	G	E	N	Br	S	Ý	Ý			
2.580	ii	S	w	G	Ē	N	Br	S	Ϋ́	Ý			
2.582	ii	N	w	G	E	N	Br	S	Y	Ý			
2.583	 II	N	w	G	E	N	Br	S	Ϋ́	Ϋ́			
2.589	ii	N	w	G	Sa	N	Br	s	Ÿ	Bf			
2.592	ii	D	w	G	E	N	Br	S	Ϋ́	Bf			
2.595	 II	N	w	G	E	N	Br	S	Ϋ́	Bf			
92.596	ii	S	w	G	E	N	Br	S	Ϋ́	Bf			
2.598 2.598	11	N	W	G	E	N	Br	S	Y	Bf			
				G									
2.603	II 	S	W		E	N	Br	S	Y	Bf			
2.607	II 	N	W	G	E	N	Br	S	Y	Bf			
92.611	II	S	w	G	E	N	Br	S	Υ	Bf			
92.625	l 	N	P	G	E	N	Br	S	Υ	Bf			
92.627	II	S	W	G	E	N	Br	S	Y	Bf			
92.629	Ш	S	W	G	E	N	Br	S	Y	Bf			
92.630	II	N	W	G	E	N	Br	S	Y	Bf			
92.633	II	S	W	G	Ε	N	Br	S	Y	Υ			
92.639	11	N	Р	T	E	N	Br	ı	Υ	Br			
92.649	l	N	Р	T	E	N	Br	D	Υ	Br			
2.660	11	N	Р	G	E	N	Br	S	Υ	G			
92.661	П	S	Р	G	E	N	Br	S	Υ	lg			
92.671	11	N	W	G	E	N	Br	D	Υ	Lbf			
92.677	II	D	W	G	E	N	Br	S	Υ	Lbf			
92.681	11	D	W	G	Ε	N	Br	S	Υ	Lbf			
92.683	П	D	W	G	Ε	N	Br	S	Υ	Bf			
92.684	П	N	Р	T	E	N	Br	S	Υ	ВІ			
2.687	П	S	W	G	Ε	N	Br	S	Υ	Bf			
2.694	П	N	Р	G	Ε	Ssp	Br	S	Υ	Υ			
92.696	11	N	Р	Т	Ε	Ssp	Br	D	Υ	Br			
92.698	II	N	Р	Lt	Ε	N	Tn	D	Br	Br			
92.705	П	N	W	G	Ε	N	Tn	S	Υ	Bf			
2.706	ł	D	W	G	E	N	Br	S	Υ	Bf			
2.717	H	N	Р	Т	Ε	Ssp	Br	1	Υ	Br			
92.719	II	N	Р	T	Ε	N .	Br	D	Υ	Br			
92.733	ii	N	W	Т	Ε	N	Br	S	ВІ	ВІ	Gnc	ot	
92.734	 II	D	w	Ġ	Ē	N	Br	S	Y	Bf	2		
92.748	ii	N	P	G	Ē	N	Br	S	Y	Ϋ́			
93.217	 II	D	Р	G	Ē	N	BI	D	Ÿ	Ý			
93.559	" II	D	P	G	E	N	Tn	S	Ÿ	Ÿ			
93.560 93.560	" 	S	W	G	E	N	Tn	S	Y	Bf			
93.565	11	S N	vv P	G	E	N N	Br	S	Y	Y			

Table 3.1 Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering <u>date</u> (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
92.460	712	913	2.8	107	3.5	2.0	1.0	2.8	2.5	15.1	2.02
92.464	705	906	2.5	97	3.0	2.5	1.0	2.8	2.0	16.7	2.52
92.465	703	912	2.2	84	1.0	2.0	2.0	3.5	1.0	18.4	2.43
92.468	701	910	2.3	84	2.5	2.0	1.0	3.3	1.0	15.2	2.25
92.469	704	903	1.6	94	4.0	3.0	1.0	2.3	1.5	13.4	2.15
92.470	628	827	1.6	69	3.0	2.0	1.0	2.5	1.0	13.6	2.06
92.561	707	915	2.9	104	4.0	2.0	2.0	2.5	1.0	15.4	2.74
92.563	706	908	1.6	71	1.0	2.0	1.0	2.5	1.0	13.1	2.29
92.565	702	904	1.3	69	1.0	2.0	1.0	3.0	1.5	14.4	2.32
92.569	705	910	2.2	99	3.0	2.0	2.0	3.0	1.0	15.7	2.13
92.570	705	912	2.7	97	3.0	2.0	2.0	3.3	1.0	19.2	2.58
92.571	705	913	2.9	97	3.0	2.0	2.0	3.3	1.5	19.4	2.56
92.572	713	918	2.8	99	3.0	3.0	2.0	3.0	1.5	18.0	2.64
92.573	713	914	2.9	86	2.5	2.0	1.0	3.3	1.5	15.7	2.80
92.576	704	912	2.8	99	2.0	2.0	2.0	3.8	1.5	19.3	2.72
92.580	706	912	2.1	99	2.0	2.0	2.0	3.5	1.0	19.7	2.50
92.582	704	913	2.3	99	3.0	2.0	1.0	3.5	1.0	18.2	2.49
92.583	708	916	3.1	97	3.0	2.0	1.0	3.8	1.0	18.3	2.70
92.589	715	921	2.9	109	3.5	3.0	1.0	3.0	1.0	16.9	2.25
92.592	704	914	2.1	81	1.5	2.0	1.0	3.0	1.0	18.2	2.63
92.595	704	914	1.8	109	3.5	2.0	1.0	2.8	1.0	16.1	2.43
92.596	706	915	1.9	81	2.0	2.5	2.0	3.8	1.0	19.9	2.46
92.598	706	915	2.1	86	2.5	2.0	2.0	3.5	1.0	19.4	2.60
92.603	704	915	2.0	89	2.0	2.0	2.0	3.0	1.0	18.6	2.66
92.607	704	915	1.9	89	2.5	2.0	2.0	3.0	1.0	18.3	2.64
92.611	704	913	1.9	84	2.0	2.0	2.0	3.0	1.0	18.3	2.58
92.625	701	903	2.5	91	3.0	2.0	2.0	2.8	1.0	12.8	2.16
92.627	706	912	1.7	86	2.0	2.0	2.0	3.0	1.0	17.1	2.42
92.629	704	913	1.9	86	2.0	2.0	2.0	3.0	1.0	18.3	2.19
92.630	707	915	2.1	91	3.0	2.5	2.0	3.3	1.0	16.8	2.79
92.633	705	914	2.5	99	2.0	2.0	2.0	3.8	1.5	18.7	2.54
92.639	709	913	2.5	94	4.0	3.0	1.0	2.8	1.5	14.1	2.65
92.649	702	828	1.6	94	4.0	2.5	2.0	2.3	1.0	13.3	1.94
92.660	704	914	1.9	104	3.5	2.0	1.0	3.3	2.0	18.2	2.23
92.661	704	916	2.2	109	2.0	3.0	2.0	3.0	1.0	21.2	2.69
92.671	704	915	1.7	104	3.0	2.0	2.0	3.0	1.5	16.1	2.39
92.677	703	913	2.0	86	1.5	2.0	1.0	3.0	2.0	18.7	2.57
92.681	703	913	2.4	94	1.5	2.0	2.0	2.8	1.5	18.0	2.64
92.683	706	914	1.8	91	1.0	2.0	2.0	3.3	1.0	19.8	2.49
92.684	702	910	2.2	91	2.5	2.0	2.0	3.0	1.0	17.1	2.39
92.687	702	913	2.3	97	2.0	2.0	2.0	2.8	1.0	17.0	2.62
92.694	707	909	2.3	81	2.5	2.0	1.0	2.8	1.5	18.1	2.27
92.696	706	916	2.0	99	3.0	2.5	1.0	2.8	1.5	14.4	2.86
92.698	707	907	2.5	114	4.0	3.0	1.0	2.5	-	11.3	2.72
92.705	705	910	2.4	99	3.0	3.0	1.0	2.5	1.0	11.8	2.68
92.706	714	908	2.2	71	1.0	2.5	5.0	2.3	1.5	12.3	1.22
92.717	704	915	1.9	97	3.5	2.0	1.0	2.3	1.5	14.1	2.86
92.719	704	914	1.6	89	3.5	3.0	2.0	2.5	2.0	15.8	2.54
92.733	713	912	1.6	76	3.0	3.0	2.0	2.8	-	13.2	2.43
92.734	706	917	2.1	86	1.5	2.0	1.0	3.0	1.0	17.8	2.66
92.748	707	911	3.4	107	4.0	2.5	1.0	3.0	1.5	16.2	2.24
93.217	702	906	1.3	69	1.5	2.0	1.0	3.0	1.0	14.5	2.20
93.559	709	908	1.7	71	1.0	2.0	1.0	2.5	1.0	16.7	2.64
93.560	714	913	2.6	89	2.0	2.0	2.0	3.3	1.0	15.0	2.47
	703	910	2.2	99	3.0	2.0	1.0	3.0	1.0	15.7	2.40

Table 4.1 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed cor	mposition	Protein composition	Oil comp	osition	Dise	ase
	Maturity	Protein	Oil	Methionine	Linoleic	Linolenic	reac	tion
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	Ру
92.460	II	37.2	20.5	1.3	49.4	7.0	s	s
92.464	.: II	38.2	20.6	1.2	49.2	7.0	s	S
92.465	"	38.1	21.7	1.1	47.6	6.3	R	S
92.468	ï	37.1	21.7	1.2	47.3	7.3	s	s
92.469	i	39.1	20.8	1.2	50.3	6.9	S	S
92.470	i	38.6	20.7	1.3	45.0	6.9	S	S
92.561	i	38.7	20.1	1.3	48.9	7.2	S	S
92.563	ii	36.3	21.7	1.2	50.5	7.2	S	S
92.565 92.565	ï	38.3	19.8	1.1	46.4	6.7	S	S
92.569	II	39.0	18.8	1.1	43.4	6.5	S	S
92.509 92.570	"	38.5	20.8	1.1	45.4 45.2	5.2	S	S
		30.5 40.4	20.8 19.7	1.1	48.2 43.7		S	
92.571	II 					5.7	S	
92.572	II 	38.2	20.4	1.2	44.7	5.8		S
92.573	II 	38.1	20.3	1.2	45.6	7.2	S	S
92.576	II 	37.5	21.1	1.4	45.0	5.7	S	S
92.580	II	37.8	20.9	1.5	45.0	6.3	S	S
92.582	II 	38.5	21.0	1.4	41.9	5.4	S	S
92.583	II	35.7	23.2	1.5	44.1	6.0	S	
92.589	II	35.8	22.8	1.4	46.1	7.5	S	S
92.592	II	38.8	20.7	1.3	46.8	6.5	S	S
92.595	II	38.1	22.3	1.2	47.7	7.2	R	S
92.596	II	37.8	21.2	1.2	46.0	6.3	S	S
92.598	II	36.1	23.4	1.1	42.9	6.1	S	S
92.603	II	36.2	23.1	1.4	37.3	5.3	S	S
92.607	11	36.1	21.9	1.3	43.8	5.8	S	S
92.611	II	36.1	21.9	1.2	42.4	5.4	S	S
92.625	l	38.5	20.9	1.4	45.7	6.0	S	н
92.627	11	36.2	22.2	1.2	45.0	5.9	S	S
92.629	II	37.5	21.5	1.2	41.6	5.5	s	
92.630	II	36.5	21.0	1.3	45.8	5.9	s	
92.633	II	38.5	21.0	1.1	46.3	6.1		
92.639	II	36.7	20.3	1.2	46.1	6.4	R	S
92.649	1	38.3	21.4	1.1	41.4	6.2	s	s
92.660	II	37.3	20.6	1.3	44.6	6.0	s	s
92.661	II	39.0	21.4	1.4	47.9	6.1	S	S
92.671	ii	38.8	22.1	1.5	45.7	7.0	s	s
92.677	ii	41.2	20.5	1.2	46.7	5.8	s	S
92.681	ii	39.5	20.4	1.3	45.5	5.5	s	S
92.683	ii	38.0	21.2	1.2	41.4	5.4	s	s
92.684	ii	37.1	21.5	1.3	43.6	6.3	s	s
92.687	ii	37.7	20.8	1.1	46.0	6.0	s	s
92.694	ii	39.0	20.1	1.3	43.4	5.6	s	S
92.696	" II	38.5	21.3	1.2	48.4	6.9	S	S S
92.698	ii	39.0	18.3	-	49.8	7.2	S	S
92.705	" 	35.6	21.5	1:1	45.4	5.9	S	S
		39.0		1.1	46.3	6.8	S	S
92.706			19.2					S
92.717	II II	38.3	21.5	1.3	48.9	6.7	S	3
92.719	 	38.5	20.6	1.3	44.9	6.3	S	S
92.733	II 	38.1	20.7	-	44.3	6.1	S	S
92.734	II 	36.4	22.7	1.3	43.8	5.8	S	s s
92.748	II 	38.2	20.1	1.2	45.8	6.1	S	S
93.217	II	40.6	19.6	1.2	45.0	7.4	S	S
93.559	11	38.6	21.3	1.3	46.2	7.0	s	S
93.560	II	39.2	20.8	1.3	46.8	7.6	S	S
93.565	II	38.2	21.5	1.3	48.0	7.9	S	S

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

		Country	Country	Year	
	Accession	of	of	introduced	Maturity
Pl No.	name	acquisition	origin	or released	group
96.152		Rep. of Korea	Rep. of Korea	1932	ı
96.171		Rep. of Korea	Rep. of Korea	1932	II
96.188		Rep. of Korea	Rep. of Korea	1932	II
96.193		Rep. of Korea	Rep. of Korea	1932	ı
96.195		Rep. of Korea	Rep. of Korea	1932	П
96.201		Rep. of Korea	Rep. of Korea	1932	11
96.549		Rep. of Korea	Rep. of Korea	1932	H
97.605		Unknown	Unknown	1932	H
03.414		China	China	1933	II
31.531	Batarowka	Sweden	Poland	1939	1
32.201		Netherlands	Netherlands	1939	ı
32.206		Netherlands	Netherlands	1939	1
32.215		Netherlands	Netherlands	1939	i
35.589		China	China	1940	II
35.590		China	China	1940	
42.491	Kroochul	China	China	1941	ï
153.214	Ki oboliai	Belgium	Belgium	1946	i
153.215	Medischer Brown	Belgium	Netherlands	1946	i
153.226	Wiedischer Brown	Belgium	Belgium	1946	i
153.227		Belgium	Belgium	1946	ï
153.229		Belgium	Belgium	1946	i
153.236	Manchu	Belgium	Belgium	1946	,
153.238	Dansk Osijek	Belgium	Belgium	1946	i
153.236	Kleverhof 527	Belgium	Germany	1946	- 1
153.2 44 153.247	Assenyed	Belgium	Netherlands	1946	- 1
	Assertyed				
153.250		Belgium	Belgium Balaium	1946	
153.253		Belgium	Belgium Balaissa	1946	
153.255		Belgium	Belgium Balaisana	1946	1
153.263	Talue Desert Black	Belgium Belgium	Belgium Balaissa	1946	1
153.264	Tokyo Dwarf Black	Belgium	Belgium	1946	II
153.266	Poppelsdorf	Belgium	Germany	1946	!
153.267	Black O	Belgium	United Kingdom	1946	!
153.271	Wisconsin Black U487	Belgium	Belgium Balaissa	1946	
153.274	·	Belgium	Belgium	1946	
153.276	Dieckmann Black	Belgium	Germany	1946	i
153.279	Kei-Jan Black	Belgium	France	1946	1
153.280	Savi	Belgium	France	1946	
153.282		Belgium	Belgium	1946	!
153.283		Belgium	Belgium	1946	!
153.285	5	Belgium	Belgium	1946	!
153.287	Wisconsin Early Black	Belgium	France	1946	
153.288	Baumann Black	Belgium	Belgium	1946	H
153.289		Belgium	Belgium	1946	11
153.290	Altonagaard A1	Belgium	Belgium	1946	ı
153.291	Karbine	Belgium	France	1946	I
153.294		Belgium	Belgium	1946	ı
153.308	Yellow J	Belgium	Belgium	1946	1
153.310	Cairo	France	France	1946	I
153.311	C.N.S. 24 (de Charlien)	France	France	1946	I
153.313	Kleverhof	France	Germany	1946	I
153.315	Maguisard	France	France	1946	ı
153.316	Meng Tseu	France	France	1946	I
154.195		Netherlands	Netherlands	1946	li
171.421	Tzu su No. 36	China	China	1948	Î
181.532		Japan	Japan	1949	ĺ

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

				<u>Pubes</u>	cence			Seedo	oat		Other t	raits	
Entry	Matu- rity group	Stem trm.	Flower	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
96.152	ı	D	W	G	Ε	N	Br	ı	Υ	Υ			
96.171	II	D	W	G	Sa	N	Br	D	Υ	Bf			
96.188	II	N	W	Т	Ε	N	Br	S	ВІ	ВІ	Gnco	t	
96.193	ı	S	P	G	E	N	ВІ	D	Y	Υ			
96.195	II	N	P	T	E	N	Br	S	Υ	BI			
96.201	II 	S	P	T	E	N	Br	S	Y	BI			
96.549	II 	N	P	G	E	N	Tn	S	Y	Y			
97.605	II 	S	W	G	E	N	Br	D	Y	Y			
103.414	II ·	D	P	G	E	N	Br	S	Y	lb			
131.531	!	D	P	T	Sa 	Ssp	Br	S	Y	Br			
132.201	!	N	P	Lt	E	N	Tn -	S	BI	BI	Fleck		
132.206	!	N	P	G -	E	N	Tn	S	BI	BI	Fleck		
132.215	 	N	P	T	E	N	Br	S	BI	BI			_
135.589	II 	N	W	T	A	Ssp	Br	В	BI	ВІ			Sw
135.590	II	N	P	T	A	Ssp	Dbr	S	Br	Br			Sw
142.491	!	N	P	G	E	N	Br	S	Y	Y			
153.214	!	N	P	T	E	N	Br	S	Br	Br		Dab	
153.215	<u> </u>	D	P	T	E	Ssp	Br —	S	Rbr	Rbr	Abh		
153.226	!!	N	P	Ţ	E	Ssp	Tn	D	Y	Br			
153.227	!	S	Ρ	Ţ	E	N	Dbr	S	Y	BI			
153.229	!	D	W	T	E	N	Br —	S	Rbr	Rbr			
153.236	!	N	P	G	E	N	Tn	S	Y	Y			
153.238	!	N	P	G -	E	N	Br	S	Y	Y			
153.244	!	D	W	Ţ	E	N	Br	S	Y	ВІ			
153.247	!	N	P	Ţ	E	N	Br	S	Y	Y			
153.250	!	D	P	T	E	Ssp	Br	S	Y	Br			
153.253	!	D	P	Ţ	E	Ssp	Br	ı	Y	Br			
153.255	!	N	P	G	E	N	Br	S	Y	Y			
153.263	!	N	P	Lt	E	N	Tn	S	BI	BI	Fleck		
153.264	II ·	D	w	T	E	Ssp	Br	S	BI	BI			
153.266	!	S	P	T -	E	N	Br	S	BI	BI			
153.267	!	N	P	T	E	N	Br —	S	BI	BI			
153.271	!	N	P	Lt -	E	N	Tn	S	BI	BI	Fleck		
153.274	!	N	W	T	E	Ssp	Br	D	BI	BI			
153.276		S	W	T T	E	N.	Br Br	S	BI	BI			
153.279		N	W		E	Ssp	Br	D	BI	BI BI		D-6	
153.280 153.282	II L	N S	P W	T T	E E	N Ssp	BI Br	S D	Bi Bi	BI		Dab	1
153.282	i	S	W	Ť	E	Ssp	Br	D	BI	BI			
153.285 153.285	;	N	P	Lt	E	N N	Tn	S	BI	BI	Fleck		
153.287	-	N	P	T	E	N	Br	S	BI	BI	FIOCK		
153.287	, II	D	W	, T	E	Ssp	Br	D	BI	BI			
153.289	'' 	N	P	T	E	N N	BI	S	BI	BI		Dab	
	"	N	P	, T	E	N	Br	S	BI	Bi		Dan	,
153.290 153.291	-	N	P	, T	E	Ssp	Br	ı	BI	BI			
153.294	:	D	W	, T	E	N N	Br	S	BI	BI			
	-	D		Ť	E	N		S	Υ	Br			
153.308	1	N	P P	T T	E	N N	Br Br	S	r Rbr	Br Rbr			
153.310	1		P	T T	E	N	Br	S		BI			
153.311	1	S	P	T T	E	N N	Br Br		BI Y	BI			
153.313	1	N						ı		A RI			
153.315	1	D	W	G	E	N	Tn Pr	D	Y Y				
153.316 154.105		S	P	T T	E	N Son	Br Br	S		Tn G			
154.195	II .	D	P	T	E	Ssp	Br B-	D	Gn	G			
171.421	I	N	P	G T	E E	N	Br	i	Y Y	Υ			

Table 3.1 Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

	Flowering	Maturity			Stem term-	Branch-	Shat-	Seed			
	date	date	Lodging	Height	ination	ing	tering	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	(score)	(score)	(cg/sd)	(Mg/ha)
96.152	701	902	1.4	74	1.0	2.0	2.0	3.3	1.0	17.0	2.15
96.171	722	918	3.2	76	1.0	3.0	4.0	2.3	1.5	11.7	2.03
96.188	714	913	1.9	81	3.0	3.0	1.0	2.8	-	13.5	2.66
96.193	701	901	1.5	74	2.0	2.5	1.0	2.8	1.0	12.8	2.16
96.195	708	916	2.7	102	4.0	3.0	1.0	3.5	1.0	15.3	2.69
96.201	702	912	2.0	79	2.0	2.0	1.0	3.0	2.0	16.2	2.19
96.549	715	917	2.6	86	2.5	3.0	1.0	2.8	2.5	17.3	2.25
97.605	702	911	1.4	86	2.0	2.0	2.0	3.3	1.0	15.9	2.21
103.414	706	907	2.3	76	1.5	2.0	1.0	2.8	1.0	12.7	2.28
131.531	708	907	2.0	61	1.0	2.0	5.0	2.8	1.5	22.0	1.85
132.201	702	831	3.8	97	4.0	3.5	2.0	2.0	-	9.8	2.13
132.206	702	831	3.6	99	4.0	3.5	2.0	2.0	-	9.4	1.92
132.215	629	830	2.3	81	3.0	3.5	2.0	2.3	-	12.5	1.84
135.589	714	913	4.0	84	4.0	4.0	3.0	2.0	-	5.6	1.91
135.590	714	909	4.3	79	4.0	4.0	3.0	2.0	1.0	5.4	1.61 1.82
142.491	628	826	1.3	74	3.0	2.0	1.0	2.3	1.0	13.2 11.8	1.82
153.214	628	826	1.3	69	3.5	2.5	1.0	2.0	-	11.6	2.18
153.215	630	903	3.2	74	1.0	3.0	2.0 1.0	2.3 2.3	1.5	14.6	2.16
153.226	706	913	2.6	91 91	3.0 2.0	2.0 2.0	2.0	3.0	1.0	15.7	2.36
153.227	701 700	908	2.2 2.3		1.0	3.0	5.0	2.8	1.0	15.5	1.74
153.229	709	912 831	2.3 2.4	64 86	3.0	2.0	1.0	2.8	1.0	13.3	2.07
153.236	701 630	829	2. 4 1.4	94	3.0	2.0	1.0	2.8	1.0	14.5	2.13
153.238	630	829 829	1.4	81	1.5	2.0	1.0	2.8	1.0	12.6	2.00
153.244	629	82 9 828	1.7	89	3.0	2.5	1.0	3.0	1.0	11.8	1.95
153.247 153.250	708	908	1.8	61	1.0	3.0	5.0	3.5	1.0	22.9	1.96
153.253	707	908	2.0	61	1.0	3.0	5.0	3.8	2.0	22.1	1.88
153.255	630	904	2.4	94	3.0	2.0	1.0	3.3	1.0	13.3	2.20
153.263	701	901	3.0	86	4.0	3.0	2.0	2.5	•	9.4	1.90
153.264	709	913	1.3	61	1.0	3.0	4.0	2.8	-	21.6	2.37
153.266	630	827	1.2	81	2.0	2.0	1.0	2.3	•	14.7	1.71
153.267	629	831	1.5	81	3.0	2.5	2.0	3.0	-	12.8	2.01
153.271	702	905	3.3	94	3.5	3.0	2.0	2.3	-	9.2	2.11
153.274	630	826	1.4	84	2.5	2.0	1.0	2.0	-	10.2	1.64
153.276	629	826	1.7	81	2.0	2.0	1.0	2.0	-	13.5	1.82
153.27 9	630	826	1.3	84	2.5	2.0	1.0	1.8	•	10.5	1.55
153.280	702	922	4.3	112	4.5	3.5	1.0	3.0	-	9.9	2.75
153.282	630	826	1.4	86	2.0	2.0	1.0	1.8	-	10.7	1.69
153.283	630	826	1.4	86	2.0	2.0	1.0	1.5	-	10.5	1.63
153.285	701	829	2.9	94	4.0	3.0	1.0	3.0	-	9.7	1.79
153.287	630	831	1.9	81	3.0	2.5	2.0	2.3	-	12.5	2.07
153.288	708	914	1.2	61	1.0	3.0	4.0	3.0	-	21.2	2.12
153.289	630	920	4.0	99	4.5	3.0	1.0	3.0	-	10.0	2.58
153.290	628	901	3.1	102	4.0	3.0	2.0	2.0	-	11.7	2.11
153.291	630	830	1.5	99	4.0	2.0	2.0	1.5	-	12.5	2.11
153.294	701	828	1.2	71	1.5	1.0	1.0	2.0	-	14.7	2.07
153.308	709	908	1.8	61	1.0	2.0	5.0	3.3	1.5	22.2	1.88
153.310	704	903	2.5	84	2.5	3.0	2.0	3.0	-	14.0	2.19
153.311	629	828	1.5	81	2.0	2.0	1.0	2.5	-	16.0	2.10
153.313	629	903	2.8	86	3.5	2.5	2.0	2.3	1.0	13.5	1.97
153.315	630	903	1.3	69	1.0	2.0	2.0	2.8	1.0	15.4	2.00
153.316	630	901	1.3	74	2.0	2.0	1.0	2.5	1.5	13.8	2.06
154.195	710	916	1.8	56	1.0	2.5	2.0	3.0	2.0	21.4	2.04
171.421	630	831	1.3	74	2.5	3.0	1.0	2.3	1.0	13.9	2.13
181.532	707	908	1.8	58	1.0	2.5	5.0	3.5	1.5	22.8	1.49

Table 4.1 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

				Protein				
		Seed con		composition	Oil compo		Dise	
	Maturity	Protein	Oil	Methionine	Linoleic	Linolenic		tion
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	Ру
96.152	1	38.8	20.1	1.2	46.4	7.2	s	s
96.171	iı	39.7	17.0	1.3	43.8	8.5	S	S
96.188	ii	33.7 37.5	21.3	1.5	44.9	6.6	S	S
96.193	ï	39.4	20.5	1.1	47.6	8.0	S	S
96.195	' II	40.9	19.7	1.1	49.4	7.3	S	S
	" 	38.1	20.4	1.3	47.1	7.3 7.4	S	S
96.201 96.549	" II	40.7	19.3	1.3	47.1 45.5	8.0	S	S
	" 	39.9	20.5	1.3	47.0	6.9	S	S
97.605		39.9 37.7		1.2	47.0 49.0	7.5	S	
103.414	II		21.6					S
131.531	1	38.3	20.4	1.2	45.9	5.9	R	S
132.201	!	40.2	17.7	-	45.1	5.9	S	S
132.206	!	39.6	17.7	-	45.4	5.8	S	S
132.215	<u>.</u>	39.7	20.4	-	47.3	5.4	Н	S
135.589	II 	39.1	15.5	-	49.4	10.2	R	S
135.590	II	41.0	16.0	•	49.7	9.6	R	S
142.491	1	39.9	19.8	1.2	46.5	6.4	s	S
153.214	ı	41.1	18.2	-	48.0	6.1	S	S
153.215		37.1	21.3	-	47.0	6.2	S	s s s
153.226	li	38.9	20.3	1.3	48.1	7.0	s	S
153.227	l	36.8	21.1	1.3	49.3	7.5	S	
153.229	1	38.3	19.5	-	44.4	7.9	Н	S
153.236	1	39.0	20.4	1.2	47.5	7.3	S	s s s
153.238	1	38.8	20.2	1.3	47.5	7.0	S	S
153.244	1	37.8	19.8	1.3	46.7	7.0	Н	S
153.247	1	39.5	20.0	1.3	47.3	7.5	S	S
153.250	1	37.7	20.7	1.4	46.6	6.1	R	S
153.253	1	38.4	20.6	1.2	46.7	6.0	R	S
153.255	1	36.9	20.8	1.3	48.5	7.1	н	s
153.263	1	39.9	18.0	-	44.8	6.0	s	s
153.264	II	37.5	19.9	-	46.6	6.9	R	S
153.266	ï	37.1	21.0	-	45.8	6.2	s	S
153.267	i	39.0	20.5	-	47.4	5.8	S	S
153.271	i	39.2	17.8	-	46.1	6.0	S	S
153.274	i	37.2	19.2	_	45.6	6.7	R	S
153.276	i	37.3	21.1	_	42.4	5.5	s	s s
153.279	i	36.9	19.4		42.5	6.3	R	s
153.280	i	36.9	17.6	-	47.5	7.8	s	s
153.282	ï	38.3	20.4	<u>-</u> -	44.4	6.6	R	s
153.283	i	37.2	19.5	-	43.8	6.2	R	s
	i	39.6	18.1	_	41.9	5.9	s	s
153.285			20.3	_	47.6	5.9	S	S
153.287	!	38.4		•	47.0 47.0	7.6	R	
153.288	II	37.9	20.2	-			S	s s s
153.289	II .	37.9	17.3	-	48.6	8.0		3
153.290		40.9	18.2	-	49.7	6.8	S	5
153.291	!	38.0	20.1	-	46.7	7.9	S	S
153.294	!	37.0	22.8	-	46.5	5.5	S	s s
153.308	I .	37.6	20.5	1.2	44.6	5.8	R	S
153.310	I	38.1	21.8	-	46.0	5.1	S	S
153.311	I	36.2	21.7	-	45.3	5.6	S	S
153.313	1	39.0	19.4	1.1	46.7	6.8	R	S
153.315	1	38.9	19.4	1.2	43.4	6.7	S	S
153.316	1	38.8	20.0	1.3	44.6	5.8	S	S
154.195	II	37.5	21.0	1.4	45.2	6.5	S	S
171.421		39.0	20.8	1.2	47.3	5.9	s	S
181.532	•	38.4	20.4	1.3	45.5	6.0	R	s

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Maturity	
PI No.	name	acquisition	origin	or released	group	
181.533		Japan	Japan	1949	II	
181.534		Japan	Japan	1949	ii	
181.536		Japan	Japan	1949	ï	
181.537		Japan	Japan	1949	i	
181.538		Japan Japan		1949		
		· · · · · · · · · · · · · · · · · · ·	Japan		l "	
181.541		Japan	Japan	1949	11	
181.548 181.570		Japan	Japan	1949	II	
	Nikaani	Japan	Japan	1949		
184.042	Nikogri	Yugoslavia	Yugoslavia	1949		
184.043	M 7	Yugoslavia	Yugoslavia	1949		
184.044	Kasna Br. 443	Yugoslavia	Yugoslavia	1949	!	
184.045	M 14	Yugoslavia	Yugoslavia	1949	ı	
184.046	M 60	Yugoslavia	Yugoslavia	1949	ı	
189.863	Grignon 59	France	France	1950	1	
89.864	Early Brown	France	France	1950	1	
189.881	Zelena Echo	France	France	1950	1	
189.888	Mandarin Ottawa	France	France	1950	ı	
189.890	Mandarin Yowa	France	France	1950	1	
189.892	Reoz 20bis	France	France	1950	1	
189.896	Giessner Stamm 63	France	Germany	1950	1	
189.907	Helun nO1	France	France	1950	1	
189.911	Ried 528	France	France	1950	ı	
189.915	Scheoken	France	France	1950	ı	
189.916	Ta ching mi hwang tau tsa	France	China	1950	i	
189.917	Norddeutsche Gelbe	France	Germany	1950	i	
189.918	Dans Desmarais	France	France	1950	i	
189.919	Visuson	France	France	1950	i	
189.921	Rouest 82 Jaune Panache	France	France	1950	i	
189.922	Rouest 82 Jaune Mat	France	France	1950	1	
189.924	Graine Jaune	France	France	1950		
189.925	American Yellow	France	France	1950	-	
189.929	Mandchu Argentine	France	France	1950	i II	
189.930	Mandchurische	France	France			
189.931	Jaune de Mandchourie	France	France	1950	11	
189.941				1950	II	
	Rouest 1	France	France	1950	!	
189.945	C F	France	France	1950	!	
189.946	Tubingen	France	France	1950	I .	
189.947	Grignon 6	France	France	1950	1	
189.958	Noir Vah	France	France	1950	II	
189.962	Green	France	France	1950	l	
189.966	Grignon 22	France	France	1950	ı	
189.967		France	France	1950	1	
189.968	Tokio	France	France	1950	I	
196.150	Chuseihadaka	Japan	Japan	1951	H	
196.151	Chuseihikarikuro	Japan	Japan	1951	II	
196.154	Kitaminagaha	Japan	Japan	1951	II	
96.158	Nagabahadaka-1	Japan	Japan	1951	II	
96.159	Okuhara-1	Japan	Japan	1951	ï	
196.160	Ooyachi-2	Japan	Japan	1951	i	
196.161	Rankoshi-1	Japan	Japan	1951	, II	
196.163	Tokachinagaha	Japan	Japan	1951	"	
196.325		Germany	Germany	1951	" 	
200.479	Ishibai	Japan	Japan	1952	ı II	
200.473	Kairiyo shirome	•	•			
LUU.40Z	Kairiyo ətili ottib	Japan	Japan	1952	II	

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Matu-			Pubescence				<u>Seedc</u>		Other 1	raits		
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plan
181.533	II		В	-	_	C	D.:		.,				
181.534	 	D	P	T	E	Ssp	Br	D	Y	Br		Na	
		D	W	T	Ε	Ssp	Br	S	BI	BI			
181.536	1	D	P	-	-	G	ВІ	S	Y	Br			
81.537	II L	D	P	-	-	G	Br	S	Y	Br		Na	
81.538	1	D	P	T	E	Ssp	Br	D	Y	Br		Na	
81.541	 	D	W	Т	E	N	Br	S	Y	Br			
81.548		D	P	-	С	N	Tn -	S	Y	Bf			
81.570	!	D	P	G	Sa	N	Tn	D	Υ	Bf			
84.042	!	N	P	G	E	N	Br	S	Υ	Υ			
84.043	!	D	P	T	E	N	Br	D	Υ	Br	Abh		
84.044	!	D	P	T	E	N	Br	S	Υ	ВІ			
84.045	1	D	P	T	Ε	N	Br	D	Υ	Br	Abh		
84.046	1	N	Р	G	E	N	Br	S	Υ	Υ			
89.863	1	N	Р	Т	E	N	ВІ	D	Br	Br	Abh		
89.864	1	N	Р	Т	E	N	Br	D	Br	Br			
89.881	1	S	Р	G	E	N	Br	D	Υ	Υ			
89.888	1	S	Р	G	E	N	Tn	S	Υ	Υ			
89.890	1	N	Р	G	Ε	N	Br	D	Υ	Υ	Abh		
89.892	1	D	Р	G	Ε	N	Br	S	Υ	Υ	Abh		
89.896	1	D	Р	Т	Ε	Ssp	Br	D	Υ	Br	Abh		
89.907	1	N	Р	Т	Ε	N	Br	D	Υ	Br			
89.911	1	S	Р	T	Ε	N	Tn	S	Υ	ВІ			
89.915	I,	N	Р	Т	Ε	N	Br	S	Υ	Υ			
89.916	1	S	Р	Т	Ε	Ssp	Tn	D	Υ	Υ			
89.917	1	N	Р	Т	Ε	N .	ВІ	D	Υ	Y			
89.918	1	D	Р	Т	Ε	N	Br	S	Ÿ	Ý			
89.919	1	D	Р	Т	Ε	Ssp	Br	S	Y	Tn			
89.921	1	N	Р	Т	E	Ssp	Tn	D	Ÿ	Tn			
89.922	i	S	P	Ť	Ē	Ssp	Tn	D	Ÿ	Tn			
89.924	i	N	P	Ť	Ē	N	Tn	S	Ÿ	Y			
89.925	i	N	Р	Ť	Ē	N	Br	Ī	Ÿ	Br			
89.929	il	N	w	G	E	N	Tn	s	Ÿ	Bf			
89.930	ii	D	w	G	E	N	Br	S	Ÿ	Lbf			
89.931	ii	D	w	G	E	N	BI	S	Ÿ	Bf			
89.941	"	D	P	T	E	N	Tn	D D	r Bi	BI	Abh		
89.945	i	N	P	†	E	N	_	_			ADN		
89.946	i	S	P	, T	E	Ssp	Br Br	S S	BI Bi	Bi Bi	Floor	Dab	
89.947	i	D	P	†	E	N N	Br	S	Bi	BI	FIECK	משט	
89.958	' 	D	W	Ť	E	Ssp	Br	S	Bi	Bi			
89.962	" I	D	P	Ť	E	N N	Br	D D					
89.966	i	N	P	†	E	N	Br Br	S	Gn G	BI	A L L		
89.967	i	N	P	T						BI Gr	Abh		
89.968	l	N D	P	T	E E	Ssp	Br	S	Gn C-	Gn C=			
96.150	1			-		N	BI	ı	Gn	Gn B-			
96.150 96.151		D	P		-	G Sam	BI B:	S	Y	Br			
	II U	D	W	T	E	Ssp	Br	S	BI	BI			
96.154	11	D	P	Т	Ε	Ssp	Br	D	Y	Br		Na	
96.158	II .	D	P	-	-	G	Br	S	Y	Br		Na	
96.159	1 .	D	P	T	E	Ssp	Br	S	Υ	Br			
96.160	1	D	P	T	E	N	Br	S	Y	Br			
96.161	11	D	W	G	Ε	N	Tn	S	Υ	Bf			
96.163	11	D	Р	Т	Ε	Ssp	Br	D	Υ	Br		Na	
96.325	1	N	Р	Т	Ε	N	Br	1	BI	BI			
00.479	11	D	W	Т	Α	N	Br	D	Υ	Br			
00.482	11	D	Р	G	Sa	N	Br	D	Υ	Bf			
00.508	1	D	Р	G	Α	N	Br	D	Υ	Bf			

Table 3.1 Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
181.533	710	915	1.1	64	1.0	3.0	4.0	2.8	2.0	15.6	1.96
181.534	708	918	1.1	56	1.0	3.0	4.0	3.0	-	29.2	1.69
181.536	710	926	1.3	41	1.0	3.0	1.0	2.5	2.5	14.2	1.28
181.537	712	926	1.0	38	1.0	3.0	4.0	2.8	2.0	21.2	1.10
181.538	708	909	1.4	66	1.0	2.0	5.0	2.3	2.5	16.5	1.61
181.541	723	925	2.4	86	1.0	3.0	5.0	2.5	2.5	14.5	1.67
181.548	724	928	2.6	76	1.0	3.0	1.0	2.0	1.5	15.0	1.74
181.570	719	908	2.8	66	1.0	2.5	5.0	2.5	1.5	12.6	1.29
184.042	630	831	1.9	84	2.5	2.0	2.0	2.5	1.0	13.5	2.21
184.043	630	904	3.2	79	1.5	3.0	2.0	2.8	1.0	10.0	1.84
184.044	702	909	2.1	79	1.5	2.0	1.0	3.0	1.0	15.1	2.29
184.045	630	901	3.3	76	1.0	2.0	2.0	3.0	1.0	10.4	1.92
	630	826	1.4	84	3.0	2.0	1.0	2.8	1.0	12.9	1.86
184.046			2.1	84	3.0	2.0	2.0	2.8		11.8	1.72
189.863	629	902 908	2.1 2.4	86	3.0	2.5	1.0	2.8	-	14.7	2.41
189.864	707			66	2.0	2.0	1.0	2.5	1.0	14.2	2.04
189.881	629	828	1.3				1.0	2.8	1.0	12.6	2.03
189.888	630	830	2.6	86	2.0	3.0			1.0	12.0	1.97
189.890	629	828	2.3	99	3.5	2.0	1.0	2.0			
189.892	629	902	1.3	76	1.5	2.0	1.0	2.5	1.5	14.5	2.45
189.896	704	903	2.4	64	1.0	3.0	3.0	3.0	1.0	16.4	1.94
189.907	630	826	1.8	76	3.0	2.0	1.0	2.8	1.0	13.5	1.54
189.911	629	828	1.4	74	2.0	2.0	1.0	3.0	1.0	12.9	1.90
189.915	630	902	1.4	94	3.0	2.0	1.0	2.5	1.5	13.3	2.17
189.916	630	902	2.4	76	2.0	2.0	1.0	2.8	1.0	13.8	2.13
189.917	629	830	1.8	81	3.0	2.0	2.0	3.0	1.0	13.4	1.90
189.918	629	830	1.4	81	1.5	2.0	1.0	3.8	2.0	14.6	2.15
189.919	702	904	2.2	74	1.0	2.0	1.0	2.5	4.5	13.5	1.73
189.921	701	903	2.0	71	2.5	2.0	2.0	2.3	1.0	13.5	1.96
189.922	630	902	2.2	71	2.0	2.0	2.0	2.3	1.0	13.0	2.01
189.924	705	908	2.7	94	3.5	2.5	1.0	3.0	2.0	12.3	1.92
189.925	703	908	1.6	84	3.0	2.0	1.0	2.8	1.5	13.5	2.15
189.929	706	912	1.9	94	3.0	2.0	1.0	2.8	1.0	15.6	2.71
189.930	703	912	1.7	84	1.5	2.0	1.0	3.3	1.5	20.5	2.70
189.931	701	908	1.2	66	1.5	2.0	3.0	3.3	1.0	12.8	1.87
189.941	628	830	1.1	33	1.0	3.0	2.0	2.5	-	14.9	1.16
189.945	629	901	3.0	104	2.5	2.5	2.0	2.3	-	11.1	2.04
189.946	705	831	2.1	81	2.0	3.0	1.0	2.3	-	9.5	1.88
189.947	701	903	3.8	48	1.0	3.0	4.0	2.8	-	12.6	1.08
189.958	709	916	1.2	53	1.0	3.0	4.0	3.0		22.0	2.13
189.962	704	830	1.1	41	1.0	2.5	2.0	3.5	1.0	21.5	1.45
189.966	701	905	2.4	84	2.5	2.5	1.0	2.8	3.0	15.2	1.47
189.967	703	906	2.3	97	3.0	2.5	1.0	3.3	2.5	11.4	2.10
189.968	629	829	1.2	69	1.5	2.0	1.0	2.8	1.5	13.9	2.13
196.150	716	927	1.1	41	1.0	3.0	1.0	2.5	1.5	15.7	1.08
196.151	706	915	1.2	56	1.0	3.0	4.0	3.0	-	28.1	1.98
196.154	711	911	1.4	69	1.0	2.0	5.0	2.8	1.5	17.4	1.87
196.158	713	923	1.2	43	1.0	3.0	4.0	2.5	1.5	20.6	1.41
196.159	630	828	1.2	43	1.0	2.5	5.0	3.0	1.5	21.5	1.45
196.160	708	910	1.8	61	1.0	2.5	4.0	3.5	2.0	24.1	2.05
196.161	708	910	2.7	56	1.0	3.0	4.0	2.5	1.5	18.8	2.64
196.163	712	914	1.4	74	1.0	2.0	5.0	2.5	2.0	15.4	2.41
196.325	629	905	2.7	99	4.0	3.0	2.0	2.8	-	13.0	2.13
200.479	721	911	4.0	84	1.0	3.0	5.0	2.0	2.5	10.2	1.77
200.479	721	911	3.3	69	1.0	3.0	5.0	2.3	1.5	12.3	1.73
200.482	718	911	3.8	79	1.0	3.0	5.0	3.0	1.5	13.1	1.88

Table 4.1 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

				Protein				
			<u>mposition</u>	composition	Oil comp		Dise	
F	Maturity	Protein	Oil	Methionine	Linoleic	Linolenic		tion
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	Ру
181.533	II	39.0	19.4	1.2	48.1	7.4	н	s
181.534	ii	38.2	20.3	•	43.5	5.5	R	S
181.536	ï	38.5	18.2	1.2	45.7	8.1	R	s
181.537	II	39.3	19.2	1.3	43.3	7.1	S	s
181.538	ï	39.0	19.0	1.3	48.0	7.1	H	s
181.541	il	43.2	16.3	1.2	46.7	7.6	s	s
181.548	ii	38.0	18.7	1.2	45.1	7.3	s	s
181.570	ï	41.4	15.1	1.1	43.6	8.5	H	s
184.042	i	37.2	20.4	1.3	45.7	6.8	s	s
184.043	i	36.8	19.8	1.2	45.8	7.1	s	s
184.044	i	37.1	21.5	1.3	48.8	7.5	S	s
184.045	i	35.9	20.8	1.4	46.5	7.3 7.2	S	S
184.046		39.7	20.0	1.2	45.3	6.6	S	S
189.863	i	38.1	19.7	-	52.6	4.9	S	S
189.864	i	38.0	18.9	-	47.7	7.7	S	S
	1		19.4	1.5			S	5
189.881 189.888		37.4			45.8 47.7	7.2		s s
	!	38.7	19.7	1.3	47.7	7.2	S	S
189.890	!	36.9	20.0	1.3	50.2	7.6	S	5
189.892	1	37.0	20.4	1.3	43.7	6.4	S	S
189.896	1	38.7	22.6	1.4	45.1	5.3	R	S
189.907	<u> </u>	38.2	22.5	1.3	47.3	5.9	S	S
189.911	I	38.0	22.0	1.4	47.7	6.7	S	S
189.915	1	38.1	19.5	1.4	49.1	8.4	S	S
189.916	I	38.2	20.2	1.4	46.9	6.6	S	S
189.917	Į	38.0	19.5	1.3	48.1	8.9	S	S
189.918	1	37.5	20.5	1.3	43.8	6.2	S	s s
189.919	I	38.1	20.1	1.4	48.8	7.1	S	S
189.921	1	39.0	20.0	1.4	48.2	6.9	S	S
189.922	1	39.2	20.5	1.4	47.8	6.7	S	S
189.924	1	38.0	18.7	1.3	46.9	7.2	S	s
189.925	1	38.5	20.0	1.3	48.6	7.1	S	S
189.929	II	38.3	21.8	1.2	48.2	6.1	S	s
189.930	II	39.0	22.3	1.2	48.5	6.5	S	S
189.931	II	39.3	20.0	1.2	45.9	6.1	s	S
189.941	t	38.4	21.3	-	48.8	5.6	s	S
189.945	1	39.5	18.6	<u>.</u>	49.3	6.3	s	s
189.946	ı	38.0	19.1	-	48.9	6.6	R	S
189.947	1	38.2	19.3	-	51.6	4.3	R	S
189.958	II	37.1	20.7	-	46.7	6.5	R	s s
189.962	ĺ	37.6	20.9	1.2	46.4	6.6	s	S
189.966	1	37.7	21.5	1.3	45.4	5.5	R	
189.967	ı	37.2	20.4	1.4	47.1	6.3	s	s s s
189.968	i	40.3	20.8	1.3	46.4	6.7	S	S
196.150	İ	39.2	17.6	1.3	47.8	8.2	R	S
196.151	ii	38.0	20.6		44.6	5.8	R	s
196.154	ii	40.4	19.3	_	48.3	7.1	s	s s
196.158	 II	39.5	19.9	1.3	44.9	7.3	s	s
196.159	i'	38.7	20.6	1.2	45.0	5.4	R	s
196.160	i	38.5	20.8	1.2	46.9	6.0	R	S
196.161	ii	38.1	20.8	1.2	46.8 46.8	6.6	R	S
	"							
196.163		39.0	19.5	1.3	49.9	7.5 6.5	S	S
196.325	!	39.6	18.3	-	50.3	6.5	S	S
200.479	II 	39.9	17.2	1.2	47.1	9.1	Н	S
200.482	II .	40.6	21.1	1.1	46.6	8.8	S	S
200.508	ı	39.2	17.5	1.1	45.9	7.9	R	??

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

		Country	Country	Year		
	Accession	of	of 	introduced	Maturity	
PI No.	name	acquisition	origin	or released	group	
00.552	Yore	Japan	Japan	1952	И	
200.592	Agloi Victores	Belgium	China	1952	II	
200.593	Konistra	Belgium	China	1952	1	
00.594	La Fleche	Belgium	China	1952	1	
200.596	Serckop	Belgium	China	1952	П	
04.653	Strengs Weihenstephaner Schwarze	Germany	Germany	1953	ı	
05.085	l higo wase	Israel	Japan	1953	I	
05.092	Shirohana sai No. 1	Israel	Japan	1953	П	
27.213	Sode furi	Japan	Japan	1955	II	
27.321	Fukuju	Japan	Japan	1955	II	
27.322	Genpokin	Japan	Japan	1955	l	
27.324	Kingen No. 1	Japan	Japan	1955	11	
27.325	Kingen No. 2	Japan	Japan	1955	ï	
27.329	Mansokin	Japan	Japan	1955	i	
27.331	Murasakibana No. 4	Japan	Japan	1955	i	
27.333	Ohoju	Japan	Japan	1955	N	
27.334	Shokino No. 1	Japan	Japan	1955	 II	
27.558	Tokachihadaka	Japan	Japan	1955	ii	
27.684	Aiohigu	Japan	Japan	1955	 II	
29.322	Hajinomi	Japan	Japan	1955	ii	
29.328	Kairyogionbo	Japan	Japan	1955	i i	
29.331	Kasugazairai	Japan	Japan	1955	11	
29.354	Shirazaya No. 1	Japan	Japan	1955	ï	
32.987	Omazaya 140. 1	China	China	1956	, II	
32.988	Harbin No. 413	China	China	1956	ii	
32.989	Transmit No. 410	China	China	1956	ii	
32.990		China	China	1956	ii	
32.991		China	China	1956	ii	
32.993	Kono No. 207	Japan	Japan	1956	ii	
38.922	Dornburger Weisbluhende	Czechoslovakia	Czechoslovakia	1957	ii	
38.930	Shatukinnashi	Japan	Japan	1957	ii	
48.396	Bogatic	Yugoslavia	Yugoslavia	1958	ii	
.48.397	Dobrudza No. 14	Yugoslavia	Yugoslavia	1958	i'	
48.398	Illinois No. 301	Yugoslavia	United States	1958	i II	
48.400	Kragujevac No. 4	Yugoslavia	Yugoslavia	1958	ï	
48.406	Osijecka	Yugoslavia	Yugoslavia	1958	i	
48.407	Sremska Mirtovica	Yugoslavia	Yugoslavia	1958	i	
48.409	Subotica	Yugoslavia	Yugoslavia	1958	i	
48.410	Turkish	Yugoslavia	Yugoslavia	1958	i	
48.509A	Tarkion	Japan	China	1958	i	
50.844		Iran	Iran	1958	i	
51.585	Dobrudza	Yugoslavia	Yugoslavia	1958	i	
51.586	Zagrebacka Rana	Yugoslavia	Yugoslavia	1958	i	
53.650A	_agrosoca rana	Netherlands	China	1958	, II	
53.650B		Netherlands	China	1958	II	
53.652C		Netherlands	China	1958	ï	
53.652D		Netherlands	China	1958	-	
.53.653C		Netherlands	China	1958	<u>'</u>	
.63.653D		Netherlands Netherlands	China	1958	<u> </u>	
		Netherlands Netherlands	China China		1	
153.658A				1958	!	
53.658B		Netherlands Netherlands	China China	1958		
153.658C	Panatau No. 1	Netherlands	China	1958	I 	
261.472	Ranetsu No. 1	Japan	Japan China	1959	II II	
261.474 266.085A	Kohojo	Japan AA	China	1959	II 	
COEA		Malaysia	China	1960	II.	

Table 2.1 Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

	Matu-			Pubes	cence	· · · · · · ·		Seedce	oat		Other to	aits	
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plan
200.552	II.	D	w	Т	_	Con	T.,		V	D.,			
200.582 200.592	" 	N	P	†	E	Ssp	Tn T	S	Y	Br			
					E	N	Tn	ı	Y	Tn			
200.593	!	D	P	G	E	N	Br —	S	Υ	Y			
200.594	!.	S	P	T	E	N	Tn	D	Υ	Br			
200.596	II ·	N	P	G -	E	N	Tn	D	Y	Y			
204.653	!	N	P	T	E	N	Br	S	ВІ	ВІ			
205.085	ı	D	W	G	Α	Ssp	Br	D	Υ	Bf			
205.092	II	D	W	G	E	N	Tn	ı	.Υ	Bf			
227.213	II	D	Р	T	Ε	N	Br	1	Gn	BI			
227.321	II	N	Р	G	Ε	N	Tn	D	Υ	Υ			
227.322	1	N	W	G	Ε	N	Br	S	Υ	Lbf			
227.324	II	N	W	G	Ε	N	Tn	S	Υ	Bf			
227.325	1	D	W	G	Ε	N	Br	S	Y	Lbf	Sabh		
227.329	1	N	W	G	Ε	N	Br	S	Ÿ	Lbf			
227.331	1	D	P	G	Ē	N	Br	D	Ÿ	Y.			
227.333	П	D	W	G	E	N	Br	s	Y	Lbf			
227.334	ii	D	W	G	Ē	N	Br	S	Ÿ	Bf			
227.558	ii	D	P	-	-	G	BI	S	Ÿ	Br			
227.684	 	D	w	T	Sa	N	Br	D	Gn	Br			
229.322	ii	D	w	Ť									
					A	N	Br	D	Rbr	Rbr			
229.328	<u> </u>	D	W	G	Sa	N	Br	D	Y	Bf			
229.331	II ·	D	P	G	Sa	N	Br	D	Ý	Bf			
229.354	1	D	Р	G	Α	Ssp	Tn	D	Υ	Bf			
232.987	II	N	Р	Т	Α	Ssp	Br	S	Br	Br			S
232.988	II	N	Р	T	Sa	Ssp	Br	S	Br	Br			S
232.989	II	N	Р	T	Sa	Ssp	Br	D	ВІ	ВІ			S
232.990	II	N	Р	T	Sa	Ssp	Br	S	Br	Br			S
232.991	H	N	Р	T	Α	Ssp	Br	В	ВІ	BI			S۱
232.993	П	N	W	T	Ε	N	Br	S	ВІ	ВІ	Gncot		
238.922	II	N	W	T	Ε	N	ВІ	S	Υ	BI			
238.930	II	D	W	Т	Α	N	Tn	D	Υ	Br			
248.396	П	N	Р	G	Ε	N	Br	D	Y	lb			
248.397	1	D	Р	Т	E	N	Br	D	Y	Br	Abh		
248.398	il .	N	P	Ť	E	N	Br	S	Ÿ	BI	ADII		
248.400	ï	D	Р	Ť	Ē	Ssp	Br	D	Ÿ	Br	Abh		
248.406	i	S	Р	Ġ	Ē	N	Br	S	Ÿ		ADII		
248.407	i	D	Р	T	E	N	Br	S		Y D-	A h.h.		
248.409 248.409	1	S	P	Ť	E	N	Br	D D	Y Y	Br Br	Abh Abh	Det	
248.410 248.410		N	P	T						Br	Abh	Dab	
248.410 248.509A	1				E	N	Br B-	D	BI	BI			
	1	N	W	G	E	N	Br	S	Y	Y			
250.844	!	D	P	T	E	Ssp	Br	S	Y	Br	Abh	Sdal	0
251.585	!	D	P	T	E	N	Br	D	Υ	Br	Abh		
251.586	! 	N	P	G	E	N	Br	S	Υ	Y			
253.650A	II 	D	P	G	E	Ssp	Br	S	Υ	G			
253.650B	II .	N	Р	G	E	N	Br	S	Υ	Υ			
253.652C		S	Р	G	E	N	Br	S	Υ	Υ			
253.652D	1	N	W	G	Ε	N	Br	S	Υ	Υ			
253.653C	ı	N	Р	Т	E	N	Tn	D	Υ	Br			
253.653D	1	D	W	G	Ε	N	Br	S	Υ	Bf			
253.658A	1	N	Р	G	Ε	N	ВІ	s	Υ	lb			
253.658B	1	N	W	G	Ē	N	Br	S	Ÿ	Y			
253.658C	i	D	P	G	E	N	Br	S	Ÿ	, lb			
261.472	i	D	w	G	E	N	Tn	S	Y	Bf			
261.474	ii	D	W	G	E	N		S	Y	Y			
£U1.7/7	11	U	44	J		1.4	Br	3	T	1			

Table 3.1
Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

	Flowering	Maturity	Lodging (score)	Height	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
Entry	(mmdd)	(mmdd)	(80018)	(6111)	(80018)	(80016)	(80010)	(800/0)	(300/0/	(cg/cu/	(IVIg/IIII/
200.552	721	916	2.3	89	1.0	3.0	4.0	2.0	2.5	11.8	1.54
200.592	710	913	2.3	91	3.0	2.5	2.0	2.8	1.5	11.8	2.10
200.593	701	905	1.3	56	1.0	2.0	1.0	2.3	1.0	14.4	2.30
200.594	701	830	1.7	71	2.0	3.0	1.0	2.3	1.5	13.9	2.07
200.596	715	918	2.4	91	3.0	3.0	1.0	2.5	1.5	18.4	2.06
204.653	629	831	3.1	91	4.0	3.0	2.0	2.5	-	12.0	2.08
205.085	712	827	2.2	66	1.0	2.0	5.0	1.5	1.5	8.5	1.07
205.092	718	911	2.3	76	1.0	2.5	5.0	2.5	1.0	14.9	1.71
227.213	709	920	1.3	66	1.0	3.0	4.0	3.0	2.5	19.4	1.42
227.321	712	912	2.7	89	3.0	2.0	1.0	2.8	1.0	17.5	2.47
227.322	629	829	1.8	79	3.0	2.0	1.0	2.5	1.0	14.8	1.85
227.324	707	911	2.2	89	3.0	2.0	2.0	2.5	1.0	13.8	2.26
227.325	630	901	1.2	71	1.0	2.0	1.0	3.5	2.0	16.2	1.86
227.329	701	905	2.8	94	3.0	2.0	1.0	3.3	1.0	15.5	1.89
227.331	630	831	1.4	69	1.0	2.0	1.0	3.0	2.0	14.6	2.16
227.333	703	911	2.2	84	1.0	2.5	1.0	3.3	1.5	20.6	2.64
227.334	707	913	1.8	81	1.0	2.0	1.0	3.0	1.0	15.5	3.05
227.558	716	924	1.6	38	1.0	3.0	4.0	2.5	2.0	15.4	1.20
227.684	721	916	3.3	76	1.0	3.0	4.0	2.3	2.0	12.2	1.92
229.322	720	910	3.1	84	1.0	3.0	5.0	2.3	-	11.2	1.86
229.328	713	904	1.7	58	1.0	2.5	5.0	2.0	1.0	11.1	1.39
229.331	719	910	3.0	66	1.0	3.0	5.0	2.3	1.5	12.2	1.71
229.354	715	903	2.5	61	1.0	3.0	4.0	1.8	1.5	11.4	1.41
232.987	713	909	3.8	64	4.0	4.0	2.0	2.0	-	5.5	1.67
232.988	717	914	4.3	74	4.0	4.0	3.0	2.0	-	4.8	1.83
232.989	718	914	4.3	74	4.0	4.0	3.0	2.3	-	5.1	1.82
232.990	718	913	4.3	64	4.0	4.0	2.0	2.0	-	5.1	1.46
232.991	716	914	4.3	66	4.0	4.0	2.0	2.0	-	5.8	1.41
232.993	713	910	1.3	79	3.0	3.0	2.0	2.5	-	12.7	2.11
238.922	630	913	1.8	97	4.0	3.0	2.0	2.3	1.0	13.7	1.67
238.930	720	911	2.8	79	1.0	3.0	5.0	2.5	1.5	18.5	1.58
248.396	705	914	1.7	104	3.5	2.0	1.0	2.5	1.0	18.3	2.76
248.397	630	902	3.3	69	1.0	2.5	1.0	2.8	1.0	9.8	1.84
248.398	707	917	1.8	81	2.5	2.0	1.0	3.0	1.5	20.7	2.99
248.400	630	902	3.0	69	1.0	2.5	2.0	2.5	1.0	9.7	2.05
248.406	630	829	1.4	76	2.0	2.0	1.0	2.3	1.0	14.4	2.17
248.407	630	830	1.3	58	1.0	2.0	1.0	2.3	1.0	10.0	1.57
248.409	630	828	2.8	69	2.0	2.0	1.0	2.3	1.0	8.3	1.74
248.410	630	901	2.4	89	2.5	2.0	2.0	2.0	-	13.2	1.88
248.509A	701	906	2.3	91	3.0	2.0	1.0	2.8	1.0	15.3	1.98
250.844	709	907	2.3	74	1.0	2.5	2.0	2.3	1.0	11.4	2.33
251.585	630	903	2.7	69	1.5	2.0	2.0	3.0	1.0	10.3	1.97
251.586	630	830	1.2	86	3.0	2.0	1.0	3.0	1.0	14.0	1.92
253.650A	710	914	1.5	56	1.0	2.0	1.0	2.3	1.5	15.3	2.31
253.650B	702	913	2.3	99	3.5	2.0	2.0	3.0	1.0	15.4	2.38
253.652C	701	902	1.3	71	2.0	2.0	1.0	2.8	1.0	14.2	1.71
253.652D	704	914	2.2	112	3.5	2.0	1.0	3.3	1.0	13.5	2.23
253.653C	702	905	2.2	81	3.0	2.0	1.0	2.8	1.5	15.0	2.19
253.653D	708	917	1.9	71	1.0	2.0	1.0	3.3	1.0	14.5	2.83
253.658A	705	918	2.8	102	3.0	3.0	1.0	3.0	2.0	17.0	2.51
253.658B	701	902	2.4	94	3.0	2.0	1.0	3.0	1.0	15.1	1.92
253.658C	710	911	1.2	56	1.0	2.5	1.0	2.5	2.0	13.5	2.01
261.472	709	914	1.8	51	1.0	3.0	5.0	2.8	1.5	19.0	2.25
261.474	703	916	1.9	84	1.5	2.0	1.0	3.8	1.5	20.1	2.96
266.085A	706	913	1.8	81	1.5	2.0	1.0	3.0	1.0	15.5	2.96

Table 4.1 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed cor	nposition	Protein <u>composition</u>	Oil comp	osition	Dise	ase
	Maturity	Protein	Oil	Methionine	Linoleic	Linolenic	reac	tion
Entry	group	(%)	(%)	(% protein)	(%)	(%)	PR	Ру
200.552	II	41.2	15.1	1.4	48.6	9.6	s	s
200.592	ii	38.7	20.3	1.5	49.5	7.7	S	s
200.593	ï	37.9	21.9	1.3	50.0	6.7	S	S
200.594	1	39.9	21.3	1.3	48.1	6.2	S	S
200.596	11	41.5	19.4	1.2	44.7	7.4	S	s
204.653	ï	41.0	17.8	-	49.5	6.8	S	s
205.085	i	37.1	13.7	1.4	47.7	8.9	R	s
205.092	ii	39.1	17.3	1.4	45.6	8.2	Ĥ	S
200.092 227.213	ii	39.0	20.5	-	44.0	6.7	H	S
227.213 227.321	ii	40.8	19.1	1.2	44.2	7.5	S	S
	"	39.6	21.1	1.1	44.2 45.4	7. 5 7.4		S
227.322	ii	39.6 36.9		1.2	46.9	7. 4 6.8	Н	
227.324			21.9				S	S
227.325	1	39.8	20.5	1.2	45.2	7.2	S	s
227.329	l	37.1	22.0	1.2	46.5	6.2	Н	S
227.331	l "	40.3	19.8	1.2	46.3	7.4	S	S
227.333	11	38.8	22.2	1.2	49.2	6.9	Н	S
227.334	II ::	37.9	22.5	1.1	48.5	6.6	S	S
227.558	II	40.1	18.3	1.1	46.1	8.0	R	S
227.684	II	40.3	17.5	1.1	44.9	7.9	R	S
229.322	11	39.4	17.1	-	47.3	8.5	R	R
229.328	I	41.7	16.5	1.1	46.7	9.1	R	S
229.331	II	41.2	16.5	1.1	42.7	8.7	S	S
229.354	I	40.6	21.1	1.1	45.7	7.8	Н	s
232.987	II	41.0	16.1	-	49.2	8.7	S	S
232.988	II	41.3	14.7	-	49.7	9.8	R	S
232.989	11	40.5	19.7	-	49.8	10.0	R	S
232.990	11	41.0	15.0	-	49.6	9.7	R	S
232.991	11	39.8	15.5	-	47.8	9.1	R	s
232.993	11	38.3	20.1	-	45.8	6.9	s	s
238.922	11	40.6	19.3	1.1	47.9	8.5	s	s
238.930	11	39.5	18.0	1.1	44.2	7.2	s	R
248.396	11	38.5	21.9	1.2	45.5	6.3	S	S
248.397	1	37.5	19.5	1.2	46.0	7.1	R	s
248.398	11	39.1	20.3	1.3	48.2	7.3	S	R
248.400	ï	37.2	19.7	1.2	46.3	7.3	H	s
248.406	i	39.6	19.6	1.2	46.3	7.4	s	s
248.407	i	37.5	19.5	1.2	45.3	7.5	s	s
248.409	i	38.2	18.0	1.2	46.7	8.2	H	s
248.410	i	37.2	19.9	-	46.5	5.7	R	s
248.509A	i	37.4	21.4	1.3	47.3	6.5	s	s
250.844	i	38.5	20.8	1.3	46.2	6.4	s	s
251.585	i	37.1	19.8	1.3	45.9	6.9	Н	S
251.586	i	39.3	20.4	1.3	46.3	6.6	S	S
	II	36.7	19.9	1.3	42.9	6.8	S	S
253.650A								
253.650B	II I	37.1 27.1	20.6	1.3	48.6 46.9	7.2 6.2	S	S
253.652C	!	37.1	21.5	1.3	46.8	6.2	Н	S
253.652D	1	37.6	21.5	1.4	48.1	7.6	S	S
253.653C	I.	37.1	21.1	1.4	49.9	7.6	s	S
253.653D	!	36.7	22.1	1.3	47.1	7.1	S	S
253.658A	ı	36.9	21.0	1.4	46.7	7.2	S	S
253.658B	I	36.7	21.9	1.4	44.9	6.6	н	S
253.658C	ı	37.1	20.1	1.4	49.2	7.1	S	S
261.472	II	37.1	20.8	1.3	46.8	7.0	R	R
261.474	11	36.9	21.4	1.3	48.8	6.8	s	R
266.085A	II	36.1	22.4	1.3	49.5	6.6	s	S

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
266.085B		Malaysia	China	1960	II
266.085C		Malaysia	China	1960	II
266.806A		Netherlands	China	1960	II
266.806B		Netherlands	China	1960	П
266.807A		Netherlands	China	1960	П
266.807B		Netherlands	China	1960	II
266.807C		Netherlands	China	1960	1

Table 2.1
Descriptive data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807

				Pubescence				Seedc	Seedcoat			Other traits		
Entry	Matu- rity group		Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant	
266.085B	11	N	Р	G	E	N	Tn	D	Υ	Υ				
266.085C	11	D	Р	G	Ε	N	Br	S	Υ	lg				
266.806A	11	D	W	G	E	N	Br	S	Υ	Ý				
266.806B	П	D	W	G	E	N	Br	S	Υ	Bf				
266.807A	11	D	W	G	E	Ssp	Br	S	Υ	Υ				
266.807B	H	N	W	G	E	N	Br	S	Υ	Bf				
266.807C	ı	N	Р	Т	Ε	N	Br	D	Tn	Tn				

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Table 3.1
Agronomic data for USDA soybean germplasm collection in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

	Flowering	Maturity			Stem term-	Branch-		Seed			
Entry	date (mmdd)	date (mmdd)	Lodging (score)	Height (cm)	ination (score)	ing (score)	tering (score)	Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
266.085B	706	910	2.8	91	3.0	2.5	1.0	2.3	1.0	14.9	2.50
266.085C	705	914	2.1	89	1.0	2.0	1.0	3.5	1.0	16.8	2.66
266.806A	710	923	1.6	27	1.0	2.5	1.0	3.0	1.0	20.4	2.49
266.806B	707	912	1.8	81	1.0	2.0	1.0	3.3	1.0	15.0	2.72
266.807A	710	923	1.6	69	1.0	2.5	1.0	3.0	1.0	20.4	2.49
266.807B	710	917	2.3	99	3.0	2.5	1.0	3.3	1.0	15.4	2.56
266.807C	702	830	2.3	84	3.0	2.0	1.0	2.8	1.5	14.1	2.00

Table 4.1
Seed composition and disease reaction data for USDA soybean germplasm in maturity groups I to II, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed con	nposition	Protein composition	Oil compo	sition	Dise	ase
Entry	Maturity group	Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	reac PR	tion Py
266.085B	II	36.9	19.8	1.3	47.1	7.4	s	н
266.085C	II	37.4	22.0	1.3	47.7	6.8	s	S
266.806A	II	36.9	20.3	-	48.6	6.8	s	S
266.806B	II	36.8	22.8	1.2	48.4	6.6	s	s
266.807A	II	36.9	20.3	1.2	48.6	6.8	s	s
266.807B	II	37.8	21.5	1.2	47.0	6.7	s	S
266.807C	ĺ	39.8	20.2	1.2	47.8	5.8	S	S

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

		Country	Country	Year	Matur-
	Accession	of	of	introduced	ity
No.	name	acquisition	origin	or released	group
	A.K. (Harrow)	Canada	Canada	By 1939	Ш
	A.K. [FC 30761]	United States	China	By 1917	IV
	A.K. [Kansas]	United States	United States	By 1949	īV
	Adams	United States	United States	1948	Ш
	Adelphia	United States	United States	1964	111
	Aoda	United States	Japan	1939	IV
	Bethel	United States	United States	1961	IV
	Boone	United States	China	1935	IV
	Chestnut	United States	Russia	1910	Ш
	Chief	United States	United States	1940	IV
	Chusei	United States	Japan	1936	Ш
	Clark	United States	United States	1953	IV
	Clark 63	United States	United States	1963	IV
	Cloud	United States	China	1910	Ш
	Columbia	United States	China	1910	Ш
	Delmar	United States	United States	1963	IV
	Dunfield	United States	China	1923	Ш
	Ebony	United States	D.P.R. of Korea	1907	IV
	Emperor	United States	D.P.R. of Korea	1939	IV
	Ford	United States	United States	1958	Ш
	Fuji	United States	Japan	1936	Ш
	Funk Delicious	United States	Japan	1932	IV
	Gibson	United States	United States	1942	IV
	Granger	United States	United States	1941	Ш
	Green and Black	United States	Rep. of Korea	1941	IV
	Guelph	United States	Japan	1907	III
	Harbinsoy	United States	China	By 1932	IV
	Harman	United States	United States	1943	111
	Higan	United States	Japan	1936	IV
	Hokkaido	United States	Japan	1936	IV
	Hongkong	United States	Hong Kong	1910	IV
	Hurrelbrink	United States	D.P.R. of Korea	By 1923	IV
	Illington	United States	Japan	1938	Ш
	Illini	United States	China	1927	Ш
	llsoy	United States	D.P.R. of Korea	By 1927	III
	Imperial	United States	Japan	1939	IV
	Jefferson	United States	Rep. of Korea	1941	IV
	Jogun	United States	D.P.R. of Korea	1936	III
	Kanrich	United States	United States	1956	111
	Kent	United States	United States	1961	IV
	Kim	United States	United States	1956	III
	Kingston	United States	Japan	1907	IV
	Kingwa	United States	China	1931	IV
	Kura	United States	Japan	1929	III
	Lincoln	United States	United States	1943	III
	Macoupin	United States	United States	1930	IV
	Manchu	United States	China	1918	III
	Manchu 2204	United States	United States	By 1942	III
	Manchu [Lafayette]	United States	United States	1943	III
	Manchuria 13177	United States	China	By 1940	III
	Manchuria 20173	United States	China	By 1948	III
	Mandell	United States	China	By 1934	III
	Mansoy	United States	China	By 1928	III
	Midwest	United States	China	1910	IV
	Mingo	United States	China	By 1940	111

Table 2.2 Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	N4 - 4: :		Pubescence					Seedce	oat	Other traits			
	Matu- rity	Stem	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plan
A.K. (Harrow)	III	N	w	G	E	N	Br	s	Y	Bf			
A.K. [FC 30761]	IV	N	W	T	Ε	N	Br	S	Υ	Br			
A.K. [Kansas]	IV	N	Р	Lt	E	N	Br	D	Gn	Br			
Adams	111	N	W	G	Ε	N	Tn	S	Υ	Bf			
Adelphia	Ш	N	W	G	E	N	Tn	S	Υ	Bf	_		
Aoda	IV	D	Р	G	E	Ssp	Br	D	Gn	Bf	Gnco	t	
Bethel	IV	N	W	G	E	N	Br	D	Y	Y			
Boone	IV	N	W	G	Ε	N	Br	S	Y	Bf			
Chestnut	Ш	N	Р	Lt	E	N	ВІ	D	Br	Br		Dat)
Chief	IV	N	P	G	E	N	Br	S	Y	lb			
Chusei	Ш	D	W	G	Sa	Ssp	Tn	D	Y	Y			
Clark	IV	N	Р	T	E	N	Br	D	Y	BI			
Clark 63	IV	N	Р	T	E	N	Br	D	Y	BI			
Cloud	Ш	N	W	Lt	E	N	Br	D	BI	BI	_		
Columbia	111	N	P	G	E	N	Dbr	S	Gn	Bf	Gncc	t	
Delmar	IV	N	W	G	E	N	Br	D	Υ	Y			
Dunfield	Ш	N	W	G	E	N	Tn	S	Υ	Bf			
Ebony	IV	D	P	Lt	E	N	Br	S	ВІ	ВІ			
Emperor	IV	D	Р	G	Ε	Ssp	Br	D	Υ	Υ			
Ford	Ш	N	W	T	Ε	N	Br	S	Υ	ВІ			
Fuji .	Ш	D	W	Т	E	N	Br	S	Gn	ВІ			
Funk Delicious	IV	D	Р	G	Ε	N	Br	D	Υ	Υ			
Gibson	IV	N	W	G	Ε	N	Tn	D	Υ	Lbf			
Granger	Ш	N	Р	Т	Ε	N	Br	S	Υ	ВІ			
Green and Black	IV	D	Р	T	Е	N	Br	D	Gn	ВІ	Sado		
Guelph	Ш	N	W	T	E	N	ВІ	S	Gn	ВІ	Gnc	ot	
Harbinsoy	IV	N	W	T	Ε	N	Br	D	Υ	Br			
Harman	Ш	N	Р	T	Ε	N	Br	S	Υ	ВІ			
Higan	IV	D	P	G	Α	N	Tn	D	Υ	Bf			
Hokkaido	IV	D	W	G	Ε	N	Br	D	Υ	Υ			
Hongkong	IV	N	W	G	Ε	N	Br	S	Υ	Bf			
Hurrelbrink	IV	D	P	Т	Ε	N	Br	D	Υ	Br			
Illington	Ш	D ·	W	G	Ε	N	Tn	D	Υ	Lbf			
Illini	Ш	N	W	G	Ε	N	Br	S	Υ	Bf			
llsoy	Ш	N	Р	Lt	Ε	N	Br	S	Br	Br			
Imperial	IV	D	P	G	E	N	Br	I	Υ	Υ			
Jefferson	IV	D	W	G	Ε	N	Br	S	Y	Bf			
Jogun	111	D	W	G	E	N	Br	D	Y	Y			
Kanrich	Ш	N	P	G	E	N	Br	D	Y	Y			
Kent	IV	N	P	Т	Ε	N	Br	D	Y	BI			
Kim	111	N	Р	Т	Ε	N	Br	D	Gn	BI	_		
Kingston	IV	D	W	Т	Ε	N	ВІ	S	BI	BI	Gnc		
Kingwa	IV	N	P	G	Ε	N	Br	S	BI	BI	<u>.</u> .	Da	D
Kura	Ш	D	W	Т	Ε	Sp	Br	S	Gn	BI	Sad	dle	
Lincoln	Ш	N	W	Т	Ε	N	Br	S	Y	BI			
Macoupin	IV	N	W	G	Ε	N	Br	S	Υ	Bf			
Manchu	Ш	N	Р	T	Ε	N	Br	S	Υ	ВІ			
Manchu 2204	111	N	Р	T	Ε	N	Br	S	Υ	BI			
Manchu[Lafayette]	111	N	Р	Т	Ε	N	Br	D	Υ	Br			
Manchuria 13177		N	P	G	E	N	Dbr	S	Y	Bf			
Manchuria 20173		N	Р	G	E	N	Br	S	Υ	Bf			
Mandell		N	P	T	Ε	N	Br	S	Υ	ВІ			
Mansoy	III	N	Р	Ť	E	N	Br	s	Υ	ВІ			
Midwest	iv	D	Р	Ť	E	N	Br	s	Υ	Br			
Mingo	III	N	P	Ť	Ē	N	Br	s	Υ	ВІ			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

	Flowering	Maturity			Stem term-	Branch-	Shet	Seed			
	date	date	Lodging	Height	ination	ing	tering	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	(score)	(score)	(cg/sd)	(Mg/ha)
A.K.(Harrow)	714	921	3.4	109	4.0	3.0	1.0	2.5	1.0	14.7	2.88
A.K.[FC 30761]	717	1005	2.9	109	3.5	3.0	1.0	2.8	2.0	14.9	2.56
A.K.[Kansas]	804	1020	3.6	130	4.0	4.0	1.0	2.0	2.0	11.6	2.13
Adams	712	916	2.5	94	3.0	2.5	1.0	2.0	1.0	14.3	2.80
Adelphia	717	1003	1.8	91	3.0	3.0	1.0	2.3	1.0	17.5	3.32
Aoda	728	1022	3.8	66	1.0	3.0	1.0	2.5	1.0	24.8	1.53
Bethel	727	1017	1.8	109	3.5	3.0	1.0	2.3	2.0	18.8	2.91
Boone	802	1012	3.7	122	3.5	3.0	1.0	2.0	1.0	18.2	2.55
Chestnut	706	918	4.0	74	3.5	3.0	1.0	2.0	-	12.1	2.17
Chief	723	1006	3.0	130	4.0	3.0	1.0	2.8	1.0	13.3	2.17
Chusei	721	1003	3.5	76	1.0	2.5	3.0	3.0	2.0	26.3	
Clark	716	1007	2.5	94	3.0	3.0	1.0	2.3	2.0	26.3 16.9	1.88
Clark 63	716	1007	2.4	102	3.0	3.0	1.0	2.3	2.0	15.1	3.26
Cloud	715	922	3.4	114	4.0	3.0	1.0	2.3 2.3	2.0		3.19
Columbia	729	1010	3.8	119	4.0	4.0	1.0	2.5 2.5		15.6	2.65
Delmar	727	1016	2.0	112	3.5	3.0	1.0		1.0	12.6	2.19
Dunfield	714	917	2.8	91	3.0	2.5	1.0	2.3	2.0	15.2	2.89
Ebony	801	1015	3.9	104	1.0	3.0	1.0	2.3	1.0	15.2	2.40
Emperor	724	1013	4.3	91	1.0	3.0	1.0	2.0	1.0	10.9	2.55
Ford	713	925	2.1	97	3.0	3.0		3.0	1.0	24.8	2.19
Fuji	713 721	930	2.5	37 79			1.0	2.5	1.5	17.4	2.97
Funk Delicious	721 721	1010		79 94	1.0	2.5	1.0	2.0	1.0	16.0	2.62
Gibson	721 728	1010	3.5		1.0	3.0	1.0	2.8	1.0	25.1	2.21
	710	919	2.6	104 79	3.5	3.5	1.0	2.5	1.5	14.1	2.43
Granger Green and Black		1026	2.8		2.5	2.5	1.0	3.0	1.0	17.2	2.86
			4.5	81	1.0	3.0	1.0	2.8	-	23.7	2.02
Guelph Harbinsoy	724 720	929 1004	3.7	89	4.0	3.5	1.0	2.5	2.5	13.4	2.94
Harman	710	919	4.0	145	5.0	3.0	1.0	2.3	1.0	14.1	2.47
Higan	710 725	1006	3.0	91 52	3.0	3.0	1.0	2.8	1.0	15.9	2.66
Hokkaido	728 718	1004	2.0	53	1.0	3.0	5.0	2.5	1.0	23.5	2.52
Hongkong	718 724		3.3	81	1.0	3.0	2.0	3.0	1.5	20.9	2.44
Hurrelbrink	72 4 801	1015	3.6	104	3.5	3.0	1.0	2.0	1.0	13.1	2.96
		1017	3.4	79	1.0	3.0	1.0	2.0	2.0	14.7	2.22
Illington Illini	717 715	1003	3.5	84	1.0	3.0	2.0	1.8	2.5	16.8	2.87
	715 724	927	3.1	117	4.0	3.0	1.0	2.5	1.0	15.4	3.02
Ilsoy	724 727	922	3.8	114	4.0	3.0	1.0	2.0		12.1	2.66
Imperial Jefferson	727 728	1012 1023	3.6	69 66	1.0	2.0	1.0	3.5	1.5	31.8	2.05
Jogun	728 718	1023	3.6	66	1.0	3.0	1.0	2.0	1.0	32.8	2.16
Kanrich	717	919	2.5 3.8	69 84	1.0	3.0	1.0	3.0	2.5	25.4	2.74
Kent	717				3.0	3.0	1.0	2.8	2.0	26.0	2.31
Kim	716	1014 926	1.9	102	3.5	3.0	1.0	2.3	2.0	17.5	3.48
			2.2	76 66	2.5	3.0	1.0	2.5	1.0	28.6	2.45
Kingston	725 720	1016	3.0	66	1.0	3.0	1.0	2.0	-	8.0	1.84
Kingwa	730	1009	3.3	114	4.0	3.5	1.0	2.0	-	10.8	2.64
Kura	712	929	1.6	48	1.0	3.0	1.0	2.5		31.0	1.86
Lincoln	713	929	2.0	97	3.0	3.0	1.0	2.3	1.0	15.5	3.12
Macoupin	726	1007	3.0	117	4.0	3.0	1.0	2.0	1.0	15.3	2.51
Manchu	710	919	2.9	86	3.5	3.0	1.0	2.5	1.5	17.1	2.75
Manchu 2204	718	1005	3.9	130	4.5	3.5	1.0	2.0	1.0	14.4	2.93
Manchu[Lafayette]		924	3.6	130	3.8	3.0	1.0	2.5	2.0	16.3	2.86
Manchuria 13177	720	1001	3.4	89	4.0	3.0	1.0	2.0	1.0	14.4	3.09
Manchuria 20173	716	922	3.8	81	2.5	3.0	1.0	2.3	1.0	12.9	2.47
Mandell	712	922	2.8	97	3.0	2.5	1.0	2.3	1.5	16.0	2.47
Mansoy	717	1007	3.4	99	4.0	2.5	1.0	1.8	1.0	16.0	3.12
Midwest	801	1014	3.4	84	1.0	3.0	1.0	2.5	3.0	11.6	1.87
Mingo	714	1004	3.1	107	4.0	3.0	1.0	2.3	1.5	14.4	2.87

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein		nposition					
		compos		composition	Pal-			Lino-	Lino-		ease
	Maturity	Protein		Methionine	mitic	Steric	Oleic	leic	lenic		tion
Entry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
N 16 (1)		40.6	01.4	4.4	10.8	4.0	19.5	55.9	9.7	R	
A.K.(Harrow)	III IV	40.6 42.1	21.4 21.6	1.1 1.1	14.4	4.2 4.6	23.4	50.9	9.7 7.4	S	
-				1.2	13.4	4.6 4.6	19.5	53.3	7. 4 9.2	R	
A.K.[Kansas]	IV	42.4	19.2	1.3	12.6	4.0	23.9	52.0	7.5	S	
Adams	III	38.5	22.3 22.7	1.1	11.5	3.9	20.7	54.3	9.7	S	
Adelphia Adelphia	III IV	41.0 41.6	17.8	1.1	11.5	4.3	20.7	54.3 59.6	10.0	S	
Aoda Bethel	IV	39.5	21.3	1.4	11.8	3.2	19.6	55.7	9.6	S	
	IV	39.5 39.7	21.8	1.0	13.3	4.5	23.8	48.6	9.7	R	
Boone Chastrut		39. <i>7</i> 39.6	20.6	1.0	13.4	4.0	25.5 25.5	49.7	7.4	s	
Chestnut	III			1.3	13.4	3.8	20.5	53.2	7. 4 9.1	S	
Chief	IV	40.7	20.1							S	
Chusei	III	44.8	18.4	1.1	11.4	4.5	24.0	50.0	10.0	S	
Clark	IV	41.1	21.2	1.2	11.8	5.1	18.7	54.5	9.9	R	
Clark 63	IV 	39.3	21.9	1.2	10.4	3.5	17.2	59.2 54.7	9.7		
Cloud	III	42.1	18.4	-	13.8	3.2	19.4	54.7	8.9	S	
Columbia 	III	40.0	20.4	-	13.3	3.5	21.3	52.8	9.1	S	
Delmar	IV 	40.9	20.7	1.0	11.9	3.9	20.2	54.7	9.3	S	
Dunfield 	III	39.1	21.8	1.1	12.7	4.0	23.4	51.3	8.7	S	
Ebony	IV	45.5	16.4	-	15.7	3.1	19.2	52.7	9.2	S	
Emperor	IV	42.1	19.6	1.1	11.8	3.2	24.0	47.7	13.2	S	
Ford	Ш	41.3	20.6	1.3	14.1	4.0	20.4	52.1	9.5	s	
=uji	III	42.0	21.7	1.3	12.0	3.5	19.2	56.3	8.9	R	
Funk Delicious	IV	42.1	19.8	1.1	11.6	3.7	24.9	50.5	9.2	S	
3ibson	IV	40.9	20.4	1.3	12.6	3.5	20.1	53.2	10.6	S	
Granger	III	42.0	21.2	1.4	11.9	4.1	21.9	51.7	10.3	S	
Green and Black		42.5	18.1	•	12.1	3.0	17.6	58.4	8.9	R	
Guelph	III	42.4	19.7	-	12.0	4.0	21.1	52.8	10.1	S	
Harbinsoy	IV	43.0	20.4	1.3	11.1	3.4	19.4	54.2	11.8	S	
Harman	Ш	42.6	20.1	1.4	12.0	4.2	21.4	52.6	9.8	s	
Higan	IV	41.2	19.3	1.3	15.7	4.0	18.6	52.2	9.6	R	
Hokkaido	IV	43.2	20.0	1.2	12.4	3.8	22.6	52.0	9.1	S	
Hongkong	IV	39.9	19.9	1.1	11.5	4.1	17.9	56.1	10.4	S	
Hurrelbrink	IV	39.3	18.2	1.4	12.5	3.2	17.8	54.5	12.0	R	
Illington	III	43.1	18.8	1.2	15.0	3.6	19.0	54.0	8.4	R	
Illini	Ш	41.5	20.7	1.3	12.2	3.4	18.9	56.1	9.3	R	
lsoy	Ш	41.5	18.1	-	11.8	3.2	20.9	55.8	8.3	S	
, Imperial	IV	43.3	19.8	1.4	11.9	3.3	22.0	51.2	11.5	S	
Jefferson	IV	45.2	18.4	1.1	10.2	4.2	22.3	52.5	10.9	s	
Jogun	Ш	41.4	21.1	1.0	10.7	3.4	23.7	52.9	9.2	s	
Kanrich	Ш	42.0	20.0	1.2	14.8	4.1	24.4	49.1	7.6	S	
Kent	IV	41.0	21.8	1.2	10.9	3.6	17.8	58.2	9.5	S	
Kim	Ш	41.1	20.4	1.3	12.3	3.6	26.2	51.9	5.9	S	
Kingston	IV	41.5	20.0	-	13.1	3.5	22.8	52.2	8.4	S	
Kingwa	IV	41.3	18.4	•	14.0	2.7	18.4	56.4	8.5	R	
Kura	III	44.5	19.7	-	11.9	3.6	21.7	55.3	7.5	S	
_incoln	Ш	40.7	21.9	1.2	12.5	3.7	20.3	55.2	8.3	S	
Macoupin	IV	40.2	21.3	1.4	13.3	3.6	19.7	53.3	10.1	s	
Manchu	III	43.0	21.0	1.2	9.3	3.6	19.5	56.9	10.7	S	
Manchu 2204	III	42.3	20.2	1.2	15.1	4.0	18.7	52.3	9.9	S	
Manchu[Lafayette]		43.5	20.2	1.4	12.3	5.1	21.9	51.1	9.7	S	
Manchuria 13177		42.0	21.9	1.3	14.2	4.6	21.0	51.9	8.2	S	
Manchuria 20173		40.5	21.9	1.3	13.5	4.0	19.8	54.8	7.8	s	
Mandell	 III	42.6	19.5	1.2	12.1	4.1	22.5	52.9	8.4	s	
Mansoy	iii	41.1	21.4	1.3	14.2	4.2	20.0	50.4	11.3	S	
· · · · · · · · · · · · · · · · · · ·	IV	43.5	17.2	1.3	13.7	3.9	20.3	52.5	9.6	s	
Midwest	III	41.7	20.4	1.3	12.4	3.3	19.0	54.2	11.1	S	

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
l No.	name	acquisition	origin	or released	group
	Morse	United States	China	1910	IV
	Norredo	United States	Unknown	1935	IV
	Osaya	United States	Japan	1936	111
	Patoka	United States	China	1940	IV
	Patterson	Morocco	Unknown	1966	IV
	Peking	United States	China	1910	IV
	Pennsoy	United States	United States	1944	Ш
	Perry	United States	United States	1952	IV
	Ross	United States	United States	1960	Ш
	Sanga	United States	China	By 1944	IV
	Sato	United States	Japan	1936	IV
	Scioto	United States	China	1933	IV
	Scott	United States	United States	1959	ίV
	Shelby	United States	United States	1958	III
	Shingto	United States	China	1910	iii
	Shiro	United States	Japan	1936	IV
	Sooty	United States	China	1927	IV
	Viking	United States	United States	1942	III
	Virginia	United States	China	1918	IV
	Wabash	United States	United States	1948	IV
	Wayne	United States	United States	1964	Ш
	Wilson	United States	China	1909	IV
	Wilson-Five	United States	China	1918	IV
	Wing Jet	United States	United States	By 1929	Ш
	Wolverine	United States	Japan	1941	Ш
C 02.108		Canada	China	1914	111
C 02.109		Canada	China	1914	111
C 03.548	Wilson Five	United States	United States	1920	īV
C 03.654-1	Imported Yellow	United States	China	1920	īV
C 03.654N	(Imported Yellow)	United States	China	1920	III
C 04.002B	•	United States	Unknown	1924	III
C 04.002N		United States	Unknown	1924	Ш
C 04.007B		United States	Unknown	1924	Ш
C 19.976-1	(Chusei o saya eda mame)	Japan	Japan	1932	IV
C 19.976-2	(Chusei o saya eda mame)	Japan	Japan	1932	IV
C 19.979-1	Sousei o saya eda mame	Japan	Japan	1932	IV
C 19.979-2	(Sousei o saya eda mame)	Japan	Japan	1932	Ш
19.979-3	(Sousei o saya eda mame)	Japan	Japan	1932	IV
19.979-4	(Sousei o saya eda mame)	Japan	Japan	1932	IV
C 19.979-5	(Sousei o saya eda mame)	Japan	Japan	1932	IV
C 19.979-6	(Sousei o saya eda mame)	Japan	Japan	1932	IV
C 19.979-7	(Sousei o saya eda mame)	Japan	Japan	1932	IV
29.333	Laredo	United States	United States	1935	Ш
31.557		United States	United States	1943	IV
31.571	Kirin	United States	Unknown	1944	III
31.572-3	(Anwei)	United States	Unknown	1944	III
31.579		United States	United States	1944	 III
C 31.630		United States	United States	1944	IV
C 31.678		United States	United States	1946	III
C 31.684	Woods Extra Early Yellow	United States	United States	1946	III
C 31.685	Woods Extra Early Yellow	United States	United States	1946	IV
C 31.697	•	Costa Rica	Costa Rica	1946	IV
C 31.702		United States	United States	1946	IV
C 31.715		United States	United States	1947	iV
		United States	United States	1949	IV

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	84			Pubes	cence			Seedc	oat		Other 1	traits	
Entry	Matu- rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plan
Morse	IV	s	w	G	E	N	Br	s	Gn	Bf			
Norredo	IV	N	P	Lt	Ε	N	Tn	S	ВІ	ы			
Osaya	111	D	W	G	Sa	Sp	Tn	D	Υ	Υ			
Patoka	IV	N	P	G	Ε	N	Br	1	Υ	lb			
Patterson	IV	N	W	G	Ε	N	Tn	D	Υ	Υ			
Peking	IV	D	W	T	Ε	N	Br	S	ВІ	ВІ			
Pennsoy	111	N	P	G	Ε	N	Br	S	Υ	lb			
Perry	IV	N	Р	G	Ε	N	Br	S	Υ	lb			
Ross	111	N	W	T	Ε	N	Br	S	Υ	ВІ			
Sanga	IV	N	Р	T	Ε	N	Br	D	Υ	Tn			
Sato	IV	D	W	T	Ε	N	Br	D	ы	ы			
Scioto	IV	N	Р	Т	Ε	N	Br	S	Υ	ВІ			
Scott	IV	N	Р	G	Sa	N	Br	S	Υ	lb			
Shelby	111	N	P	Т	Ε	N	Br	D	Υ	ВІ			
Shingto	111	N	W	T	Ε	N	ВІ	S	Gn	Br			
Shiro	IV	D	W	Т	Ε	Ssp	Tn	S	Gn	ы			
Sooty	IV	N	Р	G	Ε	N	Tn	В	ВІ	ВІ			
Viking	111	N	Р	T	Ε	N	Br	S	Υ	ВІ			
Virginia	IV	N	Р	Т	Ε	N	Br	S	Br	Br			
Wabash	IV	N	W	G	Ε	N	Tn	S	Υ	Bf			
Wayne	111	N	W	Т	Ε	N	Br	S	Υ	ВІ			
Wilson	IV	N	Р	Т	Ε	N	Br	S	ы	ВІ			
Wilson-Five	IV	N	Р	Lt	Ε	N	Br	S	ы	ы			
Wing Jet	111	D	P	Lt	Ε	N	Tn	S	ВІ	ВІ			
Wolverine	111	D	P	G	Ε	N	Br	D	Υ	Υ			
FC 02.108	III	N	P	Т	E	Ssp	Br	D	Υ	Br			
FC 02.109	111	N	P	Т	Ε	Ssp	Br	D	Υ	Br			
FC 03.548	IV	D	W	Т	E	Ssp	Br	D	Υ	Br			
FC 03.654-1	١V	N	W	Ġ	E	N	Br	D	Υ	Bf			
FC 03.654N	111	N	P	Ng	Ē	Ssp	Br	D	Υ	Br			
FC 04.002B	111	N	w	G	Ε	N	Br	s	Υ	Bf			
FC 04.002N	111	N	W	T	E	N	Br	D	Υ	Br			
FC 04.007B	111	N	P	Ť	E	Ssp	Br	D	Υ	Υ			
FC 19.976-1	IV	D	P	Ġ	E	N	Br	Ī	Υ	Bf			
FC 19.976-2	١٧	D	Р	G	E	N	Br	D.	Ý	Bf			
FC 19.979-1	iV	Ď	w	G	Ē	N	Tn	D	Ÿ	Y	Def		
FC 19.979-2	111	Ď	P	T	Ē	Ssp	Br	D	Ý	Br			
FC 19.979-3	١V	D	w	G	Ē	Ssp	Br	D	Υ	Bf			
FC 19.979-4	iV	N	P	Ğ	E	Ssp	ВІ	S	Υ	Bf			
FC 19.979-5	١٧	D	P	Ğ	E	N	Br	1	Y	Υ			
FC 19.979-6	١٧	D	w	Ğ	Ē	N	Br	S	Y	Bf			
FC 19.979-7	١٧	D	W	Ğ	Ε	N	Br	1	Υ	Bf			
FC 29.333	111	N	W	G	Ε	N	Br	S	Υ	Bf			
FC 31.557	IV	D	P	Ng	Ε	N	Br	s	Gn	ы			
FC 31.571	III	N	W	Ğ	Ε	N	Br	D	Υ	Bf			
FC 31.572-3	111	N	P	Т	E	N	Br	s	Υ	Br			
FC 31.579	111	D	w	G	Ε	N	Br	D	Υ	Bf			
FC 31.630	١٧	N	P	Ng	Ε	N	Br	s	ВІ	BI		Da	b
FC 31.678	111	N	w	G	E	N	Tn	s	Υ	Bf			
FC 31.684	111	N	w	Ğ	Ē	N	Tn	1	Y	Bf			
FC 31.685	iv	N	w	G	Ē	N	Br	S	Y	Bf			
FC 31.697	١٧	N	P	G	Ē	N	Br	s	Ý	lb			
FC 31.702	IV	N	w	G	E	N	Br	s	Ϋ́	Bf			
FC 31.702 FC 31.715	IV IV	N	W	T	E	N	Br	s	Ϋ́	Y			
FC 31.716 FC 31.946	IV IV	N	P	Ť	E	N	Br	D	Ÿ	BI			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

	Flowering	Maturity			Stem term- ght ination	Branch-	Shat-	Seed			
Entry	date (mmdd)	date (mmdd)	Lodging (score)	Height (cm)	ination (score)	ing (score)	tering (score)	Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
Morse	729	1015	3.4	102	2.0	3.0	1.0	2.3	2.5	17.0	2.75
Norredo	810	1009	4.0	114	5.0	4.0	1.0	2.5	-	6.8	2.34
Osaya	720	1002	4.3	94	1.0	3.0	3.0	2.8	2.5	25.7	2.00
Patoka Patoka	715	1010	2.6	99	3.0	3.0	1.0	2.5	2.0	18.9	2.89
Patterson	718	1004	2.3	109	3.0	3.0	1.0	2.0	1.0	13.4	2.31
Peking	807	1014	2.7	91	1.5	3.0	1.0	2.3	-	7.8	2.24
-	717	928	2.5	99	3.5	3.0	1.0	2.5	1.0	16.6	3.17
Pennsoy	717	1013	5	107	3.5	3.0	1.0	2.3	1.0	17.9	3.27
Perry		1013		104	3.5	3.0	1.0	2.0	1.0	14.8	3.21
Ross	714		2.4			3.0	1.0	3.3	2.5	28.1	2.94
Sanga	714	926	4.0	89	4.0						
Sato	716	1008	3.5	58	1.0	3.0	2.0	2.5		24.2	1.90
Scioto	716	1006	3.4	99	3.5	3.0	1.0	2.3	1.0	15.9	2.93
Scott	718	1018	2.2	117	3.0	3.0	1.0	2.0	1.0	15.0	3.21
Shelby	713	927	2.0	99	3.0	3.0	1.0	2.0	1.5	15.9	3.42
Shingto	710	919	3.5	97	3.5	2.5	1.0	2.5	2.0	14.9	2.34
Shiro	728	1018	4.3	79	1.0	3.0	1.0	2.5	3.0	27.0	2.17
Sooty	808	1007	4.0	122	5.0	4.0	1.0	2.3	-	7.8	2.60
Viking	712	1004	2.8	117	4.0	3.0	1.0	2.3	1.0	15.7	3.06
Virginia	730	1011	4.3	160	5.0	3.5	1.0	2.8	-	10.9	2.69
Wabash	722	1008	2.5	109	3.0	3.0	1.0	2.0	1.0	14.7	2.91
Wayne	712	1002	2.5	97	3.5	3.0	1.0	2.0	2.0	18.7	3.43
Wilson	803	1020	3.7	150	5.0	4.0	1.0	2.3	-	11.6	2.21
Wilson-Five	806	1012	3.8	145	5.0	4.0	1.0	2.0	•	8.6	2.43
Wing Jet	722	921	3.0	69	1.0	3.0	1.0	2.0	-	13.2	2.26
Wolverine	713	1002	2.5	58	1.0	3.0	1.0	2.5	2.0	26.1	2.26
FC 02.108	710	918	3.6	89	2.5	2.5	1.0	2.5	2.0	15.8	2.91
FC 02.109	710	921	3.5	81	3.0	3.0	1.0	2.3	2.0	16.0	3.05
FC 03.548	802	1020	4.0	97	1.0	3.0	1.0	2.0	1.0	18.7	2.41
FC 03.654-1	723	1011	3.2	130	4.0	3.0	1.0	2.0	1.0	14.2	2.76
FC 03.654N	717	922	3.2	99	4.0	3.0	1.0	2.0	2.5	13.2	2.93
FC 04.002B	718	1001	2.8	112	4.0	3.0	1.0	2.3	1.0	14.6	3.20
FC 04.002N	710	927	2.7	124	4.5	3.0	1.0	2.0	1.0	18.5	2.68
FC 04.007B	715	928	3.5	84	3.5	3.0	1.0	2.3	3.0	15.3	3.25
FC 19.976-1	725	1013	2.5	89	1.0	2.5	2.0	2.3	1.0	23.0	2.70
FC 19.976-2	725	1007	3.5	79	1.0	3.0	1.0	2.5	1.0	38.0	2.47
FC 19.979-1	724	1010	3.4	86	1.0	3.0	2.0	3.5	1.0	26.4	2.21
FC 19.979-2	721	1002	2.6	74	1.0	3.0	1.0	2.3	2.0	25.9	1.80
FC 19.979-3	724	1014	2.7	89	1.0	3.0	1.0	2.3	1.5	17.6	2.39
FC 19.979-4	728	1008	3.0	107	4.0	3.0	1.0	3.0	1.5	20.7	2.27
FC 19.979-5	723	1007	2.8	84	1.0	2.5	1.0	2.3	1.5	21.7	2.35
FC 19.979-6	719	929	3.2	74	1.0	3.0	1.0	2.5	1.5	15.3	2.10
FC 19.979-7	71 9 726	1019	3.2 3.7	99	1.0	3.0	1.0	2.5	2.0	24.0	1.79
										15.0	3.11
FC 29.333	716	922	3.0	117	4.5	3.0	1.0	2.5	1.0		1.82
FC 31.557	723	1016	1.7	58 107	1.0	3.0	1.0	2.3	1.0	22.8	
FC 31.571	716	923	3.1	107	3.5	3.0	1.0	2.8	1.0	18.4	2.55
FC 31.572-3	715	1003	3.5	112	4.0	3.0	1.0	2.8	1.5	16.5	2.85
FC 31.579	714	924	1.6	64	1.0	3.0	1.0	2.3	1.0	18.2	2.55
FC 31.630	728	1006	2.7	114	4.0	3.0	1.0	2.0	-	10.7	2.78
FC 31.678	716	920	3.8	109	3.5	2.5	1.0	2.5	1.0	15.4	2.52
FC 31.684	715	919	3.3	107	3.5	2.5	1.0	2.3	1.0	15.2	2.78
FC 31.685	726	1008	3.0	119	4.0	2.5	1.0	2.3	1.0	15.3	2.74
FC 31.697	721	1006	3.1	132	4.0	3.0	1.0	3.3	1.0	13.8	3.05
FC 31.702	726	1012	3.5	127	3.5	3.0	1.0	2.3	1.0	15.9	2.86
FC 31.715	717	1009	3.4	114	4.0	3.0	1.0	2.3	2.5	17.0	2.70
FC 31.946	720	1015	3.5	119	3.5	3.0	1.0	2.0	2.0	13.4	2.76

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein		nposition					
		compos		composition	Pal-	a. •		Lino-	Lino-		ease
Entra (Maturity	Protein (%)	(%)	Methionine (% protein)	mitic (%)	Steric (%)	Oleic (%)	leic (%)	lenic (%)		ction
ntry	group	(70)	(70)	(% protein)	(70)	(70)	(70)	(76)	(70)	PR	Ру
1orse	IV	42.3	19.3	1.3	13.2	3.3	20.2	53.2	10.1	s	
lorredo	IV	40.6	16.4	-	14.0	3.3	18.2	47.4	17.1	S	
Dsaya	Ш	43.9	18.1	1.2	13.3	4.1	20.4	51.6	10.6	S	
Patoka	IV	43.4	19.6	1.3	13.3	4.3	22.9	51.5	8.0	S	
Patterson	IV	41.4	20.9	1.2	13.9	3.8	20.2	51.6	10.5	s	
Peking	IV	38.2	18.5	-	12.1	2.9	17.9	55.3	11.8	s	
ennsoy	III	42.7	19.4	1.3	12.6	4.0	22.0	50.6	10.9	s	
erry	IV	41.4	20.7	1.3	11.0	4.1	18.1	55.8	11.0	s	
oss	Ш	42.6	20.5	1.3	11.5	3.8	18.5	55.1	11.1	R	
Sanga	IV	42.5	18.9	1.2	11.6	3.8	22.7	52.4	9.4	R	
ato	IV	44.3	19.2	-	12.9	4.2	22.7	50.6	9.5	R	
cioto	IV	41.0	20.3	1.2	12.2	4.2	19.9	57.9	5.8	s	
cott	IV	38.5	20.2	1.3	17.4	6.3	24.8	43.4	8.1	S	
helby	III	41.6	21.1	1.3	12.0	4.3	20.7	52.1	11.0	s	
Shingto	111	43.8	19.1	1.1	13.0	2.9	18.7	56.2	9.2	S	
Shiro	IV	41.9	19.4	1.3	12.4	3.6	21.4	53.6	9.1	S	
Sooty	IV	41.3	16.9	-	12.1	2.7	17.6	54.2	13.4	S	
iking/	III	40.7	21.2	-	12.1	4.1	19.7	53.6	10.5	S	
/iking /irginia	IV	42.9	18.1	1.1	10.8	3.7	19.7	55.8	10.3	R	
Vabash	IV	39.8	21.5	1.3	12.4	3.6	21.3	53.6	9.1	S	
Vapasii Vayne	III	42.3	20.7	1.3	14.0	4.7	27.0	45.6	8.7	s	
Vayn e Vilson	IV	40.7	18.1	-	11.1	3.3	18.0	55.2	12.4	S	
Vilson Vilson-Five	IV	42.3	17.1	-	12.4	3.3 2.7	16.7	55.2 55.7	12.4	S	
Viison-rive Ving Jet	III	44.1	18.3	-	12.5	3.1	20.6	56.3	7.5	S	
_	III	41.4	20.3	1.0	11.8	3.9	25.6	50.0	8.8	S	
Volverine C 02.108		42.3	20.3	1.1	10.9	3. 9 3.8	20.3	55.1	9.8	S	s
C 02.108	III	41.9	20.4	1.1	11.4	3.4	18.7	56.3	10.2	S	
	IV	40.0	19.2	1.3	10.7	3.4	18.3	56.3 56.7	11.1	S	s s
C 03.548											
C 03.654-1	IV '''	42.5	19.1	1.2	11.1	3.2	19.7	56.2	9.8	S	S
C 03.654N	III	42.9	19.3	1.2	11.5	3.9	20.8	55.2	8.5	Н	S
C 04.002B	111	40.9	21.2	1.2	11.6	3.5	19.8	55.6 54.4	10.1	R	S
C 04.002N	III	41.9	20.9	1.1	12.5	3.4	21.2	54.4	8.4	R	S
C 04.007B	III	44.1	19.4	1.2	10.3	3.6	22.1	54.5	9.3	S	S
C 19.976-1	IV	43.2	18.9	1.2	10.7	3.2	22.4	54.4	9.3	S	S
C 19.976-2	IV	43.2	18.3	1.1	13.1	3.2	17.3	56.8	9.6	R	S
C 19.979-1	IV 	43.0	19.1	1.2	11.5	3.6	21.1	53.0	10.8	H	S
C 19.979-2	III	43.1	17.8	1.3	12.1	4.1	23.3	50.9	9.6	R	S
C 19.979-3	IV	41.3	19.8	1.2	11.4	3.2	22.6	52.9	9.9	S	S
C 19.979-4	IV W	43.3	18.5	1.2	10.8	3.8	25.5	49.3	10.6	S	S
C 19.979-5	IV N/	41.6	19.9	1.3	11.6	3.8	24.7	49.0	10.9	S	S
C 19.979-6	IV	42.0	20.4	1.2	13.3	3.2	19.0	54.1	10.3	Н	S
C 19.979-7	IV 	43.0	17.4	1.2	13.2	3.1	23.2	49.0	11.4	Н	S
C 29.333	III 13.7	40.9	20.4	1.3	11.6	3.9	22.1	53.0	9.4	R	S
C 31.557	IV 	42.9	18.4	1.2	15.2	3.5	18.7	51.4	11.2	S	s
C 31.571	III	42.8	19.2	1.3	13.3	3.4	21.1	52.8	9.3	S	S
C 31.572-3	III	41.4	19.9	1.3	11.7	4.0	19.6	53.8	11.0	S	S
C 31.579	III	42.9	19.7	1.3	11.1	3.5	19.1	57.4	8.9	H	S
C 31.630	IV	41.9	18.1	-	12.6	3.7	19.8	54.0	9.9	R	S
C 31.678	Ш	40.2	21.9	1.1	12.4	3.7	21.4	53.1	9.4	S	S
C 31.684	Ш	40.2	22.5	1.2	12.2	3.7	24.2	51.0	9.0	S	S
C 31.685	IV	40.1	21.5	1.2	11.7	3.0	18.9	54.6	11.8	S	S
C 31.697	IV	40.8	20.4	1.1	11.3	4.5	20.8	53.1	10.2	S	S
C 31.702	IV	40.0	21.4	1.3	11.7	3.7	20.5	54.4	9.8	S	S
C 31.715	IV	40.5	20.2	1.1	12.6	3.8	18.2	53.0	12.3	S	S
C 31.946	IV	41.5	18.8	1.3	10.9	3.4	18.1	56.8	10.8	S	S

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

FC 33.243 19.986 54.583 54.591 54.592 54.600 54.606-1 54.606-2 54.608-2 54.608-3 54.608-5 54.609 54.610-1 54.610-4 54.613 54.614 54.615 54.615-1 54.615-2 54.617 54.618 54.620 54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2	Anderson Okute mame	acquisition United States Japan China	United States Japan China	or released 1954 1907 1921 1921 1921 1921 1921 1921 1921 192	ity group IV IV III III III IV III III III IV III III IV III IV III IV
19.986 54.583 54.591 54.592 54.600 54.606-1 54.606-2 54.608-2 54.608-3 54.608-4 54.608-5 54.609 54.610-1 54.610-4 54.613 54.614 54.615-1 54.615-2 54.617 54.615-2 54.617 54.618 54.620 54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947		Japan China	Japan China	1907 1921 1921 1921 1921 1921 1921 1921 192	
19.986 54.583 54.591 54.592 54.600 54.606-1 54.606-2 54.608-3 54.608-4 54.608-5 54.609 54.610-1 54.610-4 54.615-1 54.615-2 54.615-1 54.615-2 54.617 54.618 54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.944 61.947		Japan China	Japan China	1907 1921 1921 1921 1921 1921 1921 1921 192	
54.583 54.591 54.592 54.600 54.606-1 54.606-2 54.608-2 54.608-3 54.608-5 54.609 54.610-1 54.610-4 54.613 54.614 54.615-1 54.615-2 54.617 54.615-2 54.617 54.618 54.620 54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947	Okute mame	China China	China China	1921 1921 1921 1921 1921 1921 1921 1921	
54.591 54.592 54.600 54.606-1 54.608-2 54.608-3 54.608-5 54.609 54.610-1 54.610-4 54.615-1 54.615-2 54.617 54.618 54.620 54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.944 61.947		China China	China China China China China China China China China China China China China China China China China China China China	1921 1921 1921 1921 1921 1921 1921 1921	
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54.615 54.615-1 54.615-2 54.617 54.618 54.620 54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.272 60.296-2 60.970 61.940 61.944 61.947		China China China China China China	China China China China	1921 1921 1921	III III IV
54.615-1 54.615-2 54.617 54.618 54.620 54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.296-2 60.970 61.944 61.947		China China China China China	China China China	1921 1921	III IV
54.615-2 54.617 54.618 54.620 54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.296-2 60.970 61.944 61.947		China China China China	China China	1921	IV
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54.618 54.620 54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947		China China		1921	
54.620 54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947		China	China		IV
54.620-2 55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947				1921	Ш
55.089-1 55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947		China	China	1921	Ш
55.887 56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947		China	China	1921	Ш
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56.563 57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947		Unknown	Unknown	1922	IV
57.334 58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947		Unknown	Unknown	1923	IV
58.955 59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947	Huang tou	China	China	1923	III
59.849 60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947	Common Yellow Variety	China	China	1924	 IV
60.269-2 60.272 60.296-2 60.970 61.940 61.944 61.947	Enoki	Japan	Japan	1924	١٧
60.272 60.296-2 60.970 61.940 61.944 61.947	(Black)	Korea	Korea	1924	IV
60.296-2 60.970 61.940 61.944 61.947	Fifth Moon	China	China	1924	111
60.970 61.940 61.944 61.947	(Loh yuih bah)	China	China	1924	111
61.940 61.944 61.947	Huang do	China	China	1924	 IV
61.944 61.947	nuang do	China	China	1924	111
61.947		China			iv
			China	1924	
o∠. 199		China China	China China	1924	IV IV
60 000		China	China China	1924	IV
62.202		China	China	1924	III
62.202-2		China	China	1924	IV
62.248		Unknown	Unknown	1925	IV
62.483		China	China	1925	III
63.468		China	China	1925	IV
63.945		China	China	1925	IV
64.698	Kuro sato daizu	Japan	Korea	1925	IV
64.747		Japan	Japan	1925	IV
65.379		China	China	1925	III
	Pai hua tso zu	China	China	1926	IV
68.398		Unknown	Unknown	1926	iii
68.423		China	China	1926	III
68.449		China	China	1926	IV
68.470		China	China China	1926	III III
68.479		China	China	1926	III
68.479-1 68.483		China	China	1926 1926	

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	A - A			<u>Pubes</u>	cence			Seedo	oat		Other 1	traits	
	Matu- rity		Flower	0.1	F	D i	Pod	1	0-1	Hilum	0	1 4	DI
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leat	Plan
FC 33.243	IV	N	w	G	E	N	Br	s	Υ	Υ			
19.986	IV	D	Р	G	Α	N	Tn	D	Υ	Υ			
54.583	Ш	D	Р	G	Ε	N	ВІ	D	Gn	lb	Gnco	t	
54.591	Ш	N	Р	Т	Ε	N	Tn	D	Υ	Tn			
54.592	Ш	N	W	Т	Ε	N	Br	S	Υ	ВІ			
54.600	IV	D	W	G	E	Ssp	Br	D	Υ	Lbf			
54.606-1	IV	N	Р	T	Ε	N	Tn	1	Gn	Gn			
54.606-2	IV	N	W	G	E	N	Br	S	Υ	Bf			
54.608-2	Ш	N	Р	Lt	Ε	N	Br	S	Υ	ы			
54.608-3	Ш	N	W	G	E	N	Br	D	Υ	Υ			
54.608-4	IV	D	W	G	Ε	N	Tn	D	Υ	Υ			
54.608-5	111	N	Р	Т	E	N	Br	1	Υ	Υ			
54.609	Ш	N	Р	G	E	N	Br	D	Υ	Υ			
54.610-1	III	N	W	G	E	N	Br	D	Υ	Bf			
54.610-4	IV	N	W	G	E	N	ВІ	1	Υ	Bf			
54.613	III	S	W	G	Ε	N	Dbr	s	Υ	Υ			
54.614	IV	N	Р	G	Ε	N	Br	S	Υ	lb			
54.615	III	N	P	Т	E	Ssp	Br	D	Υ	Br			
54.615-1	III	N	P	Т	Ē	N	Tn	D	Y	ВІ			
54.615-2	IV	N	W	G	E	Ssp	Br	Ī	Υ	Bf			
54.617	IV	N	W	T	Ē	N	Br	S	Y	Br			
54.618	111	N	w	G	Ē	N	Br	s	Y	Bf			
54.620	111	N	w	Lt	Ē	N	Br	D	Y	BI			
54.620-2	111	N	P	Lt	Ē	Ssp	Br	D	Ý	Br			
55.089-1	111	N	Р	T	Ē	N	Br	s	Ý	BI			
55.887	IV	D	w	Ť	Ē	N	Br	Ď	Ý	Y			
56.563	١٧	D	w	Ġ	Ē	Ssp	Br	Ī	Ϋ́	Lbf			
57.334	111	D	P	G	E	N	Br	s	Ÿ	Bf			
58.955	iv IV	N	w	G	E	N	Br	Ĭ	Ÿ	Bf			
59.849	١٧	D	P	G	E	N	Br	, D	Ÿ	Y.			
60.269-2	١٧	D	P	G	E	N	Dbr	D	Ϋ́	, Ib			
60.272	III	D	P	T	E	Ssp	Tn	D	Ϋ́	Br			
	111	S	W	G	E	N N	Br	D	Gn	Bf			
60.296-2			W	G	E		Dbr	S	Y	Bf			
60.970	IV 	N		T		N		S					
61.940	111	N	P	Ġ	E	N	Dbr B-		Y Y	Br Bf			
61.944	IV	D	W		E	N	Br D-	s s	Y	Bf			
61.947	IV IV	D	W	G	E	N	Br D-			Bf			
62.199	IV 	D	W	G	E	N	Br T	ı	Y Y				
62.202	III	N	P	Lt	E	N	Tn	S		Br		Dal	_
62.202-2	IV	N	w	Lt	E	N	Br D-	S	Gn	Br Df		Dai	0
62.248	IV 	D	P	G	E	N	Br D-	S	Y	Bf			
62.483	III	N	P	T	E	N	Br D=	D	Y	Br			
63.468	IV	N	W	T	E	N	Br B-	ı	Y	BI			
63.945	IV	D	P	T	E	N	Br	D	Y	BI			
64.698	IV	D	w	Ng	E	N	BI D-	ı	BI	BI			
64.747	IV 	D	P	G	E	N	Br	S	Y	Υ			
65.379	III	N	W	G	E	N	Br	S	Y	Bf			
68.011	IV	N	W	G	E	N	Dbr	S	Υ	Y			
68.398	III	N	W	G	Ε	N	Br	S	Υ	Bf			
68.423	III	N	Р	G	E	N	Br	S	Υ	lg			
68.449	IV	N	Р	T	E	N	Br	ı	Υ	Br			
68.470	Ш	N	Р	Lt	Ε	N	Tn	D	Υ	Br			
68.479	Ш	S	W	G	E	N	Br	l	Υ	Bf			
68.479-1	Ш	D	W	T	Ε	N	Br	S	Υ	Br			
68.483	Ш	N	Р	G	Ε	N	Br	S	Υ	Bf			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

	Flowering	Maturity			Stem term-	Branch-		Seed			
Entry	date (mmdd)	date (mmdd)	Lodging (score)	Height (cm)	ination (score)	ing (score)	tering (score)	Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
Littry	(minaa)	· · · · · · · · · · · · · · · · · · ·	(000.0)	(0,	(000.0)	(000.0)					
FC 33.243	721	1009	2.4	104	3.0	3.0	1.0	2.5	1.5	16.0	2.82
19.986	718	1003	2.3	64	1.0	3.0	2.0	2.8	1.0	28.6	1.96
54.583	725	1005	3.0	86	1.0	3.0	1.0	2.3	1.0	16.6	2.66
54.591	725	928	3.8	119	4.5	3.0	1.0	2.5	2.5	13.1	2.39
54.592	722	929	3.8	112	4.5	3.0	1.0	2.3	1.0	13.0	2.82
54.600	726	1008	3.0	81	1.0	3.0	1.0	2.3	1.0	20.2	2.54
54.606-1	719	1002	3.2	119	4.0	4.0	1.0	2.3	2.0	13.5	2.86
54.606-2	716	929	3.0	124	4.0	2.5	1.0	3.0	1.0	17.8	2.38
54.608-2	710	920	3.5	94	2.5	2.5	1.0	2.5	2.0	15.2	2.45
54.608-3	711	911	2.5	97	3.0	2.5	1.0	2.3	1.0	20.9	2.41
54.608-4	721	1007	3.3	79	1.0	3.0	1.0	3.0	1.0	27.9	1.87
54.608-5	709	918	3.3	81	3.0	3.0	1.0	3.0	3.0	19.1	2.64
54.609	722	926	3.1	89	3.5	3.0	1.0	2.5	1.5	15.6	2.75
54.610-1	723	927	3.3	112	4.0	2.5	1.0	2.3	1.0	14.9	2.62
54.610-4	729	1015	2.7	127	4.0	3.0	1.0	2.3	1.0	16.4	2.68
54.613	711	917	2.7	74	2.0	2.5	1.0	2.5	1.0	18.9	2.65
54.614	724	1005	3.8	119	4.0	3.0	1.0	2.3	1.0	15.3	2.82
54.615	707	912	2.8	86	3.5	2.5	1.0	2.5	2.0	14.7	2.51
54.615-1	705	924	2.6	81	3.0	3.0	1.0	2.5	2.0	19.7	2.19
54.615-2	719	1016	2.9	117	3.5	3.0	1.0	2.3	2.0	17.0	2.91
54.617	721	1014	4.3	124	3.5	3.0	1.0	3.3	2.0	23.8	2.17
54.618	715	928	2.4	81	3.0	3.0	1.0	2.3	1.0	16.2	2.82
54.620	722	924	3.0	114	4.0	3.0	1.0	2.0	1.0	13.2	2.54
54.620-2	716	919	3.4	97	4.0	3.0	1.0	2.0	3.0	13.3	2.79
55.089-1	723	1004	3.0	124	4.0	3.0	1.0	2.0	2.5	12.0	2.11
55.887	729	1014	4.3	112	1.5	3.0	1.0	2.8	2.0	17.2	2.86
56.563	728	1015	3.3	84	1.0	3.0	1.0	2.3	2.0	22.1	2.47
57.334	710	928	3.2	89	1.5	3.0	1.0	2.3	1.5	13.4	2.81
58.955	801	1016	4.0	109	5.0	4.0	1.0	2.3	2.0	12.0	2.68
59.849	815	1030	3.3	109	1.0	3.0	1.0	2.3	1.0	14.6	2.02
60.269-2	728	1007	3.4	104	1.0	3.0	1.0	2.3	1.0	15.5	2.43
60.272	725	1009	3.3	89	1.0	3.0	1.0	2.0	2.0	15.5	2.56
60.296-2	714	925	2.8	86	2.0	2.5	1.0	2.3	1.0	21.5	2.60
60.970	729	1012	3.8	119	4.0	3.0	2.0	2.0	1.0	19.6	2.06
61.940	713	922	3.8	81	3.0	3.0	1.0	2.8	1.5	18.3	2.70
61.944	726	1003	2.9	86	1.0	3.0	1.0	2.3	1.0	16.7	2.61
61.947	726	1004	2.5	89	1.0	3.0	1.0	2.3	1.0	17.4	2.67
62.199	727	1010	2.0	81	1.0	3.0	1.0	2.5	1.0	19.7	2.28
62.202	717	1003	3.0	114	4.5	3.0	1.0	2.3	2.0	14.0	2.66
62.202-2	728	1013	3.9	109	4.5	4.0	1.0	2.5	2.0	15.1	2.85
62.248	730	1009	3.5	99	1.0	3.0	1.0	2.5	1.0	15.2	2.38
62.483	716	1007	3.7	127	4.5	3.0	1.0	2.5	2.5	17.8	2.54
63.468	720	1001	4.5	97	4.0	3.0	5.0	3.3	1.0	18.2	1.88
63.945	728	1013	3.2	86	1.0	3.0	1.0	2.3	1.0	13.2	2.42
64.698	804	1020	4.0	89	1.0	3.0	1.0	2.3	-	10.9	1.98
64.747	727	1008	4.3	74	1.0	3.0	1.0	2.5	3.0	14.5	2.10
65.379	718	928	3.8	107	4.5	2.5	1.0	2.5	1.0	14.4	2.91
68.011	716	923	2.5	102	3.5	3.0	1.0	2.5	1.0	19.0	2.47
68.398	723	1003	2.8	117	4.5	3.0	1.0	2.3	1.0	15.2	2.57
68.423	719	918	3.8	81	3.0	3.0	1.0	2.5	1.0	15.1	2.74
68.449	719	1015	3.9	142	5.0	4.0	1.0	2.3	1.5	20.0	3.19
68.470	714	921	4.0	91	2.5	3.0	1.0	2.5	3.0	15.5	2.66
68.479	711	914	2.3	74	2.0	2.5	1.0	2.0	1.0	15.0	2.73
68.479-1	718	1004	3.3	84	1.5	3.0	1.0	2.3	1.0	15.1	2.78
68.483	713	922	2.7	97	2.5	3.0	1.0	2.3	2.5	15.2	2.65
00.463	/13	322	2.7	31	2.0	3.0	1.0	2.0	2.0	, 3.2	2.00

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed compos	eition	Protein composition	Oil cor Pal-	nposition		Lino-	Lino-	Dic	ease
	Maturity	Protein		Methionine	mitic	Steric	Oleic	leic	lenic		ction
Entr.	-	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)		Py
Entry	group	(70)	(70)	(/e protein/	(70 /	(701	(70)	1 701	(701		гу
C 33.243	IV	39.8	21.4	1.3	11.0	4.0	20.3	55.8	8.8	s	s
19.986	iV	41.0	19.2	1.3	11.7	3.8	25.5	49.4	9.6	Н	s
54.583	III	43.5	20.0	-	11.3	3.4	20.2	55.7	9.3		
54.591	 III	41.5	19.8	1.2	10.8	4.7	26.4	49.9	8.2	s	s
		41.1	21.0	1.2	12.8	4.5	23.4	51.1	8.1	S	S
54.592											S
54.600	IV 	42.0	19.3	1.2	10.5	3.6	28.7	47.9	9.3	R	
54.606-1	IV	42.9	19.3	1.1	11.3	3.8	20.4	53.8	10.8	R	S
54.606-2	IV 	42.7	20.9	1.2	10.4	5.1	28.5	48.1	7.9	S	S
54.608-2	Ш	42.7	19.2	1.1	11.2	4.8	22.9	52.4	8.8	S	S
54.608-3	Ш	39.5	20.9	1.2	13.9	3.7	22.7	50.3	9.3	s	S
54.608-4	IV	42.4	19.4	1.2	12.0	3.9	23.4	50.4	10.2	S	s
54.608-5	111	42.2	21.1	1.2	11.4	4.8	25.2	49.9	8.8	S	S
54.609	Ш	43.9	19.3	1.2	12.7	4.0	21.0	53.0	9.2	S	S
54.610-1	III	43.1	20.7	1.1	12.9	4.1	22.0	51.9	9.1	н	S
54.610-4	IV	42.9	19.7	1.2	11.8	3.4	25.3	50.7	8.8	S	S
54.613	Ш	44.1	19.9	1.2	12.1	3.4	22.7	53.8	7.9	S	s
54.614	īV	44.0	20.1	1.1	11.0	3.6	20.8	55.9	8.8	S	s
54.615	III	43.0	20.4	1.2	10.0	3.6	21.9	54.7	9.8	s	s
54.615-1	iii	44.4	19.0	1.1	9.7	4.1	22.4	54.0	9.7	R	s
54.615-2	IV	40.3	19.7	1.3	9.9	3.8	21.1	55.2	10.1	s	s
54.617	IV	43.2	19.6	1.2	9.6	3.4	26.8	51.3	8.9	S	S
					13.2	4.7	23.8	47.6	10.7	Н	S
54.618	111	41.0	19.9	1.3							
54.620	III	43.9	20.5	1.2	11.8	3.5	20.4	55.5	8.8	S	S
54.620-2	Ш	42.4	20.1	1.3	11.2	4.3	22.8	52.6	9.2	S	S
55.089-1	Ш	43.3	19.2	•	13.7	4.0	23.2	50.2	8.9	R	S
55.887	IV	41.5	19.2	1.2	12.0	2.6	18.2	57.1	10.2	S	S
56.563	IV	44.5	19.9	1.1	12.7	3.6	24.0	51.0	8.7	Н	S
57.334	111	41.9	21.1	1.2	12.7	4.1	19.4	54.5	9.2	S	S
58.955	IV	41.1	20.6	1.1	14.5	3.1	20.0	52.6	9.8	R	S
59.849	IV	45.5	16.4	1.1	13.9	2.4	15.2	57.6	11.0	R	S
60.269-2	IV	43.1	19.4	1.2	14.1	3.4	22.3	51.3	8.9	s	S
60.272	Ш	42.2	19.1	1.2	10.4	4.0	21.7	53.2	10.7	s	S
60.296-2	Ш	43.8	18.7	1.1	14.1	3.4	20.4	53.7	8.4	s	s
60.970	IV	43.8	18.4	1.2	11.5	2.3	18.5	57.6	10.1	s	s
61.940	III	42.3	21.4	1.2	12.7	3.3	22.4	52.6	8.8	S	S
61.944	IV	41.6	18.5	1.2	14.5	3.5	20.9	50.0	11.1	s	s
61.947	١٧	41.6	19.1	1.3	13.9	3.2	19.4	52.9	10.6	s	s
62.199	IV	43.1	18.5	1.2	12.8	3.9	21.7	51.7	10.0	H	s
62.199	III	40.3	19.9	1.2	14.9	3.6	23.3	49.2	9.1	R	S
62.202 62.202-2	III IV	40.3 42.6	18.8	1.1	12.2	3.7	16.8	55.6	11.6	S	S
	IV IV	41.3	18.3	1.4	13.5	3.7 2.9	21.2	52.7	9.8	Н	S
62.248											
62.483	III	43.9	20.5	1.4	12.1	4.2	24.1	51.1	8.5	S	S
63.468	IV	43.3	19.7	1.3	14.0	3.8	23.5	50.2	8.6	S	S
63.945	IV	42.7	19.8	1.4	12.1	2.9	16.7	58.4	9.9	S	S
64.698	IV	41.6	15.7	-	11.6	3.0	16.8	57.8	10.9	S	S
64.747	IV	42.3	20.7	1.3	10.4	3.7	21.3	54.7	9.8	R	S
65.379	Ш	40.9	21.4	1.3	13.4	4.0	19.9	52.1	10.6	R	S
68.011	IV	42.0	21.7	1.3	11.1	4.1	23.6	52.5	8.7	S	S
68.398	111	41.4	19.8	1.4	11.5	4.0	21.0	53.9	9.7	S	S
68.423	Ш	43.7	20.7	1.3	11.0	3.9	25.0	51.8	8.2	S	s
68.449	IV	42.8	18.5	1.3	12.2	3.9	22.5	52.7	8.7	s	s
68.470	III	43.3	20.2	1.4	11.7	4.0	22.0	54.2	8.0	S	S
68.479	111	40.4	21.9	1.2	12.4	3.6	19.6	54.2	10.2	s	s
68.479-1	III	43.1	20.0	1.4	11.0	4.1	23.0	53.4	8.4	Н	s
UO # / 25 * 1	111	7J. I	20.0	1.7	11.0	-7. □	23.0	~~·	٠.٦	11	J

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
l No.	name	acquisition	origin	or released	group
68.494		China	China	1926	Ш
68.521-1		China	China	1926	Ш
68.523		China	China	1926	Ш
68.528		China	China	1926	Ш
68.530-2		China	China	1926	Ш
68.533-1		China	China	1926	Ш
68.533-2		China	China	1926	101
68.535		China	China	1926	111
68.560		China	China	1926	Ш
68.599		China	China	1926	Ш
88.604-1		China	China	1926	Ш
68. 6 09A		China	China	1926	Ш
68.621		China	China	1926	Ш
68.644		China	China	1926	IV
68.648		China	China	1926	III
68.679		China	China	1926	Ш
68.679-2		China	China	1926	IV
68.692		China	China	1926	IV
68.692-2		China	China	1926	Ш
68.701		China	China	1926	Ш
68.710		China	China	1926	Ш
68.731		China	China	1926	Ш
68.732-1		China	China	1926	Ш
68.748-1		China	China	1926	Ш
68.756		China	China	1926	Ш
68.759		China	China	1926	Ш
88.761-3		China	China	1926	Ш
68.768		China	China	1926	IV
68.80 6		China	China	1926	Ш
69.507-1		China	China	1926	IV
69.515		China	China	1926	Ш
59.993		China	China	1926	Ш
39.99 5		China	China	1926	Ш
70.001		China	China	1926	Ш
70.013		China	China	1926	IV
70.014		China	China	1926	Ш
70.019		China	China	1926	Ш
70.023		China	China	1926	Ш
70.076		China	China	1926	Ш
70.080		China	China	1926	Ш
70.188		China	China	1926	Ш
70.189		China	China	1926	Ш
70.192		China	China	1926	Ш
70.199		China	China	1926	Ш
70.201		China	China	1926	Ш
70.202		China	China	1926	III
70.208		China	China	1926	IV
70.212		China	China	1926	111
70.213		China	China	1926	101
70.229		China	China	1926	IV
70.242-2		China	China	1926	IV
70.243		China	China	1926	IV
70.247		China	China	1926	III
70.253		China	China	1926	III
70.462		China	China	1926	101

Table 2.2 Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807 $\,$

No. No.					Pubes	cence			Seedo	oat		Other	traits	
Entry			Stom	Elower				Pod			Hilum			
88.521 -1 III	Entry				Color	Form	Density		Luster	Color		Seed	Leaf I	Plant
88.521 -1 III				_		_								
88.523 III N P T T E Ssp Br S Y BI 88.523 III N P T T E Ssp Br S Y BI 88.533-1 III N P Lt E N Br D Y Br 68.533-1 III N P Lt E N Br D Y Br 68.533-2 III N P LT E N Br D Y Br 68.536 III N P T E N Br D Y Br 68.536 III N P T E N Br D Y Br 68.537 III N P T E N Br D Y Br 68.539 III N P T E N Br I Y Br 68.699 III N P G E N Br S Y Ib 68.690 III N P T E N Br S Y BR 68.604-1 III N P T E N Br D Y Br 68.621 III N P T E N Br D Y Br 68.648 III N P T E N Br D Y T BR 68.648 III N P T E N Br D Y T BR 68.649 III N P T E N Br D Y T BR 68.679-2 IV N P G E N Br S Y BR 68.692-2 III N W G E N Br S Y BR 68.692-2 III N W G E N Br S Y BR 68.671 III N P T E N Br S Y BR 68.671 III N W G E N Br S Y BR 68.672-1 III N P T E N Br S Y BR 68.673-1 III N P T E N Br S Y BR 68.671 III N W G E N Br S Y BR 68.679-1 III N W G E N Br S Y BR 68.691 III N P T E N Br S Y BR 68.692-2 III N W G E N Br S Y BR 68.692-1 III N W G E N Br S Y BR 68.671 III N P T E N Br S Y BR 68.701 III N P T E N Br S Y BR 68.710 III N P T E N Br S Y BR 68.710 III N P T E N Br I Y BR 68.711 III N P T E N Br S Y BR 68.712 III N P T E N Br S Y BR 68.713 III N P T E N Br I Y BR 68.713 III N P T E N Br I Y BR 68.714 III N P T E N Br I Y BR 68.715 III N P T E N Br I Y BR 68.716 III N P T E N Br I Y BR 68.716 III N P T E N Br I Y BR 68.716 III N P T E N Br I Y BR 68.718 III N W G E N Br S Y IB 68.719 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 68.710 III N P T E N Br I Y BR 70.010 III N P T E N Br I Y BR 70.010 III N P T E N Br I Y BR 70.010 III N P T E N Br I Y BR 70.010 III N P T E N BR 70.020 III N P T E N BR 70.020														
88.522 III N P T E Ssp Br S Y B 88.530-2 III N P LI E N Br D Y Br 68.533-1 III N P LI E N Br D Y Br 68.533-1 III N P G E N Br D Y Br 68.536 III N P T E N Br D Y Br 68.560 III N W G E N Dbr S Y Y 86.650 III N P T E N Br D Y Ib 68.604-1 III N W T E N Br D Y Ib 68.604-1 III N P T E N Br D Y T T F F F F F F F F														
88.830-2											-			
88.53-1 III N P Lt E N Br D Y Br 68.53-2 III N P G E N Br D Y Br 68.560 III N W G E N Br S Y Y S6.560 III N P G E N Br S Y Y S6.560 III N P T E N Br S Y Y S6.560 III N P T E N Br S Y IIb S6.504-1 III N P T E N Br S Y Bibr S6.504-1 III N P T E N Br S Y Bibr S6.504-1 III N P T E N Br D Y T T T T T T T T T							•							
Section Sect			_				•							
68.535														
68.650														
68.699 III N														
S8.604-1														
88.609A														
68.621														
68.644 IV D P G E N Br D Y Br 68.648 III N P T E N Br S Y Br 68.679 III N W G E N BI S Y Br 68.679 III N W G E N BI S Y Br 68.679 III N W G E N BI S Y Br 68.679 III N W G E N Br S Y Br 68.68.79 III N W G E N Br S Y Br 68.692 IV S P G E N Br S Y Br 68.692 III N W G E N Br S Y Br 68.701 III S W G E N Br S Y Br 68.701 III N P T E N Br I Y BI 68.731 III N P T E N Br I Y Br 68.731 III N P T E N Br I Y Br 68.748 III N P T E N Br D Y Br 68.766 III N W G E N Br D Y Br 68.766 III N W G E N Br D Y Br 68.769 III N W G E N Br D Y Br 68.761 III N P T E N Br D Y Br 68.768 III N P T E Ssp Br D Y Br 69.507 I IV N P T E Ssp Br D Y Br 69.507 I IV N P T E Ssp Br D Y Br 69.993 III S W G E N Br S Y Br D Y Br 69.993 III S W G E N Br S Y Br D Y Br 69.993 III N W G E N Br S Y Br D Y Br 70.013 IV N P T E N Br I Y Br 70.014 III N P T E N Br I Y Br 70.014 III N P T E N Br I Y Br 70.014 III N P T E N Br I Y Br 70.016 III N W G E N Br I Y Br 70.016 III N W G E N Br I Y Br 70.016 III N W G E N Br I Y Br 70.016 III N W G E N Br I Y Br 70.016 III N P T E N Br I Y Br 70.016 III N P T E N Br I Y Br 70.016 III N P T E N Br I Y Br 70.016 III N P T E N Br I Y Br 70.016 III N P T E N Br I Y Br 70.016 III N P T E N Br I Y Br 70.016 III N P T E N Br I Y Br 70.016 III N P T E N Br I Y BR 70.016 III N P T E N Br I Y BR 70.016 III N P T E N Br I Y BR 70.016 III N P T E N Br I Y BR 70.016 III N P T E N Br I Y BR 70.016 III N P T E N Br I Y BR 70.016 III N P T E N Br I Y BR 70.016 III N P T E N Br I Y BR 70.016 III N P T E N Br D Y BR 70.022 III N P T E N Br D Y BR 70.020 III N P T E N Br D Y BR 70.020 III N P T E N Br D Y BR 70.020 III N P T E N Br D Y BR 70.020 III N P T E N Br D Y BR 70.020 III N P T E N Br D Y BR 70.020 III N P T E N Br D Y BR 70.020 III N P T E N Br S Y BI 70.020 III N P T E N Br S Y BI 70.020 III N P T E N Br S Y BI 70.020 III N P T E N Br S Y BI 70.020 III N P T E N Br S Y BI 70.020 III N P T E N Br S Y BI 70.020 III N P T E N Br S Y BI 70.022 III N P T T E N Br S Y BI 70.0247 III N P T T E N BR S Y BI 70.0247 III N P T T E N BR S														
68.648														
68.679														
68.679-2 IV N P G E N Dbr I Y Y 68.692 IV S P G E N Br S Y Y 68.692 III N W G E N Br S Y Bf 68.701 III S W G E N Br S Y Bf 68.710 III N P T E N Br S Y Bf 68.731 III N P G E N Br S Y Bi 68.732-1 III N P T E N Br I Y Br 68.7348-1 III N P T E S Br D Y Br 68.766 III N W G E N Br D Y Br 68.767 III N P T E S S F D Y Br 68.768 IV N P T E Ssp Br D Y Br 68.768 IV N P T E Ssp Br D Y Br 69.507-1 IV N P T E Ssp Br D Y Br 69.993 III N W T E Ssp Tn D Y Br 69.995 III N W G E N Br S Y Bf 70.001 III S W G E N Br D Y Br 70.013 IV N P T E N Br D Y Bf 70.023 III N W G E N Br D Y Bf 70.188 III N P T E N Br D Y Bf 70.189 III N P T E N Br D Y Bf 70.201 III N P T E N Br D Y Bf 70.212 III N P T E N Br D Y Bf 70.213 III N P T E N Br D Y Bf 70.2247 III N P T E N Br S Y Bi 70.247 III N P T E N Br S Y Bi 70.247 III N P T E N Br S Y Bi 70.247 III N P T E N Br S Y Bi 70.247 III N P														
68.692														
68.692-2 III														
68.701														
68.710 III N P T E N Br I Y BI 68.731 III N P G E N Br I Y Br 68.732-1 III N P T E N Br I Y Br 68.748-1 III N P T E Ssp Br D Y Br 68.766 III N W G E N Br D Y Br 68.769 III N P T E Ssp Br D Y Br 68.769 III N P T E Ssp Tn D Y Y Ga.768.769 III N P T E Ssp Tn D Y Y Ga.768.769 III N P T E Ssp Tn D Y Br Ga.761-3 III N W G E N Tn D Y Br Ga.768 IV N P T E Ssp Br D Y Br Ga.769 III N P T E Ssp Br D Y Br Ga.769 III N P T E Ssp Tn D Y Br Ga.769.707 IV N P T E Ssp Tn D Y Br Ga.769.707 III N W G E N Tn D Y Br Ga.769.707 III N W G E N Tn D Y Br Ga.769.707 III N W G E N Tn D Y Br Ga.769.707 III N W G E N Tn D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br D Y Br Ga.769.707 III N P T E N Br S Y Br Ga.769.707 III N P T E N Br S Y Br Ga.769.707 III N P T E N Br S Y Br Ga.769.707 III N P T E N Br S Y Br Ga.769.707 III N P T E N Br S Y Br Ga.769.707 III N P T E N Br S Y III III III III III III III III III III III III III II														
68.731 III														
68.732-1 III N P T E N Br I Y Br 68.748-1 III N P T E Ssp Br D Y Br 68.756 III N W G E N Br D Y Br 68.759 III N P T E N Tn D Y Br 68.761-3 III N W G E N Tn D Y Y Y 68.768 IV N P T E Ssp Br D Y BI 68.806 III N P T E Ssp Br D Y Br 69.507-1 IV N P T E N Tn D Y Br 69.515 III N W T E Ssp Tn D Y Br 69.993 III S W G E N Br S Y Bf 69.995 III N W G E N Br S Y Bf 69.995 III N W G E N Br I Y Y Y Y Y Y Y Y Y									S					
68.748-1														
68.756 III N W G E N Br D Y Bf 68.759 III N P T E N Tn D Y Br 68.761-3 III N W G E N Tn D Y Y 68.768 IV N P T E Ssp Tn D Y Br 68.806 III N P T E Ssp Br D Y Br 69.507-1 IV N P T E Ssp Tn D Y Br 69.993 III N W G E N Br I Y Y Bf 69.995 III N W G E N Br I Y Y 70.013 IV N P G E		Ш	N	Р	Т	Ε	Ssp	Br	D		Br			
68.759 III N P T E N Tn D Y Y 68.761-3 III N W G E N Tn D Y Y Y 86.866 III N P T E Ssp Br D Y Br 69.507-1 IV N P T E Ssp Br D Y Br 69.507-1 IV N P T E Ssp Br D Y Br Br 69.507-1 IV N P T E N Tn D Y Br Br 69.507-1 IV N P T E Ssp Tn D Y Br Br 69.993 III N W G E N Br S Y Bf 70.001 III N P G E N Tn D Y	68.756	111	N	W	G			Br	D	Υ	Bf			
68.768 IV N P T E Ssp Tn D Y BI 68.806 III N P T E Ssp Br D Y Br 69.507-1 IV N P T E N Tn D Y Br 69.515 III N W T E Ssp Tn D Y Br 69.995 III N W G E N Tn D Y Bf 70.001 III S W G E N Tn D Y Bf 70.013 IV N P G E N Tn D Y Bf 70.014 III N P T E N Br S Y Bl 70.023 III N P T E N		111	N	Р			N	Tn	D	Υ	Br			
68.806 III N P T E Ssp Br D Y Br 69.507-1 IV N P T E N Tn D Y Br 69.515 III N W G E N Tn D Y Br Dab 69.993 III S W G E N Tn D Y Bf 69.995 III N W G E N Tn D Y Bf 70.001 III S W G E N Tn D Y Bf 70.013 IV N P T E N Br I Y Y Bf 70.014 III N P T E N Br S Y Lbf 70.023 III N P T	68.761-3	Ш	N	W	G	Ε	N	Tn	D	Υ	Υ			
69.507-1 IV N P T E N Tn D Y Br 69.515 III N W T E Ssp Tn D Y Br 69.993 III N W G E N Br S Y Bf 69.995 III N W G E N Tn D Y Bf 70.001 III S W G E N Tn D Y Bf 70.013 IV N P G E N Tn D Y Bf 70.014 III N P T E N Br S Y Bl 70.023 III N P T E N Br D Y BI 70.076 III N P T E N <td>68.768</td> <td>IV</td> <td>N</td> <td>Р</td> <td>Т</td> <td>Ε</td> <td>Ssp</td> <td>Tn</td> <td>D</td> <td>Υ</td> <td>ВІ</td> <td></td> <td></td> <td></td>	68.768	IV	N	Р	Т	Ε	Ssp	Tn	D	Υ	ВІ			
69.515 III N W T E Ssp Tn D Y Br Dab 69.993 III S W G E N Br S Y Bf 70.001 III N W G E N Tn D Y Bf 70.013 IV N P G E N Tn D Y Bf 70.014 III N P T E N Br S Y BI 70.019 III N W G E N Dbr S Y Lbf 70.023 III N P T E N Br D Y BI 70.076 III N P T E N Br D Y Br 70.188 III N P T E	68.806	Ш	N	Р	T	Ε	Ssp	Br	D	Υ	Br			
69.993 III S W G E N Br S Y Bf 69.995 III N W G E N Tn D Y Bf 70.001 III S W G E N Br I Y Y 70.013 IV N P G E N Tn D Y Bf 70.014 III N P T E N Br S Y Bl 70.019 III N W G E N Dbr S Y Lbf 70.023 III N P T E N Br D Y Bl 70.076 III N P T E N Br I Y Br 70.188 III N P T E N Br D Y Br 70.199 III N P T <td>69.507-1</td> <td>IV</td> <td>N</td> <td>Р</td> <td>Т</td> <td>E</td> <td>N</td> <td>Tn</td> <td>D</td> <td>Υ</td> <td>Br</td> <td></td> <td></td> <td></td>	69.507-1	IV	N	Р	Т	E	N	Tn	D	Υ	Br			
69.995 III	69.515	Ш	N	W	Т	E	Ssp	Tn	D	Υ	Br		Dab	
70.001 III S W G E N Br I Y Y 70.013 IV N P G E N Tn D Y Bf 70.014 III N P T E N Br S Y BI 70.019 III N W G E N Dbr S Y Lbf 70.023 III N P T E N Br D Y BI 70.076 III N P T E N Br I Y BI 70.080 III N P T E N BI D Y Br 70.188 IIII N P T E N Br D Y Tn Dab 70.192 III N P T E </td <td>69.993</td> <td>Ш</td> <td>S</td> <td>W</td> <td>G</td> <td>Ε</td> <td>N</td> <td>Br</td> <td>S</td> <td>Υ</td> <td>Bf</td> <td></td> <td></td> <td></td>	69.993	Ш	S	W	G	Ε	N	Br	S	Υ	Bf			
70.013 IV N P G E N Tn D Y Bf 70.014 III N P T E N Br S Y BI 70.019 III N W G E N Dbr S Y Lbf 70.023 III N P T E N Br D Y BI 70.076 III N P T E N Br I Y BI 70.080 III N P T E N BI D Y Br 70.188 III N P T E N Br D Y Br 70.192 III N P T E N Br D Y Tn Dab 70.199 III N P T E </td <td>69.995</td> <td>Ш</td> <td>N</td> <td>W</td> <td>G</td> <td>Ε</td> <td>N</td> <td>Tn</td> <td>D</td> <td>Υ</td> <td>Bf</td> <td></td> <td></td> <td></td>	69.995	Ш	N	W	G	Ε	N	Tn	D	Υ	Bf			
70.014 III N P T E N Br S Y Lbf 70.019 III N W G E N Dbr S Y Lbf 70.023 III N P T E N Br D Y BI 70.076 III N P T E N Br I Y BI 70.080 III N P T E N Tn D Y Br 70.188 III N P T E N Br D Y Bf 70.192 III N P T E N Br D Y Tn Dab 70.192 III N P T E N Br D Y Bf 70.201 III N P T E	70.001	Ш	S	W			N	Br	I					
70.019 III N W G E N Dbr S Y Lbf 70.023 III N P T E N Br D Y BI 70.076 III N P T E N Br I Y BI 70.080 III N P T E N Tn D Y Br 70.188 III N P T E N BI D Y Bf 70.192 III N P T E N Br D Y Tn Dab 70.192 III N P T E N Br D Y Tn Dab 70.192 III N P T E N Br D Y Bf 70.201 III N P	70.013		N	Р	G	Ε	N	Tn	_	Υ				
70.023 III N P T E N Br D Y BI 70.076 III N P T E N Br I Y BI 70.080 III N P T E N Tn D Y Br 70.188 III N P T E N BI D Y Bf 70.189 III N P T E N Br D Y Tn Dab 70.192 III N P T E N Br D Y Tn Dab 70.192 III N P T E N Br D Y Bf 70.192 IIII N P T E N Br D Y Bf 70.201 IIII N P														
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Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

					Stem						
	Flowering	Maturity			term-	Branch-		Seed			
_	date	date	Lodging	_	ination	ing	tering	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	(score)	(score)	(cg/sd)	(Mg/ha)
68.494	714	920	3.9	99	4.5	3.0	1.0	2.3	3.0	15.0	2.69
68.521-1	714	921	4.5	86	1.0	3.0	1.0	2.5	2.0	15.9	2.47
68.523	710	921	3.5	112	4.0	3.0	1.0	2.8	1.0	15.5	2.88
68.528	716	925	3.0	99	3.0	3.0	1.0	2.5	1.0	15.0	2.43
68.530-2	707	915	3.6	79	1.0	2.5	1.0	2.3	2.5	13.5	2.35
68.533-1	710	918	3.8	86	3.5	3.0	1.0	2.3	2.5	13.7	2.51
68.533-2	721	1003	3.8	102	4.0	3.0	1.0	2.3	1.0	13.7	2.82
68.535	713	915	3.5	94	3.5	3.0	1.0	2.3	2.5	13.4	2.64
68.560	717	925	3.2	104	4.0	2.5	1.0	2.3	1.0	18.8	2.51
68.599	710	910	2.5	81	2.5	2.5	1.0	2.5	1.0	17.2	2.34
68.604-1	718	927	3.5	99	4.5	3.0	1.0	2.5	1.0	13.9	2.72
68.609A	709	915	3.0	81	3.5	3.0	1.0	2.0	3.0	12.6	2.34
68.621	710	915	3.3	102	4.0	2.5	1.0	3.3	1.0	17.0	2.59
68.644	720	928	3.0	84	1.0	3.0	1.0	2.5	1.0	17.8	2.78
68.648	713	924	3.9	99	3.5	3.0	1.0	2.3	2.0	15.0	2.93
68.67 9	715	915	3.1	91	4.0	3.0	1.0	3.3	1.0	14.3	2.60
68.679-2	725	1014	3.3	117	3.5	3.0	1.0	2.5	3.0	16.0	2.81
68.692	720	1002	3.8	99	2.0	3.0	1.0	2.3	1.0	13.2	3.16
68.692-2	711	914	2.3	81	3.5	2.5	1.0	2.3	1.0	15.7	2.56
68.701	712	916	2.4	71	2.0	2.5	1.0	2.5	1.0	14.5	2.72
68.710	713	923	4.0	109	3.5	3.0	1.0	2.3	2.0	14.4	2.80
68.731	717	923	2.9	86	3.5	3.0	1.0	2.3	2.0	15.0	2.70
68.732-1	710	917	3.0	79	3.0	3.0	1.0	2.5	2.0	15.2	2.54
68.748-1	717	924	3.4	112	4.0	3.0	1.0	2.3	2.0	14.4	2.68
68.75 6	713	917	3.3	86	3.0	2.5	1.0	2.8	1.0	15.8	2.32
68.75 9	717	928	3.4	109	4.0	3.0	1.0	2.5	2.0	15.2	2.60
68.761-3	712	923	2.9	104	3.0	3.0	1.0	2.8	2.0	16.4	2.55
68.768	724	1006	4.2	107	3.5	3.0	1.0	2.3	2.0	14.9	2.86
68.806	706	918	2.8	102	4.0	3.0	1.0	2.3	2.0	14.4	2.68
69.507-1	718	1006	3.8	97	3.0	3.0	1.0	2.3	2.5	14.9	2.47
69.515	722	1004	4.0	74	2.5	3.0	1.0	2.3	3.0	14.6	2.27
69.993	715	916	2.4	76	2.0	2.5	1.0	2.5	2.0	19.5	2.43
69.995	722	923	3.5	99	4.0	3.0	1.0	2.3	1.0	14.8	2.62
70.001	713	921	2.8	84	2.0	3.0	1.0	3.0	2.5	20.0	2.29
70.013	715	1007	3.0	109	3.5	3.0	1.0	.2.8	2.0	15.3	2.78
70.014	711	923	3.0	84	2.5	2.5	1.0	2.3	1.0	13.1	2.60
7 0.01 9	709	913	2.3	74	3.0	2.5	1.0	2.5	1.0	17.9	2.33
70.023	714	1007	3.4	114	4.0	3.0	1.0	2.3	1.0	16.4	3.07
70.076	712	920	3.8	104	4.5	2.5	1.0	2.8	2.0	13.0	2.44
70.080	716	1003	3.3	107	4.0	3.0	1.0	2.5	2.0	15.7	2.33
70.188	719	923	4.5	94	3.5	3.0	1.0	2.8	2.5	14.9	2.81
70.189	715	930	3.3	89	3.0	3.0	1.0	2.3	2.0	15.5	3.12
70.192	710	914	2.4	81	3.5	2.5	1.0	2.3	2.5	14.4	2.05
70.199	713	916	2.8	81	3.0	3.0	1.0	2.8	1.0	15.7	2.84
70.201	717	926	4.0	119	4.5	3.0	1.0	2.5	2.0	14.9	2.56
70.202	713	927	2.8	109	3.5	2.5	1.0	2.3	1.0	16.5	2.35
70.208	715	1013	3.4	114	4.0	3.0	1.0	2.3	3.0	15.5	2.69
70.212	710	927	2.3	76	3.0	3.0	1.0	2.3	1.0	16.5	2.60
70.213	720	1005	3.4	112	4.0	3.0	1.0	2.5	2.0	16.8	2.51
70.229	725	1011	3.8	102	3.5	3.0	2.0	2.3	2.5	18.5	2.96
70.242-2	722	1011	2.3	89	3.0	3.0	1.0	2.0	3.0	20.1	2.66
70.243	726	1015	3.6	74	1.0	2.0	1.0	3.5	1.5	30.6	2.04
70.247	712	924	4.1	102	4.0	3.0	1.0	2.5	2.0	15.2	2.82
70.253	711	914	2.0	79	3.0	2.5	1.0	2.8	1.5	16.2	2.17
	714	1004	4.3	102	3.5	3.0	1.0	2.0	1.0	16.2	2.82

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein	-	nposition				_	
		compo		<u>composition</u>	Pal-			Lino-	Lino-		ease
	Maturity	Proteir	Oil	Methionine	mitic	Steric	Oleic	leic	lenic		<u>ction</u>
ntry	group	(%)	(%)	(% protein)	(%)	<u>(%)</u>	(%)	(%)	(%)	PR	Ру
68.494	111	42.2	20.1	1.3	11.4	3.5	25.2	52.3	7.6	s	s
68.521 -1	III	42.3	21.3	1.3	13.6	3.7	20.6	54.0	8.0	s	s
68.523	III	42.3	19.3	1.2	13.6	4.3	19.5	53.2	9.4	s	Н
		40.8	20.9	1.1	12.6	3.7	21.7	54.2	7.8	S	Н
68.528	III		20.9		14.6	3. <i>7</i> 3.5	20.1	53.0	8.9	S	S
68.530-2	III	40.7		1.2			20.1	53.0 57.2	8.2	S	S
68.533-1	III 	44.0	19.7	1.2	11.2	3.1		57.2 51.4		S	R
68.533-2	III 	42.5	18.4	1.2	14.8	3.6	21.8 21.2	51. 4 53.2	8.3	R	
68.535	III	41.5	19.7	1.3	13.1	3.3			9.2		S
68.560	III	41.7	21.7	1.2	10.8	3.5	24.0	53.3	8.5	S	S
68.599	Ш	43.5	20.0	1.2	13.2	3.0	25.2	50.0	8.7	S	S
68.604-1	Ш	42.5	19.8	1.3	10.8	3.0	17.3	58.6	10.4	S	Н
68.609A	Ш	43.4	19.5	1.2	12.9	3.1	22.7	53.2	8.1	S	S
68.621	Ш	42.6	19.1	1.2	14.2	3.7	22.0	51.5	8.5	S	S
68.644	IV	41.5	20.3	1.1	12.7	4.5	22.0	50.8	10.2	S	R
68.648	III	42.7	19.5	1.1	12.1	4.1	23.0	51.0	9.8	S	S
68.679	Ш	44.0	20.2	1.0	12.7	4.2	20.3	54.2	8.7	S	S
68.679-2	IV	41.5	18.4	1.1	12.7	3.8	20.0	53.4	10.1	S	S
68.692	IV	40.1	20.0	1.2	13.2	3.7	15.9	57.0	10.2	S	s
68.692-2	Ш	40.9	20.9	1.1	13.8	3.3	19.0	54.9	9.0	S	s
68.701	Ш	40.2	21.9	1.3	13.3	3.7	21.0	53.9	8.2	s	S
68.710	Ш	41.7	19.6	1.2	14.1	3.4	19.2	52.9	10.4	S	S
68.731	III	42.2	20.4	1.3	12.4	2.9	20.3	55.1	9.2	s	Н
68.732-1	Ш	41.6	20.2	1.3	14.1	3.6	19.7	54.1	8.5	s	S
68.748-1	III	43.1	20.5	1.3	14.4	3.4	21.6	51.8	8.9	s	S
68.756	HI	42.0	20.5	1.2	11.8	3.9	22.5	52.6	9.2	s	Н
68.759	III	43.0	20.2	1.3	11.1	3.4	19.6	57.3	8.5	s	s
68.761-3	III	42.1	19.9	1.2	13.2	3.9	21.9	52.2	8.8	s	s
68.768	īV	43.1	19.9	1.2	13.5	3.4	24.3	50.8	8.0	S	s
68.806	III	43.3	20.4	1.2	13.0	3.2	21.0	54.0	8.9	S	s
69.507-1	IV	41.3	19.9	1.4	11.6	3.8	21.2	53.8	9.5	S	S
69.515	III	42.8	20.3	1.3	14.3	3.7	22.2	51.6	8.2	H	s
69.993	III	44.3	20.2	1.1	14.3	3.8	21.1	52.0	8.8	S	s
69.995	III	45.1	20.2	1.2	13.0	3.6	23.5	52.1	7.7	s	R
	iii	44.3	19.6	1.1	13.0	4.1	25.2	49.4	8.3	s	S
70.001	III IV	44.3 42.2	19.6	1.2	13.0	3.4	20.2	52.9	10.3	S	s s
70.013	IV III	41.8	20.2	1.3	16.3	3. 4 3.9	16.8	52.3	10.5	S	S
70.014 70.019	III	39.8	20.2	1.3	10.3	3. 9 3.4	21.1	57.5	7.9	S	S
	III III	39.8 42.8	19.3	1.1	11.9	3. 4 3.6	22.0	54.4	8.2	S	S
70.023		42.8	20.0	1.2	12.1	4.2	20.1	53.7	9.9	S	S
70.076	III 	40.9	20.0 19.6	1.2	11.9	4.2 4.8	20.1	54.4	9.0	S	S
70.080	111 ***			1.2	11.6	4.8 4.3	22.5	53.0	8.6	R	S
70.188	111 111	43.4	19.2	1.3	12.2	4.3 3.7	20.1	55.2	8.7	S	S
70.189	111 111	43.3	20.2		11.3	3.7 3.9	19.3	56.0	9.5	S	S
70.192	III	42.3	21.1 21.3	1.2 1.3	11.6	3.5 3.5	20.2	55.7	9.0	S	S
70.199	III	41.0					20.2	55.0	9.0	S	Н
70.201	III 	43.2	20.2	1.3	10.9	4.1					
70.202	III	44.7	18.7	1.1	13.9	3.7	21.5	51.2	9.8	S	Н
70.208	IV 	44.4	18.1	-	12.5	3.8	18.5	53.7	11.4	R	S
70.212	Ш	43.4	20.2	1.2	11.7	5.4	20.7	52.9	9.3	S	S
70.213	Ш	43.3	20.9	1.1	13.2	3.5	24.3	50.9	8.2	S	S
70.229	IV	44.0	19.0	1.2	11.0	3.7	21.8	52.9	10.7	s	Н
70.242-2	IV	44.8	19.8	-	12.3	3.9	22.8	52.1	8.9	S	Н
70.243	IV	44.5	19.0	1.2	12.0	3.2	21.0	54.1	9.7	S	R
70.247	Ш	43.2	20.1	1.3	12.2	3.8	19.6	54.1	10.2	S	S
70.253	111	43.0	21.4	1.2	11.2	3.7	23.5	52.3	9.3	s	S
70.462	III	42.5	20.5	1.2	10.5	4.3	19.4	55.2	10.7	s	s

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
l No.	name	acquisition	origin	or released	group
70.466-3		China	China	1926	IV
70.466-4		China	China	1926	Ш
70.467		China	China	1926	IV
70.469		China	China	1926	Ш
70.469-1		China	China	1926	Ш
70.470		China	China	1926	Ш
70.471		China	China	1926	Ш
70.473		China	China	1926	Ш
70.490		China	China	1926	IV
70.500		China	China	1926	Ш
70.501		China	China	1926	Ш
70.515		China	China	1926	Ш
70.519		China	China	1926	Ш
70.528		China	China	1926	Ш
70.541	Teng tien hei chi	China	China	1926	Ш
70.559		China	China	1926	Ш
70.566		China	China	1926	Ш
71.444		China	China	1927	IV
71.461		China	China	1927	III
71.463		China	China	1927	IV
71.506		China	China	1927	IV
71.845		China	China	1927	Ш
71.850-1		China	China	1927	Ш
72.227	Siu wong tau	China	China	1927	IV
72.232	Wong tau	China	China	1927	111
79.583		China	China	1929	Ш
79.587		China	China	1929	Ш
79.616		China	China	1929	III
79.620		China	China	1929	111
79.627		China	China	1929	III
79.628		China	China	1929	III
79.645		China	China	1929	Ш
79.691-4		China	China	1929	III
79.692		China	China	1929	III
79.693		China	China	1929	III
79.696		China	China	1929	IV
79.710		China	China	1929	III
79.726		China	China	1929	III
79.732-3		China	China	1929	IV
79.732-4		China	China	1929	IV
79.743		China	China	1929	IV
79.760		China	China	1929	III
79.797		China	China	1929	III
79.825-1		China	China	1929	IV
79.835		China	China	1929	III
79.848-1		China	China	1929	III
79.870-2		China	China	1929	III
79.870-4		China	China	1929	IV
79.870-6		China	China	1929	IV
79.872		China	China	1929	III
79.874		China	China	1929	III
79.874-1		China	China	1929	III
80.459		Japan	Japan	1929	Ш
80.461	Wase eda mame	Japan	Japan	1929	III

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedce	oat		Other t	raits	
Entry	rity		Flower color	Color	Earm	Density	Pod color	Luster	Color	Hilum color	Sood	Loof	Dla-
intry	group	trm.	COIOI	COIOI	FOIII	Delisity	COIOI	Luster	Color	COIOI	Seed	Lear	Plan
70.466-3	IV	N	w	Т	Е	N	Br	s	Υ	Br			
70.466-4	Ш	N	W	Т	E	N	Br	D	Y	ВІ			
70.467	IV	N	P	G	E	N	Br	S	Y	lb			
70.469	III	N	w	Ğ	E	Ssp	BI	D	Ÿ	Y			
70.469-1	III	N	P	Ť	Ē	Ssp	Br	D	Ÿ	Br			
70.470	III	N	w	Ġ	E	N	BI	S	Ÿ	Bf			
70.471	III	N	P	T	E	N	Br	S	Ý	Br			
70.473-1	III	N	Р	Ť	Ē	N	Br	D	Ÿ	Br			
70.490	IV	N	Р	Ť	Ē	N	Br	D	Ÿ	Br			
70.500	III	N	w	Ġ	E	N	Br	S	Ÿ	Bf			
		N	P	T	E	Ssp	Br	D	Ϋ́				
70.501										Br D-			
70.515	III 	N	P	T	E	Ssp	Br	D	Y	Br			
70.519	III	N	P	T	E	Ssp	Br Dr	D	Y	Br			
70.528	III	N	P	T T	E	Ssp	Br	S	Y	BI			
70.541	III	N	P	T	E	N	Br	D	Y	BI			
70.559	III 	S	W	G	E	N	Dbr	S	Y	Bf			
70.566	III	N	P	G	E	N	Br	1	Y	G			
71. 444	IV	N	W	T	Ε	N	Br	ı	Υ	Br			
71.461	III	N	Р	Т	Ε	N	Br	S	Υ	ВІ			
71.463	IV	N	Р	T	Ε	N	Br	D	Υ	Br			
71.506	IV	N	Р	G	Ε	N	Br	D	Υ	Υ			
71.845	Ш	N	W	G	Ε	N	Br	S	Υ	Bf			
71.850-1	Ш	S	Р	G	Ε	N	Br	S	Υ	lb			
72.227	IV	S	W	G	Sa	N	Br	S	Υ	Bf			
72.232	Ш	D	Dp	Т	Ε	N	Tn	1	Υ	ВІ			
79.583	Ш	D	W	G	Ε	Ssp	Br	S	Gn	Gn	St	Na	
79.587	Ш	N	Р	Т	Ε	Ssp	Br	1	Rbr	Rbr			
79.616	Ш	N	W	Lt	Ε	N	Br	1	Br	ВІ	Sadd	le	
79.620	III	N	W	Т	Ε	N	Br	S	Υ	Br			
79.627	III	N	P	T	E	Ssp	Tn	S	Y	Br			
79.628	III	N	P	T	E	N	Br	D	Y	Br			
79.645	III	N	P	Ť	Ē	Ssp	Br	D	Rbr	Rbr			
79.691-4	III	D	w	Ť	Sa	Ssp	BI	D	Br	Br			
79.692	III	N	P	Ť	E	N	Br	S	Y Y	BI			
79.693	 III	N	P	Lt	E	N	Br	S ·	Br	Br			
79.696	IV	N	w	T	E	N	Br	ı	Lgn	BI			
79.710	III	N	P	, T	E	Ssp	Br	i	Rbr	Rbr			
79.726	III	N	w	Ť	E	N	Br	S	BI	BI	Gnco	t	
79.732-3	iv	D	P	Ġ	E	N	Dbr	D	Y	lb	31100	•	
79.732-4	IV	D	w	G	E	N	Dbr	Ī	Ϋ́	Bf			
79.743	IV IV	N	W	T	E	N	Br	i	Lgn	BI			
79.743 79.760	III	N	P P	Lt	E	N	Br	D	Y	Br			
79.760 79.797		N	W	T	E	N	Br	D	Y	BI			
	III								Y	Bf			
79.825-1	IV 	N	W	G	E	N Son	Br	D					
79.835	III	N	W	Lt	E	Ssp	BI B-	S	Y	Lbf			
79.848-1	III	N	P	Lt	E	N	Br T-	D	Y	Br Dr			
79.870-2	III	N	W	T ~	E	N	Tn	ı	Y	Br			
79.870-4	IV	N	P	T	E	N	Br	S	Υ	BI			
79.870-6	IV	D	W	T	E	N	Tn	S	Y	Br			
79.872	III	N	Р	T	Е	N	Tn	D	Υ	Br			
79.874	III	S	W	G	Ε	N	ВІ	S	Υ	Bf			
79.874-1	III	N	Р	Т	Ε	N	Dbr	S	Υ	ВІ			
80.459	III	D	Р	G	Ε	Ssp	Br	ı	Υ	Υ			
80.461	III	N	W	G	E	N	Dbr	S	Υ	Bf			
80.466-1	III	D	W	Т	Sa	N	Br	D	Υ	ВІ			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

					Stem						
	Flowering	Maturity			term-	Branch-		Seed	N 4 - 44 li	\A/=:=b4	Yield
Entry	<u>date</u> (mmdd)	date (mmdd)	Lodging (score)	Height (cm)	ination (score)	ing (score)	tering (score)	Quality (score)	Mottling (score)	Weight (cg/sd)	(Mg/ha)
70.466-3	712	1002	3.2	104	4.0	3.0	2.0	2.5	3.5	15.0	2.36
70.466-4	713	922	3.5	127	4.5	2.5	1.0	2.5	1.0	16.2	2.43
70.467	720	1017	2.1	112	4.0	3.0	1.0	2.5	1.5	13.4	2.84
70.469	724	1003	3.8	99	3.5	3.0	1.0	2.8	2.0	17.1	1.91
70.469-1	708	919	2.4	99	3. 5	3.0	1.0	2.3	2.0	14.2	2.70
70.470	710	916	3.3	89	3.0	2.5	1.0	2.8	1.0	18.6	2.35
70.471	712	923	3.3	104	3.5	2.5	1.0	2.8	1.0	15.1	2.89
70.473	714	927	2.9	107	3.5	3.0	1.0	2.3	2.0	16.5	2.68
70.490	719	1014	3.8	102	3.5	3.0	1.0	2.0	2.5	14.9	2.68
70.500	711	918	3.8	89	3.0	2.5	1.0	2.3	1.0	16.8	2.43
70.501	712	923	3.4	107	3.0	2.5	1.0	2.5	2.0	14.9	2.52
70.515	707	916	2.9	86	3.5	3.0	1.0	2.3	2.0	14.6	2.50
70.519	713	917	2.6	79	3.0	2.5	1.0	2.0	1.5	14.5	2.98
70.528	714	929	4.0	135	4.5	3.0	1.0	2.0	1.0	14.5	2.69
70.541	720	928	3.8	127	4.5	3.0	1.0	2.3	1.0	16.8	2.56
70.559	707	912	2.3	76	2.0	3.0	1.0	3.0	1.5	20.3	2.23
70.566	709	917	2.7	79	3.0	3.0	1.0	2.8	3.0	17.1	2.33
71.444	803	1006	3.5	117	4.0	3.0	1.0	2.3	3.5	14.2	2.27
71.461	713	925	3.7	109	4.0	3.0	1.0	2.3	1.0	16.3	2.91
71.463	715	1001	2.6	99	3.0	3.0	1.0	2.3	2.0	17.8	2.76
71.506	808	1013	3.9	135	4.0	3.5	1.0	2.0	1.0	17.1	2.56
71.845	707	919	2.8	79	2.5	3.0	1.0	2.3	2.0	19.5	2.43
71.850-1	722	925	4.3	109	2.0	2.5	1.0	2.5	1.0	15.4	2.66
72.227	801	1005	3.8	114	2.0	3.0	1.0	2.5	3.0	16.5	1.96
72.232	728	1004	3.3	89	1.0	3.0	5.0	2.3	2.5	12.5	2.21
72.232 79.583	717	924	3.0	64	1.0	2.0	1.0	2.3	-	18.4	1.77
79.583 79.587	722	1002	3.1	89	3.0	3.0	1.0	2.3	1.0	15.5	2.80
	713	920	3.1	99	3.5	3.0	1.0	2.5	-	20.7	2.58
79.616		925	2.8	117	4.0	3.0	1.0	2.5	3.0	16.2	2.74
79.620	717			94			1.0	2.3	3.0	14.6	2.58
79.627	713	926	3.7		3.5	3.0	1.0	2.3 2.0	2.0	17.2	2.67
79.628	715	930	2.5	94	2.5	3.0	1.0	1.8	2.0	16.5	2.64
79.645	721	1003	3.6	97 52	3.5	3.0				10.6	1.96
79.691-4	719	1001	3.3	53	1.0	3.5	2.0	2.5	1.0	13.8	2.60
79.692	711	923	3.5	107	4.0	3.0	1.0	2.3	1.0		
79.693	725	923	3.4	112	4.0	3.0	1.0	2.0	1.0	12.1	2.64
79.696	720	1013	2.9	114	3.5	3.0	1.0	2.0	1.0	15.1	2.97
79.710	721	1003	3.3	99	3.0	3.0	1.0	2.0	-	16.9	2.59
79.726	714	920	2.3	76	3.0	3.0	1.0	2.3	-	16.2	2.60
79.732-3	731	1014	2.9	84	1.0	2.0	1.0	2.3	3.5	17.7	2.35
79.732-4	730	1013	3.1	81	1.0	2.0	1.0	2.0	3.5	17.1	2.41
79.743	719	1011	3.1	114	3.5	3.0	1.0	2.0	1.0	16.2	3.03
79.760	714	921	3.8	10 7	4.0	3.0	1.0	2.5	3.0	15.7	2.47
79.7 9 7	716	1004	3.9	99	3.5	3.0	1.0	2.3	1.5	15.7	2.60
79.825-1	725	1010	3.4	124	3.5	2.5	1.0	2.5	2.0	15.6	2.35
79.835	714	921	2.6	97	3.5	2.5	1.0	2.0	1.0	19.8	2.37
79.848-1	713	918	3.8	104	3.5	3.0	1.0	2.8	3.0	15.6	2.31
79.870-2	716	918	3.0	97	3.5	2.5	1.0	2.5	2.5	16.7	2.41
79.870-4	725	1006	3.4	112	4.0	3.0	3.0	2.0	1.0	17.0	2.91
79.870-6	805	1014	4.2	99	1.0	3.0	1.0	2.5	2.0	13.8	2.68
79.872	707	912	3.6	79	2.5	3.0	1.0	2.5	3.0	14.9	2.61
79.874	710	917	3.0	89	2.0	3.0	1.0	2.3	1.0	15.5	2.66
79.874-1	710	929	3.3	102	3.5	3.0	1.0	2.5	2.0	15.7	2.72
80.459	720	1001	2.3	71	1.0	2.5	1.0	2.8	1.0	28.8	2.06
80.461	711	916	3.3	79	3.5	2.5	1.0	2.5	1.0	17.6	2.56
80.46 6 -1	711	925	2.8	74	1.0	1.5	1.0	3.0	1.0	17.8	1.24

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein	Oil cor	nposition					
		compo		composition	Pal-			Lino-	Lino-	Dis	ease
	Maturity	Protein	Oil	Methionine	mitic	Steric	Oleic	leic	lenic	rea	ction
ntry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
70.466-3	IV 	43.9	19.9	1.2	13.6	4.6	24.0	49.3	8.6	S	S
70.466-4	III	42.5	21.5	1.2	11.9	4.0	23.2	54.0	6.9	R	S
70.467	IV 	41.3	20.1	1.2	12.0	4.0	19.6	53.7	10.7	S	S
70.469	III 	41.2	20.8	1.3	14.1	3.4	22.1	52.4	7.9	S	S
70.469-1	III 	42.4	20.2	1.3	12.9	2.9	20.1	51.9	12.1	S	S
70.470	III	40.9	21.9	1.3	11.9	3.9	23.6	53.0	7.6	S	R
70.471	111	42.3	19.6	1.3	11.6	4.3	19.2	54.7 55.0	10.2	S	Н
70.473	III N./	45.4	19.0	1.1	13.1	3.6	19.1 19.8		9.3	s s	R
70.490	IV 	42.6	19.4	1.2	13.5	3.6		53.4	9.7		R
70.500	III	41.1	21.4	1.3	11.5	3.5	23.6	53.2	8.3	S	R
70.501	III 	44.6	18.3	1.2	12.9	3.6	18.3	54.6	10.5	S	Н
70.515	111	43.6	19.8	1.2	12.2	3.0	20.1	56.2	8.6	S	H
70.519	III 	42.2	20.0	1.2	13.4	4.0	17.7	56.9	9.1	S	R
70.528	III	43.1	19.2	1.2	11.6	3.1	17.3	57.0	11.0	S	Н
70.541	III	42.2	20.7	1.3	12.0	3.6	20.0	54.7	9.7	S	Н
70.559	111	42.9	20.2	1.3	12.4	4.1	26.4	48.3	8.8	S	S
70.566	111	46.2	19.1	1.2	13.8	3.8	23.6	49.3	9.5	S	Н
71.444	IV 	47.7	16.4	1.2	13.6	3.2	21.3	52.8	9.1	S	R
71.461	III	45.9	18.8	1.2	12.4	3.3	18.8	56.2	9.3	S	Н
71.463	IV	44.0	18.4	1.2	11.8	3.6	20.3	54.9	9.3	S	R
71.506	IV 	43.2	19.3	1.2	12.6	3.4	20.4	52.1	11.5	S	S
71.845	III	44.6	20.4	1.2	13.0	3.7	20.6	53.4	9.3	Н	S
71.850-1	III	44.0	21.1	1.1	12.4	3.8	24.8	50.5	8.5	S	S
72.227	IV 	47.6	17.5	1.1	11.9	3.9	26.8	50.3	7.1	S	Н
72.232	III	44.0	18.4	1.2	13.8	3.9	21.6	50.3	10.4	S	S
79.583	III 	43.3	19.0	-	14.6	3.9	18.6	53.2	9.8	S	S
79.587	III	42.4	20.9	-	14.8	3.9	24.8	48.2	8.3	S	S
79.616	III 	45.4	19.1		12.3	4.8	23.2	50.8	8.8	S	S
79.620	III 	44.6	19.4	1.3	11.2	3.8	23.2	52.8	8.9	S	S
79.627	III 	42.8	20.0	1.2	12.9	3.7	20.4	52.9	10.2	S	S
79.628	III	43.7	19.4	1.2	14.9	2.7	19.8	54.0	8.5	S	R
79.645	III	42.7	20.1	-	11.4	4.1	25.3	50.7	8.5	S	S
79.691-4	III	42.6	18.5	-	12.8	4.6	22.1	50.1	10.3	S	S
79.692	III	43.3	20.0	1.2	15.1	2.8	19.6	55.2	7.3	S	S
79.693	III	41.8	20.1	-	12.5	3.9	20.4	53.8	9.5	S	S
79.696	IV 	40.6	19.3	1.3	12.4	3.4	15.8	57.5	10.9	S	S
79.710	111	42.7	21.2	-	11.9	3.5	24.2	51.5	8.9	S	S
79.726	III 177	42.0	21.9	1.2	14.8	3.5	22.6	50.9	8.3	Н	S
79.732-3	IV	44.7	18.7	1.2 1.2	12.2	4.1	25.0	48.4	10.3	S	Н
79.732-4	IV	44.3 39.3	18.6	1.4	11.7 13.0	4.3 3.7	24.2 15.7	48.7 54.9	11.0 12.7	S S	S
79.743	IV III		20.3	1.4	12.1	3.7 4.4	23.8	54.9 51.5	8.2	S	s s
79.760	111	42.9 41.7	20.3	1.3	13.1	4.4 2.9	20.1	51.5 55.6	8.2 8.3	Н	S
79.797	III 1\7	41.7 40.6	21.2 20.2	1.3	11.5	2.9 4.4	25.2	49.3	8.3 9.7	S	S
79.825-1	IV III		20.2 22.1	1.3	12.3		23.5	51.1	9.7 8.9	S	S
79.835 79.848-1	III 111	41.9 42.7	20.0	1.4	12.3	4.2 5.6	24.2	49.3	8. 9 8.4	S	S
	III III			1.4			28.0				S
79.870-2	III	43.0	20.4		13.2	3.4 4.6		48.1	7.3	R	
79.870-4	IV IV	41.2	20.9	1.5	11.7	4.6	22.2	52.8	8.8	S	S
79.870-6	IV 	40.2	19.4	1.4	12.8	3.3	20.0	54.4	9.5	S	S
79.872	111	42.7	20.3	1.3	13.2	3.7	19.7	54.9	8.6	S	S
79.874	111	40.6	21.9	1.2	11.3	4.2	22.4	53.3	8.9	S	S
79.874-1	III 	40.4	20.9	1.4	10.5	4.1	19.5	55.9	10.0	S	S
80.459	III 	44.5	18.7	1.3	13.1	6.6	26.7	43.7	9.9	Н	S
80.461	III 	39.4	23.2	1.3	11.1	3.9	22.4	54.0	8.6	S	S
80.466-1	111	40.2	20.2	1.3	13.2	4.6	22.9	50.8	8.5	S	S

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Ai	Country	Country	Year	Matur-
l No.	Accession name	of acquisition	of origin	introduced	ity
140.	name	acquisition	origin	or released	group
30.466-2	(Okuro maru daizu)	Japan	Japan	1929	IV
30.470	Souseikurome o saya daizu	Japan	Japan	1929	Ш
0.471-1	(Sousei kuro sakigake)	Japan	Japan	1929	Ш
0.473	Cha mame	Japan	Japan	1929	IV
0.479	Shikou obbikuri daizu	Japan	Japan	1929	IV
0.480	Gokuwase daihosan shinbon daizu	Japan	Japan	1929	Ш
30.481	Rokusun daizu	Japan	Japan	1929	Ш
0.488	Eda mame uase chaurame	Japan	Japan	1929	IV
0.498-1	(O tsubu aojiro daizu)	Japan	Japan	1929	IV
30.822	Shiheigai shirobana	Japan	Japan	1929	111
0.825	Nagazuki	Japan	Japan	1929	111
30.828-1	Asahi 60	Japan	Japan	1929	IV
30.828-2	(Asahi 60)	Japan	Japan	1929	IV
0.831	Kaigen shirobana	Japan	Japan	1929	III
80.834-1	Daruma 20	Japan	Japan	1929	IV
30.834-2 30.837	(Daruma 20)	Japan	Japan	1929	IV
0.837	Mejiro Niuchan	Japan	Japan	1929	IV
30.841 30.844-2	Niucnan Ho ten shirokubi daizu	Japan	Japan	1929	III
30.8 44 -2	(Ho ten shirokubi daizu)	Japan	Japan	1929	III
30.8 44 -3	Rikuu 23	Japan Japan	Japan	1929	III
30.845-1	(Rikuu 23)	· .	Japan Japan	1929	111
30.847-1	Shiro saya	Japan Japan	Japan	1929	111
30.847-2	(Shiro saya)	Japan	Japan Japan	1929 1929	III IV
31.023	Honen daizu	Japan	Japan Japan		
31.027	Akasaya daizu	Japan	Japan Japan	1929 1929	IV III
1.029-1	(Chuseikurome daizu)	Japan	Japan	1929	IV
31.030	Sousei kuro daizu	Japan	Japan	1929	IV
31.030-1	(Sousei kuro daizu)	Japan	Japan	1929	111
31.031-1	Banseiosayada mame	Japan	Japan	1929	 III
1.031-2	(Banseiosayada mame)	Japan	Japan	1929	 III
31.034-1	Kuro daizu	Japan	Japan	1929	iv
1.034-2	(Kuro daizu)	Japan	Japan	1929	īV
1.037-1	(Kurakake daizu)	Japan	Japan	1929	١٧
1.037-2	(Kurakake daizu)	Japan	Japan	1929	Ш
31.037-3	(Kurakake daizu)	Japan	Japan	1929	III
1.037-5	(Kurakake daizu)	Japan	Japan	1929	IV
1.038	Sousei eda mame	Japan	Japan	1929	III
1.041	Kuro daizu	Japan	Japan	1929	III
1.041-1	(Kuro daizu)	Japan	Japan	1929	III
1.042-1	(Kurakake daizu)	Japan	Japan	1929	IV
1.042-2	(Kurakake daizu)	Japan	Japan	1929	IV
1.044-1	Akita daizu	Japan	Japan	1929	III
1.044-2	(Akita daizu)	Japan	Japan	1929	III
1.667	Selection I.V.V. Croushoul	China	China	1929	III
1.761	Aojiro	Japan	Japan	1929	Ш
1.764	Moshito	Japan	China	1929	IV
1.766	Moshito	Japan	China	1929	Ш
31.777	Kurozaya	Japan	Japan	1929	IV
1.780	Tsurunoko	Japan	Japan	1929	Ш
1.785	Chusei hadaka	Japan	Japan	1929	Ш
2.210	Funkan	Rep. of Korea	Rep. of Korea	1929	IV
2.218	Funkon	Rep. of Korea	Rep. of Korea	1929	IV
2.232	Ute	Rep. of Korea	Rep. of Korea	1929	Ш
2.235	Taichukon	Rep. of Korea	Rep. of Korea	1929	Ш

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

				Pubes	cence			Seedc	oat		Other	traits	
	Matu-	04	- 1										
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
80.466-2	IV	D	W	G	Ε	N	Tn	1	Υ	Bf			
80.470	Ш	D	Р	-	С	N	Tn	D	Gn	Br			
80.471-1	Ш	D	W	G	E	N	Dbr	S	Υ	Υ			
80.473	IV	N	W	G	E	Ssp	Br	D	Υ	Bf			
80.479	IV	N	W	Т	E	Ssp	Br	S	Υ	ВІ			
80.480	Ш	S	W	G	E	N	Br	D	Υ	Bf			
80.481	III	N	P	G	E	N	Br	D	Υ	Υ			
80.488	IV	D	W	T	E	N	Br	1	Υ	Br			
80.498-1	IV	D	Р	Т	E	N	Br	D	Υ	Tn			
80.822	Ш	S	W	G	E	N	Br	1	Υ	Lbf			
80.825	Ш	D	Р	G	Α	Ssp	Br	S	Υ	Lbf			
80.828-1	IV	D	Р	T	Sa	N	Br	S	Υ	Br			
80.828-2	IV	D	W	G	E	N	Br	S	Υ	Bf			
80.831	Ш	N	W	G	E	N	Dbr	S	Υ	Υ			
80.834-1	IV	N	W	G	Ε	N	Br	S	Υ	Bf			
80.834-2	IV	S	W	G	E	N	Br	S	Υ	Lbf			
80.837	IV	D	Р	G	E	Dn	Br	S	Υ	Υ			
80.841	Ш	D	Р	G	E	Ssp	Br	D	Υ	Υ			
80.844-2	Ш	N	Р	Т	E	N	Tn	D	Gn	G		Dab	
80.844-3	Ш	N	Р	G	Ε	N	Tn	D	Υ	lb			
80.845-1	Ш	D	Р	G	E	N	Br	D	Υ	Bf			
80.845-2	Ш	N	Р	G	E	N	Br	S	Υ	Bf			
80.847-1	Ш	N	W	T	E	N	Br	S	Υ	Br			
80.847-2	IV	N	Р	T	E	N	Br	1	Υ	ВІ			
81.023	IV	N	W	T	Sa	N	Tn	S	Υ	ВІ			
81.027	III	D	Р	T	E	Ssp	Br	D	Υ	Br			
81.029-1	IV	D	W	T	E	N	Br	S	Gn	ВІ			
81.030	IV	D	W	G	E	N	Br	D	Υ	Bf			
81.030-1	Ш	D	Р	T	E	Ssp	Dbr	S	ВІ	ВІ			
81.031-1	III	D	Р	T	E	Ssp	Br	1	ВІ	ВІ			
81.031-2	Ш	N	Р	G	E	N	Dbr	D	Υ	lb			
81.034-1	IV	N	Р	G	E	N	Tn	D	Υ	Υ			
81.034-2	IV	N	Р	G	E	Sdn	Br	S	Υ	Υ			
81.037-1	IV	D	Р	G	E	N	Br	D	Υ	lb			
81.037-2	III	N	Р	G	E	N	Tn	D	Gn	Bf			
81.037-3	III	N	Р	Т	Ε	N	Tn	1	Υ	ВІ	Sadd	le	
81.037-5	IV	N	Р	G	Sa	N	Tn	D	Υ	lb			
81.038	Ш	D	W	Т	Ε	Ssp	Br	S	ВІ	ВІ		5lft	
81.041	III	N	Р	Т	Е	N	Br	D	Υ	ВІ			
81.041-1	III	D	Р	Т	Ε	Ssp	Br	S	Rbr	Rbr			
81.042-1	IV	N	Р	G	Ε	N	Br	S	Gn	lb			
81.042-2	IV	D	Р	G	Sa	N	Br	S	Gn	lb			
81.044-1	III	N	W	G	Ε	N	Dbr	S	Υ	Bf			
81.044-2	III	N	W	G	Ε	N	Br	D	Gn	Bf			
81.667	Ш	D	Р	Т	E	Ssp	Br	S	Br	Br			
81.761	Ш	N	W	G	E	N	ВІ	S	Υ	Υ			
81.764	IV	N	Р	Т	E	N	Br	S	ВІ	ВІ			
81.766	III	N	Dp	Т	Α	Ssp	Br	В	ВІ	ВІ			Sw
81.777	IV	D	Р	G	Ε	N	Tn	D	Υ	Bf			
81.780	Ш	D	Р	G	E	Ssp	Br	D	Υ	Υ			
81.785	III	N	Р	T	Sa	Ssp	Br	S	Br	Br			Sw
82.210	IV	D	Dp	Т	Ε	Ssp	Tn	S	Υ	Tn			
82.218	IV	D	Dp	Т	Ε	Ssp	Tn	S	Υ	Tn			
82.232	III	D	P	Lt	Ε	Ssp	Br	D	Υ	Br			
82.235	Ш	D	Р	Т	E	Ssp	Br	S	Rbr	Rbr			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
90.466.2	723	1017	3.2	76	1.0	2.0	1.0	2.8	2.0	23.6	2.00
80.466-2 80.470	723 721	1017	3.2 3.3	61	1.0	2.5 2.5		2.8 2.5	2.0	23.6 16.9	2.09
80.470	721 712	919	3.3 2.3	74	1.5	2.5	1.0				1.14
80.471-1 80.473	712 720	1005	2.3 3.8	135	5.0	4.0	1.0 3.0	2.0 2.8	1.0 1.5	19.2 22.4	2.74
80.473 80.479	720 715	1006	3.0	119	4.0	3.0	2.0		1.0		2.22
80.480	713	918	3.3	94	2.0	2.0	1.0	2.5 2.5	1.0	15.4 17.0	3.21 2.35
80.481	713 712	1002	3.3 2.7	109	4.0	3.0	1.0	2.3	2.0	19.4	
80.488	712 721	1002	3.0	71	1.0	3.0	5.0	2.5 2.5	1.5	23.3	2.69
	721 721	1005	2.9	66			4.0		1.5	23.3 15.2	1.96
80.498-1	721 707	919	3.0	71	1.0 2.0	3.0	1.0	2.3 2.5	3.0		2.08
80.822 80.825	707 727	1003	2.7	66	1.0	2.0 2.0	1.0		2.5	17.2 17.7	2.23
	727 725	1003	3.9	84	1.0	3.0	1.0	2.5 2.3	2.5	13.8	1.81
80.828-1	728 728	1010		89							1.86
80.828-2			3.8		1.0	3.0	1.0	2.3	1.5	14.5	2.15
80.831 80.834-1	716 724	923 1019	2.5	97 124	3.5	2.5	1.0	2.3	1.0	18.2	2.42
80.834-1 80.834-2	724 726	1019 1013	2.3		4.0	3.0	1.0 1.0	2.0	1.0	17.3	3.23
	726 726		3.4	107	2.0	3.0		2.0	1.0	18.2	3.23
80.837	726 705	1012	3.5	81	1.0	3.0	1.0	2.0	1.0	16.4	2.39
80.841	725	928	3.3	69	1.0	2.5	3.0	2.5	2.0	19.0	1.52
80.844-2	722	1009	3.5	102	4.0	3.0	2.0	2.5	3.0	22.3	2.67
80.844-3	717	926	2.5	97	3.5	3.0	1.0	2.3	1.0	23.5	2.61
80.845-1	721	929	2.2	76	1.0	3.0	1.0	2.3	2.5	19.5	2.30
80.845-2	722	921	3.4	94	4.0	3.0	1.0	2.5	1.0	15.4	2.17
80.847-1	715	918	2.8	97	3.5	3.0	1.0	2.8	2.5	16.5	2.45
80.847-2	721	1008	2.7	109	4.0	3.0	1.0	2.5	1.0	23.9	2.95
81.023	719	1004	3.8	109	3.0	3.0	1.0	2.3	1.5	14.4	2.68
81.027	718	1002	2.9	53	1.0	3.0	1.0	2.0	2.5	15.8	1.49
81.029-1	720	1005	2.9	76	1.0	3.0	1.0	2.8	1.0	29.7	2.61
81.030	722	1013	2.5	84	1.0	3.0	1.0	2.0	1.0	19.5	2.41
81.030-1	712	924	3.8	86	1.5	3.0	1.0	2.5	-	15.9	1.99
81.031-1	713	926	1.9	56	1.0	3.0	1.0	2.5	-	24.0	1.92
81.031-2	712	926	1.4	81	2.5	3.0	1.0	2.0	1.0	21.2	2.42
81.034-1	725	1005	3.9	117	3.0	3.0	1.0	2.3	1.5	20.6	2.54
81.034-2	731	1024	3.4	97 74	3.0	3.0	1.0	2.5	1.5	23.0	2.21
81.037-1 81.037-2	720 719	1003 1003	2.6 2.8	114	1.0 4.0	3.0 3.0	2.0 1.0	2.5	2.5 2.0	21.0	2.53
81.037-2	719	925	2.6 3.5	104	3.0	3.0	1.0	2.3 2.5	2.0	22.2	2.45
81.037-3 81.037-5	723 724	1003	3.5 3.5	112	3.0 3.0	3.0	1.0	2.5 2.5	2.0	17.0 15.0	1.78
81.037-6	715	919	2.5	56	1.0	2.5	1.0	2.5 2.5		25.0	2.25
81.038	716 706	922	3.9	109	3.0	3.0	1.0	3.3	1.0	15.2	2.24 2.62
81.041-1	714	914	3.2	69	1.0	3.0	1.0	3.5 3.5	1.0	23.1	1.86
81.042-1	720	1008	2.8	124	4.0	3.0	1.0	2.5	1.0	18.1	3.24
81.042-1	720 717	1003	1.8	71	1.0	3.0	1.0	2.8	1.0	19.4	2.21
81.044-1	717	916	3.6	86	2.5	2.5	1.0	2.5	1.0	16.9	2.43
81.044-1	713	928	3.0	99	2.5 3.5	2.5 2.5	1.0	3.0	1.0	24.4	2.43 2.17
81.667	713 717	928 918	3.0 2.9	56	1.0	3.0	1.0	3.0	1.0	24.4 23.2	2.17
81.761	71 <i>7</i> 716	925	2. 9 2.5	102	3.5	3.0	1.0	2.0	1.0	23.2 18.5	2.09 2.54
81.761	814	1011	4.3	130	5.0	4.0	1.0	2.3		6.9	
81.76 4 81.766	716	915	4.5 4.5	69	5.0	5.0	1.0	2.3 2.0	-	5.6	2.39 1.41
	710	1008	4. 5 3.6	99	1.0	3.0	2.0		1.0		
81.777 81.780	730 719	930		99 74				2.3	1.0	19.8 25.7	2.97
81.780 81.785		930 918	3.8 3.5	74 89	1.0	3.0 4.5	3.0	3.5	2.0	25.7	2.12
81.785	723 726		3.5 3.6		4.5 1.0	4.5 3.0	1.0	2.5	1.0	8.3	1.88
82.210		1011	3.6	69 60	1.0	3.0	1.0	2.3	1.0	20.6	2.57
82.218	724	1010	3.7	69 53	1.0	3.0	1.0	2.5	1.0	22.1	2.55
82.232	715	1004	2.6	53	1.0	3.0	1.0	2.0	3.0	11.5	2.00
82.235	722	1001	3.4	51	1.0	3.0	1.0	3.3	-	23.2	1.8

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to Pl 266.807, grown at Urbana, IL

		Seed		Protein		nposition					
		compo		<u>composition</u>	Pal-			Lino-	Lino-		ease
	Maturity	Proteir		Methionine	mitic	Steric	Oleic	leic	lenic		ctior
ntry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
80.466-2	IV	47.2	18.9	1.2	12.9	3.8	23.4	50.2	9.7	R	s
80.470	III	41.1	21.7	1.3	11.8	4.2	24.6	50.5	9.0	s	Н
80.471-1		44.3	20.1	1.3	11.3	4.3	23.8	52.5	8.1	Н	S
80.471-1	IV	43.9	18.9	1.2	12.0		23.2	47.1	10.7		
80.479						7.0				R	s s
	IV 	41.0	21.0	1.3	11.3	3.7	18.7	56.2	10.0	S	5
80.480	III	40.6	22.3	1.2	11.6	3.7	20.9	53.5	10.2	S	s
80.481	111	44.2	19.9	1.2	11.4	5.4	23.1	50.0	10.1	S	S
80.488	IV	44.0	19.2	1.2	12.7	2.9	19.2	57.4	7.9	R	S
80.498-1	IV	43.2	18.8	1.3	13.0	3.6	21.4	52.1	9.9	R	S
80.822	Ш	44.0	19.9	1.2	12.2	3.8	24.5	52.5	7.0	S	S
80.825	Ш	43.5	19.4	1.2	12.5	3.4	24.6	52.1	7.3	R	S
80.828-1	IV	44.0	20.1	1.3	12.6	3.4	21.8	53.7	8.6	R	S
80.828-2	IV	42.5	19.2	1.3	11.8	3.2	22.5	53.6	8.8	R	S
80.831	Ш	41.9	22.2	1.3	16.7	2.9	22.3	50.5	7.5	S	S
80.834-1	IV	41.4	20.3	1.3	13.5	3.2	17.8	55.1	10.4	S	R
80.834-2	IV	41.0	21.9	1.1	13.2	2.9	21.8	52.8	9.4	S	S
80.837	IV	42.4	19.0	1.3	12.6	4.3	20.6	52.6	10.0	S	S
80.841	Ш	43.1	20.2	1.2	13.2	4.2	23.6	50.5	8.6	R	S
80.844-2	Ш	43.2	19.2	1.2	12.9	4.3	20.8	52.4	9.6	s	s
80.844-3	Ш	45.1	19.4	1.1	12.8	4.4	23.8	49.9	9.2	s	s
80.845-1	Ш	42.6	19.5	1.3	12.1	4.8	23.8	49.0	10.4	S	s
80.845-2	III	40.8	20.5	1.2	12.0	4.7	22.4	51.7	9.2	S	S
80.847-1	III	43.7	19.9	1.2	12.6	3.8	25.0	50.0	8.6	R	Н
80.847-2	IV	42.9	19.8	1.3	12.1	4.2	21.0	53.6	9.1	s	s
81.023	IV	42.2	19.4	1.2	12.5	3.6	19.3	54.0	10.6	s	s
81.027	III	43.8	18.4	1.3	11.1	3.5	17.4	57.6	10.3	R	S
81.029-1	IV	42.2	21.5	1.2	12.2	4.1	26.5	48.8	8.4	s	S
81.030	IV	42.0	20.2	1.1	13.6	3.4	19.5	53.2	10.2	S	S
81.030-1	III	41.7	18.8		12.8	3. 4 3.6	20.4	54.0	9.2	R	S
				-							
81.031-1	III	41.8	20.7	-	13.1	3.7	22.6	53.1	7.5	S	s s
81.031-2	III	42.7	21.2	1.1	11.5	3.7	24.4	49.8	10.6	R	
81.034-1	IV	41.8	20.1	1.2	14.2	3.7	21.6	52.0	8.6	S	R
81.034-2	IV	42.9	19.5	1.2	13.5	3.7	19.6	53.4	9.8	S	R
81.037-1	IV	45.5	18.5	1.1	12.4	4.1	20.9	53.6	9.0	S	S
81.037-2	111	43.3	20.8	1.2	12.2	3.7	22.6	52.1	9.5	S	S
81.037-3	Ш	44.4	19.2		13.1	3.9	22.8	50.7	9.4	H	S
81.037-5	IV	44.5	19.2	1.2	12.1	4.1	19.7	53.4	10.7	R	S
81.038	Ш	44.2	19.3	-	12.3	4.3	24.5	49.8	9.2	S	S
81.041	III	42.8	19.9	1.4	10.6	4.8	24.7	51.0	9.0	R	S
81.041-1	Ш	42.0	20.1	-	13.6	3.3	22.9	51.0	9.2	Н	S
81.042-1	IV	41.2	19.9	1.4	12.8	4.4	22.9	50.8	9.1	S	S
81.042-2	IV	42.2	19.5	1.3	11.6	3.7	21.2	55.3	8.2	S	S
81.044-1	Ш	40.6	22.2	1.4	10.8	4.2	23.1	53.3	8.9	S	S
81.044-2	Ш	45.8	18.9	1.2	13.3	5.7	25.3	48.3	7.6	S	Н
81.667	Ш	43.8	20.1	•	14.8	4.1	24.4	47.1	9.5	S	Н
81.761	Ш	41.9	21.5	1.2	10.4	4.1	24.4	52.1	8.9	S	S
81.764	IV	40.8	16.9	-	12.3	3.8	18.6	55.6	9.8	R	S
81.766	Ш	42.4	14.8	-	13.7	4.0	18.6	53.4	10.3	R	s
81.777	IV	42.6	19.0	1.3	12.5	3.5	20.2	53.7	10.1	R	S
81.780	III	44.3	18.9	1.2	10.9	4.0	26.7	49.8	8.5	S	
81.785	III	43.3	17.2	-	13.7	4.1	26.1	46.3	9.7	R	s
82.210	IV	42.9	19.1	1.4	11.6	4.1	21.2	53.5	9.6	R	S
82.218	IV	42.3	20.3	1.3	13.4	3.8	22.3	51.8	8.7	R	s
82.232	III	43.9	17.8	-	11.7	3.5 3.5	18.1	55.4	11.3	R	S
82.23 5	111	44.6	20.0	-	12.7	4.0	23.8	52.1	7.5	R	S

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

1.246	Pl No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Matur- ity group
1.246-1 (Funkonjie) Rep. of Korea Rep. of Korea 1929 IV			,			
1.246-1 (Funkonjie) Rep. of Korea Rep. of Korea 1929 IV						
1.255	82.246	•	•	•		
1.283 Papute No. 2 Rep. of Korea Rep. of Korea 1929 IV	82.246-1	•	•	•		
1.264	32.259		•	•		
1.278	82.263-1		•	•		
1.291 Kon sui yen	32.264	Kwan jo	•	•		
1.295 Maru kon chotan Rep. of Korea Rep. of Korea 1929 IV	82.278		•	•		
1.298 Kon kongenoto	82.291	•	· · · · · · · · · · · · · · · · · · ·	•		
1.302 Kiru gunte Rep. of Korea Rep. of	82.295		•	•		
1.307 Hon kon Rep. of Korea Rep. of Ko	82.296	_	•	•		
1.308 Kon chonte Rep. of Korea Rep. of	82.302	<u>₹</u>	•	•		
Rep. of Korea Rep. of Kore	82.307		•	•		
Rep. of Korea Rep. of Kore	82.308		•	•		
1.225	82.312N	(Kitu gunte)	•	•		
No. Chotan Rep. of Korea	82.315		•	•		
Name	82.325	•	•	•		
Name	82.326		•			
2.534 Chotan Rep. of Korea Rep. of Korea 1929 IV	82.509		•	•		
Chankon Rep. of Korea Re	82.527		•	•		
Name	82.534		•	•		
Name	82.544		•	•		
Somokute	82.554	•	•	•		
Name	82.555	•	•	•		
Rep. of Korea Rep. of Kore	82.558		•	•		
Same	82.581		•	•		
Name	83.853	•	•	•		
Same	83.858		•	•		
Same	83.868	•	•	•		
Name	83.881		•	•		
Tansern			•	•		
Sample S	83.889		•	•		
Name	83.891		•	•		
Shokeimeidai Rep. of Korea Rep. of Korea 1930 IV	83.892		•	•		
Rep. of Korea Japan 1930 IV	83.893	•	•	•		
Rep. of Korea Rep. of Kore	83.915					
Say Say				· · · · · · · · · · · · · · · · · · ·		
3.944 Oiarukonkii Rep. of Korea Rep. of Korea 1930 IV						
1930 III 3.945-1 Dairyu tsurunoko Rep. of Korea Rep. of Korea 1930 IV 3.945-4 (Dairyu tsurunoko) Rep. of Korea Rep. of Korea 1930 IV 3.946 Kongo shoryu Rep. of Korea Rep. of Korea 1930 IV 4.509 Unknown Unknown 1930 III 4.578 Rep. of Korea Rep. of Korea 1930 III 4.579 Rep. of Korea Rep. of Korea 1930 III 4.581 Rep. of Korea Rep. of Korea 1930 III 4.594 Rep. of Korea Rep. of Korea 1930 IV 4.610 Rep. of Korea Rep. of Korea 1930 III 4.611 Rep. of Korea Rep. of Korea 1930 III 4.619 Rep. of Korea Rep. of Korea 1930 III 4.628 Rep. of Korea Rep. of Korea 1930 IV 4.631 Rep. of Korea Rep. of Korea 1930 IV 4.632 Rep. of Korea Rep. of Korea 1930 IV 4.633 Rep. of Korea Rep. of Korea 1930 IV 4.639 Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea Rep. of Korea 1930 IV Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep. of Korea Rep.				•		
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Rep. of Korea Rep. of Korea 1930 III						
4.581 Rep. of Korea Rep. of Korea 1930 III 4.594 Rep. of Korea Rep. of Korea 1930 IV 4.610 Rep. of Korea Rep. of Korea 1930 III 4.611 Rep. of Korea Rep. of Korea 1930 III 4.619 Rep. of Korea Rep. of Korea 1930 III 4.628 Rep. of Korea Rep. of Korea 1930 IV 4.631 Rep. of Korea Rep. of Korea 1930 IV 4.632 Rep. of Korea Rep. of Korea 1930 IV 4.633 Rep. of Korea Rep. of Korea 1930 IV 4.639 Rep. of Korea Rep. of Korea 1930 IV				•		
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4.611 Rep. of Korea Rep. of Korea 1930 III 4.619 Rep. of Korea Rep. of Korea 1930 III 4.628 Rep. of Korea Rep. of Korea 1930 IV 4.631 Rep. of Korea Rep. of Korea 1930 III 4.632 Rep. of Korea Rep. of Korea 1930 IV 4.633 Rep. of Korea Rep. of Korea 1930 IV 4.639 Rep. of Korea Rep. of Korea 1930 IV				•		
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4.639 Rep. of Korea Rep. of Korea 1930 IV			•			
			•	•		
4.644 Rep. of Korea Rep. of Korea 1930 III	34.639 34.644			Rep. of Korea Rep. of Korea	1930 1930	

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

				<u>Pubes</u>	cence			Seedc	oat		Other t	raits	
	Matu- rity	Stam	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plant
82.246	IV	N	Р	т	E	Som.	D-		Y	T			
82.246-1	III	N	w	T T	E	Ssp Ssp	Br Br	S D	Y	Tn Bl			
82.259	IV	D	w	G	E	Ssp	Dbr						
82.263-1	IV	D	W	T	E	Ssp	Br	S D	Gn Y	Bf Bl			
82.264	IV	D	P	Ġ	E	N Seb	Tn	ı	Y	Y			
82.278	III	N	P	T	E	Ssp	BI	В	BI	BI			
82.291	IV	D	P	Ġ	E	Ssp	Br	I	Y	Y			
82.295	IV	D	P	G	E	Ssp	Br	D	Y	Ý			
82.296	١٧	D	P	G	E	N	Br	ı	t Lgn	t Lgn			
82.302	111	D	w	G	E	N	Br	D	Y	Y			
82.307	IV	D	P	G	E	N	Br	S	Ÿ	Ý			
82.308	111	D	w	G	E	Ssp	Dbr	S	Gn	Gn	St	Na	
82.312N	iv	D	P	G	E	N	Br	ı	Y	Bf	Si	IVA	
82.315	iv	D	Dp	T	E	Ssp	Tn	s	Y	Tn			
82.325	١٧	D	P	Ġ	E	N	Br	D	Ÿ	Bf			
82.326	iV	N	P	G	E	N	Br	S	Gn	Bf		Wa	
82.509	١٧	D	P	G	E	Ssp	Br	S	Y	Y		vva	
82.527	iV	D	P	G	E	N	Br	D	Ϋ́	Ý			
82.534	١٧	D	P	G	E	Ssp	Br	S	Ϋ́	Y			
82.544	١٧	D	P	G	E	Dn Dn	Tn	S	Y	Bf			
82.554	iV	D	P	G	E	Ssp	Br	S	Y	Bf			
82.555	١٧	D	Dp	G	E	Ssp	Br	S	Y	Y			
82.558	iV	D	W	G	E	N	Br	D	Ÿ	Bf			
82.581	iV	D	Ng	G	E	Ssp	Br	D	Gn	BI	Gncot		
83.853	iV	D	P	G	E	N	Br	D	Y	Y	Grico		
83.858	iV	D	P	T	E	Ssp	Br	S	Y	Br			
83.868	١٧	D	w	Ť	E	Ssp	Br	S	Ġ	BI			
83.881	IV	N	P	Ť	E	N	Br	S	ВІ	BI			
83.881A	IV	D	Р	Ġ	E	N	Tn	i	Y	Lbf			
83.889	IV	D	Р	G	E	Ssp	Br	s S	Ÿ	Y			
83.891	IV	D	Р	G	E	Ssp	Br	D	Ÿ	Ý			
83.892	IV	D	P	G	E	N	Br	S	Ÿ	Ý			
83.893	IV	D	W	T	E	Ssp	Br	D	Ÿ	Br			
83.915	IV	N	W	T	Ē	N	Br	D	Ÿ	BI			
83.923	IV	D	W	Ġ	E	Ssp	Br	D	Ÿ	Y			
83.925	IV	N	Р	G	E	N .	Br	S	Y	Lbf			
83.940	Ш	N	Р	G	Ε	N	Tn	D	Y	Y			
83.944	IV	D	Р	G	E	N	Br	1	Υ	Υ	Def		
83.945-1	Ш	D	W	G	E	N	Br	1	Υ	Υ			
83.945-4	IV	D	W	Т	E	N	Br	D	Υ	ВІ			Fasc
83.946	IV	D	Р	G	E	Ssp	Br	S	Υ	Υ			
84.509	111	N	Р	Т	Ε	Ssp	Br	1	Υ	Br			
84.578	Ш	N	W	Т	Ε	Ssp	Tn	D	ВІ	ВІ	Gncot	:	
84.579	Ш	N	W	Т	E	Ssp	Tn	D	BI	ВІ	Gncot		
84.581	111	N	Р	Т	Ε	N	BI	S	Gn	Blbr	Gncot	:	
84.594	IV	N	Р	G	Ε	Ssp	BI	S	Gn	Gn			
84.610	Ш	N	P	Lt	Ε	N	Br	S	ВІ	ВІ			
84.611	III	N	P	Lt	Ε	N	Br	S	ВІ	ВІ			
84.619	Ш	N	Р	T	Ε	N	Br	S	Gn	ВІ			Cd
84.628	IV	D	W	G	Ε	N	Tn	D	Υ	Bf			
84.631	Ш	D	W	G	Ε	Ssp	Dbr	S	Gn	Gn	St	Na	
84.632	IV	D	W	G	Ε	N	Br	S	Gn	Bf			
84.633	IV	N	W	T	Ε	Ssp	Br	D	Υ	ВІ			
84.639	IV	D	W	G	Ε	N	Br	S	Υ	Bf			
84.644	Ш	N	Р	G	Ε	N	Br	S	Υ	lb			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
82.246	723	1006	3.7	94	3.0	3.0	1.0	2.8	3.0	16.3	2.00
82.246-1	720	1006	3.0	86	3.0	3.0	1.0	2.8	3.0	20.3	2.21
82.259	723	1010	3.1	91	1.0	3.0	1.0	2.5	2.0	22.2	2.60
82.263-1	724	1010	2.8	69	1.0	3.0	1.0	2.0	3.5	22.2	2.40
82.264	807	1011	3.8	81	1.0	3.5	1.0	2.0	1.0	6.6	2.74
82.278	727	922	2.8	97	4.5	3.0	5.0	2.0	-	6.3	1.20
82.291	725	1005	2.8	69	1.0	3.0	1.0	2.3	3.5	8.6	2.33
82.295	721	1003	3.1	74	1.0	3.0	2.0	2.3	2.0	16.8	2.54
82.296	726	1008	3.8	74	1.0	3.0	1.0	2.5	2.0	16.2	2.48
82.302	724	1003	2.8	79	1.0	3.0	1.0	2.0	2.0	11.6	2.02
82.307	730	1017	4.0	86	1.0	3.0	1.0	2.3	1.5	19.2	2.54
82.308	717	923	2.9	66	1.0	2.5	1.0	2.3	3.0	18.2	1.69
82.312N	726	1007	3.8	91	1.0	3.0	1.0	2.3	2.0	15.1	2.53
82.315	726	1012	3.3	66	1.0	3.0	1.0	2.5	1.0	22.2	2.54
82.325	729	1014	4.0	81	1.0	3.0	1.0	2.8	1.0	18.2	2.47
82.326	718	1006	3.0	99	4.0	3.0	1.0	3.0	1.0	17.8	2.60
82.509	803	1020	4.3	81	1.0	3.0	1.0	2.3	1.0	22.5	2.43
82.527	729	1018	3.3	81	1.0	2.5	1.0	2.3	3.0	16.1	2.23
82.534	803	1021	3.8	89	1.0	3.0	1.0	2.5	2.5	21.2	2.39
82.544	731	1017	4.3	91	1.0	3.0	1.0	2.5	1.5	19.2	2.36
82.554	727	1017	4.2	84	1.0	3.0	1.0	2.8	1.0	23.0	2.74
82.555	727 726	1012	3.5	94	1.0	3.0	1.0	2.8	1.0	24.1	2.41
82.558	723	1012	3.6	79	1.0	3.0	2.0	2.3	2.0	18.7	1.61
82.581	723 728	1012	4.3	71	1.0	3.0	1.0	3.3	1.0	26.5	2.17
83.853	728 721	1002	3.0	71	1.0	3.0	1.0	2.5	2.0	16.6	2.17
83.858	721	930	3.0	71 79	1.0	3.0	2.0	2.5	1.0	18.3	2.65
83.868	723 726	1013	3.1	7 5 76	1.0	3.0	1.0	2.3	3.0	25.6	2.31
83.881	801	1005	3.8	91	4.0	4.0	3.0	2.5	-	13.4	2.19
83.881A	724	1003	2.2	84	1.0	2.5	1.0	2.8	1.0	24.0	2.07
83.889	729	1017	3.8	74	1.0	3.0	1.0	2.5	1.5	21.4	2.37
83.891	731	1018	3.7	66	1.0	3.0	1.0	2.5	3.0	18.4	2.25
83.892	731	1017	3.1	84	1.0	3.0	1.0	2.5	2.5	11.3	2.10
83.893	731	1008	3.5	86	1.0	3.0	1.0	2.5	2.0	14.2	1.80
83915	728	1011	3.3	114	3.5	3.0	1.0	2.3	1.5	18.2	2.57
83.923	726	1012	3.7	74	1.0	3.0	1.0	2.5	2.0	19.7	2.12
83.925	729	1010	4.0	117	4.0	4.0	1.0	2.5	1.0	14.1	2.52
83.940	708	915	3.0	81	3.5	3.0	1.0	3.0	2.5	15.4	2.68
83.944	727	1010	3.5	74	1.0	3.0	1.0	3.5	2.0	27.9	1.76
83.945-1	722	1006	3.0	91	1.0	3.0	1.0	3.3	4.0	20.0	2.73
83.945-4	727	1012	4.0	84	1.0	2.0	1.0	2.8	4.0	21.9	1.64
83.946	731	1019	3.7	81	1.0	3.0	1.0	2.5	2.0	20.3	2.23
84.509	723	1009	4.0	97	4.0	3.0	1.0	3.5	2.5	15.4	2.13
84.578	716	929	2.3	79	2.5	2.5	1.0	2.8		15.6	2.10
84.579	717	1002	2.5	84	2.5	3.0	1.0	2.8	-	16.2	1.94
84.581	718	923	3.1	81	3.5	3.0	1.0	3.0	2.0	13.6	1.97
84.594	804	1019	4.0	140	4.0	4.0	1.0	2.3	1.5	13.5	2.49
84.610	721	922	3.5	91	3.5	3.0	1.0	2.8	-	11.1	2.23
84.611	730	1008	3.4	142	5.0	4.0	1.0	2.0	-	10.2	2.37
84.619	708	923	3.3	71	2.5	3.0	1.0	2.8	1.0	22.8	1.98
84.628	720	1012	3.2	69	1.0	3.0	1.0	2.5	1.0	15.3	2.29
84.631	717	925	2.9	66	1.0	2.0	1.0	2.8	3.5	18.2	1.75
84.632	723	1010	3.0	71	1.0	3.0	1.0	2.8	1.0	18.7	2.19
84.633	722	1004	3.7	124	4.5	3.5	1.0	1.8	2.0	16.7	2.30
84.639	731	1009	3.4	107	1.5	3.0	1.0	2.5	1.0	12.5	2.69
J500	717	1004	2.6	99	3.0	3.0	1.0	2.5	1.0	17.8	2.80

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein	Oil cor	nposition					
		compo		<u>composition</u>	Pal-			Lino-	Lino-	Dis	ease
	Maturity	Proteir		Methionine	mitic	Steric	Oleic	leic	lenic		ction
ntry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
82.246	IV	43.1	18.4	1.3	13.5	4.2	25.4	46.9	10.0	s	s
82.246-1	III	43.3	19.4		11.4	4.9	28.4	46.6	8.6	R	Н
82.259	IV	43.2	19.9	1.3	11.2	3.6	23.6	52.4	9.2	s	Н
82.263-1	IV	41.9	20.0	1.5	12.1	3.8	21.9	52.6	9.6	S	Н
				1.3	13.5						
82.264	IV 	44.1	15.4	1.3		2.6	18.3	54.8	10.8	Н	
82.278	III	46.2	13.2	-	13.5	3.9	21.6	51.5	9.5	R	
82.291	IV	45.0	16.7	1.3	13.0	3.8	19.8	52.8	10.6	R	S
82.295	IV	45.1	19.2	1.3	11.5	3.6	21.7	54.6	8.6	R	R
82.296	IV	42.9	20.1	1.2	12.7	3.3	26.5	49.0	8.5	S	R
82.302	Ш	45.3	17.6	1.4	13.9	4.6	19.8	53.7	8.1	R	S
82.307	IV	44.0	19.1	1.3	12.5	3.4	22.9	52.6	8.6	S	S
82.308	Ш	42.3	19.8	-	13.3	4.9	20.6	52.5	8.7	S	R
82.312N	IV	41.7	20.7	1.4	12.1	2.9	21.0	55.8	8.2	R	R
82.315	IV	42.4	20.1	1.4	11.5	3.9	22.6	54.1	7.9	R	S
82.325	IV	42.0	19.8	1.4	12.6	3.8	21.6	52.7	9.3	R	s
82.326	IV	44.5	19.6	1.3	11.2	3.8	21.0	56.4	7.7	S	S
82.509	IV	44.6	19.3	1.3	11.2	3.1	21.6	55.7	8.4		
82.527	IV	43.0	18.1	1.4	12.2	3.6	18.4	56.3	9.5	R	S
82.534	IV	43.0	19.2	1.4	13.5	3.6	20.4	54.2	8.3	R	S
82.544	IV	41.9	19.6	1.2	12.5	3.6	21.3	53.5	9.0	R	S
82.554	IV	47.5	16.9	1.2	12.6	3.6	18.5	55.9	9.4	R	
82.555	IV	41.5	20.0	1.3	11.6	4.6	23.0	52.9	8.0	Н	s
82.558	īV	42.9	19.1	1.3	11.4	3.6	22.8	53.0	9.2	Н	S
82.581	IV	42.9	19.6	-	12.5	3.8	20.8	53.5	9.3	S	
83.853	IV	44.1	19.6	1.3	10.9	3.8	23.5	53.7	8.1	R	s
83.858	iV	41.3	20.7	1.2	12.3	3.6	20.1	55.2	8.8	R	s
83.868	iv	43.3	19.6	-	13.5	3.6	24.5	50.5	7.9	s	
83.881	iv	43.1	18.7	_	12.6	4.3	19.4	54.6	9.1	R	
83.881A	IV	44.4	17.3	1.2	13.0	3.8	25.1	50.5	7.6	S	
	IV	43.0	19.5	1.2	11.9	3.8	25.8	51.2	7.3	S	
83.889	IV	43.8	19.5	1.4	11.6	3.9	23.3	52.9	7.3 8.2	S	
83.891	IV	40.2	18.7	1.4	13.2	3.5 3.5	17.8	55.3	10.2	R	s
83.892										S	S
83.893	IV	41.3	19.4	1.3	13.0	3.9	20.5	53.6	9.1		
83.915	IV	42.4	19.3	1.3	12.8	4.2	23.7	51.0	8.3	S S	H
83.923	IV	43.5	19.5	1.3	12.3	4.0	21.8	54.2	7.8		
83.925	IV 	41.1	20.8	1.3	11.7	3.9	24.5	51.7	8.2	S	
83.940	111	42.3	20.7	1.3	12.2	4.5	21.1	53.4	8.8	S	Н
83.944	IV 	43.4	19.8	1.3	12.0	3.8	25.9	49.6	8.8	S	R
83.945-1	III	44.4	18.8	1.2	12.4	4.0	23.2	51.6	8.9	R	
83.945-4	IV	41.0	16.7	-	12.1	4.8	22.2	50.7	10.2	S	
83.946	IV 	43.1	19.5	1.2	12.8	3.8	20.4	52.2	10.8	R	
84.509	III 	42.5	20.0	1.3	11.9	3.7	26.3	50.4	7.7	R	Н
84.578	Ш	42.0	21.0	-	12.0	3.7	26.7	50.7	7.0	S	Н
84.579	Ш	42.1	21.1	-	13.8	4.1	26.3	48.5	7.2	S	Н
84.581	III	45.2	19.6	-	12.8	4.2	26.5	47.3	9.2	S	Н
84.594	IV	39.7	19.9	1.2	14.3	4.3	20.8	50.2	10.4		
84.610	HI	41.8	19.1	-	14.5	4.4	19.5	52.1	9.5	R	S
84.611	Ш	43.2	17.2	-	13.7	3.4	19.3	53.6	10.0	S	Н
84.619	Ш	44.2	19.9	1.2	11.0	4.6	24.9	51.4	8.2	R	R
84.628	IV	40.5	19.8	1.3	13.1	3.6	18.5	55.2	9.5	S	S
84.631	Ш	41.4	19.8	1.3	14.1	3.8	18.7	54.2	9.2	S	S
84.632	IV	42.5	18.5	1.2	12.7	4.0	21.7	52.3	9.4	s	R
84.633	IV	45.6	18.5	1.2	13.0	3.3	19.5	55.5	8.6	S	Н
84.639	iV	43.1	18.3	1.2	12.5	4.6	24.2	47.1	11.7	R	
84.644	III	42.3	21.6	1.3	11.4	3.8	23.1	54.9	6.8	s	s

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
PI No.	name	acquisition	origin	or released	group
84.646		Rep. of Korea	Dan of Kanaa	1000	
		• '	Rep. of Korea	1930	III
84.646-2		Rep. of Korea	Rep. of Korea	1930	IV III
84.656		Rep. of Korea Rep. of Korea	Rep. of Korea	1930	111
84.657		•	Rep. of Korea	1930	III
84.660		Rep. of Korea	Rep. of Korea	1930	IV III
84.662		Rep. of Korea Rep. of Korea	Rep. of Korea	1930 1930	III IV
84.664		Rep. of Korea	Rep. of Korea Rep. of Korea	1930	III
84.666 84.669N		Rep. of Korea	Rep. of Korea	1930	III IV
		•	Rep. of Korea	1930	IV
84.671 84.679		Rep. of Korea	Rep. of Korea	1930	IV
84.680		Rep. of Korea	Rep. of Korea	1930	III
		Rep. of Korea	Rep. of Korea		
84.682		Rep. of Korea		1930	III IV
84.713		Rep. of Korea	Rep. of Korea	1930	IV
84.724		Rep. of Korea	Rep. of Korea	1930	IV IV
84.742		Rep. of Korea	Rep. of Korea	1930	IV
84.751		Rep. of Korea	Rep. of Korea	1930	IV III
84.757		Rep. of Korea	Rep. of Korea	1930	III
84.807	Object of the second of the se	Rep. of Korea	Rep. of Korea	1930	IV
84.908-1	Chotan shirome	Rep. of Korea	Rep. of Korea	1930	IV
84.908-2	(Chotan shirome)	Rep. of Korea	Rep. of Korea	1930	III
84.912	Gin daizu	Rep. of Korea	Rep. of Korea	1930	IV
84.914	Ngoiju	Rep. of Korea	Rep. of Korea	1930	III
84.939	Kaundokon	Rep. of Korea	Rep. of Korea	1930	IV N
84.944	Hinkon	Rep. of Korea	Rep. of Korea	1930	IV
84.946-1	Kandokon	Rep. of Korea	Rep. of Korea	1930	IV n.
84.946-2	(Kandokon)	Rep. of Korea	Rep. of Korea	1930	IV
84.957	Yamki daizu	Japan	Japan	1930	III
84.957-1	(Yamki daizu)	Japan	Japan	1930	III
84.959	Shingichu daizu	Japan	Japan	1930	IV n.
84.960	Hakusen daizu	Japan	Japan	1930	IV
84.970	Hokkaido Black	Japan	Japan	1930	III
84.973	Takiya	Japan	Japan	1930	III
84.976		Japan	Japan	1930	III
84.976-1	Obabbia and i	Japan	Japan	1930	III
84.979	Shakkin nashi	Japan	Japan	1930	III 0.7
84.985	Shirohadaka No. 12	Japan	Japan	1930	IV
84.987	Oni hadaka	Japan	Japan	1930	III
84.987A	(Oni hadaka)	Japan	Japan	1930	III
85.009-1	Maruba daizu	Japan	Japan	1930	111
85.009-2	(Maruba daizu)	Japan	Japan	1930	III
85.019	Kohouju	Rep. of Korea	Rep. of Korea	1930	III
85.272		Rep. of Korea	Rep. of Korea	1930	III.
85.355		Rep. of Korea	Rep. of Korea	1930	IV
85.356		Rep. of Korea	Rep. of Korea	1930	III
85.407		Rep. of Korea	Rep. of Korea	1930	IV
85.420		Rep. of Korea	Rep. of Korea	1930	IV
85.420-1		Rep. of Korea	Rep. of Korea	1930	IV
85.424		Rep. of Korea	Rep. of Korea	1930	IV
85.437		Rep. of Korea	Rep. of Korea	1930	111
85.441		Rep. of Korea	Rep. of Korea	1930	IV
85.456		Rep. of Korea	Rep. of Korea	1930	Ш
85.469		Rep. of Korea	Rep. of Korea	1930	IV
85.505		Rep. of Korea	Rep. of Korea	1930	IV
85.506		Rep. of Korea	Rep. of Korea	1930	IV

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

				<u>Pubes</u>	cence			Seedco	oat		Other	traits	
	Matu- rity	Stem	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plant
84.646	Ш	D	Р	G	Sa	Ssp	Br	D	Υ	Υ			
84.646-2	IV	N	P		C	N	Dbr	s	Y	Bf			
84.656	III	N	P	G	Ē	N	Br	S	Y	lb			
84.657	III	D	Dp	G	E	N	Br	D	Y	lb			
84.660	īV	D	P	G	E	Ssp	Tn	D	Υ	Υ			
84.662	Ш	N	P	G	Ε	N	Br	D	Υ	Υ			
84.664	IV	D	W	G	E	Ssp	Br	S	Υ	Bf			
84.666	Ш	N	Р	G	E	N	Br	D	Υ	Υ			
84.669N	IV	N	W	G	E	N	Br	S	Υ	Bf			
84.671	IV	D	W	Т	E	Ssp	Br	S	Υ	ВІ			
84.679	IV	N	Р	G	E	N	Tn	D	Υ	Bf			
84.680	Ш	D	W	G	E	N	Br	D	Υ	Bf			
84.682	111	N	Р	Т	E	N	Br	S	Υ	ВІ			
84.713	IV	D	Р	G	Ε	N	ВІ	D	Gn	Gn			
84.724	IV	D	Р	G	E	N	Br	D	Gn	Bf			
84.742	IV	D	Р	G	Ε	Ssp	Br	D	Gn	Bf			
84.751	IV	D	W	Т	Ε	N	Br	S	ВІ	ВІ			
84.757	111	N	Р	G	Ε	Ssp	Br	S	Υ	Υ			
84.807	IV	N	Р	Т	Ε	N	Br	D	Ggn	G			
84.908-1	IV	D	W	Т	Ε	N	Br	S	Υ	Br			
84.908-2	Ш	D	W	G	Ε	N	Br	D	Υ	Bf			
84.912	IV	D	Р	G	Ε	N	Tn	ı	Υ	Bf			
84.914	Ш	N	W	G	Ε	N	Br	ı	Υ	Υ			
84.939	IV	D	Р	G	E	N	Br	S	Υ	Υ			
84.944	IV	N	Р	G	Ε	N	Br	1	Υ	Υ			
84.946-1	IV	N	W	Т	E	Ssp	Br	1	Υ	ВІ			
84.946-2	IV	D	Ρ	Т	Ε	Ssp	Br	S	Υ	Br			
84.957	Ш	N	P	G	E	Ssp	Br	S	Υ	Υ			
84.957-1	Ш	N	P	Т	Ε	N	Br	D	Υ	Υ			
84.959	IV	D	W	G	Ε	Ssp	Br	D	Υ	Υ			
84.960	IV	D	P	G	Ε	Ssp	Br	D	Υ	Υ			
84.970	Ш	D	Р	Т	Ε	Ssp	Tn	S	ВІ	ВІ			
84.973	Ш	N	W	-	С	N	Tn	S	Υ	Bf			
84.976	Ш	D	Р	G	E	N	Tn	S	Υ	Bf			
84.976-1	Ш	N	Р	G	E	N	Tn	D	Υ	Υ			
84.979	Ш	D	W	G	Α	Ssp	Tn	D	Υ	Υ			
84.985	IV	D	W	G	Ε	N	Tn	S	Υ	Bf			
84.987	Ш	D	Р	-	С	N	Tn	D	Υ	Bf			
84.987A	111	N	Р	G	Ε	N	Tn	D	Y	Bf			
85.009-1	III	N	W	Т	Sa	N	Br	D	Gn	Br			
85.009-2	III	D	W	G	Sa	N	Tn	D	Υ	Υ			
85.019	Ш	N	Р	G	E	N	Br	S	Υ	G			
85.272	Ш	D	Dp	Т	E	Ssp	Br	D	ВІ	ВІ			
85.355	IV	D	Р	G	Ε	Ssp	Br	S	Y	lb			
85.356	Ш	N	W	T	E	N	Br	l .	Υ	Br			
85.407	IV	D	W	T	E	Ssp	Br	D	Y	Br			
85.420	IV	N	W	G	E	Ssp	Br	D	Υ	Bf			
85.420-1	IV	D	Р	G	E	N	Br	D	Υ	Υ			
85.424	IV	D	Р	T	E	Ssp	Br	S	Υ	Tn			
85.437	Ш	S	P	G	Sa	Ssp	Br	S	Υ	Bf			
85.441	IV	D	Р	G	E	Ssp	Br	S	Y	Υ	Def		
85.456	III	N	W	Т	Ε	N	Br	S	Υ	Br			
85.469	IV	D	Р	G	E	N	Tn	D	Y	Bf			
85.505	IV	D	Р	G	Ε	Ssp	ВІ	D	Υ	Υ			
85.506	IV	D	Р	G	Ε	Ssp	Br	S	Υ	Υ			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
84.646	726	1001	3.3	71	1.0	2.5	1.0	2.5	1.5	19.2	1.59
84.646-2	729	1013	3.8	99	4.0	3.0	3.0	2.5	2.0	15.2	1.67
84.656	718	1004	2.6	97	3.0	3.0	1.0	2.5	1.0	17.8	2.75
84.657	720	1002	3.0	84	1.5	2.5	1.0	2.8	2.0	19.9	2.29
84.660	729	1008	3.3	79	1.0	3.0	1.0	2.3	2.0	12.1	1.81
84.662	714	926	3.3	89	3.5	3.0	1.0	2.3	3.0	15.4	2.85
84.664	725	1010	3.2	91	1.0	3.0	1.0	2.5	1.0	22.8	2.47
84.666	723	927	3.2	89	3.5	3.0	1.0	2.5	1.0	15.8	2.85
84.669N	722	1002	3.3	97	3.0	3.0	1.0	3.0	1.0	15.0	2.64
84.671	806	1017	3.8	89	1.0	3.0	1.0	2.5	4.0	14.1	2.31
84.679	723	1009	3.2	99	3.5	3.0	1.0	2.0	2.0	18.2	2.84
84.680	719	1001	3.5	86	1.0	3.0	1.0	2.5	2.0	21.9	3.14
84.682	712	923	3.8	99	3.5	3.0	1.0	2.3	1.0	16.3	2.76
84.713	717	1012	2.8	69	1.0	3.5	1.0	2.3	2.0	17.3	2.31
84.724	801	1025	4.5	84	1.0	3.0	1.0	2.3	2.0	23.3	2.20
84.742	804	1027	4.5	84	1.0	3.0	1.0	2.3	2.0	22.8	2.26
84.751	808	1011	2.7	94	1.5	3.0	2.0	2.0	-	7.4	2.36
84.757	718	1001	3.4	91	3.5	3.0	1.0	3.0	3.0	17.2	2.61
84.807	715	1004	3.8	99	4.0	3.5	1.0	2.5	3.5	21.7	2.61
84.908-1	802	1017	3.9	102	1.0	3.0	4.0	2.5	2.0	17.1	2.10
84.908-2	719	926	2.4	69	1.0	3.0	1.0	2.8	2.0	20.9	2.37
84.912	727	1009	3.4	86	1.0	3.0	1.0	2.3	2.0	13.9	2.04
84.914	708	917	3.6	84	4.0	3.0	1.0	2.5	3.0	15.3	2.36
84.939	726	1009	3.7	86	1.0	3.5	1.0	3.3	2.0	25.1	1.78
84.944	722	929	3.9	97	3.0	3.0	1.0	3.0	3.0	18.9	2.56
84.946-1	717	1005	3.1	99	3.0	3.0	1.0	3.0	2.0	21.2	2.36
84.946-2	718	930	3.2	66	1.0	3.0	1.0	3.0	2.0	23.3	1.95
84.957	712	919	3.8	89	3.5	3.0	1.0	2.8	3.0	18.0	2.43
84.957-1	716	919	3.8	91	3.5	3.0	1.0	2.8	4.0	17.5	2.52
84.959	726	1007	3.7	74	1.0	3.0	1.0	2.3	3.0	12.4	1.71
84.960	730	1012	3.3	81	1.0	3.0	1.0	2.5	2.5	18.9	2.09
84.970	721	1003	2.7	74	1.0	3.0	1.0	2.5	-	25.8	2.26
84.973	721	1012	3.2	86	3.0	3.0	1.0	2.8	1.0	16.2	1.63
84.976	722	925	3.1	71	1.0	3.0	1.0	2.3	2.5	14.4	1.90
84.976-1	717	918	2.8	86	3.0	3.0	1.0	2.8	3.0	17.2	2.31
84.979	721	930	3.0	61	1.0	2.5	5.0	2.8	2.0	22.8	1.23
84.985	724	1002	3.3	84	1.0	3.0	1.0	2.5	1.0	16.6	2.39
84.987	723	929	2.7	64	1.0	2.5	1.0	2.3	3.0	14.8	1.40
84.987A	723	1002	2.6	112	3.5	3.0	1.0	2.8	1.5	16.1	2.34
85.009-1	727	1003	4.3	107	3.0	3.0	5.0	2.3	3.0	13.6	1.74
85.009-2	722	923	4.0	79	1.5	3.0	1.0	2.8	2.5	18.1	2.06
85.019	717	930	3.3	89	3.0	3.0	1.0	3.0	2.5	22.9	2.68
85.272	723	1006	3.3	69	1.0	3.0	1.0	2.5	-	27.4	1.92
85.355	726	1014	3.5	74	1.0	3.0	1.0	2.5	2.0	27.2	2.29
85. 356	719	1001	3.1	127	4.0	3.0	1.0	2.3	1.0	16.4	2.69
85.407	730	1006	3.6	74	1.0	3.0	1.0	2.5	2.0	10.9	1.92
85.420	727	1016	3.9	112	3.0	3.0	1.0	2.3	1.0	20.1	2.72
85.420-1	804	1026	3.9	84	1.0	3.0	1.0	2.5	2.0	19.9	2.11
85.424	728	1016	3.7	74	1.0	3.0	1.0	2.0	3.0	21.8	2.12
85.437	724	1009	2.7	81	2.0	3.0	1.0	2.3	2.0	23.4	2.20
85.441	727	1016	4.1	71	1.0	2.5	1.0	3.0	1.5	32.0	2.04
85. 456	716	927	3.4	124	4.0	3.0	1.0	2.3	1.0	17.8	2.68
85.469	805	1016	3.4	89	1.0	3.0	1.0	2.5	1.5	18.7	2.92
85.505	805	1014	3.7	86	1.0	4.0	1.0	2.0	1.0	6.7	2.50
85.50 6	804	1027	3.8	74	1.0	3.0	1.0	·3.0	2.0	25.0	1.92

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein		nposition					
		compo		composition	Pal-			Lino-	Lino-		ease
	Maturity	Proteir		Methionine	mitic	Steric	Oleic	leic	lenic		ction
intry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
84.646	Ш	43.0	20.2	1.3	12.2	4.4	21.9	53.3	8.1	R	s
84.646-2	IV	40.8	19.4	1.3	10.4	3.5	24.4	50.6	11.2	s	
84.656	III	42.4	21.7	1.3	10.4	4.2	22.3	54.5	8.4	s	S
84.657	111	44.2	18.8	1.3	10.3	3.7	24.6	53.2	8.2	S	
84.660	IV	43.2	16.9	1.3	10.3	4.2	24.8	53.2 52.9	7.7	S	s
84.662	III	42.8	20.3	1.4	10.4	3.7	22.1	55.2	8.0	S	S
84.664	IV	42.0	18.7	1.3	10.3	3.6	27.1	49.2	9.7	S	
84.666	III	43.7	19.5	1.3	12.2	4.5	21.7	52.0	9.6	S	s
84.669N	IV	41.4	21.0	1.3	10.9	3.1	21.7	54.6		S	S
84.671	IV	41.5	18.5	1.5	12.7	3.6	18.6	53.5	10.1		
84.679	IV	43.3	18.5	1.2	13.8	3.6 4.0		48.4	11.7	s s	s
84.680	III	41.6	21.6	1.3	14.0	4.0 4.9	24.8		9.1	S	
	III	45.0	19.0				21.4	51.2	8.6		S
84.682 84.713	III IV			1.3	12.2	4.5	22.7	53.2	7.5	s s	s s
	IV IV	43.9	17.9 18.7	1.2	12.7	4.6	22.0	51.7	8.9		S
84.724		42.5		1.2	12.7	3.4	22.2	52.4	9.3	S	
84.742	IV IV	42.2	18.2	1.2	12.5	4.2	21.5	52.3	9.5	S	
84.751	IV	40.5	18.0	-	12.8	3.9	18.0	53.5	11.9	S	S
84.757	III 13.7	42.4	20.5	1.3	12.0	4.6	23.0	51.7	8.7	S	S
84.807	IV	44.5	20.1	-	11.7	3.5	24.0	51.1	9.6	S	S
84.908-1	IV	43.7	18.0	1.2	12.6	3.3	23.5	51.7	8.9	S	S
84.908-2	III	43.8	19.1	1.2	12.0	3.7	21.9	53.6	8.8	S	S
84.912	IV	43.1	18.6	1.3	12.4	3.6	23.7	49.6	10.8	S	
84.914	Ш	41.6	20.4	1.3	11.7	4.0	21.7	53.0	9.6	S	Н
84.939	IV	43.8	19.8	1.2	12.1	3.3	23.1	52.7	8.8	R	S
84.944	IV	42.7	18.8	1.2	11.8	4.4	22.7	51.1	10.0	S	S
84.946-1	IV	43.0	20.6	1.2	12.2	4.2	25.7	49.5	8.5	R	S
84.946-2	IV	42.9	20.4	1.2	10.2	4.2	21.7	53.8	10.1	S	S
84.957	111	43.8	19.9	1.2	11.8	4.6	24.2	51.3	8.1	Н	S
84.957-1	111	42.3	19.6	1.2	12.0	4.8	25.2	49.2	8.7	R	S
84.959	IV	41.7	18.5	1.3	13.5	3.5	19.5	53.7	9.7	R	S
84.960	IV	43.6	18.7	1.2	14.0	3.2	24.1	51.0	7.7	R	S
84.970	Ш	43.1	18.6	-	11.8	4.3	23.4	51.8	8.7	S	S
84.973	111	43.3	19.2	1.1	12.8	4.0	24.3	50.3	8.5	S	S
84.976	111	43.7	17.9	1.2	13.2	4.2	22.8	49.9	9.9	S	S
84.976-1	Ш	46.1	18.4	-	13.0	4.9	23.5	49.2	9.5	s	s
84.979	111	44.0	18.7	1.2	12.1	4.7	23.7	50.7	8.9	R	
84.985	IV	40.4	20.3	1.4	13.7	4.5	23.2	50.3	8.4	s	s
84.987	Ш	41.4	19.1	1.2	12.5	3.8	23.0	51.3	9.4	S	S
84.987A	111	43.1	18.7	1.2	12.4	3.8	24.6	50.2	8.9	S	S
85.009-1	Ш	43.5	17.9	-	13.3	3.5	21.9	52.1	9.1	S	s
85.009-2	Ш	42.4	18.8	1.2	13.7	4.3	22.0	50.0	10.0	S	s
85.019	Ш	45.6	17.5	1.2	11.0	3.6	24.4	52.4	8.5	s	s
85.272	111	44.7	18.3	-	11.2	4.2	22.3	53.1	9.1	S	s
85.355	IV	43.2	19.8	1.3	13.2	4.1	28.5	46.6	7.6	S	
85.356	Ш	40.7	21.4	1.3	16.2	3.3	22.1	51.4	7.0	S	s
85.407	IV	40.7	20.1	1.3	13.9	4.4	20.0	52.2	9.5	S	S
85.420	IV	41.9	17.5	1.2	12.0	3.1	23.1	52.2	9.6	S	
85.420-1	īV	42.1	19.6	1.3	14.2	2.9	21.7	52.8	8.3	S	
85.424	١٧	45.1	17.8	1.2	12.2	3.2	21.8	53.2	9.6	s	s
85.437	111	44.2	19.5	1.2	10.9	3.7	29.1	47.2	9.1	R	s
85.441	١٧	43.0	19.8	1.3	13.0	3.5	23.5	51.7	8.3	s	s
85.456	111	41.9	20.1	1.3	12.8	3.3	19.8	55.5	8.7	S	S
85.469	IV	44.0	18.7	1.2	12.6	3.4	21.7	53.0	9.4	R	S
85.505	IV IV	44.3	17.5	1.2	13.9	3.4	17.5	54.0	11.4	R	S
85.506	IV	41.8	19.6	1.3	13.5	2.2	17.0	53.0	10.6	n	3

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807 $\,$

	Accession	Country of	Country of	Year introduced	Matur- itγ
PI No.	name	acquisition	origin	or released	group
85.519		Rep. of Korea	Rep. of Korea	1930	IV
85.550		Rep. of Korea	Rep. of Korea	1930	IV
85.559		Rep. of Korea	Rep. of Korea	1930	III
85.590		Rep. of Korea	Rep. of Korea	1930	IV
85.619		Rep. of Korea	Rep. of Korea	1930	
85.624		Rep. of Korea	•		IV
85.626			Rep. of Korea	1930	IV
		Rep. of Korea	Rep. of Korea	1930	IV
85.630		Rep. of Korea	Rep. of Korea	1930	III
85.658		Rep. of Korea	Rep. of Korea	1930	IV
85.663		Japan	Japan	1930	IV
85.665	Hokkaido Kuro daizu	Japan	Japan	1930	Ш
85.666	Hokkaido Tsurunoko	Japan	Japan	1930	III
85.668		Japan	China	1930	111
85.878	Karihatakiya No. 28	Japan	Japan	1930	111
85.903		Japan	Japan	1930	IV
86.004	Isabera	Japan	Japan	1930	111
86.006	Kiio shokuzu	Japan	Japan	1930	Ш
86.007	Chadaizu	Japan	Japan	1930	IV
86.024	Daidzuhinshu satei	Japan	Japan	1930	III
86.026	Tokachi	Japan	Japan	1930	Ш
86.026-1	(Tokachi)	Japan	Japan	1930	111
86.027	Tsuryoku shoryu	Japan	Japan	1930	III
86.028	Aemimame	Japan	Japan	1930	iii
86.029	Manchuria	Japan	Japan	1930	III
86.032	Chusei kurodaizu	Japan	Japan	1930	 III
86.046	Genshin koku ou	Japan	Japan	1930	11
86.053	33.13.1	Japan	Japan	1930	iii
86.060	Honen akazaya konnin B	Japan	Japan	1930	IV
86.062	Daizu hinshu satei	Japan	Japan	1930	iV
86.063	Sangaku	Japan	Japan	1930	111
86.071	Akazaya konnin		•	1930	
86.073	Hadakadaizu	Japan Japan	Japan Japan	1930	111 111
86.075	Misukugurigunma to kudai	Japan	Japan	1930	III
86.078-1	(Shoryu A)		-	1930	IV
86.081	Hakakadaizu	Japan	Japan		
	пакакадаіги	Japan	Japan	1930	III
86.091-1	Mizukuguri	Japan	Japan	1930	IV
86.098	Mizukuguri	Japan	Japan	1930	 }/
86.103	(Canadhidaine)	Japan	Japan	1930	IV
86.109B	(Sorachidaizu)	Japan	Japan	1930	IV
86.111	Taishodaizu	Japan	Japan	1930	III
86.112-1	(Hadakadaizu)	Japan	Japan	1930	IV
86.114	Hoten kuroheso	Japan	Japan	1930	III
86.116		Japan	Japan	1930	Ш
86.123	Selected Oyachi	Japan	Japan	1930	Ш
86.128	Karifuto	Japan	Japan	1930	IV
86.134-1	Kurodaizu	Japan	Japan	1930	IV
86.134-2	(Kurodaizu)	Japan	Japan	1930	IV
86.134-3	(Kurodaizu)	Japan	Japan	1930	Ш
86.134-4	(Kurodaizu)	Japan	Japan	1930	IV
86.136	Kuromame	Japan	Japan	1930	IV
86.137	Chusei kurodaizu	Japan	Japan	1930	IV
86.138	Daizu honbetsu	Japan	Japan	1930	IV
86.138R	(Daizu honbetsu)	Japan	Japan	1930	IV
86.142	Akazaya	Japan	Japan	1930	III
86.144	Chairomame	Japan	Japan	1930	111

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Matu-			Pubes	cence			Seedce	oat		<u>Other</u>	traits	
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
85.519	IV	N	Р	G	E	Ssp	Br	s	Υ	Υ			
85.550	١٧	D	Р	G	E	Ssp	Br	S	Ÿ	Ÿ			
85.559	111	D	P	G	E	N	Br	D	Ÿ	Ÿ			
85.590	IV	D	P	G	E	Ssp	Br	D	Ÿ	Ÿ			
85.619	١V	D	P	T	E	Ssp	Br	ĺ	Ϋ́	Br			
85.624	IV	D	w	Ġ	E	Ssp	Br	D	Y	Y			
85.626	IV	D	w	G	E	Ssp	Br	D	Ϋ́	Ý			
85.630	III	D	P	G	E	N Sep	Br	D	Ϋ́	Ý			
85.658	IV	D	P	G	E	Ssp			Y	Ý			
				T		-	Br B-	ı					
85.663	IV 	D	P		Ε	N	Br	D	BI	BI			
85.665	111	N	P	T	E	N	Br	S	Y	BI			
85.666	III 	N	W	G	Sa -	N	Dbr	S	Υ	Bf			
85.668	III	N	P	G	E	N	Tn —	D	Υ	Υ			
85.878	III	D	W	G	A	Ssp	Tn	D	Y	Y			
85.903	IV	D	W	G	E	Ssp	Br	D	Gn	Bf			
86.004	III	D	P	T	E	Ssp	Br	D	Br	Br			
86.006	Ш	N	Р	T	Α	N	ы	ı	Rbr	Rbr			
86.007	IV	D	Р	T	E	N	Br	S	Υ	Br			
86.024	111	D	W	Т	E	Ssp	Br	D	Ggn	ВІ		5lft	
86.026	111	D	W	G	E	Ssp	Dbr	S	Gn	Gn	St	Na	
86.026-1	- 111	D	W	Т	Ε	Ssp	Br	S	Υ	G			
86.027	111	N	Р	Lt	Ε	N	Tn	D	Gn	Gn			
86.028	Ш	D	Р	Т	Ε	N	Br	D	Υ	ВІ			
86.029	Ш	D	W	G	Ε	Ssp	Br	S	Gn	Gn	St	Na	
86.032	Ш	D	Р	Т	E	Ssp	Tn	D	Υ	ВІ			
86.046	Ш	N	Р	Т	Α	Ssp	Br	В	ы	ВІ			Sw
86.053	Ш	D	Р	T	Ε	N	Br	S	Υ	Br			
86.060	IV	D	Р	G	Ε	Ssp	Br	D	Υ	lb			
86.062	IV	D	Р	G	Ε	N	Br	S	Υ	Υ			
86.063	Ш	D	Р	Т	Ε	N	Br	D	Υ	Br			
86.071	Ш	D	Р	G	Ε	Ssp	ы	I	Υ	Bf			
86.073	Ш	N	W	Т	Ε	N	Br	S	Υ	ВІ			
86.075	Ш	D	Р	-	С	N	Tn	1	Υ	Bf			
86.078-1	IV	D	Р	G	E	N	Br	1	Υ	Υ			
86.081	Ш	D	Р	-	С	N	Tn	D	Υ	Bf			
86.091-1	IV	N	P	G	E	Ssp	Br	D	Y	Υ			
86.098	III	D	W	T	E	N	Br	S	Y	Br		Cup	
86.103	IV	N	P	Ť	E	Ssp	Br	S	ВІ	ВІ			
86.109B	IV	D	P	G	E	Ssp	Br	D	Y	Bf			
86.111	iii	D	P	T	Ē	N	Br	S	Ÿ	Br			
86.112-1	IV.	N	w	Ť	Ē	N	Br	S	Ÿ	Tn			
86.114	III	N	w	Ť	Ē	N	Br	Ď	Ÿ	BI			
86.116	111	D	P	Ť	Ē	N	Br	D	Ÿ	BI			
86.123	III	D	w	Ť	E	N	Br	S	Ϋ́	Tn			
86.128	١V	D	P	T	E	N	Br	D	Ÿ	Br			
86.134-1	IV	D	P	G	E	N	Br	D	Ϋ́	Y			
86.134-2	IV	D	P	T	E	Ssp	Tn	ı	Y	Br			
86.134-2 86.134-3	III	D	W	Ť	E	Ssp N	Br	D	Y	Br Tn			
86.134-4	IV	N	W	T	E	N	Br B-	D	Y	Br			
86.136	IV N	D	W	T	E	N	Br	S	BI	BI			
86.137	IV	D	P	T	E	Ssp	Br	D	Br	Br			
86.138	IV	D	P	T	E	N	Br —	S	Υ	Br			
86.138R	IV	D	W	G	E	N	Tn	D	Υ	Bf			
86.142	Ш	D	Р	G	E	Ssp	Br	1	Bf	Bf			
86.144	Ш	D	Dp	G	Ε	N	Tn	D	Bf	Bf			

Table 3.2
Agronomic data for USDA soybean germplasm collection in maturity groups
III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

Stem Flowering Maturity term-Branch- Shat-Seed Weight Lodging Height ination ing tering Quality Mottling Yield date date (Mg/ha) (mmdd) (mmdd) (score) (cm) (score) (score) (score) (score) (score) (cg/sd) Entry 22.6 728 1014 91 1.0 2.3 2.43 85.519 3.3 3.5 3.0 1.5 730 1018 3.3 86 1.0 1.0 2.3 2.0 21.4 2.45 85.550 3.0 721 1004 74 2.0 1.0 18.1 2.49 2.8 1.0 3.0 1.0 85.559 728 1016 3.3 81 1.0 3.0 1.0 2.3 2.0 26.0 2.27 85.590 806 1025 3.8 112 1.0 3.0 1.0 2.0 1.5 18.4 2.06 85.619 2.3 1.88 85.624 725 1008 3.5 74 1.0 3.0 1.0 2.5 13.4 2.3 2.02 724 1008 3.7 74 1.0 3.0 1.0 2.5 13.7 85.626 2.0 14.9 2.45 723 1002 3.0 71 1.0 3.0 1.0 1.0 85.630 801 1026 4.0 76 1.0 3.0 1.0 2.5 2.0 26.2 2.46 85.658 85.663 719 1009 1.7 69 1.0 2.5 2.0 2.5 27.7 1.74 1.0 2.5 2.0 16.5 2.15 85.665 707 915 2.0 71 3.0 3.0 102 3.0 1.0 2.8 1.0 15.1 1.98 85.666 716 916 4.3 4.0 79 3.0 2.5 1.0 2.5 2.0 18.5 2.78 85.668 716 921 3.6 1003 69 1.0 2.5 5.0 2.3 2.0 23.2 1.48 85.878 720 3.4 728 1019 4.3 132 1.0 3.0 1.0 2.5 2.5 15.4 2.47 85.903 86.004 720 1002 3.5 74 1.0 3.0 1.0 2.5 22.1 2.53 86.006 719 921 4.5 61 3.5 5.0 1.0 3.0 8.5 1.32 1.0 2.8 1.0 23.6 86.007 725 1011 3.5 91 1.0 3.0 2.76 71 3.0 1.0 3.0 4.0 23.5 1.74 86.024 718 926 4.0 1.0 66 1.0 2.0 1.0 2.5 4.0 18.3 1.64 86.026 716 918 3.0 1.95 86.026-1 721 920 2.7 81 1.0 2.0 1.0 2.3 3.5 17.3 3.0 1.0 2.8 2.5 15.2 2.91 86.027 719 924 2.9 102 3.5 924 79 1.0 2.5 1.0 2.3 1.0 15.4 1.90 719 3.2 86.028 1.68 66 1.0 2.0 1.0 2.5 4.0 18.5 716 922 2.9 86.029 2.8 18.0 1.98 929 2.4 66 1.0 3.0 1.0 3.0 86.032 719 914 4.5 66 5.0 5.0 1.0 2.0 5.9 1.51 86.046 716 66 2.5 1.0 2.5 3.0 12.3 1.55 86.053 717 927 2.7 1.0 723 1008 3.4 76 1.0 3.0 1.0 2.0 1.0 14.1 1.82 86.060 86.062 1019 2.9 81 1.0 2.5 1.0 2.8 1.0 25.1 2.79 729 86.063 927 2.8 71 1.0 3.0 1.0 2.3 1.0 14.5 1.67 721 86.071 1002 2.5 66 1.0 3.0 2.0 2.5 2.0 15.4 1.39 727 86.073 713 926 2.5 99 3.5 3.0 1.0 2.3 1.5 15.1 3.21 2.0 86.075 723 927 2.5 64 1.0 2.0 1.0 3.0 13.3 1.24 1005 71 1.0 2.5 16.1 2.29 86.078-1 726 3.5 1.0 3.0 2.0 927 2.3 61 2.0 1.0 2.0 3.0 13.0 1.20 86.081 724 1.0 728 1016 4.0 127 5.0 4.0 1.0 2.3 1.0 20.6 2.41 86.091-1 12.7 86.098 725 925 2.6 71 1.0 3.0 1.0 2.5 3.0 1.30 2.3 7.2 2.48 124 5.0 4.0 2.0 86.103 813 1010 3.8 1.0 2.65 71 1.0 3.0 1.0 2.0 15.4 86.109B 724 1010 3.2 1.0 2.5 3.0 923 2.5 64 1.0 2.0 12.1 1.55 717 86.111 729 1012 2.9 117 4.0 3.5 1.0 2.5 1.0 16.5 2.67 86.112-1 86.114 718 1003 3.1 99 3.5 3.0 1.0 2.3 2.5 16.6 2.68 1.0 2.8 2.0 15.0 86.116 720 923 2.9 69 1.0 2.5 2.19 2.8 4.0 713 2.7 69 1.0 3.0 1.0 17.7 1.87 86.123 919 4.0 2.5 3.0 1007 2.8 64 1.0 2.5 15.3 2.13 721 86.128 1007 3.2 84 1.0 3.0 2.0 2.8 1.5 30.8 2.13 722 86.134-1 3.0 5.0 18.8 1008 3.1 69 1.0 2.5 2.0 1.92 86.134-2 726 710 928 3.3 58 1.0 2.5 1.0 3.3 2.0 22.9 1.96 86.134-3 3.8 76 3.0 3.0 4.0 2.0 28.3 2.03 86.134-4 716 1002 3.0 727 1012 3.0 79 1.0 3.0 1.0 2.5 20.8 3.13 86.136 1013 4.1 81 1.0 3.0 5.0 24.9 2.33 724 2.5 86.137 2.7 1.0 2.5 1.0 2.5 12.3 1.31 718 930 66 2.5 86.138 3.0 2.0 20.0 1.90 803 1019 3.8 117 1.5 1.0 2.5 86.138R 713 919 2.6 58 1.0 2.0 1.0 3.3 24.3 1.53 86.142 86.144 719 922 3.2 58 1.0 2.0 1.0 2.0 14.4 2.43

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein		nposition					
		compo		<u>composition</u>	Pal-			Lino-	Lino-		ease
	Maturity	Protein		Methionine	mitic	Steric	Oleic	leic	lenic		ction
Entry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
		40.0	40.4	4.0	40.0	0.0	26.6	49.7	7.5	R	_
85.519	IV	43.0	19.4	1.3 1.3	12.6 12.1	3.6 3.3	19.9	54.1	10.6	S	s s
85.550	IV 	42.5	19.7		13.0	3.5 3.5	22.8	51.1	9.6	Н	S
85.559	III	43.0	20.4	1.2						S	S
85.590	IV	42.5	19.7	1.2	14.5	3.5	21.2	50.5	10.4		
85.619	IV	40.0	18.6	1.4	13.5	3.2	19.3	53.6	10.5	Н	S
85.624	IV	42.1	19.3	1.3	11.0	4.0	19.4	54.6	10.9	R	S
85.626	IV	42.1	18.6	1.3	11.7	3.8	18.1	56.1	10.4	R	S
85.630	III	41.9	20.1	1.2	12.0	3.8	21.4	53.5	9.3	Н	S
85.658	IV	41.6	19.5	1.3	13.8	2.4	23.3	51.0	9.4	S	S
85.663	IV	42.4	19.1	-	10.8	4.2	23.8	51.3	9.8	S	s s
85.665	Ш	42.6	20.2	1.2	10.8	3.6	23.8	53.4	8.3	S	S
85.666	Ш	42.7	20.3	1.3	12.2	4.3	22.3	52.2	8.9	S	S
85.668	Ш	43.4	20.0	1.2	12.8	4.0	22.9	51.4	8.9	S	S
85.878	Ш	43.5	19.1	1.2	10.7	4.4	24.4	52.4	8.1	S	s
85.903	IV	40.6	20.5	1.2	11.8	3.9	20.0	54.4	9.9	S	
86.004	Ш	43.8	19.6	-	15.1	4.4	27.0	46.9	6.6	S	S
86.006	III	43.8	16.7	-	14.9	4.2	21.0	50.2	9.3	R	S
86.007	IV	41.9	19.5	1.3	13.2	4.5	24.2	49.9	8.2	S	S
86.024	Ш	46.2	18.2	-	14.5	4.3	26.2	48.3	6.7	S	s
86.026	Ш	43.4	19.5	-	14.0	4.4	21.2	52.0	8.4	S	S
86.026-1	Ш	44.5	19.1	-	14.5	3.1	23.9	50.8	7.7	S	S
86.027	III	43.9	19.7	-	13.2	4.0	22.7	50.7	9.4	s	S
86.028	III	41.7	20.5	1.3	12.5	4.0	25.6	50.4	7.4	R	S
86.029	III	42.7	19.9	-	13.3	3.9	19.7	54.1	8.9	S	S
86.032	III	40.8	19.6	-	12.2	3.8	25.4	49.5	9.1	s	R
86.046	II	42.6	14.9	-	13.4	3.8	18.8	53.0	10.9	R	S
86.053	Ш	43.2	18.7	1.2	11.9	3.3	19.4	55.2	10.2	s	s
86.060	IV	43.0	18.2	1.2	11.4	3.7	21.2	52.4	11.2	н	S
86.062	īV	42.0	19.2	1.2	9.9	3.5	20.3	55.7	10.6	s	s
86.063	III	42.8	20.3	1.3	11.7	3.7	22.5	53.8	8.3	R	s
86.071	III	45.3	18.2	1.2	12.5	4.3	25.5	49.1	8.6	R	s
86.073	iii	42.3	21.6	1.3	12.7	3.6	19.9	54.8	9.0	s	R
86.075	iii	41.8	19.6	1.4	11.3	4.5	24.1	50.9	9.3	s	s
86.078-1	iv	42.5	20.5	1.3	11.3	3.5	19.4	55.8	10.0	R	R
86.081	III	41.1	19.1	1.3	15.6	4.3	26.8	47.1	6.2	s	S
86.081 86.091-1	III IV	43.2	19.1	1.2	12.0	3.6	24.7	51.6	8.1	S	S
86.091-1	III	45.2 45.3	16.9	-	14.2	3.6	23.0	50.4	8.8	S	R
86.103	III IV	41.0	17.3	-	13.0	3.1	17.2	56.2	10.5	R	s
86.103 86.109B	IV IV	41.0 45.0	19.2	1.3	13.0	3.1	21.5	52.6	9.3	S	
86.111	III	41.0	19.2	1.3 -	12.9	3.6	24.3	51.3	7.9	R	s
		40.8	20.1	1.4	10.6	3.7	20.2	56.7	9.3	S	S
86.112-1	IV III	41.7	20.1	1.7	11.0	3. <i>7</i> 4.7	28.2	48.1	9.3 8.1	R	S
86.114	III 111	41.8	20.7	1.2	12.0	3.5	27.0	49.9	7.6	R	s
86.116	III III	43.9		-	14.2	3.5 3.7	21.6	52.9	7.7	S	S
86.123	III		19.6	- -	12.3	3. <i>7</i> 3.2	18.6	55.2	10.6	Н	S
86.128	IV	41.2	20.0		12.3	3.2 3.6	25.0	49.9	8.6	S	S
86.134-1	IV	42.5	18.5	1.3				53.6		S	S
86.134-2	IV 	43.7	18.3	1.2	12.3	3.4	20.2		10.5		
86.134-3	III	44.3	20.2	1.2	13.6	4.3	19.6	53.1	9.4	S	
86.134-4	IV	44.2	20.1	1.2	12.9	3.5	24.9	50.4	8.3	R	S
86.136	IV	40.9	18.9	-	12.0	4.1	20.6	53.2	10.1	R	S
86.137	IV	41.4	18.8	-	11.6	3.4	19.8	55.1	10.1	S	S
86.138	IV	43.9	18.4	-	12.6	3.6	19.4	54.7	9.8	S	S
86.138R	IV	43.9	18.3	1.3	11.7	2.8	20.7	54.7	10.0	S	
86.142	Ш	42.0	18.3	-	12.0	4.5	26.4	48.2	8.9	S	
86.144	Ш	42.9	19.1	-	12.7	4.5	24.5	48.8	9.5	S	S

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	A a a a a a i s =	Country	Country	Year	Matur-
No.	Accession name	of acquisition	of origin	introduced or released	ity
140.	Hallie	acquisition	Origin	OI Teleased	group
86.145	Monbersu nagaba daizu	Japan	Japan	1930	Ш
86.146	Kawanagare	Japan	Japan	1930	111
86.150	lwafune takiya	Japan	Japan	1930	IV
86.153	Hongoku	Japan	Japan	1930	111
86.154	Akazaya konnin	Japan	Japan	1930	iii
86.301	ARGEGYG ROTTINI	Japan	Japan	1930	111
86.425	Mizukuguri	Japan	Japan	1930	111
86.445	Koshurei hakubi	Japan	Japan	1930	iii
86.449	Shiheigo kuroheso	Japan	Japan	1930	iii
86.449-0	(Shiheigo kuroheso)	Japan	Japan	1930	
86.449-2	(Shiheigo kuroheso)	Japan	Japan	1930	111
86.452	Koshurei No. 35	Japan	Japan	1930	111
86.456	Kakukwazoshi	Japan	Japan	1930	 III
86.457	Kazusa	Japan	Japan	1930	111
86.457-1	(Kazusa)	Japan	Japan	1930	IV
86.469	Ginnan ginko	Japan	Japan	1930	111
86.482	Toyonaga	Japan	Japan	1930	111
86.482-1	(Toyonaga)	Japan	Japan	1930	 III
86.490-2	(Shirohadaka)	Japan	Japan	1930	!!!
86.490-3	(Shirohadaka)	Japan	Japan	1930	IV
36.490-4	(Shirohadaka)	Japan	Japan	1930	IV
86.491	Chotan	Japan	Japan	1930	IV
36.502	Kaigenshirohana	Japan	Japan	1930	111
86.504	Chinko	Japan	Japan	1930	IV
86.510	Shirosaya	Japan	Japan	1930	111
36.740	Chuzu	Rep. of Korea	Rep. of Korea	1930	IV
86.876	Daizu pikuanda	Japan	Japan	1930	IV
86.903-3	Pakumeta	Rep. of Korea	Rep. of Korea	1930	IV
86.903-4	(Pakumeta)	Rep. of Korea	Rep. of Korea	1930	iii
86.904-1	(Fukota)	Rep. of Korea	Rep. of Korea	1930	iv
86.908	Kujongumurukon	Rep. of Korea	Rep. of Korea	1930	iV
86.972-2	(Pakute)	Rep. of Korea	Rep. of Korea	1930	iV
86.978	Zonggukon	Rep. of Korea	Rep. of Korea	1930	īV
37.005	Hinkon	Rep. of Korea	Rep. of Korea	1930	īV
87.011	Orukongu	Rep. of Korea	Rep. of Korea	1930	īV
37.013	Hingukongu	Rep. of Korea	Rep. of Korea	1930	iV
37.026	Hinkongu	Rep. of Korea	Rep. of Korea	1930	III
37.029	Hinchongutari	Rep. of Korea	Rep. of Korea	1930	IV
37.047	Anjanbangu	Rep. of Korea	Rep. of Korea	1930	IV
37.059	Moyashimame	Rep. of Korea	Rep. of Korea	1930	IV
37.074	Rokukon	Rep. of Korea	Rep. of Korea	1930	IV
87.165		Unknown	Unknown	1930	111
37.167		Unknown	Unknown	1930	111
37.457		Unknown	Unknown	1930	IV
37.465-1		Unknown	Unknown	1930	Ш
37.465-2		Unknown	Unknown	1930	Ш
7.525	Daizuohigu	Japan	Japan	1930	IV
37.530	Seishin	Japan	Rep. of Korea	1930	īV
87.540	Horabikon	Rep. of Korea	Rep. of Korea	1930	Ш
37.561	Sekishoku zunonikon	Rep. of Korea	Rep. of Korea	1930	IV
37.571	Kokukaku	Rep. of Korea	Rep. of Korea	1930	IV
87.574	Shoryushota	Rep. of Korea	Rep. of Korea	1930	III
37.575	Kuromepakuta	Rep. of Korea	Rep. of Korea	1930	iv
37.588	Keimeita	Rep. of Korea	Rep. of Korea	1930	IV
7.600-1	Komujonkon	Rep. of Korea	Rep. of Korea	1930	111

Table 2.2 Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

				<u>Pubes</u>	cence			Seedo	oat		Other 1	traits	
	Matu- rity	Stem	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plant
86.145	Ш	D	w	G	E	Ssp	Dbr	S	Br	Br	St	Na	
86.146	III	D	P	Ğ	Ē	Ssp	Br	D	Y	Lbf	•		
86.150	IV	D	Р	Ğ	Sa	N	Tn	ī	Ÿ	Bf			
86.153	III	D	P	T	E	N	Br	s	Ÿ	Blbr	Abh		
86.154	III	D	P	Ġ	Ē	Ssp	Br	S	Ý	Bf	, 1211		
86.301	III	N	P	G	Ē	N	Br	S	Ÿ	lb			
86.425	III	D	P	G	E	N	Tn	S	Y	Bf			
86.445	Ш	N	Р	G	E	N	Br	S	Y	Y			
86.449	Ш	N	Р	G	Ε	N	Dbr	S	Υ	lb			
86.449-0	111	N	W	Т	Ε	N	Br	S	Υ	ВІ			
86.449-2	Ш	N	W	G	Ε	N	ВІ	s	Υ	Υ			
86.452	III	D	Р	-	-	G	Br	D	Y	Bf			
86.456	III	N	W	G	E	N	Dbr	s	Y	Lbf			
86.457	III	D	Р	-	С	N	Tn	D	Υ	Bf			
86.457-1	IV	D	Р	G	E	N	Br	D	Υ	Bf			
86.469	Ш	D	Р	G	Ε	N	Tn	S	Υ	Bf			
86.482	Ш	D	W	Т	Ε	N	Br	S	Υ	Br		Cup	
86.482-1	Ш	N	Р	G	Ε	N	Br	S	Υ	Bf		•	
86.490-2	111	D	W	G	Sa	N	Br	S	Υ	Bf			
86.490-3	IV	D	W	G	Ε	Ssp	Br	S	Υ	Bf			
86.490-4	IV	N	Р	Т	Ε	N .	Br	D	Υ	ВІ			
86.491	IV	D	W	G	Ε	N	Br	ı	Υ	Lbf		Cup	
86.502	Ш	N	W	G	Ε	N	ВІ	S	Υ	Lbf		•	
86.504	IV	D	W	Т	Ε	N	Br	S	Υ	Br			
86.510	Ш	D	Р	G	Α	Ssp	Tn	D	Υ	Υ			
86.740	IV	D	W	G	Ε	Ssp	Tn	D	Υ	Bf			
86.876	IV	D	W	Т	Ε	N	Tn	D	Υ	Br			
86.903-3	IV	N	W	G	Ε	N	Tn	1	Υ	Bf			
86.903-4	Ш	D	Р	G	Ε	Ssp	Br	S	Υ	Bf			
86.904-1	IV	N	Р	Т	Ε	N	Br	S	Υ	Tn			
86.908	IV	D	Р	G	Ε	Dn	Tn	D	Υ	Bf			
86.972-2	IV	N	Р	G	Ε	N	Lbr	1	Υ	Υ			
86.978	IV	D	Р	G	Ε	Ssp	Br	S	Υ	G			
87.005	IV	D	W	G	Ε	Ssp	Br	D	Υ	Υ			
87.011	IV	D	Р	G	Ε	N	Tn	ı	Υ	Bf			
87.013	IV	D	Р	G	Ε	Ssp	Br	1	Υ	lb		Dab	
87.026	III	D	Р	G	Ε	N	Tn	S	Y	Bf			
87.029	IV	D	P	G	Ε	Ssp	Br	S	Υ	Υ			
87.047	IV	D	Р	G	Α	Ssp	Tn	S	Y	Bf			
87.059	IV	N	W	Lt	Ε	N	Tn	S	ВІ	ВІ			
87.074	IV	D	Р	G	Sa	Ssp	Br	S	Gn	Lbf			
87.165	Ш	D	W	G	Ε	Sp	Br	D	Υ	Υ			
87.167	Ш	N	Р	G	Ε	N	Br	S	Υ	Bf			Fechle
87.457	IV	D	W	Т	Ε	Ssp	Br	D	Lgn	ВІ			
87.465-1	Ш	N	W	Т	Ε	N	Tn	1	Υ	BI			
87.465-2	Ш	D	W	G	E	N	Tn	S	Y	Bf			
87.525	IV	N	W	T	Ε	N	Br	S	Gn	ВІ			
87.530	IV	N	W	G	Ε	N	Br	S	Y	Lbf			
87.540	Ш	D	Р	T	Ε	Ssp	Br	S	ВІ	ВІ			
87.561	IV	D	Р	G	Ε	N	Tn	ı	Υ	Bf			
87.571	IV	D	W	G	Ε	Ssp	Br	I	Υ	Υ			
87.574	111	N	Р	G	Ε	N	Tn	D	Υ	Υ			
87.575	IV	D	Р	Т	Ε	Ssp	Br	S	Υ	ВІ			
87.588	IV	D	W	G	Ε	N	Tn	S	Υ	Bf			
87.600-1	Ш	N	W	G	Sa	N	Br	S	Υ	Υ			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
	_										
86.145	716	916	2.7	53	1.0	2.0	1.0	2.3	5.0	18.2	1.36
86.146	727	1002	2.4	79	1.0	3.0	1.0	2.3	2.0	15.6	2.14
86.150	801	1011	4.0	94	1.0	3.0	5.0	2.0	2.0	14.3	2.44
86.153	718	924	2.7	69	1.0	2.5	1.0	3.0	1.0	21.4	2.37
86.154	727	1004	2.9	84	1.0	3.0	1.0	2.3	1.5	12.8	1.74
86.301	718	1002	3.2	117	4.0	3.0	1.0	2.5	2.0	15.9	2.62
86.425	722	929	2.5	79	1.0	3.0	1.0	2.5	2.5	13.9	1.81
86.445	714	925	: 9	86	3.5	3.0	1.0	3.0	2.0	19.8	2.51
86.449	719	1004	3.0	124	4.0	3.0	1.0	2.3	1.0	16.0	3.11
86.449-0	710	926	3.3	94	3.5	3.0	1.0	3.3	2.0	21.6	2.48
86.449-2	714	922	2.8	97	3.5	2.5	1.0	2.3	1.0	19.2	2.30
86.452	727	1009 924	2.5	43 97	1.0 3.5	3.0 2.5	2.5 1.0	2.3 2.5	2.0	15.1 19.1	0.89
86.456 86.457	716 722	924 928	2.9	66	1.0	3.0	1.0	2.5 2.5	1.0 2.5	13.5	2.57 1.25
86.457 86.457-1	722 727	1010	3.0 3.5	71	1.0	3.0	1.0	2.3	2.0	16.5	1.28
86.469	727 724	927	3.4	71	1.0	3.0	1.0	2.5 2.5	1.5	11.8	2.45
86.482	724	925	3. 4 3.5	81	1.0	3.0	1.0	2.5	2.0	13.4	1.69
86.482-1	720	1004	3.9	91	4.0	3.0	1.0	2.3	1.0	14.3	3.21
86.490-2	719	921	3.8	89	1.0	2.5	5.0	3.5	1.0	22.3	1.94
86.490-3	722	1001	2.4	74	1.0	3.0	5.0	2.8	1.0	18.5	1.63
86.490-4	725	1012	3.4	112	3.0	2.5	1.0	3.3	3.0	18.1	1.67
86.491	727	1013	3.5	84	1.0	3.0	1.0	2.5	2.5	18.4	2.46
86.502	716	925	2.8	107	3.5	2.5	1.0	2.3	1.0	18.6	2.73
86.504	728	1011	3.8	104	1.0	3.0	1.0	2.3	2.0	14.7	2.52
86.510	723	1010	3.0	71	1.0	3.0	1.0	2.5	2.0	21.8	1.59
86.740	801	1015	3.7	97	1.0	3.0	1.0	2.0	1.0	12.3	3.20
86.876	728	1010	3.3	91	1.0	3.0	1.0	2.0	4.0	11.7	2.22
86.903-3	805	1023	2.9	99	3.5	3.0	1.0	2.3	1.0	15.4	1.76
86.903-4	722	929	3.9	56	1.0	3.0	1.0	2.5	1.0	15.3	1.98
86.904-1	728	1010	4.0	104	4.0	3.0	1.0	3.0	2.0	16.7	2.31
86.908	731	1018	4.0	109	1.0	3.0	1.0	2.3	1.0	19.9	2.22
86.972-2	725	1013	3.1	109	3.5	3.0	1.0	2.5	2.0	13.3	2.78
86.978	728	1014	3.4	8 9	1.0	3.0	1.0	2.0	1.5	16.9	2.40
87.005	724	1009	3.7	71	1.0	3.0	1.0	2.3	2.5	12.7	1.90
87.011	807	1027	4.4	102	1.0	4.0	1.0	2.5	1.0	14.1	2.76
87.013	729	1015	3.5	86	1.0	3.0	1.0	2.3	1.0	16.2	2.86
87.026	722	926	3.2	84	1.0	3.0	1.0	2.8	1.5	18.5	2.52
87.029	803	1027	4.2	79	1.0	3.0	1.0	3.0	2.0	24.9	2.27
87.047	724	1007	4.3	66	1.0	3.0	1.0	2.8	2.0	11.6	2.15
87.059	818	1017	2.9	112	4.0	4.0	1.0	2.0	-	7.5	2.41
87.074	725	1016	4.0	76	1.0	3.0	1.0	2.8	3.5	27.7	2.14
87.165	714	929	1.9	48	1.0	3.0	1.0	2.8	1.5	34.4	1.39
87.167	708	916	2.8	97	3.0	2.5	1.0	3.0	2.0	20.1	2.25
87.457	802	1015	3.8	91	1.0	3.0	1.0	2.5	2.5	13.8	2.15
87.465-1	713	919	3.4	86	3.5	3.0	1.0	3.3	2.0	19.1	2.03
87.465-2	725	1004	3.2	81	1.0	3.0	1.0	2.3	1.0	17.0	2.51
87.525	802	1017	4.3	132	5.0	4.0	1.0	2.5	2.0	13.1	3.19
87.530	712	1002	3.2	89	2.5	3.0	1.0	2.8	2.0	17.4	2.81
87.540	721	1001	3.9	69	1.0	3.0	1.0	2.3		21.2	2.45
87.561	806	1026	4.2	117	1.0	4.0	1.0	2.3	1.0	14.4	2.90
87.571	726	1010	3.6	81	1.0	3.0	1.0	2.3	2.5	13.7	2.04
87.574	710	918	2.8	76	3.5	3.0	1.0	2.3	2.5	14.6	2.49
87.575	717	1010	3.3	56	1.0	3.0	1.0	3.0	1.5	26.2	2.20
87.588	726	1010	3.3	91	1.0	3.0	1.0	2.0	1.0	16.1	3.34
87.600-1	719	1006	3.6	112	3.5	3.0	1.0	2.5	2.0	20.2	2.33

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein		nposition					
		compo		<u>composition</u>	Pal-			Lino-	Lino-		ease
	Maturity	Protein		Methionine	mitic	Steric	Oleic	leic	lenic		ction
intry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
86.145	111	41.7	19.1	<u>-</u>	12.8	3.8	16.7	55.5	11.3	s	s
86.146	111	42.5	19.2	1.2	12.5	3.7	21.3	53.6	8.9	Н	s
86.150	IV	43.4	18.5	1.3	10.3	3.2	18.7	58.5	9.3	R	s
86.153	111	41.2	21.7	1.2	14.4	4.0	20.4	52.0	9.3	S	S
86.154	111	43.1	19.2	1.2	13.8	4.4	21.1				
86.301	111	41.6	21.0	1.3			23.7	50.5	10.2	Н	S
86.425	111	44.2	16.7	1.2	12.2 12.3	3.7 4.1	22.2	51.6	8.8	S	s s
86. 4 25	111	46.5	19.6	1.1	12.3		23.4	50.3 51.9	11.1	R	
86.449	111	43.2	21.3	1.1	12.4	4.1 4.0	20.7	53.0	7.8	s s	S
86. 449 -0	111	43.2	21.0	1.2	11.1		22.4		9.9		S H
86.449-2	111	43.3 41.5	21.9	1.3		3.6		55.0	7.9	S	
86.452	111	43.8	16.9	1.3	11.3	4.1	23.6	52.5	8.5	S	R
					11.4	4.0	25.6	49.6	9.4	R	S
86.456	111	41.7	22.1	1.3	11.1	3.8	22.9	53.9	8.3	S	S
86.457	III	40.4	19.2	1.3	12.8	4.5	28.3	44.7	9.7	S	S
86.457-1	IV	40.9	19.1	1.3	14.7	4.0	23.5	49.7	8.1	S	R
86.469	111	41.8	18.8	1.2	13.5	3.5	22.0	52.6	8.3	S	S
86.482	111	45.0	16.4	-	15.8	4.2	24.6	47.4	7.9	S	S
86.482-1	111	42.1	20.2	1.3	12.7	4.5	23.5	51.4	7.8	S	S
86.490-2	III	45.6	18.5	1.2	13.4	4.2	23.1	50.8	8.6	S	S
86.490-3	IV	43.9	19.5	1.2	12.6	3.8	24.5	50.2	8.9	s	S
86.490-4	IV	42.4	19.1	-	11.5	5.0	26.9	47.4	9.1	S	S
86.491	IV	42.0	20.4	1.2	14.4	4.4	23.9	48.8	8.5	S	
86.502	111	41.9	22.3	1.3	12.8	3.7	24.4	51.5	7.6	S	S
86.504	IV	44.3	18.2	1.2	13.6	3.8	22.4	50.7	9.5	S	S
86.510	111	43.6	18.7	1.2	12.9	4.3	20.1	53.4	9.2	S	S
86.740	IV	43.0	18.6	1.2	11.7	3.6	19.3	56.3	9.2	R	S
86.876	IV	43.0	18.6	-	14.0	4.0	24.4	47.2	10.4	R	S
86.903-3	IV	41.4	19.2	1.2	11.6	3.3	19.4	54.7	11.1	S	S
86.903-4	111	47.1	17.8	1.1	12.6	3.7	26.8	48.4	8.5	S	S
86.904-1	IV	41.0	18.5	1.2	12.8	3.8	24.0	50.4	8. 9	S	S
86.908	IV	41.1	18.9	1.2	14.2	2.8	19.5	53.9	9.5	S	s
86.972-2	IV	40.5	18.9	1.4	12.7	3.4	19.3	54.8	9.8	R	S
86.978	IV	41.1	20.3	1.2	11.9	4.1	22.4	53.1	8.6	S	
87.005	IV	41.2	18.5	1.2	11.7	3.1	17.5	56.5	11.3	R	s
87.011	IV	40.4	18.9	1.3	12.6	3.3	18.7	53.1	12.2	R	s
87.013	IV	39.3	19.4	1.3	11.3	3.9	19.0	55.4	10.4	s	S
87.026	111	44.0	18.5	1.2	11.9	4.1	23.2	52.1	8.7	s	s
87.029	īV	40.7	19.1	1.3	13.2	3.0	21.3	51.4	11.1	H	s
87.047	iV	43.0	19.0	1.2	14.0	3.7	19.5	51.5	11.3	R	s
87.059	IV	42.4	16.2	-	14.0	4.2	17.8	52.1	11.9	s	s
87.074	īV	44.0	19.1	1.1	10.6	3.7	22.6	53.1	10.0	R	s
87.165	III	42.0	19.5	1.2	10.7	4.1	26.1	49.9	9.2	s	s
87.167	III	43.9	19.5	1.1	10.6	5.1	27.6	48.5	8.2	s	s
87.457	ïV	40.6	19.1	1.3	11.4	3.9	20.3	53.6	10.8	s	S S
87.465-1	III	42.9	20.1	-	11.6	5.2	28.8	46.4	7.8	s	s
87.465-2	111	40.5	20.3	1.4	12.8	3.8	22.2	50.5	10.6	S	s
87.525	iv	44.2	18.1	1.3	11.5	3.3	20.1	56.0	9.2	R	s
87.525 87.530	IV	43.2	20.0	1.1	11.3	4.3	21.9	53.8	8.7	S	S
87.540	111	41.6	19.0		11.9	4.3 3.7	23.7	53.4	7.4	S	S
				1.2						R	
87.561	IV IV	41.3	18.3		12.5	3.1	18.9	55.7 56.1	9.7		S
87.571	IV 	41.4	18.9	1.2	11.2	3.7	18.6	56.1	10.4	R	S
87.574	III	43.9	20.5	1.2	10.5	3.4	22.0	55.9	8.2	S	S
87.575	IV	44.3	18.9	-	11.0	4.3	20.0	54.4	10.3	S	S
87.588	IV	41.7	20.1	1.3	11.2	4.4	22.5	51.8	10.0	S	S
87.600-1	111	43.8	18.9	1.1	11.5	4.9	27.3	47.8	8.5	S	S

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
PI No.	name	acquisition	origin	or released	group
87.600-2	(Komujonkon)	Rep. of Korea	Rep. of Korea	1930	IV
87.606	Oiarukon	Rep. of Korea	Rep. of Korea	1930	IV
87.614	Tsurunoko	Rep. of Korea	Rep. of Korea	1930	III
87.615	Shirobana	Rep. of Korea	Rep. of Korea	1930	iii
87.617	Miyongaikon	Rep. of Korea	Rep. of Korea	1930	iii
87.618	Chameshoryu	Rep. of Korea	Rep. of Korea	1930	111
87.619	Shiromeshoryu	Rep. of Korea	Rep. of Korea	1930	 III
87.620	Kuromeshoryu	Rep. of Korea	Rep. of Korea	1930	111
87.620-1	(Kuromeshoryu)	Rep. of Korea	Rep. of Korea	1930	IV
87.622	Onihadaka	Japan	Japan	1930	IV
87.623	Suzunari saki No. 1	Japan	Japan	1930	IV
87.629	Asahi	Japan	Japan	1930	IV
87.630	Chizuka	Japan	Japan	1930	III
87.631-1	(Kindaizu)	Japan	Japan Japan	1930	III
87.631-3	(Kindaizu)	Japan	Japan	1930	IV
87.632	Shirohadaka	Japan	Japan	1930	IV
87.634	Mizukuguri	Japan	Japan	1930	III
88.282	·····zukuguri	China	China	1930	
88.287	Mosheto	China	China	1930	111
88.289	MOSITERO	China	China	1930	III
88.290	Changechung No. 591	China	China	1930	111
88.291	Changechang No. 201	China	China	1930	iii
88.292		China	China	1930	;;;
88.297		China	China	1930	
88.300		China	China	1930	IV
88.302-1		China	China	1930	IV IV
88.302-1		China	China	1930	IV IV
88.303-1		China	China	1930	III
88.305		China	China	1930	
88.306		China	China	1930	
88.306-1		China	China	1930	 III
88.310		China	China	1930	111
88.312		China	China	1930	111
88.349	Fukukingen	China	China	1930	;;;
88.350	Kaiyuan	China	China	1930	III
88.353	. cary a a r	China	China	1930	111
88.354		China	China	1930	;;;
88.359		China	China	1930	;;; !!!
88.444	Chinghuangtou	China	China	1930	IV
88.445		China	China	1930	III
88.447		China	China	1930	111
88.447-3		China	China	1930	;;; ;;;
88.448		China	China	1930	 III
88.452	Hsiaohuangtou	China	China	1930	IV
88.458	Kokuzu	China	China	1930	IV
88.459	Shokozu	China	China	1930	IV
88.466	Shiryukozu No. 87	China	China	1930	III
88.466-1	(Shiryukozu No. 87)	China	China	1930	IV
88.486	Kaigen's Kingenzu	China	China	1930	III
88.490-1	(Haouben)	China	China	1930	III
88.490-2	(Haouben)	China	China	1930	IV
88.491	Ryokuchazu	China	China	1930	IV
88.492	Nagaobaao	China	China	1930	III
88.499	Kiizu	China	China	1930	
JJ.7JJ	NIIZU	Cillia	Cillia	1930	IV

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	N. 4.			<u>Pubes</u>	cence			Seedce	oat		Other to	raits	
	Matu- rity	Stem	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plant
87.600-2	IV	N	Р	G	E	Sp	Br	s	Υ	Lbf			
87.606	IV	N	P	G	E	N	Br	Ī	Y	Bf			
87.614	III	N	Р	G	E	N	Br	D	Y	Y			
87.615	111	D	W	T	Ē	N	Br	s	Ÿ	BI			
87.617	III	N	P	Ť	Ē	Ssp	Br	Ī	Ÿ	Tn			
87.618	111	N	Р	Ġ	Ē	N	BI	D	Ÿ	Bf			
87.619	111	N	Р	G	Ē	N	Br	S	Ÿ	Y			
87.620	 III	N	w	T	E	N	Br	D	Ϋ́	BI			
87.620-1	IV	D	w	G	Ē	Ssp	Br	D	Ÿ	Bf			
87.622	iV	D	P	G	Ē	N	Tn	D	Ÿ	Bf			
87.623	iV	D	Р	G	E	N	Br	D	Ÿ	Bf			
87.629	iV	N	Р	T	E	N	Br	s	Br	Br			
87.630	111	D	Р	Ť	Sa	N	Br	S	Y	Br			
87.631-1	111	N	P	T	E	N	Dbr	S	Lgn	BI			
87.631-3	IV	N	W	† T	E	N	Br	S	Y	BI			
87.632	IV	N	P	Ť	E	N	Br	D	Ϋ́	Br			
87.634	III	N	P	T T	E	N	Br	S	Y	Br			
		N	w	Lt	E	N	Tn	S	Ϋ́	Br			
88.282			P	Lt	E	N	BI	S	Br	Br			
88.287	III 	N							Y	Y		Dab	
88.289	III	N	W	G	E	N	Br B-	S	Y	Ý		Dab	
88.290	III	N	W	G	E	N	Br B-	S				Dab	
88.291	III	N	P	T	E	N	Br D-	D	Y	Tn			
88.292	III	N	W	T	Sa	N	Br	S	BI	BI			
88.297	III	N	W	G	E	N	Br	S	Y	Bf Df			
88.300	IV	N	W	G	E	N	Br	D	Y	Bf			
88.302-1	IV	N	P	G	E	N	Tn	D	Y	Y			
88.302-2	IV 	N	W	Lt —	E	N	Br	ı	Y	BI			
88.303-1	III	N	Р	T	E	N	Br	S	Y	Br			
88.305	III	S	W	G	E	N	Dbr	D	Y	Bf		Wa	
88.306	111	D	W	G	E	N	Br	D	Y	Lbf			
88.306-1	111	N	Р	T	E	N	Br	D	Y	Br			
88.310	111	D	W	G	Ε	N	Br	D	Υ	Lbf			
88.312	111	D	W	G	Ε	N	Br	D	Υ	Bf			
88.349	111	N	W	G	Ε	N	ВІ	S	Υ	Υ			
88.350	111	N	W	G	Ε	N	Dbr	S	Υ	Υ			
88.353	Ш	N	W	G	Sa	N	Br	S	Υ	Υ		Swa	
88.354	Ш	N	W	G	Ε	N	Br	S	Υ	Bf			Fechlo
88.359	Ш	N	W	G	E	N	Br	S	Y	Bf			
88.444	IV	D	W	G	E	N	Dbr	S	Y	Bf			
88.445	Ш	N	Р	G	E	N	Br	S	Υ	Bf			
88.447	Ш	N	Р	G	Ε	N	Br	D	Y	Y			
88.447-3	Ш	N	W	Т	Ε	N	Br	S	Υ	ВІ			
88.448	Ш	N	W	G	E	N	Br	D	Y	Bf			
88.452	IV	N	W	G	Ε	N	Br	S	Υ	Bf			
88.458	IV	N	W	Т	Ε	N	Br	S	ВІ	ВІ	Sabh		
88.459	IV	N	W	G	Ε	N	Dbr	S	Υ	Bf			
88.466	Ш	N	W	G	Ε	N	Br	S	Υ	Lbf		Dab)
88.466-1	IV	D	Р	G	Ε	N	Tn	D	Υ	Bf		Dab)
88.486	Ш	N	W	G	E	Ssp	ВІ	D	Υ	Bf			
88.490-1	III	N	W	G	E	N .	Tn	S	Υ	Υ			
88.490-2	IV	D	W	G	E	Ssp	Tn	D	Υ	Bf			
88.491	IV	D	P	G	E	Ssp	Br	D	Gn	Bf			
88.492	111	D	W	Lt	E	Ssp	Br	S	Gn	Br	St	Na	
88.499	IV	D	w	G	E	N	Tn	s	Y	Bf			
00.433	1 V		~ ~	_	-	. •		_	•	٠.			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering <u>date</u> (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
87.600-2	717	1007	3.9	89	3.0	3.0	1.0	2.8	1.0	27.5	2.43
87.606	725	1011	4.0	99	2.5	3.0	1.0	3.3	1.0	18.7	2.89
87.614	714	917	3.6	84	3.5	3.0	1.0	2.5	1.0	24.3	2.64
87.615	719	929	3.4	74	1.0	3.0	1.0	2.5	1.0	16.2	2.38
87.617	714	923	4.0	81	3.0	3.0	1.0	3.0	3.0	26.5	2.28
87.618	719	930	2.8	102	3.0	3.0	1.0	2.0	1.5	12.6	2.80
87.619	714	920	3.8	94	4.5	3.0	1.0	2.8	2.0	18.4	2.95
87.620	714	928	4.3	112	4.0	3.0	1.0	2.0	1.0	11.3	2.63
87.620-1	727	1016	4.0	94	1.0	3.0	1.0	2.5	1.0	16.3	2.89
87.622	726	1013	3.8	81	1.0	3.0	1.0	2.5	2.0	15.0	2.29
87.623	804	1018	3.3	91	1.0	3.0	1.0	2.0	2.0	13.3	2.43
87.629	731	1015	4.0	165	5.0	4.0	1.0	2.5	-	11.0	2.76
87.630	730	1007	3.8	79	1.0	3.0	4.0	2.0	3.5	11.5	1.96
87.631-1	725	926	4.5	117	4.5	4.0	1.0	2.5	2.5	9.0	3.11
87.631-3	721	1011	3.9	117	4.0	3.0	1.0	2.5	1.0	16.2	2.70
87.632	719	1016	4.8	112	4.5	4.0	1.0	2.3	2.5	15.9	2.58
87.634	717	924	3.5	124	4.5	2.5	1.0	2.3	1.5	15.9	2.85
88.282	724	923	4.0	102	4.5	3.0	1.0	2.5	1.5	11.5	2.84
88.287	722	926	3.4	117	4.5	3.0	1.0	2.8	-	13.7	2.95
88.289	715	1001	4.3	114	4.5	3.0	1.0	2.5	2.0	13.9	3.07
88.290	714	1001	4.3	119	4.5	3.0	1.0	2.5	2.0	13.9	2.91
88.291	717	1001	4.2	117	4.0	3.0	1.0	2.5	2.5	16.3	2.91
88.292	728	1007	4.3	132	4.0	3.0	2.0	2.0	-	11.3	2.61
88.297	713	925	2.7	91	3.0	2.5	1.0	2.8	1.5	18.9	2.52
88.300	727	1011	3.4	114	4.0	3.0	1.0	2.5	1.5	13.8	2.75
88.302-1	725	1011	3.3	119	4.0	3.5	1.0	2.3	1.0	20.1	3.46
88.302-2	718	1006	3.9	122	4.0	3.0	1.0	2.8	1.0	18.7	2.72
88.303-1	713	918	3.6	86	3.5	3.0	1.0	3.3	1.0	19.7	2.70
88.305	718	917	2.0	66	2.0	3.0	1.0	2.5	1.0	13.5	2.60
88.306	717	1003	3.4	` 89	1.0	3.0	1.0	2.3	1.5	22.3	2.91
88.306-1	713	928	3.6	97	3.5	3.0	1.0	2.5	2.5	16.1	2.82
88.310	718	1001	3.8	84	1.0	3.0	1.0	2.5	2.0	21.9	3.00
88.312	716	925	3.3	79	1.0	3.0	1.0	2.5	1.0	18.8	2.75
88.349	714	919	3.2	97	3.5	2.5	1.0	2.3	1.0	19.6	2.49
88.350	716	923	2.7	107	3.5	3.0	1.0	2.5	1.0	19.2	2.71
88.353	718	928	3.2	97	3.5	3.0	1.0	2.5	1.0	16.6	2.52
88.354	710	916	3.4	76	2.5	2.5	1.0	2.8	1.0	17.4	2.20
88.359	712	919	3.3	81	2.5	2.5	1.0	2.8	1.0	16.8	2.61
88.444	804	1027	3.6	107	1.0	3.0	1.0	2.3	1.0	16.2	2.82
88.445	716	926	3.8	109	4.0	3.0	1.0	2.8	1.0	15.1	2.54
88.447	716	926	3.8	107	4.0	3.0	1.0	2.8	1.0	18.3	3.01
88.447-3	716	929	3.4	112	3.5	3.0	1.0	2.5	1.0	15.4	2.84
88.448	721	929	3.4	114	4.0	3.0	1.0	2.5	1.0	13.5	2.70
88.452	802	1020	3.1	124	4.0	3.0	1.0	2.3	1.0	16.9	2.95
88.458	729	1010	4.2	130	4.5	3.0	1.0	2.5		12.7	2.61
88.459	723	1004	3.8	114	3.5	3.0	1.0	2.8	1.0	17.4	3.30
88.466	715	930	3.3	102	4.0	3.0	1.0	2.5	3.0	16.4	2.69
88.466-1	803	1022	3.4	84	1.0	3.0	1.0	2.5	3.0	17.9	2.47
88.486	717	925	2.7	99	3.5	3.0	1.0	3.0	1.0	16.9	2.77
88.490-1	715	930	2.9	91	4.0	3.0	1.0	2.8	2.5	18.2	2.55
88.490-2	728	1012	3.5	91	1.0	3.0	1.0	2.5	1.0	15.1	2.68
88.491	730	1018	3.5	81	1.0	3.0	1.0	2.3	2.0	17.3	2.52
88.492	721	924	3.5	81	1.0	3.0	1.0	2.3		14.6	2.02
88.499	728	1016	3.9	94	1.0	3.0	1.0	2.5	1.0	16.8	3.04
88.502	722	1003	4.0	66	1.0	3.0	1.0	2.5	-	21.4	2.41

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein		nposition					
		compo		composition	Pal-		.	Lino-	Lino-		ease
_	Maturity	Proteir		Methionine	mitic	Steric	Oleic	leic	lenic		ction
ntry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
87.600-2	IV	44.0	18.8	1.1	10.4	4.3	25.7	49.9	9.8	s	s
87.606	IV	44.1	18.5	1.2	10.4	3.7	24.7	50.9	10.1	S	S
87.614	III	43.1	19.8	1.2	10.9	4.2	24.5	50.7	9.9	S	Н
87.615	 III	40.8	20.6	1.3	12.2	3.3	19.7	55.1	9.8	S	S
87.617	III	42.5	21.0	1.1	11.5	3.9	24.0	50.1	10.3	R	S
87.618	III	45.5	18.1	1.2	13.3	4.6	20.1	52.9	9.0	S	S
87.619	!!!	42.0	21.0	1.2	11.5	4.7	24.0	50.6	9.2	R	S
87.620	!!!	42.5	19.9	1.2	12.1	4.4	20.8	50.6 52.7	10.0	R	S
87.620-1	IV	39.9	21.0	1.3	11.0	3.5	18.5	57.7	9.2	Н	S
87.622	IV	40.8	18.9	1.3	11.6	3.7	20.8	57.7 53.7	10.3	R	S
87.623	IV	39.9	18.6	1.3	11.9	3.1	18.0	56.0	10.3	S	S
87.629	IV	41.5	18.8	1.3	10.4	3.4	18.5	58.6	9.1	R	S
87.630	III	43.1	17.2	1.3	14.7	3.8	22.2	50.6	8.7	R	S
87.631-1	III	41.5	18.1	1.3	13.3		18.3				
87.631-1	IV	46.8	18.6	1.2	11.8	3.2 4.0	22.5	54.8 52.1	10.3 9.6	H S	S S
87.632	IV	40.9	20.6	1.4	11.6	4.0	20.3	52.1 53.0	9.6 11.1	S	S
87.634	III	41.5	20.6	1.4	11.8	5.2	24.5	49.5	9.6	S	S
88.282	!!! !!!	41.5	18.2	1.4	12.6	6.2 4.1	20.8	49.6 54.6		S	S
88.287	III	41.9	18.2	-	13.2	4. I 4.2	20.8	54.5 53.1	7.9 9.5	S	S
88.289	III	41.3	20.0	1.3	15.7	4.2 5.5	20.0			S	
88.290	!!! !!!	39.8	20.4	1.4	15.7			48.7 49.0	9.4	S	S
	III	39.6 44.4	20.4	1.4		5.0	21.3		9.5		S
88.291	III		18.1		12.7 13.2	4.1	20.9	52.8	9.5	S	s s
88.292 88.297	III	41.6 41.5	21.5	- 1.3	10.9	4.9	22.1 23.9	50.1	9.6	S	
88.300		42.3	20.2	1.3	12.8	5.1		51.7	8.5	S	S
	IV	42.3 42.1	20.2	1.3		4.2	20.8 20.5	56.2	6.0	S	R
88.302-1 88.302-2	IV IV	44.5	21.3	1.3	14.0 11.8	3.6		51.9	10.0	S S	S
88.303-1	III	42.2	21.5	1.2		5.0	24.0	49.8	9.4	S	R
		40.3		1.4	13.0	4.2	25.9	48.5	8.5		Н
88.305	III		21.0		13.6	4.2	18.5	53.3	10.4	S	S
88.306 88.306 1	III	41.9	21.9	1.3	13.4	5.7	22.1	49.6	9.2	S	S
88.306-1 88.310	 	41.7 42.1	21.4 21.4	1.3 1.4	11.6	4.2	22.7	52.5	9.0	S	S
	III				13.2	4.5	20.5	52.3	9.6	S	S
88.312		40.3 41.2	21.3	1.4	12.4	3.7	21.2	52.9	9.8	S	R
88.349	III		22.3	1.3	11.4	4.4	21.8	53.3	9.1	S	R
88.350	III	41.9	22.6	1.3	11.0	5.7	23.2	50.6	9.6	S	S
88.353	111	41.2	20.4	1.3	11.6	4.2	19.7	55.4 53.6	9.1	S	S
88.354 88.359	 	39.1 39.2	22.3 22.6	1.4 1.4	11.7 11.2	3.9 4.2	21.5 23.3	53.6	9.3	S	S
88.444	III IV	39.2 40.3	19.7	1.4	11.7			52.7	8.6 11.6	S	S
88.445	III	40.3 40.6	20.3	1.3	12.6	3.4 4.6	17.1 20.9	56.2	11.6	R S	s s
88.447	!!! !!!	40.6	20.3 20.6	1.3	12.4	4.6 5.0	20.9	51.8 51.9	10.1 10.5	S	S
88.447-3	III	41.7	21.0	1.2	12.4	4.9	20.3	51.9 52.2	10.5	S	Н
88.448	!!! !!!	41.5	20.3	1.3	10.9	4. 9 4.8	20.3	52.2 52.6	9.4	S	S
88.452	IV	40.5	20.3	1.3	12.1	4.0	17.1	54.4	9.4 12.4	S	S
88.458	IV	40.0	18.7	-	14.6	4.1	21.5	50.5	9.3	S	S
88.459	IV	41.3	21.6	1.3	12.0	4.2	23.0	52.1	8.7	S	
88.466	III	41.6	20.3	1.3	13.5	4.2	22.9	51.2	8. <i>1</i>	S	s s s
88.466-1	IV	44.1	17.8	-	12.6	3.6	20.2	54.9	8.8	R	9
88.486	III	43.5	19.1	1.2	12.0	3.5 3.5	24.4	54.9 52.3		S	S
88.490-1	 	43.5 43.7	19.1	1.2	11.4				7.8		2
88.490-1 88.490-2	III IV	43.7 42.4	19.8	1.2		3.8	25.9	49.7	9.2	S	S
					11.6	3.9 3.7	19.2	54.4	11.1	Н	S
88.491	IV III	41.8 41.1	19.3 20.5	1.3 -	12.0 13.1	3.7	20.5	52.2	11.6 9.7	S S	s s
	111	41.1	∠U.⊅	-	13.1	4.4	20.5	52.2	9.7	S	S
88.492 88.499	IV	41.3	19.5	1.4	11.2	5.0	24.2	48.8	10.8	S	S

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

		Country	Country	Year	Matur-
	Accession	of	of	introduced	ity
PI No.	name	acquisition	origin	or released	group
88.780		China	China	1930	III
88.782		China	China	1930	111
88.783		China	China	1930	III
88.788		China	China	1930	III
88.789		China	China	1930	III
88.790		China	China	1930	III
88.793		China	China	1930	IV
88.799		China	China	1930	III
88.803-1		China	China	1930	111
88.806		China	China	1930	III
88.809	Seita	Rep. of Korea	Rep. of Korea	1930	III
88.811	Pakute	Rep. of Korea	Rep. of Korea	1930	IV
88.813	Ryumuo	Rep. of Korea	Rep. of Korea	1930	iv
88.814	Mote	Rep. of Korea	Rep. of Korea	1930	iv
88.815	Orukon	Rep. of Korea	Rep. of Korea	1930	iii
88.816	Hota	Rep. of Korea	Rep. of Korea	1930	IV
88.818	Yota	Rep. of Korea	China	1930	iii
88.820N	(Heihokuta)	Rep. of Korea	Rep. of Korea	1930	 IV
88.823	Aota	Rep. of Korea	Rep. of Korea	1930	iii
88.826	Kurugara	Rep. of Korea	Rep. of Korea	1930	iii
88.886	ra agara	Unknown	Unknown	1930	iii
88.965		Unknown	Unknown	1930	iii
88.998-1		China	China	1930	iii
88.998-2		China	China	1930	 III
89.002		China	China	1930	 III
89.002-2		China	China	1930	111
89.003-2		China	China	1930	iii
89.005-4		China	China	1930	III
89.006		China	China	1930	111
89.007		China	China	1930	111
89.009		China	China	1930	111
89.009-2		China	China	1930	111
89.Ö10		China	China	1930	IV
89.012-1		China	China	1930	III
89.056-2		China	China	1930	IV
89.061-2		China	China	1930	III
89.061-3		China	China	1930	IV
89.061N		China	China	1930	III
89.066		China	China	1930	III
89.067		China	China	1930	III
89.074		China	China	1930	IV
89.117		China	China	1930	iii
89.128	Tsurunoko	Rep. of Korea	Rep. of Korea	1930	IV
89.130	Muyonzon	Rep. of Korea	Rep. of Korea	1930	iii
89.133	Saichou	Rep. of Korea	Rep. of Korea	1930	 III
89.134	Mentou	Rep. of Korea	Rep. of Korea	1930	 III
89.143	Kuromeshoryu	Rep. of Korea	Rep. of Korea	1930	iii
89.146	Churyokurota	Rep. of Korea	Rep. of Korea	1930	III
89.150	Takuchikon	Rep. of Korea	Rep. of Korea	1930	iii
89.152	Hakuchuta	Rep. of Korea	Rep. of Korea	1930	iii
89.154-2	(Chirumukon)	Rep. of Korea	Rep. of Korea	1930	iv
89.162	Hawane	Rep. of Korea	Rep. of Korea	1930	III
89.168	1 10 17 01 10	China	China	1930	!!!
		Unknown	Unknown	1930	IV
89.471 89.769		China	CHRIDWII	1930	IV

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedce	oat		Other	traits	
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	l eef	Plant
	0												1 Idile
88.780	Ш	N	W	G	Ε	N	ВІ	1	Υ	Bf			
88.782	Ш	N	Р	T	Ε	N	Br	D	Υ	G			
88.783	III	N	W	Lt	Ε	N	Tn	1	Υ	Br		Dab	
88.788	III	N	W	T	E	N	Br	D	ВІ	ВІ			
88.789	III	N	Р	G	Ε	N	Dbr	S	Υ	lb			
88.790	Ш	N	W	G	Ε	N	Br	S	Υ	Lbf			
88.793	IV	N	Р	T	Ε	Ssp	Br	ı	Υ	G			
88.799	Ш	N	Р	Lt	E	N	Br	1	Υ	Br			
88.803-1	Ш	N	Р	T	Ε	N	Br	S	Υ	Υ			
88.806	Ш	N	W	T	Ε	N	Br	D	Υ	Lbl			
88.809	111	D	W	G	Ε	N	Br	S	Gn	Bf			
88.811	IV	D	Р	G	Ε	Ssp	Br	D	Gn	Bf			
88.813	IV	D	W	T	Ε	N	Tn	S	Υ	G			
88.814	IV	N	Р	T	Ε	Ssp	Tn	D	Υ	ВІ			
88.815	Ш	D	W	T	Ε	N	Tn	D	Υ	Rbr			
88.816	IV	N	W	G	Ε	Ssp	Br	D	Υ	Υ			
88.818	Ш	D	W	G	Ε	N	Dbr	S	Gn	Lbf	Na		
88.820N	IV	N	Р	G	Ε	Ssp	Tn	S	Υ	Υ			
88.823	Ш	D	W	T	Ε	Ssp	Br	1	Gn	ВІ	Na		
88.826	Ш	D	W	G	Ε	Ssp	Br	D	Υ	Υ			
88.886	Ш	N	W	G	Ε	N .	Tn	S	Υ	Y		Dab	
88.965	Ш	N	P	G	Ε	N	Tn	1	Υ	Y			
88.998-1	Ш	N	Р	Т	Ε	N	Br	D	Υ	Br			
88.998-2	Ш	N	W	Lt	Ε	N	Br	D	Y	Br			
89.002	Ш	N	W	G	Ε	N	Dbr	S	Y	Bf			Ysdl
89.002-2	Ш	N	Р	Т	E	N	Br	D	Ÿ	Br		Dab	
89.003-2	Ш	N	W	Lt	E	N	Tn	D	Br	Br			
89.005-4	111	N	W	G	Ε	N	Br	s	Y	Bf			
89.006	III	N	P	G	E	N	Tn	Ď	Ÿ	Υ Υ			
89.007	III	N	P	G	E	N	Tn	S	Ý	Bf			
89.009	III	N	Р	G	E	N	Br	S	Ÿ	Bf			
89.009-2	111	D	w	G	Ē	N	Br	D	Ý	Bf			
89.010	IV	N	w	G	E	N	Dbr	S	Ÿ	Bf			
89.012-1	111	N	P	G	E	Ssp	BI	S	Ÿ	Bf			Ysdlç
89.056-2	IV	N	Р	T	E	Ssp	Br	S	Ϋ́	Br			i suit
89.061-2	III	N	Р	Ġ	E	N	Tn	S	Ÿ	Lbf			
89.061-3	IV	N	w	Lt	E	N	Tn	Ī	Ÿ	Br			
89.061N	111	N	w	G	Sa	N	Br	s	Ϋ́	Bf		5lft	
89.066	III	N	P	T	E	N	Br	S	Gn	Br		Sire	
89.067	iii	N	Р	G	Ē	N	Tn	S	Y	lg			
89.074	IV	N	w	T	E	N	Br	S	Ÿ	Br			
89.117	III	N	P	Ť	E	Ssp	Br	D	Ÿ	Br			
89.128	IV	N	P	Ť	E	N	Br	S	Y	BI			
89.130	III	N	w	Ġ	E	N	BI	S	Y	Y			
89.133	 III	D	P	G	E	N	Br	D	Y	Y			
89.134	III	N N	P	T	E	Ssp	Br B-	S	Y	Tn			
89.143	III	N	W	T	E	N	Br	D	Y	BI			
89.146	III	N	P	T	E	N	Br	D	BI	BI			
89.150	III	N	P	T	E	N	Br	D	Y	Tn			
89.152	III	N	P	G	E	N	Tn	S	Υ	lb			
89.154-2	IV	N	W	T	E	N	Br	1	Υ	Br			
89.162	III	S	Р	G	Ε	N	Br	D	Υ	Υ			
89.168	III	N	Р	G	Ε	N	Tn	D	Υ	Υ			
89.471	IV	N	P	G	E	N	Br	S	Υ	lb			
89.769	IV	D	W	G	Ε	N	Tn	S	Υ	Bf			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

	Flowering	Maturity			Stem term-	Branch-	Shat-	Seed			
	date	date	Lodging	Height	ination	ing	tering	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	(score)	(score)	(cg/sd)	(Mg/ha)
88.780	720	923	4.0	130	4.5	3.0	1.0	2.3	1.0	12.9	2.63
88.782	710	918	3.5	99	4.0	3.0	1.0	3.3	3.5	18.6	2.61
88.783	710 720	1011	3.8	104	4.0	3.0	1.0	2.5	2.0	12.4	2.49
88.788	802	930	4.2	124	4.0	3.5	1.0	2.3	•	9.4	2.04
88.789	716	929	3.2	112	3.5	3.0	1.0	2.3	1.5	16.3	3.04
88.790	708	917	3.4	89	3.0	2.5	1.0	2.8	3.0	18.6	2.29
88.793	719	1013	2.8	97	3.0	3.0	1.0	3.0	3.5	17.9	2.86
88.799	717	920	3.9	91	4.0	3.0	1.0	2.5	3.5	12.1	2.60
88.803-1	714	922	4.3	94	3.5	3.0	1.0	2.5	3.0	16.2	2.48
88.806	717	1003	3.2	97	3.5	3.0	1.0	2.0	1.5	12.4	2.49
88.809	720	927	4.0	94	1.0	3.0	1.0	2.5	1.5	13.8	2.61
88.811	725	1008	3.8	81	1.0	3.0	1.0	2.5	2.0	16.9	2.16
88.813	726	1009	3.9	84	1.0	3.0	1.0	2.3	3.5	17.5	2.31
88.814	726	1008	3.2	114	4.0	3.5	1.0	2.5	3.5	12.7	1.94
88.815	713	1004	2.9	53	1.0	3.0	1.0	2.3	4.0	15.0	2.06
88.816	725	1015	3.4	104	4.0	3.0	1.0	2.8	2.0	17.3	2.26
88.818	718	920	2.8	76	1.0	2.5	1.0	2.3	1.5	14.0	2.15
88.820N	804	1028	4.0	114	3.0	3.0	1.0	2.8	2.0	24.0	2.03
88.823	720	1005	3.5	74	1.0	3.0	1.0	2.8	3.0	23.1	2.08
88.826	723	1008	3.5	69	1.0	2.5	1.0	2.3	3.0	13.4	1.74
88.886	707	917	2.9	81	3.0	2.5	1.0	2.8	2.5	21.6	2.68
88.965	713	915	3.4	86	3.5	2.5	1.0	2.8	1.5	18.5	2.27
88.998-1	716	1002	3.8	91	3.5	3.0	1.0	2.5	1.5	15.8	3.21
88.998-2	719	1003	3.3	91	3.5	3.0	1.0	2.3	2.0	12.5	2.46
89.002	713	921	3.2	79	3.0	2.5	1.0	2.3	1.0	17.0	2.63
89.002-2	719	930	3.8	91	3.0	3.0	1.0	2.8	2.0	14.4	2.73
89.003-2	715	921	4.0	119	5.0	4.0	1.0	3.5	-	13.1	2.82
89.005-4	716	919	3.3	107	4.0	3.5	1.0	2.8	1.0	15.5	2.69
89.006	713	914	3.9	89	3.0	2.5	1.0	2.8	2.0	18.9	2.38
89.007	720	929	3.8	91	2.5	3.0	1.0	2.8	2.0	17.4	2.92
89.009	719	929	3.6	86	3.0	3.0	1.0	2.8	1.0	15.3	3.36
89.009-2	717	927	3.3	81	1.0	3.0	1.0	2.8	1.0	19.9	3.02
89.010	715	930	3.5	114	4.0	3.0	1.0	2.5	1.0	14.9	3.21
89.012-1	722	1010	3.4	86	3.0	2.5	1.0	2.3	1.0	15.9	2.87
89.056-2	720	1016	3.1	124	4.0	3.0	1.0	2.5	2.0	19.6	2.68
89.061-2	709	1002	3.3	109	3.0	2.0	1.0	2.5	1.5	15.4	3.24
89.061-3	717	929	3.6	109	3.5	2.0	5.0	2.5	2.0	16.9	2.23
89.061N	711	928	3.6	86	2.5	3.0	1.0	2.8	2.0	17.9	2.28
89.066	714	922	3.4	102	4.0	3.0	1.0	2.8	2.0	14.5	2.80
89.067	712	916	2.9	94	2.5	2.5	1.0	2.8	3.0	15.3	2.66
89.074	728	1011	4.2	145	4.5	4.0	1.0	2.5	2.0	19.4	2.44
89.117	712	926	3.4	89	3.0	3.0	1.0	2.5	2.5	15.4 15.0	2.95 3.08
89.128	717	1008	3.6	107	4.0	3.0	1.0	2.0	1.0	15.8	
89.130	714	920	3.1	107	3.5	2.5	1.0	2.5	1.0	19.7	2.58
89.133	715	921	2.9	61	1.0	3.0	1.0	2.5	2.5	24.7	2.18
89.134	714	1004	3.3	91	4.0	3.0	1.0	3.3	4.5	19.2	2.49
89.143	719	923	3.7	104	4.0	2.5	1.0	2.5	1.0	16.0	2.75
89.146	717	921	3.2	104	4.5	3.5	1.0	2.3	2.0	13.7	2.87
89.150	717	1002	4.3	76	3.0	3.0	1.0	2.8	3.0	24.9	2.36
89.152	711	925	3.2	94	3.0	2.0	1.0	2.8	1.5	18.0	3.07
89.154-2	717	1013	3.5	119	4.0	3.0	1.0	2.5	3.0	14.0	2.60
89.162	711	917	3.0	74	2.0	3.0	1.0	3.0	2.5	28.5	2.39
89.168	714	917	3.2	81	2.5	2.0	1.0	2.8	2.5	19.1	2.79
89.471	726	1011	3.7	109	3.5	3.0	1.0	2.5	1.0	17.1	3.19
89.769	731	1017	4.5	109	1.0	3.0	2.0	2.5	1.0	17.1	2.80

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein		nposition					
		compo		composition	Pal-			Lino-	Lino-		ease
_	Maturity	Protein		Methionine	mitic	Steric	Oleic	leic	lenic		ction
Entry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
88.780	Ш	42.6	20.5	1.3	13.3	3.9	21.2	53.2	8.4	R	s
88.782	111	45.1	18.1	-	12.8	4.7	20.3	52.7	9.6	s	s
88.783	111	43.1	19.9	1.2	11.4	3.7	22.6	52.1	10.2	s	s
88.788	111	42.4	17.5	-	13.0	3.9	18.3	53.8	11.0	S	S
	III	42.5	19.3	1.2	12.4	3. 5 3.5	20.8	53.8	9.6	S	S
88.789 88.790	III	43.2	20.1	1.3	11.8	5.0	23.6	49.5	10.1	S	3
	IV	43.2 43.9	18.6	1.3	12.7	4.5	20.5	51.9	10.1	S	s s
88.793	III	43.5 41.5	21.0	1.2	12.7	4.8 4.2	20.0	54.2	9.0	S	S
88.799 88.803-1	III	42.8	19.6	1.3	12.0	4.2 4.8	21.6	52.2	9.3	S	R
88.806	111	41.6	20.5	1.2	12.3	4.2	22.0	51.1	10.4	S	S
88.809	III	41.9	20.5	1.2	12.2	3.8	19.3	54.8	9.8	S	S
88.811	IV	43.5	19.1	1.2	11.9	3.7	21.9	54.0	8.5	R	S
88.813	IV IV	43.6	19.2	-	12.0	4.3	23.1	50.0	10.7	S	S
88.814	IV 	45.4	18.7	-	12.0	4.1	19.9	54.0	10.0	S	S
88.815	III	42.5	19.8	-	12.8	4.3	20.5	52.4	9.9	R	S
88.816	IV 	42.1	18.7	1.2	12.5	5.0	20.2	51.6	10.7	R	S
88.818	III	42.3	19.6	1.2	11.4	3.8	19.5	54.6	10.7	S	S
88.820N	IV	42.1	19.1	1.2	11.9	2.9	22.0	53.1	10.1	S	S
88.823	Ш	44.5	19.8	-	12.1	3.8	22.7	52.0	9.4	S	S
88.826	Ш	42.4	18.6	1.3	12.2	3.1	17.6	56.8	10.2	R	S
88.886	Ш	43.1	20.7	1.2	11.7	3.2	21.3	55.6	8.2	Н	S
88.965	111	43.7	19.2	1.2	12.9	4.2	23.5	49.9	9.5	S	S
88.998-1	Ш	43.1	20.5	1.2	11.7	4.1	20.0	54.6	9.6	S	Н
88.998-2	Ш	43.6	20.1	1.2	12.7	4.4	22.6	51.6	8.7	S	S
89.002	Ш	39.8	22.9	1.3	11.3	4.4	22.4	52.1	9.9	S	S
89.002-2	Ш	42.2	21.6	1.2	11.5	3.6	17.1	58.5	9.3	s	S
89.003-2	Ш	40.5	19.5	-	11.9	4.7	26.4	48.5	8.4	н	S
89.005-4	III	43.8	21.0	1.2	12.3	4.2	19.9	53.0	10.6	s	Н
89.006	Ш	42.6	19.8	1.2	12.5	4.3	24.5	49.5	9.1	s	S
89.007	III	40.3	20.2	1.2	12.4	4.1	22.7	51.1	9.7	S	S
89.009	Ш	40.1	21.7	1.3	12.6	5.2	22.8	50.7	8.8	s	Н
89.009-2	Ш	43.1	20.7	1.2	12.1	3.8	18.3	55.4	10.4	s	Н
89.010	IV	42.3	20.2	1.3	13.9	5.1	20.4	50.8	9.9	S	s
89.012-1	Ш	44.2	20.2	1.2	13.0	4.7	23.4	49.4	9.6	S	S
89.056-2	IV	43.1	18.9	1.1	13.8	4.3	18.4	51.8	11.7	s	S
89.061-2	III	39.8	19.9	1.3	12.5	5.6	19.1	53.0	9.7	s	s
89.061-3	IV	40.4	21.0	1.2	13.5	4.9	19.3	51.1	11.2	s	s
89.061N	III	42.6	20.1	1.2	13.0	4.8	20.3	52.2	9.7	R	S
89.066	III	45.2	17.5	1.0	12.4	4.8	20.7	51.8	10.4	S	S
89.067	111	42.6	20.1	1.2	12.3	3.6	21.8	52.4	9.9	s	S
89.074	IV	42.6	18.7	1.2	11.7	4.6	19.8	52.3	11.6	S	S
89.117	III	41.4	21.5	1.3	12.4	3.9	20.6	53.5	9.6	s	S
89.128	IV	41.2	21.4	1.2	11.7	4.1	18.0	55.7	10.6	s	R
89.130	III	40.6	22.4	1.2	11.4	4.4	22.3	52.7	9.1	s	S
89.133	111	41.4	20.4	1.2	12.6	4.6	27.4	46.0	9.4	s	s
89.134	111	42.8	20.4	-	14.1	4.4	25.9	47.6	8.0	R	s
89.143	III	44.6	19.8	1.1	12.9	4.7	23.2	51.0	8.3	s	s
89.146	111	43.2	19.1	-	13.6	3.7	19.9	54.2	8.6	S	s
	III	43.2 42.9	20.8	1.3	12.4	4.2	23.8	50.1	9.5	R	S
89.150				1.2	12.4		25.8 25.2	49.8	7.9	S	Н
89.152	III	39.7	21.8			4.4 4.7					
89.154-2	IV 	40.3	20.5	1.3	13.2	4.7	22.2	51.1	8.7	S	S
89.162	III	43.1	21.4	1.2	11.0	4.4	26.8	50.0	7.8	S	S
89.168	Ш	43.1	20.4	1.2	13.8	4.0	24.3	48.1	9.8	S	S
89.471	IV	42.9	20.4	1.2	12.8	3.6	20.7	53.1	10.4	S	S

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
Pl No.	name	acquisition	origin	or released	group
89.772		China	China	1930	IV
89.773		China	China	1930	III
89.783		China	China	1930	III
89.784		China	China	1930	III
90.138		Unknown	Unknown	1930	IV
90.208	Komujonkon	Rep. of Korea	Rep. of Korea	1930	iV
90.220	Heijo	Rep. of Korea	Rep. of Korea	1930	iV
90.221	Oriorkon	Rep. of Korea	Rep. of Korea	1930	iv
90.233	Jojunge	Rep. of Korea	Rep. of Korea	1930	iv
90.241	Hakuta otsu	Rep. of Korea	Rep. of Korea	1930	iv
90.245	Neihen	Rep. of Korea	Rep. of Korea	1930	IV
	Neihen	•	Rep. of Korea	1930	IV
90.249	Neinen	Rep. of Korea	•		
90.256		Rep. of Korea	Rep. of Korea	1930	IV III
90.258		Rep. of Korea	Rep. of Korea	1930	III
90.305		Unknown	Unknown	1930	IV
90.354		Unknown	Unknown	1930	IV
90.369		China	China	1930	IV
90.392		China	China	1930	III 13.7
90.401		China	China	1930	IV
90.402		China	China	1930	IV
90.406-1		China	China	1930	IV
90.407		China	China	1930	Ш
90.463		China	China	1930	Ш
90.479P		China	China	1930	IV
90.479-1		China	China	1930	IV
90.486		China	China	1930	Ш
90.490		China	China	1930	IV
90.490-2		China	China	1930	IV
90.495N		China	China	1930	IV
90.499-1	(Black and White)	China	China	1930	Ш
90.499-2	(Black and White)	China	China	1930	IV
90.563		China	China	1930	IV
90.566		China	China	1930	Ш
90.566-1		China	China	1930	Ш
90.567-1		China	China	1930	III
90.573		China	China	1930	III
90.576-1		China	China	1930	III
90.576-2		China	China	1930	IV
90.578		China	China	1930	III
90.579		China	China	1930	III
90.723		Unknown	Unknown	1930	111
90.760		China	China	1930	iv
90.763		China	China	1930	iv
91.073	Ajikarikon	Rep. of Korea	Rep. of Korea	1931	IV
91.082	Zomukon	Rep. of Korea	Rep. of Korea	1931	IV
91.082	Seihita	Rep. of Korea			
91.089	Connica	China	Rep. of Korea	1931	III III
			China China	1931	III
91.100-1		China	China	1931	III
91.100-2		China	China	1931	III
91.100-3		China	China	1931	III
91.100-4		China	China	1931	IV
91.103		China	China	1931	IV
91.108-1		China	China	1931	IV
91.108-2		China	China	1931	IV
91.108N		China	China	1931	Ш

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedo	oat		Other 1	traits	
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plar
89.772	IV	N	Р	т	E	N	Br	s	ВІ	ВІ			
89.773	III	D	w	Ġ	Ē	N	Dbr	s	Gn	Bf			
89.783	111	N	w	T	E	N	Br	s	BI	BI			
89.784	, III	D	w	Ġ	E	N	Br	S	Υ	Bf			
90.138	iv IV	D	P	G	E	Ssp	Br	S	Y	Bf			
90.208	IV	N	P	T	E		Br	D			0.44		
	IV	D	P	†		Ssp			Lgn	BI	Sadd	ie	
90.220					E	Ssp	Br	S	Y	Br			
90.221	IV	N	P	G	E	N	Br	S	Y	Bf			
90.233	IV IV	D	P	G	E	Ssp	Br	D	Υ	Y			
90.241	IV	D	P	G	E	Ssp	Br	D	Υ	Υ			
90.245	IV	N	W	G	E	Ssp	Br	S	Υ	Υ			
90.249	IV	N	P	T	E	Ssp	Br	D	Y	Br			
90.256	IV	D	W	G	Ε	N	Tn	D	Υ	Bf			
90.258	Ш	D	P	G	E	N	Br	I	Υ	Υ			
90.305	IV	D	P	G	Ε	Ssp	Br	D	Υ	Υ			
90.354	IV	N	W	G	E	N	Br	1	Υ	Bf	Abh		
90.369	IV	D	W	G	Ε	Ssp	Br	1	Υ	Bf			
90.392	Ш	D	W	G	E	N	Br	S	Υ	Bf			
90.401	IV	D	W	G	Ε	Ssp	Tn	D	Υ	Bf			
90.402	IV	N	P	G	E	N	ВІ	D	Υ	Bf			
90.406-1	IV	N	P	G	Ε	N	Br	S	Υ	lb			
90.407	Ш	N	W	Т	Ε	N	Br	S	Y	Br			
90.463	111	N	Р	Т	E	Ssp	Br	D	Y	Br			
90.479P	IV	D	W	Ġ	E	Ssp	Br	s	Y	Y			
90.479-1	١٧	N	w	G	E	Ssp	Br	s	Ÿ	Bf			
90.486	III	N	P	T	Ē	N	Tn	D	Ÿ	Br			
90.490	IV	N	Р	Ġ	E	N	Dbr	S	Ÿ	Bf			
90.490-2	iV	D	w	G	E	N	Br	S	Ÿ	Bf			
90.495N	IV	D	P	G	E	Ssp		S	Y				
				T		•	Br D-			lb D			
90.499-1	III	N	P		E	N	Br D-	D	Y	Br			
90.499-2	IV "V	N	P	G	E	N	Br	S	Y	lb			
90.563	IV 	D	P	G	E	Ssp	Br	S	Υ	Y			
90.566	III	N	P	T	E	N	Br —	S	Υ	Br			
90.566-1	III	N	W	G	E	N	Tn	S	Y	Bf			
90.567-1	III	N	P	T	E	Sdn	Br	D	Υ	ВІ			
90.573	Ш	D	P	G	E	N	Br	D	Υ	Υ			
90.576-1	Ш	N	P	Lt	E	N	Tn	D	Υ	Dbr			
90.576-2	IV	D	P	G	E	Ssp	Br	S	Y	Υ			
90.578	Ш	N	P	Ng	E	N	Br	1	Υ	Br			
90.579	Ш	D	P	T	E	Ssp	Br	D	Υ	ВІ			
90.723	Ш	N	P	G	E	N	Dbr	D	Υ	Bf			
90.760	IV	N	W	G	E	N	Br	D	Υ	Υ			
90.763	IV	N	Р	Lt	Ε	N	Tn	S	ВІ	ы			
91.073	IV	D	Р	T	Ε	Ssp	Br	S	Br	Br	St	Dab	
91.082	IV	N	W	G	E	N	Tn	D	Υ	Υ			
91.083	Ш	N	W	G	Ε	N	Br	1	Υ	Bf			
91.089	Ш	N	W	G	E	N	Br	s	Υ	Bf			
91.100-1	Ш	N	W	Т	E	N	Br	s	Υ	Υ			
91.100-2	Ш	D	W	G	E	N	Br	S	Gn	Bf			
91.100-3	III	D	P	T	E	N	Br	S	Y	Br			
91.100-4	IV	N	w	Ġ	Ē	N	Br	S	Ÿ	Bf			
91.103	iV	N	w	G	E	N	Tn	D	Ÿ	Lbf			
91.108-1	١٧	N	w	G	E	N	Br	S	Ÿ	Y			
	IV		W	G				S	Y	Bf			
91.108-2 91.108N	III	D D	W	T	E E	N N	Tn Tn	S	Y	Br			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

90.495N 721 1001 3.5 86 1.0 3.0 1.0 2.5 1.0 13.2 2.31 90.499-1 713 914 3.3 86 3.5 3.0 1.0 2.5 1.0 16.0 2.50 90.499-2 725 1013 3.5 132 4.0 3.0 1.0 2.5 2.0 16.3 2.76 90.566 706 914 2.9 71 3.0 2.5 1.0 1.0 18.8 2.66 90.566-1 707 914 3.4 86 3.0 3.0 1.0 2.5 1.0 14.8 2.76 90.567-1 711 920 3.3 86 3.0 3.0 1.0 2.5 1.0 14.8 2.76 90.576-1 711 920 3.3 86 3.0 3.0 1.0 2.5 1.0 15.0 2.70 90.576-1 713 919 3.8 86	Entry	Flowering <u>date</u> (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
89.773			4040		400	4.0	4.0					
89.783 730 1006 3.4 130 5.0 4.0 1.0 2.3 . 10.1 2.67 89.784 727 1006 2.9 81 1.0 3.0 1.0 2.5 2.5 1.0 16.0 2.62 80.138 729 1017 4.3 94 1.0 3.0 1.0 2.5 2.5 2.2 22.8 2.23 80.220 731 1018 3.6 99 4.0 3.0 1.0 2.5 2.5 2.5 17.4 2.60 80.221 726 1010 3.8 119 3.5 3.0 1.0 2.5 2.5 3.5 2.35 1.98 80.241 727 1019 3.6 61 1.0 3.0 1.0 2.5 3.5 2.35 1.98 80.241 727 1019 3.6 61 1.0 3.0 1.0 2.5 3.5 2.5 1.98 80.247 725 1016 3.7 114 4.0 3.5 1.0 2.5 2.0 14.6 2.91 80.248 721 1008 3.6 74 3.0 3.0 1.0 2.5 3.5 18.0 1.97 80.266 731 1006 3.9 97 1.0 3.0 1.0 2.5 3.5 18.0 1.80 80.305 726 1019 3.6 66 1.0 3.0 1.0 2.5 3.0 2.5 1.0 16.6 80.305 726 1019 3.6 66 1.0 3.0 1.0 2.5 3.5 18.0 2.5 80.364 726 1011 3.9 107 4.0 3.0 1.0 2.5 3.0 2.5 1.5 16.0 80.392 726 1007 2.6 71 1.0 3.0 1.0 2.5 3.0 2.5 1.0 80.306 724 1007 3.0 79 1.0 3.0 1.0 2.5 3.0 2.5 1.0 80.402 730 1012 3.3 109 4.0 4.0 3.0 1.0 2.5 3.0 2.5 1.0 80.406.1 718 1009 3.8 114 4.0 3.0 1.0 2.5 1.0 11.5 80.406.1 718 1009 3.8 114 4.0 3.0 1.0 2.5 1.0 11.5 80.497 724 829 4.3 102 3.5 3.0 1.0 2.5 2.5 1.5 16.6 2.18 80.498 719 930 4.2 104 3.5 3.0 1.0 2.5 2.5 1.5 16.6 2.18 80.498 713 1002 3.6 89 3.0 3.0 1.0 2.5 2.5 1.5 16.6 2.18 80.499 724 1009 3.8 114 4.0 3.0 3.0 1.0 2.5 2.0 16.2 80.490 730 1012 3.1 102 3.5 80 3.0												
89.784 727 1006 2.9 81 1.0 3.0 1.0 2.3 1.0 16.0 2.62												
90.138												
90.208 730 1017 3.6 99 4.0 3.0 1.0 2.5 - 22.8 2.23 90.221 726 1018 3.9 91 1.0 3.0 1.0 2.5 2.5 2.5 1.7 4 2.60 90.221 726 1010 3.8 119 3.5 3.0 1.0 2.5 2.5 2.5 1.5 16.3 2.73 90.241 727 1019 3.6 61 1.0 3.0 1.0 2.5 3.0 23.5 1.98 90.245 725 1016 3.7 114 4.0 3.5 1.0 2.5 3.0 25.0 14.6 2.91 90.246 721 1008 3.6 74 3.0 3.0 1.0 2.5 3.5 3.0 25.0 1.98 90.266 731 1006 3.9 97 1.0 3.0 1.0 2.5 3.5 3.0 2.5 2.5 90.287 716 923 2.7 69 1.0 3.0 1.0 2.5 3.5 3.0 2.7 2.48 90.305 726 1019 3.6 66 1.0 3.0 1.0 2.5 3.5 3.0 2.7 2.48 90.305 726 1019 3.6 66 1.0 3.0 1.0 2.5 3.5 3.0 21.7 2.48 90.305 726 1019 3.6 66 1.0 3.0 1.0 2.5 3.5 3.0 25.2 1.98 90.392 725 1007 2.6 71 1.0 3.0 1.0 2.5 2.5 1.0 16.5 90.392 725 1007 2.6 71 1.0 3.0 1.0 2.5 2.5 1.0 16.0 90.401 725 1011 2.4 86 1.0 3.0 1.0 2.8 1.0 18.0 90.402 730 1012 3.3 109 4.0 4.0 2.0 2.5 1.5 16.5 2.18 90.406 718 1009 3.8 114 4.0 3.0 1.0 2.8 2.5 1.5 16.5 2.18 90.407 724 929 4.3 102 3.5 3.0 1.0 2.8 2.5 1.0 18.0 90.479P 729 1022 3.0 89 1.0 3.0 1.0 2.8 2.5 1.0 18.0 90.498 719 390 4.2 104 3.5 3.0 1.0 2.5 1.0 16.2 3.13 90.499 729 1021 3.1 112 3.0 3.0 1.0 2.5 1.0 16.2 2.8 90.498 719 390 4.2 104 3.5 3.0 1.0 2.5 1.0 16.2 2.8 90.499 729 1022 3.0 89 1.0 3.0 1.0 2.5 1.0 16.2 2.8 90.499 729 1022 3.0 89 1.0 3.0 1.0 2.5 1.0 16.0 2.5 90.499 729 1024 3.3 86 3.0 3.0 1.0 2.5 1.0 16.0 2.5 90.499 729 1022 3.0 89 1.0 3.0 1.0 2.5 1.0 16.0 2.5 90.576 711 910												
90.220												
90.221 726 1010 3.8 119 3.6 3.0 1.0 2.8 1.6 16.3 2.73 90.231 726 1022 3.9 64 1.0 3.0 1.0 2.5 3.6 23.5 1.98 90.241 727 1019 3.6 611 1.0 3.0 1.0 2.5 3.0 28.0 1.97 90.245 726 1016 3.7 114 4.0 3.5 1.0 2.5 3.0 28.0 1.97 90.246 721 1008 3.6 74 3.0 3.0 1.0 2.5 3.5 18.0 1.80 90.266 731 1006 3.9 97 1.0 3.0 2.0 2.5 1.0 15.6 2.35 90.268 716 923 2.7 69 1.0 3.0 1.0 2.8 3.0 21.7 2.48 90.305 726 1019 3.6 66 1.0 3.0 1.0 2.5 3.0 25.2 1.99 90.369 724 1007 3.0 79 1.0 3.0 1.0 2.5 2.5 1.0 16.7 1.80 90.392 725 1007 2.6 71 1.0 3.0 1.0 2.5 2.5 1.0 16.0 2.97 90.402 730 1012 3.3 109 4.0 4.0 2.0 2.5 1.5 16.6 2.35 90.407 724 929 4.3 102 3.5 3.0 1.0 2.8 2.5 1.5 16.6 2.18 90.407 724 929 4.3 102 3.5 3.0 1.0 2.8 2.5 1.5 16.6 2.18 90.407 724 929 4.3 102 3.5 3.0 1.0 2.8 2.5 1.5 16.6 2.18 90.408 713 1002 3.6 89 3.0 3.0 1.0 2.5 2.5 1.5 16.6 2.84 90.496 730 1012 3.1 112 3.0 3.0 1.0 2.5 2.0 19.6 90.497 729 1022 3.0 89 1.0 3.0 1.0 2.5 2.0 15.2 3.06 90.499 730 1006 3.0 91 3.5 3.0 1.0 2.5 2.0 16.2 3.13 90.490 730 1006 3.0 91 3.5 3.0 1.0 2.5 2.0 16.2 3.13 90.499 729 1022 3.0 89 1.0 3.0 1.0 2.5 2.0 16.2 3.13 90.499 730 1006 3.4 97 1.0 3.5 3.0 1.0 2.5 2.0 16.2 3.13 90.499 730 1006 3.0 91 3.5 3.0 1.0 2.5 1.0 16.1 2.15 90.499 731 1001 3.5 86 1.0 3.0 1.0 2.5 1.0 16.2 2.5 90.499 725 1013 3.5 86 1.0 3.0 1.0 2.5 1.0 16.2 2.5 90.566 706 914 2.9 71 3.0 3.5 3.0 1.0 2.5 1.0 16.2 2.5 90.578 714 922 4.2 9												
90.23												
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91.083 720 1004 3.8 86 3.0 3.0 1.0 3.0 1.5 21.1 2.60 91.089 710 929 2.5 99 3.5 3.0 1.0 2.5 1.0 18.3 3.11 91.100-1 717 1001 3.5 114 3.5 3.0 1.0 2.8 1.0 16.0 2.89 91.100-2 710 921 1.2 66 1.0 3.0 1.0 2.3 1.0 15.8 1.73 91.100-3 707 915 3.2 58 1.0 3.0 1.0 2.5 1.0 16.6 2.01 91.100-4 718 1011 4.0 109 4.0 3.0 1.0 2.5 2.0 17.2 2.68 91.103 719 1010 3.2 99 4.0 3.0 1.0 2.5 2.5 18.4 2.54 91.108-1 723 1011 3.2 109 4.0 3.0 1.0 2.5 2.0 15.6 2.73												
91.089 710 929 2.5 99 3.5 3.0 1.0 2.5 1.0 18.3 3.11 91.100-1 717 1001 3.5 114 3.5 3.0 1.0 2.8 1.0 16.0 2.89 91.100-2 710 921 1.2 66 1.0 3.0 1.0 2.3 1.0 15.8 1.73 91.100-3 707 915 3.2 58 1.0 3.0 1.0 2.5 1.0 16.6 2.01 91.100-4 718 1011 4.0 109 4.0 3.0 1.0 2.5 2.0 17.2 2.68 91.103 719 1010 3.2 99 4.0 3.0 1.0 2.5 2.5 18.4 2.54 91.108-1 723 1011 3.2 109 4.0 3.0 1.0 2.5 2.0 15.6 2.73 91.108-2 803 1026 3.2 94 1.0 3.0 1.0 2.5 2.0 17.8 2.60 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>												
91.100-1 717 1001 3.5 114 3.5 3.0 1.0 2.8 1.0 16.0 2.89 91.100-2 710 921 1.2 66 1.0 3.0 1.0 2.3 1.0 15.8 1.73 91.100-3 707 915 3.2 58 1.0 3.0 1.0 2.5 1.0 16.6 2.01 91.100-4 718 1011 4.0 109 4.0 3.0 1.0 2.5 2.0 17.2 2.68 91.103 719 1010 3.2 99 4.0 3.0 1.0 2.5 2.5 18.4 2.54 91.108-1 723 1011 3.2 109 4.0 3.0 1.0 2.5 2.0 15.6 2.73 91.108-2 803 1026 3.2 94 1.0 3.0 1.0 2.5 2.0 17.8 2.60												
91.100-2 710 921 1.2 66 1.0 3.0 1.0 2.3 1.0 15.8 1.73 91.100-3 707 915 3.2 58 1.0 3.0 1.0 2.5 1.0 16.6 2.01 91.100-4 718 1011 4.0 109 4.0 3.0 1.0 2.5 2.0 17.2 2.68 91.103 719 1010 3.2 99 4.0 3.0 1.0 2.5 2.5 18.4 2.54 91.108-1 723 1011 3.2 109 4.0 3.0 1.0 2.5 2.0 15.6 2.73 91.108-2 803 1026 3.2 94 1.0 3.0 1.0 2.5 2.0 17.8 2.60												
91.100-3 707 915 3.2 58 1.0 3.0 1.0 2.5 1.0 16.6 2.01 91.100-4 718 1011 4.0 109 4.0 3.0 1.0 2.5 2.0 17.2 2.68 91.103 719 1010 3.2 99 4.0 3.0 1.0 2.5 2.5 18.4 2.54 91.108-1 723 1011 3.2 109 4.0 3.0 1.0 2.5 2.0 15.6 2.73 91.108-2 803 1026 3.2 94 1.0 3.0 1.0 2.5 2.0 17.8 2.60												
91.100-4 718 1011 4.0 109 4.0 3.0 1.0 2.5 2.0 17.2 2.68 91.103 719 1010 3.2 99 4.0 3.0 1.0 2.5 2.5 18.4 2.54 91.108-1 723 1011 3.2 109 4.0 3.0 1.0 2.5 2.0 15.6 2.73 91.108-2 803 1026 3.2 94 1.0 3.0 1.0 2.5 2.0 17.8 2.60												
91.103 719 1010 3.2 99 4.0 3.0 1.0 2.5 2.5 18.4 2.54 91.108-1 723 1011 3.2 109 4.0 3.0 1.0 2.5 2.0 15.6 2.73 91.108-2 803 1026 3.2 94 1.0 3.0 1.0 2.5 2.0 17.8 2.60												
91.108-1 723 1011 3.2 109 4.0 3.0 1.0 2.5 2.0 15.6 2.73 91.108-2 803 1026 3.2 94 1.0 3.0 1.0 2.5 2.0 17.8 2.60												
91.108-2 803 1026 3.2 94 1.0 3.0 1.0 2.5 2.0 17.8 2.60												
- MILLION 115 MIM 24 MM II 40 10 40 76 701 779	91.108-2 91.108N	713	919	2.4	69	1.0	3.0	1.0	3.0	2.5	20.1	2.42

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein	Oil cor						
		compo		composition	Pal-	-		Lino-	Lino-	Disease reaction	
Entry	Maturity group	Proteii (%)	n Oil (%)	Methionine (% protein)	mitic (%)	Steric (%)	Oleic (%)	leic (%)	lenic (%)		ction Py
					<u></u>						
89.772	IV	41.7	17.5	-	12.8	3.8	16.4	51.9	15.0	S	S
89.773	Ш	43.1	18.7	1.4	14.9	3.6	21.2	49.5	10.7	S	S
89.783	111	40.9	18.2	•	13. 9	3.8	18.7	52.6	11.0	S	Н
89.784	Ш	41.6	19.1	1.4	13.8	3.5	20.8	51.0	11.0	S	R
90.138	IV	42.9	19.6	1.3	12.5	3.6	20.6	52.4	11.0	R	S
90.208	IV	43.4	18.5	-	12.6	3.7	21.1	52.4	10.2	R	S
90.220	IV	41.9	19.7	-	13.7	3.1	19.2	53.4	10.6	S	s
90.221	IV	40.9	19.9	1.4	12.5	4.1	19.1	53.8	10.5	S	S
90.233	IV	43.7	18.2	1.3	12.1	4.0	21.2	52.4	10.4	R	s
90.241	IV	44.0	18.2	-	12.3	4.1	20.3	52.7	10.5	R	R
90.245	IV	40.9	19.0	1.3	11.6	3.9	16.9	54.9	12.7	R	S
90.249	IV	46.9	18.6	-	11.4	5.0	23.9	50.4	9.2	R	S
90.256	IV	44.9	18.6	1.2	13.1	4.2	20.4	52.0	10.4	R	S
90.258	Ш	43.9	18.3	1.3	12.6	4.2	21.8	50.7	10.8	s	s
90.305	IV	43.4	19.0	-	12.0	4.0	20.3	53.3	10.4	R	s
90.354	IV	45.0	18.5	1.2	11.3	3.7	21.3	54.6	9.1	S	S
90.369	IV	45.4	17.9	1.2	11.9	3.2	21.6	52.5	10.8	S	R
90.392	Ш	43.6	19.1	1.2	13.9	4.6	21.9	48.9	10.6	s	s
90.401	IV	42.9	17.6	1.2	13.3	3.8	19.6	50.7	12.5	Н	S
90.402	IV	42.7	18.8	1.2	13.2	4.1	20.0	50.1	12.5	S	S
90.406-1	iv	42.3	19.7	1.2	11.2	3.9	20.6	53.8	10.5	s	s
90.407	III	42.3	20.5	1.3	10.9	3.8	27.4	48.8	9.2	s	s s
90.463	iii	41.6	21.3	1.2	12.5	3.6	20.4	54.3	9.2	s	s
90.479P	iv	42.6	18.9	1.2	11.0	4.6	18.2	52.8	13.3	s	s
90.479-1	iv	44.3	19.1	1.2	10.4	3.5	21.7	54.5	10.0	R	
90.486	111	41.5	18.7	1.2	11.5	4.9	21.3	52.6	9.6	s	s
90.490	IV	42.5	19.2	1.2	12.3	3.9	22.8	51.1	9.9	s	s
90.490-2	IV	41.7	21.5	1.3	12.4	4.7	19.5	53.3	10.1	s	s
90.495N	IV	41.1	19.6	1.3	12.6	3.5	19.4	53.0	11.5	S	s
90.499-1	III	41.5	21.5	1.3	12.2	3.5	23.0	51.7	9.6	S	S
90.499-2	IV	42.9	18.4	1.2	14.0	4.3	19.1	52.2	10.3	S	S
90.563	IV	41.7	19.0	1.2	16.0	4.4	22.2	47.6	9.9	S	S
					13.9					S	S
90.566	111	41.1	21.7	1.2		4.6	22.8	50.0	8.6		
90.566-1	III	39.6	23.2	1.2	14.3	4.7 5.2	22.2 25.1	51.2 48.9	7.6	s s	R R
90.567-1	111	41.0	21.5		12.8	5.3 4.7			7.9		
90.573	111	40.9		1.2	14.0		21.1		10.3	S	R
90.576-1	III	43.5	20.6	1.2	13.8	3.8	21.1	52.5 52.5	8.7	R	S
90.576-2	IV 	43.0 42.1	20.0	1.2	13.3	4.3	18.1		11.8	Н	s s
90.578	III	. —	20.8	1.3	12.3	4.7	24.0	50.8	8.3	S	
90.579	III	42.4	20.3	1.4	12.8	4.4	22.6	50.0	10.2	Н	S
90.723	III	42.2	21.6	1.4	13.5	4.9	24.5	48.7	8.4	S	s s
90.760	IV	40.4	20.4	1.3	14.0	3.1	22.2	50.3	10.4	S	5
90.763	IV	40.5	18.9	•	13.2	3.6	20.4	51.7	11.1	S	S
91.073	IV	41.6	19.7		13.6	3.9	20.4	51.8	10.4	S	R
91.082	IV 	42.3	19.9	1.3	13.1	3.9	25.6	48.4	9.0	S	S
91.083	III	45.3	18.9	1.3	14.4	5.0	21.9	48.8	9.8	S	R
91.089	111	40.4	21.1	1.3	12.4	4.9	23.2	50.9	8.6	S	R
91.100-1	111	39.7	22.1	1.3	11.8	3.9	21.5	53.5	9.3	s	Н
91.100-2	III	41.1	21.5	1.2	13.6	4.0	23.6	50.3	8.5	S	Н
91.100-3	HI	40.6	20.0	1.3	12.5	3.2	22.8	53.4	8.1	S	S
91.100-4	IV	40.8	20.7	1.2	12.3	3.7	20.1	54.3	9.6	Н	R
91.103	IV	42.7	19.6	1.3	13.8	4.2	20.4	51.0	10.6	S	s
91.108-1	IV	41.9	18.7	1.3	12.6	4.7	21.7	51.6	9.4	S	Н
91.108-2	īV	39.9	19.6	1.1	12.1	3.7	18.7	53.5	12.0	S	R
91.108N	iii	43.0	19.1	1.3	12.8	4.0	24.3	49.6	9.3	s	

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807 $\,$

	Accession	Country of	Country of	Year introduced	Matur- ity
PI No.	name	acquisition	origin	or released	group
91.113		China	China	1931	III
91.120-3		China	China	1931	III
91.121-1		China	China	1931	III
91.121-2		China	China	1931	IV
91.127		China	China	1931	III
91.132-3		China	China	1931	IV
91.133		China	China	1931	IV
91.142		China	China	1931	111
91.149		China	China	1931	 III
91.151		China	China	1931	III
91.152		China	China	1931	
			China	1931	
91.153		China			
91.153-1		China	China	1931	IV
91.153-7		China	China	1931	IV
91.154		China	China	1931	III
91.159		China	China	1931	III
91.159-4		China	China	1931	IV
91.160		China	China	1931	III
91.162		China	China	1931	Ш
91.163		China	China	1931	IV
91.165		China	China	1931	Ш
91.166		China	China	1931	IV
91.169		China	China	1931	Ш
91.174		China	China	1931	Ш
91.178		China	China	1931	IV
91.178-1		China	China	1931	IV
91.340		China	China	1931	Ш
91.341		China	China	1931	Ш
91.343		China	China	1931	iii
91.346		China	China	1931	īV
91.349		China	China	1931	III
91.679	Ryumokute	Rep. of Korea	Rep. of Korea	1931	iv
91.684	Porikon	Rep. of Korea	Rep. of Korea	1931	iv
91.702	Awate	Rep. of Korea	Rep. of Korea	1931	iv
91.702	Shirodaizu	Rep. of Korea	Rep. of Korea	1931	IV
91.715	(Akazu)	Rep. of Korea	Rep. of Korea	1931	IV
91.725-2	(Akazu)	Rep. of Korea	Rep. of Korea	1931	III
91.729	Kokaita	Rep. of Korea	Rep. of Korea	1931	111
91.729	NUKaila	China	China	1931	III
		China			III
91.730-1			China China	1931	
91.731		China	China China	1931	III
91.731-1		China	China China	1931	IV
91.733-1		China	China	1931	IV
91.734		China	China	1931	IV
91.750		Unknown	Unknown	1931	III
92.463		Russia	Russia	1931	IV
92.466		Russia	Russia	1931	Ш
92.557		China	China	1931	IV
92.560		China	China	1931	Ш
92.568		China	China	1931	111
92.577		China	China	1931	III
92.590		China	China	1931	Ш
92.593		China	China	1931	III
92.594		China	China	1931	III
92.600		China	China	1931	 III

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedo	oat		Other to	raits	
	rity	Stem	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plan
91.113	Ш	N	w	G	Ε	N	Dbr	s	Υ	Bf			
91.120-3	111	N	P	T	E	N	Br	S	Y				
91.121-1	iii	N	w	Ġ	E	N	Br	S		BI			
91.121-2	IV	D	W	G	E				Y	Y			
91.127	III	N	w	T	E	Ssp	Br T	D	Y	Bf			
91.132-3	IV	N	W	Ť	E	N	Tn T	S	Y	Br			
91.133	IV	N	W	Ť		N	Tn	D	Y	Tn			
91.142	III				E	N	Br	D	Y	Tn			
91.149		N	W	G	E	N	Br	S	Y	Lbf			
	III	N	W	G	E	N	Br —	S	Υ	Υ			
91.151	III 	N	W	G	E	N	Tn	S	Υ	Lbf			
91.152	III 	N	W	G	E	N	Br	S	Υ	Lbf			
91.153	III	N	W	G	Ε	N	Br	I	Υ	Lbf			
91.153-1	IV	N	P	G	E	N	Br	D	Υ	Bf			
91.153-7	IV 	S	W	G	E	N	Br	S	Y	Bf			
91.154	III 	N	W	Lt	E	N	Br	D	Υ	Br			
91.159	III	N	W	G	Е	N	Tn	S	Υ	Bf	Mih		
91.159-4	IV	N	Р	G	E	N.	Br	D	Υ	lb			
91.160	Ш	N	W	Т	Е	Sp	Br	D	Υ	Br			
91.162	Ш	D	P	T	Ε	N	Br	S	Υ	Br			
91.163	IV	N	W	Lt	Ε	N	Tn	S	Υ	Tn			
91.165	Ш	N	W	G	Ε	N	Br	S	Υ	Bf			
91.166	IV	N	W	T	Ε	N	Br	D	Υ	Tn			
91.169	Ш	N	W	G	Ε	N	Br	S	Υ	Bf			
91.174	Ш	N	Р	Т	Е	N	Br	1	Υ	Υ			
91.178	IV	N	W	Т	Е	N	Br	D	Y	Br			
91.178-1	IV	N	W	G	Ε	N	Tn	D	Y	Bf			
91.340	III	N	Р	Lt	E	N	Br	D	Gn	Br			
91.341	III	D	Р	Т	E	N	Br	D	Gn	BI	Gncot		
91.343	III	N	P	Т	E	N	Br	S	Y	Blbr	Sph		
91.346	ïV	N	w	Ť	E	Ssp	Br	D	, Gn	Br	Gncot		
91.349	III	N	P	Ť	E	N	BI	D	BI	Br	GIICOL		
91.679	IV	N	w	G	A	N	Tn	D	Y	Lbf			
91.684	IV	D	w	G	Ē	Ssp	Br	S	Y				
91.702	١٧	D	P	G	E	N	Br	S	Y	Lbf			
91.719	IV	D	Р	G	E	N		S		Y			
91.725-2	IV	N	w	_	_	_	Tn Pr		Y	Y			
91.725-4	111	D	w	G G	E Sa	Ssp N	Br Br	S	Y Y	Bf D4			
91.729	 III	D	w	Ng	E	Ssp	Dbr	D S		Bf D	04		
91.730	 III	N	P	G	E	N			Br	Br	St		
91.730-1	 III	N	W	G	E	N	Br Br	S	Y	Y			
91.731	 III	N	w	T	E	N		S	Y	Y			
91.731 91.731-1	IV	N	VV P	Ġ	E	N N	Tn Br	S	Y	BI			
91.733-1	IV IV	N	W	T	E		Br	S	Y	Bf To			
91.734	IV IV	D	W	G G	Sa	Ssp	Br B-	D	Y	Tn			
91.750	III					N	Br B-	S	Y	Υ			
92.463	III IV	N	P	G	E	N	Br D-	S	Y	lg 			
92.463 92.466		N	P	G	E	N	Br T-	Ī	Y	Lbf		Dab	
	III	N	P	G	E	N	Tn	D	Y	Y	_		
92.557	IV 	N	P	G	E	Ssp	BI	I .	Gn	lb	Gncot		
92.560	III	N	P	Ng	E	N	Br	S	Br	Br			
92.568	III 	N	P	G	E	N	Br	S	Υ	Υ			
92.577	Ш	N	W	G	E	N	Br	S	Υ	Υ			
92.590	111	N	W	G	Ε	N	Br	S	Υ	Bf			
92.593	Ш	N	W	G	Ε	N	Br	S	Υ	Bf			
92.594	Ш	N	W	G	E	N	Br	S	Υ	Bf			
92.600	Ш	N	W	G	Ε	N	Br	S	Υ	Bf			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
91.113	712	919	4.0	97	3.5	3.0	1.0	2.0	1.0	15.0	2.68
91.113	712	915	2.0	58	2.5	3.0	1.0	2.8	2.0	21.6	2.15
	719	929	2.9	99	3.5	3.0	1.0	2.8	3.0	17.5	2.64
91.121-1 91.121-2	71 3 721	1013	3.4	86	1.0	2.5	1.0	2.0	2.0	23.8	2.47
91.121-2	721 721	917	3.8	112	4.5	3.5	1.0	2.5	2.0	11.4	2.54
91.132-3	721	1012	3.8	119	4.0	3.0	1.0	2.0	3.0	11.1	2.41
91.133	714	1003	2.7	104	3.5	3.0	1.0	3.0	2.5	19.1	2.78
91.142	717	1003	3.3	94	3.0	3.0	1.0	2.5	2.0	16.9	3.07
91.149	714	918	3.0	81	2.5	3.0	1.0	2.8	2.5	16.2	2.35
91.151	705	919	3.4	86	3.0	3.0	1.0	2.8	3.0	20.4	2.33
91.152	705	915	2.9	89	3.0	2.0	1.0	2.5	1.5	19.5	2.49
91.153	705	913	2.6	71	3.0	3.0	1.0	2.5	3.0	21.6	2.06
91.153-1	716	1008	3.8	107	3.5	3.0	1.0	2.5	2.0	17.2	2.77
91.153-7	808	1026	4.0	112	2.0	4.0	1.0	2.5	1.5	13.5	2.28
91.154	718	1002	3.9	99	3.5	3.0	1.0	2.3	2.5	13.0	2.59
91.159	708	913	2.9	86	3.0	3.0	1.0	1.8	1.0	14.3	2.47
91.159-4	719	1012	3.5	99	3.5	3.0	1.0	2.8	2.0	18.5	2.34
91.160	717	924	3.4	86	2.5	3.0	1.0	2.0	3.0	14.8	2.57
91.162	723	925	4.5	109	1.5	3.0	5.0	3.0	1.5	14.3	1.94
91.163	802	1018	4.0	127	4.0	3.5	1.0	2.5	2.0	15.8	2.78
91.165	709	917	3.4	89	3.5	3.0	1.0	3.3	2.0	18.2	2.53
91.166	731	1012	3.7	124	4.0	3.0	1.0	2.3	3.0	12.8	2.28
91.169	710	916	3.2	76	2.5	2.5	1.0	2.5	1.0	16.4	2.50
91.174	712	918	3.2	102	3.5	3.0	1.0	2.5	3.0	15.3	2.49
91.178	717	924	3.2	97	3.5	3.0	1.0	2.8	2.0	17.0	2.30
91.178-1	801	1025	3.7	124	4.0	3.0	1.0	2.3	1.5	15.6	2.00
91.340	720	926	3.5	86	3.5	3.0	1.0	2.8	2.0	18.4	2.50
91.341	719	921	4.0	66	1.0	3.0	1.0	2.3	1.0	16.3	2.67
91.343	708	921	4.8	99	4.0	4.0	1.0	3.0	2.5	13.4	2.51
91.346	731	1016	3.9	112	3.0	4.0	1.0	2.0	-	17.5	2.02
91.349	709	924	4.8	94	4.5	4.0	1.0	2.8	-	12.3	2.97
91.679	807	1016	3.6	84	3.0	3.0	1.0	2.3	1.0	11.2	2.45
91.684	726	1021	3.6	64	1.0	3.0	1.0	3.0	1.0	30.5	2.20
91.702	805	1026	3.9	84	1.0	3.0	1.0	2.8	1.5	23.0	2.40
91.719	725	1004	2.7	76	1.0	3.0	1.0	3.3	2.0	21.6	2.15
91.725-2	716	1011	3.7	104	4.0	3.0	1.0	2.3	2.0	16.7	2.28
91.725-4	723	925	3.7	74	1.0	3.0	1.0	2.5	2.0	15.0	2.29
91.729	720	929	3.8	81	1.0	2.5	1.0	2.3	-	18.0	2.04
91.730	706	912	3.3	94	3.5	3.0	1.0	2.8	2.0	15.6	2.13
91.730-1	713	930	3.5	97	4.0	3.0	1.0	2.5	3.0	16.3	2.76
91.731	711	913	3.0	94	3.5	3.0	1.0	2.5	1.5	16.5	2.44
91.731-1	725	1010	3.1	122	4.0	3.0	1.0	2.3	1.0	16.3	2.68
91.733-1	718	1014	3.3	107	3.5	3.0	1.0	2.5	2.5	14.8	2.89
91.734	804	1023	4.2	66	1.0	3.0	1.0	2.8	1.5	20.2	2.26
91.750	716	923	2.9	86	3.0	3.0	1.0	2.5	1.0	21.1	2.64
92.463	728	1021	3.3	86	3.5	3.0	1.0	2.8	3.0	18.2	2.19
92.466	713	926	3.7	99	3.0	3.0	1.0	2.5	1.5	17.8	2.69
92.557	724	928	3.4	97	3.5	3.0	1.0	2.8	1.0	19.5	2.47
92.560	723	923	3.0	117	4.5	3.5	1.0	2.3	-	10.8	2.47
92.568	714	920	3.5	84	3.5	3.0	1.0	2.8	1.5	15.2	2.77
92.577	711	913	3.2	79	3.0	3.0	1.0	2.5	1.0	16.8	2.65
92.590	713	914	3.4	89	3.5	2.5	1.0	2.8	1.0	15.9	2.73
92.593	713	916	3.0	84	3.5	2.5	1.0	3.0	1.0	17.8	2.47
92.594	710	915	2.9	74	3.0	2.5	1.0	2.8	1.0	16.8	2.40
92.600	711	916	3.0	76	3.0	2.5	1.0	2.8	1.0	17.6	2.41

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

Maturity Protein Oil Mathionine mito Steric Oleic loic enic PR			Seed		Protein		nposition					
					<u>composition</u>	Pal-			Lino-	Lino-		ease
91.113		Maturity										ction
91.120-3	ntry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
91.120-3	01 112		40.0	21.6	1.0	126	4.0	22 E	EO 3	o e	_	
91.121-1												R H
91.121-2 IV 49.2 19.0 1.2 12.6 3.9 21.1 51.6 10.8 H 91.132-3 IV 42.1 17.8 1.2 13.2 4.5 23.4 48.9 10.0 S 91.132-3 IV 44.7 19.8 1.2 12.6 3.9 19.0 64.2 10.2 S 91.133 IV 44.7 19.8 1.2 12.6 3.9 19.0 64.2 10.2 S 91.142 III 42.3 20.4 1.2 13.0 4.0 20.3 53.2 9.5 S 91.149 III 42.3 20.4 1.2 13.0 4.0 20.3 53.2 50.4 8.5 9.5 S 91.161 III 46.5 18.7 1.2 12.8 4.6 23.2 50.3 9.0 S 91.161 III 48.5 20.1 1.2 11.7 4.1 24.0 50.9 9.4 H 91.162 III 43.3 20.1 1.2 11.7 4.1 24.0 50.9 9.4 H 91.163 III 43.0 20.2 - 12.2 4.2 23.5 51.6 8.4 H 91.163 III 43.0 20.2 - 12.2 4.2 23.5 51.6 8.4 H 91.163-7 IV 42.8 18.6 1.3 11.7 3.3 19.9 54.5 10.1 S 91.169 III 39.4 22.3 1.4 13.2 4.9 20.6 51.3 9.9 S 91.169 III 39.4 22.3 1.4 13.2 4.9 20.6 51.3 9.9 S 91.169 III 42.3 19.6 11.3 14.3 3.9 23.2 48.2 10.1 S 91.169 III 42.3 19.6 11.3 14.3 3.9 23.2 51.0 7.5 R 91.160 III 42.3 18.6 1.3 14.3 3.9 23.2 51.0 7.5 R 91.160 III 42.3 18.6 1.3 14.3 3.9 23.2 51.0 7.5 R 91.160 III 42.3 18.6 1.3 14.3 3.9 23.2 51.0 7.5 R 91.160 III 42.3 18.6 1.2 14.0 3.6 21.8 51.6 9.5 - 91.160 III 42.3 18.6 1.2 14.0 3.6 21.3 53.1 7.9 R 91.165 III 44.8 12.1 1.2 14.0 3.6 21.3 53.1 7.9 R 91.166 III 44.3 18.2 1.6 1.2 14.0 3.6 21.3 53.1 7.9 R 91.166 III 44.8 19.1 1.1 14.2 4.1 20.3 52.2 9.3 S 91.178 III 38.8 22.6 1.5 11.9 4.2 22.7 52.0 9.2 S 91.178 III 38.8 22.6 1.5 13.1 4.1 25.9 47.8 91.1 8.9 11.169 III 38.8 22.6 1.5 11.9 4.2 22.7 52.0 9.2 S 91.178 III 44.8 19.1 1.1 14.2 4.1 20.3 52.2 51.0 7.5 R 91.149 III 44.8 18.2 1.2 12.1 3.7 20.7 51.1 12.4 8.9 11.5 R 91.344 III 38.9 20.9 - 13.8 3.7 21.8 56.8 11.1 18.8 R 91.341 III 38.9 20.9 - 13.8 3.7 21.8 56.8 11.1 8.8 R 91.341 III 38.9 4.9 20.9 1.2 14.5 3.5 24.1 46.9 11.5 R 91.344 III 38.9 1.2 1.2 13.4 3.7 20.7 51.1 12.4 8.8 R 91.344 III 38.9 1.1 11 12.2 4.3 3.9 19.2 54.7 9.5 8.9 11.79 III 44.8 18.2 1.2 12.1 3.7 20.7 51.1 12.4 8.9 91.349 III 44.8 18.2 1.2 12.1 3.7 20.7 51.1 12.4 8.9 91.349 III 44.8 18.2 1.2 12.1 3.7 20.7 51.1 12.4 8.9 91.349 III 44.8 18.2 1.2 12.3 3.8 4.8 9.3 1.2 51.1 12.9 52.9 9.8 R 91.349 III 44.8 19.7 11.1 12.2 4.3 3.9 19.2 54.7 9.5 8.8 91.3 9												S
91.127												S
91.132-3 IV												
91.133 IV					1.2							H S
91.142 III					-							
91.169 III												
91.161 III 46.5 18.7 1.2 12.8 4.6 23.2 50.3 9.0 S 91.162 III 43.3 20.1 1.2 11.7 4.1 24.0 50.9 9.4 H 91.163 III 43.0 20.2 - 12.2 4.2 23.5 51.6 8.4 H 91.163-1 IV 43.8 19.7 1.2 11.6 4.4 24.3 51.6 8.0 S 91.163-7 IV 42.3 18.6 1.3 11.7 3.3 19.9 54.5 10.6 S 91.164 III 42.0 20.6 1.2 13.4 5.0 23.2 48.2 10.1 S 91.169 III 39.4 22.3 1.4 13.2 4.9 20.6 51.3 9.9 S 91.169 III 43.2 20.1 1.2 13.5 3.6 21.8 51.6 9.5 - 91.160 III 42.3 19.6 1.3 14.3 3.9 23.2 51.0 7.5 R 91.160 III 42.3 19.6 1.3 14.3 3.9 23.2 51.0 7.5 R 91.162 III 43.3 18.4 1.2 12.6 3.5 22.6 51.7 9.6 R 91.165 III 43.3 18.4 1.2 12.6 3.5 22.6 51.7 9.8 R 91.165 III 41.3 21.6 1.2 14.0 3.6 21.3 53.1 7.9 R 91.166 IV 42.2 20.5 1.2 13.1 4.1 25.9 47.8 91.169 III 38.8 22.6 1.5 11.9 4.2 22.7 52.0 9.2 S 91.174 III 44.8 19.1 1.1 14.2 4.1 20.3 52.2 9.3 S 91.178 IV 42.4 19.5 1.1 13.2 4.3 24.1 46.9 11.5 R 91.178-1 IV 41.4 18.2 1.2 12.1 3.7 20.7 51.1 12.4 S 91.340 III 42.8 18.5 1.2 14.5 3.5 21.2 51.1 8.8 R 91.341 III 38.9 20.9 - 13.8 3.7 21.8 51.6 9.1 H.5 R 91.343 III 42.8 18.5 1.3 12.9 3.8 19.3 54.3 9.7 S 91.341 III 38.9 20.9 - 13.8 3.7 21.8 51.6 9.1 H.5 R 91.343 III 42.8 18.5 1.3 12.9 3.8 19.3 54.3 9.7 S 91.69 III 43.8 17.5 - 12.0 4.1 15.9 56.8 91.1 10.0 - 12.1 13.6 S 1.1 10.0 - 12.1 13.6 S 1.1 11.0 S 11.0 S 11.1 11.1 12.7 12.9 13.8 11.1 12.4 S 11.1 12.7 3.9 III 5.8 R 91.341 III 43.8 17.5 - 12.0 4.1 15.9 56.8 II.1 15.9 56.8 R 91.370 III 43.8 17.5 - 12.0 4.1 15.9 56.8 R 91.370 III 43.8 17.5 - 12.0 4.1 15.9 56.8 S 11.1 10.0 - 12.1 13.6 3.5 21.2 51.1 10.0 - 13.6 3.5 21.2 51.1 10.0 - 13.7 11.1 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.1 52.2 9.8 S 11.7 11.7 11.7 4.2 22.												
91.162 III												
91.163 III												
91.163-1 IV 42.8 19.7 1.2 11.6 4.4 24.3 51.6 8.0 S 91.154 III 42.0 20.6 1.2 13.4 50.0 23.2 48.2 10.1 S 91.159 III 39.4 22.3 1.4 13.2 4.9 20.6 51.3 9.9 S 91.169 III 42.3 19.6 1.3 14.3 3.9 23.2 51.0 7.5 R 91.160 III 42.3 19.6 1.3 14.3 3.9 23.2 51.0 7.5 R 91.161 III 43.3 18.4 1.2 12.6 3.5 22.6 51.7 9.6 R 91.162 III 43.3 18.4 1.2 12.6 3.5 22.6 51.7 9.6 R 91.163 IV 43.7 18.7 1.2 15.1 3.9 18.2 51.1 16.6 S 91.166 IV 42.2 20.5 1.2 13.1 4.1 25.9 47.8 9.1 S 91.166 IV 42.2 20.5 1.2 13.1 4.1 25.9 47.8 9.1 S 91.174 III 44.8 19.1 1.1 14.2 4.1 20.3 52.2 9.3 S 91.178 IV 42.4 19.5 1.1 13.2 4.3 24.1 46.9 11.5 R 91.178-1 IV 41.4 18.2 1.2 12.1 3.7 20.7 51.1 12.4 S 91.340 III 42.8 20.5 1.2 14.5 4.5 21.2 51.1 8.8 R 91.343 III 42.8 18.5 1.3 12.9 3.8 19.3 54.3 9.7 S 91.349 III 43.8 17.5 - 12.0 4.1 15.9 56.8 I1.1 S 91.379 IV 44.3 18.2 1.1 12.7 3.9 19.2 54.7 9.5 S 91.779 IV 41.3 18.2 1.1 12.7 3.9 19.2 54.7 9.6 R 91.779 IV 44.3 18.9 1.1 12.7 3.9 19.2 54.7 9.5 S 91.770 IV 41.0 19.0 1.2 13.6 3.5 21.2 51.1 9.6 R 91.770 IV 44.3 18.9 1.1 12.7 3.9 19.2 54.7 9.5 S 91.770 IV 44.3 18.9 1.1 12.7 3.9 19.2 54.7 9.5 S 91.770 III 44.8 18.9 1.1 12.7 3.9 19.2 54.7 9.6 R 91.771 III 44.8 18.9 1.1 12.7 3.9 19.2 54.7 9.6 R 91.7725-2 IV 44.3 18.9 1.1 12.7 3.9 19.2 54.7 9.6 R 91.7730 III 42.1 19.7 17.0 1.4 13.0 3.9 19.2 54.7 9.6 R 91.7730 III 44.8 18.9 1.1 12.7 4.1 21.5 52.2 9.8 R 91.7730 III 44.8 18.9 1.1 12.7 4.1 21.5 52.2 9.8 R 91.7730 III 44.8 18.3 1.2 11.2 12.3 3.4 8.7 15.6 52.2 9.8 R 91.7730 III 44.8 18.3 1.2 11.6 4.1 18.4 55.3 10.0 S 91.7730 III 44.8 18.3 1.2 11.6 11.7 4.2 22.1 52.2 9.8 R 91.7731 III 44.8 20.8 1.1 12.1 12.7 3.9 19.2 54.7 9.0 S 91.7730 III 44.8 20.8 1.1 12.1 13.7 4.0 21.5 52.2 9.8 R 91.7730 III 44.8 20.8 1.1 12.1 13.7 4.0 21.5 52.2 9.8 R 91.7730 III 44.8 20.8 1.1 12.1 13.7 4.0 21.5 53.0 9.3 - 93.7 93.7 93.7 93.7 93.7 93.7 93.7 93.7												
91.163-7 IV												
91.154 III												
91.169 39.4 22.3 1.4 13.2 4.9 20.6 61.3 9.9 S 91.169-4												
91.189-4 IV 43.2 20.1 1.2 13.5 3.6 21.8 61.6 9.5 91.160 III 42.3 19.6 1.3 14.3 3.9 22.2 51.0 7.5 R 91.162 III 43.3 18.4 1.2 12.6 3.5 22.6 51.7 9.6 R 91.163 IV 43.7 18.7 1.2 15.1 3.9 18.2 51.1 11.6 S 91.165 III 41.3 21.6 1.2 14.0 3.6 21.3 53.1 7.9 R 91.169 III 38.8 22.6 1.5 11.9 4.2 22.7 52.0 9.2 S 91.169 III 44.8 19.1 1.1 14.2 4.1 20.3 52.2 9.3 S 91.174 III 44.8 19.1 1.1 14.2 4.1 20.3 52.2 9.3 S 91.178 IV 42.4 19.5 1.1 13.2 4.3 24.1 46.9 11.5 R 91.178-1 IV 41.4 18.2 1.2 12.1 3.7 20.7 51.1 12.4 S 91.340 III 42.8 20.5 1.2 14.5 4.5 21.2 51.1 8.8 R 91.341 III 38.9 20.9 - 13.8 3.7 21.8 51.6 9.1 H 91.343 III 42.8 18.5 1.3 12.9 3.8 19.3 54.3 9.7 S 91.346 IV 42.8 18.9 - 14.5 3.5 21.2 51.1 9.6 R 91.346 IV 42.8 18.9 - 14.5 3.5 21.2 51.1 9.6 R 91.679 IV 43.1 18.2 1.2 13.4 3.7 17.7 53.6 11.6 R 91.684 IV 45.3 18.2 1.1 12.7 3.9 19.2 54.7 9.5 S 91.790 IV 41.0 19.0 1.2 13.6 3.5 21.8 51.1 10.0 - 91.719 IV 45.3 17.8 1.1 12.7 4.1 21.7 3.9 19.2 54.7 9.5 S 91.725 III 43.4 19.7 1.2 12.6 3.8 18.5 53.9 10.3 R 91.725 III 43.1 19.7 1.1 12.6 3.8 18.5 54.0 11.1 S 91.725 III 42.2 19.2 - 14.0 4.1 17.5 53.6 10.7 S 91.730 III 43.4 19.7 1.2 13.6 3.5 22.9 51.6 8.6 S 91.731 III 40.8 21.5 1.2 12.3 4.6 22.9 51.6 8.6 S 91.731 III 40.8 21.5 1.2 12.3 4.6 22.9 51.6 8.6 S 91.731 III 40.8 21.5 1.2 12.3 4.6 22.9 51.6 8.6 S 91.731 III 40.8 21.5 1.2 12.3 4.6 22.9 51.6 8.6 S 91.731 III 40.8 21.5 1.2 12.3 4.6 22.9 51.6 8.6 S 91.731 III 40.8 21.5 1.2 12.3 4.6 22.9 51.6 8.6 S 91.731 III 40.8 21.5 1.2 12.3 4.6 22.9 51.6 8.6 S 91.731 III 40.8 21.5 1.2 12.3 4.6 22.9 51.6 8.8 S 91.732 III 43.4 19.7 1.1 11.7 4.2 22.1 55.5 48.8 8.0 S 91.733 III 40.8 20.6 1.1 13.1 13.1 4.0 20.6 53.0 9.3 R 92.666 III 42.0 20.4 1.2 13.3 4.8 24.2 48.7 9.0 S 92.667 IV 43.9 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.5690 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S												
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91.169 III 38.8 22.6 1.5 11.9 4.2 22.7 52.0 9.2 S 91.174 III 44.8 19.1 1.1 14.2 4.1 20.3 52.2 9.3 S 91.178 IV 42.4 19.5 1.1 13.2 4.3 24.1 46.9 11.5 R 91.178-1 IV 41.4 18.2 1.2 12.1 3.7 20.7 51.1 12.4 S 91.340 III 42.8 20.5 1.2 14.5 4.5 21.2 51.1 8.8 R 91.341 III 38.9 20.9 - 13.8 3.7 21.8 51.6 9.1 H 91.343 III 42.8 18.5 1.3 12.9 3.8 19.3 54.3 9.7 S 91.346 IV 42.8 18.9 - 14.5 3.5 21.2 51.1 9.6 R 91.349 III 43.8 17.5 - 12.0 4.1 15.9 56.8 11.1 S S 51.679 IV 43.1 18.2 1.2 13.4 3.7 17.7 53.6 11.6 R 91.679 IV 45.3 18.2 1.1 12.7 3.9 19.2 54.7 9.5 S 91.702 IV 41.0 19.0 1.2 13.6 3.5 21.8 51.1 10.0 - 91.719 IV 45.3 17.8 1.1 12.6 3.8 18.5 54.0 11.1 S 91.725-2 IV 44.3 18.9 1.1 12.7 4.1 21.5 52.2 9.6 R 91.725-4 III 47.7 17.0 1.4 13.0 3.9 18.9 53.9 10.3 R 91.730 III 43.1 19.7 1.1 11.7 4.2 22.1 52.2 9.8 S 91.731 III 40.8 21.5 1.2 12.3 4.6 22.9 51.6 8.6 S 91.731-1 IV 43.4 19.7 1.2 13.1 3.1 18.4 55.3 10.0 S 91.733-1 IV 43.4 18.3 1.2 12.2 3.8 18.9 53.9 11.1 S 91.733-1 IV 43.4 18.3 1.2 12.2 3.8 18.9 53.9 11.1 S 91.733-1 IV 43.4 18.3 1.2 12.2 3.8 18.9 53.9 11.1 S 91.733-1 IV 43.4 18.3 1.2 11.6 4.1 18.4 55.2 10.6 R 91.733-1 IV 43.4 18.3 1.2 11.6 4.1 18.4 55.2 10.6 R 91.733-1 IV 43.4 18.3 1.2 12.2 3.8 18.9 53.9 11.1 S 91.733-1 IV 43.4 18.3 1.2 12.6 51.5 51.6	91.165					14.0	3.6	21.3	53.1	7.9	R	
91.174 III	91.166	IV	42.2	20.5		13.1	4.1	25.9	47.8	9.1	S	
91.178 IV 42.4 19.5 1.1 13.2 4.3 24.1 46.9 11.5 R 91.178-1 IV 41.4 18.2 1.2 12.1 3.7 20.7 51.1 12.4 S 91.340 III 42.8 20.5 1.2 14.5 4.5 21.2 51.1 8.8 R 91.341 III 38.9 20.9 - 13.8 3.7 21.8 51.6 9.1 H 91.343 III 42.8 18.5 1.3 12.9 3.8 19.3 54.3 9.7 S 91.346 IV 42.8 18.9 - 14.5 3.5 21.2 51.1 9.6 R 91.349 III 43.8 17.5 - 12.0 4.1 15.9 56.8 11.1 S 91.679 IV 43.1 18.2 1.2 13.4 3.7 17.7 53.6 11.6 R 91.684 IV 45.3 18.2 1.1 12.7 3.9 19.2 54.7 9.5 S 91.702 IV 41.0 19.0 1.2 13.6 3.5 21.8 51.1 10.0 91.719 IV 45.3 17.8 1.1 12.6 3.8 18.5 54.0 11.1 S 91.725-2 IV 44.3 18.9 1.1 12.7 4.1 21.5 52.2 9.6 R 91.725-4 III 47.7 17.0 1.4 13.0 3.9 18.9 53.9 10.3 R 91.730 III 42.2 19.2 - 14.0 4.1 17.5 53.6 10.7 S 91.730 III 40.8 21.5 1.2 12.8 4.0 21.4 51.8 10.0 S 91.731 III 40.8 21.5 1.2 12.3 4.6 22.9 51.6 8.6 S 91.731 IV 43.4 19.7 1.2 13.1 3.1 18.4 55.3 10.0 S 91.731 IV 43.4 18.3 1.2 11.2 12.2 3.8 18.9 53.9 11.1 S 91.750 III 42.2 19.2 - 14.0 4.1 17.5 53.6 10.7 S 91.731 IV 43.4 18.3 1.2 12.2 13.1 3.1 18.4 55.3 10.0 S 91.731 IV 43.4 18.3 1.2 12.2 3.8 18.9 53.9 11.1 S 91.750 III 42.1 12.1 12.2 3.8 18.9 53.9 11.1 S 91.750 III 42.0 20.4 1.2 13.3 4.8 24.2 48.7 9.0 S 92.463 IV 41.9 18.1 1.1 11.5 3.7 23.6 49.9 11.3 S 92.466 III 42.1 20.1 1.1 13.1 4.0 20.5 53.0 9.3 R 92.560 III 40.8 20.6 1.1 13.4 4.1 22.4 51.2 8.7 S 92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.593 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S	91.169	Ш	38.8	22.6		11.9	4.2	22.7	52.0	9.2		
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91.340 III	91.178	IV	42.4	19.5	1.1	13.2	4.3	24.1	46.9	11.5	R	
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91.343 III			38.9	20.9		13.8		21.8	51.6		н	
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91.731-1 IV 43.4 19.7 1.2 13.1 3.1 18.4 55.3 10.0 S 91.733-1 IV 43.2 18.1 1.2 12.2 3.8 18.9 53.9 11.1 S 91.734 IV 43.4 18.3 1.2 11.6 4.1 18.4 55.2 10.6 R 91.750 III 42.0 20.4 1.2 13.3 4.8 24.2 48.7 9.0 S 92.463 IV 41.9 18.1 1.1 11.5 3.7 23.6 49.9 11.3 S 92.466 III 42.1 20.1 1.1 13.1 4.0 20.5 53.0 9.3 92.557 IV 43.9 20.5 - 12.6 5.1 25.5 48.8 8.0 R 92.560 III 42.2 18.3 - 12.8 3.9 21.0 53.0 9.3 R 92.568 III 41.9 19.9 1.2 13.5 4.1 22.4 51.2 8.7 S 92.577 III 41.8 20.8 1.1 13.7 4.0 24.7 48.8 8.8 S 92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 55.5 9.6 S												
91.733-1 IV 43.2 18.1 1.2 12.2 3.8 18.9 53.9 11.1 S 91.734 IV 43.4 18.3 1.2 11.6 4.1 18.4 55.2 10.6 R 91.750 III 42.0 20.4 1.2 13.3 4.8 24.2 48.7 9.0 S 92.463 IV 41.9 18.1 1.1 11.5 3.7 23.6 49.9 11.3 S 92.466 III 42.1 20.1 1.1 13.1 4.0 20.5 53.0 9.3 92.557 IV 43.9 20.5 - 12.6 5.1 25.5 48.8 8.0 R 92.560 III 42.2 18.3 - 12.8 3.9 21.0 53.0 9.3 R 92.568 III 41.9 19.9 1.2 13.5 4.1 22.4 51.2 8.7 S 92.577 III 41.8 20.8 1.1 13.7 4.0 24.7 48.8 8.8 S 92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 55.5 9.6 S												
91.734 IV 43.4 18.3 1.2 11.6 4.1 18.4 55.2 10.6 R 91.750 III 42.0 20.4 1.2 13.3 4.8 24.2 48.7 9.0 S 92.463 IV 41.9 18.1 1.1 11.5 3.7 23.6 49.9 11.3 S 92.466 III 42.1 20.1 1.1 13.1 4.0 20.5 53.0 9.3 92.557 IV 43.9 20.5 - 12.6 5.1 25.5 48.8 8.0 R 92.560 III 42.2 18.3 - 12.8 3.9 21.0 53.0 9.3 R 92.568 III 41.9 19.9 1.2 13.5 4.1 22.4 51.2 8.7 S 92.577 III 41.8 20.8 1.1 13.7 4.0 24.7 48.8 8.8 S 92.593 III 40.8 20.6 1.1 13.4 4.1 20.6 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>												
91.750 III 42.0 20.4 1.2 13.3 4.8 24.2 48.7 9.0 S 92.463 IV 41.9 18.1 1.1 11.5 3.7 23.6 49.9 11.3 S 92.466 III 42.1 20.1 1.1 13.1 4.0 20.5 53.0 9.3 92.557 IV 43.9 20.5 - 12.6 5.1 25.5 48.8 8.0 R 92.560 III 42.2 18.3 - 12.8 3.9 21.0 53.0 9.3 R 92.568 III 41.9 19.9 1.2 13.5 4.1 22.4 51.2 8.7 S 92.577 III 41.8 20.8 1.1 13.7 4.0 24.7 48.8 8.8 S 92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>												
92.463 IV 41.9 18.1 1.1 11.5 3.7 23.6 49.9 11.3 S 92.466 III 42.1 20.1 1.1 13.1 4.0 20.5 53.0 9.3 92.567 IV 43.9 20.5 - 12.6 5.1 25.5 48.8 8.0 R 92.560 III 42.2 18.3 - 12.8 3.9 21.0 53.0 9.3 R 92.568 III 41.9 19.9 1.2 13.5 4.1 22.4 51.2 8.7 S 92.577 III 41.8 20.8 1.1 13.7 4.0 24.7 48.8 8.8 S 92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 55.5 9.6 S												
92.466 III 42.1 20.1 1.1 13.1 4.0 20.5 53.0 9.3 92.567 IV 43.9 20.5 - 12.6 5.1 25.5 48.8 8.0 R 92.560 III 42.2 18.3 - 12.8 3.9 21.0 53.0 9.3 R 92.568 III 41.9 19.9 1.2 13.5 4.1 22.4 51.2 8.7 S 92.577 III 41.8 20.8 1.1 13.7 4.0 24.7 48.8 8.8 S 92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 55.5 9.6 S												
92.557 IV 43.9 20.5 - 12.6 5.1 25.5 48.8 8.0 R 92.560 III 42.2 18.3 - 12.8 3.9 21.0 53.0 9.3 R 92.568 III 41.9 19.9 1.2 13.5 4.1 22.4 51.2 8.7 S 92.577 III 41.8 20.8 1.1 13.7 4.0 24.7 48.8 8.8 S 92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 55.5 9.6 S												
92.560 III 42.2 18.3 - 12.8 3.9 21.0 53.0 9.3 R 92.568 III 41.9 19.9 1.2 13.5 4.1 22.4 51.2 8.7 S 92.577 III 41.8 20.8 1.1 13.7 4.0 24.7 48.8 8.8 S 92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 55.5 9.6 S												
92.568 III 41.9 19.9 1.2 13.5 4.1 22.4 51.2 8.7 S 92.577 III 41.8 20.8 1.1 13.7 4.0 24.7 48.8 8.8 S 92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 55.5 9.6 S												
92.577 III 41.8 20.8 1.1 13.7 4.0 24.7 48.8 8.8 \$ 92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 \$ 92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 55.5 9.6 \$												
92.590 III 40.8 20.6 1.1 13.4 4.1 20.6 51.5 10.4 S 92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 55.5 9.6 S												
92.593 III 40.3 22.0 1.0 14.6 4.8 15.5 55.5 9.6 S												
92.594 III 41.6 21.5 12 13.3 4.2 21.1 52.0 9.4 9												
92.600 III 39.3 22.6 1.1 12.3 4.7 20.4 52.7 9.9 S	92.594	111	41.6	21.5	1.2	13.3	4.2	21.1	52.0	9.4	S	

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
PI No.	name	acquisition	origin	or released	group
92.601-1		China	China	1931	Ш
92.601-2		China	China	1931	III
92.601-5		China	China	1931	III
92.602		China	China	1931	III
92.604		China	China	1931	IV
92.605		China	China	1931	Ш
92.606		China	China	1931	III
92.608		China	China	1931	III
92.617		China	China	1931	iii
92.618		China	China	1931	111
92.619		China	China	1931	111
92.623		China	China	1931	 III
92.636		China	China	1931	iv
92.640		China	China	1931	111
92.641		China	China	1931	III
92.641B		China	China	1931	IV
92.642		China	China	1931	III
92.643		China	China		III
92.645				1931	III
		China	China	1931	
92.651		China	China	1931	IV
92.654		China	China	1931	III
92.659		China	China	1931	III
92.662		China	China	1931	III
92.663		China	China	1931	111
92.672		China	China	1931	111
92.686		China	China	1931	Ш
92.688		China	China	1931	Ш
92.688-2		China	China	1931	IV
92.689		China	China	1931	IV
92.690		China	China	1931	111
92.691		China	China	1931	111
92.702		China	China	1931	Ш
92.704		China	China	1931	Ш
92.707		China	China	1931	Ш
92.707-2		China	China	1931	IV
92.713		China	China	1931	IV
92.718		China	China	1931	Ш
92.718-2		China	China	1931	111
92.720		China	China	1931	111
92.722		China	China	1931	III
92.728		China	China	1931	Ш
93.055		China	China	1931	IV
93.563		China	China	1931	111
93.565A		China	China	1931	Ш
94.159-3	(Kiizaya)	Japan	Japan	1931	IV
94.159B	(Kiizaya)	Japan	Japan	1931	IV
95.740	•	Rep. of Korea	Rep. of Korea	1932	III
95.769		Rep. of Korea	Rep. of Korea	1932	IV
95.801		Rep. of Korea	Rep. of Korea	1932	IV
95.853		Rep. of Korea	Rep. of Korea	1932	iV
95.887		Rep. of Korea	Rep. of Korea	1932	IV
96.093		Rep. of Korea	Rep. of Korea	1932	IV
96.118		Rep. of Korea	Rep. of Korea	1932	IV
96.162		Rep. of Korea	Rep. of Korea	1932	III
			DHU ULKUMA	1507	

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedc	oat		Other t	raits	
	rity		Flower	0-1	F	.	Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plan
92.601-1	Ш	N	Р	G	E	Ssp	Br	D	Υ	lb			
92.601-2	III	N	w	G	E	N	Br	D	Ÿ	Bf			
92.601-5	III	N	W	G	E	N	Br	S	Ÿ	Bf			
92.602	 III	N	w	G	E	N	BI	S	Y	Lbf			
92.604	IV	N	w	G	E	N	BI	ı	Y				
92.605	111	S	w	G	E	N	Br	S	Y	Bf Bf			
92.606	iii	N	w	G	E	Ssp	Br	S	Y	Y			
92.608	iii	N	w	G	E	N	Br		Y				
92.617	;;;	S	w	G	E			S		Bf			
92.618		N				N	Br	S	Y	Bf			
			W	G	E	N	Br	S	Y	Bf	Def		
92.619	111	N	W	G	E	N	Br	S	Υ	Bf			
92.623	111	N	W	G	E	N	Br —	D	Y	Υ			
92.636	IV 	D	P	G	E	Ssp	Tn	S	Υ	Y			
92.640	III	N	P	T	E	N	Br	D	Υ	Br			
92.641	III	N	W	T	E	N	Br	D	Υ	Br			
92.641B	IV	D	Р	G	Ε	Ssp	Br	S	Υ	Υ			
92.642	III	N	W	Т	E	N	Br	S	Υ	ВІ			
92.643	Ш	N	Р	Т	E	Ssp	Br	D	Υ	Br			
92.645	Ш	N	Р	G	Ε	N	Br	D	Υ	lb		5lft	
92.651	IV	N	W	T	Ε	N	Br	S	Υ	Tn			
92.654	Ш	N	W	G	Ε	Ssp	Br	S	Υ	Υ			
92.659	Ш	N	W	Т	Ε	N	Br	D	Υ	ВІ			
92.662	Ш	N	Р	G	Ε	N	Br	S	Υ	lb			
92.663	Ш	N	Р	G	Ε	N	Br	S	Υ	lb			
92.672	Ш	S	W	G	Ε	N	Br	Ī	Y	Lbf			
92.686	111	N	W	Т	E	N	Br	S	Ÿ	BI			
92.688	Ш	N	W	Ġ	Ē	N	Br	s	Ÿ	Y.			
92.688-2	IV	D	W	G	Ē	N	Br	S	Ÿ	Ý			
92.689	IV	N	W	G	E	N	Tn	D	Y	Ÿ			
92.690	III	N	W	T	E	N	Br	D	Ÿ	Ý			
92.691	III	N	P	Ġ	E	N	Tn	D	Ϋ́	Ÿ			
92.702	111	N	W	G	E	N	Br	D	Ϋ́	Bf			
92.704	111	N	w	G	E	N	Br	S	Y		D-4		
92.707	III	N	w	G	E	N				Bf	Def		
92.707-2	IV [.]	N	w	T	E	N	Br B-	S	Y	Y			
92.713	١٧	N	W	Ť	E	N	Br B-	S	Y	BI			
92.718	III	N	P	T	E		Br Br	D	Y	BI			
92.718-2		N	P	G	E	N N	Br Br	S	Y	BI			
92.720		N N	W	T				1	Y	Bf	6		
92.722		N	W	G	E E	Ssp N	Br Br	S	BI	BI Bf	Gnco	Į.	
92.728	III	N	P	T	E	N N	Br Tn	D	Y	Bf B-			
93.055	IV	D	W	G	E	N Ssp		D	Y	Br			
93.563	III	N	W	T		•	Tn Tn	D	Y	Bf			
	III			T	E	N Son	Tn Pr	S	Y	BI Br			
93.565A		N	P		E	Ssp	Br 	D	Y	Br			
94.159-3	IV	N	W	G	E	N	Tn To	S	Y	Bf			
94.159B	IV 	N	W	Lt	E	N	Tn	D	Y	Br			
95.740	III	D	W	G	E	N	Br	S	Y	Y			
95.769	IV	D	P	G	E	Ssp	Tn	D	Y	Y			
95.801	IV	D	P	G	Ε	Ssp	Br	S	Lgn	Bf	Def		
95.853	IV	D	Р	G	Sa	Ssp	Br	D	Υ	Υ			
95.887	IV	D	Р	G	E	Ssp	Br	S	Υ	Υ			
96.093	IV	D	Р	G	Ε	Ssp	Br	D	Υ	Υ			
96.118	IV	D	Р	G	Ε	Ssp	Br	S	Υ	Υ	Def		
96.162	Ш	D	W	G	Α	N	Br	D	Υ	Bf			
96.169B	IV	D	Р	G	Ε	N	Br	S	Υ	Bf			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

					Stem						
	Flowering	Maturity			term-	Branch-		Seed	B.4	VA / - !	V:-1J
F	<u>date</u> (mmdd)	date (mmdd)	Lodging (score)	Height (cm)	ination (score)	ing (score)	tering (score)	Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
Entry	(minaa)	(minuu)	(80016)	(СП)	(80010)	(800/6)	(80010)	(800/0/	(300/0)	(og/ou/	(Mg/Hd/
92.601-1	716	924	2.7	104	2.5	3.0	1.0	2.8	1.0	17.8	2.87
92.601-2	716	1003	3.5	112	4.0	3.0	1.0	2.5	1.0	16.2	2.94
92.601-5	716	919	3.4	91	3.0	3.0	1.0	2.3	1.0	14.4	1.81
92.602	713	915	3.5	94	3.5	2.5	1.0	3.3	1.0	16.4	2.83
92.604	719	929	3.2	104	4.0	4.0	1.0	2.8	-	12.2	2.65
92.605	709	916	3.3	81	2.0	2.0	1.0	2.3	1.0	17.9	2.39
92.606	710	922	3.2	94	3.0	3.0	1.0	2.8	2.0	14.2	2.77
92.608	710	917	3.4	81	2.5	2.0	1.0	2.8	1.0	16.7	2.50
92.617	711	918	3.0	79	2.0	2.0	1.0	2.5	1.0	17.7	2.62
92.618	717	928	3.8	104	3.5	3.0	1.0	3.0	1.0	15.4	2.97
92.619	710	916	2.9	81	2.5	2.0	1.0	2.8	1.0	16.8	2.38
92.623	712	1004	3.0	91	3.0	3.0	1.0	2.8	2.0	21.4	2.74
92.636	802	1026	3.3	86	1.0	3.0	3.0	2.8	1.5	16.0	1.86
92.640	713	928	3.0	76	3.0	3.0	1.0	2.5	2.0	16.5	3.13
92.641	714	1003	3.3	114	4.0	3.0	1.0	2.0	1.0	16.7	3.25
92.641B	730	1017	4.3	89	1.0	3.0	1.0	2.0	1.0	18.5	2.70
92.642	711	921	2.6	99	3.5	3.0	1.0	2.5	1.0	15.2	3.19
92.643	713	929	3.4	91	3.0	3.0	1.0	2.3	2.5	16.0	2.96
92.645	721	1011	3.3	104	4.0	3.0	1.0	2.3	2.0	19.9	2.88
92.651	805	1015	3.7	142	4.5	4.0	1.0	2.5	1.0	13.2	2.66
92.654	711	921	2.6	94	3.5	3.0	1.0	2.5	2.0	14.3	2.57
92.659	717	1003	3.4	114	3.5	3.0	1.0	2.8	2.5	16.9	2.73
92.662	712	915	3.4	86	3.5	3.0	1.0	3.0	1.0	17.1	2.19
92.663	709	919	2.8	86	3.0	2.5	1.0	2.5	1.5	15.7	2.50
92.672	707	916	2.8	74	2.0	2.0	1.0	2.5	2.5	17.3	1.94
92.686	713	923	2.2	102	3.5	2.5	1.0	2.5	2.0	15.3	3.19
92.688	708	914	3.5	81	3.0	2.5	1.0 1.0	3.0 2.5	1.5 2.5	16.5 14.9	2.32 2.18
92.688-2	727	1015	2.9	76	1.0 2.5	3.0 3.0	1.0	2.8 2.8	1.0	21.2	2.18
92.689	715	1013 925	3.5	89 89	3.0	3.0 3.0	1.0	2.8	2.5	15.1	2.66
92.690	711 715	917	3.4 4.0	89	3.0	2.5	1.0	2.5	2.0	18.9	2.53
92.691 92.702	716	923	3.4	114	4.0	3.0	1.0	3.0	1.0	17.0	2.76
92.704	714	918	3.8	104	4.0	3.0	1.0	2.8	1.0	15.2	2.37
92.707	713	923	2.8	97	3.5	2.5	1.0	2.3	1.0	18.0	2.70
92.707-2	713	1015	3.7	97	2.5	3.0	1.0	2.5	3.0	19.2	2.39
92.713	728	1010	3.6	122	4.0	3.5	1.0	2.8	1.0	17.9	2.66
92.718	715	1003	3.5	124	4.5	3.5	1.0	2.0	1.0	13.9	3.07
92.718-2	715	924	4.3	97	3.5	3.0	1.0	2.8	1.0	20.0	3.09
92.720	713	913	2.2	74	3.0	3.0	1.0	2.3	-	14.4	2.23
92.722	714	1002	3.8	99	4.0	3.0	1.0	2.5	2.0	14.8	2.84
92.728	714	916	3.8	89	4.0	2.5	1.0	2.8	2.0	14.1	2.57
93.055	726	1013	3.4	76	1.0	3.0	2.0	2.5	2.5	19.5	2.16
93.563	725	1002	3.4	119	5.0	4.0	1.0	2.3	3.0	13.9	2.24
93.565A	712	920	3.3	104	3.5	3.0	1.0	2.5	2.0	14.2	2.48
94.159-3	727	1011	3.9	109	4.0	3.0	1.0	2.3	1.0	14.4	2.59
94.159B	729	1019	4.0	127	4.0	4.0	1.0	2.5	1.5	13.0	2.64
95.740	723	1007	4.0	79	1.0	3.0	5.0	2.3	2.0	18.3	2.20
95.769	804	1025	4.4	91	1.0	3.0	1.0	2.5	1.5	14.0	2.31
95.801	729	1011	3.4	71	1.0	3.0	1.0	3.0	1.0	19.6	2.54
95.853	804	1027	3.4	86	1.0	3.0	1.0	2.5	1.5	19.8	2.28
95.887	728	1014	3.6	74	1.0	3.0	1.0	2.5	2.0	21.2	2.64
96.093	723	1015	3.6	56	1.0	3.0	1.0	2.5	3.5	26.5	1.96
96.118	729	1027	3.5	79	1.0	3.0	1.0	3.0	2.0	28.0	2.23
96.162	720	919	4.3	74	1.0	3.0	5.0	2.5	2.5	11.6	1.92
96.169B	801	1010	3.7	104	1.0	3.0	1.0	2.8	1.0	16.8	1.91

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein		<u>nposition</u>					
		compo		composition	Pal-			Lino-	Lino-	_	ase
_	Maturity	Protein		Methionine	mitic	Steric	Oleic	leic	lenic		tion
Entry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
92.601-1	III	43.9	19.9	1.1	13.3	4.2	24.9	49.2	8.4	s	
92.601-2	III	39.7	21.6	1.2	13.3	4.6	21.4	52.0	8.7	R	
92.601-5	 III	42.1	20.5	1.1	11.6	4.6	23.5	51.1	9.1	R	
92.602	111	40.7	22.6	1.1	13.7	4.3	20.8	52.4	8.8	R	
92.604	IV	42.8	18.7	-	15.7	3.7	16.1	53.4	11.1	s	
92.605	III	40.4	22.6	1.1	10.6	4.5	24.0	52.6	8.3	s	
92.606	111	43.0	19.3	1.3	12.8	4.8	22.1	50.3	10.0	S	
92.608	111	39.6	21.8	1.3	11.2	4.5	21.9	52.0	10.4	S	
92.617	III	38.5	22.1	1.2	10.8	3.6	22.5	54.3	8.9	S	
92.618	III	40.0	20.9	1.2	12.7	4.3	20.7	51.2	11.0	S	
		40.6	20. 5 22.5	1.2	11.9		22.6	51.9	10.1	S	
92.619		43.8	18.3			3.5	21.3		9.5	S	
92.623	III IV	43.8 43.7		1.2 1.2	12.6 12.9	3.8	20.1	52.8 52.2		S	
92.636	III	43.7 40.1	18.3 20.2	1.3	13.9	3.6	21.9		11.1	R	
92.640						4.0	21.9	50.1	10.1		
92.641	III	41.4	21.0	1.3	12.6	4.3		51.2	9.4	S	
92.641B	IV 	43.4	18.5	1.2	11.8	3.6	19.2	52.6	12.8	S	
92.642	III 	41.4	21.1	1.3	13.4	4.5	18.4	51.4	12.2	S S	
92.643	III 	41.4	20.4	1.3	12.4	4.3	23.5	51.5	8.3		
92.645	III	44.5	18.9	1.2	12.7	4.2	19.9	53.2	10.0	S	
92.651	IV 	39.9	19.7	1.3	13.7	4.5	19.2	51.3	11.3	R	
92.654	III	43.1	18.9	1.2	12.2	3.5	22.6	52.1	9.6	S	
92.659	III	41.9	20.1	1.2	11.7	4.7	26.3	48.6	8.8	R	
92.662	Ш	40.8	21.0	1.3	13.6	4.9	23.3	48.4	9.8	S	
92.663	Ш	42.8	20.4	1.2	13.6	4.2	23.1	50.6	8.6	S	
92.672	Ш	44.1	19.9	1.2	12.7	4.3	26.7	47.5	8.8	S	
92.686	111	41.2	21.1	1.6	13.1	4.4	19.4	52.3	10.8	S	
92.688	Ш	41.7	21.1	1.4	14.8	5.1	21.9	48.8	9.3	S	
92.688-2	IV	41.7	18.5	1.3	14.5	3.8	17.5	53.8	10.3	S	
92.689	IV	45.0	18.7	1.2	15.1	3.6	20.1	51.8	9.4	S	
92.690	Ш	44.1	18.8	1.3	13.9	3.6	18.9	53.4	10.2	R	
92.691	Ш	42.4	19.2	1.3	14.0	3.8	22.7	5 1.0	8.5		
92.702	Ш	44.7	19.6	1.2	12.2	4.2	24.5	50.4	8.7	S	
92.704	111	42.1	20.5	1.3	13.7	4.5	20.3	51.1	10.3	S	
92.707	Ш	39.1	22.0	1.3	13.7	4.1	21.2	51.2	9.8	S	
92.707-2	IV	41.0	20.7	-	12.7	3.4	22.7	51.9	9.3	S	
92.713	IV	41.1	20.4	1.5	12.0	3.9	23.0	52.8	8.4	s	
92.718	Ш	40.9	19.9	1.5	12.3	4.1	17.7	55.8	10.1	S	
92.718-2	Ш	42.1	20.9	1.2	13.6	3.9	23.0	51.5	8.0	R	
92.720	Ш	41.7	20.1	-	13.0	3.6	25.4	50.1	7.9	S	
92.722	Ш	42.0	20.4	1.3	13.9	4.4	23.6	48.9	9.2	S	
92.728	Ш	41.9	20.2	1.2	11.3	4.1	21.2	53.3	10.1	S	
93.055	IV	43.9	18.2	1.2	12.7	3.4	21.9	52.2	9.8	S	
93.563	Ш	43.8	19.7	1.3	12.3	3.5	19.7	54.7	9.7	S	
93.565A	Ш	43.9	19.3	1.3	12.6	3.9	20.2	53.9	9.3	S	
94.159-3	IV	42.6	18.7	1.2	12.6	4.1	20.4	51.2	11.7	S	
94.159B	IV	44.4	16.7	1.2	13.3	3.3	17.1	54.4	11.8	R	
95.740	111	43.0	19.6	1.2	11.1	4.8	22.4	51.7	10.0	Н	
95.769	IV	44.4	17.0	1.2	11.0	3.7	19.3	55.6	10.5	R	
95.801	IV	41.7	19.8	1.1	11.4	3.7	21.1	54.0	9.9	Н	
95.853	IV	42.6	18.5	1.2	10.6	3.7	21.2	52.8	11.8	S	
95.887	IV	44.5	18.4	1.1	11.9	3.7	21.0	53.1	10.2	s	
96.093	IV	45.0	17.8	1.2	11.4	3.8	21.0	54.4	9.4	R	
96.118	IV	44.6	17.9	1.1	13.1	4.0	19.3	51.5	12.0	S	
96.162	III	43.0	17.9	1.2	11.9	5.2	24.4	48.6	9.8	S	
96.169B	IV	42.1	17.3	1.1	11.6	3.6	22.1	51.7		s	

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
PI No.	name	acquisition	origin	or released	group
96.194P		Rep. of Korea	Rep. of Korea	1932	IV
96.194-3		Rep. of Korea	Rep. of Korea	1932	Ш
96.199		Rep. of Korea	Rep. of Korea	1932	Ш
96.280		Rep. of Korea	Rep. of Korea	1932	IV
96.321		Rep. of Korea	Rep. of Korea	1932	Ш
96.322		Rep. of Korea	Rep. of Korea	1932	Ш
96.333		Rep. of Korea	Rep. of Korea	1932	IV
96.550		Rep. of Korea	Rep. of Korea	1932	IV
96.783		Rep. of Korea	Rep. of Korea	1932	IV
96.786-1		Rep. of Korea	Rep. of Korea	1932	Ш.
96.787		Rep. of Korea	Rep. of Korea	1932	Ш
96.808		Rep. of Korea	Rep. of Korea	1932	IV
96.927		Rep. of Korea	Rep. of Korea	1932	111
96.978		Rep. of Korea	Rep. of Korea	1932	IV
96.984		Rep. of Korea	Rep. of Korea	1932	IV
97.038		Rep. of Korea	Rep. of Korea	1932	IV
97.139		Rep. of Korea	Rep. of Korea	1932	Ш
97.155		Rep. of Korea	Rep. of Korea	1932	IV
97.220		Rep. of Korea	Rep. of Korea	1932	IV
97.222		Rep. of Korea	Rep. of Korea	1932	IV
97.225		Rep. of Korea	Rep. of Korea	1932	IV
97.235		Rep. of Korea	Rep. of Korea	1932	IV
97.627		Unknown	Unknown	1932	Ш
98.243		Unknown	Unknown	1932	III
103.080	White Soybean	China	China	1933	IV
103.088	Ming chuan	China	China	1933	111
103.091	Wu an	China	China	1933	IV
103.415		China	China	1933	IV
103.419B		China	China	1933	IV
104.708	C.S.S.	Poland	Poland	1934	III
105.579		Russia	France	1934	IV
123.577B	(Hopei E-3)	China	China	1937	IV
123.578	Hopei E-4	China	China	1937	Ш
124.871		Japan	Japan	1937	IV
153.231		Belgium	Unknown	1946	Ш
153.243	Dunfield	Belgium	Belgium	1946	Ш
153.292	Japonica	Belgium	France	1946	Ш
153.309	Bergerac	France	France	1946	Ш
153.321	Vert d'Agen	France	France	1946	IV
157.395	An byon tae	Rep. of Korea	Rep. of Korea	1947	IV
157.396	Baec chung No. 48	Rep. of Korea	Rep. of Korea	1947	IV
157.397	Baec mi oialkong	Rep. of Korea	Rep. of Korea	1947	Ш
157.398	Baec moc sa ryu	Rep. of Korea	Rep. of Korea	1947	IV
157.401	Bang chan bac mi	Rep. of Korea	Rep. of Korea	1947	IV
157.402	Bang chan bac mi	Rep. of Korea	Rep. of Korea	1947	IV
157.404	Chae rae chong	Rep. of Korea	Rep. of Korea	1947	IV
157.405	Chae rae chong	Rep. of Korea	Rep. of Korea	1947	IV
157.408	Chang tan bac mac	Rep. of Korea	Rep. of Korea	1947	IV
157.409	Chang tan da mac	Rep. of Korea	Rep. of Korea	1947	IV
157.410	Chang uwal	Rep. of Korea	Rep. of Korea	1947	IV
157.414	Chung buc huwang No. 1	Rep. of Korea	Rep. of Korea	1947	IV
157.416	Chung buc tae	Rep. of Korea	Rep. of Korea	1947	III
157.417	Chung gari	Rep. of Korea	Rep. of Korea	1947	IV
157.419	Dairya tsurunoko	Rep. of Korea	Rep. of Korea	1947	IV

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

				<u>Pubes</u>	cence			Seedc	oat		Other t	raits	
	Matu-	04	Cl				D			1.131			
Entre	rity		Flower	Color	Earm	Density	Pod color	Luster	Color	Hilum color	Seed	Loof	Plant
Entry	group	trm.	COIOI	COIOI	rom	Density	COIO	Luster	COIO	COIOI	2660	Leai	Flant
96.194P	IV	N	Р	G	E	N	Br	s	Υ	lb			
96.194-3	III	D	w	G	Ē	N	Br	S	Ÿ	Bf			
96.199	Ш	D	W	G	Α	N	Br	D	Y	Bf			
96.280	īV	D	P	G	E	N	Tn	D	Y	Y			
96.321	Ш	D	W	G	E	Ssp	Dbr	s	Gn	Gn	St	Na	
96.322	Ш	N	W	Т	E	N	Tn	D	ВІ	ВІ	Gncot	t	
96.333	IV	N	Р	G	E	N	ВІ	D	Gn	lb	Gncot	t	
96.550	IV	D	Р	G	E	Ssp	Br	S	Υ	Υ			
96.783	IV	D	Р	T	Α	Ssp	Br	D	Υ	Br			
96.786-1	Ш	N	W	G	E	N	Tn	S	Υ	Lbf			
96.787	Ш	D	Р	Т	E	Ssp	Br	S	Υ	Br			
96.808	IV	D	W	G	E	N	Br	D	Υ	Υ			
96.927	Ш	D	Р	Т	E	N	Br	D	Υ	ВІ			
96.978	IV	D	Р	G	Sa	N	Br	D	Υ	G			
96.984	IV	N	Р	T	E	Ssp	Br	S	Υ	ВІ			
97.038	IV	N	W	G	E	N	Br	S	Υ	Υ			
97.139	Ш	N	W	G	E	N	Br	S	Υ	Bf			
97.155	IV	D	W	G	E	N	Br	S	Υ	Bf			
97.220	IV	D	W	G	E	Ssp	Br	D	Υ	Υ			
97.222	IV	D	P	G	E	Ssp	Br	S	Υ	Υ			
97.225	IV	D	P	G	E	N	Br	D	Υ	Υ			
97.235	IV	D	W	G	E	Ssp	Br	D	Υ	Υ			
97.627	Ш	D	P	G	E	N	Tn	S	Υ	lb			
98.243	Ш	N	P	G	Ε	N	Br	S	Υ	Bf			
103.080	IV	S	W	G	Sa	N	Br	D	Υ	Bf			
103.088	Ш	D	W	G	E	N	Tn	D	Υ	Bf			
103.091	IV	S	W	G	Sa	N	Br	D	Υ	Bf			
103.415	IV	N	W	G	E	N	Tn	S	Υ	Lbf			
103.419B	IV	N	Р	G	E	Sdn	Br	1	Υ	Υ			
104.708	Ш	N	Р	G	E	N	Br	1	Υ	Υ			
105.579	IV	D	Р	G	E	Ssp	Br	1	Υ	Υ			
123.577B	IV	N	W	G	Ε	N	Br	D	Υ	Bf			
123.578	Ш	D	W	G	E	N	Br	ı	Υ	Lbf			
124.871	IV	D	W	T	E	Ssp	Br	S	ВІ	ВІ			
153.231	Ш	N	P	Т	E	Ssp	Br	D	Rbr	Rbr			
153.243	Ш	N	W	Т	E	N	Br	S	Υ	ВІ			
153.292	Ш	N	Р	T	E	N	ВІ	S	ВІ	Br		Dab	s Sw
153.309	III	N	W	G	E	N	Br	S	Y	Bf	_		
153.321	IV	D	P	T	E	N	BI	S	Gn	Br	Gnco	t	
157.395	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.396	IV 	D	P	G	E	Ssp	Br	S	Y	Y			
157.397	III	D	W	T	E	Ssp	Br D-	D	Y	G			
157.398	IV	D	P	T	A	N	Br Br	D	Y	Br			
157.401	IV	D	W	G	E	Ssp	Br	D	Y	Y			
157.402	IV	D	P	G	E	Ssp	Br	D	Y	Υ			
157.404	IV	D	P	G	E	N	BI	D	Y	Bf			
157.405	IV	D	P	G	E	N	ВІ	S	Lgn	G			
157.408	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.409	IV	D	P	G	A	N	Br	S	Y	Bf			
157.410	IV	D	P	G	E	Ssp	Br	S	Y	Bf	Def		
157.414	IV 	D	P	G	E	Ssp	Br	S	Y	Y	_		
157.416	III	N	W	T	E	N	Br	S	BI	BI	Gnco	t	
157.417	IV	D	P	G	A	Ssp	Tn	S	Y	Y			
157.419	IV	D	Р	G	E	N	Br	D	Υ	Υ			
157.421	Ш	N	Р	Ng	Ε	N	Tn	S	ВІ	ВІ			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

					Stem						
	Flowering	Maturity			term-	Branch-		Seed			
	date	date	Lodging	Height	ination	ing	tering	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	(score)	(score)	(cg/sd)	(Mg/ha)
06 104D	727	1010	4.0	132	4.0	3.5	1.0	2.3	1.0	16.0	3.04
96.194P	727 720	927	3.3	97	1.0	3.0	1.0	2.5	1.0	16.4	3.02
96.194-3		918	4.0	74	1.0	3.0	5.0	2.5	2.0	11.7	1.81
96.199	720	1018	3.2	86	1.0	3.0	1.0	2.3	1.0	13.2	1.83
96.280	802	921	3.2	66	1.0	2.5	1.0	2.5	-	18.9	1.75
96.321	717	921 925	3.0 2.4	69	2.5	3.0	1.0	2.5	-	15.5	1.75
96.322	717	1011	2. 4 3.4	119	4.0	3.5	1.0	2.3	1.0	16.5	2.90
96.333	801	1011	3. 4 3.5	89	1.0	3.0	1.0	3.0	2.5	28.2	2.09
96.550	728	1024	3.8	91	1.0	3.0	3.0	2.5	1.0	28.9	1.58
96.783	729			107	4.0	3.0	1.0	2.5	2.5	18.6	2.45
96.786-1	721	1004	3.4 3.0	56	1.0	3.0	1.0	2.5	1.5	14.1	1.76
96.787	713	920		76	1.0	3.0	1.0	2.5	3.0	15.2	2.08
96.808	725	1010	4.0			1.0	1.0	2.3	2.5	11.4	2.35
96.927	711	923	2.7	90	1.0			2.5 2.5	3.0	22.8	1.92
96.978	726	1018	4.0	69	1.0	3.0	1.0			18.0	2.86
96.984	728	1016	3.2	119	4.0	3.0	1.0	2.3	1.0		
97.038	727	1016	3.9	104	2.5	3.0	3.0	3.3	2.0	24.3	2.39
97.139	712	918	2.8	81	2.5	2.5	1.0	2.3	1.0	19.5	2.10
97.155	727	1016	4.4	97	1.0	3.0	1.0	2.8	3.0	16.8	2.70
97.220	724	1010	3.6	71	1.0	3.0	1.0	2.3	3.0	12.9	1.63
97.222	728	1015	3.6	74	1.0	3.0	1.0	2.5	2.0	19.1	2.57
97.225	731	1014	4.2	71	1.0	3.0	1.0	2.5	3.0	12.4	1.87
97.235	723	1009	4.0	74	1.0	3.0	1.0	2.5	3.0	13.8	2.00
97.627	722	1004	2.6	74	1.0	2.5	5.0	2.3	2.0	15.5	1.95
98.243	712	924	3.9	81	3.0	3.0	1.0	3.0	1.5	16.2	3.03
103.080	802	1014	4.8	102	2.0	4.0	1.0	2.3	2.0	10.3	2.27
103.088	724	1003	3.6	86	1.0	3.0	1.0	2.3	2.0	11.2	2.22
103.091	802	1014	4.8	99	2.0	4.0	1.0	2.5	2.0	10.3	2.44
103.415	730	1016	3.9	119	3.5	3.0	1.0	2.5	1.5	14.1	2.40
103.419B	726	1020	3.4	114	4.0	3.0	1.0	2.8	3.0	23.3	2.72
104.708	713	918	3.4	79	3.0	3.0	1.0	3.0	2.5	20.8	2.45
105.579	728	1023	4.1	86	1.0	3.0	1.0	2.8	2.5	27.7	2.13
123.577B	805	1023	4.3	122	4.0	4.0	1.0	2.5	1.5	16.0	2.62
123.578	721	1002	3.5	84	1.0	3.0	1.0	2.5	2.0	20.5	1.80
124.871	719	1009	2.6	58	1.0	2.5	5.0	3.0	-	33.4	1.39
153.231	721	1004	3.3	99	3.5	3.0	1.0	2.3	-	16.0	2.74
153.243	714	927	4.8	122	5.0	4.0	1.0	2.5	1.5	15.0	3.00
153.292	708	927	4.8	102	5.0	4.5	1.0	3.0	-	10.4	2.56
153.309	713	919	3.1	112	4.0	3.0	1.0	2.8	1.0	14.4	3.04
153.321	727	1009	2.9	79	1.0	3.0	5.0	2.8	1.5	15.8	1.99
157.395	729	1022	3.9	81	1.0	3.0	1.0	2.3	2.0	21.2	2.37
157.396	729	1021	3.9	84	1.0	3.0	1.0	2.5	2.0	21.2	2.47
157.397	713	926	3.5	61	1.0	3.0	1.0	3.3	2.5	19.8	1.62
157.398	809	1026	3.0	86	1.0	3.0	4.0	2.3	1.0	18.2	2.11
157.401	725	1009	3.6	71	1.0	3.0	1.0	2.3	2.5	14.3	2.00
157.402	726	1019	3.9	58	1.0	3.0	1.0	2.5	3.0	25.2	2.02
	802	1013	4.0	71	1.0	3.0	1.0	2.0	1.0	8.3	2.72
157.404	802	1014	4.0	84	1.0	3.0	1.0	2.5	-	17.0	2.49
157.405		1022	3.6	76	1.0	3.0	1.0	2.5	2.0	21.8	2.50
157.408	726 727			94	1.0	3.5	5.0	2.5	1.0	17.3	2.48
157.409	727	1009	3.8							20.2	2.40
157.410	731	1017	3.5	74	1.0	3.0	1.0	2.5	1.0		
157.414	731	1023	3.9	81	1.0	3.0	1.0	2.5	2.0	19.4	2.46
157.416	713	921	2.5	74	3.0	3.0	3.0	2.5	-	16.0	2.70
157.417	725	1015	4.2	84	1.0	3.0	1.0	2.5	2.0	22.8	2.00
157.419	720	1014	3.4	81	1.0	3.0	2.0	3.0	2.0	32.4	2.59
157.421	724	1001	4.3	97	3.5	3.0	1.0	2.5	-	9.7	2.80

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein		nposition					
		compos	sition	composition	Pal-			Lino-	Lino-		ease
	Maturity	Protein		Methionine	mitic	Steric	Oleic	leic	lenic	rea	ction
ntry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
				_				50.4	10.0	•	
96.194P	IV 	41.7	20.1	1.1	12.7	3.6 3.5	21.1 20.5	52.4 54.3	10.2 8.9	S S	
96.194-3	111	40.8	21.7	1.1	12.8			50.4	10.0	S	
96.199	111	43.1	20.5	1.1	11.9	4.4	23.4				
96.280	IV	40.5	19.4	1.3	12.4	3.2	18.1	53.8	12.5	S	
96.321	111	42.6	19.8	-	15.0	4.8	18.8	51.8	9.6	S	
96.322	111	40.8	21.9	-	14.6	4.3	25.5	47.6	8.0	S	
96.333	IV	41.0	20.4	-	13.6	3.6	23.0	50.3	9.5	S	
96.550	IV	42.5	18.0	1.1	13.0	4.0	21.8	50.2	11.0	S	
96.783	IV	40.0	18.5	1.2	12.7	3.6	19.0	53.1	11.5	R	
96.786-1	111	41.4	20.8	1.2	14.4	4.5	23.6	48.2	9.4	s	
96.787	111	42.5	19.5	1.1	9.8	4.3	22.0	54.1	9.7	s	
96.808	IV	41.8	18.9	1.2	17.3	4.3	18.1	49.3	11.0	R	
	111	46.6	18.2	-	11.6	3.6	24.6	52.4	7.9		
96.927		44.2	18.2	1.1	13.7	3.1	19.3	52.8	11.1	R	
96.978	IV		19.7	1.1	12.2	3.3	18.9	54.4	11.2	s	
96.984	IV "V	42.1			13.8	3.3 3.9	21.1	50.3	10.9	s	
97.038	IV 	42.9	18.5	1.2					9.1	S	
97.139	III	43.4	21.2	1.1	13.3	4.6	22.2	50.8		S	
97.155	IV	41.7	18.9	1.1	12.2	3.6	22.7	51.4	10.2		
97.220	IV	41.1	19.2	-	12.4	3.5	18.4	54.2	11.5	Н	
97.222	IV	42.5	18.5	1.1	13.5	3.1	20.0	52.5	10.8	S	
97.225	IV	44.6	18.9	1.3	12.5	3.1	18.0	55.8	10.6	R	
97.235	IV	42.1	18.3	1.2	12.5	3.7	16.9	54.6	12.3	Н	
97.627	111	42.0	19.7	1.3	13.6	4.0	21.5	50.6	10.2	S	
98.243	111	43.1	20.8	1.2	12.9	4.0	19.1	54.0	10.1	s	
103.080	IV	43.1	18.4	1.2	12.5	3.1	19.4	53.9	11.0	R	
103.088	111	45.3	18.6	1.2	12.7	3.3	18.5	55.0	10.6	R	
	IV	42.9	18.4	1.3	12.2	3.4	21.0	52.6	10.9	R	
103.091				1.1	13.2	3.9	18.9	50.3	13.7	S	
103.415	IV	44.0	16.8		15.2	2.6	20.6	51.4	10.4	s	
103.419B	IV 	41.7	19.1	1.2			25.8	48.4	8.5	s	
104.708	111	42.8	19.9	1.1	13.7	3.7				S	
105.579	IV	43.2	18.5	1.1	11.8	4.0	21.2	51.4	11.6		
123.577B	IV	42.8	17.8	1.3	15.3	3.2	17.1	52.8	11.6	Н	
123.578	111	44.9	18.2	1.1	13.1	3.5	21.8	51.4	10.2	S	
124.871	IV	42.1	17.7	-	13.9	3.5	21.8	51.0	9.8	R	
153.231	111	42.0	19.9	-	12.1	4.2	24.0	50.6	9.1	S	
153.243	111	40.6	20.4	1.3	16.3	5.8	22.5	47.2	8.2	S	
153.292	111	41.7	17.6	-	15.4	4.0	18.4	50.9	11.3	S	
153.309	III	41.4	20.7	1.2	14.3	4.3	20.7	50.6	10.0	R	
153.321	ïV	43.6	19.5	1.2	14.2	4.0	22.3	52.1	7.4	R	
157.395	iV	44.5	18.6	1.1	15.3	3.0	19.6	53.2	8.9	S	
157.396	IV	43.4	18.6	1.2	12.2	3.4	20.1	53.7	10.6	s	
157.390	III	42.9	20.8	1.3	11.1	4.1	24.0	52.3	8.5	Н	
157.397	IV	41.8	18.5	1.2	12.1	3.7	17.1	55.5	11.6	R	
		41.1	19.4	1.3	13.1	4.2	18.0	53.0	11.7	R	
157.401	IV			1.1	12.9	3.3	21.1	51.3	11.4	R	
157.402	IV	44.6	17.6				16.9	56.7	11.2	R	
157.404	IV	43.1	17.7	1.2	11.8	3.4		55.5	12.4	H	
157.405	IV	41.7	18.7	-	12.5	3.0	16.6				
157.408	IV	42.8	19.9	1.3	12.1	3.6	20.9	54.1	9.4	S	
157.409	IV	42.8	18.7	1.1	14.2	3.7	21.8	48.9	11.5	R	
157.410	IV	41.3	19.6	1.4	14.2	3.0	18.6	52.9	11.2	R	
157.414	IV	44.6	19.0	1.2	13.9	3.7	18.3	53.3	10.8	S	
157.416	111	41.6	20.6	-	12.5	4.2	24.5	50.7	8.2	Н	
157.417	IV	41.4	20.0	1.4	11.8	4.4	18.1	53.8		R	
	IV	42.3	18.7	1.3	11.2	3.6	19.8	53.8		s	
157.419	IV	4 2.3	16.9		12.3	4.5	20.3	52.8		s	

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
PI No.	name	acquisition	origin	or released	group
					
57.424	Ham hung dal ri	Rep. of Korea	Rep. of Korea	1947	IV
57.428	Hoosier	Rep. of Korea	Rep. of Korea	1947	IV
57.429	Huwang bozu	Rep. of Korea	Rep. of Korea	1947	III
57.431	lc san	Rep. of Korea	Rep. of Korea	1947	IV
57.434	Illini	Rep. of Korea	Rep. of Korea	1947	IV
57.435	Il soy	Rep. of Korea	Rep. of Korea	1947	IV
57.436	Kae wan bac huwa	Rep. of Korea	Rep. of Korea	1947	IV
57.437	Kam ro	Rep. of Korea	Rep. of Korea	1947	IV
57.438	Kang won No. 16	Rep. of Korea	Rep. of Korea	1947	IV
57.439	Kap san chai rae	Rep. of Korea	Rep. of Korea	1947	IV
57.441	Kum kang No. 2	Rep. of Korea	Rep. of Korea	1947	IV
57.442	Kum kang No. 1	Rep. of Korea	Rep. of Korea	1947	IV
57.445	Kum kang so ryu	Rep. of Korea	Rep. of Korea	1947	IV
57.446	Kum san	Rep. of Korea	Rep. of Korea	1947	IV
57.447	Kyeong du	Rep. of Korea	Rep. of Korea	1947	IV
57.448	Kyui za an	Rep. of Korea	Rep. of Korea	1947	IV
57.449	Maeng tae	Rep. of Korea	Rep. of Korea	1947	IV
57.450	Man soy	Rep. of Korea	Rep. of Korea	1947	IV
57.452	Mil tae	Rep. of Korea	Rep. of Korea	1947	IV
57.453	Mes ko	Rep. of Korea	Rep. of Korea	1947	IV
57.454	Mi ka do	Rep. of Korea	Rep. of Korea	1947	IV
57.456	Tama tsurunoko	Rep. of Korea	Japan	1947	IV
57.457	Oi al kong No. 5	Rep. of Korea	Rep. of Korea	1947	111
57.458	Oi al kong No. 3	Rep. of Korea	Rep. of Korea	1947	IV
57.459	Oi al kong	Rep. of Korea	Rep. of Korea	1947	IV
57.460	Oi al kong	Rep. of Korea	Rep. of Korea	1947	IV
57.462	Patten	Rep. of Korea	Rep. of Korea	1947	IV
57.468	Ri ae chong du	Rep. of Korea	Rep. of Korea	1947	IV
57.471	Sang du	Rep. of Korea	Rep. of Korea	1947	IV
57.472	Sang go ro	Rep. of Korea	Rep. of Korea	1947	IV
57.474	Sa pyong ga huc je	Rep. of Korea	Rep. of Korea	1947	IV
57.477	Suwon No. 1	Rep. of Korea	Rep. of Korea	1947	IV
57.482	Tetsu saya ao mame	Rep. of Korea	Japan	1947	IV
57.483	U ki chol	Rep. of Korea	Rep. of Korea	1947	IV
57.485	UI san	Rep. of Korea	Rep. of Korea	1947	IV
57.487B	(Well man)	Rep. of Korea	Rep. of Korea	1947	IV
57.490	Yong il	Rep. of Korea	Rep. of Korea	1947	IV
57.491	Yu co ro	Rep. of Korea	Rep. of Korea	1947	Ш
57.492	Yuc u No. 7	Rep. of Korea	Japan	1947	IV
58.765		China	China	1947	IV
59.923B	Casa Grande	Peru	Peru	1947	IV
67.240	No. 59	Turkey	Turkey	1948	111
67.277	Mammoth Yellow	Turkey	Turkey	1948	IV
70.380		Turkey	Turkey	1948	IV
71.427		China	China	1948	IV
71.428		China	China	1948	IV
71.429		China	China	1948	IV
71.431		China	China	1948	IV
71.432		China	China	1948	IV
71.433		China	China	1948	IV
71.434		China	China	1948	IV
71.449	Kariha takiya	Japan	Japan	1948	111
71.450	Kisaya	Japan	Japan	1948	III
71.454	Kurosakigake	Japan	Japan	1948	IV
71.652		Turkey	Turkey	1949	IV

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedce	oat		Other t	raits	
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plan
157.424	IV	D	Р	G	E	Ssp	Br	D	Y	Υ			
157.428	IV	D	Р	G	Ε	Ssp	Br	S	Υ	Bf	Def		
157.429	111	N	Р	G	Ε	N .	Tn	D	Υ	Υ			
157.431	IV	N	Р	G	Ε	Ssp	Tn	D	Υ	Bf			
157.434	IV	D	W	Т	E	Ssp	Br	D	Υ	Br			
57.435	IV	N	Р	Ng	Ε	N .	Br	S	Br	Br		Dab	
57.436	IV	N	Р	Ğ	Ε	Ssp	Br	s	Υ	Υ			
57.437	IV	N	W	G	Ε	N .	Br	S	Υ	Bf			
57.438	IV	D	Р	G	Ε	Ssp	Br	S	Υ	Υ			
57.439	IV	D	Р	G	Ε	Ssp	Br	S	Υ	Bf	Def		
57.441	IV	D	Р	G	Ε	Ssp	Br	D	Υ	Lbf			
57.442	IV	D	Р	G	Ε	N .	Br	S	Υ	Υ	Def		
57.445	īV	D	P	G	E	Ssp	Br	S	Ý	Y			
57.446	īV	D	P	G	E	Ssp	Br	Ī	Y	Y			
57.447	iV	D	P	G	E	Ssp	Br	s	Ý	Bf	Def		
57.448	iV	D	P	G	E	Ssp	Dbr	Ī	Gn	lb	Gnco	t	
157.449	١٧	D	Р	G	Ē	Ssp	Br .	i	Υ	Bf	200	-	
57.450	١٧	D	P	Ğ	Ē	N	Br	s S	Ÿ	Y			
157.452	IV	D	P	G	Ē	Ssp	Br	s	Ÿ	Ý			
157.453	IV	D	P	T	Ē	N	BI	S	Gn	Br	Gnco	t	
157.454	iV	D	Р	Ġ	Ē	Ssp	Br	S	Y	Bf	Def	•	
157.456	IV	D	P	G	E	Ssp	Br	S	Ϋ́	Y	50.		
157.457	111	D	Р	G	E	Ssp	Br	S	Ϋ́	Bf			
157.458	IV	D	P	G	E	Ssp	Br	S	Ϋ́	Y			
157.459	١٧	D	P	G	Ē	Ssp	Br	S	Ϋ́	Ÿ			
157.460	١٧	D	, P	G	E	Ssp	Br	S	Ÿ	Ÿ			
157.462	IV	D	P	G	E	N	BI	S	Gn	, Lbf	Gnco		
157.468	IV	D	w	T	E	Ssp	Br	S	Gn	Gn	dileo		
157.471	IV	D	P	Ġ	E	Ssp	Br	S	Y	Y			
157.472	IV	D	P	G	E	Ssp	Br	D	Ϋ́	Ý			
157.474	iV	D	P	G	E	Ssp	Br	S	Ϋ́	Ý			
157.477	IV	D	P	G	E	Ssp	Br	ı	Ϋ́	Ý			
157.482	IV	D	P	G	E	N	Br	s	Ϋ́	Ý			
	IV	N	P	T	E	Ssp	Br	D	Ϋ́	Br			
157.483	IV IV	N	P	Ġ	E	•	Tn	D	Ϋ́	Bf			
157.485	IV	N	W	G	E	Ssp N	Br	D	Gn	Bf			
157.487B 157.490	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.491	111	N	w	G	E	N N	Tn	S	Ϋ́	Ÿ			
	IV	N	P	T	E	N	BI	В	BI	BI			
157.492	IV	N	P	Ġ	E	N	Br	D	Υ	lb			
158.765 159.923B	IV	D	_	G	E	Ssp	Br	D	Y	Y			
	III	N	Dp W	G	E	N	Dbr	S	Ϋ́	Ý			
167.240 167.277	IV	D	P	T	E	N	Br	S	Ϋ́	Br			
	IV	N	P	Ť	E	Ssp	Br	S	Ϋ́	Bi			
170.380					E	N		D	Ϋ́	Bf			
171.427	IV	N	W	G			Br B-	S	Y	Bf			
171.428	IV	N	P	G	E	N	Br B-				Cabb		
171.429	IV IV	D	W	T	E	N	Br Br	S	BI	Bl	Sabh		
171.431	IV	N	P	G	E	N	Br B-	D	Gn Gn	lb Bf	Gnco		
171.432	IV IV	N	W	G	E	N	Br B-	S	Gn	Bf	Gnco	· L	
171.433	IV	N	W	T	E	N	Br D-	S	BI	Br			
171.434	IV 	N	P	G	E	N	Br T-	S	Y	lb Bt			
171.449	III 	D	P	-	C	N	Tn	S	Y	Bf			
171.450	111	D	P	T	A	N	Tn	S	Y	Br			
171.454	IV	D	P	T	Sa	N	Br	D	ВІ	BI			
171.652	IV	N	W	G	Ε	N	Tn	S	Υ	Lbf			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to Pl 266.807, grown at Urbana, IL

	Flowering	Maturity			Stem term-	Branch-	Shat-	Seed			
Entry	<u>date</u> (mmdd)	date (mmdd)	Lodging (score)	Height (cm)	ination (score)	ing (score)	tering (score)	Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
157.424	727	1014	4.4	76	1.0	3.0	1.0	3.0	3.0	29.4	2.31
157.428	731	1017	3.4	71	1.0	3.0	1.0	2.5	1.0	20.3	2.58
157.429	712	914	3.4	81	3.5	2.5	1.0	2.5	1.5	19.5	2.59
157.431	803	1017	4.2	122	4.0	3.0	1.0	2.3	1.5	19.3	3.29
157.434	729	1014	4.3	86	1.0	3.0	1.0	2.3	2.5	20.3	2.70
157.435	730	1014	4.3	119	4.0	3.0	1.0	2.3	-	9.9	2.81
157.436	725	1015	4.5	109	3.0	3.5	1.0	2.8	2.0	21.5	2.68
157.437	723	1013	4.5	132	4.5	3.5	1.0	2.5	1.0	17.6	3.23
157.438	731	1020	4.0	84	1.5	3.0	1.0	2.5	2.0	21.5	2.39
157.439	730	1017	3.3	74	1.0	3.0	1.0	2.5	1.0	21.1	2.74
157.441	729	1014	3.3	74	1.0	3.0	1.0	2.8	2.0	21.7	2.72
157.442	724	1012	3.5	76	1.0	3.0	1.0	3.0	1.5	29.8	2.27
157.445	801	1025	4.2	76	1.0	3.0	1.0	2.5	2.0	18.7	2.67
157.446	730	1023	4.4	81	1.0	3.0	1.0	2.5	2.0	22.0	2.64
157.447	730	1016	3.7	71	1.0	3.0	1.0	2.5	1.0	21.4	2.55
157.448	728	1018	3.2	84	1.0	3.0	1.0	2.5	1.5	22.4	2.45
157.449	723	929	3.0	64	1.0	3.0	1.0	2.5	1.0	20.3	2.80
157.450	729	1021	4.4	76	1.0	3.0	1.0	2.5	2.0	19.6	2.64
157.452	729	1019	4.4	81	1.0	3.0	1.0	2.5	2.0	20.9	2.72
157.453	728	1013	3.6	84	1.0	3.0	5.0	2.8	2.0	15.5	2.10
157.454	730	1016	3.3	71	1.0	3.0	1.0	2.5	1.0	21.1	2.58
157.456	730	1023	4.3	97	1.0	3.0	1.0	2.5	2.0	20.2	2.65
157.457	725	1001	3.0	66	1.0	3.0	1.0	2.5	1.0	19.1	2.48
157.458	727	1013	3.9	76	1.0	3.0	1.0	2.5	1.0	24.9	3.01
157.459	727	1015	4.5	89	1.0	3.0	1.0	2.5	1.0	25.8	2.70
157.460	728	1020	3.8	71	1.0	3.0	1.0	2.3	2.0	21.0	2.66
157.462	807	1015	3.8	91	1.0	3.0	1.0	2.3	1.0	10.5	2.56
157.468	727	1020	4.2	86	1.0	3.0	1.0	2.5	3.0	17.8	2.50
157.471	731	1022	4.5	86	1.0	3.0	1.0	2.5	1.0	20.8	2.99
157.472	725	1021	4.0	61	1.0	3.0	1.0	2.5	3.5	24.3	2.17
157.474	730	1024	3.6	81	1.0	3.0	1.0	2.3	2.0	21.2	2.48
157.477	802	1026	3.5	81	1.0	3.0	1.0	2.8	2.0	25.8	2.02
157.482	728	1019	3.7	91	1.0	3.0	1.0	3.3	3.0	24.9	2.30
157.483	728	1026	3.3	112	3.0	3.0	1.0	2.0	1.0	22.0	2.45
157.485	802	1016	3.7	109	3.5	3.5	1.0	2.3	1.5	19.8	3.06
157.47B	726	1007	4.3	109	4.0	4.0	1.0	2.8	1.0	18.1	2.87
157.490	730	1024	3.9	79	1.0	3.0	1.0	2.3	2.0	20.7	2.39
157.491	716	919	2.2	86	3.5	3.0	1.0	2.3	2.5	20.5	2.43
157.492	801	1005	4.5	127	5.0	4.0	4.5	2.5	-	7.7	1.84
158.765	727	1014	4.3	107	5.0	4.0	1.0	2.5	1.0	18.6	2.64
159.923B	728	1019	3.9	79	1.0	3.0	1.0	2.5	1.0	20.9	2.58
167.240	714	921	2.8	99	3.5	2.5	1.0	2.5	1.0	19.2	2.35
167.277	801	1014	3.6	81	1.0	3.0	1.0	2.5	3.0	10.9	2.09
170.380	716	1004	3.3	114	4.0	3.0	1.0	2.8	2.0	16.8	2.96
171.427	726	1009	3.5	104	4.0	4.0	3.0	2.5	1.0	17.7	2.72
171.428	803	1016	3.8	91	3.5	3.5	1.0	2.3	1.5	16.0	2.16
171.429	807	1018	4.8	140	1.5	3.5	1.0	2.3	-	9.9	2.21
171.431	727	1017	4.0	109	3.5	3.0	1.0	2.3	1.5	18.9	2.54
171.432	728	1014	4.3	114	4.0	3.0	1.0	2.3	2.0	13.8	2.60
171.433	724	1005	2.6	112	4.0	3.0	1.0	2.5	-	13.0	2.43
171.434	731	1015	3.3	107	4.0	3.5	1.0	2.3	1.0	18.3	3.06
171.449	728	1003	3.8	69	1.0	2.5	1.0	2.5	2.5	14.1	1.22
171.450	724	922	4.0	89	1.0	3.0	1.0	2.3	3.5	11.0	1.65
171.454	716	1001	3.0	56	1.0	2.5	1.0	2.5	-	17.8	1.39
171.652	803	1011	4.3	86	2.5	4.0	1.0	2.0	2.0	8.0	2.08

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed			Oil con		- Disease				
		compos		<u>composition</u>	Pal-			Lino-	Lino-		
	Maturity	Protein		Methionine	mitic	Steric	Oleic	leic	lenic	reac	
ntry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
57.424	IV	44.4	19.0	1.3	11.3	3.2	20.8	53.6	11.2	S	
57.428	IV	42.2	18.9		11.6	3.2	19.1	55.1	11.0	R	
	III	43.9	19.1	1.3	11.9	3.6	22.1	52.2	10.2	s	
57.429	IV	43.4	18.1	1.3	12.5	3.4	18.1	54.5	11.5	Ř	
57.431			18.5	1.2	12.5	5.1	21.7	49.6	11.2	s	
57.434	IV	41.4		-	12.0	3.9	18.0	54.8	11.4	R	
57.435	IV	41.1	18.6	1.3	12.2	3.5 3.5	21.1	53.6	9.6	s	
57.436	IV	42.0	20.5	1.4	13.9	3.5 3.7	23.7	49.4	9.3	s	
57.437	IV	41.7	21.6		14.3	3.5	20.4	51.7	10.2	s	
57.438	IV	43.0	19.2	1.4					10.2	R	
157.439	IV	41.5	19.8	1.4	14.1	3.1	18.7	53.3		Н	
157.441	IV	43.0	19.1	1.3	13.9	2.9	17.8	55.4	10.0		
57.442	IV	43.0	19.9	1.3	13.7	3.4	20.9	50.8	11.1	S	
57.445	IV	43.4	18.2	1.3	14.0	3.5	19.6	52.3	10.7	S	
157.446	IV	43.8	19.6	1.3	11.1	3.1	19.9	56.6	9.4	S	
157.447	IV	41.4	19.0	1.3	12.0	3.2	19.6	54.6	10.7	R	
157.448	IV	41.5	20.5	•	10.8	3.5	21.0	54.3	10.5	R	
157.449	IV	41.0	19.1	1.2	13.2	4.1	18.9	52.3	11.5	R	
157.450	IV	42.9	18.2	1.3	14.8	3.9	19.2	51.7	10.4	S	
157.452	IV	44.4	18.2	1.3	14.2	3.9	21.6	50.3	10.0	S	
157.453	IV	41.9	19.5	-	12.4	4.7	20.2	53.9	8.8	R	
157.454	IV	41.3	19.2	1.2	11.9	3.4	19.9	54.5	10.3	н	
157.456	IV	44.1	18.3	1.2	12.3	3.4	19.7	53.4	11.2	S	
157.457	111	41.0	19.3	1.2	12.9	3.4	20.2	52.0	11.5	R	
157.458	IV	42.8	19.2	1.1	11.8	3.6	20.5	52.9	11.3	н	
157.459	IV	42.7	20.1	1.2	11.0	3.2	21.6	53.6	10.6	R	
157.460	IV	44.4	19.2	1.1	11.9	3.3	19.6	55.5	9.8	S	
157.462	IV	41.7	19.5	-	10.9	3.3	17.0	56.4	12.3	R	
157.468	IV	40.2	20.5	-	15.3	4.7	17.9	49.8	12.4	R	
157.471	īV	43.0	17.5	1.3	14.2	4.6	20.3	51.3	9.6	S	
157.472	iV	44.5	17.9	1.3	11.9	4.7	21.3	52.5	9.6	R	
157.474	IV	43.5	18.3	1.2	15.5	3.1	20.9	52.5	7.9	s	
157.477	IV	45.1	17.5	1.2	14.8	4.6	19.0		10.5	s	
157.482	IV	43.7	18.3	1.3	11.6	4.7	22.3	52.6	8.7	s	
157.483	IV	43.1	19.5	1.2	13.4	3.4	20.7	53.4	9.1		
	IV	44.0	17.6	1.3	10.5	3.6	19.7	53.9	12.3	R	
157.485 157.487B	IV IV	44.9	19.2	1.2	12.1	4.5	20.1	52.6	10.7	H	
157.487B 157.490	IV IV	43.3	18.9	1.3	11.9	3.6	21.7	53.4	9.4	s	
157.490 157.491	III	43.3 43.4	19.3	1.3	12.4	4.2	23.8	51.2	8.5	S	
		43.4 42.8	17.4	-	12.6	4.1	18.8	51.9	12.5	R	
157.492	IV IV	43.2	18.5	1.2	10.9	4.0	23.5	51.8	9.9	s	
158.765	IV IV	40.5	20.0	1.4	11.4	3.2	18.7	55.0	11.6	R	
159.923B		40.8	20.0	1.3	10.7	4.0	22.9	54.3	8.1	s	
167.240	III 137	43.0	17.4	-	12.1	3.8	17.9	54.0	12.1	s	
167.277	IV		21.3	-	12.1	4.2	21.1	53.6	8.5	s	
170.380	IV	41.6		1.2	13.7	3.5	21.6	51.5	9.8	S	_
171.427	IV	43.9	19.1				19.5	52.1	9.8	S	
171.428	IV	43.1	19.1	1.2	15.7	3.0	17.6	54.0	12.4	S	
171.429	IV	42.0	18.7	-	12.4	3.6				S	
171.431	IV	42.3	20.0	-	13.5	3.5	22.5	50.5	10.0		
171.432	IV	40.8	20.0	-	13.3	3.8	21.6	51.6	9.7	S	
171.433	IV	42.6	18.1	-	13.1	3.1	21.4	53.9	8.6	S	-
171.434	IV	43.0	19.1	1.4	11.9	3.3	21.8	53.5	9.5	S	-
171.449	Ш	41.7	19.0	1.3	11.0	4.6	25.5	47.0		S	-
171.450	111	46.3	15.3	-	13.6	3.9	20.2			R	
171.454	IV	42.2	19.2	-	12.0	3.4	21.4			S	-
171.652	IV	43.7	18.0	1.3	11.1	3.7	19.9	54.8	10.4	s	

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
Pl No.	name	acquisition	origin	or released	group
172.901		Turkey	Turkey	1949	IV
173.994	Chomg puk paik	Rep. of Korea	Rep. of Korea	1949	III
173.995	Chomg tan baik	Rep. of Korea	Rep. of Korea	1949	IV
179.826	Peiping	China	China	1949	IV
181.535	reiping	Japan	Japan	1949	111
181.539		Japan	Japan	1949	iv
181.540		Japan	Japan	1949	III
181.542		Japan	Japan	1949	 III
181.549		Japan	Japan	1949	iii
181.550		Japan	Japan	1949	ïV
181.551		Japan	Japan	1949	IV
181.552			Japan	1949	III
181.553		Japan	Japan Japan	1949	;;; ;;;
		Japan	•		111
181.554		Japan	Japan	1949	IV
181.555		Japan	Japan	1949	
181.557	Alicanona	Japan	Japan	1949	IV
187.150	Akagara	Japan	Japan	1950	IV
187.152	Kimusume ibaraki No. 1	Japan	Japan	1950	III
187.153	Omejiro	Japan	Japan	1950	III
189.891	Graine Jaune Unie	France	France	1950	III
189.920	Ito San	France	France	1950	III
189.926	Washington 37563	France	France	1950	IV
189.928	Rouest Garola	France	France	1950	Ш
189.935	Soja 2	France	France	1950	Ш
189.969	Erectus	France	France	1950	111
196.148	Akasaya-1	Japan	Japan	1951	Ш
196.149	Banseihikarikuro	Japan	Japan	1951	Ш
196.152	Gindaizu	Japan	Japan	1951	Ш
196.153	Isikarisiro-1	Japan	Japan	1951	Ш
196.155	Kurosaya	Japan	Japan	1951	IV
196.156	Marukotsubu	Japan	Japan	1951	Ш
196.157	Mitsuishidaizu	Japan	Japan	1951	Ш
196.162	Shirotsurunoko	Japan	Japan	1951	Ш
196.164	Wasekurosengoku	Japan	Japan	1951	111
196.165	Wasetsurunoko	Japan	Japan	1951	HII .
196.167	Baik tae	Rep. of Korea	Rep. of Korea	1951	IV
196.170	Bang kohng	Rep. of Korea	Rep. of Korea	1951	IV
196.171	Chong du	Rep. of Korea	Rep. of Korea	1951	IV
196.172	Huk tae	Rep. of Korea	Rep. of Korea	1951	IV
200.453	Ao ji	Japan	Japan	1952	Ш
200.457	Azuma aki	Japan	Japan	1952	Ш
200.458	Ban echigo	Japan	Japan	1952	Ш
200.460	Ching tao	Japan	China	1952	IV
200.463	Daizu shin No. 2	Japan	Japan	1952	IV
200.470	Hanayome	Japan	Japan	1952	IV
200.471	Hanayome ibaragi No. 1	Japan	Japan	1952	III
200.473	Higo daizu	Japan	Japan	1952	III
200.478	Ichiyo gawari	Japan	Japan	1952	III
200.480	Itate	Japan	Japan	1952	III
200.485	Keburi	Japan	Japan	1952	111
200.495	Kuro daizu	Japan	Japan	1952	iv
200.496	Kurosaya	Japan	Japan	1952	iii
200.499	Matsu ura	Japan	Japan	1952	iii
		Japan	=	1952	iv
200.501	Mikuriya		Japan		

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedc	oat		Other tr	aits
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf Plar
172.901	IV	D	Р	т	E	Ssp	Br	D	Y	Tn		
173.994	Ш	D	W	G	Α	Ssp	Tn	D	Υ	Υ		
173.995	IV	D	P	G	E	Ssp	Br	S	Υ	Υ		
179.826	IV	N	W	Ng	E	N .	Br	S	Br	Br	St	
181.535	Ш	D	Р	Т	E	N	Br	D	Υ	Br		
181.539	īV	D	P	G	E	N	ВІ	S	Lgn	Bf		
181.540	Ш	D	w	T	E	N	Br	S	Y	Br		Cup
181.542	111	D	P	Ġ	Sa	N	Br	S	Y	Y		
181.549	111	D	w	Ť	Sa	N	Tn	S	Ý	Br		Swa
181.550	IV	D	w	Ť	A	Ssp	Br	S	Ÿ	BI		• • • • • • • • • • • • • • • • • • • •
181.551	١٧	D	P	T	Ā	Ssp	Br	S	Ÿ	Br		
181.552	111	D	w	-	Ĉ	Ssp	Tn	Ĭ	Ÿ	Ϋ́		
181.553	111	D	P	Т	E	Ssp	Br	s	Ÿ	Tn		
181.554	111	D	P	T	E	Ssp	Br	S	Ϋ́	Tn		
181.555	IV	D	P	T	A	Ssp	Br	S	Ϋ́	Br		
181.555 181.557			W	, T	Sa	•	Br	S	Ϋ́	BI		
	IV	D		, T		Ssp		S	Y			
187.150	IV	D	P		Sa	N	Tn T-			Br Br		
187.152	III 	D	P		С	N	Tn -	S	Y	Bf		
187.153	III 	D	w	G	Sa	Ssp	Tn	D	Y	Y		
189.891	III 	N	P	G -	E	N	Br	ı	Y	Y		
189.920	III	N	P	T	E	N	Br	D	Υ	Y		
189.926	IV	N	P	T	E	Ssp	Br	D	Υ	Br		
189.928	111	N	Р	T	E	N	Br	S	Y	BI		
189.935	111	N	W	Т	E	N	Br	D	Y	ВІ		
189.969	111	D	Р	Т	E	N	ВІ	S	Gn	Br	Gncot	
196.148	Ш	D	Р	T	E	N ·	ВІ	D	Y	Br		
196.149	111	D	W	Т	E	Ssp	Br	S	ВІ	ВІ		
196.152	111	D	Р	G	E	N	Br	S	Υ	Bf		
196.153	Ш	D	P	Т	E	N	Br	D	Lgn	Br		
196.155	IV	D	Р	G	E	N	ы	S	Lgn	Bf		
196.156	Ш	D	Р	Т	E	N	Br	D	Υ	Br		
196.157	Ш	D	P	Т	Ε	N	Br	D	Υ	Br		
196.162	Ш	D	Р	G	Ε	Ssp	Br	D	Υ	Υ		
196.164	Ш	D	P	Т	Sa	N	ВІ	S	ы	BI	Gnco	t
196.165	111	D	W	G	Ε	Ssp	Br	D	Υ	Υ		
196.167	IV	D	W	G	E	Ssp	Tn	D	Υ	Bf		
196.170	IV	D	Р	Т	Ε	Ssp	Br	D	Υ	Br		
196.171	IV	D	Р	G	Ε	Ssp	Br	1	Gn	Bf	Gnco	t
196.172	IV	D	Р	Т	E	Ssp	Br	1	ы	ВІ		
200.453	Ш	D	W	G	Α	Ssp	Br	1	Gn	Bf		
200.457	Ш	D	Р	G	Α	Ssp	Br	D	Lgn	Bf		
200.458	Ш	D	Р	Т	Α	Ssp	Br	S	Υ	Br		
200.460	IV	D	Р	Т	Α	N	Br	S	Υ	Lbr		
200.463	IV	D	Р	Т	E	Ssp	Br	s	Υ	Br		Cup
200.470	IV	D	Р	-	С	N .	Tn	D	Υ	Υ		•
200.471	III	D	P	_	C	N	Tn	S	Υ	Bf		
200.473	111	D	Р	G	Ā	N	Tn	Ĭ	Y	Bf		
200.478	111	D	w	-	-	G	Br	D	Ÿ	Br		
200.476 200.480	111	D	P		C	N	Tn	D	Ÿ	Bf		
			P	_	c	N	Tn	S	Ÿ	Bf		
200.485	III	D		т				ı	т ВI	BI		Dab
200.495	IV 	N	W	T	E	N Son	Br B-					Dab
200.496	III	D	P	G	A	Ssp	Br T-	D	Lgn	Bf		
200.499	III	D	W	G	E	N	Tn	D	Y	Bf		
200.501	IV	D	W	Т	Sa	Ssp	Br	S	Y	Br		
200.504	IV	D	Р	G	Α	Ssp	Tn	D	Υ	Lbf		

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

	ri- '	N 4-4			Stem	Dun 1	Object	01			
	Flowering	Maturity date	Lodging	∐ aiab±	term- ination	Branch-	Shat- tering	Seed Quality	Mottlin-	Weight	Yield
Entry	<u>date</u> (mmdd)	(mmdd)	(score)	(cm)	(score)	ing (score)	(score)	(score)	Mottling (score)	(cg/sd)	(Mg/ha)
172.901	725	1011	2.7	66	1.0	3.0	1.0	2.3	3.5	18.5	1.92
173.994	720	1002	4.5	76	1.0	3.0	1.0	2.5	2.0	22.0	1.63
173.995	727	1016	4.4	84	1.0	3.0	1.0	2.3	2.0	19.8	2.51
179.826	728	1014	3.3	97	3.0	3.0	1.0	2.3	-	22.8	2.62
181.535	714	918	2.3	53	1.0	3.0	1.0	2.3	2.0	13.6	1.81
181.539	728	1013	3.8	79	1.0	3.0	1.0	2.5	2.0	13.6	1.91
181.540	722	924	3.2	81	1.0	3.0	2.0	2.3	2.5	13.7	1.71
181.542	726	929	1.8	74	1.0	1.5	1.0	2.8	2.0	16.3	1.92
181.549	730	1006	4.2	89	1.0	3.0	3.5	2.3	2.5	10.8	1.46
181.550	728	1009	3.5	81	1.0	3.0	3.0	2.5	1.0	20.5	1.80
181.551	725	1008	4.2	64	1.0	3.0	3.0	2.5	1.0	14.2	1.25
181.552	724	1012	4.0	76	1.0	3.0	3.0	2.3	2.5	17.1	1.62
181.553	720	919	3.8	76	1.0	3.0	1.0	2.5	1.0	16.1	2.20
181.554	722	920	4.0	74	1.0	3.0	1.0	2.8	1.0	15.7	2.28
181.555	729	1013	3.8	86	1.0	3.0	2.5	2.5	1.0	16.7	1.73
181.557	727	1009	3.2	79	1.0	3.0	2.5	2.3	1.0	20.6	1.78
187.150	728	1013	4.0	94	1.0	3.0	3.5	2.5	2.0	16.0	1.76
187.152	724	1002	2.8	66	1.0	2.5	1.0	2.5	2.0	12.9	1.33
187.153	718	918	3.8	69	1.0	2.0	1.0	3.0	1.5	24.0	1.39
189.891	711	916	2.5	84	3.0	3.0	1.0	2.5	1.5	13.5	2.72
189.920	716	927	4.0	84	3.5	3.0	1.0	2.5	1.5	14.9	2.91
189.926	713	1008	3.8	112	4.0	3.0	1.0	2.3	3.0	17.8	2.78
189.928	711	1001	3.0	99	3.0	3.0	1.0	2.5	1.5	19.8	3.29
189.935	711	928	3.5	117	3.5	3.0	1.0	2.0	1.0	15.4	2.90
189.969	724	1004	3.2	74	1.0	3.0	5.0	2.5	1.0	15.5	1.67
196.148	715	922	1.8	46	1.0	3.0	1.0	2.3	2.5	17.5	1.47
196.149	715	926	2.4	53	1.0	3.0	1.0	3.8	-	34.0	1.20
196.152	718	928	2.9	74	1.0	3.0	1.0	3.0	2.0	16.4	2.35
196.153	714	919	2.8	51	1.0	2.5	1.0	2.5	2.0	14.1	1.51
196.155	730	1014	3.6	81	1.0	3.0	1.0	2.5	2.5	13.8	1.93
196.156	716	918	2.4	66	1.0	2.5	1.0	2.8	2.5	15.7	1.86
196.157	721	923	2.8	74	1.0	1.5	1.0	2.5	1.5	14.8	1.61
196.162	717	1006	2.6	66	1.0	3.0	1.0	3.0	2.5	28.2	2.06
196.164	726	1007	2.9	69	1.0	3.0	1.0	2.0		8.6	1.97
196.165	713	930	2.9	48	1.0	2.5	1.0	3.0	2.5	17.7	1.51
196.167	802	1027	3.6	99	1.0	3.0	1.0	2.5	2.0	20.5	1.86
196.170	801	1017	3.5	79	1.0	3.0	1.0	2.3	4.0	22.0	2.09
196.171	803	1020	3.9	89	1.0	3.0	1.0	2.5	2.0	21.0	2.00
196.172	727	1014	3.9	71	1.0	3.0	3.0	2.5	•	19.8	2.22
200.453	721	917	4.0	71	1.0	3.0	5.0	2.8	2.0	16.6	1.59
200.457	719	924	2.7	74	1.0	2.0	5.0	2.8	1.0	21.3	1.66
200.458	728	929	4.3	76	1.0	3.0	1.0	2.5	2.0	14.6	1.84
200.460	730	1013	3.8	86	1.0	3.0	5.0	2.5	1.0	17.8	1.70
200.463	728	1009	4.0	81	1.0	3.0	1.0	2.3	2.0	17.0	1.96
200.470	725	1011	4.3	64	1.0	3.0	4.0	2.5	3.0	16.1	0.67
200.471	724	1002	3.1	64	1.0	2.5	1.0	2.3	2.5	13.6	1.19
200.473	720	919	3.8	71	1.0	3.0	1.0	2.5	2.0	13.3	1.47
200.478	723	922	3.0	36	1.0	3.0	1.0	2.3	2.0	11.3	0.65
200.480	721	929	3.4	53	1.0	2.5	1.0	2.3	2.0	17.6	1.09
200.485	725	1002	3.1	64	1.0	2.5	1.0	2.0	2.0	13.9	1.15
200.495	730	1014	4.0	122	4.0	3.0	1.0	2.5	-	13.4	2.86
200.496	736 726	928	3.7	79	1.0	3.0	1.0	2.0	2.5	11.0	1.90
200.499	720 722	923	3. <i>7</i> 3.7	75 81	1.0	3.0 3.0	1.0	2.0	2.6	11.7	
200.499	804	1006	3.7 4.3	89	1.0	3.0 3.0	5.0	2.5	3.0	11.7	2.02 1.36
							2011				

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to Pl 266.807, grown at Urbana, IL

		Seed		Protein		nposition				٠.	
		compos		composition	Pal-		-	Lino-	Lino-		ease
	Maturity	Protein		Methionine	mitic	Steric	Oleic	leic	lenic		ction
Entry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PK	Ру
172.901	IV	44.6	18.1	1.3	12.6	2.9	20.1	53.6	10.9	R	
173.994	III	44.3	18.4	1.1	12.9	5.0	24.2	47.3	10.7	s	
173.995	IV	43.7	19.2	1.2	12.4	3.5	19.6	54.9	9.6	s	
	IV	40.2	21.4	-	13.9	3.2	19.5	54.0	9.4	S	
179.826		41.5	19.5	1.2	12.9	3.6	21.7	52.9	9.0	s	
181.535	III	45.0	17.5	1.3	11.8	3.0	22.1	53.5	9.6	R	
181.539	IV 		17.0	1.2	13.0	4.0	23.4	50.5	9.1	s	
181.540	III	45.6	19.9	1.2	10.9	3.9	22.3	53.3	9.6	R	
81.542	III	41.8			11.2	3.8	24.1	50.7	10.2	R	
181.549	III	41.9	17.4	1.2				52.5	10.2	H	
181.550	IV	45.2	17.5	1.2	13.2	3.4	20.2				
181.551	IV	42.2	19.5	1.2	12.9	4.1	19.8	52.3	10.9	R	
181.552	Ш	41.3	19.5	1.2	10.8	4.5	20.0	54.0	10.6	S	
181.553	Ш	41.8	18.1	1.2	12.8	3.6	21.1	52.2	10.4	R	
181.554	Ш	42.9	19.8	1.1	12.7	3.4	20.6	54.5	8.8	R	
181.555	IV	40.7	18.6	1.3	14.2	3.1	17.4	54.8	10.6	Н	
181.557	IV	45.1	17.3	1.2	14.0	3.8	19.0	52.8	10.4	Н	
187.150	IV	42.0	18.9	1.3	13.8	3.7	21.9	51.7	8.9	н	
187.152	III	40.2	19.7	1.2	11.8	4.0	23.6	51.1	9.5	s	
187.153	III	43.5	18.9	1.2	13.9	3.9	20.8	51.3	10.1	Н	
189.891	111	42.4	20.6	1.3	13.1	4.0	21.0	52.6	9.4	s	
189.920	III	43.6	19.5	1.2	12.7	4.0	20.5	52.3	10.5	s	
189.926	IV	42.7	20.8	1.2	15.0	3.5	18.6	53.3	9.6	S	
		43.9	19.5	1.3	11.6	3.5	20.9	54.5	9.5	S	
189.928	III		20.4	1.2	14.6	4.6	20.6	50.9	9.3	s	
189.935	III 	42.4			14.6	4.7	18.9	52.7	9.0	R	
189.969	III 	44.3	19.9	-			19.4	52.7	10.6	R	
196.148	Ш	41.6	19.2	1.3	14.1	3.7			8.5	R	
196.149	Ш	42.9	17.7	-	14.4	4.5	23.5	49.2			
196.152	Ш	42.9	19.0	1.2	13.0	3.8	23.4	49.7	10.1	R	
196.153	Ш	42.7	20.0	1.2	13.7	2.8	22.1	52.8	8.5	S	
196.155	IV	44.6	17.4	1.2	13.2	3.6	21.0	50.5	11.7	R	
196.156	Ш	43.3	19.6	1.3	12.9	3.9	22.4	49.9	10.9	R	
196.157	Ш	43.1	19.9	1.3	14.4	4.4	21.1	50.9	9.2	R	
196.162	Ш	41.2	20.4	1.3	13.4	4.5	21.5	51.2	9.5	Н	
196.164	Ш	40.6	19.6	-	12.8	3.8	21.1	53.3	9.0	S	
196.165	Ш	42.7	19.5	1.2	12.6	4.8	24.4	47.7	10.5	S	
196.167	IV	42.6	18.4	1.2	13.6	3.6	16.3	53.8	12.7	н	
196.170	IV	44.1	18.1	•	14.7	2.8	18.0	55.0	9.5	S	
196.171	١٧	43.6	18.7	-	13.1	3.7	19.4	54.8	9.1	S	
196.171	iv	44.1	18.7	-	13.3	4.0	18.3	51.9	12.4	s	
200.453	III	43.4	18.2	1.2	12.2	4.0	26.5	48.4	8.8	S	
200. 45 3 200.457		45.0	19.2	1.2	12.7	3.9	25.2	50.6	7.6	R	
200.457	!!!	40.9	19.0	1.3	10.1	5.2	26.0	49.6	9.1	S	
200.460	IV	39.8	19.1	1.4	11.2	3.2	20.9	55.3	9.4	R	
		45.5	17.4	1.2	11.5	3.5	24.9	52.2	7.9	s	
200.463	IV		18.3	1.2	9.8	4.7	23.6	51.9	10.1	s	
200.470	IV 	42.9			10.8	4.7	27.1	47.9	9.6	s	
200.471	III 	41.1	19.2	1.2			24.6	49.3	11.0	Н	
200.473	III	42.1	18.4	1.3	10.8	4.3			10.5	R	
200.478	Ш	41.7	18.8	1.3	10.9	4.0	20.8	53.8			
200.480	III	44.9	17.3	1.2	10.6	4.2	25.7	50.6	8.9	S	
200.485	Ш	40.7	19.0	1.3	9.9	3.8	25.8	51.3	9.2	S	
200.495	IV	42.1	18.1	-	12.1	3.6	20.6	53.8	9.9	S	
200.496	III	41.8	18.5	1.2	12.6	4.3	25.1	47.5	10.6	R	
200.499	III	45.0	15.7	1.1	14.2	4.1	21.2	49.5	11.1	R	
200.501	IV	42.2	17.5	1.2	12.2	4.4	24.7	48.2	10.5	Н	
200.504	١٧	41.6	17.0	1.3	12.7	4.5	23.4	48.2	11.2	н	

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

Accession		Country of	Country of	Year introduced	Matur- ity	
PI No.	name	acquisition	origin	or released	group	
200.517	Onihadaka No. 6	Japan	Japan	1952	IV	
200.518	Onihadaka No. 7	Japan	Japan	1952	IV	
200.519	Onihadaka saki No. 1	Japan	Japan	1952	IV	
200.522	Rikuu No. 7	Japan	Japan	1952	IV	
200.533	Shirome	Japan	Japan	1952	Ш	
200.535	Shirosaya	Japan	Japan	1952	Ш	
200.536	Shirosota	Japan	Japan	1952	IV	
200.541	Takiya jun No. 1	Japan	Japan	1952	IV	
200.545	Thizuka ibaragi No. 1	Japan	Japan	1952	IV	
200.548	Wase kin	Japan	Japan	1952	Ш	
205.086	Kimusume sai No. 1	Israel	Japan	1953	Ш	
205.087	Narato hadaka	Israel	Japan	1953	Ш	
205.088	Norin No. 1	Israel	Japan	1953	IV	
205.089	Norin No. 2	Israel	Japan	1953	IV	
209.331		Japan	Japan	1953	Ш	
209.332		Japan	Japan	1953	IV	
209.334		Japan	Japan	1953	Ш	
209.335		Japan	Japan	1953	IV	
219.782	Azeminori	Japan	Japan	1954	IV	
219.783	Daruma masari	Japan	Japan	1954	IV	
219.784	Katazaya	Japan	Japan	1954	Ш	
219.787	Ohwu No. 13	Japan	Japan	1954	IV	
224.271	Norin No. 3	Japan	Japan	1955	IV	
224.272	Ohdate No. 1	Japan	Japan	1955	Ш	
224.275	Tamamusume	Japan	Japan	1955	Ш	
226.588	Tochigi No. 2	Japan	Japan	1955	Ш	
226.589	Tochigi No. 3	Japan	Japan	1955	Ш	
226.590	Tochigi kimusume No. 1	Japan	Japan	1955	Ш	
226.591	Shin mejiro	Japan	Japan	1955	IV	
227.212	Fuji No. 4	Japan	Japan	1955	Ш	
227.218	Natsudaizu No. 1	Japan	Japan	1955	Ш	
227.320	Daiishihienuki	Japan	Japan	1955	IV	
227.328	Manchikin	Japan	Japan	1955	Ш	
227.560	Nukanai daizu	Japan	Japan	1955	Ш	
227.563	Shizunai daizu	Japan	Japan	1955	Ш	
227.566	Yoshioka tairiu	Japan	Japan	1955	Ш	
227.685	Shiko anola	Japan	Japan	1955	Ш	
227.686		Japan	Japan	1955	III	
229.312	Akita	Japan	Japan	1955	IV 	
229.313	Akita ani	Japan	Japan	1955	IV	
229.314	Ani	Japan	Japan	1955	IV 	
229.316	Buko mame	Japan	Japan	1955	IV 	
229.317	Daruma No. 2	Japan	Japan	1955	IV 	
229.319	Dekisugi No. 1	Japan	Japan	1955	IV 	
229.324	Itachi	Japan	Japan	1955	111	
229.325	Iwate No. 1	Japan	Japan	1955	IV	
229.326	Iwate No. 2	Japan	Japan	1955	IV	
229.327	lwate yagi No. 1	Japan	Japan	1955	IV	
229.333	Kimusume No. 77	Japan	Japan	1955	Ш	
229.334	Kinnari No. 1	Japan	Japan	1955	IV	
229.336	Kimusume	Japan	Japan	1955	Ш	
229.340	Nadeshiko No. 1	Japan	Japan	1955	IV	
229.341	Nooki No. 1	Japan	Japan	1955	IV	
229.342	Nooki shirohana	Japan	Japan	1955	IV	
229.343	Nonaka No. 1	Japan	Japan	1955	IV	

Table 2.2 Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedce	oat		Other t	raits	
	rity	Stem	Flower				Pod			Hilum			
Entry	group	trm.	color	Color	Form	Density	color	Luster	Color	color	Seed	Leaf	Plan
200.517	IV	D	Р	Т	Sa	Ssp	Br	s	Υ	Br			
200.518	ĬV	D	P	T	Sa	Ssp	Br	S	Y	Br			
200.519	iV	D	P	Ť	A	Sp	Br	D	Ý	Lbr			
200.522	iV	D	P	Lt	Sa	Ssp	Br	S	Y	Br			
200.533	III	D	P	-	C	N	Tn	S	Y	Bf			
200.535	III	D	W	G	A	Ssp	Tn	D	Y	Υ			
200.536	īV	D	Р	T	A	N	Br	S	Y	Tn			
200.541	IV	D	Р	G	Α	Ssp	Br	S	Υ	Lbf			
200.545	IV	D	Р	Т	Sa	Ssp	Br	S	Υ	Br			
200.548	iii	D	W	G	Sa	N	Br	1	Gn	Bf			
205.086	III	D	Р	-	С	N	Tn	1	Υ	Bf			
205.087	III	D	Р	-	-	G	Br	1	Υ	Br			
205.088	iV	D	w	Т	Α	Ssp	Br	S	Y	Br			
205.089	iV	D	W	Ť	A	Ssp	Br	S	Ý	BI			
209.331	111	N	w	Lt	Sa	N	BI	s	Br	Br	Gnco	t	
209.332	IV	N	P	T	E	N	BI	S	BI	BI	Gnco		
209.334	III	D	P	Lt	E	N	BI	S	Br	Br	0	Dat)
209.335	IV	D	Р	T.	E	N	Br	S	Gn	BI	Gnco		-
219.782	١٧	D	Р	G	Sa	Ssp	Br	S	Y	Bf	G 1100	•	
219.783	IV	D	w	T	A	Ssp	Br	S	Ÿ	Br			
219.784	III	D	P		Ĉ	Sp	Tn	S	Ϋ́	Lbf			
219.787	IV	D	P	Т	Ā	N	Br	S	Ÿ	Br			
224.271	IV	D	P	Ť	Â	Ssp	Br	S	Ÿ	Br			
224.272	III	D	Р	Ť	Â	Ssp	Br	Ī	Ÿ	Br			
224.275	!!!	D	w	-	Ĉ	Ssp	Tn	s	Ÿ	Y			
22 4 .278 226.588	III	D	w	G	A	Ssp	Tn	D	Ÿ	Ý			
226.589	 III	D	w	G	Â	N	Br	D	Gn	Bf			
226.589 226.590	III	D	P	-	Ĉ	N	Tn	S	Y	Bf			
226.590 226.591	IV	D	P	G	A	Ssp	Br	D	Ϋ́	Ϋ́			
227.212	111	D	P		Ĉ	N	Br	S	Ϋ́	Br			
227.212 227.218	III	D	W	T	Sa	Ssp	Tn	D	Ϋ́	BI			
227.218 227.320	IV	D	P	Ť	E	Ssp	Dbr	S	Gn	BI	Gnco		
227.320 227.328	III	N	W	Ġ	E	Sdn	Br	S	Y	Lbf	Gilco		
227.526 227.560		D	P	T	E	N	Br	D	Ϋ́	Br			
		D	P	Ť	E	Ssp	Dbr	D	Ϋ́	Br			
227.563 227.566	 	D	P	Ť	E	Ssp N	Br	D	Gn	BI			
227.566 227.685	III	D	W	Ť	Sa	N	Tn	D	Y	Br			
227.685 227.686	 	D	W	Ġ	Sa	N	Br	D	Y	Bf			
227.080 229.312	IV	D	P	G	A	Ssp	Tn	S	Ϋ́	Y			
229.312 229.313	IV IV	D	P	T	A	Ssp	Br	S	Y	Br			
229.313 229.314	IV IV	D	P	Ť	A	Ssp	Br	S	t Lgn	Br			
229.314 229.316	IV IV	D	W	Ť	A	N N	Br	D	Y	Tn			
229.316 229.317	IV IV	D	VV P	Ť	E	N	Br	S	Y	Br			
229.317 229.319	IV IV	D	P	Ť	A	Ssp	Br	S	Y	Br			
229.319 229.324	III	D	W	†	Ē	N Ssb	Tn	D	Y	Br			
				Ť				S					
229.325	IV	D	P	G	A	Ssp	Br Br		Y Y	Br Bf			
229.326	IV	D	P		E	Ssp	Br B-	ı					
229.327	IV 	D	P	Т	A	Ssp	Br T	S	Y	Br Br			
229.333	III	D	P	-	С	N	Tn -	S	Y	Bf			
229.334	IV 	D	P	Lt	A	Ssp	Tn -	S	Y	Br			
229.336	III	D	Р	-	С	N	Tn	S	Y	Bf			
229.340	IV	D	W	T	E	Ssp	Br	D	Y	Br			
229.341	IV	D	Р	Т	Α	Ssp	Br	S	Υ	Br			
229.342	IV	D	W	Т	Α	Ssp	Br	S	Υ	Br		Cu	p
229.343	IV	D	W	Т	Α	N	Br	- 1	Υ	Br			

Table 3.2

Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

					Stem						-
	Flowering	Maturity			term-	Branch-	Shat-	Seed			
	date	date	Lodging	Height	ination	ing	tering	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	(score)	(score)	(cg/sd)	(Mg/ha)
200.517	802	1009	3.9	81	1.0	3.0	3.5	2.5	3.5	11.6	1.67
200.517	805	1013	4.3	91	1.0	3.0	3.0	2.3	3.5	11.7	2.00
200.519	729	1013	3.8	81	1.0	3.0	3.5	2.5	1.0	13.9	1.50
200.522	804	1011	3.9	79	1.0	3.0	2.5	2.5	3.5	11.1	1.98
200.533	726	1006	3.2	66	1.0	2.5	2.0	2.5	2.0	13.6	1.22
200.535	720	930	4.0	69	1.0	3.0	3.0	2.8	2.0	21.4	1.53
200.536	730	1017	3.8	89	1.0	3.0	5.0	2.3	1.0	17.5	1.86
200.541	729	1010	3.6	86	1.0	3.0	5.0	2.0	1.0	17.5	1.94
200.545	803	1013	3.9	81	1.0	3.0	3.0	2.3	3.0	11.8	1.90
200.548	719	917	3.3	64	1.0	3.0	5.0	2.8	2.0	13.7	1.45
205.086	720	923	3.0	61	1.0	2.5	1.0	2.8	2.5	13.3	0.98
205.087	715	917	1.5	30	1.0	3.0	5.0	3.3	2.5	13.7	0.59
205.088	730	1006	4.0	79	1.5	3.0	5.0	2.5	3.0	11.9	1.53
205.089	727	1009	3.2	79	1.0	3.0	5.0	2.5	1.0	19.5	1.63
209.331	710	929	2.5	86	4.0	3.0	1.0	2.8	-	9.2	2.21
209.332	802	1007	4.0	107	4.5	4.0	1.0	1.8	-	6.1	2.10
209.334	727	1003	3.8	84	1.0	2.5	1.0	2.8	-	12.1	1.53
209.335	731	1016	2.9	81	1.0	3.0	1.0	2.5	3.0	11.4	1.86
219.782	729	1018	3.7	84	1.0	3.0	1.0	2.5	1.0	15.6	2.58
219.783	727	1009	3.4	76	1.0	3.0	5.0	2.5	2.0	17.5	1.23
219.784	723	927	2.1	53	1.0	2.5	1.0	2.5	1.5	13.6	1.17
219.787	729	1013	4.3	89	1.0	3.0	5.0	2.3	1.0	16.8	1.40
224.271	725	1010	4.4	74	1.0	3.0	5.0	2.5	1.0	15.3	1.23
224.272	720	926	3.7	81	1.0	3.0	5.0	2.5	1.0	19.1	1.88
224.275	723	1004	2.0	43	1.0	3.0	1.0	2.5	2.5	16.9	0.95
226.588	721	1003	3.8	71	1.0	3.0	5.0	2.8	2.0	22.6	1.43
226.589	725	1005	3.2	66	1.0	2.5	3.5	2.0	2.0	21.6	1.96
226.590	721	923	3.5	61	1.0	2.5	1.0	2.5	2.0	13.8	1.16
226.591	730	1014	3.8	81	1.0	3.0	5.0	2.3	1.0	16.8	0.91
227.212	722	918	3.8	58	1.0	2.5	5.0	2.5	2.5	12.5	1.08
227.218	724	926	4.0	81	1.0	3.0	1.0	2.5	3.0	17.5	1.38
227.320	808	1024	4.3	117	1.5	3.0	2.0	2.8	2.5	16.4	1.45
227.328	714	928	3.2	94	3.0	3.0	1.0	2.8	2.5	19.4	3.09
227.560	719	1005	3.3	61	1.0	2.5	1.0	2.5	2.5	17.8	1.89
227.563	716	929	2.4	53	1.0	2.5	1.0	2.3	2.0	17.8	1.84
227.566	712	930	1.5	38	1.0	2.5	1.0	2.5	1.0	21.1	1.37
227.685	730	1006	3.4	86	1.0	3.0	1.0	2.3	3.0	11.6	2.21
227.686	723	920	4.0	74	1.0	3.0	1.0	2.5	1.5	11.6	1.95
229.312	727	1015	4.5	91	1.0	3.0	1.0	2.5	2.0	24.0	1.97
229.313	730	1016	3.9	84	1.0	3.0	5.0	2.5	1.0	17.0	1.41
229.314	803	1019	4.0	99	1.0	3.0	2.0	2.8	1.0	18.4	1.71
229.316	807	1024	3.6	79	1.0	3.0	5.0	2.5	2.5	19.0	1.86
229.317	731	1015	4.2	81	1.0	3.0	5.0	2.5	2.0	18.6	1.26
229.319	731	1019	4.0	91	1.0	3.0	1.0	2.3	1.0	17.5	2.10
229.324	726 720	926	3.9	76	1.0	2.5	4.5	2.8	2.5	18.6	1.53
229.325	730	1019	4.1	97	1.0	3.0	5.0	2.5	1.5	19.1	1.53
229.326	728 720	1024	4.0	79	1.0	3.0	3.0	2.5	1.5	19.1	1.54
229.327	730	1020	3.7	99	1.0	3.0	5.0	2.5	1.0	19.9	2.09
229.333	725	1001	2.8	66	1.0	2.5	1.0	2.3	2.5	13.4	1.20
229.334	729 724	1025	3.3	89	1.0	3.0	2.0	2.5	2.0	26.4	2.08
229.336	724	928	2.8	61	1.0	2.0	5.0	2.5	2.5	14.1	0.97
229.340	728	1021	3.7	97	1.0	3.0	3.5	2.5	2.0	19.2	2.60
229.341	730	1016	3.8	97	1.0	3.0	5.0	2.5	1.0	19.3	1.64
229.342	803	1018	3.6	91	1.0	3.0	5.0	2.5	1.0	19.0	2.11
229.343	728	1021	3.0	81	1.0	2.0	5.0	2.8	1.0	28.2	2.05

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed composition			Oil composition						
				composition	Pal-			Lino-	Lino-	Disease	
	Maturity	Proteir		Methionine	mitic	Steric	Oleic	leic	lenic		ction
ntry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
200.517	IV	43.7	17.0	1.2	13.2	3.6	23.7	50.5	8.9	R	
00.518	iV	41.7	17.2	1.3	13.3	3.6	20.8	52.0	10.3	R	
00.519	iV	42.8	18.0	1.3	10.7	3.6	20.6	55.2	9.9	H	
00.513	IV	42.4	16.8	1.3	10.7	4.5	22.5	52.5	9.9	R	
200.533		41.4	19.5	1.3	10.7	4.1	27.0	50.1		S	
200.535	111		18.3						8.7	S	
	III	43.7		1.2	10.9	2.5	25.5	50.8	10.4	_	
00.536	IV	40.0	18.7	1.4	13.4	4.1	23.6	51.1	7.9	Н	
00.541	IV	41.1	18.3	1.3	11.9	4.5	24.4	50.3	8.9	R	
00.545	IV	42.4	16.9	1.3	12.8	3.5	22.4	52.2	9.1	R	
200.548	Ш	44.2	17.3	1.2	12.4	5.3	29.6	43.9	8.9	S	
205.086	111	41.4	19.2	1.3	11.8	5.2	29.7	46.5	6.8	S	
05.087	III	42.3	19.1	1.2	11.2	4.6	27.0	49.8	7.3	R	
05.088	IV	43.0	17.8	1.2	11.5	5.2	27.5	47.7	8.1	R	
05.089	IV	45.6	17.2	1.2	13.4	4.1	22.6	51.8	8.1	R	
09.331	111	41.0	18.5	-	12.1	4.6	21.8	54.4	7.1	Н	
209.332	IV	41.5	17.5	-	13.1	5.3	22.7	50.5	8.4	S	
209.334	Ш	41.9	18.1	-	12.1	4.6	21.2	53.1	9.0	R	
209.335	IV	41.2	18.6	-	11.0	4.5	24.7	50.8	8.9	S	
219.782	IV	41.2	19.9	1.3	15.7	4.3	23.0	50.3	6.7	H	
219.783	iV	40.8	18.2	1.4	11.6	3.8	22.5	53.1	8.9	R	
19.784	III	42.6	18.8	1.4	12.3	3.8	23.8	51.1	9.0	s	
19.78 7 119.787	IV	40.2	19.0	1.3	12.3	4.3	20.8	52.5	10.1	Н	
						4.3 3.7					
24.271	IV 	41.2	20.0	1.4	12.0		23.6	50.5	10.2	R	
24.272	III 	42.9	18.7	1.2	11.6	4.4	21.7	53.3	8.9	R	
224.275	III	42.4	18.1	1.3	10.6	4.4	25.7	50.6	8.8	S	
226.588	III	44.3	17.7	1.2	10.4	4.5	26.6	49.1	9.4	Н	
226.589	Ш	45.0	17.1	1.3	12.7	4.6	25.8	48.5	8.3	S	
226.590	Ш	41.3	19.2	1.2	11.0	4.5	29.0	46.3	9.2	S	
226.591	IV	40.0	16.9	1.3	10.5	4.4	24.0	49.9	11.2	R	
227.212	III	42.2	18.2	1.3	12.2	4.5	27.7	48.3	7.4	S	
227.218	III	46.8	16.8	-	12.5	4.8	28.5	47.1	7.2	Н	
227.320	IV	43.7	17.6	-	12.0	3.7	23.6	50.8	9.9	S	
227.328	III	44.1	20.0	1.2	10.5	3.9	25.5	51.3	8.8	н	
227.560	Ш	42.1	18.8	1.3	12.8	4.5	23.9	51.7	7.2	R	
227.563	III	43.2	18.7	1.3	12.6	4.0	22.4	52.0	8.9	R	
227.566	 III	42.8	19.7	1.3	13.0	4.1	19.8	52.7	10.4	R	
227.685	iii	43.6	18.8	-	11.2	4.4	23.9	51.1	9.5	R	
27.686	111	42.6	17.1	1.2	13.1	3.7	23.4	50.8	8.9	s	
229.312	iv	41.9	19.5	1.4	10.7	3.6	23.4	52.7	9.6	R	
29.312	IV	40.7	19.0	1.2	11.9	4.0	19.7	54.9	9.5	R	
29.313	IV	38.5	18.2	1.3	11.5	3.4	22.6	51.3	11.2	R	
229.314	IV	44.4	16.2	1.3	11.1	3. 4 3.6	19.9	51.3	12.3	R	
29.317	IV	41.9	18.1	1.3	13.8	5.1	23.7	49.6	7.9	R	
29.319	IV 	39.1	18.2	1.4	12.3	4.3	22.8	49.9	10.6	S	
29.324	III	42.6	19.4	1.3	10.7	4.9	27.5	47.3	9.5	Н	
29.325	IV	39.2	19.4	1.5	12.8	3.7	21.3	51.6	10.6	Н	
29.326	IV	41.6	18.5	1.4	10.7	4.0	24.1	51.2	9.9	Н	
229.327	IV	40.4	18.7	1.4	13.1	4.9	26.4	46.0	9.6	R	
229.333	Ш	40.5	19.5	1.4	11.6	5.3	27.6	46.2	9.3	S	
229.334	IV	41.2	18.2	1.3	11.6	4.4	22.5	51.5	10.0	R	
229.336	H	40.9	18.7	1.4	11.9	4.6	29.0	45.3	9.1	S	
229.340	IV	42.2	17.5	1.4	12.0	4.8	23.9	48.8	10.5	s	
229.341	١٧	39.7	18.8	1.2	12.3	4.5	24.6	49.3	9.3	R	
229.342	iV	38.5	19.5	1.5	13.2	4.4	21.0	50.6	10.8	R	
229.342 229.343	IV	38.1	18.5	1.4	12.2	4.5	22.9	49.6	10.8	R	-

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Accession	Country of	Country of	Year introduced	Matur- ity
l No.	name	acquisition	origin	or released	group
29.344	Norin No. 4	Japan	Japan	1955	IV
29.345	Norin No. 5	Japan	Japan	1955	Ш
29.349	Rikuu No. 27	Japan	Japan	1955	IV
29.351	Senrya	Japan	Japan	1955	Ш
29.352	Shakkin nashi	Japan	Japan	1955	IV
29.353	Shirataka	Japan	Japan	1955	IV
29.356	Shiro hachikoku No. 2	Japan	Japan	1955	IV
29.357	Shiro hachikoku	Japan	Japan	1955	IV
29.359	Tohoku No. 1	Japan	Japan	1955	IV
29.360	Tamatsukuri No. 11	Japan	Japan	1955	IV
29.361	Tokichi	Japan	Japan	1955	IV
29.362	Yogetsu No. 1	Japan	Japan	1955	IV
29.738	Hubert 33	Algeria	Algeria	1955	Ш
32.992	Kono kuradaizu	Japan	Japan	1956	Ш
35.335	Mukden	Uruguay	Uruguay	1956	IV
35.339		Uruguay	Uruguay	1956	III
35.340	Seneca (Cornell)	Uruguay	Uruguay	1956	IV
35.344	•	Uruguay	Uruguay	1956	IV
35.346		Uruguay	Uruguay	1956	IV
38.926	Bikuni	Japan	Japan	1957	IV
38.931	Shinhonen	Japan	Japan	1957	III
38.933	Yonryuki	Japan	Japan	1957	iii
43.514	Abura mame	Japan	Japan	1957	IV
43.515	Achumuri	Japan	Japan	1957	iV
43.516	Akanedzumime	Japan	Japan	1957	IV
43.517	Akazuka	Japan	Japan	1957	111
43.518	Ao	Japan	Japan	1957	IV
43.519	Aobishi	Japan	Japan	1957	IV
43.519	Aomame		•		
43.520 43.521	Aotsurunoka	Japan	Japan	1957	IV
43.521	Beni iro daizu	Japan	Japan	1957	IV
43.522 43.523	Cha	Japan	Japan	1957	IV IV
		Japan	Japan	1957	IV
43.524	Dateao	Japan	Japan	1957	IV
43.525	Fukui shiro Gaishi	Japan	Japan	1957	IV
43.527	Goishi Goku aa	Japan	Japan	1957	IV IV
43.528	Goku ao	Japan	Japan	1957	IV
43.529	Goyo	Japan	Japan	1957	IV
43.530	Haiiro	Japan	Japan	1957	IV N/
43.531	Juseita Kariba Askiwa	Japan	Japan	1957	IV
43.532	Kariha takiya	Japan	Japan	1957	III
43.533	Karimame	Japan	Japan	1957	IV
43.535	Kura kake	Japan	Japan	1957	IV
43.536	Madara	Japan	Japan	1957	IV
43.537	Miyako	Japan	Japan	1957	Ш
43.538	Nedzumi meta	Japan	Japan	1957	IV
13.540	Sennari	Japan	Japan	1957	IV
43.541	Shakujo	Japan	Japan	1957	IV
43.543	Shonai wase	Japan	Japan	1957	IV
43.544	Takiya	Japan	Japan	1957	IV
43.545	Tanishi	Japan	Japan	1957	IV
43.546	Tora mame	Japan	Japan	1957	IV
43.548	Uma daizu	Japan	Japan	1957	IV
43.549	Wearucong	Japan	Japan	1957	IV
43.551	Yukino shita	Japan	Japan	1957	IV
6.365	lwate	Japan	Japan	1958	iv

Table 2.2 Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

				<u>Pubes</u>	cence			Seedc	oat		Other tr	aits	
	Matu-	•											
Entry	rity group	Stem trm.	Flower	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
	9 p												
229.344	IV	D	w	G	Sa	N	Br	s	Y	Bf			
229.345	Ш	D	W	G	Α	Ssp	Br	S	Υ	Bf			
229.349	IV	D	Р	Т	Α	N	Br	S	Υ	Br			
229.351	Ш	D	Р	G	Sa	Ssp	Br	S	Υ	Bf			
229.352	IV	D	P	G	Α	Ssp	Br	D	Υ	Bf			
229.353	IV	D	Р	Т	Α	N	Br	S	Υ	Br			
229.356	IV	D	W	G	E	N	Br	D	Υ	Lbf			
229.357	IV	D	Р	Т	Ε	N	Tn	S	Υ	Br		Cup	
229.359	IV	D	Р	Т	Sa	Ssp	Br	S	Υ	Br		-	
229.360	IV	D	Р	G	Α	N .	Br	S	Υ	Bf			
229.361	IV	D	Р	Т	Α	Ssp	Br	S	Υ	Br			
229.362	īV	D	P	Ġ	A	N	Br	D	Y	Bf			
229.738	Ш	N	W	G	E	N	Br	S	Y	Bf			
232.992	iii	D	P	T	Ē	Ssp	BI	Ĭ	BI	BI	Fleck		Sw
235.335	IV	D	P	Ť	Ā	Ssp	Br	S	Lgn	BI			
235.339	111	N	Р	Ť	A	N	Br	S	Υ	BI			
235.340	IV	N	w	Ť	A	Ssp	Br	s	Lgn	Br			
235.344	١٧	N	w	T	Ē	N	Tn	S	Υ Υ	Tn			
235.346	iV	N	w	Ġ	Sa	N	Br	S	Ÿ	Bf			
238.926	IV	D	P	-	C	N	Tn	S	Ý	Bf			
238.931	111	D	w	G	Sa	Ssp	Tn	D	Ÿ	Y.			
238.933		N	w	G	Sa	N	Br	D	Ÿ	Lbf			
	IV	N	W	T	Sa	N	Br	S	Ϋ́	Br			
243.514	IV IV	D	P	T T		Ssp	Br	S	BI	BI	Net		
243.515			P	T T	l E	Ssp N			Rbr	Rbr	Net		
243.516	١٧	D		G		N	Br Tn	S	Rbf				
243.517		D	W		A			D		Rbf	0		
243.518	IV	D	W	G	E	N	Br	D	Gn O	Bf	Gncot		
243.519	IV	D	P	T -	E	Ssp	Br	S	Gn	BI	Gncot	(
243.520	IV	D	P	T	E	Ssp	Br	s	G	BI			
243.521	IV	D	P	T	E	N	Br	Ī	Gn	Br	Gnco		
243.522	IV	D	Р	Т	Α	N	Br	D	Y	Br			
243.523	IV	D	Р	T	E	N	Br	S	Br	Br			
243.524	IV	D	W	Т	Α	Ssp	ВІ	D	Gn	Br			
243.525	IV	D	Р	G	E	N	Tn	1	Υ	Lbf		Cup)
243.527	IV	D	W	Т	E	Ssp	Br	S	ВІ	ВІ			
243.528	IV	D	Р	G	Α	N	Tn	S	Gn	Bf	Gnco		
243.529	IV	D	Р	Т	E	Ssp	Br	D	Gn	Br		5lft	
243.530	IV	D	Р	Т	Ε	N	Br	S	Br	Br			
243.531	IV	D	Р	Т	Ε	Ssp	Br	S	Gn	ВІ	Saddl	е	
243.532	111	D	W	Т	E	N	Dbr	S	Υ	Br			
243.533	IV	N	Р	Т	Ε	N	Br	D	Gn	Gn			
243.535	IV	D	Р	Т	E	Ssp	Br	S	Gn	ВІ	Saddl	е	
243.536	IV	D	Р	Т	Ε	Ssp	Br	S	Br	Br	St		
243.537	Ш	D	W	G	Sa	Ssp	Br	S	Υ	Bf			
243.538	IV	N	Р	Т	Ε	N	Tn	D	ВІ	ВІ			Sw
243.540	IV	D	Р	Т	Α	N	Br	1	Υ	Br			
243.541	IV	D	W	Т	E	N	Tn	D	Υ	Br			Fasc
243.543	IV	D	P	T	A	N	Tn	S	Υ	Br			
243.544	iV	D	P	Ġ	A	Ssp	Br	D	Ý	Bf			
243.545	IV	D	w	T	A	N	Br	S	Rbr	Rbr			
243.546	١٧	D	P	Ť	î	Sp	Br	S	Br	Br	Net		
243.548	IV	D	P	Ġ	' Sa	N	BI	D	Gn	Gn	Gnco	t	
243.549	IV	D	P	G	E	Ssp	Br	D	Y	Y	31100	•	
	IV IV	D	P	T	Sa		Br	D	Gn	BI			
243.551 246.365						Ssp							
746 36h	IV	D	W	G	Ε	N	Br	D	Υ	Υ			

Table 3.2 Agronomic data for USDA soybean germplasm collection in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

Height ination Height ination Ing Lever Leve		
229.344 802 1016 2.9 84 1.0 2.0 1.0 2.5 2.0 229.345 726 1005 3.8 76 1.0 2.0 5.0 2.5 1.0 229.349 730 1019 4.2 109 1.0 3.0 5.0 2.5 1.0 229.351 727 930 2.9 69 1.0 1.5 1.0 2.8 2.0 229.352 729 1012 3.4 81 1.0 3.0 5.0 2.3 1.0 229.356 721 0 3.9 86 1.0 3.0 5.0 2.3 1.0 229.357 808 1024 4.8 94 1.0 3.5 4.0 2.8 2.0 229.367 808 1022 3.9 94 1.0 3.0 3.5 2.3 1.0 229.360 805 1022 3.9 94 1.0 3.0 5.0		Yield
229.345 726 1005 3.8 76 1.0 2.0 5.0 2.5 1.0 229.349 730 1019 4.2 109 1.0 3.0 5.0 2.5 1.0 229.351 727 930 2.9 69 1.0 1.5 1.0 2.8 2.0 229.352 729 1012 3.4 81 1.0 3.0 5.0 2.3 1.0 229.353 731 1024 4.0 86 1.0 3.0 5.0 2.3 1.0 229.356 721 0 3.9 86 1.0 3.0 4.0 2.8 2.0 229.357 808 1024 4.8 94 1.0 3.5 2.3 1.0 229.359 724 1012 3.3 89 1.0 3.0 3.5 2.3 1.0 229.361 731 1018 3.9 99 1.0 3.0 5.0 2.3	(cg/sd)	(Mg/ha)
229.345 726 1005 3.8 76 1.0 2.0 5.0 2.5 1.0 229.349 730 1019 4.2 109 1.0 3.0 5.0 2.5 1.0 229.351 727 930 2.9 69 1.0 1.5 1.0 2.8 2.0 229.352 729 1012 3.4 81 1.0 3.0 5.0 2.3 1.0 229.356 721 0 3.9 86 1.0 3.0 5.0 2.3 1.0 229.356 721 0 3.9 86 1.0 3.0 4.0 2.8 2.0 229.357 808 1024 4.8 94 1.0 3.5 4.0 2.3 2.5 229.359 724 1012 3.3 89 1.0 3.0 3.5 2.3 1.0 229.361 731 1018 3.9 99 1.0 3.0 5.0	20.5	2.06
229.349 730 1019 4.2 109 1.0 3.0 5.0 2.5 1.0 229.351 727 930 2.9 69 1.0 1.5 1.0 2.8 2.0 229.352 729 1012 3.4 81 1.0 3.0 5.0 2.3 1.0 229.353 731 1024 4.0 86 1.0 3.0 5.0 2.3 1.0 229.356 721 0 3.9 86 1.0 3.0 4.0 2.8 2.0 229.357 808 1024 4.8 94 1.0 3.5 4.0 2.3 2.5 229.369 724 1012 3.3 89 1.0 3.0 3.5 2.3 1.0 229.361 731 1018 3.9 94 1.0 3.0 5.0 2.3 1.0 229.362 726 1008 3.8 79 1.0 3.0 5.0	22.0	1.28
229.351 727 930 2.9 69 1.0 1.5 1.0 2.8 2.0 229.352 729 1012 3.4 81 1.0 3.0 5.0 2.3 1.0 229.356 721 0 3.9 86 1.0 3.0 5.0 2.3 1.0 229.357 808 1024 4.8 94 1.0 3.5 4.0 2.8 2.0 229.359 724 1012 3.3 89 1.0 3.5 4.0 2.3 2.5 229.360 805 1022 3.9 94 1.0 3.0 5.0 2.3 1.0 229.361 731 1018 3.9 99 1.0 3.0 5.0 2.3 1.0 229.362 726 1008 3.8 79 1.0 3.0 5.0 2.3 1.0 229.738 717 929 2.9 117 4.0 3.0 1.0	19.1	2.20
229.352 729 1012 3.4 81 1.0 3.0 5.0 2.3 1.0 229.353 731 1024 4.0 86 1.0 3.0 5.0 2.3 1.0 229.356 721 0 3.9 86 1.0 3.0 4.0 2.8 2.0 229.357 808 1024 4.8 94 1.0 3.5 4.0 2.3 2.5 229.359 724 1012 3.3 89 1.0 3.0 3.5 2.3 1.0 229.360 805 1022 3.9 94 1.0 3.0 1.0 2.3 1.5 229.361 731 1018 3.9 99 1.0 3.0 5.0 2.3 1.0 229.738 717 929 2.9 117 4.0 3.0 1.0 2.3 1.0 235.335 727 1008 3.4 79 1.0 3.0 1.0	17.3	1.76
229.353 731 1024 4.0 86 1.0 3.0 5.0 2.3 1.0 229.356 721 0 3.9 86 1.0 3.0 4.0 2.8 2.0 229.357 808 1024 4.8 94 1.0 3.5 4.0 2.3 2.5 229.359 724 1012 3.3 89 1.0 3.0 3.5 2.3 1.0 229.360 805 1022 3.9 94 1.0 3.0 5.0 2.3 1.0 229.361 731 1018 3.9 99 1.0 3.0 5.0 2.3 1.0 229.362 726 1008 3.8 79 1.0 3.0 5.0 2.3 1.0 229.738 717 929 2.9 117 4.0 3.0 1.0 2.3 1.0 235.339 725 929 3.4 104 3.5 3.0 1.0	18.5	1.86
229.356 721 0 3.9 86 1.0 3.0 4.0 2.8 2.0 229.357 808 1024 4.8 94 1.0 3.5 4.0 2.3 2.5 229.369 724 1012 3.3 89 1.0 3.0 3.5 2.3 1.0 229.360 805 1022 3.9 94 1.0 3.0 1.0 2.3 1.5 229.361 731 1018 3.9 99 1.0 3.0 5.0 2.3 1.0 229.362 726 1008 3.8 79 1.0 3.0 5.0 2.3 1.0 229.738 717 929 2.9 117 4.0 3.0 1.0 2.3 1.0 235.335 727 1008 3.4 79 1.0 3.0 1.0 2.3 1.0 235.340 730 1014 3.5 104 3.5 3.0 1.0	20.3	2.14
229.357 808 1024 4.8 94 1.0 3.5 4.0 2.3 2.5 229.359 724 1012 3.3 89 1.0 3.0 3.5 2.3 1.0 229.360 805 1022 3.9 94 1.0 3.0 1.0 2.3 1.5 229.361 731 1018 3.9 99 1.0 3.0 5.0 2.3 1.0 229.738 717 929 2.9 117 4.0 3.0 1.0 2.3 1.0 229.738 717 929 2.9 117 4.0 3.0 1.0 2.3 1.0 235.335 727 1008 3.4 79 1.0 3.0 5.0 3.0 - 235.339 725 929 3.4 104 3.5 3.0 1.0 2.0 1.0 235.340 730 1014 3.5 104 3.5 3.0 1.0 2.0 1.0 235.346 726 1010 4.0 99	25.2	
229.359 724 1012 3.3 89 1.0 3.0 3.5 2.3 1.0 229.360 805 1022 3.9 94 1.0 3.0 1.0 2.3 1.5 229.361 731 1018 3.9 99 1.0 3.0 5.0 2.3 1.0 229.362 726 1008 3.8 79 1.0 3.0 5.0 2.3 1.0 229.738 717 929 2.9 117 4.0 3.0 1.0 2.3 1.0 232.992 716 1005 3.8 51 1.0 3.0 5.0 3.0 - 235.335 727 1008 3.4 79 1.0 3.0 1.0 2.0 1.0 235.340 730 1014 3.5 104 3.5 3.0 1.0 2.3 1.0 235.344 723 1008 3.4 104 4.5 3.0 1.0 2.3 1.0 235.346 726 1010 4.0 99 <td< td=""><td>12.4</td><td>1.82</td></td<>	12.4	1.82
229.360 805 1022 3.9 94 1.0 3.0 1.0 2.3 1.5 229.361 731 1018 3.9 99 1.0 3.0 5.0 2.3 1.0 229.362 726 1008 3.8 79 1.0 3.0 5.0 2.3 1.0 229.738 717 929 2.9 117 4.0 3.0 1.0 2.3 1.0 232.992 716 1005 3.8 51 1.0 3.0 5.0 3.0 - 235.335 727 1008 3.4 79 1.0 3.0 1.0 2.0 1.0 235.339 725 929 3.4 104 3.5 3.0 1.0 2.0 1.0 235.340 730 1014 3.5 104 3.5 3.0 1.0 2.0 1.0 235.344 723 1008 3.4 104 4.5 3.0 1.0 2.3 1.0 238.926 724 1002 3.0 71 <td< td=""><td>18.0</td><td>1.66</td></td<>	18.0	1.66
229.361 731 1018 3.9 99 1.0 3.0 5.0 2.3 1.0 229.362 726 1008 3.8 79 1.0 3.0 5.0 2.3 1.0 229.738 717 929 2.9 117 4.0 3.0 1.0 2.3 1.0 232.992 716 1005 3.8 51 1.0 3.0 5.0 3.0 - 235.335 727 1008 3.4 79 1.0 3.0 1.0 2.0 1.0 235.340 730 1014 3.5 104 3.5 3.0 1.0 2.3 1.0 235.344 723 1008 3.4 104 4.5 3.0 1.0 2.3 1.0 235.346 726 1010 4.0 99 4.0 3.0 1.0 2.5 2.5 238.931 721 1002 3.8 71 1.0 2.5 2.5 2.5 238.933 720 1001 3.4 99 3.5 <td< td=""><td>16.8</td><td>1.90</td></td<>	16.8	1.90
229.362 726 1008 3.8 79 1.0 3.0 5.0 2.3 1.0 229.738 717 929 2.9 117 4.0 3.0 1.0 2.3 1.0 232.992 716 1005 3.8 51 1.0 3.0 5.0 3.0 - 235.335 727 1008 3.4 79 1.0 3.0 1.0 2.0 1.0 235.339 725 929 3.4 104 3.5 3.0 1.0 2.3 1.0 235.340 730 1014 3.5 104 3.5 3.0 1.0 2.3 1.0 235.344 723 1008 3.4 104 4.5 3.0 1.0 2.3 1.0 235.346 726 1010 4.0 99 4.0 3.0 1.0 2.5 2.5 238.931 721 1002 3.8 71 1.0 2.5 2.0 2.5 2.5 238.933 720 1001 3.4 99 <td< td=""><td>18.2</td><td>2.34</td></td<>	18.2	2.34
229.738 717 929 2.9 117 4.0 3.0 1.0 2.3 1.0 232.992 716 1005 3.8 51 1.0 3.0 5.0 3.0 - 235.335 727 1008 3.4 79 1.0 3.0 1.0 2.0 1.0 235.339 725 929 3.4 104 3.5 3.0 1.0 2.3 1.0 235.340 730 1014 3.5 104 3.5 3.0 1.0 2.0 1.0 235.344 723 1008 3.4 104 4.5 3.0 1.0 2.3 1.0 235.346 726 1010 4.0 99 4.0 3.0 1.0 2.5 2.5 238.926 724 1002 3.0 71 1.0 2.5 2.0 2.5 2.5 238.933 720 1001 3.4 99 3.5 3.0 1.0 2.8 2.0 243.514 806 1018 2.8 97 <td< td=""><td>18.1</td><td>2.03</td></td<>	18.1	2.03
232.992 716 1005 3.8 51 1.0 3.0 5.0 3.0 - 235.335 727 1008 3.4 79 1.0 3.0 1.0 2.0 1.0 235.339 725 929 3.4 104 3.5 3.0 1.0 2.3 1.0 235.340 730 1014 3.5 104 3.5 3.0 1.0 2.0 1.0 235.344 723 1008 3.4 104 4.5 3.0 1.0 2.3 1.0 235.346 726 1010 4.0 99 4.0 3.0 1.0 2.5 2.5 238.926 724 1002 3.0 71 1.0 2.5 2.0 2.5 2.5 238.931 721 1002 3.8 71 1.0 2.5 1.0 2.8 2.0 238.933 720 1001 3.4 99 3.5 3.0 1.0 2.8 3.0 243.515 811 1025 4.0 64 <td< td=""><td>14.3</td><td>3.36</td></td<>	14.3	3.36
235.335 727 1008 3.4 79 1.0 3.0 1.0 2.0 1.0 235.339 725 929 3.4 104 3.5 3.0 1.0 2.3 1.0 235.340 730 1014 3.5 104 3.5 3.0 1.0 2.0 1.0 235.344 723 1008 3.4 104 4.5 3.0 1.0 2.3 1.0 235.346 726 1010 4.0 99 4.0 3.0 1.0 2.5 2.5 238.926 724 1002 3.0 71 1.0 2.5 2.0 2.5 2.5 238.931 721 1002 3.8 71 1.0 2.5 1.0 2.8 2.0 238.933 720 1001 3.4 99 3.5 3.0 1.0 2.8 2.0 243.514 806 1018 2.8 97 3.0 2.5 5.0 2.5 2.0 243.515 811 1025 4.0 64 <	7.5	1.55
235.339 725 929 3.4 104 3.5 3.0 1.0 2.3 1.0 235.340 730 1014 3.5 104 3.5 3.0 1.0 2.0 1.0 235.344 723 1008 3.4 104 4.5 3.0 1.0 2.3 1.0 235.346 726 1010 4.0 99 4.0 3.0 1.0 2.5 2.5 238.926 724 1002 3.0 71 1.0 2.5 2.0 2.5 2.5 238.931 721 1002 3.8 71 1.0 2.5 1.0 2.8 2.0 238.933 720 1001 3.4 99 3.5 3.0 1.0 2.8 2.0 243.514 806 1018 2.8 97 3.0 2.5 5.0 2.5 2.0 243.515 811 1025 4.0 64 1.0 3.0 3.0 2.5 - 243.517 720 922 2.8 71	13.1	2.65
235.340 730 1014 3.5 104 3.5 3.0 1.0 2.0 1.0 235.344 723 1008 3.4 104 4.5 3.0 1.0 2.3 1.0 235.346 726 1010 4.0 99 4.0 3.0 1.0 2.5 2.5 238.926 724 1002 3.0 71 1.0 2.5 2.0 2.5 2.5 238.931 721 1002 3.8 71 1.0 2.5 1.0 2.8 2.0 238.933 720 1001 3.4 99 3.5 3.0 1.0 2.8 2.0 243.514 806 1018 2.8 97 3.0 2.5 5.0 2.5 2.0 243.515 811 1025 4.0 64 1.0 3.0 3.0 2.5 - 243.517 720 922 2.8 71 1.0 3.0 1.0	14.3	2.78
235.344 723 1008 3.4 104 4.5 3.0 1.0 2.3 1.0 235.346 726 1010 4.0 99 4.0 3.0 1.0 2.5 2.5 238.926 724 1002 3.0 71 1.0 2.5 2.0 2.5 2.5 238.931 721 1002 3.8 71 1.0 2.5 1.0 2.8 2.0 238.933 720 1001 3.4 99 3.5 3.0 1.0 2.8 2.0 243.514 806 1018 2.8 97 3.0 2.5 5.0 2.5 2.0 243.515 811 1025 4.0 64 1.0 3.0 3.0 2.5 - 243.517 720 922 2.8 71 1.0 3.0 1.0 2.3 - 243.518 726 1003 4.3 69 1.0 3.0 3.5	12.3	2.90
235.346 726 1010 4.0 99 4.0 3.0 1.0 2.5 2.5 238.926 724 1002 3.0 71 1.0 2.5 2.0 2.5 2.5 238.931 721 1002 3.8 71 1.0 2.5 1.0 2.8 2.0 238.933 720 1001 3.4 99 3.5 3.0 1.0 2.8 3.0 243.514 806 1018 2.8 97 3.0 2.5 5.0 2.5 2.0 243.515 811 1025 4.0 64 1.0 3.0 3.0 2.5 - 243.516 731 1014 3.9 71 1.0 3.0 1.0 2.0 - 243.517 720 922 2.8 71 1.0 3.0 1.0 2.3 - 243.518 726 1003 4.3 69 1.0 3.0 3.5	13.8	2.97
238.926 724 1002 3.0 71 1.0 2.5 2.0 2.5 2.5 238.931 721 1002 3.8 71 1.0 2.5 1.0 2.8 2.0 238.933 720 1001 3.4 99 3.5 3.0 1.0 2.8 3.0 243.514 806 1018 2.8 97 3.0 2.5 5.0 2.5 2.0 243.515 811 1025 4.0 64 1.0 3.0 3.0 2.5 - 243.516 731 1014 3.9 71 1.0 3.0 1.0 2.0 - 243.517 720 922 2.8 71 1.0 3.0 1.0 2.3 - 243.518 726 1003 4.3 69 1.0 3.0 3.5 2.5 2.0 243.519 728 1027 3.0 64 1.0 3.0 2.5	14.1	2.30
238.931 721 1002 3.8 71 1.0 2.5 1.0 2.8 2.0 238.933 720 1001 3.4 99 3.5 3.0 1.0 2.8 3.0 243.514 806 1018 2.8 97 3.0 2.5 5.0 2.5 2.0 243.515 811 1025 4.0 64 1.0 3.0 3.0 2.5 - 243.516 731 1014 3.9 71 1.0 3.0 1.0 2.0 - 243.517 720 922 2.8 71 1.0 3.0 1.0 2.3 - 243.518 726 1003 4.3 69 1.0 3.0 3.5 2.5 2.0 243.519 728 1027 3.0 64 1.0 3.0 2.5 4.0 1.5 243.521 810 1030 4.3 109 1.0 3.0 1.0 2.8 1.0 243.522 810 1026 2.5 74 1.0 </td <td>14.0</td> <td>1.38</td>	14.0	1.38
238.933 720 1001 3.4 99 3.5 3.0 1.0 2.8 3.0 243.514 806 1018 2.8 97 3.0 2.5 5.0 2.5 2.0 243.515 811 1025 4.0 64 1.0 3.0 3.0 2.5 - 243.516 731 1014 3.9 71 1.0 3.0 1.0 2.0 - 243.517 720 922 2.8 71 1.0 3.0 1.0 2.3 - 243.518 726 1003 4.3 69 1.0 3.0 3.5 2.5 2.0 243.519 728 1027 3.0 64 1.0 3.0 2.5 4.0 1.5 243.520 728 1019 4.2 81 1.0 3.0 1.0 2.5 4.0 243.521 810 1030 4.3 109 1.0 3.0 1.0 2.8 1.0 243.522 810 1026 2.5 74 1.0 </td <td>22.3</td> <td>1.76</td>	22.3	1.76
243.514 806 1018 2.8 97 3.0 2.5 5.0 2.5 2.0 243.515 811 1025 4.0 64 1.0 3.0 3.0 2.5 - 243.516 731 1014 3.9 71 1.0 3.0 1.0 2.0 - 243.517 720 922 2.8 71 1.0 3.0 1.0 2.3 - 243.518 726 1003 4.3 69 1.0 3.0 3.5 2.5 2.0 243.519 728 1027 3.0 64 1.0 3.0 2.5 4.0 1.5 243.520 728 1019 4.2 81 1.0 3.0 1.0 2.5 4.0 243.521 810 1030 4.3 109 1.0 3.0 1.0 2.8 1.0 243.522 810 1026 2.5 74 1.0 3.0 4.0 2.3 1.0	18.8	2.13
243.515 811 1025 4.0 64 1.0 3.0 3.0 2.5 - 243.516 731 1014 3.9 71 1.0 3.0 1.0 2.0 - 243.517 720 922 2.8 71 1.0 3.0 1.0 2.3 - 243.518 726 1003 4.3 69 1.0 3.0 3.5 2.5 2.0 243.519 728 1027 3.0 64 1.0 3.0 2.5 4.0 1.5 243.520 728 1019 4.2 81 1.0 3.0 1.0 2.5 4.0 243.521 810 1030 4.3 109 1.0 3.0 1.0 2.8 1.0 243.522 810 1026 2.5 74 1.0 3.0 4.0 2.3 1.0		
243.516 731 1014 3.9 71 1.0 3.0 1.0 2.0 - 243.517 720 922 2.8 71 1.0 3.0 1.0 2.3 - 243.518 726 1003 4.3 69 1.0 3.0 3.5 2.5 2.0 243.519 728 1027 3.0 64 1.0 3.0 2.5 4.0 1.5 243.520 728 1019 4.2 81 1.0 3.0 1.0 2.5 4.0 243.521 810 1030 4.3 109 1.0 3.0 1.0 2.8 1.0 243.522 810 1026 2.5 74 1.0 3.0 4.0 2.3 1.0	18.8	1.99
243.517 720 922 2.8 71 1.0 3.0 1.0 2.3 - 243.518 726 1003 4.3 69 1.0 3.0 3.5 2.5 2.0 243.519 728 1027 3.0 64 1.0 3.0 2.5 4.0 1.5 243.520 728 1019 4.2 81 1.0 3.0 1.0 2.5 4.0 243.521 810 1030 4.3 109 1.0 3.0 1.0 2.8 1.0 243.522 810 1026 2.5 74 1.0 3.0 4.0 2.3 1.0	21.2	1.94
243.518 726 1003 4.3 69 1.0 3.0 3.5 2.5 2.0 243.519 728 1027 3.0 64 1.0 3.0 2.5 4.0 1.5 243.520 728 1019 4.2 81 1.0 3.0 1.0 2.5 4.0 243.521 810 1030 4.3 109 1.0 3.0 1.0 2.8 1.0 243.522 810 1026 2.5 74 1.0 3.0 4.0 2.3 1.0	9.0	2.43
243.519 728 1027 3.0 64 1.0 3.0 2.5 4.0 1.5 243.520 728 1019 4.2 81 1.0 3.0 1.0 2.5 4.0 243.521 810 1030 4.3 109 1.0 3.0 1.0 2.8 1.0 243.522 810 1026 2.5 74 1.0 3.0 4.0 2.3 1.0	19.8	2.52
243.520 728 1019 4.2 81 1.0 3.0 1.0 2.5 4.0 243.521 810 1030 4.3 109 1.0 3.0 1.0 2.8 1.0 243.522 810 1026 2.5 74 1.0 3.0 4.0 2.3 1.0	11.7	1.47
243.521 810 1030 4.3 109 1.0 3.0 1.0 2.8 1.0 243.522 810 1026 2.5 74 1.0 3.0 4.0 2.3 1.0	35.4	1.67
243.522 810 1026 2.5 74 1.0 3.0 4.0 2.3 1.0	22.8	2.53
	18.5	1.52
	17.2	1.99
243.523 807 1025 3.2 81 1.0 3.0 1.0 2.0 -	22.5	2.35
243.524 803 1030 3.2 89 1.0 3.0 5.0 2.8 2.0	21.9	2.02
243.525 730 1016 4.3 91 1.0 3.0 1.0 2.5 2.0	13.7	2.33
243.527 721 1016 3.5 81 1.0 3.0 5.0 3.3 -	32.6	2.01
243.528 729 1012 4.5 76 1.0 3.5 3.0 2.3 1.5	14.5	1.98
243.529 728 1020 3.3 71 1.0 2.5 5.0 2.5 2.5	31.2	2.10
243.530 807 1025 3.3 89 1.0 3.0 1.0 2.3 -	22.2	2.54
243.531 807 1028 4.5 69 1.0 3.0 1.0 2.5 -	25.2	1.83
243.532 727 1005 3.3 76 1.5 3.0 5.0 2.0 3.0	12.7	1.41
243.533 809 1028 4.4 117 3.0 3.0 1.0 2.5 1.0	20.6	2.22
243.535 808 1028 4.5 74 1.0 3.0 1.0 3.0 -	26.9	1.95
243,536 727 1012 4.3 61 1.0 3.0 1.0 2.5	24.4	2.05
243.537 728 1006 3.5 71 1.0 2.5 4.0 2.3 3.0	15.7	1.90
243.538 817 1022 4.8 99 3.0 4.0 1.0 2.0 -	10.4	1.98
243.540 806 1027 4.5 114 1.0 3.0 5.0 3.0 2.0	23.2	1.65
243.541 824 1106 3.8 74 1.0 1.0 1.0 2.5 3.0	12.0	1.16
243.543 731 1011 4.5 81 1.0 3.0 1.0 2.5 2.5	12.0	1.74
243.544 728 1010 3.8 86 1.0 3.0 4.5 2.3 1.0	16.6	2.23
243.545 729 1024 3.2 86 1.0 2.5 5.0 2.5 -	29.7	1.95
	26.2	1.26
<u> </u>	10.7	2.48
	27.7	1.68
	33.4	1.84
= 101000		2.66
246.365 731 1024 3.4 79 1.0 3.0 3.5 2.8 2.0	20.8	∠.00

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed		Protein composition	Oil cor						
		composition			Pal-			Lino-	Lino-		ease
	Maturity	Protein		Methionine	mitic	Steric	Oleic	leic	lenic		ction
ntry	group	(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
200 244	15.7	20 E	18.0	4 5	10 F	4.0	0F 1	F0.0	10.1	_	
229.344	IV '''	38.5		1.5	10.5	4.2	25.1	50.0	10.1	R	
229.345	III	41.9	18.6	1.3	11.6	4.7	26.8	48.5	8.4	Н	
229.349	IV 	40.3	18.9	1.3	12.7	4.5	23.2	48.6	11.0	R	
229.351	III	43.1	18.6	1.2	11.3	3.9	27.9	47.6	9.2	R	
29.352	IV	41.0	17.0	1.2	11.5	4.8	23.1	49.9	10.7	R	
29.353	IV	42.5	17.6	1.3	12.5	3.5	21.3	52.3	10.4	R	
29.356	IV	41.0	18.1	1.2	12.0	4.6	24.8	48.5	10.1	R	
29.357	IV	42.0	16.7	1.2	13.5	3.8	21.0	52.3	9.3	S	
29.359	IV	41.6	18.9	1.3	12.1	3.9	23.2	51.3	9.5	R	
29.360	IV	41.1	16.9	1.4	12.1	3.5	23.2	50.1	11.2	R	
29.361	IV	39.8	18.1	1.3	13.7	4.0	22.4	48.4	11.5	R	
29.362	IV	41.5	17.9	1.3	11.4	4.2	22.2	51.7	10.6	R	
29.738	Ш	40.6	20.6	1.5	12.5	4.7	21.3	50.8	10.7	R	
32.992	Ш	41.1	17.5	-	13.8	4.4	16.3	55.2	10.2	R	
35.335	IV	40.5	19.2	1.4	11.6	4.0	20.6	53.2	10.6	S	
235.339	Ш	41.1	19.9	1.4	12.0	4.0	18.8	54.7	10.5	Н	
35.340	IV	39.8	19.0	1.3	12.3	4.4	21.7	50.7	10.9	s	
235.344	IV	40.3	21.5	1.4	11.8	4.2	23.5	49.8	10.7	S	
235.346	IV	41.9	19.9	1.2	12.1	2.7	22.2	51.4	11.5	s	
38.926	IV	40.9	18.7	1.2	10.7	4.2	25.2	50.1	9.9	s	
238.931	Ш	43.6	18.5	1.3	11.2	4.2	21.3	53.3	10.0	R	
238.933	Ш	44.2	18.6	1.3	11.8	5.1	24.7	49.7	8.8	R	
43.514	IV	40.6	17.5	1.4	10.7	4.4	20.1	53.0	11.8	R	
43.515	IV	42.6	17.0	-	14.1	3.9	17.5	52.0	12.5	s	
243.516	ΙV	43.7	16.0	-	12.4	3.7	19.9	52.7	11.4	s	
43.517	III	45.2	15.7	-	11.6	4.0	21.4	51.6	11.5	H	
243.518	IV	43.0	18.1	1.3	9.9	3.7	21.5	53.8	11.1	R	
243.519	١٧	43.8	17.5	-	12.0	3.1	19.6	54.7	10.6		
243.520	IV	41.5	20.0	-	10.6	3.8	23.4	52.1	10.0	R	
243.521	iV	41.6	17.3	1.3	11.5	3.0	16.7	56.0	12.8		
243.522	١٧	40.5	17.6	1.2	12.3	3.7	18.5	52.4	13.1	R	
243.523	IV	40.8	18.2	1.2	12.5	4.5	19.9	49.9	13.1	R	
243.523 243.524	IV	40.8 40.8	17.4	1.3	12.3	3.8	19.4	52.7	11.8	R	
			17.4	1.2	14.4	4.7	26.4	45.8	8.7	R	
243.525	IV	41.9								H	
243.527	IV	39.5	20.4	-	13.4	3.5	19.6	54.5	8.9		
243.528	IV	41.5	17.1	-	11.1	3.3	21.1	52.0	12.4	S	
243.529	IV	40.9	18.3	1.3	12.4	3.4	21.2	52.3	10.7	R	
243.530	IV	40.8	19.3	-	12.9	3.5	18.6	53.4	11.7	R	
243.531	IV	44.5	17.6	-	11.8	4.4	21.3	52.1	10.5	R	
243.532	III	47.8	16.2	1.2	11.9	3.8	25.8	48.8	9.7	R	
243.533	IV N	42.3	18.9	1.2	13.0	3.4	18.3	54.3	11.1	R	
243.535	IV	45.0	17.3	-	11.3	4.1	18.7	54.1	11.8	R	
243.536	IV 	44.1	19.1	-	12.5	4.4	22.4	50.9	9.9	S	
43.537	III	41.8	18.9	1.1	12.3	4.1	24.6	48.5	10.5	S	
43.538	IV 	44.5	15.2	-	11.4	4.7	18.5	51.8	13.7	R	
43.540	IV	40.7	17.1	1.2	11.1	3.4	20.9	52.5	12.1	S	
43.541	IV	42.6	16.6	-	11.9	3.2	18.5	51.5	14.9	R	
43.543	IV	41.4	17.6	-	11.3	3.7	24.2	48.6	12.1	Н	
243.544	IV	41.6	18.0	1.3	10.8	3.3	22.1	50.6	13.2	R	
43.545	IV	37.2	18.1	-	12.0	3.3	21.3	50.4	13.0	R	
243.546	IV	43.1	17.5	-	9.5	4.0	18.9	53.1	14.5	S	
243.548	IV	42.1	17.7	-	10.0	3.5	17.7	55.5	13.3	R	
243.549	IV	43.5	18.1	1.4	11.5	3.9	22.9	51.4	10.3	R	
243.551	iv	41.6	16.2	-	12.5	3.7	21.4	50.1	12.2	S	
246.365	iv	40.4	17.5	1.2	11.3	3.9	20.5	51.3	13.1	H	

Table 1.2 Identification and origin information for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807 $\,$

		Country	Country	Year	Matur- ity group	
	Accession	of	of	introduced		
Pl No.	nam e	acquisition	origin	or released		
246.366	Kinsei No. 1	Japan	Japan	1958	IV	
246.367	Shimoda shitachi	Japan	Japan	1958	IV	
246.368	Tsurunotomoto No. 1	Japan	Japan	1958	IV	
246.369	Ugodaizu	Japan	Japan	1958	IV	
248.402	Manhatan	Yugoslavia	United States	1958	IV	
248.509B		Japan	China	1958	Ш	
248.511	Hakuho No. 1	Japan	Japan	1958	IV	
248.513	Miyagi No. 2	Japan	Japan	1958	IV	
248.514	Nagano No. 2	Japan	Japan	1958	IV	
248.515	lwata No. 2	Japan	Japan	1958	IV	
253.651A		Netherlands	China	1958	IV	
253.651B		Netherlands	China	1958	IV	
253.651C		Netherlands	China	1958	Ш	
253.651D		Netherlands	China	1958	IV	
253.652A		Netherlands	China	1958	IV	
253.652B		Netherlands	China	1958	IV	
253.653A		Netherlands	China	1958	Ш	
253.653B		Netherlands	China	1958	IV	
253.654		Netherlands	China	1958	IV	
253.655		Netherlands	China	1958	IV	
253.656A		Netherlands	China	1958	IV	
253.656B		Netherlands	China	1958	IV	
253.659		Netherlands	China	1958	IV	
253.660A		Netherlands	China	1958	Ш	
253.660B		Netherlands	China	1958	Ш	
253.661A		Netherlands	China	1958	Ш	
253.661B		Netherlands	China	1958	Ш	
253.661C		Netherlands	China	1958	IV	
253.663		Netherlands	China	1958	īV	
253.665A		Netherlands	China	1958	IV	
253.665B		Netherlands	China	1958	IV	
253.665C		Netherlands	China	1958	īV	
253.665D		Netherlands	China	1958	Ш	
253.666A		Netherlands	China	1958	IV	
253.666B		Netherlands	China	1958	IV	
261.466	Higodaizu	Japan	Japan	1959	Ш	
261.467	Saikai No. 3	Japan	Japan	1959	III	
261.468	Saikai No. 6	Japan	Japan	1959	III	
261.473	Shiro kotsubu	Japan	Japan	1959	Ш	
262.181	Shikoku	China	Japan	1959	IV	
264.555	F.A.V. 24-3	Argentina	Argentina	1960	IV	
266.806C		Netherlands	China	1960	II	
266.807D		Netherlands	China	1960	ïV	

Table 2.2
Descriptive data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807

	Matu-			<u>Pubes</u>	cence			Seedo	oat		Other	traits
Entry	rity group	Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf Plant
246.366	IV	D		-	C	C	T		.,			
246.367	IV		P P	T	Sa	Ssp	Tn	S	Y	Br		
		D		G	A	Ssp	Br	D	Y	Y		
246.368	IV	D	P	T	A	N	Br	S	Υ	Br		
246.369	IV	D	P	T	A	Ssp	Br	S	Υ	Br		
248.402	IV 	N	P	G	E	N	Br	S	Υ	lb		
248.509B	III	D	W	G	E	N	Br	S	Υ	Y		
248.511	IV	D	Р	G	E	N	Tn	I .	Υ	Bf		
248.513	IV	D	W	Ţ	A	N	Br	D	Υ	Υ		
248.514	IV	D	W	T	Ε	Ssp	Br	D	Υ	Br		
248.515	IV	D	W	G	Ε	N	Br	D	Υ	Υ		
253.651A	IV	N	P	Lt	Α	N	Br	D	Gn	ВІ		5lft
253.651B	IV	N	P	G	Sa	N	Br	I	Gn	Bf		Dab
253.651C	Ш	N	P	Lt	Ε	Ssp	ВІ	1	BI	ВІ		
253.651D	IV	D	W	T	Ε	N	Br	S	Gn	Br		
253.652A	IV	D	W	T	Ε	Ssp	Br	1	Υ	Br		
253.652B	IV	S	W	G	Ε	N	Br	S	Υ	Bf		
253.653A	III	D	W	G	Ε	N	Dbr	S	Υ	Bf		
253.653B	IV	D	Р	G	Ε	N	Br	S	Υ	Υ		
253.654	IV	N	W	G	Sa	N	Br	S	Υ	Bf		
253.655	IV	N	W	G	Ε	N	Tn	S	Υ	Bf		
253.656A	IV	N	Р	G	Ε	N	Br	S	Gn	Bf		
253.656B	IV	N	Р	Lt	Sa	N	ВІ	D	Br	Br		
253.659	IV	N	W	G	Α	N	Br	D	Υ	Bf		
253.660A	Ш	N	W	G	Ε	Sdn	Br	S	Υ	Bf		
253.660B	Ш	D	W	G	Ε	Ssp	Br	s	Υ	Υ		
253.661A	Ш	N	W	G	Ε	N .	Br	S	Y	Bf		
253.661B	Ш	N	W	Lt	E	N	Br	D	Ÿ	Br		
253.661C	īV	D	W	G	Ē	N	Br	S	Ÿ	Lbf		
253.663	IV	N	W	G	Ē	N	Br	ĺ	Ý	Bf		
253.665A	IV	D	W	Т	Ē	N	Br	s S	Ý	Br		
253.665B	IV	D	W	G	E	N	Br	Ĭ	Ý	Bf		
253.665C	iV	D	P	G	Ē	N	Br	i	Ÿ	Bf		
253.665D	ili	N	W	G	E	N	Br	s	Ÿ	Lbf		
253.666A	IV	N	w	G	Sa	N	Br	ı	Y	Bf		
253.666B	IV	N	P	T	Sa	N	Tn	s S	Y			
261.466	111	D	W	Ť	A	N	Tn	D	r Gn	BI Br		
261.467	III	D	P	G	E	N	Tn					
261.468	III	D	P	T	E			S S	Y	Bf		
261.473	III	D	P	G	E	Ssp	Br B-		Y	Tn Df		
						Ssp	Br D-	S	Y	Bf		
262.181 264 EEE	IV	D	P	G	A	Ssp	Br	S	Y	Lbf		
264.555	IV	N	W	T	A	Ssp	Br —	S	Lgn	BI		
266.806C		D	P	T	E	N	Tn	S	Υ	Br		
266.807D	IV	N	P	G	Ε	N	Br	S	Υ	Bf		

Table 3.2
Agronomic data for USDA soybean germplasm collection in maturity groups
III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

Entry	Flowering date (mmdd)	Maturity date (mmdd)	Lodging (score)	Height (cm)	Stem term- ination (score)	Branch- ing (score)	Shat- tering (score)	Seed Quality (score)	Mottling (score)	Weight (cg/sd)	Yield (Mg/ha)
246.366	731	1024	3.0	89	1.0	4.0	1.0	2.8	2.0	24.3	1.96
246.367	809	1029	4.8	130	1.0	4.0	1.0	2.0	1.0	18.9	2.66
246.368	729	1016	3.5	89	1.0	3.0	5.0	2.5	1.0	18.5	2.16
246.369	730	1017	4.5	89	1.0	3.0	5.0	2.5	1.0	19.6	1.65
248.402	717	1017	2.8	107	3.5	3.0	1.0	2.5	1.0	17.6	3.42
248.509B	714	927	2.5	69	1.0	2.0	1.0	2.8	2.0	20.0	2.60
248.511	808	1101	3.4	107	1.0	3.0	1.0	2.5	1.0	18.8	1.96
248.513	807	1025	3.7	89	1.0	3.0	3.5	2.5	2.0	18.3	2.09
248.514	728	1023	3.2	84	1.0	3.0	1.0	2.5	1.0	32.4	1.84
248.515	731	1025	3.2	76	1.0	3.0	5.0	2.5	2.0	21.5	2.41
253.651A	811	1023	4.5	112	4.5	4.0	2.0	2.3	1.5	15.4	2.43
253.651B	815	1025	4.8	107	5.0	4.0	1.0	2.5	1.0	12.5	2.43
253.651C	730	1001	3.8	147	5.0	4.0	5.0	2.0	-	6.5	1.96
253.651D	801	1022	4.3	104	1.0	3.0	1.0	2.5	2.0	13.8	2.29
253.652A	723	1007	3.3	102	1.0	3.0	1.0	2.8	1.0	19.2	2.78
253.652B	804	1019	3.4	114	2.0	3.0	1.0	2.0	1.0	12.8	2.74
253.653A	713	925	3.1	76	1.5	3.0	1.0	2.5	1.0	14.7	3.00
253.653B	713 727	1014	4.0	81	1.0	3.0	1.0	2.5	2.0	21.5	2.34
253.654	811	1023	4.8	130	5.0	4.0	2.0	2.3	2.0	11.3	1.84
253.655	728	1011	4.8	127	5.0 5.0	3.5	1.0	2.3	2.0	11.4	2.20
253.656A	803	1009	4.8	132	5.0	4.0	1.0	2.8	3.0	8.3	2.03
253.656B	822	1028	3.9	127	5.0	4.0	1.0	2.5	-	9.6	1.63
253.659	809	1023	4.8	152	5.0	3.5	1.0	2.5	3.5	11.5	1.87
253.660A	713	926	3.1	102	4.0	3.0	1.0	2.5	3.0	18.7	2.76
253.660B	715	928	3.0	66	1.0	2.5	1.0	2.8	2.0	19.9	2.52
253.661A	715	926	3.0	94	3.5	3.0	1.0	2.5	1.0	16.8	2.73
253.661B	719	1004	3.1	94	3.5	3.0	1.0	2.3	2.0	12.9	2.62
253.661C	710 720	1005	3.8	91	1.0	3.0	1.0	2.8	2.0	21.8	2.88
253.663	815	1029	4.8	152	5.0	4.0	1.0	2.5	2.0	10.8	1.74
253.665A	726	1011	3.5	104	1.0	3.0	1.0	2.8	1.0	18.3	3.32
253.665B	721	1004	3.5	89	1.0	3.0	1.0	3.0	2.0	21.5	2.86
253.665C	723	1003	3.4	102	1.0	3.0	1.0	2.8	1.0	17.7	2.64
253.665D	714	927	2.8	84	3.0	2.5	1.0	2.8	1.0	19.7	3.21
253.666A	806	1022	4.8	135	5.0	4.0	1.0	2.3	3.5	12.0	2.13
253.666B	804	1013	4.8	114	3.0	4.0	1.0	2.3	2.5	11.8	2.25
261.466	723	923	4.3	86	1.0	3.0	5.0	2.5	2.5	15.0	1.51
261.467	721	919	4.5	81	1.0	3.0	1.0	2.5	1.5	14.1	1.95
261.468	722	926	3.4	74	1.0	3.0	1.0	2.5	1.0	16.1	2.40
261.473	728	1008	2.2	69	1.0	2.5	3.0	2.0	2.0	13.2	2.03
262.181	730	1011	3.8	84	1.0	3.0	4.0	2.5	1.0	16.7	2.10
264.555	731	1014	4.3	107	4.0	3.5	1.0	2.0	1.0	11.9	2.84
266.806C	707		3.4	94				3.0	2.5	15.0	2.11
266.807D	804	1019	3.4	117	3.5	3.0	1.0	2.3	1.0	13.8	2.48

Table 4.2 Seed composition and disease reaction data for USDA soybean germplasm in maturity groups III to IV, FC 01.547 to PI 266.807, grown at Urbana, IL

		Seed composition Protein Oil		Protein composition	Oil cor						
	Maturity group				Pal-			Lino- leic	Lino-	Dis	ease
F				Methionine	mitic	Steric	Oleic		lenic	reaction	
Entry		(%)	(%)	(% protein)	(%)	(%)	(%)	(%)	(%)	PR	Ру
246.366	IV	40.5	18.3	1.2	10.3	3.3	19.5	52.6	14.3	R	
246.367	IV	41.4	18.6	1.2	11.3	4.7	20.2	51.6	12.2	R	
246.368	IV	39.4	18.9	1.3	11.9	3.6	17.7	55.3	11.4	Н	
246.369	IV	40.5	17.7	1.3	10.1	3.5	18.5	54.4	13.6	R	
248.402	IV	41.1	21.5	1.3	10.7	4.4	19.2	54.5	11.2	S	
248.509B	Ш	41.8	19.8	1.2	10.5	4.0	21.4	54.5	9.6	S	
248.511	IV	39.8	18.3	1.2	11.4	2.8	19.2	54.8	11.7	R	
248.513	IV	40.6	17.5	1.2	10.2	3.7	18.8	54.7	12.6	S	
248.514	IV	41.4	19.2	1.2	14.1	3.6	17.0	53.8	11.6		
248.515	iV	40.3	17.4	1.1	10.9	3.8	20.9	50.5	13.9	Н	
253.651A	iv	42.6	18.5	-	11.0	3.6	19.0	55.2	11.2		
253.651B	iv	42.6	19.2	1.2	10.7	3.6	19.1	52.2	14.4	 D	
253.651C	iii	43.2	16.9	-	11.2	3.6 3.9	17.5	52.2 53.5	13.8	R	
253.651D	iv	42.0	18.4	1.2	11.1	3.3	18.7	56.2	10.6	S S	
253.652A	īV	41.5	20.5	1.2	12.4	4.2	23.5	50.2			
253.652B	iv	39.2	20.3	1.3	11.4	3.4	21.0	50.3 53.4	9.5	S	
253.653A	iii	39.6	22.0	1.4	12.1	4.5			10.9	R	
253.653B	 I∨	42.1	19.5	1.2	11.1	4.0	19.5	54.1	9.8	S	
253.654	iv	46.6	17.2	1.1			22.4	51.3	11.1	S	
253.655	iv	44.3	18.8	1.2	11.3	4.0	19.3	54.0	11.4	R	
253.656A	iv	42.8	18.0	-	11.0	3.9	19.2	54.4	11.5	S	
253.656B	iv	46.5	15.4		14.9	4.4	20.9	47.5	12.4		
253.659	IV	44.9	17.6	-	11.5	3.8	16.0	55.3	13.3	R	
253.660A	III	41.1	20.1	1.1	13.5	3.5	20.1	51.4	11.4	Н	
253.660B		41.9		1.3	12.3	3.5	20.2	54.2	9.7	S	
253.661A	 		20.1	1.2	14.2	4.6	19.0	50.8	11.4	S	
253.661B		38.4	22.7	1.5	12.2	4.4	22.4	52.0	9.0		
253.661C	III	45.6	21.0	1.3	12.8	4.3	22.0	51.0	9.8	S	
253.663	IV	42.6	20.8	1.4	12.6	4.4	20.0	52.4	10.5	S	
	IV	46.6	16.5	1.2	12.4	3.5	18.3	52.8	13.1		
253.665A	IV	39.9	21.4	1.3	13.6	4.4	20.6	50.5	11.0	S	
253.665B	IV	41.9	21.7	1.2	13.2	4.2	19.1	53.0	10.5	S	
253.665C	IV 	40.5	20.0	1.2	14.1	4.1	18.3	51.9	11.6	S	
253.665D	III	41.9	20.9	1.2	12.7	4.1	20.9	53.1	9.3	S	
253.666A	IV	47.9	15.7	1.2	12.5	2.8	15.3	56.9	12.5	S	
253.666B	IV 	42.6	18.5	-	11.5	4.2	19.0	53.3	12.0	S	
261.466	III 	43.5	16.2	1.3	12.4	3.6	20.8	51.8	11.4	R	
61.467	III	43.0	18.2	1.3	13.7	3.7	22.6	50.4	9.6	R	
261.468	III 	41.7	19.5	1.2	14.2	3.5	20.4	51.9	10.1	R	
261.473	III	42.1	19.7	1.2	12.5	3.3	18.6	54.7	10.9	Н	
262.181	IV	40.5	18.5	1.2	10.9	3.2	19.2	53.8	13.0	R	
264.555	IV 	40.5	19.4	1.2	11.3	3.6	21.0	52.7	11.5	S	
266.806C	II D.	43.5	20.2	1.3	13.8	3.4	21.4	51.7	9.6	S	
266.807D	IV	41.3	19.9	1.2	11.3	4.0	21.2	53.8	9.7	R	