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Evaluation of the USDA Soybean Germplasm Collection: Maturity Groups 000-IV (PI 507670-PI 574486)

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Abstract

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This publication contains information on the origin, descriptive characteristics, agronomic performance, and seed composition of soybean [Glycine max (L.) Merrill] germplasm accessions in maturity groups 000-IV from the USDA Soybean Germplasm Collection that were primarily introduced into the United States between 1987 and 1993. The accessions included in this publication were evaluated in 1994 and 1995 in Rosemount, Minnesota (Lat. 45° 02' N, for MG 000-I) and Urbana, Illinois (Lat. 40° 00' N, for MG I-IV).

KEYWORDS: agronomic characteristics, fatty acids, *Glycine max*, origin, seed composition, seed yield, soybean oil, soybean protein.

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Introduction

This publication contains information on the origin, descriptive characteristics, agronomic performance, and seed composition data of soybean [Glycine max (L.) Merr.] germplasm accessions in maturity groups 000 through IV in the range from PI 507670 to PI 574486. Also included are cultivars in the same maturity groups, developed at public institutions in the United States and Canada, and released by early 1993. These data are also available electronically through the Germplasm Resources Information Network (GRIN) at http://www.ars-grin.gov/npgs/ or from the Database Management Unit, USDA-ARS, BARC West, Beltsville, MD 20705. This is one of a series of technical bulletins that report on evaluation of the USDA Soybean Germplasm Collection. Other evaluation publications can be obtained from the Curator, USDA Soybean Germplasm Collection, USDA-ARS, 1101 West Peabody Drive, University of Illinois, Urbana, IL 61801.

The accessions included in this publication were evaluated in 1994 and 1995 in Rosemount, Minnesota (Lat. 45° 02' N, for MG 000-I) and Urbana, Illinois (Lat. 40° 00' N, for MG I-IV). All tests were replicated once per year. Specific comments about each evaluation follow.

MG 000-l evaluation (Minnesota)

Planting dates were May 31, 1994 and May 5, 1995. Plots were 3.6 m long with 4 rows 76 cm apart. Plots were trimmed to 2.4 m after maturity and the middle two rows harvested. Because of the difference in planting date, plants flowered and matured later in 1994 than in 1995. The difference in planting was almost 4 weeks but the average difference between years in flowering and maturity dates was only about 14 days. There was more rain in 1994 and yields were generally much higher in 1994 than in 1995.

MG I-IV evaluation (Illinois)

Planting dates were May 20-21, 1994 and May 31-June 1, 1995. Plots were 4 m long with 4 rows 76 cm apart. They were trimmed to 3.2 m after maturity and the middle two rows harvested. Because of the difference in planting date, plants flowered about 5 days later in 1995 than in 1994. Accessions in maturity groups I and II also matured about 5 days later in 1995 than in 1994. Rainfall in August and early September of 1994 was much greater than in the same period of 1995, which may have contributed to a longer growing season for the later maturing accessions in 1994. A frost on September 22, 1995 cut the growing season short; therefore maturity dates from 1995 were not included if the accessions had not matured before the frost. Accessions in maturity group III matured about 10 days earlier in 1995 than in 1994 where data from both years were available.

The seed composition data were collected at the USDA Northern Center for Agricultural Utilization Research in Peoria, IL. To obtain oil and protein percentages of the seeds with yellow seed coats, approximately 7 g of seeds were placed in a beaker and dried in a forced air oven for 3 hours at 130 C. The seeds were then transferred to 50 g bottles, sealed, and allowed to cool for 1 hour. Samples were then ground in a Varco electric dry-food grinder and returned to the 50 g bottles. Seed samples were analyzed with an Infratec 1255 food and grain analyzer (Perstorp Analytical Company). Samples were scanned from 800-1100 nm. The analyzer was calibrated with at least 40 soybean samples having a protein range of 33 to 50 percent and an oil range of 12 to 24 percent. Protein and oil concentrations for samples with colored or very heavily mottled seed coats were obtained with the Kjeldahl procedure for protein and Butt extraction for oil.

Fatty acid composition was obtained by gas-liquid chromatography of the methyl esters. Seeds were ground in a small food grinder and stored at -20°C until analyzed. Approximately 200 mg of ground sample was placed in a 25-ml vial, and 5 ml of sodium methoxide added in two 2.5 ml aliquots with an automatic syringe in such a way as to ensure mixing. (The sodium methoxide solution was prepared daily by adding 1 g of sodium metal to 100 ml of reagent grade methanol.) The sodium methoxide, ground sample suspension was allowed to stand for 45 minutes, after which 1 ml of 10 percent acetic acid solution was added, followed immediately by 10 ml of heptane (in two 5 ml aliquots). The samples were completely mixed after each reagent addition. This mixture was allowed to stand for several minutes so that the layers could separate. A 2-ml aliquot of the heptane layer was extracted for analysis in a Hewlett Packard model 6890 gas chromatograph equipped with a Model 6890 auto injector and flame ionization detector. Columns were 30 m by 0.32 mm capillaries coated internally with 5 percent diphenyl dimethyl siloxane. In the HP 6890, chromatography was isothermal and flow rates for helium, hydrogen, and air were 40, 40, and 450 ml min⁻¹ respectively. The injection volume was 1 µl with split ratios used, dependent upon the concentration of sample. Total analysis time was approximately 5 minutes. The integration, peak identification, data storage, and report printing were all performed by the Hewlett Packard Chemstation software and a modified Excel spreadsheet.

Data Categories and Abbreviations

The maturity groups of some accessions were changed based on evaluation data, but accessions are listed with the evaluation in which they were planted. Each evaluation was blocked by maturity group but the data are presented in cultivar name or PI number order.

Numeric values are the mean of observations from two years, except chemical data from the Urbana, IL location are for 1995 only. Where only one observation was used, that value is followed by a caret (^). Chemical data obtained using the Kjeldahl procedure and Butt extraction are followed by a "*". An asterisk (*) following a mean indicates that the difference between the values for the two replications exceeded a specified limit. The limits for each trait are as follows:

Flowering Date	>20 days
Maturity Date	>20 days
Lodging	>1 unit
Height	>15 cm
Stem termination	>1 unit
Shattering	>1 unit
Seed quality	>1 unit
Seed mottling	>1 unit
Seed weight	$>4.0 \text{ cg sd}^{-1}$
Yield	$>0.7 {\rm Mg \ ha^{-1}}$

This approach was implemented because of the possibility of misinterpreting the mean of only two observations when the difference between the individual values was large.

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

Table 1

PI number

Serial numbers assigned by the Plant Exchange Office, National Germplasm Resources Laboratory, USDA-ARS, BARC-West, Beltsville, MD 20705.

Accession name

Accession names and identification numbers 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 letter (A, B, C, etc.) suffixed to the PI number. Any name or number received with the original sample is enclosed in parentheses for sublines with other than the "A" designation.

Region and country of origin

This is the region (province, state, or prefecture) and country where the accession originated based on the best information received from the country of acquisition or accession name. In some cases, the region listed may be the source of the seeds and not the origin of the accession.

Country of acquisition

This is the country from which the seeds were actually obtained.

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.

Maturity group

Maturity group is the classification of relative maturity based on data collected at Urbana, IL and in some cases modified by data from Rosemount, MN.

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

W = white

Pubescence color

T = tawny

Lt = light tawny

G = gray

Ng = near gray

Pubescence form

A = appressed on leaf surface

E = erect on leaf surface

Sa = semiappressed on leaf surface

Pubescence density

N = normal density

Sp = sparse

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

Dn = dense

Sdn = semidense

Pod color

Bl = black

Br = brown

Dbr = dark brown

Lbr = light brown

Tn = Tan

Seedcoat luster

B = bloom

Lb = light bloom

D = dull

I = intermediate (between shiny and dull)

S = shiny

Seedcoat and hilum color

Bf = buff

B1 = black

Brbl = variable from brown to black

Blbr = black hilum with brown outer ring

Br = brown

G = gray

Ggn = gray green

Gn = green

Gnbr = green brown

Ib = imperfect black

Ig = imperfect gray

Rhf = red buff

Rbr = red brown

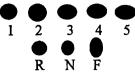
Tn = tan

Y = yellow

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

Seed shape

Side view: 1 (Round) to 5 (Very elongated)



End view: R (Round), N (Normal), F (Flat)

Other traits

Abh = imperfect abscission of hilum

Dab = delayed abscissions of leaves

Def = defective seedcoat (irregular splitting of the seedcoat)

Flk = brown flecks on black seedcoat

Gnc = 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

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

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

St = black, curved stripes on seedcoat

Vhil = variable hilum color

Vsc = variable seedcoat color

Lft4, Lft5, or Lft7 = 4, 5, or 7 leaflets frequent

Na = narrow leaflet

Cd = chlorophyll deficient

Sw = semi-wild

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

Also see "Mottling" in Table 3.

Table 3

Flowering

Date when 50 percent of the plants have at least one flower (month-day).

Maturity

Date when 95 percent 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)

Shattering

Early: Scored at harvest

Late: Scored on border rows two weeks after maturity Score 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 (very 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 double dash (--) indicates that the seedcoat was normally dark pigmented and thus mottling cannot be scored.

Seed weight

Centigrams per seed based on a 100-seed sample.

Seed yield

Megagrams per hectare.

Table 4

Seed composition

Protein and oil: Percentage of dry weight of seed.

Fatty acids (palmitic, stearic, oleic, linoleic, linolenic): Percentage of total fatty acids.

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	group
	Agassiz	Minnesota	United States	United States	1992	00
	Archer	Iowa	United States	United States	1990	I
	Bell	Illinois	United States	United States	1989	I
	Bert	Minnesota	United States	United States	1991	I
	Black Jet	Unknown	United States	United States	1992	00
	Butterbean	Unknown	United States	United States	1992	I
	Canatto	Ontario	Canada	Canada	1989	00
	Chico	Minnesota	United States	United States	1983	00
	Dassel	Minnesota	United States	United States	1986	0
	Envy	Unknown	United States	United States	1992	0
	Haroson	Ontario	Canada	Canada	1987	I
	HP201	Iowa	United States	United States	1988	I
	HP202	Iowa	United States	United States	1988	I
	HP203	Iowa	United States	United States	1988	I
	HP204	Iowa	United States	United States	1988	I
	Kasota	Minnesota	United States	United States	1990	I
	Kato	Minnesota	United States	United States	1989	Ī
	Lambert	Minnesota	United States	United States	1992	0
	Leslie	Minnesota	United States	United States	1991	I
	Merrimax	New Hampshire	United States	United States	1986	0
	Minnatto	Minnesota	United States	United States	1989	0
	Nattawa	Ontario	Canada	Canada	1989	0
	Nattosan	Ontario	Canada	Canada	1989	00
	OAC Dorado	Ontario	Canada	Canada	1988	I
	OAC Eclipse	Ontario	Canada	Canada	1989	0
	OAC Frontier	Ontario	Canada	Canada	1989	00
	OAC Shire	Ontario	Canada	Canada	1990	I
	OAC Vision	Ontario	Canada	Canada	1991	000
	Parker	Minnesota	United States	United States	1992	I
	Proto	Minnesota	United States	United States	1989	0
	RCAT Persian	Ontario	Canada	Canada	1989	Ĭ
	Sturdy	Minnesota	United States	United States	1989	II
507670	Amurskaja 310	Amur	Russia	Russia	1987	00
507672	Avrora	Unknown	Russia	Russia	1987	00
507673	Belckaja 80	Unknown	Russia	Russia	1987	0
507674	Belosnezka	Unknown	Russia	Russia	1987	00
507675	Beregovcanka	Unknown	Ukraine	Russia	1987	00
507677	Dalnevostocnaja 22	Unknown	Russia	Russia	1987	00
507678	Fakel	Unknown	Russia	Russia	1987	I
	Harkovcanka	Unknown	Russia	Russia	1987	00
07679B	(Harkovcanka)	Unknown	Russia	Russia	1987	00
07680	Iskza	Unknown	Russia	Russia	1987	00
07681A	Jangiabad	Unknown	Uzbekistan	Russia	1987	00
07682	Jantarnaja	Unknown	Russia	Russia	1987	00
07683	Kartuli 7	Unknown	Russia	Russia	1987	I
	Kirovogradskaja 5	Unknown	Ukraine		- / 0 /	•

Table 2.1. Descriptive data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A

_	Maturity						Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
Agassiz	00	N	P	G	E	N	Br	I	Y	Bf		2N
Archer	I	N	P	G	\mathbf{E}	N	Tn	D	Y	Ib		2N
Bell	I	N	P	T	E	N	Tn	S	Y	Bl		2N
Bert	I	N	P	G	\mathbf{E}	N	Br	I	Y	Bf		2N
Black Jet	00	S	P	T	Sa	Ssp	Br	Lb	Bl	B1		2N
Butterbean	I	D	W	T	E	Ssp	Br	D	Lgn	Bl	Vsc	2N
Canatto	00	N	W	G	\mathbf{E}	N	Br	I	Y	Y		2N
Chico	00	N	W	G	E	N	Br	S	Y	Bf		2N
Dassel	0	N	P	G	E	N	Br	S	Y	Y		2N
Envy	0	D	P	T	Ε	N	Br	I	Gn	Brbl		2N
Haroson	I	N	P	G	E	N	Br	D	Y	Bf		2N
HP201	I	N	P	G	E	N	Br	D	Y	Y		2N
HP202	I	N	P	G	E	N	Tn	D	Y	Y		2N
HP203	I	N	W	G	E	N	Tn	D	Y	Y		2N
HP204	I	N	P	G	E	N	Tn	D	Y	Y		2N
Kasota	I	N	W	G	Ε	N	Br	D	Y	Bf		2N
Kato	I	N	P	T	Е	N	Br	S	Y	B1		2N
Lambert	0	N	P	G	Е	N	Br	S	Y	\mathbf{Bf}		3N
eslie	I	N	P	G	\mathbf{E}	N	Tn	I	Y	Ib		2N
Merrimax	0	N	P	G	Ε	N	Tn	I	Y	Bf		2N
Minnatto	0	N	W	G	E	N	Tn	D	Y	Y		2N
Vattawa	0	N	P	G	Sa	N	Br	D	Y	Y		2N
Vattosan	00	N	P	G	E	N	Br	I	Y	Y		2N
OAC Dorado	I	N	P	T	E	N	Br	D	Y	Br		2N
OAC Eclipse	0	N	P	T	Ē	N	Br	D	Ÿ	Br		2N
OAC Frontier	00	N	P	T	E	Ssp	Br	D	Y	Br		2N
DAC Shire	I	N	P	T	E	N	Br	D	Y	Bl		2N
OAC Vision	000	N	P	T	E	N	Br	D	Y	Tn		3N
Parker	I	N	W	G	E	N	Br	D	Y	Bf		3N
Proto	0	N	P	G	E	N	Br	D	Ÿ	Bf		2N
RCAT Persian	I	N	W	G	E	Dn	Br	D	Ÿ	Y		2N
Sturdy	II	N	P	G	Ē	N	Br	S	Ÿ	Ιb		2N
507670	00	N	P	T	E	N	Br	S	Ŷ	Tn		2N
507672	00	N	P	T	E	N	Br	S	Ŷ	G		3N
507673	0	N	W	T	E	N	Br	D	Lg	Bl		2N
507674	00	D	P	Ġ	E	N	Tn	I	Y	Bf		2N
507675	00	D	P	T	E	N	Tn	Ī	Ŷ	Br	Abh	3N
507677	00	N	P	T	E	Ssp	Br	Ī	Y	Tn	Vhil	2N
507678	I	N	W	T	E	N N	Br	Ī	Y	Bl	* 1111	2N
507678 507679A	00	N	P P	T	E	N	Br	I	Y	Bl	Abh	3N
507679A 507679B	00	S	P	T	E	N	Tn	D	Y	Br	Abh	3N
507680	00	S	W	T	E	N	Br	I	Y	Br	Aun	2N
507681A	00	S	P ·	T	E	N	Br	I	Y	Tn		2N 2N
	00		P	T	E	N	Br	S	Y	Y		2N 2N
507682		N N	P P	G	E E	N N	Dbr	S S	Y	Bf	Abh	2N 2N
507683 507685A	I 00	N N	W W	T	E E	N N	Br	S S	Y	Bl	Aun	2N 2N

Table 3.1. Agronomic data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN

	Flowering	Maturity	······································		Stem	Seed			
	date	date	Lodging	Height	termination		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	$(cg sd^{-1})$	(Mg ha ⁻¹)
	620	906	1.5						
Agassiz	630		1.5	71	3.0	1.0	1.0	16.2	2.59
Archer	705	927	2.0	106	3.0	1.5	1.0	18.6	3.32
Bell	710	1001*	1.5	103*	3.0	1.0	1.5	20.8	2.97
Bert	704	925	2.0*	114*	3.0	1.0	1.5	15.5	2.75
Black Jet	628	828	1.0	44	2.0	1.3		20.6	0.91
Butterbean	715	918	1.0	50*	1.0	1.0	1.0	31.3	1.73*
Canatto	627	825*	2.5	74	3.0	1.5	1.0	11.2	1.44
Chico	708	903	2.5	74	3.0	1.0	1.0	13.2	2.28
Dassel	704	913	1.5	76	3.0	1.0	1.0	18.9	2.39*
Envy	710	908	1.5	54	1.0	1.0	1.0	19.7	1.51
Haroson	703	917	2.5	109	3.0	1.0	1.0	16.2	2.76*
HP201	713	925	2.0*	104*	3.0	1.3	1.0	20.8	2.50
HP202	708	925	2.5	106	3.0	1.0	1.0	21.8	2.47*
HP203	709	1002	3.5	110*	3.0	1.0	1.0	23.3	2.42*
HP204	709	925	3.5	104	3.0	1.0	1.0	23.0*	2.51*
Kasota	705	923	1.0	96	3.0	1.0	1.0	16.8	2.85
Kato	708	919	1.5	96*	3.0	1.0	1.0	22.9	2.82
Lambert	702	912	2.0	85	3.0	1.3	1.0	18.1	3.09
Leslie	704	925	2.0	100	3.0	1.0	1.5	18.7	2.91
Merrimax	703	914	1.5	80*	2.5	1.0	1.0	22.6	2.29
Minnatto	705	913	2.0*	72	3.0	1.0	1.0	9.9	1.60
Nattawa	701	902	3.5	64	3.5	1.0	1.0	9.9 7.4	
Nattosan	701	903	3.0	88	2.8	1.0			1.26
OAC Dorado	701	920	2.5	96			1.0	10.0	2.00
OAC Bolado OAC Eclipse	629	912	2.0	90 82	3.0	1.0	1.0	17.2	2.28
OAC Eclipse OAC Frontier	630	904			3.0	1.0	1.0	17.7	2.79
OAC Frontier OAC Shire	704		2.0	64*	3.0	1.0	1.0	15.0	2.33
		919	2.0	80	2.5	1.0	1.0	18.8	3.08*
OAC Vision	626	824	2.0	60	3.0	1.3	1.0	16.7	1.76
Parker	709	920	3.0	124*	3.0	1.3	1.0	17.7	3.16
Proto	703	912	2.0	72	3.0	1.0	1.0	19.3	2.23
RCAT Persian	713	924	3.0	108*	3.0	1.0	1.0	17.4	2.56
Sturdy	711	930	2.5	102	3.0	1.0	1.0	18.7	2.60*
507670	628	903	3.0	78	3.0	1.3	1.0	17.9	2.30
507672	627	828*	3.5	76*	3.0	1.3	3.0	15.3	1.90
507673	703	909	2.0	94	3.0	1.0	1.0	14.7	2.06
507674	704	831	2.0	56*	1.5	1.0	1.0	19.1	1.75*
507675	711	901	2.5	58	1.5	1.0	1.0	14.3	1.77
507677	628	903	2.5	74	3.0	1.5	1.0	17.9	2.27
507678	710	922	2.5	99	2.8	1.0	1.0	16.6	1.86*
507679A	702	906	4.0	84	2.8	1.8*	1.0	16.0	2.17
507679B	703	902	2.5	6 8	2.0	1.0	1.0	15.1	1.74
507680	629	902	3.5	82*	2.0	1.0	1.0	17.7	1.82
507681A	701	903	3.0*	6 8	2.0	1.0	1.0	13.9	2.04
507682	628	904*	3.0	84	3.0	1.0	1.0	17.6	2.11
507683	717	927	1.5	83*	3.0	1.0	1.0	16.2	1.91*
- · · - 	630	906	2.5	72	3.0			10.2	

Table 4.1. Seed composition data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN.

		Seed con	nposition	Oil compo	sition			
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Agassiz	00	42.5	19.5	11.0	3.1	20.7	56.3	9.0
Archer	I	41.4	20.3	10.5	4.0	21.5	54.6	9.4
Bell	Ī	43.0	20.4	10.5	3.2	22.9	54.7	8.6
Bert	Ī	40.2	20.4	11.5	3.8	20.1	55.8	8.8
Black Jet	00	41.5 ^w	17.6 ^w	10.9	3.2	26.1	50.7	9.0
Butterbean	I	42.1	19.3	11.0	3.2	26.3	49.3	10.2
Canatto	00	47.2	15.8	12.1	3.5	20.6	54.6	9.3
Chico	00	45.5	17.3	11.3	3.0	19.3	55.9	10.6
Dassel	0	42.2	21.0	10.5	3.2	25.0	53.1	8.2
Envy	0	46.9 ^w	15.3 ^w	12.2	3.4	20.4	53.4	10.6
Haroson	Ī	41.8	20.4	11.3	3.2	22.7	54.4	8.4
HP201	I	44.3	19.0	9.9	3.3	27.5	51.6	7.7
HP202	I	43.5	19.6	10.5	3.6	24.3	53.0	8.6
HP203	I	43.7	19.4	10.3	3.7	24.3	53.7	8.1
HP204	I	43.9	19.3	10.5	3.3	22.7	55.1	8.5
Kasota	I	44.1	19.8	10.7	3.7	21.4	56.0	8.2
Kasota Kato	I	44.3	19.0	11.2	3.5	22.0	54.9	8.4
Lambert	0	43.4	19.9	10.7	3.8	20.9	56.4	8.2
Leslie	I	41.6	20.6	10.4	4.0	22.1	55.6	7.9
Aerrimax	0	42.2	19.8	10.0	3.2	28.7	49.0	9.0
Minnatto	0	45.1	16.5	12.1	3.2	17.3	57.1	10.3
Villilatto Vattawa	0	44.5	16.9	11.5	3.4	25.9	47.6	11.6
Vattawa Vattosan	00	46.7	17.2	11.1	2.7	27.0	49.9	9.3
OAC Dorado	I	40.2	20.8	10.6	3.2	22.2	54.6	9.4
AC Dolado AC Eclipse	0	40.0	21.7	9.6	3.0	23.2	55.8	8.3
OAC Eclipse OAC Frontier	00	39.4	21.7	9.7	2.9	22.1	56.6	8.7
DAC Shire	I	42.5	20.4	11.0	4.1	23.8	52.9	8.2
OAC Since	000	42.7	18.6	11.8	3.4	23.2	53.2	8.5
		40.9	20.8	10.7	3.9	22.5	54.8	8.1
Parker	I 0	40.9 47.2	20.8 16.7	10.7	3.1	21.8	55.1	8.9
Proto RCAT Persian	I	41.9	20.2	11.2	2.9	23.5	54.1	8.2
	I	42.0	20.2 19.6	10.3	3.5	23.5	54.0	8.7
Sturdy	00	43.2	19.0	10.3	3.0	26.5	51.6	7.8
607670 107672	00	43.2 42.7	19.2	10.5	3.0	21.2	54.0	11.2
507672	0	42.7	20.3	10.3	3.2	25.0	53.2	8.1
507673	00	43.6	20.3 17.9	10.4	2.9	26.9	50.4	9.1
507674 507675	00	43.6 42.7	17.9	10.7	3.1	23.2	51.8	10.4
	00	42.7 44.7	18.4	11.3	3.0	26.7	51.0	8.0
07677 07678	I	44.7	18.4	11.2	3.5	20.7	55.8	8.6
		43.3 44.0	18.6	11.4	3.7	22.0	54.0	9.0
507679A	00 00	44.0 44.0	17.8	11.4	3.7	25.1	51.0	9.4
507679B	00	44.0 44.9	17.8	10.4	3.3	25.6	51.7	9.1
507680 507681 A	00	41.2	19.5	10.4	3.6	22.6	54.1	9.0
507681A	00	43.2	18.6	11.5	3.2	27.6	50.1	7.6
507682 507683	I	43.6	18.8	9.1	3.2	29.7	48.8	9.3
		43.7	18.5	10.3	3.2	28.6	49.1	8.8
607685A	00	43.7	10.3	10.5	5.4	20.0	72.1	0.0

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A.

			_			
		.	Country	Country	Year	
DIA	Accession	Region	of 	of	introduced	
PI No.	name	of origin	origin	acquisition	or released	group
507685B	(Kirovogradskaja 5)	Unknown	Ukraine	Russia	1987	0
507686A	Kisinjevskaja 19	Unknown	Moldova	Russia	1987	I
507686B	(Kisinjevskaja 19)	Unknown	Moldova	Russia	1987	0
507686C	(Kisinjevskaja 19)	Unknown	Moldova	Russia	1987	I
507687A	Krapinka	Unknown	Russia	Russia	1987	00
507687B	(Krapinka)	Unknown	Russia	Russia	1987	00
507688	KSHI 711	Unknown	Moldova	Russia	1987	0
507689	Lumina	Unknown	Russia	Russia	1987	00
507691	Niva	Unknown	Russia	Russia	1987	00
507693	Peremoga	Unknown	Russia	Russia	1987	I
507695	Premera	Unknown	Russia	Russia	1987	I
507696B	(Primorskaja 529)	Primorye	Russia	Russia	1987	II
507697	Ranniaja 10	Unknown	Russia	Russia	1987	I
507698	Rassvet	Unknown	Russia	Russia	1987	000
507700	Seroglazka	Unknown	Russia	Russia	1987	00
507701	Skynteja	Unknown	Russia	Russia	1987	I
507702	Sputnik	Unknown	Russia	Russia	1987	00
507703	Strelka	Unknown	Russia	Russia	1987	00
507704A	Tercinskaja 24	Unknown	Ukraine	Russia	1987	00
507705	Veselka	Unknown	Russia	Russia	1987	00
507706	Veselovskaia 1	Unknown	Russia	Russia	1987	0
507709	VNIIMK 15	Krasnodar	Russia	Russia	1987	I
507710	VNIIS 1	Krasnodar	Russia	Russia	1987	00
507711A	VNIIS 2	Krasnodar	Russia	Russia	1987	00
507711B	(VNIIS 2)	Krasnodar	Russia	Russia	1987	00
507712	Volna	Unknown	Russia	Russia	1987	0
507714	Vzljet	Unknown	Russia	Russia	1987	00
507715A	Zaznica	Unknown	Russia	Russia	1987	0
507715B	(Zaznica)	Unknown	Russia	Russia	1987	00
507717		Unknown	North Korea	Russia	1987	I
511866	Nen feng No. 9	Heilongjiang	China	China	1987	0
511867	Nen feng No. 10	Heilongjiang	China	China	1987	0
511868	Nen feng 11	Heilongjiang	China	China	1987	Ī
511869	Nen feng 12	Heilongjiang	China	China	1987	0
512322A	Imeretinskaja	Unknown	Georgia	Russia	1987	Ī
512322B	(Imeretinskaja)	Unknown	Georgia	Russia	1987	Ī
512322C	(Imeretinskaja)	Unknown	Georgia	Russia	1987	Ī
512323	Kubanskaja 19	Krasnodar	Russia	Russia	1987	0
512324	Saliut 216	Unknown	Russia	Russia	1987	00
514671	Feng shou No. 7	Heilongjiang	China	China	1988	0
514672	Hei he 54	Heilongjiang	China	China	1988	00
518291A	Ta lien tou	Liaoning	China	Taiwan	1988	0
518291C	(Ta lien tou)	Liaoning	China	Taiwan	1988	I
518702	Feng shou 19	Heilongjiang	China	China	1988	0
518703	He feng 25	Heilongjiang	China	China	1988	Ī
518704	Hei he No. 5	Heilongjiang	China	China	1988	00

Table 2.1. Descriptive data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A

	Maturity						Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
507685B	0	N	W	Lt	E	N	Br	S	Y	Bl		2N
507686A	I	N	W	T	E	N	Br	D	Y	Bl		3N
507686B	0	D	W	T	E	N	Br	D	Y	Br		3N
507686C	I	N	P	T	E	N	Br	D	Y	Brbl		3N
507687A	00	N	P	T	E	N	Br	S	Y	G		2N
507687B	00	N	P	T	E	N	Br	I	G	G		2N
507688	0	D	P	T	E	N	Br	I	Br	Br	Abh	2N
507689	00	N	P	T	E	N	Br	I	Y	Bl		2N
507691	00	S	P	T	E	N	Br	S	Y	Br		2N
507693	I	N	P	T	\mathbf{E}	N	Tn	D	Y	Tn	Abh,Vhil	4N
507695	I	S	P	T	E	N	Br	D	Y	Tn		2N
507696B	II	N	W	G	E	N	Br	I	Y	Y		2N
507697	I	N	P	T	E	N	Br	S	Y	Br		2N
507698	000	N	P	T	\mathbf{E}	N	Br	I	Y	Tn		4N
507700	00	N	P	T	\mathbf{E}	N	Br	I	Y	G		2R
507701	I	N	W	T	E	N	Br	D	Y	Br		2N
507702	00	N	P	T	\mathbf{E}	N	\mathbf{Br}	I	Y	Lbr		2N
507703	00	N	P	T	E	N	Br	I	Y	Tn		2N
507704A	00	N	P	T	\mathbf{E}	N	Br	S	Y	Br		3N
507705	00	D	P	T	\mathbf{E}	N	Br	I	Y	Y		3N
507706	0	D	P	T	E	N	Br	I	Y	Br		2N
507709	I	D	P	T	E	N	Br	S	Y	Bl	Abh	3N
507710	00	N	P	T	E	N	Br	I	Y	Tn		2N
507711A	00	N	P	T	E	N	Br	I	Y	Y		2N
507711B	00	N	P	T	E	N	Br	I	Y	Y		2N
507712	0	D	P	T	E	N	Br	S	Y	Bl		3N
507714	00	N	P	T	E	N	Br	D	Y	Tn		3N
507715A	0	N	W	T	E	N	Br	S	Y	Br		2N
50771 <i>5</i> B	00	D	P	T	E	N	Br	I	Y	Br	Abh	2N
507717	I	N	P	T	Sa	Ssp	Tn	D	Y	Tn		3N
511866	0	S	W	G	E	N	Br	I	Y	Bf		2R
511867	0	N	W	G	E	N	Br	I	Y	Lbf	Na	1R
511868	I	N	W	G	E	N	Br	I	Y	Lbf	Na	1R
511869	0	S	W	G	E	N	Br	I	Y	Lbf	Na	1N
512322A	I	N	P	T	E	N	Br	I	Y	Brbl		4N
512322B	I	N	W	T	E	N	Br	D	Y	Brbl		3N
512322C	I	N	W	T	E	N	Br	S	Y	Brbl		4N
512323	0	N	P	T	E	N	Br	D	Y	Br		3N
512324	00	N	P	T	E	Ssp	Br	D	Y	Y		3N
514671	0	N	P	G	E	N	Br	I	Y	Y		3N
514672	00	S	P	G	E	N	Br	D	Y	Y		2N
518291A	0	N	W	G	E	N	Br	I	Y	Bf		2N
518291C	Ι	N	W	G	E	N	Br	I	Y	Bf		1N
518702	0	N	P	G	E	N	Br	I	Y	Y	Na	2N
518703	I	D	W	G	E	Ssp	Br	D	Y	Y	Na	2N
518704	00	D	P	G	E	N	Br	D	Y	Y		2N

Table 3.1. Agronomic data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN

	Flowering	Maturity			Stem	Seed			
	date	date	Lodging	Height	termination		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)		(Mg ha ⁻¹)
507685B	701	911	4.0	94	3.0	1.3	1.0	17.2	2.05
507686A	703	918	4.0	110*	3.5	1.3	1.0	18.6	2.72*
507686B	709	915	3.5	78	1.5	1.0	1.0	16.7	1.69
507686C	704	916	5.0	117*	3.5	1.8	1.0	18.0	1.68*
507687A	628	830	2.5	65	3.0	1.3	3.0	16.0	1.69
507687B	630	901	3.5	80	3.0	1.0	3.5	16.5	1.88
507688	705	910	4.0	58	1.0	1.3		9.4	1.28
507689	702	905	3.0*	84	2.5	1.3	1.0	18.1	2.20
507691	629	830	3.0	78	2.0	1.3	1.0	13.6	1.81
507693	708	917	3.5	108*	3.0	1.5	1.0	17.1	2.22
507695	708	923	3.0	88	2.0	1.8	1.0	19.3	2.25*
507696B	720	1003	4.5	90	3.0	1.0	1.0	22.0	2.03*
507697	715	921	2.5	79*	3.0	1.0	1.0	13.6	1.91*
507698	626	820	2.0*	68	3.0	1.3	1.0	14.2	0.86
507700	626	829	2.0*	64	3.0	1.3	3.0*	14.6	1.32
507701	712	918	2.5	86	3.0	1.3	1.0	13.8	2.16*
507702	626	828	2.5	68	3.0	1.5	1.0	17.4	1.77
507703	701	830	1.5	56	3.0	1.0	1.0	17.9	2.07
507704A	629	901	2.5	76	2.8	1.0	1.0	13.4	1.81
507705	630	901	3.5	72	1.5	1.3	1.0	14.6	2.36
507706	702	911	2.0*	60*	1.5	1.0	1.0	15.7	2.56
507709	713	922	2.5	75	1.5	1.0	1.0	16.3	2.55
507710	629	901	2.0	80	3.0	1.0	1.0	17.6	2.29
507711A	630	829*	2.0	72	3.0	1.3	1.0	15.0	1.68
507711B	626	830*	2.0	78	3.0	1.0	1.0	18.1	1.85
507712	701	911	3.5	82	1.5	1.0	1.0	17.5	1.84
507714	630	828*	2.0	68	3.0	1.0	1.0	18.2	2.31
507715A	630	906*	3.5	98*	4.0	1.0	1.0	18.2	1.76
507715B	703	903	3.5	72	1.5	1.0	1.0	15.4	1.70
507717	714	922	4.5	102	3.5	1.0	1.0	18.2	2.10
511866	704	912	1.5	71*	2.0	2.0	1.0	20.6	1.99
511867	702	912	2.0	69	3.0	1.3	1.0	19.5	2.41
511868	706	921	1.5	90*	3.3*	1.0	1.0	21.2	2.74
511869	630	910	2.5	54	2.0	1.3	1.0	16.7	2.74
512322A	712	918	4.5	102*	2.8	1.5	1.0	17.6	2.02
512322R 512322B	712	925	3.0	102	3.0	1.3	1.5		1.74
512322B 512322C	719	923	5.0	100	2.5	1.3		14.8 15.3	1.74
512322	703	923	2.5	72	3.0		1.0		
						1.0	1.0	16.9	2.82
512324 514671	630 709	901 913	2.0	74 86	3.0	1.3	1.0	17.0	2.18
	630	913	2.5		3.0	1.0	1.0	21.7	2.50
514672			1.5	54 02	1.5	1.0	1.0	20.0	1.78
518291A	701 700	916	3.5	92	2.5	1.3	1.0	17.0	2.22
518291C	709	925	2.5	114*	2.5	1.0	1.0	17.0	2.14
518702	705	912	2.0	84	3.0	1.8	1.0	20.6	2.49
518703	705	916	1.0	72	1.0	1.0	1.0	19.6	2.22
518704	630	904	1.5	64	1.5	1.3	1.0	21.8	2.25

Table 4.1. Seed composition data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN.

Entry group (%) (%) (%) (%) (%) (%) (%) (%) (%) 507685B 0 43.8 18.8 10.4 3.3 27.5 49.5 9.507686A I 42.7 19.8 11.1 3.2 21.6 55.9 8.507686B 0 42.5 19.4 12.5 3.5 17.1 57.1 9.507686C I 43.0 19.3 11.4 3.5 22.4 54.0 8.507687A 00 42.8 19.1 12.6 4.1 21.7 50.4 11.507687B 00 43.9 18.5 11.2 3.0 26.0 50.8 9.507688 0 41.9 16.0 12.2 3.6 16.1 56.8 11.507689 00 44.6 19.0 10.5 3.6 23.4 52.9 9.507691 00 42.8 19.2 10.8 3.1 23.7 53.1 9.507691	2.3 2.8 3.6 .2 2.0
Entry group (%) (%) (%) (%) (%) (%) (%) (%) (%) (%)	6) 2.3 3.3 2.8 3.6 .2 2.0
507685B 0 43.8 18.8 10.4 3.3 27.5 49.5 9.5 507686A I 42.7 19.8 11.1 3.2 21.6 55.9 8.5 507686B 0 42.5 19.4 12.5 3.5 17.1 57.1 9.5 507687A 00 42.8 19.1 12.6 4.1 21.7 50.4 11.5 507687B 00 43.9 18.5 11.2 3.0 26.0 50.8 9.5 507688 0 41.9 ^w 16.0 ^w 12.2 3.6 16.1 56.8 11.5 507689 00 44.6 19.0 10.5 3.6 23.4 52.9 9.5 507691 00 42.8 19.2 10.8 3.1 23.7 53.1 9.5	3.3 3.8 3.6 .2 2.0
507686A I 42.7 19.8 11.1 3.2 21.6 55.9 8 507686B 0 42.5 19.4 12.5 3.5 17.1 57.1 9 507686C I 43.0 19.3 11.4 3.5 22.4 54.0 8 507687A 00 42.8 19.1 12.6 4.1 21.7 50.4 11 507687B 00 43.9 18.5 11.2 3.0 26.0 50.8 9 507688 0 41.9 ^w 16.0 ^w 12.2 3.6 16.1 56.8 11 507689 00 44.6 19.0 10.5 3.6 23.4 52.9 9 507691 00 42.8 19.2 10.8 3.1 23.7 53.1 9	3.3 3.8 3.6 .2 2.0 .4
507686B 0 42.5 19.4 12.5 3.5 17.1 57.1 9.5 507686C I 43.0 19.3 11.4 3.5 22.4 54.0 8.5 507687A 00 42.8 19.1 12.6 4.1 21.7 50.4 11.5 507687B 00 43.9 18.5 11.2 3.0 26.0 50.8 9.5 507688 0 41.9 ^w 16.0 ^w 12.2 3.6 16.1 56.8 11.5 507689 00 44.6 19.0 10.5 3.6 23.4 52.9 9.5 507691 00 42.8 19.2 10.8 3.1 23.7 53.1 9.5	2.8 3.6 .2 2.0 .4
507686C I 43.0 19.3 11.4 3.5 22.4 54.0 8 507687A 00 42.8 19.1 12.6 4.1 21.7 50.4 11 507687B 00 43.9 18.5 11.2 3.0 26.0 50.8 9 507688 0 41.9 ^w 16.0 ^w 12.2 3.6 16.1 56.8 11 507689 00 44.6 19.0 10.5 3.6 23.4 52.9 9 507691 00 42.8 19.2 10.8 3.1 23.7 53.1 9	3.6 .2 9.0 .4
507687A 00 42.8 19.1 12.6 4.1 21.7 50.4 11 507687B 00 43.9 18.5 11.2 3.0 26.0 50.8 9 507688 0 41.9** 16.0** 12.2 3.6 16.1 56.8 11 507689 00 44.6 19.0 10.5 3.6 23.4 52.9 9 507691 00 42.8 19.2 10.8 3.1 23.7 53.1 9	.2 2.0 .4
507687B 00 43.9 18.5 11.2 3.0 26.0 50.8 9 507688 0 41.9 ^w 16.0 ^w 12.2 3.6 16.1 56.8 11 507689 00 44.6 19.0 10.5 3.6 23.4 52.9 9 507691 00 42.8 19.2 10.8 3.1 23.7 53.1 9	0.0 4
507688 0 41.9 ^w 16.0 ^w 12.2 3.6 16.1 56.8 11 507689 00 44.6 19.0 10.5 3.6 23.4 52.9 9 507691 00 42.8 19.2 10.8 3.1 23.7 53.1 9	.4
507689 00 44.6 19.0 10.5 3.6 23.4 52.9 9 507691 00 42.8 19.2 10.8 3.1 23.7 53.1 9	
507691 00 42.8 19.2 10.8 3.1 23.7 53.1 9	1.6
307071	
).7
307033	7. 7 3.8
201020	
3070902	3.7
507697 I 43.2 17.9 11.6 3.4 17.3 57.5 10).2).7
307070	3.4
507700	3.4 3.2
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	9.6
307702	
507703 00 43.5 19.1 11.5 3.4 21.7 53.1 10	
30770111	3.0
307703	9.0
307700	3.8
507709 I 42.9 18.5 9.7 3.1 21.8 55.0 10	
307710	3.4
30771111).2 7.0
307711B	7.9
307712	3.0
).2 9.5
30771311	
3077102).8
	9.0
	7.8
	7.5 7.7
311000	
311007	3.9
31232211	3.2
3123225	9.0
3123220	3.4
	9.8
	3.5
311071	9.1
311072	9.2
	3.4
	3.9
510702	7.4
510705	3.9 3.8
518704 00 42.7 19.7 11.8 3.1 24.0 52.4 8	

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	
518705	Hei nong 28	Heilongjiang	China	China	1988	0
	Hei nong 29	Heilongjiang	China	China	1988	I
518706B	(Hei nong 29)	Heilongjiang	China	China	1988	0
518706C	(Hei nong 29)	Heilongjiang	China	China	1988	I
518707	Sui nong No. 7	Heilongjiang	China	China	1988	I
518709	Jilin 18	Jilin	China	China	1988	I
518710	Jilin 20	Jilin	China	China	1988	I
518750	NS-16	Serbia	Yugoslavia	Yugoslavia	1988	I
518752	NS-106	Serbia	Yugoslavia	Yugoslavia	1988	I
518753	NS-L-30	Serbia	Yugoslavia	Yugoslavia	1988	I
518754	NS-L-118	Serbia	Yugoslavia	Yugoslavia	1988	I
518758	Kaohsiung 1	Kaohsiung	Taiwan	Taiwan	1988	I
518829	Domaca	Unknown	Hungary	Japan	1988	0
518830	Domestic Novi Sad	Serbia	Yugoslavia	Japan	1988	00
518831	Grignon 21	Unknown	France	Japan	1988	0
522186	Arkadia Odessaja	Unknown	Ukraine	Russia	1988	0
522187	Krasnogradskaja 1	Unknown	Ukraine	Russia	1988	000
522188A	VNIIMK 3985	Krasnodar	Russia	Russia	1988	I
522188B	(VNIIMK 3985)	Krasnodar	Russia	Russia	1988	0
522189		Unknown	Moldova	Russia	1988	I
522190		Unknown	Moldova	Russia	1988	I
522192A		Unknown	Moldova	Russia	1988	0
522192B		Unknown	Moldova	Russia	1988	0
524994	Vengerka	Unknown	Russia	Russia	1988	I
532436A	He feng No. 6	Heilongjiang	China	China	1988	00
532436B	(He feng No. 6)	Heilongjiang	China	China	1988	0
532438	Bei liang 11	Jilin	China	China	1988	00
532439	Fusong you xian bai hua	Jilin	China	China	1988	I
532441A	Hui nan do lan qi	Jilin	China	China	1988	I
	Gong peng mo shi dou	Jilin	China	China	1988	Ī
532445	Bei feng No. 1	Jilin	China	China	1988	000
532446	Bei feng No. 2	Jilin	China	China	1988	00
532447	Chang bai yue huang	Jilin	China	China	1988	I
532454	Tai xing hei dou	Jiangsu	China	China	1988	0
532467	Hidaka	Unknown	Japan	Japan	1989	000
532468	Karikachi 3	Unknown	Japan	Japan	1989	I
32469	Kitamidori	Unknown	Japan	Japan	1989	Ī
532471	Shiretoko	Unknown	Japan	Japan	1989	Ī
38388	Early Brown	Hokkaido	Japan	Japan	1989	Ī
38391	Nigra	Hokkaido	Japan	Japan	1989	0
38392	An tu dang di hei dou	Jilin	China	China	1989	I
38393	Jilin No. 1	Jilin	China	China	1989	I
38395	Jilin 13	Jilin	China	China	1989	0
38398	Jiu nong No. 8	Jilin	China	China	1989	I
	Kegon	Unknown	Japan	Japan	1989	I
	Natsunoka	Unknown	apan	Jupun	1707	0

Table 2.1. Descriptive data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A

	Maturity	Stem	Flower	Pubes	cence		Pod	Seedco	at	Hilum		Seed
Entry	group	term.	color			Density				color	Other traits	shape
518705	0	S	P	G	Е	Ssp	Br	D	Y	Bf	Na	2N
518706A	I	N	W	G	E	N .	Br	I	Y	Bf	Na	2N
518706B	0	S	P	G	E	Ssp	Br	D	Y	\mathbf{Bf}	Na	2N
518706C	I	N	W	G	E	N	Br	I	Y	\mathbf{Bf}	Na	2N
518707	Ī	S	W	G	E	Ssp	Br	I	Y	Y	Na	1N
518709	Ī	S	W	Ğ	Ē	Ssp	Br	S	Y	Y	Na	2N
518710	Ī	S	P	Ğ	E	N	Br	S	Y	Y	Na	2N
518750	Ī	N	P	Ğ	Ē	N	Br	S	Y	Lbf		2N
518752	Ī	N	P	Ğ	Ē	N	Br	D	Y	Bf		2N
518752	I	N	P	G	E	N	Br	D	Ÿ	Bf		2N
518754	I	N	P	G	E	N	Tn	Ī	Ÿ	Bf		3N
518754	I	D	P	G	Sa	N	Br	Ī	Ÿ	Y		2N
518738	0	N	P	T	E	N	Br	S	Ŷ	Brbl	Abh	2N
	00	S	P	T	E	N	Tn	I	Y	Br	Abh	2N
518830	0	S N	P	T	E	N	Bl	S	Y	Br		3N
518831	0	D	P	T	E	N	Br	S	Y	Br	Abh	2N
522186	000	N	P	G	E	N	Tn	D	Y	Y	11011	3N
522187		D	r P	T	E	N	Br	S	Y	Brbl	Abh	3N
522188A	I		W	T	E	N	Br	S	Y	Brbl	Abh	3N
522188B	0	D		G	E	N	Br	S	Y	Ib	Aon	2N
522189	I	S	P	T	E	N	Br	I	Y	Bl		2N
522190	I	N	P				Br	S	Bl	Bl		2N
522192A	0	N	W	T	E	Ssp		S S	Bl	Bl		3N
522192B	0	N	W	T	E	Ssp	Br		Y		Abh	2N
524994	I	N	P	T	E	N	Br	D		Br	Na	2N 2N
532436A	00	S	W	G	E	N	Br	I	Y	Y		2N 2N
532436B	0	N	W	G	E	N	Br	S	Y	Lbf	Vhil	
532438	00	N	P	G	E	N	Br	I	Y	Y	Na	2N
532439	I	D	W	G	E	Ssp	Br	S	Y	Y		2N
532441A	I	N	P	G	E	N	Br	I	Y	G		2N
53 2 444A	I	N	P	Lt	E	N	Br	S	Br	Br	2.7	4F
532445	000	N	P	G	E	N	Br	S	Y	Y	Na	2N
532446	00	N	P	G	E	N	Br	I	Y	Y	Sabh,Na	2N
532447	I	S	P	G	E	N	Tn	I	Y	Lbf	Vhil	2N
532454	0	D	W	T	Sa	N	Tn	I	Bl	B1		3N
532467	000	D	P	T	E	Ssp	Br	I	Y	Br		2N
532468	I	D	W	G	Sa	Ssp	Br	D	Gn	Lbf		2N
532469	I	D	W	T	E	Ssp	Br	D	Gn	Bl		3N
532471	I	D	W	G	E	N	Br	D	Gn	Gn		2N
538388	I	N	P	T	E	N	Br	D	Br	Br		3N
538391	0	N	W	T	E	N	Br	S	Bl	Bl		2N
538392	I	N	P	T	E	Ssp	Br	S	Bl	Bl		3N
538393	I	N	W	G	E	Ssp	Br	S	Y	Lbf	Vhil,Na	1N
538395	0	D	W	G	E	N	Tn	S	Y	\mathbf{Bf}	Na	2N
538398	I	S	W	G	E	N	Br	I	Y	Lbf	Vhil	1N
538403	I	D	W	G	Α	N	Br	D	Y	Y		2N
538404	0	D	P	T	E	Ssp	Br	I	Y	Br		2N

Table 3.1. Agronomic data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN

	Flowering	Maturity			Stem	Seed			****
	date	date	Lodging	Height	termination		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)		(Mg ha ⁻¹)
518705	703	914	3.0	92	2.0	1.3	1.5	17.2	2.33
518706A	706	920	3.0	96	2.8	1.5	1.0	21.1	2.69*
518706B	703	914	2.5	88	2.0	1.0	1.0	17.8	2.54*
518706C	706	922	1.5	85	2.0	1.0	1.0	19.4	3.16
518707	702	918	2.0	84	2.0	1.3	1.5	20.3	2.42*
518709	713	1002	2.0*	90	1.5	1.0	1.0	18.2	1.98
518710	711	930	2.5	94*	1.5	1.0	1.0	19.8	2.41
518750	702	914	2.0*	81*	3.0	1.0	1.0	16.8	2.30*
518752	706	917	2.5	88	3.0	1.0	1.0	14.7	2.41*
518753	702	916	3.0*	104*	3.0	1.0	1.0	17.7	3.17
518754	710	919	3.0	94	2.5	1.0	1.0	17.5	2.25*
518758	714	920	2.5	62	1.0	1.0	1.0	36.8	2.54*
518829	703	912	3.5	80	2.5	1.0	1.0	14.4	1.59
518830	702	908	4.0	71*	2.0	1.5	1.0	11.9	1.62
518831	630	907	3.5*	69	3.0	1.5	2.0	14.8	2.23
522186	706	911	2.5	76	1.0	1.0	1.0	16.1	2.38*
522187	629	827	4.0	78	3.0	1.0	1.0	17.6	1.65
522188A	713	918	2.5	84	1.0	2.0*	1.0	16.5	1.77*
522188B	709	915	2.0	75	1.0	2.0*	1.0	16.5	1.90*
522189	718	928	4.0	100	2.0	1.0	1.0	15.6	1.93*
522190	714	925	3.5	113	3.0	1.0	1.0	17.4	2.19*
522192A	706	910	2.0	90	3.0	1.0		14.3	1.93
522192B	708	911	2.5	78*	3.0	1.0		15.1	2.35
524994	715	919	4.0*	57	2.5	1.0	1.0	10.4	1.59*
532436A	702	908	3.5	68	1.5	1.0	1.0	19.3	2.18
532436B	704	913	3.5	79*	3.0	1.0	1.0	17.6	2.01*
532438	701	907	2.0	88	3.0	1.5	1.0	22.8	2.04
532439	716	929	1.5	66*	1.0	1.0	1.0	19.6	2.30
532441A	718	1002	3.5	138*	3.0	1.0	1.0	16.0	2.06
532444A	731	1002	4.0*	132*	3.0	1.3		9.6	1.11*
532445	626	826*	1.5	60	3.0	1.0	1.0	19.8	1.64
532446	626	830	1.5	54	3.0	1.0	1.0	21.7	1.90
532447	712	930*	5.0	96	2.0	1.0	1.0	15.7	2.58
532454	718	914	3.0*	72	1.0	1.3		16.0	1.67
532467	626	822	1.0	42	1.0	1.8	1.0	25.1	1.70
532468	713	920	2.0	60	1.0	1.0	1.0	34.5*	2.00*
532469	714	918	1.5	46	1.0	1.3	1.0	30.5	2.20*
532471	717	923	2.0*	68	1.0	1.0	1.0	30.1	2.13
538388	717	922	4.5	103*	3.0	1.5		17.9	1.86
538391	702	911	3.0	88	3.0	1.3		20.0	2.09
538392	716	921	2.5	106	3.0	1.0			2.17
538393	711	1002*	4.0	116	2.8	1.0	1.0	19.8	1.98*
538395	702	914	2.0*	79	1.5	1.3	1.0		2.30
538398	713	929	3.5	110	2.0	1.8	2.0		1.96
538403	714	924	1.0	40	1.0	1.0	1.0		1.86

Table 4.1. Seed composition data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN.

		Seed con		Oil compo				
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)
518705	0	41.5	20.7	10.6	4.1	27.6	49.6	8.1
518706A	I	41.7	20.8	10.2	3.3	35.0	44.5	6.9
518706R 518706B	0	42.6	19.6	10.8	4.0	26.6	50.3	8.3
518706C	Ī	42.6	20.4	10.9	3.6	24.0	53.3	8.2
518707	Ī	41.5	20.1	12.5	3.2	21.7	53.2	9.4
518709	Ī	45.6	17.8	11.1	2.8	24.0	53.3	8.8
518710	Ī	39.7	19.8	11.1	3.6	26.8	49.8	8.7
518750	Î	41.3	20.0	11.6	3.9	22.4	53.0	9.1
518752	Ī	41.2	20.2	11.3	3.1	20.7	55.7	9.2
518753	Ī	42.7	20.0	11.1	3.1	21.8	55.1	8.9
518754	Ī	42.1	20.1	11.7	4.0	25.9	49.1	9.3
518758	I	41.6	19.9	11.1	3.2	25.6	49.8	10.3
518829	0	42.0	18.9	11.6	3.2	24.5	52.0	8.7
518830	00	43.2	17.9	12.2	3.4	21.7	54.1	8.6
518831	0	44.2	16.4	12.9	2.7	21.8	52.1	10.5
522186	0	44.1	18.9	10.3	3.0	23.5	54.5	8.7
522180	000	42.7	18.9	10.9	3.3	26.8	50.3	8.7
522187 522188A	I	44.2	17.7	9.4	3.5	31.8	46.5	8.8
522188B	0	44.0	18.7	9.3	3.3	31.0	47.6	8.9
	I	42.7	18.5	10.7	3.3	22.4	54.2	9.3
522189	I	45.0	18.3	10.6	4.0	21.2	55.4	8.9
522190	0	43.8 ^w	16.8 ^w	12.5	3.1	22.5	53.5	8.4
522192A	0	42.5 ^w	10.3 17.4 ^w	12.5	3.2	22.8	53.5	8.0
522192B	I ·	42.3	18.7	12.1	3.2	16.3	57.9	10.5
524994	00	41.7	19.9	10.7	3.1	25.5	51.8	8.9
532436A	0	41.7	20.9	11.1	3.5	23.6	53.3	8.5
532436B	00	43.7	17.6	10.7	3.0	33.3	44.8	8.1
532438	I	41.0	17.6	11.4	3.2	21.4	52.7	11.3
532439		45.4	18.1	11.3	3.2	25.8	51.3	8.4
532441A	I I	43.4 43.3 ^w	18.1 18.8 ^w	10.2	3.7	23.6	53.6	8.8
532444A		43.3 43.0	19.7	10.2	3.6	24.8	52.6	7.6
532445	000	43.0 42.3	20.0	11.4	3.6	24.6	51.8	8.2
532446	00	42.3 42.4	20.0 18.9	10.6	3.0	19.9	56.7	9.6
532447	I	42.4 47.3 ^w	18.9 16.8 ^w	10.5	3.6	24.2	51.9	9.8
532454	0		18.9	10.3	3.3	31.0	46.1	8.6
532467	000	43.4 40.8	18.9	10.0	3.3 2.7	30.8	46.2	10.2
532468	I	40.8 41.6 ^w	18.9 19.6 ^w	10.0	3.3	26.9	48.5	10.2
532469	I				3.3 3.4	26.5	47.3	10.3
532471	I	42.0 ^w	17.8 ^w	11.6 12.3	3.4 3.4	20.3	53.2	10.4
538388	I	44.1 ^w	17.1 ^w	12.3	3.4 3.9	26.7 26.7	53.2 52.1	7.2
538391	0	42.8 ^w	18.3 ^w		3.9	20.7	54.6	8.3
538392	I	46.8 ^w	17.0 ^w	10.7		22.8 25.7	54.6 51.2	8.3 8.2
538393	I	41.6	19.3	11.6	3.3		51.2 45.7	8.2 7.5
538395	0	42.0	18.7	10.0	3.6	33.2	45.7 47.7	7.3 7.7
538398	I	42.9	20.1	10.4	3.6	30.6		10.9
538403	I	44.3	18.2	11.9	2.7	22.7	51.8	
538404	0	41.7	19.5	10.7	2.7	29.5	47.9	9.1

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	
538405	Oosodefuri	Unknown	Japan	Japan	1989	I
538406	Sapporo midori	Hokkaido	Japan	Japan	1989	00
538407	Shirofumi	Unknown	Japan	Japan	1989	I
538408	Shirofusa	Unknown	Japan	Japan	1989	00
538409	Shironomai	Unknown	Japan	Japan	1989	I
538410A	Tengamine	Unknown	Japan	Japan	1989	Ī
538410B	(Tengamine)	Unknown	Japan	Japan	1989	Ī
540739	An tu bai chang lu dou	Jilin	China	China	1990	Ī
540740	Hatsutaka	Unknown	Japan	Japan	1990	I
549049A	Primorskaja	Primorye	Russia	Russia	1990	I
549049B	(Primorskaja)	Primorye	Russia	Russia	1990	I
549050	Avak 33	Unknown	Russia	Russia	1990	00
549051A	Haborovskaja	Primorye	Russia	Russia	1990	00
549051B	(Haborovskaja)	Primorye	Russia	Russia	1990	00
549052	Primorskaja 13	Primorye	Russia	Russia	1990	0
549054	Ao 75	Unknown	Japan	Japan	1990	00
49055	Ezomidori	Unknown	Japan	Japan	1990	I
49057A		Unknown	Japan	Japan	1990	I
49057B	(Hakucho)	Unknown	Japan	Japan	1990	I
49060	Hokuei shiroge	Unknown	Japan	Japan	1990	0
49061	Ichiriki	Unknown	Japan	Japan	1990	00
49066	Kitanosuzu	Unknown	Japan	Japan	1990	I
49067	Misono Green	Unknown	Japan	Japan	1990	I
49068	Ryokushin	Unknown	Japan	Japan	1990	I
49069	Shiro jishi	Unknown	Japan	Japan	1990	0
49070	Shirokuma	Unknown	Japan	Japan	1990	0
49071	Tamasudake	Unknown	Japan	Japan	1990	II
49072	Yukimusume	Unknown	Japan	Japan Japan	1990	
49073	Hei feng 22	Heilongjiang	China	China	1990	I 0
49074	Hei he No. 2	Heilongjiang	China	China		
49075	Hei he No. 3	Heilongjiang	China	China	1990 1990	00
	Hong feng No. 3	Heilongjiang	China	China	1990	00
49076B	(Hong feng No. 3)	Heilongjiang	China	China	1990	00 0
49078	Jiu feng No. 2	Heilongjiang	China	China	1990	
49079	Jiu feng No. 3	Heilongjiang	China	China		00
49080	Jiu feng No. 4	Heilongjiang	China	China	1990	00
61227	ora rong rvo. v	Beijing	China	China	1990 1991	00
61228		Beijing	China	China	1991	II
61229		Beijing	China	China		I
61231		Beijing	China	China	1991 1991	I
51232		Beijing	China	China	1991	I
51234		Beijing Beijing	China China	China China		I
61235		Beijing Beijing	China	China China	1991	II
51236		Beijing Beijing	China China	China China	1991	I
		Deiling	Cillia		1991	II
51237		Beijing	China	China	1991	I

Table 2.1. Descriptive data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A

	Maturity	Stem	Flower				Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
538405	I	D	W	T	E	Ssp	Br	D	Gn	Bl		2N
538406	00	D	W	G	E	Ssp	Br	D	Gn	Lbf		1R
538407	I	D	W	G	E	N	Br	D	Gn	Lbf	Vhil	2N
538408	00	D	W	G	Sa	Ssp	Br	D	Gn	Lbf		1N
538409	I	D	P	G	E	N	Br	I	Y	Y		1N
538410A	I	D	W	G	E	Ssp	Br	D	Gn	\mathbf{Bf}		2N
538410B	I	D	W	G	E	N	Br	D	Gn	Bf		2N
540739	I	D	W	T	E	N	Dbr	D	Gn	Lbr	Gnc,Vhil	2N
540740	I	D	W	T	E	N	Br	D	Gn	Bl		2N
549049A	I	N	P	T	E	N	Br	D	Y	Tn		2N
549049B	I	D	P	T	E	N	Br	D	Y	Tn		2N
549050	00	N	P	T	\mathbf{E}	N	Br	I	Y	Tn		2N
549051A	00	N	P	T	E	N	Br	I	Y	Tn	Na	2N
549051B	00	N	P	T	E	. N	Br	D	Y	Tn		2N
549052	0	N	P	T	E	N	Br	I	Lg	G		2N
549054	00	D	W	G	Е	N	Br	I	Lgn	Lbf		2N
549055	I	D	W	G	Е	Ssp	Br	D	Gn	Lbf		2N
549057A	I	D	W	T	Е	N	Br	D	Gn	Bl		2N
549057B	Ī	D	W	T	Е	Ssp	Br	D	Gn	Bl		2N
549060	0	D	W	G	E	Ssp	Br	D	Gn	Lbf		2N
549061	00	D	W	G	E	N	Br	I	Lgn	Lbf		2N
549066	I	D	W	G	Sa	Ssp	Br	I	Lgn	Lgn	Vhil,Vsc	2N
549067	Ī	D	W	G	E	Ssp	Br	D	Ϋ́	Lbf	Vhil	2N
549068	Ī	D	W	G	Ε	N	Br	D	Gn	Gn		2N
549069	0	D	W	G	Ε	N	Br	D	Gn	Lbf		2N
549070	0	D	W	G	E	N	Br	D	Gn	Lbf		2N
549071	II	D	W	G	Α	N	Tn	I	Y	\mathbf{Bf}		2N
549072	I	D	W	G	E	N	Br	D	Gn	Gn	Sdef	2N
549073	0	S	W	G	E	N	Tn	D	Y	Lbf	Sdef	2N
549074	00	S	P	G	E	N	Br	S	Y	Y	Na	2N
549075	00	N	W	G	E	Ssp	Br	S	Y	Y	Na	2N
549076A	00	N	W	G	Ε	N	Br	S	Y	Lbf	Vhil,Na	2N
549076B	0	D	W	G	Е	N	Br	S	Y	Lbf	Vhil,Na	2N
549078	00	N	P	Ğ	E	Ssp	Br	S	Y	Y	Na	2N
549079	00	N	P	Ğ	E	N	Br	S	Y	Y	Vhil,Na	2N
549080	00	D	P	G	E	N	Br	S	$\dot{\mathbf{Y}}$	Bf	Na	2N
561227	II	N	W	G	Ē	Ssp	Br	Ď	Rbf	Rbf		2N
561228	I	N	P	G	Ē	N N	Dbr	D	Y	Bf	Na	2N
561229	I	N	P	G	E	N	Br	I	Ÿ	Bf	Na	2N
561231	I	D	P	G	E	N	Lbr	Ī	Ÿ	Bf		2N
561232	I	N	w	G	E	Ssp	Br	Ī	Ÿ	Lbf	Vhil,Sdef	1N
561234	II	N	w	G	E	Ssp	Br	Ī	Ÿ	Lbf	Vhil	1N
561235	I	N	w	G	E	Ssp	Br	Ī	Ÿ	Lbf	Vhil	1N
561236	II	N	w	G	E	Ssp	Br	Ī	Ÿ	Lbf	Vhil	1N
561237	I	N	W	G	E	N N	Br	Ī	Ŷ	Lbf	Vhil,Na	1R
JU1437	1	14	W	G	E	N	Tn	S	Y	Lbf	Vhil	2N

Table 3.1. Agronomic data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN

	Flowering	Maturity			Stem	Seed			
	date	date	Lodging	Height	termination	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	$(cg sd^{-1})$	
538405	704	917	1.5	56	1.5	1.0	1.0	28.8	
538406	630	905	1.0	34	1.0	1.3	1.0		2.20
538407	714	920	2.0	54	1.0	1.8		32.0	1.49
538408	704	906	1.0	3 4 37	1.0		1.0	36.7	2.30*
538409	713	919	2.0	57 52		1.0	1.0	30.1	1.31
538409 538410A	713	919	2.0		1.0	1.3	1.0	36.4	2.34
538410A 538410B	712	919		56	1.5	1.0	1.0	31.3	2.48
540739			2.0	61	1.5	1.0	1.0	31.5	2.56
	716	925	2.5	66	1.0	1.0	2.0	22.3	1.88
540740	715	917	2.0	54	1.0	1.0	1.0	28.5	2.36
549049A	714	929	4.5	118*	3.0	1.0	1.5	19.9	2.46*
549049B	712	923	3.5	94	1.0	1.0	1.0	17.4	2.31*
549050	630	904	2.5	84	3.0	1.5	1.0	17.3	2.13
549051A	627	904	2.5	72	3.0	1.0	1.0	17.4	2.34
549051B	630	829	2.0	71	3.0	1.0	2.0	16.1	1.70
549052	709	911	3.0*	80	3.0	1.0	1.0	18.0	2.42
549054	629	901	1.0	30	1.0	2.3	1.0	32.2	0.78
549055	714	922	2.0	61*	1.0	1.0	1.0	33.7	2.28*
549057A	714	918	1.5	47*	1.0	1.0	1.0	33.3	1.88*
549057B	714	917	1.5	62	1.0	1.0	1.0	32.2	2.22
549060	703	907	1.0	36	1.0	1.5	1.0	31.7	1.34
549061	630*	831*	1.0	32	1.0	2.0	1.0	32.8	1.19
549066	709	918	1.0	52	1.5	1.3	1.0	24.3	2.08
549067	711	920	2.0	50	1.0	1.3	1.0	33.2	2.25*
549068	713	920	1.5	48	1.0	1.0	1.0	34.4	2.39*
549069	702	906	1.0	40	1.0	1.3	1.0	29.4	1.66
549070	701	911*	1.0	36*	1.0	1.8	1.0	28.5	1.69*
549071	723	1003	2.5	55*	1.0	1.5	1.0	28.5	1.93*
549072	712	919	2.0*	51	1.0	1.0	1.0	33.8	2.27*
549073	703	914	2.0*	88*	2.0	1.0	2.0	21.4	2.49
549074	630	904*	1.5	57	1.5	1.0	1.0	20.7	2.02
549075	630	904*	1.0	66	3.0	1.0	1.0	21.7	2.34
549076A	701	908*	1.5	74	3.0	1.0	1.0	20.9	2.39
549076B	701	915	2.5	88	1.5	1.5	2.0*	21.0	2.59
549078	630	901	2.5	70	3.0	1.3	1.0	19.4	2.14
549079	630	902	1.5	60	2.8	1.0	1.0	20.2	2.21
549080	629	831	1.5	58	1.5	1.0	1.0	14.4	1.88
561227	713	1005*	3.5	91	3.0	3.8*		27.4*	1.99*
561228	706	928*	4.0	109*	3.0	1.0	1.0	23.5	2.74*
561229	709	1001*	2.5	102	3.0	1.0	1.0	23.0	2.36*
561231	704	922	2.0*	62	1.0	1.0	1.0	22.1	2.83*
561232	708	930*	3.0	106	3.0	1.0	2.0	33.5	2.36
561234	715	1003*	3.5	113*	3.0	1.0	1.0	32.4	2.25*
561235	711	927*	2.5	96	3.0	1.0	1.0	28.7	2.53*
561236	711	1003	3.5	108*					
561236 561237 561238	711 704 713	1003 925 1001*	3.5 3.0* 3.0*	108* 92 86*	3.0 3.0 2.0	1.5 1.0 1.0	1.0 1.0 1.0	33.9 21.6 19.7	2.172.952.06

Table 4.1. Seed composition data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN.

		Seed composition		Oil composition				
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)
38405	I	40.5 ^w	19.1 ^w	11.2	3.3	26.1	49.2	10.2
38406	00	40.6 ^w	18.4 ^w	10.7	3.3	33.7	42.6	9.8
38407	I	39.4 ^w	18.9 ^w	10.4	3.0	33.4	43.4	9.8
38408	00	42.5 ^w	18.3 ^w	11.1	3.3	28.6	46.5	10.6
38409	I	41.8	20.3	10.6	3.3	27.8	48.5	9.8
38410A	. I	40.7	19.5	9.7	3.2	32.1	45.5	9.4
38410B	I	40.2	19.5	9.9	3.2	35.0	42.3	9.6
40739	I	42.4 ^w	16.5 ^w	11.4	3.7	22.2	54.2	8.4
40740	I	40.4 ^w	18.4 ^w	11.3	3.5	25.1	50.0	10.2
49049A	Ī	42.2	19.4	11.6	2.9	18.7	55.6	11.1
49049B	Ī	42.8	19.1	11.6	3.2	18.5	56.9	9.8
49050	00	42.7	19.3	11.4	2.9	25.0	53.0	7.7
49051A	00	42.6	19.6	11.4	3.0	24.8	53.1	7.7
49051B	00	42.6	19.9	11.5	3.4	20.8	56.0	8.3
49052	0	41.2	20.3	10.0	2.9	22.1	55.6	9.4
49054	00	44.1	19.1	10.5	4.0	31.1	44.8	9.6
49055	I	42.1	18.4	10.2	2.7	31.5	45.0	10.6
49055 49057A	Ĭ	41.2 ^w	18.8 ^w	10.8	3.3	28.4	47.6	10.0
49057A 49057B	I	41.1 ^w	18.8 ^w	11.0	3.2	24.6	50.5	10.9
49057B 49060	0	42.4 ^w	17.9 ^w	11.1	3.3	29.4	45.9	10.4
49060 49061	00	44.4	17.9	10.1	3.6	32.9	44.0	9.3
	I	42.0	19.2	11.7	3.0	21.3	53.6	10.4
49066 49067	I	41.7	19.2	10.0	2.9	28.0	48.6	10.4
49067 49068	I	40.2 ^w	19.0 ^w	10.5	3.1	29.6	46.5	10.3
	0	40.2 42.6 ^w	19.2 18.3 ^w	11.0	3.5	29.8	45.4	10.3
49069 40070	0	43.0	17.6	11.3	3.4	28.4	45.5	11.4
49070 40071	II	46.8	17.0	10.3	2.7	27.9	47.9	11.1
49071		40.8	19.6	9.9	2.8	32.1	45.2	10.0
49072	I 0	42.0	19.8	11.1	3.9	27.6	48.6	8.8
49073	0 0	42.0	21.0	11.5	3.2	23.5	52.3	9.4
49074 40075	00	41.2 41.4	20.7	11.9	4.0	29.5	45.6	9.0
49075	00	40.8	20.7	12.1	3.8	25.7	49.4	9.0
49076A	00	40.8	20.7	10.9	3.6	29.3	49.1	7.1
49076B	00	42.3	19.3	11.2	3.8	21.1	54.9	9.0
49078	00	43.2	18.2	10.7	3.6	22.0	52.8	10.9
49079		43.8 43.7	17.5	10.7	3.0	18.2	56.7	10.3
49080	00	43.7 43.8 ^w	17.3 13.7 ^w	10.2	3.0	20.6	55.7	10.1
61227	II		13.7	11.6	3.7	18.6	55.6	10.3
61228	I	42.6 43.3	19.8	11.6	3.6	21.6	53.8	9.8
61229	I		19.5	12.1	3.4	19.9	55.8 54.9	9.8 9.7
61231	I	42.9		12.1	3.4	28.1	48.8	9.7
61232	I	41.9	19.3 19.4	10.3	2.9	25.6	50.8	9.9
61234	II	42.0		10.7	3.0	23.6	52.8	9.9
61235	I	42.6	20.0	10.9		26.4	50.1	9.8 9.9
61236	II	42.0	18.7	10.5	3.0	25.7	30.1 49.7	9.9
61237	I	41.7	20.3		3.9	26.0	49.7 52.7	7.9
61238	Ι	43.2	18.8	9.9	3.3	∠0.0	34.1	1.7

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A.

		.	Country	Country	Year	
DY 3.7	Accession	Region	of	of	introduced	
PI No.	name	of origin	origin	acquisition	or released	group
561239		Beijing	China	China	1991	I
561241		Beijing	China	China	1991	I
561242		Beijing	China	China	1991	0
561272		Voronezh	Russia	Russia	1991	00
561273		Voronezh	Russia	Russia	1991	000
61274		Voronezh	Russia	Russia	1991	00
61275		Voronezh	Russia	Russia	1991	00
61276		Voronezh	Russia	Russia	1991	000
61277		Voronezh	Russia	Russia	1991	00
61278A		Voronezh	Russia	Russia	1991	00
61278B		Voronezh	Russia	Russia	1991	00
61279		Voronezh	Russia	Russia	1991	00
61280		Voronezh	Russia	Russia	1991	00
61282B	(Yantarnaya)	Voronezh	Russia	Russia	1991	00
61282C	(Yantarnaya)	Voronezh	Russia	Russia	1991	00
61282D	(Yantarnaya)	Voronezh	Russia	Russia	1991	00
61283	Hei nong 33	Heilongjiang	China	China	1991	I
61284	Hei nong 34	Heilongjiang	China	China	1991	I
61285A		Heilongjiang	China	China	1991	I
61285B	(Hei nong 35)	Heilongjiang	China	China	1991	I
61295	An tu zi hua lu da dou	Jilin	China	China	1991	I
61296A	•	Heilongjiang	China	China	1991	I
61296B	(Ba yan shui li shan)	Heilongjiang	China	China	1991	I
61296C	(Ba yan shui li shan)	Heilongjiang	China	China	1991	I
61299A	•	Heilongjiang	China	China	1991	0
61299B	(Bai hua yao)	Heilongjiang	China	China	1991	I
61301	Bai lu dou	Jilin	China	China	1991	I
61302A	S	Heilongjiang	China	China	1991	0
6130 2 B	(Bai mao shuang)	Heilongjiang	China	China	1991	I
61302C	(Bai mao shuang)	Heilongjiang	China	China	1991	I
61302D	(Bai mao shuang)	Heilongjiang	China	China	1991	I
61304A	Bai nong No. 1	Jilin	China	China	1991	I
61304B	(Bai nong No. 1)	Jilin	China	China	1991	I
61305	Hei nong 24	Heilongjiang	China	China	1991	I
61306	Hei nong 25	Heilongjiang	China	China	1991	I
61307	Hei nong 26	Heilongjiang	China	China	1991	I
61308	Hei pi qing rang	Jilin	China	China	1991	I
61315	Hui chun da dou	Jilin	China	China	1991	I
51317	Hui nan bai hua tie jia	Jilin	China	China	1991	I
	Hui nan bai hua xiao hei dou	Jilin	China	China	1991	I
61318B	(Hui nan bai hua xiao hei dou)		China	China	1991	I
61327A	Jilin No. 3	Jilin	China	China	1991	I
61331	Jiao he xiao hei dou	Jilin	China	China	1991	I
61332	Jiao he zi hua 1	Jilin Tilin	China	China	1991	0
61333	Jiao he zi hua xiao bai dou	Jilin Hailanaiiana	China	China	1991	I
51337	Mao dou	Heilongjiang	China	China	1991	I

Table 2.1. Descriptive data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A

	Maturity	Stem	Flower	Piihec	cence		Pod	Seedco	at	Hilum		Seed
Entry	group	term.				Density				color	Other traits	shape
												_
561239	Ι	N	W	G	E	N	Br	S	Y	Lbf	Vhil,Na	2N
561241	I	N	W	G	E	Ssp	Br	I	Y	Lbf	Vhil	1N
561242	0	N	W	G	E	N	Br	I	Y	Lbf	Sdef	2N
561272	00	N	P	T	E	N	Br	I	Y	Tn	Vhil	2N
561273	000	N	P	T	E	N	Br	I	Y	Tn		2N
561274	00	N	P	T	E	N	Br	I	Y	Tn		2N
561275	00	D	P	T	E	N	Br	I	Y	Bl		3N
561276	000	N	P	T	E	N	Br	I	Y	Tn		2N
561277	00	N	P	T	E	N	Br	I	Y	Tn		3N
561278A	00	N	P	T	E	Ssp	Br	D	Y	Tn		3N
561278B	00	N	P	T	E	Ssp	Br	I	Y	Tn		3N
561279	00	N	P	T	E	Ssp	Br	I	Y	Tn	Lft7	2N
561280	00	N	P	T	E	N	Br	I	Br	Br	Dab	3N
561282B	00	N	P	T	E	Ssp	Br	I	Y	Tn		2N
561282C	00	N	Lp	T	E	Ssp	Br	D	Y	Tn		3N
561282D	00	N	P	T	E	Ssp	Br	I	Y	Tn		2N
561283	I	S	W	G	E	Ssp	Br	D	Y	Lbf	Vhil,Na	2N
561284	I	N	W	G	E	N	Br	D	Y	Bf	Na	2N
561285A	I	S	W	G	E	Ssp	Br	D	Y	Y	Na	2N
561285B	I	N	P	G	E	Ssp	\mathbf{Br}	D	Y	Y	Vhil,Na	1N
561295	I	D	P	T	E	Ssp	Br	D	Ggn	Bl		2N
561296A	I	N	P	G	E	Ssp	Tn	I	Y	Y		3N
561296B	I	N	W	G	E	N	\mathbf{Br}	S	Y	Lbf	Vhil	2R
561296C	I	D	P	G	E	N	Br	I	Y	Y	Sdef	2N
561299A	0	N	W	G	E	N	Br	I	Y	Lbf	Vhil	2N
561299B	I	N	W	G	E	N	Br	I	Y	Lbf	Vhil,Sabh	2N
561301	I	N	P	G	\mathbf{E}	N	Br	D	Y	Y	Sdef	2N
561302A	0	N	P	G	E	Dn	Br	D	Y	Y	Sdef	2N
561302B	I	N	W	G	\mathbf{E}	N	Br	D	Y	Y	Sabh	2N
561302C	I	N	W	G	E	Dn	Br	I	Y	Y	Na	2N
561302D	I	N	W	G	E	N	Br	S	Y	\mathbf{Bf}		3N
561304A	I	N	W	G	E	N	Br	S	Y	Lbf	Vhil	2N
561304B	I	N	W	G	E	Ssp	Tn	I	Y	Y		2N
561305	I	N	W	G	E	N	Br	I	Y	Lbf	Vhil	3N
561306	I	N	W	G	E	N	Dbr	S	Y	Lbf	Vhil,Na	2N
561307	I	N	W	G	E	N	Br	S	Y	Y	Na	2N
561308	Ī	D	P	T	E	N	Bl	Lb	Bl	B1	Gnc	3N
561315	Ī	D	w	G	E	N	Br	I	Y	Y		2N
561317	Ī	N	W	G	E	N	Bl	I	Y	Lbf	Vhil,Na	2N
561318A	Ī	N	w	T	Ē	Ssp	Bl	Lb	Bl	Bl	,	3N
561318B	Ī	N	W	T	E	Ssp	Bl	Lb	Bl	B1	Gnc	2N
561327A	Ī	N	W	G	Ē	Ssp	Tn	S	Y	Bf	Na	2N
561331	I	N	W	Ť	Ē	Ssp	Br	Ī	Bl	Bl		3N
561332	0	N	P	G	Ē	N	Br	Ī	Y	Y		2N
561333	I	S	P	G	E	N	Dbr	S	Ŷ	Ιb		3N
561337	I	S	P	G	Ē	N	Dbr	S	Ÿ	Y		2N

Table 3.1. Agronomic data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN

	Flowering	Maturity			Stem	Seed			
	date	date	Lodging	Height			Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)		(Mg ha ⁻¹)
561239	703	922	2.5	97	3.0	1.0	1.0	23.1*	2.27
561241	710	928	3.0	106*	3.0	1.5	1.5	33.2	2.33*
561242	703	913	1.5	85	2.5	1.5	1.0	23.7	2.65
561272	629	829	2.0	72	3.0	1.3	1.0	15.9	1.71
561273	627	827*	2.0	72*	3.0	1.3	1.0	15.3	1.58
561274	630	901	2.5	64	3.0	1.0	1.0	16.9	1.55*
561275	701	904	4.0	71	1.5	1.8*	1.0	18.0	1.83
561276	627	827*	2.0	72	3.0	1.0	1.0	15.3	1.57
561277	630	830	2.0	65	3.0	1.0	1.0	16.7	2.07
561278A	629	830	2.0	74	3.0	1.0	1.0	15.8	2.15
561278B	630	905	3.0*	76	2.5	1.0	1.0	17.7	2.36
561279	· 629	901	3.0*	86	3.0	1.0	1.0	18.1	1.87
561280	701	901	2.5	81	3.0	1.0		16.6	2.00
561282B	629	906	2.0*	76	3.0	1.0	1.0	15.4	2.08
561282C	629	906	2.0*	80	2.5	1.3	1.0	20.0	2.21
561282D	629	907	2.0	78	3.0	1.0	1.0	15.7	2.21
561283	707*	923	1.0	78	2.0	1.0	1.0	21.7	2.62
561284	703	919	2.5	94	3.0	1.0	1.0	19.5	2.81
561285A	704	917	1.5	74	2.0	1.0	1.0	20.9	2.77
561285B	705	917	1.5	68	2.5	1.0	1.0	19.3	3.01
561295	718	927	3.0*	58	1.0	1.0	1.0	29.7	2.31
561296A	713	918	2.5	92	2.8	1.0	1.0	16.2	2.23*
561296B	707*	922	2.5	99*	3.0	1.3	1.0	24.1	2.18
561296C	714	923	3.5	78	1.0	1.5	1.0	18.1	2.26
561299A	703	915	2.0*	78	3.0	1.5	1.5	23.2	2.24
561299B	705	920	2.5	92	3.0	1.8	2.0	23.2	2.60
561301	701	918	4.0	98	3.0	2.0	1.0	24.2	2.00*
561302A	701	912	2.0*	86	3.0	1.5	1.5	20.6	2.05
561302B	705	922	3.0*	81	2.5	1.8	1.0	23.8	2.03
561302C	704	918	3.5	100	3.0	1.0	1.0	16.3	2.12*
561302D	712	923	3.0*	100	3.0	1.0	1.0	19.0	1.97*
561304A	704	923	2.5	94	3.0	1.3	1.0	22.9	2.30
561304B	710	923	3.5	104	3.0	1.0	1.0	19.7	2.31*
561305	703	916	2.5	86	3.0	1.3	1.0	21.2	2.31
561306	715	922	2.5	90	3.0	1.0	1.5	17.7	2.38
561307	702	921	3.5	97	2.0	1.0	1.0	17.7	2.27*
561308	715	919	2.0	70	1.5	1.0		19.3	
561315	719	1002	2.5	78	1.0	1.0	1.0	20.2	1.88 2.19
561317	712	1004	4.0	124	3.0	1.5	1.5		
561318A	716	924	4.5	118*	3.0	1.0		15.9 14.5	1.79*
561318B	717	924	3.5	106	3.0	1.0			1.97*
561327A	714	1001*	2.5	106	3.0		1.0	14.6	1.89
561327A 561331	715	918	2.5	100		1.0	1.0	16.4	2.03
561332	713 701	918	2.5 3.0*		3.0	1.5	1.0	14.7	2.35*
561333	701 714	908 926*		72	3.0	1.0	1.0	17.3	1.91
			4.0	103	2.0	1.0	1.0	16.4	2.13*
561337	715	924	3.5	85	2.0	1.0	1.0	18.9	2.13

Table 4.1. Seed composition data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN.

		Seed composition		Oil composition					
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic	
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
61239	I	42.0	20.1	11.4	3.9	24.7	50.9	9.2	
61241	I	41.4	19.9	10.6	3.1	27.9	49.1	9.4	
61242	0	41.4	20.5	11.2	3.7	28.7	48.0	8.4	
61272	00	43.4	18.9	11.6	3.1	21.9	53.8	9.6	
61273	000	44.7	18.3	11.2	3.3	28.8	49.4	7.3	
61274	00	43.1	19.0	11.2	3.4	27.8	50.3	7.2	
61275	00	45.2	18.2	10.8	3.0	28.2	49.7	8.3	
61276	000	45.1	18.0	11.4	3.5	26.9	50.5	7.7	
61277	00	46.0	17.3	12.0	3.3	21.9	52.1	10.7	
61278A	00	42.8	19.3	10.6	3.0	25.3	51.1	9.9	
61278B	00	43.5	18.8	10.8	3.1	21.2	56.0	8.8	
61279	00	43.3	19.0	11.4	3.5	30.9	47.6	6.7	
61280	00	42.4 ^w	16.8 ^w	12.5	3.8	23.6	51.5	8.6	
61282B	00	43.3	19.3	10.2	3.1	24.9	53.1	8.6	
61282C	00	43.6	19.2	9.6	3.0	29.1	49.3	9.0	
61282D	00	43.9	19.4	10.3	3.2	26.5	51.6	9.0 8.4	
61283	I	42.8	19.4	11.7	3.1	21.5	55.1	8.7	
61284	I	41.3	20.4	11.7	3.7	25.0	50.8	9.2	
61285A	I	42.3	19.9	12.3	3.7	22.3		9.2 9.7	
61285B	I	42.3 42.4	19.9	12.5	3.3		52.4		
	I	42.4 41.6 ^w	19.6 15.9 ^w	10.7		19.9	54.0	10.3	
61295					3.5	23.0	53.1	9.7	
61296A	I	43.4	19.4	10.3	3.2	26.4	51.6	8.6	
61296B	I	42.6	19.7	10.2	3.2	29.2	49.0	8.3	
61296C	I	43.2	18.6	10.6	3.8	21.8	53.9	9.9	
51299A	0	43.6	18.9	11.9	3.0	25.1	49.9	10.1	
51299B	I	42.2	20.7	11.8	3.2	24.0	51.6	9.4	
61301	I	43.5	19.5	10.6	3.1	26.8	51.6	7.9	
61302A	0	45.2	18.1	12.1	2.9	21.4	53.8	9.9	
61302B	I	43.0	19.7	11.0	3.2	29.5	48.3	8.1	
61302C	I -	42.9	18.5	12.0	3.2	19.5	55.2	10.1	
61302D	I -	42.0	19.6	10.8	3.1	26.8	50.2	9.1	
61304A	I	43.0	19.2	10.1	3.3	33.8	45.6	7.3	
61304B	I	42.5	20.1	11.2	3.7	28.0	49.0	8.0	
61305	I	42.4	19.6	10.5	3.9	31.1	47.0	7.5	
61306	I	43.1	19.4	10.8	3.5	31.4	47.2	7.1	
61307	I	42.5	19.9	10.2	4.2	27.9	48.5	9.2	
61308	I	42.4 ^w	18.2 ^w	10.0	3.4	22.0	56.4	8.2	
61315	I	41.9	19.6	10.3	2.9	28.2	49.5	9.0	
61317	I	41.8	19.0	11.7	3.4	20.3	55.3	9.3	
61318A	I	45.4 ^w	17.1 ^w	12.1	3.4	19.2	56.7	8.6	
61318B	I	43.0 ^w	16.1 ^w	11.7	3.7	29.2	48.1	7.3	
61327A	I	43.5	17.0	10.0	3.7	28.9	49.8	7.6	
61331	I	43.5 ^w	17.5 ^w	12.5	3.5	20.2	55.4	8.4	
61332	0	45.8	18.1	11.4	3.1	23.0	51.5	11.0	
61333	I	43.0	18.8	10.9	3.5	22.4	53.9	9.4	
61337	I	42.8	19.0	10.6	3.9	23.1	52.9	9.5	

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A.

PI No. name of origin origin acquisition or relations of the second of t	duced Maturity leased group I I I I II I O I I I I I I I I I I I I
PI No. name of origin origin acquisition or relations of the second of t	leased group
561341AMu feng No. 1HeilongjiangChinaChina199561341B(Mu feng No. 1)HeilongjiangChinaChina199561342Mu feng No. 2HeilongjiangChinaChina199561343Mu feng No. 3HeilongjiangChinaChina199561344Mu feng No. 4HeilongjiangChinaChina199561345Yi tong lu da douJilinChinaChina199561346Yi tong man cang jinJilinChinaChina199561348Yi wo liangJilinChinaChina199561351Hei nong 33HeilongjiangChinaChina199561353Hei he No. 3HeilongjiangChinaChina199	1 I 1 II 1 0 1 I 1 I 1 I 1 I 1 I 1 I 1 I 1 I 1 I 1 I
561341B(Mu feng No. 1)HeilongjiangChinaChina199561342Mu feng No. 2HeilongjiangChinaChina199561343Mu feng No. 3HeilongjiangChinaChina199561344Mu feng No. 4HeilongjiangChinaChina199561345Yi tong lu da douJilinChinaChina199561346Yi tong man cang jinJilinChinaChina199561348Yi wo liangJilinChinaChina199561351Hei nong 33HeilongjiangChinaChina199561353Hei he No. 3HeilongjiangChinaChina199	1 II 1 0 1 I 1 0 1 I 1 I 1 I 1 I 1 I 1 I 1 I 1 I
561342Mu feng No. 2HeilongjiangChinaChina199561343Mu feng No. 3HeilongjiangChinaChina199561344Mu feng No. 4HeilongjiangChinaChina199561345Yi tong lu da douJilinChinaChina199561346Yi tong man cang jinJilinChinaChina199561348Yi wo liangJilinChinaChina199561351Hei nong 33HeilongjiangChinaChina199561353Hei he No. 3HeilongjiangChinaChina199	1 0 1 I 1 0 1 I 1 I 1 I 1 I 1 I 1 I 1 I 1 I
561343Mu feng No. 3HeilongjiangChinaChina199561344Mu feng No. 4HeilongjiangChinaChina199561345Yi tong lu da douJilinChinaChina199561346Yi tong man cang jinJilinChinaChina199561348Yi wo liangJilinChinaChina199561351Hei nong 33HeilongjiangChinaChina199561353Hei he No. 3HeilongjiangChinaChina199	1 I 1 0 1 I 1 I 1 I 1 I 1 I 1 I
561344Mu feng No. 4HeilongjiangChinaChina199561345Yi tong lu da douJilinChinaChina199561346Yi tong man cang jinJilinChinaChina199561348Yi wo liangJilinChinaChina199561351Hei nong 33HeilongjiangChinaChina199561353Hei he No. 3HeilongjiangChinaChina199	1 0 1 I 1 I 1 I 1 I
561345Yi tong lu da douJilinChinaChina199561346Yi tong man cang jinJilinChinaChina199561348Yi wo liangJilinChinaChina199561351Hei nong 33HeilongjiangChinaChina199561353Hei he No. 3HeilongjiangChinaChina199	1 I 1 I 1 I 1 I 1 I
561346Yi tong man cang jinJilinChinaChina199561348Yi wo liangJilinChinaChina199561351Hei nong 33HeilongjiangChinaChina199561353Hei he No. 3HeilongjiangChinaChina199	1 I 1 I 1 I 1 I
561348Yi wo liangJilinChinaChina199561351Hei nong 33HeilongjiangChinaChina199561353Hei he No. 3HeilongjiangChinaChina199	1 I 1 I 1 I
561351 Hei nong 33 Heilongjiang China China 199 561353 Hei he No. 3 Heilongjiang China China 199	1 I 1 I
561353 Hei he No. 3 Heilongjiang China China 199	1 I
a 5	
561354 Zi hua No. 4 Heilongjiang China China 199	
561366 An feng No. 1 Heilongjiang China China 199	
561367 Sui nong No. 4 Heilongjiang China China 199	
561368 Sui heng 25 Heilongjiang China China 199	
561369 Heilongjiang China China 199	
561374 Nin zheng No. 1 Jiangsu China China 199	
561377 Chohakuzan Unknown Japan 199	
561389A Okura natto Unknown Japan Japan 199	
561389B (Okura natto) Unknown Japan 199	
567151 Kogeki Yamagata Japan Japan 199	
567152 Shounai 1 Yamagata Japan Japan 1995	
567154 Wase dadacha Yamagata Japan Japan 199	
567155A Wase shiroyama dadacha Yamagata Japan Japan 1995	
567155B (Wase shiroyama dadacha) Yamagata Japan Japan 1995	
567156A He jiao No. 8 Heilongjiang China China 1995	
567156B (He jiao No. 8) Heilongjiang China China 199	
567157A He jiao 11 Heilongjiang China China 1995	
567157B (He jiao 11) Heilongjiang China China 1993	
567158 He jiao 13 Heilongjiang China China 1993	
567159A He long da dou Heilongjiang China China 1992	
567163 He long yong hua dou Heilongjiang China China 1993	
567164 He long you tai Heilongjiang China China 1992	
567165 He long zao shou dou Heilongjiang China China 1992	
567167 He mao dou Jilin China China 1992	
567169 He qi feng di huang Jilin China China 1992	
567171 Hei he No. 1 Heilongjiang China China 1992	
567173 Hei he 51 Heilongjiang China China 1992 567174A Hei he 54 Heilongjiang China China 1992	
۵ ۵ - ۱	
567174B (Hei he 54) Heilongjiang China China 1992	
567175A Hei jia zi Liaoning China China 1992	
567175B (Hei jia zi) Liaoning China China 1992	
567175C (Hei jia zi) Liaoning China China 1992	
567177 Line 9970 Unknown Japan Australia 1992	
567200A Unknown Georgia Germany 1992	
567200B Unknown Georgia Germany 1992	
567208 Unknown Georgia Germany 1992	2 00

Table 2.1. Descriptive data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A

Entry gr 561341A 561341B 561342 561343 561344 561345 561346 561348 561351 561353 561354 561366 561367 561368 561369 561374 561377 561389A 561379 567151 567152 567154 567155B 567155A 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567164 567163 567167 567169 567171	I II O I I I I I I I I I I I I I I I I	term. N N N N N N N N N N N N N N N N N N	W W W W P W P P	G G G G T G	E E E E E E E E	N N N N N N Ssp	Br Br Br Br	I D S	Color Y Y Y	Lbf Lbf Lbf	Other traits Vhil,Na Vhil	shape 2N 2N
561341B 561342 561343 561344 561345 561346 561348 561351 561353 561354 561366 561367 561368 561369 561374 561377 561389A 561389B 567151 567152 567154 567155B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567163 567164 567165 567167	II 0 I I I I I I I I I I I I I I I I I	N N N D N D N N	W W W P W P	G G G T G T	E E E E	N N N N	Br Br Br	D S	Y	Lbf	Vhil	2N
561341B 561342 561343 561344 561345 561346 561348 561351 561353 561354 561366 561367 561368 561369 561374 561377 561389A 561389B 567151 567152 567154 567155B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567163 567164 567165 567167	0 I O I I I I O I I I I I I I I I I I I	N N D N D N D N	W W W P W	G G T G T	E E E E	N N N	Br Br	S		Lbf		
561343 561344 561345 561346 561348 561351 561353 561354 561367 561368 561367 561368 561374 561377 561389B 567151 567152 567154 567155B 567155A 567157B 567157A 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567164 567165 567167	I O I I I I I I I I I I I I I I I I I I	N N D N D N N N	W W P W P	G G T G T	E E E	N N	Br		Y	Lbf	¥ 74 14 5 -	
561344 561345 561346 561348 561351 561353 561354 561366 561367 561368 561369 561374 561389A 561389A 561389B 567151 567152 567154 567155B 567155A 567157A 567157B 567157A 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567164 567163 567167 567169 567171	O I I I I I I I I I I I I I I I I I I I	N D N D N N	W P W P W	G T G T	E E	N		_			Vhil,Na	1R
561344 561345 561346 561348 561351 561353 561354 561366 561367 561368 561369 561374 561389A 561389A 561389B 567151 567152 567154 567155B 567155A 567157A 567157B 567157A 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567164 567163 567167 567169 567171	I I I I I O I I I	D N D N N	P W P W	T G T	E		_	I	Y	Lbf	Vhil,Na	1N
561345 561346 561348 561351 561353 561354 561366 561367 561368 561369 561374 561389A 561389B 567151 567152 567155A 567155B 567155A 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567164 567165 567167	I I I I O I I I	N D N N	W P W	G T		Ssp	Br	I	Y	Bf	Na	2R
561346 561348 561351 561353 561354 561366 561367 561368 561369 561374 561389A 561389B 567151 567152 567154 567155B 567155A 567155B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567163 567164 567165 567167	I I I I I I I I I	D N N	P W	T	Ε		Br	D	Ggn	Bl		2N
561348 561351 561353 561354 561366 561367 561368 561369 561374 561377 561389A 561389B 567151 567152 567154 567155B 567155B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567163 567164 567165 567167	I I O I I I	N N N	W		_	N	\mathbf{Br}	S	Ϋ́	Lbf	Vhil	2N
561351 561353 561354 561366 561367 561368 561369 561374 561377 561389A 561389B 567151 567152 567155A 567155A 567155B 567156A 567156B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567163 567164 567165 567167	I 0 I I I	N N		~	${f E}$	Ssp	Br	I	Y	Br		2N
561353 561354 561366 561367 561368 561369 561374 561377 561389A 561389B 567151 567152 567155A 567155B 567156A 567156B 567156B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567163 567164 567165 567167	I 0 I I	N N	P	G	E	N	Br	D	Y	\mathbf{Bf}	Na	1R
561354 561366 561367 561368 561369 561374 561377 561389A 561389B 567151 567152 567154 567155A 567155A 567157A 567157B 567157A 567157B 567157B 567157B 567157B 567167 567169 567167	I 0 I I	N		G	E	Ssp	Br	D	Y	Y	Na	2N
561366 561367 561368 561369 561374 561389A 561389B 567151 567152 567155A 567155B 567155B 567156A 567157B 567157B 567157B 567157B 567163 567163 567169 567167	0 I I I		P	G	E	N	Br	I	Y	\mathbf{Bf}		2N
561367 561368 561369 561374 561377 561389A 561389B 567151 567152 567154 567155A 567155B 567156A 567157B 567157B 567157B 567157B 567157B 567163 567163 567169 567167	I I I	N	P	G	E	N	Br	D	Y	Y		2R
561368 561369 561374 561377 561389A 561389B 567151 567152 567154 567155A 567155A 567156B 567156B 567157B 567157B 567157B 567157B 567163 567163 567169 567169	I I	N	P	Ğ	Ē	Ssp	Br	D	Ÿ	Ÿ	Na	2N
561369 561374 561377 561389A 561389B 567151 567152 567154 567155A 567155B 567156A 567156B 567157B 567157B 567157B 567157B 567157B 567163 567164 567169 567167	I	S	W	Ğ	Ē	Ssp	Br	D	Ŷ	Ÿ	Na	2N
561374 561377 561389A 561389B 567151 567152 567154 567155A 567155B 567156A 567156B 567157B 567157B 567157B 567157B 567157B 567163 567163 567164 567165 567169 567171		S	w	Ğ	Ē	Ssp	Br	D	Ÿ	Ÿ	Na	2N
561377 561389A 561389B 567151 567152 567154 567155B 567155B 567156A 567157B 567157B 567157B 567157B 567157B 567157B 567157B 567163 567163 567164 567165 567169 567161	I	D	P	T	E	N	Br	D	Ÿ	Bl		2N
561389A 561389B 567151 567152 567154 567155A 567155B 567156A 567157A 567157B 567157B 567157B 567163 567163 567164 567169 567169	II	S	P	G	E	N	Tn	Ī	Ÿ	Y		2N
561389B 567151 567152 567154 567155A 567155B 567156A 567156B 567157A 567157B 567157B 567157B 567163 567163 567164 567165 567167	00	N	P	Ğ	Ē	N	Br	D	Ÿ	Ÿ		2N
567151 567152 567154 567155A 567155B 567156A 567157A 567157B 567157B 567159A 567163 567164 567165 567167	0	N	P	Ğ	Ē	N	Tn	S	Ÿ	Ÿ		2N
567152 567154 567155A 567155B 567156A 567157B 567157B 567157B 567159A 567163 567164 567165 567165	II	D	w	Lt	Ā	N	Br	S	Br	Br		2N
567154 567155B 567156A 567156B 567157B 567157B 567157B 567158 567163 567164 567165 567167	II	D	W	Lt	E	Ssp	Br	D	Br	Br		2N
567155A 567155B 567156A 567156B 567157A 567157B 567158 567159A 567163 567164 567165 567167	II	D	W	Lt	E	Ssp	Br	Ī	Br	Br		2N
567155B 567156A 567156B 567157A 567157B 567158 567159A 567163 567164 567165 567167	I	D	W	Lt	A	Ssp	Br	S	Br	Br		2N
567156A 567156B 567157A 567157B 567158 567159A 567163 567164 567165 567167	II	D	W	Lt	E	Ssp	Br	· I	Br	Br		2N
567156B 567157A 567157B 567158 567159A 567163 567164 567165 567167 567167	0	N	W	G	Ē	N	Br	Ī	Y	Y		2N
567157A 567157B 567157B 567159A 567163 567164 567165 567167 567169	Ĭ	N	P	G	E	N	Br	Î	Ŷ	Lbf	Vhil	2N
567157B 567158 567159A 567163 567164 567165 567167 567169	0	D	W	G	E	N	Br	Ī	Ŷ	Lbf	Sabh	2N
567158 567159A 567163 567164 567165 567167 567169	0	N	W	G	E	N	Br	Ī	Y	Lbf	Vhil	2N
567159A 567163 567164 567165 567167 567169 567171	0	S	W	G	E	N	Br	I	Y	Y	Sdef	2N
567163 567164 567165 567167 567169 567171	I	N	W	G	E	Ssp	Tn	Ī	Y	Bf	Na	2N
567164 567165 567167 567169 567171	I	N	W	G	E	N N	Br	I	Y	Lbf	Sdef	1R
567165 567167 567169 567171	0	N	P P	T	E	Ssp	Br	D	Y	Br	buci	2N
567167 567169 567171	0	N	W	G	E	N N	Br	I	Y	Y	Na	1N
567169 567171	00	N	P VV	T	E	N	Br	D	Y	Tn	114	2N
567171	I	S	W	G	E	N N	Dbr	D	Y	Bf		2N 2N
	00	S N	W	T	E	N	Br	D	Y	Tn		2N
00/1/3	00	N N	vv P	G	E	N N	Br	I	Y	Y		2N 2N
567174A	00	N	P	G	E	N	Br	I	Y	Y	Vhil	2N 2N
567174A 567174B	0	S	P	G	E	N	Br	D	Y	Y	Viii	3N
567174B 567175A	000	S	P	G	E	N	Br	D	Y	Lbf	A 1111	2N
	000	S N	P	G	E	N	Br	I	Y	Y		2N 2N
567175B		D D	P P	G	E	N N	Br	D D	Y	Y		3N
567175C		D	W	T	E		Br	D	Gn	Bl		2N
567177 567300A	00		W	T	E	Ssp N	Tn	S	Y	Br		2N 2N
567200A	0	N N		T	E	N N	Br	S I	Y	Br		2N 2N
567200B 567208		N N	W P	T	E E	IN Ssp	Br	D D	Y	Tn		2N 2N

Table 3.1. Agronomic data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN

	Flowering	Maturity			Stem	Seed			
	date	date	Lodging	Height	termination		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)		(Mg ha ⁻¹)
	709	920	4.5	85	3.0	1.0			
561341A		1003	4.5 3.0*		3.0	1.0	1.0 1.0	17.8 22.8	2.15 2.51
561341B	715	915	3.5	110 74	3.0	1.0	1.5	18.3	2.31 1.74*
561342	708	913	3.3 4.0*	74 90*	3.0	1.0			
561343	713						1.5	19.7	2.21
561344	706	914	4.0	78	2.8	1.5	1.0	17.8	2.04
561345	718	925	2.5	56*	1.0	1.0	1.5	28.8	2.33*
561346	709	922*	4.0	114*	3.0	1.3	1.0	18.5	1.91
561348	717	918	2.0	72	1.5	1.3	1.0	31.5	2.04
561351	703	918	2.0	96	3.0	1.0	1.0	18.6	2.67
561353	703	915	1.0	58	2.5	1.0	1.0	22.0	2.98
561354	713	926	2.5	92*	3.0	1.0	1.0	20.0	2.55
561366	702	916	2.0*	81	3.0	2.3	1.0	23.6	1.98
561367	702	917	1.0	74	2.5	1.0	1.0	21.1	3.10
561368	703	917	1.0	75 72	2.0	1.0	1.0	20.7	2.52*
561369	703	916	2.0	72 70	2.0	1.0	1.5	20.8	2.84
561374	719	919	3.0	78	1.5	1.0	1.0	18.1	1.60*
561377	715	1001*	5.0	113	2.0	1.3	1.0	12.6	2.03
561389A	630	901	3.5	65	3.5	1.3	1.0	7.2	1.21
561389B	712	912	3.5*	68	3.0*	1.0	1.0	6.9	1.56
567151	726	1006	3.5	72	1.0	1.0		30.0	1.98
567152	724	1009*	3.0	68	1.0	1.0		28.7*	1.30*
567154	723	1005*	3.5	80	1.0	1.0		26.8	1.57
567155A	726	1006	3.5	84	1.5	1.0		29.6	1.95*
567155B	724	1010*	3.5	74	1.0	3.8*		26.2^	0.40^
567156A	702	914	1.5	78	2.5	1.3	1.0	23.0	2.44
567156B	711	925	2.5	102*	3.0	1.0	1.0	23.4	2.59
567157A	703	915	2.5*	81*	1.5	1.0	1.0	20.4	1.94*
567157B	702	912	2.5	90	3.0	1.0	1.0	19.8	2.15
567158	701	910	2.5	88	2.5	1.0	1.0	19.3	2.30
567159A	709*	1001*	2.5	95	3.0	1.3	1.0	17.5	1.98*
567163	709	920	3.5	86*	2.5	2.3	2.5	26.6	1.90*
567164	709	911	3.5	79	3.0	1.0	1.5	18.5	1.93*
567165	701	909	2.5	79	3.0	1.0	1.0	17.9	2.25
567167	703	908	2.5	78	3.0	1.3	1.0	18.9	2.24
567169	714	930*	3.5	99*	2.0	1.0	1.0	18.4	1.99*
567171	706	902	2.0*	70	2.5	1.0	1.0	21.3	1.77
567173	630	905	2.5	68	3.0	1.0	1.0	23.3	2.11
567174A	629	831	2.0	68	3.0	1.0	1.0	15.2	1.96
567174B	701	915	2.5	80	2.0	1.5^	1.0^	21.9	2.52
567175A	629	822	2.5*	50	2.0	1.3	1.0	17.9	1.25
567175B	701	901	1.5	66	2.5	1.0	1.0	15.7	1.75
567175C	630	830	2.0*	60	1.5	1.0	1.0	18.7	1.80
567177	712	910	1.0	51	1.0	1.0	1.0	28.4	1.58
567200A	630	906	2.0*	60	2.5	1.0	1.0	15.0	2.02
567200B	630	907	2.5	86	3.0	1.5	1.0	16.9	1.87
567208	629	902	1.5	75*	2.5	1.5	1.0	16.7	2.05

Table 4.1. Seed composition data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN.

		Seed composition		Oil compo					
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic	
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
561341A	I	41.0	20.7	10.5	3.7	29.9	48.1	7.8	
561341B	II	42.3	19.9	11.0	3.2	25.2	52.0	8.6	
561342	0	41.1	20.5	10.5	3.5	31.5	46.9	7.5	
561343	I	41.3	20.5	10.2	3.7	29.2	49.0	7.9	
561344	0	42.2	20.1	10.5	3.6	29.7	48.5	7.7	
561345	I	43.7 ^w	17.9 ^w	10.3	3.7	20.3	54.4	11.3	
561346	I	40.9	19.8	9.6	3.6	29.8	48.6	8.3	
561348	Ī	42.1	19.0	11.0	3.1	28.0	48.6	9.3	
561351	Ī	41.0	20.9	11.4	3.7	23.6	52.0	9.4	
561353	Ī	42.5	19.6	13.7	4.0	21.0	51.5	9.8	
561354	Ī	41.8	19.5	10.5	3.9	26.0	50.1	9.6	
561366	0	45.2	18.8	11.4	2.9	31.1	46.8	7.7	
561367	I	42.2	19.9	13.1	3.7	21.8	51.6	9.8	
561368	I	43.1	19.3	11.4	3.0	23.5	53.7	8.5	
561369	I	42.8	19.3	11.3	3.0	24.5	53.0	8.3	
561374	Ī	45.4	17.0	10.4	.3.7	23.5	52.8	9.6	
561377	II	41.7	18.7	10.4	3.3	17.6	58.1	10.1	
	00	44.0	17.6	11.9	3.5	26.4	46.8	11.4	
561389A		49.0	17.0	11.9	3.2	16.5	56.7	11.4	
561389B	0 II	49.0 41.4 ^w	13.7 14.9 ^w	11.7	3.2	26.4	49.0	9.7	
567151		39.3 ^w	14.9 15.2 ^w	11.7	2.9	28.1	48.3	9.7	
567152	II II	39.3 39.7 ^w	13.2 14.1 ^w	10.2		29.8	46.9	10.2	
567154 567155 A					3.0				
567155A	I	40.1 ^w	17.8 ^w	11.6	3.5	26.4	49.5	9.0	
567155B	II	41.3 ^w	14.1 ^w	11.2	3.4	21.0	54.8	9.6	
567156A	0	42.0	20.2	10.8	3.8	30.3	46.5	8.7	
567156B	I	42.0	20.3	11.8	3.3	25.4	50.9	8.6	
567157A	0	42.7	20.0	11.2	3.7	29.1	47.4	8.6	
567157B	0	42.6	20.0	11.0	3.6	30.5	46.2	8.8	
567158	0	41.9	20.3	10.9	2.9	25.9	52.1	8.1	
567159A	I	42.6	17.2	10.2	3.5	28.4	50.1	7.8	
567163	I	42.2	20.9	10.7	3.7	30.0	47.9	7.7	
567164	0	42.6	20.1	10.2	3.0	25.1	53.5	8.3	
567165	0	42.6	19.9	11.9	3.7	20.8	54.2	9.4	
567167	00	45.7	17.9	11.8	3.0	23.9	52.2	9.0	
567169	I	43.2	19.4	10.3	3.3	25.7	52.2	8.6	
567171	00	41.9	20.7	11.2	3.0	22.2	53.7	9.9	
567173	00	42.7	20.2	11.1	3.2	29.7	46.7	9.3	
567174A	00	42.3	19.1	11.2	3.4	24.5	50.6	10.3	
567174B	0	42.4^	20.5^	10.6^	2.7^	31.6^	47.8^	7.3^	
567175A	000	43.2	18.9	11.6	3.4	21.6	52.3	11.0	
567175B	00	44.3	18.6	11.2	3.4	25.2	49.4	10.9	
567175C	00	41.8	19.7	10.8	3.0	21.4	54.9	9.8	
567177	0	42.7	19.3	11.2	3.3	27.4	47.4	10.6	
567200A	00	43.6	19.6	12.8	3.8	20.5	54.0	8.8	
567200B	00	44.2	19.5	11.2	3.8	24.1	52.3	8.5	
567208	00	43.1	19.4	10.2	3.0	25.7	51.9	9.3	

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	group
567 2 09A		Unknown	Georgia	Germany	1992	00
567209B		Unknown	Georgia	Germany	1992	0
567210	Linija N 52-M	Unknown	Russia	Russia	1992	000
567211A	K-001	Unknown	Russia	Russia	1992	0
567211B	(K-001)	Unknown	Russia	Russia	1992	0
567212A	K-002	Unknown	Russia	Russia	1992	0
567212B	(K-002)	Unknown	Russia	Russia	1992	0
567212C	(K-002)	Unknown	Russia	Russia	1992	0
567212D	(K-002)	Unknown	Russia	Russia	1992	I
67213A	Al'tair	Unknown	Russia	Russia	1992	00
567213B	(Al'tair)	Unknown	Russia	Russia	1992	00
567213C	(Al'tair)	Unknown	Russia	Russia	1992	0
567213D	(Al'tair)	Unknown	Russia	Russia	1992	0
567214A	Demetra	Unknown	Russia	Russia	1992	I
67214B	(Demetra)	Unknown	Russia	Russia	1992	I
67215A	Juzanka	Unknown	Russia	Russia	1992	00
67215B	(Juzanka)	Unknown	Russia	Russia	1992	I
67215C	(Juzanka)	Unknown	Russia	Russia	1992	I
67216A	Kievskaja 91	Unknown	Ukraine	Russia	1992	00
67216B	(Kievskaja 91)	Unknown	Ukraine	Russia	1992	00
67216C	(Kievskaja 91)	Unknown	Ukraine	Russia	1992	00
67217A	•	Unknown	Ukraine	Russia	1992	0
67217B	(Vitiaz' 50)	Unknown	Ukraine	Russia	1992	I
67218	Jug 30	Unknown	Ukraine	Russia	1992	000
67219	SIBNIIK 315	Unknown	Russia	Russia	1992	000
67220A	Lucezarnaja	Unknown	Russia	Russia	1992	00
67220B	(Lucezarnaja)	Unknown	Russia	Russia	1992	00
67220C	(Lucezarnaja)	Unknown	Russia	Russia	1992	0
67221	Bystrica 2	Unknown	Russia	Russia	1992	0
67222	Alisa	Unknown	Russia	Russia	1992	I
67223	Lad'ja	Unknown	Russia	Russia	1992	I
67224A	Mageva	Unknown	Russia	Russia	1992	000
67224B	(Mageva)	Unknown	Russia	Russia	1992	000
67224C	(Mageva)	Unknown	Russia	Russia	1992	000
67224D	(Mageva)	Unknown	Russia	Russia	1992	000
67225	Kisinevskaja 90	Unknown	Moldova	Russia	1992	0
67226	Har'kovskaja Zernoukosnaja	Unknown	Russia	Russia	1992	00
67227	Viktorija	Unknown	Russia	Russia	1992	00
67228	BM 143	Unknown	Russia	Russia	1992	00
	Primorskaja 1081	Primorye	Russia	Russia	1992	I
67229B	(Primorskaja 1081)	Primorye	Russia	Russia	1992	Ī
67242	· · · · · · · · · · · · · · · · · · ·	Hunan	China	China	1992	II
	Xiang chun dou No. 6	Hunan	China	China	1992	I
67255A	5	Jiangxi	China	China	1992	Ī
67261A		Fujian	China	China	1992	II
		Unknown	Japan	South Korea	1992	00

Table 2.1. Descriptive data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A

	Maturity	Stem					Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567209A	00	N	P	T	E	Ssp	Br	D	Br	Br		3N
567209B	0	N	W	T	E	Ssp	Br	Lb	Br	Br		3N
567210	000	N	P	T	E	Ssp	Br	I	Y	Brbl	Abh	3N
567211A	0	D	P	T	E	N	Br	I	Y	Br		2N
567211B	0	N	W	T	E	N	Tn	S	Y	Br		2N
567 2 12A	0	N	P	T	E	N	Tn	D	Y	Br		2N
567212B	0	N	P	T	E	N	Br	D	Y	Br		2N
567212C	0	N	P	T	E	N	Tn	I	Y	Br		2N
567212D	I	N	P	T	Ε	N	Br	D	Y	Br		2R
567213A	00	N	P	T	E	N	Br	I	Y	Br		2N
567213B	00	N	W	T	E	N	Br	I	Y	Bl		2N
567213C	0	N	P	T	E	N	Br	I	Y	Br		3N
567213D	0	N	P	T	E	Ssp	Br	I	Y	Br		3N
567214A	Ī	N	P	G	E	Ń	Br	I	Lg	Ig	Vsc	2N
567214B	I	N	P	G	Е	N	Br	D	Y	Ιg	Vsc	2N
567215A	00	S	P	G	Е	N	Dbr	I	Y	Ig	Abh	2N
567215B	I	N	W	G	E	N	Br	D	Y	Ý		1N
567215C	I	S	P	T	E	N	Br	D	Y	G	Abh	2N
567216A	00	N	W	T	E	N	Tn	I	Y	Br		2N
567216B	00	N	P	T	E	N	Br	S	Y	Br		2N
567216C	00	N	P	T	E	N	Br	D	Y	Br		3N
567217A	0	N	P	G	Е	N	Br	D	Y	Ig		2N
567217B	I	N	P	G	E	N	Br	D	Y	Ig		2N
567218	000	N	W	G	Е	N	Tn	D	Y	Ÿ		2N
567219	000	N	P	T	E	N	Br	I	Y	Tn		4N
567220A	00	N	P	T	E	Ssp	Br	I	Y	Tn		2N
567220B	00	N	P	T	E	Ssp	Br	I	Y	Tn		2R
567220C	0	S	P	Т	Е	N	Br	D	Y	Tn		3N
567221	0	N	W	T	E	N	Br	I	Y	Br		2N
567222	I	N	P	G	E	N	Br	I	Y	\mathbf{Bf}		2N
567223	Ī	D	W	T	E	N	Br	I	Y	Brbl	Abh	3N
567224A	000	N	P	T	E	N	Br	Ī	Y	Tn	Vhil	4N
567224B	000	N	P	T	E	N	Br	D	Y	Tn	Vhil	3N
567224C	000	N	P	T	E	N	Br	D	Y	Tn	Vhil	3N
567224D	000	N	P	T	E	Ssp	Br	I	Y	Tn	Vhil	3N
567225	0	N	P	T	E	Ssp	Tn	Ī	Y	Bl		2N
567226	00	D	P	T	Ē	N	Br	Ī	Ggn	Bl	Abh	2N
567227	00	S	P	T	Ē	N	Br	Ī	Y	Tn		1R
567228	00	S	P	T	Ē	N	Br	D	Ÿ	Br	Abh	3N
567229A	I	D	w	T	Ē	N	Br	Ī	Ÿ	Tn	Vhil	2N
567229B	Ī	N	P	T	Ē	Ssp	Dbr	D	Ÿ	Tn	Vhil	2N
567242	II	S	P	G	Ā	N	Tn	D	Ÿ	Bf		3N
567250A	I	S	P	G	A	N	Tn	Ī	Ÿ	Ib	Vhil	3N
567255A	I	S	W	Lt	A	N	Br	D	Ÿ	Br		3N
567261A	II	S	W	T	E	N	Br	Ī	Bl	Bl		3N
567283	00	D	w	Ġ	E	Ssp	Br	D	Gn	Lbf	Vhil,Vsc	1N

Table 3.1. Agronomic data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN

Entry 567209A 567209B 567210 567211A 567211B 567212A 567212B 567212C 567212D 567213A	date (mmdd) 702 706 626 710 712 630 701 701 630	date (mmdd) 908 911 821 912 912 911 913	2.0 2.5 4.0* 2.5 1.5 2.0*	Height (cm) 80 72* 62 68	Stem termination (score) 2.5 2.5 3.0	1.0 1.3	Mottling (score)		Yield (Mg ha ⁻¹) 2.36
567209A 567209B 567210 567211A 567211B 567212A 567212B 567212C 567212D	702 706 626 710 712 630 701 701	908 911 821 912 912 911	2.0 2.5 4.0* 2.5 1.5	80 72* 62	2.5 2.5	1.0 1.3	(score)	(cg sd ⁻¹)	(Mg ha ⁻¹) 2.36
567209B 567210 567211A 567211B 567212A 567212B 567212C 567212D	706 626 710 712 630 701 701	911 821 912 912 911	2.5 4.0* 2.5 1.5	72 * 62	2.5	1.3			
567210 567211A 567211B 567212A 567212B 567212C 567212D	626 710 712 630 701 701	821 912 912 911	4.0* 2.5 1.5	62					
567211A 567211B 567212A 567212B 567212C 567212D	710 712 630 701 701	912 912 911	2.5 1.5		3.0	1.0		1/.0	2.31
567211B 567212A 567212B 567212C 567212D	712 630 701 701	912 911	1.5	68		1.0	1.0	15.2	1.31
567212A 567212B 567212C 567212D	630 701 701	911			1.5	1.3	1.0	18.1	2.30
567212B 567212C 567212D	701 701		2 0*	85	2.5	1.0	1.0	15.4	1.77*
567212C 567212D	701	913	2.0	98*	3.0	1.3	1.0	14.3	2.24*
567212D			2.5	100	3.0	1.0	1.0	19.1	2.42
	630	915	2.0	102*	3.0	1.0	1.0	16.4	2.08
567213A	030	917	1.5	110	3.0	1.0	1.0	17.6	2.46
	630	907*	2.0*	74	3.0	1.0	1.0	17.6	2.24*
567213B	629	902	2.0*	78	3.0	1.3	1.0	19.6	1.64*
567213C	701	911	2.5	78	3.0	1.0	1.0	15.9	2.07
567213D	702	909*	2.5	75	3.0	1.0	1.0	16.7	2.07
567214A	710	920	3.5	86*	3.5	1.0	1.0	18.0	2.18*
567214B	711	919	3.5	120*	3.5	1.0	1.0	17.8	2.17*
567215A	701	902	4.0	80	2.0	1.5	1.0	15.7	1.64
567215B	702	917	2.5	92	3.0	1.0	1.0	17.7*	2.33
567215C	717	922	3.5	132	2.0	1.0	1.0		1.78*
567216A	630	901	2.5	75	3.0	1.0	1.0	14.1	2.01
567216B	702	901	3.5	82	2.5	1.0	1.0	15.4	2.14
567216C	630	903	3.0*	76	3.0	1.0	1.0	19.0	1.60
567217A	701	915	3.0	98	3.0	1.0	1.0	19.1	2.86
567217B	701	920	2.5	104	3.0	1.5	1.0	20.6	2.56
567218	627	824	1.5	66	3.0	1.0	1.0	15.0	1.82
567219	625	818	2.0*	54	3.0	1.0	1.0	14.4	1.20
567220A	629	902	2.0	70	2.5	1.0	1.0	17.6	2.31
567220B	629	904	2.5	69	2.5	1.0	1.0	14.9	2.04
567220C	702	910	5.0	88	2.0	1.8	1.5	19.2	2.19
567221	701	908	3.5	86	3.0	1.5	1.0	16.6	1.72
567222	706*	917	2.0*	88	3.0	1.0	1.0	13.8	2.43
567223	713	919	1.5	58	1.5	1.0	1.0	16.5	2.43
567224A	626	819	2.0	52	3.0	1.0	1.0	15.1	1.29
567224B	627	824	2.5	66	3.0	1.0	1.0	15.7	1.71
567224C	626	821	3.0*	56	3.0	1.3	1.0	15.7	1.71
567224D	625	820	2.0*	56	3.0	1.0	1.0	15.3	1.52
567225	712	913	2.5	104	3.0	1.0	1.0		2.23
567226	701	903	2.0*	51	1.5	1.0	1.0		1.54
567227	630	902	2.0*	72	2.0	1.0	1.0		2.22
567228	705*	901	2.0	61	2.0	1.3	1.0		1.37
567229A	713	927	2.5	85*	1.0	1.3	1.5		1.37 2.45*
567229B	704	928	3.5*	96	2.0	1.0	1.0		2.45** 2.04
567242	805*	1009*	4.0*	114*	2.5	1.3	2.0*		2.04 1.68*
567250A	728	930	3.5	91	2.0	1.0	1.0		
567255A	728	1006	3.5	72	2.0	1.0	2.5		1.53
567261A	806	1005	4.5	100*	2.0	1.0			1.42*
567283	630	904	1.0	26	1.0	1.5	1.0		0.89 1.18^

Table 4.1. Seed composition data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN.

		Seed con	nposition	Oil compo	Oil composition					
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic		
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
567209A	00	43.2 ^w	15.5 ^w	11.5	3.0	21.6	54.4	9.6		
567209B	0	45.8 ^w ^	16.9 ^w ^	11.8^	2.9^	25.4^	52.6^	7.2^		
567210	000	41.2	19.2	10.1	3.1	26.3	49.9	10.7		
567211A	0	41.8	19.6	10.9	3.3	19.4	57.0	9.5		
567211B	0	41.5	19.7	11.5	3.7	20.2	54.5	10.1		
567212A	0	42.3	20.2	12.2	3.8	23.1	52.7	8.4		
567212B	0	44.1	19.5	11.4	3.7	32.8	45.2	7.0		
567212C	0	43.2	19.6	10.8	3.8	28.8	49.3	7.3		
567212D	I	43.9	19.6	11.3	3.7	25.0	51.9	8.1		
567213A	00	43.3	19.0	11.0	3.6	20.4	56.4	8.5		
567213B	00	43.8	18.6	12.3	3.5	28.8	47.4	8.0		
567213C	0	41.5	19.9	11.7	3.6	20.5	55.8	8.4		
567213D	0	41.8	19.6	10.8	3.8	21.2	55.9	8.3		
567214A	Ĭ	40.8	20.2	11.4	3.1	24.9	52.8	7.8		
567214B	I	40.4	20.4	11.0	3.0	25.9	52.5	7.7		
567215A	00	41.5	17.9	10.7	2.6	36.9	41.5	8.2		
567215B	I	41.6	21.2	11.4	2.8	25.7	51.5	8.6		
567215C	Ī	42.2	19.0	10.6	3.6	21.8	54.9	9.1		
567216A	00	44.6	18.5	11.7	3.7	20.4	55.1	9.2		
567216B	00	43.8	18.8	10.5	3.0	24.4	52.6	9.5		
567216C	00	43.1	19.8	10.1	2.5	24.1	54.5	8.8		
567217A	0	42.5	20.8	11.1	3.3	27.2	50.6	7.7		
567217B	Ī	42.8	20.3	10.8	3.6	28.9	49.2	7.5		
567218	000	42.0	18.8	11.9	3.5	22.9	52.9	8.8		
567219	000	44.0	17.2	11.1	3.1	21.8	52.9	11.1		
567220A	00	42.0	19.8	11.6	3.2	24.5	52.5	8.2		
567220B	00	40.9	20.3	10.9	3.1	22.4	53.7	9.9		
567220C	0	43.6	19.3	11.2	3.1	21.7	55.2	8.9		
567221	0	44.3	19.3	11.0	4.1	26.0	50.7	8.3		
567222	I	42.5	19.7	10.7	3.3	19.8	56.4	9.8		
567223	Ī	46.3	21.2	9.6	3.4	26.5	51.9	8.5		
567224A	000	43.8	17.8	11.0	3.1	22.1	52.8	11.0		
567224B	000	43.5	17.7	11.3	3.4	20.1	55.7	9.6		
567224C	000	43.2	18.0	11.3	3.4	20.3	53.6	11.4		
567224D	000	43.4	19.1	12.0	3.5	21.2	54.5	8.8		
567225	0	43.5	18.5	10.7	3.6	22.5	52.3	10.9		
567226	00	44.7 ^w	15.6 ^w	11.6	3.8	20.7	53.8	9.4		
567227	00	41.9	19.7	11.1	3.1	18.3	57.4	10.1		
567228	00	43.2	18.7	11.5	3.1	25.5	51.3	8.6		
567229A	I	43.1	18.1	11.4	3.2	19.1	57.2	9.1		
567229B	Ĩ	45.4	18.1	11.3	3.3	20.8	55.1	9.5		
567242	II	43.9	15.7	10.2	3.1	19.4	55.7	11.5		
567250A	I	48.4	13.6	11.7	3.5	23.3	50.9	10.6		
567255A	Ī	46.6	15.3	10.8	3.0	19.7	55.4	11.0		
567261A	II	43.7 ^w	15.8 ^w	11.5	3.2	25.9	50.7	8.7		
567283	00	42.1 ^w	19.4 ^w	11.1	3.5	29.6	46.1	9.7		

Table 1.1 Identification and origin information for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A.

PI No.	Accession name	Region of origin	Country of origin	Country of acquisition	Year introduced or released	•
567302	He se huang dou	Gansu	China	China	1992	ΙΪ
567417A	Bai gun dou	Shanxi	China	China	1992	I
567417B	(Bai gun dou)	Shanxi	China	China	1992	I
567425A	Bai hua huang dou	Shanxi	China	China	1992	II
567473A	Yang gun dou	Shanxi	China	China	1992	I
567473B	(Yang gun dou)	Shanxi	China	China	1992	I
567598A	Xiao jin huang lu dou	Shandong	China	China	1992	0
574478A	Hai jiao zhao	Heilongjiang	China	China	1993	II

Table 2.1. Descriptive data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A

	Maturity	Stem	Flower	Pubes	cence		Pod	Seedco	at	Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567302	II	N	W	T	Е	N	Br	I	Rbr	Rbr		2N
567417A	I	S	P	G	Ε	N	Tn	I	Y	Bf		3N
567417B	I	S	P	G	E	N	Tn	I	Y	Bf	Abh	2N
567425A	II	N	W	T	Е	N	Br	S	Y	Br	Abh	2N
567473A	I	S	W	G	E	N	Br	I	Y	Bf		2N
567473B	Ī	S	W	T	Е	N	Br	S	Y	Br		2N
567598A	0	N	P	T	E	N	Tn	D	Lgn	Tn	Vhil,Vsc	2N
574478A	II	D	P	G	Sa	N	Br	D	Y	Ib		2N

Table 3.1. Agronomic data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN

	Flowering	Maturity			Stem	Seed			
Entry	date (mmdd)	date (mmdd)	Lodging (score)	Height (cm)	termination (score)	Quality (score)	Mottling (score)		Yield (Mg ha ⁻¹)
567302	724	1006	5.0	99*	3.0	1.5		13.7	1.25
567417A	714	924	4.5	95*	2.0	1.3	3.0	13.7	1.82
567417B	718	928	4.0	82	2.0	1.0	1.5	13.0	1.94
567425A	722	1004	4.5	118*	3.0	1.8	3.0*	14.3	1.50
567473A	715	928	4.0*	89	2.0	1.0	1.0	16.5	2.17*
567473B	718	929	4.0*	84	2.5	1.3	2.0*	15.3	1.78*
567598A	704	911	3.0	74	2.5	1.0	1.5	17.0	1.68*
574478A	720	1005	2.5	97	1.5	1.0	1.0	17.7	2.20

Table 4.1. Seed composition data for USDA soybean germplasm in maturity groups 000 through I, PI 507670 to PI 574478A, grown at Rosemount, MN.

		Seed con	position	Oil compo	sition			
Entry	Maturity group	Protein (%)	Oil (%)	Palmitic (%)	Stearic (%)	Oleic (%)	Linoleic (%)	Linolenic (%)
567302	II	40.1 ^w	15.0 ^w	11.1	3.5	21.2	52.8	11.3
567417A	I	44.4	17.5	12.1	3.9	22.1	53.0	8.8
567417B	I	44.2	17.7	12.8	3,2	18.3	55.4	10.2
567425A	II	42.9	18.9	11.3	3.9	19.9	55.9	9.0
567473A	I	42.3	19.7	11.2	3.3	20.6	56.2	8.7
567473B	I	42.4	19.1	11.0	3.3	23.0	54.1	8.5
567598A	0	43.5	18.9	12.4	3.5	23.0	50.0	11.2
574478A	II	45.2	17.2	11.2	3.1	19.0	56.9	9.8

 $Table \ 1.2. \ Identification \ and \ origin \ information \ for \ USDA \ soybean \ germplasm \ in \ maturity \ groups \ I \ through \ IV, \ PI \ 507671 \ to \ PI \ 574486.$

BellIllinoisUnited StatesUnited States1989IBertMinnesotaUnited StatesUnited States1991IBrockOntarioCanadaCanada1991IButterbeanUnknownUnited StatesUnited States1992I			_	Country	Country	Year	
Amcor 89		Accession		of	of	introduced	Maturity
Archer Iowa United States United States 1990 I	PI No.	name	of origin	origin	acquisition		
Archer Ilowa United States United States 1990 I I Bass Maryland United States United States 1989 II Berl Illinois United States United States 1989 II Bert Minnesota United States United States 1991 I Brock Ontario Canada Canada 1991 I Ganda United States United States 1991 I United States United States 1992 II Calboun Kentucky United States United States 1992 II United States United States 1992 III Calboun Maryland United States United States 1992 III United States 1992 III United States 1992 III United States 1992 III United States 1991 IV United States 1991 II United States II Unite		Amcor 89	Ohio	United States	United States	1989	II
Bass Maryland United States United States 1989 II Bert Minnesota United States United States 1989 I Bert Minnesota United States United States 1991 I Brock Ontario Canada Canada 1991 I United States United States United States 1992 I Calhoun Kentucky United States United States 1990 II Chapman Ohio United States United States 1990 II Chapman Ohio United States United States 1990 II Chapman Ohio United States United States 1991 IV Ohio Ohio United States United States 1991 IV Ohio Ohio Ohio United States United States 1991 IV Ohio Ohio Ohio Ohio Ohio Ohio Ohio Ohio		Archer	Iowa	United States			
Bell		Bass	Maryland	United States	United States		III
Bert Minnesota United States United States 1991 I Brock Ontario Canada Canada 1991 I Brock Ontario Canada Canada 1991 I Brock United States 1992 I Calboum Kentucky United States United States 1992 I United States Charleston Ohio United States United States 1993 IV. Chapman Ohio United States United States 1992 III Corsica Maryland United States United States 1991 IV. Delsoy 4210 Missouri United States United States 1991 IV. Delsoy 4500 Missouri United States United States 1991 IV. Delsoy 4910 Missouri United States United States 1991 IV. Delsoy 4900 Missouri United States 1992 IV. Delsoy 4900 Missouri United States 1992 IV. Delsoy 4900 Missouri United States 1993 IV. Delsoy 4900 Missouri		Bell	Illinois	United States			
Brock		Bert	Minnesota	United States			
Butterbean		Brock	Ontario	Canada			
Calhoum Kentucky United States United States 1993 IV. Charpman Ohio United States United States 1990 III Charleston Ohio United States United States 1990 III Corsica Maryland United States United States 1991 IV. Delsoy 4210 Missouri United States United States 1991 IV. Delsoy 4710 Missouri United States United States 1991 IV. Delsoy 4900 Missouri United States United States 1991 IV. Dimon Michigan United States United States 1991 III Edison Ohio United States United States 1991 III Edison Ohio United States United States 1991 III Hamilton Illinois United States United States 1991 II Harvointon Ontario United States United States		Butterbean	Unknown	United States	United States		
Chapman Ohio United States United States 1990 II Charleston Ohio United States United States 1992 III Corsica Maryland United States United States 1991 IV Delsoy 4210 Missouri United States United States 1991 IV Delsoy 4500 Missouri United States United States 1989 IV Delsoy 4900 Missouri United States United States 1991 IV Dimon Michigan United States United States 1991 III Dunbar Nebraska United States United States 1991 III Edison Ohio United States United States 1991 III Erie Ohio United States United States 1991 II Hamilton Illinois United States 1091 II Harovinton Ontario Canada Canada 1989 IV		Calhoun	Kentucky	United States			ĪV
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Corsica Maryland United States United States 1991 IV Delsoy 4210 Missouri United States United States 1991 IV Delsoy 4500 Missouri United States United States 1989 IV Delsoy 4710 Missouri United States United States 1991 IV Delsoy 4900 Missouri United States United States 1991 IV Dimon Michigan United States United States 1991 III Dumbar Nebraska United States 1991 III Edison Ohio United States 1991 III Edison Ohio United States 1991 II Hamilton Illinois United States 1991 II Hamilton Illinois United States 1991 II Harovinton Ontario Canada United States 1989 IV Haroy Ohio United States United Stat							
Delsoy 4210		Corsica					
Delsoy 4500 Missouri United States United States 1989 IV Delsoy 4710 Missouri United States United States 1991 IV Delsoy 4900 Missouri United States United States 1991 IV Dimon Michigan United States United States 1991 III Dunbar Nebraska United States United States 1991 III Edison Ohio United States 1991 III Edison Ohio United States 1991 III Felix Michigan United States 1991 II Hamilton Illinois United States 1991 II Harovinton Ontario Canada United States 1989 IV Holt Nebraska United States United States 1989 II HP201 Iowa United States United States 1989 I HP202 Iowa United States		Delsoy 4210					
Delsoy 4900 Missouri United States United States 1991 IV							
Delsoy 4900 Missouri United States United States 1989 IV							
Dimon Michigan United States United States 1991 III Dunbar Nebraska United States United States 1991 III Edison Ohio United States United States 1991 III Edison Ohio United States United States 1991 III Erie Ohio United States United States 1991 III Felix Michigan United States United States 1991 III Hamilton III Ilinois United States United States 1991 III Hamilton Ontario Canada Canada 1988 IV United States 1989 IV Harovinton Ontario Canada Canada 1988 III HAP201 III Nebraska United States United States 1989 III HP201 Iowa United States United States 1988 III HP202 Iowa United States United States 1988 III HP203 Iowa United States United States 1988 III III III III III III III III III							
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Nile Illinois United States United States 1991 IV OAC Dorado Ontario Canada Canada 1988 I OAC Shire Ontario Canada Canada 1990 I							
OAC Dorado Ontario Canada Canada 1988 I OAC Shire Ontario Canada Canada 1990 I							
OAC Shire Ontario Canada Canada 1990 I							
0.40 0.11							
OAC Tailoot Ontario Canada Canada 1991 II							
		OAC Talbot	Ontario	Canada	Canada	1991	II

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

P.,4	•		Flower			Don-!t	Pod	Seedco		Hilum	Othor to its	Seed
Entry	group	term.	color	Color	Form	Density	color		Color	color	Other traits	shape
Amcor 89	II	N	P	G	E	N	Br	S	Y	Y		2N
Archer	I	N	P	G	E	N	Tn	D	Y	Ib		2N
Bass	III ·	N	P	T	E	N	Tn	D	Y	Bl		2N
Bell	I	N	P	T	E	N	Tn	S	Y	B1		2N
Bert	I	N	P	G	E	N	Br	I	Y	\mathbf{Bf}		2N
Brock	I	N	P	T	\mathbf{E}	N	Br	D	Y	Br		2N
Butterbean	I	D	W	T	\mathbf{E}	Ssp	Br	D	Lgn	B1	Vsc	2N
Calhoun	IV	D	P	G	E	N	Tn	I	Y	\mathbf{Bf}		2N
Chapman	II	N	P	G	\mathbf{E}	· N	Br	S	Y	Ib		2N
Charleston	III	D	P	T	E	N	Tn	S	Y	Bl		3N
Corsica	IV	N	P	T	\mathbf{E}	N	Tn	D	Y	G		2N
Delsoy 4210	IV	N	W	T	E	N	Tn	I	Y	B1		2N
Delsoy 4500	IV	N	W	G	E	N	Tn	I	Y	Bf		2N
Delsoy 4710	IV	N	P	T	E	N	Tn	I	Y	Bl		2N
Delsoy 4900	IV	D	P	T	E	N	Tn	D	Y	Lbr		2N
Dimon	II	N	P	T	E	N	Tn	S	Y	B1		2N
Dunbar	III	N	P	G	E	N	Br	I	Y	Ib		2N
Edison	III	N	P	Т	E	N	Tn	S	Y	Bl		2N
Erie	II	N	P	T	E	N	Br	D	Y	Br		2N
Felix	I	N	W	G	Е	N	Br	D	Y	Y		2N
Hamilton	IV	N	W	G	E	N	Br	S	Y	\mathbf{Bf}		2N
Harovinton	I	N	P	G	E	N	Tn	D	Y	Y		2N
Hayes	III	N	P	G	E	N	Br	S	Y	Ib		2N
Holt	II	N	W	G	E	N	Br	D	Y	Bf		2N
HP201	I	N	P	G	E	N	Br	D	Y	Y		2N
HP202	I	N	P	G	E	N	Tn	D	Y	Y		2N
HP203	Ī	N	W	G	E	N	Tn	D	Y	Y		2N
HP204	Ī	N	P	G	E	N	Tn	D	Y	Y		2N
IL1	II	D	P	Ğ	E	N	Tn	S	Ÿ	Lbf	Vhil	2N
IL2	III	D	P	Ğ	Ē	N	Tn	Ď	Ÿ	Lbf	Vhil	2N
Jack	II	N	W	Ğ	Ē	N	Br	D	Ÿ	Y		2N
Kasota	I	N	w	G	E	N	Br	D	Y	Bf		2N
Kato	Ī	N	P	T	E	N	Br	S	Ÿ	Bl		2N
Kenwood	II	N	P	T	Ē	N	Br	D	Ŷ	Bl		2N
Kunitz	III	N	W	T	E	N	Tn	S	Ÿ	Bl		2N
Lancaster	III	D	P	T	E	N	Tn	D	Y	Bl		2N
Lancasiei Leslie	I	N	P	G	E	N	Tn	I	Y	Ib		2N
Linford	III	N	W	T	E	N	Tn	S	Y	Bl		2N
LS201	II	N	P	G	E	N	Tn	D	Ÿ	Y		3N
LS201 LS301	III	N	P	G	E	N	Br	D	Y	Y		2N
Marcus	II	N	W	T	E	N	Tn	D	Y	Br		3N
Marcus Newton	II	N	P P	G	E	N	Br	S	Y	Ib		2N
	II IV	N N	W	T	E	N	Tn	I	Y	Bl		2N
Nile			vv P	T	E	N	Br	D	Y	Br		2N
OAC Dorado	I	N N		T T			Br	D	Y	Bl		2N 2N
OAC Shire	I	N	P	I	E	N	DI.	ע	I	DI		21N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity	<i>-</i>		Stem	Shatter	ing	Seed		*	
	date	date	Lodging	Heigh			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)			(score)		(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
Amcor 89	708	919	1.8	93	3.0	1.0	1.0	2.0	2.0	16.0	3.46
Archer	701	908	1.2	82	3.0	1.0	1.5	1.8			
Bass	712	1002^	1.2	104	3.0	1.0	1.0	2.0	1.0	14.8*	3.32*
Bell	705	911	1.5	76	3.0	1.0			2.0	15.0	4.26
Bert	701	907	1.5	90	3.0	1.0	1.0	1.8	1.5	17.6	3.52*
Brock	701	910	1.0	80			1.0	2.0	1.5	14.2	3.53
Butterbean	70 4 707	905			3.0	1.0	1.0	1.8	1.0	16.0	3.65
Calhoun	707 722		1.0	36	1.0	1.2	4.0*	2.2	1.0	24.5	2.63
		1013^	1.2	81*	1.0	1.0	1.0	1.8	1.5	14.2*	3.91*
Chapman	710	919	1.2	88	3.0	1.0	1.0	1.8	1.0	19.5	4.15
Charleston	715	929^	1.2	68	1.0	1.0	1.0	1.8	2.0	16.0	4.44
Corsica	714	1003^	1.5	93*	3.0	1.0	1.0	2.0	2.0	16.5*	3.69*
Delsoy 4210	716	1010^	2.2	117*	3.0	1.0	1.0	2.5	2.0	17.5*	3.61*
Delsoy 4500	714	1007^	2.0	114	3.0	1.0	1.0	2.0	2.0*	12.6	3.59*
Delsoy 4710	719	1012^	2.5	122	3.0	1.0	1.0	3.2	2.5	13.8*	3.05*
Delsoy 4900	807	1031^	2.5	107*	1.0	1.0	1.0^	2.5	2.5	14.6*	2.15
Dimon	708	917	1.5	80	3.0	1.0	1.0	2.2	2.0	17.0	3.85
Dunbar	710	924	1.2	94	3.0	1.0	1.0	2.0	1.0	15.0	4.27*
Edison	710	929^	1.2	92	3.0	1.0	1.0	2.0	2.0	14.4	3.86*
Erie	703	909	1.8	80	3.0	1.0	1.0	1.8	1.0	15.3	3.76
Felix	702	906	1.0	84	3.0	1.0	1.0	1.8	1.5	15.4*	3.45
Hamilton	712	927	1.8	93	3.0	1.0	1.0	2.0	1.5	16.4*	3.37
Harovinton	701	908	1.5	74	3.0	1.0	1.0	2.0	1.0	20.8	3.31*
Hayes	711	927^	1.8	98	3.0	1.0	1.2	2.0	1.5	17.6*	3.74
Holt	702	912	1.0	80	3.0	1.0	1.0	1.8	1.0	17.9	3.78
HP201	703	907	1.5	78	3.0	1.0	1.0	2.0	1.0	16.5	3.24
HP202	629	907	1.2	87	3.0	1.0	1.2	2.0	1.0	17.6	3.20
HP203	703	912	1.8	94	3.0	1.0	1.0	2.2	1.5	17.9	3.08
HP204	629	909	1.8	91	3.0	1.0	1.0	2.2	1.5	20.6	3.35
IL1	717	917	1.2	54	1.0	1.8	3.5*	1.8	1.0	7.5	2.74
IL2	723	1004^	1.2	76	1.5	1.0	1.0	1.5	1.0	10.2	3.41
Jack	707	919^	2.0	102	3.0	1.0	1.0	2.0	2.0	14.4	4.45
Kasota	703	905	1.0	71	3.0	1.0	1.0	2.2	1.0	15.2*	2.84
Kato	701	901	1.0	78	3.0	1.0	1.0	2.2	1.0	18.3	2.87
Kenwood	707	915	1.8	86	3.0	1.0	1.0	2.0	1.5	14.7	3.76
Kunitz	711	928^	1.5	110	3.0	1.0	1.0	2.2	2.0	18.6	3.87
Lancaster	707	927^	1.2	70	1.5	1.0	1.0	2.0	1.5	17.4	3.61
Leslie	630	907	1.0	80	3.0	1.0	1.0	2.2	1.0	16.2	3.12
Linford	713	1003^	2.0	113	3.0	1.0	1.0	2.2	2.0	17.7*	4.40
LS201	708	915	1.0	79*	3.0	1.0	1.0	2.0	1.5	25.2*	3.36
LS301	706	917	1.2	72	3.0	1.0	1.0	2.8	1.5	26.4*	3.22
Marcus	708	913	1.5	72	3.0	1.0	1.2	2.2	1.5	16.1	3.35
Newton	708	917	1.8	99	3.0	1.0	1.2	1.8	1.0	16.1	3.51
Nile	714	1005^	2.2	121	3.0	1.0	1.0	2.5	2.0	10.0	
OAC Dorado	628	905	1.0	72	3.0	1.0	1.0	1.5	1.0		3.68*
OAC Shire	702	907	1.0	58	2.0	1.0	1.0	1.8	1.0	14.9 15.2	3.01 3.18*
OAC Talbot	702	907	1.0	70	3.0	1.0	1.0	2.0	1.5		
	, 02	201	1.0	, 0	5.0	1.0	1.0	2.0	د.1	17.2	3.72

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed con	position	Oil composition						
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic		
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
Amcor 89	II	39.9	19.6	11.3	3.7	24.5	53.2	7.0		
Archer	I	45.1	21.6	10.4	3.9	22.7	55.3	7.7		
Bass	III	44.7	21.3	11.5	4.6	21.6	55.0	7.3		
Bell	I	45.6	22.8	11.4	3.5	24.1	54.4	6.5		
Bert	Ī	42.1	23.0	12.1	3.9	24.0	53.4	6.6		
Brock	Ī	43.6	23.6	11.5	4.2	20.8	56.8	6.4		
Butterbean	I	40.3	21.3	10.7	3.1	34.5	45.4	5.7		
Calhoun	IV	46.2	20.3	12.5	3.8	20.7	54.4	8.6		
Chapman	II	40.7	20.5	11.6	3.9	23.8	54.4	6.1		
Charleston	III	43.4	21.5	10.9	4.2	19.3	57.8	7.5		
Corsica	IV	46.8	19.0	11.9	4.1	20.6	55.9	7.6		
Delsoy 4210	IV	45.7	20.7	10.6	4.2	19.7	57.4	8.1		
Delsoy 4500	IV	45.2	20.0	11.3	4.0	20.8	56.3	7.7		
Delsoy 4710	IV	43.3	20.5	10.6	4.5	18.0	58.3	8.6		
Delsoy 4900	IV	43.5	19.4	10.8	4.7	20.7	54.7	9.1		
Dimon	II	40.4	20.3	12.1	4.5	19.6	56.4	7.2		
Dunbar	III	45.0	21.1	11.4	3.8	19.7	56.8	8.3		
Edison	III	44.5	20.8	11.4	4.1	19.2	57.5	7.8		
Erie	II	43.1	19.6	12.5	4.4	29.6	48.2	5.3		
Felix	I	45.2	20.5	12.0	3.3	22.5	55.9	6.1		
Hamilton	IV	45.6	21.3	11.0	3.7	23.6	54.9	6.8		
Harovinton	I	48.2	20.1	10.8	3.5	29.2	50.2	6.2		
Hayes	III	42.7	22.0	11.7	3.9	22.4	55.1	7.0		
Holt	II	42.4	20.8	12.0	3.7	23.7	54.6	5.9		
HP201	Ī	44.5	23.1	10.8	3.5	29.6	50.1	5.8		
HP202	Ī	47.1	20.7	11.3	4.3	25.3	52.5	6.4		
HP203	Ī	46.1	21.4	11.0	4.1	27.0	51.7	6.0		
HP204	Ī	48.7	19.7	10.7	3.6	25.4	53.4	6.6		
IL1	II	40.1	18.4	11.7	4.1	20.6	55.8	7.7		
IL2	III	44.5	19.1	12.0	3.8	20.2	55.7	8.3		
Jack	II	39.3	19.7	11.1	4.1	21.3	56.5	6.8		
Kasota	I	46.4	22.6	11.4	4.3	24.0	54.3	6.0		
Kato	Ī	46.6	21.1	11.4	3.5	25.8	52.5	6.5		
Kenwood	II	38.8	21.1	13.0	4.2	22.6	54.0	6.2		
Kunitz	III	44.1	20.9	10.8	3.8	21.0	56.9	7.5		
Lancaster	III	48.6	19.4	11.3	4.1	22.6	55.4	6.7		
Leslie	I	44.0	22.8	11.2	4.2	23.5	54.7	6.4		
Linford	III	45.2	20.9	11.1	3.8	20.5	56.2	8.5		
LS201	II	42.6	20.2	12.0	4.3	23.5	54.0	6.2		
LS301	III	44.2	19.7	11.2	3.5	23.9	53.5	7.9		
Marcus	II	40.9	20.8	11.8	4.5	22.6	54.2	6.3		
Newton	II	38.1	19.8	10.9	4.1	20.0	57.2	7.8		
Nile	IV	44.8	19.9	11.4	4.4	20.8	56.0	7.4		
OAC Dorado	I	41.9	24.2	11.0	3.2	25.3	54.1	6.4		
OAC Shire	I	45.6	23.2	11.3	4.6	26.6	51.2	5.4		
OAC Talbot	II	39.7	22.0	11.9	4.0	23.0	55.4	5.7		

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

			Count	Ct	37	
	Accession	Pagion	Country of	Country	Year	Matalle
PI No.	name	Region		of	introduced	
1110.		of origin	origin	acquisition	or released	group
	Parker	Minnesota	United States	United States	1992	I
	Pharaoh	Illinois	United States	United States	1989	IV
	Piatt	Illinois	United States	United States	1993	III
	RCAT Alliance	Ontario	Canada	Canada	1988	II
	RCAT Angora	Ontario	Canada	Canada	1991	II
	RCAT Persian	Ontario	Canada	Canada	1989	I
	Sandusky	Ohio	United States	United States	1993	II
	Spry	Illinois	United States	United States	1991	IV
	SS201	Iowa	United States	United States	1989	II
	SS202	Iowa	United States	United States	1989	II
	Sturdy	Minnesota	United States	United States	1989	II
	Thorne	Ohio	United States	United States	1992	III
	Vertex	Ohio	United States	United States	1993	II
507671	Aurika	Unknown	Russia	Russia	1987	II
507676	Colpon	Unknown	Russia	Russia	1987	III
507678	Fakel	Unknown	Russia	Russia	1987	I
507681B	(Jangiabad)	Unknown	Uzbekistan	Russia	1987	II
507683	Kartuli 7	Unknown	Russia	Russia	1987	I
507684	Kazahstanskaja 5	Unknown	Kazakhstan	Russia	1987	II
507692A		Unknown	Russia	Russia	1987	III
507692B	(Orzu)	Unknown	Russia	Russia	1987	III
507693	Peremoga	Unknown	Russia	Russia	1987	I
507694	Plamia	Unknown	Russia	Russia	1987	II
507695	Premera	Unknown	Russia	Russia	1987	I
507696A	3	Primorye	Russia	Russia	1987	II
507696B	(Primorskaja 529)	Primorye	Russia	Russia	1987	II
507696C	(Primorskaja 529)	Primorye	Russia	Russia	1987	III
507697	Ranniaja 10	Unknown	Russia	Russia	1987	I
507699	Senaki	Unknown	Russia	Russia	1987	II
507701	Skynteja	Unknown	Russia	Russia	1987	I
507707		Unknown	Russia	Russia	1987	II
507708	VNIIMK 6	Krasnodar	Russia	Russia	1987	III
507709	VNIIMK 15	Krasnodar	Russia	Russia	1987	Ι
507712	Volna	Unknown	Russia	Russia	1987	0
507715B	(Zaznica)	Unknown	Russia	Russia	1987	00
507716		Unknown	North Korea	Russia	1987	II
507717		Unknown	North Korea	Russia	1987	Ι
507718A		Unknown	North Korea	Russia	1987	II
507718B		Unknown	North Korea	Russia	1987	IV
508293		Cholla Nam	South Korea	South Korea	1987	IV
508296A		Cholla Nam	South Korea	South Korea	1987	IV
508296B		Cholla Nam	South Korea	South Korea	1987	IV
508296C		Cholla Nam	South Korea	South Korea	1987	III
508296D		Cholla Nam	South Korea	South Korea	1987	IV
508296E		Cholla Nam	South Korea	South Korea	1987	IV
508296F		Cholla Nam	South Korea	South Korea	1987	IV

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

				····								
	Maturity	Stem	Flower				Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
Parker	I	N	W	G	E	N	Br	D	Y	Bf		3N
Pharaoh	IV	D	P	T	Е	N	Tn	S	Y	Br		2N
Piatt	III	N	W	G	E	N	Tn	D	Y	\mathbf{Bf}		2N
RCAT Alliance		N	P	Т	E	Dn	Br	D	Y	Bl		2N
RCAT Angora	II	N	P	G	E	N	Br	D	Y	Y		2N
RCAT Persian	I	N	W	G	E	Dn	Br	D	Y	Y		3N
Sandusky	II	N	P	Ğ	E	N	Tn	D	Y	Bf		2N
Spry	IV	S	P	T	E	N	Tn	D	Y	Bl		2N
SS201	II	N	P	Ġ	Ē	N	Br	D	Y	Y		2N
SS201	II	N	P	G	Ē	N	Br	D	Ÿ	Ÿ		2N
Sturdy	II	N	P	G	E	N	Br	S	Ÿ	Ιb		2N
Thorne	III	N	W	T	E	N	Br	Ď	Ÿ	B1		2N
Vertex	II	N	P	Ġ	E	N	Br	D	Y	Bf		2N
507671	II	N	P	T	E	N	Br	I	Y	Lbl		2N
	III	N	W	T	E	N	Br	I	Y	Bl		2N
507676		N N	W	T	E	N	Br	I	Y	Bl		2N
507678	I		W	G	E	N	Br	I	Y	Y		2N
507681B	II	N		G	E	N	Dbr	S	Y	Bf	Abh	2N
507683	I	N	P		E E	N N		I	Y	Br	Sabh	2N
507684	II	D	W	T			Br		Y	Bl	Saun	2N 2N
507692A	III	N	W	T	E	N	Br	I	Y			2N 2N
507692B	III	N	W	T	E	N	Tn	S	Y Y	Bl To	A 1-1- 371-:1	
507693	I	N	P	T	E	N	Tn	D		Tn	Abh, Vhil	4N
507694	II	N	P	T	E	N	Br	I	Y	Bl		2N
507695	I	S	P	T	E	N	Br	D	Y	Tn	* ** '1	2N
507696A	II	N	P	G	E	N	Br	I	Y	Lbf	Vhil	2N
507696B	II	N	W	G	E	N	Br	I	Y	Y		2N
507696C	III	N	W	G	E	N	Br	I	Y	Lbf	Vhil	2N
507697	I	N	P	T	E	N	Br	S	Y	Br		2N
507699	II	N	P	G	E	N	Br	I	Y	Ib		3N
507701	I	N	W	T	E	N	Br	D	Y	Br		2N
507707	II	N	P	T	E	N	Br	I	Y	Bl	Vhil	2N
507708	III	N	W	T	E	N	Br	I	Y	Bl		2N
507709	I	D	P	T	E	N	Br	S	Y	Bl	Abh	3N
507712	0	D	P	T	E	N	Br	S	Y	Bl		3N
507715B	00	D	P	T	E	N	Br	I	Y	Br	Abh	2N
507716	II	N	P	T	E	N	Br	I	Y	Lbr		3N
507717	I	N	P	T	Sa	Ssp	Tn	D	Y	Tn		3N
507718A	II	D	P	G	Sa	N	Br	I	Y	Bf	Vhil	2N
507718B	IV	D	P	G	E	Ssp	Tn	I	Y	Y		2N
508293	IV	D	P	G	Α	N	Br	I	Y	\mathbf{Bf}		2N
508296A	IV	D	W	G	Α	N	Tn	I	Y	Y		1N
508296B	IV	D	W	G	E	N	Tn	I	Y	Bf		2N
508296C	III	S	W	G	Α	Ssp	Tn	I	Y	Y		2N
508296D	IV	S	P	G	E	Ssp	Tn	I	Y	Bf		2N
508296E	IV	D	P	G	E	Ssp	Br	I	Y	Bf		3N
508296F	IV	S	W	G	E	Ssp	Lbr	I	Y	Bf		2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity	7		Stem	Shatter	ing	Seed			
	date	date	Lodging	Heigh			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)		(cm)	(score)	•	(score)		(score)	$(cg sd^{-1})$	(Mg ha ⁻¹)
Parker	704	906	1.2	86	3.0	1.0	1.0	1.8	1.0	16.8	3.43*
Pharaoh	726	1023^	2.5	103*	2.0	1.0	1.0^	2.2	3.0	11.6*	3.34*
Piatt	709	929^	1.2	95	3.0	1.0	1.2	2.0	1.5	15.2	3.80
RCAT Alliance	702	913	1.2	82	3.0	1.0	1.0	2.0	1.5	18.5	3.80
RCAT Angora	706	919	1.8	81	3.0	1.0	1.0	2.0	2.0*	16.0	4.27
RCAT Persian	703	907	1.0	70	3.0	1.0	1.0	2.0	1.0	15.7	3.37
Sandusky	707	919	1.2	88	3.0	1.0	1.0	1.8	1.5	17.8	3.97
Spry	726	1014^	2.8	104	2.0	1.0	1.0	2.2	2.5	14.4*	3.97 3.19*
SS201	710	919	2.0	83	3.0	1.0	1.5	2.2	1.5	9.3	3.73
SS202	707	917	2.5	94	4.0	1.0	1.5	2.0	1.5	10.2	3.75
Sturdy	701	911	1.0	76	3.0	1.0	1.5	1.8	1.0	17.2	3.46
Thorne	713	927^	1.5	86	3.0	1.0	1.0	2.0	2.0	17.2	4.05
Vertex	705	913	1.2	84	3.0	1.0	1.0	1.8	1.0	18.8	
507671	706	909	2.0	71	3.0	1.0	1.0	2.0	1.0	14.2	4.12 3.42
507676	713	920	2.0	105	3.0	1.0	1.5	2.5	1.0	14.2	2.90
507678	704	907	1.2	78	3.0	1.0	1.2	2.2	1.0	14.2	2.84
507681B	715	914	1.2	77	3.0	1.0	1.0	2.0	1.5	17.0	3.42
507683	710	909	1.8	70	3.0	1.0	1.0	1.8	1.0	14.7	3.42
507684	714	913	1.5	64	1.0	1.0	1.0	2.2	1.5	13.6	3.29
507692A	714	923	2.5	106	3.0	1.0	1.0	2.2	2.0	13.8	
507692B	714	928^	2.2	99*	3.0	1.0	1.0	2.2	2.0*	13.6	2.96 2.39*
507693	701	901	2.0	78	3.0	1.0	1.0	2.8*	2.0	13.1	
507694	710	914	2.0	104	2.5	1.0	1.0	2.2	1.0	15.1	2.73
507695	705	907	1.5	64	2.0	1.2	1.5	2.0	1.5	13.7	2.67 2.42
507696A	710	913	2.0	71	3.0	1.0	1.2	2.5	2.0	13.7 17.4*	2.42
507696B	709	911	1.8	74	3.0	1.0	2.0*	2.8	1.0	16.1	2.93
507696C	711	917	2.2	112	3.0	1.0	1.0	2.8	2.0*	19.5	2.60
507697	708	903	1.5	66	3.0	1.0	1.5	2.0	1.0	11.7	2.74
507699	708	917	1.2*	96	3.0	1.0	1.2	2.0	1.0	17.8	3.30
507701	707	904	1.2	66	3.0	1.0	1.0	1.8	1.0	12.2	2.28
507707	712	911	2.0	84	3.0	1.0	1.0	2.0	1.5	15.2	2.28
507708	710	922	2.0	105	3.0	1.0	1.0	2.5	2.0	13.6	2.73
507709	705	905	1.2	60	2.0	1.0	1.0	1.8	1.0	13.0	2.72
507712	702	825	2.2*	70	2.0	1.0	1.2	2.0	1.0	13.8	
507715B	629	826	2.2*	60	2.0	3.0*	3.5*	2.0	1.0	12.3	2.17 1.43
507716	712	911	1.8	87	3.0	1.0	1.2	2.0	1.0	16.3	2.48
507717	708	830	3.2	68	3.0	1.0	1.0	2.5	1.0	14.2	1.95
507718A	717	913	1.5	45	1.0	1.0	2.5*	1.8	1.5	12.2	2.64
507718B	720	1006^	1.5	56*	1.0	1.0	1.0	2.8*	3.5	11.7*	1.89*
508293	729	1001	2.8	74*	1.0	1.0	1.5	2.0	3.0	10.8	2.36*
508296A	722	927	2.8	60*	1.0	2.2*	3.5*	2.0	3.0	14.6*	1.62*
508296B	722	927	2.2	75 *	1.0	1.0	3.0*	2.2	3.5	17.7*	1.90
508296C	720	924	2.5	58*	2.0	3.2*	3.5*	2.0	2.5	18.8*	1.33*
508296D	727		2.2	78 *	2.0	2.0*	2.5*	1.8	4.0	9.6	1.87*
508296E	802		3.8	107	1.0	1.5	3.0*	2.2	3.0	11.0	0.93
508296F	730		2.8	95	2.0	1.0	1.0	2.2	2.0	16.0*	1.80*
J J J J J J J J	. 50	1010	2.0	,,	2.0	1.0	1.0	۷.۷	2.0	10.0	1.00

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed cor		Oil compo		***		
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Parker	I	43.7	23.0	10.8	4.2	30.0	49.4	5.3
Pharaoh	ĪV	43.9	21.0	11.2	3.9	18.7	58.3	7.9
Piatt	III	43.8	21.2	11.9	4.5	19.4	56.4	7.9
RCAT Alliance	II	42.3	20.6	10.2	4.2	22.1	56.4	6.8
RCAT Angora	II	37.9	21.4	11.5	4.1	22.2	54.9	7.1
CAT Persian	I	44.2	22.1	12.2	3.3	23.7	54.2	6.6
andusky	II	37.7	21.8	11.6	3.9	26.0	52.3	6.1
pry	IV	45.8	20.8	10.4	4.6	23.7	54.4	7.0
S201	II	39.2	18.1	11.7	3.7	18.1	57.0	8.9
S202	II	43.4	17.8	11.4	4.1	24.5	53.5	6.3
turdy	II	44.0	22.7	11.0	3.8	26.6	52.3	6.3
horne	III	43.9	20.7	10.9	3.9	20.4	56.8	7.9
riorne ertex	II	40.5	21.2	12.1	3.8	25.3	52.1	6.3
07671	II	42.1	20.6	11.6	4.1	23.3	56.1	6.8
07676	III	43.8	22.1	11.0	4.1	20.7	56.4	7.9
07678	I	43.3	20.5	12.2	3.6	24.2	53.7	6.4
07681B	II	43.3 42.9	18.4	12.2	3.5			
07683	I	45.4	22.1			22.0	54.3	7.6
				10.1	3.4	30.7	49.7	6.2
07684	II	42.9	18.4	12.9	3.9	20.4	55.1	7.7
07692A	III	48.0	19.7	11.1	4.1	19.2	57.4	8.2
07692B	III	48.3	18.2	11.5	4.2	18.6	57.1	8.7
07693	I	46.0	19.7	11.4	3.6	22.3	54.9	7.7
07694	II	41.9	19.0	11.0	4.2	24.6	52.9	7.3
07695	I	44.1	22.9	11.4	4.2	24.3	53.9	6.1
07696A	II	44.5	17.7	12.9	3.7	22.1	54.3	7.0
07696B	II	48.2	18.8	12.8	3.6	22.4	54.3	7.0
07696C	III	46.8	19.6	12.6	3.7	25.5	51.8	6.5
07697	I	45.3	21.5	12.4	3.7	20.7	55.9	7.2
07699	II	42.1	18.4	10.8	4.1	18.3	58.1	8.1
07701	I	45.1	22.5	12.1	3.7	26.5	51.4	6.3
07707	II	44.6	18.6	11.7	4.2	23.6	53.3	6.8
07708	III	45.6	20.9	10.9	4.0	19.4	57.2	8.4
07709	I	45.5	21.1	10.5	3.3	25.0	54.1	7.0
07712	0	47.9	20.1	11.0	3.7	29.1	50.3	6.0
07715B	00	48.6	18.3	12.1	3.9	33.2	43.9	6.7
07716	II	42.9	18.0	11.1	3.8	22.7	54.9	6.9
07717	I	46.1	22.2	10.8	3.7	32.9	46.6	5.5
07718A	II	44.3	17.8	12.8	3.6	25.2	50.8	7.1
07718B	IV	49.5	16.7	11.5	4.1	21.0	55.0	8.4
08293	IV	47.4	17.1	12.5	4.0	20.6	53.9	9.1
08 2 96A	IV	47.7	16.9	12.6	3.9	22.9	52.6	8.0
08296B	IV	49.0	17.7	12.6	5.3	24.3	50.5	7.3
08296C	III	47.6	18.0	12.1	4.6	25.2	50.8	7.4
08296D	IV	51.3	15.3	11.0	4.0	21.2	54.5	9.3
08296E	IV	51.1	13.8	12.7	4.7	19.3	54.1	9.2
08 2 96F	IV	47.9	17.6	12.0	4.5	20.7	53.5	9.2

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	
508296G		Cholla Nam	South Korea	South Korea	1987	IV
508296H		Cholla Nam	South Korea	South Korea	1987	IV
509075		Kyonggi	South Korea	South Korea	1987	IV
509079		Chungchong Nam		South Korea	1987	IV
509083		Chungchong Nam		South Korea	1987	IV
509085		Chungchong Nam		South Korea	1987	IV
509087		Chungchong Puk	South Korea	South Korea	1987	IV
509088		Cholla Nam	South Korea	South Korea	1987	IV
509089		Cholla Puk	South Korea	South Korea	1987	IV
509105		Kyongsang Puk	South Korea	South Korea	1987	IV
509107		Kyongsang Puk	South Korea	South Korea	1987	IV
509111		Kyongsang Puk	South Korea	South Korea	1987	IV
509112		Kyongsang Puk	South Korea	South Korea	1987	IV
512322B	(Imeretinskaja)	Unknown	Georgia	Russia	1987	I
512322D	(Imeretinskaja)	Unknown	Georgia	Russia	1987	II
518283	(imeremisiaja)	Unknown	Taiwan	Taiwan	1988	II
518287	Mao 205		Unknown	Taiwan	1988	III
518290	Ping tung cho tzu tou	Unknown	Taiwan	Taiwan	1988	IV
518703	He feng 25	Heilongjiang	China	China	1988	Ī
518706C	(Hei nong 29)	Heilongjiang	China	China	1988	Ī
518707	Sui nong No. 7	Heilongjiang	China	China	1988	Ī
518708	Chang nong No. 4	Jilin	China	China	1988	II
518709	Jilin 18	Jilin	China	China	1988	I
518710	Jilin 20	Jilin	China	China	1988	Ī
518711	Jilin 21	Jilin	China	China	1988	II
518712	Kai yu No. 8	Liaoning	China	China	1988	III
518715	Tie feng 18	Liaoning	China	China	1988	III
518716	You bian 30	Beijing	China	China	1988	III
	Lu dou No. 4	Shandong	China	China	1988	III
518718B	(Lu dou No. 4)	Shandong	China	China	1988	III
518719	Lu dou No. 7	Shandong	China	China	1988	IV
518720	Yue jin No. 5	Shandong	China	China	1988	IV
518750	NS-16	Serbia	Yugoslavia	Yugoslavia	1988	I
518751	NS-20	Serbia	Yugoslavia	Yugoslavia	1988	II
518752	NS-106	Serbia	Yugoslavia	Yugoslavia	1988	I
518753	NS-L-30	Serbia	Yugoslavia	Yugoslavia	1988	I
518754	NS-L-118	Serbia	Yugoslavia	Yugoslavia	1988	I
518757	AGS 313	Unknown	Taiwan	Taiwan	1988	III
518758	Kaohsiung 1	Kaohsiung	Taiwan	Taiwan	1988	I
520733	-	Kyonggi	South Korea	South Korea	1988	IV
522189		Unknown	Moldova	Russia	1988	I
522190		Unknown	Moldova	Russia	1988	I
522191		Unknown	Moldova	Russia	1988	II
524993	Amurskaja 41	Amur	Russia	Russia	1988	II
525492	-	Unknown	Japan	United States	1988	II
J2J7J2						

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem	Flower	Pubes	cence		Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
508296G	IV	S	P	Ng	Sa	Ssp	Lbr	I	Y	Bf		2N
508296H	IV	D	P	G	E	Ssp	\mathbf{Br}	I	Y	Bf		3N
509075	IV	D	P	T	E	Ssp	Br	I	Gnbr	Br	Gnc	2N
509079	IV	S	P	G	E	N	Br	I	Y	Bf		2N
509083	IV	D	P	T	E	Ssp	Br	I	B1	Bl	Snet	2N
509085	IV	D	P	T	E	Ssp	Br	I	B1	B1	Snet	2N
509087	IV	D	P	G	E	Ssp	Br	I	Y	Y		2N
509088	IV	S	P	G	Sa	Ssp	Br	I	Y	Y		2N
509089	IV	D	P	T	E	Ssp	Tn	I	Y	Br		2N
509105	IV	D	P	G	E	Ssp	Br	I	Y	Y		2N
509107	IV	D	P	T	E	Ssp	Bl	S	Br	Br		2N
509111	IV	D	P	T	E	Ssp	Br	I	Gn	Bl	Gnc	2N
509112	IV	D	P	G	Α	N	Bl	I	Gn	\mathbf{Bf}	Gnc	2N
512322B	Ī	N	W	T	E	N	Br	D	Y	Brbl		3N
512322D	II	N	W	T	E	N	Br	I	Y	Br	Sph, Lft5	5N
518283	II	N	P	Lt	Sa	Ssp	Br	В	Bl	Bl	Sw	3N
518287	III	S	P	G	Α	Ssp	Br	I	Y	Lbf	Vhil	2N
518290	IV	D	P	G	Α	N	Tn	I	Y	Lbf	Vhil	2N
518703	I	D	W	G	E	Ssp	Br	D	Y	Y	Na	2N
518706C	Ī	N	W	G	E	N	Br	I	Y	Bf	Na	2N
518707	Ī	S	W	G	E	Ssp	Br	I	Y	Y	Na	1N
518708	ĪI	S	W	G	Е	N	Br	I	Y	Y		2N
518709	I	S	W	G	Е	Ssp	Br	S	Y	Y	Na	2N
518710	Ī	S	P	G	E	N Î	Br	S	Y	Y	Na	2N
518711	II	S	w	G	E	N	Br	I	Y	Y		2N
518712	III	D	W	G	E	Ssp	Br	I	Y	Lbf	Vhil	2N
518715	III	D	P	G	Е	N	Br	I	Y	Y		2N
518716	III	N	P	Ğ	Ā	N	Br	·I	Y	Lbf	Vhil	2N
518718A	III	D	w	Ť	Sa	N	Br	I	Y	Br		3N
518718B	III	S	w	T	Sa	N	Br	Ī	Ÿ	Br		2N
518719	IV	S	w	T	E	N	Br	Ī	Ÿ	Br		2N
518720	IV	S	w	Ġ	E	N	Br	Ī	Ÿ	Bf	Vhil	2N
518750	I	N	P	G	Ē	N	Br	S	Ÿ	Lbf		2N
518751	II	N	P	G	Ē	N	Br	Ī	Ÿ	Ιb		2R
518752	I	N	P	G	Ē	N	Br	D	Ÿ	Bf		2N
518753	I	N	P	G	Ē	N	Br	Ď	Ÿ	Bf		2N
518754	I	N	P	G	E	N	Tn	Ī	Ÿ	Bf		3N
518757	III	S	P	T	E	Ssp	Br	Ī	Gn	Br	Vsc	3N
518757	I	D	P	Ġ	Sa	N SSP	Br	Ī	Y	Y	- -	2N
520733	IV	D	W	G	Sa	Ssp	Tn	Ī	Ÿ	Ÿ		2N
520733	I	S	P	G	E	N N	Br	S	Ŷ	Ϊ́b		2N
	I	N	P	T	E	N	Br	I	Y	Bl		2N
522190	II	N	W	T	E	Ssp	Br	I	Br	Br		2N
522191	II	N N	W	G	E	N	Br	I	Y	Y		2N
524993		D	W W	T	E	Ssp	Br	S	Bl	Bl		3N
525492 532434	II II	D N	W W	T	E	N N	Bl	I	Bl	Bl		3F

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

-	Flowering	Maturity	<i>1</i>		Stem	Shatter	ing	Seed			
	date	date	Lodging	Heigh			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)		(cm)		•		(score)	(score)	$(cg sd^{-1})$	(Mg ha ⁻¹)
508296G	727	927	2.8	88*	2.0	1.2	3.0*	1.8	3.5	11.0	1.77
508296H	803	1007^	3.5	101	1.5	1.5	3.0*	2.5	3.0	11.8	1.11
509075	728	1020^	2.8	78*	1.0	1.2	1.2	2.0		18.4*	1.95*
509079	721	929	2.2	75*	2.0	1.0	3.0*	1.5	1.5	15.9*	2.83*
509083	730	1025^	3.0	76*	1.0	1.0	2.0^	2.8*		22.3*	1.51*
509085	730	1022^	3.2	72*	1.0	1.0	2.0^	2.8*		23.4*	1.66*
509087	803	1026^	3.2	87	1.0	1.0	1.0^	2.8*	4.5	17.6*	1.36*
509088	731	1023^	3.2	92*	2.0	1.0	2.0^	3.0	3.5	16.4*	1.76*
509089	806	1023^	3.5	72*	1.0	1.0	1.0^	2.5	5.0	10.4*	1.73*
509105	730	1022^	4.0	84	1.5	1.0	1.0^	2.2	3.0	17.1*	2.05
509107	806	1014^	3.5	81*	2.0	1.0	1.0	2.2		14.2*	2.03 1.79*
509111	801	1015^	3.2*	74	1.0	1.0	1.0	2.8*	4.5	16.8*	
509112	816	1023^	3.2*	66	1.0	1.0	1.0^	2.5	2.5		1.48*
512322B	710	903	2.2	80	3.0	1.0	1.0	2.2		6.6*	0.90
512322D	713	911	2.8	112*	4.0	1.0	1.0	2.2	1.0	13.6	2.68
518283	722	915	4.2	62	4.5	1.0	3.5		1.5	14.9	2.93
518287	725	927	2.0	71	2.0	2.2*	3.3 4.0*	2.0 2.0	1.0	5.0	1.12
518290	729	1009^	2.8	88	1.5	2.5*	3.5*		1.0	14.8*	1.95*
518703	701	830	1.0	52	1.5	1.0		2.0	2.5	12.9	1.94*
518706C	706	901	1.0	64	3.0		1.0	2.8	1.0	16.0	2.53
518707	629	829	1.0	58	3.0	1.0	1.0	2.8	1.0	14.8	2.92
518707	709	915	1.5	78	2.0	1.0 1.2	1.2	2.5	1.0	17.0	2.45
518709	706	905	1.0	65	3.0	1.2	1.8*	2.0	1.5	18.1*	3.18
518710	703	906	1.5	84	3.0		1.0	2.0	1.0	14.4	2.27
518711	705 706	915	1.8	72	2.0	1.0 1.0	1.0	1.8	1.0	16.1	2.49
518712	716	928^	1.5	71	1.5	1.0	1.2	1.8	1.5	18.1	3.48
518715	717	925	1.5	70	1.0	1.0	1.0 2.0*	2.5	2.0	21.2*	3.52
518716	728	1003^	2.5	78	3.0	1.0		2.5	2.5	16.6	3.21
518718A	728 721	923	1.5	60	1.0		1.5	2.5	1.0	19.2	2.27
518718B	721	923	2.5	95*		1.0	2.0*	1.8	1.0	14.3	3.27
518719	730	1007^	3.0	121*	2.0	1.0	2.5*	2.2	1.0	14.1	3.10
518720	803	1007	3.8		2.0	1.0	1.0	2.0	2.0*	12.6*	2.66*
518750	705	831	1.0	101*	2.0	1.2	2.0*	2.2	1.0	15.2*	2.50*
518751	703 710	919		64	3.0	1.0	1.0	2.5	1.0	14.3	2.38
			1.8	87	3.0	1.0	1.5	2.0	1.0	16.5*	4.05
518752	704 701		1.0	62	3.0	1.0	1.0	1.8	1.0	13.8	2.80^
518753 518754	701		1.2	70	3.0	1.0	1.0	2.0	1.0	15.2	2.49
518754	705		1.8	70	3.0	1.0	1.0	2.0	1.0	15.6	3.08
518757	721 700		2.2		2.0	1.5	2.8*	2.0	4.5	6.2	1.76
518758 520733	709 720		1.2		2.0	2.0	5.0	2.2	1.5	26.0	2.22
520733	720 710		1.5	62	1.5	1.5	3.0*	3.0	2.5	26.0*	2.29*
522189 522100	710		2.8		2.5	1.0	1.2	1.8	1.0	13.4*	2.52
522190	709 710		1.8		3.0	1.0	1.0	2.0	1.0	13.9	2.56
522191 524002	710				4.0	1.0	1.0	2.0		12.4	2.78
524993 525402	708		2.2		3.0	1.0	1.0	2.0	2.0	19.6*	3.28
525492 522424	711		1.0		1.0	1.8	3.5	2.0		25.6*	2.46
532434	719	918	3.8	108	4.0	1.0	2.0*	2.0		13.4	2.53

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed con	nposition .	Oil composition						
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic		
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
508296G	IV	46.9	18.6	12.8	4.3	21.5	53.5	7.8		
508296H	IV	51.5	14.4	12.8	4.6	19.7	54.1	8.8		
509075	IV	48.3	19.8	12.7	4.8	22.5	52.8	7.2		
509073 509079	IV	46.4	19.5	12.5	3.7	20.2	55.0	8.7		
509083	IV	47.8 ^w	15.3 ^w	11.1	5.2	22.4	53.0	8.3		
509085	IV	47.6 ^w	15.4 ^w	10.7	3.8	21.7	54.8	8.9		
509087	IV	46.2	19.1	11.4	4.6	21.6	54.0	8.3		
509088	IV	51.0	21.0	11.2	5.1	22.6	53.1	8.1		
509089	IV	49.1	17.2	11.1	4.4	18.5	52.7	9.0		
509105	IV	46.3	18.8	11.7	4.4	20.8	54.8	8.3		
	IV	46.9 ^w	16.6 ^w	10.5	4.4	19.6	57.4	8.1		
509107	IV	47.0	19.0	10.9	5.0	21.1	53.8	8.5		
509111	IV IV	42.1	20.7	12.2	5.2	19.6	51.8	11.3		
509112		42.1 47.5	20.7	12.2	3.7	30.9	47.4	5.8		
512322B	I	47.3	16.2	12.2	3.5	28.9	48.3	6.5		
12322D	II	43.1 48.1 ^w	10.2 11.2 ^w	13.9	3.8	13.3	56.9	12.1		
18283	II		18.4	11.6	3.3	20.1	55.1	10.0		
18287	III	44.6	19.0	11.1	4.1	21.4	54.2	9.3		
18290	IV	43.4	21.0	12.0	3.3	31.0	48.0	5.7		
18703	I	46.3		11.5	3.3 4.5	27.3	51.2	5.5		
18706C	I	45.5	22.9	13.0	3.5	26.0	50.7	6.7		
318707	I	43.4	21.6			27.4	52.0	5.6		
518708	II	40.6	20.2	10.8	4.0	26.8	50.8	5.9		
18709	I	44.7	19.9	12.0	3.4		48.8	6.2		
518710	I	43.0	22.6	11.7	4.1	29.0		6.2		
518711	II	44.3	22.0	11.2	3.9	25.0	53.7			
518712	III	41.1	19.7	10.7	3.7	28.4	50.7	6.5		
518715	III	42.5	20.5	12.3	3.9	23.7	52.3	7.7		
518716	III	42.2	20.4	11.7	4.2	23.6	52.9	7.6		
518718A	III	42.4	18.0	11.9	4.0	23.4	52.9	7.6		
518718B	III	45.2	20.6	12.0	3.9	24.3	52.2	7.6		
518719	IV	47.2	18.6	11.4	4.3	19.4	56.7	8.3		
518720	IV	47.1	18.3	11.5	4.0	20.2	53.5	10.1		
518750	I	42.7	25.4	11.0	4.6	30.0	48.3	6.0		
518751	II	43.4	21.1	10.4	3.4	19.0	59.1	7.6		
518752	I	44.1	22.7	12.2	3.6	26.1	52.1	6.1		
518753	I	46.2	23.0	11.5	3.9	26.8	51.6	6.2		
518754	I	44.3	22.8	12.3	4.1	29.1	48.1	6.4		
518757	III	42.1	20.7	11.8	4.4	17.5	54.8	11.5		
518758	I	41.9	23.0	11.5	3.2	28.5	50.4	6.4		
520733	IV	45.0	19.3	10.4	3.8	21.8	56.1	7.9		
522189	I	44.2	22.5	12.2	3.7	24.6	53.2	6.4		
522190	I	48.2	21.0	11.8	4.3	26.5	51.1	6.3		
522191	II	40.3 ^w	16.8 ^w	13.9	3.7	18.0	54.8	8.9		
524993	II	46.4	20.2	12.1	3.4	27.5	50.8	6.1		
525492	II	42.8 ^w	18.1 ^w	11.0	3.4	31.2	48.6	5.7		
532434	II	41.1 ^w	16.3 ^w	12.6	4.2	20.8	54.6	7.7		

Table~1.2.~Identification~and~origin~information~for~USDA~soybean~germplasm~in~maturity~groups~I~through~IV,~PI~507671~to~PI~574486.

			<u> </u>	<u> </u>		
	Accession	Danian	Country	Country	Year	
PI No.	name	Region	of	of	introduced	
		of origin	origin	acquisition	or released	group
532437	Gu nian dou	Jilin	China	China	1988	IV
532439	Fusong you xian bai hua	Jilin	China	China	1988	I
532441A	.	Jilin	China	China	1988	I
532441B	• • • • • • • • • • • • • • • • • • • •	Jilin	China	China	1988	II
532442	Bai mao zi	Jilin	China	China	1988	III
532443	Si li huang	Jilin	China	China	1988	II
532444A		Jilin	China	China	1988	I
532444B	(21 2)	Jilin	China	China	1988	II
532447	Chang bai yue huang	Jilin	China	China	1988	I
532448	Hua dian bai hua shao tiao dou	Jilin	China	China	1988	III
532455A	, ,	Jiangsu	China	China	1988	IV
532455B	` ; ;	Jiangsu	China	China	1988	IV
532456	Hang zhou wu yue bai	Jiangsu	China	China	1988	II
532457	An yue dou	Jiangsu	China	China	1988	III
532459	Huai dou yi hao	Jiangsu	China	China	1988	IV
532460A		Jiangsu	China	China	1988	IV
532460B	(Chen liu niu mao dou)	Jiangsu	China	China	1988	IV
532462A		Hebei	China	China	1988	III
532462B	(Fu 51)	Hebei	China	China	1988	IV
	He bei No. 1	Hebei	China	China	1988	III
	(He bei No. 1)	Hebei	China	China	1988	III
532464	He bei No. 6	Hebei	China	China	1988	II
532465	7531-3321	Hebei	China	China	1988	II
532466A		Chungchong Puk		South Korea	1988	IV
532466B		Chungchong Puk	South Korea	South Korea	1988	IV
532468	Karikachi 3	Unknown	Japan	Japan	1989	I
532469	Kitamidori	Unknown	Japan	Japan	1989	I
532471	Shiretoko	Unknown	Japan	Japan	1989	I
532472	Soya	Unknown	Japan	Japan	1989	II
532473	Tsurunoko	Unknown	Japan	Japan	1989	II
	Ryokkoh	Tainan	Taiwan	Taiwan	1989	III
536547B	(Ryokkoh)	Tainan	Taiwan	Taiwan	1989	III
536547C		Tainan	Taiwan	Taiwan	1989	III
	Bai mao dou	Hebei	China	China	1989	III
538376	Da bei mei dou	Hebei	China	China	1989	IV
538377	Niou mao huang	Hebei	China	China	1989	III
538378	Ping ding huang	Hebei	China	China	1989	IV
538380	Si jiao qi huang dou	Hebei	China	China	1989	IV
538381	Wu ji da huang dou	Hebei	China	China	1989	III
538382	Xiao bian hei dou	Hebei	China	China	1989	III
538383	Xiao hei dou	Hebei	China	China	1989	IV
538385A	Yi wo hou huang dou	Hebei	China	China	1989	IV
538385B	(Yi wo hou huang dou)	Hebei	China	China	1989	IV
	1886	Hebei	China	China	1989	III
538386B	(1886)	Hebei	China	China	1989	IV
538387	Tie feng 19	Liaoning	China	China	1989	II

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem	Flower	Pubes	cence		Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
532437	IV	D	W	G	E	Ssp	Br	I	Gn	Gn		2N
532439	I	D	W	G	E	Ssp	Br	S	Y	Y		2N
532441A	I	N	P	G	E	N	Br	I	Y	G		2N
532441B	II	N	P	G	E	N	Br	I	Y	Ig	Vhil	2N
532442	III	D	W	G	E	N	Br	S	Y	Y		3N
532443	II	N	P	G	E	N	Tn	I	Y	Y		3N
532444A	I	N	P	Lt	\mathbf{E}	N	Br	S	Br	Br		4F
532444B	II	N	P	Lt	Ε	N	Br	I	Gnbr	Gnbr		5F
532447	I	S	P	G	E	N	Tn	I	Y	Lbf	Vhil	2N
532448	III	N	W	G	E	Ssp	Br	· I	Y	Y	Na, Lft5	2N
532455A	IV	S	W	G	Α	N	Tn	I	Y	Bf		2N
532455B	IV	D	W	Ğ	E	N	Br	I	Y	\mathbf{Bf}		3N
532456	II	S	W	Ğ	Ā	N	Tn	I	Y	Bf		3N
532457	III	S	Dр	Ğ	A	N	Tn	I	Y	Ιb	Vhil	3N
532459	IV	S	P	Ğ	A	N	Tn	I	Y	Lbf		2N
532460A	IV	S	w	T	A	N	Br	I	Y	Br		2N
532460B	IV	S	W	T	Α	N	Br	I	Y	Br	Sph	2N
532462A	III	D	W	G	E	N	Dbr	I	Y	Lbf	Vhil	4N
532462B	IV	S	W	G	E	N	Dbr	· I	Y	Bf		3N
532463A	III	S	W	G	E	N	Br	I	Y	Lbf		2N
532463B	III	S	W	G	E	N	Br	I	Y	Bf		2N
532464	II	N	P	T	Sa	N	Br	I	Y	Br		2N
532465	II	N	P	Lt	Ε	N	Tn	I	Y	Y		2N
532466A	IV	D	P	G	E	Ssp	Br	I	Y	Y	Na	2N
532466B	IV	Ď	P	Ğ	E	Ssp	Br	I	Y	Y		3N
532468	I	Ď	w	G	Sa	Ssp	Br	D	Gn	Lbf		2N
532469	Ī	D	W	T	E	Ssp	Br	D	Gn	B1		3N
532471	I	D	w	G	Ē	N	Br	D	Gn	Gn		2N
532471	II	D	W	G	E	Ssp	Br	I	Gn	Lbf	Vhil	2N
532472	II	D	w	G	Ē	Ssp	Br	I	Y	Y	Sdef	2N
536547A	III	S	W	G	E	Ssp	Br	Ī	Gn	Gn	Na	2N
536547B	III	D	w	Ğ	Ē	Ssp	Br	Ī	Gn	Gn		2N
536547C	III	D	w	Ğ	Ē	Ssp	Br	I	Gn	Gn		2N
538375	III	N	P	Lt	Ē	N	Br	Ī	Y	Br		4F
538376	IV	S	Dp	G	Ē	N	Br	Ī	Y	\mathbf{Bf}		2N
538377	III	D	P	G	Ā	Sp	Tn	Ī	Y	Bf		3N
538378	IV	S	W	G	E	N	Br	Ī	Y	\mathbf{Bf}		2N
538380	IV	S	W	G	Ē	N	Br	I	Y	\mathbf{Bf}		3N
538381	III	D	P	G	Ā	N	Tn	Ī	Y	Ib	Vhil	2N
538382	III	N	W	T	E	N	Br	Ī	Bl	Bl		4F
538383	IV	S	P	T	Ē	N	Br	Ī	Bl	Bl		4N
538385A	IV	S	W	Ġ	E	N	Br	Ī	Y	Bf		4N
538385B	IV	S	Dp	G	E	N	Br	Ī	Ÿ	Bf		3N
	III	D	W	T	E	N	Br	Lb	Bl	Bl		4F
538386A	IV	D	P	T	E	N	Br	I	Bl	Bl		4N
538386B 538387	II	N	W	G	E	N	Tn	Ī	Y	Bf	Na	2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity	7		Stem	Shatter	ring	Seed			
	date	date	Lodging	Heigh			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)		(cm)		•		(score)	(score)	$(cg sd^{-1})$	(Mg ha ⁻¹)
532437	723	1011^	3.0	99	1.5	1.0	2.0*	2.5	3.5	21.7*	2.78
532439	707	907	1.0	39	1.0	1.0	1.2	2.0	1.0	18.1	2.78
532441A	707	905	2.0	97	3.0	1.0	1.5	3.0*	1.0	13.8	
532441B	708	919	2.2	107	3.5	1.0	1.5	2.0	1.5	15.0	2.75
532442	720	1005^	1.8	94	1.5	1.0	1.5	2.2	3.0	20.8	2.88
532443	715	919	2.8	94	3.0	1.0	1.5	1.8	2.0*		3.32
532444A	718	909	2.5	104	4.0	1.0	1.0	2.0		18.6	2.99
532444B	719	916	4.0	126	4.0	1.0	1.0	2.0		8.0	1.77
532447	706	905	3.5	76	2.0	1.0	1.0	2.0	1.0	10.4	2.89^
532448	717	919	2.2	97	3.0	1.0	3.2*	3.0	3.0	12.1	2.96
532455A	804	1006^	3.0	70 *	2.0	2.5*	3.0*	2.0		15.4*	2.60
532455B	803	1025^	2.0	100*	1.5	1.0	1.0^		2.5	11.2	0.94
532456	716	913	2.2	24	2.0	3.0*	5.0^	2.0	1.0	12.5	2.21*
532457	727	925	3.0	2 4 84*	2.0	1.0		1.8	1.5	13.6	0.37
532459	802	1009^	2.8*	78 *	2.0	2.2*	2.2*	2.2	2.5	10.9	1.60
532460A	803	1003^	1.8	52 *	2.0		3.0*	2.2	2.5	12.8*	1.74*
532460B	802	1013^	4.0	88*	2.0	1.0	2.0	1.8	2.0*	11.0	1.27
532462A	714	921	1.2	76	1.0	1.0	1.0	1.8	3.0	11.0	2.42*
532462B	726	1015^	2.2	106*	2.0	1.0	1.2	1.8	1.5	17.2	3.39
532463A	719	930^	1.8	85	2.0	1.0	1.0	2.0	2.0	14.6*	3.12*
532463B	725	1007^	2.8	104	2.0	1.0	1.0	2.0	2.0	19.0	3.66
532464	712	913	2.0	90*	3.0	1.0	1.5	2.0	2.0	11.6	2.59
532465	709	917	1.5	90	3.0	1.0	3.0*	1.8	1.0	18.8	2.99
532466A	723	1011^	1.8	70 *	1.0	1.0	2.0*	2.0	1.5	18.4*	3.69
532466B	803	1011	3.0	92		1.0	2.0*	1.8	1.5	22.3*	2.54*
532468	709	908	1.0	38	1.5 2.0	1.0	1.0	3.0*	4.0	18.4*	1.62*
532469	707	904	1.0	36 34		1.5	4.5	3.2*	2.0	25.4	1.96
532471	707	911	1.0		1.0	1.5	4.0*	2.8	1.0	21.7	2.05
532472	703	912	1.0	48 36	1.0	2.5	4.5	2.5	1.0	24.6*	1.32
532472	710	920	1.0		1.0	2.0	5.0	2.2	1.5	28.5	2.06
536547A	716	920		54	1.0	4.5	5.0	2.2	2.0	35.4*	1.38
536547B	716	923 928^	2.0 2.0	76	2.0	1.0	1.2	2.2	3.0	26.0*	2.73
536547B	715			69	1.0	1.0	3.0*	3.0	3.0	30.6*	2.13
538375	802	923 1002^	1.5	76	1.0	1.8	3.5*	2.8	3.5	29.8*	2.00
			3.8	136	4.0	1.2	4.0*	2.5	5.0	8.0	1.54
538376 538377	724 726		2.2	80	2.0	1.0	1.5	2.2	1.5	24.2*	2.93
538377 538378	726 728		1.5	38	1.0	1.0	2.5*	1.8	1.5	10.2	0.75
538380	728 726		3.0	86	2.0	1.0	1.5	1.5	1.5	17.2	2.42
538381	728 728		3.2		2.0	1.0	2.5*	2.8	2.0	15.2	2.70
38382			2.0		1.0	1.2	3.0*	2.8	2.5	19.4	0.99
38383	724 802		3.2		3.0	1.2	3.5	2.8		10.1	2.19
38385A	802 804		3.5		2.0	1.0	3.0	2.0		8.5	2.08*
38385B			3.2		2.0	1.0	1.8	2.2	2.0	11.9	2.33*
	803 720				2.0	1.0	2.0*	2.0	2.5	8.0	1.94
38386A	729		3.8			1.2	3.5*	2.2		8.3	2.21
38386B	801		3.8			1.2		2.2		8.2	2.10
38387	711	911	2.0	87	3.0	1.0	1.0	1.8	1.0	19.5*	3.20

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition						
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic		
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
532437	IV	45.8	18.6	11.7	4.4	20.4	54.7	8.4		
532439	I	46.1	21.9	12.2	3.2	26.1	51.3	7.1		
532441A	Ï	48.6	20.5	12.3	3.7	27.6	49.1	6.4		
532441B	II	46.4	19.6	11.7	3.6	21.6	55.8	7.3		
5324415	III	43.8	20.1	12.7	3.8	22.9	52.8	7.8		
53 244 2	II	47.8	18.7	11.5	3.5	22.1	54.0	8.0		
532 44 3 532444A	I	38.0 ^w	17.2 ^w	12.4	3.6	22.2	53.1	8.0		
	II	42.1	20.7	12.5	4.0	21.9	52.9	8.3		
532444B	I	45.3	22.3	11.1	3.6	26.5	52.1	6.0		
532447			19.8	11.1	3.6	24.4	53.1	7.7		
532448	III	44.3		11.2	3.0 4.4	22.7	53.1	8.2		
532455A	IV	48.7	17.2			22.6	53.1	8.6		
532455B	IV	48.2	16.6	10.8	4.9			8.5		
532456	II	51.3	15.7	12.5	4.0	23.7 21.5	50.9 54.9	8.5 8.7		
532457	III	45.2	18.5	11.4	3.6					
532459	IV	47.0	17.4	12.2	3.8	17.7	57.7	8.6		
532460A	IV	48.2	19.2	12.6	4.5	18.9	55.6	8.4		
532460B	IV	45.3	19.5	11.1	4.4	21.9	55.0	7.1		
532462A	III	45.6	21.3	11.6	3.4	24.9	53.1	6.9		
532462B	IV	44.9	20.6	11.4	4.2	23.3	53.7	7.5		
532463A	III	44.0	21.5	11.1	4.1	20.8	56.4	7.6		
532463B	III	45.6	18.7	12.6	3.6	21.7	53.6	8.5		
532464	II	49.3	18.9	10.8	3.8	30.4	48.9	6.0		
532465	II	47.2	19.9	12.1	3.4	26.2	50.8	6.4		
532466A	IV	46.7	18.6	10.8	4.3	23.9	52.6	7.8		
532466B	IV	47.6	17.9	11.7	5.1	23.2	50.5	9.5		
532468	I	45.5	19.5	11.8	3.4	32.6	45.8	6.3		
532469	I	42.9	23.1	10.9	3.3	37.6	42.7	5.5		
532471	I	43.0	21.3	10.2	3.2	42.6	38.8	5.2		
532472	II	42.3	21.6	11.2	3.1	31.5	48.1	5.9		
532473	II	43.3	20.1	11.0	3.4	25.7	52.5	7.4		
536547A	III	45.1	20.5	10.8	3.5	28.5	50.2	6.7		
536547B	III	44.9	19.8	10.9	4.3	28.1	49.4	7.3		
536547C	III	46.9	19.5	11.1	3.8	24.6	52.8	7.7		
538375	III	42.1	20.7	13.2	3.3	19.6	54.3	9.6		
538376	IV	48.0	17.9	12.3	3.1	20.4	55.7	8.6		
538377	III	46.1	18.7	11.5	4.1	24.5	52.6	7.4		
538378	IV	44.3	18.2	11.9	3.5	22.2	53.6	8.8		
538380	IV	46.0	18.3	13.4	3.9	22.1	52.6	8.0		
538381	III	49.0	17.2	11.7	3.7	25.9	51.4	7.3		
538382	III	41.2 ^w	15.4 ^w	11.7	3.5	18.8	57.2	8.8		
538383	IV	45.0 ^w	15.9 ^w	10.7	3.8	19.5	58.0	8.0		
538385A	IV	47.0	18.5	11.6	4.4	22.4	52.7	9.0		
538385B	IV	48.3	14.1	11.6	4.3	18.6	55.1	10.0		
538386A	III	45.2 ^w	16.2 ^w	10.7	4.0	20.3	56.3	8.7		
538386B	IV	43.3 ^w	16.5 ^w	10.7	3.9	20.1	57.1	7.9		
538387	II	44.7	20.4	11.0	3.0	28.7	50.9	6.4		

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

	A	D '	Country	Country	Year	
DI Ma	Accession	Region	of 	of	introduced	
PI No.	name	of origin	origin	acquisition	or released	group
538388	Early Brown	Hokkaido	Japan	Japan	1989	I
538389	Jet	Hokkaido	Japan	Japan	1989	III
538390	Mikado	Hokkaido	Japan	Japan	1989	III
538394	Jilin No. 6	Jilin	China	China	1989	II
538397	Jiu nong No. 2	Jilin	China	China	1989	II
538398	Jiu nong No. 8	Jilin	China	China	1989	· I
538400	Si ping tou	Unknown	China	China	1989	II
538401A		Unknown	Taiwan	Taiwan	1989	III
538401B	(AV 62)	Unknown	Taiwan	Taiwan	1989	IV
538407	Shirofumi	Unknown	Japan	Japan	1989	I
540739	An tu bai chang lu dou	Jilin	China	China	1990	I
549017	•	Ningxia	China	China	1990	IV
	Na hei dou	Liaoning	China	China	1990	III
549022	Qing rang wu dou	Liaoning	China	China	1990	IV
549027A	Tian er dan	Liaoning	China	China	1990	IV
549029	Feng cheng da jing huan	Liaoning	China	China	1990	III
549030A		Beijing	China	China	1990	III
549030B		Beijing	China	China	1990	IV
549031		Beijing	China	China	1990	III
549040		Liaoning	China	China	1990	IV
549041A		Liaoning	China	China	1990	III
549041B		Liaoning	China	China	1990	II
549042A		Liaoning	China	China	1990	IV
549042B		Liaoning	China	China	1990	II
549043		Liaoning	China	China	1990	IV
549049A	Primorskaja	Primorye	Russia	Russia	1990	I
549049B	(Primorskaja)	Primorye	Russia	Russia	1990	I
549053	Mecta	Primorye	Russia	Russia	1990	II
549055	Ezomidori	Unknown	Japan	Japan	1990	I
549056	Fukura	Unknown	Japan	Japan	1990	II
549057A	Hakucho	Unknown	Japan	Japan	1990	I
549057B	(Hakucho)	Unknown	Japan	Japan	1990	I
549058	Hamanishiki	Unknown	Japan	Japan	1990	II
549063	Kaoriotome	Unknown	Japan	Japan	1990	ĪV
549064	Karikachi 3	Unknown	Japan	Japan	1990	II
549065	Kinshu	Unknown	Japan	Japan	1990	ĪV
549066	Kitanosuzu	Unknown	Japan	Japan	1990	I
549067	Misono Green	Unknown	Japan	Japan	1990	Ī
549068	Ryokushin	Unknown	Japan	Japan	1990	Ī
549071	Tamasudake	Unknown	Japan	Japan	1990	II
549072	Yukimusume	Unknown	Japan	Japan	1990	I
556948	Da bai ma	Jilin	China	China	1990	III
556949	Ke feng No. 1	Beijing	China	China	1990	IV
556950	Xu dou No. 1	Jiangsu	China	China	1990	IV
561227		Beijing	China	China	1991	II
561228		Beijing	China	China	1991	I
		, ,				•

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem	Flower				Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
538388	I	N	P	Т	Е	N	Br	D	Br	Br		3N
538389	III	N	W	Ng	E	N	Br	I	Bl	Bl	Flk	5F
538390	III	D	Dp	T	Sa	N	Br	I	Y	Br	Vhil	2N
538394	II	N	w	G	E	N	Dbr	I	Y	\mathbf{Bf}		2N
538397	II	D	W	G	E	N	Dbr	S	Y	\mathbf{Bf}	Na	2N
538398	I	S	W	G	E	N	Br	I	Y	Lbf	Vhil	1N
538400	II	S	W	G	E	N	Dbr	I	Y	Bf		2N
538401A	III	N	P	T	E	N	\mathbf{Br}	I.	Y	B1	Na	2N
538401B	IV	N	P	T	E	N	\mathbf{Br}	I	Y	Bl	Na, Lft4,5	2N
538407	I	D	W	G	E	N	Br	D	Gn	Lbf	Vhil	2N
540739	I	D	W	T	E	N	Dbr	D	Gn	Lbr	Gnc, Vhil	2N
549017	IV	N	W	G	Α	N	Tn	I	Y	Y	Sna, Sw	3N
549021A	III	D	P	T	Sa	Ssp	Br	I	Bl	Bl	Gnc, Na	1N
549022	IV	D	P	T	E	Ssp	Br	I	B1	Bl	Gnc	3N
549027A	IV	D	P	G	E	Ssp	Br	I	Y	Y		3N
549029	III	D	P	T	E	Ssp	Br	I	Y	Y		2N
549030A	III	S	W	G	Sa	Ssp	Dbr	I	Rbf	Rbf	Def, Sw	3N
549030B	IV	D	W	Lt	Α	Ssp	Dbr	I	Bl	Bl	Sw	4N
549031	III	N	P	Lt	E	N	Br	I	Bl	Bl	Dab	4F
549040	IV	N	P	T	E	N	Br	I	Gn	Br	Sw	2N
549041A	III	N	P	T	E	N	Br	В	B1	Bl	Sw	4F
549041B	II	N	W	T	Α	N	Br	В	Bl	Bl	Sw	4N
549042A	IV	N	W	Lt	E	N	Bl	I	Gn	Bl	Sw	4N
549042B	II	N	W	Lt	Α	N	Bl	S	B1	Bl	Flk, Sw	4N
549043	IV	N	P	T	E	N	Br	I	Gn	Br	Sw	3N
549049A	I	N	P	T	E	N	Br	D	Y	Tn		2N
549049B	I	D	P	T	E	N	Br	D	Y	Tn		2N
549053	II	D	W	G	E	N	Tn	I	Y	Lbf	Vhil	2N
549055	I	D	W	G	E	Ssp	Br	D	Gn	Lbf		2N
549056	II	D	W	G	Sa	N	Br	I	Gn	Lbf	Vhil	2N
549057A	I	D	W	T	E	N	Br	D	Gn	Bl		2N
549057B	I	D	W	T	E	Ssp	Br	D	Gn	Bl		2N
549058	II	D	W	G	Sa	Ssp	Br	I	Gn	Lbf	Vhil	2N
549063	IV	D	W	Lt	E	Ssp	Br	S	Br	Br		3F
549064	II	D	W	G	Sa	Ssp	Br	I	Gn	Lbf	Vhil	2N
549065	IV	D	W	G	E	Ssp	Br	I	Gn	Lbf	Vhil	3N
549066	I	D	W	G	Sa	Ssp	Br	I	Lgn	Lgn	Vhil, Vsc	3N
549067	I	D	W	G	E	Ssp	Br	D	Y	Lbf	Vhil	2N
549068	I	D	W	G	E	N	Br	D	Gn	Gn		2N
549071	II	D	W	G	Α	N	Tn	I	Y	Bf		2N
549072	I	D	W	G	E	N	Br	D	Gn	Gn	Sdef	2N
556948	III	N	W	T	E	N	Br	I	Y	Bl		2N
556949	IV	S	W	T	E	N	Br	I	B1	Bl		4F
556950	IV	N	P	G	Α	N	Br	I	Y	Bf		2N
561227	II	N	W	G	E	Ssp	Br	D	Rbf	Rbf		2N
561228	I	N	P	G	E	N	Dbr	D	Y	\mathbf{Bf}	Na	2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering		Stem	Shatter	ing	Seed				
	date	date Lodging	Heigh			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd) (score)	(cm)		(score)			(score)	$(\operatorname{cg} \operatorname{sd}^{-1})$	(Mg ha ⁻¹)
538388	709	902 2.8	82	3.0	1.0	2.5*	2.2		14.6	2.47
538389	725	1003^ 4.0	118	3.0	1.0	1.5	3.0		10.6	2.47
538390	720	921 1.2	66	1.0	1.2	3.0*	2.2	2.0	13.3*	1.54
538394	709	913 3.0	100	2.5	1.0	1.5	2.0	1.0	14.8	3.25
538397	706	911 1.8	74	1.5	1.0	1.0	1.8	1.5	16.9	3.20
538398	706	907 2.0	88	2.5	1.0	1.0	1.8	1.5	17.0	2.81
538400	708	913 2.0	77	2.0	1.0	1.0	2.0	1.5	15.1	3.58
538401A	714	1008^ 2.2	112	3.0	1.0	1.0	2.8	2.5	13.1	3.00*
538401B	715	1002^ 2.0	140*	3.0	1.0	1.0	2.2	2.0	12.4	2.18
538407	708	907 1.0	39	1.0	1.2	3.0	2.5	1.5	25.4	2.10
540739	707	912 1.0	53	1.0	1.0	4.0*	2.0	2.5	18.2	2.32
549017	729	1002^ 5.0	108*	4.0	1.0	3.0	2.5*	2.0*	4.8	1.77 *
549021A	717	920 1.2	40	1.0	2.0*	3.0*	2.2	2. 0	11.4	1.77
549022	725	1013^ 1.8	72	1.5	1.5	3.0*	2.0		21.6*	1.85*
549027A	726	1016^ 2.2	88	1.5	1.0	1.5	2.8*	3.0	26.8*	2.09*
549029	716	923 1.8	74	1.0	1.0	1.0	2.8	3.0	17.2	2.48
549030A	726	1001^ 4.5	144*	2.0	3.5*	4.5	2.8	J.0 	5.6	1.56*
549030B	730	1001^ 5.0	102*	5.0	3.0*	5.0	2.0		6.1	1.15*
549031	801	1001^ 4.0	165	4.0	1.0	1.8	2.2		7.0	2.21
549040	806	1003^ 5.0	68	5.0	1.8	3.0*	1.8	3.5	3.3	1.04
549041A	803	925^ 5.0	99	5.0	1.2	4.5	2.0		3.1	0.63
549041B	724	914 4.8	42	4.5	2.5	5.0	2.0		3.9	0.37
549042A	813	1012^ 4.8	138	5.0	1.0	5.0	3.0*	4.0*	5.0	0.91*
549042B	726	913 4.5	42	4.5	1.5	5.0	1.5		2.0	0.32
549043	813	1008^ 5.0	112*	5.0	1.2	4.5	2.5	3.0	3.8	0.75
549049A	705	911 2.2	84	3.0	1.0	1.0	2.5	1.5	17.0	2.84
549049B	705	904 1.8	72	2.0	1.0	1.0	1.8	1.5	14.0	2.32
549053	706	917 1.2	55	1.0	1.0	1.0	2.0	1.5	17.2	3.55
549055	708	907 1.0	36	2.0	1.8*	4.5	3.5*	1.0	19.6*	2.00
549056	709	909 1.0	42	1.0	1.0	4.5	2.8	2.0*	27.6	2.57
549057A	709	903 1.0	40	1.0	1.5	3.5*	3.0	1.0	23.2	2.31
549057B	708	904 1.0	30	1.0	1.2	3.5*	2.5	1.0	23.3	2.24
549058	707	909 1.0	40	1.0	1.2	5.0	2.5	2.0*	27.4	2.73
549063	720	929 1.5	70	1.0	2.0*	3.5*	2.8		28.4*	2.34*
549064	707	908 1.0	41	1.0	1.0	3.5	2.2	2.0*	26.5	2.29
549065	717	930^ 1.5	68	1.0	1.2	1.8	3.0	3.0	34.4*	2.16*
549066	702	909 1.0	34	1.0	2.0	5.0	2.0	1.0	20.8	2.08
549067	706	903 1.0	42	2.0	2.0*	4.0	2.8	1.0	22.6	2.07
549068	707	906 1.0	38	2.0	1.2	4.0*	2.8	1.5	24.5	1.96
549071	714	910 1.2	48	1.5	2.8*	5.0	2.2	1.0	25.1*	1.89
549072	708	907 1.0	39	1.5	1.2	4.0*	3.2*	1.0	24.6	2.39
556948	706	924 2.5	102	3.0	1.0	1.0	2.2	2.5	20.4	2.96
556949	812	1011^ 3.0	104	2.0	1.0	3.2*	2.0		6.9	2.06
556950	803	1012^ 3.2	116*	4.0	1.0	1.0	2.0	1.5	13.2*	2.21*
561227	708	914 1.5	85	3.0	1.0	1.0	1.8		24.2	2.71
561228	703	906 2.2	74	3.0	1.0	1.0	2.0	1.0	18.6	2.13

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	-	Seed con	nposition	Oil composition						
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic		
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
538388	I	42.0 ^w	17.6 ^w	12.8	3.4	24.8	51.1	7.3		
538389	III	45.3 ^w	14.9 ^w	11.2	3.5	20.2	56.4	8.8		
538390	III	45.9	20.5	11.7	3.6	24.5	53.1	7.1		
538394	II	43.6	22.0	11.0	3.8	26.0	52.9	5.8		
538397	II	43.4	22.5	10.9	3.8	23.4	55.2	6.1		
38398	I	45.0	22.7	11.6	3.8	34.2	45.5	4.8		
38400	II	47.3	20.5	11.9	3.8	25.6	52.2	6.4		
38401A	III	45.1	20.4	10.9	4.4	18.0	58.2	8.5		
38401B	IV	47.7	18.8	10.7	4.6	19.2	57.2	8.4		
38407	I	41.1	21.7	10.9	3.1	39.6	41.1	5.5		
540739	Ī	45.8	21.5	12.1	3.7	26.6	52.2	5.4		
549017	IV	42.1	20.7	11.6	4.0	18.0	56.3	9.6		
549021A	III	45.5 ^w	14.6 ^w	12.6	3.2	16.1	58.6	9.6		
549021A	IV	43.0 ^w	14.0 ^w	11.0	4.5	24.5	52.8	7.1		
549022 549027A	IV	47.8	18.5	11.3	4.1	22.6	53.9	8.0		
549027A	III	46.6	19.1	11.8	3.3	20.5	56.9	7.5		
549029 549030A	III	42.1	20.7	11.9	3.4	15.9	58.6	10.2		
549030A	IV	45.4 ^w	13.2 ^w	11.6	4.0	17.7	56.3	10.4		
49031	III	41.1 ^w	14.0 ^w	11.8	3.2	16.1	58.8	10.0		
49040	IV	42.1	20.7	13.7	3.7	12.3	61.0	9.2		
549041A	III	45.5 ^w	11.8 ^w	13.2	3.3	14.9	55.7	12.8		
549041B	II	47.8 ^w	12.1 ^w	12.6	3.8	18.0	54.5	11.1		
49041B	IV	50.5	16.2	13.4	4.8	20.3	54.6	6.9		
549042B	II	44.6 ^w	11.3 ^w	12.5	4.6	14.7	54.3	13.8		
549042B 549043	IV	42.1	20.7	13.6	4.4	17.6	53.7	10.8		
549043 549049A	I	45.8	21.3	12.5	3.9	23.7	52.7	7.2		
549049A 549049B	I	43.2	22.6	11.8	3.6	25.7	52.8	6.0		
549049B 549053	II	43.8	22.4	11.9	3.6	21.6	55.2	6.4		
	I	43.6	20.1	10.2	3.7	44.6	35.2	5.1		
549055 549056	II	42.0 41.9	21.9	10.2	3.7	41.7	39.3	5.5		
549056 549057A	I	42.9	21.9	10.1	3.0	41.7	39.6	5.3		
549057A 549057B	I	42.9 42.5	21.6	10.4	3.2	44.9	36.6	4.9		
549057B 549058	II	42.5 42.6	22.7	10.0	2.9	40.5	40.8	5.5		
	IV	42.0 42.3 ^w	16.9 ^w	12.2	3.4	25.6	50.7	7.0		
549063 540064	II	42.3 42.4	22.8	10.1	2.9	38.6	42.4	7.0 5.6		
549064	IV	42.4 47.7	18.8	10.1	4.1	22.0	54.4	7.9		
549065 540066	I	44.5	21.5	12.5	2.9	26.0	52.0	6.4		
549066 540067		44.3	22.3	10.5	3.0	36.4	44.4	5.7		
49067	I I	43.8 42.0	22.3	10.3	3.0	42.1	38.7	5.1		
49068		42.0 39.4	19.8	10.1	3.1	34.2	45.0	6.4		
549071 - 40073	II		21.9	10.9	3.0	42.8	38.6	5.3		
549072	I	42.2 45.7	21.9	10.1	3.2 4.5	42.8 23.9	53.2	5.5 6.4		
556948	III					23.9 18.7	55.9	10.1		
556949	IV	38.0 ^w	16.9 ^w	11.6	3.7	22.6	53.9 53.6	7.1		
556950	IV	46.2	19.2	12.2	4.5			6.3		
561227	II	42.7	19.9	11.5	4.1	30.9	47.2			
61228	I	43.5	20.7	13.1	4.2	22.7	53.2	6.9		

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	group
561229		Beijing	China	China	1991	I
561230		Beijing	China	China	1991	II
561231		Beijing	China	China	1991	I
561232		Beijing	China	China	1991	Ī
561234		Beijing	China	China	1991	II
561235		Beijing	China	China	1991	Ī
561236		Beijing	China	China	1991	II
561238		Beijing	China	China	1991	I
561240		Beijing	China	China	1991	II
561241		Beijing	China	China	1991	I
561284	Hei nong 34	Heilongjiang	China	China	1991	I
	AGS 290	Unknown	Taiwan	Taiwan	1991	IV
561288	AGS 293	Unknown	Taiwan	Taiwan	1991	IV
561289	AGS 314	Unknown	Taiwan	Taiwan	1991	IV
561292A		Unknown	Taiwan	Taiwan	1991	III
561292B		Unknown	Taiwan	Taiwan	1991	IV
561293	GC-84126-P-4-1-8	Unknown	Taiwan	Taiwan	1991	IV
561295	An tu zi hua lu da dou	Jilin	China	China	1991	I
561296C		Heilongjiang	China	China	1991	I
561297	Bai hua cuo	Jilin	China	China	1991	II
561298	Bai hua cuo zi	Jilin	China	China	1991	II
	(Bai hua yao)	Heilongjiang	China	China	1991	I
	Bai ke qing	Liaoning	China	China	1991	III
	(Bai ke qing)	Liaoning	China	China	1991	III
561301	Bai lu dou	Jilin	China	China	1991	I
561302C		Heilongjiang	China	China	1991	I
	(Bai mao shuang)	Heilongjiang	China	China	1991	I
561303	Bai mai	Jilin	China	China	1991	IV
	Bai nong No. 1	Jilin	China	China	1991	
	(Bai nong No. 1)	Jilin	China	China	1991	I
561307	Hei nong 26	Heilongjiang	China	China		I
561308	Hei pi qing rang	Jilin	China	China	1991	I
	Hua feng No. 1	Jilin Jilin	China	China	1991	I
	(Hua feng No. 1)	Jilin Jilin	China	China	1991	II
561310	Huai de hei dou	Jilin Jilin	China		1991	II
	Huai de si li huang	Jilin Jilin	China	China	1991	III
	(Huai de si li huang)	Jilin Jilin	China	China	1991	II
5613112	Huai de xiao bai mei	Jilin Jilin	China	China	1991	III
561313	Huang qi			China	1991	II
	Huang qi tie jia	Liaoning Liaoning	China China	China	1991	III
561314 B		Liaoning Liaoning		China	1991	II
561315	Hui chun da dou	Jilin	China	China	1991	II
			China	China	1991	I
561316 561317	Hui jia zi	Jilin Tilin	China	China	1991	II
561317	Hui nan bai hua tie jia	Jilin	China	China	1991	I
	Hui nan bai hua xiao hei dou	Jilin	China	China	1991	I
561318B	(Hui nan bai hua xiao hei dou)	Jilin	China	China	1991	I

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Matarita	Ctore	Elavvos	Dubos			Pod	Seedco	ot.	Hilum		Seed
Entry	Maturity group	term.	color			Density				color	Other traits	shape
			P	G	Е	N	Br	I	Y	Bf	Na	2N
561229	I	N	W	G	E	Ssp	Tn	I	Y	Lbf	Vhil	2R
561230	II	S				-			Y	Bf	V 1111	2N
561231	I	D	P	G	E	N	Lbr	I			04-6 371-11	
561232	I	N	W	G	E	Ssp	Br	I	Y	Lbf	Sdef, Vhil	1N
561234	II	N	W	G	E	Ssp	Br	I	Y	Lbf	Vhil	1N
561235	I	N	W	G	E	Ssp	Br	I	Y	Lbf	Vhil	1N
561236	II	N	W	G	E	Ssp	Br	I	Y	Lbf	Vhil	1N
561238	I	N	W	G	E	N	Tn	S	Y	Lbf	Vhil	2N
561240	II	N	W	G	E	Ssp	Br	I	Y	Lbf	Vhil	2N
561241	I	N	W	G	E	Ssp	Br	I	Y	Lbf	Vhil	1N
561284	Ι.,	N	W	G	E	N	Br	D	Y	\mathbf{Bf}	Na	2N
561287A	IV	N	P	T	E	N	Br	I	Y	Br	Abh	2N
561288	IV	D	W	G	E	Ssp	\mathbf{Br}	I	Gn	Gn		2N
561289	IV	S	P	T	E	Ssp	Br	I	Gn	Br	Sph, Lft4	3N
561292A	III	S	W	G	E	Ssp	Br	I	Gn	Gn		2N
561292B	IV	D	W	G	E	Ssp	Br	I	Gn	Gn		2N
561293	IV	D	W	G	Е	Ssp	\mathbf{Br}	I	Gn	\mathbf{Bf}		2N
561295	I	D	P	T	E	Ssp	Br	D	Ggn	Bl		2N
561296C	I	D	P	G	E	N	Br	I	Y	Y	Sdef	2N
561297	II	S	W	G	E	N	Br	I	Y	Y	Vhil	2N
561298	II	N	P	G	E	N	Dbr	S	Y	Y	Vhil	2N
561299B	I	N	W	G	E	N	\mathbf{Br}	I	Y	Lbf	Sabh, Vhil	2N
561300A	III	S	W	G	E	N	Br	I	Gn	Lbf	Vhil	1N
561300B	III	S	W	G	E	N	Br	I	Gn	Gn	Vhil	1N
561301	I	N	P	G	E	N	Br	D	Y	Y	Sdef	2N
561302C	Ī	N	w	G	E	Dn	Br	I	Y	Y	Na	2N
561302D	Ī	N	W	G	E	N	Br	S	Y	Bf		3N
561303	IV	S	w	Ğ	E	N	Dbr	Ī	Y	Lbf	Vhil	3N
561304A	I	N	w	Ğ	Ē	N	Br	S	Ÿ	Lbf	Vhil	2R
561304B	Ī	N	w	G	E	Ssp	Tn	Ĭ	Ÿ	Y		2N
561307	Ī	N	w	G	E	N	Br	S	Ÿ	Ÿ	Na	2N
561308	I	D	P	T	E	N	Bl	Lb	Bl	Bl	Gnc	3N
561309A	II	N	W	G	E	N	Dbr	I	Y	Y	Vhil, Na	2N
		N	W	T	E	N	Bl	Ī	Ÿ	Br	Vhil	3N
561309B	II III	N	P	T	E	N	Br	Ī	Bl	Bl	• ••••	2N
561310	II	N	W	G	E	N	Br	I	Y	Bf		2N
561311A		N	P VV	G	E	N	Br	I	Y	Bf		2N
561311B	III		W	G	E	N	Br	I	Y	Y	Vhil	2N
561312	II	N N	W	G	E	N	Dbr		Y	Lbf	Viii	3N
561313	III	N N	W	G	E	N	Br	I	Y	Y	Viii	2N
561314A	II	N		G	E E	N N	Br	I	Y	Y	Viii	2N 2N
561314B	II	N	W		E E	N N	Br	I	Y	Y	A 1111	2N 2N
561315	I	D	W	G					Y	r Bf		2N 2N
561316	II	N	W	G	E	N N	Dbr				VIII No	
561317	I	N	W	G	Е	N	Bl	I T 1-	Y	Lbf	Vhil, Na	2N
561318A	I	N	W	T	E	Ssp	Bl	Lb	Bl	Bl	C	3N
561318B	I	N	W	T	E	Ssp	Bl	Lb	Bl	Bl	Gnc	2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	g Maturity		Stem	Shatter	ing	Seed			
	date	date Lodging	Heigh			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd) (score)	(cm)			(score)		(score)	$(cg sd^{-1})$	(Mg ha ⁻¹)
561229	703	907 1.8	76	3.0	1.0	1.0	2.0	1.5	19.7	2.77
561230	704	911 1.5	84	2.0	1.0	1.2	1.5	1.5	19.3	3.53
561231	630	901 1.0	38	1.0	1.0	1.0	2.2	1.5	18.2	2.73
561232	708	911 1.2	78	3.0	1.0	1.5	2.8	1.5	25.8	2.93
561234	708	913 1.5	79	3.0	1.0	1.2	2.2	1.5	24.2	2.40
561235	707	911 1.5	75	3.0	1.0	1.8	2.5	1.5	22.4	2.42
561236	708	913 1.5	76	3.0	1.0	1.5	2.2	1.5	26.2	2.82
561238	705	909 1.0	69	3.0	1.0	1.0	1.8	1.0	16.8	3.01
561240	706	912 1.5	78	3.0	1.0	1.0	2.5	2.0	27.4	3.19
561241	708	911 1.5	72	3.0	1.0	1.0	2.5	1.0	25.0	2.50
561284	627	903 1.0	58	3.0	1.0	1.0	2.5	1.0	20.6	2.88*
561287A	716	1005^ 3.2	126	4.0	1.5	2.8*	2.2	4.0*	14.6	2.33
561288	718	1003^ 1.5	68	1.0	1.0	2.8*	2.8	3.0	32.4*	2.12*
561289	720	930^ 2.0	87	2.0	1.5	2.5*	1.8	4.0	6.3	1.76*
561292A	715	929^ 1.5	72	2.0	1.5	2.8*	2.8	3.0	33.6*	1.57
561292B	717	930^ 1.5	66*	1.0	1.8	2.8*	2.2	2.5	31.8*	1.99*
561293	721	1012^ 1.8	74*	1.0	2.2*	3.5*	2.5	2.5	31.6*	1.80*
561295	712	911 1.8	48	1.0	1.0	2.8*	3.0	1.5	23.7*	2.58
561296C	707	903 1.2	54	2.0	1.0	1.0	2.0	1.0	15.2	2.82
561297	706	916 3.0	72	2.0	1.0	1.2	1.8	1.5	17.8	3.56
561298	708	912 2.8	101	3.0	1.0	1.0	2.5	1.0	20.2	3.15
561299B	703	901 1.2	57	3.0	1.0	1.0	3.0*	2.5	18.4	2.67
561300A	719	923 2.2	91	2.0	1.0	1.0	2.5	3.0	16.4*	2.82
561300B	721	925 2.5	95	2.0	1.0	1.0	2.0	3.0	16.6*	2.43
561301	701	830 1.5	73	3.0	1.0	1.0	2.5	1.0	16.6	2.51
561302C	703	831 1.5	64	3.0	1.0	1.0	2.2	2.0	14.1	2.17
561302D	706	909 1.8	82	3.0	1.0	2.0*	2.2	1.0	18.7	2.74
561303	722	929 2.8	94	2.0	1.0	1.5	1.8	1.0	15.4	2.96*
561304A	703	901 1.5	72	3.0	1.0	1.0	2.5	1.0	19.8	2.72
561304B	705	831 1.8	70	3.0	1.0	1.0	1.5	1.5	15.2	2.44
561307	703	903 1.0	66	3.0	1.0	1.0	2.5	1.5	14.4	2.39
561308	707	903 1.0	56	2.0	1.0	1.8	1.8		13.6	2.03
561309A	707	912 3.5	91	3.0	1.0	1.2	2.0	1.5	17.6	2.94
561309B	709	911 3.0	106	3.0	1.0	1.0	2.0	2.5	15.3	2.98
561310	713	917 3.0	94	3.0	1.0	2.0*	2.5		15.4*	2.55
561311A	706	915 2.5	88	3.0	1.0	1.2	2.0	1.0	16.5	3.18
561311B	712	919 3.5	122*	3.0	1.0	1.0	2.5	3.0	13.2	2.49
561312	706	911 2.5	86	3.0	1.0	1.0	2.0	2.0	18.0	3.08
561313	724	925 4.0	117*	3.0	1.2	3.0*	1.8	1.0	13.3	2.34*
561314A	706	911 2.0	88	3.0	1.0	1.0	1.8	1.5	17.0	2.86
561314B	708	913 1.8	90	3.0	1.0	1.0	2.0	1.5	17.1	3.04
561315	711	911 1.5	52	2.0	1.0	1.0	2.5	1.5	19.5	2.83
561316	705	912 2.2	83	3.0	1.0	1.5	2.2	1.5	17.4	3.15
561317	706	907 2.0	90	3.0	1.0	1.5	2.0	2.0	13.8	2.64
561318A	709	905 2.5	86	3.0	1.0	1.0	2.0		13.4	2.87
561318B	710	911 2.2	90	3.5	1.0	1.0	2.0		13.0	2.70

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition						
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic		
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
561229	I	46.6	20.7	12.3	4.0	26.3	50.9	6.5		
561230	II	45.9	20.8	10.5	3.6	33.1	47.4	5.0		
561231	I	44.2	21.3	12.6	3.8	23.9	53.7	6.1		
561232	Ī	42.1	20.3	11.2	3.8	32.9	45.9	6.1		
561234	II	43.7	20.9	11.6	3.9	29.6	48.4	6.6		
561235	I	44.0	20.8	11.8	3.5	28.5	49.8	6.4		
561236	II	42.4	20.4	11.4	3.6	31.2	47.4	6.3		
	I	46.9	21.4	11.1	3.4	29.6	50.4	5.5		
561238	II	41.3	20.7	11.0	3.5	33.5	45.5	5.9		
561240		42.6	20.6	11.3	3.7	33.4	45.4	6.2		
561241	I I	43.0	21.6	11.7	4.3	30.5	47.5	6.1		
561284		43.0	20.5	11.7	4.0	18.4	57.0	8.7		
561287A	IV	42.7 47.0	19.2	12.0	4.1	21.4	54.4	7.6		
561288	IV		20.7	12.0	4.1	18.1	54.3	10.9		
561289	IV	42.1	20.7 18.9	11.4	4.3	24.5	52.3	7.4		
561292A	III	45.5		12.0	3.7	21.7	54.4	7.8		
561292B	IV	48.1	18.0		3.8	21.6	54.0	8.1		
561293	IV	47.1	16.8	11.7	3.8	26.9	54.1	6.0		
561295	I	45.7	20.9	9.3		25.5	52.3	6.5		
561296C	I	45.6	21.9	11.8	3.9		53.8	6.9		
561297	II	43.7	22.2	11.5	2.9	24.5				
561298	II	45.2	21.2	11.7	3.8	29.0	49.8	5.6		
561299B	I	44.4	22.3	11.7	3.9	28.6	49.7	6.1		
561300A	III	43.0	19.1	12.4	4.1	19.9	54.8	8.7		
561300B	III	47.7	17.4	12.7	4.1	18.0	55.4	9.5		
561301	I	45.5	22.0	11.1	3.5	28.1	51.3	6.0		
561302C	I	47.2	19.7	12.5	3.3	21.9	54.2	8.1		
561302D	I	41.1	20.6	11.5	3.2	34.4	45.3	5.6		
561303	IV	45.9	19.6	12.7	4.5	21.0	53.0	8.1		
561304A	I	41.6	21.6	11.2	3.4	32.7	47.6	5.1		
561304B	I	42.2	20.5	12.1	3.9	30.7	47.6	5.8		
561307	I	43.0	18.4	11.0	4.4	23.9	52.9	7.7		
561308	I	48.7^{w}	17.8 ^w	10.7	3.9	31.6	48.6	5.1		
561309A	II	44.6	21.1	11.5	3.6	24.1	52.1	7.1		
561309B	II	47.2	20.4	12.2	3.6	22.2	54.3	7.1		
561310	III	42.1 ^w	17.3 ^w	11.8	4.0	26.9	50.3	7.0		
561311A	II	44.1	22.4	10.3	3.8	25.6	53.7	6.6		
561311B	III	45.0	19.3	11.9	4.4	20.8	55.7	7.3		
561312	II	44.1	22.3	11.4	3.6	30.1	49.3	5.5		
561313	III	46.4	18.6	12.6	4.4	21.9	52.2	8.9		
561314A	II	45.6	20.0	11.3	4.1	27.9	50.6	6.1		
561314B	II	45.7	21.2	11.5	4.2	26.5	51.7	6.2		
561315	I	41.9	20.8	10.6	3.4	37.9	43.0	5.1		
561316	II	46.7	21.5	11.3	3.4	35.5	44.6	5.2		
561317	I	43.0	18.5	12.5	3.8	25.8	51.8	6.2		
561318A	I	42.6 ^w	18.5 ^w	13.2	3.6	18.7	57.2	7.3		
						20.4	56.4	6.8		
561318B	I	41.1 ^w	16.7 ^w	12.8	3.7	20.4	56.4	6.8		

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

	A	- .	Country	Country	Year	
DIN	Accession	Region	of	of		d Maturity
PI No.	name	of origin	origin	acquisition	or release	d group
	Hui nan zi hua he jia	Jilin	China	China	1991	II
561319B	` J/	Jilin	China	China	1991	II
561320	Hui nan zi hua hei dou	Jilin	China	China	1991	II
561321	Hui nan zi hua xiao hei dou	Jilin	China	China	1991	III
561322	Hui tie jia	Jilin	China	China	1991	II
561323	Hui tie jia	Jilin	China	China	1991	III
561324	Hun jiang da hin huang	Jilin	China	China	1991	II
561325	Ji an du li dou	Jilin	China	China	1991	IV
561326	Jilin No. 2	Jilin	China	China	1991	II
561327A	Jilin No. 3	Jilin	China	China	1991	I
561327B	(Jilin No. 3)	Jilin	China	China	1991	II
561327C	(Jilin No. 3)	Jilin	China	China	1991	II
561327D	(Jilin No. 3)	Jilin	China	China	1991	II
561328	Jian dou	Liaoning	China	China	1991	III
561329	Jiang ye dou	Jilin	China	China	1991	II
561330A	Jiao he bai hua xiao bai dou	Jilin	China	China	1991	III
561330B	(Jiao he bai hua xiao bai dou)	Jilin	China	China	1991	III
561331	Jiao he xiao hei dou	Jilin	China	China	1991	I
561333	Jiao he zi hua xiao bai dou	Jilin	China	China	1991	I
561334	Jin dou 34	Liaoning	China	China	1991	IV ·
561335	Man cang jin	Liaoning	China	China	1991	III
561336	Man di jin	Jilin	China	China	1991	II
561337	Mao dou	Heilongjiang	China	China	1991	I
561338A	Mi shan tie jia qing	Heilongjiang	China	China	1991	II
561338B	(Mi shan tie jia qing)	Heilongjiang	China	China	1991	II
561339	Mian yan	Liaoning	China	China	1991	III
561340	Miao pu	Heilongjiang	China	China	1991	II
561341A	Mu feng No. 1	Heilongjiang	China	China	1991	I
561341B	(Mu feng No. 1)	Heilongjiang	China	China	1991	II
561345	Yi tong lu da dou	Jilin	China	China	1991	I
561346	Yi tong man cang jin	Jilin	China	China	1991	I
561347	Yi wo feng	Jilin	China	China	1991	II
561348	Yi wo liang	Jilin	China	China	1991	I
561349	Yong feng dou	Jilin	China	China	1991	II
561350A	Yong ji qun zhong da dou	Jilin	China	China	1991	II
561350B	(Yong ji qun zhong da dou)	Jilin	China	China	1991	II
561353	Hei he No. 3	Heilongjiang	China	China	1991	I
561354	Zi hua No. 4	Heilongjiang	China	China	1991	I
561364	Tosankei NA614	Kanto	Japan	Japan	1991	IV
561365	Tosankei NA793	Kanto	Japan	Japan	1991	IV
561367	Sui nong No. 4	Heilongjiang	China	China	1991	I
561370	Fen dou 14	Shanxi	China	China	1991	III
561371	Fen dou 15	Shanxi	China	China	1991	IV
561374	Nin zheng No. 1	Jiangsu	China	China	1991	I
561377	Chohakuzan	Unknown	Japan	Japan	1991	II
561394	Hourei	Nagano	Japan	Japan	1991	III
			P	ompani	1771	111

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

_	Maturity						Pod	Seedco		Hilum	0.1	Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
561319A	II	N	W	G	E	Ssp	Tn	I	Y	Y		2N
561319B	II	D	P	G	E	Ssp	Br	I	Y	Y	Vhil, Na	2N
561320	II	N	P	T	E	Ssp	Br	Lb	B1	B1		3N
561321	III	N	P	T	E	Ssp	Br	Lb	B1	B1		3N
561322	II	N	P	G	\mathbf{E}	N	Br	I	Y	Y	Vhil	3N
561323	III	D	P	T	\mathbf{E}	Ssp	Br	I	Y	Y		2N
561324	II	N	W	G	\mathbf{E}	N	Br	I	Y	Y	Vhil	2N
561325	IV	D	W	G	\mathbf{E}	Ssp	Dbr	I	Y	Lbf	Vhil	3N
561326	II	N	W	G	E	N	Tn	I	Y	Bf	Na	2N
561327A	I	N	W	G	\mathbf{E}	Ssp	Tn	S	Y	Bf	Na	2N
561327B	II	S	W	G	E	N	Tn	I	Y	Bf	Na	2N
561327C	II	N	W	G	E	N	Br	I	Y	Lbf	Vhil	2N
561327D	II	S	W	G	E	N	Tn	I	Y	Bf	Na	2N
561328	III	N	W	T	E	N	Dbr	I	Br	Br	Gnc	2N
561329	II	N	W	G	E	Ssp	Br	I	Y	Y	Vhil, Na	2N
61330A	III	N	W	G	E	N	Br	I	Y	Y		2N
61330B	III	N	W	G	E	N	Br	I	Y	\mathbf{Bf}		2N
61331	I	N	W	T	E	Ssp	Br	I	Bl	B1		3N
61333	I	S	P	G	\mathbf{E}	N .	Dbr	S	Y	Ib		3N
61334	IV	S	W	G	E	N	Br	I	Y	Y		2N
61335	III	N	W	G	E	N	Br	I	Y	Y	Vhil	2N
61336	II	N	W	G	E	N	Tn	I	Y	Y		2N
61337	I	S	P	G	E	N	Dbr	S	Y	Y		2N
61338A	II	N	W	G	${f E}$	Ssp	Tn	I	Y	Y		2N
561338B	II	N	P	G	E	N	Dbr	I	Y	Ιb		2N
561339	III	N	P	G	E	N	Tn	I	Y	Y		2N
561340	II	N	W	G	Е	N	Br	I	Y	Lbf	Vhil	2N
561341A	I	N	W	G	E	N	Br	I	Y	Lbf	Vhil, Na	2N
61341B	II	N	W	G	Е	N	Br	D	Y	Lbf	Vhil	2N
561345	I	D	P	T	E	Ssp	Br	D	Ggn	B1		2N
561346	Ī	N	W	G	E	N	Br	S	Y	Lbf	Vhil	2N
561347	II	N	P	G	Ē	N	Br	I	Ÿ	Lbf	Vhil	2N
561348	I	D	P	T	E	Ssp	Br	Ī	Ÿ	Br		2N
561349	II	D	w	G	Ē	Ssp	Br	Ī	Ÿ	Y		2N
561350A	II	N	W	Ğ	Ē	N	Br	Ī	Ÿ	Lbf		1R
561350B	II	S	P	Ğ	Ē	N	Br	Ī	Ÿ	Bf		2N
561353	I	N	P	Ğ	Ē	Ssp	Br	D	Ÿ	Y	Na	2N
561354	Ī	N	P	G	Ē	N	Br	I	Ŷ	Bf		2N
561364	IV	S	. P	G	Ē	N	Br	Ī	Ŷ	Y		3N
561365	IV	S	P	G	Sa	N	Br	Î	Y	Y		2N
61367	I	N	P	G	E	Ssp	Br	D	Y	Y	Na	2N
561370	III	N	P	T	E	N N	Br	I	Y	Bl		3N
561371	IV	N	W	T	E	N	Br	Ī	Y	Bl		2N
561374	I	D	P	T	E	N	Br	D	Y	Bl		2N
561377	II	S	P	G	E	N	Tn	I	Y	Y		2N
561394	III	S	P	G	A	N	Br	I	Y	Y		2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	****	Stem	Shatter	ing	Seed				
	date	date Lodging	Heigh			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd) (score)	(cm)		-		(score)	(score)	$(cg sd^{-1})$	(Mg ha ⁻¹)
			94							
561319A	710	912 2.2		3.0	1.0	2.5*	1.8	1.0	17.9	3.81
561319B	714	915 2.0	67	1.0	1.0	2.0*	2.0	2.0	14.0*	2.72*
561320	713	913 2.0	88	3.0	1.0	1.5	1.8		12.3*	2.91
561321	712	919^ 2.8	116*	3.0	1.0	1.0	2.2		10.2	2.73
561322	707	911 2.5	96	3.0	1.0	1.0	2.0	2.0	14.8	2.98
561323	716	918 1.8	70	1.5	1.0	1.0	2.8	4.0	16.5	1.62
561324	706	913 1.8	90	3.0	1.0	1.5	1.8	2.0	19.8	3.78
561325	731	1016^ 4.0	97*	1.5	1.0	2.2*	2.2	2.0*	11.6*	2.51
561326	708	913 2.8	81	3.0	1.0	2.0*	1.8	1.0	18.0	3.55
561327A	707	911 1.2	78	3.0	1.0	1.0	1.8	1.0	15.4*	3.05
561327B	704	913 2.2	85	2.0	1.0	1.5	1.5	1.0	14.1	3.09
561327C	706	910 2.0	87*	3.0	1.0	1.0	2.0	1.0	15.8	2.97
561327D	705	915 2.0	82	2.0	1.0	1.2	1.5	1.0	14.5	3.23
561328	719	926 2.8	115	4.0	1.0	1.0	2.2		14.0	2.49
561329	706	909 2.8*	77	3.0	1.0	1.0	2.0	1.5	18.0	2.90
561330A	711	922 2.5	114	3.0	1.0	1.0	2.5	2.0	16.6	2.74
561330B	707	923 2.2	110	3.0	1.0	1.0	2.2	2.5	17.2*	3.20
561331	707	903 1.8	74	3.0	1.0	1.0	2.0		12.7	2.80
561333	707	908 3.5	82	2.0	1.0	1.0	2.0	1.0	15.6	3.18
561334	718	930^ 1.8	87	2.0	1.0	1.2	2.0	2.0	20.0*	3.37*
561335	716	920 2.5	95	2.5	1.0	1.0	2.8	2.0	17.2*	2.74
561336	712	917 2.5	88	3.0	1.0	1.0	2.0	2.0	19.2	3.93
561337	706	905 1.5	60	2.0	1.0	2.0*	2.2	1.0	16.2	3.21
561338A	707	910 2.2	82	3.0	1.0	1.0	2.0	1.0	15.8	2.89
561338B	705	911 2.0	82	2.5	1.0	1.0	2.0	1.0	13.4	3.12
561339	715	918 3.0	100	3.0	1.0	1.0	2.5	2.0*	19.8*	2.64
561340	706	911 1.5	70	3.0	1.0	1.0	2.8	2.0	18.2	2.85
561341A	702	831 2.5	63	3.0	1.0	1.0	2.0	1.5	15.4	2.64
561341B	706	912 1.8	76	3.0	1.0	1.0	2.5	2.0	19.8	3.05
561345	711	911 1.8	48	1.0	1.0	2.2*	2.5	2.0	24.8	3.16
561346	705	903 3.2	78	3.0	1.0	1.0	2.2	1.5	15.8	2.59
561347	712	909 2.0	76	3.0	1.0	1.5	2.2	1.0	15.6	3.21
561348	708	911 1.2	56	2.0	3.0	5.0	2.2	1.0	23.4	2.22*
561349	711	913 1.2	58	1.0	1.0	1.0	1.8	1.5	20.4	3.13
561350A	705	917 2.5	88	3.0	1.0	1.0	1.8	2.0	19.6*	3.28
561350B	707	915 2.2	71	2.0	1.0	2.0*	2.0	1.5	15.8	3.51
561353	630	902 1.0	51	3.0	1.0	1.5	2.2	1.0	18.4	3.01
561354	705	911 1.2	74	3.0	1.0	1.2	1.8	1.5	17.5	3.48
561364	802	1009^ 3.0	96*	2.0	1.0	1.0	2.5	2.5	16.0*	2.05*
561365	726	1007^ 1.5	82*	2.0	1.0	1.5	2.2	2.5	16.8*	2.30*
561367	701	905 1.0	53	3.0	1.0	1.0	2.5	1.0	18.2	3.10
561370	705	921^ 1.8	90	3.0	1.0	1.5	2.2	1.0	20.0*	3.07
561371	722	927 3.2	112	4.0	1.0	1.0	2.0	3.0	14.4*	2.66
561374	712	903 2.0	62	2.0	1.8*	3.5	2.0	1.0	17.4*	2.44
561377	706	913 2.0	78	2.0	1.0	1.0	2.0	1.5	12.0	3.77
561394	718	925 1.5	52	2.0	1.8	3.5*	1.8	1.5	18.8*	1.98

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition					
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic	
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
561319A	II	44.3	21.0	11.0	3.0	30.4	50.3	5.4	
561319B	II	44.9	19.6	12.5	3.7	16.4	58.2	9.2	
561320	II	46.7 ^w	15.4 ^w	12.7	4.2	19.8	56.1	7.0	
561321	III	42.5 ^w	17.7 ^w	12.8	4.0	19.3	56.1	7.8	
561322	II	44.4	22.1	11.1	3.3	26.4	52.5	6.7	
561323	III	46.7	19.8	12.3	4.3	23.4	52.7	7.2	
561324	II	45.0	21.5	11.9	3.9	23.9	54.0	6.3	
561325	IV	45.3	19.9	12.5	4.4	21.1	53.7	7.8	
561326	II	46.3	21.7	11.1	4.2	33.5	46.2	5.0	
561327A	I	41.0	19.4	11.4	3.9	31.9	47.6	5.2	
561327B	II	44.2	21.4	12.0	3.9	24.2	53.7	6.2	
61327C	II	45.9	21.2	11.4	3.8	29.2	49.9	5.8	
561327D	II	44.4	21.4	11.9	3.8	24.7	51.7	5.9	
561328	III	42.7 ^w	19.3 ^w	11.3	3.4	23.8	54.9	6.6	
5613 2 9	II	47.6	18.3	12.7	3.7	27.4	48.8	7.3	
61330A	III	43.8	21.0	11.6	4.6	23.8	53.1	6.9	
61330B	III	43.6	22.9	11.5	3.9	21.7	55.9	7.0	
61331	I	41.0 ^w	18.4 ^w	13.0	3.9	26.7	50.9	5.6	
61333	I	42.8	19.6	11.6	1.1	32.8	48.7	5.8	
61334	IV	44.4	20.0	12.2	4.2	19.0	56.8	7.8	
61335	III	47.9	20.0	11.6	3.2	28.9	50.8	6.1	
		46.7			3.6		52.1	6.9	
61336	II		20.0	11.1		25.9			
61337	I	42.5	19.8	11.5	3.9	29.5	49.0	6.0	
61338A	II	45.2	22.2	10.4	3.7	36.5	44.7	4.7	
61338B	II	47.9	19.8	11.0	3.6	23.9	53.7	7.1	
61339	III	45.4	19.8	12.0	3.5	23.2	53.7	7.6	
61340	II	49.2	20.3	10.7	3.3	33.6	47.4	5.0	
61341A	I	41.3	21.2	11.4	4.3	37.4	42.1	4.6	
61341B	· II	43.6	19.7	12.0	3.5	25.9	52.5	6.2	
61345	I	44.8	18.0	9.1	3.5	26.9	54.2	6.3	
61346	I	40.8	21.8	10.9	4.4	33.9	45.1	5.3	
61347	II	45.4	21.9	11.6	3.2	27.7	51.5	6.1	
61348	I	42.4	20.5	11.3	2.8	30.5	49.6	5.6	
61349	II	44.2	21.6	10.9	3.1	29 .5	50.5	5.5	
61350A	II	47.2	19.6	11.1	3.4	27.1	52.6	5.8	
61350B	II	47.2	20.9	11.3	3.8	24.0	54.3	6.6	
61353	I	42.3	20.5	13.4	4.1	20.8	53.9	7.1	
61354	I	42.8	19.8	11.0	4.1	29.3	49.4	6.1	
61364	IV	45.7	15.3	10.5	3.9	18.6	55.5	11.5	
61365	IV	45.0	19.4	11.8	3.4	18.7	54.8	10.0	
61367	I	42.6	19.6	13.4	4.2	23.1	52.6	6.7	
61370	III	42.8	18.7	12.4	4.6	19.2	54.7	9.1	
561371	IV	46.6	20.5	11.1	4.1	20.9	55.8	7.5	
561374	I	47.3	17.7	11.3	3.9	31.0	47.6	6.0	
561377	II	41.9	19.1	11.4	3.4	23.3	55.4	6.5	
561394	III	45.2	21.7	15.0	3.8	22.4	50.7	7.4	

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

	7.57.4	•	Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	
562387		Iwate	Japan	Japan	1992	I
567151	Kogeki	Yamagata	Japan	Japan	1992	II
567152	Shounai 1	Yamagata	Japan	Japan	1992	II
567153	Shounai 2	Yamagata	Japan	Japan	1992	II
567154	Wase dadacha	Yamagata	Japan	Japan	1992	II
567155A		Yamagata	Japan	Japan	1992	I
567155B	(Wase shiroyama dadacha)	Yamagata	Japan	Japan	1992	II
567155C	(Wase shiroyama dadacha)	Yamagata	Japan	Japan	1992	II
567156B	(He jiao No. 8)	Heilongjiang	China	China	1992	I
567159A	, •	Heilongjiang	China	China	1992	I
567159B	(He long da dou)	Heilongjiang	China	China	1992	II
567160	He long hei mo shi dou	Heilongjiang	China	China	1992	II
567161	He long hui mao dou	Heilongjiang	China	China	1992	II
567162	He long lu guo hei dou	Heilongjiang	China	China	1992	II
567166	He mao	Jilin	China	China	1992	II II .
567168	He ping No. 1	Jilin Jilin	China	China	1992	II . II
567169	He qi feng di huang	Jilin	China	China	1992	II I
567170A		Jilin	China	China	1992	II
567170B	(He qi ping ding xiang)	Jilin	China	China	1992	II
567174C	(Hei he 54)	Heilongjiang	China	China		
567175D	(Hei jia zi)	Liaoning	China	China	1992 1992	IV
567197	(Heijia zi)	Unknown	Georgia			IV
567198		Unknown	Georgia	Germany	1992	II
567199		Unknown	_	Germany	1992	II
567201A		Unknown	Georgia	Germany	1992	II
567201B		Unknown	Georgia	Germany	1992	IV
567201C		Unknown	Georgia	Germany	1992	IV
567201D		Unknown	Georgia	Germany	1992	IV
567201			Georgia	Germany	1992	IV
	Domostus	Unknown	Georgia	Germany	1992	IV
567214A		Unknown	Russia	Russia	1992	I
567214B	(Demetra)	Unknown	Russia	Russia	1992	I
567215C	(Juzanka)	Unknown	Russia	Russia	1992	I
	(Vitiaz' 50)	Unknown	Ukraine	Russia	1992	II
	Primorskaja 1081	Primorye	Russia	Russia	1992	I
567229B	(Primorskaja 1081)	Primorye	Russia	Russia	1992	I
567237	W6-6348	Xinjiang	China	China	1992	IV
567239		Hunan	China	China	1992	II
567240		Hunan	China	China	1992	II
567241		Hunan	China	China	1992	II
567242		Hunan	China	China	1992	II
567243		Hunan	China	China	1992	III
567244		Hunan	China	China	1992	III
567245		Hunan	China	China	1992	II
567246		Hunan	China	China	1992	II
567247		Hunan	China	China	1992	II
567248		Hunan	China	China	1992	IV

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

Entry	Maturity	Stem term.				Density	Pod	Seedco		Hilum color	Other traits	Seed shape
	group											
562387	I	N	W	T	E	N	Dbr	В	Bl	Bl	Flk, Sw	2N
567151	II	D	W	Lt	Α	N	Br	S	Br	Br		2N
567152	II	D	W	Lt	E	Ssp	Br	D	Br	Br		2N
567153	II	D	W	T	E	Ssp	Dbr	S	Br	Br		2N
567154	II	D	W	Lt	E	Ssp	Br	I	Br	Br		2N
567155A	I	D	W	Lt	Α	Ssp	Br	S	Br	Br		2N
567155B	II	D	W	Lt	E	Ssp	Br	Ι	Br	Br		2N
567155C	II	D	W	Lt	E	Ssp	Dbr	I	Br	Br		2N
567156B	I	N	P	G	E	N	Br	Ι	Y	Lbf	Vhil	2N
567159A	I	N	W	G	E	Ssp	Tn	I	Y	Bf	Na	2N
567159B	II	N	W	G	E	N	Tn	I	Y	Bf	Dab, Na	2N
567160	II	D	P	T	E	N	Br	Lb	Bl	B1	Flk, Dab	4N
567161	II	N	W	G	E	N	Br	I	Y	Lbf	Vhil	2N
567162	II	N	P	T	E	N	Br	Lb	Bl	B1		2N
567166	II	N	P	T	E	N	Br	I	Y	Y		2N
567168	II	N	W	G	E	N	Tn	I	Y	Y		2N
567169	. <u>I</u>	S	W	G	E	N	Dbr	D	Y	Bf		2N
567170A	II	D	W	G	E	N	Tn	I	Y	Lbf	Vhil	2N
567170B	II	D	W	G	E	N	Br	Ι	Y	Bf		2N
567174C	IV	S	W	G	E	N	Dbr	I	Y	Bf		3N
567175D	IV	N	W	G	E	N	Dbr	I	Y	Lbf	Vhil	2N
567197	II	N	P	T	E	N	Br	Ι	Y	Tn		2N
567198	II	N	P	T	E	N	Br	I	Y	Tn		2N
567199	II	N	P	T	E	N	Br	I	Y	Tn		2N
567201A	IV	D	W	Lt	E	Ssp	Br	I	Y	Brbl		2N
567201B	IV	D	P	G	E	Ssp	Br	I	Y	Ib		3N
567201C	IV	N	P	Lt	E	N	Br	I	Y	Brbl		3N
567201D	IV	N	P	Lt	E	Ssp	Br	I	Y	Brbl		3N
567202	IV	D	P	T	E	N	Br	I	Y	Br	Vhil	2N
567214A	I	N	P	G	E	N	Br	I	Lg	Ig	Vsc	2N
567214B	I	N	P	G	E	N	Br	D	Y	Ig	Vsc	2N
567215C	I	S	P	T	E	N	Br	D	Y	G	Abh	2N
567217C	II	N	W	G	E	N	Br	I	Y	Y	Vhil	2N
567229A	I	D	W	T	E	N	Br	I	Y	Tn	Vhil	2N
567229B	I	N	P	T	E	Ssp	Dbr	D	Y	Tn	Vhil	2N
567237	IV	S	P	T	A	N	Tn	I	Y	Bl	T 71 '1	3N
567239	II	D	W	Lt	A	N	Br	I	Y	Lbr	Vhil	3N
567240	II	S	P	T	E	Ssp	Tn	I	Rbr	Rbr		2N
567241	II	N	W	G	Sa	N	Br	I	Gn	Bf		4N
567242	II	S	P	G	A	N	Tn	D	Y	Bf		3N
567243	III	S	P	T	E	Ssp	Tn	I	Y	Bl		2N
567244	III	S	W	G	E	Ssp	Br	I	Y	Bf		4N
567245	II	N	P	G	Sa	N	Tn	I	Y	Bf		3N
567246	II	N	P	Lt	E	Ssp	Tn	I	Y	Br	Vsc, Dab	3N
567247	II	N	P	G	Sa	N	Tn	I	Y	Bf		3N
567248	IV	S	P	T	Α	Ssp	Br	I	Y	Br		2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity	7		Stem	Shatter	ing	Seed	T. I.		
	date	date	Lodging	Heigh	t term.	early	late	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)		(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
562387	717	907	4.2	98	5.0	1.0	3.5*	2.0		4.0	1.73
567151	716	908	1.2	54	1.0	2.2*	4.5	2.2		25.1	2.38
567152	712	910	1.0	61	1.0	2.0*	5.0	2.2		28.2	2.54^
567153	712	913	1.0	52	1.5	2.5	5.0	2.0		29.9*	1.76
567154	713	909	1.0	50	1.0	2.5*	5.0	2.5		27.6	2.26
567155A	716	907	1.0	55	1.0	2.0*	5.0	2.2		24.6*	2.11
567155B	715	913	2.2	52*	1.5	3.0	3.0*	3.2*		25.6	1.76
567155C	715	912	1.8	64	1.0	1.5	4.0*	2.0		27.4	2.36*
567156B	703	907	1.0	75	3.0	1.0	1.0	2.2	1.5	20.3	3.23
567159A	705	910	1.0	72	3.0	1.0	1.0	1.8	1.0	16.3	2.74
567159B	708	911	1.2	82	3.0	1.0	1.0	2.0	1.0	16.4	2.79
567160	713	914	4.5	96*	4.0	1.0	1.0	2.0		8.9	1.58
567161	713	915	3.5	87	3.0	1.0	1.2	3.0	2.0	19.1	2.84
567162	707	911	3.0	92	4.0	1.0	2.0	2.0		21.8*	2.09*
567166	712	909	1.8	94	3.0	1.0	1.5	2.0	2.0	13.7	1.96*
567168	717	919	3.0	95	3.0	1.0	1.0	1.8	2.0	15.9*	2.64
567169	706	910	1.8	76	2.0	1.0	1.0	2.0	1.0	16.0	2.98
567170A	715	919	1.5	68	1.0	1.0	1.2	2.0	1.0	16.2*	3.27
567170B	716	919	2.0	72	1.0	1.0	1.0	2.0	1.0	18.6*	3.08
567174C	724	1011^	2.5	95	2.0	1.0	1.5	2.2	1.0	16.6*	3.24
567175D	803	1013^	3.8	129*	3.5	1.0	1.5	2.2	1.0	13.4*	2.66
567197	714	917	3.0	98	3.0	1.0	2.0*	2.0	3.0	16.1	2.83
567198	711	914	3.2	96	3.0	1.0	2.0*	2.0	2.5	14.4	2.80
567199	710	916	3.2	95	3.0	1.0	2.0*	2.0	3.0	15.5	3.11
567201A	728	1010^	1.8	70	1.0	1.0	1.0	2.2	3.0	15.4*	2.12
567 2 01B	726	1010^	2.0	68	1.5	1.0	1.8	3.0	2.5	17.2*	1.38
567201C	7 26	1012^	3.0	96	3.0	1.0	1.0	2.5	3.0	17.4*	2.49*
567 2 01D	728	1013^	3.0	84	3.0	1.0	1.0	2.5	3.0	16.2*	2.50*
567202	730	1011^	2.0	88	1.5	1.0	1.5	3.0	4.0	9.0*	1.97*
567214A	705	903	2.0	92	3.0	1.0	1.2	2.5	1.0	16.1	3.00
567214B	704	901	2.0	90*	3.0	1.0	1.0	2.5	1.5	15.6	2.46
567 2 15C	708	905	2.5	117^	2.8	1.0	1.0	2.0	2.0	12.3	3.09
567217C	706	917	1.8	112*	3.5	1.0	1.2	2.0	2.0	17.6*	3.30
567229A	705	912	1.5	64*	1.0	1.0	1.0	2.0	1.0	14.3	3.04
567229B	701	913	2.0	70	3.0	1.0	1.0	2.0	1.5	17.8	3.02
567237	728	1007^	2.8	52*	2.0	2.2*	2.8*	2.2	3.0	19.0	0.92
567239	718	911	2.0	34*	1.0	2.5*	4.5	1.8	1.5	13.1	0.58
567240	725	919	2.8	67	2.0	1.5	3.0*	2.0		10.0	1.98
567241	801	919	3.5	79*	4.0	2.2	4.0*	2.0	4.0	8.8	1.24
567242	720	909	3.5	66	2.0	1.5	3.5*	2.0	1.0	12.8	1.58
567243	731	927	3.5	103	2.0	1.5	3.0*	2.0	4.5	7.2	1.50
567244	727	924	3.5	94*	2.0	1.8	4.0*	2.0	4.0*	10.4*	1.48*
567245	727	913	2.2	80*	4.0	2.8*	4.0*	1.8	2.0	12.0*	1.24*
567246	727	917	3.5	92*	3.0	3.5*	4.5	1.8	3.0	9.4	1.21*
567247	727	912	2.8	92	3.5	2.0*	4.0*	1.8	2.0	11.8	1.85
567248	809	1015^	4.0	58*	2.0	1.0	1.5	2.0	3.0	6.6	1.45

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed cor	nposition	Oil compo	sition				
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic	
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
562387	I	45.3 ^w	11.3 ^w	12.9	4.4	12.9	57.5	12.2	
567151	II	39.3 ^w	17.8 ^w	12.4	3.1	32.5	46.1	5.9	
567152	II	42.1 ^w	16.6 ^w	10.9	2.8	36.1	43.8	6.0	
567153	II	43.2 ^w	19.5 ^w	10.6	3.6	35.3	44.9	5.2	
567154	II	43.2 ^w	18.8 ^w	10.5	3.0	40.9	39.9	5.7	
567155A	I	38.7 ^w	18.6 ^w	12.3	3.0	34.0	45.0	5.7	
567155B	II	45.8 ^w	15.1 ^w	12.3	3.3	39.9	39.0	5.5	
567155C	II	45.1 ^w	16.7 ^w	11.9	3.1	33.8	45.3	6.0	
567156B	I	42.6	20.2	12.5	3.8	26.8	50.5	6.3	
567159A	I	43.1	18.9	11.1	3.7	34.4	45.8	5.0	
567159B	II	46.0	20.8	11.1	3.6	33.5	46.8	5.1	
567160	II	47.7 ^w	14.9 ^w	13.0	4.0	20.8	53.5	7.1	
567161	II	43.3	20.2	10.2	3.8	27.6	51.6	6.5	
567162	II	45.7 ^w	18.6 ^w	10.6	3.8	29.6	50.2	5.8	
567166	II	47.7	20.7	12.5	3.8	23.6	53.5	6.6	
567168	II	43.9	19.5	12.4	3.8	21.4	52.3	9.2	
567169	I	43.0	19.7	11.7	3.7	24.7	53.7	6.3	
567170A	II	44.1	21.2	10.2	3.9	24.1	54.5	6.9	
567170B	II	42.2	21.4	11.5	3.5	21.2	56.2	7.6	
567174C	IV	47.8	20.1	10.7	4.1	22.5	56.0	6.8	
567175D	IV	43.2	19.7	11.6	4.1	19.8	55.4	8.7	
567197	II	47.6	17.7	12.8	3.3	20.9	53.7	9.3	
567198	II	46.1	18.4	12.6	3.4	22.5	52.6	8.9	
567199	II	46.3	18.7	12.6	3.3	22.0	52.5	8.8	
567201A	IV	44.9	18.3	11.4	3.6	22.5	54.3	7.8	
567201B	IV	45.0	20.6	11.2	4.1	23.9	52.9	7.9	
567201C	IV	45.0	19.2	11.6	3.8	21.8	54.1	8.3	
567201D	IV	45.0	19.9	11.0	3.8	22.9	54.4	7.9	
567202	IV	46.0	16.3	12.3	3.6	18.4	54.6	10.6	
567214A	I	40.8	21.5	11.8	3.5	33.7	46.0	4.8	
567214B	I	40.5	22.3	11.6	3.4	36.1	44.0	4.5	
567215C	I	41.7	20.2	11.5	3.9	26.6	51.6	6.0	
567217C	II	43.3	22.7	11.7	4.0	25.2	52.0	6.6	
567229A	I	43.3	18.7	12.0	3.3	25.3	53.5	5.6	
567229B	I	48.3	17.3	11.7	3.9	25.1	52.7	6.6	
567237	IV	48.4	16.5	10.9	3.7	23.4	54.1	7.3	
567239	II	46.9	18.8	12.7	3.7	24.1	51.8	7.5	
567240	II	42.1	20.7	11.9	3.9	23.0	51.9	9.2	
567241	II	48.7	16.0	11.8	4.7	23.7	51.0	8.0	
567242	II	43.1	16.1	12.1	3.8	24.8	51.7	7.6	
567243	III	48.0	17.2	12.6	4.5	21.3	52.7	8.9	
567244	III	49.1	16.4	11.6	4.4	22.9	52.6	8.2	
567245	II	50.2	16.3	11.3	3.8	22.3	53.8	8.4	
567246	II	45.3	17.7	12.9	4.7	22.1	49.9	10.5	
567247	II	48.7	16.5	11.4	3.9	20.5	54.8	8.9	
567248	IV	45.2	16.9	11.5	3.9	18.1	56.1	10.0	

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

			<u> </u>		T.7	
	A	D	Country	Country	Year	3.6
DIN	Accession	Region	of 	of	introduced	•
PI No.	name	of origin	origin	acquisition	or released	group
567249	Xiang chun dou No. 5	Hunan	China	China	1992	III
567250A	Xiang chun dou No. 6	Hunan	China	China	1992	I
567250B	(Xiang chun dou No. 6)	Hunan	China	China	1992	III
567251	Xiang chun dou No. 10	Hunan	China	China	1992	III
567252	Xiang chun dou 11	Hunan	China	China	1992	III
567253	Xiang chun dou 13	Hunan	China	China	1992	II
567254	Chuan xiang zao No. 1	Hunan	China	China	1992	II
567255A		Jiangxi	China	China	1992	I
567255B		Jiangxi	China	China	1992	II
567258	He pi dou	Jiangxi	China	China	1992	II
567259	Ai jiao zao	Jiangxi	China	China	1992	III
567260	Hei dou (Jin xian No. 1)	Jiangxi	China	China	1992	II
567261A		Fujian	China	China	1992	II
567261B		Fujian	China	China	1992	II
567261C		Fujian	China	China	1992	III
567261D		Fujian	China	China	1992	II
567261E		Fujian	China	China	1992	III
567262A		Fujian	China	China	1992	II
567262B		Fujian	China	China	1992	II
567262C		Fujian	China	China	1992	III
567262D		Fujian	China	China	1992	II
567262E		Fujian	China	China	1992	II
567263		Fujian	China	China	1992	III
567264A		Fujian	China	China	1992	II
567264B		Fujian	China	China	1992	II
567264C		Fujian	China	China	1992	II
567264D		Fujian	China	China	1992	III
567265		Fujian	China	China	1992	IV
567266A		Fujian	China	China	1992	II
567266B		Fujian	China	China	1992	II
567266C		Fujian	China	China	1992	III
567266D		Fujian	China	China	1992	III
567267A		Fujian	China	China	1992	II
567267B		Fujian	China	China	1992	III
567270A		Guangdong	China	China	1992	IV
567272A	AV 215	Unknown	Taiwan	Taiwan	1992	IV
567272B	(AV 215)	Unknown	Taiwan	Taiwan	1992	IV
567273A	Back tac	Unknown	South Korea	South Korea	1992	IV
567273B	(Back tac)	Unknown	South Korea	South Korea	1992	IV
567275	Chusei koukoko	Unknown	Japan	South Korea	1992	II
567276	Fukuichi	Unknown	Japan	South Korea	1992	II
567277	Fukujisi	Unknown	Japan	South Korea	1992	II
567278	Fuuki	Unknown	Japan	South Korea	1992	II
567279A		Kyonggi	South Korea	South Korea	1992	IV
567279B		Kyonggi	South Korea	South Korea	1992	IV
567280		Kangwon	South Korea	South Korea	1992	III
		-				

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

Entry 567249 567250A 567250B 567251 567252 567253 567254 567255A 567255B 567259 567260 567261A 567261B 567261C 567261D 567261E 567262A	group III III III III II II II II	s S S N S S S S S D D	W P P W W W	G G T Lt G Lt	A A E A E	N N N N N	Tn Tn Bl	Luster I I	Color Y Y	Bf Ib	Other traits	shape 3N
567250A 567250B 567251 567252 567253 567254 567255A 567255B 567255B 567258 567260 567261A 567261B 567261C 567261D 567261E 567262A 567262B	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	S N S S S S D	P P W W W	G T Lt G Lt	A E A	N N N	Tn					
567250B 567251 567252 567253 567254 567255A 567255B 567255B 567259 567260 567261A 567261B 567261C 567261D 567261E 567262A 567262B	III III II I	N S N S S S D	P W W W	T Lt G Lt	E A	N N		I	V	Th		
567251 567252 567253 567254 567255A 567255B 567258 567259 567260 567261A 567261B 567261C 567261D 567261E 567262A 567262B	III II	S N S S S D	W W W W	Lt G Lt	Α	N	Bl		1	10	Vhil	3N
567252 567253 567254 567255A 567255B 567259 567260 567261A 567261B 567261C 567261D 567261E 567262A 567262B	III II II II II II II III III	N S S S D	W W W	G Lt				I	Gnbr	Br		5F
567253 567254 567255A 567255B 567258 567259 567260 567261A 567261B 567261C 567261D 567261E 567262A 567262B	II II II III III	S S S D	W W W	Lt	E		Tn	I	Y	Bl		3N
567254 567255B 567258 567259 567260 567261A 567261B 567261C 567261D 567261E 567262A 567262B	II II II III II	S S D	W W			N	Br	I	Y	Bf		4N
567255A 567255B 567258 567259 567260 567261A 567261B 567261C 567261D 567261E 567262A 567262B	II II II II	S D	W	C	Α	N	Br	I	Y	Brbl		3N
567255B 567258 567259 567260 567261A 567261B 567261C 567261D 567261E 567262A 567262B	II III II	D		U	Α	N	Br	I	Y	Bf		3N
567258 567259 567260 567261A 567261B 567261C 567261D 567261E 567262A	II III			Lt	Α	N	Br	D	Y	Br		3N
567259 567260 567261A 567261B 567261C 567261D 567261E 567262A 567262B	III II	D	W	Lt	Α	N	Br	I	Y	Lbr	Vhil	3N
567260 567261A 567261B 567261C 567261D 567261E 567262A 567262B	II		P	T	E	Ssp	Br	I	Br	Br		2N
567261A 567261B 567261C 567261D 567261E 567262A 567262B		S	W	G	\mathbf{E}	N	Br	I	Y	Bf		3N
567261B 567261C 567261D 567261E 567262A 567262B	II	D	P	T	E	Ssp	Br	I	Bl	Bl		3N
567261C 567261D 567261E 567262A 567262B		S	W	T	E	N	Br	I	Bl	Bl		3N
567261D 567261E 567262A 567262B	II	S	P	G	Α	Ssp	Tn	Ī	Y	Bf		3N
567261E 567262A 567262B	III	N	P	T	E	Ssp	Tn	I	Y	Bl		3N
567262A 567262B	II	S	P	T	Α	N	Tn	I	Ÿ	Br		3N
567262B	III	S	P	T	Α	N	Tn	Ī	Ÿ	Br		2N
	II	S	P	T	Sa	N	Tn	Ī	Ÿ	Br		2N
	II	S	P	T	A	N	Tn	Ī	Ŷ	Br		2N
567262C	III	S	P	T	A	N	Tn	Ī	Ÿ	Br		2N
567262D	II	S	W	T	A	N	Tn	Ī	Ŷ	Br	Lft5	2N
567262E	II	N	P	T	A	N	Tn	Ī	Ŷ	Br	Dits	2N
567263	III	S	P	T	A	N	Tn	Ī	Ŷ	Br		2N
567264A	II	S	W	G	A	N	Tn	Ī	Ŷ	Bf		2N
567264B	II	S	P	T	E	N	Tn	Ī	Ŷ	Br		3N
567 2 64C	II	S	W	T	A	N	Tn	Ī	Ŷ	Br		2N
567264D	III	S	P	T	A	N	Tn	Ī	Ŷ	Br		2N
567265	IV	S	P	T	E	N	Tn	Ī	Ŷ	Br		2N 2N
567266A	II	S	P	T	Ā	N	Tn	Ī	Ŷ	Br		3N
567266B	II	N	W	T	A	N	Tn	Ī	Ŷ	Br		2N
567266C	III	S	P	T	A	N	Tn	Ī	Y	Br		2N 2N
567266D	III	S	W	Ť	A	N	Tn	I	Y	Br		2N 2N
567267A	II	S	P	T	E	N	Tn	I	Y	Br		2N 2N
567267B	III	S	P	T	A	N	Tn	I	Y			
67270A	IV	N	P	G	E	N	Tn	I	Y	Br Bf		2N
567272A	IV	N	P	T	Sa	Ssp	Br	I	Y	Tn	Cd	2N
67272B	IV	N	P	T	Sa	Ssp	Br	I	Y		Cd	2N
667273A	IV	D	P	G	Sa E	N N	Br	I	Y	Y	NI-	2N
67273B	IV	D	P	G	E					Y	Na Na	2N
67275 .	. II	D	r W	T	E E	Ssp	Br Dr	I	Y	Y	Na	2N
67276	II	D	P vv	G	E	Ssp Ssp	Br Dr	I	Bl V	Bl		2F
67277	II	D	W	G	E Sa	Ssp N	Br Dr	I	Y	Y	3.71. 11	2N
67278	II	D D	W	G	Sa Sa		Br	I	Gn	Gn	Vhil	2N
67279A		D D	vv P	T		N Son	Br Br	I I	Gn Br	Gn	Vhil	2N
	1.37		r	I	E	Ssp	HIT		⊷r.	⊔r.		1 3 K I
67279B 67280	IV IV	D	P	T	E	Ssp	Br	I	Br	Br Br		2N 2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity		Stem	Shatter	ing	Seed			
	date		g Heigh	nt term.	early	late	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd) (score)	(cm)	(score)	(score)	(score)	(score)	(score)	$(cg sd^{-1})$	(Mg ha ⁻¹)
567249	724	923 2.2	56	2.0	1.5	3.2*	2.2	3.0	15.2	0.94
567250A	718	905 2.0	53	2.0	1.0	5.0	1.8	1.0	10.8	1.66
567250B	723	928^ 5.0	151	5.0	1.0	2.0	2.2		4.0*	0.53
567251	722	923 2.2	69*		1.8	3.2*	2.2	2.0	15.8*	1.74
567252	716	922 2.5	109	3.5	1.8	3.5	1.8	1.5	19.4*	2.38
567253	721	914 3.0	54*		3.0	5.0	2.0	1.5	17.8*	0.55
567254	715	915 3.0	70*		2.8	5.0	1.5	1.0	15.2	1.34
567255A	716	906 2.5	42	2.0	3.0*	5.0	2.0	1.5	11.8	0.80
567255B	721	913 2.8	49	1.0	2.5	5.0	2.0	1.5	13.8	1.07
567258	721	913 3.0	68*		1.5	4.0*	1.5		9.4	1.56*
567259	726	923 3.2	110	2.0	1.8	3.8*	2.0	3.0	9.8*	1.94
567260	724	915 3.8	90*		3.5*	5.0	1.8		9.0	1.04
567261A	720	913 3.0	92	2.0	1.5	4.0*	2.0		8.5	1.91
567261B	724	912 2.0	67	2.0	4.0*	5.0	1.5	2.5	10.6	1.29
567261C	727	922 3.0	92*		2.5	4.8	2.2	4.5	10.8	1.27
567261D	723	917 2.0	68*		3.5*	5.0	1.5	3.0	10.6	1.31
567261E	731	926 3.0	70	2.0	2.5	4.0*	2.5	4.0	10.2	1.09
567262A	725	917 2.8	72	2.0	4.5	5.0	1.8	3.0	8.7	1.24
567262B	725	917 2.8	72	2.0	5.0	5.0	1.8	2.5	10.6	1.02
567262C	730	923 3.0	78*		3.0*	5.0	2.2	4.5	9.1	0.61
567262D	726	917 2.5	63*		3.2*	5.0	1.5	2.0*	10.6	0.90
567262E	726	917 3.8	115*		3.2*	4.5	1.5	3.5	10.6	1.30
567263	727	923 3.0	73*		2.8*	3.5*	2.2	3.0	14.2*	1.20*
567264A	724	911 2.2	60	2.0	4.0*	5.0	1.8	2.5	10.0	1.07
567264B	727	918 3.0	77	2.0	4.0*	5.0	1.8	3.5	10.6	1.04
567264C	727	918 3.0	72	2.0	4.5	5.0	1.8	3.5	10.2	0.83
567264D	729	925 2.8	74*		2.5	4.0*	2.0	4.0	10.4	1.02
567265	807	1011^ 3.2	106*		1.0	1.0	3.0	2.5	14.8*	1.12
567266A	727	918 2.5	81	2.0	2.2	4.5	1.8	3.0	11.8	1.36
567266B	727	914 3.5	80*		3.5	5.0	1.5	2.0	10.8	0.91
567266C	731	925 2.8	76 *		2.5	4.0 *	2.0	4.0	9.8	1.04
	731 728	923 3.0	70	2.0	3.0*	4.5	2.0	4.0	10.2	1.04
567266D	728 724	915 3.2	101	2.0	3.2	5.0	1.8	3.5	10.2	1.57
567267A	72 4 729	913 3.2	84		3.2*	4.0*	2.0	3.0	10.8	1.62
567267B		1025^ 4.5	84*		1.0	2.0^	2.0	3.5	7.6	0.68
567270A	818	1023 4.3	88*		1.5	2.5*	2.0	3.3 4.0	7.0 14.8*	1.85*
567272A	726 724	1011 3.3	100*		1.5	3.0*	2.2	5.0	15.2*	1.98*
567272B	724 721	1012 3.0	74	1.0	1.0	2.0*	2.0	1.5	21.0	2.91
567273A	721 722	1010^ 2.0	74	1.0	1.0	3.0*	1.8	2.0	21.0*	2.91 2.76*
567273B	722	915 1.0	48	1.0	3.0*	4.5	2.2	2.0 	21.0* 27.7*	1.89
567275		915 1.0	48 44	1.0	3.0** 2.5	4.3 5.0	1.8	1.0	27.7*	2.29
567276	706 700		38		1.2		2.5	1.0	26.2	1.84
567277	709 700	909 1.0		1.0		4.0*	2.3	2.0	26.2 26.5	2.20
567278	709	912 1.0	40 72*	1.0	1.5	4.0*	2.2		26.5 19.4*	2.20 1.91*
567279A	728	1016^ 2.5			2.0*	2.5*				
567279B	728 723	1015^ 2.5	68*		1.5	2.5*	2.0		18.7*	1.98*
567280	723	1005^ 2.0	60*	1.0	1.5	3.0*	2.5		22.2*	2.40*

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil compo				
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)
567249	III	48.3	16.7	11.2	3.7	26.2	51.5	7.4
567250A	I	46.4	14.1	13.2	4.1	24.1	50.1	8.4
567250B	III	42.1	20.7	11.5	4.4	17.7	57.4	8.3
567251	III	45.0	20.6	12.2	3.7	26.2	50.7	7.2
567252	III	47.1	19.0	11.7	4.3	24.2	52.2	7.4
567253	II	47.2	19.5	11.6	3.9	25.1	51.5	7.3
567254	II	45.2	19.8	11.7	3.8	22.5	54.1	7.8
567255A	I	45.3	16.0	12.9	3.5	24.4	51.8	7.5
567255B	II	49.0	18.3	13.1	3.7	22.9	52.4	7.9
567258	II	47.0 ^w	15.4 ^w	12.8	4.2	20.1	53.9	9.0
567259	III	48.0	16.4	11.6	4.1	20.9	54.3	9.1
567260	II	45.8 ^w	14.7 ^w	11.2	4.0	23.4	53.1	8.3
567261A	II	44.5 ^w	14.3 ^w	12.3	4.2	21.6	51.6	10.3
567261B	II	45.6	17.3	11.9	3.7	20.8	53.6	9.7
567261C	III	50.5	17.3	12.5	3.8	21.3	54.1	8.4
567261D	II	44.4	18.8	11.7	3.9	23.5	52.6	8.2
567261E	III	47.0	16.2	11.6	3.7	20.9	55.4	8.4
567262A	II	47.4	15.6	11.8	3.5	18.2	55.9	10.3
567262B	II	48.6	15.4	11.6	3.4	20.1	55.7	9.2
567262C	III	49.0	16.2	12.1	3.9	23.2	52.9	7.9
567262D	II	48.3	15.8	11.8	3.3	18.7	56.7	9.5
567262E	II	46.4	17.1	11.9	3.5	19.8	55.6	9.0
567263	III	51.9	14.8	13.2	3.9	20.5	53.3	9.1
567264A	II	47.0	17.8	12.1	3.5	21.0	54.0	9.0
567264B	II	45.6	17.9	11.7	3.4	21.9	54.5	8.6
567264C	II	46.0	18.0	11.7	3.9	25.7	50.4	8.0
567264D	III	46.3	18.3	12.4	3.7	22.9	53.0	7.9
567265	IV	46.4	17.2	11.4	4.4	21.1	52.6	9.8
567266A	II	47.5	16.9	11.6	4.0	21.4	53.0	8.4
567266B	II	46.8	17.3	11.9	4.0	23.5	52.4	7.9
567266C	III	45.9	16.7	12.2	3.7	21.0	54.7	8.3
567266D	III	47.4	17.0	12.4	3.6	21.2	54.7	8.1
567267A	II	49.4	15.8	12.4	3.8	22.2	53.7	7.9
567267B	III	47.3	16.1	11.8	4.3	27.5	48.9	6.7
567270A	IV	48.2	14.5	11.7	4.4	21.3	54.2	7.9
567270A 567272A	IV	47.9	18.7	11.7	4.5	21.0	55.1	8.1
567272B	IV	47.5	19.2	11.5	4.3	21.7	54.5	7.5
567272B	IV	44.4	19.9	11.1	3.9	22.9	53.6	8.4
567273B	IV	43.3	19.9	12.1	4.8	23.3	52.2	7.0
567275	II	43.8 ^w	19.9 ^w	11.6	4.8	34.3	44.0	7.0 4.9
567276	II	46.2	20.4	12.1	3.3	27.6	50.4	5.6
567277	II	42.9	22.1	10.3	3.3	40.9	40.0	4.8
567278	II	42.3	21.6	10.3	3.4	35.1	44.7	4.6 5.4
567278 567279A	IV	42.5 ^w	16.9 ^w	12.8	3.4	18.1	56.4	8.1
567279B	IV	42.3 44.2 ^w	16.9 ^w	11.8	4.5	21.4	53.9	8.0
JUL/ /. / 71)	1 V	44 .4	10.7	11.0	4.5	41.4	JJ.Y	0.0

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

	The state of the s	The second control of the second seco	Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origi n	acquisition	or released	group
567281A		Unknown	South Korea	South Korea	1992	III
567281B		Unknown	South Korea	South Korea	1992	IV
567284	Ba yue zha	Gansu	China	China	1992	III
567285	Ba yue zha	Gansu	China	China	1992	III
567286	Ba yue zha	Gansu	China	China	1992	III
567287	Bai gun dou	Gansu	China	China	1992	IV
567288A	_	Gansu	China	China	1992	II
567288B	(Bai gun dou)	Gansu	China	China	1992	III
567289A	· •	Gansu	China	China	1992	IV
567289B	(Bai gun dou)	Gansu	China	China	1992	IV
567290A		Gansu	China	China	1992	IV
567291	Bai huang dou	Gansu	China	China	1992	IV
567293	Ben di huang dou	Gansu	China	China	1992	II
567294	Bian huang dou	Gansu	China	China	1992	IV
567296A	•	Gansu	China	China	1992	IV
567296B	(Chang yan wo da dou)	Gansu	China	China	1992	IV
567296C		Gansu	China	China	1992	IV
567297	Cai dou	Gansu	China	China	1992	IV
567300A		Gansu	China	China	1992	IV
	He pi xiao huang dou	Gansu	China	China	1992	IV
567301B	(He pi xiao huang dou)	Gansu	China	China	1992	IV
567302	He se huang dou	Gansu	China	China	1992	II
	Hei da dou	Gansu	China	China	1992	IV
567304	Hei dou	Gansu	China	China	1992	IV
567305	Hei dou zi	Gansu	China	China	1992	IV
567306A		Gansu	China	China	1992	IV
567306B	(Hei gun dou)	Gansu	China	China	1992	IV
567307	Hei huang dou	Gansu	China	China	1992	IV
567311A		Gansu	China	China	1992	IV
567311B		Gansu	China	China	1992	IV
567313	Hei yao huang dou	Gansu	China	China	1992	II
567317	Hua huang dou	Gansu	China	China	1992	IV
567318	Hua lai dou	Gansu	China	China	1992	IV
	Huang dou	Gansu	China	China	1992	IV
	(Huang dou)	Gansu	China	China	1992	IV
	Huang dou	Gansu	China	China	1992	IV
	Huang dou	Gansu	China	China	1992	II
	(Huang dou)	Gansu	China	China	1992	II
567323C	· · · · · · · · · · · · · · · · · · ·	Gansu	China	China	1992	II
567324	Huang dou	Gansu	China	China	1992	IV
	Huang dou	Gansu	China	China	1992	II
567327	Huang dou	Gansu	China	China	1992	IV
567330	Huang mai dou	Gansu	China	China	1992	IV
567331	Huang pi xiao huang dou	Gansu	China	China	1992	IV
	Ji dan pi	Gansu	China	China	1992	IV
	Lai da dou	Gansu	China	China	1992	IV
30/333A	Lai da dod	Gansu	Cillia	Cillia	1994	1 4

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem					Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567281A	III	D	P	T	E	Ssp	Br	I	Bl	Bl		3N
567281 B	IV	D	P	T	E	Ssp	Br	I	Bl	Bl		3N
567284	III	N	P	T	E	N	Br	I	Y	Brbl		4N
567285	III	N	P	T	E	N	Br	I	Y	Brbl		4N
567286	III	N	P	T	E	N	Br	I	Y	Brbl		4N
567287	IV	S	P	G	E	N	Dbr	I	Y	Ιb		2N
567288A	II	N	W	T	E	N	Br	I	Y	B1		2N
567288B	III	N	W	T	Ε	Ssp	Br	Ī	Ÿ	B1	Vhil	2N
567289A	IV	N	W	T	E	Ssp	Br	I	Ÿ	B1		3N
567289B	IV	N	P	T	E	N	Dbr	Ī	Ÿ	Brbl		4N
567290A	IV	S	P	T	Ē	N	Dbr	Ī	Ŷ	Br		3N
567291	IV	S	P	Ġ	Sa	N	Br	Ī	Y	Bf		3N
567293	II	N	W	T	E	N	Br	Ī	Y	Bl		2N
567294	IV	N	P	Lt	E	N	Br	I	Y	Brbl		5N
567296A	IV	N	P	T	E	N	Br	I	Br	Br	St	3N
567296B	IV	N	P	T	E	N	Br	I	Br	Br	St	2N
567296C	IV	N	P	T	E	N	Br	I	Br	Br	St	3N
567297	IV	N	P	Lt	Ē	N	Bl	Ī	Gnbr	Br	Lft5	3N
567300A	IV	N	P	T	E	N	Bl	I	Bl	Bl	Lits	3N
567301A	IV	N	P	T	E	N	Dbr	Ī	Gnbr	Br	Dab	3F
567301B	IV	N	P	T	E	N	Bl	I	Gnbr	Br	Dab	4F
567301 D	II	N	W	T	E	N	Br	I	Rbr	Rbr	Dau	2N
567303A	IV	N	W	T	E	N	Tn	I	Bl	Bl		4F
567304	IV	N	P	T	E	N	Bl	I	Bl	Bl	Dab	4F 5F
567305	IV	N	P	T	E	N	Bl	I	Bl	Bl		
567306A	IV	D	P	T	E	N	Br	Lb	Bl		Dab	5F
567306B	IV	D	P	T	E	N		Lb	Bl	Bl		3N
567307	IV	D	P	Lt	E	N N	Br			Bl		2N
567311A	IV IV	N	W	Lt	E	N N	Bl D::	I	Bl	Bl		3F
							Br	I	Y	Bl		5N
567311B 567313	IV	N	W	T	E	N	Br	I	Y	Bl	0.11045	4N
	II	N	P	T	E	N	Tn	I	Y	Bl	Sad, Lft4, Dab	
567317	IV	S	P	T	E	N C.J	Bl D.	I	Br	Br	St	2N
567318	IV	D	W	T	E	Sdn	Br	I	Gnbr	Br	St	3N
567319A	IV	N	W	T	E	Ssp	Br	I	Y	Br		3N
567319B	IV	N	P	G	A	N	Br	I	Y	Bf		4N
567321A	IV	N	P	G	E	N	Bl	I	Y	Ib	* ** **	3N
567323A	II	N	W	G	E	Ssp	Br	I	Y	Y	Vhil	2N
567323B	II	N	W	G	E	Ssp	Br	I	Y	Y	Vhil	2N
567323C	II	N	W	G	E	N	Br	I	Y	Y	Na	2N
567324	IV	N	P	T	E	N	Bl	I	Y	Br		3N
567325A	II	N	W	G	E	Ssp	Br	Ι	Y	Y	Vhil	2N
567327	IV	N	W	T	E	N	Br	I	Rbr	Rbr		3N
567330	IV	N	P	G	E	N	Br	I	Y	Bf	Dab, Vhil	4N
567331	IV	N	P	T	E	N	Bl	I	Y	Br		3N
567333A	IV	D	W	G	E	N	Tn	I	Y	Bf		3N
567335A	IV	N	P	T	E	N	Bl	I	Y	Brbl		4N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	g Maturity		Stem	Shatter	ing	Seed			· · · · · · · · · · · · · · · · · · ·
	date		g Heigl	nt term.	early	late	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd) (score)	(cm)		(score)	(score)	(score)	(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
567281A	722	928^ 2.0	76	1.5	1.2	2.5*	2.2		23.8*	2.54
567281B	724	1010^ 3.2*	77	1.5	1.5	3.0*	2.0		21.6*	2.22*
567284	723	926^ 3.8	108*	3.0	1.0	1.0	2.2	3.0	10.4	2.07*
567285	721	925^ 3.2	83*	4.0	1.0	1.0	2.2	3.0	9.2	1.57
567286	721	925^ 2.8	84*	3.5	1.0	1.0	2.2	3.0	9.4	1.63*
567287	725	1005^ 4.0	88*	2.0	1.0	1.0	2.5	3.0	7.3	1.31*
567288A	706	918 2.5	100*	4.0	1.0	1.0	2.0	1.0	19.5	3.01
567288B	720	1003^ 3.2	129	4.0	1.0	1.0	2.2	2.5	13.8	3.30
567289A	722	1009^ 1.5	112	3.0	1.0	1.0	2.0	2.0*	17.8*	2.77*
567289B	802	1009^ 4.2	148*	3.5	1.0	1.0	3.5	3.0	8.5	1.33
567 2 90A	803	1015^ 3.5	126*	2.0	1.0	1.0	3.2*	4.0	7.6*	1.32*
567291	729	1010^ 2.8	110	2.0	1.0	2.5*	2.0	2.5	15.0	2.27
567293	706	917 2.8	104*	3.5	1.0	1.0	2.0	1.5	18.6	2.93
567294	802	1009^ 3.8	72	4.0	1.0	1.0	3.2*	4.0	7.8	1.46*
567296A	724	1013^ 4.2	128	4.0	1.0	1.5	2.2		21.2*	1.93
567296B	723	1010^ 4.0	104*	4.0	1.0	1.5	2.2		19.4*	1.98
567296C	727	1009^ 3.8	96	3.5	1.0	1.0	2.8*		16.6*	1.53*
567297	801	1010^ 4.5	146*	4.0	1.0	1.0	2.2		12.3*	1.76*
567300A	801	1004^ 3.8	114	4.0	1.0	1.2	3.0		12.0*	1.68*
567301A	727	1001^ 4.0	145*	4.0	1.0	1.0	2.2		6.0	0.98
567301B	803	1010^ 4.0	116	4.0	1.0	2.5	3.2*		4.0	0.96*
567302	713	912 3.2*	78	3.0	1.0	3.0*	2.0		13.0	2.86
567303A	730	1003^ 4.5	108	3.5	1.0	1.0	3.0*		7.5	1.04*
567304	802	1007^ 4.0	132	3.5	1.0	1.0	2.8*		6.2	1.38*
567305	805	1002^ 4.2	140	4.0	1.0	1.5	2.5		5.0	1.86*
567306A	729	1003^ 3.2	108	3.0	1.0	1.0	2.5		12.6*	0.89
567306B	729	1004^ 3.5	94*	* 3.5	1.0	1.0	2.8*		11.6*	0.80
567307	803	1009^ 4.2	130	4.0	1.0	1.0	2.8*		6.7	1.28
567311A	728	1010^ 4.2	112	4.0	1.0	1.0	2.5	3.0	12.8*	1.61*
567311B	729	1011^ 4.0	125*	4.0	1.0	1.0	2.8	4.0*	12.5	1.64*
567313	715	916 3.5	110	4.0	1.0	1.0	2.0		9.5*	2.03
567317	730	1013^ 4.0	126	2.0	1.0	1.0	2.5		9.8*	1.68*
567318	801	1020^ 4.2*	76*	1.5	1.0	1.0	2.0		5.7	1.48*
567319A	723	1001^ 3.2	138	4.0	1.0	2.8*	2.0	2.5*	14.2*	2.50*
567319B	729	1010^ 4.5	96	4.0	1.0	1.0	2.8*	3.0*	14.0	2.01*
567321A	728	1005^ 3.5	103	2.5	1.0	1.0	3.2*	3.5	10.0	2.01*
567323A	707	913 1.8	87	3.0	1.2	3.0*	2.2	3.5	18.3*	2.56
567323B	709	915 2.0	82	3.0	1.2	2.5*	2.2	4.5	18.8*	2.32
567323C	710	915 2.0	86	3.0	1.0	1.2	2.2	3.0*	16.1*	3.09
567324	730	1004^ 4.2	102	4.0	1.0	1.0	2.2	5.0	6.0	1.50*
567325A	706	913 1.8	81	3.0	1.2	2.5*	2.0	2.5	18.3	2.58
567327	801	1007^ 3.8	106	3.0	1.0	1.0	2.2		9.0	1.35
567330	726	1012^ 4.2	90'		1.0	1.0	3.0	3.5	8.4	1.59
567331	731	1005^ 4.5	129	4.0	1.0	1.0	2.0	5.0	5.7	1.35
567333A	806	1023^ 2.5	84	1.5	1.0	1.0^	2.2	2.5	11.8*	1.55*
567335A	802	1004^ 4.5	130	4.0	1.0	1.5	2.8	4.5	5.1	1.00

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition					
_	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic	
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
567281A	III	48.1 ^w	17.2 ^w	12.4	4.6	25.1	51.2	6.3	
567281B	IV	48.4 ^w	15.6 ^w	12.8	3.5	17.7	56.2	8.7	
567284	III	46.7	16.9	12.7	3.6	16.7	58.0	8.9	
567285	III	46.6	17.0	11.5	4.6	18.7	56.4	8.1	
567286	III	46.3	15.7	11.7	5.5	22.0	53.3	6.8	
567287	IV	48.5	15.0	11.6	3.8	20.3	53.8	10.0	
567288A	II	43.3	21.5	12.3	4.7	26.5	50.0	5.4	
67288B	III	45.7	19.1	12.1	4.1	20.5	55.3	8.0	
567289A	IV	46.6	19.1	11.0	4.6	25.5	50.9	7.3	
67289B	IV	46.7	17.7	12.7	4.8	19.2	53.4	9.5	
567290A	IV	44.9	16.6	12.1	4.7	19.3	53.6	9.8	
67291	IV	44.0	20.1	11.9	4.0	22.4	52.8	9.8 8.4	
67293	II	45.1	21.3	12.5	4.6	25.1	51.3	5. 4 5.9	
67294	IV	42.1	20.7	12.6	3.9	18.1	54.4	10.3	
67296A	IV	44.1 ^w	19.5 ^w	11.1	4.9	22.1	54.4 54.1	7.8	
67296B	IV	43.3 ^w	16.8 ^w	11.1	5.0	22.1	53.5	7.8 7.8	
67296C	IV	46.3 ^w	15.0 ^w	11.8	4.3	16.7			
67297	IV	42.1	20.7	10.7	4.8		57.4 55.2	9.1	
67300A	IV	40.9 ^w	17.0 ^w	12.4	4.5	20.2	55.3	8.6	
67301A	IV	42.1	20.7	12.4	3.9	17.1	56.5	9.0	
67301B	IV	42.1	20.7	11.6	3.9 4.6	19.5	54.8	8.8	
67302	II	42.0	23.9	12.4		17.3	54.7	11.4	
67303A	IV	42.0 41.2 ^w	14.4 ^w		3.8	25.1	51.4	6.8	
67304	IV	39.9 ^w	14.4 ^w	11.7	4.2	19.5	54.7	9.6	
6730 4 67305	IV	39.9 41.7 ^w	14.4 13.1 ^w	12.1	3.7	17.6	55.8	10.8	
67305 67306A	IV	41.7 41.1 ^w		10.9	3.6	16.3	58.2	11.1	
			16.0 ^w	12.7	4.9	19.1	53.8	9.0	
67306B	IV	42.2 ^w	16.3 ^w	12.1	5.2	20.8	52.8	8.6	
67307	IV	42.0 ^w	14.7 ^w	12.2	4.0	16.9	55.8	10.9	
67311A	IV	48.5	17.2	12.8	3.9	17.9	55.2	9.4	
67311B	IV	46.7	18.1	11.6	3.7	18.8	56.8	8.7	
67313 67317	II	42.1	20.7	12.7	5.1	22.6	52.2	6.5	
67317	IV	43.6 ^w	16.8 ^w	11.8	4.9	20.3	53.3	9.7	
67318 67310 A	IV	42.1	20.7	11.6	4.1	19.3	53.5	11.5	
67319A	IV	45.6	18.3	12.3	3.9	19.4	55.7	8.7	
67319B	IV	43.6	18.5	13.1	4.7	18.9	54.7	8.6	
67321A	IV	42.1	20.7	12.6	4.1	18.7	56.1	8.6	
67323A	II	46.3	20.1	12.6	4.0	24.5	51.8	6.2	
67323B	II	46.7	20.1	12.6	4.1	25.1	51.4	6.1	
67323C	II	44.7	19.9	12.9	4.0	23.6	51.8	6.6	
67324	IV 	47.8	15.7	10.4	4.3	17.5	57.8	10.1	
67325A	II	46.3	20.1	12.5	3.9	23.0	53.4	6.7	
67327	IV	42.1	20.7	11.6	4.3	19.2	56.4	8.5	
67330	IV	47.3	15.1	11.5	4.6	18.3	57.0	8.6	
67331	IV	42.1	20.7	12.7	4.1	18.2	55.9	9.1	
67333A	IV	48.0	16.4	10.4	4.9	17.7	56.9	10.2	
67335A	IV	42.1	20.7	12.7	4.1	16.4	54.2	12.6	

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	group
567336A	Lao hei dou	Gansu	China	China	1992	IV
567336B	(Lao hei dou)	Gansu	China	China	1992	IV
567337	Lu gun dou	Gansu	China	China	1992	IV
567341	Lu se da dou	Gansu	China	China	1992	IV
567348	Shen huang dou	Gansu	China	China	1992	IV
567351A	_	Gansu	China	China	1992	II
567351R	(Tu huang dou)	Gansu	China	China	1992	III
567352A	` '	Gansu	China	China	1992	IV
567352B	• • •	Gansu	China	China	1992	IV
567353	Yang yan ren dou	Gansu	China	China	1992	IV
567354	You huang dou	Gansu	China	China	1992	IV
567357	Du jia qiao huang dou	Ningxia	China	China	1992	III
567358	He lan huang dou	Ningxia	China	China	1992	IV
567359	Hua mei dou	Ningxia	China	China	1992	III
567360	Jin ji hei yuan yan hei dou	Ningxia	China	China	1992	III
567361	Lu fang huang dou	Ningxia	China	China	1992	III
567362A	2 2	Ningxia	China	China	1992	III
567362B	(Lu fang huang dou)	Ningxia	China	China	1992	III
	Ping luo huang da dou	Ningxia	China	China	1992	III
567363B		Ningxia	China	China	1992	III
567364	Ping luo huang da dou	Ningxia	China	China	1992	III
567365	Qing da dou	Ningxia	China	China	1992	III
567366A	• •	Ningxia	China	China	1992	III
567366B	(Wu tong shu huang dou)	Ningxia	China	China	1992	IV
567367	Wu tong shu huang dou	Ningxia	China	China	1992	II
567368	Xi he huang dou	Ningxia	China	China	1992	IV
567369A	_	Ningxia	China	China	1992	III
567369B		Ningxia	China	China	1992	IV
	Xu wang huang da dou	Ningxia	China	China	1992	IV
567371A		Ningxia	China	China	1992	IV
567371B	(Ying nan huang dou)	Ningxia	China	China	1992	IV
567371B	` ` ` ` ` ` ` ` `	Ningxia	China	China	1992	III
567372B	(Ying nan huang dou)	Ningxia	China	China	1992	III
	Zhong wei huang da dou	Ningxia	China	China	1992	IV
567374	Ba yue zha	Shaanxi	China	China	1992	IV
567375A	•	Shaanxi	China	China	1992	IV
567375B	•	Shaanxi	China	China	1992	IV
	Bai ke huang	Shaanxi	China	China	1992	IV
567387	Huang huai dou	Shaanxi	China	China	1992	IV
567389A	•	Shaanxi	China	China	1992	IV
567395	Lai wa dou	Shaanxi	China	China	1992	IV
567396A		Shaanxi	China	China	1992	IV
567396B	-	Shaanxi	China	China	1992	IV
567398	Lu lan dou	Shaanxi	China	China	1992	IV
567404A		Shaanxi	China	China	1992	III
	Xiao yi wo feng	Shaanxi	China	China	1992	IV
JUITUIA	Alao yi wo long	Simmini				_

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem	Flower	Pubes	cence		Pod	Seedco	at	Hilum		Seed
Entry	group		color			Density	•			color	Other traits	shape
567336A	IV	N	P	Т	Е	N	B1	I	Bl	Bl	Dab	4F
567336B	IV	N	P	T	E	N	B1	I	B1	B1	Dab	4F
567337	IV	N	P	G	E	N	B1	I	Gn	\mathbf{Bf}	Gnc	4N
567341	IV	\mathbf{S}	P	T	E	N	Br	I	Gn	Br	Gnc	5N
567348	IV	N	P	G	E	N	Br	I	Y	Bf		5N
567351A	II	S	P	T	E	N	Br	I	Y	Br	Dab	5N
567351B	III	N	P	T	E	N	Br	I	Y	Br	Sph, Dab	4N
567352A	IV	N	W	Lt	E	N	B1	I	Br	Br	St	3N
567352B	IV	D	P	T	E	N	Br	I	Br	Br	St	3N
567353	IV	D	P	T	E	N	Dbr	I	Br	Br	St	3N
567354	IV	N	W	T	E	N	B1	I	Br	Br	Lft5	2N
567357	III	N	W	G	E	N	Br	I	Y	Bf		2N
567358	IV	N	P	G	E	N	Br	I	Y	Dbf	Lft5	5N
567359	III	N	W	T	E	N	Br	I	Br	Br	St	2N
567360	III	N	W	T	E	N	Br	Ī	Bl	Bl		2N
567361	III	N	W	T	E	N	Tn	Ī	Y	Br	Sdab, Sph	4F
567362A	III	N	P	T	E	N	Br	Ī	Ÿ	Br	, - p	5N
567362B	III	N	W	G	E	N	Tn	Ī	Ÿ	Y		4N
567363A	III	S	W	G	Sa	N	Br	Ī	Ÿ	Ÿ	Vhil	3N
567363B	III	N	W	Ğ	E	N	Br	Ī	Ÿ	Bf		2N
567364	III	N	W	G	E	N	Br	Ī	Y	Bf		3N
567365	III	N	W	T	E	N	Tn	Ī	Lgn	Br		5N
567366A	III	N	P	T	E	N	Tn	Ī	Y	Bl		4N
567366B	IV	N	P	Lt	Ē	N	Br	Ī	Ÿ	Brbl		5N
567367	II	N	W	G	E	N	Tn	Ī	Y	Bf		2N
567368	ĪV	N	P	Lt	Е	N	Br	Ī	Y	Brbl	Lft4,5	5N
567369A	III	N	W	G	Ē	N	Br	Ī	Ÿ	Dbf	2111,0	3N
567369B	IV	N	W	Lt .	E	N	Br	Ī	Ÿ	Brbl		5N
567370A	IV	N	W	T	E	N	Br	Ī	Ÿ	Brbl		3N
567371A	IV	N	W	G	Ē	N	Br	Ī	Ÿ	Bf	Lft5	4N
567371B	IV	N	w	T	Ē	N	Br	Ī	Ÿ	Bl	Bits	5N
567372A	III	N	P	T	E	N	Tn	I	Y	Bl		5N
567372B	III	N	W	T	E	N	Br	I	Y	Brbl		4N
567373A	IV	N	W	Ġ	E	N	Br	I	Y	Bf		4N
567374	IV	N	W	G	E	Ssp	Bl	Ī	Y	Bf		3N
567375A	IV	N	P	G	A	N N	Br	I	Y	Bf		2N
567375B	IV	N	P	G	Sa	N	Br	I	Y	Bf		2N
567381A	IV	S	P	T	Sa	Ssp	Br	Ī	Y	Brbl		3N
567387	IV	N	P	Lt	E	N N	Bl	Ī	Gnbr	Br	Dab	4F
567389A	IV	S	W	G	Sa	Ssp	Br	I	Y	Bf	Duo	3N
567395	IV	N	P	G	E	N N	Bl	I	Ggn	Bf		2N
567396A	IV	N	W	G	A	N	Br	Ī	Y	Bf		3N
567396B	IV	N	W	G	A	N	Br	I	Y	Bf		3N
567398	IV	N	W	T	E	N	Br	I	Gn	Bl		4N
567404A	III	N	W	T	Sa	N	Br	I	Y	Bl		2N
567404A 567409A	III IV	N	W	G	Sa E	N	Tn	I	Y	Bf		2N 3F

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity	7		Stem	Shatter	ing	Seed			
	date	date	Lodging	Heigh			late	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)		(cm)		(score)	(score)	(score)	(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
567336A	728	1004^	4.5	121	4.0	1.0	1.5	2.8		4.6	1.19
567336B	729	1003^	4.0	158*	4.0	1.0	1.0^	2.8		4.6	1.25*
567337	726	1003^	3.8	104*	2.5	1.0	2.5	2.2	2.5	7.6	1.30
567341	727	1008^	3.2	116	2.0	1.0	1.0	3.2*	3.0	12.2	1.11*
567348	726	1011^	4.5	75	3.5	1.0	1.0	2.8	3.0	8.4	1.32*
567351A	719	919	4.0	81*	2.0	1.2	3.0*	2.0	4.5	9.1	1.54
567351B	716	1001^	4.5	196*	4.0	1.0	2.0	2.0	3.0	8.5	1.41*
567352A	727	1003^	3.2	109	4.0	1.0	1.0	2.2		10.6	1.53
567352B	726	1005^	3.8	112*	3.0	1.0	1.0^	3.2		14.0*	1.19
567353	726	930^	3.2	96	4.0	1.0	1.2	3.0		10.6	0.77
567354	730	1004^	3.8	114	4.0	1.0	1.0	2.8		10.4*	1.23*
567357	721	924	2.5	114	3.5	1.0	1.0	3.0	3.0	13.6*	1.90
567358	729	1004^	3.5	94*	3.0	1.0	1.2	3.0	2.0	10.7	1.62*
567359	723	1006^	3.0	132	4.0	1.0	1.0	2.2		16.9*	2.38*
567360	718	928^	3.2	132	4.0	1.0	1.5	2.5		19.9*	2.26
567361	723	926^	3.5	124	4.0	1.0	1.0	2.8	4.0	10.8	1.82
567362A	721	927	3.5	124*	3.0	1.0	1.2	3.0	2.5	14.3	1.72
567362B	722	925	2.8	116	3.0	1.0	1.2	2.5	3.0	14.1	2.79
567363A	720	924	2.0	83	2.0	1.0	1.0	2.2	2.5	13.6*	1.56
567363B	720	928^	2.5	121	3.0	1.0	1.0	2.8	3.0	13.9	1.99
567364	720	923	2.5	110*	3.5	1.0	1.0	2.2	3.0	14.0*	1.91
567365	726	1006^	4.2	110*	3.0	1.0	1.5	3.2	3.5	12.6*	1.84
567366A	722	928^	3.5	158	4.0	1.0	1.0	3.5	3.5	13.0	2.08
567366B	730	1007^	3.8	112	3.5	1.0	1.0	4.0	3.0	12.2	1.32*
567367	721	921	2.0	99*	3.0	1.0	2.0*	2.2	2.0	15.0*	2.21
567368	803	1005^	4.2	117*	3.5	1.0	1.0	3.5	3.0	11.8	1.66*
567369A	722	1005^	2.5	118	3.0	1.0	1.0	3.0	4.0	12.9	1.81
567369B	804	1010^	3.8	122	3.0	1.0	1.0	3.2	3.0	11.8*	1.34
567370A	802	1012^	3.8	134	4.0	1.0	1.0	2.5	3.5	12.0*	1.61
567371A	802	1010^	4.5	125*	4.0	1.0	1.0	2.5	4.0	10.4*	1.64
567371B	801	1006^	4.0	132*	3.5	1.0	1.5	3.2	4.0	10.2*	1.43*
567372A	724	925	3.5	129	4.0	1.0	1.0	2.8	3.0	12.0	1.74
567372B	726	1005^	3.8	86*	3.0	1.0	1.5	3.2	4.0	13.4	1.66
567373A	801	1005^		94*	4.0	1.0	1.0	2.8	3.5	11.8*	1.67
567374	803	1012^		118	3.5	1.0	1.0	2.2	4.0	10.4*	1.37*
567375A	809	1010^		112*	4.0	1.0	1.0^	2.5	3.0	9.6*	1.08
567375B	810	1011^		113*	3.5	1.0	1.0	2.2	3.0	9.5*	1.60
567381A	802	1009^	3.5	112*	2.0	1.0	1.0	2.2	2.0	9.8*	2.64*
567387	803	1008^		120	4.0	1.0	1.5	2.2	 2.5	4.4	1.45*
567389A	802	1007^		115*	2.0	1.0	1.5	2.2	2.5	9.8*	1.32
567395	813	1015^		122*	4.0	1.0	1.0	3.2	3.0	9.6*	1.12*
567396A	807	1003^		98*	3.0	1.0	1.8	3.2*	3.0	9.0	1.33
567396B	814	1023^		98	2.5	1.0	1.0^	3.0	4.0	11.6*	1.33
567398	811	1014^		115*	4.0	1.0	1.0	2.8	5.0	6.6	1.20
567404A	715	929^		115	3.0	1.0	1.5	2.2	3.0	17.2*	2.80
567409A	816	1007^	4.0	92*	4.0	1.0	1.0	2.8	4.5	5.1	0.29

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition					
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic	
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
667336A	IV	47.6 ^w	12.3 ^w	11.1	4.2	14.3	53.8	9.8	
67336B	IV	43.0 ^w	11.8 ^w	12.1	3.5	14.1	58.9	11.5	
67337	IV	42.1	20.7	13.1	4.1	18.1	55.3	9.4	
67341	IV	45.9	18.3	11.7	4.8	22.7	52.8	7.9	
67348	IV	48.0	15.1	11.5	4.4	18.2	57.3	8.7	
67351A	II	44.8	17.9	12.6	4.7	18.7	55.8	8.2	
67351B	III	47.7	16.4	11.5	4.2	18.7	57.2	8.4	
67352A	IV	41.6 ^w	17.8 ^w	12.2	4.5	18.3	56.6	8.4	
667352B	IV	44.5 ^w	16.8 ^w	10.0	5.5	21.3	54.7	8.5	
667353	IV	40.7 ^w	16.8 ^w	12.1	5.2	20.7	52.7	9.3	
67354	IV	42.5 ^w	16.3 ^w	11.4	4.3	20.5	53.4	10.4	
56735 7	III	48.5	18.5	13.0	3.9	22.3	54.0	6.8	
67358	IV	50.3	15.1	11.9	3.9	20.1	55.5	8.8	
67359	III	48.1 ^w	17.1 ^w	13.0	3.9	17.8	57.8	7.6	
67360	III	48.0 ^w	17.1 ^w	11.7	3.9	19.4	57.2	7.8	
67361	III	50.7	15.9	13.3	3.6	18.7	55.4	9.0	
67362A	III	47.6	16.3	12.8	3.2	17.1	58.4	8.5	
67362B	III	46.3	17.5	12.4	3.1	20.9	54.7	8.2	
67363A	III	48.7	18.4	11.9	3.3	18.7	58.0	8.2	
67363B	III	46.5	19.2	12.7	3.8	23.0	54.3	6.3	
67364	III	46.4	19.4	13.1	3.6	21.7	54.7	6.9	
67365	III	49.1	17.5	12.2	4.0	20.1	56.3	7.4	
67366A	III	52.7	16.1	13.0	3.9	20.2	54.6	7.4	
67366B	IV	50.8	15.7	11.8	3.7	19.2	55.2	10.1	
67367	II	49.1	19.0	13.0	3.3	20.8	54.7	8.3	
67368	IV	51.7	15.4	12.8	4.0	17.1	56.2	9.9	
67369A	III	49.4	16.7	11.5	3.9	21.1	55.8	7.8	
567369B	IV	48.5	14.9	11.8	3.6	19.0	54.3	11.3	
67370A	IV	48.1	17.9	11.3	4.1	19.7	56.2	8.7	
667370A	IV	49.7	13.8	11.9	4.1	18.1	55.9	9.9	
67371B	IV	42.1	20.7	12.0	4.2	18.4	55.7	9.7	
667372A	III	50.5	14.7	13.7	3.7	17.4	55.9	9.3	
67372B	III	48.9	16.9	12.9	4.1	22.1	54.1	6.8	
67372B	IV	49.5	14.9	12.5	4.1	19.6	54.4	9.4	
67374	IV	47.0	15.9	11.5	5.2	20.0	52.8	10.5	
67375A	IV	46.4	17.8	13.2	4.5	19.7	52.2	10.4	
67375B	IV	45.7	15.9	13.2	4.3	17.3	54.2	11.0	
67381A	IV	45.5	18.0	11.5	4.2	19.4	55.4	9.5	
67387	IV	42.1	20.7	12.7	4.0	14.4	55.5	13.3	
67389A	IV	47.7	15.5	11.7	4.1	19.4	54.2	10.6	
67395	IV	46.8	15.1	11.4	4.3	19.2	53.4	11.6	
67396A	IV	44.9	17.2	10.9	4.1	20.3	55.6	9.1	
567396B	IV	44.9	15.7	11.2	4.6	20.1	53.9	10.3	
567398	IV	42.1	20.7	10.6	4.4	16.6	54.8	13.6	
567404A	III	43.6	19.9	11.8	3.8	22.7	54.3	7.4	
	TTT					16.8	53.6	13.1	

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

Accession Region of of introduced		
PI No. name of origin origin acquisition or released of sections 567415A Bai da huang dou Shanxi China China 1992 567416 Bai dou Shanxi China China 1992 567417C (Bai gun dou) Shanxi China China 1992 567418A Bai hei dou Shanxi China China 1992 567418B (Bai hei dou) Shanxi China China 1992 567418C (Bai hei dou) Shanxi China China 1992 567419A Bai hei dou Shanxi China China 1992 567419B (Bai hei dou) Shanxi China China 1992 567420 Bai hei dou Shanxi China China 1992 567421 Bai hei dou Shanxi China China 1992 567422B Bai hei dou Shanxi China China 1992 567424A	Maturity	
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567418B (Bai hei dou) Shanxi China 1992 567418C (Bai hei dou) Shanxi China China 1992 567419A Bai hei dou Shanxi China China 1992 567419B (Bai hei dou) Shanxi China China 1992 567420 Bai hei dou Shanxi China China 1992 567421 Bai hei dou Shanxi China China 1992 567422 Bai hei dou Shanxi China China 1992 567423 Bai hei dou Shanxi China China 1992 567424A Bai hei dou Shanxi China China 1992 567424B (Bai hei dou) Shanxi China China 1992 567425A Bai hua huang dou Shanxi China China 1992 567425B (Bai hua huang dou Shanxi China China 1992 567426 Bai huang dou	II	
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567419ABai hei douShanxiChinaChina1992567419B(Bai hei dou)ShanxiChinaChina1992567420Bai hei douShanxiChinaChina1992567421Bai hei douShanxiChinaChina1992567422Bai hei douShanxiChinaChina1992567423Bai hei douShanxiChinaChina1992567424ABai hei douShanxiChinaChina1992567424B(Bai hei dou)ShanxiChinaChina1992567425ABai hua huang douShanxiChinaChina1992567425B(Bai hua huang dou)ShanxiChinaChina1992567426Bai huang douShanxiChinaChina1992567427Bai huang douShanxiChinaChina1992567428Bai ji yaoShanxiChinaChina1992567429ABai pi huang douShanxiChinaChina1992	II	
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567422Bai hei douShanxiChinaChina1992567423Bai hei douShanxiChinaChina1992567424ABai hei douShanxiChinaChina1992567424B(Bai hei dou)ShanxiChinaChina1992567425ABai hua huang douShanxiChinaChina1992567425B(Bai hua huang dou)ShanxiChinaChina1992567426Bai huang douShanxiChinaChina1992567427Bai huang douShanxiChinaChina1992567428Bai ji yaoShanxiChinaChina1992567429ABai pi huang douShanxiChinaChina1992	IV	
567423Bai hei douShanxiChinaChina1992567424ABai hei douShanxiChinaChina1992567424B(Bai hei dou)ShanxiChinaChina1992567425ABai hua huang douShanxiChinaChina1992567425B(Bai hua huang dou)ShanxiChinaChina1992567426Bai huang douShanxiChinaChina1992567427Bai huang douShanxiChinaChina1992567428Bai ji yaoShanxiChinaChina1992567429ABai pi huang douShanxiChinaChina1992	IV	
567424ABai hei douShanxiChinaChina1992567424B(Bai hei dou)ShanxiChinaChina1992567425ABai hua huang douShanxiChinaChina1992567425B(Bai hua huang dou)ShanxiChinaChina1992567426Bai huang douShanxiChinaChina1992567427Bai huang douShanxiChinaChina1992567428Bai ji yaoShanxiChinaChina1992567429ABai pi huang douShanxiChinaChina1992	IV	
567424B(Bai hei dou)ShanxiChinaChina1992567425ABai hua huang douShanxiChinaChina1992567425B(Bai hua huang dou)ShanxiChinaChina1992567426Bai huang douShanxiChinaChina1992567427Bai huang douShanxiChinaChina1992567428Bai ji yaoShanxiChinaChina1992567429ABai pi huang douShanxiChinaChina1992	IV	
567425ABai hua huang douShanxiChinaChina1992567425B(Bai hua huang dou)ShanxiChinaChina1992567426Bai huang douShanxiChinaChina1992567427Bai huang douShanxiChinaChina1992567428Bai ji yaoShanxiChinaChina1992567429ABai pi huang douShanxiChinaChina1992	III	
567425B(Bai hua huang dou)ShanxiChinaChina1992567426Bai huang douShanxiChinaChina1992567427Bai huang douShanxiChinaChina1992567428Bai ji yaoShanxiChinaChina1992567429ABai pi huang douShanxiChinaChina1992	IV	
567426Bai huang douShanxiChinaChina1992567427Bai huang douShanxiChinaChina1992567428Bai ji yaoShanxiChinaChina1992567429ABai pi huang douShanxiChinaChina1992	II	
567427Bai huang douShanxiChinaChina1992567428Bai ji yaoShanxiChinaChina1992567429ABai pi huang douShanxiChinaChina1992	III	
567428 Bai ji yao Shanxi China China 1992 567429A Bai pi huang dou Shanxi China China 1992	IV	
567429A Bai pi huang dou Shanxi China China 1992	IV	
• •	IV	
E(E100D (D 1 11 1 1) C1 1	II	
567429B (Bai pi huang dou) Shanxi China China 1992	III	
567429C (Bai pi huang dou) Shanxi China China 1992	III	
567429D (Bai pi huang dou) Shanxi China China 1992	IV	
567429E (Bai pi huang dou) Shanxi China China 1992	IV	
567430 Da bai pi Shanxi China China 1992	III	
567431 Da dou Shanxi China China 1992	IV	
567432A Da yang bai dou Shanxi China China 1992	IV	
567432B (Da yang bai dou) Shanxi China China 1992	IV	
567432C (Da yang bai dou) Shanxi China China 1992	IV	
567433A Er e dan Shanxi China China 1992	IV	
567433B (Er e dan) Shanxi China 1992	IV	
567434 Hei bai dou Shanxi China China 1992	IV	
567435A Hei hei dou Shanxi China China 1992	III	
567435B (Hei hei dou) Shanxi China China 1992	III	
567436 Hei jia da huang dou Shanxi China China 1992	IV	
567437 Hei zui dou Shanxi China China 1992	IV	
567438 Hei zui huang dou Shanxi China China 1992	IV	
567440 Huang dou Shanxi China China 1992	II	
567441A Huang dou Shanxi China China 1992	IV	
567441B (Huang dou) Shanxi China 1992	IV	
567442 Huang dou Shanxi China China 1992	IV	
567443 Huang dou Shanxi China China 1992	IV	
567444 Huang dou Shanxi China China 1992	***	
567445A Huang dou Shanxi China China 1992	III	
567445B (Huang dou) Shanxi China 1992	IV	
567446 Huang dou Shanxi China China 1992		

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem					Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567415A	IV	N	P	T	E	N	Br	I	Y	Bl		2N
567416	IV	N	P	G	E	N	Bl	I	Y	Ib		5N
567417C	II	N	P	G	E	N	Tn	I	Y	Bf		2N
567418A	II	N	W	T	E	N	Br	I	Y	Bl		3N
567418B	II	N	W	T	E	N	Br	I	Y	Bl		2N
567418C	III	N	W	G	E	N	Br	I	Y	Bf	Sdef, Mih	2N
567419A	IV	N	P	G	Α	N	Br	I	Y	Bf	Vhil	5N
567419B	IV	N	W	G	E	N	Br	I	Y	Y	Vhil	3N
567420	IV	N	P	G	Α	N	Tn	I	Y	Bf		5N
567421	IV	N	P	G	Α	N	Br	I	Y	Bf		5N
567422	IV	N	P	T	E	N	Br	I	Y	Brbl		3N
567423	IV	N	P	G	Α	N	Br	I	Y	Bf		5N
567424A	III	N	W	G	E	N	Br	I	Y	Dbf		2N
567424B	IV	N	P	G	E	N	Br	I	Y	Dbf		4N
567425A	II	N	W	T	E	N	Br	S	Y	Br	Abh	2N
567425B	III	N	W	T	E	N	Tn	I	Y	Br	Sph	3N
567426	IV	N	P	T	E	Ssp	Br	I	Y	Brbl	•	4N
567427	IV	N	P	T	E	N	Br	I	Y	Bl		4N
567428	IV	N	P	G	Α	N	Br	I	Y	\mathbf{Bf}		5N
567429A	II	S	P	T	E	N	Br	I	Y	Blbr	Dab	5N
567429B	III	N	W	T	E	N	Br	I	Ggn	Brbl	Vhil, Vsc	4N
567429C	III	N	P	T	E	N	Br	I	Y	Br	Sph	5N
567429D	IV	N	P	T	E	N	Br	I	Y	Brbl	1	3N
567429E	IV	N	P	T	E	N	Br	Ī	Y	Brbl		3N
567430	III	N	P	Lt	E	N	Br	Ī	Y	Brbl		2N
567431	IV	N	P	G	Ā	N	Br	Ī	Ÿ	Bf		2N
567432A	IV	N	w	G	E	N	Br	Ī	Ÿ	Bf		3N
567432B	IV	N	w	G	E	N	Br	Ī	Ŷ	Bf		3N
567432C	IV	N	P	G	Sa	N	Br	Ī	Ŷ	Bf	Vhil	3N
567433A	IV	N	P	T	E	N	Br	Ī	Ÿ	Br	V 1111	3N
567433B	IV	N	P	T	E	N	Br	Ī	Ŷ	Br		3N
567434	IV	S	P	T	E	N	Br	Ī	Y	Bl		2N
567435A	III	N	P	G	E	N	Br	Ī	Ŷ	Ib		2N
567435B	III	N.	W	Lt	E	N	Tn	Ī	Ÿ	Brbl		4N
567436	IV	N	P	G	A	N	Br	I	Y	Bf		5N
567437	IV	N	W	Lt	E	N	Br	Ī	Y	Br		3N
	IV	N	P P	G	E	N	Dbr	I	Y	Bf		3N
567438	II	D	P	G	E	N	Br	I	Y	Bf		3N
567440 567441 A	IV	N	P	G	A	N	Br	I	Y	Bf		5N
567441A	IV IV	N N	W	G	A A	N N	Br	I	Y	Bf		3N 4N
567441B	IV IV	N N	vv P	G	E	N	Br	I	Y	Ib		4N
567442			W	G	E	N	Br	I	Y	Dbf		2N
567443	IV	N N	W W	G	E E		Bl	I	Y	Rbf		2N 2N
567444	III	N		T	E E	Ssp		I	Y Y	Brbl		3N
567445A	IV	N	P			N	Br					
567445B	IV	N	P	T	E	N	Br	I	Y	Br		3N
567446	II	N	P	G	E	N	Tn	I	Y	Y		2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering Maturity			Stem	Shatter	ing	Seed			
	date	date Lodging	Heigh	t term.	early	late		Mottling		Yield
Entry	(mmdd)	(mmdd) (score)	(cm)	(score)	(score)	(score)		(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
567415A	803	1018^ 3.5	118*	4.0	1.0	1.0	2.2	2.0	14.0*	1.91*
567416	723	1001^ 4.0	98	4.0	1.0	1.2	2.5	3.5	10.4	1.94
567417C	707	914 3.8*	90*	3.5	1.0	1.2	2.0	2.0	13.4	2.68
567418A	709	915 2.8	96*	3.0	2.0*	3.2*	2.8*	1.5	14.8*	2.49*
567418B	709	920 1.8	104	3.0	1.0	1.0	1.8	2.0	14.8	3.21
567418C	718	927^ 3.2	129	4.0	1.0	1.0	2.5	2.0	13.6	2.81
567419A	728	1004^ 3.8	67*	3.5	1.0	1.0	2.2	2.0	10.0	1.84
567419B	731	1016^ 4.0	119	4.0	1.0	1.0	2.5	3.0	14.4	2.21
567420	729	1009^ 4.5	95	3.5	1.0	1.0	2.2	2.0	10.1*	2.08*
567421	730	1011^ 4.5	104	3.5	1.0	1.0	2.8	2.0	11.2*	1.45
567422	726	1004^ 3.2	144	3.5	1.0	1.8	2.0	3.0	11.4*	2.57*
567423	729	1008^ 4.5	81	4.0	1.0	1.0	2.8	2.5	9.7*	1.75
567424A	724	1003^ 3.8	124	3.0	1.0	1.0	2.5	2.5	12.6	2.10
567424B	729	1010^ 4.0	148*	3.5	1.0	1.0	2.2	4.0	9.2	1.75
567425A	713	908 2.8	102	3.5	1.0	1.2	2.8*	3.5	13.5	2.63
567425B	720	930^ 4.0	117	3.5	1.0	1.0	2.5	3.5	11.7	2.17
567426	722	1002^ 3.0	98	3.0	1.0	2.0	2.5	3.0	13.4*	1.89
567427	725	1003^ 3.8	96	3.0	1.0	1.0	2.5	3.0	12.6*	1.89*
567428	730	1010^ 4.2	74	4.0	1.0	1.0	2.5	2.0	7.6	1.70
567429A	715	919 3.2	85*	2.0	1.8	3.5*	2.2	2.0	14.2	2.51
567429B	718	1001^ 3.2	104	3.5	1.0	1.5	2.5	3.0	11.8	2.46
567429C	724	1001^ 4.2	94	3.5	1.0	1.0	3.0	3.5	12.2	2.32*
567429D	731	1009^ 4.0	128	3.5	1.0	1.8	2.2	3.5	10.6*	2.15*
567429E	730	1007^ 4.5	142*	4.0	1.0	1.0	2.5	3.5	11.1*	2.39*
567430	730	930^ 3.2	112	3.0	1.0	2.0*	2.2	3.0	11.9	2.31
567431	730	1007^ 3.5	102	4.0	1.0	1.0	2.0	2.0	12.0	1.88
567432A	727	1012^ 3.8	104*	3.5	1.0	1.0	2.8	2.0	14.1	2.05*
567432B	727	1014^ 4.0	102*	3.0	1.0	1.0	3.0	2.0	13.8*	2.09
567432C	722	1002^ 4.2	122	4.0	1.0	1.0	2.5	2.0	10.7	1.22
567433A	724	930^ 3.8*	128	3.5	1.0	1.8	2.5	3.0	14.4*	2.39
567433B	725	1001^ 3.8	134*	3.5	1.0	1.5	2.2	3.0	13.5*	2.42
567434	727	1011^ 3.8	93	2.0	1.0	1.0	2.2	2.0	16.5*	2.48*
567435A	726	925 3.0	113	3.5	1.0	1.0	2.5	2.5	14.1	2.24
567435B	726	1002^ 2.8	118*	4.0	1.0	2.0*	2.5	3.0	12.6	2.27
567436	802	1008^ 4.2	90	4.0	1.0	1.0	2.5	2.5	9.1	1.86
567437	727	1010^ 3.5	142*	4.0	1.0	1.5	2.5	3.0	15.5*	2.64*
567438	805	1005^ 3.2	120	4.0	1.0	1.5	2.2	2.5	9.4	1.64
567440	712	919 3.5	69	1.5	1.0	1.2	1.8	1.5	9.8	2.21
567441A	802	1006^ 4.2	107*	4.0	1.0	1.0	2.8*	2.5	9.0	1.87
567441B	729	1010^ 3.8	146	4.0	1.0	1.8	2.5	2.5	8.9*	1.84*
567442	803	1010^ 3.0	97	4.0	1.0	2.2*	2.5	2.0	13.4	2.10
567443	728	1029^ 3.5	120*	3.5	1.0	1.0^	2.2	4.0	17.0*	2.03
567444	727	1003^ 3.0	118	4.0	1.5	3.0*	2.5	3.0	10.2	2.56
567445A	727	1004^ 3.8	94*	3.5	1.0	2.0	2.8	3.5	12.6*	2.00*
567445B	727	1015^ 4.5	142	3.0	1.0	1.0	2.5	4.0	12.4*	2.24*
567446	714	917 3.2	94	3.0	1.0	1.5	2.2	3.5	19.8*	2.75

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed con	nposition	Oil composition						
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic		
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
567415A	IV	43.4	19.2	11.2	4.7	18.9	55.6	9.6		
67416	IV	47.6	16.7	12.2	3.8	19.5	56.1	8.4		
567417C	II	46.9	19.9	11.9	3.3	20.8	57.1	6.9		
67418A	II .	48.3	19.6	12.4	3.1	25.9	51.9	6.7		
67418B	II	43.3	20.2	10.6	4.1	19.5	57.6	8.3		
67418C	III	45.9	19.9	11.4	4.1	22.2	54.6	7.6		
67419A	IV	42.5	15.6	12.6	3.8	16.6	57.3	9.8		
67419B	IV	44.5	19.1	10.9	4.1	21.8	55.3	7.9		
67420	IV	43.1	15.1	12.5	3.9	18.2	55.9	9.7		
67421	IV	43.2	16.1	12.1	4.1	20.1	54.3	9.4		
67422	IV	46.1	17.4	11.7	4.4	21.2	54.8	7.9		
67423	IV	42.1	20.7	12.1	4.0	18.4	55.6	10.0		
67424A	III	46.8	18.6	12.3	4.5	18.9	56.2	8.1		
67424B	IV	48.9	14.9	11.3	3.7	18.8	57.0	9.2		
67425A	II	44.2	18.3	12.5	4.1	20.5	56.2	6.9		
67425B	III	52.0	15.4	11.7	3.9	16.7	58.2	8.6		
67426	IV	48.2	16.6	11.8	4.1	20.5	54.7	9.0		
67427	IV	47.8	16.4	11.6	3.7	20.0	55.2	9.5		
67428	IV	42.1	20.7	12.2	3.6	17.0	56.6	10.7		
67429A	II	44.3	14.0	11.5	3.2	20.1	57.0	8.1		
67429B	III	44.8	17.0	12.5	3.4	16.5	58.1	9.2		
67429C	III	49.0	15.4	11.3	4.0	17.1	58.2	9.2		
67429D	IV	43.7	16.8	11.8	3.9	17.1	56.3	10.9		
67429E	IV	42.1	20.7	11.2	4.0	17.1	57.1	10.6		
67430	III	45.0	18.7	12.5	3.8	20.6	54.0	8.4		
67431	IV	46.4	17.9	13.2	3.8	22.0	53.0	8.1		
67432A	IV	47.8	18.3	12.7	4.5	19.5	55.5	7.8		
67432B	IV	46.5	18.9	12.9	4.5	19.1	55.6	8.0		
67432C	IV	49.6	14.3	14.1	4.2	18.5	54.5	8.8		
67433A	IV	46.4	18.3	11.4	4.7	21.9	54.0	7.9		
67433B	IV	46.0	18.6	11.5	4.9	22.3	53.0	8.3		
67434	IV	43.6	23.1	10.6	4.6	23.2	54.3	7.2		
67435A	III	45.1	20.5	13.2	4.0	20.3	53.7	8.3		
67435B	III	47.7	18.1	11.9	4.0	20.9	54.9	7.7		
67436	IV	42.1	20.7	12.0	4.2	18.0	55.9	9.9		
67437	IV	45.9	19.2	11.8	4.1	20.5	55.7	7.9		
67438	IV	44.7	16.8	12.8	4.3	18.1	54.4	10.5		
67440	II	43.9	14.0	12.3	3.5	19.5	56.6	8.2		
67441A	IV	44.2	15.3	12.1	4.3	18.1	55.8	9.8		
67441B	IV	46.2	13.7	12.4	4.6	17.6	54.1	11.3		
67442	IV	44.4	19.2	12.4	3.8	21.7	53.9	8.2		
67443	IV	43.8	19.3	10.2	5.1	21.9	55.5	7.3		
67444	III	46.3	17.5	12.7	4.1	17.7	55.9	9.3		
567445A	IV	45.9	17.8	11.5	4.5	22.6	53.4	8.0		
67445B	IV	47.6	17.2	11.5	4.2	19.9	54.8	9.6		
67446	II	45.2	17.3	11.6	3.5	24.2	53.1	7.6		

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	-
567447A	Huang dou	Shanxi	China	China	1992	IV
567447B	(Huang dou)	Shanxi	China	China	1992	IV
567447C	(Huang dou)	Shanxi	China	China	1992	IV
567448	Huang gun dou	Shanxi	China	China	1992	II
567449	Huang hei dou	Shanxi	China	China	1992	IV
567450	Huang hua dou	Shanxi	China	China	1992	IV
567451	Huang mei dou	Shanxi	China	China	1992	II
567452	Huang mei dou	Shanxi	China	China	1992	III
567453	Huang mei dou	Shanxi	China	China	1992	IV
567454	Huang qi xiao huang dou	Shanxi	China	China	1992	III
567455	Huang yuan dou	Shanxi	China	China	1992	IV
567456	Hui bei jia huang dou	Shanxi	China	China	1992	IV
567457	Hui lao shu	Shanxi	China	China	1992	III
567458	Ji li huang dou	Shanxi	China	China	1992	IV
567460	Luo ge shan dou	Shanxi	China	China	1992	IV
567461	Mao jia er xiao huang dou	Shanxi	China	China	1992	III
567462	Niu yan jing dou	Shanxi	China	China	1992	II
567463	Ping ding shan	Shanxi	China	China	1992	IV
567464	Ping ding xiao huang dou	Shanxi	China	China	1992	IV
567465	Tian e dou	Shanxi	China	China	1992	III
	Xiao bai dou	Shanxi	China	China	1992	IV
567467	Xiao bai huang dou	Shanxi	China	China	1992	IV
567468	Xiao bai huang dou	Shanxi	China	China	1992	IV
	Xiao huang dou	Shanxi	China	China	1992	III
	(Xiao huang dou)	Shanxi	China	China	1992	III
567470	Xiao jin huang dou	Shanxi	China	China	1992	IV
567471	Xiao jin huang dou	Shanxi	China	China	1992	IV
567473A	•	Shanxi	China	China	1992	I
567473B	(Yang gun dou)	Shanxi	China	China	1992	I
567473D	(Yang gun dou)	Shanxi	China	China	1992	II
567473D	(Yang gun dou)	Shanxi	China	China	1992	II
567474	Ye dou	Shanxi	China	China	1992	IV
567475	Yin e dan	Shanxi	China	China	1992	III
567476	Yu ci huang	Shanxi	China	China	1992	IV
567477	Yu xuan 12	Shanxi	China	China	1992	IV
567478	Yuan huang dou	Shanxi	China	China	1992	IV
567479	Zui huang dou	Shanxi	China	China	1992	IV
	Bang zi shu	Hebei	China	China	1992	III
567480B	_	Hebei	China	China	1992	II
567481	Bao ding huang dou	Hebei	China	China	1992	II
	Ben di huang	Hebei	China	China	1992	III
	(Ben di huang)	Hebei	China	China	1992	III IV
567482C	· —-	Hebei	China China	China China	1992 1992	
567484	Da bai qi	Hebei	China	China China		IV
	<u>-</u>	Hebei	China China		1992	III
567485 567486 A	Da bai qi			China	1992	III
00/480A	Da bai qi	Hebei	China	China	1992	II

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity						Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567447A	IV	N	P	Lt	E	N	Br	I	Y	Brbl		5N
567447B	IV	N	P	G	Α	N	Br	I	Y	Bf		5N
567447C	IV	N	P	Lt	E	N	Br	I	Y	Brbl		5N
567448	II	N	W	T	E	N	Br	I	Y	Br		2N
567449	IV	N	P	T	E	N	Br	I	Y	Blbr		2N
567450	IV	N	P	Lt	E	N	Br	I	Y	Blbr	Lft5	3N
567451	II	N	P	G	E	N	Br	I	Y	Ιb	Sabh, Lft5	2R
567452	III	N	W	G	E	Ssp	Br	I	Y	Bf		2N
567453	IV	N	W	G	E	N .	Br	I	Y	Bf		2N
567454	III	N	P	T	E	Ssp	Br	I	Y	Br		4N
567455	IV	N	P	T	E	N	Br	I	Y	Brbl	Lft3,5	4N
567456	IV	N	P	G	Ē	N	Br	Ī	Y	Ib	,-	3N
567457	III	N	P	Ğ	Ē	N	Br	Ī	Ÿ	Ιb	Vhil	2N
567458	IV	N	P	G	E	Ssp	Br	Ī	Ÿ	Bf	Lft5	3N
567460	IV	N	P	T	Ā	N	Tn	Ī	Ÿ	Br		4N
567461	III	N	W	T	E	N	Br	Ī	Ÿ	Bl	Sabh, Vhil	3N
567462	II	N	P	Ġ	Ē	N	Tn	Ī	Ÿ	Y	, ·	2N
567463	IV	S	P	T	E	N	Br	Ī	Ŷ	Br		3N
567464	IV	N	P	Ġ	E	N	Br	Ī	Y	Bf		3N
567465	III	S	w	T	E	N	Br	Ī	Ŷ	Bl	Sabh	3N
567466A	IV	N	P	G	A	N	Br	I	Y	Bf	Duon	4N
567467	IV	N	P	T	E	N	Br	I	Y	Bl		3N
567468	IV	N	P	G	E	Ssp	Br	I	Y	Bf	Lft5	3N
567469A	III	N	W	G	E	N N	Br	I	Y	Bf	LIG	2N
	III	N	P P	T	E	Ssp	Tn	Ī	Y	Br		3N
567469B	IV	N	P	T	E	N N	Br	I	Y	Br	Lft5	3N
567470	IV	N	P	G	E	N	Br	I	Y	Bf	LIG	3N
567471			W	G	E	N	Br	I	Y	Bf		2N
567473A	I	S		T	E E	N		S	Y	Br		2N 2N
567473B	I	S	W				Br		Y			2N 2N
567473C	II	S	W	T	E	N	Br	I		Br	Vhil	2N 2N
567473D	II	N	W	G	Е	N S	Br	I	Y	Lbf		
567474	IV	N	P	G T	E	Ssp	Br	I I	Y Y	Bf Debi	Lft5	3N 2N
567475	III	N	W		E	Ssp	Br			Brbl		2N 4N
567476	IV	N	P	T	E	N	Br	I	Y	Br		
567477	IV	N	W	G	E	N	Br	I	Y	Bf		3N
567478	IV	N	P	G	E	N	Br	I	Y	Bf		3N
567479	IV	N	P	T	E	N	Br	I	Y	Brbl	3.611 3.71.11	2N
567480A	III	N	W	G	E	N	Br	Ī	Y	Lbf	Mih, Vhil	2N
567480B	II	D	W	G	E	N	Br	I	Y	Y		2N
567481	II	N	P	G	E	N	Br	Ī	Y	Y		3N
567482A	III	N	P	G	E	N	Br	I	Y	Ib		3N
567482B	IV	N	W	G	E	N	Br	I	Y	Bf		3N
567482C	IV	N	W	G	E	Ssp	Br	I	Y	Lbf	2.511	4N
567484	III	N	W	G	E	N	Br	I	Y	Bf	Mih	2N
567485	III	N	W	G	E	N	Br	Ι	Y	Bf		3N
567486A	II	N	W	G	E	N	\mathbf{Br}	I	Y	Lbf	Vhil	2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity	•		Stem	Shatter	ing	Seed		******	
	date	date	Lodging	Heigh			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)		(score)	$(cg sd^{-1})$	(Mg ha ⁻¹)
567447A	728	1008^	4.2	108*	3.5	1.0	1.0	2.5	4.5	11.1	2.08
567447B	728	1009^	4.2	90*	4.0	1.0	1.0	2.5	2.5	9.2	1.83*
567447C	72 5	1010^	3.5	97*	3.5	1.0	1.0	2.5	3.0	12.6*	2.01*
567448	712	915	2.5	90*	3.0	1.0	3.0*	3.0*	2.0	16.8*	2.73
567449	725	1011^	2.8	121*	3.0	1.0	1.5	2.5	2.0	14.2*	2.30
567450	802	1018^	2.8	120	4.0	1.0	1.0	3.0	3.0	13.2*	1.86
567451	718	919	3.0	94	3.0	1.0	1.2	3.2	2.0	22.7*	1.76
567452	724	927^	2.5	104	3.5	1.0	1.5	2.0	2.0	15.0	2.12
567453	726	929^	2.5	99	3.0	1.0	1.2	2.2	2.0	15.1	1.97
567454	723	927^	2.0	92	3.0	1.0	1.2	2.2	3.0	13.2	1.81
567455	726	1004^	3.5	96	3.0	1.0	2.2	2.5	3.0	13.2*	1.70
567456	801	1010^	3.2*	120	3.0	1.0	1.5	2.0	2.5	11.6	1.94
567457	724	923	2.5	103	4.0	1.0	1.2	2.0	1.5	13.1	2.15
567458	726	1005^	4.2	114	3.5	1.0	2.0	2.5	2.0	13.8*	2.13
567460	723	1006^	3.8*	102	3.0	1.0	1.5	2.5	3.5	13.6*	1.84*
567461	718	923^	2.8	86	2.2	1.0	1.5	2.0	2.0	17.6*	2.70
567462	715	917	2.5	94	3.0	1.0	1.5	2.0	3.0	19.8*	2.70
567463	728	1004^	4.0	80*	2.0	1.0	1.5	2.8	3.5	13.0*	2.51*
567464	805	1020^	3.5	124*	3.5	1.0	1.5	2.5	3.0	11.2*	2.34*
567465	7 2 0	929^	2.5	98*	2.0	1.0	1.0	2.5	3.0	18.3*	
567466A	731	1006^	4.2	92*	3.0	1.0	1.0	2.5	2.5	8.8	2.26
567467	727	1005^	4.2	110	3.5	1.0	1.8	2.5	2.0	o.o 14.4*	1.89
567468	726	1003	4.0	109*	3.0	1.0	1.5	2.5	2.5	14.4*	1.95
567469A	724	923	2.8	98	3.5	1.0	1.2	2.0			1.88*
567469B	723	929^	3.5	143*	4.0	1.0	1.0	2.8	2.0	15.4	1.71
567470	803	1010^	4.0	116*	3.5	1.0	1.0	2.8	2.5	12.5*	2.11*
567471	731	1010^	3.8	104*	4.0	1.0	1.0	2.2	4.0 3.0	10.0*	1.75*
567473A	706	910	2.2	69	2.5	1.0	1.0	2.0		13.8*	1.23
567473B	708	911	2.0	65	2.0	1.0	2.5*	2.8*	1.0	14.6	2.30
567473C	706	915	2.2	78 *	2.0	1.0	1.8*	2.5	2.0	13.4	2.37
567473D	706	917	2.0	87*	3.0	1.0	1.5	2.0	2.0	14.6*	2.88*
567474	726	1004^	4.0	113	3.5	1.0	1.8	2.8	1.5 3.0	14.4	2.68
567475	725	1007	3.2	112	3.0	1.0	1.0	3.0		13.7*	1.98*
567476	731	1012^		116	3.5	1.0	1.0	2.2	2.0 5.0	19.2*	2.39
567477	806		2.8	99*	3.0	1.0	2.0*			10.8	1.86*
567478	808		3.2	110*	3.0	1.0	2.0^	2.5	3.0	12.0	1.83
567479	724		2.8	125*	4.0	1.0	1.5	2.5	3.0	14.2*	1.70
567480A	719		2.2*	102*	3.0	1.0	1.3	3.0 2.2	2.0	15.0	2.38*
567480B	719	927	1.2	60	1.0	1.0	1.2	2.2	1.5	15.8*	2.47
567481	707	912	2.2	97	3.0	1.0	1.0		1.0	16.6	2.86
567482A	707 72 7	912	3.0	97 102*	4.0	1.0		2.0	2.0	14.8	2.86
567482B	727 729		3.0*	118*			1.5	2.8	2.0	14.2	2.24
567482C	803		3.8		4.0	1.0	2.0*	2.0	1.5	14.0	2.30
567484	720			146	4.0	1.0	3.0*	2.0	2.0	9.2	1.48
56748 4 567485	720 724		3.0	102	2.5	1.0	1.5	2.8	2.0	17.0*	2.54
567485 567486A	72 4 709		2.8	104*	3.0	1.0	1.5	2.5	1.5	19.0*	2.70
JU/400A	/09	913	3.0	84	3.0	1.0	1.5	3.2*	2.5	18.1*	2.80

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

Entry 667447A 667447B 667447C 667448 667449 667450 667451 667452	Maturity group IV IV IV II IV	Protein (%) 42.1 47.4 42.1	Oil (%)	Palmitic (%)	Stearic (%)	Oleic (%)	Linoleic (%)	Linolenic
667447A 667447B 667447C 667448 667449 667450	IV IV IV II IV	42.1 47.4 42.1	20.7		(%)	(%)	(%)	(0/2)
667447B 667447C 667448 667449 667450 667451	IV IV II IV	47.4 42.1				(, , ,	(70)	(%)
667447B 667447C 667448 667449 667450 667451	IV IV II IV	47.4 42.1		12.3	4.0	19.5	56.4	7.8
567448 567449 567450 567451	II IV		14.0	12.3	3.5	18.4	55.6	10.3
567449 567450 567451	II IV		20.7	11.2	3.6	19.2	56.2	9.8
567450 567451	IV	48.2	17.5	11.9	3.2	26.4	52.4	6.1
667451	TX 7	45.3	19.4	11.8	3.7	21.0	55.4	8.1
667451	IV	49.0	16.6	12.1	4.5	19.8	53.6	10.0
67452	II	40.6	19.6	12.8	4.7	24.1	51.9	6.4
	III	43.5	22.4	13.0	4.1	21.4	53.7	7.6
67453	IV	44.7	21.8	12.8	4.2	21.0	54.2	7.8
67454	III	47.6	17.8	12.5	4.0	20.8	54.1	8.2
67455	IV	46.3	17.8	11.1	4.5	23.5	53.4	7.5
67456	IV	45.8	19.2	12.9	3.8	19.5	55.6	8.2
67457	III	44.8	20.5	13.3	4.1	19.8	54.0	8.5
67458	IV	46.7	18.0	11.4	4.5	21.1	53.9	9.1
67460	IV	46.6	19.2	12.1	4.6	23.3	52.5	7.5
67461	III	41.6	20.0	12.2	4.1	20.4	53.2	7.5
67462	II	46.7	19.1	11.7	3.4	22.1	54.3	7.9
67463	IV	46.3	17.5	12.2	4.7	19.0	54.7	9.5
67464	IV	48.1	15.9	12.6	4.1	19.9	53.3	10.1
67465	III	43.6	19.4	13.0	3.3	21.7	53.9	7.7
67466A	IV	44.3	16.3	11.8	4.1	17.8	56.3	10.0
67467	IV	44.6	19.0	12.0	4.4	19.7	55.1	8.9
67468	IV	47.7	17.5	11.3	4.7	21.8	53.5	8.8
67469A	III	44.3	21.7	13.1	4.1	21.5	53.3	7.5
67469B	III	47.9	16.7	12.3	4.1	20.2	55.1	7. <i>3</i> 8.4
67470	IV	47.6	16.0	11.7	4.0	20.2	52.9	11.3
67471	IV	46.5	17.4	12.0	4.3	19.6	56.0	8.1
67471 67473A	I	44.5	18.1	11.7	3.9	23.9	53.5	6.6
		43.2						
67473B	I II	43.2 44.7	18.4 21.6	11.7 12.0	3.9	25.6	52.1	6.7
67473C					3.8	21.9	55.2	6.8
67473D	II IV	43.3 48.1	22.3 17.8	11.8	3.9	19.8	55.9 54.1	8.0
67474 67475	III	48.1 44.6	21.3	11.3 12.5	4.6 4.3	21.3	54.1	8.8 7.0
		44.6 42.1				23.1	52.8	
67476	IV IV	42.1 43.9	20.7	11.8	4.2	19.3	56.4	8.3
67477	IV IV	43.9 47.4	19.7	12.4	3.5	20.7	55.2 53.0	8.2
67478 67479	IV IV	47.4 45.1	16.5 20.0	11.9	4.4	21.8 20.7	53.0	8.9
				11.6	3.7		56.0	8.0
67480A	III	43.9	18.9	11.9	4.2	19.3	56.3	8.0
67480B	II	42.0	21.4	11.3	3.6	21.2	56.3	7.3
67481	II	44.2	21.1	11.1	3.3	22.2	55.1	7.6
67482A	III	47.4	17.9	13.0	3.5	22.6	53.0	7.9
67482B	IV	46.6	17.9	12.6	3.3	23.2	53.2	7.7
67482C	IV	48.5	16.0	12.5	4.2	26.7	45.6	9.8
667484	III	44.6	18.3	11.2	4.3	21.8	54.9	7.5
67485 67486A	III II	46.0 45.3	18.7 20.3	12.6 11.8	3.7 3.5	20.3 26.6	54.7 51.3	8.1 6.4

Table~1.2.~Identification~and~origin~information~for~USDA~soybean~germplasm~in~maturity~groups~I~through~IV,~PI~507671~to~PI~574486.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	
567486B	(Da bai qi)	Hebei	China	China	1992	III
567487	Da mao jiao	Hebei	China	China	1992	III
	Di liu huang dou 2	Hebei	China	China	1992	IV
567489A	_	Hebei	China	China	1992	IV
567489B	(Er da li huang dou)	Hebei	China	China	1992	IV
567490	Er huang dou	Hebei	China	China	1992	IV
567491A	-	Hebei	China	China	1992	III
567491B	(Er huang yang)	Hebei	China	China	1992	IV
567492	Hei bai men huang dou	Hebei	China	China	1992	IV
567493	Huang dou	Hebei	China	China	1992	IV
567494	Huang dou	Hebei	China	China	1992	III
567496	Huang dou	Hebei	China	China	1992	IV
567497	Huang dou	Hebei	China	China	1992	IV
567498	Huang dou	Hebei	China	China	1992	IV
567499	Huang dou	Hebei	China	China	1992	III
567500	Huang dou	Hebei	China	China	1992	IV
567501	Huang dou	Hebei	China	China	1992	IV
567502	Niu jiao qi huang dou	Hebei	China	China	1992	III
567503	Niu mao huang	Hebei	China	China	1992	IV
567504	Tu er dun	Hebei	China	China	1992	III
567505	Tu er yan	Hebei	China	China	1992	III
567506	Wang jia gou huang dou	Hebei	China	China	1992	III
567507A		Hebei	China	China	1992	II
567507B	(Xiao huang dou 2)	Hebei	China	China	1992	II
567507C	(Xiao huang dou 2)	Hebei	China	China	1992	III
567507D	(Xiao huang dou 2)	Hebei	China	China	1992	IV
567508A	` '	Hebei	China	China	1992	IV
567508B	(Xiao huang dou)	Hebei	China	China	1992	IV
567509	Xiao li bai dou	Hebei	China	China	1992	IV
		Hebei	China	China	1992	III
567510A	<u> </u>	Hebei	China	China	1992	III
567510B	(Xiao li tie jia hei) Yi wo hou	Hebei	China	China	1992	III
567511 567512 A	Yuan huang dou	Hebei	China	China	1992	II
567512B	(Yuan huang dou)	Hebei	China China	China	1992	II
567512C	` ,	Hebei	China	China China	1992	III
567513	Zhua zi tui huang dou Ai jie li huang dou	Hebei	China China	China China	1992 1992	III IV
567514A		Shandong	China	China	1992	IV
567514B		Shandong	China			
567515 567516A	Ba yue huang	Shandong Shandong	China	China China	1992 1992	III III
	Ba yue zha (Ba yue zha)	Shandong Shandong	China China	China China	1992	III IV
567516B 567516C	` •	Shandong Shandong	China China	China China	1992	IV IV
	` '					
567518	Bai guo zi dou	Shandong	China	China	1992	IV
567519	Bai hua chi	Shandong	China	China	1992	III
567520A		Shandong	China	China	1992	III
567520B	(Bai hua zao)	Shandong	China	China	1992	II

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem	Flower	Pubes	cence		Pod	Seedco	at	Hilum		Seed
Entry	group	term.	color			Density				color	Other traits	shape
567486B	III	N	W	G	E	N	Br	I	Y	Bf		2N
567487	III	N	P	G	E	N	Br	I	Y	Ib	Mih	2N
567488A	IV	N	W	G	E	N	Br	I	Y	Rbf		3N
567489A	IV	N	W	G	E	N	Br	I	Y	Lbf	Sdab	4N
567489B	IV	N	W	G	Ε	N	Dbr	I	Y	Bf		3N
567490	IV	N	P	Lt	E	N	Br	I	Y	Br		3N
567491A	III	N	P	T	E	N	Br	I	Bl	Bl	Sdab	4F
567491B	IV	N	P	Lt	E	N	Bl	I	Bl	B1		4F
567492	IV	D	W	G	E	N	Tn	I	Y	Lbf	Vhil	4N
567493	IV	S	P	G	E	N	Br	I	Y	Ib	Vhil	2N
567494	III	S	P	G	E	N	Br	I	Y	Lbf	Vhil	2N
567496	IV	S	W	G	E	N	Br	I	Y	Lbf	Vhil	2N
567497	IV	S	P	G	E	N	Br	I	Y	\mathbf{Bf}		2N
567498	IV	S	W	G	E	N	Br	I	Y	Bf		2N
567499	III	D	P	G	E	N	Br	I	Y	Ib		2N
567500	IV	S	P	G	E	N	Br	I	Y	Ib	Vhil	3N
567501	IV	N	W	G	E	N	Br	I	Y	Lbf	Vhil	3N
567502	III	N	P	Lt	E	N	Br	I	Y	Br	Vsc	4N
567503	IV	S	W	G	E	N	Br	I	Gn	Bf		4N
567504	III	D	P	G	E	N	Bl	I	Y	Bf		2N
567505	III	D	P	G	E	N	Bl	I	Y	Bf		3N
567506	III	N	W	G	E	N	Br	I	Y	Lbf	Vhil	2N
567507A	II	N	W	G	E	N	Br	I	Y	\mathbf{Bf}		3N
567507B	II	D	W	G	E	N	Br	I	Y	Bf		4N
567507C	III	N	W	G	E	N	Br	I	Y	Bf		4N
567507D	IV	S	W	G	E	N	Br	I	Y	Bf		4N
567508A	IV	D	P	G	E	N	Br	I	Y	Ib		2N
567508B	IV	S	P	G	E	N	Br	I	Y	Dbf		3N
567509	IV	N	W	G	Α	Sp	Br	I	Y	Bf		3N
567510A	III	N	P	T	E	N	Bl	I	Y	Br		3N
567510B	III	N	W	T	E	N	Bl	I	Y	Br		2N
567511	III	N	P	G	E	N	Br	I	Y	Y		3N
567512A	II	N	W	G	E	N	Br	I	Y	Lbf	Mih	2N
567512B	II	N	W	G	E	N	Br	I	Y	Bf		2N
567512C	III	N	W	G	E	Ssp	Br	I	Y	Bf		2N
567513	III	S	P	G	E	N	Br	Ī	Y	Ib		2N
567514A	IV	S	W	G	E	N	Br	Ī	Ÿ	Bf		3N
567514B	ĪV	N	W	G	E	Ssp	Dbr	Ī	Ÿ	Bf		3N
567515	III	N	W	G	E	N	Br	Ī	Ÿ	Bf		3N
567516A	III	N	W	G	Sa	N	Br	I	Ÿ	Bf		3N
567516B	IV	N	P	G	A	N	Br	Ī	Ÿ	Bf		2N
567516C	IV	N	P	Lt	E	N	Bl	Ī	Gnbr	Gnbr	Dab	4F
567518	IV	N	P	T	Ē	Ssp	Bl	Ī	Y	Brbl		4N
567519	III	N	w	G	Ē	Ssp	Dbr	Ī	Ŷ	Dbf		4N
567520A	III	N	W	Ğ	Ē	N N	Bl	Ī	Ŷ	Bf		2N
567520B	II	N	W	G	Sa	Ssp	Bl	Ī	Ÿ	Bf	Dab	2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	g Maturity		Stem	Shatter	ring	Seed				
	date	date Lodging	Heioh	it term.		late		Mottling	Weight	Yield	
Entry	(mmdd)	(mmdd) (score)	(cm)		•		(score)	(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)	
567486B	723	1004^ 2.8	104	3.0	1.0	1.5	2.2	2.0	19.5*	3.09	
567487	721	927 2.5	118	4.0	1.0	1.2	2.2	1.0	16.5*	2.64	
567488A	728	1010^ 3.2	104	3.0	1.5	3.2*	2.5	3.5	13.4	2.44	
567489A	803	1010 3.2	152*	4.0	1.0	2.2*	2.2	2.0	10.0	1.85	
567489B	729	1012 4.0	116*	3.5	1.0	1.5	2.2	2.0*	14.4	2.30	
567490	803	1002^ 3.8	145	3.5	1.0	5.0	2.2	4.5	8.2	1.56	
567491A	804	924^ 3.8*	142*	3.5	1.0	1.8	2.5		8.0	1.49	
567491B	727	1002^ 4.0	94	4.0	1.0	1.0	2.2		7.8	2.21	
567492	726	1014^ 2.8	77	1.5	1.0	1.5	2.5	2.0	25.8*	1.74	
567493	730	1009^ 3.0	89	2.0	1.0	1.5	2.5	1.5	11.8	2.45	
567494	730 729	1007 3.0	86	2.0	1.0	2.5*	2.5	1.5	12.3	2.36	
567496	727	1013^ 3.0	83	2.0	1.0	2.2*	2.2	1.0	12.8	2.57	
567497	802	1012^ 3.8	108	2.0	1.0	1.0	2.2	1.5	12.8*	2.25	
567498	727	1009^ 3.0	94	2.0	1.0	2.0*	2.2	1.5	16.9	2.67	
567499	729	1009 3.0	82	1.5	1.0	1.8*	2.2	2.0	12.6	2.46	
567500	801	1010^ 3.5	128*	2.0	1.0	2.5*	2.5	2.5	13.5	2.54	
567501	730	1004^ 3.8	104*	2.5	1.0	1.5	2.2	2.0	10.0*	2.19	
567502	802	927^ 3.8	139*	3.5	1.0	2.5*	2.5	5.0	8.8	1.59	
567503	802	1010^ 4.0	123*	2.0	1.0	1.5	2.5	2.5	12.0	2.14*	
567504	722	928^ 2.0	70	1.5	1.0	1.0	1.8	2.0	20.6	3.34	
567505	722	929^ 2.0	86	1.0	1.0	1.2	2.0	2.0	20.4*	2.98	
567506	725	1004^ 2.2	123	4.0	1.0	1.5	2.2	1.0	15.8*	2.59	
567507A	723	921 4.0	122	4.0	1.0	2.2*	2.0	2.5	13.2	2.44	
567507B	723	921^ 2.0	84	1.5	1.0	1.5	2.0	1.5	11.8	2.07	
567507C	727	1003^ 3.2	121*	4.0	1.0	1.2	2.2	2.0	12.7	2.49	
567507D	815	1027^ 4.0	98*	2.0	1.0	1.0^	3.0	3.0	8.6	1.15	
567508A	802	1010^ 3.0	86	1.5	1.0	1.0	2.0	1.5	12.8	2.17	
567508B	810	1019^ 3.5	88*	2.0	1.0	1.0	2.0	1.5	12.0	2.04	
567509	812	1025^ 4.5	81	4.0	1.2	3.0^	2.5	2.5	5.5	1.48	
567510A	725	927 2.8	106*	4.0	1.0	2.0*	2.0	3.0	11.6*	2.46*	
567510B	725	1004^ 2.5	101	3.0*	1.0	2.2*	2.2	3.0	11.6*	1.94	
567511	713	923 2.2	92	3.0	1.0	1.0	2.5	3.5	16.2	2.58	
567512A	713	915 1.8	82	3.0	1.0	1.2	2.2	1.5	14.4	3.00	
567512B	709	918 2.8*	103	3.0	1.0	1.2	2.0	2.0*	16.8*	2.83	
567512C	716	922 2.0	92	3.0	1.0	1.5	2.2	3.0	19.4*	2.64	
567513	729	1005^ 3.0	86	2.0	1.0	1.5	2.0	1.5	11.8	2.16	
567514A	726	1004^ 3.2	96	2.0	1.0	1.8	2.5	3.0	14.0	2.17	
567514B	731	1009^ 4.0	126*	3.0	1.0	1.5	2.5	2.0	10.1	2.37*	
567515	727	929^ 3.8	131	3.0	1.0	3.5*	2.5	3.0	11.3	2.27	
567516A	727	928^ 3.5	131	3.0	1.2	3.5*	2.5	3.0	12.6	2.30	
567516B	728	1010^ 3.2	94	4.0	1.2	2.0*	1.8	1.0	15.2*	2.35*	
567516C	7 2 9	1008^ 4.8	176*	4.0	1.0	1.0	2.2		4.4	1.39	
567518	806	1009^ 4.2	162*	3.5	1.0	1.5	1.8	1.5	10.2*	2.25*	
567519	724	929^ 3.8	178*	4.0	1.0	3.0*	2.2	2.0	10.4	2.38	
567520A	722	923 3.0	92	2.5	1.5	4.0*	2.0	2.5	12.2	1.91	
567520B	721	919 2.5	86	2.5	1.8	3.5*	2.0	2.0	11.8	1.68	
2012200	121	7.7 2.3	30	2.5	1.0	٥.5	2.0	2.0	11.0	1.00	

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition					
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic	
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
567486B	III	45.9	19.1	12.5	3.9	20.5	54.9	7.8	
567487	III	44.6	20.4	12.2	3.8	21.6	54.3	8.1	
567488A	IV	47.2	17.5	12.2	3.6	23.1	52.5	8.5	
567489A	IV	48.6	16.5	13.4	4.5	18.3	53.4	9.3	
567489B	IV	46.2	18.4	12.7	3.3	22.6	53.1	8.0	
567490	IV	42.1	20.7	12.9	3.3	19.5	54.7	9.5	
567491A	III	41.4 ^w	15.9 ^w	12.4	4.2	20.4	53.2	9.4	
567491B	IV	43.7 ^w	14.6 ^w	11.5	3.7	16.3	59.1	9.4	
567492	IV	47.8	17.0	11.0	4.1	25.4	52.3	7.3	
567493	IV	44.6	18.3	12.9	3.3	20.0	54.2	8.9	
567494	III	45.0	17.4	12.8	3.2	20.3	53.8	9.4	
567496	IV	44.8	18.4	12.9	3.2	20.2	54.5	8.7	
567497	IV	43.0	19.7	12.1	3.6	20.9	53.7	9.2	
567498	IV	45.4	17.7	12.1	3.3	21.5	53.4	9.4	
567499	III	44.6	18.5	12.7	3.1	20.1	54.4	9.0	
567500	IV	45.6	17.9	12.4	3.3	19.5	54.8	9.5	
567501	IV	48.3	18.4	12.4	3.6	19.4	55.7	8.9	
567502	III	42.1	20.7	12.0	3.5	19.1	54.3	9.8	
567503	IV	45.2	17.9	11.3	4.3	21.6	51.9	10.9	
67504	III	45.7	19.9	12.7	3.3	22.2	54.2	7.0	
567505	III	44.9	19.7	12.2	3.1	22.7	53.9	7.7	
567506	III	46.2	19.6	11.6	4.4	21.3	54.3	8.0	
567507A	II	49.7	15.3	12.7	3.5	20.2	54.1	9.4	
567507B	II	48.7	15.9	12.9	3.4	19.1	54.2	10.1	
567507C	III	47.9	15.6	12.4	3.6	17.7	57.2	8.8	
67507D	IV	44.6	16.6	11.8	4.3	19.4	53.8	10.7	
67508A	IV	44.1	18.9	12.4	3.1	19.3	56.3	9.0	
567508B	IV	42.8	20.1	12.0	3.2	19.4	56.4	9.0	
67509	IV	45.3	16.2	12.9	3.8	17.8	54.6	10.6	
67510A	III	47.8	18.2	11.3	4.8	20.3	54.6	8.7	
667510B	III	49.5	17.1	11.9	4.3	19.1	54.9	9.0	
567511B	III	42.1	20.7	11.6	4.3	23.3	53.1	7.3	
67512A	II	43.4	23.1	11.7	4.0	27.7	50.4	6.2	
667512B	II	45.3	20.2	12.9	4.1	22.3	53.6	7.1	
67512D	III	45.4	20.0	11.9	3.6	23.2	53.8	7.1	
667513	III	44.5	18.7	12.8	3.3	19.7	54.8	9.0	
67514A	IV	46.0	19.3	12.6	4.0	21.4	53.6	8.5	
67514B	IV	48.7	17.5	10.9	3.9	20.5	55.3	9.4	
667515	III	46.0	18.1	12.3	3.6	22.0	51.9	9.6	
67516A	III	45.5	18.6	12.2	3.8	23.2	51.2	9.3	
67516B	IV	45.8	18.4	12.0	3.8	21.5	53.5	9.2	
667516C	IV	42.1	20.7	12.0	3.8	14.3	56.8	12.7	
567518	IV	47.8	17.6	12.0	3.9	20.3	54.1	9.7	
567519	III	48.4	17.6	13.2	4.2	21.2	51.9	9.5	
567520A	III	50.4	16.4	12.1	3.4	19.6	55.1	9.9	
567520B	II	50.0	16.6	11.9	3.3	21.2	54.5	9.1	

 $Table 1.2. \ Identification \ and \ origin \ information \ for \ USDA \ soybean \ germplasm \ in \ maturity \ groups \ I \ through \ IV, PI \ 507671 \ to \ PI \ 574486.$

•			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	
		Shandong	China	China	1992	IV
567522A		Shandong	China	China	1992	IV
567522B 567523	(Bai mi lan)	Shandong	China	China	1992	IV
	Bao jie huang	Shandong	China	China	1992	III
567524	Ba yue mang	Shandong	China	China	1992	II
567525	Cao qing huang dou Cao si li	Shandong	China	China	1992	III
567526	_	Shandong	China	China	1992	IV
567527	Da hong hua	Shandong	China	China	1992	III
567528A		Shandong	China	China	1992	III
567528B	(Da si li)	Shandong	China	China	1992	IV
567529	Da xiang dou Da zi hua	Shandong	China	China	1992	IV
567530		_	China	China	1992	IV
567531	Dai dou zi	Shandong	China	China	1992	IV
567532	Dai ye xiao huang dou	Shandong	China	China	1992	IV
567533	Dang nian chen	Shandong	China	China	1992	IV
567534	Dang nian chen	Shandong	China China	China	1992	IV
567535A		Shandong	China China	China	1992	IV
567535B	(Er bai guo)	Shandong	China	China	1992	IV
567536	Gong fu dou	Shandong	China China	China China	1992	II
567537	Gu li hun	Shandong	China	China	1992	II
567538A		Shandong	China China	China	1992	II
567538B	(Gu li hun)	Shandong	China China	China China	1992	II
567539	Gu li hun	Shandong		China	1992	IV
567540A		Shandong	China	China	1992	IV
567540B	(Gu li hun)	Shandong	China China	China	1992	III
567541A	•	Shandong		China China	1992	III
567541B	(Gun li huang)	Shandong	China	China China	1992	III
567541C	(Gun li huang)	Shandong	China	China China	1992	IV
567542	Gu li huang	Shandong	China China	China	1992	II
567543A		Shandong	China China	China	1992	III
567543B	(He nan chun)	Shandong		China China	1992	III
567543C	(He nan chun)	Shandong	China	China	1992	IV
567544	Hei men huang dou zi	Shandong	China	China		III
567545	Hei qi huang dou	Shandong	China		1992	IV
567546	Hei ying huang	Shandong	China	China	1992	
567547	Hu li hun	Shandong	China	China	1992	III
567548	Hua li hu zi	Shandong	China	China	1992	IV III
567549A		Shandong	China	China China	1992	
567549B	(Hua ye zi)	Shandong	China		1992 1992	III
567550	Huang jia zi	Shandong	China	China China	1992	II IV
567551	Huang li	Shandong	China	China China	1992	IV
567552	Huang si li	Shandong	China	China China	1992 1992	IV IV
567554A	_	Shandong	China			
567554B	(Jin huang dou)	Shandong	China	China	1992	IV
567555	Kai guo lan	Shandong	China	China	1992	IV
567556	Kao shan hong	Shandong	China	China	1992	IV IV
567557	Li huang dou	Shandong	China	China	1992	1 V

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem					Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567522A	IV	S	W	G	E	Ssp	Br	I	Gn	Bf		3N
567522B	IV	S	W	G	E	N	Br	I	Gn	\mathbf{Bf}		3N
567523	IV	S	W	G	E	Ssp	Br	I	Y	Bf		3N
567524	III	N	W	G	Α	Ssp	Tn	I	Y	Bf		2N
567525	II	S	W	T	Α	Ssp	Tn	I	Y	Lbl	Vhil	2N
567526	, III	N	W	G	E	Ssp	Tn	I	Y	Bf		2N
567527	IV	S	W	T	E	N	Br	I	Y	Br	Na	2N
567528A	III	N	W	G	E	N	Br	Ī	Y	Bf		2N
567528B	III	N	W	G	$^{-}$ E	N	Br	I	Y	Bf		3N
67529	IV	S	P	G	Sa	N	Br	I	Y	Ib		3N
67530	IV	S	W	T	E	Ssp	Br	I	Y	Br	Vhil	3N
567531	IV	N	W	T	Е	Ssp	Tn	I	Y	Bl		2N
567532	IV	S	W	G	E	Ssp	Br	I	Y	Bf		3N
567533	IV	N	W	G	E	N	Br	I	Y	Bf		3N
567534	IV	N	W	T	E	Ssp	Tn	I	Y	B1		2N
67535A	IV	D	W	T	E	N	Br	I	Y	Br		2N
67535B	IV	S	W	G	E	Ssp	Br	I	Y	\mathbf{Bf}		3N
67536	IV	S	W	G	E	Ssp	Br	I	Y	Bf	Mih	3N
67537	II	S	W	G	Α	N	B1	I	Y	Bf	Dab	3N
67538A	II	N	W	G	Α	N	Tn	I	Y	Lbf	Vhil	2N
67538B	II	D	W	G	Α	N	Br	I	Y	Lbf	Vhil, Vsc, Dab	3N
567539	II	N	W	G	E	N	Br	I	Y	\mathbf{Bf}	Lft5	3N
567540A	IV	N	W	G	E	Ssp	Br	I	Y	Bf		3N
567540B	IV	N	W	G	E	N	Br	I	Y	Bf		3N
567541A	III	N	W	G	E	Ssp	Br	I	Y	Bf		4N
567541B	III	S	W	G	Α	N	Br	I	Y	Bf		3N
567541C	III	S	W	G	Α	N	Br	I	Y	Lbf	Vhil	2N
567542	IV	D	W	G	E	Ssp	Br	I	Y	\mathbf{Bf}	Vsc, Dab	2N
567543A	II	S	W	T	Α	Ssp	Dbr	I	Y	Br		2N
567543B	III	N	W	G	E	Ssp	Dbr	I	Y	Bf		2N
567543C	III	N	W	T	Α	Ssp	Dbr	I	Y	Br		2N
567544	IV	S	P	G	E	Ssp	Br	I	Y	Ib	Mih, Dab	3N
567545	III	S	W	G	E	N	Br	I	Y	Bf	•	3N
567546	IV	S	W	G	E	Ssp	Br	I	Y	\mathbf{Bf}	Mih, Dab	2N
567547	III	N	P	T	Sa	N	Br	I	Y	B1	•	2N
567548	IV	N	W	G	E	Ssp	Br	I	Y	Bf		3N
567549A	III	S	W	G	E	N	Tn	I	Y	Bf		3N
567549B	III	N	W	G	E	Ssp	Dbr	I	Y	Bf	Mih	4N
567550	II	N	W	T	Sa	N	Br	I	Y	B1		3N
567551	IV	S	W	T	E	Ssp	Dbr	I	G	B1		2N
567552	IV	S	W	G	E	N	Br	I	Y	Lbf	Vhil, Dab	3N
567554A	IV	N	W	G	E	N	Br	I	Y	Bf	•	3N
567554B	IV	N	W	Ğ	Sa	N	Tn	Ī	Ÿ	Bf		3N
567555	IV	S	W	G	E	N	Br	Ī	Ÿ	Bf		4N
567556	IV	N	w	T	Ē	Ssp	Br	Ī	Ÿ	Br		2N
567557	IV	N	w	Ğ	Ē	Ssp	Br	S	Ÿ	Bf		3N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity	•		Stem	Shatter	ing	Seed			
	date	•	Lodging	Height			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)		(cm)		(score)			(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
567522A	803	1004^	4.2	111	2.0	1.0	1.5	2.2	2.5	11.4	2.34
567522B	804	1009^	4.0	128*	2.0	1.0	1.5	2.5	2.5	12.3	2.10*
567523	724	1001^	3.0	100*	2.0	1.5	2.8*	2.2	1.0	15.5	2.44
567524	722	921	3.5	101*	3.0	2.0*	3.0*	1.8	1.5	11.4	1.69*
567525	723	917	3.0	88	2.0	1.0	2.5*	1.5	2.0	11.4	2.08
567526	727	1005^	3.0	100	2.5	1.0	3.0*	2.2	3.5	13.4	2.01
567527	717	1010^	2.0	105	2.0	1.0	1.0	2.2	1.0	16.9*	3.63
567528A	726	1001^	4.2	150*	3.0	1.0	3.0*	2.2	2.0	12.3	2.33
567528B	728	1003^	4.5	148*	3.5	1.0	2.5*	2.2	2.0	13.2	2.47
567529	728	1009^	3.8	93*	2.0	1.2	2.2*	2.8	2.0	14.6*	1.93*
567530	725	1006^	3.8	96*	2.0	1.0	1.5	2.0	1.5	15.5	3.14
567531	727	1010^	3.0	92	3.0	1.0	1.2	2.2	2.5	16.4	2.43
567532	727	1011^	2.5	94*	2.0	1.5	2.0*	2.2	2.0	12.6	2.92
567533	730	1009^	3.8	123	2.5	1.0	2.0	2.2	3.0	11.9*	2.48
567534	727	1009^	3.5	80*	3.0	1.0	1.0	2.2	2.5	15.2	1.99
567535A	731	1010^	3.2	102*	1.5	1.0	1.0	2.5	3.0*	14.2*	2.63*
567535B	730	1005^	4.0	90*	2.0	1.2	2.0*	2.2*	1.0	11.4*	2.96*
567536	729	1009^	4.0	102*	2.0	1.5	2.0*	2.5	1.5	13.3*	3.03*
567537	720	919	3.8	94	2.0	2.2*	3.5*	2.0	2.0	13.0	1.91
567538A	720	919	4.0	98	3.0	1.8	4.0*	2.0	1.5	11.4	2.12
567538B	717	921	3.0	76	1.5	2.8	4.5	2.0	2.0	11.4	2.12
567539	720	917	3.5	103	3.0	1.0	2.5*	2.0	2.5	12.2	2.77
567540A	724	1006^	2.8	98*	3.0	1.0	3.0*	2.0	2.5	16.7	2.77
567540B	727	1006^	3.2	102	3.0	1.5	3.0*	2.0	3.0	10.7 14.4*	2.26
567541A	727	1003^	3.5	130*	3.0	1.0	2.5*	2.5	3.0	8.2	2.20
567541B	729	1005^	4.0	82	2.0	2.5*	3.5*	2.5	2.0	13.1	2.20
567541C	728	929	2.5	88*	2.0	1.0	3.0*	2.5	1.0	13.1	1.87
567542	730	1008^	4.0	97*	1.5	1.0	2.0*	2.2*		11.4	2.71*
567543A	730 722	921	2.8	102	2.0	2.5	4.0*	2.2	1.0		
567543B	722 720	921	2.8	102	3.0	1.2	3.2*		2.0	10.8	2.09
567543B 567543C		923	3.2			1.2 2.2*		2.2	1.5	14.1	2.50
	723 720		3.2 4.0	114	3.0		3.5*	2.0	2.5	10.4	2.04*
567544 567545	730 736	1009^	3.2	95 82	2.0	1.0 3.0*	1.5	2.2	1.5	11.8*	2.86*
567545	725 721	1005^	3.2 4.2	82	2.0		3.5*	2.8	2.0	13.4	1.95*
567546	731	1011^		103*		1.0	1.5	2.0	1.0	13.0*	2.93*
567547	727	925	2.2	95 142*	4.0	1.8	3.5*	2.0	3.0	14.4*	2.31
567548 567540 A	809	1013^	4.2	143*	4.0	1.0	1.5	2.8*	2.0	7.2	1.69*
567549A	721 722	921	4.0	90	2.0	2.5*	3.0*	2.0	2.5	11.8	1.90
567549B	722 720	930^	3.8	173	4.0	1.5	3.2*	2.0	1.5	10.8	2.59
567550	720	917	3.2	108	4.0	1.0	3.0*	2.0	1.5	16.2	2.74
567551 567553	804	1008^	3.8	116	2.0	1.0	1.8	2.2	2.5	10.7	2.44*
567552	722	1004^		122	2.0	1.2	2.2*	2.0	2.5	12.8	2.71
567554A	728	930^	3.5	110*	4.0	1.0	1.8	2.2	2.0	12.8	2.86
567554B	729	1002^	4.0	118*	3.0	1.0	1.0	2.2	2.0	12.6	2.44
567555	730	1004^	4.0	121*	2.0	1.0	1.8	2.2	2.0	11.4	2.45*
567556	731	1007^	4.0	153	3.0	1.0	2.5	2.5	2.0	11.8*	1.93
567557	731	1007^	4.0	122*	2.5	1.2	2.0	2.2	2.0	9.3	2.39

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition						
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic		
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
67522A	IV	48.2	15.9	11.5	4.0	19.4	53.2	11.9		
67522B	IV	46.5	17.1	11.1	4.4	21.1	51.5	10.9		
67523	IV	46.4	19.8	10.9	4.2	19.8	56.3	8.7		
67524	III	51.0	16.3	11.6	3.6	22.4	53.6	8.1		
67525	II	46.7	18.6	13.2	3.8	22.7	52.3	8.0		
67526	III	50.2	16.3	11.3	3.4	21.6	55.1	8.3		
67527	IV	42.9	21.5	11.1	4.6	20.0	56.0	8.3		
67528A	III	46.4	18.1	12.0	3.1	23.8	52.0	8.6		
67528B	III	48.4	16.7	12.1	3.4	23.5	52.5	8.5		
67529	IV	48.9	16.9	12.0	3.6	19.5	55.4	8.9		
567530	IV	46.0	19.9	10.9	3.7	21.9	55.4	8.1		
567531	IV	46.4	19.1	12.3	4.0	23.2	53.1	7.4		
67532	IV	46.7	18.6	11.6	3.6	15.7	58.9	10.3		
567533	IV	44.0	18.2	11.4	3.5	18.0	55.0	12.0		
67534	IV	45.3	18.7	11.9	4.0	23.0	53.4	7.9		
67535A	IV	46.9	19.2	11.5	4.3	20.3	54.8	9.2		
67535B	IV	45.8	20.3	11.8	4.1	19.1	55.4	9.7		
67536	IV	47.9	17.8	11.7	3.4	16.3	57.4	11.3		
67537	II	50.5	16.6	11.5	3.3	20.7	55.8	8.7		
67538A	II	49.2	17.2	11.9	3.6	20.6	55.2	8.7		
67538B	II	50.6	15.9	11.6	3.3	19.8	56.0	9.5		
67539	II	47.5	17.8	12.4	3.4	19.6	55.2	9.5		
67540A	· IV	48.3	16.9	11.9	3.6	19.5	57.1	8.0		
67540B	IV	46.5	18.0	11.5	3.9	21.9	54.6	8.1		
67541A	III	48.5	15.2	11.8	3.9	19.1	54.2	10.5		
67541B	III	47.0	16.9	12.1	3.5	21.5	53.4	8.9		
67541C	III	45.2	19.6	12.8	3.5	20.5	54.4	7.9		
67542	IV	45.2	19.9	11.5	4.0	18.8	55.4	9.9		
67543A	II	48.8	18.3	12.7	3.8	23.5	51.8	8.2		
567543B	III	50.2	18.9	12.7	3.8	26.1	49.9	7.0		
567543C	III	48.4	18.2	12.8	4.0	24.3	50.2	8.3		
67544	IV	46.3	18.2	10.4	3.7	18.3	56.4	11.2		
67545	III	47.6	17.1	12.2	3.9	24.9	50.5	7.8		
67546	IV	48.8	17.0	11.3	3.5	18.5	55.3	11.4		
567547	III	48.4	18.4	13.6	4.0	22.4	50.1	10.0		
67548	IV	45.5	15.5	11.7	4.1	18.2	55.0	11.0		
567549A	III	48.7	17.7	12.4	3.5	20.9	53.8	8.9		
67549B	III	48.9	17.8	13.0	4.2	21.8	51.3	9.2		
67550	II	47.4	21.2	12.5	3.3	24.6	53.1	6.5		
67551	IV	48.3	19.2	12.4	3.9	17.8	56.0	10.0		
67552	IV	46.2	19.8	11.9	4.5	19.6	56.2	7.9		
67554A	IV	47.5	17.5	11.0	3.7	20.3	55.8	8.5		
567554B	IV	48.0	17.0	11.5	3.8	19.3	56.0	9.2		
567555	IV	47.4	19.0	12.5	3.8	18.8	56.0	8.9		
567556	IV	47.3	17.8	11.5	4.5	19.8	54.7	9.5		
567557	IV	50.0	16.2	12.2	3.5	18.2	56.7	9.4		

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	group
67558	Liu shi ri jin huang da dou	Shandong	China	China	1992	III
567559	Liu yue xian	Shandong	China	China	1992	II
567560	Liu yue xian	Shandong	China	China	1992	III
67561	Lou gan huang	Shandong	China	China	1992	IV
67562A	Lou gan huang	Shandong	China	China	1992	IV
67562B	(Lou gan huang)	Shandong	China	China	1992	IV
67563A		Shandong	China	China	1992	III
67563B	(Luan jin huang)	Shandong	China	China	1992	III
67564	Mao huang dou	Shandong	China	China	1992	IV
67565	Mao huang dou	Shandong	China	China	1992	IV
67566	Mou ping ping ding huang	Shandong	China	China	1992	IV
67567	Niu mao huang	Shandong	China	China	1992	IV
67568A	Ping ding huang	Shandong	China	China	1992	IV
67569	Ping ding huang	Shandong	China	China	1992	IV
67570	Ping ding huang	Shandong	China	China	1992	IV
67571	Ping ding huang	Shandong	China	China	1992	IV
67572A		Shandong	China	China	1992	IV
67572B	(Ping ding huang)	Shandong	China	China	1992	IV
67573A		Shandong	China	China	1992	IV
57573B	(Ping ding huang)	Shandong	China	China	1992	IV
	Ping ding huang	Shandong	China	China	1992	III
67574B		Shandong	China	China	1992	III
67575	Ping ding huang	Shandong	China	China	1992	IV
67576	Ping ding huang	Shandong	China	China	1992	III
67577	Ping ding huang	Shandong	China	China	1992	IV
	Ping ding si	Shandong	China	China	1992	IV
67578B	(Ping ding si)	Shandong	China	China	1992	IV
67579B	Ping wang dou zi	Shandong	China	China	1992	IV
	Qi si mi	Shandong	China	China	1992	IV
67580B	(Qi si mi)	Shandong	China	China	1992	IV
67581	Qi si wa	Shandong	China	China		
	Qi si wa	Shandong	China	China	1992	IV
	(Qi si wa)	Shandong	China	China	1992	IV
		Shandong	China	China	1992	IV
	Qi tu gu				1992	III
	(Qi tu gu)	Shandong Shandong	China	China	1992	III
	(Qi tu gu)	_	China	China	1992	IV
57584	(Qi tu gu)	Shandong	China	China	1992	IV
	Qi yue mang	Shandong	China	China	1992	III
	Ri zhao huang	Shandong	China	China	1992	II
	(Ri zhao huang)	Shandong	China	China	1992	III
67586A		Shandong	China	China	1992	III
67586B	(San hua cao)	Shandong	China	China	1992	III
	Si li da dou	Shandong	China	China	1992	IV
	(Si li da dou)	Shandong	China	China	1992	IV
	Si li qiu dou	Shandong	China	China	1992	IV
57588B	(Si li qiu dou)	Shandong	China	China	1992	IV

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

T	Maturity					D :	Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567558	III	N	W	G	E	Ssp	Br	I	Y	Bf		3N
567559	II	N	W	G	Sa	N	Br	I	Y	Bf		3N
567560	III	N	W	G	Α	N	Tn	I	Y	Bf		2N
567561	IV	N	W	G	E	N	Bl	Ι	Y	\mathbf{Bf}		3N
567562A	IV	D	W	G	E	N	Br	I	Y	Bf		3N
567562B	IV	N	W	G	E	N	Br	I	Y	Bf		3N
567563A	III	N	P	G	Α	N	Br	I	Y	Ib	Vhil	2N
567563B	III	N	P	G	Α	N	Br	I	Y	Bf	Dab	3N
567564	IV	S	W	G	E	Ssp	Br	Ι	Y	\mathbf{Bf}		3N
567565	IV	N	W	T	E	Ssp	Br	I	Y	Br	Sst	4N
567566	IV	D	W	G	E	Ssp	Br	I	Y	Bf		3N
567567	IV	N	W	T	E	Ssp	Tn	I	Y	Bl		3N
567568A	IV	N	P	T	E	Ssp	Br	I	Y	Br	Sst	3N
567569	IV	D	P	Ğ	E	Ssp	Br	Ī	Ÿ	Y	Vhil	2N
567570	IV	D	W	G	Ē	Ssp	Br	Ī	Ÿ	Bf		3N
567571	IV	S	W	T	E	N	Br	Ī	Ÿ	Brbl	Sdef	3N
567572A	IV	S	W	G	E	N	Br	Ī	Ÿ	Bf	2001	3N
567572B	IV	S	W	G	E	N	Br	Ī	Ÿ	Bf		3N
67573A	IV	S	W	Ğ	Ē	N	Br	Ī	Ÿ	Bf		3N
67573B	IV	N	P	Ğ	Sa	N	Tn	Ī	Ÿ	Bf		4N
67574A	III	N	W	Ğ	E	N	Br	Ī	Ÿ	Bf		2N
567574B	III	N	w	Ğ	Ē	Ssp	Br	Ī	Ŷ	Bf		2N
567575	IV	S	w	G	E	Ssp	Br	I	Y	Bf		3N
567576	III	N	w	G	Sa	N	Br	Ī	Y	Bf		3N
567577	IV	N	w	G	E	Ssp	Br	Ī	Y	Bf		4N
567578A	IV	S	W	G	E	Ssp	Br	Ī	Y	Bf		3N
567578B	IV	N	w	G	E	N N	Br	Ī	Y	Bf		3N
567579	IV	S	W	T	A	N	Br	Ī	Y	Br	Sph	2N
567580A	IV	N	W	T	E	N	Br	I	Y	Bl	Spii	3N
567580A 567580B	IV IV	N	W	T	E	Ssp	Br	I	Y	Bl		3N
567580B 567581	IV IV	S	W	T	E	-	Br	I	G	Bl	Vsc	3N
567581 567582A	IV IV	s S	W	G	E	Ssp	Br	I	Y	Bf	v 80	3N
		S S	W W	G	E Sa	Ssp	Br Br	I	Y	Bf		
567582B	IV	S S	W W	G	Sa E	Ssp		I				3N
567583A	III					Ssp	Tn	-	Y	Bf		3N
567583B	III	N	P	G	A	N	Br	I	Y	Bf	C1-C	2N
567583C	IV	S	W	T	E	N Sara	Br T	I	Y	Lbl	Sdef	3N
567583D	IV	D	W	G	E	Ssp	Tn T	I	Y	Bf		3N
67584	III	N	W	G	A	N	Tn	I	Y	Bf	3 71 '1	2N
67585A	II	N	W	G	A	N	Tn	I	Y	Lbf	Vhil	2N
67585B	III	S	W	G	A	N	Br	I	Y	Lbf	Vhil	2N
67586A	III	S	W	G	Sa	N	Tn	I	Y	Rbf	Lft5	2N
67586B	III	N	W	G	E	N	Tn	I	Y	Bf		3N
567587A	IV	N	P	G	A	N	Br	I	Y	Bf		2N
567587B	IV	S	W	G	A	N	Br	I	Y	Bf		2N
567588A	IV	N	W	T	Α	N	Tn	I	Y	Br		2N
567588B	IV	N	W	T	Sa	Ssp	Tn	I	Y	Br		2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	g Maturity		Stem	Shatter	ing	Seed			
	date		dging Heigh			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd) (sc			(score)	(score)		(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
567558	711	918^ 3.	.5 88	2.5	2.2*	3.5*	2.2	1.0	15.9	2.54*
567559	724	920 3.	.5 106	3.5	2.2*	3.5*	2.0	2.0	10.3	2.16
567560	721	918 3.	.5 103*	2.5	1.5	3.0*	2.0	1.5	10.6	1.99
567561	728	1010^ 4.	.0 200*	4.0	2.0*	4.5	2.0	2.0	9.5	1.99
567562A	729	1010^ 3.	.5 114	1.5	1.0	1.8	2.0	1.5	12.2*	2.29
567562B	806	1012^ 4.	.0 125*	3.0	1.0	1.5	2.5	2.0	10.7	2.25
567563A	729	1003^ 3.	.5 102	4.0	1.0	2.0*	2.0	1.0	12.2	1.84
567563B	723	925 3.	.2 100	3.0	1.5	3.2*	2.2	1.0	15.3	1.77*
567564	802	1004^ 3.	.8 136*	2.0	1.0	2.5	2.2	2.5	8.9	2.08
567565	731	1006^ 4.	.5 160*	3.0	1.2	2.5	2.5	3.0	10.2	2.41
567566	729	1010^ 3.	.8 91*	1.5	1.2	2.0*	2.5	1.0	13.6	3.22*
567567	730	1014^ 4.	.0 88	3.0	1.0	1.5	2.0	3.0	16.9	2.61
567568A	803	1008^ 4.	.0 148*	4.0	1.0	1.8	1.8	5.0	9.7	2.30*
567569	729	1025^ 3.	.5 88	1.0	1.0	2.0^	2.5	3.0	18.9*	2.10
567570	731	1010^ 4.	.0 96	1.5	1.0	2.0*	2.0	1.0	13.6*	2.77*
567571	726	1004^ 2.	.2 104*	2.0	1.2	2.5	2.8*	2.5	15.0*	2.55*
567572A	726	1004^ 4.	.2 104*	2.0	1.0	2.2*	2.5	2. 5	14.2	2.48
567572B	728	1003^ 3.	.5 104	2.0	1.0	1.5	2.2*	1.5	14.5*	2.71*
567573A	723	1004^ 3.	.8 102	2.0	1.2	2.0*	2.0	2.5	15.4	2.54
567573B	807	1003^ 4.	.2 205*	3.0	1.0	1.8	2.2*	2.0	9.6	1.90
567574A	719	925 2.	.5 120	4.0	1.0	2.0*	1.5	1.0	20.0	2.63
567574B	724	925 2.	.5 126	4.0	2.0*	3.0*	2.0	1.0	19.0	2.70
567575	802	1003^ 4.	.5 135	2.0	1.2	4.5	2.2	2.0	10.4	2.41
567576	725	927 3.	.0 85	2.5	1.0	2.0*	2.0	2.0	15.6*	2.61
567577	801	1003^ 3.	.8 118*	2.5	1.0	2.5	2.5	1.0	10.2	2.63
567578A	801	1008^ 4.		2.0	1.0	3.5	2.2	2.0	10.2	2.28
567578B	802	1008^ 4.			1.0	1.5	2.0	2.0	11.0	2.43
567579	804	1012^ 4.	.5 86*	2.0	1.0	1.5	2.0	3.5	9.2	1.90
567580A	726	1002^ 4.	.2 142	4.0	1.0	2.0*	2.2	2.0	16.6*	2.79
567580B	726	1006^ 4.		4.0	1.0	2.0	2.8	2.0	17.6*	2.27
567581	805	1009^ 4.		2.0	1.0	3.0	2.5	5.0	9.2	2.79
567582A	804	1011^ 4.		2.0	1.0	1.5	2.5	3.0	10.0	2.41*
567582B	812	1012^ 4.	.0 96	2.0	1.2	2.5	2.2	2.0	9.0	1.35
567583A	721	927^ 2.		2.0	1.5	2.5*	2.0	1.0	14.0*	2.87*
567583B	724		.0* 104	3.5	1.0	3.0*	2.0	1.0	14.6*	2.41*
567583C	724	1001^ 2.			1.2	3.0*	2.8	2.0	15.3*	2.69*
567583D	728	1006^ 3.		1.5	1.2	3.0*	2.0	1.0	13.9*	3.09*
567584	721		.5 104	4.0	1.5	3.8*	1.8	1.5	12.0	2.10*
567585A	719		.2* 90	2.5	2.0*	4.0*	2.0	1.5	11.4	1.85
567585B	727		.5 78*		1.2	3.0*	2.0	1.0	12.4*	1.73*
567586A	724	925 2.		2.0	1.5	2.5*	2.0	4.0	13.8	1.37
567586B	72 6		.0 92	3.0	1.0	3.0*	1.8	2.0	14.0	2.41
567587A	730	1007^ 3.		4.0	1.0	1.5	2.2	2.0	15.2*	1.99
567587B	729	1007^ 3.		2.0	1.0	1.2	2.2	3.0	12.9	2.41*
567588A	72 8	1010^ 4.		3.5	2.0*	3.5*	1.8	3.0	10.2	1.95*
567588B	804	1015^ 4.	.5 100*	2.5	2.0	3.5*	2.2	3.5	11.0	2.21

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition					
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic	
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
567558	III	46.6	21.1	12.8	4.2	20.8	54.0	7.2	
567559	II	47.3	18.1	11.2	3.6	21.0	54.2	10.1	
567560	III	49.8	17.1	12.0	3.5	19.6	55.3	9.1	
567561	IV	49.0	17.0	12.6	4.0	18.1	54.0	10.9	
567562A	IV	44.3	17.3	11.6	3.7	20.5	53.5	10.5	
567562B	IV	44.4	17.2	12.0	3.5	16.9	54.8	12.8	
567563A	III	48.9	17.7	11.7	3.9	18.4	56.2	9.3	
567 5 63B	III	46.5	18.8	11.9	4.6	24.7	47.7	8.1	
567564	IV	45.9	17.1	10.7	3.8	17.2	58.2	10.2	
567565	IV	46.9	18.0	11.0	4.1	18.6	56.5	9.9	
567566	IV	43.4	20.3	10.6	4.1	21.7	54.7	9.1	
567567	IV	46.5	18.5	12.0	4.5	24.1	52.4	7.0	
567568A	IV	45.4	19.6	11.0	4.2	20.5	54.7	9.7	
567569	IV	46.3	18.2	11.5	4.3	22.1	53.4	8.7	
567570	IV	46.1	18.5	10.9	4.2	20.4	54.0	9.9	
567571	IV	46.7	19.0	11.5	4.0	20.2	55.2	9.1	
567572A	IV	46.5	18.8	12.1	4.0	21.3	53.9	8.7	
567572B	IV	47.3	18.5	11.8	3.9	19.8	55.0	9.5	
5675 7 3A	IV	46.1	19.1	11.4	4.6	21.7	54.2	8.1	
567573B	IV	47.0	17.6	11.8	4.3	19.8	54.2	10.0	
567574A	III	45.5	19.0	12.8	4.0	22.8	51.5	8.4	
667574B	III	49.0	17.9	12.5	3.6	25.7	50.5	7.7	
567575	IV	45.4	17.5	10.8	4.4	18.6	54.5	11.7	
567576	III	50.2	16.7	12.2	3.5	17.8	56.9	9.7	
67577	IV	47.9	18.7	11.8	3.8	19.1	56.1	9.2	
567578A	IV	44.6	18.4	11.2	3.6	18.3	55.3	11.7	
667578B	IV	43.9	18.6	11.3	3.8	18.8	54.7	11.5	
567579	IV	47.1	17.1	12.0	3.7	18.8	57.0	8.5	
67580A	IV	52.9	21.2	11.0	3.8	20.5	55.5	9.1	
567580B	IV	47.0	18.2	11.7	3.6	20.8	54.3	9.5	
67581	IV	46.0	18.2	11.8	4.0	17.6	57.0	9.6	
67582A	IV	45.3	18.0	12.2	4.3	17.9	54.8	10.9	
67582B	IV	46.0	16.5	11.8	4.3	19.9	53.4	10.7	
67583A	III	48.8	15.4	12.3	3.2	14.9	57.9	11.8	
67583B	III	47.9	17.7	12.5	3.8	22.7	52.3	8.8	
67583C	IV	47.0	19.1	11.4	4.0	19.6	55.7	9.3	
67583D	IV	47.9	17.2	11.8	3.8	17.2	57.2	10.1	
67584	III	49.6	16.5	12.1	3.4	19.8	55.3	8.9	
67585A	II	50.6	16.6	12.2	3.6	21.1	54.7	8.5	
67585B	III	46.4	19.6	12.9	3.4	20.9	54.6	8.1	
67586A	III	50.5	15.3	11.6	3.5	22.5	54.7	7.8	
67586B	III	50.2	15.5	11.6	3.2	22.1	54.7	8.4	
67587A	IV	45.1	18.2	12.6	3.9	21.9	52.8	8.9	
67587B	IV	49.5	16.3	11.2	4.0	20.8	56.0	8.1	
67588A	IV	48.2	18.4	12.6	4.6	22.3	51.9	8.7	
67588B	IV	46.4	18.0	12.5	4.5	19.0	54.0	10.0	

Table~1.2.~Identification~and~origin~information~for~USDA~soybean~germplasm~in~maturity~groups~I~through~IV,~PI~507671~to~PI~574486.

			Country	Country	Year	
	Accession	Region	of	of	introduced Maturi	-
PI No.	name	of origin	origin	acquisition	or released group	
567589	Wan dou li da dou	Shandong	China	China	1992 III	
567590A	Wu ye zi	Shandong	China	China	1992 III	
567590B	(Wu ye zi)	Shandong	China	China	1992 IV	
567591	Xi hai zhuang da dou	Shandong	China	China	1992 IV	
567592	Xiao bai dou	Shandong	China	China	1992 III	
567593A	Xiao bai dou	Shandong	China	China	1992 III	
567593B	(Xiao bai dou)	Shandong	China	China	1992 IV	
567594A	Xiao bai jiao	Shandong	China	China	1992 III	
567594B	(Xiao bai jiao)	Shandong	China	China	1992 III	
567595A	` '	Shandong	China	China	1992 III	
567595B	(Xiao hei mei)	Shandong	China	China	1992 III	
567596	Xiao hong jia	Shandong	China	China	1992 IV	
567597A		Shandong	China	China	1992 III	
567597B	(Xiao huang dou)	Shandong	China	China	1992 III	
567597C	(Xiao huang dou)	Shandong	China	China	1992 III	
567598A	Xiao jin huang lu dou	Shandong	China	China	1992 0	
567598B	(Xiao jin huang lu dou)	Shandong	China	China	1992 III	
567599	Xiao ping ding huang	Shandong	China	China	1992 III	
567600	Xiao pu di hei	Shandong	China	China	1992 IV	
567601	Xiao tie jiao	Shandong	China	China	1992 III	
567602A		Shandong	China	China	1992 III	
567602B	(Xiao tie ke)	Shandong	China	China	1992 III	
567602D	(Xiao tie ke)	Shandong	China	China	1992 IV	
567602D	(Xiao tie ke)	Shandong	China	China	1992 IV	
567603A	· ·	Shandong	China	China	1992 III	
567603B	(Xiao wu ye)	Shandong	China	China	1992 IV	
567604A	•	Shandong	China	China	1992 IV	
567604B	_	Shandong	China	China	1992 IV	
567605	Yan li dou	Shandong	China	China	1992 IV	
567606	Yi wo hou	Shandong	China	China	1992 IV	
	Yuan dou	Shandong	China	China	1992 III	
567607B	(Yuan dou)	Shandong	China	China	1992 IV	
567608	Zhu yan	Shandong	China	China	1992 IV	
567609	Zi jie huang	Shandong	China	China	1992 III	
	Bai wu ke dou	Henan	China	China	1992 IV	
567610B		Henan	China	China	1992 IV	
567611	Ba yue zha	Henan	China	China	1992 IV	
567612	Bo ai er zi bai dou	Henan	China	China	1992 IV	
	Chang yuan xiao tian e dan	Henan	China	China	1992 IV	
567614B		Henan	China	China	1992 IV	
567614B	· •	Henan	China	China	1992 IV	
		Henan	China	China	1992 IV	
567614D	Chen liu niu mao huang	Henan	China	China	1992 IV	
567615 567616		Henan	China	China	1992 IV	
	Dan cheng hong hua cao Dan cheng shui niu pi	Henan	China	China	1992 III	
		Henan	China	China	1992 IV	
30/01/B	(Dan cheng shui niu pi)	Heliali	Cimia	Cillia	1772 10	

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem	Flower				Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567589	III	N	P	G	Α	N	Br	I	Y	Bf		1N
5675 9 0A	III	N	W	G	Sa	N	Br	I	Y	\mathbf{Bf}		2N
567590B	IV	S	W	G	Α	Ssp	Br	I	Y	\mathbf{Bf}	Lft5	2N
567591	IV	D	W	G	E	Ssp	Br	D	Y	Bf	Dab	3N
567592	III	D	W	G	Α	Ssp	Tn	I	Y	Bf		3N
567593A	III	D	W	G	Α	Ssp	Br	Ι	Y	Bf		3N
567593B	IV	S	W	G	\mathbf{E}	N.	Br	I	Y	Bf		3N
567594A	III	D	W	T	\mathbf{E}	N	Br	I	Y	Br	Vsc	3N
567594B	III	S	W	G	\mathbf{E}	N	Tn	I	Y	Bf		3N
567595A	III	S	P	T	Sa	Ssp	Dbr	I	G	Bl		5N
567595B	III	S	P	T	E	Ssp	Dbr	I	G	B 1		5N
567596	ĪV	N	W	T	E	Ssp	Dbr	Ī	Y	Br	Vhil	2N
567597A	III	S	W	T	Ā	Ssp	Dbr	Ī	Ÿ	Br		2N
567597B	III	S	w	T	A	Ssp	Tn	Ī	Ÿ	Br		2N
567597C	III	S	w	T	A	N	Tn	Ī	Ÿ	Br		3N
567598A	0	N	P	T	E	N	Tn	D	Lgn	Tn	Vhil, Vsc	2N
567598B	III	S	W	G	Sa	N	Br	I	Y	Bf	· 1111, · 50	3N
567599	III	S	w	G	E	Ssp	Br	Ī	Ÿ	Bf		2N
567600	IV	N	w	G	E	Ssp	Br	S	Ŷ	Bf		4N
567601	III	N	P	G	E	Ssp	Br	I	Y	Bf		3N
567602A	III	N	W	G	Ē	Ssp	Br	Ī	Y	Bf		4N
567602B	III	N	w	Lt	E	Ssp	Br	I	Y	Br	Dab	3N
567602D	IV	N	w	T	E	Ssp	Br	Ī	Y	Br	Dao	3N
567602D	IV	S	W	T	E	Sp	Br	I	Y	Br	Na	2N
567603A	III	N	w	Ġ	E	N N	Tn	I	Y	Bf	Sdab	3N
567603B	IV	N	w	G	E	N	Br	I	Y	Bf	Sdab	2N
567604A	IV	D	W	G	E	Ssp	Br	S	Y	Bf	Vhil	3N
567604B	IV	D	W	G	E	Ssp	Br	I	Y	Bf	V 1111	3N
	IV	D	W	G	E	_	Tn	I	Y	Bf		
567605 567606	IV IV	D	vv P	G	E E	Ssp Ssp	Tn	I	Y	Bf		3N 3N
	III	S	W	T	E	-			Y			
567607A	III IV	D D	vv P	G	E	Ssp N	Br Tn	I I	Y	Br G		3N
567607B	IV IV	N	W	T	E Sa			I	Y	Bl		2N
567608				G		Ssp	Tn	I				2N
567609 567610 A	III	N N	P		Sa	Ssp	Br		Y	Bf	T 64.5	3N
567610A	IV	N	W	G	Sa	N	Br	I	Y	Bf	Lft5	2N
567610B	IV	N	P	G	A	N	Br	I	Y	Bf	Lft5	2N
567611	IV	N	W	G	E	N	Br	I	Y	Bf		3N
567612	IV	S	P	G	A	Ssp	Br	I	Y	Bf	1.05	3N
567614A	IV	S	W	G	E S-	Ssp	Br	I	Bf	Bf	Lft5	3N
567614B	IV	D	W	G	Sa	Ssp	Br	I	Bf	Bf	Lft5	3N
567614C	IV	N	P	T	E	Ssp	Br	I	Y	Br		3N
567614D	IV	N	P	G	A	N	Br	I	Y	Bf		2N
567615	IV	D	W	T	A	N	Br	I	Y	Br		3N
567616	IV	S	P	G	A	N	Br	I	Y	Bf		3N
567617A	III	N	P	G	Α	N	Tn	I	Y	Bf		3N
567617B	IV	N	W	G	E	N	Tn	I	Y	Bf		3N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	g Maturity	Stem	Shattering		Seed			
	date		Height term.			Quality	Mottling		Yield
Entry	(mmdd)	(mmdd) (score)	(cm) (score) (score) (so	core)	(score)	(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
567589	802	1005^ 3.0	80* 4.0	1.0 1	.5	2.0	2.5	14.0*	1.31
567590A	720	927 2.5	116 4.0		2.0*	1.8	1.0	19.1*	2.89
567590B	803	1014^ 3.5	108* 2.0		.5	2.5	2.0	12.0*	1.87*
567591	730	1006^ 4.0	92* 1.5		.0 *	2.5	1.0	11.8*	2.53*
567592	722	923 2.5	70 1.5		.2*	1.8	2.5	12.0	2.45
567593A	725	926 3.2	71* 1.0		*0.	1.8	1.5	12.0	2.47*
567593B	727	1009^ 3.2	92* 2.0		.5	2.8	1.0	17.1	2.58
567594A	721	923 1.5	90 1.5		.8*	1.5	1.5	15.0	2.59
567594B	801	927^ 3.0	105 2.0		.0	2.0	4.0	12.0	1.93
567595A	726	927^ 3.5	104 2.0		.0*	2.2	3.0	8.8	1.83
567595B	725	922 3.2	100* 2.0		.0*	2.2	3.0	8.9	2.06
567596	802	1009^ 4.0	126* 3.0		2.8	2.8*	2.5	11.4*	1.62
567597A	719	929 1.8	89 2.0		.0	1.5	2.0*	15.4*	2.91*
567597B	723	929^ 3.2	98 2.0		.5*	1.8	2.5	11.0*	1.74
567597C	722	929^ 3.2	105 2.0		.2*	1.8	2.0	11.4*	1.80
567598A	629	824 1.0	52 3.0		.0^	2.0	1.5	14.0	1.42
567598B	721	922 3.2	98 2.0		.0*	1.5	2.0	11.6	2.42*
567599	724	928^ 3.2	79 2.0		2.5*	2.0	4.0	10.6	2.11
567600	731	1004^ 4.0	106* 2.5		2.0	2.2	2.0	9.6	2.91
567601	723	927 4.5	148 4.0		.5	2.2	1.5	9.4	2.49
567602A	722	927 4.0	155 3.0		.5	2.0	1.5	11.2	2.58
567602B	728	925 3.2	134* 3.0		.5	2.0	3.0	9.6*	2.32*
567602C	731	1004^ 4.5	146 3.0		.8	2.2	1.5	9.2	2.36
567602D	730	1006^ 3.5	116* 2.0		.0	2.2	1.5	10.4	2.23
567603A	729	1002^ 3.8	122 4.0		.0*	1.8	3.5	9.8	2.05
567603B	726	1015^ 2.8	112* 2.5		.5	1.8	1.0	14.6	3.25
567604A	802	1015 4.0	110* 1.5		.2	2.2	1.5	10.8	2.91*
567604B	808	1011^ 3.5	98 1.5		.0	2.5	1.0	9.4	2.62*
567605	727	1013^ 4.5	96 1.5		.0*	2.5	2.5	11.8	2.08*
567606	726	1009^ 1.8	64 1.0		.0	2.2*	1.0	20.2*	3.01*
567607A	728	929 2.8	118 2.0		.5	1.8	1.5	12.6	2.81*
567607B	723	1005^ 2.2	70 1.5		.5	2.5	2.5	22.6*	3.10
567608	728	1010^ 3.5	93 2.5		.2	1.8	2.5	17.1	3.01
567609	723	926 3.2	110 4.0		.5*	1.8	1.0	14.2	2.56*
567610A	811	1006^ 4.2	108* 3.5		2.8*	2.2	2.0	13.3	1.17
567610B	816	1011^ 4.2	98* 3.0		.0	2.5	3.0	10.6	1.42
567611	804	1008^ 4.2	134* 3.0		.0	2.2	2.0	9.4	2.23
567612	805	1005 4.2	98* 2.0		2.5	2.2	2.0	9.2	2.06
567614A	805	1014^ 4.2	74 2.0		.5	2.5		10.8	1.66
567614B	807	1011^ 4.2	102* 1.5		.0	2.5		10.6	1.41*
567614C	812	1011 4.2	156* 3.0		.5	2.2	2.0	9.3	2.01
567614D	729	1011 4.3	106* 4.0		.5	1.8	2.0	12.4	2.42
567615	803	1010 3.8	98* 1.5		.5	2.0	2.5	11.6	2.05*
567616	811	1013 3.8	98 2.0		.0	2.2	2.0	11.0*	1.40
	728	1003^ 3.2	102* 3.5		.0 .0*	2.0	2.0	13.5	1.40
567617A		1003 3.2	102 · 3.3 149 * 2.5		2.0*	2.2	3.0	10.4	1.44
567617B	814	1021 4.2	149 2.3	1.0 2	U ·	2.2	3.0	10.4	1.44

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed cor	mposition	Oil compo	Oil composition					
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic		
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
567589	III	48.9	15.8	12.8	3.8	21.5	52.6	9.3		
567590A	III	45.9	18.9	12.9	3.6	22.0	52.4	9.1		
567590B	IV	46.6	17.0	11.6	4.7	19.4	53.8	10.5		
567591	IV	46.5	19.8	11.8	4.2	19.4	55.0	9.6		
567592	III	46.9	18.2	12.3	3.6	20.5	55.3	8.4		
567593A	III	47.4	17.5	12.0	3.7	21.7	53.9	8.8		
567593B	IV	47.0	18.7	11.4	4.2	21.3	55.1	8.1		
567594A	III	45.9	20.2	11.9	3.7	23.8	52.8	7.9		
567594B	III	49.4	15.5	12.5	3.9	21.3	53.5	8.8		
567595A	III	48.6	15.9	12.3	3.4	17.0	57.0	10.4		
567595B	III	48.5	15.5	12.4	3.4	16.9	56.7	10.6		
567596	IV	46.2	18.5	11.4	4.7	20.0	54.6	9.3		
567597A	III	46.1	19.1	12.5	3.3	20.7	55.0	8.5		
567597B	III	49.2	16.6	11.6	3.7	19.0	56.7	9.1		
567597C	III	49.9	16.7	12.3	3.6	18.4	56.7	9.0		
567598A	0	43.3	18.1	13.3	4.5	23.7	50.3	7.7		
567598B	III	48.4	17.5	11.7	3.5	20.5	55.9	8.5		
567599	III	49.0	16.1	11.0	3.8	18.7	57.1	9.4		
567600	IV	49.1	17.2	12.1	3.6	18.3	56.9	9.1		
67601	III	45.6	19.2	12.6	3.9	21.9	53.0	8.6		
67602A	III	47.8	18.2	12.6	4.3	24.0	51.1	8.1		
67602B	III	48.0	17.9	12.6	4.0	24.2	51.5	7.7		
67602C	IV	47.3	17.4	11.7	4.3	19.1	55.3	9.6		
67602D	IV	47.6	18.3	11.7	4.1	18.4	55.5	9.5		
67603A	III	51.3	16.4	12.7	4.0	21.5	53.3	8.5		
67603B	IV	45.6	18.2	11.4	3.7	20.0	54.9	10.0		
67604A	IV	43.8	19.5	12.5	4.3	21.3	52.9	9.0		
67604B	IV	45.9	16.8	12.6	4.4	16.2	54.3	12.5		
67605	IV	48.8	17.5	11.6	3.5	18.0	57.6	9.4		
67606	IV	46.5	19.6	11.3	3.3	21.1	55.3	8.7		
67607A	III	44.8	21.2	12.3	4.4	25.1	51.4	6.8		
67607B	IV	45.3	20.2	10.6	3.7	25.5	53.3	6.9		
67608	IV	46.9	18.1	11.6	3.8	22.8	53.8	8.0		
67609	III	47.0	17.8	12.6	4.3	24.9	49.7	8.5		
67610A	IV	48.3	17.9	11.8	4.5	21.0	53.1	9.6		
67610B	IV	50.6	15.1	10.9	4.8	23.1	51.7	9.6		
67611	IV	48.4	17.4	11.4	4.4	21.4	53.6	9.0		
67612	IV	46.4	17.7	11.3	4.1	19.6	55.3	9.7		
67614A	IV	52.2	15.3	12.1	4.3	20.4	54.8	8.4		
67614B	IV	53.6	14.7	12.2	4.2	19.3	55.8	8.5		
67614C	IV	50.2	16.0	12.4	4.4	19.3	54.1	9.8		
67614D	IV	47.6	17.1	13.3	3.5	21.4	53.5	8.3		
67615	IV	46.2	18.5	11.7	4.2	20.9	55.6	7.7		
67616	IV	46.6	17.0	10.6	7.3	19.8	52.9	9.5		
67617A	III	49.4	16.3	11.9	5.9	20.3	53.2	8.8		
67617B	IV	51.1	15.2	12.4	3.9	20.1	54.1	9.5		

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

			Country	Country	Year	
	Accession	Region	of	of	introduced	•
PI No.	name	of origin	origin	acquisition	or released	group
567617C	(Dan cheng shui niu pi)	Henan	China	China	1992	IV
567618A		Henan	China	China	1992	III
567618B	(Gong xian huang dou)	Henan	China	China	1992	IV
567619	Gong xian xiao bai dou	Henan	China	China	1992	III
567620A	Guang shan tian e dan	Henan	China	China	1992	IV
567620B	(Guang shan tian e dan)	Henan	China	China	1992	IV
567621A	· · ·	Henan	China	China	1992	IV
567621B	(Huai yang niu mao huang)	Henan	China	China	1992	IV
567622	Huang chuan mian hua hu	Henan	China	China	1992	IV
567623	Ji yuan shui bai dou	Henan	China	China	1992	IV
567624	Ji yuan xiao bai dou	Henan	China	China	1992	III
567626	Jian ding da bai dou	Henan	China	China	1992	IV
567627A		Henan	China	China	1992	IV
567627B	(Kai feng xiao zi tie jiao huang)	Henan	China	China	1992	IV
567627C	(Kai feng xiao zi tie jiao huang)	Henan	China	China	1992	IV
567628A		Henan	China	China	1992	IV
567628B	•	Henan	China	China	1992	IV
	Luan chuan ba yue zha bai dou	Henan	China	China	1992	IV
567630B	•	Henan	China	China	1992	IV
567631	Luan chuan bai neng dou	Henan	China	China	1992	IV
	Luan chuan xiao huang dou	Henan	China	China	1992	IV
567632B		Henan	China	China	1992	IV
567633	Luo ning da ke bai dou	Henan	China	China	1992	IV
567636	Min quan ba yue zha	Henan	China	China	1992	IV
567637	Min quan ping ding shi	Henan	China	China	1992	IV
567638	Min quan wan dou yuan	Henan	China	China	1992	IV
567639	Min quan yuan dan li	Henan	China	China	1992	IV
567640	Nan yang ping ding shi	Henan	China	China	1992	IV
567641	Nan yang tian he dan	Henan	China	China	1992	IV
567642A	, ,	Henan	China	China	1992	IV
567642B	_	Henan	China	China	1992	IV
567642C	•	Henan	China	China	1992	IV
567643	Nei huang niu mao huang	Henan	China	China	1992	IV
567644	Nei xiang ba yue zha	Henan	China	China	1992	III
567645A		Henan	China	China	1992	III
567645B		Henan	China	China	1992	IV
567646A	, -	Henan	China	China	1992	IV
567646B		Henan	China	China	1992	IV
567647A	, , , , , , , , , , , , , , , , , , , ,	Henan	China	China	1992	IV
567647B	•	Henan	China	China	1992	IV
567648A		Henan	China	China	1992	III
567648B		Henan	China	China	1992	IV
567648C		Henan	China	China	1992	IV
567649	Qing feng xiao bai mei	Henan	China	China	1992	III
567650A		Henan	China	China	1992	IV
				China	1992	IV
567650A 567650B	_	Henan	China			

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

_	Maturity						Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567617C	IV	N	P	G	E	N	Tn	I	Y	Ιb		2N
567618A	III	S	P	G	Α	N	Br	I	Y	Bf		3N
567618B	IV	S	P	G	Α	N	Br	I	Y	\mathbf{Bf}		2N
567619	III	S	P	G	Α	N	Br	I	Y	Bf		3N
5676 2 0A	IV	N	P	G	Α	N	Tn	I	Y	Bf		2N
567620B	IV	N	W	G	Α	N	Tn	I	Y	Lbf	Vhil	2N
567621A	IV	D	W	G	E	N	Br	I	Y	Bf		2N
567621B	IV	S	W	G	Sa	N	Br	I	Y	Bf		2N
567622	IV	S	W	G	Α	N	Br	I	Y	Bf		2N
567623	IV	D	W	T	Α	Ssp	Br	I	Y	Br		3N
567624	III	N	W	G	Α	N	Br	I	Y	Bf		3N
567626	IV	S	P	G	E	Ssp	Tn	I	Y	Ib	Vhil	3N
567627A	IV	N	P	G	Α	N	Tn	Ī	Ÿ	Bf	•	2N
5676 27B	IV	S	W	G	Α	N	Br	Ī	Ÿ	Bf		3N
567627C	IV	N	W	G	Sa	N	Br	Ī	Ŷ	Bf		2N
67628A	IV	N	P	G	Sa	N	Br	Ī	$\dot{\mathbf{Y}}$	Bf		3N
67628B	IV	N	P	G	Α	N	Br	Ī	Ÿ	Bf		3N
67630A	IV	D	P	G	E	Ssp	Tn	Ī	Ÿ	Ib		2N
67630B	IV	S	W	T	Sa	N	Br	Ī	Ÿ	Brbl		4N
67631	IV	D	P	Lt	E	N	Tn	Ī	Lg	Bl		2N
67632A	IV	N	W	G	E	Ssp	Br	Ī	Y	Bf		2N
567632B	IV	S	P	G	A	N	Br	Ī	Ğ	Bf	Vsc	3N
67633	IV	S	W	G	A	N	Br	Ī	Ÿ	Bf	, 50	3N
567636	IV	N	P	Lt	Е	N	Br	I	Ÿ	Br		4F
67637	IV	N	W	G	E	N	Tn	I	Y	Bf		3N
567638	IV	N	W	G	E	N	Br	I	Ÿ	Bf		2N
567639	IV	N	P	G	E	N	Br	Ī	Lg	Bf	Vsc	2N
567640	IV	D	W	T	Α	N	Br	Ī	Y	Br	Sph	3N
567641	IV	S	W	G	Sa	N	Tn	Ī	Ÿ	Bf	-P.	3N
67642A	IV	S	P	G	Α	Ssp	Br	I	G	Bf	Vsc	3N
67642B	IV	D	W	G	E	N	Br	Ī	Ÿ	Bf	. 50	3N
67642C	IV	D	W	G	A	N	Br	Ī	Ÿ	Bf		2N
67643	IV	D	W	T	A	N	Br	Ī	Ÿ	Br		3N
67644	III	N	W	G	Sa	N	Br	Ī	Ÿ	Bf		3N
67645A	III	S	W	G	E	N	Br	Ī	Ÿ	Bf		3N
67645B	IV	S	W	G	Sa	N	Tn	Ī	Ŷ	Bf		3N
67646A	IV	Ď	W	T	A	N	Br	Ī	Ÿ	Br	Sph	3N
67646B	IV	D	W	T	Sa	Ssp	Br	Ī	Ÿ	Br	~F	3N
67647A	IV	S	P	G	E	Ssp	Br	Ī	Ÿ	Bf		3N
67647B	IV	N	W	Ğ	Ē	Ssp	Br	Ī	Ŷ	Bf		3N
67648A	III	S	W	Ğ	Ē	N	Br	Î	Ŷ	Bf		3N
67648B	IV	N	W	G	Ā	Ssp	Br	Ī	Ŷ	Bf		3N
67648C	IV	N	w	G	E	Ssp	Br	Ī	Ÿ	Bf		3N
67649	III	S	P	G	Ā	N	Br	Î	Ŷ	Bf		3N
67650A	IV	S	w	T	A	N	Br	Ī	Ÿ	Br		2N
67650B	IV	S	w	T	Sa	N	Br	Ī	Ÿ	Br		3N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	g Maturity		Shattering		Seed			
	date		Height term.	-	te	-	Mottling		Yield
Entry	(mmdd)	(mmdd) (score)	(cm) (score)	(score) (s	core)	(score)	(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
567617C	815	1025^ 4.8	140* 4.0	1.0 2	2.0^	2.2	2.5	7.6	1.42
567618A	802	930^ 3.2	76* 2.0	1.0 2	2.5*	1.8	2.0	7.2	1.42
567618B	806	1009^ 4.2	104* 2.0	1.5	1.0*	1.8	2.0	9.2	1.47*
567619	729	927 4.0	96* 2.0	1.0	3.0*	2.2	2.5	11.2	1.65
567620A	729	1009^ 4.0	152* 3.0	1.0 1	1.2	2.0	2.0	12.4	2.41*
567620B	731	1005^ 3.2	98 3.0	1.2 2	2.2*	2.0	1.5	8.8	2.19
567621A	804	1006^ 4.0	99* 1.5	1.0 1	1.0	2.2	3.0	7.0*	1.63
567621B	805	1020^ 4.2	121* 2.0	1.0 1	1.5	2.2	3.5	6.6	1.48
567622	803	1012^ 3.8	54 2.0	1.0 2	2.0*	2.2	1.5	11.4	1.31
567623	731	1010^ 3.8	98 1.5	1.0 3	3.0*	2.0	3.0	11.8*	2.28
567624	726	925 3.0	108 2.5	1.2	3.0*	1.5	2.5	6.9	1.93
567626	802	1011^ 3.5	120* 2.0		1.5	2.5	3.0	11.2	2.00
567627A	812	1004^ 4.0	108* 2.5		1.0	2.2	3.0	8.4	1.35
567627B	808	1011^ 4.5	128 2.0		1.5	2.0	4.0	7.0	2.15
567627C	817	1016^ 4.5	148* 4.0	1.0 1	1.0	3.0*	2.5	6.0	0.89
567 62 8A	809	1005^ 4.0	116 3.0	1.0 2	2.0*	2.2	2.5	8.4	1.78*
567628B	810	1005^ 4.0	125* 3.0		1.0	2.2	2.5	8.4	1.45
567630A	730	1011^ 2.0	65 1.0		2.5*	2.2	2.0	13.3	1.56
67630B	807	1014^ 3.8	128* 2.0	1.0 1	1.8	2.2	2.5	11.8*	2.29
567631	803	1012^ 3.2	98 1.5	1.0 2	2.5*	2.2	2.0	11.6*	2.49*
567632A	729	1013^ 3.5	95 3.5	1.0 1	1.5	2.5	3.0	11.7	1.77
567632B	803	1003^ 4.5	110* 2.0		2.0*	2.8*	3.0	7.8	1.65
567633	807	1011^ 4.5	121* 2.0		2.0*	2.2	2.5	8.2	1.60
567636	803	1002^ 3.8	123* 3.5		3.0*	2.2	5.0	8.0	1.76
567637	807	1020^ 4.5	112 3.0		2.0*	2.2	3.0	6.8	1.75
567638	805	1015^ 2.8	96 2.5		1.0	3.0	2.5	16.6*	2.05*
567639	801	1011^ 3.8	112* 4.0		1.0	2.5	2.5	11.6	2.24
567640	805	1017^ 4.2	99* 1.5		1.0	2.0	3.5	9.8	1.91
567641	810	1015^ 4.5	103 2.0		1.0	2.8*	3.0	9.6*	1.41*
567642A	804	1003^ 4.2	112 2.0		1.8	2.5	3.0	8.0	1.48
567642B	803	1012^ 4.0	104 1.5		1.0	2.5	3.0	8.0	1.78
56764 2 C	803	1011^ 4.0	112 1.5		2.2*	2.2	3.5	9.0	2.50
567643	802	1012^ 4.2	98* 1.5		1.0	2.0	3.5	11.8	2.22
567644	805	928 3.8	125 4.0		1.2	2.0	4.5	7.4	1.05
567645A	725	927 3.8	107* 2.0		2.5*	2.2	3.0	11.0	2.01
567645B	805	1011^ 4.2	108 2.0		1.5	2.2	2.5	11.0	1.94
567646A	803	1014^ 4.5	94* 1.5		1.5	2.0	3.0	10.7	2.21
567646B	801	1022^ 4.2	90* 1.5		3.0^	2.2	2.5	14.6	2.24
567647A	803	1014^ 4.5	140 2.0		2.8*	2.5	3.0	8.8*	1.07
567647B	809	1017 3.8	142 3.5		2.0*	2.0	2.5	8.0*	1.84
567648A	730	927 3.5	130 2.0		3.5 *	2.0	4.0	7.0	1.77
567648B	802	1010^ 4.0	130* 3.0		3.5 *	2.0	2.5	8.3	1.67
567648C	809	1013^ 4.0	140* 4.0		3.0*	2.2	3.0	8.0	1.95
567649	804	1005^ 4.5	118 2.0		1.5	2.2	2.5	11.4	1.69
567650A	805	1013^ 4.5	138* 2.0		1.5	2.2	2.5	9.6	2.29
567650B	804	1013 4.5	144 2.0		l.5	2.2	2.5	10.8	1.61

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed con	nposition	Oil compo	sition		t a sur to exercise	
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)
567617C	IV	48.0	15.2	11.7	3.9	18.7	55.7	10.0
567618A	III	45.7	17.5	13.0	3.6	19.4	54.9	9.0
567618B	IV	51.5	14.1	11.3	4.2	21.3	53.1	9.1
567619	III	49.5	16.2	11.8	6.8	20.3	53.4	7.8
567620A	IV	47.6	17.4	13.0	3.5	21.0	53.8	8.3
567620B	IV	45.7	17.5	12.4	3.6	20.2	54.6	8.8
567621A	IV	46.6	17.2	12.2	4.2	19.2	55.3	9.1
567621B	IV	45.1	16.8	11.0	4.2	17.4	56.5	10.9
567622	IV	48.3	18.0	11.8	4.5	21.1	54.2	8.4
567623	IV	44.9	18.7	10.1	4.1	23.1	55.0	7.7
5676 2 4	III	41.7	19.7	13.4	3.6	20.5	53.7	8.9
567626	IV	43.9	17.5	12.4	3.6	18.8	54.0	11.2
567627A	IV	45.9	16.7	11.1	4.2	18.5	54.9	11.3
567627B	IV	42.8	18.5	11.1	3.8	15.4	57.9	11.9
567627C	IV	46.7	15.1	11.1	4.0	15.8	55.5	13.1
567628A	IV	46.7	17.4	10.7	4.2	20.0	55.2	9.9
567628B	IV	47.2	17.0	11.0	4.2	19.8	54.8	10.2
567630A	IV	49.2	15.7	12.0	3.5	21.8	55.3	7.5
67630B	IV	46.2	17.1	11.1	5.0	19.9	54.0	10:1
567631	IV	47.1	16.9	11.4	4.6	17.8	53.5	8.9
67632A	IV	48.3	16.4	12.7	4.1	20.7	53.0	9.5
567632B	IV	50.4	14.5	11.2	3.4	19.4	55.3	10.7
567633	IV	45.8	18.0	13.0	4.0	17.8	56.2	9.1
567636	IV	46.8	17.7	13.2	3.5	19.1	53.7	9.5
567637	IV	45.8	15.9	11.6	4.1	19.0	55.6	9.8
567638	IV	47.8	18.9	12.0	4.7	22.1	52.4	8.9
567639	IV	46.9	17.2	13.1	3.4	20.2	55.4	8.0
567640	IV	44.9	19.0	11.8	3.7	18.6	57.4	8.6
567641	IV	51.5	13.4	12.0	4.4	17.6	53.2	11.1
567642A	IV	51.0	13.4	11.3	3.7	19.9	54.6	10.2
567642B	IV	45.3	18.2	12.3	4.2	19.5	55.1	9.0
567642C	IV	43.5	19.0	11.4	4.1	18.2	57.3	9.0
567643	IV	45.4	18.6	10.9	4.1	20.6	56.8	7.6
567644	III	55.4	11.7	13.6	4.0	19.4	53.4	7.0 9.6
67645A	III	49.8	16.2	12.4	3.8	20.9	54.9	8.0
667645B	IV	45.6	19.0	11.5	4.6	21.4	54.6	7.9
667646A	IV	47.6	17.6	11.8	3.6	19.3	56.6	7. 9 8.7
667646B	IV	45.6	17.9	11.1	4.2	22.0	54.2	8.7 8.5
667647A	IV	50.3	17.9	11.5	4.3	21.2	53.7	9.4
667647B	IV	30.3 46.8	17.5	12.6	4.3 3.7	18.8	55.7 55.9	9.4
	III	40.8 47.1	16.4	13.3	3.7 3.7	17.7	55.9 55.9	9.0 9.4
567648A		47.1 45.1	18.4	13.3	3.7 3.7	17.7	55.9 56.0	
567648B	IV	45.1 46.3	18.4 17.9	12.6				8.5
567648C	IV				3.8	18.7	56.1	9.1
67649	III	50.8	15.3	12.0	4.0	20.2	55.3	8.5
567650A	IV	45.2	19.4	11.6	4.2	21.3	54.9	8.0
567650B	IV	45.8	18.5	11.0	3.9	21.0	56.1	8.0

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

	· · · · · · · · · · · · · · · · · · ·		Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	
567651	Shang cai er cao ping ding shi	Henan	China	China	1992	IV
567652	Shang cai qi yue ban	Henan	China	China	1992	IV
567653	Shang cheng liu yue bao	Henan	China	China	1992	IV
567654	Shang qiu bai hua cao	Henan	China	China	1992	IV
567655	Shang qiu tie jiao huang	Henan	China	China	1992	IV
567656	Shen qui tian e dan	Henan	China	China	1992	IV
567658	Tang yin bai hua cao huang dou	Henan	China	China	1992	IV
567659	Tong xu xiao zi huang	Henan	China	China	1992	IV
567660A		Henan	China	China	1992	IV
567661A	•	Henan	China	China	1992	IV
567661B	(Wei shi hong mao huang dou)	Henan	China	China	1992	IV
567662	Wei shi xiao zi huang	Henan	China	China	1992	IV
567663	Wu zhi hong mao lang	Henan	China	China	1992	IV
567664	Xi chuan han di huang dou	Henan	China	China	1992	IV
567665	Xi chuan hou gu zhuang	Henan	China	China	1992	IV
567666	Xi xia tian e dan	Henan	China	China	1992	IV
567667A		Henan	China	China	1992	IV
567667B	•	Henan	China	China	1992	IV
567668	Xiang xian mian dou	Henan	China	China	1992	III
567669	Xin an huang dou	Henan	China	China	1992	IV
567671A	_	Henan	China	China	1992	III
567671B	•	Henan	China	China	1992	IV
567671C		Henan	China	China	1992	IV
567672	Yi yang huang dou	Henan	China	China	1992	IV
	Yu cheng da zi tie jiao huang	Henan	China	China	1992	III
567673B		Henan	China	China	1992	IV
567674	Yu cheng xiao tie jiao huang	Henan	China	China	1992	IV
567675	Yu cheng xiao tie jiao huang	Henan	China	China	1992	IV
	Yu xian da zi huang	Henan	China	China	1992	IV
567676B		Henan	China	China	1992	IV
567677	Yu xian huang dou	Henan	China	China	1992	IV
567678	Zhe cheng huang yuan dou	Henan	China	China	1992	IV
	Zhe cheng tie jiao huang	Henan	China	China	1992	III
	(Zhe cheng tie jiao huang)	Henan	China	China	1992	IV
567679C	(Zhe cheng tie jiao huang)	Henan	China	China	1992	IV
567681	Zhen ping ben huang dou	Henan	China	China	1992	IV
567683A		Henan	China	China	1992	IV
		Henan	China	China	1992	IV
567684B	(Zheng zhou zao shu xiao zi huang)		China	China	1992	IV IV
567685	Zhong mou tie jiao er cao	Henan	China	China	1992	IV IV
567686	Fu yang (3)	Anhui	China	China	1992	III
567687		Anhui	China	China	1992	III IV
	Fu yang (4)	Anhui	China	China	1992	
567688A		Anhui	China	China		III
567688B	(Fu yang (5))				1992	IV IV
567689	Fu yang (6)	Anhui Anhui	China China	China	1992 1992	IV
567690	Fu yang (7)	Aillui	China	China	1992	III

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

_	Maturity						Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567651	IV	S	W	G	Sa	N	Br	I	Y	\mathbf{Bf}		2N
567652	IV	S	W	G	Sa	N	Br	I	Y	Bf	Na	2N
567653	IV	D	P	G	Α	N	Br	I	Y	Bf		2N
567654	IV	D	W	G	E	N	Tn	I	Y	Bf		2N
567655	IV	D	W	G	Α	N	Br	I	Y	\mathbf{Bf}		3N
567656	IV	N	P	G	Α	N	Br	I	Y	\mathbf{Bf}		2N
567658	IV	N	P	G	Α	N	Tn	I	Y	\mathbf{Bf}		2N
567659	IV	N	W	G	E	N	Br	I	Y	\mathbf{Bf}		3N
567660A	IV	S	W	G	Sa	N	Br	I	Y	\mathbf{Bf}		3N
567661A	IV	S	W	T	Α	N	Br	I	Y	Br		2N
567661B	IV	S	P	Lt	Α	N	Br	I	Y	Br		3N
567662	IV	N	W	G	E	Ssp	Br	I	Y	Lbf	Vhil	2N
567663	IV	S	W	T	A	Ssp	Br	Ī	Ÿ	Br	Sph, Sst	3N
567664	IV	D	W	G	A	Ssp	Br	Ī	Ŷ	Bf	-F, DOI	2N
567665	IV	N	W	G	A	N	Br	Ī	Ŷ	Bf		3N
567666	IV	S	W	Ğ	A	N	Tn	Ī	Ÿ	Bf		3N
567667A	IV	S	P	G	A	N	Br	Ī	Ÿ	Bf		3N
567667B	IV	D	w	G	A	N	Br	Ī	Ÿ	Bf		3N
67668	III	S	W	Ğ	A	Ssp	Br	Ī	Ÿ	Bf		2N
567669	IV	Ď	w	Ğ	A	N	Br	Ī	Ÿ	Bf		3N
567671A	III	S	P	G	A	N	Br	Î	Ÿ	Bf		3N
567671B	IV	D	P	G	A	N	Br	Ī	Ÿ	Bf		3N
67671C	IV	N	P	Lt	E	N	Bl	Ī	Gnbr	Br		5F
567672	IV	S	w	G	A	N	Br	Ī	Y	Bf		2N
567673A	III	N	P	G	A	N	Br	I	Y	Lbf	Vhil	2N
567673B	IV	N	W	G	E	Ssp	Br	I	Y	Bf	V 1111	3N
567674	IV	S	P	G	E	N N	Br	Ī	Y	Bf	Vhil	3N
567675	IV	N	W	G	Sa	N	Br	I	Y	Bf	V 1111	3N
567676A	IV	N	W	G	Sa	N	Br	I	Y	Bf		3N 2N
567676B	IV	N	W	G	E	N	Br	I	Y	Bf		
	IV	D	W	T	A	N	Br	I	G			3N
567677	IV IV	N	w P	G G	A E	N N				Bl		2N
567678	III	N N	P P	G			Tn	I I	Y	Bf		2N
567679A 567679B		N N	P P	Lt	A E	Ssp N	Br	I	Y	Bf		3N
	IV						Br		Y	Br		4F
567679C	IV	N N	W	G	E	N N	Br	I	Y	Bf		3N
67681	IV D	N	W	G	Sa	N	Br	I	Y	Bf		3N
67683A	IV IV	S	W	G	A	N	Br	I	Y	Bf		2N
67684A	IV	S	W	G	A C-	N	Br	I	Y	Bf		2N
67684B	IV	S	W	G	Sa	N	Br	I	Y	Bf	015:	2N
67685	IV	N	W	Lt	E	N	Br	I	Y	Br	Sph, Dab	4N
67686	III	S	P	G	A	N	Br	I	Y	Bf		3N
67687	IV	N	W	G	E	N	Tn	I	Y	Bf		3N
67688A	III	S	P	G	A	N	Br	I	Y	Bf		3N
67688B	IV	N	P	G	A	N	Tn	I	Y	Bf		2N
67689	IV	D	W	G	E	N	Br	I	Y	Bf		3N
67690	III	S	P	G	Α	N	Br	I	Y	Bf		3N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity			Stem	Shatter	ing	Seed			
	date		Lodging	Heigh			late	Quality	Mottling		Yield
Entry	(mmdd)	(mmdd)		(cm)		(score)	(score)	(score)	(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
567651	807	1009^	4.5	95	2.0	1.2	2.5	2.2	3.5	7.4	1.76
567652	807	1020^	3.2	111	2.0	1.0	2.0*	2.0	2.5	8.8	2.18
567653	802	1010^	3.0	58	1.0	1.0	1.2	2.0	1.5	8.9	1.11
567654	731	1016^	4.5	112*	1.5	2.5*	3.5*	2.2	3.0	7.0	1.97*
567655	729	1007^	4.2	96*	1.0	1.0	1.0	2.5	3.0	11.8	2.22
567656	808	1013^	4.2	96	4.0	1.0	1.5	2.0	2.0	17.8*	1.77
567658	802	1008^	4.0	101	3.0	1.0	1.5	2.2	2.0	14.7	2.24
567659	811	1014^	4.5	163	3.5	1.2	2.5*	2.0	2.5	6.7	1.80
567660A	804	1011^	3.8	102	2.0	1.0	2.0*	2.2	3.0	8.8	2.39
567661A	730	1008^	4.0	92*	2.0	1.0	2.0*	2.0	3.0	12.5	2.31
567661B	804	1011^	4.0	102*	2.0	1.0	1.0	2.0	3.5	11.6	1.78
567662	7 2 9	1012^	3.2	88*	2.5	1.0	1.5	2.8	3.5	12.8	1.59
567663	808	1024^	4.5	90	2.0	1.0	1.0^	2.2	4.5	11.4	1.68
567664	802	1012^	4.0	72 *	1.5	1.2	2.5*	2.0	3.5	9.5	1.32
567665	807	1012	4.2	102	2.5	1.5	3.0*	2.0	3.5	9.1	1.20
567666	812	1012^	4.0	100*	2.0	1.0	1.5	3.2	3.0	13.9*	1.47
567667A	805	1010^	4.5	108*	2.0	1.0	1.0	2.0	2.5	13.0	2.11
567667B	808	1015^	4.5	104	1.5	1.0	1.5	2.2	2.5	13.6	2.07
567668	7 2 8	1001^	3.0	85	2.0	1.0	1.2	2.5	2.0	16.2*	1.72
567669	802	1011^	4.2	96*	1.5	1.0	1.5	2.5	2.5	13.7	2.09
567671A	730	925	4.2	110	2.0	1.0	2.8*	2.2	3.0	11.4	1.69
567671B	807	1011^	4.2	94*	1.5	1.0	1.0	2.2	2.5	7.6	1.82
567671C	814	1005^	4.5	190*	3.5	1.0	1.0	2.2		6.9	1.08
567672	807	1003	4.2	94*	2.0	1.0	1.0	2.5	2.5	11.0	1.91
567673A	7 2 6	1003^	3.8	115*	3.5	1.0	1.5	2.0	3.0	14.4	2.10
567673B	809	1003	4.2	152*	4.0	1.0	3.0*	2.2	2.5	8.2*	2.13
567674	809	1017	4.5	113*	2.0	1.2	3.0*	2.2	3.5	7.2	1.96
567675	803	1012	4.5	113*	3.0	1.0	1.0	2.5	2.0	9.8	1.80
567676A	803	1003	3.8	94	2.5	1.0	1.0	3.2*	2.0	17.6*	2.01
567676B	812	1010	3.2	116	3.0	1.0	2.0	2.5	2.5	10.6	1.93*
	805	1009	4.2	102	1.5	1.0	1.5	2.2	4.0	9.9	2.13
567677 567678	805 805	1016^	3.2	102	4.0	1.5	2.5*	2.5	2.0	15.6	1.79
567678 567679A	803 803	1010^		118	3.5	1.0	2.8*	2.0	3.5	9.6	2.40
	803 802	1003^		129*		1.0	3.0	2.2	5.0	8.2	1.89
567679B		1001^		94	3.0	1.0	2.0*	2.5	2.5	10.7	1.36
567679C	813 805	1013^		122*	3.0	1.0	1.0	2.3	2.0	9.2	1.70
567681	805	1010^		80	2.0	1.0	1.5	2.5	3.0	9.2 6.6	0.85
567683A	814 801	1009^		134*		1.0	1.5	2.3	3.0	9.2	2.25
567684A	801 803	1010^		118*		1.0	1.5	2.2	3.0	8.1	2.23
567684B	803	1011^		155*		1.0	1.5	2.2	4.0	6.0	1.55
567685	812			116*	2.0	1.2	1.5 2.5*	2.2	2.5	11.2	1.33
567686	730	925 1005	3.8	110*			1.5	2.0	3.0	10.6	2.09
567687	803	1005^				1.0	1.5 3.0*	2.2	3.0	10.6	2.09 1.74
567688A	801	1004^		114	2.0	1.0				11.2 15.0*	1.74
567688B	728	1008^	2.5	84*	3.0	1.2	2.5*	2.0	1.0		
567689	805	1009^		88	1.5	1.0	2.0*	2.5	4.5	7.2	1.10
567690	803	1004^	4.0	100*	2.0	1.0	3.0*	2.0	3.0	10.6	1.82

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil compo					
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic	
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
67651	IV	48.8	17.0	10.5	4.2	20.8	54.7	9.8	
67652	IV	48.5	16.9	10.8	3.9	23.4	53.5	8.5	
67653	IV	47.1	17.6	11.5	4.5	20.1	54.3	9.5	
67654	IV	47.3	16.9	11.7	3.9	18.8	55.3	10.4	
67655	IV	49.6	16.2	11.1	3.6	19.5	56.9	9.0	
67656	IV	45.5	17.3	12.3	4.0	20.5	53.4	9.8	
67658	IV	46.3	18.9	12.5	3.8	19.9	54.7	9.0	
67659	IV	47.8	15.3	11.5	3.9	19.0	55.5	10.1	
67660A	IV	44.0	17.4	11.2	3.7	16.1	58.4	10.6	
67661A	IV	44.3	20.3	11.0	4.3	21.1	56.5	7.2	
67661B	IV	45.2	19.5	11.1	4.2	19.8	56.1	8.9	
67662	IV	47.7	16.8	12.4	3.8	20.5	53.5	9.8	
67663	IV	46.7	18.2	11.0	4.5	20.7	55.3	8.5	
67664	IV	47.6	18.2	11.1	3.9	21.4	55.4	8.2	
67665	IV	48.0	16.1	13.1	4.6	20.8	53.1	8.4	
67666	IV	48.5	15.7	11.4	3.7	17.4	58.1	9.5	
67667A	IV	45.8	19.2	12.3	4.3	21.5	52.9	9.1	
67667B	IV	46.5	18.7	13.2	3.3	18.9	54.6	10.0	
67668	III	46.6	18.2	11.5	4.0	22.7	54.1	7.7	
67669	IV	50.7	16.0	12.3	3.8	19.7	54.9	9.3	
67671A	III	48.7	16.4	12.0	6.2	19.2	54.4	8.2	
67671B	IV	50.6	16.0	11.4	4.5	21.6	53.2	9.3	
67671C	IV	42.1	20.7	12.2	4.0	20.3	51.8	11.7	
67672	IV	46.7	17.4	11.5	3.8	17.6	57.4	9.8	
67673A	III	44.9	18.6	12.6	3.8	20.6	54.8	8.2	
67673B	IV	46.3	18.1	11.4	3.8	16.9	57.8	10.1	
67674	IV	49.0	16.1	12.8	4.1	16.6	54.0	12.6	
67675	IV	44.6	18.4	11.2	4.1	20.5	55.6	8.6	
67676A	IV	46.9	17.2	12.3	3.8	23.7	52.7	7.6	
67676B	IV	46.9	17.3	11.5	4.2	22.0	53.5	8.9	
67677	IV	46.7	18.3	11.0	6.9	20.0	53.9	8.3	
67678	IV	45.4	17.6	10.6	4.2	21.0	54.4	9.9	
67679A	III	50.6	16.0	12.1	3.7	19.3	55.7	9.1	
67679B	IV	42.1	20.7	10.6	7.2	20.3	53.6	8.3	
67679C	IV	49.5	16.0	10.8	4.9	20.3	53.1	10.9	
67681	IV	45.5	17.7	12.5	4.3	23.0	52.0	8.2	
67683A	IV	47.2	16.7	11.8	4.2	22.3	53.1	8.7	
67684A	IV	41.8	18.6	11.6	3.6	19.8	55.6	9.4	
67684B	IV	42.1	18.1	11.7	4.0	20.2	55.4	8.7	
67685	IV	•	-	10.7	4.1	22.4	54.3	8.6	
67686	III	49.4	16.6	11.2	6.4	19.6	54.6	8.3	
67687	IV	49.1	17.7	10.9	4.1	21.9	54.5	8.6	
67688A	III	49.6	16.5	11.3	6.8	19.9	53.9	8.1	
67688B	IV	45.1	20.1	11.2	4.1	21.4	54.8	8.4	
67689	IV	51.7	15.4	11.3	4.3	22.3	53.4	8.8	
67690	III	49.2	16.8	10.9	6.3	19.4	54.9	8.6	

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	•
567691	Fu yang (8)	Anhui	China	China	1992	IV
567692	Fu yang (10)	Anhui	China	China	1992	IV
567693	Fu yang (11)	Anhui	China	China	1992	IV
567694	Fu yang (12)	Anhui	China	China	1992	IV
567695	Fu yang (14)	Anhui	China	China	1992	III
567696A		Anhui	China	China	1992	III
567696B	(Fu yang (15))	Anhui	China	China	1992	IV
567696C	(Fu yang (15))	Anhui	China	China	1992	IV
567697	Fu yang (16)	Anhui	China	China	1992	III
567698A		Anhui	China	China	1992	IV
567698B	(Fu yang (17))	Anhui	China	China	1992	IV
567699	Fu yang (18)	Anhui	China	China	1992	III
567700	Fu yang (19)	Anhui	China	China	1992	III
567701	Fu yang (20)	Anhui	China	China	1992	IV
567702A		Anhui	China	China	1992	IV
567702B	(Fu yang (21))	Anhui	China	China	1992	IV
567703	Fu yang (22)	Anhui	China	China	1992	IV
567704	Fu yang (23)	Anhui	China	China	1992	IV
567705	Fu yang (24)	Anhui	China	China	1992	III
	Fu yang (25)	Anhui	China	China	1992	III
567706B	(Fu yang (25))	Anhui	China	China	1992	III
567707	Fu yang (26)	Anhui	China	China	1992	IV
567708	Fu yang (29)	Anhui	China	China	1992	IV
567709	Fu yang (30)	Anhui	China	China	1992	IV
567710	Fu yang (31)	Anhui	China	China	1992	IV
	Fu yang (33)	Anhui	China	China	1992	IV
567711B	(Fu yang (33))	Anhui	China	China	1992	IV
567712	Fu yang (35)	Anhui	China	China	1992	III
	Fu yang (36)	Anhui	China	China	1992	III
567713B	(Fu yang (36))	Anhui	China	China	1992	IV
567713C	(Fu yang (36))	Anhui	China	China	1992	IV
567713D	(Fu yang (36))	Anhui	China	China	1992	IV
	· · · · · · · · · · · · · · · · · · ·	Anhui	China	China	1992	IV
	Fu yang (37)	Anhui	China	China	1992	IV
567715	Fu yang (38)	Anhui	China	China	1992	IV
	Fu yang (39)	Anhui	China	China	1992	IV
567716B	(Fu yang (39))	Anhui	China	China	1992	IV
	Fu yang (40)	Anhui	China	China	1992	III
567717B	(Fu yang (40))	Anhui	China	China	1992	IV
567717C	(Fu yang (40))	Anhui	China	China	1992	IV
567718	Fu yang (42)	Anhui	China	China	1992	IV
567719	Fu yang (43)	Anhui	China	China	1992	IV
	Fu yang (44)	Anhui	China	China	1992	III
567720B	(Fu yang (44))	Anhui	China	China	1992	IV
567721	Fu yang (45)	Anhui	China	China	1992	IV
567722	Fu yang (46)	Anhui	China	China	1992	IV
5011 22	J (· · ·)		~1111M		1774	1 7

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

_	Maturity						Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567691	IV	S	P	G	Α	N	Br	I	Y	\mathbf{Bf}		3N
567692	IV	S	W	G	Sa	N	Br	I	Y	\mathbf{Bf}		3N
567693	IV	N	P	G	\mathbf{E}	N	Br	I	Y	Bf		3N
567694	IV	N	W	G	\mathbf{E}	N	Br	I	Y	\mathbf{Bf}		3N
567695	III	S	P	G	Α	N	Br	I	Y	Bf		3N
567696A	III	S	W	G	\mathbf{E}	N	Br	I	Y	Bf		3N
567696B	IV	N	P	G	Α	N	Br	I	Y	\mathbf{Bf}	Lft5	2N
567696C	IV	S	W	G	Α	N	Tn	I	Y	Bf		3N
567697	III	S	P	G	Α	N	Br	I	Y	Bf		3N
567698A	IV	S	W	G	\mathbf{E}	N	Br	I	Y	Bf		3N
567698B	IV	S	W	G	Α	N	Br	I	Y	Bf		2N
567699	III	S	P	G	Α	N	Br	I	Y	Bf		3N
567700	III	S	P	G	A	N	Br	Ī	Ÿ	Bf		4N
567701	IV	S	P	Ğ	A	N	Br	Ī	Ŷ	Dbf		2N
567702A	IV	S	W	G	A	N	Br	Ī	Ÿ	Dbf		2N
567702B	IV	S	W	G	E	N	Br	Ī	Ÿ	Dbf		2N
567703	IV	S	W	G	E	N	Br	Ī	Ÿ	Rbf	Vhil	3N
567704	IV	S	P	G	Ā	N	Br	Ī	Ÿ	Dbf	* ****	2N
567705	III	S	P	Ğ	A	N	Br	Ī	Ÿ	Bf		3N
567706A	III	S	P	Ğ	E	N	Br	Ī	Ŷ	Ib		3N
567706B	III	S	P	Ğ	E	N	Br	Ī	Ġ	Ib	Vhil, Vsc	3N
567707	IV	S	P	Ğ	Ā	N	Br	Î	Y	Dbf	v 1111, v 30	2N
567708	IV	N	w	G	A	N	Tn	Ī	Ÿ	Bf		2N
567709	IV	S	w	G	Sa	N	Br	Ī	Y	Bf		3N
567710	IV	S	w	G	E	N	Br	I	Y	Bf		3N
567711A	IV	S	w	G	A	N	Br	Ī	Y	Bf		3N
567711B	IV	S	w	G	E	N	Br	I	Y	Bf		3N
567712	III	S	P	G	A	N	Br	I	Y	Bf		3N
567713A	III	S	P	G	A	N	Br	I	Y	Ib		
567713B	IV	S	P	G	A	N	Br	I	G	Ib	Vac	3N
567713C	IV	S	P	G	A	N			Y		Vsc	3N
667713D	IV	S	P	G	A A	N N	Br Dr	I	Y Y	Dbf Df		2N
567713E	IV	S N	r P	G	A A	N	Br Br	I I	Y	Bf		2N
567713E	IV	S	P W	G	A A	N N		I		Bf Bf		2N
567714 567715	IV	S S	W	_			Br	-	Y	Bf		3N
567715 567716 A	IV	S S	W W	G G	Sa E	N N	Br	I	Y	Dbf		2N
	IV	S S	W W			N N	Br Dr	I	Y	Bf		2N
567716B		S S		G	A	N N	Br	I	Y	Dbf		2N
67717A	III		W	G	A	N	Br	I	Y	Bf		3N
67717B	IV	S	W	G	A	N	Br	I	Y	Bf		2N
67717C	IV	S	W	G	A	N	Br	I	Y	Bf		2N
67718	IV	N N	W	G	E	N	Tn	I	Y	Bf		3N
67719	IV	N	W	G	A	N	Br	I	Y	Bf		3N
67720A	III	S	W	G	A	N	Br	I	Y	Bf		3N
67720B	IV	S	W	G	A	N	Br	I	Y	Bf		2N
67721	IV	S	W	G	E	N	Br	I	Y	Bf		3N
67722	IV	N	W	G	E	N	Br	I	Y	Rbf		2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity		Stem	Shatter	ing	Seed			· · · · · · · · · · · · · · · · · · ·
	date	date Lodging	Heigh			late		Mottling	Weight	Yield
Entry	(mmdd)	(mmdd) (score)	(cm)				(score)	(score)	$(cg sd^{-1})$	(Mg ha ⁻¹)
567691	806	1009^ 4.5	95*		1.2	2.0*	2.0	3.0	11.2	1.63
567692	805	1006^ 4.8	110	2.0	1.0	1.8	2.2	3.0	9.0	1.65
567693	802	1003^ 4.5	116	2.5	1.5	3.0*	2.5	2.5	10.2	1.61
567694	804	1009 4.8	122	3.0	1.2	3.0*	2.2	2.0	8.8	1.88
567695	801	1004^ 4.2	100*		1.0	2.5*	2.0	2.5	10.6	1.42
567696A	727	1004 4.2	110*		1.0	3.0*	2.0	3.5	10.6*	2.45
567696B	730	1004^ 3.2	132	4.0	1.0	1.2	1.8	1.0	13.8	1.78
567696C	806	1004 5.2	91*		1.2	2.0*	2.5	3.5	10.0	1.29
	730	925 4.2	104*		1.0	2.5*	2.0	2.5	10.9*	1.84
567697	730 728	1009^ 4.0	112	2.0	1.2	3.5*	2.2	3.0	10.0*	1.79
567698A	728 726	1012^ 4.0	88	2.0	1.0	1.5	2.2	3.5	13.3	2.12
567698B	720	926 4.5	102	2.0	1.0	3.0*	2.2	2.5	11.0	1.51
567699	804	1004^ 4.2	89	2.0	1.0	1.5	2.0	3.0	10.4	1.48
567700	730	1011^ 4.0	104*		1.0	2.0*	2.0	3.5	12.4	2.14
567701		1005^ 4.0	109*		1.0	2.2*	2.0	4.5	8.4	1.49
567702A	731	1006^ 3.8	100*		1.0	1.5	2.2	3.5	8.0	1.47
567702B	731	1000 3.8	100*		1.0	3.5*	2.0	3.5	10.3	1.88
567703	728	1012^ 4.0	109*		1.0	1.5	2.2	3.5	12.0	1.96
567704	803	926 4.2	106*		1.0	2.5*	2.2	2.5	10.4*	1.61
567705	731	1004^ 4.5	130	2.0	1.0	3.0*	2.2	3.0	7.3	1.64
567706A	802	927 4.2	88*		1.0	2.5*	2.2	3.5	7.5	1.90
567706B	803	1010^ 4.0	101*		1.0	1.5	2.0	3.0*	12.2	2.13
567707	729	929^ 4.8	101*		1.0	4.5	2.2	2.5	9.6	1.40
567708	803		86*		1.0	2.2*	2.0	3.0	9.4	1.53
567709	803	1007^ 4.0	95*		1.5	3.0*	2.5	3.5	8.0	1.46
567710	802	1004^ 4.2	99*		1.2	2.2*	2.5	3.0	8.8	1.88
567711A	802	1006^ 4.2	98*		1.0	1.8	2.2	3.0	8.8	1.59
567711B	804	1008^ 4.2			1.0	2.5*	2.2	3.0	11.0	1.65
567712	730	927 4.5	100* 73	2.0	1.0	3.0*	2.0	1.5	13.8*	1.42
567713A	728	1004^ 4.5	112*		1.0	1.0	3.2	2.0	15.4	2.63*
567713B	730	1010^ 3.8	88*		1.0	1.5	2.5	4.0	11.7	1.78
567713C	803	1018^ 4.0	100*		1.0	1.0	2.8	2.0	15.5*	2.38*
567713D	729	1014^ 3.8	114*		1.0	1.0^	2.8	1.5	15.0*	2.04
567713E	804	1024^ 3.5			1.5	3.0*	2.5	3.5	9.0	1.84
567714	803	1008^ 4.2 1004^ 4.2	94° 92°		1.5	3.0*	2.5	3.5	8.6	1.80
567715	802				1.0	1.8	2.5	3.0	9.9	1.89
567716A	731	1005^ 4.2	98 88*	2.0	1.5	2.5	2.3	3.5	9.9 8.6	1.64
567716B	801	1005^ 4.5				2.5*	2.0	3.3 4.0*	10.0	1.63
567717A	802	1005^ 4.0	74	2.0	1.0 1.0	2.5	2.0	3.0	8.2	1.03
567717B	803	1004^ 4.5	98	2.0			2.5	3.0	8.2 8.6	1.78
567717C	806	1010^ 4.0	99*		1.0	2.0	2.3	2.0	8.6 10.8	1.62
567718	728	1002^ 4.5	125		1.2	1.8	2.2	2.5	10.8	1.02
567719	805	1003^ 4.5	122	3.0	1.0	2.8		2.5 3.5	9.3	1.34
567720A	803	1006^ 4.0	84	2.0	1.0	1.5	2.0			1.69
567720B	802	1005^ 4.5	96'		1.2	2.5	2.2	3.0	8.2	1.69
567721	804	1005^ 4.5	96'		1.5	5.0	2.2	2.5	7.2	
567722	803	1002^ 4.2	109'	* 3.5	1.2	4.0*	2.0	3.5	10.8	1.79

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition						
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic		
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)		
Liluy	group	(70)	(70)	(70)	(70)	(70)	(70)	(70)		
567691	IV	47.5	16.8	10.8	7.0	20.1	53.9	8.2		
567692	IV	50.2	15.3	10.6	4.3	21.0	54.3	9.8		
567693	IV	49.8	15.8	10.4	7.3	20.4	53.6	8.3		
567694	IV	48.6	16.0	10.7	4.9	20.4	53.2	10.8		
567695	III	49.9	16.1	11.3	6.2	19.5	54.6	8.5		
567696A	III	49.5	15.5	12.8	3.9	18.7	54.9	9.7		
567696B	IV	46.6	19.3	12.3	4.4	23.0	52.2	8.1		
567696C	IV	50.3	16.2	11.6	4.2	22.3	53.2	8.7		
567697	III	48.9	16.9	11.0	6.3	20.3	54.3	8.1		
567698A	IV	49.2	15.4	13.1	3.9	18.9	54.7	9.4		
567698B	IV	48.4	16.7	11.3	3.7	20.0	55.7	9.3		
567699	III	50.2	16.0	11.3	6.6	19.2	54.4	8.6		
567700	III	49.0	16.4	11.5	6.8	19.2	54.5	8.1		
567701	IV	46.7	18.8	11.3	4.0	20.3	55.7	8.8		
567702A	IV	50.3	16.5	10.6	4.2	22.5	54.3	8.5		
567702B	IV	51.3	16.5	10.9	4.2	21.9	54.5	8.5		
567703	IV	49.8	15.9	13.1	3.7	18.7	55.3	9.3		
567704	IV	49.4	18.2	11.2	4.2	21.4	54.5	8.2		
567705	III	48.7	16.7	11.2	6.3	19.8	54.5	8.1		
567706A	III	47.6	15.6	11.2	4.2	20.2	55.5	8.9		
567706B	III	47.9	15.7	11.5	3.7	19.5	55.6	9.7		
567707	IV	46.3	19.5	11.4	4.1	21.9	54.6	7.8		
567708	IV	47.5	17.4	11.6	4.3	21.0	53.7	9.4		
567709	IV	51.8	16.0	10.5	3.9	21.1	54.9	9.6		
567710	IV	53.4	15.3	10.8	4.5	22.6	53.9	8.3		
567711A	IV	50.2	16.4	10.8	4.3	21.6	54.4	9.0		
567711B	IV	51.3	15.8	10.3	4.3	21.5	54.4 54.4	9.0		
567712	III	49.3	16.8	11.1	7.1	21.0	53.5	7.4		
567712 567713A	III	49.3 45.7	19.0	11.7	5.3	23.4	52.3	7.4		
567713A 567713B	IV	45.7	18.9	11.7	3.9	23.4	54.9	7.3 8.0		
567713B	IV	48.7	18.1	11.3	4.2	21.7	54.9 54.6			
567713D	IV	47.4	18.2	11.9	4.2	20.6	54.8	8.4		
567713E	IV	47. 4 45.9	19.3	11.5	4.0	20.8	53.3	8.7 9.2		
567714	IV	43.9	16.3	10.4	3.8	19.9				
567714	IV	48.8	17.0	10.4	3.8	20.2	54.6 55.9	11.4		
								10.0		
567716A	IV IV	47.2 47.5	18.2	11.1	4.0	20.4	55.4 54.6	9.1		
567716B	IV	47.3 49.7	17.7 17.8	10.5	4.1	21.1	54.6	9.7		
67717A	III			11.3	4.4	24.1	52.7	7.6		
67717B	IV	47.4 50.3	17.6	10.6	3.9	20.5	55.5 54.3	9.6		
567717C	IV	50.3	16.4	10.3	3.8	20.6	54.3	10.4		
567718	IV IV	47.7	18.3	11.1	4.0	21.1	54.2	9.1		
567719	IV	46.9	16.5	9.7	7.4	19.6	52.7	9.8		
567720A	III	49.5	17.5	11.1	4.6	23.6	53.0	7.7		
567720B	IV	48.6	16.7	10.2	4.1	21.5	54.2	9.9		
567721	IV	42.1	20.7	11.1	3.3	17.5	55.5	12.1		
567722	IV	50.9	16.2	11.6	4.0	23.1	51.1	9.5		

 $Table \ 1.2. \ Identification \ and \ origin \ information \ for \ USDA \ soybean \ germplasm \ in \ maturity \ groups \ I \ through \ IV, \ PI \ 507671 \ to \ PI \ 574486.$

	And the state of t		Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	-
567724	Fu yang (48)	Anhui	China	China	1992	IV
567725	Fu yang (49)	Anhui	China	China	1992	IV
567726	Fu yang (50)	Anhui	China	China	1992	IV
567727A		Anhui	China	China	1992	IV
567727B	(Fu yang (51))	Anhui	China	China	1992	IV
567728	Fu yang (52)	Anhui	China	China	1992	IV
567729	Fu yang (53)	Anhui	China	China	1992	III
567730	Fu yang (54)	Anhui	China	China	1992	IV
567731	Fu yang (56)	Anhui	China	China	1992	III
567732	Fu yang (57)	Anhui	China	China	1992	III
567733	Fu yang (58)	Anhui	China	China	1992	IV
567734	Fu yang (59)	Anhui	China	China	1992	IV
567735	Fu yang (60)	Anhui	China	China	1992	IV
567737	Feng xian jian ding da bai pi	Jiangsu	China	China	1992	IV
567738A	Feng xian niu mao huang	Jiangsu	China	China	1992	IV
567738B	(Feng xian niu mao huang)	Jiangsu	China	China	1992	IV
567739A	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	Jiangsu	China	China	1992	IV
567739B	(Feng xian sun lou mei guo qing)	Jiangsu	China	China	1992	IV
567740	Feng xian tie jiao huang jia	Jiangsu	China	China	1992	IV
567742A		Jiangsu	China	China	1992	IV
567742A	Gan yu zhe wang da hong mao chun dou	Jiangsu	China	China	1992	IV
	Pei xian ba yue zha	Jiangsu	China	China	1992	IV
567745	Pei xian cheng guan tian e dan	Jiangsu	China	China	1992	IV
567746	Pei xian da bai jiao	Jiangsu	China	China	1992	IV
567747	Pei xian da bai pi jia	Jiangsu	China	China	1992	IV
567748	Pei xian da bai pi yi	Jiangsu	China	China	1992	IV
	Pei xian da hong mao	Jiangsu	China	China	1992	IV
567749B	(Pei xian da hong mao)	Jiangsu	China	China	1992	IV
567750	Pei xian da ping ding huang	-	China	China	1992	IV
	Pei xian hong mao you	Jiangsu Jiangsu	China	China	1992	IV
	•	•	China	China	1992	IV
567751B	(Pei xian hong mao you) Pei xian lian mao sheng	Jiangsu	China	China	1992	IV
567752	•	Jiangsu	China	China	1992	II
	Pei xian liu yue xian	Jiangsu	China	China	1992	III
	(Pei xian liu yue xian)	Jiangsu				
567753C	(Pei xian liu yue xian)	Jiangsu	China	China	1992	IV
567754	Pei xian ping ding hei	Jiangsu	China	China	1992	IV
	Pei xian ping ding huang yi	Jiangsu	China	China	1992	IV
567755B	(Pei xian ping ding huang yi)	Jiangsu	China	China	1992	IV
	Pei xian si li cao	Jiangsu	China	China	1992	IV
567756B	(Pei xian si li cao)	Jiangsu	China	China	1992	IV
567757	Pei xian tie jiao huang	Jiangsu	China	China	1992	IV
567758	Pei xian tu shan da ping ding huang	•	China	China	1992	IV
567760	Pei xian xiao bai pi	Jiangsu	China	China	1992	IV
567761	Pei xian xiao hong dou	Jiangsu	China	China	1992	III
	Pei xian xiao huang ke	Jiangsu	China	China	1992	IV
567762B	(Pei xian xiao huang ke)	Jiangsu	China	China	1992	IV

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem					Pod	Seedco		Hilum		Seed
Entry	group	term.	color .	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567724	IV	N	W	G	E	N	Tn	I	Y	Bf		3N
567725	IV	S	P	G	Α	N	Br	I	Y	Bf		3N
567726	IV	N	P	Lt	E	N	Br	I	Y	Br	Sph	4N
567727A	IV	S	W	G	E	N	Br	I	Y	Dbf	•	3N
567727B	IV	S	W	G	Α	N	Br	I	Y	Dbf		3N
567728	IV	N	W	G	E	N	Br	I	Y	Bf		2N
567729	III	S	Dp	G	Α	N	Br	I	Y	Bf		4N
567730	IV	S	w	G	Sa	N	Br	I	Y	Bf		2N
567731	III	S	Dp	G	Α	N	Br	I	Y	Bf		3N
567732	III	N	w	G	E	N	Tn	I	Y	Bf		3N
567733	IV	S	Dp	G	Α	N	Br	I	Y	Dbf		2N
567734	IV	N	w	G	Е	N	Tn	I	Y	Lbf	Vhil	2N
567735	IV	S	W	G	Е	N	Tn	I	Y	Bf		2N
567737	IV	N	W	G	Α	N	Tn	I	Y	\mathbf{Bf}		2N
567738A	IV	D	W	T	Α	Ssp	Br	I	Y	Br		2N
567738B	IV	S	W	T	Α	Ssp	Br	I	Y	Br		2N
567739A	IV	N	W	T	Sa	N	Br	I	Gn	Bl		3N
567739B	IV	N	W	T	E	N	Br	I	Gn	Bl		3N
567740	IV	D	W	G	Α	N	Br	I	Y	Dbf		2N
567742A	IV	N	W	G	Α	N	Tn	I	Y	\mathbf{Bf}		2N
567743	IV	N	W	T	Е	N	Tn	I	Y	Bl		2N
567744A	IV	N	P	G	Sa	N	Br	I	Y	\mathbf{Bf}	Vhil	3N
567745	IV	N	P	G	Α	N	Br	I	Y	Bf		2N
567746	IV	N	W	G	Α	N	Tn	I	Y	Bf		2N
567747	IV	N	P	G	E	N	Tn	I	Y	Ib		2N
567748	IV	N	P	G	Sa	N	Tn	I	Y	Ib		2N
567749A	IV	N	W	T	Sa	Ssp	Tn	I	Y	Bl		2N
567749B	IV	N	W	T	Sa	N	Tn	I	G	Bl	Vsc	2N
567750	IV	D	P	G	Α	N	Br	I	Y	Bf		2N
567751A	ĪV	N	P	G	Α	N	Tn	I	Y	Bf		2N
567751B	IV	N	P	G	Α	N	Tn	I	Y	Bf		2N
567752	IV	N	W	Ğ	Sa	Ssp	Br	Ī	Ÿ	Bf		3N
567753A	II	S	P	Ğ	E	N	Br	Ī	Ÿ	Bf		2N
567753B	III	N	P	Ğ	Ē	N	Br	Ī	Ÿ	Bf		1R
567753C	IV	S	P	Ğ	Ē	N	Br	Ī	Ÿ	Bf		1R
567754	IV	N	W	Ğ	Ā	N	Tn	Ī	Ÿ	Bf		2N
567755A	IV	D	W	Ğ	A	N	Tn	Ī	Ÿ	Bf		2N
567755B	IV	D	Dp	Ğ	A	N	Tn	Ī	G	Ib	Vsc	2N
567756A	IV	S	P	G	E	N	Br	Ī	Y	Dbf		2N
567756B	IV	S	P	Ğ	Ē	N	Br	Ī	Ÿ	Dbf		2N
567757	IV	N	P	Ğ	A	N	Br	Ī	Y	Bf		2N
567758	IV	N	P	T	A	N	Tn	Ī	Ğ	Bl	Vsc	2N
567760	IV	N	P	G	Sa	N	Tn	I	Y	Ib		2N
567761	III	D	P	T	A	N	Br	Ī	Rbr	Rbr		2N
567762A	IV	D	W	Ġ	Sa	N	Tn	Ī	Y	Bf		2N
567762B	IV	N	w	G	Sa	N	Tn	Ī	Ÿ	Bf		3N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity	7		Stem	Shatter	ing	Seed			
	date	date	Lodging	Heigh	t term.	early	late	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)		(score)	(cg sd ⁻¹)	(Mg ha ⁻¹)
567724	802	1005^	4.2	106	2.5	1.0	1.5	2.2	2.5	10.5	1.89
567725	728	1009^	4.0	94*	2.0	1.0	1.5	1.8	3.0*	12.5	2.47
567726	803	929^	3.8	128	3.5	1.0	2.5	2.2	5.0	8.4	1.97
567727A	805	1004^	4.2	102	2.0	1.2	2.0*	2.5	3.0	8.6	1.56
567727B	809	1004^	4.2	92*	2.0	1.0	3.0	2.5	3.0	8.5	1.43
567728	809	1006^	4.2	108*	3.0	1.0	2.0	2.5	4.0	7.7	1.40
567729	802	1002^	4.5	98*	2.0	1.5	3.0*	2.2	3.0	10.8	1.54
567730	805	1009^	4.0	86	2.0	1.0	2.2*	2.2	3.5	8.4	1.29
567731	729	927	3.5	94*	2.0	1.0	1.5	1.8	3.0	12.5	1.96
567732	802	928^	4.2	113	2.5	2.0*	5.0	2.0	2.0	7.8	2.02
567733	730	1010^	4.0	102*	2.0	1.0	2.5*	2.0	3.0	13.2	2.42
567734	802	1001^	4.8	118*	3.0	1.5	3.5	2.2	3.0	8.1	1.61
567735	802	1006^	4.2	96*	2.0	1.0	1.5	2.2	3.0	10.6	1.83
567737	810	1015^	4.2	106	3.0	1.0	1.0	2.0	2.5	13.2	1.92
567738A	802	1012^	4.5	82*	1.5	1.0	1.0	2.2	3.5	13.2	1.64
567738B	807	1017^	4.2	96*	2.0	1.0	1.0	2.2	3.5	11.6*	1.51
567739A	803	1012^	4.2	106*	2.5	1.0	2.2	2.2	2.5	12.3	2.32
567739B	805	1013^	4.0	111*	3.5	1.0	1.2	2.2	2.5	11.0	1.96
567740	805	1015^	4.5	93*	1.0	1.0	1.5	2.5	3.5	12.4	1.79
567742A	812	1010^	4.5	116	3.0	1.0	1.0	2.2	2.0	11.2*	1.58
567743	802	1014^	3.8	118*	3.0	1.0	1.5	2.0	2.5	14.4	2.76
567744A	804	1010^	4.5	125	4.0	1.0	1.5	2.0	1.5	12.0	1.68
567745	729	1010^	4.0	111*	4.0	1.0	1.0	2.5	2.5	12.2	2.01
567746	810	1013^	4.0	100*	3.0	1.0	1.5	2.2	3.0	13.0	1.87
567747	812	1014^	3.5	150	3.0	1.0	1.0	2.5	2.0	15.2*	2.07*
567748	811	1012^	3.8	116*	3.0	1.0	1.0	2.5	2.0	15.6*	1.94*
567749A	731	1016^	4.2	94	3.0	1.0	1.0	2.0	3.5	15.5	2.38
567749B	730	1018^	4.0	115*	3.0	1.0	1.0	2.0	2.0	17.0*	2.66
567750	803	1015^	2.2	70*	1.0	1.0	1.0	2.2	2.5	15.2	2.06
567751A	808	1023^	3.5	99*	2.5	1.0	1.0^	2.0	1.5	13.3	2.10
567751B	803	1010^	4.0	126	3.0	1.0	1.5	2.2	2.0	13.6	1.96
567752	802	1004^	4.0	126*	3.5	1.0	1.5	2.2	2.0	11.8	1.89
567753A	721	917	2.0*	90*	2.0	1.0	2.5*	1.8	2.0	14.3	2.23
567753B	726	927		115	3.0	1.0	2.5*	2.0	2.5	14.2	2.25
567753C	726	1012^	3.2	120*	2.0	1.0	2.0*	2.2	2.0	14.0*	2.49
567754	803	1004^	4.0	92*	2.5	1.0	1.5	2.0	2.0	11.0	1.58
567755A	802		3.5	101	1.5	1.0	1.0	2.0	2.5	11.7	1.61
567755B	728		3.2*	82	1.5	1.0	1.0	2.2	2.0	11.7	2.34*
567756A	813	1031^	3.0	90	2.0	1.0	1.0^	2.5	2.5	12.6	1.38
567756B	815	1031	2.8	. 96	2.0	1.0	1.0^	2.8	3.0	11.4	1.03
567757	726	1006^	3.5	119	4.0	1.0	1.0	2.2	2.0	12.4	2.32
567758	802	1012^	3.5	92*	2.5	1.2	2.5*	2.5	2.0	14.4	2.32
567760	802	1012	4.0	114*	3.0	1.0	1.5	2.5	1.5	11.2	2.32*
567761	728	923	4.0	87	2.0	2.2*	4.0*	2.2	1.5	11.2	0.98
	803	1007^	3.5	105*	1.5	1.0	1.0	2.2	1.5	12.2	2.37
567762A	AUA										

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil compo				
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)
567724	IV	47.1	18.7	11.0	4.2	20.2	55.8	8.8
567725	IV	48.7	18.5	11.3	3.7	21.4	55.4	8.3
567726	IV	42.1	20.7	12.4	3.5	19.8	54.6	9.8
567727A	IV	48.9	16.7	10.8	4.3	21.7	54.1	9.2
567727B	IV	49.1	16.6	10.6	4.2	22.6	53.1	9.5
567728	IV	48.2	15.5	11.0	4.3	21.3	53.5	10.0
567729	III	49.4	16.3	11.0	7.4	20.2	53.7	7.7
567730	IV	50.0	15.6	10.1	4.1	21.1	54.3	10.5
567731	III	47.4	17.8	10.9	6.6	20.9	52.5	7.9
567732	III	47.6	16.5	10.4	4.0	20.3	55.3	10.0
567733	IV	46.3	19.5	11.3	3.8	20.0	56.1	8.7
567734	IV	52.0	15.6	10.6	3.7	18.7	57.3	9.7
567735	IV	46.0	18.7	10.9	3.8	20.5	55.7	9.1
567737	IV	45.6	18.7	10.5	4.4	22.3	54.9	8.0
567738A	IV	45.6	19.8	10.4	4.4	21.2	56.9	7.1
667738B	IV	43.6	19.3	10.2	4.5	21.1	56.4	7.7
567739A	IV	45.7	18.2	11.6	4.2	22.4	53.0	8.7
667739B	IV	46.1	17.9	11.4	4.3	22.8	52.7	8.9
67740	IV	46.1	18.2	10.6	4.4	20.6	57.1	7.3
67742A	IV	44.9	17.8	10.8	4.2	22.0	52.4	10.7
667743	IV	48.6	17.1	11.7	4.0	21.7	54.5	8.0
67744A	IV	47.1	17.7	11.3	4.0	21.8	54.3	8.6
667745	IV	43.5	19.0	11.1	4.0	21.3	55.4	8.1
667746	IV	46.3	18.1	10.9	4.6	22.4	54.4	7.8
567747	IV	45.1	17.4	12.4	3.8	19.3	53.4	11.2
567748	IV	46.2	17.1	12.3	4.2	19.1	53.4	11.0
567749A	IV	46.4	18.4	11.6	3.9	21.6	54.5	8.5
567749B	IV	44.1	19.3	11.7	4.1	20.6	54.5	9.2
567750	IV	43.2	18.9	11.4	4.0	24.1	51.7	8.8
567751A	IV	45.0	19.1	12.7	3.8	17.0	55.8	10.7
567751A	IV	45.8	18.0	11.5	3.7	19.3	56.2	9.4
567752	IV	48.4	16.9	11.9	4.1	18.9	55.4	9.8
667753A	II	43.8	20.2	12.6	3.4	25.6	51.3	7.1
667753B	III	44.9	19.7	12.6	4.0	25.2	50.4	7.3
667753C	IV	44.2	19.3	12.7	3.8	23.3	52.5	7.7
567754	IV	44.2	18.0	10.9	4.6	22.1	52.2	10.1
567755A	IV	46.0	17.1	11.9	3.8	21.6	54.7	8.1
567755 B	IV	44.1	19.7	11.4	3.6	20.0	56.0	9.0
667756 A	IV	47.9	15.9	11.4	4.1	21.5	52.9	10.1
567756 B	IV	47.3	16.3	11.4	4.2	22.1	51.9	10.1
567757	IV	42.9	19.6	11.4	3.7	21.0	56.1	8.2
567758	IV	43.3	20.4	12.4	4.1	21.2	53.7	8.7
567760	IV	45.5 45.5	17.6	12.4	4.2	19.7	53.7	10.9
567761	III	45.3 46.2 ^w	17.0 15.3 ^w	11.9	3.5	22.9	53.0	8.1
	IV	43.6	19.4	10.9	4.1	20.6	54.1	10.4
567762A 567762B	IV	43.7	18.3	10.7	4.4	21.0	54.0	9.9

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

			Country	Country	Year	
	Accession	Region	of	of	introduced	Maturity
PI No.	name	of origin	origin	acquisition	or released	
567762C	(Pei xian xiao huang ke)	Jiangsu	China	China		
567765A	`	Jiangsu Jiangsu	China	China	1992	IV
567765B	(Sui ning da si li yi)	Jiangsu Jiangsu	China	China	1992	III
567765C	(Sui ning da si li yi)	Jiangsu Jiangsu	China China		1992	IV
567765D	` '	Jiangsu Jiangsu	China China	China China	1992	IV
567767A	Tong shan da bai pi	_	China	China	1992	IV
567767B	(Tong shan da bai pi)	Jiangsu Jiangsu			1992	IV
567767C	(Tong shan da bai pi)	Jiangsu Jiangsu	China	China	1992	IV
567767D	· - ·	Jiangsu	China	China	1992	IV
567768	Tong shan da li ping ding huang	Jiangsu	China	China	1992	IV
567769	Tong shan da mian tao	Jiangsu	China	China	1992	III
567770A	_	Jiangsu	China	China	1992	IV
		Jiangsu	China	China	1992	III
567770C	(Tong shan da miao bai jian ke)	Jiangsu	China	China	1992	IV
567771A	Tong shan da wu bai jian ke	Jiangsu	China	China	1992	II
567771B	(Tong shan da wu bai jian ke)	Jiangsu	China	China	1992	III
567771C	(Tong shan da wu bai jian ke)	Jiangsu	China	China	1992	IV
567771D	(Tong shan da wu bai jian ke)	Jiangsu	China	China	1992	IV
567771E	(Tong shan da wu bai jian ke)	Jiangsu	China	China	1992	IV
567772	Tong shan hong mao you	Jiangsu	China	China	1992	IV
567773	Tong shan huang da dou jia	Jiangsu	China	China	1992	IV
567774A	0	Jiangsu	China	China	1992	III
567774B	(Tong shan lang pi)	Jiangsu	China	China	1992	III
567775A	Tong shan niu mao huang	Jiangsu	China	China	1992	III
567775B	` •	Jiangsu	China	China	1992	IV
567776	Tong shan tong cun hong mao you	Jiangsu	China	China	1992	III
567777	Tong shan wan dou yuan	Jiangsu	China	China	1992	IV
567778	Tong shan xi he cao	Jiangsu	China	China	1992	III
567779A	Tong shan xiao hong mao	Jiangsu	China	China	1992	IV
567779B	(Tong shan xiao hong mao)	Jiangsu	China	China	1992	IV
567780A	Tong shan zheng ji dou	Jiangsu	China	China	1992	IV
567780B	(Tong shan zheng ji dou)	Jiangsu	China	China	1992	IV
567781	Tong shan zheng ji dou	Jiangsu	China	China	1992	IV
572265D		Unknown	Georgia	Russia	1993	IV
	Fen dou 16	Shanxi	China	China	1993	IV
574476B	(Fen dou 16)	Shanxi	China	China	1993	IV
574477	Fen dou 31	Shanxi	China	China	1993	IV
	Hai jiao zhao	Heilongjiang	China	China	1993	II
574478B	(Hai jiao zhao)	Heilongjiang	China	China	1993	II
574478C	(Hai jiao zhao)	Heilongjiang	China	China	1993	II
574479A		Heilongjiang	China	China	1993	II
574479B	(Zhao su No. 6)	Heilongjiang	China	China	1993	II
574480A	Jin dou 33	Liaoning	China	China	1993	II
574480B	(Jin dou 33)	Liaoning	China	China	1993	III
574481	Zhong dou 19	Hubei	China	China	1993	III
574482	Jin dou No. 2	Shanxi	China	China	1993	III
574483	Jin dou No. 5	Shanxi	China	China	1993	IV

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem					Pod	Seedco		Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
567762C	IV	N	W	G	Sa	N	Tn	I	Y	Bf		2N
567765A	III	N	P	G	Α	N	Br	I	Y	Bf		3N
567765B	IV	N	P	T	Α	N	Br	I	Y	Br		2N
567765C	IV	N	P	T	E	N	Br	I	Y	Br		2N
567765D	IV	N	P	T	Α	N	Br	I	Y	Br		2N
567767A	IV	N	W	G	Α	N	Tn	I	Y	\mathbf{Bf}		2N
567767B	IV	N	W	T	E	N	Tn	I	Y	Bl		2N
567767C	IV	N	W	G	Α	N	Tn	I	Y	\mathbf{Bf}		2N
567767D	IV	S	Dp	G	E	N	Tn	I	Y	Ib		3N
567768	III	S	Dp	G	Α	N	Br	I	Y	\mathbf{Bf}		3N
567769	IV	N	P	G	Α	N	Tn	I	Y	Bf		2N
567770A	III	N	P	G	Sa	N	Tn	I	Y	Ib		2N
567770C	IV	N	P	G	Α	N	Tn	I	Y	Bf		3N
567771A	II	N	W	G	Sa	N	Br	I	Y	Bf		3N
567771B	III	N	W	G	Sa	Ssp	Br	I	Y	\mathbf{Bf}		3N
567771C	IV	N	P	G	Α	N .	Br	I	Y	\mathbf{Bf}		2N
567771D	IV	N	W	G	Е	Ssp	Br	I	Y	\mathbf{Bf}		3N
567771E	IV	N	W	T	Ε	Ssp	Br	I	Y	Brbl		3N
567772	IV	S	W	T	E	N	Br	I	Gn	Br	Sst	3N
567773	IV	N	Dp	G	Sa	N	Br	I	Y	Ib	Vhil	2N
567774A	III	S	P	G	Α	N	Tn	I	Y	Ib		3N
567774B	III	S	P	G	Α	N	Tn	I	Y	Ib		3N
567775A	III	S	W	T	Α	N	Br	I	Y	Br		3N
567775B	IV	S	W	T	Α	N	Br	I	Y	Br		2N
567776	III	N	P	Lt	E	N	Tn	I	Y	Lbl		3N
567777	IV	N	P	G	\mathbf{A}	N	Br	I	Y	\mathbf{Bf}		2N
567778	III	N	P	G	Sa	Ssp	Tn	I	Y	Ib		2N
567779A	IV	N	P	G	Α	N .	Br	I	Y	\mathbf{Bf}		2N
567779B	IV	N	P	G	Α	N	Tn	I	Y	\mathbf{Bf}		2N
567780A	IV	S	W	G	E	N	Br	I	Y	Bf		2N
567780B	IV	S	Dp	G	E	N	Br	I	Y	Bf		2N
567781	IV	S	Dр	G	E	N	Br	I	Y	Bf		3N
572 26 5D	IV	D	P	Lt	E	Ssp	Br	I	Y	Blbr		3N
574476A	IV	N	P	G	E	N	Br	I	Y	Y		4N
574476B	IV	N	P	G	E	N	Br	I	Y	Y		3N
574477	IV	N	W	T	E	Ssp	Br	I	Y	Br		2N
574478A	II	D	P	G	Sa	N .	Br	D	Y	Ib		2N
574478B	II	N	P	G	Α	N	Tn	I	Y	Ib		3N
574478C	II	D	P	G	Sa	N	Br	I	Y	Ib		2N
574479A	II	N	W	G	Α	N	Br	I	Y	Y		2N
574479B	II	N	W	G	Α	N	Tn	I	Y	Y		2N
574480A	II	S	W	G	Sa	N	Br	I	Y	Y		2N
574480B	III	S	W	G	E	Ssp	Br	I	Y	Lbf		2N
574481	III	S	P	G	E	N ·	Tn	I	Y	Lbf	Vhil	3N
574482	III	S	P	G	E	N	Br	I	Y	Y		2N
574483	IV	N	w	Ğ	E	N	Br	I	Y	Dbf		2N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	Maturity			Stem	Shatter	ing	Seed			
	date	date	Lodging	Heigh	t term.	early	late	Quality	Mottling	Weight	Yield
Entry	(mmdd)	(mmdd)	(score)	(cm)	(score)	(score)	(score)	(score)	(score)	$(cg sd^{-1})$	(Mg ha ⁻¹)
567762C	806	1011^	4.2	98*	2.5	1.0	1.0	2.2	2.0	11.8	1.79
567765A	725	924	3.8	96*	2.5	2.0	4.0*	2.2	3.0	13.0*	1.25
567 76 5B	803	1010^	4.0	91	4.0	1.0	2.5	2.5	2.0	18.8	1.63
5677 6 5C	803	1011^	4.0	124	4.0	1.5	3.5*	2.2	2.5	14.6*	1.61
567765D	726	1009^	3.2	110*	3.0	1.2	2.5*	2.2	1.5	15.9	2.24
567767A	812	1013^	3.8	140*	3.0	1.0	1.0	2.5	2.5	13.4	1.60
567767B	714	1002^	1.5	110	3.0	1.0	1.0	2.0	2.0	17.4	3.78
567767C	811	1016^	3.8	102	3.0	1.0	1.0^	2.8*	3.5	13.0	1.43
567767D	804	1012^	3.8	118	2.0	1.0	1.5	2.2	2.0	12.0	1.78
567768	7 26 ^	925	4.0^	103^	2.0^	1.0^	2.0^	2.0^	3.0^	12.6^	1.81^
5677 69	813	1011^	4.2	104*	4.0	1.0	1.0	2.5	2.0	14.8	1.57
567770A	726	923	2.8*	90*	3.0	1.0	2.5*	2.0	2.0	11.7	2.13
567770C	731	1007^	3.2*	66*	2.5	2.5*	3.2*	2.0	2.0	12.6	1.68*
567771A	720	915	3.5	124*	4.0	1.2	3.2*	2.0	2.0	11.4	2.07
567771B	723	923	2.2	92	3.0	1.0	1.5	2.0	2.0	11.4	2.12
567 7 71C	731	1007^	3.8	112	4.0	1.0	1.0	2.2	2.0	12.6	2.72
567771D	802	1012^	3.8	108*	4.0	1.0	1.0	2.2	2.0	10.6*	2.07
567771E	812	1022^	4.0	120*	4.0	1.0	1.0^	2.2	3.0	9.6	1.14
567772	802	1018^	4.2	112*	2.0	1.2	2.0*	2.0	3.5	12.2	2.15
567773	805	1012^	4.5	7 7*	3.5	1.5	2.5*	2.8	3.0	18.5	1.35
567774A	730	925	3.0	70*	2.0	1.0	3.2*	2.0	2.5	8.8	1.13
567774B	801	927	3.0	68*	2.0	1.0	3.5*	2.0	2.5	8.8*	1.13
567775A	728	1005^	3.5	91*	2.0	1.0	2.0*	2.0	3.0	12.0*	2.07
567775B	803	1011^	4.0	94*	2.0	1.0	2.0*	2.0	2.5	12.5	2.07
567776	729	927	2.2	140*	3.0	1.0	1.0	2.2	3.5	10.6*	1.96
567777	801	1011^	4.0	116*	4.0	1.2	2.0*	2.2	2.0	11.8	2.23
5 6 7778	728	923	4.0	101*	3.0	1.5	3.0*	2.0	2.5	10.6*	2.23
567779A	731	1007^	3.8	101	3.5	1.0	1.0	2.0	2.0	13.0	2.02
567779B	731	1007	4.2	122*	3.0	1.0	1.5	2.0	1.0		2.39 2.99
567780A	726	1011	4.0	116*	2.0	1.0	2.5*	2.2		14.6	
567780B	730	1004	4.0	112*	2.0	1.0	2.2*	2.2	2.5	11.6	2.60
567781	730	1006^	4.0	109*	2.0	1.0			2.5	9.8	2.20
572265D	731 725		1.5	62*	1.0		2.2*	2.2	2.5	9.0*	1.83
574476A	803	1011^		118*		1.0 1.0	1.0	2.8	2.5	19.4*	2.24
							1.5	2.5	1.0	9.3	2.11*
574476B 574477	802	1010^ 1007^	4.0	122	4.0	1.0	1.5	2.2	1.0	9.4	1.81
	721 713	912	1.8	108*	3.0	1.0	1.0	2.0	2.0	16.0*	3.27*
574478A	713 727	912	1.5 1.5	70 70 *	2.0 3.0	1.0	1.0	2.0	1.0	16.6	3.29
574478B						1.0	3.2*	1.8	2.0	11.8	1.13*
574478C	713 716	919	1.2	64*	1.5	1.0	1.0	2.0	1.0	15.6	2.35*
574479A	716 715	911	1.5	36 40	3.0	2.0*	5.0	2.2	1.5	15.6	0.36
574479B	715	911	2.0	49	3.0	1.0	2.0*	2.0	1.5	18.0	1.13
574480A	715	921	1.2	76	2.0	1.0	1.2	1.8	2.5*	12.9	2.49
574480B	721 725	928	1.8	85	2.0	1.0	1.0	2.0	2.0	16.6*	3.16*
574481	725	925	2.0	76*	2.0	2.5*	3.0*	2.0	1.0	18.0*	1.98*
574482	722	923	2.2	91	2.0	1.0	1.5	2.0	1.0	15.3*	2.72
574483	720	1003^	2.0	80	3.0	1.0	1.0	2.0	2.5	17.6*	3.29*

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition					
	Maturity	Protein	Oil	Palmitic	Stearic	Oleic	Linoleic	Linolenic	
Entry	group	(%)	(%)	(%)	(%)	(%)	(%)	(%)	
567762C	IV	45.0	17.7	10.7	4.1	20.9	53.8	10.3	
567765A	III	49.4	17.3	11.0	6.5	20.4	54.0	8.1	
567765B	IV	44.9	19.0	13.1	4.5	21.4	52.2	8.5	
567765C	IV	45.0	20.8	11.6	4.3	20.6	54.9	8.3	
567765D	IV	42.4	21.0	13.7	3.9	20.9	53.8	7.8	
567767A	IV	46.6	18.3	10.4	4.6	22.2	54.7	8.1	
567767B	IV	45.0	20.9	10.9	4.1	20.7	56.8	7.6	
567767C	IV	46.6	18.8	10.6	4.7	22.7	54.4	7.4 7.4	
67767D	IV	44.5	17.7	12.4	3.7	20.3	53.8	9.8	
567768	III	-	-	-	<i>3.1</i>	-		- -	
		44.8	17.5	11.0	3.9		- 52.9		
67769 67770 A	IV	44.8 43.7	17.3	13.2		21.8		10.0	
67770A	III				3.4	21.5	52.4 54.4	9.5 8.5	
67770C	IV	43.1	19.5	10.7	4.6	21.7	54.4 56.1	8.5	
67771A	II	49.2	17.5	11.9	3.7	19.6	56.1	8.3	
67771B	III	47.5	18.2	11.8	3.6	20.2	54.7	9.4	
67771C	IV	46.1	18.2	12.7	3.6	22.1	53.6	8.0	
67771D	IV	47.2	18.2	11.8	4.1	20.3	53.8	9.5	
67771E	IV	45.5	18.4	11.8	4.8	21.1	52.7	9.7	
67772	IV	46.2	18.0	12.0	4.8	24.1	52.3	6.5	
67773	IV	46.3	17.5	12.4	4.9	24.8	50.6	7.4	
67774A	III	47.0	16.7	11.6	4.0	20.8	55.1	8.5	
67774B	III	48.1	16.2	11.4	3.9	20.4	55.6	8.8	
67775A	III	45.3	19.0	11.3	4.3	22.0	54.7	7.2	
67775B	IV	44.1	19.0	10.9	4.2	20.5	56.6	7.8	
67776	III	50.5	15.1	12.3	3.7	21.6	53.2	8.8	
67777	IV	45.0	18.0	12.8	3.6	20.1	54.8	8.7	
67778	III	46.2	18.2	13.5	3.4	21.7	52.0	8.9	
67779A	IV	45.4	18.7	12.8	3.6	21.2	54.3	8.2	
67779B	IV	43.0	19.2	12.9	3.5	20.2	54.6	8.8	
667780A	IV	44.9	18.9	12.9	3.7	20.1	54.7	8.6	
67780B	IV	46.0	17.6	13.1	3.8	19.3	54.5	9.3	
67781	IV	45.2	17.5	13.3	3.7	19.5	54.1	9.4	
72265D	IV	47.8	17.3	12.1	3.5	21.9	54.6	7.9	
74476A	IV	44.0	15.6	13.6	3.5	14.7	57.6	10.7	
574476B	IV	43.7	18.0	11.8	3.6	18.8	57.1	8.8	
574477	IV	44.3	21.4	10.8	3.8	20.6	57.3	7.5	
74478A	II	44.9	17.2	12.3	3.5	21.7	55.2	7.2	
74478B	II	48.9	16.6	11.4	3.4	21.7	55.1	8.9	
74478C	II	48.4	17.6	12.1	3.4	21.8	54.6	7.7	
	II	46.9	17.0	12.1	3.2 4.6	23.1	52.5	7. <i>1</i> 7.1	
74479A				12.2	4.0			6.8	
574479B	II	45.0 47.1	20.5			23.0	53.3 55.5		
574480A	II	47.1	18.1	12.5	3.6	19.0	55.5	9.3	
574480B	III	44.0	21.4	11.6	4.1	20.8	55.4	8.1	
574481	III	46.5	17.7	11.6	3.6	28.6	49.7	6.5	
574482	III	45.0	19.1	12.6	2.9	21.0	54.7	8.5	
74483	IV	43.3	19.4	12.1	4.1	22.6	53.5	7.7	

Table 1.2. Identification and origin information for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486.

PI No.	Accession name	Region of origin	Country of origin	Country of acquisition	Year introduced or released	•
574484	Jin dou No. 6	Shanxi	China	China	1993	IV
574485	Jin dou No. 9	Shanxi	China	China	1993	IV
574486	Jin dou 13	Shanxi	China	China	1993	III

Table 2.2. Descriptive data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486

	Maturity	Stem	Flower	Pubes	cence		Pod	Seedco	at	Hilum		Seed
Entry	group	term.	color	Color	Form	Density	color	Luster	Color	color	Other traits	shape
574484	IV	N	W	T	E	N	Br	Ι	Y	Tn		2N
574485	IV	N	W	T	Sa	Ssp	Br	I	Y	B1		2N
574486	III	N	W	T	E	N	Br	I	Y	Bl		3N

Table 3.2 Agronomic data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

	Flowering	-	Stem	Shatter	ing	Seed					
Entry	date (mmdd)	date (mmdd)	Lodging (score)	_		•		Quality (score)	Mottling (score)	Weight (cg sd ⁻¹)	Yield (Mg ha ⁻¹)
574484	725	1002^	3.2	100	3.0	1.0	1.0	2.0	3.0	12.9	2.44*
574485	722	1004^	1.8	114	3.0	1.0	1.0	2.0	2.0*	15.8*	2.63
574486	714	1003^	1.8	108	3.0	1.0	1.0	2.2	2.0	17.2*	3.00*

Table 4.2. Seed composition data for USDA soybean germplasm in maturity groups I through IV, PI 507671 to PI 574486, grown at Urbana, IL.

		Seed composition		Oil composition				
Entry	Maturity group	Protein (%)	Oil (%)	Palmitic (%)	Stearic (%)	Oleic (%)	Linoleic (%)	Linolenic (%)
574484	IV	46.5	18.7	10.6	4.4	19.1	57.1	8.9
574485	IV	43.6	20.7	12.3	5.5	24.2	52.2	5.9
574486	III	46.9	19.3	11.0	4.7	22.0	55.3	7.0

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