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United States
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Technical
Bulletin
No. 1844

January 1998

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

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

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

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ABSTRACT

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. 1995. Evaluation of the USDA Soybean Germplasm Collection: Maturity Groups 000–IV (FC 01.547–PI 266.807). U.S. Department of Agriculture Technical Bulletin No. 1844, 178 pp.

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, *Phytophthora 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 = semispars (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	Ib = imperfect black
Br = brown	Rbr = red brown
G = gray	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 yield:

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 = heterogeneous (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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
	Acme	Canada	Canada	1954	00
	Agate	United States	Japan	1937	00
	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
FC 21.340		United States	United States	1932	0
FC 30.683		Canada	Canada	1939	0
FC 30.684		Canada	China	1939	0
FC 30.685	Cha kura kake	Canada	Japan	1939	00
FC 30.687	Kosodiguri Extra Early	Canada	Japan	1939	000
FC 30.689	Selection No. 9	Canada	Canada	1939	00
FC 30.691		Canada	Canada	1939	00
FC 30.692		Canada	China	1939	0
FC 30.694	M202	United States	United States	1939	00
FC 32.033	Brown Derby No. 1	United States	United States	1954	0
FC 32.141	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
132.203		Netherlands	Netherlands	1939	00
132.204		Netherlands	Netherlands	1939	0
132.205		Netherlands	Netherlands	1939	0
132.207		Netherlands	Netherlands	1939	0
132.214		Netherlands	Netherlands	1939	00
132.217		Netherlands	Netherlands	1939	00
151.249	Soja Brun Harif U 486	Belgium	Belgium	1945	00
152.361	Hybrid No. 398-97	Sweden	Sweden	1945	0
152.573		United Kingdom	United Kingdom	1945	00
153.203	U486	Belgium	Belgium	1946	00
153.208	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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat			Other traits		
				Color	Form	Density		Luster	Color	Hilum color	Seed	Leaf	Plant
Acme	00	N	P	G	E	N	Br	S	Y	Y	Saddle		
Agate	00	D	W	T	E	N	Br	S	Y	Rbr			
Capital	0	N	P	T	E	N	Br	D	Y	Tn			
Comet	0	N	P	G	E	N	Br	S	Y	Y			
Crest	00	N	P	G	E	N	Br	S	Y	Y			
Early W. Eyebrow	000	N	P	G	E	N	Br	D	Y	Y			
Flambeau	00	N	P	T	E	N	Br	S	Y	Bl			
Goldsoy	0	N	P	G	E	N	Br	S	Y	Y			
Grant	0	N	W	Lt	E	N	Br	S	Y	Bl			
Hardome	0	N	P	G	E	N	Br	S	Y	G			
Hidatsa	000	D	P	T	E	N	Br	S	Gn	Bl			
Kabott	0	N	P	G	E	N	Br	S	Y	Y			
Mandarin(Ottawa)	0	N	P	G	E	N	Br	D	Y	Y			
Manitoba Brown	00	S	W	T	E	N	Br	S	Rbr	Rbr			
Merit	0	N	W	G	E	N	Br	D	Y	Bf			
Minsoy	0	N	P	T	E	N	Tn	S	Y	Br	Abh	Dab	
Norchief	0	N	P	T	E	N	Br	S	Y	Bl			
Ogemaw	00	D	W	T	E	N	Br	S	Rbr	Rbr			
Pagoda	00	N	P	G	E	N	Br	S	Y	Y			
Pando	000	D	P	T	E	N	Br	S	Gn	Bl			
Poland Yellow	0	N	P	G	E	N	Br	D	Y	Y			
Sioux	000	D	P	T	E	N	Br	S	Gn	Bl			
FC 21.340	0	N	W	T	E	Ssp	Br	D	Bl	Bl			
FC 30.683	0	N	P	T	E	N	Tn	S	Br	Br			
FC 30.684	0	N	P	T	E	N	Tn	D	Y	Tn			
FC 30.685	00	D	W	T	E	N	Br	S	Y	Rbr	Saddle		
FC 30.687	000	D	P	T	E	N	Br	I	Gn	Bl			
FC 30.689	00	D	W	T	E	Ssp	Br	S	Y	Y			
FC 30.691	00	D	W	T	E	N	Br	S	Y	Y			
FC 30.692	0	N	W	T	E	N	Br	D	Br	Br			
FC 30.694	00	N	P	G	E	Ssp	Br	D	Y	Y			
FC 32.033	0	N	P	T	E	N	Br	S	Br	Br	Abh		
FC 32.141	0	N	P	G	E	N	Br	S	Y	Y			
54.855	00	S	W	T	Sa	N	Br	S	Rbr	Rbr			
68.722	0	N	P	T	E	N	Br	D	Y	Bl			
70.242-4	0	N	P	G	E	N	Br	S	Y	Bf			
79.739	0	N	P	G	E	N	Br	S	Y	Y			
89.001	0	N	P	G	E	N	Br	S	Y	Y			
132.203	00	S	W	T	E	N	Br	S	Rbr	Rbr			
132.204	0	N	P	T	E	Ssp	Br	S	Bl	Bl	Fleck		
132.205	0	N	P	T	E	Ssp	Br	S	Bl	Bl	Fleck		
132.207	0	N	P	G	E	N	Br	S	Y	Y			
132.214	00	S	W	T	E	N	Br	S	Rbr	Rbr			
132.217	00	S	W	T	E	N	Br	S	Rbr	Rbr			
151.249	00	S	W	T	E	N	Br	S	Rbr	Rbr			
152.361	0	N	P	T	E	N	Tn	S	Y	Br			
152.573	00	D	W	T	E	N	Br	S	Rbr	Rbr			
153.203	00	S	W	T	Sa	Ssp	Br	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	T	E	N	Br	S	Rbr	Rbr			
153.212	00	S	W	T	E	N	Br	S	Rbr	Rbr			
153.213	0	N	P	T	E	N	Tn	D	Br	Br			
153.216	00	S	W	T	E	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	709	905	2.0	66	2.0	1.0	3.0	3.0	22.3	1.21
Merit	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
Pando	703	827	2.0	48	1.0	1.0	2.5	3.5	17.9	0.68
Poland Yellow	707	912	3.5	76	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	715	923	3.5	74	2.5	2.0	2.0	2.0	28.4	1.65
FC 30.683	713	918	5.0	97	3.5	1.0	3.5	2.0	15.3	1.26
FC 30.684	701	914	3.0	84	3.0	1.0	3.0	3.0	19.7	1.71
FC 30.685	704	907	2.0	48	1.0	1.0	3.0	3.5	31.6	0.83
FC 30.687	704	830	2.5	53	1.0	3.0	3.0	3.5	17.9	0.62
FC 30.689	709	911	1.5	61	1.5	1.0	3.0	3.0	22.7	0.69
FC 30.691	708	913	1.5	58	1.5	1.0	1.5	4.0	25.1	0.54
FC 30.692	708	913	2.5	76	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	3.0	1.0	2.5	3.0	23.8	1.93
132.203	708	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	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>	
		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
Kabott	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	0	19.0	40.3	1.33	48.1	7.7
79.739	0	19.1	44.3	1.03	45.3	7.2
89.001	0	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	0	16.8	45.6	-	47.1	8.1
132.207	0	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	-	44.0	7.6
153.203	00	17.0	45.4	-	51.6	7.6
153.208	00	17.6	44.5	-	41.7	7.4
153.209	0	17.1	41.9	-	45.8	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
153.217	Manitoba Brown	Belgium	Belgium	1946	00
153.218	Brown C	Belgium	United Kingdom	1946	00
153.219	Platter Early Brown	Belgium	Belgium	1946	00
153.221		Belgium	Belgium	1946	00
153.222		Belgium	Switzerland	1946	00
153.223	Ras 20	Belgium	Netherlands	1946	00
153.225		Belgium	Belgium	1946	00
153.230		Belgium	Germany	1946	00
153.233	Ras 89	Belgium	Netherlands	1946	0
153.234		Belgium	Netherlands	1946	00
153.235	Grignon 1	Belgium	France	1946	0
153.237	Grignon 23	Belgium	France	1946	0
153.239	Desme 1	Belgium	Belgium	1946	0
153.240	Rouest 250	Belgium	France	1946	0
153.241	Rouest Yellow	Belgium	France	1946	0
153.242	Weinsoy	Belgium	Belgium	1946	0
153.245	Dieckmann Green-yellow	Belgium	Germany	1946	0
153.246		Belgium	Belgium	1946	0
153.249		Belgium	Belgium	1946	0
153.251		Belgium	Belgium	1946	0
153.252	Kesteley	Belgium	Hungary	1946	00
153.259		Belgium	Belgium	1946	0
153.261		Belgium	Belgium	1946	0
153.262		Belgium	Belgium	1946	0
153.265	Grignon 10	Belgium	France	1946	0
153.270	C.B.	Belgium	Belgium	1946	0
153.272	Villaneuve	Belgium	France	1946	0
153.273	Delitzsch	Belgium	Germany	1946	0
153.275		Belgium	Belgium	1946	0
153.277	U487	Belgium	Belgium	1946	0
153.278	Hsachich	Belgium	France	1946	0
153.281		Belgium	Belgium	1946	0
153.284	Noir de Toulouse	Belgium	France	1946	0
153.286	Tokio Nain Noir	Belgium	France	1946	0
153.293		Belgium	Belgium	1946	000
153.296		Belgium	Belgium	1946	000
153.297		Belgium	Belgium	1946	00
153.299	Dieckmann Green	Belgium	Germany	1946	00
153.300		Belgium	Belgium	1946	0
153.301		Belgium	Belgium	1946	00
153.302		Belgium	Belgium	1946	00
153.303		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
153.314	Kong Fou Tseu	France	France	1946	00
153.317	Onze Novembre	France	France	1946	0
153.318	Sun	France	France	1946	0
153.319	Tohang	France	France	1946	0
153.320	Tokio Jaune d'Aubignun	France	France	1946	0
154.189		Netherlands	Netherlands	1946	0
154.190		Netherlands	Netherlands	1946	00
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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat			Hilum color	Other traits		
				Color	Form	Density		Luster	Color			Seed	Leaf	Plant
153.217	00	S	W	T	Sa	Ssp	Br	S	Rbr	Rbr				
153.218	00	S	W	T	E	N	Br	S	Rbr	Rbr				
153.219	00	S	W	T	E	N	Br	S	Rbr	Rbr				
153.221	00	S	W	T	E	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	T	E	Ssp	Br	S	Rbr	Rbr				
153.233	0	N	P	G	E	N	Br	S	Y	Y				
153.234	00	N	P	G	E	N	Br	S	Y	Y				
153.235	0	N	P	T	E	N	Br	D	Y	Bl				
153.237	0	N	P	T	E	N	Br	D	Y	Br				
153.239	0	N	P	T	E	N	Tn	S	Y	Br	Abh		Dab	
153.240	0	N	P	G	E	N	Br	D	Y	Bf	Abh			
153.241	0	N	P	T	E	N	Br	I	Y	Br				
153.242	0	N	P	T	E	N	Tn	S	Y	Br	Abh		Dab	
153.245	0	N	P	T	E	N	Tn	S	Lg	G				
153.246	0	N	P	G	E	N	Br	S	Y	Y				
153.249	0	N	P	G	E	N	Br	S	Y	Y				
153.251	0	D	P	G	E	N	Br	D	Y	Y				
153.252	00	N	P	T	E	N	Tn	S	Y	Br	Abh		Dab	
153.259	0	D	P	G	E	N	Br	S	Y	Y				
153.261	0	D	P	G	E	N	Br	D	Y	Y				
153.262	0	S	P	T	E	N	Tn	S	Y	Br	Abh			
153.265	0	S	P	T	E	N	Tn	D	Bl	Bl	Abh			
153.270	0	N	W	T	E	N	Br	D	Bl	Bl				
153.272	0	N	W	T	E	N	Br	D	Bl	Bl				
153.273	0	N	W	T	E	Ssp	Br	D	Bl	Bl				
153.275	0	N	W	T	E	N	Br	D	Bl	Bl				
153.277	0	N	W	T	E	Ssp	Br	D	Bl	Bl				
153.278	0	N	W	T	E	Ssp	Br	D	Bl	Bl				
153.281	0	N	P	T	E	N	Br	S	Bl	Bl	Fleck			
153.284	0	N	W	T	E	Ssp	Br	D	Bl	Bl				
153.286	0	N	W	T	E	Ssp	Br	D	Bl	Bl				
153.293	000	D	P	T	E	N	Br	S	Gn	Bl				
153.296	000	D	P	T	E	N	Br	S	Gn	Bl				
153.297	00	D	P	T	E	Ssp	Br	S	Gn	Bl				
153.299	00	N	P	T	E	N	Br	S	Lg	G				
153.300	0	N	P	T	E	N	Tn	S	Y	Br	Abh		Dab	
153.301	00	D	P	T	E	N	Br	S	Gn	Bl				
153.302	00	D	P	T	E	N	Br	S	Gn	Bl				
153.303	00	S	W	T	Sa	N	Br	I	Rbr	Rbr				
153.304	0	N	P	T	E	N	Br	S	Y	Br				
153.305	0	N	P	T	E	N	Tn	S	Y	Br	Abh		Dab	
153.306	0	N	P	T	E	N	Br	S	Y	Bl				
153.314	00	N	P	T	E	N	Br	D	Y	Br				
153.317	0	N	P	T	E	N	Br	S	Y	Br				
153.318	0	N	P	G	E	N	Br	D	Y	Bf	Abh			
153.319	0	N	P	G	E	N	Br	S	Y	lb				
153.320	0	N	P	G	E	N	Br	D	Y	Bf	Abh			
154.189	0	S	W	T	E	N	Br	S	Y	Tn				
154.190	00	S	W	T	E	Ssp	Br	S	Gn	Bl				
154.191	0	S	P	T	E	N	Tn	S	Gn	Gn				
154.192	0	S	P	T	E	N	Br	D	Gn	Gn				
154.193	00	N	W	T	E	N	Br	D	Y	Y				

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)
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	1.5	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
153.252	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
153.261	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
153.265	705	913	2.0	53	2.0	1.0	2.5	2.0	18.9	1.36
153.270	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
153.277	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
153.305	705	909	4.0	74	3.0	1.0	2.5	2.0	12.1	2.04
153.306	709	924	4.5	99	3.5	1.0	2.5	3.0	20.3	2.86
153.314	702	907	2.5	74	3.0	1.0	1.0	3.0	22.3	2.19
153.317	704	909	4.0	74	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 PI 266.807, grown at St. Paul, MN

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>	
		Oil (%)	Protein (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)
153.217	00	16.6	44.7	-	41.3	7.2
153.218	00	17.1	45.4	-	41.9	7.0
153.219	00	17.6	43.5	-	43.8	7.0
153.221	00	17.0	45.4	-	41.4	7.3
153.222	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	0	19.3	41.0	1.32	45.2	9.5
153.242	0	20.6	36.6	1.14	45.1	8.5
153.245	0	20.6	40.4	1.15	43.1	10.5
153.246	0	20.0	42.9	1.10	43.3	7.9
153.249	0	20.2	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	0	18.9	41.2	-	47.7	8.1
153.281	0	16.8	46.1	-	47.4	8.3
153.284	0	19.3	42.2	-	44.4	8.0
153.286	0	18.5	41.0	-	46.0	7.7
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	0	20.9	40.3	1.37	42.5	7.9
153.319	0	20.8	38.9	1.32	44.5	7.7
153.320	0	21.7	40.4	1.26	45.5	7.8
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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Matur- ity 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
154.200		Netherlands	Netherlands	1946	00
159.764		Rep. of Korea	Rep. of Korea	1947	00
161.431A	Fiskeby II	Sweden	Sweden	1947	00
161.431B	(Fiskeby II)	Sweden	Sweden	1947	000
161.988	Giesseler	Austria	Germany	1948	00
161.989	Wolfsthaler	Austria	Germany	1948	0
179.822	Wachenheimer Glebe	Germany	Germany	1949	0
180.499		Germany	Germany	1949	00
180.501		Germany	Germany	1949	0
180.502		Germany	Germany	1949	00
180.507		Germany	Germany	1949	00
180.508		Germany	Germany	1949	00
180.509		Germany	Germany	1949	00
180.516		Germany	Germany	1949	00
180.517		Germany	Germany	1949	00
180.519		Germany	Germany	1949	000
180.521		Germany	Germany	1949	000
180.524		Germany	Germany	1949	00
180.525		Germany	Germany	1949	000
180.529		Germany	Germany	1949	0
180.530		Germany	Germany	1949	0
180.532		Germany	Germany	1949	0
181.531		Japan	Japan	1949	0
181.571		Japan	Japan	1949	0
184.047	Rana Br. 442	Yugoslavia	Yugoslavia	1949	0
189.857	Grignon 17	France	France	1950	0
189.859	Light Brown	France	France	1950	0
189.860	Starackramiskaya	France	France	1950	00
189.861	Grignon 18	France	France	1950	0
189.862	Brun Matif Rouest	France	France	1950	0
189.866		France	France	1950	0
189.867	Vilhensis	France	France	1950	00
189.868	Grignon 19	France	France	1950	000
189.869	Grignon 39	France	France	1950	000
189.870	Grignon 3	France	France	1950	0
189.871	Grignon 15	France	France	1950	0
189.872	Commercial Huilerie Nord	France	France	1950	0
189.873	Miko Saumon	France	France	1950	0
189.874	Ochroleuca	France	France	1950	00
189.875	Kamianetz Graine Jaune Unie	France	France	1950	00
189.876	Weka	France	France	1950	0
189.877	SS	France	France	1950	00
189.878	Mandchourie	France	France	1950	00
189.879	Tulowka	France	France	1950	00
189.880	Bitterhof	France	Germany	1950	00
189.882	Dieckmanns Hellgelb	France	Germany	1950	0
189.883	Dieckmanns Fruhelgelbe	France	Germany	1950	0
189.885	Hatto Jaune	France	France	1950	0
189.886	Jaune de Desme	France	France	1950	00
189.893	Grignon 5	France	France	1950	0

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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Seedcoat			Other traits			
				Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
154.194	0	D	P	G	E	N	Br	D	Gn	lb			
154.196	0	D	P	T	E	N	Br	D	Gn	Bl			
154.197	00	D	P	T	Sa	N	Br	S	Y	Bl			
154.198	00	D	P	T	E	N	Br	S	Gn	Bl			
154.199	00	S	P	T	E	N	Br	S	Rbr	Rbr			
154.200	00	D	P	T	Sa	N	Br	D	Gn	Bl			
159.764	00	D	P	T	E	N	Br	S	Gn	Bl			
161.431A	00	S	W	T	E	N	Tn	S	Y	Y			
161.431B	000	S	W	T	E	N	Br	S	Y	Br			
161.988	00	N	P	T	E	N	Tn	S	Y	Br	Abh	Dab	
161.989	0	N	P	T	E	N	Br	S	Y	Br	Abh		
179.822	0	N	P	T	E	N	Tn	S	Y	Y			
180.499	00	N	P	T	E	Ssp	Br	S	Y	Br			
180.501	0	N	P	T	E	Ssp	Br	S	Y	Br			
180.502	00	N	P	T	E	Ssp	Br	S	Y	Br			
180.507	00	N	W	T	E	N	Br	S	Y	Br			
180.508	00	N	P	T	E	Ssp	Tn	S	Y	Br			
180.509	00	N	W	T	E	Ssp	Tn	S	Y	Br			
180.516	00	N	W	T	E	Ssp	Tn	S	Y	Br			
180.517	00	N	W	T	E	Ssp	Tn	S	Y	Br			
180.519	000	N	P	T	E	N	Tn	S	Y	Tn			
180.521	000	N	P	T	E	Ssp	Tn	S	Y	Br			
180.524	00	N	P	T	E	Ssp	Br	l	Y	Br			
180.525	000	N	P	T	E	Ssp	Br	l	Y	Br			
180.529	0	N	W	T	E	Ssp	Br	S	Y	Br			
180.530	0	N	P	T	E	N	Br	S	Y	Br			
180.532	0	N	W	T	E	N	Br	S	Y	Bl			
181.531	0	S	P	T	E	Ssp	Br	S	Y	Br			
181.571	0	N	W	G	A	N	Br	D	Y	Bf			
184.047	0	N	P	T	E	N	Tn	S	Y	Br	Abh		
189.857	0	N	P	G	E	N	Dbr	D	Bf	Bf			
189.859	0	N	P	T	E	N	Tn	D	Br	Br			
189.860	00	N	P	T	E	Ssp	Br	S	Rbr	Rbr			
189.861	0	N	P	T	E	N	Tn	S	Rbr	Rbr	Abh	Dab	
189.862	0	S	P	T	E	N	Br	D	Rbr	Rbr			
189.866	0	N	P	T	A	N	Bl	S	Br	Br			Sw
189.867	00	S	W	T	E	Ssp	Br	S	Rbr	Rbr			
189.868	000	S	W	T	E	Ssp	Dbr	S	Rbr	Rbr			
189.869	000	S	W	T	E	Ssp	Br	S	Br	Br			
189.870	0	S	W	T	E	N	Br	S	Rbr	Rbr			
189.871	0	S	W	T	E	N	Br	D	Br	Br			
189.872	0	N	W	T	E	N	Br	S	Br	Br			
189.873	0	N	W	T	E	Ssp	Bl	D	Rbr	Rbr			
189.874	00	D	W	T	E	N	Br	S	Rbr	Rbr			
189.875	00	N	P	G	E	Ssp	Br	S	Y	Y			
189.876	0	D	P	G	E	N	Tn	D	Y	Y			
189.877	00	D	P	G	E	N	Br	D	Y	Y			
189.878	00	N	P	G	E	N	Br	S	Y	Y			
189.879	00	D	P	G	E	Ssp	Br	D	Y	Y			
189.880	00	N	P	G	E	N	Br	S	Y	Y			
189.882	0	N	P	G	E	N	Tn	D	Y	G			
189.883	0	N	P	G	E	N	Br	S	Y	G			
189.885	0	N	P	G	E	N	Br	D	Y	Bf	Abh		
189.886	00	N	P	G	E	N	Br	S	Y	Y			
189.893	0	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
180.521	702	828	4.0	74	2.5	1.0	2.5	3.5	17.5	1.53
180.524	707	904	3.5	69	3.0	1.0	3.0	3.0	19.6	2.06
180.525	706	829	3.5	76	3.0	1.0	2.5	3.5	18.3	2.03
180.529	701	910	3.5	71	3.0	1.0	3.5	2.5	16.8	1.84
180.530	701	908	4.5	84	3.5	1.0	3.0	3.0	13.9	1.65
180.532	701	911	3.5	79	3.0	1.0	3.0	3.0	20.4	2.09
181.531	711	922	3.0	79	2.0	1.5	2.5	3.0	28.5	1.15
181.571	726	925	4.0	76	2.5	2.0	3.0	2.5	12.8	1.45
184.047	702	908	3.5	81	3.0	1.0	2.5	2.5	13.1	1.96
189.857	706	914	2.5	81	3.0	1.0	3.0	3.0	24.4	1.46
189.859	707	916	5.0	89	3.5	1.0	3.0	3.0	15.2	1.14
189.860	702	909	3.0	76	3.0	1.0	3.0	3.0	15.5	1.61
189.861	708	906	4.0	71	3.0	1.0	2.5	3.0	10.7	1.90
189.862	709	911	2.0	51	2.0	1.0	3.0	3.0	21.6	1.93
189.866	723	912	5.0	71	3.0	1.0	2.5	3.0	4.0	0.93
189.867	708	907	2.0	58	2.0	1.0	2.0	2.5	24.8	1.20
189.868	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
189.871	713	917	2.5	71	2.0	1.0	2.0	3.0	22.8	1.80
189.872	703	916	2.5	89	3.0	1.0	3.0	2.5	16.6	1.78
189.873	703	911	3.0	69	3.0	1.5	3.0	3.5	24.4	1.43
189.874	709	907	2.5	66	1.5	2.0	2.0	3.0	19.0	0.32
189.875	630	908	2.5	69	3.0	1.0	4.0	4.0	23.0	1.46
189.876	708	915	2.0	56	1.5	1.0	3.5	3.0	18.5	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	709	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

Entry	Maturity group	Seed composition		Protein composition	Oil composition	
		Oil (%)	Protein (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)
154.194	0	19.9	41.0	1.17	48.8	8.8
154.196	0	16.0	49.4	-	45.2	8.4
154.197	00	18.4	47.8	-	43.2	6.7
154.198	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
161.431A	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
180.508	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	17.1	42.7	1.30	41.7	8.1
180.519	000	19.4	46.4	1.16	44.9	5.8
180.521	000	19.6	44.7	1.16	42.0	5.8
180.524	00	20.3	40.9	1.20	42.2	5.1
180.525	000	21.9	39.0	1.22	40.2	7.0
180.529	0	20.3	43.1	1.31	48.0	8.0
180.530	0	20.2	43.7	1.19	47.7	8.5
180.532	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	-	45.7	6.9
189.861	0	19.8	38.2	-	47.6	7.6
189.862	0	18.1	43.5	-	48.4	9.6
189.866	0	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	-	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
189.872	0	18.2	43.8	-	46.1	7.9
189.873	0	17.5	42.0	-	42.5	8.1
189.874	00	16.6	44.3	-	37.6	7.4
189.875	00	17.0	47.3	1.23	42.6	6.4
189.876	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Matur- ity group
189.894	Dippes Fruhe Gelbe	France	Germany	1950	0
189.897	Rouest 71	France	France	1950	0
189.898	Grignon 45	France	France	1950	0
189.899	Rouest 104	France	France	1950	0
189.900	Grignon 41	France	France	1950	0
189.901	Grignon 21	France	France	1950	00
189.903	Kouban 0375	France	France	1950	0
189.904	Tokio Jaune Oeil Brun	France	France	1950	0
189.906	Halton	France	France	1950	00
189.913	Braungelbe II	France	Germany	1950	0
189.923	Dans Ossijek II	France	France	1950	0
189.932	Rouest 85	France	France	1950	00
189.936	Dr. Brillmeyer	France	France	1950	00
189.937	Semilutea	France	France	1950	00
189.938	Mediascher Braune	France	France	1950	0
189.939	Poppelsdorf 3/1225	France	Germany	1950	0
189.940	Rouest 13 Al 2	France	France	1950	000
189.944	Amourskayachortnaya	France	France	1950	0
189.950	Cosse Lisse	France	France	1950	0
189.951	Cosse Velue	France	France	1950	0
189.952	Norddeutsche Schwarz Matt	France	Germany	1950	00
189.955	Noir des Freres Dippeo	France	France	1950	0
189.956		France	France	1950	00
189.960	Oscar Dickmann	France	France	1950	0
189.961	Rouest 117	France	France	1950	0
189.963	Geant Vert	France	France	1950	000
189.964		France	France	1950	0
189.965		France	France	1950	0
194.624		Sweden	Sweden	1951	00
194.625		Sweden	Sweden	1951	0
194.626		Sweden	Sweden	1951	00
194.627		Sweden	Sweden	1951	00
194.630		Sweden	Sweden	1951	00
194.631		Sweden	Sweden	1951	00
194.632		Sweden	Sweden	1951	00
194.633		Sweden	Sweden	1951	000
194.634		Sweden	Sweden	1951	000
194.635		Sweden	Sweden	1951	00
194.636		Sweden	Sweden	1951	000
194.638		Sweden	Sweden	1951	00
194.639		Sweden	Sweden	1951	000
194.640		Sweden	Sweden	1951	000
194.641		Sweden	Sweden	1951	000
194.643		Sweden	Sweden	1951	00
194.644		Sweden	Sweden	1951	000
194.645		Sweden	Sweden	1951	00
194.646		Sweden	Sweden	1951	00
194.647		Sweden	Sweden	1951	00
194.648		Sweden	Sweden	1951	00
194.653		Sweden	Sweden	1951	00
194.654		Sweden	Sweden	1951	00
194.655		Sweden	Sweden	1951	00
194.656		Sweden	Sweden	1951	00
196.485		Sweden	Sweden	1951	000
196.486		Sweden	Sweden	1951	00

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
189.894	0	N	P	T	E	N	Br	D	Y	Y			
189.897	0	N	P	T	E	N	Tn	S	Y	Br			
189.898	0	N	P	T	E	N	Tn	S	Y	Bl	Abh		
189.899	0	N	P	T	E	Ssp	Br	S	Y	G			
189.900	0	N	P	T	E	N	Bl	S	Y	Br			
189.901	00	N	P	T	E	Ssp	Br	S	Y	Y			
189.903	0	N	P	G	E	N	Br	S	Y	lb			
189.904	0	N	P	T	E	N	Br	S	Y	Br			
189.906	00	N	P	T	E	N	Br	S	Y	Bl			
189.913	0	N	P	T	E	N	Tn	S	Y	Br	Abh		
189.923	0	N	W	T	E	Ssp	Tn	D	Y	Br			
189.932	00	N	W	T	E	Ssp	Tn	D	Y	Br			
189.936	00	N	P	T	E	N	Br	D	Y	Br			
189.937	00	N	P	T	E	N	Br	D	Y	Br			
189.938	0	N	P	T	E	N	Br	D	Y	Br			
189.939	0	N	P	T	E	N	Br	S	Bl	Bl	Fleck		
189.940	000	S	P	T	E	Ssp	Br	D	Bl	Bl			
189.944	0	N	P	T	E	N	Br	D	Bl	Bl		Dab	
189.950	0	N	P	T	A	Sp	Br	B	Bl	Bl			Sw
189.951	0	N	P	T	A	Sp	Br	B	Bl	Bl			Sw
189.952	00	N	W	T	Sa	Ssp	Br	D	Bl	Bl			
189.955	0	N	W	T	E	Ssp	Br	D	Bl	Bl			
189.956	00	N	W	T	Sa	Ssp	Br	D	Bl	Bl			
189.960	0	N	W	T	E	Ssp	Br	D	Bl	Bl			
189.961	0	N	W	T	E	N	Br	S	Bl	Bl			
189.963	000	D	P	T	E	N	Br	D	Gn	Bl			
189.964	0	N	P	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	Y	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	Y	Y			
194.630	00	N	P	T	Sa	N	Tn	D	Y	Y			
194.631	00	N	P	G	E	N	Tn	S	Y	G			
194.632	00	N	P	G	E	N	Br	S	Y	Bf			
194.633	000	N	P	T	E	N	Br	S	Lg	Bl			
194.634	000	D	P	T	E	Ssp	Tn	D	Y	Br			
194.635	00	D	P	T	E	N	Tn	D	Gn	Bl			
194.636	000	D	P	T	E	Ssp	Tn	I	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	Bl			
194.641	000	S	P	T	E	N	Br	S	Gn	Bl			
194.643	00	N	P	T	E	N	Br	D	Y	Y			
194.644	000	N	P	T	E	N	Br	D	Y	Br			
194.645	00	S	P	G	E	N	Br	S	Y	Lbf			
194.646	00	N	P	G	E	Ssp	Br	D	Y	Bf			
194.647	00	N	P	G	E	N	Br	D	Y	Y	Abh		
194.648	00	N	P	G	E	N	Br	S	Y	Bf			
194.653	00	N	P	G	E	Ssp	Tn	D	Y	Bf	Abh		
194.654	00	N	P	G	E	Ssp	Br	D	Y	Bf	Abh		
194.655	00	N	P	T	E	N	Br	D	Y	Br	Abh		
194.656	00	N	P	T	E	N	Br	S	Y	Br			
196.485	000	S	P	T	E	Ssp	Tn	S	Y	Br			
196.486	00	D	P	T	E	N	Tn	I	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)
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	3.0	1.0	2.5	2.5	18.7	2.19
189.899	711	916	2.5	79	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	1.92
189.901	705	913	3.5	84	3.0	1.0	2.0	4.0	20.8	1.24
189.903	702	910	2.0	66	3.0	1.0	2.5	3.0	17.8	2.02
189.904	704	909	2.5	71	3.0	1.0	1.0	2.5	19.2	1.85
189.906	705	907	3.5	66	2.5	1.0	1.5	3.5	20.0	1.86
189.913	701	909	3.5	81	3.5	1.0	2.0	2.0	12.7	1.93
189.923	701	908	2.5	69	3.0	1.0	2.5	2.5	18.7	2.00
189.932	702	911	3.0	58	3.0	1.0	3.0	2.5	20.8	1.92
189.936	628	907	4.0	79	3.0	1.0	2.0	3.0	20.5	2.35
189.937	628	907	4.0	79	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	3.5	1.0	2.5	2.5	15.2	2.20
189.940	628	901	1.5	66	2.0	1.0	3.5	2.5	26.9	1.56
189.944	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
189.951	728	926	4.5	61	2.5	1.5	1.5	2.0	6.1	1.73
189.952	629	909	3.5	89	3.5	1.0	4.0	3.0	14.5	2.28
189.955	704	912	3.0	99	4.5	1.0	1.0	2.0	13.8	2.35
189.956	708	913	2.5	91	4.0	1.0	3.0	2.0	13.1	2.15
189.960	708	913	3.0	99	4.0	1.0	2.0	2.0	14.1	2.00
189.961	701	911	2.5	91	4.0	1.0	1.5	2.0	15.8	2.54
189.963	703	901	2.0	48	1.0	2.0	3.0	4.0	18.3	0.80
189.964	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
194.645	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
196.486	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>	
		Oil (%)	Protein (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)
189.894	0	18.4	44.0	1.30	46.5	8.5
189.897	0	18.6	41.9	1.25	46.2	9.7
189.898	0	19.9	40.1	1.45	45.8	8.9
189.899	0	18.7	44.0	1.25	46.0	8.9
189.900	0	18.5	41.6	1.31	45.4	8.9
189.901	00	17.1	47.6	1.21	46.6	8.6
189.903	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
189.936	00	18.7	43.4	1.27	43.1	7.1
189.937	00	19.3	43.7	1.23	42.7	7.4
189.938	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	0	14.3	44.7	-	44.9	11.4
189.951	0	15.2	42.6	-	49.6	7.2
189.952	00	20.7	40.6	-	44.5	7.8
189.955	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
194.633	000	17.9	47.1	1.20	42.1	7.9
194.634	000	18.4	44.8	1.21	43.0	6.5
194.635	00	17.5	46.7	-	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
194.644	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 PI 266.807

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
196.491		Sweden	Sweden	1951	000
196.501		Sweden	Sweden	1951	000
196.502		Sweden	Sweden	1951	000
196.504		Sweden	Sweden	1951	000
196.525		Sweden	Sweden	1951	00
196.526		Sweden	Sweden	1951	00
196.527		Sweden	Sweden	1951	00
196.528		Sweden	Sweden	1951	000
196.529		Sweden	Sweden	1951	000
196.530		Sweden	Sweden	1951	000
198.067	Ugra Saja	Sweden	Sweden	1951	000
200.595	Morlanvia	Belgium	China	1952	0
204.652	Von Burklin-Wolf's Wachenheimer	Germany	Germany	1953	0
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
227.330	Murasakibana No. 1	Japan	Japan	1955	0
227.565	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
232.901	Iregszemcsei Szurkebarat	Hungary	Hungary	1956	0
232.902	Iregszemcsei Universal	Hungary	Hungary	1956	0
232.994		Germany	Germany	1956	0
232.995		Germany	Germany	1956	0
232.996		Germany	Germany	1956	0
232.997		Germany	Germany	1956	00
232.998		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
240.079		Japan	Japan	1957	00
243.547	Toyo naga	Japan	Japan	1957	0
243.550	Yoshioka	Japan	Japan	1957	0
248.395	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
248.404	Novosadska Bela	Yugoslavia	Yugoslavia	1958	0
248.405	Novosadska Rana	Yugoslavia	Yugoslavia	1958	000
248.408	Stara Pazova	Yugoslavia	Yugoslavia	1958	0
248.512	Hokkaido Akita No. 2	Japan	Japan	1958	0
250.002	Bydgoska 0 52	Poland	Poland	1958	00
257.428		Germany	Germany	1959	0
257.429		Germany	Germany	1959	000
257.430		Germany	Germany	1959	000
257.431		Germany	Germany	1959	000
257.432		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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
196.491	000	S	P	T	E	Ssp	Tn	D	Y	Br	Abh		
196.501	000	S	P	T	E	Ssp	Tn	S	Y	Br	Abh		
196.502	000	S	P	T	E	Ssp	Br	S	Y	Br			
196.504	000	S	P	T	E	Ssp	Tn	D	Y	Br			
196.525	00	N	P	T	E	N	Br	S	Y	Br			
196.526	00	S	P	T	E	N	Br	D	Y	Br			
196.527	00	N	W	T	E	Ssp	Br	S	Y	Br			
196.528	000	S	P	T	E	N	Tn	I	Gn	Br			
196.529	000	S	P	T	E	Ssp	Br	S	Y	Br			
196.530	000	D	P	T	E	Ssp	Br	D	Y	Bl			
198.067	000	D	P	T	Sa	N	Tn	S	Rbr	Rbr			
200.595	0	N	P	G	E	N	Br	D	Y	Y			
204.652	0	N	P	T	E	N	Br	S	Lg	G			
205.090	000	D	P	T	E	N	Br	D	Bl	Bl			
227.323	0	N	P	G	E	N	Br	S	Y	Y			
227.326	0	N	W	G	E	N	Br	S	Y	Y			
227.327	00	N	P	G	E	Ssp	Br	S	Y	Y			
227.330	0	N	P	G	E	N	Br	D	Y	Y			
227.565	0	S	P	-	-	G	Tn	S	Y	Br			
229.330	0	N	W	G	A	Ssp	Br	D	Y	Bf			
231.172	000	N	P	T	E	Ssp	Br	D	Y	Br			
232.899	0	N	P	T	E	Ssp	Br	S	Y	G			
232.900	0	N	P	G	E	N	Tn	S	Y	G			
232.901	0	N	W	T	E	N	Tn	S	Lg	Bl			
232.902	0	N	P	T	E	N	Br	S	Y	G			
232.994	0	N	P	T	E	N	Br	S	Y	Br			
232.995	0	N	P	T	E	Ssp	Br	S	Y	Tn			
232.996	0	N	W	T	E	N	Tn	S	Y	Br			
232.997	00	N	P	T	E	Ssp	Br	D	Y	Br			
232.998	000	N	P	T	E	Ssp	Br	S	Y	Br			
232.999	00	N	P	T	E	N	Tn	S	Y	Br			
238.920	00	N	P	T	E	N	Br	S	Lgn	Br	Abh		
238.921	0	N	W	T	E	N	Br	S	Bl	Bl			
238.923	00	N	P	T	E	Ssp	Tn	D	Y	Br			
238.924	0	N	P	G	E	N	Bl	S	Y	G			
238.925	0	N	W	T	E	Ssp	Br	D	Bl	Bl			
240.079	00	S	W	G	E	N	Br	S	Y	Bf			
243.547	0	S	P	T	E	Ssp	Br	I	Y	Br			
243.550	0	S	P	T	E	N	Br	S	Gn	Bl			
248.395	0	N	P	T	E	N	Tn	S	Y	Br	Abh		
248.399	0	N	P	T	E	N	Tn	S	Y	Br	Abh	Sdab	
248.401	0	N	P	T	E	N	Br	D	Y	Br	Abh		
248.403	0	N	P	G	E	N	Tn	S	Y	G			
248.404	0	N	P	G	E	N	Br	S	Y	Y			
248.405	000	S	P	T	E	N	Tn	D	Y	Br	Abh		
248.408	0	N	P	T	E	N	Tn	S	Y	Br	Abh	Sdab	
248.512	0	S	P	T	E	Ssp	Br	S	Y	Br			
250.002	00	N	P	T	E	N	Br	S	Lgn	Br	Abh		
257.428	0	N	P	T	E	N	Tn	S	Y	Br			
257.429	000	N	W	T	E	N	Tn	S	Y	Br			
257.430	000	N	P	T	E	Ssp	Br	S	Y	Br			
257.431	000	N	P	T	E	Ssp	Br	S	Y	Br			
257.432	0	N	P	T	E	N	Tn	S	Y	Br			
257.433	0	N	P	T	E	N	Tn	S	Y	Br			
257.434	0	N	W	T	E	N	Br	S	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)
196.491	629	828	2.5	53	2.0	1.5	2.0	3.5	23.8	1.12
196.501	628	902	3.0	58	2.0	1.0	1.0	2.0	22.7	1.54
196.502	629	821	2.5	48	2.0	1.5	1.5	4.0	22.6	0.75
196.504	701	828	4.5	58	2.0	1.5	1.0	2.5	16.4	1.29
196.525	706	909	3.5	76	2.5	2.0	1.0	2.5	20.8	1.70
196.526	628	903	3.0	61	2.0	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	2.0	2.0	1.5	4.0	16.1	0.90
196.529	628	826	2.5	56	2.0	3.5	2.5	3.0	16.6	0.75
196.530	628	828	3.0	56	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	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
227.327	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>	
		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
196.504	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
196.528	000	18.1	44.2	1.12	40.5	6.3
196.529	000	18.0	46.4	1.16	38.8	5.8
196.530	000	19.0	45.4	1.10	43.0	6.6
198.067	000	20.1	43.0	-	45.9	6.4
200.595	0	19.0	44.0	1.11	43.0	7.3
204.652	0	20.4	40.9	1.17	47.1	9.9
205.090	000	20.0	49.7	-	45.5	6.9
227.323	0	17.8	45.8	1.12	46.1	7.2
227.326	0	20.4	41.6	1.20	45.1	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	0	19.9	39.5	1.45	42.8	8.1
248.399	0	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity 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

Entry	Matu- rity group	Stem trm.	Flower color	<u>Pubescence</u>			Pod color	<u>Seedcoat</u>		Hilum color	<u>Other traits</u>		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
257.435	0	N	P	T	E	N	Br	I	Y	G			
257.436	0	N	Dp	T	E	N	Tn	S	Y	Br			
257.437	0	N	W	T	E	Ssp	Br	S	Y	Br			
257.438	0	N	W	T	E	Ssp	Br	S	Y	Br			
257.439	0	N	P	G	E	N	Tn	S	Y	Bf			
258.383	000	N	P	T	E	N	Br	S	Y	G			
258.384	0	N	P	T	E	N	Br	D	Y	Tn			
258.385	0	N	P	T	E	N	Br	S	Y	G			
258.386	00	N	P	T	E	N	Br	S	Y	Tn			
258.387	00	N	P	T	E	Ssp	Br	S	Y	Y			
261.469	0	N	W	G	A	Ssp	Br	D	Y	Bf			
261.475	0	N	P	G	E	N	Br	S	Y	Y			

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)
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	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>	
		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

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
	Aksarben	United States	China	By 1923	II
	Amsoy	United States	United States	1962	II
	Bansei	United States	Japan	1936	II
	Black Eyebrow	United States	China	1918	II
	Blackhawk	United States	United States	1950	I
	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	I
	Etum	United States	Japan	By 1941	II
	Funman	United States	United States	By 1938	II
	Giant Green	United States	Japan	1938	I
	Goku	United States	Japan	1936	II
	Habaro	United States	Russia	1910	I
	Hakote	United States	Japan	1936	II
	Harly	Canada	Canada	1948	I
	Harosoy	Canada	Canada	1951	II
	Harosoy 63	United States	United States	1963	II
	Hawkeye	United States	United States	1947	II
	Hawkeye 63	United States	United States	1963	II
	Henry	United States	United States	1960	II
	Hoosier	United States	China	By 1923	I
	Kagon	United States	United States	By 1944	I
	Kanro	United States	D.P.R. of Korea	1936	II
	Kanum	United States	Rep. of Korea	By 1941	II
	Korean	Canada	China	By 1928	II
	Lindarin	United States	United States	1958	II
	Lindarin 63	United States	United States	1964	II
	Linman 533	United States	United States	By 1939	II
	Manchu 3	United States	United States	By 1940	II
	Manchu 606	United States	United States	By 1940	II
	Manchu [Madison]	United States	United States	1951	II
	Manchu Hudson	Canada	Canada	By 1939	II
	Manchu Montreal	Canada	Canada	By 1944	I
	Manchukota	United States	United States	1943	II
	Manchuria	United States	China	By 1912	I
	Mandarin	United States	China	By 1920	I
	Mandarin 507	United States	United States	By 1943	I
	Medium Green	United States	Japan	By 1903	I
	Mendota	United States	Rep. of Korea	By 1944	I
	Monroe	United States	United States	1948	I
	Mukden	United States	China	1932	II
	Norsoy	United States	United States	By 1944	I
	OAC 211	Canada	Canada	By 1928	I
	Ontario	United States	China	1941	I
	Portugal	Unknown	Unknown	By 1949	I
	Renville	United States	United States	1952	I
	Richland	United States	China	1938	II
	Sac	United States	Japan	1941	I
	Seneca	United States	China	1939	II
	Sousei	United States	Japan	1936	II
	Soysoy	Italy	Italy	By 1923	I
	Tastee	United States	Japan	By 1941	II

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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
Aksarben	II	N	P	G	E	N	Tn	D	Y	Y	Saddle		
Amsoy	II	N	P	G	E	N	Tn	S	Y	Y			
Bansei	II	D	P	G	E	N	Br	D	Y	Y			
Black Eyebrow	II	N	W	T	E	N	Br	S	Br	Bl			
Blackhawk	I	N	W	G	E	N	Br	S	Y	Bf			
Burwell	I	D	P	T	E	Ssp	Br	D	Bl	Bl			
Cayuga	I	N	W	T	E	Ssp	Br	D	Bl	Bl			
Chippewa	I	N	P	T	E	N	Br	S	Y	Bl			
Chippewa 64	I	N	P	T	E	N	Br	S	Y	Bl			
Earlyana	I	N	P	T	E	N	Br	D	Y	Tn			
Elton	I	N	P	G	E	N	Br	S	Y	Y			
Etum	II	D	P	G	E	N	Br	D	Y	Y			
Funman	II	N	P	T	E	N	Br	S	Y	Bl			
Giant Green	I	D	P	T	E	N	Br	D	Gn	Bl			
Goku	II	D	W	G	E	N	Tn	D	Y	Bf			
Habaro	I	N	P	G	E	N	Br	S	Y	Y			
Hakote	II	D	W	T	E	Ssp	Br	S	Gn	Bl	5Lft		
Harly	I	N	P	G	E	N	Br	D	Y	Y			
Harosoy	II	N	P	G	E	N	Br	D	Y	Y			
Harosoy 63	II	N	P	G	E	N	Br	D	Y	Y			
Hawkeye	II	N	P	G	E	N	Br	D	Y	lb			
Hawkeye 63	II	N	P	G	E	N	Br	D	Y	lb			
Henry	II	N	P	G	E	N	Br	D	Y	G			
Hoosier	I	N	P	T	E	N	Br	D	Y	Tn			
Kagon	I	N	P	G	E	N	Br	D	Y	Y			
Kanro	II	D	P	G	E	N	Br	I	Y	Y			
Kanum	II	D	P	G	E	N	Br	D	Y	Y			
Korean	II	N	W	Lt	E	N	Br	S	Y	Bl			
Lindarin	II	N	P	G	E	N	Br	D	Y	Bf			
Lindarin 63	II	N	P	G	E	N	Br	D	Y	Bf			
Linman 533	II	N	P	T	E	N	Br	S	Y	Bl			
Manchu 3	II	N	P	T	E	N	Br	S	Y	Bl			
Manchu 606	II	S	P	T	E	N	Br	S	Y	Bl			
Manchu [Madison]	II	N	P	T	E	N	Br	I	Y	Br			
Manchu Hudson	II	S	P	T	E	N	Br	S	Y	Bl			
Manchu Montreal	I	N	P	T	E	N	Br	S	Y	Bl			
Manchukota	II	S	P	T	E	N	Br	S	Y	Bl			
Manchuria	I	S	P	G	E	N	Bl	S	Y	Lbf			
Mandarin	I	N	P	G	E	N	Br	S	Y	Y			
Mandarin 507	I	N	P	G	E	N	Br	S	Y	Y			
Medium Green	I	N	P	G	E	N	Br	S	Gn	Bf	Gncot		
Mendota	I	D	P	G	E	N	Br	D	Y	Y			
Monroe	I	N	W	G	E	N	Br	S	Y	Y			
Mukden	II	N	W	G	E	N	Br	S	Y	Bf			
Norsoy	I	N	P	G	E	N	Br	D	Y	Y			
OAC 211	I	N	P	G	E	N	Br	S	Y	Y			
Ontario	I	D	P	T	E	N	Br	S	Y	Bl			
Portugal	I	D	P	T	E	Ssp	Br	S	Y	Br			
Renville	I	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	Bl			
Seneca	II	N	W	G	E	N	Bl	S	Y	Bf			
Sousei	II	D	W	G	E	N	Tn	S	Y	Bf			
Soysota	I	D	P	T	E	N	Br	S	Br	Br	Abh		
Tastee	II	D	P	T	E	Ssp	Br	S	Gn	Bl			

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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>		<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
Aksarben	II	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	-	43.5	6.8	S	--
Blackhawk	I	39.8	21.3	1.3	44.6	7.4	R	--
Burwell	I	41.5	21.5	-	44.0	7.0	--	--
Cayuga	I	40.4	19.9	-	43.8	6.8	H	--
Chippewa	I	41.0	21.2	1.3	47.1	7.8	S	--
Chippewa 64	I	41.4	21.1	1.3	49.1	7.0	R	--
Earlyana	I	41.4	21.6	1.3	48.1	7.4	S	--
Elton	I	40.0	20.4	1.4	45.5	7.6	S	--
Etum	II	40.8	19.8	1.1	44.7	7.2	S	--
Funman	II	41.9	21.0	1.2	46.9	6.8	S	--
Giant Green	I	40.0	21.3	-	46.7	6.7	S	--
Goku	II	43.4	17.2	1.2	45.8	7.9	R	--
Habaro	I	42.0	20.8	1.1	48.0	6.6	R	--
Hakote	II	42.6	19.9	1.0	46.6	6.2	H	--
Harly	I	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	II	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	II	41.6	22.2	1.3	44.8	6.4	R	--
Henry	II	43.0	21.1	1.3	44.0	6.4	R	--
Hoosier	I	40.1	22.2	1.5	48.2	6.7	S	--
Kagon	I	42.2	20.6	1.3	46.9	7.1	S	--
Kanro	II	41.4	19.9	1.3	45.0	6.9	S	--
Kanum	II	41.7	20.9	1.3	47.0	7.2	S	--
Korean	II	41.9	21.7	1.2	45.6	8.4	S	--
Lindarin	II	39.9	22.2	1.4	47.1	6.9	S	--
Lindarin 63	II	40.6	22.1	1.3	48.0	6.9	R	--
Linman 533	II	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 Hudson	II	41.4	21.1	1.3	50.0	6.6	S	--
Manchu Montreal	I	41.4	20.5	1.3	46.7	6.7	S	--
Manchukota	II	42.0	20.8	1.5	50.3	6.9	S	--
Manchuria	I	42.2	20.5	1.4	48.1	6.8	S	--
Mandarin	I	43.0	19.9	1.2	47.4	6.9	S	--
Mandarin 507	I	43.4	19.7	1.3	47.0	6.9	H	--
Medium Green	I	40.4	20.2	1.3	49.1	8.3	S	--
Mendota	I	41.6	19.5	1.3	47.6	8.5	H	--
Monroe	I	40.3	21.5	1.4	46.1	7.5	R	--
Mukden	II	42.5	20.5	1.3	44.0	7.5	R	--
Norsoy	I	43.0	18.4	1.3	47.3	7.6	S	--
OAC 211	I	41.2	20.0	1.2	46.7	7.2	S	--
Ontario	I	40.8	21.8	1.1	45.7	6.2	S	--
Portugal	I	42.1	21.7	1.3	45.0	6.1	--	--
Renville	I	40.9	22.1	1.3	48.8	6.8	S	--
Richland	II	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	II	39.4	21.2	1.2	48.6	7.5	R	--
Sousei	II	39.1	17.4	1.3	44.2	7.6	S	--
Soysoya	I	42.8	21.2	-	43.1	5.9	S	--
Tastee	II	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
	Toku	United States	Japan	1936	II
	Tortoise Egg	United States	Japan	1933	I
	Waseda	United States	Japan	1938	II
	Wea	United States	China	1923	II
	Wisconsin Black	France	France	1909	I
	Yellow Marvel	United States	Unknown	By 1941	II
FC 01.547	Southern Manchurian Yellow	United States	China	1911	II
FC 03.609		United States	China	1920	I
FC 04.007A		United States	Unknown	1924	II
FC 19.976	Chusei o saya eda mame	Japan	Japan	1932	II
FC 29.219		United States	United States	1935	II
FC 30.233		Canada	Canada	1938	I
FC 31.122		United States	United States	1941	I
FC 31.408	ND 1392	United States	United States	1939	II
FC 31.409	ND 1394	United States	United States	1939	II
30.594	Ching tou	China	China	1911	II
30.599	Chin yuan tou	China	China	1911	II
30.600	Chin yuan tou	China	China	1911	II
36.653		China	China	1913	I
47.131		China	China	1919	II
54.604		China	China	1921	II
54.607		China	China	1921	II
54.608		China	China	1921	II
54.608-1		China	China	1921	II
54.619		China	China	1921	II
54.809		China	China	1922	I
54.818		China	China	1922	II
54.834		China	China	1922	I
54.853		China	China	1922	I
54.854		China	China	1922	I
54.857		China	China	1922	I
54.859		China	China	1922	II
54.862		China	China	1922	II
54.865		China	China	1922	I
54.873		China	China	1922	II
60.279		China	China	1924	II
60.296-1	(Loh yuih bah)	China	China	1924	II
63.271		China	China	1925	I
65.338		China	China	1925	II
65.341		China	China	1925	II
65.346		China	China	1925	II
65.354		China	China	1925	II
65.388		China	China	1925	II
68.410		Unknown	Unknown	1926	II
68.421		China	China	1926	II
68.427		China	China	1926	II
68.430		China	China	1926	II
68.436		China	China	1926	II
68.439		China	China	1926	II
68.443		China	China	1926	II
68.446		China	China	1926	II
68.448		China	China	1926	II
68.454		China	China	1926	II
68.455		China	China	1926	II
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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
Toku	II	D	W	G	E	N	Tn	S	Y	Bf			
Tortoise Egg	I	D	W	G	A	N	Br	I	Y	Bf			
Waseda	II	D	P	G	E	N	Br	I	Y	Y			
Wea	II	N	W	G	E	N	Tn	S	Y	Bf			
Wisconsin Black	I	N	P	T	E	N	Br	D	Bl	Bl		Dab	
Yellow Marvel	II	D	W	G	E	N	Tn	S	Y	Lbf			
FC 01.547	II	S	W	G	E	N	Br	S	Y	Bf			
FC 03.609	I	N	P	G	E	N	Br	S	Y	Y			
FC 04.007A	II	D	P	G	E	N	Br	S	Y	Bf			
FC 19.976	II	D	W	G	E	N	Tn	D	Y	Y			
FC 29.219	II	D	P	G	E	N	Br	D	Y	Y			
FC 30.233	I	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	E	N	Br	D	Y	Br			
FC 31.409	II	N	P	T	E	N	Br	D	Y	Br			
30.594	II	N	W	T	E	Ssp	Bl	D	Gn	Bl	Gncot		
30.599	II	N	P	T	E	N	Br	I	Y	Bl			
30.600	II	D	P	G	E	N	Br	D	Y	Bf			
36.653	I	N	P	G	E	N	Br	S	Y	Bf			
47.131	II	N	P	T	E	N	Br	S	Bl	Bl	Fleck	Dab	
54.604	II	D	P	G	E	N	Br	S	Gn	Gn			
54.607	II	N	W	Lt	E	N	Br	S	Y	Bl	Sabh		
54.608	II	N	W	G	E	N	Br	S	Y	Bf			
54.608-1	II	D	P	G	E	Dn	Br	S	Y	Y			
54.619	II	S	W	G	E	N	Br	S	Y	Bf			
54.809	I	N	P	G	E	N	Br	S	Y	Y			
54.818	II	N	W	G	E	N	Br	S	Y	Bf			
54.834	I	D	P	T	E	N	Bl	D	Gn	Tn			
54.853	I	N	P	G	E	N	Br	D	G	G			
54.854	I	N	P	T	E	N	Br	D	Br	Br		Dab	
54.857	I	N	P	T	E	N	Tn	D	Y	Br	Saddle		
54.859	II	N	P	G	E	N	Tn	S	Br	Br			
54.862	II	N	P	T	E	Ssp	Br	S	Br	Br			
54.865	I	N	W	T	E	N	Br	D	Br	Br			
54.873	II	S	P	T	E	N	Br	I	Br	Br			
60.279	II	N	W	G	E	N	Br	S	Y	Bf			
60.296-1	II	N	P	T	E	N	Br	S	Y	Br			
63.271	I	N	P	Lt	E	N	Bl	S	Br	Br			
65.338	II	D	P	G	E	N	Br	S	Y	lb			
65.341	II	D	W	G	E	N	Br	S	Y	Bf			
65.346	II	D	W	G	E	N	Br	S	Y	Bf			
65.354	II	N	W	T	E	N	Br	I	Bl	Bl	Gncot		
65.388	II	N	P	T	A	Ssp	Tn	S	Br	Br			Sw
68.410	II	N	W	G	E	N	Br	S	Y	Bf			
68.421	II	N	P	T	E	N	Bl	I	Y	Bl			
68.427	II	D	P	G	E	N	Br	S	Y	lb			
68.430	II	D	P	G	E	N	Br	D	Y	Y			
68.436	II	N	P	T	E	N	Br	S	Y	Br			
68.439	II	N	W	G	E	N	Br	S	Y	Bf			
68.443	II	D	P	G	E	N	Br	S	Y	lb			
68.446	II	D	P	T	E	N	Tn	S	Y	Bl			
68.448	II	D	P	G	E	N	Br	S	Y	lb			
68.454	II	D	P	T	E	N	Br	S	Y	Bl			
68.455	II	S	P	G	E	N	Br	D	Y	Y			
68.457	II	D	W	G	E	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 .

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)
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	702	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	629	828	1.3	64	3.0	2.0	1.0	2.0	1.5	13.6	1.76
FC 04.007A	705	912	.6	71	1.0	2.0	1.0	2.8	1.0	13.6	2.66
FC 19.976	711	910	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	908	2.1	76	1.5	2.0	1.0	3.3	1.0	17.6	2.31
65.346	707	913	2.2	84	1.5	2.0	1.0	3.5	1.0	19.2	2.62
65.354	705	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	914	2.0	91	3.0	2.0	1.0	3.0	1.0	16.6	2.57
68.421	702	910	2.9	89	3.0	2.0	1.0	2.8	1.0	16.1	2.33
68.427	704	909	1.9	66	1.0	2.0	1.0	3.0	1.0	13.3	2.55
68.430	712	918	2.3	94	1.5	2.5	1.0	2.5	1.5	12.8	2.71
68.436	705	913	2.6	94	2.5	2.0	1.0	3.0	2.0	13.2	2.47
68.439	707	917	2.4	97	2.5	2.0	1.0	3.0	1.0	16.2	2.23
68.443	705	908	1.6	74	1.0	2.0	1.0	2.8	1.0	12.9	2.38
68.446	702	906	3.4	89	1.0	2.0	1.0	2.8	1.0	15.6	2.16
68.448	706	910	1.9	74	1.0	2.0	1.0	3.0	1.0	13.5	2.67
68.454	701	910	2.1	89	1.5	2.0	1.0	3.5	1.0	16.6	2.31
68.455	705	910	2.2	91	2.0	2.0	1.0	2.8	1.5	16.2	2.26
68.457	706	913	1.8	79	1.0	2.0	1.0	3.0	1.0	17.3	2.62

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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>		<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
Toku	II	41.4	19.2	1.1	45.7	6.6	H	--
Tortoise Egg	I	47.0	16.4	1.1	42.6	6.5	H	--
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	I	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	H	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	I	41.1	20.8	1.2	43.4	6.4	S	S
FC 31.122	I	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	I	44.0	18.5	1.2	46.8	6.6	R	S
47.131	II	41.1	17.7	-	48.7	6.6	S	S
54.604	II	42.7	19.5	1.3	47.9	7.1	R	S
54.607	II	41.1	21.6	-	44.3	6.0	H	S
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	I	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	I	41.4	20.5	-	46.0	7.3	S	S
54.853	I	42.8	19.1	-	46.9	7.9	S	S
54.854	I	39.6	17.0	-	43.9	7.2	S	S
54.857	I	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	II	38.3	20.4	-	46.8	7.1	R	S
54.865	I	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	S
63.271	I	42.8	16.0	-	47.6	8.1	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	II	37.2	21.9	-	44.9	6.7	H	S
65.354	II	41.5	19.4	-	48.8	6.4	S	S
65.388	II	42.5	15.1	-	47.9	8.4	S	S
68.410	II	38.5	21.5	-	44.7	5.9	--	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	H	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
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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
68.457-1		China	China	1926	II
68.461		China	China	1926	II
68.461-1		China	China	1926	II
68.465		China	China	1926	II
68.465-1		China	China	1926	II
68.466		China	China	1926	II
68.474		China	China	1926	II
68.474-2		China	China	1926	I
68.475		China	China	1926	II
68.475-1		China	China	1926	II
68.480		China	China	1926	II
68.481		China	China	1926	II
68.484-1		China	China	1926	II
68.484-4		China	China	1926	II
68.488		China	China	1926	II
68.500		China	China	1926	II
68.503		China	China	1926	II
68.508		China	China	1926	II
68.516		China	China	1926	II
68.521		China	China	1926	II
68.522		China	China	1926	II
68.526		China	China	1926	II
68.530		China	China	1926	II
68.543		China	China	1926	II
68.551-2		China	China	1926	II
68.551-3		China	China	1926	I
68.554		China	China	1926	I
68.555		China	China	1926	II
68.562		China	China	1926	II
68.564		China	China	1926	II
68.572		China	China	1926	I
68.576		China	China	1926	I
68.585		China	China	1926	II
68.586		China	China	1926	I
68.587		China	China	1926	II
68.598		China	China	1926	II
68.600		China	China	1926	II
68.604-2		China	China	1926	I
68.609B		China	China	1926	II
68.610		China	China	1926	I
68.622		China	China	1926	II
68.627		China	China	1926	II
68.629		China	China	1926	II
68.639		China	China	1926	II
68.642		China	China	1926	II
68.655		China	China	1926	II
68.658		China	China	1926	II
68.661		China	China	1926	II
68.663		China	China	1926	II
68.666		China	China	1926	II
68.670-1		China	China	1926	II
68.670-2		China	China	1926	II
68.671		China	China	1926	II
68.676		China	China	1926	II
68.680		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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
68.457-1	II	N	P	T	E	N	Br	S	Y	Br			
68.461	II	D	P	G	E	N	Br	S	Y	lb			
68.461-1	II	S	W	G	E	N	Br	S	Y	Bf			
68.465	II	D	P	G	E	N	Br	S	Y	lb			
68.465-1	II	N	P	Lt	E	N	Tn	D	Y	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	I	N	P	T	E	N	Br	D	Y	Dbr			
68.475	II	D	P	G	E	N	Br	S	Y	lb			
68.475-1	II	N	P	T	E	N	Br	D	Y	Br			
68.480	II	D	W	G	E	N	Br	S	Y	Bf			
68.481	II	N	W	G	E	N	Br	S	Y	Bf			
68.484-1	II	N	P	T	E	N	Bl	S	Y	Bl			
68.484-4	II	N	P	T	E	N	Br	D	Y	Br			
68.488	II	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	II	D	W	G	E	N	Br	S	Y	Bf			
68.516	II	N	P	G	E	N	Br	S	Y	Y			
68.521	II	D	P	G	E	N	Br	S	Y	lb			
68.522	II	N	W	G	E	N	Br	S	Y	Bf			
68.526	II	D	P	G	E	N	Br	S	Y	lb			
68.530	II	N	W	G	E	N	Br	S	Y	Bf			
68.543	II	D	P	G	E	N	Br	S	Y	lb			
68.551-2	II	N	P	T	E	N	Br	D	Y	Br			
68.551-3	I	S	P	T	E	N	Br	S	Y	Bl			
68.554	I	N	P	T	E	Ssp	Br	D	Y	Bl			
68.555	II	D	P	G	E	N	Br	S	Y	Bf			
68.562	II	D	P	G	E	N	Br	S	Y	lb			
68.564	II	D	P	G	E	N	Br	S	Y	lb			
68.572	I	N	P	T	E	N	Br	D	Y	Br			
68.576	I	N	P	T	E	N	Br	S	Y	Tn			
68.585	II	D	P	G	E	N	Br	S	Y	lb			
68.586	I	D	P	T	E	N	Br	S	Y	Bl			
68.587	II	D	P	G	E	N	Tn	S	Y	lb			
68.598	II	N	W	G	E	N	Br	S	Y	Bf			
68.600	II	N	P	G	E	N	Br	S	Y	lb			
68.604-2	I	N	P	T	E	N	Br	S	Y	Tn			
68.609B	II	N	P	T	E	N	Br	S	Y	Bl			
68.610	I	S	P	T	E	N	Tn	S	Y	Br	Def		
68.622	II	S	P	T	E	Ssp	Br	D	Y	Br			
68.627	II	D	P	G	E	N	Br	S	Y	lb			
68.629	II	D	P	G	E	N	Br	S	Y	Bf			
68.639	II	D	P	G	E	N	Br	S	Y	lb			
68.642	II	D	W	G	E	N	Br	S	Y	Bf			
68.655	II	S	P	G	E	N	Br	S	Y	lb			
68.658	II	S	P	G	E	N	Br	S	Y	lb			
68.661	II	D	P	G	E	N	Tn	S	Y	Y			
68.663	II	N	W	G	Sa	N	Br	S	Y	Bf			
68.666	II	S	P	G	E	N	Br	S	Y	lb			
68.670-1	II	D	P	T	E	N	Br	S	Y	Bl			
68.670-2	II	N	P	T	E	N	Br	D	Y	Br			
68.671	II	D	P	G	E	N	Br	S	Y	Lbf			
68.676	II	D	P	G	E	N	Br	S	Y	Bf			
68.680	II	N	W	G	E	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

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)
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	86	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	89	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
68.598	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
68.658	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

Entry	Maturity group	Seed composition		Protein composition	Oil composition		Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
68.457-1	II	39.8	21.9	1.3	49.4	7.0	S	S
68.461	II	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	I	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	H	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	II	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	II	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	I	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	I	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	II	41.8	21.4	1.4	48.8	6.7	S	S
68.586	I	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	I	41.9	21.1	1.4	48.3	6.4	S	S
68.609B	II	40.8	21.0	1.3	46.5	6.6	S	S
68.610	I	43.2	20.6	1.1	44.8	7.0	S	S
68.622	II	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	II	39.4	21.3	1.3	45.9	6.6	S	S
68.680	II	38.9	22.1	1.3	44.9	5.9	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
68.680-2		China	China	1926	II
68.683		China	China	1926	II
68.685		China	China	1926	II
68.687		China	China	1926	II
68.694		China	China	1926	II
68.696		China	China	1926	II
68.704		China	China	1926	II
68.706		China	China	1926	II
68.708		China	China	1926	II
68.709		China	China	1926	II
68.712		China	China	1926	II
68.713		China	China	1926	II
68.715		China	China	1926	II
68.718		China	China	1926	II
68.725		China	China	1926	II
68.728		China	China	1926	II
68.729		China	China	1926	II
68.732		China	China	1926	II
68.736		China	China	1926	II
68.741		China	China	1926	II
68.746		China	China	1926	I
68.748		China	China	1926	II
68.761		China	China	1926	II
68.762		China	China	1926	II
68.763		China	China	1926	II
68.765		China	China	1926	II
68.770		China	China	1926	I
68.778		China	China	1926	II
68.788		China	China	1926	II
68.795		China	China	1926	II
68.815		China	China	1926	II
69.500		China	China	1926	II
69.501		China	China	1926	II
69.503		China	China	1926	II
69.507		China	China	1926	I
69.512		China	China	1926	II
69.532		China	China	1926	II
69.533		China	China	1926	I
69.991		China	China	1926	II
69.992		China	China	1926	II
69.996		China	China	1926	II
70.009		China	China	1926	II
70.016		China	China	1926	I
70.017		China	China	1926	I
70.021		China	China	1926	II
70.027		China	China	1926	I
70.036		China	China	1926	II
70.077		China	China	1926	II
70.078		China	China	1926	II
70.084		China	China	1926	II
70.087		China	China	1926	I
70.089		China	China	1926	II
70.091		China	China	1926	II
70.197		China	China	1926	II
70.224		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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
68.680-2	II	D	P	T	E	N	Br	S	Y	G			
68.683	II	S	P	T	E	N	Br	S	Y	Bl			
68.685	II	D	W	G	E	N	Br	S	Y	Bf			
68.687	II	N	P	Lt	E	N	Br	S	Y	Bl			
68.694	II	N	P	T	E	N	Br	D	Y	Tn			
68.696	II	N	P	Ng	E	N	Br	D	Y	Br			
68.704	II	D	P	G	E	N	Br	S	Y	Bf			
68.706	II	D	P	G	E	N	Br	S	Y	Ig			
68.708	II	D	P	G	E	N	Br	S	Y	Bf			
68.709	II	N	P	Lt	E	N	Tn	D	Y	Br			
68.712	II	D	W	G	E	N	Br	I	Y	Y			
68.713	II	S	W	G	E	N	Br	S	Y	Bf			
68.715	II	D	P	T	E	N	Br	S	Y	Br			
68.718	II	N	P	T	E	N	Br	S	Y	Br			
68.725	II	N	P	T	E	N	Br	D	Y	Br			
68.728	II	N	P	Lt	E	N	Br	D	Y	Br			
68.729	II	N	P	G	E	N	Br	S	Y	Lbf			
68.732	II	N	W	Lt	E	N	Br	S	Y	Bl			
68.736	II	N	W	T	E	N	Tn	D	Y	Br	Def		
68.741	II	D	W	G	E	N	Br	S	Y	Bf			
68.746	I	S	P	T	E	N	Br	S	Y	Bl			
68.748	II	N	W	G	E	N	Br	S	Y	Bf			
68.761	II	D	P	G	E	N	Br	S	Y	Ib			
68.762	II	S	P	T	E	N	Br	D	Y	Br		Dab	
68.763	II	N	P	G	E	N	Br	S	Y	Ib			
68.765	II	N	P	T	E	N	Tn	D	Y	Y			
68.770	I	D	P	G	E	N	Br	S	Y	Ib			
68.778	II	N	P	G	E	N	Br	D	Y	G			
68.788	II	D	W	G	E	N	Br	S	Y	Bf			
68.795	II	D	P	G	E	N	Br	S	Y	Ib			
68.815	II	N	P	G	E	N	Tn	I	Y	Ib			
69.500	II	N	W	Lt	E	N	Br	D	Y	Br			
69.501	II	N	W	G	E	N	Br	S	Y	Bf			
69.503	II	N	W	G	E	N	Br	S	Y	Bf			
69.507	I	N	P	T	E	N	Br	S	Y	Bl			
69.512	II	N	P	T	E	N	Br	S	Y	Bl			
69.532	II	N	P	G	E	N	Br	S	Y	Y			
69.533	I	D	P	G	E	N	Br	S	Y	Ib			
69.991	II	D	W	G	E	N	Br	S	Y	Bf			
69.992	II	N	W	G	E	N	Br	S	Y	Bf			
69.996	II	N	W	G	E	N	Br	S	Y	Bf			
70.009	II	N	W	G	E	N	Br	S	Y	Y			
70.016	I	N	P	T	E	N	Br	S	Y	Bl			
70.017	I	S	P	G	E	Ssp	Bl	S	Y	Bf			
70.021	II	N	W	G	E	N	Tn	S	Y	Bf			
70.027	I	N	P	T	E	N	Br	D	Gn	Br			
70.036	II	N	W	G	E	N	Br	S	Y	Bf			
70.077	II	N	P	G	E	N	Br	D	Y	Bf			
70.078	II	N	W	T	E	Ssp	Br	D	Y	Br			
70.084	II	D	P	G	E	N	Br	D	Y	Bf			
70.087	I	N	P	G	E	N	Br	D	Y	Y			
70.089	II	N	W	G	E	N	Br	S	Y	Bf			
70.091	II	D	W	G	E	N	Br	S	Y	Bf			
70.197	II	N	P	T	E	N	Br	I	Y	Rbr			
70.224	II	N	W	Lt	E	N	Br	S	Y	Bl			

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)
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

Entry	Maturity group	Seed composition		Protein composition	Oil composition		Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
68.680-2	II	42.1	20.7	1.2	45.3	5.9	S	S
68.683	II	40.0	21.7	1.2	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	II	41.8	20.3	1.2	43.9	8.2	S	S
68.696	II	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	H	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	II	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	II	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	II	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	R	S
68.728	II	42.9	19.4	1.3	49.4	6.6	R	S
68.729	II	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	I	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	II	38.8	22.5	1.1	48.6	7.0	S	S
68.762	II	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	I	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	H	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	H
69.503	II	37.5	21.6	1.2	44.5	6.2	S	S
69.507	I	36.9	21.0	1.4	48.8	7.2	S	S
69.512	II	39.8	20.7	1.2	47.0	6.6	S	S
69.532	II	40.0	21.0	1.3	47.7	7.4	S	S
69.533	I	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	II	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	I	37.0	21.3	1.3	46.0	6.9	S	S
70.017	I	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	I	37.6	19.8	-	48.1	6.5	S	S
70.036	II	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	I	38.5	20.8	1.3	47.8	7.9	S	S
70.089	II	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
70.228		China	China	1926	II
70.241		China	China	1926	I
70.242		China	China	1926	II
70.251		China	China	1926	II
70.453		China	China	1926	II
70.456		China	China	1926	II
70.457		China	China	1926	II
70.458		China	China	1926	II
70.459		China	China	1926	II
70.460		China	China	1926	II
70.461		China	China	1926	II
70.463		China	China	1926	II
70.473-1		China	China	1926	I
70.476		China	China	1926	II
70.478		China	China	1926	II
70.485		China	China	1926	I
70.495		China	China	1926	II
70.503		China	China	1926	II
70.507		China	China	1926	II
70.516		China	China	1926	II
70.520		China	China	1926	I
70.561		China	China	1926	II
71.161		China	China	1927	I
71.850		China	China	1927	II
72.328		China	China	1927	II
72.337		China	China	1927	II
72.341		China	China	1927	II
72.342		China	China	1927	II
73.583		China	China	1927	II
73.585		China	China	1927	II
73.587		China	China	1927	II
73.772		China	China	1927	II
73.780		China	China	1927	II
78.242		Russia	Russia	1928	I
78.243		Russia	Russia	1928	I
79.586		China	China	1929	II
79.593		China	China	1929	II
79.596		China	China	1929	II
79.602		China	China	1929	II
79.609		China	China	1929	II
79.610		China	China	1929	I
79.613		China	China	1929	II
79.617		China	China	1929	I
79.648		China	China	1929	I
79.694		China	China	1929	I
79.695		China	China	1929	II
79.699		China	China	1929	I
79.703		China	China	1929	II
79.712		China	China	1929	II
79.727		China	China	1929	I
79.737		China	China	1929	II
79.745		China	China	1929	II
79.746		China	China	1929	II
79.747		China	China	1929	II
79.756		China	China	1929	II

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
70.228	II	N	P	T	E	N	Tn	D	Y	Y			
70.241	I	D	W	G	E	N	Br	S	Y	Bf			
70.242	II	N	P	T	E	N	Tn	D	Y	Y			
70.251	II	D	P	T	E	Ssp	Br	S	Y	Bl			
70.453	II	N	P	T	E	N	Br	S	Y	Bl			
70.456	II	D	P	G	E	N	Br	S	Y	lb			
70.457	II	D	W	G	E	N	Br	S	Y	Bf			
70.458	II	D	P	T	E	Ssp	Br	D	Y	Br			
70.459	II	N	P	T	E	N	Br	S	Y	Bl			
70.460	II	D	W	T	E	N	Br	S	Y	Bl			
70.461	II	N	P	T	E	N	Br	D	Y	Br			
70.463	II	N	W	G	E	N	Dbr	S	Y	Bf			
70.473-1	I	N	P	G	E	N	Tn	S	Y	Y			
70.476	II	N	P	T	E	Ssp	Bl	I	Y	Br			
70.478	II	D	W	G	E	N	Br	S	Y	Bf			
70.485	I	D	P	T	E	N	Br	S	Y	Y			
70.495	II	N	P	T	E	N	Br	S	Y	Br			
70.503	II	N	P	T	E	N	Br	S	Y	Bl			
70.507	II	N	P	Lt	E	N	Tn	D	Y	Br			
70.516	II	N	P	G	E	N	Br	S	Y	Y			
70.520	I	N	P	T	E	N	Br	S	Y	Bl			
70.561	II	D	W	G	E	N	Br	S	Y	Bf			
71.161	I	D	P	G	E	N	Br	S	Y	Bf			
71.850	II	D	P	G	E	N	Br	S	Y	Bf			
72.328	II	S	P	T	E	Ssp	Br	D	Y	Br			
72.337	II	N	P	G	E	N	Tn	I	Y	Y			
72.341	II	D	P	G	E	N	Br	S	Y	Bf			
72.342	II	N	P	G	E	N	Br	S	Y	lb			
73.583	II	D	P	G	E	N	Br	S	Y	lb			
73.585	II	N	P	T	E	N	Br	S	Y	Bl			
73.587	II	N	P	T	E	Ssp	Tn	D	Y	Br			
73.772	II	N	W	G	E	N	Br	S	Y	Bf			
73.780	II	N	P	G	E	N	Br	S	Y	lb			
78.242	I	D	P	T	E	N	Br	S	Y	Bl			
78.243	I	N	P	T	E	N	Br	D	Y	Br			
79.586	II	N	P	Lt	E	N	Bl	S	Bl	Bl	Fleck		
79.593	II	N	P	T	A	Ssp	Br	B	Bl	Bl			Sw
79.596	II	D	P	G	E	N	Br	D	Y	Bf			
79.602	II	N	P	T	E	N	Br	S	Y	Bl			
79.609	II	N	W	T	E	N	Br	S	Bl	Bl	Gncot		
79.610	I	N	P	T	E	Ssp	Bl	S	Gn	Bl	Gncot		
79.613	II	D	P	G	E	N	Br	S	Y	lb			
79.617	I	N	P	T	E	N	Br	D	Y	Br			
79.648	I	N	W	T	A	Sp	Br	B	Bl	Bl			Sw
79.694	I	N	W	T	A	Ssp	Br	B	Bl	Bl			Sw
79.695	II	D	P	T	E	N	Br	S	Y	Bl			
79.699	I	N	P	G	E	N	Tn	S	Y	Y			
79.703	II	D	P	G	E	N	Br	S	Y	lb			
79.712	II	D	W	G	E	N	Br	S	Gn	Bf			
79.727	I	N	Nw	T	A	Ssp	Br	B	Bl	Bl			Sw
79.737	II	D	P	T	E	Ssp	Br	D	Y	Bl			
79.745	II	D	W	G	E	N	Br	S	Y	Bf			
79.746	II	N	P	G	E	N	Br	D	Y	lb			
79.747	II	D	P	G	E	N	Br	S	Y	lb			
79.756	II	N	P	Lt	E	N	Bl	I	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>		<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
70.228	II	38.4	20.6	1.2	46.2	7.9	H	S
70.241	I	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	H	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	II	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	I	39.0	19.4	1.3	44.0	7.0	S	S
70.476	II	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
70.485	I	40.7	19.7	-	43.8	6.1	S	S
70.495	II	38.5	19.7	1.2	43.2	6.8	S	S
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	H	S
70.516	II	38.2	20.4	1.3	44.3	5.8	S	S
70.520	I	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	I	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
78.242	I	37.7	21.0	1.4	46.3	5.8	S	S
78.243	I	39.4	20.9	1.4	49.8	7.5	S	S
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	I	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	I	39.3	15.0	-	46.6	9.2	R	S
79.694	I	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	I	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
79.727	I	41.1	15.9	-	47.9	7.4	S	S
79.737	II	41.9	19.6	1.4	46.5	5.7	S	S
79.745	II	36.0	22.1	1.5	46.7	6.4	S	S
79.746	II	38.3	21.1	1.4	44.2	6.9	S	S
79.747	II	36.3	22.2	1.3	48.6	7.3	S	S
79.756	II	37.7	18.7	-	50.0	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
79.761		China	China	1929	II
79.773		China	China	1929	II
79.846		China	China	1929	II
79.848		China	China	1929	II
79.862-1		China	China	1929	II
79.863		China	China	1929	II
79.870-1		China	China	1929	I
79.885		China	China	1929	II
80.469	Kuro maru daizu	Japan	Japan	1929	II
80.471	Sousei kuro sakigake	Japan	Japan	1929	II
80.485	Chusei hattoku daizu	Japan	Japan	1929	II
80.488-1	(Eda mame uase chaurame)	Japan	Japan	1929	II
80.494	Tsurunoko daizu	Japan	Japan	1929	II
80.536		Japan	Japan	1929	II
80.671	Sode furi daizu	Japan	Japan	1929	II
81.029N	(Chuseikurome daizu)	Japan	Japan	1929	II
81.033	Aoshiro daizu	Japan	Japan	1929	I
81.035		Japan	Japan	1929	II
81.037-4	(Kurakake daizu)	Japan	Japan	1929	I
81.040	Cha mame	Japan	Japan	1929	I
81.763	Moshito	Japan	China	1929	II
81.765	Moshito	Japan	China	1929	I
81.767	Moshito	Japan	China	1929	II
81.768	Moshito	Japan	China	1929	II
81.770		Japan	China	1929	II
81.771		Japan	China	1929	II
81.772		Japan	China	1929	I
81.773	Shirosaya	Japan	Japan	1929	II
81.775		Japan	Japan	1929	I
81.971		Unknown	Unknown	1929	II
82.183	Chonte	Rep. of Korea	Rep. of Korea	1929	I
82.184	Pepute	Rep. of Korea	Rep. of Korea	1929	II
82.263-2	(Pepute No. 2)	Rep. of Korea	Rep. of Korea	1929	II
82.263-3	(Pepute No. 2)	Rep. of Korea	Rep. of Korea	1929	II
82.532	Oiarukon	Rep. of Korea	Rep. of Korea	1929	II
83.945-3	(Dairyu tsurunoko)	Rep. of Korea	Rep. of Korea	1930	I
84.580		Rep. of Korea	Rep. of Korea	1930	II
84.609		Rep. of Korea	Rep. of Korea	1930	II
84.637		Rep. of Korea	Rep. of Korea	1930	II
84.665		Rep. of Korea	Rep. of Korea	1930	II
84.666-1		Rep. of Korea	Rep. of Korea	1930	II
84.668		Rep. of Korea	Rep. of Korea	1930	I
84.668-1		Rep. of Korea	Rep. of Korea	1930	II
84.673		Rep. of Korea	Rep. of Korea	1930	II
84.673-1		Rep. of Korea	Rep. of Korea	1930	II
84.674		Rep. of Korea	Rep. of Korea	1930	I
84.681		Rep. of Korea	Rep. of Korea	1930	II
84.683		Rep. of Korea	Rep. of Korea	1930	II
84.683A		Rep. of Korea	Rep. of Korea	1930	II
84.686		Rep. of Korea	Rep. of Korea	1930	I
84.750		Rep. of Korea	Rep. of Korea	1930	II
84.810		Rep. of Korea	Rep. of Korea	1930	I
84.896		Rep. of Korea	Rep. of Korea	1930	II
84.921	Koshurei	Rep. of Korea	Rep. of Korea	1930	II
84.928	Kanro	Rep. of Korea	Rep. of Korea	1930	II

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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
79.761	II	N	P	Lt	E	N	Br	D	Y	Br	Saddle		
79.773	II	D	P	T	E	N	Br	S	Y	Bl			
79.846	II	N	P	T	E	N	Br	I	Y	Br			
79.848	II	D	W	G	E	N	Br	S	Y	Lbf			
79.862	II	D	P	G	E	N	Br	S	Y	Ib			
79.863	II	N	P	T	E	N	Br	S	Y	Bl			
79.870-1	I	S	W	T	E	N	Br	S	Y	Bl			
79.885	II	D	P	G	E	N	Br	S	Y	Bf			
80.469	II	N	W	G	E	N	Br	S	Y	Lbf			
80.471	II	D	W	T	E	Ssp	Tn	D	Y	Bl			
80.485	II	D	W	T	E	Ssp	Br	D	Bl	Bl			
80.488-1	II	N	P	T	A	Ssp	Br	B	Bl	Bl			Sw
80.494	II	D	P	G	E	N	Br	D	Y	Y			
80.536	II	D	W	G	E	N	Br	I	Y	Lbf			
80.671	II	D	P	T	E	N	Br	D	Gn	Bl			
81.029N	II	D	P	G	E	N	Br	S	Y	Ib			
81.033	I	D	P	T	E	N	Br	D	Gn	Bl			
81.035	II	D	P	T	E	Sp	Br	I	Y	Br			
81.037-4	I	D	P	T	E	N	Br	S	Y	Bl			
81.040	I	N	W	T	E	Ssp	Br	S	Br	Br			
81.763	II	N	Nw	T	A	Ssp	Br	S	Bl	Bl	Fleck		Sw
81.765	I	N	Nw	T	A	Sp	Br	B	Bl	Bl			Sw
81.767	II	N	Nw	T	A	Ssp	Br	S	Br	Br			Sw
81.768	II	N	P	T	E	Ssp	Tn	B	Br	Br			Sw
81.770	II	N	P	T	A	Ssp	Br	S	Br	Br			Sw
81.771	II	N	P	T	A	Ssp	Br	S	Br	Br		Sw	
81.772	I	N	W	T	A	Ssp	Br	B	Bl	Bl		Sw	
81.773	II	N	P	T	A	Ssp	Br	S	Br	Br		Sw	
81.775	I	N	P	T	E	N	Tn	D	Y	Y			
81.971	II	N	W	G	E	N	Br	S	Y	Bf			
82.183	I	N	P	T	E	N	Tn	D	Y	Y			
82.184	II	S	P	G	E	N	Br	D	Y	Ib			
82.263-2	II	D	W	T	E	N	Br	S	Y	Bl			
82.263-3	II	N	W	T	E	N	Br	S	Lgn	Tn			
82.532	II	N	P	T	A	Ssp	Br	B	Bl	Bl			Sw
83.945-3	I	S	W	G	E	Ssp	Dbr	S	Y	Y			
84.580	II	N	W	T	E	N	Dbr	S	Gn	G			
84.609	II	N	P	T	E	N	Br	B	Bl	Bl			
84.637	II	N	P	T	E	N	Br	D	Y	Br			
84.665	II	N	P	G	E	N	Tn	D	Y	Y			
84.666-1	II	N	P	T	E	N	Br	D	Y	Bl			
84.668	I	D	P	G	E	N	Br	S	Y	Ib			
84.668-1	II	S	P	G	E	N	Bl	D	Y	Lbf			
84.673	II	N	W	T	E	N	Br	S	Bl	Bl	Gncot		
84.673-1	II	D	P	G	E	N	Br	S	Y	Ib			
84.674	I	N	W	T	E	N	Bl	D	Bl	Bl	Gncot		
84.681	II	N	P	T	E	Ssp	Br	S	Y	Bl			
84.683	II	N	P	T	E	N	Br	S	Y	Bl			
84.683A	II	D	P	G	E	N	Br	S	Y	Ib			
84.686	I	D	P	G	E	N	Br	S	Y	Ib			
84.750	II	D	W	G	E	Ssp	Bl	S	Gn	Gn			
84.810	I	D	P	T	E	N	Bl	D	Y	Br			
84.896	II	D	P	G	E	N	Br	D	Y	Bf			
84.921	II	N	W	G	E	N	Tn	D	Y	Bf			
84.928	II	D	P	G	E	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

Entry	Maturity group	Seed composition		Protein composition	Oil composition		Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
79.761	II	38.3	20.7	1.3	46.3	5.8	S	S
79.773	II	37.1	22.0	-	49.2	7.1	S	S
79.846	II	39.0	21.2	1.4	48.1	6.6	S	S
79.848	II	35.9	23.3	1.3	46.2	6.5	S	S
79.862-1	II	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	I	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	II	40.5	18.9	-	45.9	6.1	S	S
80.488-1	II	40.1	15.3	-	47.1	9.2	R	S
80.494	II	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	II	38.1	21.8	1.3	48.5	7.5	S	S
81.029N	II	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	I	39.8	20.5	1.3	43.4	5.2	S	S
81.040	I	38.6	19.5	-	43.7	7.0	S	S
81.763	II	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	I	41.4	14.9	-	48.1	8.4	S	S
81.773	II	41.2	14.2	-	49.3	9.8	R	S
81.775	I	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	I	42.2	19.5	-	48.3	7.8	S	S
82.184	II	39.7	19.8	1.2	51.3	7.2	S	S
82.263-2	II	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	-	47.3	8.8	R	S
83.945-3	I	36.8	21.4	1.5	48.6	7.1	S	S
84.580	II	38.3	21.0	-	46.4	6.1	S	S
84.609	II	40.5	18.9	-	49.3	7.1	S	S
84.637	II	41.2	20.1	1.3	48.1	6.8	R	S
84.665	II	41.2	19.4	1.4	45.0	6.3	S	S
84.666-1	II	44.2	18.9	1.2	45.5	6.9	S	S
84.668	I	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
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	I	41.6	18.0	-	45.4	6.1	S	S
84.681	II	39.9	20.9	1.3	49.4	6.9	S	S
84.683	II	43.5	19.3	1.3	48.8	6.5	S	S
84.683A	II	38.5	21.7	1.3	48.5	6.7	S	S
84.686	I	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
84.896	II	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	II	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

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

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Seedcoat			Other traits			
				Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
84.954	II	D	W	G	E	N	Br	S	Y	Lbf			
84.964	I	D	W	G	E	N	Br	I	Y	Lbf			
84.965	II	N	P	G	E	N	Tn	D	Y	Y			
84.992	II	D	W	G	E	N	Tn	D	Y	Lbf			
85.012	II	D	W	G	Sa	N	Br	D	Y	Bf			
85.014	II	D	W	T	A	N	Br	D	Y	Br			
85.021	II	N	P	G	E	N	Tn	D	Y	Y			
85.340	II	N	P	T	E	N	Br	S	Y	Bl			
85.492	II	D	W	G	E	N	Tn	D	Y	Bf			
85.508	II	S	W	G	E	N	Br	S	Y	Bf			Fechlor
85.625	II	D	W	G	E	N	Tn	I	Y	Bf			
85.671	II	N	P	T	E	N	Br	S	Y	Bl			
86.002	II	N	P	T	A	Ssp	Br	B	Bl	Bl			Sw
86.021	I	D	P	T	E	Ssp	Br	D	Gn	Br			
86.022	II	D	W	G	Sa	Ssp	Tn	D	Y	Bf			
86.023	II	D	P	T	E	N	Br	D	Gn	Bl			
86.031	II	N	W	T	E	Ssp	Br	S	Bl	Bl	Gncot		
86.038	II	D	P	T	E	Sp	Br	D	Bl	Bl			
86.045	II	N	P	T	E	N	Br	S	Bl	Bl	Fleck	Dab	
86.050	II	D	P	T	E	N	Br	D	Y	Br			
86.069	II	N	W	T	E	N	Br	S	Bl	Bl	Gncot		
86.089	II	D	W	G	E	N	Br	S	Y	Bf			
86.102	II	N	P	G	E	N	Tn	D	Y	Y			
86.112	II	D	W	-	-	G	Tn	S	Y	lb			
86.113	II	D	P	G	E	N	Br	D	Y	lb			
86.115	II	N	W	T	E	N	Br	S	Y	Bl			
86.122	II	D	P	T	E	N	Br	D	Y	Bl			
86.133	I	D	P	T	E	Ssp	Br	D	Bl	Bl			
86.137-1	II	D	P	T	E	Ssp	Br	S	Br	Br			
86.410	I	D	P	T	E	N	Br	D	Gn	Bl			
86.411	I	S	P	T	E	N	Br	D	Y	Br			
86.416	I	S	P	G	E	N	Br	S	Y	Y			
86.443	II	S	P	G	E	N	Tn	D	Y	Y			
86.454	II	D	P	G	E	N	Br	S	Y	lb			
86.463	II	D	P	G	A	N	Tn	I	Y	Bf			
86.737	I	N	P	Lt	E	N	Br	I	Y	Br			
86.741	II	N	P	T	E	N	Br	I	Y	Br			
86.878	II	N	P	G	E	N	Tn	S	Y	Y			
86.878-2	II	D	P	T	E	N	Tn	D	Y	Y			
86.972-1	II	N	W	T	E	N	Br	D	Y	Y			
87.065	II	N	W	G	E	N	Br	S	Y	Bf			
87.524	II	N	P	G	E	N	Tn	D	Y	Y			
87.531	I	S	P	G	E	N	Br	I	Y	Y			
87.619-1	II	N	P	T	E	Ssp	Br	S	Y	Y			
87.628	II	N	W	T	E	N	Br	S	Bl	Bl	Gncot		
87.631	II	N	P	T	E	N	Tn	S	Y	Bl			
88.288	I	N	P	T	E	N	Br	D	Br	Br			Dab
88.293	II	N	P	G	E	N	Tn	D	Y	Y			
88.293A	II	D	P	G	E	N	Br	S	Y	Bf			
88.294	II	N	W	G	E	N	Br	S	Y	Bf			
88.294-1	II	N	W	T	E	Ssp	Br	D	Y	Y			
88.295	I	D	W	G	E	N	Tn	S	Y	Y			
88.295-1	II	N	P	T	E	Ssp	Br	I	Y	Tn			
88.296	II	D	P	G	E	N	Br	S	Y	lb			
88.298	II	N	W	G	E	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

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)
84.954	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
86.137-1	716	917	1.4	66	1.0	3.0	4.0	3.0	-	28.0	1.76
86.410	704	908	1.3	48	1.0	3.0	5.0	2.5	1.0	17.9	1.77
86.411	701	831	1.3	74	2.0	3.0	1.0	2.3	1.0	12.2	1.96
86.416	628	827	1.3	71	2.0	2.0	1.0	3.0	1.0	13.1	1.86
86.443	710	911	2.1	79	2.0	2.0	1.0	2.8	2.0	18.0	2.60
86.454	707	911	1.9	71	1.5	2.0	1.0	3.3	1.0	13.8	2.26
86.463	723	920	2.4	86	1.0	3.0	4.0	2.5	1.0	17.5	1.68
86.737	630	827	2.5	89	3.0	2.0	1.0	2.3	2.0	13.0	1.61
86.741	629	831	1.8	81	3.0	2.0	2.0	2.5	2.0	13.3	2.23
86.878	706	909	2.3	104	3.5	3.0	1.0	3.3	1.0	16.4	2.25
86.878-2	701	906	1.4	71	1.0	2.0	2.0	2.8	1.5	15.2	2.51
86.972-1	707	914	2.0	99	3.5	3.0	2.0	2.8	1.0	15.0	2.39
87.065	706	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	2.0	3.0	1.0	13.7	2.54
88.294	703	913	2.3	89	3.0	2.0	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	2.0	1.0	2.8	1.5	15.0	2.37
88.295-1	705	912	1.8	89	3.0	2.5	2.0	2.8	2.0	15.4	2.38
88.296	708	915	2.0	76	1.0	2.0	1.0	3.0	1.0	15.5	2.46
88.298	704	916	2.2	94	2.5	2.0	1.0	3.0	1.0	17.7	2.44

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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>		<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
84.954	II	39.8	20.8	1.3	48.7	6.6	S	S
84.964	I	37.1	21.1	1.3	49.4	6.8	S	S
84.965	II	40.7	18.6	1.4	45.3	7.0	S	S
84.992	II	39.8	17.6	1.4	45.9	8.1	S	S
85.012	II	39.4	16.8	1.4	44.7	8.0	S	S
85.014	II	39.9	17.0	-	45.9	8.3	S	S
85.021	II	40.9	19.2	1.3	44.9	7.1	S	S
85.340	II	42.3	20.0	1.3	50.5	7.4	S	S
85.492	II	42.1	15.1	1.3	45.9	9.1	R	S
85.508	II	39.1	20.7	1.3	44.9	6.4	S	S
85.625	II	40.2	18.3	1.3	45.3	8.0	H	S
85.671	II	39.9	20.2	1.4	43.0	6.0	S	S
86.002	II	40.3	15.2	-	46.7	9.7	R	S
86.021	I	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	II	40.3	19.5	-	45.4	6.2	S	S
86.045	II	39.5	18.2	-	47.1	6.4	S	S
86.050	II	38.5	20.5	1.4	46.7	5.9	R	S
86.069	II	37.0	21.0	-	45.6	5.6	S	S
86.089	II	35.8	22.8	1.3	47.8	5.8	S	S
86.102	II	38.8	20.0	1.4	47.5	6.0	S	S
86.112	II	38.6	18.0	-	46.7	7.3	S	S
86.113	II	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	II	38.8	20.3	1.4	44.1	5.5	R	S
86.133	I	38.5	20.6	-	46.8	6.3	S	S
86.137-1	II	40.5	19.5	-	46.6	6.3	H	S
86.410	I	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	II	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	H	S
86.737	I	40.4	18.8	1.3	43.0	5.7	S	S
86.741	II	38.7	19.8	1.4	44.3	7.6	S	S
86.878	II	38.7	21.0	1.4	48.6	6.3	S	S
86.878-2	II	37.4	21.2	1.3	47.7	6.2	R	S
86.972-1	II	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	H	S
87.531	I	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
87.628	II	37.5	20.2	-	44.2	6.1	S	S
87.631	II	38.5	20.1	1.1	46.6	7.0	S	S
88.288	I	40.8	17.4	-	45.0	5.9	S	S
88.293	II	39.2	20.2	1.3	46.4	6.3	S	S
88.293A	II	36.9	22.3	1.3	50.1	7.1	S	S
88.294	II	38.8	20.9	1.2	45.3	6.3	S	S
88.294-1	II	38.2	19.7	1.2	46.5	6.9	S	S
88.295	I	40.4	21.1	1.2	45.8	6.8	S	S
88.295-1	II	40.8	19.7	1.2	47.2	7.4	S	S
88.296	II	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
88.301		China	China	1930	II
88.303		China	China	1930	II
88.304		China	China	1930	II
88.307		China	China	1930	II
88.308		China	China	1930	II
88.309		China	China	1930	II
88.311		China	China	1930	II
88.313		China	China	1930	II
88.351		China	China	1930	II
88.352	Kingen	China	China	1930	II
88.355		China	China	1930	II
88.356		China	China	1930	II
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	II
88.468	Iganzu	China	China	1930	II
88.479	Kungchuling Improved No. 77	China	China	1930	II
88.484		China	China	1930	I
88.495	Knoiku No. 66	China	China	1930	II
88.497	Taisho 24-9	China	China	1930	I
88.508	Showa No. 1-4	China	China	1930	II
88.777		China	China	1930	II
88.787		China	China	1930	II
88.797		China	China	1930	I
88.798		China	China	1930	II
88.803		China	China	1930	II
88.804		China	China	1930	I
88.805-2		China	China	1930	I
88.805-4		China	China	1930	II
88.810	Orukon	Rep. of Korea	Rep. of Korea	1930	II
88.825	Tsurunoko	Rep. of Korea	Rep. of Korea	1930	II
88.997		China	China	1930	II
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	II
89.006-2		China	China	1930	II
89.008		China	China	1930	II
89.012		China	China	1930	II
89.013		China	China	1930	II
89.014		China	China	1930	II
89.053		China	China	1930	II
89.055		China	China	1930	I
89.055-1		China	China	1930	II
89.056-3		China	China	1930	I
89.057		China	China	1930	I
89.058		China	China	1930	I
89.059		China	China	1930	II
89.060		China	China	1930	I
89.061-1		China	China	1930	I
89.063		China	China	1930	II
89.064		China	China	1930	II
89.065		China	China	1930	II

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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
88.301	II	N	W	G	E	N	Br	S	Y	Bf			
88.303	II	D	P	G	E	N	Br	S	Y	lb			
88.304	II	N	W	G	E	N	Br	S	Y	Bf			
88.307	II	N	P	G	E	N	Br	S	Y	Y			
88.308	II	D	W	T	E	Ssp	Br	S	Y	Tn			
88.309	II	S	P	G	E	N	Br	S	Y	lb			
88.311	II	N	W	G	E	Ssp	Br	D	Y	Bf			
88.313	II	D	P	G	E	N	Tn	S	Y	Y			
88.351	II	N	W	G	E	N	Dbr	S	Y	Lbf			
88.352	II	D	W	G	E	N	Br	S	Y	Bf			
88.355	II	N	W	G	E	N	Br	S	Y	Y			
88.356	II	S	W	G	E	N	Br	S	Y	Bf			
88.357	II	N	W	G	E	Ssp	Br	I	Y	Bf			
88.358	II	S	W	G	E	N	Br	S	Y	Bf			
88.442	II	S	P	G	E	N	Br	D	Y	Y			
88.443	I	N	P	T	E	N	Br	S	Y	Y			
88.455	II	N	W	G	F	N	Br	S	Y	Lbf			
88.468	II	D	P	T	E	Ssp	Br	S	Bl	Bl			
88.479	II	S	W	G	E	N	Br	S	Y	Lbf			
88.484	I	N	P	G	E	N	Br	S	Y	Y			
88.495	II	D	W	G	E	N	Br	S	Y	Bf			
88.497	I	D	W	G	E	N	Tn	I	Y	Y			
88.508	II	N	P	Lt	E	N	Br	D	Bl	Bl		Dab	
88.777	II	N	W	G	E	N	Bl	S	Gn	Bf			
88.787	II	N	P	T	E	Ssp	Br	D	Y	Br			
88.797	I	N	P	G	E	N	Br	S	Y	Y			
88.798	II	S	W	Lt	E	N	Br	S	Y	Bl			
88.803	II	N	W	G	E	N	Bl	S	Y	Bf			
88.804	I	D	P	G	E	N	Bl	S	Y	Lbf	Mih		
88.805-2	I	S	P	G	E	N	Br	S	Y	lb			
88.805-4	II	N	P	Lt	E	N	Br	S	Y	Br			
88.810	II	N	W	T	E	N	Br	D	Y	Br			
88.825	II	D	P	G	E	N	Br	D	Y	Y			
88.997	II	N	P	T	E	N	Br	D	Y	Br			
89.000	II	N	P	T	E	N	Br	S	Y	Tn			
89.003-1	II	N	P	G	E	N	Bl	D	Br	Br			
89.004	II	D	P	T	E	N	Br	S	Y	Bl			
89.005-5	II	N	W	G	E	N	Br	S	Y	Bf			
89.006-2	II	D	P	T	E	N	Bl	S	Y	Br			
89.008	II	N	P	T	E	N	Dbr	S	Lgn	Bl	Sph		
89.012	II	N	W	G	E	N	Br	S	Y	Bf			
89.013	II	N	P	G	E	N	Tn	D	Y	Br			
89.014	II	N	P	T	E	Ssp	Br	S	Y	Y			
89.053	II	N	P	Lt	E	N	Br	S	Y	Br			
89.055	I	S	W	G	E	N	Br	S	Y	Y			
89.055-1	II	N	P	T	E	N	Br	I	Y	Br			
89.056-3	I	D	P	T	E	Ssp	Tn	D	G	G			
89.057	I	N	P	G	E	N	Tn	S	Y	Y			
89.058	I	D	P	G	E	N	Br	S	Y	Y			
89.059	II	N	W	G	E	N	Br	S	Y	Bf			
89.060	I	S	P	G	E	N	Bl	I	Y	Y			
89.061-1	I	S	P	G	E	Ssp	Tn	S	Y	Y			
89.063	II	D	P	G	E	N	Tn	S	Y	G			
89.064	II	S	W	G	E	N	Br	S	Y	Bf			
89.065	II	N	W	G	E	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

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
88.356	703	912	2.2	97	2.0	2.0	2.0	3.0	1.0	17.4	2.45
88.357	707	913	2.6	86	3.0	3.0	2.0	2.8	1.0	17.4	2.41
88.358	703	913	2.2	97	2.0	2.0	2.0	2.8	1.0	16.8	2.37
88.442	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	1.9	91	3.0	2.5	1.0	3.3	2.5	19.8	2.39
88.468	712	911	1.4	51	1.0	3.0	2.0	2.5	-	18.6	1.91
88.479	712	916	2.0	91	2.0	2.5	1.0	3.0	1.0	15.7	2.60
88.484	629	902	3.4	94	4.0	2.0	1.0	3.3	1.5	13.9	2.18
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	89	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	2.0	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	706	910	1.5	74	2.0	2.5	1.0	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>		<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
88.301	II	38.3	20.8	1.3	44.7	6.3	H	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	II	38.5	20.3	1.4	48.0	7.0	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	37.9	22.1	1.4	46.3	5.8	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	II	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	I	40.2	20.6	1.3	46.5	7.2	S	S
88.455	II	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	II	35.7	22.4	1.3	45.7	6.6	S	S
88.484	I	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	I	39.7	20.1	1.4	44.7	5.9	S	S
88.508	II	40.2	16.8	-	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	I	39.6	19.2	1.4	46.1	6.9	S	S
88.798	II	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	I	38.1	20.9	1.4	48.4	6.7	S	S
88.805-2	I	38.5	20.9	1.4	48.4	6.7	S	S
88.805-4	II	37.2	20.3	1.4	42.7	4.9	S	S
88.810	II	41.7	18.2	1.5	44.8	6.5	S	S
88.825	II	37.8	20.1	1.4	44.0	6.9	S	S
88.997	II	39.7	18.9	1.2	47.5	6.6	S	S
89.000	II	38.7	21.2	1.4	46.9	6.0	S	S
89.003-1	II	39.4	18.6	-	47.7	7.3	S	S
89.004	II	37.9	21.9	1.4	47.8	7.4	S	S
89.005-5	II	40.2	20.1	1.3	49.1	6.9	S	S
89.006-2	II	39.0	19.8	1.2	49.5	8.4	S	S
89.008	II	37.5	17.9	1.3	47.2	8.5	S	S
89.012	II	38.2	20.9	1.4	44.0	6.7	S	S
89.013	II	38.0	21.4	1.4	47.3	6.8	S	S
89.014	II	40.1	19.1	1.4	48.8	8.6	S	S
89.053	II	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
89.055-1	II	39.2	20.4	1.3	48.4	6.9	S	S
89.056-3	I	37.6	20.6	1.4	48.7	6.9	S	S
89.057	I	38.0	20.4	1.3	47.2	7.5	S	S
89.058	I	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	I	38.1	21.1	1.4	47.3	6.5	S	S
89.061-1	I	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	H	S
89.065	II	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
89.065-2		China	China	1930	II
89.070		China	China	1930	II
89.072		China	China	1930	II
89.073		China	China	1930	II
89.075		China	China	1930	II
89.138	Zontanorukon	Rep. of Korea	Rep. of Korea	1930	II
89.153	Wasenakuta	Rep. of Korea	Rep. of Korea	1930	II
89.154	Chirumukon	Rep. of Korea	Rep. of Korea	1930	II
89.154-1	(Chirumukon)	Rep. of Korea	Rep. of Korea	1930	II
89.156	Chonkon	Rep. of Korea	Rep. of Korea	1930	II
89.167		China	China	1930	II
89.170		China	China	1930	II
89.171		China	China	1930	II
90.180		Unknown	Unknown	1930	II
90.560		China	China	1930	II
90.567		China	China	1930	I
90.570		China	China	1930	II
90.574		China	China	1930	II
90.575		China	China	1930	II
91.091		China	China	1931	II
91.102		China	China	1931	II
91.104		China	China	1931	II
91.107		China	China	1931	II
91.109		China	China	1931	II
91.110		China	China	1931	I
91.110-1		China	China	1931	I
91.114		China	China	1931	II
91.115		China	China	1931	II
91.116		China	China	1931	II
91.117		China	China	1931	II
91.119		China	China	1931	II
91.120		China	China	1931	II
91.120-2		China	China	1931	II
91.123		China	China	1931	I
91.124		China	China	1931	II
91.126		China	China	1931	II
91.129		China	China	1931	II
91.132-2		China	China	1931	II
91.138		China	China	1931	II
91.141		China	China	1931	II
91.144		China	China	1931	II
91.150		China	China	1931	II
91.156		China	China	1931	II
91.161		China	China	1931	II
91.164		China	China	1931	II
91.167		China	China	1931	II
91.171		China	China	1931	II
91.180		China	China	1931	II
91.557		China	China	1931	II
91.559		China	China	1931	II
91.725-3	(Akazu)	Rep. of Korea	Rep. of Korea	1931	II
91.732-1		China	China	1931	I
91.732-2		China	China	1931	I
91.733		China	China	1931	I
92.109		Unknown	Unknown	1931	II

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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
89.065-2	II	D	P	T	E	N	Tn	S	Y	Br			
89.070	II	S	W	G	E	N	Br	S	Y	Lbf			
89.072	II	N	W	G	E	N	Br	S	Y	Bf			
89.073	II	N	W	G	E	N	Br	S	Y	Y			
89.075	II	D	P	G	E	N	Br	S	Y	Bf			
89.138	II	N	W	T	E	Ssp	Br	S	Y	Bl			
89.153	II	D	P	T	E	N	Dbr	D	Y	Tn			
89.154	II	N	P	T	E	N	Br	S	Y	Bl			
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	Y	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	I	D	P	G	E	N	Br	S	Y	lb			
90.570	II	N	P	T	E	Ssp	Br	I	Y	Br			
90.574	II	D	W	G	E	N	Br	D	Y	Lbf			
90.575	II	N	W	G	E	N	Br	S	Y	Bf			
91.091	II	S	W	G	E	N	Tn	S	Y	Y			
91.102	II	N	P	T	E	N	Dbr	S	Gn	Br	Sph		
91.104	II	N	P	G	E	N	Br	S	Y	Bf			
91.107	II	D	P	G	E	N	Br	S	Y	Bf			
91.109	II	N	P	G	E	N	Br	S	Y	lb			
91.110	I	N	P	G	E	N	Br	S	Y	Y			
91.110-1	I	N	P	T	E	N	Tn	D	Y	Y			
91.114	II	D	P	G	E	N	Br	S	Y	lb			
91.115	II	D	P	T	E	N	Br	S	Y	Bl			
91.116	II	N	P	T	E	N	Br	D	Y	Br			
91.117	II	N	P	T	E	Ssp	Br	S	Bl	Bl			
91.119	II	N	P	T	E	N	Br	I	Y	Br			
91.120	II	N	P	G	E	N	Br	S	Y	Lbf			
91.120-2	II	N	P	T	E	N	Tn	D	Y	Br			
91.123	I	S	P	T	E	N	Tn	S	Y	Tn			
91.124	II	N	W	G	E	N	Br	S	Y	Lbf			
91.126	II	D	W	T	E	Ssp	Br	S	Y	Tn			
91.129	II	D	W	T	E	Ssp	Br	S	Y	Tn			
91.132-2	II	D	P	T	E	N	Br	D	Y	Br			
91.138	II	N	W	T	E	N	Br	D	Y	Br			
91.141	II	S	P	G	E	N	Br	D	Y	Y			
91.144	II	N	W	G	E	N	Tn	S	Y	Lbf			
91.150	II	D	P	G	E	N	Br	S	Y	lb			
91.156	II	D	W	T	E	Ssp	Br	S	Y	Tn			
91.161	II	N	W	G	E	N	Tn	S	Y	Bf			
91.164	II	S	P	G	E	N	Br	D	Y	Y			
91.167	II	N	W	G	E	N	Br	S	Y	Y	Sabh		
91.171	II	N	W	G	E	N	Bl	S	Y	Bf			
91.180	II	N	W	G	E	N	Tn	D	Y	Bf			
91.557	II	N	P	T	E	Ssp	Br	S	Y	Bl			
91.559	II	N	P	T	E	N	Br	S	Y	Bl			
91.725-3	II	D	W	G	E	Ssp	Tn	D	Y	Y			
91.732-1	I	S	W	T	E	Ssp	Br	I	Br	Br			
91.732-2	I	N	W	G	E	N	Bl	S	Y	Tn			
91.733	I	D	W	G	E	N	Br	I	Y	Y			
92.109	II	N	P	G	E	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	911	2.0	84	1.5	2.0	1.0	3.3	2.0	19.8	2.48
90.560	708	917	2.1	91	3.0	2.0	1.0	3.5	1.0	18.6	2.34
90.567	705	909	2.8	84	1.5	2.0	1.0	3.0	1.0	12.1	2.24
90.570	706	911	1.8	94	3.0	2.0	2.0	2.8	1.5	12.8	2.54
90.574	703	914	1.9	84	1.5	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	2.17
91.559	703	915	2.5	102	3.0	2.0	2.0	4.5	1.5	13.3	2.64
91.725-3	711	914	1.3	61	1.0	2.5	5.0	2.5	1.5	26.1	1.78
91.732-1	630	829	1.4	74	2.0	2.0	1.0	2.0	-	11.1	1.94
91.732-2	708	910	1.9	97	3.0	2.0	1.0	3.5	1.5	15.5	1.99
91.733	701	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>		<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
89.065-2	II	37.5	20.5	1.3	46.5	7.5	S	S
89.070	II	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
89.154	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	45.7	6.3	S	S
90.180	II	37.4	21.7	1.2	48.3	6.8	S	S
90.560	II	38.1	21.8	1.5	46.4	6.8	S	S
90.567	I	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	II	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	II	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	I	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	II	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	I	38.3	20.1	1.3	48.4	8.0	S	S
91.124	II	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
91.164	II	37.1	21.2	1.2	46.4	6.4	S	S
91.167	II	37.3	22.0	1.1	51.6	6.8	S	S
91.171	II	35.7	21.3	1.2	46.8	6.6	R	S
91.180	II	37.8	21.3	1.2	46.6	6.5	S	S
91.557	II	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	H	S
91.732-1	I	37.0	19.5	-	49.4	6.4	S	S
91.732-2	I	38.1	20.1	1.2	47.7	6.7	R	S
91.733	I	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
92.460		Russia	Russia	1931	II
92.464	Kpynyrs No. 9/3 Ceb.Menrmyud	Russia	Russia	1931	II
92.465	Xapsunchoe Onormnoe	Russia	Russia	1931	II
92.468	Xapsunchoe Onormnoe	Russia	Russia	1931	I
92.469	Konyeccur Dpyear	Russia	Russia	1931	I
92.470	Konyeccur Dpyear	Russia	Russia	1931	I
92.561		China	China	1931	II
92.563		China	China	1931	II
92.565		China	China	1931	I
92.569		China	China	1931	II
92.570		China	China	1931	II
92.571		China	China	1931	II
92.572		China	China	1931	II
92.573		China	China	1931	II
92.576		China	China	1931	II
92.580		China	China	1931	II
92.582		China	China	1931	II
92.583		China	China	1931	II
92.589		China	China	1931	II
92.592		China	China	1931	II
92.595		China	China	1931	II
92.596		China	China	1931	II
92.598		China	China	1931	II
92.603		China	China	1931	II
92.607		China	China	1931	II
92.611		China	China	1931	II
92.625		China	China	1931	I
92.627		China	China	1931	II
92.629		China	China	1931	II
92.630		China	China	1931	II
92.633		China	China	1931	II
92.639		China	China	1931	II
92.649		China	China	1931	I
92.660		China	China	1931	II
92.661		China	China	1931	II
92.671		China	China	1931	II
92.677		China	China	1931	II
92.681		China	China	1931	II
92.683		China	China	1931	II
92.684		China	China	1931	II
92.687		China	China	1931	II
92.694		China	China	1931	II
92.696		China	China	1931	II
92.698		China	China	1931	II
92.705		China	China	1931	II
92.706		China	China	1931	I
92.717		China	China	1931	II
92.719		China	China	1931	II
92.733		China	China	1931	II
92.734		China	China	1931	II
92.748		Unknown	Unknown	1931	II
93.217		Unknown	Unknown	1931	II
93.559	Paimei tou	China	China	1931	II
93.560	Paimei tou	China	China	1931	II
93.565		China	China	1931	II

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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
92.460	II	N	P	G	E	N	Tn	S	Y	Y			
92.464	II	N	P	G	E	N	Tn	S	Y	Y			
92.465	II	D	P	G	E	N	Tn	S	Y	Bf			
92.468	I	N	P	T	E	N	Br	S	Y	Bl			
92.469	I	N	P	T	E	N	Br	D	Y	Br			
92.470	I	N	P	G	E	N	Br	S	Y	Y			
92.561	II	N	P	G	E	N	Br	S	Gn	Gn			
92.563	II	D	P	G	E	N	Br	S	Y	lb			
92.565	I	D	P	G	E	N	Tn	S	Y	Y			
92.569	II	N	W	G	E	N	Br	S	Y	Y			
92.570	II	N	W	G	E	N	Br	S	Y	Y			
92.571	II	N	W	G	E	N	Br	S	Y	Y			
92.572	II	N	P	G	E	N	Br	S	Y	Y			
92.573	II	N	P	G	E	N	Br	S	Y	Y			
92.576	II	S	W	G	E	N	Br	S	Y	Y			
92.580	II	S	W	G	E	N	Br	S	Y	Y			
92.582	II	N	W	G	E	N	Br	S	Y	Y			
92.583	II	N	W	G	E	N	Br	S	Y	Y			
92.589	II	N	W	G	Sa	N	Br	S	Y	Bf			
92.592	II	D	W	G	E	N	Br	S	Y	Bf			
92.595	II	N	W	G	E	N	Br	S	Y	Bf			
92.596	II	S	W	G	E	N	Br	S	Y	Bf			
92.598	II	N	W	G	E	N	Br	S	Y	Bf			
92.603	II	S	W	G	E	N	Br	S	Y	Bf			
92.607	II	N	W	G	E	N	Br	S	Y	Bf			
92.611	II	S	W	G	E	N	Br	S	Y	Bf			
92.625	I	N	P	G	E	N	Br	S	Y	Bf			
92.627	II	S	W	G	E	N	Br	S	Y	Bf			
92.629	II	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	E	N	Br	S	Y	Y			
92.639	II	N	P	T	E	N	Br	I	Y	Br			
92.649	I	N	P	T	E	N	Br	D	Y	Br			
92.660	II	N	P	G	E	N	Br	S	Y	G			
92.661	II	S	P	G	E	N	Br	S	Y	lg			
92.671	II	N	W	G	E	N	Br	D	Y	Lbf			
92.677	II	D	W	G	E	N	Br	S	Y	Lbf			
92.681	II	D	W	G	E	N	Br	S	Y	Lbf			
92.683	II	D	W	G	E	N	Br	S	Y	Bf			
92.684	II	N	P	T	E	N	Br	S	Y	Bl			
92.687	II	S	W	G	E	N	Br	S	Y	Bf			
92.694	II	N	P	G	E	Ssp	Br	S	Y	Y			
92.696	II	N	P	T	E	Ssp	Br	D	Y	Br			
92.698	II	N	P	Lt	E	N	Tn	D	Br	Br			
92.705	II	N	W	G	E	N	Tn	S	Y	Bf			
92.706	I	D	W	G	E	N	Br	S	Y	Bf			
92.717	II	N	P	T	E	Ssp	Br	I	Y	Br			
92.719	II	N	P	T	E	N	Br	D	Y	Br			
92.733	II	N	W	T	E	N	Br	S	Bl	Bl	Gncot		
92.734	II	D	W	G	E	N	Br	S	Y	Bf			
92.748	II	N	P	G	E	N	Br	S	Y	Y			
93.217	II	D	P	G	E	N	Bl	D	Y	Y			
93.559	II	D	P	G	E	N	Tn	S	Y	Y			
93.560	II	S	W	G	E	N	Tn	S	Y	Bf			
93.565	II	N	P	G	E	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)
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
93.565	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>		<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
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	II	38.1	21.7	1.1	47.6	6.3	R	S
92.468	I	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	II	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	I	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
92.570	II	38.5	20.8	1.1	45.2	5.2	S	S
92.571	II	40.4	19.7	1.2	43.7	5.7	S	--
92.572	II	38.2	20.4	1.2	44.7	5.8	S	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	II	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	I	38.5	20.9	1.4	45.7	6.0	S	H
92.627	II	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	I	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
92.698	II	39.0	18.3	-	49.8	7.2	S	S
92.705	II	35.6	21.5	1.1	45.4	5.9	S	S
92.706	I	39.0	19.2	1.1	46.3	6.8	S	S
92.717	II	38.3	21.5	1.3	48.9	6.7	S	S
92.719	II	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
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	II	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
96.152		Rep. of Korea	Rep. of Korea	1932	I
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	I
96.195		Rep. of Korea	Rep. of Korea	1932	II
96.201		Rep. of Korea	Rep. of Korea	1932	II
96.549		Rep. of Korea	Rep. of Korea	1932	II
97.605		Unknown	Unknown	1932	II
103.414		China	China	1933	II
131.531	Batarowka	Sweden	Poland	1939	I
132.201		Netherlands	Netherlands	1939	I
132.206		Netherlands	Netherlands	1939	I
132.215		Netherlands	Netherlands	1939	I
135.589		China	China	1940	II
135.590		China	China	1940	II
142.491	Kroochul	China	China	1941	I
153.214		Belgium	Belgium	1946	I
153.215	Medischer Brown	Belgium	Netherlands	1946	I
153.226		Belgium	Belgium	1946	II
153.227		Belgium	Belgium	1946	I
153.229		Belgium	Belgium	1946	I
153.236	Manchu	Belgium	Belgium	1946	I
153.238	Dansk Osijek	Belgium	Belgium	1946	I
153.244	Kleverhof 527	Belgium	Germany	1946	I
153.247	Assenyed	Belgium	Netherlands	1946	I
153.250		Belgium	Belgium	1946	I
153.253		Belgium	Belgium	1946	I
153.255		Belgium	Belgium	1946	I
153.263		Belgium	Belgium	1946	I
153.264	Tokyo Dwarf Black	Belgium	Belgium	1946	II
153.266	Poppelsdorf	Belgium	Germany	1946	I
153.267	Black O	Belgium	United Kingdom	1946	I
153.271	Wisconsin Black	Belgium	Belgium	1946	I
153.274	U487	Belgium	Belgium	1946	I
153.276	Dieckmann Black	Belgium	Germany	1946	I
153.279	Kei-Jan Black	Belgium	France	1946	I
153.280	Savi	Belgium	France	1946	II
153.282		Belgium	Belgium	1946	I
153.283		Belgium	Belgium	1946	I
153.285		Belgium	Belgium	1946	I
153.287	Wisconsin Early Black	Belgium	France	1946	I
153.288	Baumann Black	Belgium	Belgium	1946	II
153.289		Belgium	Belgium	1946	II
153.290	Altonagaard A1	Belgium	Belgium	1946	I
153.291	Karbine	Belgium	France	1946	I
153.294		Belgium	Belgium	1946	I
153.308	Yellow J	Belgium	Belgium	1946	I
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	I
153.316	Meng Tseu	France	France	1946	I
154.195		Netherlands	Netherlands	1946	II
171.421	Tzu su No. 36	China	China	1948	I
181.532		Japan	Japan	1949	I

Table 2.1

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
96.152	I	D	W	G	E	N	Br	I	Y	Y			
96.171	II	D	W	G	Sa	N	Br	D	Y	Bf			
96.188	II	N	W	T	E	N	Br	S	Bl	Bl	Gncot		
96.193	I	S	P	G	E	N	Bl	D	Y	Y			
96.195	II	N	P	T	E	N	Br	S	Y	Bl			
96.201	II	S	P	T	E	N	Br	S	Y	Bl			
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	I	D	P	T	Sa	Ssp	Br	S	Y	Br			
132.201	I	N	P	Lt	E	N	Tn	S	Bl	Bl	Fleck		
132.206	I	N	P	G	E	N	Tn	S	Bl	Bl	Fleck		
132.215	I	N	P	T	E	N	Br	S	Bl	Bl			
135.589	II	N	W	T	A	Ssp	Br	B	Bl	Bl			Sw
135.590	II	N	P	T	A	Ssp	Dbr	S	Br	Br			Sw
142.491	I	N	P	G	E	N	Br	S	Y	Y			
153.214	I	N	P	T	E	N	Br	S	Br	Br		Dab	
153.215	I	D	P	T	E	Ssp	Br	S	Rbr	Rbr	Abh		
153.226	II	N	P	T	E	Ssp	Tn	D	Y	Br			
153.227	I	S	P	T	E	N	Dbr	S	Y	Bl			
153.229	I	D	W	T	E	N	Br	S	Rbr	Rbr			
153.236	I	N	P	G	E	N	Tn	S	Y	Y			
153.238	I	N	P	G	E	N	Br	S	Y	Y			
153.244	I	D	W	T	E	N	Br	S	Y	Bl			
153.247	I	N	P	T	E	N	Br	S	Y	Y			
153.250	I	D	P	T	E	Ssp	Br	S	Y	Br			
153.253	I	D	P	T	E	Ssp	Br	I	Y	Br			
153.255	I	N	P	G	E	N	Br	S	Y	Y			
153.263	I	N	P	Lt	E	N	Tn	S	Bl	Bl	Fleck		
153.264	II	D	W	T	E	Ssp	Br	S	Bl	Bl			
153.266	I	S	P	T	E	N	Br	S	Bl	Bl			
153.267	I	N	P	T	E	N	Br	S	Bl	Bl			
153.271	I	N	P	Lt	E	N	Tn	S	Bl	Bl	Fleck		
153.274	I	N	W	T	E	Ssp	Br	D	Bl	Bl			
153.276	I	S	W	T	E	N	Br	S	Bl	Bl			
153.279	I	N	W	T	E	Ssp	Br	D	Bl	Bl			
153.280	II	N	P	T	E	N	Bl	S	Bl	Bl		Dab	
153.282	I	S	W	T	E	Ssp	Br	D	Bl	Bl			
153.283	I	S	W	T	E	Ssp	Br	D	Bl	Bl			
153.285	I	N	P	Lt	E	N	Tn	S	Bl	Bl	Fleck		
153.287	I	N	P	T	E	N	Br	S	Bl	Bl			
153.288	II	D	W	T	E	Ssp	Br	D	Bl	Bl			
153.289	II	N	P	T	E	N	Bl	S	Bl	Bl		Dab	
153.290	I	N	P	T	E	N	Br	S	Bl	Bl			
153.291	I	N	P	T	E	Ssp	Br	I	Bl	Bl			
153.294	I	D	W	T	E	N	Br	S	Bl	Bl			
153.308	I	D	P	T	E	N	Br	S	Y	Br			
153.310	I	N	P	T	E	N	Br	S	Rbr	Rbr			
153.311	I	S	P	T	E	N	Br	S	Bl	Bl			
153.313	I	N	P	T	E	N	Br	I	Y	Bl			
153.315	I	D	W	G	E	N	Tn	D	Y	Y			
153.316	I	S	P	T	E	N	Br	S	Y	Tn			
154.195	II	D	P	T	E	Ssp	Br	D	Gn	G			
171.421	I	N	P	G	E	N	Br	I	Y	Y			
181.532	I	D	P	T	E	Ssp	Br	S	Y	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)
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	-	5.4	1.61
142.491	628	826	1.3	74	3.0	2.0	1.0	2.3	1.0	13.2	1.82
153.214	628	826	1.3	69	3.5	2.5	1.0	2.0	-	11.8	1.82
153.215	630	903	3.2	74	1.0	3.0	2.0	2.3	-	11.6	2.18
153.226	706	913	2.6	91	3.0	2.0	1.0	2.3	1.5	14.6	2.85
153.227	701	908	2.2	91	2.0	2.0	2.0	3.0	1.0	15.7	2.36
153.229	709	912	2.3	64	1.0	3.0	5.0	2.8	-	15.5	1.74
153.236	701	831	2.4	86	3.0	2.0	1.0	2.8	1.0	13.3	2.07
153.238	630	829	1.4	94	3.0	2.0	1.0	2.8	1.0	14.5	2.13
153.244	630	829	1.6	81	1.5	2.0	1.0	2.8	1.0	12.6	2.00
153.247	629	828	1.7	89	3.0	2.5	1.0	3.0	1.0	11.8	1.95
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
153.279	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

Entry	Maturity group	Seed composition		Protein composition	Oil composition		Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
96.152	I	38.8	20.1	1.2	46.4	7.2	S	S
96.171	II	39.7	17.0	1.3	43.8	8.5	S	S
96.188	II	37.5	21.3	-	44.9	6.6	S	S
96.193	I	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
96.201	II	38.1	20.4	1.3	47.1	7.4	S	S
96.549	II	40.7	19.3	1.3	45.5	8.0	S	S
97.605	II	39.9	20.5	1.3	47.0	6.9	S	S
103.414	II	37.7	21.6	1.2	49.0	7.5	S	S
131.531	I	38.3	20.4	1.2	45.9	5.9	R	S
132.201	I	40.2	17.7	-	45.1	5.9	S	S
132.206	I	39.6	17.7	-	45.4	5.8	S	S
132.215	I	39.7	20.4	-	47.3	5.4	H	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	I	39.9	19.8	1.2	46.5	6.4	S	S
153.214	I	41.1	18.2	-	48.0	6.1	S	S
153.215	I	37.1	21.3	-	47.0	6.2	S	S
153.226	II	38.9	20.3	1.3	48.1	7.0	S	S
153.227	I	36.8	21.1	1.3	49.3	7.5	S	S
153.229	I	38.3	19.5	-	44.4	7.9	H	S
153.236	I	39.0	20.4	1.2	47.5	7.3	S	S
153.238	I	38.8	20.2	1.3	47.5	7.0	S	S
153.244	I	37.8	19.8	1.3	46.7	7.0	H	S
153.247	I	39.5	20.0	1.3	47.3	7.5	S	S
153.250	I	37.7	20.7	1.4	46.6	6.1	R	S
153.253	I	38.4	20.6	1.2	46.7	6.0	R	S
153.255	I	36.9	20.8	1.3	48.5	7.1	H	S
153.263	I	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	I	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
153.279	I	36.9	19.4	-	42.5	6.3	R	S
153.280	II	36.9	17.6	-	47.5	7.8	S	S
153.282	I	38.3	20.4	-	44.4	6.6	R	S
153.283	I	37.2	19.5	-	43.8	6.2	R	S
153.285	I	39.6	18.1	-	41.9	5.9	S	S
153.287	I	38.4	20.3	-	47.6	5.9	S	S
153.288	II	37.9	20.2	-	47.0	7.6	R	S
153.289	II	37.9	17.3	-	48.6	8.0	S	S
153.290	I	40.9	18.2	-	49.7	6.8	S	S
153.291	I	38.0	20.1	-	46.7	7.9	S	S
153.294	I	37.0	22.8	-	46.5	5.5	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	I	39.0	19.4	1.1	46.7	6.8	R	S
153.315	I	38.9	19.4	1.2	43.4	6.7	S	S
153.316	I	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	I	39.0	20.8	1.2	47.3	5.9	S	S
181.532	I	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
181.533		Japan	Japan	1949	II
181.534		Japan	Japan	1949	II
181.536		Japan	Japan	1949	I
181.537		Japan	Japan	1949	II
181.538		Japan	Japan	1949	I
181.541		Japan	Japan	1949	II
181.548		Japan	Japan	1949	II
181.570		Japan	Japan	1949	I
184.042	Nikogri	Yugoslavia	Yugoslavia	1949	I
184.043	M 7	Yugoslavia	Yugoslavia	1949	I
184.044	Kasna Br. 443	Yugoslavia	Yugoslavia	1949	I
184.045	M 14	Yugoslavia	Yugoslavia	1949	I
184.046	M 60	Yugoslavia	Yugoslavia	1949	I
189.863	Grignon 59	France	France	1950	I
189.864	Early Brown	France	France	1950	I
189.881	Zelena Echo	France	France	1950	I
189.888	Mandarin Ottawa	France	France	1950	I
189.890	Mandarin Yowa	France	France	1950	I
189.892	Reoz 20bis	France	France	1950	I
189.896	Giessner Stamm 63	France	Germany	1950	I
189.907	Helun nO1	France	France	1950	I
189.911	Ried 528	France	France	1950	I
189.915	Scheoken	France	France	1950	I
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	I
189.924	Graine Jaune	France	France	1950	I
189.925	American Yellow	France	France	1950	I
189.929	Mandchu Argentine	France	France	1950	II
189.930	Mandchurische	France	France	1950	II
189.931	Jaune de Mandchourie	France	France	1950	II
189.941	Rouest 1	France	France	1950	I
189.945	C F	France	France	1950	I
189.946	Tubingen	France	France	1950	I
189.947	Grignon 6	France	France	1950	I
189.958	Noir Vah	France	France	1950	II
189.962	Green	France	France	1950	I
189.966	Grignon 22	France	France	1950	I
189.967		France	France	1950	I
189.968	Tokio	France	France	1950	I
196.150	Chuseihadaka	Japan	Japan	1951	II
196.151	Chuseihikarikuro	Japan	Japan	1951	II
196.154	Kitaminagaha	Japan	Japan	1951	II
196.158	Nagabahadaka-1	Japan	Japan	1951	II
196.159	Okuhara-1	Japan	Japan	1951	I
196.160	Ooyachi-2	Japan	Japan	1951	I
196.161	Rankoshi-1	Japan	Japan	1951	II
196.163	Tokachinagaha	Japan	Japan	1951	II
196.325		Germany	Germany	1951	I
200.479	Ishibai	Japan	Japan	1952	II
200.482	Kairiyo shirome	Japan	Japan	1952	II
200.508	Natsu daizu	Japan	Japan	1952	I

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

Entry	Matur- ity group	Pubescence					Seedcoat			Other traits			
		Stem trm.	Flower color	Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
181.533	II	D	P	T	E	Ssp	Br	D	Y	Br		Na	
181.534	II	D	W	T	E	Ssp	Br	S	Bl	Bl			
181.536	I	D	P	-	-	G	Bl	S	Y	Br			
181.537	II	D	P	-	-	G	Br	S	Y	Br		Na	
181.538	I	D	P	T	E	Ssp	Br	D	Y	Br		Na	
181.541	II	D	W	T	E	N	Br	S	Y	Br			
181.548	II	D	P	-	C	N	Tn	S	Y	Bf			
181.570	I	D	P	G	Sa	N	Tn	D	Y	Bf			
184.042	I	N	P	G	E	N	Br	S	Y	Y			
184.043	I	D	P	T	E	N	Br	D	Y	Br	Abh		
184.044	I	D	P	T	E	N	Br	S	Y	Bl			
184.045	I	D	P	T	E	N	Br	D	Y	Br	Abh		
184.046	I	N	P	G	E	N	Br	S	Y	Y			
189.863	I	N	P	T	E	N	Bl	D	Br	Br	Abh		
189.864	I	N	P	T	E	N	Br	D	Br	Br			
189.881	I	S	P	G	E	N	Br	D	Y	Y			
189.888	I	S	P	G	E	N	Tn	S	Y	Y			
189.890	I	N	P	G	E	N	Br	D	Y	Y	Abh		
189.892	I	D	P	G	E	N	Br	S	Y	Y	Abh		
189.896	I	D	P	T	E	Ssp	Br	D	Y	Br	Abh		
189.907	I	N	P	T	E	N	Br	D	Y	Br			
189.911	I	S	P	T	E	N	Tn	S	Y	Bl			
189.915	I	N	P	T	E	N	Br	S	Y	Y			
189.916	I	S	P	T	E	Ssp	Tn	D	Y	Y			
189.917	I	N	P	T	E	N	Bl	D	Y	Y			
189.918	I	D	P	T	E	N	Br	S	Y	Y			
189.919	I	D	P	T	E	Ssp	Br	S	Y	Tn			
189.921	I	N	P	T	E	Ssp	Tn	D	Y	Tn			
189.922	I	S	P	T	E	Ssp	Tn	D	Y	Tn			
189.924	I	N	P	T	E	N	Tn	S	Y	Y			
189.925	I	N	P	T	E	N	Br	I	Y	Br			
189.929	II	N	W	G	E	N	Tn	S	Y	Bf			
189.930	II	D	W	G	E	N	Br	S	Y	Lbf			
189.931	II	D	W	G	E	N	Bl	S	Y	Bf			
189.941	I	D	P	T	E	N	Tn	D	Bl	Bl	Abh		
189.945	I	N	P	T	E	N	Br	S	Bl	Bl			
189.946	I	S	P	T	E	Ssp	Br	S	Bl	Bl	Fleck	Dab	
189.947	I	D	P	T	E	N	Br	S	Bl	Bl			
189.958	II	D	W	T	E	Ssp	Br	S	Bl	Bl			
189.962	I	D	P	T	E	N	Br	D	Gn	Bl			
189.966	I	N	P	T	E	N	Br	S	G	Bl	Abh		
189.967	I	N	P	T	E	Ssp	Br	S	Gn	Gn			
189.968	I	D	P	T	E	N	Bl	I	Gn	Gn			
196.150	II	D	P	-	-	G	Bl	S	Y	Br			
196.151	II	D	W	T	E	Ssp	Br	S	Bl	Bl			
196.154	II	D	P	T	E	Ssp	Br	D	Y	Br		Na	
196.158	II	D	P	-	-	G	Br	S	Y	Br		Na	
196.159	I	D	P	T	E	Ssp	Br	S	Y	Br			
196.160	I	D	P	T	E	N	Br	S	Y	Br			
196.161	II	D	W	G	E	N	Tn	S	Y	Bf			
196.163	II	D	P	T	E	Ssp	Br	D	Y	Br		Na	
196.325	I	N	P	T	E	N	Br	I	Bl	Bl			
200.479	II	D	W	T	A	N	Br	D	Y	Br			
200.482	II	D	P	G	Sa	N	Br	D	Y	Bf			
200.508	I	D	P	G	A	N	Br	D	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

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
184.046	630	826	1.4	84	3.0	2.0	1.0	2.8	1.0	12.9	1.86
189.863	629	902	2.1	84	3.0	2.0	2.0	2.8	-	11.8	1.72
189.864	707	908	2.4	86	3.0	2.5	1.0	2.8	-	14.7	2.41
189.881	629	828	1.3	66	2.0	2.0	1.0	2.5	1.0	14.2	2.04
189.888	630	830	2.6	86	2.0	3.0	1.0	2.8	1.0	12.6	2.03
189.890	629	828	2.3	99	3.5	2.0	1.0	2.0	1.0	12.0	1.97
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
200.482	720	911	3.3	69	1.0	3.0	5.0	2.3	1.5	12.3	1.73
200.508	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

Entry	Maturity group	Seed composition		Protein composition	Oil composition		Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
181.533	II	39.0	19.4	1.2	48.1	7.4	H	S
181.534	II	38.2	20.3	-	43.5	5.5	R	S
181.536	I	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	I	39.0	19.0	1.3	48.0	7.1	H	S
181.541	II	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	I	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	7.2	S	S
184.046	I	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
189.881	I	37.4	19.4	1.5	45.8	7.2	S	S
189.888	I	38.7	19.7	1.3	47.7	7.2	S	S
189.890	I	36.9	20.0	1.3	50.2	7.6	S	S
189.892	I	37.0	20.4	1.3	43.7	6.4	S	S
189.896	I	38.7	22.6	1.4	45.1	5.3	R	S
189.907	I	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	I	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	I	38.0	19.5	1.3	48.1	8.9	S	S
189.918	I	37.5	20.5	1.3	43.8	6.2	S	S
189.919	I	38.1	20.1	1.4	48.8	7.1	S	S
189.921	I	39.0	20.0	1.4	48.2	6.9	S	S
189.922	I	39.2	20.5	1.4	47.8	6.7	S	S
189.924	I	38.0	18.7	1.3	46.9	7.2	S	S
189.925	I	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	I	38.4	21.3	-	48.8	5.6	S	S
189.945	I	39.5	18.6	-	49.3	6.3	S	S
189.946	I	38.0	19.1	-	48.9	6.6	R	S
189.947	I	38.2	19.3	-	51.6	4.3	R	S
189.958	II	37.1	20.7	-	46.7	6.5	R	S
189.962	I	37.6	20.9	1.2	46.4	6.6	S	S
189.966	I	37.7	21.5	1.3	45.4	5.5	R	S
189.967	I	37.2	20.4	1.4	47.1	6.3	S	S
189.968	I	40.3	20.8	1.3	46.4	6.7	S	S
196.150	II	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
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	20.1	1.2	46.8	6.6	R	S
196.163	II	39.0	19.5	1.3	49.9	7.5	S	S
196.325	I	39.6	18.3	-	50.3	6.5	S	S
200.479	II	39.9	17.2	1.2	47.1	9.1	H	S
200.482	II	40.6	21.1	1.1	46.6	8.8	S	S
200.508	I	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
200.552	Yore	Japan	Japan	1952	II
200.592	Agloi Victores	Belgium	China	1952	II
200.593	Konistra	Belgium	China	1952	I
200.594	La Fleche	Belgium	China	1952	I
200.596	Serckop	Belgium	China	1952	II
204.653	Strengs Weihestephaner Schwarze	Germany	Germany	1953	I
205.085	I higo wase	Israel	Japan	1953	I
205.092	Shirohana sai No. 1	Israel	Japan	1953	II
227.213	Sode furi	Japan	Japan	1955	II
227.321	Fukuju	Japan	Japan	1955	II
227.322	Genpokin	Japan	Japan	1955	I
227.324	Kingen No. 1	Japan	Japan	1955	II
227.325	Kingen No. 2	Japan	Japan	1955	I
227.329	Mansokin	Japan	Japan	1955	I
227.331	Murasakibana No. 4	Japan	Japan	1955	I
227.333	Ohoju	Japan	Japan	1955	II
227.334	Shokino No. 1	Japan	Japan	1955	II
227.558	Tokachihadaka	Japan	Japan	1955	II
227.684	Aiohigu	Japan	Japan	1955	II
229.322	Hajinomi	Japan	Japan	1955	II
229.328	Kairyogionbo	Japan	Japan	1955	I
229.331	Kasugazairai	Japan	Japan	1955	II
229.354	Shirazaya No. 1	Japan	Japan	1955	I
232.987		China	China	1956	II
232.988	Harbin No. 413	China	China	1956	II
232.989		China	China	1956	II
232.990		China	China	1956	II
232.991		China	China	1956	II
232.993	Kono No. 207	Japan	Japan	1956	II
238.922	Dornburger Weisbluhende	Czechoslovakia	Czechoslovakia	1957	II
238.930	Shatukinnashi	Japan	Japan	1957	II
248.396	Bogatic	Yugoslavia	Yugoslavia	1958	II
248.397	Dobrudza No. 14	Yugoslavia	Yugoslavia	1958	I
248.398	Illinois No. 301	Yugoslavia	United States	1958	II
248.400	Kragujevac No. 4	Yugoslavia	Yugoslavia	1958	I
248.406	Osijecka	Yugoslavia	Yugoslavia	1958	I
248.407	Sremska Mirtovica	Yugoslavia	Yugoslavia	1958	I
248.409	Subotica	Yugoslavia	Yugoslavia	1958	I
248.410	Turkish	Yugoslavia	Yugoslavia	1958	I
248.509A		Japan	China	1958	I
250.844		Iran	Iran	1958	I
251.585	Dobrudza	Yugoslavia	Yugoslavia	1958	I
251.586	Zagrebacka Rana	Yugoslavia	Yugoslavia	1958	I
253.650A		Netherlands	China	1958	II
253.650B		Netherlands	China	1958	II
253.652C		Netherlands	China	1958	I
253.652D		Netherlands	China	1958	I
253.653C		Netherlands	China	1958	I
253.653D		Netherlands	China	1958	I
253.658A		Netherlands	China	1958	I
253.658B		Netherlands	China	1958	I
253.658C		Netherlands	China	1958	I
261.472	Ranetsu No. 1	Japan	Japan	1959	II
261.474	Kohojo	Japan	China	1959	II
266.085A		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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
200.552	II	D	W	T	E	Sep	Tn	S	Y	Br			
200.592	II	N	P	T	E	N	Tn	I	Y	Tn			
200.593	I	D	P	G	E	N	Br	S	Y	Y			
200.594	I	S	P	T	E	N	Tn	D	Y	Br			
200.596	II	N	P	G	E	N	Tn	D	Y	Y			
204.653	I	N	P	T	E	N	Br	S	Bl	Bl			
205.085	I	D	W	G	A	Sep	Br	D	Y	Bf			
205.092	II	D	W	G	E	N	Tn	I	Y	Bf			
227.213	II	D	P	T	E	N	Br	I	Gn	Bl			
227.321	II	N	P	G	E	N	Tn	D	Y	Y			
227.322	I	N	W	G	E	N	Br	S	Y	Lbf			
227.324	II	N	W	G	E	N	Tn	S	Y	Bf			
227.325	I	D	W	G	E	N	Br	S	Y	Lbf	Sabh		
227.329	I	N	W	G	E	N	Br	S	Y	Lbf			
227.331	I	D	P	G	E	N	Br	D	Y	Y			
227.333	II	D	W	G	E	N	Br	S	Y	Lbf			
227.334	II	D	W	G	E	N	Br	S	Y	Bf			
227.558	II	D	P	-	-	G	Bl	S	Y	Br			
227.684	II	D	W	T	Sa	N	Br	D	Gn	Br			
229.322	II	D	W	T	A	N	Br	D	Rbr	Rbr			
229.328	I	D	W	G	Sa	N	Br	D	Y	Bf			
229.331	II	D	P	G	Sa	N	Br	D	Y	Bf			
229.354	I	D	P	G	A	Sep	Tn	D	Y	Bf			
232.987	II	N	P	T	A	Sep	Br	S	Br	Br			Sw
232.988	II	N	P	T	Sa	Sep	Br	S	Br	Br			Sw
232.989	II	N	P	T	Sa	Sep	Br	D	Bl	Bl			Sw
232.990	II	N	P	T	Sa	Sep	Br	S	Br	Br			Sw
232.991	II	N	P	T	A	Sep	Br	B	Bl	Bl			Sw
232.993	II	N	W	T	E	N	Br	S	Bl	Bl	Gncot		
238.922	II	N	W	T	E	N	Bl	S	Y	Bl			
238.930	II	D	W	T	A	N	Tn	D	Y	Br			
248.396	II	N	P	G	E	N	Br	D	Y	lb			
248.397	I	D	P	T	E	N	Br	D	Y	Br	Abh		
248.398	II	N	P	T	E	N	Br	S	Y	Bl			
248.400	I	D	P	T	E	Sep	Br	D	Y	Br	Abh		
248.406	I	S	P	G	E	N	Br	S	Y	Y			
248.407	I	D	P	T	E	N	Br	S	Y	Br	Abh		
248.409	I	S	P	T	E	N	Br	D	Y	Br	Abh	Dab	
248.410	I	N	P	T	E	N	Br	D	Bl	Bl			
248.509A	I	N	W	G	E	N	Br	S	Y	Y			
250.844	I	D	P	T	E	Sep	Br	S	Y	Br	Abh	Sdab	
251.585	I	D	P	T	E	N	Br	D	Y	Br	Abh		
251.586	I	N	P	G	E	N	Br	S	Y	Y			
253.650A	II	D	P	G	E	Sep	Br	S	Y	G			
253.650B	II	N	P	G	E	N	Br	S	Y	Y			
253.652C	I	S	P	G	E	N	Br	S	Y	Y			
253.652D	I	N	W	G	E	N	Br	S	Y	Y			
253.653C	I	N	P	T	E	N	Tn	D	Y	Br			
253.653D	I	D	W	G	E	N	Br	S	Y	Bf			
253.658A	I	N	P	G	E	N	Bl	S	Y	lb			
253.658B	I	N	W	G	E	N	Br	S	Y	Y			
253.658C	I	D	P	G	E	N	Br	S	Y	lb			
261.472	II	D	W	G	E	N	Tn	S	Y	Bf			
261.474	II	D	W	G	E	N	Br	S	Y	Y			
266.085A	II	D	W	G	E	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

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)
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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>		<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
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	I	37.9	21.9	1.3	50.0	6.7	S	S
200.594	I	39.9	21.3	1.3	48.1	6.2	S	S
200.596	II	41.5	19.4	1.2	44.7	7.4	S	S
204.653	I	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	H	S
227.213	II	39.0	20.5	-	44.0	6.7	H	S
227.321	II	40.8	19.1	1.2	44.2	7.5	S	S
227.322	I	39.6	21.1	1.1	45.4	7.4	H	S
227.324	II	36.9	21.9	1.2	46.9	6.8	S	S
227.325	I	39.8	20.5	1.2	45.2	7.2	S	S
227.329	I	37.1	22.0	1.2	46.5	6.2	H	S
227.331	I	40.3	19.8	1.2	46.3	7.4	S	S
227.333	II	38.8	22.2	1.2	49.2	6.9	H	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	II	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	H	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	II	40.5	19.7	-	49.8	10.0	R	S
232.990	II	41.0	15.0	-	49.6	9.7	R	S
232.991	II	39.8	15.5	-	47.8	9.1	R	S
232.993	II	38.3	20.1	-	45.8	6.9	S	S
238.922	II	40.6	19.3	1.1	47.9	8.5	S	S
238.930	II	39.5	18.0	1.1	44.2	7.2	S	R
248.396	II	38.5	21.9	1.2	45.5	6.3	S	S
248.397	I	37.5	19.5	1.2	46.0	7.1	R	S
248.398	II	39.1	20.3	1.3	48.2	7.3	S	R
248.400	I	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	H	S
251.586	I	39.3	20.4	1.3	46.3	6.6	S	S
253.650A	II	36.7	19.9	1.3	42.9	6.8	S	S
253.650B	II	37.1	20.6	1.3	48.6	7.2	S	S
253.652C	I	37.1	21.5	1.3	46.8	6.2	H	S
253.652D	I	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	I	36.7	22.1	1.3	47.1	7.1	S	S
253.658A	I	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	H	S
253.658C	I	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	II	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	II
266.807A		Netherlands	China	1960	II
266.807B		Netherlands	China	1960	II
266.807C		Netherlands	China	1960	I

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

Entry	Maturity group	Stem trm.	Flower color	<u>Pubescence</u>			Pod color	<u>Seedcoat</u>		Hilum color	<u>Other traits</u>		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
266.085B	II	N	P	G	E	N	Tn	D	Y	Y			
266.085C	II	D	P	G	E	N	Br	S	Y	Ig			
266.806A	II	D	W	G	E	N	Br	S	Y	Y			
266.806B	II	D	W	G	E	N	Br	S	Y	Bf			
266.807A	II	D	W	G	E	Ssp	Br	S	Y	Y			
266.807B	II	N	W	G	E	N	Br	S	Y	Bf			
266.807C	I	N	P	T	E	N	Br	D	Tn	Tn			

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	Maturity	Lodging	Height	Stem term- ination	Branch- ing	Shat- tering	Seed			Yield
	<u>date</u> (mmdd)	<u>date</u> (mmdd)						Quality	Mottling	Weight	
	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	(score)	(score)	(cg/sd)	(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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>		<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Linoleic (%)	Linolenic (%)	PR	Py
266.085B	II	36.9	19.8	1.3	47.1	7.4	S	H
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	I	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
	A.K. (Harrow)	Canada	Canada	By 1939	III
	A.K. [FC 30761]	United States	China	By 1917	IV
	A.K. [Kansas]	United States	United States	By 1949	IV
	Adams	United States	United States	1948	III
	Adelphia	United States	United States	1964	III
	Aoda	United States	Japan	1939	IV
	Bethel	United States	United States	1961	IV
	Boone	United States	China	1935	IV
	Chestnut	United States	Russia	1910	III
	Chief	United States	United States	1940	IV
	Chusei	United States	Japan	1936	III
	Clark	United States	United States	1953	IV
	Clark 63	United States	United States	1963	IV
	Cloud	United States	China	1910	III
	Columbia	United States	China	1910	III
	Delmar	United States	United States	1963	IV
	Dunfield	United States	China	1923	III
	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	III
	Fuji	United States	Japan	1936	III
	Funk Delicious	United States	Japan	1932	IV
	Gibson	United States	United States	1942	IV
	Granger	United States	United States	1941	III
	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	III
	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	III
	Illini	United States	China	1927	III
	Ilsoy	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	III
	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	III

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
A.K. (Harrow)	III	N	W	G	E	N	Br	S	Y	Bf			
A.K. [FC 30761]	IV	N	W	T	E	N	Br	S	Y	Br			
A.K. [Kansas]	IV	N	P	Lt	E	N	Br	D	Gn	Br			
Adams	III	N	W	G	E	N	Tn	S	Y	Bf			
Adelphia	III	N	W	G	E	N	Tn	S	Y	Bf			
Aoda	IV	D	P	G	E	Ssp	Br	D	Gn	Bf	Gncot		
Bethel	IV	N	W	G	E	N	Br	D	Y	Y			
Boone	IV	N	W	G	E	N	Br	S	Y	Bf			
Chestnut	III	N	P	Lt	E	N	Bl	D	Br	Br		Dab	
Chief	IV	N	P	G	E	N	Br	S	Y	lb			
Chusei	III	D	W	G	Sa	Ssp	Tn	D	Y	Y			
Clark	IV	N	P	T	E	N	Br	D	Y	Bl			
Clark 63	IV	N	P	T	E	N	Br	D	Y	Bl			
Cloud	III	N	W	Lt	E	N	Br	D	Bl	Bl			
Columbia	III	N	P	G	E	N	Dbr	S	Gn	Bf	Gncot		
Delmar	IV	N	W	G	E	N	Br	D	Y	Y			
Dunfield	III	N	W	G	E	N	Tn	S	Y	Bf			
Ebony	IV	D	P	Lt	E	N	Br	S	Bl	Bl			
Emperor	IV	D	P	G	E	Ssp	Br	D	Y	Y			
Ford	III	N	W	T	E	N	Br	S	Y	Bl			
Fuji	III	D	W	T	E	N	Br	S	Gn	Bl			
Funk Delicious	IV	D	P	G	E	N	Br	D	Y	Y			
Gibson	IV	N	W	G	E	N	Tn	D	Y	Lbf			
Granger	III	N	P	T	E	N	Br	S	Y	Bl			
Green and Black	IV	D	P	T	E	N	Br	D	Gn	Bl	Saddle		
Guelph	III	N	W	T	E	N	Bl	S	Gn	Bl	Gncot		
Harbinsoy	IV	N	W	T	E	N	Br	D	Y	Br			
Harman	III	N	P	T	E	N	Br	S	Y	Bl			
Higan	IV	D	P	G	A	N	Tn	D	Y	Bf			
Hokkaido	IV	D	W	G	E	N	Br	D	Y	Y			
Hongkong	IV	N	W	G	E	N	Br	S	Y	Bf			
Hurrelbrink	IV	D	P	T	E	N	Br	D	Y	Br			
Illington	III	D	W	G	E	N	Tn	D	Y	Lbf			
Illini	III	N	W	G	E	N	Br	S	Y	Bf			
Ilsoy	III	N	P	Lt	E	N	Br	S	Br	Br			
Imperial	IV	D	P	G	E	N	Br	I	Y	Y			
Jefferson	IV	D	W	G	E	N	Br	S	Y	Bf			
Jogun	III	D	W	G	E	N	Br	D	Y	Y			
Kanrich	III	N	P	G	E	N	Br	D	Y	Y			
Kent	IV	N	P	T	E	N	Br	D	Y	Bl			
Kim	III	N	P	T	E	N	Br	D	Gn	Bl			
Kingston	IV	D	W	T	E	N	Bl	S	Bl	Bl	Gncot		
Kingwa	IV	N	P	G	E	N	Br	S	Bl	Bl		Dab	
Kura	III	D	W	T	E	Sp	Br	S	Gn	Bl	Saddle		
Lincoln	III	N	W	T	E	N	Br	S	Y	Bl			
Macoupin	IV	N	W	G	E	N	Br	S	Y	Bf			
Manchu	III	N	P	T	E	N	Br	S	Y	Bl			
Manchu 2204	III	N	P	T	E	N	Br	S	Y	Bl			
Manchu[Lafayette]	III	N	P	T	E	N	Br	D	Y	Br			
Manchuria 13177	III	N	P	G	E	N	Dbr	S	Y	Bf			
Manchuria 20173	III	N	P	G	E	N	Br	S	Y	Bf			
Mandell	III	N	P	T	E	N	Br	S	Y	Bl			
Mansoy	III	N	P	T	E	N	Br	S	Y	Bl			
Midwest	IV	D	P	T	E	N	Br	S	Y	Br			
Mingo	III	N	P	T	E	N	Br	S	Y	Bl			

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)
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	2.93
Chusei	721	1003	3.5	76	1.0	2.5	3.0	3.0	2.0	26.3	1.88
Clark	716	1007	2.5	94	3.0	3.0	1.0	2.3	2.0	16.9	3.26
Clark 63	716	1007	2.4	102	3.0	3.0	1.0	2.3	2.0	15.1	3.19
Cloud	715	922	3.4	114	4.0	3.0	1.0	2.3	-	15.6	2.65
Columbia	729	1010	3.8	119	4.0	4.0	1.0	2.5	1.0	12.6	2.19
Delmar	727	1016	2.0	112	3.5	3.0	1.0	2.3	2.0	15.2	2.89
Dunfield	714	917	2.8	91	3.0	2.5	1.0	2.3	1.0	15.2	2.40
Ebony	801	1015	3.9	104	1.0	3.0	1.0	2.0	-	10.9	2.55
Emperor	724	1013	4.3	91	1.0	3.0	1.0	3.0	1.0	24.8	2.19
Ford	713	925	2.1	97	3.0	3.0	1.0	2.5	1.5	17.4	2.97
Fuji	721	930	2.5	79	1.0	2.5	1.0	2.0	1.0	16.0	2.62
Funk Delicious	721	1010	3.5	94	1.0	3.0	1.0	2.8	1.0	25.1	2.21
Gibson	728	1009	2.6	104	3.5	3.5	1.0	2.5	1.5	14.1	2.43
Granger	710	919	2.8	79	2.5	2.5	1.0	3.0	1.0	17.2	2.86
Green and Black	807	1026	4.5	81	1.0	3.0	1.0	2.8	-	23.7	2.02
Guelph	724	929	3.7	89	4.0	3.5	1.0	2.5	2.5	13.4	2.94
Harbinsoy	720	1004	4.0	145	5.0	3.0	1.0	2.3	1.0	14.1	2.47
Harman	710	919	3.0	91	3.0	3.0	1.0	2.8	1.0	15.9	2.66
Higan	725	1006	2.0	53	1.0	3.0	5.0	2.5	1.0	23.5	2.52
Hokkaido	718	1004	3.3	81	1.0	3.0	2.0	3.0	1.5	20.9	2.44
Hongkong	724	1015	3.6	104	3.5	3.0	1.0	2.0	1.0	13.1	2.96
Hurrelbrink	801	1017	3.4	79	1.0	3.0	1.0	2.0	2.0	14.7	2.22
Illington	717	1003	3.5	84	1.0	3.0	2.0	1.8	2.5	16.8	2.87
Illini	715	927	3.1	117	4.0	3.0	1.0	2.5	1.0	15.4	3.02
Ilsoy	724	922	3.8	114	4.0	3.0	1.0	2.0	-	12.1	2.66
Imperial	727	1012	3.6	69	1.0	2.0	1.0	3.5	1.5	31.8	2.05
Jefferson	728	1023	3.6	66	1.0	3.0	1.0	2.0	1.0	32.8	2.16
Jogun	718	1004	2.5	69	1.0	3.0	1.0	3.0	2.5	25.4	2.74
Kanrich	717	919	3.8	84	3.0	3.0	1.0	2.8	2.0	26.0	2.31
Kent	716	1014	1.9	102	3.5	3.0	1.0	2.3	2.0	17.5	3.48
Kim	716	926	2.2	76	2.5	3.0	1.0	2.5	1.0	28.6	2.45
Kingston	725	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]	713	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
A.K.(Harrow)	III	40.6	21.4	1.1	10.8	4.2	19.5	55.9	9.7	R	--
A.K.[FC 30761]	IV	42.1	21.6	1.1	14.4	4.6	23.4	50.2	7.4	S	--
A.K.[Kansas]	IV	42.4	19.2	1.2	13.4	4.6	19.5	53.3	9.2	R	--
Adams	III	38.5	22.3	1.3	12.6	4.0	23.9	52.0	7.5	S	--
Adelphia	III	41.0	22.7	1.1	11.5	3.9	20.7	54.3	9.7	S	--
Aoda	IV	41.6	17.8	1.1	11.7	4.3	22.5	59.6	10.0	S	--
Bethel	IV	39.5	21.3	1.4	11.8	3.2	19.6	55.7	9.6	S	--
Boone	IV	39.7	21.8	1.0	13.3	4.5	23.8	48.6	9.7	R	--
Chestnut	III	39.6	20.6	-	13.4	4.0	25.5	49.7	7.4	S	--
Chief	IV	40.7	20.1	1.3	13.3	3.8	20.5	53.2	9.1	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	S	--
Clark 63	IV	39.3	21.9	1.2	10.4	3.5	17.2	59.2	9.7	R	--
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	III	41.3	20.6	1.3	14.1	4.0	20.4	52.1	9.5	S	--
Fuji	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	--
Gibson	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	IV	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	III	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	III	41.5	20.7	1.3	12.2	3.4	18.9	56.1	9.3	R	--
Ilsoy	III	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	III	41.4	21.1	1.0	10.7	3.4	23.7	52.9	9.2	S	--
Kanrich	III	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	III	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	--
Lincoln	III	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]	III	43.5	20.2	1.4	12.3	5.1	21.9	51.1	9.7	S	--
Manchuria 13177	III	42.0	21.9	1.3	14.2	4.6	21.0	51.9	8.2	S	--
Manchuria 20173	III	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	--
Midwest	IV	43.5	17.2	1.3	13.7	3.9	20.3	52.5	9.6	S	--
Mingo	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
	Morse	United States	China	1910	IV
	Norredo	United States	Unknown	1935	IV
	Osaya	United States	Japan	1936	III
	Patoka	United States	China	1940	IV
	Patterson	Morocco	Unknown	1966	IV
	Peking	United States	China	1910	IV
	Pennsoy	United States	United States	1944	III
	Perry	United States	United States	1952	IV
	Ross	United States	United States	1960	III
	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	IV
	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	III
	Wilson	United States	China	1909	IV
	Wilson-Five	United States	China	1918	IV
	Wing Jet	United States	United States	By 1929	III
	Wolverine	United States	Japan	1941	III
FC 02.108		Canada	China	1914	III
FC 02.109		Canada	China	1914	III
FC 03.548	Wilson Five	United States	United States	1920	IV
FC 03.654-1	Imported Yellow	United States	China	1920	IV
FC 03.654N	(Imported Yellow)	United States	China	1920	III
FC 04.002B		United States	Unknown	1924	III
FC 04.002N		United States	Unknown	1924	III
FC 04.007B		United States	Unknown	1924	III
FC 19.976-1	(Chusei o saya eda mame)	Japan	Japan	1932	IV
FC 19.976-2	(Chusei o saya eda mame)	Japan	Japan	1932	IV
FC 19.979-1	Sousei o saya eda mame	Japan	Japan	1932	IV
FC 19.979-2	(Sousei o saya eda mame)	Japan	Japan	1932	III
FC 19.979-3	(Sousei o saya eda mame)	Japan	Japan	1932	IV
FC 19.979-4	(Sousei o saya eda mame)	Japan	Japan	1932	IV
FC 19.979-5	(Sousei o saya eda mame)	Japan	Japan	1932	IV
FC 19.979-6	(Sousei o saya eda mame)	Japan	Japan	1932	IV
FC 19.979-7	(Sousei o saya eda mame)	Japan	Japan	1932	IV
FC 29.333	Laredo	United States	United States	1935	III
FC 31.557		United States	United States	1943	IV
FC 31.571	Kirin	United States	Unknown	1944	III
FC 31.572-3	(Anwei)	United States	Unknown	1944	III
FC 31.579		United States	United States	1944	III
FC 31.630		United States	United States	1944	IV
FC 31.678		United States	United States	1946	III
FC 31.684	Woods Extra Early Yellow	United States	United States	1946	III
FC 31.685	Woods Extra Early Yellow	United States	United States	1946	IV
FC 31.697		Costa Rica	Costa Rica	1946	IV
FC 31.702		United States	United States	1946	IV
FC 31.715		United States	United States	1947	IV
FC 31.946		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

Entry	Matur- ity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
Morse	IV	S	W	G	E	N	Br	S	Gn	Bf			
Norredo	IV	N	P	Lt	E	N	Tn	S	Bl	Bl			
Osaya	III	D	W	G	Sa	Sp	Tn	D	Y	Y			
Patoka	IV	N	P	G	E	N	Br	I	Y	Ib			
Patterson	IV	N	W	G	E	N	Tn	D	Y	Y			
Peking	IV	D	W	T	E	N	Br	S	Bl	Bl			
Pennsoy	III	N	P	G	E	N	Br	S	Y	Ib			
Perry	IV	N	P	G	E	N	Br	S	Y	Ib			
Ross	III	N	W	T	E	N	Br	S	Y	Bl			
Sanga	IV	N	P	T	E	N	Br	D	Y	Tn			
Sato	IV	D	W	T	E	N	Br	D	Bl	Bl			
Scioto	IV	N	P	T	E	N	Br	S	Y	Bl			
Scott	IV	N	P	G	Sa	N	Br	S	Y	Ib			
Shelby	III	N	P	T	E	N	Br	D	Y	Bl			
Shingto	III	N	W	T	E	N	Bl	S	Gn	Br			
Shiro	IV	D	W	T	E	Ssp	Tn	S	Gn	Bl			
Sooty	IV	N	P	G	E	N	Tn	B	Bl	Bl			
Viking	III	N	P	T	E	N	Br	S	Y	Bl			
Virginia	IV	N	P	T	E	N	Br	S	Br	Br			
Wabash	IV	N	W	G	E	N	Tn	S	Y	Bf			
Wayne	III	N	W	T	E	N	Br	S	Y	Bl			
Wilson	IV	N	P	T	E	N	Br	S	Bl	Bl			
Wilson-Five	IV	N	P	Lt	E	N	Br	S	Bl	Bl			
Wing Jet	III	D	P	Lt	E	N	Tn	S	Bl	Bl			
Wolverine	III	D	P	G	E	N	Br	D	Y	Y			
FC 02.108	III	N	P	T	E	Ssp	Br	D	Y	Br			
FC 02.109	III	N	P	T	E	Ssp	Br	D	Y	Br			
FC 03.548	IV	D	W	T	E	Ssp	Br	D	Y	Br			
FC 03.654-1	IV	N	W	G	E	N	Br	D	Y	Bf			
FC 03.654N	III	N	P	Ng	E	Ssp	Br	D	Y	Br			
FC 04.002B	III	N	W	G	E	N	Br	S	Y	Bf			
FC 04.002N	III	N	W	T	E	N	Br	D	Y	Br			
FC 04.007B	III	N	P	T	E	Ssp	Br	D	Y	Y			
FC 19.976-1	IV	D	P	G	E	N	Br	I	Y	Bf			
FC 19.976-2	IV	D	P	G	E	N	Br	D	Y	Bf			
FC 19.979-1	IV	D	W	G	E	N	Tn	D	Y	Y	Def		
FC 19.979-2	III	D	P	T	E	Ssp	Br	D	Y	Br			
FC 19.979-3	IV	D	W	G	E	Ssp	Br	D	Y	Bf			
FC 19.979-4	IV	N	P	G	E	Ssp	Bl	S	Y	Bf			
FC 19.979-5	IV	D	P	G	E	N	Br	I	Y	Y			
FC 19.979-6	IV	D	W	G	E	N	Br	S	Y	Bf			
FC 19.979-7	IV	D	W	G	E	N	Br	I	Y	Bf			
FC 29.333	III	N	W	G	E	N	Br	S	Y	Bf			
FC 31.557	IV	D	P	Ng	E	N	Br	S	Gn	Bl			
FC 31.571	III	N	W	G	E	N	Br	D	Y	Bf			
FC 31.572-3	III	N	P	T	E	N	Br	S	Y	Br			
FC 31.579	III	D	W	G	E	N	Br	D	Y	Bf			
FC 31.630	IV	N	P	Ng	E	N	Br	S	Bl	Bl		Dab	
FC 31.678	III	N	W	G	E	N	Tn	S	Y	Bf			
FC 31.684	III	N	W	G	E	N	Tn	I	Y	Bf			
FC 31.685	IV	N	W	G	E	N	Br	S	Y	Bf			
FC 31.697	IV	N	P	G	E	N	Br	S	Y	Ib			
FC 31.702	IV	N	W	G	E	N	Br	S	Y	Bf			
FC 31.715	IV	N	W	T	E	N	Br	S	Y	Y			
FC 31.946	IV	N	P	T	E	N	Br	D	Y	Bl			

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)
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	715	1010	2.6	99	3.0	3.0	1.0	2.5	2.0	18.9	2.89
Patterson	728	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
Pennsoy	717	928	2.5	99	3.5	3.0	1.0	2.5	1.0	16.6	3.17
Perry	717	1013	2.5	107	3.5	3.0	1.0	2.3	1.0	17.9	3.27
Ross	714	1002	2.4	104	3.5	3.0	1.0	2.0	1.0	14.8	3.21
Sanga	714	926	4.0	89	4.0	3.0	1.0	3.3	2.5	28.1	2.94
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	726	1019	3.7	99	1.0	3.0	1.0	2.5	2.0	24.0	1.79
FC 29.333	716	922	3.0	117	4.5	3.0	1.0	2.5	1.0	15.0	3.11
FC 31.557	723	1016	1.7	58	1.0	3.0	1.0	2.3	1.0	22.8	1.82
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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
Morse	IV	42.3	19.3	1.3	13.2	3.3	20.2	53.2	10.1	S	--
Norredo	IV	40.6	16.4	-	14.0	3.3	18.2	47.4	17.1	S	--
Osaya	III	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	--
Pennsoy	III	42.7	19.4	1.3	12.6	4.0	22.0	50.6	10.9	S	--
Perry	IV	41.4	20.7	1.3	11.0	4.1	18.1	55.8	11.0	S	--
Ross	III	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	--
Sato	IV	44.3	19.2	-	12.9	4.2	22.7	50.6	9.5	R	--
Scioto	IV	41.0	20.3	1.2	12.2	4.2	19.9	57.9	5.8	S	--
Scott	IV	38.5	20.2	1.3	17.4	6.3	24.8	43.4	8.1	S	--
Shelby	III	41.6	21.1	1.3	12.0	4.3	20.7	52.1	11.0	S	--
Shingto	III	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	--
Viking	III	40.7	21.2	-	12.1	4.1	19.7	53.6	10.5	S	--
Virginia	IV	42.9	18.1	1.1	10.8	3.7	19.4	55.8	10.3	R	--
Wabash	IV	39.8	21.5	1.3	12.4	3.6	21.3	53.6	9.1	S	--
Wayne	III	42.3	20.7	1.3	14.0	4.7	27.0	45.6	8.7	S	--
Wilson	IV	40.7	18.1	-	11.1	3.3	18.0	55.2	12.4	S	--
Wilson-Five	IV	42.3	17.1	-	12.4	2.7	16.7	55.7	12.4	S	--
Wing Jet	III	44.1	18.3	-	12.5	3.1	20.6	56.3	7.5	S	--
Wolverine	III	41.4	20.3	1.0	11.8	3.9	25.6	50.0	8.8	S	--
FC 02.108	III	42.3	20.4	1.1	10.9	3.8	20.3	55.1	9.8	S	S
FC 02.109	III	41.9	20.4	1.1	11.4	3.4	18.7	56.3	10.2	S	S
FC 03.548	IV	40.0	19.2	1.3	10.7	3.2	18.3	56.7	11.1	S	S
FC 03.654-1	IV	42.5	19.1	1.2	11.1	3.2	19.7	56.2	9.8	S	S
FC 03.654N	III	42.9	19.3	1.2	11.5	3.9	20.8	55.2	8.5	H	S
FC 04.002B	III	40.9	21.2	1.2	11.6	3.5	19.8	55.6	10.1	R	S
FC 04.002N	III	41.9	20.9	1.1	12.5	3.4	21.2	54.4	8.4	R	S
FC 04.007B	III	44.1	19.4	1.2	10.3	3.6	22.1	54.5	9.3	S	S
FC 19.976-1	IV	43.2	18.9	1.2	10.7	3.2	22.4	54.4	9.3	S	S
FC 19.976-2	IV	43.2	18.3	1.1	13.1	3.2	17.3	56.8	9.6	R	S
FC 19.979-1	IV	43.0	19.1	1.2	11.5	3.6	21.1	53.0	10.8	H	S
FC 19.979-2	III	43.1	17.8	1.3	12.1	4.1	23.3	50.9	9.6	R	S
FC 19.979-3	IV	41.3	19.8	1.2	11.4	3.2	22.6	52.9	9.9	S	S
FC 19.979-4	IV	43.3	18.5	1.2	10.8	3.8	25.5	49.3	10.6	S	S
FC 19.979-5	IV	41.6	19.9	1.3	11.6	3.8	24.7	49.0	10.9	S	S
FC 19.979-6	IV	42.0	20.4	1.2	13.3	3.2	19.0	54.1	10.3	H	S
FC 19.979-7	IV	43.0	17.4	1.2	13.2	3.1	23.2	49.0	11.4	H	S
FC 29.333	III	40.9	20.4	1.3	11.6	3.9	22.1	53.0	9.4	R	S
FC 31.557	IV	42.9	18.4	1.2	15.2	3.5	18.7	51.4	11.2	S	S
FC 31.571	III	42.8	19.2	1.3	13.3	3.4	21.1	52.8	9.3	S	S
FC 31.572-3	III	41.4	19.9	1.3	11.7	4.0	19.6	53.8	11.0	S	S
FC 31.579	III	42.9	19.7	1.3	11.1	3.5	19.1	57.4	8.9	H	S
FC 31.630	IV	41.9	18.1	-	12.6	3.7	19.8	54.0	9.9	R	S
FC 31.678	III	40.2	21.9	1.1	12.4	3.7	21.4	53.1	9.4	S	S
FC 31.684	III	40.2	22.5	1.2	12.2	3.7	24.2	51.0	9.0	S	S
FC 31.685	IV	40.1	21.5	1.2	11.7	3.0	18.9	54.6	11.8	S	S
FC 31.697	IV	40.8	20.4	1.1	11.3	4.5	20.8	53.1	10.2	S	S
FC 31.702	IV	40.0	21.4	1.3	11.7	3.7	20.5	54.4	9.8	S	S
FC 31.715	IV	40.5	20.2	1.1	12.6	3.8	18.2	53.0	12.3	S	S
FC 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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
FC 33.243	Anderson	United States	United States	1954	IV
19.986	Okute mame	Japan	Japan	1907	IV
54.583		China	China	1921	III
54.591		China	China	1921	III
54.592		China	China	1921	III
54.600		China	China	1921	IV
54.606-1		China	China	1921	IV
54.606-2		China	China	1921	IV
54.608-2		China	China	1921	III
54.608-3		China	China	1921	III
54.608-4		China	China	1921	IV
54.608-5		China	China	1921	III
54.609		China	China	1921	III
54.610-1		China	China	1921	III
54.610-4		China	China	1921	IV
54.613		China	China	1921	III
54.614		China	China	1921	IV
54.615		China	China	1921	III
54.615-1		China	China	1921	III
54.615-2		China	China	1921	IV
54.617		China	China	1921	IV
54.618		China	China	1921	III
54.620		China	China	1921	III
54.620-2		China	China	1921	III
55.089-1		Unknown	Unknown	1922	III
55.887		Unknown	Unknown	1922	IV
56.563		Unknown	Unknown	1923	IV
57.334	Huang tou	China	China	1923	III
58.955	Common Yellow Variety	China	China	1924	IV
59.849	Enoki	Japan	Japan	1924	IV
60.269-2	(Black)	Korea	Korea	1924	IV
60.272	Fifth Moon	China	China	1924	III
60.296-2	(Loh yuih bah)	China	China	1924	III
60.970	Huang do	China	China	1924	IV
61.940		China	China	1924	III
61.944		China	China	1924	IV
61.947		China	China	1924	IV
62.199		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
68.011	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	1926	III
68.479		China	China	1926	III
68.479-1		China	China	1926	III
68.483		China	China	1926	III

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
FC 33.243	IV	N	W	G	E	N	Br	S	Y	Y	Gncot		
19.986	IV	D	P	G	A	N	Tn	D	Y	Y			
54.583	III	D	P	G	E	N	Bl	D	Gn	lb			
54.591	III	N	P	T	E	N	Tn	D	Y	Tn			
54.592	III	N	W	T	E	N	Br	S	Y	Bl			
54.600	IV	D	W	G	E	Ssp	Br	D	Y	Lbf			
54.606-1	IV	N	P	T	E	N	Tn	I	Gn	Gn			
54.606-2	IV	N	W	G	E	N	Br	S	Y	Bf			
54.608-2	III	N	P	Lt	E	N	Br	S	Y	Bl			
54.608-3	III	N	W	G	E	N	Br	D	Y	Y			
54.608-4	IV	D	W	G	E	N	Tn	D	Y	Y			
54.608-5	III	N	P	T	E	N	Br	I	Y	Y			
54.609	III	N	P	G	E	N	Br	D	Y	Y			
54.610-1	III	N	W	G	E	N	Br	D	Y	Bf			
54.610-4	IV	N	W	G	E	N	Bl	I	Y	Bf			
54.613	III	S	W	G	E	N	Dbr	S	Y	Y			
54.614	IV	N	P	G	E	N	Br	S	Y	lb			
54.615	III	N	P	T	E	Ssp	Br	D	Y	Br			
54.615-1	III	N	P	T	E	N	Tn	D	Y	Bl			
54.615-2	IV	N	W	G	E	Ssp	Br	I	Y	Bf			
54.617	IV	N	W	T	E	N	Br	S	Y	Br			
54.618	III	N	W	G	E	N	Br	S	Y	Bf			
54.620	III	N	W	Lt	E	N	Br	D	Y	Bl			
54.620-2	III	N	P	Lt	E	Ssp	Br	D	Y	Br			
55.089-1	III	N	P	T	E	N	Br	S	Y	Bl	Dab		
55.887	IV	D	W	T	E	N	Br	D	Y	Y			
56.563	IV	D	W	G	E	Ssp	Br	I	Y	Lbf			
57.334	III	D	P	G	E	N	Br	S	Y	Bf			
58.955	IV	N	W	G	E	N	Br	I	Y	Bf			
59.849	IV	D	P	G	E	N	Br	D	Y	Y			
60.269-2	IV	D	P	G	E	N	Dbr	D	Y	lb			
60.272	III	D	P	T	E	Ssp	Tn	D	Y	Br			
60.296-2	III	S	W	G	E	N	Br	D	Gn	Bf			
60.970	IV	N	W	G	E	N	Dbr	S	Y	Bf			
61.940	III	N	P	T	E	N	Dbr	S	Y	Br			
61.944	IV	D	W	G	E	N	Br	S	Y	Bf			
61.947	IV	D	W	G	E	N	Br	S	Y	Bf			
62.199	IV	D	W	G	E	N	Br	I	Y	Bf			
62.202	III	N	P	Lt	E	N	Tn	S	Y	Br			
62.202-2	IV	N	W	Lt	E	N	Br	S	Gn	Br			
62.248	IV	D	P	G	E	N	Br	S	Y	Bf			
62.483	III	N	P	T	E	N	Br	D	Y	Br			
63.468	IV	N	W	T	E	N	Br	I	Y	Bl			
63.945	IV	D	P	T	E	N	Br	D	Y	Bl			
64.698	IV	D	W	Ng	E	N	Bl	I	Bl	Bl			
64.747	IV	D	P	G	E	N	Br	S	Y	Y			
65.379	III	N	W	G	E	N	Br	S	Y	Bf			
68.011	IV	N	W	G	E	N	Dbr	S	Y	Y			
68.398	III	N	W	G	E	N	Br	S	Y	Bf			
68.423	III	N	P	G	E	N	Br	S	Y	Ig			
68.449	IV	N	P	T	E	N	Br	I	Y	Br			
68.470	III	N	P	Lt	E	N	Tn	D	Y	Br			
68.479	III	S	W	G	E	N	Br	I	Y	Bf			
68.479-1	III	D	W	T	E	N	Br	S	Y	Br			
68.483	III	N	P	G	E	N	Br	S	Y	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)
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

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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
FC 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	H	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
54.592	III	41.1	21.0	1.2	12.8	4.5	23.4	51.1	8.1	S	S
54.600	IV	42.0	19.3	1.2	10.5	3.6	28.7	47.9	9.3	R	S
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	III	42.7	19.2	1.1	11.2	4.8	22.9	52.4	8.8	S	S
54.608-3	III	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	III	42.2	21.1	1.2	11.4	4.8	25.2	49.9	8.8	S	S
54.609	III	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	H	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	III	44.1	19.9	1.2	12.1	3.4	22.7	53.8	7.9	S	S
54.614	IV	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
54.618	III	41.0	19.9	1.3	13.2	4.7	23.8	47.6	10.7	H	S
54.620	III	43.9	20.5	1.2	11.8	3.5	20.4	55.5	8.8	S	S
54.620-2	III	42.4	20.1	1.3	11.2	4.3	22.8	52.6	9.2	S	S
55.089-1	III	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	H	S
57.334	III	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	III	42.2	19.1	1.2	10.4	4.0	21.7	53.2	10.7	S	S
60.296-2	III	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	IV	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
62.202	III	40.3	19.9	1.2	14.9	3.6	23.3	49.2	9.1	R	S
62.202-2	IV	42.6	18.8	1.1	12.2	3.7	16.8	55.6	11.6	S	S
62.248	IV	41.3	18.3	1.4	13.5	2.9	21.2	52.7	9.8	H	S
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	III	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	III	41.4	19.8	1.4	11.5	4.0	21.0	53.9	9.7	S	S
68.423	III	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	III	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	H	S
68.483	III	44.7	18.5	1.1	12.0	3.3	23.4	53.0	8.2	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Matur- ity group
68.494		China	China	1926	III
68.521-1		China	China	1926	III
68.523		China	China	1926	III
68.528		China	China	1926	III
68.530-2		China	China	1926	III
68.533-1		China	China	1926	III
68.533-2		China	China	1926	III
68.535		China	China	1926	III
68.560		China	China	1926	III
68.599		China	China	1926	III
68.604-1		China	China	1926	III
68.609A		China	China	1926	III
68.621		China	China	1926	III
68.644		China	China	1926	IV
68.648		China	China	1926	III
68.679		China	China	1926	III
68.679-2		China	China	1926	IV
68.692		China	China	1926	IV
68.692-2		China	China	1926	III
68.701		China	China	1926	III
68.710		China	China	1926	III
68.731		China	China	1926	III
68.732-1		China	China	1926	III
68.748-1		China	China	1926	III
68.756		China	China	1926	III
68.759		China	China	1926	III
68.761-3		China	China	1926	III
68.768		China	China	1926	IV
68.806		China	China	1926	III
69.507-1		China	China	1926	IV
69.515		China	China	1926	III
69.993		China	China	1926	III
69.995		China	China	1926	III
70.001		China	China	1926	III
70.013		China	China	1926	IV
70.014		China	China	1926	III
70.019		China	China	1926	III
70.023		China	China	1926	III
70.076		China	China	1926	III
70.080		China	China	1926	III
70.188		China	China	1926	III
70.189		China	China	1926	III
70.192		China	China	1926	III
70.199		China	China	1926	III
70.201		China	China	1926	III
70.202		China	China	1926	III
70.208		China	China	1926	IV
70.212		China	China	1926	III
70.213		China	China	1926	III
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	III

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
68.494	III	N	P	Lt	E	N	Tn	D	Y	Br			
68.521 -1	III	D	P	T	E	N	Br	S	Y	Br			
68.523	III	N	P	T	E	N	Br	D	Y	Dg			
68.528	III	N	P	T	E	Ssp	Br	S	Y	Bl			
68.530-2	III	D	P	T	E	Ssp	Tn	I	Lg	G			
68.533-1	III	N	P	Lt	E	N	Br	D	Y	Br			
68.533-2	III	N	P	G	E	N	Br	D	Y	lb			
68.535	III	N	P	T	E	N	Br	I	Y	Br			
68.560	III	N	W	G	E	N	Dbr	S	Y	Y			
68.599	III	N	P	G	E	N	Br	S	Y	lb			
68.604-1	III	N	W	T	E	N	Br	S	Y	Blbr			
68.609A	III	N	P	T	E	N	Br	D	Y	Tn			
68.621	III	N	P	T	E	N	Br	I	Y	Br			
68.644	IV	D	P	G	E	N	Br	D	Y	Y			
68.648	III	N	P	T	E	N	Br	S	Y	Br			
68.679	III	N	W	G	E	N	Bl	S	Y	Bf			
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			
68.692-2	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	I	Y	Bl			
68.731	III	N	P	G	E	N	Br	S	Y	lb			
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	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	Bl			
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		Dab	
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	Bl			
70.080	III	N	P	T	E	N	Tn	D	Y	Br			
70.188	III	N	P	G	E	N	Bl	D	Y	Bf			
70.189	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	W	G	E	N	Dbr	S	Y	Bf			
70.201	III	N	P	T	E	N	Br	D	Y	Br			
70.202	III	N	P	T	E	N	Dbr	S	Y	Bl			
70.208	IV	N	P	T	E	N	Lbr	D	Y	Bl			
70.212	III	N	P	T	E	N	Br	S	Y	Bl			
70.213	III	N	P	G	E	N	Br	S	Y	lb			
70.229	IV	N	W	G	E	N	Br	S	Y	Lbf			
70.242-2	IV	N	P	T	E	N	Br	S	Y	Bl			
70.243	IV	D	P	G	E	Ssp	Br	S	Y	Y			
70.247	III	N	P	T	E	Ssp	Br	I	Y	Bl			
70.253	III	N	W	G	E	N	Br	S	Y	Lbf			
70.462	III	N	P	T	E	N	Br	S	Y	Bl			

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)
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
68.679	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
68.756	713	917	3.3	86	3.0	2.5	1.0	2.8	1.0	15.8	2.32
68.759	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
70.019	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
70.462	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

Entry	Maturity group	Seed composition		Protein composition Methionine (% protein)	Oil composition					Disease reaction	
		Protein (%)	Oil (%)		Pal- mitic (%)	Steric (%)	Oleic (%)	Lino- leic (%)	Lino- lenic (%)	PR	Py
68.494	III	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	H
68.528	III	40.8	20.9	1.1	12.6	3.7	21.7	54.2	7.8	S	H
68.530-2	III	40.7	20.9	1.2	14.6	3.5	20.1	53.0	8.9	S	S
68.533-1	III	44.0	19.7	1.2	11.2	3.1	20.3	57.2	8.2	S	S
68.533-2	III	42.5	18.4	1.2	14.8	3.6	21.8	51.4	8.3	S	R
68.535	III	41.5	19.7	1.3	13.1	3.3	21.2	53.2	9.2	R	S
68.560	III	41.7	21.7	1.2	10.8	3.5	24.0	53.3	8.5	S	S
68.599	III	43.5	20.0	1.2	13.2	3.0	25.2	50.0	8.7	S	S
68.604-1	III	42.5	19.8	1.3	10.8	3.0	17.3	58.6	10.4	S	H
68.609A	III	43.4	19.5	1.2	12.9	3.1	22.7	53.2	8.1	S	S
68.621	III	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	III	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	III	40.9	20.9	1.1	13.8	3.3	19.0	54.9	9.0	S	S
68.701	III	40.2	21.9	1.3	13.3	3.7	21.0	53.9	8.2	S	S
68.710	III	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	H
68.732-1	III	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	III	42.0	20.5	1.2	11.8	3.9	22.5	52.6	9.2	S	H
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	IV	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
70.001	III	44.3	19.6	1.1	13.0	4.1	25.2	49.4	8.3	S	S
70.013	IV	42.2	19.9	1.2	13.1	3.4	20.2	52.9	10.3	S	S
70.014	III	41.8	20.2	1.3	16.3	3.9	16.8	52.3	10.6	S	S
70.019	III	39.8	21.8	1.3	10.2	3.4	21.1	57.5	7.9	S	S
70.023	III	42.8	19.3	1.1	11.9	3.6	22.0	54.4	8.2	S	S
70.076	III	40.9	20.0	1.2	12.1	4.2	20.1	53.7	9.9	S	S
70.080	III	42.8	19.6	1.2	11.9	4.8	20.0	54.4	9.0	S	S
70.188	III	43.4	19.2	1.2	11.6	4.3	22.5	53.0	8.6	R	S
70.189	III	43.3	20.2	1.3	12.2	3.7	20.1	55.2	8.7	S	S
70.192	III	42.3	21.1	1.2	11.3	3.9	19.3	56.0	9.5	S	S
70.199	III	41.0	21.3	1.3	11.6	3.5	20.2	55.7	9.0	S	S
70.201	III	43.2	20.2	1.3	10.9	4.1	20.8	55.0	9.2	S	H
70.202	III	44.7	18.7	1.1	13.9	3.7	21.5	51.2	9.8	S	H
70.208	IV	44.4	18.1	-	12.5	3.8	18.5	53.7	11.4	R	S
70.212	III	43.4	20.2	1.2	11.7	5.4	20.7	52.9	9.3	S	S
70.213	III	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	H
70.242-2	IV	44.8	19.8	-	12.3	3.9	22.8	52.1	8.9	S	H
70.243	IV	44.5	19.0	1.2	12.0	3.2	21.0	54.1	9.7	S	R
70.247	III	43.2	20.1	1.3	12.2	3.8	19.6	54.1	10.2	S	S
70.253	III	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
70.466-3	Teng tien hei chi	China	China	1926	IV
70.466-4		China	China	1926	III
70.467		China	China	1926	IV
70.469		China	China	1926	III
70.469-1		China	China	1926	III
70.470		China	China	1926	III
70.471		China	China	1926	III
70.473		China	China	1926	III
70.490		China	China	1926	IV
70.500		China	China	1926	III
70.501		China	China	1926	III
70.515		China	China	1926	III
70.519		China	China	1926	III
70.528		China	China	1926	III
70.541		China	China	1926	III
70.559		China	China	1926	III
70.566		China	China	1926	III
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	III
71.850-1		China	China	1927	III
72.227	Siu wong tau Wong tau	China	China	1927	IV
72.232		China	China	1927	III
79.583		China	China	1929	III
79.587		China	China	1929	III
79.616		China	China	1929	III
79.620		China	China	1929	III
79.627		China	China	1929	III
79.628		China	China	1929	III
79.645		China	China	1929	III
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	Wase eda mame (Okuro maru daizu)	Japan	Japan	1929	III
80.461		Japan	Japan	1929	III
80.466-1		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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Seedcoat			Hilum color	Other traits		
				Color	Form	Density	Pod color	Luster	Color		Seed	Leaf	Plant
70.466-3	IV	N	W	T	E	N	Br	S	Y	Br			
70.466-4	III	N	W	T	E	N	Br	D	Y	Bl			
70.467	IV	N	P	G	E	N	Br	S	Y	lb			
70.469	III	N	W	G	E	Ssp	Bl	D	Y	Y			
70.469-1	III	N	P	T	E	Ssp	Br	D	Y	Br			
70.470	III	N	W	G	E	N	Bl	S	Y	Bf			
70.471	III	N	P	T	E	N	Br	S	Y	Br			
70.473-1	III	N	P	T	E	N	Br	D	Y	Br			
70.490	IV	N	P	T	E	N	Br	D	Y	Br			
70.500	III	N	W	G	E	N	Br	S	Y	Bf			
70.501	III	N	P	T	E	Ssp	Br	D	Y	Br			
70.515	III	N	P	T	E	Ssp	Br	D	Y	Br			
70.519	III	N	P	T	E	Ssp	Br	D	Y	Br			
70.528	III	N	P	T	E	Ssp	Br	S	Y	Bl			
70.541	III	N	P	T	E	N	Br	D	Y	Bl			
70.559	III	S	W	G	E	N	Dbr	S	Y	Bf			
70.566	III	N	P	G	E	N	Br	I	Y	G			
71.444	IV	N	W	T	E	N	Br	I	Y	Br			
71.461	III	N	P	T	E	N	Br	S	Y	Bl			
71.463	IV	N	P	T	E	N	Br	D	Y	Br			
71.506	IV	N	P	G	E	N	Br	D	Y	Y			
71.845	III	N	W	G	E	N	Br	S	Y	Bf			
71.850-1	III	S	P	G	E	N	Br	S	Y	lb			
72.227	IV	S	W	G	Sa	N	Br	S	Y	Bf			
72.232	III	D	Dp	T	E	N	Tn	I	Y	Bl			
79.583	III	D	W	G	E	Ssp	Br	S	Gn	Gn	St	Na	
79.587	III	N	P	T	E	Ssp	Br	I	Rbr	Rbr			
79.616	III	N	W	Lt	E	N	Br	I	Br	Bl	Saddle		
79.620	III	N	W	T	E	N	Br	S	Y	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	T	E	Ssp	Br	D	Rbr	Rbr			
79.691-4	III	D	W	T	Sa	Ssp	Bl	D	Br	Br			
79.692	III	N	P	T	E	N	Br	S	Y	Bl			
79.693	III	N	P	Lt	E	N	Br	S	Br	Br			
79.696	IV	N	W	T	E	N	Br	I	Lgn	Bl			
79.710	III	N	P	T	E	Ssp	Br	I	Rbr	Rbr			
79.726	III	N	W	T	E	N	Br	S	Bl	Bl	Gncot		
79.732-3	IV	D	P	G	E	N	Dbr	D	Y	lb			
79.732-4	IV	D	W	G	E	N	Dbr	I	Y	Bf			
79.743	IV	N	W	T	E	N	Br	I	Lgn	Bl			
79.760	III	N	P	Lt	E	N	Br	D	Y	Br			
79.797	III	N	W	T	E	N	Br	D	Y	Bl			
79.825-1	IV	N	W	G	E	N	Br	D	Y	Bf			
79.835	III	N	W	Lt	E	Ssp	Bl	S	Y	Lbf			
79.848-1	III	N	P	Lt	E	N	Br	D	Y	Br			
79.870-2	III	N	W	T	E	N	Tn	I	Y	Br			
79.870-4	IV	N	P	T	E	N	Br	S	Y	Bl			
79.870-6	IV	D	W	T	E	N	Tn	S	Y	Br			
79.872	III	N	P	T	E	N	Tn	D	Y	Br			
79.874	III	S	W	G	E	N	Bl	S	Y	Bf			
79.874-1	III	N	P	T	E	N	Dbr	S	Y	Bl			
80.459	III	D	P	G	E	Ssp	Br	I	Y	Y			
80.461	III	N	W	G	E	N	Dbr	S	Y	Bf			
80.466-1	III	D	W	T	Sa	N	Br	D	Y	Bl			

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)
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
79.583	717	924	3.0	64	1.0	2.0	1.0	2.3	-	18.4	1.77
79.587	722	1002	3.1	89	3.0	3.0	1.0	2.3	1.0	15.5	2.80
79.616	713	920	3.2	99	3.5	3.0	1.0	2.5	-	20.7	2.58
79.620	717	925	2.8	117	4.0	3.0	1.0	2.5	3.0	16.2	2.74
79.627	713	926	3.7	94	3.5	3.0	1.0	2.3	3.0	14.6	2.58
79.628	715	930	2.5	94	2.5	3.0	1.0	2.0	2.0	17.2	2.67
79.645	721	1003	3.6	97	3.5	3.0	1.0	1.8	-	16.5	2.64
79.691-4	719	1001	3.3	53	1.0	3.5	2.0	2.5	-	10.6	1.96
79.692	711	923	3.5	107	4.0	3.0	1.0	2.3	1.0	13.8	2.60
79.693	725	923	3.4	112	4.0	3.0	1.0	2.0	-	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	107	4.0	3.0	1.0	2.5	3.0	15.7	2.47
79.797	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
80.466-1	720	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
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	III	42.3	19.6	1.3	11.6	4.3	19.2	54.7	10.2	S	H
70.473	III	45.4	19.0	1.1	13.1	3.6	19.1	55.0	9.3	S	R
70.490	IV	42.6	19.4	1.2	13.5	3.6	19.8	53.4	9.7	S	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	H
70.515	III	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	H
70.541	III	42.2	20.7	1.3	12.0	3.6	20.0	54.7	9.7	S	H
70.559	III	42.9	20.2	1.3	12.4	4.1	26.4	48.3	8.8	S	S
70.566	III	46.2	19.1	1.2	13.8	3.8	23.6	49.3	9.5	S	H
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	H
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	H	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	H
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	III	42.7	21.2	-	11.9	3.5	24.2	51.5	8.9	S	S
79.726	III	42.0	21.9	-	14.8	3.5	22.6	50.9	8.3	H	S
79.732-3	IV	44.7	18.7	1.2	12.2	4.1	25.0	48.4	10.3	S	H
79.732-4	IV	44.3	18.6	1.2	11.7	4.3	24.2	48.7	11.0	S	S
79.743	IV	39.3	20.3	1.4	13.0	3.7	15.7	54.9	12.7	S	S
79.760	III	42.9	20.3	1.3	12.1	4.4	23.8	51.5	8.2	S	S
79.797	III	41.7	21.2	1.3	13.1	2.9	20.1	55.6	8.3	H	S
79.825-1	IV	40.6	20.2	1.3	11.5	4.4	25.2	49.3	9.7	S	S
79.835	III	41.9	22.1	1.2	12.3	4.2	23.5	51.1	8.9	S	S
79.848-1	III	42.7	20.0	1.4	12.4	5.6	24.2	49.3	8.4	S	S
79.870-2	III	43.0	20.4	1.3	13.2	3.4	28.0	48.1	7.3	R	S
79.870-4	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	III	42.7	20.3	1.3	13.2	3.7	19.7	54.9	8.6	S	S
79.874	III	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	H	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	III	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
80.466-2	(Okuro maru daizu)	Japan	Japan	1929	IV
80.470	Souseikurome o saya daizu	Japan	Japan	1929	III
80.471-1	(Sousei kuro sakigake)	Japan	Japan	1929	III
80.473	Cha mame	Japan	Japan	1929	IV
80.479	Shikou obbikuri daizu	Japan	Japan	1929	IV
80.480	Gokuwase daihosan shinbon daizu	Japan	Japan	1929	III
80.481	Rokusun daizu	Japan	Japan	1929	III
80.488	Eda mame uase chaurame	Japan	Japan	1929	IV
80.498-1	(O tsubu aojiro daizu)	Japan	Japan	1929	IV
80.822	Shiheigai shirobana	Japan	Japan	1929	III
80.825	Nagazuki	Japan	Japan	1929	III
80.828-1	Asahi 60	Japan	Japan	1929	IV
80.828-2	(Asahi 60)	Japan	Japan	1929	IV
80.831	Kaigen shirobana	Japan	Japan	1929	III
80.834-1	Daruma 20	Japan	Japan	1929	IV
80.834-2	(Daruma 20)	Japan	Japan	1929	IV
80.837	Mejiro	Japan	Japan	1929	IV
80.841	Niuchan	Japan	Japan	1929	III
80.844-2	Ho ten shirokubi daizu	Japan	Japan	1929	III
80.844-3	(Ho ten shirokubi daizu)	Japan	Japan	1929	III
80.845-1	Rikuu 23	Japan	Japan	1929	III
80.845-2	(Rikuu 23)	Japan	Japan	1929	III
80.847-1	Shiro saya	Japan	Japan	1929	III
80.847-2	(Shiro saya)	Japan	Japan	1929	IV
81.023	Honen daizu	Japan	Japan	1929	IV
81.027	Akasaya daizu	Japan	Japan	1929	III
81.029-1	(Chuseikurome daizu)	Japan	Japan	1929	IV
81.030	Sousei kuro daizu	Japan	Japan	1929	IV
81.030-1	(Sousei kuro daizu)	Japan	Japan	1929	III
81.031-1	Banseiosayada mame	Japan	Japan	1929	III
81.031-2	(Banseiosayada mame)	Japan	Japan	1929	III
81.034-1	Kuro daizu	Japan	Japan	1929	IV
81.034-2	(Kuro daizu)	Japan	Japan	1929	IV
81.037-1	(Kurakake daizu)	Japan	Japan	1929	IV
81.037-2	(Kurakake daizu)	Japan	Japan	1929	III
81.037-3	(Kurakake daizu)	Japan	Japan	1929	III
81.037-5	(Kurakake daizu)	Japan	Japan	1929	IV
81.038	Sousei eda mame	Japan	Japan	1929	III
81.041	Kuro daizu	Japan	Japan	1929	III
81.041-1	(Kuro daizu)	Japan	Japan	1929	III
81.042-1	(Kurakake daizu)	Japan	Japan	1929	IV
81.042-2	(Kurakake daizu)	Japan	Japan	1929	IV
81.044-1	Akita daizu	Japan	Japan	1929	III
81.044-2	(Akita daizu)	Japan	Japan	1929	III
81.667	Selection I.V.V. Croushoul	China	China	1929	III
81.761	Aojiro	Japan	Japan	1929	III
81.764	Moshito	Japan	China	1929	IV
81.766	Moshito	Japan	China	1929	III
81.777	Kurozaya	Japan	Japan	1929	IV
81.780	Tsurunoko	Japan	Japan	1929	III
81.785	Chusei hadaka	Japan	Japan	1929	III
82.210		Rep. of Korea	Rep. of Korea	1929	IV
82.218	Funkon	Rep. of Korea	Rep. of Korea	1929	IV
82.232	Ute	Rep. of Korea	Rep. of Korea	1929	III
82.235	Taichukon	Rep. of Korea	Rep. of Korea	1929	III

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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Seedcoat			Other traits			
				Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
80.466-2	IV	D	W	G	E	N	Tn	I	Y	Bf			
80.470	III	D	P	-	C	N	Tn	D	Gn	Br			
80.471-1	III	D	W	G	E	N	Dbr	S	Y	Y			
80.473	IV	N	W	G	E	Ssp	Br	D	Y	Bf			
80.479	IV	N	W	T	E	Ssp	Br	S	Y	Bl			
80.480	III	S	W	G	E	N	Br	D	Y	Bf			
80.481	III	N	P	G	E	N	Br	D	Y	Y			
80.488	IV	D	W	T	E	N	Br	I	Y	Br			
80.498-1	IV	D	P	T	E	N	Br	D	Y	Tn			
80.822	III	S	W	G	E	N	Br	I	Y	Lbf			
80.825	III	D	P	G	A	Ssp	Br	S	Y	Lbf			
80.828-1	IV	D	P	T	Sa	N	Br	S	Y	Br			
80.828-2	IV	D	W	G	E	N	Br	S	Y	Bf			
80.831	III	N	W	G	E	N	Dbr	S	Y	Y			
80.834-1	IV	N	W	G	E	N	Br	S	Y	Bf			
80.834-2	IV	S	W	G	E	N	Br	S	Y	Lbf			
80.837	IV	D	P	G	E	Dn	Br	S	Y	Y			
80.841	III	D	P	G	E	Ssp	Br	D	Y	Y			
80.844-2	III	N	P	T	E	N	Tn	D	Gn	G		Dab	
80.844-3	III	N	P	G	E	N	Tn	D	Y	Ib			
80.845-1	III	D	P	G	E	N	Br	D	Y	Bf			
80.845-2	III	N	P	G	E	N	Br	S	Y	Bf			
80.847-1	III	N	W	T	E	N	Br	S	Y	Br			
80.847-2	IV	N	P	T	E	N	Br	I	Y	Bl			
81.023	IV	N	W	T	Sa	N	Tn	S	Y	Bl			
81.027	III	D	P	T	E	Ssp	Br	D	Y	Br			
81.029-1	IV	D	W	T	E	N	Br	S	Gn	Bl			
81.030	IV	D	W	G	E	N	Br	D	Y	Bf			
81.030-1	III	D	P	T	E	Ssp	Dbr	S	Bl	Bl			
81.031-1	III	D	P	T	E	Ssp	Br	I	Bl	Bl			
81.031-2	III	N	P	G	E	N	Dbr	D	Y	Ib			
81.034-1	IV	N	P	G	E	N	Tn	D	Y	Y			
81.034-2	IV	N	P	G	E	Sdn	Br	S	Y	Y			
81.037-1	IV	D	P	G	E	N	Br	D	Y	Ib			
81.037-2	III	N	P	G	E	N	Tn	D	Gn	Bf			
81.037-3	III	N	P	T	E	N	Tn	I	Y	Bl	Saddle		
81.037-5	IV	N	P	G	Sa	N	Tn	D	Y	Ib			
81.038	III	D	W	T	E	Ssp	Br	S	Bl	Bl		5ft	
81.041	III	N	P	T	E	N	Br	D	Y	Bl			
81.041-1	III	D	P	T	E	Ssp	Br	S	Rbr	Rbr			
81.042-1	IV	N	P	G	E	N	Br	S	Gn	Ib			
81.042-2	IV	D	P	G	Sa	N	Br	S	Gn	Ib			
81.044-1	III	N	W	G	E	N	Dbr	S	Y	Bf			
81.044-2	III	N	W	G	E	N	Br	D	Gn	Bf			
81.667	III	D	P	T	E	Ssp	Br	S	Br	Br			
81.761	III	N	W	G	E	N	Bl	S	Y	Y			
81.764	IV	N	P	T	E	N	Br	S	Bl	Bl			
81.766	III	N	Dp	T	A	Ssp	Br	B	Bl	Bl		Sw	
81.777	IV	D	P	G	E	N	Tn	D	Y	Bf			
81.780	III	D	P	G	E	Ssp	Br	D	Y	Y			
81.785	III	N	P	T	Sa	Ssp	Br	S	Br	Br		Sw	
82.210	IV	D	Dp	T	E	Ssp	Tn	S	Y	Tn			
82.218	IV	D	Dp	T	E	Ssp	Tn	S	Y	Tn			
82.232	III	D	P	Lt	E	Ssp	Br	D	Y	Br			
82.235	III	D	P	T	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			Yield (Mg/ha)
								Quality (score)	Mottling (score)	Weight (cg/sd)	
80.466-2	723	1017	3.2	76	1.0	2.0	1.0	2.8	2.0	23.6	2.09
80.470	721	1001	3.3	61	1.0	2.5	1.0	2.5	2.0	16.9	1.14
80.471-1	712	919	2.3	74	1.5	2.5	1.0	2.0	1.0	19.2	2.74
80.473	720	1005	3.8	135	5.0	4.0	3.0	2.8	1.5	22.4	2.22
80.479	715	1006	3.0	119	4.0	3.0	2.0	2.5	1.0	15.4	3.21
80.480	713	918	3.3	94	2.0	2.0	1.0	2.5	1.0	17.0	2.35
80.481	712	1002	2.7	109	4.0	3.0	1.0	2.3	2.0	19.4	2.69
80.488	721	1016	3.0	71	1.0	3.0	5.0	2.5	1.5	23.3	1.96
80.498-1	721	1005	2.9	66	1.0	3.0	4.0	2.3	1.5	15.2	2.08
80.822	707	919	3.0	71	2.0	2.0	1.0	2.5	3.0	17.2	2.23
80.825	727	1003	2.7	66	1.0	2.0	1.0	2.5	2.5	17.7	1.81
80.828-1	725	1004	3.9	84	1.0	3.0	1.0	2.3	2.5	13.8	1.86
80.828-2	728	1010	3.8	89	1.0	3.0	1.0	2.3	1.5	14.5	2.15
80.831	716	923	2.5	97	3.5	2.5	1.0	2.3	1.0	18.2	2.42
80.834-1	724	1019	2.3	124	4.0	3.0	1.0	2.0	1.0	17.3	3.23
80.834-2	726	1013	3.4	107	2.0	3.0	1.0	2.0	1.0	18.2	3.23
80.837	726	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	3.0	3.0	1.0	2.5	1.5	23.0	2.21
81.037-1	720	1003	2.6	74	1.0	3.0	2.0	2.5	2.5	21.0	2.53
81.037-2	719	1003	2.8	114	4.0	3.0	1.0	2.3	2.0	22.2	2.45
81.037-3	723	925	3.5	104	3.0	3.0	1.0	2.5	-	17.0	1.78
81.037-5	724	1003	3.5	112	3.0	3.0	1.0	2.5	2.0	15.0	2.25
81.038	715	919	2.5	56	1.0	2.5	1.0	2.5	-	25.0	2.24
81.041	706	922	3.9	109	3.0	3.0	1.0	3.3	1.0	15.2	2.62
81.041-1	714	914	3.2	69	1.0	3.0	1.0	3.5	-	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
81.042-2	717	1003	1.8	71	1.0	3.0	1.0	2.8	1.0	19.4	2.21
81.044-1	710	916	3.6	86	2.5	2.5	1.0	2.5	1.0	16.9	2.43
81.044-2	713	928	3.0	99	3.5	2.5	1.0	3.0	1.0	24.4	2.17
81.667	717	918	2.9	56	1.0	3.0	1.0	3.0	-	23.2	2.09
81.761	716	925	2.5	102	3.5	3.0	1.0	2.0	1.0	18.5	2.54
81.764	814	1011	4.3	130	5.0	4.0	1.0	2.3	-	6.9	2.39
81.766	716	915	4.5	69	5.0	5.0	1.0	2.0	-	5.6	1.41
81.777	730	1008	3.6	99	1.0	3.0	2.0	2.3	1.0	19.8	2.97
81.780	719	930	3.8	74	1.0	3.0	3.0	3.5	2.0	25.7	2.12
81.785	723	918	3.5	89	4.5	4.5	1.0	2.5	-	8.3	1.88
82.210	726	1011	3.6	69	1.0	3.0	1.0	2.3	1.0	20.6	2.57
82.218	724	1010	3.7	69	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	1.80

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

Entry	Maturity group	Seed composition		Protein composition	Oil composition					Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
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	H
80.471-1	III	44.3	20.1	1.3	11.3	4.3	23.8	52.5	8.1	H	S
80.473	IV	43.9	18.9	1.2	12.0	7.0	23.2	47.1	10.7	R	S
80.479	IV	41.0	21.0	1.3	11.3	3.7	18.7	56.2	10.0	S	S
80.480	III	40.6	22.3	1.2	11.6	3.7	20.9	53.5	10.2	S	S
80.481	III	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	III	44.0	19.9	1.2	12.2	3.8	24.5	52.5	7.0	S	S
80.825	III	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	III	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	III	43.1	20.2	1.2	13.2	4.2	23.6	50.5	8.6	R	S
80.844-2	III	43.2	19.2	1.2	12.9	4.3	20.8	52.4	9.6	S	S
80.844-3	III	45.1	19.4	1.1	12.8	4.4	23.8	49.9	9.2	S	S
80.845-1	III	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	H
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	3.6	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
81.031-2	III	42.7	21.2	1.1	11.5	3.7	24.4	49.8	10.6	R	S
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	III	43.3	20.8	1.2	12.2	3.7	22.6	52.1	9.5	S	S
81.037-3	III	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	III	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	III	42.0	20.1	-	13.6	3.3	22.9	51.0	9.2	H	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	III	40.6	22.2	1.4	10.8	4.2	23.1	53.3	8.9	S	S
81.044-2	III	45.8	18.9	1.2	13.3	5.7	25.3	48.3	7.6	S	H
81.667	III	43.8	20.1	-	14.8	4.1	24.4	47.1	9.5	S	H
81.761	III	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	III	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	18.1	55.4	11.3	R	S
82.235	III	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
82.246	Funkonja	Rep. of Korea	Rep. of Korea	1929	IV
82.246-1	(Funkonja)	Rep. of Korea	Rep. of Korea	1929	III
82.259	Chonte	Rep. of Korea	Rep. of Korea	1929	IV
82.263-1	Pepute No. 2	Rep. of Korea	Rep. of Korea	1929	IV
82.264	Kwan jo	Rep. of Korea	Rep. of Korea	1929	IV
82.278		Rep. of Korea	Rep. of Korea	1929	III
82.291	Kon sui yen	Rep. of Korea	Rep. of Korea	1929	IV
82.295	Maru kon chotan	Rep. of Korea	Rep. of Korea	1929	IV
82.296	Kon kongenoto	Rep. of Korea	Rep. of Korea	1929	IV
82.302	Kiru gunte	Rep. of Korea	Rep. of Korea	1929	III
82.307	Hon kon	Rep. of Korea	Rep. of Korea	1929	IV
82.308	Kon chonte	Rep. of Korea	Rep. of Korea	1929	III
82.312N	(Kitu gunte)	Rep. of Korea	Rep. of Korea	1929	IV
82.315		Rep. of Korea	Rep. of Korea	1929	IV
82.325	Hon jon kon	Rep. of Korea	Rep. of Korea	1929	IV
82.326	Chotan	Rep. of Korea	Rep. of Korea	1929	IV
82.509	Hinkon	Rep. of Korea	Rep. of Korea	1929	IV
82.527	Pumunkon	Rep. of Korea	Rep. of Korea	1929	IV
82.534	Chotan	Rep. of Korea	Rep. of Korea	1929	IV
82.544	Chankon	Rep. of Korea	Rep. of Korea	1929	IV
82.554	Haiyonkon	Rep. of Korea	Rep. of Korea	1929	IV
82.555	Chanpakute	Rep. of Korea	Rep. of Korea	1929	IV
82.558	Somokute	Rep. of Korea	Rep. of Korea	1929	IV
82.581	Chontekon	Rep. of Korea	Rep. of Korea	1929	IV
83.853	Ryuzan	Rep. of Korea	Rep. of Korea	1930	IV
83.858	Pakute	Rep. of Korea	Rep. of Korea	1930	IV
83.868	Anpenkon	Rep. of Korea	Rep. of Korea	1930	IV
83.881	Orukon	Rep. of Korea	Rep. of Korea	1930	IV
83.881A	(Orukon)	Rep. of Korea	Rep. of Korea	1930	IV
83.889	Hotadai	Rep. of Korea	Rep. of Korea	1930	IV
83.891	Tansern	Rep. of Korea	Rep. of Korea	1930	IV
83.892	Akagara	Rep. of Korea	Rep. of Korea	1930	IV
83.893	Quanpadai	Rep. of Korea	Rep. of Korea	1930	IV
83.915	Shokeimeidai	Rep. of Korea	Rep. of Korea	1930	IV
83.923	Rikuu No. 10	Rep. of Korea	Japan	1930	IV
83.925	Rikuu No. 22	Rep. of Korea	Japan	1930	IV
83.940	Echo No. 24	Rep. of Korea	Rep. of Korea	1930	III
83.944	Oiarukonkii	Rep. of Korea	Rep. of Korea	1930	IV
83.945-1	Dairyu tsurunoko	Rep. of Korea	Rep. of Korea	1930	III
83.945-4	(Dairyu tsurunoko)	Rep. of Korea	Rep. of Korea	1930	IV
83.946	Kongo shoryu	Rep. of Korea	Rep. of Korea	1930	IV
84.509		Unknown	Unknown	1930	III
84.578		Rep. of Korea	Rep. of Korea	1930	III
84.579		Rep. of Korea	Rep. of Korea	1930	III
84.581		Rep. of Korea	Rep. of Korea	1930	III
84.594		Rep. of Korea	Rep. of Korea	1930	IV
84.610		Rep. of Korea	Rep. of Korea	1930	III
84.611		Rep. of Korea	Rep. of Korea	1930	III
84.619		Rep. of Korea	Rep. of Korea	1930	III
84.628		Rep. of Korea	Rep. of Korea	1930	IV
84.631		Rep. of Korea	Rep. of Korea	1930	III
84.632		Rep. of Korea	Rep. of Korea	1930	IV
84.633		Rep. of Korea	Rep. of Korea	1930	IV
84.639		Rep. of Korea	Rep. of Korea	1930	IV
84.644		Rep. of Korea	Rep. of Korea	1930	III

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

Entry	Matur- ity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
82.246	IV	N	P	T	E	Ssp	Br	S	Y	Tn			
82.246-1	III	N	W	T	E	Ssp	Br	D	Y	Bl			
82.259	IV	D	W	G	E	Ssp	Dbr	S	Gn	Bf			
82.263-1	IV	D	W	T	E	Ssp	Br	D	Y	Bl			
82.264	IV	D	P	G	E	N	Tn	I	Y	Y			
82.278	III	N	P	T	E	Ssp	Bl	B	Bl	Bl			
82.291	IV	D	P	G	E	Ssp	Br	I	Y	Y			
82.295	IV	D	P	G	E	Ssp	Br	D	Y	Y			
82.296	IV	D	P	G	E	N	Br	I	Lgn	Lgn			
82.302	III	D	W	G	E	N	Br	D	Y	Y			
82.307	IV	D	P	G	E	N	Br	S	Y	Y			
82.308	III	D	W	G	E	Ssp	Dbr	S	Gn	Gn	St	Na	
82.312N	IV	D	P	G	E	N	Br	I	Y	Bf			
82.315	IV	D	Dp	T	E	Ssp	Tn	S	Y	Tn			
82.325	IV	D	P	G	E	N	Br	D	Y	Bf			
82.326	IV	N	P	G	E	N	Br	S	Gn	Bf		Wa	
82.509	IV	D	P	G	E	Ssp	Br	S	Y	Y			
82.527	IV	D	P	G	E	N	Br	D	Y	Y			
82.534	IV	D	P	G	E	Ssp	Br	S	Y	Y			
82.544	IV	D	P	G	E	Dn	Tn	S	Y	Bf			
82.554	IV	D	P	G	E	Ssp	Br	S	Y	Bf			
82.555	IV	D	Dp	G	E	Ssp	Br	S	Y	Y			
82.558	IV	D	W	G	E	N	Br	D	Y	Bf			
82.581	IV	D	Ng	G	E	Ssp	Br	D	Gn	Bl	Gncot		
83.853	IV	D	P	G	E	N	Br	D	Y	Y			
83.858	IV	D	P	T	E	Ssp	Br	S	Y	Br			
83.868	IV	D	W	T	E	Ssp	Br	S	G	Bl			
83.881	IV	N	P	T	E	N	Br	S	Bl	Bl			
83.881A	IV	D	P	G	E	N	Tn	I	Y	Lbf			
83.889	IV	D	P	G	E	Ssp	Br	S	Y	Y			
83.891	IV	D	P	G	E	Ssp	Br	D	Y	Y			
83.892	IV	D	P	G	E	N	Br	S	Y	Y			
83.893	IV	D	W	T	E	Ssp	Br	D	Y	Br			
83.915	IV	N	W	T	E	N	Br	D	Y	Bl			
83.923	IV	D	W	G	E	Ssp	Br	D	Y	Y			
83.925	IV	N	P	G	E	N	Br	S	Y	Lbf			
83.940	III	N	P	G	E	N	Tn	D	Y	Y			
83.944	IV	D	P	G	E	N	Br	I	Y	Y	Def		
83.945-1	III	D	W	G	E	N	Br	I	Y	Y			
83.945-4	IV	D	W	T	E	N	Br	D	Y	Bl			Fasc
83.946	IV	D	P	G	E	Ssp	Br	S	Y	Y			
84.509	III	N	P	T	E	Ssp	Br	I	Y	Br			
84.578	III	N	W	T	E	Ssp	Tn	D	Bl	Bl	Gncot		
84.579	III	N	W	T	E	Ssp	Tn	D	Bl	Bl	Gncot		
84.581	III	N	P	T	E	N	Bl	S	Gn	Blbr	Gncot		
84.594	IV	N	P	G	E	Ssp	Bl	S	Gn	Gn			
84.610	III	N	P	Lt	E	N	Br	S	Bl	Bl			
84.611	III	N	P	Lt	E	N	Br	S	Bl	Bl			
84.619	III	N	P	T	E	N	Br	S	Gn	Bl			Cd
84.628	IV	D	W	G	E	N	Tn	D	Y	Bf			
84.631	III	D	W	G	E	Ssp	Dbr	S	Gn	Gn	St	Na	
84.632	IV	D	W	G	E	N	Br	S	Gn	Bf			
84.633	IV	N	W	T	E	Ssp	Br	D	Y	Bl			
84.639	IV	D	W	G	E	N	Br	S	Y	Bf			
84.644	III	N	P	G	E	N	Br	S	Y	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	1012	4.2	84	1.0	3.0	1.0	2.8	1.0	23.0	2.74
82.555	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	728	1017	4.3	71	1.0	3.0	1.0	3.3	1.0	26.5	2.17
83.853	721	1002	3.0	71	1.0	3.0	1.0	2.5	2.0	16.6	2.31
83.858	723	930	3.1	79	1.0	3.0	2.0	2.5	1.0	18.3	2.65
83.868	726	1013	3.2	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
83.915	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
84.644	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
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	H
82.259	IV	43.2	19.9	1.3	11.2	3.6	23.6	52.4	9.2	S	H
82.263-1	IV	41.9	20.0	-	12.1	3.8	21.9	52.6	9.6	S	H
82.264	IV	44.1	15.4	1.3	13.5	2.6	18.3	54.8	10.8	H	--
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	III	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	III	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	H	S
82.558	IV	42.9	19.1	1.3	11.4	3.6	22.8	53.0	9.2	H	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	--
83.889	IV	43.0	19.5	1.2	11.9	3.8	25.8	51.2	7.3	S	--
83.891	IV	43.8	19.1	1.4	11.6	3.9	23.3	52.9	8.2	S	--
83.892	IV	40.2	18.7	1.4	13.2	3.5	17.8	55.3	10.2	R	S
83.893	IV	41.3	19.4	1.3	13.0	3.9	20.5	53.6	9.1	S	S
83.915	IV	42.4	19.3	1.3	12.8	4.2	23.7	51.0	8.3	S	H
83.923	IV	43.5	19.5	1.3	12.3	4.0	21.8	54.2	7.8	S	--
83.925	IV	41.1	20.8	1.3	11.7	3.9	24.5	51.7	8.2	S	--
83.940	III	42.3	20.7	1.3	12.2	4.5	21.1	53.4	8.8	S	H
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	H
84.578	III	42.0	21.0	-	12.0	3.7	26.7	50.7	7.0	S	H
84.579	III	42.1	21.1	-	13.8	4.1	26.3	48.5	7.2	S	H
84.581	III	45.2	19.6	-	12.8	4.2	26.5	47.3	9.2	S	H
84.594	IV	39.7	19.9	1.2	14.3	4.3	20.8	50.2	10.4	--	--
84.610	III	41.8	19.1	-	14.5	4.4	19.5	52.1	9.5	R	S
84.611	III	43.2	17.2	-	13.7	3.4	19.3	53.6	10.0	S	H
84.619	III	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	III	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	H
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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
84.646		Rep. of Korea	Rep. of Korea	1930	III
84.646-2		Rep. of Korea	Rep. of Korea	1930	IV
84.656		Rep. of Korea	Rep. of Korea	1930	III
84.657		Rep. of Korea	Rep. of Korea	1930	III
84.660		Rep. of Korea	Rep. of Korea	1930	IV
84.662		Rep. of Korea	Rep. of Korea	1930	III
84.664		Rep. of Korea	Rep. of Korea	1930	IV
84.666		Rep. of Korea	Rep. of Korea	1930	III
84.669N		Rep. of Korea	Rep. of Korea	1930	IV
84.671		Rep. of Korea	Rep. of Korea	1930	IV
84.679		Rep. of Korea	Rep. of Korea	1930	IV
84.680		Rep. of Korea	Rep. of Korea	1930	III
84.682		Rep. of Korea	Rep. of Korea	1930	III
84.713		Rep. of Korea	Rep. of Korea	1930	IV
84.724		Rep. of Korea	Rep. of Korea	1930	IV
84.742		Rep. of Korea	Rep. of Korea	1930	IV
84.751		Rep. of Korea	Rep. of Korea	1930	IV
84.757		Rep. of Korea	Rep. of Korea	1930	III
84.807		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
84.944	Hinkon	Rep. of Korea	Rep. of Korea	1930	IV
84.946-1	Kandokon	Rep. of Korea	Rep. of Korea	1930	IV
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
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		Japan	Japan	1930	III
84.979	Shakkin nashi	Japan	Japan	1930	III
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	III
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	III
85.441		Rep. of Korea	Rep. of Korea	1930	IV
85.456		Rep. of Korea	Rep. of Korea	1930	III
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

Entry	Matur- ity group	Stem trm.	Flower color	Pubescence			Seedcoat			Other traits			
				Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
84.646	III	D	P	G	Sa	Ssp	Br	D	Y	Y			
84.646-2	IV	N	P	-	C	N	Dbr	S	Y	Bf			
84.656	III	N	P	G	E	N	Br	S	Y	lb			
84.657	III	D	Dp	G	E	N	Br	D	Y	lb			
84.660	IV	D	P	G	E	Ssp	Tn	D	Y	Y			
84.662	III	N	P	G	E	N	Br	D	Y	Y			
84.664	IV	D	W	G	E	Ssp	Br	S	Y	Bf			
84.666	III	N	P	G	E	N	Br	D	Y	Y			
84.669N	IV	N	W	G	E	N	Br	S	Y	Bf			
84.671	IV	D	W	T	E	Ssp	Br	S	Y	Bl			
84.679	IV	N	P	G	E	N	Tn	D	Y	Bf			
84.680	III	D	W	G	E	N	Br	D	Y	Bf			
84.682	III	N	P	T	E	N	Br	S	Y	Bl			
84.713	IV	D	P	G	E	N	Bl	D	Gn	Gn			
84.724	IV	D	P	G	E	N	Br	D	Gn	Bf			
84.742	IV	D	P	G	E	Ssp	Br	D	Gn	Bf			
84.751	IV	D	W	T	E	N	Br	S	Bl	Bl			
84.757	III	N	P	G	E	Ssp	Br	S	Y	Y			
84.807	IV	N	P	T	E	N	Br	D	Ggn	G			
84.908-1	IV	D	W	T	E	N	Br	S	Y	Br			
84.908-2	III	D	W	G	E	N	Br	D	Y	Bf			
84.912	IV	D	P	G	E	N	Tn	I	Y	Bf			
84.914	III	N	W	G	E	N	Br	I	Y	Y			
84.939	IV	D	P	G	E	N	Br	S	Y	Y			
84.944	IV	N	P	G	E	N	Br	I	Y	Y			
84.946-1	IV	N	W	T	E	Ssp	Br	I	Y	Bl			
84.946-2	IV	D	P	T	E	Ssp	Br	S	Y	Br			
84.957	III	N	P	G	E	Ssp	Br	S	Y	Y			
84.957-1	III	N	P	T	E	N	Br	D	Y	Y			
84.959	IV	D	W	G	E	Ssp	Br	D	Y	Y			
84.960	IV	D	P	G	E	Ssp	Br	D	Y	Y			
84.970	III	D	P	T	E	Ssp	Tn	S	Bl	Bl			
84.973	III	N	W	-	C	N	Tn	S	Y	Bf			
84.976	III	D	P	G	E	N	Tn	S	Y	Bf			
84.976-1	III	N	P	G	E	N	Tn	D	Y	Y			
84.979	III	D	W	G	A	Ssp	Tn	D	Y	Y			
84.985	IV	D	W	G	E	N	Tn	S	Y	Bf			
84.987	III	D	P	-	C	N	Tn	D	Y	Bf			
84.987A	III	N	P	G	E	N	Tn	D	Y	Bf			
85.009-1	III	N	W	T	Sa	N	Br	D	Gn	Br			
85.009-2	III	D	W	G	Sa	N	Tn	D	Y	Y			
85.019	III	N	P	G	E	N	Br	S	Y	G			
85.272	III	D	Dp	T	E	Ssp	Br	D	Bl	Bl			
85.355	IV	D	P	G	E	Ssp	Br	S	Y	lb			
85.356	III	N	W	T	E	N	Br	I	Y	Br			
85.407	IV	D	W	T	E	Ssp	Br	D	Y	Br			
85.420	IV	N	W	G	E	Ssp	Br	D	Y	Bf			
85.420-1	IV	D	P	G	E	N	Br	D	Y	Y			
85.424	IV	D	P	T	E	Ssp	Br	S	Y	Tn			
85.437	III	S	P	G	Sa	Ssp	Br	S	Y	Bf			
85.441	IV	D	P	G	E	Ssp	Br	S	Y	Y	Def		
85.456	III	N	W	T	E	N	Br	S	Y	Br			
85.469	IV	D	P	G	E	N	Tn	D	Y	Bf			
85.505	IV	D	P	G	E	Ssp	Bl	D	Y	Y			
85.506	IV	D	P	G	E	Ssp	Br	S	Y	Y			

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
85.506	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Palmitic (%)	Steric (%)	Oleic (%)	Linoleic (%)	Linolenic (%)	PR	Py
84.646	III	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	10.6	4.2	22.3	54.5	8.4	S	S
84.657	III	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	10.4	4.2	24.8	52.9	7.7	S	S
84.662	III	42.8	20.3	1.4	10.9	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	21.4	54.6	10.1	S	S
84.671	IV	41.5	18.5	-	12.7	3.6	18.6	53.5	11.7	S	--
84.679	IV	43.3	18.5	1.2	13.8	4.0	24.8	48.4	9.1	S	S
84.680	III	41.6	21.6	1.3	14.0	4.9	21.4	51.2	8.6	S	S
84.682	III	45.0	19.0	1.3	12.2	4.5	22.7	53.2	7.5	S	S
84.713	IV	43.9	17.9	1.2	12.7	4.6	22.0	51.7	8.9	S	S
84.724	IV	42.5	18.7	1.2	12.7	3.4	22.2	52.4	9.3	S	--
84.742	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	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	III	41.6	20.4	1.3	11.7	4.0	21.7	53.0	9.6	S	H
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	III	43.8	19.9	1.2	11.8	4.6	24.2	51.3	8.1	H	S
84.957-1	III	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	III	43.1	18.6	-	11.8	4.3	23.4	51.8	8.7	S	S
84.973	III	43.3	19.2	1.1	12.8	4.0	24.3	50.3	8.5	S	S
84.976	III	43.7	17.9	1.2	13.2	4.2	22.8	49.9	9.9	S	S
84.976-1	III	46.1	18.4	-	13.0	4.9	23.5	49.2	9.5	S	S
84.979	III	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	III	41.4	19.1	1.2	12.5	3.8	23.0	51.3	9.4	S	S
84.987A	III	43.1	18.7	1.2	12.4	3.8	24.6	50.2	8.9	S	S
85.009-1	III	43.5	17.9	-	13.3	3.5	21.9	52.1	9.1	S	S
85.009-2	III	42.4	18.8	1.2	13.7	4.3	22.0	50.0	10.0	S	S
85.019	III	45.6	17.5	1.2	11.0	3.6	24.4	52.4	8.5	S	S
85.272	III	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	III	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	IV	42.1	19.6	1.3	14.2	2.9	21.7	52.8	8.3	S	--
85.424	IV	45.1	17.8	1.2	12.2	3.2	21.8	53.2	9.6	S	S
85.437	III	44.2	19.5	1.2	10.9	3.7	29.1	47.2	9.1	R	S
85.441	IV	43.0	19.8	1.3	13.0	3.5	23.5	51.7	8.3	S	S
85.456	III	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	44.3	17.5	1.2	13.9	3.2	17.5	54.0	11.4	R	S
85.506	IV	41.8	19.6	1.3	13.5	2.2	20.7	53.0	10.6	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity 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	IV
85.624		Rep. of Korea	Rep. of Korea	1930	IV
85.626		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	III
85.666	Hokkaido Tsurunoko	Japan	Japan	1930	III
85.668		Japan	China	1930	III
85.878	Karihatakiya No. 28	Japan	Japan	1930	III
85.903		Japan	Japan	1930	IV
86.004	Isabera	Japan	Japan	1930	III
86.006	Kiio shokuzu	Japan	Japan	1930	III
86.007	Chadaizu	Japan	Japan	1930	IV
86.024	Daidzuhinshu satei	Japan	Japan	1930	III
86.026	Tokachi	Japan	Japan	1930	III
86.026-1	(Tokachi)	Japan	Japan	1930	III
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	II
86.053		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	III
86.071	Akazaya konnin	Japan	Japan	1930	III
86.073	Hadakadaizu	Japan	Japan	1930	III
86.075	Misukugurigunma to kudai	Japan	Japan	1930	III
86.078-1	(Shoryu A)	Japan	Japan	1930	IV
86.081	Hakakadaizu	Japan	Japan	1930	III
86.091-1		Japan	Japan	1930	IV
86.098	Mizukuguri	Japan	Japan	1930	III
86.103		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	III
86.123	Selected Oyachi	Japan	Japan	1930	III
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	III
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	III

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

Entry	Matur- ity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
85.519	IV	N	P	G	E	Ssp	Br	S	Y	Y			
85.550	IV	D	P	G	E	Ssp	Br	S	Y	Y			
85.559	III	D	P	G	E	N	Br	D	Y	Y			
85.590	IV	D	P	G	E	Ssp	Br	D	Y	Y			
85.619	IV	D	P	T	E	Ssp	Br	I	Y	Br			
85.624	IV	D	W	G	E	Ssp	Br	D	Y	Y			
85.626	IV	D	W	G	E	Ssp	Br	D	Y	Y			
85.630	III	D	P	G	E	N	Br	D	Y	Y			
85.658	IV	D	P	G	E	Ssp	Br	I	Y	Y			
85.663	IV	D	P	T	E	N	Br	D	Bl	Bl			
85.665	III	N	P	T	E	N	Br	S	Y	Bl			
85.666	III	N	W	G	Sa	N	Dbr	S	Y	Bf			
85.668	III	N	P	G	E	N	Tn	D	Y	Y			
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	III	N	P	T	A	N	Bl	I	Rbr	Rbr			
86.007	IV	D	P	T	E	N	Br	S	Y	Br			
86.024	III	D	W	T	E	Ssp	Br	D	Ggn	Bl	St	5lft	Na
86.026	III	D	W	G	E	Ssp	Dbr	S	Gn	Gn			
86.026-1	III	D	W	T	E	Ssp	Br	S	Y	G			
86.027	III	N	P	Lt	E	N	Tn	D	Gn	Gn			
86.028	III	D	P	T	E	N	Br	D	Y	Bl			
86.029	III	D	W	G	E	Ssp	Br	S	Gn	Gn	St	Na	
86.032	III	D	P	T	E	Ssp	Tn	D	Y	Bl			
86.046	II	N	P	T	A	Ssp	Br	B	Bl	Bl			Sw
86.053	III	D	P	T	E	N	Br	S	Y	Br			
86.060	IV	D	P	G	E	Ssp	Br	D	Y	lb			
86.062	IV	D	P	G	E	N	Br	S	Y	Y			
86.063	III	D	P	T	E	N	Br	D	Y	Br			
86.071	III	D	P	G	E	Ssp	Bl	I	Y	Bf			
86.073	III	N	W	T	E	N	Br	S	Y	Bl			
86.075	III	D	P	-	C	N	Tn	I	Y	Bf			
86.078-1	IV	D	P	G	E	N	Br	I	Y	Y			
86.081	III	D	P	-	C	N	Tn	D	Y	Bf			
86.091-1	IV	N	P	G	E	Ssp	Br	D	Y	Y			
86.098	III	D	W	T	E	N	Br	S	Y	Br		Cup	
86.103	IV	N	P	T	E	Ssp	Br	S	Bl	Bl			
86.109B	IV	D	P	G	E	Ssp	Br	D	Y	Bf			
86.111	III	D	P	T	E	N	Br	S	Y	Br			
86.112-1	IV	N	W	T	E	N	Br	S	Y	Tn			
86.114	III	N	W	T	E	N	Br	D	Y	Bl			
86.116	III	D	P	T	E	N	Br	D	Y	Bl			
86.123	III	D	W	T	E	N	Br	S	Y	Tn			
86.128	IV	D	P	T	E	N	Br	D	Y	Br			
86.134-1	IV	D	P	G	E	N	Br	D	Y	Y			
86.134-2	IV	D	P	T	E	Ssp	Tn	I	Y	Br			
86.134-3	III	D	W	T	E	N	Br	D	Y	Tn			
86.134-4	IV	N	W	T	E	N	Br	D	Y	Br			
86.136	IV	D	W	T	E	N	Br	S	Bl	Bl			
86.137	IV	D	P	T	E	Ssp	Br	D	Br	Br			
86.138	IV	D	P	T	E	N	Br	S	Y	Br			
86.138R	IV	D	W	G	E	N	Tn	D	Y	Bf			
86.142	III	D	P	G	E	Ssp	Br	I	Bf	Bf			
86.144	III	D	Dp	G	E	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

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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
85.519	IV	43.0	19.4	1.3	12.6	3.6	26.6	49.7	7.5	R	S
85.550	IV	42.5	19.7	1.3	12.1	3.3	19.9	54.1	10.6	S	S
85.559	III	43.0	20.4	1.2	13.0	3.5	22.8	51.1	9.6	H	S
85.590	IV	42.5	19.7	1.2	14.5	3.5	21.2	50.5	10.4	S	S
85.619	IV	40.0	18.6	1.4	13.5	3.2	19.3	53.6	10.5	H	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	H	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
85.665	III	42.6	20.2	1.2	10.8	3.6	23.8	53.4	8.3	S	S
85.666	III	42.7	20.3	1.3	12.2	4.3	22.3	52.2	8.9	S	S
85.668	III	43.4	20.0	1.2	12.8	4.0	22.9	51.4	8.9	S	S
85.878	III	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	III	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	III	46.2	18.2	-	14.5	4.3	26.2	48.3	6.7	S	S
86.026	III	43.4	19.5	-	14.0	4.4	21.2	52.0	8.4	S	S
86.026-1	III	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	III	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	H	S
86.062	IV	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
86.091-1	IV	43.2	19.1	1.2	12.0	3.6	24.7	51.6	8.1	S	S
86.098	III	45.3	16.9	-	14.2	3.6	23.0	50.4	8.8	S	R
86.103	IV	41.0	17.3	-	13.0	3.1	17.2	56.2	10.5	R	S
86.109B	IV	45.0	19.2	1.3	13.2	3.5	21.5	52.6	9.3	S	--
86.111	III	41.0	19.7	-	12.9	3.6	24.3	51.3	7.9	R	S
86.112-1	IV	40.8	20.1	1.4	10.6	3.7	20.2	56.7	9.3	S	S
86.114	III	41.7	20.7	-	11.0	4.7	28.2	48.1	8.1	R	S
86.116	III	41.8	20.4	1.2	12.0	3.5	27.0	49.9	7.6	R	S
86.123	III	43.9	19.6	-	14.2	3.7	21.6	52.9	7.7	S	S
86.128	IV	41.2	20.0	-	12.3	3.2	18.6	55.2	10.6	H	S
86.134-1	IV	42.5	18.5	1.3	12.8	3.6	25.0	49.9	8.6	S	S
86.134-2	IV	43.7	18.3	1.2	12.3	3.4	20.2	53.6	10.5	S	S
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	III	42.0	18.3	-	12.0	4.5	26.4	48.2	8.9	S	--
86.144	III	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
86.145	Monbersu nagaba daizu	Japan	Japan	1930	III
86.146	Kawanagare	Japan	Japan	1930	III
86.150	Iwafune takiya	Japan	Japan	1930	IV
86.153	Hongoku	Japan	Japan	1930	III
86.154	Akazaya konnin	Japan	Japan	1930	III
86.301		Japan	Japan	1930	III
86.425	Mizukuguri	Japan	Japan	1930	III
86.445	Koshurei hakubi	Japan	Japan	1930	III
86.449	Shiheigo kuroheso	Japan	Japan	1930	III
86.449-0	(Shiheigo kuroheso)	Japan	Japan	1930	III
86.449-2	(Shiheigo kuroheso)	Japan	Japan	1930	III
86.452	Koshurei No. 35	Japan	Japan	1930	III
86.456	Kakukwazoshi	Japan	Japan	1930	III
86.457	Kazusa	Japan	Japan	1930	III
86.457-1	(Kazusa)	Japan	Japan	1930	IV
86.469	Ginnan ginko	Japan	Japan	1930	III
86.482	Toyonaga	Japan	Japan	1930	III
86.482-1	(Toyonaga)	Japan	Japan	1930	III
86.490-2	(Shirohadaka)	Japan	Japan	1930	III
86.490-3	(Shirohadaka)	Japan	Japan	1930	IV
86.490-4	(Shirohadaka)	Japan	Japan	1930	IV
86.491	Chotan	Japan	Japan	1930	IV
86.502	Kaigenshirohana	Japan	Japan	1930	III
86.504	Chinko	Japan	Japan	1930	IV
86.510	Shirosaya	Japan	Japan	1930	III
86.740	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	IV
87.005	Hinkon	Rep. of Korea	Rep. of Korea	1930	IV
87.011	Orukongu	Rep. of Korea	Rep. of Korea	1930	IV
87.013	Hingukongu	Rep. of Korea	Rep. of Korea	1930	IV
87.026	Hinkongu	Rep. of Korea	Rep. of Korea	1930	III
87.029	Hinchongutari	Rep. of Korea	Rep. of Korea	1930	IV
87.047	Anjanbangu	Rep. of Korea	Rep. of Korea	1930	IV
87.059	Moyashimame	Rep. of Korea	Rep. of Korea	1930	IV
87.074	Rokukon	Rep. of Korea	Rep. of Korea	1930	IV
87.165		Unknown	Unknown	1930	III
87.167		Unknown	Unknown	1930	III
87.457		Unknown	Unknown	1930	IV
87.465-1		Unknown	Unknown	1930	III
87.465-2		Unknown	Unknown	1930	III
87.525	Daizuohigu	Japan	Japan	1930	IV
87.530	Seishin	Japan	Rep. of Korea	1930	IV
87.540	Horabikon	Rep. of Korea	Rep. of Korea	1930	III
87.561	Sekishoku zunonikon	Rep. of Korea	Rep. of Korea	1930	IV
87.571	Kokukaku	Rep. of Korea	Rep. of Korea	1930	IV
87.574	Shoryushota	Rep. of Korea	Rep. of Korea	1930	III
87.575	Kuromepakuta	Rep. of Korea	Rep. of Korea	1930	IV
87.588	Keimeita	Rep. of Korea	Rep. of Korea	1930	IV
87.600-1	Komujonkon	Rep. of Korea	Rep. of Korea	1930	III

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
86.145	III	D	W	G	E	Ssp	Dbr	S	Br	Br	St	Na	
86.146	III	D	P	G	E	Ssp	Br	D	Y	Lbf			
86.150	IV	D	P	G	Sa	N	Tn	I	Y	Bf			
86.153	III	D	P	T	E	N	Br	S	Y	Blbr	Abh		
86.154	III	D	P	G	E	Ssp	Br	S	Y	Bf			
86.301	III	N	P	G	E	N	Br	S	Y	lb			
86.425	III	D	P	G	E	N	Tn	S	Y	Bf			
86.445	III	N	P	G	E	N	Br	S	Y	Y			
86.449	III	N	P	G	E	N	Dbr	S	Y	lb			
86.449-0	III	N	W	T	E	N	Br	S	Y	Bl			
86.449-2	III	N	W	G	E	N	Bl	S	Y	Y			
86.452	III	D	P	-	-	G	Br	D	Y	Bf			
86.456	III	N	W	G	E	N	Dbr	S	Y	Lbf			
86.457	III	D	P	-	C	N	Tn	D	Y	Bf			
86.457-1	IV	D	P	G	E	N	Br	D	Y	Bf			
86.469	III	D	P	G	E	N	Tn	S	Y	Bf			
86.482	III	D	W	T	E	N	Br	S	Y	Br		Cup	
86.482-1	III	N	P	G	E	N	Br	S	Y	Bf			
86.490-2	III	D	W	G	Sa	N	Br	S	Y	Bf			
86.490-3	IV	D	W	G	E	Ssp	Br	S	Y	Bf			
86.490-4	IV	N	P	T	E	N	Br	D	Y	Bl			
86.491	IV	D	W	G	E	N	Br	I	Y	Lbf		Cup	
86.502	III	N	W	G	E	N	Bl	S	Y	Lbf			
86.504	IV	D	W	T	E	N	Br	S	Y	Br			
86.510	III	D	P	G	A	Ssp	Tn	D	Y	Y			
86.740	IV	D	W	G	E	Ssp	Tn	D	Y	Bf			
86.876	IV	D	W	T	E	N	Tn	D	Y	Br			
86.903-3	IV	N	W	G	E	N	Tn	I	Y	Bf			
86.903-4	III	D	P	G	E	Ssp	Br	S	Y	Bf			
86.904-1	IV	N	P	T	E	N	Br	S	Y	Tn			
86.908	IV	D	P	G	E	Dn	Tn	D	Y	Bf			
86.972-2	IV	N	P	G	E	N	Lbr	I	Y	Y			
86.978	IV	D	P	G	E	Ssp	Br	S	Y	G			
87.005	IV	D	W	G	E	Ssp	Br	D	Y	Y			
87.011	IV	D	P	G	E	N	Tn	I	Y	Bf			
87.013	IV	D	P	G	E	Ssp	Br	I	Y	lb		Dab	
87.026	III	D	P	G	E	N	Tn	S	Y	Bf			
87.029	IV	D	P	G	E	Ssp	Br	S	Y	Y			
87.047	IV	D	P	G	A	Ssp	Tn	S	Y	Bf			
87.059	IV	N	W	Lt	E	N	Tn	S	Bl	Bl			
87.074	IV	D	P	G	Sa	Ssp	Br	S	Gn	Lbf			
87.165	III	D	W	G	E	Sp	Br	D	Y	Y			
87.167	III	N	P	G	E	N	Br	S	Y	Bf			
87.457	IV	D	W	T	E	Ssp	Br	D	Lgn	Bl			Fechlor
87.465-1	III	N	W	T	E	N	Tn	I	Y	Bl			
87.465-2	III	D	W	G	E	N	Tn	S	Y	Bf			
87.525	IV	N	W	T	E	N	Br	S	Gn	Bl			
87.530	IV	N	W	G	E	N	Br	S	Y	Lbf			
87.540	III	D	P	T	E	Ssp	Br	S	Bl	Bl			
87.561	IV	D	P	G	E	N	Tn	I	Y	Bf			
87.571	IV	D	W	G	E	Ssp	Br	I	Y	Y			
87.574	III	N	P	G	E	N	Tn	D	Y	Y			
87.575	IV	D	P	T	E	Ssp	Br	S	Y	Bl			
87.588	IV	D	W	G	E	N	Tn	S	Y	Bf			
87.600-1	III	N	W	G	Sa	N	Br	S	Y	Y			

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	2.9	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	2.5	43	1.0	3.0	2.5	2.3	2.0	15.1	0.89
86.456	716	924	2.9	97	3.5	2.5	1.0	2.5	1.0	19.1	2.57
86.457	722	928	3.0	66	1.0	3.0	1.0	2.5	2.5	13.5	1.25
86.457-1	727	1010	3.5	71	1.0	3.0	1.0	2.3	2.0	16.5	1.98
86.469	724	927	3.4	71	1.0	3.0	1.0	2.5	1.5	11.8	2.45
86.482	722	925	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	89	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

Entry	Maturity group	Seed composition		Protein composition	Oil composition					Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
86.145	III	41.7	19.1	-	12.8	3.8	16.7	55.5	11.3	S	S
86.146	III	42.5	19.2	1.2	12.5	3.7	21.3	53.6	8.9	H	S
86.150	IV	43.4	18.5	1.3	10.3	3.2	18.7	58.5	9.3	R	S
86.153	III	41.2	21.7	1.2	14.4	4.0	20.4	52.0	9.3	S	S
86.154	III	43.1	19.2	1.2	13.8	4.4	21.1	50.5	10.2	H	S
86.301	III	41.6	21.0	1.3	12.2	3.7	23.7	51.6	8.8	S	S
86.425	III	44.2	16.7	1.2	12.3	4.1	22.2	50.3	11.1	R	S
86.445	III	46.5	19.6	1.1	12.9	4.1	23.4	51.9	7.8	S	S
86.449	III	43.2	21.3	1.1	12.4	4.0	20.7	53.0	9.9	S	S
86.449-0	III	43.3	21.0	1.2	11.1	3.6	22.4	55.0	7.9	S	H
86.449-2	III	41.5	21.9	1.3	11.3	4.1	23.6	52.5	8.5	S	R
86.452	III	43.8	16.9	1.2	11.4	4.0	25.6	49.6	9.4	R	S
86.456	III	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	III	41.8	18.8	1.2	13.5	3.5	22.0	52.6	8.3	S	S
86.482	III	45.0	16.4	-	15.8	4.2	24.6	47.4	7.9	S	S
86.482-1	III	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	III	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	III	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	III	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	III	44.0	18.5	1.2	11.9	4.1	23.2	52.1	8.7	S	S
87.029	IV	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	IV	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	IV	40.6	19.1	1.3	11.4	3.9	20.3	53.6	10.8	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	III	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
87.530	IV	43.2	20.0	1.1	11.3	4.3	21.9	53.8	8.7	S	S
87.540	III	41.6	19.0	-	11.9	3.7	23.7	53.4	7.4	S	S
87.561	IV	41.3	18.3	1.2	12.5	3.1	18.9	55.7	9.7	R	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	III	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity 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	Shiobana	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	III
87.619	Shiromeshoryu	Rep. of Korea	Rep. of Korea	1930	III
87.620	Kuromeshoryu	Rep. of Korea	Rep. of Korea	1930	III
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	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		China	China	1930	III
88.287	Mosheto	China	China	1930	III
88.289		China	China	1930	III
88.290	Changechung No. 591	China	China	1930	III
88.291		China	China	1930	III
88.292		China	China	1930	III
88.297		China	China	1930	III
88.300		China	China	1930	IV
88.302-1		China	China	1930	IV
88.302-2		China	China	1930	IV
88.303-1		China	China	1930	III
88.305		China	China	1930	III
88.306		China	China	1930	III
88.306-1		China	China	1930	III
88.310		China	China	1930	III
88.312		China	China	1930	III
88.349	Fukukingen	China	China	1930	III
88.350	Kaiyuan	China	China	1930	III
88.353		China	China	1930	III
88.354		China	China	1930	III
88.359		China	China	1930	III
88.444	Chinghuangtou	China	China	1930	IV
88.445		China	China	1930	III
88.447		China	China	1930	III
88.447-3		China	China	1930	III
88.448		China	China	1930	III
88.452	Hsiaohuangtou	China	China	1930	IV
88.458	Kokuzu	China	China	1930	IV
88.459	Shokoza	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	Nagaobaa	China	China	1930	III
88.499	Kiizu	China	China	1930	IV
88.502	Ryoryuao	China	China	1930	III

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
87.600-2	IV	N	P	G	E	Sp	Br	S	Y	Lbf			
87.606	IV	N	P	G	E	N	Br	I	Y	Bf			
87.614	III	N	P	G	E	N	Br	D	Y	Y			
87.615	III	D	W	T	E	N	Br	S	Y	Bl			
87.617	III	N	P	T	E	Ssp	Br	I	Y	Tn			
87.618	III	N	P	G	E	N	Bl	D	Y	Bf			
87.619	III	N	P	G	E	N	Br	S	Y	Y			
87.620	III	N	W	T	E	N	Br	D	Y	Bl			
87.620-1	IV	D	W	G	E	Ssp	Br	D	Y	Bf			
87.622	IV	D	P	G	E	N	Tn	D	Y	Bf			
87.623	IV	D	P	G	E	N	Br	D	Y	Bf			
87.629	IV	N	P	T	E	N	Br	S	Br	Br			
87.630	III	D	P	T	Sa	N	Br	S	Y	Br			
87.631-1	III	N	P	T	E	N	Dbr	S	Lgn	Bl			
87.631-3	IV	N	W	T	E	N	Br	S	Y	Bl			
87.632	IV	N	P	T	E	N	Br	D	Y	Br			
87.634	III	N	P	T	E	N	Br	S	Y	Br			
88.282	III	N	W	Lt	E	N	Tn	S	Y	Br			
88.287	III	N	P	Lt	E	N	Bl	S	Br	Br			
88.289	III	N	W	G	E	N	Br	S	Y	Y		Dab	
88.290	III	N	W	G	E	N	Br	S	Y	Y		Dab	
88.291	III	N	P	T	E	N	Br	D	Y	Tn			
88.292	III	N	W	T	Sa	N	Br	S	Bl	Bl			
88.297	III	N	W	G	E	N	Br	S	Y	Bf			
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	I	Y	Bl			
88.303-1	III	N	P	T	E	N	Br	S	Y	Br			
88.305	III	S	W	G	E	N	Dbr	D	Y	Bf		Wa	
88.306	III	D	W	G	E	N	Br	D	Y	Lbf			
88.306-1	III	N	P	T	E	N	Br	D	Y	Br			
88.310	III	D	W	G	E	N	Br	D	Y	Lbf			
88.312	III	D	W	G	E	N	Br	D	Y	Bf			
88.349	III	N	W	G	E	N	Bl	S	Y	Y			
88.350	III	N	W	G	E	N	Dbr	S	Y	Y			
88.353	III	N	W	G	Sa	N	Br	S	Y	Y		Swa	
88.354	III	N	W	G	E	N	Br	S	Y	Bf			Fechlor
88.359	III	N	W	G	E	N	Br	S	Y	Bf			
88.444	IV	D	W	G	E	N	Dbr	S	Y	Bf			
88.445	III	N	P	G	E	N	Br	S	Y	Bf			
88.447	III	N	P	G	E	N	Br	D	Y	Y			
88.447-3	III	N	W	T	E	N	Br	S	Y	Bl			
88.448	III	N	W	G	E	N	Br	D	Y	Bf			
88.452	IV	N	W	G	E	N	Br	S	Y	Bf			
88.458	IV	N	W	T	E	N	Br	S	Bl	Bl	Sabh		
88.459	IV	N	W	G	E	N	Dbr	S	Y	Bf			
88.466	III	N	W	G	E	N	Br	S	Y	Lbf		Dab	
88.466-1	IV	D	P	G	E	N	Tn	D	Y	Bf		Dab	
88.486	III	N	W	G	E	Ssp	Bl	D	Y	Bf			
88.490-1	III	N	W	G	E	N	Tn	S	Y	Y			
88.490-2	IV	D	W	G	E	Ssp	Tn	D	Y	Bf			
88.491	IV	D	P	G	E	Ssp	Br	D	Gn	Bf			
88.492	III	D	W	Lt	E	Ssp	Br	S	Gn	Br	St	Na	
88.499	IV	D	W	G	E	N	Tn	S	Y	Bf			
88.502	III	D	P	T	E	Ssp	Br	S	Bl	Bl			

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)
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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
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	10.6	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	H
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	50.2	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	III	42.0	21.0	1.2	11.5	4.7	24.0	50.6	9.2	R	S
87.620	III	42.5	19.9	1.2	12.1	4.4	20.8	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	H	S
87.622	IV	40.8	18.9	1.3	11.6	3.7	20.8	53.7	10.3	R	S
87.623	IV	39.9	18.6	1.3	11.9	3.1	18.0	56.0	10.9	S	S
87.629	IV	41.5	18.8	-	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	-	13.3	3.2	18.3	54.8	10.3	H	S
87.631-3	IV	46.8	18.6	1.2	11.8	4.0	22.5	52.1	9.6	S	S
87.632	IV	40.9	20.6	1.4	11.6	4.0	20.3	53.0	11.1	S	S
87.634	III	41.5	20.6	1.4	11.2	5.2	24.5	49.5	9.6	S	S
88.282	III	41.5	18.2	1.2	12.6	4.1	20.8	54.6	7.9	S	S
88.287	III	41.9	19.0	-	13.2	4.2	20.0	53.1	9.5	S	S
88.289	III	41.3	20.0	1.3	15.7	5.5	20.7	48.7	9.4	S	S
88.290	III	39.8	20.4	1.4	15.1	5.0	21.3	49.0	9.5	S	S
88.291	III	44.4	20.0	1.2	12.7	4.1	20.9	52.8	9.5	S	S
88.292	III	41.6	18.1	-	13.2	4.9	22.1	50.1	9.6	S	S
88.297	III	41.5	21.5	1.3	10.9	5.1	23.9	51.7	8.5	S	S
88.300	IV	42.3	20.2	1.3	12.8	4.2	20.8	56.2	6.0	S	R
88.302-1	IV	42.1	20.6	1.3	14.0	3.6	20.5	51.9	10.0	S	S
88.302-2	IV	44.5	21.3	1.3	11.8	5.0	24.0	49.8	9.4	S	R
88.303-1	III	42.2	21.5	1.2	13.0	4.2	25.9	48.5	8.5	S	H
88.305	III	40.3	21.0	1.4	13.6	4.2	18.5	53.3	10.4	S	S
88.306	III	41.9	21.9	1.3	13.4	5.7	22.1	49.6	9.2	S	S
88.306-1	III	41.7	21.4	1.3	11.6	4.2	22.7	52.5	9.0	S	S
88.310	III	42.1	21.4	1.4	13.2	4.5	20.5	52.3	9.6	S	S
88.312	III	40.3	21.3	1.4	12.4	3.7	21.2	52.9	9.8	S	R
88.349	III	41.2	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	III	41.2	20.4	1.3	11.6	4.2	19.7	55.4	9.1	S	S
88.354	III	39.1	22.3	1.4	11.7	3.9	21.5	53.6	9.3	S	S
88.359	III	39.2	22.6	1.4	11.2	4.2	23.3	52.7	8.6	S	S
88.444	IV	40.3	19.7	1.3	11.7	3.4	17.1	56.2	11.6	R	S
88.445	III	40.6	20.3	1.3	12.6	4.6	20.9	51.8	10.1	S	S
88.447	III	40.1	20.6	1.3	12.4	5.0	20.3	51.9	10.5	S	S
88.447-3	III	41.7	21.0	1.2	12.1	4.9	20.3	52.2	10.5	S	H
88.448	III	41.5	20.3	1.3	10.9	4.8	22.2	52.6	9.4	S	S
88.452	IV	40.5	20.7	1.3	12.1	4.0	17.1	54.4	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	S
88.466	III	41.6	20.3	1.3	13.5	4.2	22.9	51.2	8.1	S	S
88.466-1	IV	44.1	17.8	-	12.6	3.6	20.2	54.9	8.8	R	S
88.486	III	43.5	19.1	1.2	12.1	3.5	24.4	52.3	7.8	S	S
88.490-1	III	43.7	19.8	1.2	11.4	3.8	25.9	49.7	9.2	S	S
88.490-2	IV	42.4	19.4	1.2	11.6	3.9	19.2	54.4	11.1	H	S
88.491	IV	41.8	19.3	1.3	12.0	3.7	20.5	52.2	11.6	S	S
88.492	III	41.1	20.5	-	13.1	4.4	20.5	52.2	9.7	S	S
88.499	IV	41.3	19.5	1.4	11.2	5.0	24.2	48.8	10.8	S	S
88.502	III	42.1	19.2	-	11.4	5.2	24.9	48.8	9.7	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
88.780		China	China	1930	III
88.782		China	China	1930	III
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	III
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		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	III
89.003-2		China	China	1930	III
89.005-4		China	China	1930	III
89.006		China	China	1930	III
89.007		China	China	1930	III
89.009		China	China	1930	III
89.009-2		China	China	1930	III
89.010		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		China	China	1930	III
89.471		Unknown	Unknown	1930	IV
89.769		China	China	1930	IV

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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
88.780	III	N	W	G	E	N	Bl	I	Y	Bf			
88.782	III	N	P	T	E	N	Br	D	Y	G			
88.783	III	N	W	Lt	E	N	Tn	I	Y	Br		Dab	
88.788	III	N	W	T	E	N	Br	D	Bl	Bl			
88.789	III	N	P	G	E	N	Dbr	S	Y	lb			
88.790	III	N	W	G	E	N	Br	S	Y	Lbf			
88.793	IV	N	P	T	E	Ssp	Br	I	Y	G			
88.799	III	N	P	Lt	E	N	Br	I	Y	Br			
88.803-1	III	N	P	T	E	N	Br	S	Y	Y			
88.806	III	N	W	T	E	N	Br	D	Y	Lbl			
88.809	III	D	W	G	E	N	Br	S	Gn	Bf			
88.811	IV	D	P	G	E	Ssp	Br	D	Gn	Bf			
88.813	IV	D	W	T	E	N	Tn	S	Y	G			
88.814	IV	N	P	T	E	Ssp	Tn	D	Y	Bl			
88.815	III	D	W	T	E	N	Tn	D	Y	Rbr			
88.816	IV	N	W	G	E	Ssp	Br	D	Y	Y			
88.818	III	D	W	G	E	N	Dbr	S	Gn	Lbf	Na		
88.820N	IV	N	P	G	E	Ssp	Tn	S	Y	Y			
88.823	III	D	W	T	E	Ssp	Br	I	Gn	Bl	Na		
88.826	III	D	W	G	E	Ssp	Br	D	Y	Y			
88.886	III	N	W	G	E	N	Tn	S	Y	Y		Dab	
88.965	III	N	P	G	E	N	Tn	I	Y	Y			
88.998-1	III	N	P	T	E	N	Br	D	Y	Br			
88.998-2	III	N	W	Lt	E	N	Br	D	Y	Br			
89.002	III	N	W	G	E	N	Dbr	S	Y	Bf			Ysdlg
89.002-2	III	N	P	T	E	N	Br	D	Y	Br		Dab	
89.003-2	III	N	W	Lt	E	N	Tn	D	Br	Br			
89.005-4	III	N	W	G	E	N	Br	S	Y	Bf			
89.006	III	N	P	G	E	N	Tn	D	Y	Y			
89.007	III	N	P	G	E	N	Tn	S	Y	Bf			
89.009	III	N	P	G	E	N	Br	S	Y	Bf			
89.009-2	III	D	W	G	E	N	Br	D	Y	Bf			
89.010	IV	N	W	G	E	N	Dbr	S	Y	Bf			
89.012-1	III	N	P	G	E	Ssp	Bl	S	Y	Bf			Ysdlg
89.056-2	IV	N	P	T	E	Ssp	Br	S	Y	Br			
89.061-2	III	N	P	G	E	N	Tn	S	Y	Lbf			
89.061-3	IV	N	W	Lt	E	N	Tn	I	Y	Br			
89.061N	III	N	W	G	Sa	N	Br	S	Y	Bf		5ft	
89.066	III	N	P	T	E	N	Br	S	Gn	Br			
89.067	III	N	P	G	E	N	Tn	S	Y	lg			
89.074	IV	N	W	T	E	N	Br	S	Y	Br			
89.117	III	N	P	T	E	Ssp	Br	D	Y	Br			
89.128	IV	N	P	T	E	N	Br	S	Y	Bl			
89.130	III	N	W	G	E	N	Bl	S	Y	Y			
89.133	III	D	P	G	E	N	Br	D	Y	Y			
89.134	III	N	P	T	E	Ssp	Br	S	Y	Tn			
89.143	III	N	W	T	E	N	Br	D	Y	Bl			
89.146	III	N	P	T	E	N	Br	D	Bl	Bl			
89.150	III	N	P	T	E	N	Br	D	Y	Tn			
89.152	III	N	P	G	E	N	Tn	S	Y	lb			
89.154-2	IV	N	W	T	E	N	Br	I	Y	Br			
89.162	III	S	P	G	E	N	Br	D	Y	Y			
89.168	III	N	P	G	E	N	Tn	D	Y	Y			
89.471	IV	N	P	G	E	N	Br	S	Y	lb			
89.769	IV	D	W	G	E	N	Tn	S	Y	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)
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	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	2.95
89.128	717	1008	3.6	107	4.0	3.0	1.0	2.0	1.0	15.8	3.08
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	-	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
88.780	III	42.6	20.5	1.3	13.3	3.9	21.2	53.2	8.4	R	S
88.782	III	45.1	18.1	-	12.8	4.7	20.3	52.7	9.6	S	S
88.783	III	43.1	19.9	1.2	11.4	3.7	22.6	52.1	10.2	S	S
88.788	III	42.4	17.5	-	13.0	3.9	18.3	53.8	11.0	S	S
88.789	III	42.5	19.3	1.2	12.4	3.5	20.8	53.8	9.6	S	S
88.790	III	43.2	20.1	1.3	11.8	5.0	23.6	49.5	10.1	S	S
88.793	IV	43.9	18.6	1.3	12.7	4.5	20.5	51.9	10.4	S	S
88.799	III	41.5	21.0	1.2	12.5	4.2	20.0	54.2	9.0	S	S
88.803-1	III	42.8	19.6	1.3	12.0	4.8	21.6	52.2	9.3	S	R
88.806	III	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	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	III	44.5	19.8	-	12.1	3.8	22.7	52.0	9.4	S	S
88.826	III	42.4	18.6	1.3	12.2	3.1	17.6	56.8	10.2	R	S
88.886	III	43.1	20.7	1.2	11.7	3.2	21.3	55.6	8.2	H	S
88.965	III	43.7	19.2	1.2	12.9	4.2	23.5	49.9	9.5	S	S
88.998-1	III	43.1	20.5	1.2	11.7	4.1	20.0	54.6	9.6	S	H
88.998-2	III	43.6	20.1	1.2	12.7	4.4	22.6	51.6	8.7	S	S
89.002	III	39.8	22.9	1.3	11.3	4.4	22.4	52.1	9.9	S	S
89.002-2	III	42.2	21.6	1.2	11.5	3.6	17.1	58.5	9.3	S	S
89.003-2	III	40.5	19.5	-	11.9	4.7	26.4	48.5	8.4	H	S
89.005-4	III	43.8	21.0	1.2	12.3	4.2	19.9	53.0	10.6	S	H
89.006	III	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	III	40.1	21.7	1.3	12.6	5.2	22.8	50.7	8.8	S	H
89.009-2	III	43.1	20.7	1.2	12.1	3.8	18.3	55.4	10.4	S	H
89.010	IV	42.3	20.2	1.3	13.9	5.1	20.4	50.8	9.9	S	S
89.012-1	III	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	III	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	III	41.4	20.4	1.2	12.6	4.6	27.4	46.0	9.4	S	S
89.134	III	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	III	43.2	19.1	-	13.6	3.7	19.9	54.2	8.6	S	S
89.150	III	42.9	20.8	1.3	12.4	4.2	23.8	50.1	9.5	R	S
89.152	III	39.7	21.8	1.2	12.8	4.4	25.2	49.8	7.9	S	H
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	III	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
89.769	IV	40.3	20.5	1.3	12.6	3.6	18.3	54.7	10.7	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity 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
90.249	Neihen	Rep. of Korea	Rep. of Korea	1930	IV
90.256		Rep. of Korea	Rep. of Korea	1930	IV
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
90.401		China	China	1930	IV
90.402		China	China	1930	IV
90.406-1		China	China	1930	IV
90.407		China	China	1930	III
90.463		China	China	1930	III
90.479P		China	China	1930	IV
90.479-1		China	China	1930	IV
90.486		China	China	1930	III
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	III
90.499-2	(Black and White)	China	China	1930	IV
90.563		China	China	1930	IV
90.566		China	China	1930	III
90.566-1		China	China	1930	III
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	III
90.760		China	China	1930	IV
90.763		China	China	1930	IV
91.073	Ajkarikon	Rep. of Korea	Rep. of Korea	1931	IV
91.082	Zomukon	Rep. of Korea	Rep. of Korea	1931	IV
91.083	Seihita	Rep. of Korea	Rep. of Korea	1931	III
91.089		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	III

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
89.772	IV	N	P	T	E	N	Br	S	Bl	Bl			
89.773	III	D	W	G	E	N	Dbr	S	Gn	Bf			
89.783	III	N	W	T	E	N	Br	S	Bl	Bl			
89.784	III	D	W	G	E	N	Br	S	Y	Bf			
90.138	IV	D	P	G	E	Ssp	Br	S	Y	Bf			
90.208	IV	N	P	T	E	Ssp	Br	D	Lgn	Bl	Saddle		
90.220	IV	D	P	T	E	Ssp	Br	S	Y	Br			
90.221	IV	N	P	G	E	N	Br	S	Y	Bf			
90.233	IV	D	P	G	E	Ssp	Br	D	Y	Y			
90.241	IV	D	P	G	E	Ssp	Br	D	Y	Y			
90.245	IV	N	W	G	E	Ssp	Br	S	Y	Y			
90.249	IV	N	P	T	E	Ssp	Br	D	Y	Br			
90.256	IV	D	W	G	E	N	Tn	D	Y	Bf			
90.258	III	D	P	G	E	N	Br	I	Y	Y			
90.305	IV	D	P	G	E	Ssp	Br	D	Y	Y			
90.354	IV	N	W	G	E	N	Br	I	Y	Bf	Abh		
90.369	IV	D	W	G	E	Ssp	Br	I	Y	Bf			
90.392	III	D	W	G	E	N	Br	S	Y	Bf			
90.401	IV	D	W	G	E	Ssp	Tn	D	Y	Bf			
90.402	IV	N	P	G	E	N	Bl	D	Y	Bf			
90.406-1	IV	N	P	G	E	N	Br	S	Y	lb			
90.407	III	N	W	T	E	N	Br	S	Y	Br			
90.463	III	N	P	T	E	Ssp	Br	D	Y	Br			
90.479P	IV	D	W	G	E	Ssp	Br	S	Y	Y			
90.479-1	IV	N	W	G	E	Ssp	Br	S	Y	Bf			
90.486	III	N	P	T	E	N	Tn	D	Y	Br			
90.490	IV	N	P	G	E	N	Dbr	S	Y	Bf			
90.490-2	IV	D	W	G	E	N	Br	S	Y	Bf			
90.495N	IV	D	P	G	E	Ssp	Br	S	Y	lb			
90.499-1	III	N	P	T	E	N	Br	D	Y	Br			
90.499-2	IV	N	P	G	E	N	Br	S	Y	lb			
90.563	IV	D	P	G	E	Ssp	Br	S	Y	Y			
90.566	III	N	P	T	E	N	Br	S	Y	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	Y	Bl			
90.573	III	D	P	G	E	N	Br	D	Y	Y			
90.576-1	III	N	P	Lt	E	N	Tn	D	Y	Dbr			
90.576-2	IV	D	P	G	E	Ssp	Br	S	Y	Y			
90.578	III	N	P	Ng	E	N	Br	I	Y	Br			
90.579	III	D	P	T	E	Ssp	Br	D	Y	Bl			
90.723	III	N	P	G	E	N	Dbr	D	Y	Bf			
90.760	IV	N	W	G	E	N	Br	D	Y	Y			
90.763	IV	N	P	Lt	E	N	Tn	S	Bl	Bl			
91.073	IV	D	P	T	E	Ssp	Br	S	Br	Br	St	Dab	
91.082	IV	N	W	G	E	N	Tn	D	Y	Y			
91.083	III	N	W	G	E	N	Br	I	Y	Bf			
91.089	III	N	W	G	E	N	Br	S	Y	Bf			
91.100-1	III	N	W	T	E	N	Br	S	Y	Y			
91.100-2	III	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	G	E	N	Br	S	Y	Bf			
91.103	IV	N	W	G	E	N	Tn	D	Y	Lbf			
91.108-1	IV	N	W	G	E	N	Br	S	Y	Y			
91.108-2	IV	D	W	G	E	N	Tn	S	Y	Bf			
91.108N	III	D	W	T	E	N	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

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)
89.772	808	1013	4.0	130	4.0	4.0	2.0	2.8	-	9.6	2.45
89.773	727	1004	3.5	97	1.5	3.0	1.0	2.5	1.0	12.4	2.30
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	2.3	1.0	16.0	2.62
90.138	729	1017	4.3	94	1.0	3.0	1.0	2.5	2.0	19.1	2.06
90.208	730	1017	3.6	99	4.0	3.0	1.0	2.5	-	22.8	2.23
90.220	731	1018	3.9	91	1.0	3.0	1.0	2.5	2.5	17.4	2.60
90.221	726	1010	3.8	119	3.5	3.0	1.0	2.8	1.5	16.3	2.73
90.23	726	1022	3.9	64	1.0	3.0	1.0	2.5	3.5	23.5	1.98
90.241	727	1019	3.6	61	1.0	3.0	1.0	2.5	3.0	26.0	1.97
90.245	725	1016	3.7	114	4.0	3.5	1.0	2.5	2.0	14.6	2.91
90.249	721	1008	3.6	74	3.0	3.0	1.0	2.5	3.5	18.0	1.80
90.256	731	1006	3.9	97	1.0	3.0	2.0	2.5	1.0	15.6	2.35
90.258	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
90.354	726	1011	3.9	107	4.0	3.0	1.0	2.5	2.5	17.8	2.50
90.369	724	1007	3.0	79	1.0	3.0	4.0	2.5	1.0	16.7	1.80
90.392	725	1007	2.6	71	1.0	3.0	1.0	2.8	1.0	19.2	2.34
90.401	726	1011	2.4	86	1.0	3.0	1.0	2.3	1.0	16.0	2.87
90.402	730	1012	3.3	109	4.0	4.0	2.0	2.5	1.5	15.6	2.18
90.406-1	718	1009	3.8	114	4.0	3.0	1.0	2.8	2.5	16.8	2.53
90.407	724	929	4.3	102	3.5	3.0	1.0	3.3	2.0	19.6	2.64
90.463	713	1002	3.6	89	3.0	3.0	1.0	2.5	2.0	15.2	3.06
90.479P	729	1022	3.0	89	1.0	3.0	1.0	2.0	1.0	13.9	2.31
90.479-1	730	1021	3.1	112	3.0	3.0	1.0	2.5	1.0	16.1	2.15
90.486	719	930	4.2	104	3.5	3.0	1.0	2.8	1.0	16.2	3.13
90.490	730	1006	3.0	91	3.5	3.0	1.0	2.5	1.5	16.0	2.35
90.490-2	723	1010	3.4	97	1.0	2.5	1.0	2.8	1.0	16.2	2.89
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
90.563	730	1020	4.0	81	1.0	3.0	1.0	2.5	2.0	22.0	2.40
90.566	706	914	2.9	71	3.0	2.5	1.0	3.0	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	3.0	15.2	2.96
90.573	722	930	3.4	69	1.0	3.0	1.0	2.5	1.0	15.0	2.70
90.576-1	713	919	3.8	86	3.0	3.0	1.0	2.8	1.0	15.5	2.36
90.576-2	726	1015	4.3	91	1.0	3.0	1.0	2.3	1.0	17.8	2.59
90.578	714	922	4.2	99	4.5	3.5	1.0	3.3	3.0	15.5	2.52
90.579	719	928	3.0	81	1.0	2.5	1.0	2.5	2.0	18.0	2.54
90.723	723	1005	3.6	122	4.0	3.0	1.0	2.8	1.0	18.6	2.64
90.760	730	1019	4.0	135	4.0	3.0	1.0	2.0	1.0	19.2	2.58
90.763	730	1010	3.4	117	4.0	3.5	3.0	2.3	-	9.8	2.25
91.073	727	1012	3.5	64	1.0	3.0	1.0	2.0	-	21.6	2.27
91.082	718	1005	3.0	99	3.5	3.0	1.0	2.5	2.5	17.7	2.47
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
91.108-2	803	1026	3.2	94	1.0	3.0	1.0	2.5	2.0	17.8	2.60
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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
89.772	IV	41.7	17.5	-	12.8	3.8	16.4	51.9	15.0	S	S
89.773	III	43.1	18.7	1.4	14.9	3.6	21.2	49.5	10.7	S	S
89.783	III	40.9	18.2	-	13.9	3.8	18.7	52.6	11.0	S	H
89.784	III	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	III	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	III	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	H	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
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	III	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
90.566	III	41.1	21.7	1.2	13.9	4.6	22.8	50.0	8.6	S	S
90.566-1	III	39.6	23.2	1.2	14.3	4.7	22.2	51.2	7.6	S	R
90.567-1	III	41.0	21.5	-	12.8	5.3	25.1	48.9	7.9	S	R
90.573	III	40.9	20.5	1.2	14.0	4.7	21.1	49.9	10.3	S	R
90.576-1	III	43.5	20.6	1.2	13.8	3.8	21.1	52.5	8.7	R	S
90.576-2	IV	43.0	20.0	1.2	13.3	4.3	18.1	52.5	11.8	H	S
90.578	III	42.1	20.8	1.3	12.3	4.7	24.0	50.8	8.3	S	S
90.579	III	42.4	20.3	1.4	12.8	4.4	22.6	50.0	10.2	H	S
90.723	III	42.2	21.6	1.4	13.5	4.9	24.5	48.7	8.4	S	S
90.760	IV	40.4	20.4	1.3	14.0	3.1	22.2	50.3	10.4	S	S
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	III	40.4	21.1	1.3	12.4	4.9	23.2	50.9	8.6	S	R
91.100-1	III	39.7	22.1	1.3	11.8	3.9	21.5	53.5	9.3	S	H
91.100-2	III	41.1	21.5	1.2	13.6	4.0	23.6	50.3	8.5	S	H
91.100-3	III	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	H	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	H
91.108-2	IV	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity 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	III
91.149		China	China	1931	III
91.151		China	China	1931	III
91.152		China	China	1931	III
91.153		China	China	1931	III
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	III
91.163		China	China	1931	IV
91.165		China	China	1931	III
91.166		China	China	1931	IV
91.169		China	China	1931	III
91.174		China	China	1931	III
91.178		China	China	1931	IV
91.178-1		China	China	1931	IV
91.340		China	China	1931	III
91.341		China	China	1931	III
91.343		China	China	1931	III
91.346		China	China	1931	IV
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
91.719	Shirodaizu	Rep. of Korea	Rep. of Korea	1931	IV
91.725-2	(Akazu)	Rep. of Korea	Rep. of Korea	1931	IV
91.725-4	(Akazu)	Rep. of Korea	Rep. of Korea	1931	III
91.729	Kokaita	Rep. of Korea	Rep. of Korea	1931	III
91.730		China	China	1931	III
91.730-1		China	China	1931	III
91.731		China	China	1931	III
91.731-1		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	III
92.557		China	China	1931	IV
92.560		China	China	1931	III
92.568		China	China	1931	III
92.577		China	China	1931	III
92.590		China	China	1931	III
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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat			Other traits		
				Color	Form	Density		Luster	Color	Hilum color	Seed	Leaf	Plant
91.113	III	N	W	G	E	N	Dbr	S	Y	Bf			
91.120-3	III	N	P	T	E	N	Br	S	Y	Bl			
91.121-1	III	N	W	G	E	N	Br	S	Y	Y			
91.121-2	IV	D	W	G	E	Ssp	Br	D	Y	Bf			
91.127	III	N	W	T	E	N	Tn	S	Y	Br			
91.132-3	IV	N	W	T	E	N	Tn	D	Y	Tn			
91.133	IV	N	W	T	E	N	Br	D	Y	Tn			
91.142	III	N	W	G	E	N	Br	S	Y	Lbf			
91.149	III	N	W	G	E	N	Br	S	Y	Y			
91.151	III	N	W	G	E	N	Tn	S	Y	Lbf			
91.152	III	N	W	G	E	N	Br	S	Y	Lbf			
91.153	III	N	W	G	E	N	Br	I	Y	Lbf			
91.153-1	IV	N	P	G	E	N	Br	D	Y	Bf			
91.153-7	IV	S	W	G	E	N	Br	S	Y	Bf			
91.154	III	N	W	Lt	E	N	Br	D	Y	Br			
91.159	III	N	W	G	E	N	Tn	S	Y	Bf	Mih		
91.159-4	IV	N	P	G	E	N	Br	D	Y	lb			
91.160	III	N	W	T	E	Sp	Br	D	Y	Br			
91.162	III	D	P	T	E	N	Br	S	Y	Br			
91.163	IV	N	W	Lt	E	N	Tn	S	Y	Tn			
91.165	III	N	W	G	E	N	Br	S	Y	Bf			
91.166	IV	N	W	T	E	N	Br	D	Y	Tn			
91.169	III	N	W	G	E	N	Br	S	Y	Bf			
91.174	III	N	P	T	E	N	Br	I	Y	Y			
91.178	IV	N	W	T	E	N	Br	D	Y	Br			
91.178-1	IV	N	W	G	E	N	Tn	D	Y	Bf			
91.340	III	N	P	Lt	E	N	Br	D	Gn	Br			
91.341	III	D	P	T	E	N	Br	D	Gn	Bl	Gncot		
91.343	III	N	P	T	E	N	Br	S	Y	Blbr	Sph		
91.346	IV	N	W	T	E	Ssp	Br	D	Gn	Br	Gncot		
91.349	III	N	P	T	E	N	Bl	D	Bl	Br			
91.679	IV	N	W	G	A	N	Tn	D	Y	Lbf			
91.684	IV	D	W	G	E	Ssp	Br	S	Y	Lbf			
91.702	IV	D	P	G	E	N	Br	S	Y	Y			
91.719	IV	D	P	G	E	N	Tn	S	Y	Y			
91.725-2	IV	N	W	G	E	Ssp	Br	S	Y	Bf			
91.725-4	III	D	W	G	Sa	N	Br	D	Y	Bf			
91.729	III	D	W	Ng	E	Ssp	Dbr	S	Br	Br	St		
91.730	III	N	P	G	E	N	Br	S	Y	Y			
91.730-1	III	N	W	G	E	N	Br	S	Y	Y			
91.731	III	N	W	T	E	N	Tn	S	Y	Bl			
91.731-1	IV	N	P	G	E	N	Br	S	Y	Bf			
91.733-1	IV	N	W	T	E	Ssp	Br	D	Y	Tn			
91.734	IV	D	W	G	Sa	N	Br	S	Y	Y			
91.750	III	N	P	G	E	N	Br	S	Y	lg			
92.463	IV	N	P	G	E	N	Br	I	Y	Lbf		Dab	
92.466	III	N	P	G	E	N	Tn	D	Y	Y			
92.557	IV	N	P	G	E	Ssp	Bl	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	Y	Y			
92.577	III	N	W	G	E	N	Br	S	Y	Y			
92.590	III	N	W	G	E	N	Br	S	Y	Bf			
92.593	III	N	W	G	E	N	Br	S	Y	Bf			
92.594	III	N	W	G	E	N	Br	S	Y	Bf			
92.600	III	N	W	G	E	N	Br	S	Y	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			Yield (Mg/ha)
								Quality (score)	Mottling (score)	Weight (cg/sd)	
91.113	712	919	4.0	97	3.5	3.0	1.0	2.0	1.0	15.0	2.68
91.120-3	714	915	2.0	58	2.5	3.0	1.0	2.8	2.0	21.6	2.15
91.121-1	719	929	2.9	99	3.5	3.0	1.0	2.8	3.0	17.5	2.64
91.121-2	721	1013	3.4	86	1.0	2.5	1.0	2.0	2.0	23.8	2.47
91.127	721	917	3.8	112	4.5	3.5	1.0	2.5	2.0	11.4	2.54
91.132-3	729	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	1004	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

Entry	Maturity group	Seed composition		Protein composition	Oil composition					Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Palmitic (%)	Steric (%)	Oleic (%)	Linoleic (%)	Linolenic (%)	PR	Py
91.113	III	40.0	21.6	1.2	13.6	4.0	23.5	50.3	8.6	R	R
91.120-3	III	41.8	21.7	1.3	12.4	4.8	26.8	47.3	8.7	S	H
91.121-1	III	43.9	18.2	1.2	13.7	4.4	22.1	50.2	9.5	S	S
91.121-2	IV	43.2	19.0	1.2	12.6	3.9	21.1	51.6	10.8	H	S
91.127	III	42.1	17.8	1.2	13.2	4.5	23.4	48.9	10.0	S	H
91.132-3	IV	42.3	19.2	-	13.9	3.4	22.2	51.6	8.9	R	S
91.133	IV	44.7	19.8	1.2	12.6	3.9	19.0	54.2	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	21.1	1.4	12.7	4.3	24.0	50.4	8.5	S	--
91.151	III	46.5	18.7	1.2	12.8	4.6	23.2	50.3	9.0	S	--
91.152	III	43.3	20.1	1.2	11.7	4.1	24.0	50.9	9.4	H	--
91.153	III	43.0	20.2	-	12.2	4.2	23.5	51.6	8.4	H	--
91.153-1	IV	43.8	19.7	1.2	11.6	4.4	24.3	51.6	8.0	S	--
91.153-7	IV	42.3	18.6	1.3	11.7	3.3	19.9	54.5	10.6	S	--
91.154	III	42.0	20.6	1.2	13.4	5.0	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	--
91.159-4	IV	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	--
91.162	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	--
91.166	IV	42.2	20.5	1.2	13.1	4.1	25.9	47.8	9.1	S	--
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	--
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	--
91.729	III	42.2	19.2	-	14.0	4.1	17.5	53.6	10.7	S	--
91.730	III	41.0	20.5	1.2	12.8	4.0	21.4	51.8	10.0	S	--
91.730-1	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	43.2	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	--
92.594	III	41.6	21.5	1.2	13.3	4.2	21.1	52.0	9.4	S	--
92.600	III	39.3	22.6	1.1	12.3	4.7	20.4	52.7	9.9	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Matur- ity group
92.601-1		China	China	1931	III
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	III
92.606		China	China	1931	III
92.608		China	China	1931	III
92.617		China	China	1931	III
92.618		China	China	1931	III
92.619		China	China	1931	III
92.623		China	China	1931	III
92.636		China	China	1931	IV
92.640		China	China	1931	III
92.641		China	China	1931	III
92.641B		China	China	1931	IV
92.642		China	China	1931	III
92.643		China	China	1931	III
92.645		China	China	1931	III
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	III
92.672		China	China	1931	III
92.686		China	China	1931	III
92.688		China	China	1931	III
92.688-2		China	China	1931	IV
92.689		China	China	1931	IV
92.690		China	China	1931	III
92.691		China	China	1931	III
92.702		China	China	1931	III
92.704		China	China	1931	III
92.707		China	China	1931	III
92.707-2		China	China	1931	IV
92.713		China	China	1931	IV
92.718		China	China	1931	III
92.718-2		China	China	1931	III
92.720		China	China	1931	III
92.722		China	China	1931	III
92.728		China	China	1931	III
93.055		China	China	1931	IV
93.563		China	China	1931	III
93.565A		China	China	1931	III
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
96.169B		Rep. of Korea	Rep. of Korea	1932	IV

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

Entry	Matur- ity group	Stem trm.	Flower color	Pubescence			Seedcoat			Other traits			
				Color	Form	Density	Pod color	Luster	Color	Hilum color	Seed	Leaf	Plant
92.601-1	III	N	P	G	E	Ssp	Br	D	Y	lb	Def		
92.601-2	III	N	W	G	E	N	Br	D	Y	Bf			
92.601-5	III	N	W	G	E	N	Br	S	Y	Bf			
92.602	III	N	W	G	E	N	Bl	S	Y	Lbf			
92.604	IV	N	W	G	E	N	Bl	I	Y	Bf			
92.605	III	S	W	G	E	N	Br	S	Y	Bf			
92.606	III	N	W	G	E	Ssp	Br	S	Y	Y			
92.608	III	N	W	G	E	N	Br	S	Y	Bf			
92.617	III	S	W	G	E	N	Br	S	Y	Bf			
92.618	III	N	W	G	E	N	Br	S	Y	Bf			
92.619	III	N	W	G	E	N	Br	S	Y	Bf			
92.623	III	N	W	G	E	N	Br	D	Y	Y			
92.636	IV	D	P	G	E	Ssp	Tn	S	Y	Y			
92.640	III	N	P	T	E	N	Br	D	Y	Br			
92.641	III	N	W	T	E	N	Br	D	Y	Br			
92.641B	IV	D	P	G	E	Ssp	Br	S	Y	Y			
92.642	III	N	W	T	E	N	Br	S	Y	Bl			
92.643	III	N	P	T	E	Ssp	Br	D	Y	Br			
92.645	III	N	P	G	E	N	Br	D	Y	lb	5lft		
92.651	IV	N	W	T	E	N	Br	S	Y	Tn			
92.654	III	N	W	G	E	Ssp	Br	S	Y	Y			
92.659	III	N	W	T	E	N	Br	D	Y	Bl			
92.662	III	N	P	G	E	N	Br	S	Y	lb			
92.663	III	N	P	G	E	N	Br	S	Y	lb			
92.672	III	S	W	G	E	N	Br	I	Y	Lbf			
92.686	III	N	W	T	E	N	Br	S	Y	Bl			
92.688	III	N	W	G	E	N	Br	S	Y	Y			
92.688-2	IV	D	W	G	E	N	Br	S	Y	Y			
92.689	IV	N	W	G	E	N	Tn	D	Y	Y			
92.690	III	N	W	T	E	N	Br	D	Y	Y			
92.691	III	N	P	G	E	N	Tn	D	Y	Y			
92.702	III	N	W	G	E	N	Br	D	Y	Bf			
92.704	III	N	W	G	E	N	Br	S	Y	Bf	Def		
92.707	III	N	W	G	E	N	Br	S	Y	Y			
92.707-2	IV	N	W	T	E	N	Br	S	Y	Bl			
92.713	IV	N	W	T	E	N	Br	D	Y	Bl			
92.718	III	N	P	T	E	N	Br	S	Y	Bl			
92.718-2	III	N	P	G	E	N	Br	I	Y	Bf			
92.720	III	N	W	T	E	Ssp	Br	S	Bl	Bl	Gncot		
92.722	III	N	W	G	E	N	Br	D	Y	Bf			
92.728	III	N	P	T	E	N	Tn	D	Y	Br			
93.055	IV	D	W	G	E	Ssp	Tn	D	Y	Bf			
93.563	III	N	W	T	E	N	Tn	S	Y	Bl			
93.565A	III	N	P	T	E	Ssp	Br	D	Y	Br			
94.159-3	IV	N	W	G	E	N	Tn	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	E	Ssp	Br	S	Lgn	Bf	Def		
95.853	IV	D	P	G	Sa	Ssp	Br	D	Y	Y			
95.887	IV	D	P	G	E	Ssp	Br	S	Y	Y			
96.093	IV	D	P	G	E	Ssp	Br	D	Y	Y			
96.118	IV	D	P	G	E	Ssp	Br	S	Y	Y	Def		
96.162	III	D	W	G	A	N	Br	D	Y	Bf			
96.169B	IV	D	P	G	E	N	Br	S	Y	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			Yield (Mg/ha)
								Quality (score)	Mottling (score)	Weight (cg/sd)	
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	3.0	1.5	16.5	2.32
92.688-2	727	1015	2.9	76	1.0	3.0	1.0	2.5	2.5	14.9	2.18
92.689	715	1013	3.5	89	2.5	3.0	1.0	2.8	1.0	21.2	2.84
92.690	711	925	3.4	89	3.0	3.0	1.0	2.8	2.5	15.1	2.66
92.691	715	917	4.0	89	3.0	2.5	1.0	2.5	2.0	18.9	2.53
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	727	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

Entry	Maturity group	Seed composition		Protein composition	Oil composition					Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Palmitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
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	III	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	III	43.0	19.3	1.3	12.8	4.8	22.1	50.3	10.0	S	--
92.608	III	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	--
92.619	III	40.6	22.5	1.2	11.9	3.5	22.6	51.9	10.1	S	--
92.623	III	43.8	18.3	1.2	12.6	3.8	21.3	52.8	9.5	S	--
92.636	IV	43.7	18.3	1.2	12.9	3.6	20.1	52.2	11.1	S	--
92.640	III	40.1	20.2	1.3	13.9	4.0	21.9	50.1	10.1	R	--
92.641	III	41.4	21.0	1.3	12.6	4.3	22.4	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	--
92.643	III	41.4	20.4	1.3	12.4	4.3	23.5	51.5	8.3	S	--
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	III	40.8	21.0	1.3	13.6	4.9	23.3	48.4	9.8	S	--
92.663	III	42.8	20.4	1.2	13.6	4.2	23.1	50.6	8.6	S	--
92.672	III	44.1	19.9	1.2	12.7	4.3	26.7	47.5	8.8	S	--
92.686	III	41.2	21.1	1.6	13.1	4.4	19.4	52.3	10.8	S	--
92.688	III	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	III	44.1	18.8	1.3	13.9	3.6	18.9	53.4	10.2	R	--
92.691	III	42.4	19.2	1.3	14.0	3.8	22.7	51.0	8.5	--	--
92.702	III	44.7	19.6	1.2	12.2	4.2	24.5	50.4	8.7	S	--
92.704	III	42.1	20.5	1.3	13.7	4.5	20.3	51.1	10.3	S	--
92.707	III	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	III	40.9	19.9	1.5	12.3	4.1	17.7	55.8	10.1	S	--
92.718-2	III	42.1	20.9	1.2	13.6	3.9	23.0	51.5	8.0	R	--
92.720	III	41.7	20.1	-	13.0	3.6	25.4	50.1	7.9	S	--
92.722	III	42.0	20.4	1.3	13.9	4.4	23.6	48.9	9.2	S	--
92.728	III	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	III	43.8	19.7	1.3	12.3	3.5	19.7	54.7	9.7	S	--
93.565A	III	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	III	43.0	19.6	1.2	11.1	4.8	22.4	51.7	10.0	H	--
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	H	--
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	11.0	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
96.194P		Rep. of Korea	Rep. of Korea	1932	IV
96.194-3		Rep. of Korea	Rep. of Korea	1932	III
96.199		Rep. of Korea	Rep. of Korea	1932	III
96.280		Rep. of Korea	Rep. of Korea	1932	IV
96.321		Rep. of Korea	Rep. of Korea	1932	III
96.322		Rep. of Korea	Rep. of Korea	1932	III
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	III
96.787		Rep. of Korea	Rep. of Korea	1932	III
96.808		Rep. of Korea	Rep. of Korea	1932	IV
96.927		Rep. of Korea	Rep. of Korea	1932	III
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	III
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	III
98.243		Unknown	Unknown	1932	III
103.080	White Soybean	China	China	1933	IV
103.088	Ming chuan	China	China	1933	III
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	III
124.871		Japan	Japan	1937	IV
153.231		Belgium	Unknown	1946	III
153.243	Dunfield	Belgium	Belgium	1946	III
153.292	Japonica	Belgium	France	1946	III
153.309	Bergerac	France	France	1946	III
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	III
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
157.421	Ebony	Rep. of Korea	Rep. of Korea	1947	III

Table 2.2

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
96.194P	IV	N	P	G	E	N	Br	S	Y	lb			
96.194-3	III	D	W	G	E	N	Br	S	Y	Bf			
96.199	III	D	W	G	A	N	Br	D	Y	Bf			
96.280	IV	D	P	G	E	N	Tn	D	Y	Y			
96.321	III	D	W	G	E	Ssp	Dbr	S	Gn	Gn	St	Na	
96.322	III	N	W	T	E	N	Tn	D	Bl	Bl	Gncot		
96.333	IV	N	P	G	E	N	Bl	D	Gn	lb	Gncot		
96.550	IV	D	P	G	E	Ssp	Br	S	Y	Y			
96.783	IV	D	P	T	A	Ssp	Br	D	Y	Br			
96.786-1	III	N	W	G	E	N	Tn	S	Y	Lbf			
96.787	III	D	P	T	E	Ssp	Br	S	Y	Br			
96.808	IV	D	W	G	E	N	Br	D	Y	Y			
96.927	III	D	P	T	E	N	Br	D	Y	Bl			
96.978	IV	D	P	G	Sa	N	Br	D	Y	G			
96.984	IV	N	P	T	E	Ssp	Br	S	Y	Bl			
97.038	IV	N	W	G	E	N	Br	S	Y	Y			
97.139	III	N	W	G	E	N	Br	S	Y	Bf			
97.155	IV	D	W	G	E	N	Br	S	Y	Bf			
97.220	IV	D	W	G	E	Ssp	Br	D	Y	Y			
97.222	IV	D	P	G	E	Ssp	Br	S	Y	Y			
97.225	IV	D	P	G	E	N	Br	D	Y	Y			
97.235	IV	D	W	G	E	Ssp	Br	D	Y	Y			
97.627	III	D	P	G	E	N	Tn	S	Y	lb			
98.243	III	N	P	G	E	N	Br	S	Y	Bf			
103.080	IV	S	W	G	Sa	N	Br	D	Y	Bf			
103.088	III	D	W	G	E	N	Tn	D	Y	Bf			
103.091	IV	S	W	G	Sa	N	Br	D	Y	Bf			
103.415	IV	N	W	G	E	N	Tn	S	Y	Lbf			
103.419B	IV	N	P	G	E	Sdn	Br	I	Y	Y			
104.708	III	N	P	G	E	N	Br	I	Y	Y			
105.579	IV	D	P	G	E	Ssp	Br	I	Y	Y			
123.577B	IV	N	W	G	E	N	Br	D	Y	Bf			
123.578	III	D	W	G	E	N	Br	I	Y	Lbf			
124.871	IV	D	W	T	E	Ssp	Br	S	Bl	Bl			
153.231	III	N	P	T	E	Ssp	Br	D	Rbr	Rbr			
153.243	III	N	W	T	E	N	Br	S	Y	Bl			
153.292	III	N	P	T	E	N	Bl	S	Bl	Br		Dab	Sw
153.309	III	N	W	G	E	N	Br	S	Y	Bf			
153.321	IV	D	P	T	E	N	Bl	S	Gn	Br	Gncot		
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	Y	G			
157.398	IV	D	P	T	A	N	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	Y			
157.404	IV	D	P	G	E	N	Bl	D	Y	Bf			
157.405	IV	D	P	G	E	N	Bl	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	Bl	Bl	Gncot		
157.417	IV	D	P	G	A	Ssp	Tn	S	Y	Y			
157.419	IV	D	P	G	E	N	Br	D	Y	Y			
157.421	III	N	P	Ng	E	N	Tn	S	Bl	Bl			

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)
96.194P	727	1010	4.0	132	4.0	3.5	1.0	2.3	1.0	16.0	3.04
96.194-3	720	927	3.3	97	1.0	3.0	1.0	2.5	1.0	16.4	3.02
96.199	720	918	4.0	74	1.0	3.0	5.0	2.5	2.0	11.7	1.81
96.280	802	1018	3.2	86	1.0	3.0	1.0	2.3	1.0	13.2	1.83
96.321	717	921	3.0	66	1.0	2.5	1.0	2.5	-	18.9	1.75
96.322	717	925	2.4	69	2.5	3.0	1.0	2.5	-	15.5	1.75
96.333	801	1011	3.4	119	4.0	3.5	1.0	2.3	1.0	16.5	2.90
96.550	728	1024	3.5	89	1.0	3.0	1.0	3.0	2.5	28.2	2.09
96.783	729	1017	3.8	91	1.0	3.0	3.0	2.5	1.0	28.9	1.58
96.786-1	721	1004	3.4	107	4.0	3.0	1.0	2.5	2.5	18.6	2.45
96.787	713	920	3.0	56	1.0	3.0	1.0	2.5	1.5	14.1	1.76
96.808	725	1010	4.0	76	1.0	3.0	1.0	2.5	3.0	15.2	2.08
96.927	711	923	2.7	90	1.0	1.0	--	2.3	2.5	11.4	2.35
96.978	726	1018	4.0	69	1.0	3.0	1.0	2.5	3.0	22.8	1.92
96.984	728	1016	3.2	119	4.0	3.0	1.0	2.3	1.0	18.0	2.86
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
157.404	802	1014	4.0	71	1.0	3.0	1.0	2.0	1.0	8.3	2.72
157.405	811	1022	4.0	84	1.0	3.0	1.0	2.5	-	17.0	2.49
157.408	726	1017	3.6	76	1.0	3.0	1.0	2.5	2.0	21.8	2.50
157.409	727	1009	3.8	94	1.0	3.5	5.0	2.5	1.0	17.3	2.48
157.410	731	1017	3.5	74	1.0	3.0	1.0	2.5	1.0	20.2	2.61
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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
96.194P	IV	41.7	20.1	1.1	12.7	3.6	21.1	52.4	10.2	S	--
96.194-3	III	40.8	21.7	1.1	12.8	3.5	20.5	54.3	8.9	S	--
96.199	III	43.1	20.5	1.1	11.9	4.4	23.4	50.4	10.0	S	--
96.280	IV	40.5	19.4	1.3	12.4	3.2	18.1	53.8	12.5	S	--
96.321	III	42.6	19.8	-	15.0	4.8	18.8	51.8	9.6	S	--
96.322	III	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	III	41.4	20.8	1.2	14.4	4.5	23.6	48.2	9.4	S	--
96.787	III	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	--
96.927	III	46.6	18.2	-	11.6	3.6	24.6	52.4	7.9	--	--
96.978	IV	44.2	18.2	1.1	13.7	3.1	19.3	52.8	11.1	R	--
96.984	IV	42.1	19.7	1.1	12.2	3.3	18.9	54.4	11.2	S	--
97.038	IV	42.9	18.5	1.2	13.8	3.9	21.1	50.3	10.9	S	--
97.139	III	43.4	21.2	1.1	13.3	4.6	22.2	50.8	9.1	S	--
97.155	IV	41.7	18.9	1.1	12.2	3.6	22.7	51.4	10.2	S	--
97.220	IV	41.1	19.2	-	12.4	3.5	18.4	54.2	11.5	H	--
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	H	--
97.627	III	42.0	19.7	1.3	13.6	4.0	21.5	50.6	10.2	S	--
98.243	III	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	III	45.3	18.6	1.2	12.7	3.3	18.5	55.0	10.6	R	--
103.091	IV	42.9	18.4	1.3	12.2	3.4	21.0	52.6	10.9	R	--
103.415	IV	44.0	16.8	1.1	13.2	3.9	18.9	50.3	13.7	S	--
103.419B	IV	41.7	19.1	1.2	15.0	2.6	20.6	51.4	10.4	S	--
104.708	III	42.8	19.9	1.1	13.7	3.7	25.8	48.4	8.5	S	--
105.579	IV	43.2	18.5	1.1	11.8	4.0	21.2	51.4	11.6	S	--
123.577B	IV	42.8	17.8	1.3	15.3	3.2	17.1	52.8	11.6	H	--
123.578	III	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	III	42.0	19.9	-	12.1	4.2	24.0	50.6	9.1	S	--
153.243	III	40.6	20.4	1.3	16.3	5.8	22.5	47.2	8.2	S	--
153.292	III	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	IV	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	--
157.397	III	42.9	20.8	1.3	11.1	4.1	24.0	52.3	8.5	H	--
157.398	IV	41.8	18.5	1.2	12.1	3.7	17.1	55.5	11.6	R	--
157.401	IV	41.1	19.4	1.3	13.1	4.2	18.0	53.0	11.7	R	--
157.402	IV	44.6	17.6	1.1	12.9	3.3	21.1	51.3	11.4	R	--
157.404	IV	43.1	17.7	1.2	11.8	3.4	16.9	56.7	11.2	R	--
157.405	IV	41.7	18.7	-	12.5	3.0	16.6	55.5	12.4	H	--
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	III	41.6	20.6	-	12.5	4.2	24.5	50.7	8.2	H	--
157.417	IV	41.4	20.0	1.4	11.8	4.4	18.1	53.8	11.9	R	--
157.419	IV	42.3	18.7	1.3	11.2	3.6	19.8	53.8	11.5	S	--
157.421	III	45.4	16.9	-	12.3	4.5	20.3	52.8	10.1	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
157.424	Ham hung dal ri	Rep. of Korea	Rep. of Korea	1947	IV
157.428	Hoosier	Rep. of Korea	Rep. of Korea	1947	IV
157.429	Huwang bozu	Rep. of Korea	Rep. of Korea	1947	III
157.431	Ic san	Rep. of Korea	Rep. of Korea	1947	IV
157.434	Illini	Rep. of Korea	Rep. of Korea	1947	IV
157.435	Il soy	Rep. of Korea	Rep. of Korea	1947	IV
157.436	Kae wan bac huwa	Rep. of Korea	Rep. of Korea	1947	IV
157.437	Kam ro	Rep. of Korea	Rep. of Korea	1947	IV
157.438	Kang won No. 16	Rep. of Korea	Rep. of Korea	1947	IV
157.439	Kap san chai rae	Rep. of Korea	Rep. of Korea	1947	IV
157.441	Kum kang No. 2	Rep. of Korea	Rep. of Korea	1947	IV
157.442	Kum kang No. 1	Rep. of Korea	Rep. of Korea	1947	IV
157.445	Kum kang so ryu	Rep. of Korea	Rep. of Korea	1947	IV
157.446	Kum san	Rep. of Korea	Rep. of Korea	1947	IV
157.447	Kyeong du	Rep. of Korea	Rep. of Korea	1947	IV
157.448	Kyui za an	Rep. of Korea	Rep. of Korea	1947	IV
157.449	Maeng tae	Rep. of Korea	Rep. of Korea	1947	IV
157.450	Man soy	Rep. of Korea	Rep. of Korea	1947	IV
157.452	Mil tae	Rep. of Korea	Rep. of Korea	1947	IV
157.453	Mes ko	Rep. of Korea	Rep. of Korea	1947	IV
157.454	Mi ka do	Rep. of Korea	Rep. of Korea	1947	IV
157.456	Tama tsurunoko	Rep. of Korea	Japan	1947	IV
157.457	Oi al kong No. 5	Rep. of Korea	Rep. of Korea	1947	III
157.458	Oi al kong No. 3	Rep. of Korea	Rep. of Korea	1947	IV
157.459	Oi al kong	Rep. of Korea	Rep. of Korea	1947	IV
157.460	Oi al kong	Rep. of Korea	Rep. of Korea	1947	IV
157.462	Patten	Rep. of Korea	Rep. of Korea	1947	IV
157.468	Ri ae chong du	Rep. of Korea	Rep. of Korea	1947	IV
157.471	Sang du	Rep. of Korea	Rep. of Korea	1947	IV
157.472	Sang go ro	Rep. of Korea	Rep. of Korea	1947	IV
157.474	Sa pyong ga huc je	Rep. of Korea	Rep. of Korea	1947	IV
157.477	Suwon No. 1	Rep. of Korea	Rep. of Korea	1947	IV
157.482	Tetsu saya ao mame	Rep. of Korea	Japan	1947	IV
157.483	U ki chol	Rep. of Korea	Rep. of Korea	1947	IV
157.485	Ul san	Rep. of Korea	Rep. of Korea	1947	IV
157.487B	(Well man)	Rep. of Korea	Rep. of Korea	1947	IV
157.490	Yong il	Rep. of Korea	Rep. of Korea	1947	IV
157.491	Yu co ro	Rep. of Korea	Rep. of Korea	1947	III
157.492	Yuc u No. 7	Rep. of Korea	Japan	1947	IV
158.765		China	China	1947	IV
159.923B	Casa Grande	Peru	Peru	1947	IV
167.240	No. 59	Turkey	Turkey	1948	III
167.277	Mammoth Yellow	Turkey	Turkey	1948	IV
170.380		Turkey	Turkey	1948	IV
171.427		China	China	1948	IV
171.428		China	China	1948	IV
171.429		China	China	1948	IV
171.431		China	China	1948	IV
171.432		China	China	1948	IV
171.433		China	China	1948	IV
171.434		China	China	1948	IV
171.449	Kariha takiya	Japan	Japan	1948	III
171.450	Kisaya	Japan	Japan	1948	III
171.454	Kurosakigake	Japan	Japan	1948	IV
171.652		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

Entry	Matu- rity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
157.424	IV	D	P	G	E	Ssp	Br	D	Y	Y			
157.428	IV	D	P	G	E	Ssp	Br	S	Y	Bf	Def		
157.429	III	N	P	G	E	N	Tn	D	Y	Y			
157.431	IV	N	P	G	E	Ssp	Tn	D	Y	Bf			
157.434	IV	D	W	T	E	Ssp	Br	D	Y	Br			
157.435	IV	N	P	Ng	E	N	Br	S	Br	Br		Dab	
157.436	IV	N	P	G	E	Ssp	Br	S	Y	Y			
157.437	IV	N	W	G	E	N	Br	S	Y	Bf			
157.438	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.439	IV	D	P	G	E	Ssp	Br	S	Y	Bf	Def		
157.441	IV	D	P	G	E	Ssp	Br	D	Y	Lbf			
157.442	IV	D	P	G	E	N	Br	S	Y	Y	Def		
157.445	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.446	IV	D	P	G	E	Ssp	Br	I	Y	Y			
157.447	IV	D	P	G	E	Ssp	Br	S	Y	Bf	Def		
157.448	IV	D	P	G	E	Ssp	Dbr	I	Gn	lb	Gncot		
157.449	IV	D	P	G	E	Ssp	Br	I	Y	Bf			
157.450	IV	D	P	G	E	N	Br	S	Y	Y			
157.452	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.453	IV	D	P	T	E	N	Bl	S	Gn	Br	Gncot		
157.454	IV	D	P	G	E	Ssp	Br	S	Y	Bf	Def		
157.456	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.457	III	D	P	G	E	Ssp	Br	S	Y	Bf			
157.458	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.459	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.460	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.462	IV	D	P	G	E	N	Bl	S	Gn	Lbf	Gncot		
157.468	IV	D	W	T	E	Ssp	Br	S	Gn	Gn			
157.471	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.472	IV	D	P	G	E	Ssp	Br	D	Y	Y			
157.474	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.477	IV	D	P	G	E	Ssp	Br	I	Y	Y			
157.482	IV	D	P	G	E	N	Br	S	Y	Y			
157.483	IV	N	P	T	E	Ssp	Br	D	Y	Br			
157.485	IV	N	P	G	E	Ssp	Tn	D	Y	Bf			
157.487B	IV	N	W	G	E	N	Br	D	Gn	Bf			
157.490	IV	D	P	G	E	Ssp	Br	S	Y	Y			
157.491	III	N	W	G	E	N	Tn	S	Y	Y			
157.492	IV	N	P	T	E	N	Bl	B	Bl	Bl			
158.765	IV	N	P	G	E	N	Br	D	Y	lb			
159.923B	IV	D	Dp	G	E	Ssp	Br	D	Y	Y			
167.240	III	N	W	G	E	N	Dbr	S	Y	Y			
167.277	IV	D	P	T	E	N	Br	S	Y	Br			
170.380	IV	N	P	T	E	Ssp	Br	S	Y	Bl			
171.427	IV	N	W	G	E	N	Br	D	Y	Bf			
171.428	IV	N	P	G	E	N	Br	S	Y	Bf			
171.429	IV	D	W	T	E	N	Br	S	Bl	Bl	Sabh		
171.431	IV	N	P	G	E	N	Br	D	Gn	lb	Gncot		
171.432	IV	N	W	G	E	N	Br	S	Gn	Bf	Gncot		
171.433	IV	N	W	T	E	N	Br	S	Bl	Br			
171.434	IV	N	P	G	E	N	Br	S	Y	lb			
171.449	III	D	P	-	C	N	Tn	S	Y	Bf			
171.450	III	D	P	T	A	N	Tn	S	Y	Br			
171.454	IV	D	P	T	Sa	N	Br	D	Bl	Bl			
171.652	IV	N	W	G	E	N	Tn	S	Y	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

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)
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
157.478	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
157.424	IV	44.4	19.0	1.3	11.3	3.2	20.8	53.6	11.2	S	--
157.428	IV	42.2	18.9	-	11.6	3.2	19.1	55.1	11.0	R	--
157.429	III	43.9	19.1	1.3	11.9	3.6	22.1	52.2	10.2	S	--
157.431	IV	43.4	18.1	1.3	12.5	3.4	18.1	54.5	11.5	R	--
157.434	IV	41.4	18.5	1.2	12.5	5.1	21.7	49.6	11.2	S	--
157.435	IV	41.1	18.6	-	12.0	3.9	18.0	54.8	11.4	R	--
157.436	IV	42.0	20.5	1.3	12.2	3.5	21.1	53.6	9.6	S	--
157.437	IV	41.7	21.6	1.4	13.9	3.7	23.7	49.4	9.3	S	--
157.438	IV	43.0	19.2	1.4	14.3	3.5	20.4	51.7	10.2	S	--
157.439	IV	41.5	19.8	1.4	14.1	3.1	18.7	53.3	10.7	R	--
157.441	IV	43.0	19.1	1.3	13.9	2.9	17.8	55.4	10.0	H	--
157.442	IV	43.0	19.9	1.3	13.7	3.4	20.9	50.8	11.1	S	--
157.445	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	H	--
157.456	IV	44.1	18.3	1.2	12.3	3.4	19.7	53.4	11.2	S	--
157.457	III	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	H	--
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	IV	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	51.2	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	--	--
157.485	IV	44.0	17.6	1.3	10.5	3.6	19.7	53.9	12.3	R	--
157.487B	IV	44.9	19.2	1.2	12.1	4.5	20.1	52.6	10.7	H	--
157.490	IV	43.3	18.9	1.3	11.9	3.6	21.7	53.4	9.4	S	--
157.491	III	43.4	19.3	1.3	12.4	4.2	23.8	51.2	8.5	S	--
157.492	IV	42.8	17.4	-	12.6	4.1	18.8	51.9	12.5	R	--
158.765	IV	43.2	18.5	1.2	10.9	4.0	23.5	51.8	9.9	S	--
159.923B	IV	40.5	20.0	1.4	11.4	3.2	18.7	55.0	11.6	R	--
167.240	III	40.9	22.1	1.3	10.7	4.0	22.9	54.3	8.1	S	--
167.277	IV	43.0	17.4	-	12.1	3.8	17.9	54.0	12.1	S	--
170.380	IV	41.6	21.3	-	12.6	4.2	21.1	53.6	8.5	S	--
171.427	IV	43.9	19.1	1.2	13.7	3.5	21.6	51.5	9.8	S	--
171.428	IV	43.1	19.1	1.2	15.7	3.0	19.5	52.1	9.8	S	--
171.429	IV	42.0	18.7	-	12.4	3.6	17.6	54.0	12.4	S	--
171.431	IV	42.3	20.0	-	13.5	3.5	22.5	50.5	10.0	S	--
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	III	41.7	19.0	1.3	11.0	4.6	25.5	47.0	11.8	S	--
171.450	III	46.3	15.3	-	13.6	3.9	20.2	50.4	11.9	R	--
171.454	IV	42.2	19.2	-	12.0	3.4	21.4	53.7	9.4	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity 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		Japan	Japan	1949	III
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	IV
181.551		Japan	Japan	1949	IV
181.552		Japan	Japan	1949	III
181.553		Japan	Japan	1949	III
181.554		Japan	Japan	1949	III
181.555		Japan	Japan	1949	IV
181.557		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	III
189.935	Soja 2	France	France	1950	III
189.969	Erectus	France	France	1950	III
196.148	Akasaya-1	Japan	Japan	1951	III
196.149	Banseihikarikuro	Japan	Japan	1951	III
196.152	Gindaizu	Japan	Japan	1951	III
196.153	Isikarisiro-1	Japan	Japan	1951	III
196.155	Kurosaya	Japan	Japan	1951	IV
196.156	Marukotsubu	Japan	Japan	1951	III
196.157	Mitsuishidaizu	Japan	Japan	1951	III
196.162	Shiotsurunoko	Japan	Japan	1951	III
196.164	Wasekurosengoku	Japan	Japan	1951	III
196.165	Wasetsurunoko	Japan	Japan	1951	III
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	III
200.457	Azuma aki	Japan	Japan	1952	III
200.458	Ban echigo	Japan	Japan	1952	III
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	III
200.495	Kuro daizu	Japan	Japan	1952	IV
200.496	Kurosaya	Japan	Japan	1952	III
200.499	Matsu ura	Japan	Japan	1952	III
200.501	Mikuriya	Japan	Japan	1952	IV
200.504	Mizu moguri	Japan	Japan	1952	IV

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
172.901	IV	D	P	T	E	Ssp	Br	D	Y	Tn			
173.994	III	D	W	G	A	Ssp	Tn	D	Y	Y			
173.995	IV	D	P	G	E	Ssp	Br	S	Y	Y			
179.826	IV	N	W	Ng	E	N	Br	S	Br	Br	St		
181.535	III	D	P	T	E	N	Br	D	Y	Br			
181.539	IV	D	P	G	E	N	Bl	S	Lgn	Bf			
181.540	III	D	W	T	E	N	Br	S	Y	Br		Cup	
181.542	III	D	P	G	Sa	N	Br	S	Y	Y			
181.549	III	D	W	T	Sa	N	Tn	S	Y	Br		Swa	
181.550	IV	D	W	T	A	Ssp	Br	S	Y	Bl			
181.551	IV	D	P	T	A	Ssp	Br	S	Y	Br			
181.552	III	D	W	-	C	Ssp	Tn	I	Y	Y			
181.553	III	D	P	T	E	Ssp	Br	S	Y	Tn			
181.554	III	D	P	T	E	Ssp	Br	S	Y	Tn			
181.555	IV	D	P	T	A	Ssp	Br	S	Y	Br			
181.557	IV	D	W	T	Sa	Ssp	Br	S	Y	Bl			
187.150	IV	D	P	T	Sa	N	Tn	S	Y	Br			
187.152	III	D	P	-	C	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	I	Y	Y			
189.920	III	N	P	T	E	N	Br	D	Y	Y			
189.926	IV	N	P	T	E	Ssp	Br	D	Y	Br			
189.928	III	N	P	T	E	N	Br	S	Y	Bl			
189.935	III	N	W	T	E	N	Br	D	Y	Bl			
189.969	III	D	P	T	E	N	Bl	S	Gn	Br	Gncot		
196.148	III	D	P	T	E	N	Bl	D	Y	Br			
196.149	III	D	W	T	E	Ssp	Br	S	Bl	Bl			
196.152	III	D	P	G	E	N	Br	S	Y	Bf			
196.153	III	D	P	T	E	N	Br	D	Lgn	Br			
196.155	IV	D	P	G	E	N	Bl	S	Lgn	Bf			
196.156	III	D	P	T	E	N	Br	D	Y	Br			
196.157	III	D	P	T	E	N	Br	D	Y	Br			
196.162	III	D	P	G	E	Ssp	Br	D	Y	Y			
196.164	III	D	P	T	Sa	N	Bl	S	Bl	Bl	Gncot		
196.165	III	D	W	G	E	Ssp	Br	D	Y	Y			
196.167	IV	D	W	G	E	Ssp	Tn	D	Y	Bf			
196.170	IV	D	P	T	E	Ssp	Br	D	Y	Br			
196.171	IV	D	P	G	E	Ssp	Br	I	Gn	Bf	Gncot		
196.172	IV	D	P	T	E	Ssp	Br	I	Bl	Bl			
200.453	III	D	W	G	A	Ssp	Br	I	Gn	Bf			
200.457	III	D	P	G	A	Ssp	Br	D	Lgn	Bf			
200.458	III	D	P	T	A	Ssp	Br	S	Y	Br			
200.460	IV	D	P	T	A	N	Br	S	Y	Lbr			
200.463	IV	D	P	T	E	Ssp	Br	S	Y	Br		Cup	
200.470	IV	D	P	-	C	N	Tn	D	Y	Y			
200.471	III	D	P	-	C	N	Tn	S	Y	Bf			
200.473	III	D	P	G	A	N	Tn	I	Y	Bf			
200.478	III	D	W	-	-	G	Br	D	Y	Br			
200.480	III	D	P	-	C	N	Tn	D	Y	Bf			
200.485	III	D	P	-	C	N	Tn	S	Y	Bf			
200.495	IV	N	W	T	E	N	Br	I	Bl	Bl		Dab	
200.496	III	D	P	G	A	Ssp	Br	D	Lgn	Bf			
200.499	III	D	W	G	E	N	Tn	D	Y	Bf			
200.501	IV	D	W	T	Sa	Ssp	Br	S	Y	Br			
200.504	IV	D	P	G	A	Ssp	Tn	D	Y	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

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)
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	726	928	3.7	79	1.0	3.0	1.0	2.0	2.5	11.0	1.90
200.499	722	923	3.7	81	1.0	3.0	1.0	2.0	2.0	11.7	2.02
200.501	804	1006	4.3	89	1.0	3.0	5.0	2.5	3.0	11.3	1.36
200.504	801	1017	3.7	84	1.0	3.0	1.0	2.3	1.0	16.1	2.06

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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
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	--
179.826	IV	40.2	21.4	-	13.9	3.2	19.5	54.0	9.4	S	--
181.535	III	41.5	19.5	1.2	12.9	3.6	21.7	52.9	9.0	S	--
181.539	IV	45.0	17.5	1.3	11.8	3.0	22.1	53.5	9.6	R	--
181.540	III	45.6	17.0	1.2	13.0	4.0	23.4	50.5	9.1	S	--
181.542	III	41.8	19.9	1.2	10.9	3.9	22.3	53.3	9.6	R	--
181.549	III	41.9	17.4	1.2	11.2	3.8	24.1	50.7	10.2	R	--
181.550	IV	45.2	17.5	1.2	13.2	3.4	20.2	52.5	10.7	H	--
181.551	IV	42.2	19.5	1.2	12.9	4.1	19.8	52.3	10.9	R	--
181.552	III	41.3	19.5	1.2	10.8	4.5	20.0	54.0	10.6	S	--
181.553	III	41.8	18.1	1.2	12.8	3.6	21.1	52.2	10.4	R	--
181.554	III	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	H	--
181.557	IV	45.1	17.3	1.2	14.0	3.8	19.0	52.8	10.4	H	--
187.150	IV	42.0	18.9	1.3	13.8	3.7	21.9	51.7	8.9	H	--
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	H	--
189.891	III	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	--
189.928	III	43.9	19.5	1.3	11.6	3.5	20.9	54.5	9.5	S	--
189.935	III	42.4	20.4	1.2	14.6	4.6	20.6	50.9	9.3	S	--
189.969	III	44.3	19.9	-	14.6	4.7	18.9	52.7	9.0	R	--
196.148	III	41.6	19.2	1.3	14.1	3.7	19.4	52.1	10.6	R	--
196.149	III	42.9	17.7	-	14.4	4.5	23.5	49.2	8.5	R	--
196.152	III	42.9	19.0	1.2	13.0	3.8	23.4	49.7	10.1	R	--
196.153	III	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	III	43.3	19.6	1.3	12.9	3.9	22.4	49.9	10.9	R	--
196.157	III	43.1	19.9	1.3	14.4	4.4	21.1	50.9	9.2	R	--
196.162	III	41.2	20.4	1.3	13.4	4.5	21.5	51.2	9.5	H	--
196.164	III	40.6	19.6	-	12.8	3.8	21.1	53.3	9.0	S	--
196.165	III	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	H	--
196.170	IV	44.1	18.1	-	14.7	2.8	18.0	55.0	9.5	S	--
196.171	IV	43.6	18.7	-	13.1	3.7	19.4	54.8	9.1	S	--
196.172	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	--
200.457	III	45.0	19.2	1.2	12.7	3.9	25.2	50.6	7.6	R	--
200.458	III	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	--
200.463	IV	45.5	17.4	1.2	11.5	3.5	24.9	52.2	7.9	S	--
200.470	IV	42.9	18.3	1.2	9.8	4.7	23.6	51.9	10.1	S	--
200.471	III	41.1	19.2	1.2	10.8	4.7	27.1	47.9	9.6	S	--
200.473	III	42.1	18.4	1.3	10.8	4.3	24.6	49.3	11.0	H	--
200.478	III	41.7	18.8	1.3	10.9	4.0	20.8	53.8	10.5	R	--
200.480	III	44.9	17.3	1.2	10.6	4.2	25.7	50.6	8.9	S	--
200.485	III	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	H	--
200.504	IV	41.6	17.0	1.3	12.7	4.5	23.4	48.2	11.2	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Matur- ity 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	III
200.535	Shirosaya	Japan	Japan	1952	III
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	III
205.086	Kimusume sai No. 1	Israel	Japan	1953	III
205.087	Narato hadaka	Israel	Japan	1953	III
205.088	Norin No. 1	Israel	Japan	1953	IV
205.089	Norin No. 2	Israel	Japan	1953	IV
209.331		Japan	Japan	1953	III
209.332		Japan	Japan	1953	IV
209.334		Japan	Japan	1953	III
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	III
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	III
224.275	Tamamusume	Japan	Japan	1955	III
226.588	Tochigi No. 2	Japan	Japan	1955	III
226.589	Tochigi No. 3	Japan	Japan	1955	III
226.590	Tochigi kimusume No. 1	Japan	Japan	1955	III
226.591	Shin mejiro	Japan	Japan	1955	IV
227.212	Fuji No. 4	Japan	Japan	1955	III
227.218	Natsudaizu No. 1	Japan	Japan	1955	III
227.320	Daiishihienuki	Japan	Japan	1955	IV
227.328	Manchikin	Japan	Japan	1955	III
227.560	Nukanai daizu	Japan	Japan	1955	III
227.563	Shizunai daizu	Japan	Japan	1955	III
227.566	Yoshioka tairiu	Japan	Japan	1955	III
227.685	Shiko anola	Japan	Japan	1955	III
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	III
229.325	Iwate No. 1	Japan	Japan	1955	IV
229.326	Iwate No. 2	Japan	Japan	1955	IV
229.327	Iwate yagi No. 1	Japan	Japan	1955	IV
229.333	Kimusume No. 77	Japan	Japan	1955	III
229.334	Kinnari No. 1	Japan	Japan	1955	IV
229.336	Kimusume	Japan	Japan	1955	III
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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
200.517	IV	D	P	T	Sa	Ssp	Br	S	Y	Br			
200.518	IV	D	P	T	Sa	Ssp	Br	S	Y	Br			
200.519	IV	D	P	T	A	Sp	Br	D	Y	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	Y			
200.536	IV	D	P	T	A	N	Br	S	Y	Tn			
200.541	IV	D	P	G	A	Ssp	Br	S	Y	Lbf			
200.545	IV	D	P	T	Sa	Ssp	Br	S	Y	Br			
200.548	III	D	W	G	Sa	N	Br	I	Gn	Bf			
205.086	III	D	P	-	C	N	Tn	I	Y	Bf			
205.087	III	D	P	-	-	G	Br	I	Y	Br			
205.088	IV	D	W	T	A	Ssp	Br	S	Y	Br			
205.089	IV	D	W	T	A	Ssp	Br	S	Y	Bl			
209.331	III	N	W	Lt	Sa	N	Bl	S	Br	Br	Gncot		
209.332	IV	N	P	T	E	N	Bl	S	Bl	Bl	Gncot		
209.334	III	D	P	Lt	E	N	Bl	S	Br	Br		Dab	
209.335	IV	D	P	T	E	N	Br	S	Gn	Bl	Gncot		
219.782	IV	D	P	G	Sa	Ssp	Br	S	Y	Bf			
219.783	IV	D	W	T	A	Ssp	Br	S	Y	Br			
219.784	III	D	P	-	C	Sp	Tn	S	Y	Lbf			
219.787	IV	D	P	T	A	N	Br	S	Y	Br			
224.271	IV	D	P	T	A	Ssp	Br	S	Y	Br			
224.272	III	D	P	T	A	Ssp	Br	I	Y	Br			
224.275	III	D	W	-	C	Ssp	Tn	S	Y	Y			
226.588	III	D	W	G	A	Ssp	Tn	D	Y	Y			
226.589	III	D	W	G	A	N	Br	D	Gn	Bf			
226.590	III	D	P	-	C	N	Tn	S	Y	Bf			
226.591	IV	D	P	G	A	Ssp	Br	D	Y	Y			
227.212	III	D	P	-	C	N	Br	S	Y	Br			
227.218	III	D	W	T	Sa	Ssp	Tn	D	Y	Bl			
227.320	IV	D	P	T	E	Ssp	Dbr	S	Gn	Bl	Gncot		
227.328	III	N	W	G	E	Sdn	Br	S	Y	Lbf			
227.560	III	D	P	T	E	N	Br	D	Y	Br			
227.563	III	D	P	T	E	Ssp	Dbr	D	Y	Br			
227.566	III	D	P	T	E	N	Br	D	Gn	Bl			
227.685	III	D	W	T	Sa	N	Tn	D	Y	Br			
227.686	III	D	W	G	Sa	N	Br	D	Y	Bf			
229.312	IV	D	P	G	A	Ssp	Tn	S	Y	Y			
229.313	IV	D	P	T	A	Ssp	Br	S	Y	Br			
229.314	IV	D	P	T	A	Ssp	Br	S	Lgn	Br			
229.316	IV	D	W	T	A	N	Br	D	Y	Tn			
229.317	IV	D	P	T	E	N	Br	S	Y	Br			
229.319	IV	D	P	T	A	Ssp	Br	S	Y	Br			
229.324	III	D	W	T	E	N	Tn	D	Y	Br			
229.325	IV	D	P	T	A	Ssp	Br	S	Y	Br			
229.326	IV	D	P	G	E	Ssp	Br	I	Y	Bf			
229.327	IV	D	P	T	A	Ssp	Br	S	Y	Br			
229.333	III	D	P	-	C	N	Tn	S	Y	Bf			
229.334	IV	D	P	Lt	A	Ssp	Tn	S	Y	Br			
229.336	III	D	P	-	C	N	Tn	S	Y	Bf			
229.340	IV	D	W	T	E	Ssp	Br	D	Y	Br			
229.341	IV	D	P	T	A	Ssp	Br	S	Y	Br			
229.342	IV	D	W	T	A	Ssp	Br	S	Y	Br		Cup	
229.343	IV	D	W	T	A	N	Br	I	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

Entry	Flowering	Maturity	Lodging	Height	Stem	Branch-	Shat-	Seed			Yield
	date	date			term-			Quality	Mottling	Weight	
	(mmdd)	(mmdd)	(score)	(cm)	ination	ing	tering	(score)	(score)	(cg/sd)	(Mg/ha)
					(score)	(score)	(score)				
200.517	802	1009	3.9	81	1.0	3.0	3.5	2.5	3.5	11.6	1.67
200.518	805	1013	4.3	91	1.0	3.0	3.0	2.3	3.5	11.7	2.00
200.519	729	1011	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	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	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	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

Entry	Maturity group	<u>Seed composition</u>		<u>Protein composition</u>	<u>Oil composition</u>					<u>Disease reaction</u>	
		Protein (%)	Oil (%)	Methionine (% protein)	Palmitic (%)	Steric (%)	Oleic (%)	Linoleic (%)	Linolenic (%)	PR	Py
200.517	IV	43.7	17.0	1.2	13.2	3.6	23.7	50.5	8.9	R	--
200.518	IV	41.7	17.2	1.3	13.3	3.6	20.8	52.0	10.3	R	--
200.519	IV	42.8	18.0	1.3	10.7	3.6	20.6	55.2	9.9	H	--
200.522	IV	42.4	16.8	1.3	10.7	4.5	22.5	52.5	9.9	R	--
200.533	III	41.4	19.5	1.3	10.1	4.1	27.0	50.1	8.7	S	--
200.535	III	43.7	18.3	1.2	10.9	2.5	25.5	50.8	10.4	S	--
200.536	IV	40.0	18.7	1.4	13.4	4.1	23.6	51.1	7.9	H	--
200.541	IV	41.1	18.3	1.3	11.9	4.5	24.4	50.3	8.9	R	--
200.545	IV	42.4	16.9	1.3	12.8	3.5	22.4	52.2	9.1	R	--
200.548	III	44.2	17.3	1.2	12.4	5.3	29.6	43.9	8.9	S	--
205.086	III	41.4	19.2	1.3	11.8	5.2	29.7	46.5	6.8	S	--
205.087	III	42.3	19.1	1.2	11.2	4.6	27.0	49.8	7.3	R	--
205.088	IV	43.0	17.8	1.2	11.5	5.2	27.5	47.7	8.1	R	--
205.089	IV	45.6	17.2	1.2	13.4	4.1	22.6	51.8	8.1	R	--
209.331	III	41.0	18.5	-	12.1	4.6	21.8	54.4	7.1	H	--
209.332	IV	41.5	17.5	-	13.1	5.3	22.7	50.5	8.4	S	--
209.334	III	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	--
219.784	III	42.6	18.8	1.4	12.3	3.8	23.8	51.1	9.0	S	--
219.787	IV	40.2	19.0	1.3	12.3	4.3	20.8	52.5	10.1	H	--
224.271	IV	41.2	20.0	1.4	12.0	3.7	23.6	50.5	10.2	R	--
224.272	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	H	--
226.589	III	45.0	17.1	1.3	12.7	4.6	25.8	48.5	8.3	S	--
226.590	III	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	H	--
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	H	--
227.560	III	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	--
227.686	III	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	--
229.313	IV	40.7	19.0	1.2	11.9	4.0	19.7	54.9	9.5	R	--
229.314	IV	38.5	18.2	1.3	11.5	3.4	22.6	51.3	11.2	R	--
229.316	IV	44.4	16.0	1.3	11.1	3.6	19.9	53.1	12.3	R	--
229.317	IV	41.9	18.1	1.3	13.8	5.1	23.7	49.6	7.9	R	--
229.319	IV	39.1	18.2	1.4	12.3	4.3	22.8	49.9	10.6	S	--
229.324	III	42.6	19.4	1.3	10.7	4.9	27.5	47.3	9.5	H	--
229.325	IV	39.2	19.4	1.5	12.8	3.7	21.3	51.6	10.6	H	--
229.326	IV	41.6	18.5	1.4	10.7	4.0	24.1	51.2	9.9	H	--
229.327	IV	40.4	18.7	1.4	13.1	4.9	26.4	46.0	9.6	R	--
229.333	III	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	III	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	IV	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	--
229.343	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
229.344	Norin No. 4	Japan	Japan	1955	IV
229.345	Norin No. 5	Japan	Japan	1955	III
229.349	Rikuu No. 27	Japan	Japan	1955	IV
229.351	Senrya	Japan	Japan	1955	III
229.352	Shakkin nashi	Japan	Japan	1955	IV
229.353	Shirataka	Japan	Japan	1955	IV
229.356	Shiro hachikoku No. 2	Japan	Japan	1955	IV
229.357	Shiro hachikoku	Japan	Japan	1955	IV
229.359	Tohoku No. 1	Japan	Japan	1955	IV
229.360	Tamatsukuri No. 11	Japan	Japan	1955	IV
229.361	Tokichi	Japan	Japan	1955	IV
229.362	Yogetsu No. 1	Japan	Japan	1955	IV
229.738	Hubert 33	Algeria	Algeria	1955	III
232.992	Kono kuradaizu	Japan	Japan	1956	III
235.335	Mukden	Uruguay	Uruguay	1956	IV
235.339		Uruguay	Uruguay	1956	III
235.340	Seneca (Cornell)	Uruguay	Uruguay	1956	IV
235.344		Uruguay	Uruguay	1956	IV
235.346		Uruguay	Uruguay	1956	IV
238.926	Bikuni	Japan	Japan	1957	IV
238.931	Shinhonen	Japan	Japan	1957	III
238.933	Yonryuki	Japan	Japan	1957	III
243.514	Abura mame	Japan	Japan	1957	IV
243.515	Achumuri	Japan	Japan	1957	IV
243.516	Akanedzumime	Japan	Japan	1957	IV
243.517	Akazuka	Japan	Japan	1957	III
243.518	Ao	Japan	Japan	1957	IV
243.519	Aobishi	Japan	Japan	1957	IV
243.520	Aomame	Japan	Japan	1957	IV
243.521	Aotsurunoka	Japan	Japan	1957	IV
243.522	Beni iro daizu	Japan	Japan	1957	IV
243.523	Cha	Japan	Japan	1957	IV
243.524	Dateao	Japan	Japan	1957	IV
243.525	Fukui shiro	Japan	Japan	1957	IV
243.527	Goishi	Japan	Japan	1957	IV
243.528	Goku ao	Japan	Japan	1957	IV
243.529	Goyo	Japan	Japan	1957	IV
243.530	Haiiro	Japan	Japan	1957	IV
243.531	Juseita	Japan	Japan	1957	IV
243.532	Kariha takiya	Japan	Japan	1957	III
243.533	Karimame	Japan	Japan	1957	IV
243.535	Kura kake	Japan	Japan	1957	IV
243.536	Madara	Japan	Japan	1957	IV
243.537	Miyako	Japan	Japan	1957	III
243.538	Nedzumi meta	Japan	Japan	1957	IV
243.540	Sennari	Japan	Japan	1957	IV
243.541	Shakujo	Japan	Japan	1957	IV
243.543	Shonai wase	Japan	Japan	1957	IV
243.544	Takiya	Japan	Japan	1957	IV
243.545	Tanishi	Japan	Japan	1957	IV
243.546	Tora mame	Japan	Japan	1957	IV
243.548	Uma daizu	Japan	Japan	1957	IV
243.549	Wearucong	Japan	Japan	1957	IV
243.551	Yukino shita	Japan	Japan	1957	IV
246.365	Iwate	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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
229.344	IV	D	W	G	Sa	N	Br	S	Y	Bf			
229.345	III	D	W	G	A	Ssp	Br	S	Y	Bf			
229.349	IV	D	P	T	A	N	Br	S	Y	Br			
229.351	III	D	P	G	Sa	Ssp	Br	S	Y	Bf			
229.352	IV	D	P	G	A	Ssp	Br	D	Y	Bf			
229.353	IV	D	P	T	A	N	Br	S	Y	Br			
229.356	IV	D	W	G	E	N	Br	D	Y	Lbf			
229.357	IV	D	P	T	E	N	Tn	S	Y	Br		Cup	
229.359	IV	D	P	T	Sa	Ssp	Br	S	Y	Br			
229.360	IV	D	P	G	A	N	Br	S	Y	Bf			
229.361	IV	D	P	T	A	Ssp	Br	S	Y	Br			
229.362	IV	D	P	G	A	N	Br	D	Y	Bf			
229.738	III	N	W	G	E	N	Br	S	Y	Bf			
232.992	III	D	P	T	E	Ssp	Bl	I	Bl	Bl	Fleck		Sw
235.335	IV	D	P	T	A	Ssp	Br	S	Lgn	Bl			
235.339	III	N	P	T	A	N	Br	S	Y	Bl			
235.340	IV	N	W	T	A	Ssp	Br	S	Lgn	Br			
235.344	IV	N	W	T	E	N	Tn	S	Y	Tn			
235.346	IV	N	W	G	Sa	N	Br	S	Y	Bf			
238.926	IV	D	P	-	C	N	Tn	S	Y	Bf			
238.931	III	D	W	G	Sa	Ssp	Tn	D	Y	Y			
238.933	III	N	W	G	Sa	N	Br	D	Y	Lbf			
243.514	IV	N	W	T	Sa	N	Br	S	Y	Br			
243.515	IV	D	P	T	I	Ssp	Br	S	Bl	Bl	Net		
243.516	IV	D	P	T	E	N	Br	S	Rbr	Rbr			
243.517	III	D	W	G	A	N	Tn	D	Rbf	Rbf			
243.518	IV	D	W	G	E	N	Br	D	Gn	Bf	Gncot		
243.519	IV	D	P	T	E	Ssp	Br	S	Gn	Bl	Gncot		
243.520	IV	D	P	T	E	Ssp	Br	S	G	Bl			
243.521	IV	D	P	T	E	N	Br	I	Gn	Br	Gncot		
243.522	IV	D	P	T	A	N	Br	D	Y	Br			
243.523	IV	D	P	T	E	N	Br	S	Br	Br			
243.524	IV	D	W	T	A	Ssp	Bl	D	Gn	Br			
243.525	IV	D	P	G	E	N	Tn	I	Y	Lbf		Cup	
243.527	IV	D	W	T	E	Ssp	Br	S	Bl	Bl			
243.528	IV	D	P	G	A	N	Tn	S	Gn	Bf	Gncot		
243.529	IV	D	P	T	E	Ssp	Br	D	Gn	Br		5lft	
243.530	IV	D	P	T	E	N	Br	S	Br	Br			
243.531	IV	D	P	T	E	Ssp	Br	S	Gn	Bl	Saddle		
243.532	III	D	W	T	E	N	Dbr	S	Y	Br			
243.533	IV	N	P	T	E	N	Br	D	Gn	Gn			
243.535	IV	D	P	T	E	Ssp	Br	S	Gn	Bl	Saddle		
243.536	IV	D	P	T	E	Ssp	Br	S	Br	Br	St		
243.537	III	D	W	G	Sa	Ssp	Br	S	Y	Bf			
243.538	IV	N	P	T	E	N	Tn	D	Bl	Bl			Sw
243.540	IV	D	P	T	A	N	Br	I	Y	Br			
243.541	IV	D	W	T	E	N	Tn	D	Y	Br			Fasc
243.543	IV	D	P	T	A	N	Tn	S	Y	Br			
243.544	IV	D	P	G	A	Ssp	Br	D	Y	Bf			
243.545	IV	D	W	T	A	N	Br	S	Rbr	Rbr			
243.546	IV	D	P	T	I	Sp	Br	S	Br	Br	Net		
243.548	IV	D	P	G	Sa	N	Bl	D	Gn	Gn	Gncot		
243.549	IV	D	P	G	E	Ssp	Br	D	Y	Y			
243.551	IV	D	P	T	Sa	Ssp	Br	D	Gn	Bl			
246.365	IV	D	W	G	E	N	Br	D	Y	Y			

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			Yield (Mg/ha)
								Quality (score)	Mottling (score)	Weight (cg/sd)	
229.344	802	1016	2.9	84	1.0	2.0	1.0	2.5	2.0	20.5	2.06
229.345	726	1005	3.8	76	1.0	2.0	5.0	2.5	1.0	22.0	1.28
229.349	730	1019	4.2	109	1.0	3.0	5.0	2.5	1.0	19.1	2.20
229.351	727	930	2.9	69	1.0	1.5	1.0	2.8	2.0	17.3	1.76
229.352	729	1012	3.4	81	1.0	3.0	5.0	2.3	1.0	18.5	1.86
229.353	731	1024	4.0	86	1.0	3.0	5.0	2.3	1.0	20.3	2.14
229.356	721	0	3.9	86	1.0	3.0	4.0	2.8	2.0	25.2	--
229.357	808	1024	4.8	94	1.0	3.5	4.0	2.3	2.5	12.4	1.82
229.359	724	1012	3.3	89	1.0	3.0	3.5	2.3	1.0	18.0	1.66
229.360	805	1022	3.9	94	1.0	3.0	1.0	2.3	1.5	16.8	1.90
229.361	731	1018	3.9	99	1.0	3.0	5.0	2.3	1.0	18.2	2.34
229.362	726	1008	3.8	79	1.0	3.0	5.0	2.3	1.0	18.1	2.03
229.738	717	929	2.9	117	4.0	3.0	1.0	2.3	1.0	14.3	3.36
232.992	716	1005	3.8	51	1.0	3.0	5.0	3.0	-	7.5	1.55
235.335	727	1008	3.4	79	1.0	3.0	1.0	2.0	1.0	13.1	2.65
235.339	725	929	3.4	104	3.5	3.0	1.0	2.3	1.0	14.3	2.78
235.340	730	1014	3.5	104	3.5	3.0	1.0	2.0	1.0	12.3	2.90
235.344	723	1008	3.4	104	4.5	3.0	1.0	2.3	1.0	13.8	2.97
235.346	726	1010	4.0	99	4.0	3.0	1.0	2.5	2.5	14.1	2.30
238.926	724	1002	3.0	71	1.0	2.5	2.0	2.5	2.5	14.0	1.38
238.931	721	1002	3.8	71	1.0	2.5	1.0	2.8	2.0	22.3	1.76
238.933	720	1001	3.4	99	3.5	3.0	1.0	2.8	3.0	18.8	2.13
243.514	806	1018	2.8	97	3.0	2.5	5.0	2.5	2.0	18.8	1.99
243.515	811	1025	4.0	64	1.0	3.0	3.0	2.5	-	21.2	1.94
243.516	731	1014	3.9	71	1.0	3.0	1.0	2.0	-	9.0	2.43
243.517	720	922	2.8	71	1.0	3.0	1.0	2.3	-	19.8	2.52
243.518	726	1003	4.3	69	1.0	3.0	3.5	2.5	2.0	11.7	1.47
243.519	728	1027	3.0	64	1.0	3.0	2.5	4.0	1.5	35.4	1.67
243.520	728	1019	4.2	81	1.0	3.0	1.0	2.5	4.0	22.8	2.53
243.521	810	1030	4.3	109	1.0	3.0	1.0	2.8	1.0	18.5	1.52
243.522	810	1026	2.5	74	1.0	3.0	4.0	2.3	1.0	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
243.546	811	1101	4.7	71	1.0	3.0	1.0	3.0	-	26.2	1.26
243.548	815	1018	3.4	99	1.0	3.5	1.0	3.0	1.0	10.7	2.48
243.549	729	1024	3.9	71	1.0	3.0	2.0	2.5	3.0	27.7	1.68
243.551	801	1030	3.8	94	1.0	3.0	2.0	2.8	1.5	33.4	1.84
246.365	731	1024	3.4	79	1.0	3.0	3.5	2.8	2.0	20.8	2.66

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

Entry	Maturity group	Seed composition		Protein composition	Oil composition					Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Pal-mitic (%)	Steric (%)	Oleic (%)	Lino-leic (%)	Lino-lenic (%)	PR	Py
229.344	IV	38.5	18.0	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	H	--
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	--
229.352	IV	41.0	17.0	1.2	11.5	4.8	23.1	49.9	10.7	R	--
229.353	IV	42.5	17.6	1.3	12.5	3.5	21.3	52.3	10.4	R	--
229.356	IV	41.0	18.1	1.2	12.0	4.6	24.8	48.5	10.1	R	--
229.357	IV	42.0	16.7	1.2	13.5	3.8	21.0	52.3	9.3	S	--
229.359	IV	41.6	18.9	1.3	12.1	3.9	23.2	51.3	9.5	R	--
229.360	IV	41.1	16.9	1.4	12.1	3.5	23.2	50.1	11.2	R	--
229.361	IV	39.8	18.1	1.3	13.7	4.0	22.4	48.4	11.5	R	--
229.362	IV	41.5	17.9	1.3	11.4	4.2	22.2	51.7	10.6	R	--
229.738	III	40.6	20.6	1.5	12.5	4.7	21.3	50.8	10.7	R	--
232.992	III	41.1	17.5	-	13.8	4.4	16.3	55.2	10.2	R	--
235.335	IV	40.5	19.2	1.4	11.6	4.0	20.6	53.2	10.6	S	--
235.339	III	41.1	19.9	1.4	12.0	4.0	18.8	54.7	10.5	H	--
235.340	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	--
238.926	IV	40.9	18.7	1.2	10.7	4.2	25.2	50.1	9.9	S	--
238.931	III	43.6	18.5	1.3	11.2	4.2	21.3	53.3	10.0	R	--
238.933	III	44.2	18.6	1.3	11.8	5.1	24.7	49.7	8.8	R	--
243.514	IV	40.6	17.5	1.4	10.7	4.4	20.1	53.0	11.8	R	--
243.515	IV	42.6	17.0	-	14.1	3.9	17.5	52.0	12.5	S	--
243.516	IV	43.7	16.0	-	12.4	3.7	19.9	52.7	11.4	S	--
243.517	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	IV	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	IV	40.5	17.6	1.2	12.3	3.7	18.5	52.4	13.1	R	--
243.523	IV	40.8	18.2	-	12.5	4.5	19.9	49.9	13.1	R	--
243.524	IV	40.8	17.4	1.3	12.3	3.8	19.4	52.7	11.8	R	--
243.525	IV	41.9	17.6	1.2	14.4	4.7	26.4	45.8	8.7	R	--
243.527	IV	39.5	20.4	-	13.4	3.5	19.6	54.5	8.9	H	--
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	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	--
243.537	III	41.8	18.9	1.1	12.3	4.1	24.6	48.5	10.5	S	--
243.538	IV	44.5	15.2	-	11.4	4.7	18.5	51.8	13.7	R	--
243.540	IV	40.7	17.1	1.2	11.1	3.4	20.9	52.5	12.1	S	--
243.541	IV	42.6	16.6	-	11.9	3.2	18.5	51.5	14.9	R	--
243.543	IV	41.4	17.6	-	11.3	3.7	24.2	48.6	12.1	H	--
243.544	IV	41.6	18.0	1.3	10.8	3.3	22.1	50.6	13.2	R	--
243.545	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

PI No.	Accession name	Country of acquisition	Country of origin	Year introduced or released	Maturity group
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	III
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	Iwata No. 2	Japan	Japan	1958	IV
253.651A		Netherlands	China	1958	IV
253.651B		Netherlands	China	1958	IV
253.651C		Netherlands	China	1958	III
253.651D		Netherlands	China	1958	IV
253.652A		Netherlands	China	1958	IV
253.652B		Netherlands	China	1958	IV
253.653A		Netherlands	China	1958	III
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	III
253.660B		Netherlands	China	1958	III
253.661A		Netherlands	China	1958	III
253.661B		Netherlands	China	1958	III
253.661C		Netherlands	China	1958	IV
253.663		Netherlands	China	1958	IV
253.665A		Netherlands	China	1958	IV
253.665B		Netherlands	China	1958	IV
253.665C		Netherlands	China	1958	IV
253.665D		Netherlands	China	1958	III
253.666A		Netherlands	China	1958	IV
253.666B		Netherlands	China	1958	IV
261.466	Higodaizu	Japan	Japan	1959	III
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	III
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	IV

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

Entry	Maturity group	Stem trm.	Flower color	Pubescence			Pod color	Seedcoat		Hilum color	Other traits		
				Color	Form	Density		Luster	Color		Seed	Leaf	Plant
246.366	IV	D	P	T	Sa	Ssp	Tn	S	Y	Br			
246.367	IV	D	P	G	A	Ssp	Br	D	Y	Y			
246.368	IV	D	P	T	A	N	Br	S	Y	Br			
246.369	IV	D	P	T	A	Ssp	Br	S	Y	Br			
248.402	IV	N	P	G	E	N	Br	S	Y	lb			
248.509B	III	D	W	G	E	N	Br	S	Y	Y			
248.511	IV	D	P	G	E	N	Tn	I	Y	Bf			
248.513	IV	D	W	T	A	N	Br	D	Y	Y			
248.514	IV	D	W	T	E	Ssp	Br	D	Y	Br			
248.515	IV	D	W	G	E	N	Br	D	Y	Y			
253.651A	IV	N	P	Lt	A	N	Br	D	Gn	Bl		5lft	
253.651B	IV	N	P	G	Sa	N	Br	I	Gn	Bf		Dab	
253.651C	III	N	P	Lt	E	Ssp	Bl	I	Bl	Bl			
253.651D	IV	D	W	T	E	N	Br	S	Gn	Br			
253.652A	IV	D	W	T	E	Ssp	Br	I	Y	Br			
253.652B	IV	S	W	G	E	N	Br	S	Y	Bf			
253.653A	III	D	W	G	E	N	Dbr	S	Y	Bf			
253.653B	IV	D	P	G	E	N	Br	S	Y	Y			
253.654	IV	N	W	G	Sa	N	Br	S	Y	Bf			
253.655	IV	N	W	G	E	N	Tn	S	Y	Bf			
253.656A	IV	N	P	G	E	N	Br	S	Gn	Bf			
253.656B	IV	N	P	Lt	Sa	N	Bl	D	Br	Br			
253.659	IV	N	W	G	A	N	Br	D	Y	Bf			
253.660A	III	N	W	G	E	Sdn	Br	S	Y	Bf			
253.660B	III	D	W	G	E	Ssp	Br	S	Y	Y			
253.661A	III	N	W	G	E	N	Br	S	Y	Bf			
253.661B	III	N	W	Lt	E	N	Br	D	Y	Br			
253.661C	IV	D	W	G	E	N	Br	S	Y	Lbf			
253.663	IV	N	W	G	E	N	Br	I	Y	Bf			
253.665A	IV	D	W	T	E	N	Br	S	Y	Br			
253.665B	IV	D	W	G	E	N	Br	I	Y	Bf			
253.665C	IV	D	P	G	E	N	Br	I	Y	Bf			
253.665D	III	N	W	G	E	N	Br	S	Y	Lbf			
253.666A	IV	N	W	G	Sa	N	Br	I	Y	Bf			
253.666B	IV	N	P	T	Sa	N	Tn	S	Y	Bl			
261.466	III	D	W	T	A	N	Tn	D	Gn	Br			
261.467	III	D	P	G	E	N	Tn	S	Y	Bf			
261.468	III	D	P	T	E	Ssp	Br	S	Y	Tn			
261.473	III	D	P	G	E	Ssp	Br	S	Y	Bf			
262.181	IV	D	P	G	A	Ssp	Br	S	Y	Lbf			
264.555	IV	N	W	T	A	Ssp	Br	S	Lgn	Bl			
266.806C	II	D	P	T	E	N	Tn	S	Y	Br			
266.807D	IV	N	P	G	E	N	Br	S	Y	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			Yield
								Quality (score)	Mottling (score)	Weight (cg/sd)	(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	1018	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	1031	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	1026	4.8	107	5.0	4.0	1.0	2.5	1.0	12.5	2.34
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	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	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	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

Entry	Maturity group	Seed composition		Protein composition	Oil composition					Disease reaction	
		Protein (%)	Oil (%)	Methionine (% protein)	Palmitic (%)	Steric (%)	Oleic (%)	Linoleic (%)	Linolenic (%)	PR	Py
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	H	--
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	III	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	H	--
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	R	--
253.651C	III	43.2	16.9	-	11.2	3.9	17.5	53.5	13.8	S	--
253.651D	IV	42.0	18.4	1.2	11.1	3.3	18.7	56.2	10.6	S	--
253.652A	IV	41.5	20.5	1.2	12.4	4.2	23.5	50.3	9.5	S	--
253.652B	IV	39.2	20.3	1.3	11.4	3.4	21.0	53.4	10.9	R	--
253.653A	III	39.6	22.0	1.4	12.1	4.5	19.5	54.1	9.8	S	--
253.653B	IV	42.1	19.5	1.2	11.1	4.0	22.4	51.3	11.1	S	--
253.654	IV	46.6	17.2	1.1	11.3	4.0	19.3	54.0	11.4	R	--
253.655	IV	44.3	18.8	1.2	11.0	3.9	19.2	54.4	11.5	S	--
253.656A	IV	42.8	18.0	-	14.9	4.4	20.9	47.5	12.4	--	--
253.656B	IV	46.5	15.4	-	11.5	3.8	16.0	55.3	13.3	R	--
253.659	IV	44.9	17.6	1.1	13.5	3.5	20.1	51.4	11.4	H	--
253.660A	III	41.1	20.1	1.3	12.3	3.5	20.2	54.2	9.7	S	--
253.660B	III	41.9	20.1	1.2	14.2	4.6	19.0	50.8	11.4	S	--
253.661A	III	38.4	22.7	1.5	12.2	4.4	22.4	52.0	9.0	--	--
253.661B	III	45.6	21.0	1.3	12.8	4.3	22.0	51.0	9.8	S	--
253.661C	IV	42.6	20.8	1.4	12.6	4.4	20.0	52.4	10.5	S	--
253.663	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	--
261.467	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	H	--
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	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	--