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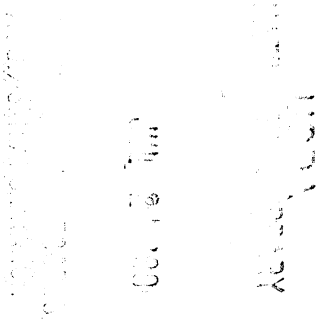
# Evaluation of the USDA Wild Soybean Germplasm Collection: Maturity Groups 000 to IV (PI 65.549 to PI 483. 464)



## ABSTRACT

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This report contains data on the origin, descriptive characteristics, agronomic performance, and seed composition for 200 wild soybean (Glycine soja Siebold & Zucc.) accessions in maturity groups 000 to IV from the USDA Wild Soybean Germplasm Collection. These accessions (PI 65.549 to PI 483.464) were introduced from China, Japan, South Korea, and the Soviet Union into the United States from 1925 to 1984. A total of 38 categories of data is presented for each entry. These accessions were evaluated at Urbana, IL, in 1984 and 1985.

**KEYWORDS:** Evaluation, germplasm, Glycine soja Siebold & Zucc., origin, seed composition, wild soybean.

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# EVALUATION OF THE USDA WILD SOYBEAN GERMPLASM COLLECTION: MATURITY GROUPS 000 TO IV (PI 65.549 TO PI 483.464)

Gail A. Juvik, Richard L. Bernard, Ruzhen Chang, and James F. Cavins

This publication contains information on the origin, descriptive characteristics, agronomic performance, and seed composition of wild soybean (Glycine soja Siebold & Zucc.) germplasm accessions for PI 65.549 to PI 483.464 in maturity groups 000 through IV. These data can also be obtained through the Germplasm Resources Information Network (GRIN), Database Management Unit, USDA-ARS, BARC-West, Beltsville, MD 20705.

The accessions were tested on the Agronomy-Plant Pathology South Farm, University of Illinois, Urbana (40°8′ N. lat.), with one replication per year. Seeds were planted on May 14 and 15, 1984, and on May 20, 1985. Plots consisted of one row with four hills per row, 60 cm between hills, and 1 m between rows. In 1984, plots for maturity groups III and IV were two rows wide, two hills per row, 1 m between hills, and 1 m between rows. Data were collected on all plants in a plot. The accessions were blocked by maturity group in the field, but the data are reported numerically by PI number.

The growth of wild soybeans in central Illinois is highly variable. Seeds of wild soybeans, which are normally very impermeable, were scarified in concentrated sulfuric acid for 5 minutes, rinsed thoroughly in water, and air-dried before planting. Despite this treatment, hard seed coats still resulted in some delayed emergence and poor stands. The number of plants per plot ranged from 2 to 20. Most wild soybeans are very susceptible to soybean mosaic virus and leafhopper feeding, and these pests caused considerable yellowing, stunting, and leaf rugosity. The insecticide Pydrin was applied in July both years to help reduce insect feeding.

Some accessions in the collection appear to be of hybrid origin with Glycine max and are identified as semiwild. Although their seed and plant size are larger and more vigorous than those of true wild soybeans, these semiwild accessions exhibit characteristics, such as excessive twining and shattering, which make them easier to maintain

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with other wild soybeans than with cultivated soybeans. These accessions are more similar to wild soybeans than those designated "semiwild" in the cultivated soybean collection.

The data in tables 3 and 4 are 2-year means (except data for PI numbers greater than PI 468.919, which are based on 1984 values only). An asterisk (*) following a mean indicates that the difference between the values for the 2 years exceeded a specified limit. The limits for the traits were as follows:

| | | | |
|---|---|---|---|
| Twining date | > 7 days | Flowering date | > 7 days |
| Maturity date | > 7 days | Height | > 30 cm |
| Leaf length | > 15 mm | Leaf shape | > .15 unit |
| Seed weight | > 0.5 cg/seed | Pod length | > 4 mm |

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

To obtain protein and oil percentages of an accession, approximately 7 g of seeds was placed in a beaker and dried in a Thelco forced air oven for 3 hours at 130°C. The seeds were then transferred to a 50-g bottle, sealed, and allowed to cool for 1 hour. A sample was then ground in a Varco electric dry-food grinder and returned to the 50-g bottle. The ground meal was analyzed by near-infrared reflectance in a Pacific-Scientific feed-grain analyzer. The analyzer calibration was checked with two sealed standards (a wheatmeal and a soymeal) and a freshly ground soymeal standard before each batch of 100 samples was processed.

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 was placed in a 25-ml vial, and 5 ml of sodium methoxide was 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 suspension of ground sample in sodium methoxide was allowed to stand for 45 minutes, after which 1 ml of 10% acetic acid solution was added followed immediately by 10 ml of heptane. The sample was completely mixed after each reagent addition. After the final mixing the sample was allowed to stand for several minutes so that the layers could separate. The heptane layer was analyzed with a Varian gas chromotograph equipped with two autoinjectors and flame detectors. Columns were 2 m by 2 mm and packed with 100/200 mesh Gas-Chrom Q coated with 5% LAC-2R-446. Analysis was made isothermally at 180°C, with the injector at 230°C and the detector at 240°C. Gas flow rates for helium, hydrogen, and air were 25, 25, and 250 ml per minute, respectively. The autoinjectors were set to inject 0.5 $\mu$l. Total analysis time per injection was 10 minutes. Integration, peak identification, data storage, and report printing were done by computer.

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

**Table 1:**

PI number:
Serial numbers assigned by the Plant Introduction Office, Germplasm Resources Laboratory, USDA-ARS, BARC-West, Beltsville, MD 20705.

Accession name and foreign or collector number:
Accession names and foreign or collector numbers are reported as received. An attempt was made to standardize transliterations and to correct obvious errors. When heterogeneous introductions were received, two or more sublines were preserved and are distinguished by a letter (A, B, C, etc.) suffixed to the PI number, except PI 407.018 to PI 407.307, to which different PI numbers were assigned after sublining.

Country of acquisition:
This is the country from which the seeds were obtained.

Country of origin:
This is the country from which the accession originated, based on information received from the country of acquisition.

Year introduced:
This is the year the introduction was assigned a PI number.

Maturity group:
Classification of relative time of maturity based on data previously collected at Urbana, IL. Maturity groups include 000 (earliest), 00, 0, I, II, III, and IV.

**Table 2:**

Flower color:
P = purple, W = white

Pubescence color:
Ng = near gray, T = tawny

Pubescence form:
A = appressed (most hairs flat on leaf surface)
E = erect on leaf surface
Sa = semiappressed (between erect and appressed)
Va = very appressed (all hairs flat on leaf surface)

Pubescence density:
N = normal, Sp = sparse

Pod color:
Bl = black, Br = brown, Dbr = dark brown

Seed coat luster:
B = bloom (heavy coating of a powdery substance adhering to the seed coat)
D = dull (trace amounts of bloom)
Db = dense bloom (heavy bloom)
I = intermediate (between dull and shiny)
Lb = light bloom (slight bloom)
S = shiny (absence of bloom)

Seed coat and hilum color:
Bl = black, Br = brown, Gn = green

Seed shape:
Nr = near round
Ob = oblong (near rectangular in lateral outline)
Ov = oval (elliptical in lateral outline)

Other seed traits:
Fleck = brown flecks on black seed coat

Other leaf traits:
Na = narrow leaflet

Other plant traits:
4sd = four-seeded pods
Sw = semiwild (visual classification based on plant and seed characteristics, between soybean and wild soybean)

**Table 3:**

Twining date:
Date that 50% of the plants have begun to twine, expressed as month (mm) and day (dd).

Flower date:
Date that 50% of the plants have begun to flower, expressed as month (mm) and day (dd).

Maturity date:
Date that 95% of the pods have reached final color, expressed as month (mm) and day (dd).

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

Leaflet length:
Length of a typical terminal leaflet from the upper third and from the lower third of plant, in millimeters.

Leaflet shape:
Ratio of width to length of a typical terminal leaflet from the upper third and from the lower third of plant.

Pod length:
Length of a typical three-seeded pod, in millimeters.

Seed weight:
Centigrams per seed based on a 200-seed sample.

SMV:
Reaction to soybean mosaic virus based on leaf symptoms. Scored 1 (moderately resistant) to 5 (highly susceptible). Data are for 1985 only.

**Table 4:**

Seed composition:
Protein and oil: Percentage of dry weight of seeds.

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

Table 1
Identification and origin information for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| PI No. | Accession name | Foreign or collector No. | Country of acquisition | Country of origin | Year introduced | Maturity group |
|---|---|---|---|---|---|---|
| 65.549 | | | China | China | 1925 | II |
| 81.762 | | | Japan | Soviet Union | 1929 | II |
| 101.404A | | T106-2 | China | China | 1932 | II |
| 101.404B | | T106-6 | China | China | 1932 | II |
| 135.624 | | | China | China | 1940 | II |
| 326.581 | | K-5820 | Soviet Union | Soviet Union | 1968 | II |
| 326.582A | | | Soviet Union | Soviet Union | 1968 | II |
| 326.582B | | | Soviet Union | Soviet Union | 1968 | I |
| 339.732 | | | South Korea | South Korea | 1969 | IV |
| 339.735A | | | South Korea | South Korea | 1969 | IV |
| 339.735B | | | South Korea | South Korea | 1969 | IV |
| 342.618A | | | Soviet Union | Soviet Union | 1969 | II |
| 342.618B | | | Soviet Union | Soviet Union | 1969 | I |
| 342.619A | | | Soviet Union | Soviet Union | 1969 | 0 |
| 342.619B | | | Soviet Union | Soviet Union | 1969 | 00 |
| 342.620A | | | Soviet Union | Soviet Union | 1969 | I |
| 342.620B | | | Soviet Union | Soviet Union | 1969 | II |
| 342.621A | | | Soviet Union | Soviet Union | 1969 | 00 |
| 342.621B | | | Soviet Union | Soviet Union | 1969 | 00 |
| 342.621C | | | Soviet Union | Soviet Union | 1969 | 00 |
| 342.622A | | | Soviet Union | Soviet Union | 1969 | I |
| 342.622B | | | Soviet Union | Soviet Union | 1969 | I |
| 366.120 | | A-2 | Japan | Japan | 1971 | IV |
| 366.121 | | A-4 | Japan | Japan | 1971 | IV |
| 366.122 | | | Japan | Japan | 1971 | IV |
| 366.123 | | A-20 | Japan | Japan | 1971 | IV |
| 378.692 | | A-21 | Japan | Japan | 1973 | IV |
| 378.702 | | | Japan | Japan | 1973 | IV |
| 391.587 | Ye sheng tou | | China | China | 1974 | II |
| 406.684 | Hidaka 1 | | Japan | Japan | 1976 | III |
| 407.029 | | J8 | Japan | Japan | 1976 | IV |
| 407.162 | | K1 | South Korea | South Korea | 1976 | IV |
| 407.166 | | K2 | South Korea | South Korea | 1976 | IV |
| 407.171 | | K2 | South Korea | South Korea | 1976 | IV |
| 407.175 | | K4 | South Korea | South Korea | 1976 | IV |
| 407.176 | | K4 | South Korea | South Korea | 1976 | IV |
| 407.182 | | K8 | South Korea | South Korea | 1976 | IV |
| 407.184 | | K29 | South Korea | South Korea | 1976 | IV |
| 407.195 | | K12 | South Korea | South Korea | 1976 | IV |
| 407.196 | | K12 | South Korea | South Korea | 1976 | IV |
| 407.200 | | K14 | South Korea | South Korea | 1976 | IV |
| 407.205 | | K17 | South Korea | South Korea | 1976 | IV |
| 407.209 | | K21 | South Korea | South Korea | 1976 | IV |
| 407.217 | | K24 | South Korea | South Korea | 1976 | IV |
| 407.275 | | K101 | South Korea | South Korea | 1976 | IV |
| 407.277 | | K101 | South Korea | South Korea | 1976 | IV |
| 407.278 | | K102 | South Korea | South Korea | 1976 | IV |

Table 2
Descriptive data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Maturity group | Flower color | Pubescence | | | Pod color | Seed coat | | Hilum color | Seed shape | Other traits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Color | Form | Density | | Luster | Color | | | Seed | Leaf | Plant |
| 65.549 | II | P | T | Sa | N | Bl | Db | Bl | Bl | Nr | | | |
| 81.762 | II | P | T | Sa | N | Bl | Db | Bl | Bl | Ov | | | |
| 101.404A | II | P | T | Sa | N | Bl | Db | Bl | Bl | Nr | | | |
| 101.404B | II | P | T | Sa | N | Bl | Db | Bl | Bl | Nr | Fleck | | |
| 135.624 | II | P | T | Sa | N | Bl | B | Bl | Bl | Ov | | | |
| 326.581 | II | P | T | Sa | N | Bl | Db | Bl | Bl | Ob | | | |
| 326.582A | II | P | T | Va | N | Bl | Lb | Bl | Bl | Ov | Fleck | | |
| 326.582B | I | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 339.732 | IV | P | T | Va | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 339.735A | IV | P | T | A | N | Bl | Lb | Bl | Bl | Ov | Fleck | | |
| 339.735B | IV | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 342.618A | II | P | T | Va | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 342.618B | I | P | T | Va | N | Bl | B | Bl | Bl | Ov | | | |
| 342.619A | 0 | P | T | A | N | Br | Db | Bl | Bl | Ob | Fleck | | Sw |
| 342.619B | 00 | P | T | Va | N | Br | Db | Bl | Bl | Ob | Fleck | | Sw |
| 342.620A | I | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 342.620B | II | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 342.621A | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 342.621B | 00 | P | T | Va | Sp | Bl | Db | Bl | Bl | Ob | | | |
| 342.621C | 00 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 342.622A | I | P | T | Va | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 342.622B | I | P | T | Va | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 366.120 | IV | P | T | A | N | Bl | D | Bl | Bl | Ob | Fleck | | |
| 366.121 | IV | P | T | Sa | N | Bl | D | Bl | Bl | Ob | Fleck | | |
| 366.122 | IV | P | T | Sa | N | Bl | D | Bl | Bl | Ob | Fleck | | |
| 366.123 | IV | P | T | Va | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 378.692 | IV | P | T | Va | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 378.702 | IV | P | T | Sa | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 391.587 | II | P | T | A | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 406.684 | III | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 407.029 | IV | P | T | A | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 407.162 | IV | P | T | Va | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 407.166 | IV | P | T | Va | N | Bl | Lb | Bl | Bl | Ov | Fleck | | |
| 407.171 | IV | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 407.175 | IV | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 407.176 | IV | P | T | Va | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 407.182 | IV | P | T | Va | N | Bl | B | Bl | Bl | Nr | Fleck | | |
| 407.184 | IV | P | T | A | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 407.195 | IV | P | T | A | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 407.196 | IV | P | T | A | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 407.200 | IV | P | T | Va | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 407.205 | IV | P | T | A | N | Bl | Lb | Bl | Bl | Ov | Fleck | | |
| 407.209 | IV | P | T | Va | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 407.217 | IV | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 407.275 | IV | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 407.277 | IV | P | T | A | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 407.278 | IV | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |

Table 3
Agronomic data for USDA wild soybean germplasm in maturity groups
000 to IV, PI 65.549 to PI 483.464

| Entry | Twining date (mmdd) | Flower date (mmdd) | Maturity date (mmdd) | Height (cm) | Leaflet length lower (mm) | Leaflet length upper (mm) | Leaflet shape lower | Leaflet shape upper | Pod length (mm) | Seed weight (cg/sd) | SMV (score) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 65.549 | 627 | 729 | 914 | 100* | 50 | 45* | 0.44 | 0.40 | 21 | 1.4 | 4 |
| 81.762 | 626 | 724 | 913 | 110 | 50 | 46 | 0.47* | 0.37 | 21 | 1.4 | 3 |
| 101.404A | 628* | 727 | 914 | 100* | 53* | 46* | 0.50 | 0.40 | 20 | 1.3 | 2 |
| 101.404B | 618 | 724 | 913 | 102* | 48 | 49* | 0.49 | 0.35* | 22 | 1.5 | 3 |
| 135.624 | 623 | 725 | 913 | 98* | 43 | 41* | 0.60 | 0.33 | 23 | 1.4 | 2 |
| 326.581 | 620 | 720 | 905 | 123* | 40 | 44* | 0.54* | 0.40 | 24 | 1.4 | 3 |
| 326.582A | 619 | 726 | 911 | 77 | 43 | 33 | 0.54* | 0.42* | 24 | 1.7 | 4 |
| 326.582B | 625 | 727 | 912 | 89* | 48* | 45* | 0.46* | 0.37 | 23 | 1.5 | 3 |
| 339.732 | 624 | 817 | 1002* | 55 | 34 | 29 | 0.65 | 0.47 | 26 | 1.6* | 5 |
| 339.735A | 625 | 818 | 1011 | 129 | 53 | 41 | 0.57 | 0.50 | 24 | 1.8* | 3 |
| 339.735B | 622 | 819 | 1009 | 81 | 50 | 44 | 0.50 | 0.41 | 27* | 1.6 | 5 |
| 342.618A | 701* | 728 | 910 | 67 | 48 | 39 | 0.50* | 0.39 | 24 | 1.6 | 4 |
| 342.618B | 624 | 725 | 912 | 79* | 44 | 41 | 0.46* | 0.34 | 22 | 1.4 | 3 |
| 342.619A | 622 | 626 | 821* | 83* | 61 | 65* | 0.50 | 0.53* | 35* | 6.1* | 1 |
| 342.619B | 623 | 625 | 821* | 58* | 66 | 68* | 0.56 | 0.41* | 39* | 6.7* | 2 |
| 342.620A | 624 | 725 | 909 | 75 | 55 | 42 | 0.40* | 0.28 | 23 | 1.3 | 3 |
| 342.620B | 619 | 724 | 912 | 71 | 54 | 49* | 0.47* | 0.32 | 22 | 1.6 | 4 |
| 342.621A | 627* | 625 | 813* | 27 | 40 | 40 | 0.46 | 0.28 | 26 | 1.7 | 5 |
| 342.621B | 626 | 627 | 811 | 45* | 43 | 44* | 0.37 | 0.25 | 24 | 2.0* | 4 |
| 342.621C | 623 | 627 | 812 | 55* | 53* | 61* | 0.38 | 0.29 | 26* | 2.1* | 4 |
| 342.622A | 624 | 717* | 830 | 79* | 40 | 43* | 0.44 | 0.31 | 22 | 1.3 | 4 |
| 342.622B | 620 | 709 | 828 | 54 | 33 | 23 | 0.39 | 0.30 | 24 | 1.1 | 4 |
| 366.120 | 619 | 821* | 1012* | 126 | 57 | 48 | 0.55* | 0.38* | 28 | 2.0 | 4 |
| 366.121 | 619 | 817 | 1012* | 146 | 61* | 46 | 0.49 | 0.39 | 27 | 1.8* | 4 |
| 366.122 | 618 | 825* | 1011* | 135* | 52 | 41 | 0.46 | 0.40 | 28 | 1.7* | 4 |
| 366.123 | 625 | 817 | 1005* | 117* | 52 | 41 | 0.47* | 0.37 | 24 | 1.5* | 4 |
| 378.692 | 621 | 816 | 1006* | 117* | 45* | 44 | 0.50 | 0.36 | 25 | 1.5 | 4 |
| 378.702 | 623 | 818 | 1009* | 94* | 55 | 45 | 0.58 | 0.34 | 24 | 2.2 | 4 |
| 391.587 | 622 | 730 | 912 | 66* | 43 | 43 | 0.53* | 0.37 | 22 | 1.4 | 4 |
| 406.684 | 625 | 805* | 1002 | 139* | 65* | 52* | 0.42 | 0.43 | 33 | 2.3* | 3 |
| 407.029 | 623 | 815 | 1007* | 79 | 47 | 38 | 0.50* | 0.37 | 27 | 2.0 | 4 |
| 407.162 | 705 | 820 | 1009 | 91 | 45 | 40 | 0.66* | 0.39 | 27 | 2.4 | 3 |
| 407.166 | 704 | 818 | 1007* | 113* | 53 | 43 | 0.56 | 0.51 | 26 | 1.9 | 3 |
| 407.171 | 704 | 821 | 1009 | 73 | 57 | 45 | 0.58 | 0.48 | 26 | 1.7 | 4 |
| 407.175 | 705 | 821 | 1008* | 60 | 45 | 44 | 0.51* | 0.33 | 23 | 1.7 | 4 |
| 407.176 | 629 | 820 | 1008* | 73* | 51 | 47* | 0.57 | 0.38 | 25 | 1.9 | 3 |
| 407.182 | 629 | 818 | 1010 | 98* | 61 | 46 | 0.44 | 0.40 | 23 | 1.6 | 3 |
| 407.184 | 630* | 819 | 1008* | 80* | 49 | 42 | 0.50 | 0.34 | 26 | 1.9 | 4 |
| 407.195 | 625 | 814 | 1007* | 99 | 57 | 44 | 0.65* | 0.37 | 26 | 2.1 | 4 |
| 407.196 | 623 | 814 | 1007* | 86* | 51 | 35 | 0.48 | 0.45 | 29 | 1.9 | 4 |
| 407.200 | 706 | 818 | 1008* | 68* | 45 | 35 | 0.61 | 0.53 | 24 | 2.1* | 3 |
| 407.205 | 623 | 817 | 1007* | 91 | 45 | 35 | 0.64* | 0.42 | 23 | 2.1 | 4 |
| 407.209 | 702 | 821 | 1010* | 79 | 45 | 37 | 0.54 | 0.47 | 26 | 2.3 | 3 |
| 407.217 | 706 | 820 | 1006* | 61 | 52* | 55* | 0.45 | 0.39* | 26 | 1.9 | 4 |
| 407.275 | 701 | 817 | 1011 | 102* | 52 | 49* | 0.56* | 0.38 | 24 | 1.6 | 3 |
| 407.277 | 622 | 818 | 1009 | 144* | 67 | 52* | 0.59 | 0.46 | 25 | 1.9 | 4 |
| 407.278 | 623 | 817 | 1010 | 103* | 49 | 40 | 0.56 | 0.47 | 27 | 2.2 | 4 |

Table 4
Seed composition data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Maturity group | Protein (%) | Oil (%) | Palmitic (%) | Stearic (%) | Oleic (%) | Linoleic (%) | Linolenic (%) | Other (%) |
|---|---|---|---|---|---|---|---|---|---|
| 65.549 | II | 51.4 | 8.7 | 14.1 | 2.6 | 8.9 | 55.3 | 19.2 | 0.0 |
| 81.762 | II | 51.9 | 8.0 | 14.3 | 2.6 | 9.0 | 55.5 | 18.6 | 0.0 |
| 101.404A | II | 50.9 | 8.3 | 14.2 | 2.8 | 9.7 | 55.3 | 18.1 | 0.0 |
| 101.404B | II | 50.9 | 8.3 | 14.0 | 2.7 | 10.0 | 55.1 | 18.2 | 0.1 |
| 135.624 | II | 51.1 | 8.7 | 12.9 | 2.8 | 9.5 | 54.8 | 20.0 | 0.1 |
| 326.581 | II | 49.7 | 8.2 | 12.3 | 3.2 | 13.5 | 53.2 | 17.9 | 0.1 |
| 326.582A | II | 48.6 | 10.2 | 12.9 | 2.8 | 15.4 | 53.8 | 15.3 | 0.0 |
| 326.582B | I | 48.7 | 9.8 | 13.5 | 2.8 | 11.2 | 55.8 | 16.8 | 0.1 |
| 339.732 | IV | 50.5 | 8.1 | 14.5 | 3.0 | 11.5 | 54.3 | 16.8 | 0.1 |
| 339.735A | IV | 49.4 | 9.3 | 14.1 | 3.2 | 11.6 | 54.6 | 16.7 | 0.0 |
| 339.735B | IV | 47.5 | 9.2 | 13.7 | 3.0 | 12.7 | 54.7 | 16.0 | 0.0 |
| 342.618A | II | 47.8 | 10.6 | 13.7 | 3.0 | 11.1 | 54.7 | 17.6 | 0.1 |
| 342.618B | I | 49.0 | 9.9 | 13.4 | 2.7 | 11.0 | 55.7 | 17.2 | 0.0 |
| 342.619A | 0 | 43.4 | 16.5 | 11.9 | 3.7 | 13.3 | 59.5 | 11.6 | 0.1 |
| 342.619B | 00 | 45.1 | 16.0 | 12.1 | 3.7 | 13.7 | 59.6 | 11.0 | 0.1 |
| 342.620A | I | 49.3 | 9.1 | 13.2 | 2.7 | 9.0 | 52.5 | 22.7 | 0.0 |
| 342.620B | II | 51.6 | 8.1 | 13.4 | 3.2 | 11.8 | 54.9 | 16.7 | 0.1 |
| 342.621A | 00 | 46.3 | 9.9 | 12.7 | 2.6 | 15.0 | 56.0 | 13.8 | 0.1 |
| 342.621B | 00 | 46.7 | 11.5 | 12.5 | 2.6 | 11.8 | 57.5 | 15.5 | 0.1 |
| 342.621C | 00 | 48.1 | 11.4 | 12.5 | 2.8 | 12.9 | 57.0 | 14.9 | 0.1 |
| 342.622A | I | 49.0 | 8.3 | 13.8 | 3.5 | 11.6 | 52.3 | 18.8 | 0.1 |
| 342.622B | I | 46.3 | 8.8 | 13.2 | 2.8 | 11.3 | 56.7 | 16.1 | 0.0 |
| 366.120 | IV | 51.2 | 8.2 | 14.3 | 2.8 | 10.5 | 54.3 | 19.1 | 0.0 |
| 366.121 | IV | 52.5 | 6.5 | 13.4 | 2.6 | 8.3 | 52.6 | 23.2 | 0.1 |
| 366.122 | IV | 52.2 | 6.8 | 14.1 | 3.0 | 8.8 | 52.2 | 22.2 | 0.1 |
| 366.123 | IV | 51.7 | 8.0 | 13.6 | 3.2 | 10.0 | 53.9 | 19.5 | 0.0 |
| 378.692 | IV | 52.8 | 7.0 | 13.4 | 3.2 | 9.9 | 53.6 | 20.0 | 0.1 |
| 378.702 | IV | 51.2 | 8.3 | 13.0 | 2.7 | 10.7 | 54.9 | 18.7 | 0.1 |
| 391.587 | II | 48.4 | 9.4 | 13.3 | 3.2 | 11.9 | 54.9 | 16.8 | 0.1 |
| 406.684 | III | 51.1 | 8.7 | 12.9 | 3.0 | 11.8 | 55.7 | 16.6 | 0.0 |
| 407.029 | IV | 50.4 | 8.5 | 13.8 | 3.2 | 10.9 | 54.1 | 18.2 | 0.1 |
| 407.162 | IV | 50.8 | 9.4 | 13.8 | 3.0 | 12.8 | 55.6 | 14.8 | 0.1 |
| 407.166 | IV | 50.1 | 9.7 | 13.9 | 3.0 | 11.8 | 55.7 | 15.9 | 0.0 |
| 407.171 | IV | 48.2 | 8.7 | 15.4 | 2.7 | 10.4 | 54.1 | 17.5 | 0.1 |
| 407.175 | IV | 49.3 | 9.7 | 12.6 | 3.0 | 12.5 | 57.8 | 14.2 | 0.0 |
| 407.176 | IV | 48.9 | 9.2 | 14.0 | 2.9 | 11.5 | 54.9 | 16.7 | 0.1 |
| 407.182 | IV | 49.1 | 9.2 | 13.7 | 2.7 | 11.5 | 53.5 | 18.7 | 0.0 |
| 407.184 | IV | 50.1 | 8.3 | 13.5 | 2.6 | 11.8 | 56.6 | 15.5 | 0.0 |
| 407.195 | IV | 50.9 | 8.7 | 14.3 | 2.9 | 11.0 | 55.7 | 16.2 | 0.1 |
| 407.196 | IV | 50.2 | 9.4 | 13.8 | 3.1 | 10.8 | 56.4 | 16.0 | 0.1 |
| 407.200 | IV | 49.4 | 10.1 | 12.9 | 2.4 | 12.1 | 57.1 | 15.7 | 0.1 |
| 407.205 | IV | 50.3 | 9.5 | 12.3 | 2.7 | 11.6 | 57.4 | 16.1 | 0.1 |
| 407.209 | IV | 49.0 | 10.9 | 13.5 | 2.4 | 13.1 | 55.7 | 15.5 | 0.0 |
| 407.217 | IV | 49.3 | 8.9 | 14.0 | 2.5 | 11.4 | 54.7 | 17.6 | 0.0 |
| 407.275 | IV | 49.1 | 9.2 | 13.3 | 2.5 | 11.2 | 54.6 | 18.6 | 0.0 |
| 407.277 | IV | 50.1 | 8.5 | 14.1 | 2.7 | 11.8 | 53.3 | 18.2 | 0.0 |
| 407.278 | IV | 48.0 | 10.6 | 12.2 | 2.7 | 13.9 | 57.0 | 14.2 | 0.0 |

Table 1
Identification and origin information for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| PI No. | Accession name | Foreign or collector No. | Country of acquisition | Country of origin | Year introduced | Maturity group |
|---|---|---|---|---|---|---|
| 407.288 | | W1 | China | China | 1976 | II |
| 407.289 | | W1 | China | China | 1976 | II |
| 407.290 | | W2 | China | China | 1976 | II |
| 407.291 | | W2 | China | China | 1976 | II |
| 407.292 | | W3 | China | China | 1976 | II |
| 407.293 | | W3 | China | China | 1976 | II |
| 407.294 | | W3 | China | China | 1976 | II |
| 407.295 | | W3 | China | China | 1976 | II |
| 407.296 | | W4 | China | China | 1976 | II |
| 407.297 | | W4 | China | China | 1976 | II |
| 407.298 | | W4 | China | China | 1976 | II |
| 407.299 | | W4 | China | China | 1976 | II |
| 407.320 | | | South Korea | South Korea | 1976 | IV |
| 407.321 | | | South Korea | South Korea | 1976 | IV |
| 423.988 | J-077630 | F7 | Soviet Union | Soviet Union | 1978 | 00 |
| 423.989A | J-077631 | F8 | Soviet Union | Soviet Union | 1978 | 00 |
| 423.989B | J-077631 | F8 | Soviet Union | Soviet Union | 1978 | 0 |
| 423.990A | J-077632 | F9 | Soviet Union | Soviet Union | 1978 | 0 |
| 423.990B | J-077632 | F9 | Soviet Union | Soviet Union | 1978 | 0 |
| 423.991 | J-077633 | F10 | Soviet Union | Soviet Union | 1978 | 0 |
| 423.992 | J-077634 | F11 | Soviet Union | Soviet Union | 1978 | 00 |
| 423.993 | J-077635 | F12 | Soviet Union | Soviet Union | 1978 | 00 |
| 423.994 | J-077636 | F13 | Soviet Union | Soviet Union | 1978 | 0 |
| 423.995 | J-077637 | F14 | Soviet Union | Soviet Union | 1978 | 0 |
| 423.996 | J-077638 | F15 | Soviet Union | Soviet Union | 1978 | 00 |
| 423.997 | J-077639 | F16 | Soviet Union | Soviet Union | 1978 | 00 |
| 423.998 | J-077640 | F17 | Soviet Union | Soviet Union | 1978 | 00 |
| 423.999A | J-077641 | F18 | Soviet Union | Soviet Union | 1978 | 00 |
| 423.999B | J-077641 | F18 | Soviet Union | Soviet Union | 1978 | 00 |
| 424.000 | J-077642 | F19 | Soviet Union | Soviet Union | 1978 | 00 |
| 424.001 | J-077643 | F20 | Soviet Union | Soviet Union | 1978 | 00 |
| 424.002 | J-077644 | F21 | Soviet Union | Soviet Union | 1978 | 00 |
| 424.003 | J-077645 | F22 | Soviet Union | Soviet Union | 1978 | 00 |
| 424.004A | | 74001 | South Korea | South Korea | 1978 | II |
| 424.004B | | 74001 | South Korea | South Korea | 1978 | II |
| 424.005 | | 74002 | South Korea | South Korea | 1978 | IV |
| 424.006A | | 74004 | South Korea | South Korea | 1978 | IV |
| 424.006B | | 74004 | South Korea | South Korea | 1978 | IV |
| 424.032 | | 74035 | South Korea | South Korea | 1978 | IV |
| 424.033 | | 74036 | South Korea | South Korea | 1978 | IV |
| 424.034 | | 74037 | South Korea | South Korea | 1978 | IV |
| 424.036 | | 74039 | South Korea | South Korea | 1978 | IV |
| 424.038A | | 74053 | South Korea | South Korea | 1978 | IV |
| 424.051A | | 74066 | South Korea | South Korea | 1978 | IV |
| 424.051B | | 74066 | South Korea | South Korea | 1978 | IV |
| 424.063 | | 74043 | South Korea | South Korea | 1978 | IV |
| 424.067 | | 74048 | South Korea | South Korea | 1978 | IV |

Table 2
Descriptive data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Maturity group | Flower color | Pubescence | | | Pod color | Seed coat | | Hilum color | Seed shape | Other traits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Color | Form | Density | | Luster | Color | | | Seed | Leaf | Plant |
| 407.288 | II | P | T | Va | N | Bl | B | Bl | Bl | Ov | | | |
| 407.289 | II | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 407.290 | II | P | T | Sa | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 407.291 | II | P | T | Sa | N | Bl | Db | Bl | Bl | Ob | Fleck | | |
| 407.292 | II | P | T | Va | N | Bl | B | Bl | Bl | Ov | | | |
| 407.293 | II | P | T | Va | N | Bl | Db | Bl | Bl | Ov | | | |
| 407.294 | II | P | T | Sa | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 407.295 | II | P | T | Va | N | Bl | B | Bl | Bl | Ov | | | |
| 407.296 | II | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 407.297 | II | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 407.298 | II | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 407.299 | II | P | T | Va | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 407.320 | IV | P | T | A | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 407.321 | IV | P | T | A | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 423.988 | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.989A | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.989B | 0 | P | T | Sa | N | Bl | I | Bl | Bl | Ob | Fleck | | |
| 423.990A | 0 | P | T | A | N | Br | Db | Bl | Bl | Ob | Fleck | | |
| 423.990B | 0 | P | T | A | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.991 | 0 | P | T | A | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.992 | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.993 | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.994 | 0 | P | T | A | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.995 | 0 | P | T | A | N | Bl | B | Bl | Bl | Ob | | | |
| 423.996 | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.997 | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.998 | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.999A | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 423.999B | 00 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 424.000 | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 424.001 | 00 | P | T | A | N | Dbr | D | Bl | Bl | Ov | Fleck | | |
| 424.002 | 00 | P | T | Va | N | Bl | B | Bl | Bl | Ov | | | 4sd |
| 424.003 | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 424.004A | II | P | T | E | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 424.004B | II | P | T | E | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 424.005 | IV | W | T | A | N | Bl | B | Gn | Bl | Ob | | | Sw |
| 424.006A | IV | P | T | Sa | N | Bl | B | Bl | Br | Ob | Fleck | | |
| 424.006B | IV | P | T | Sa | N | Bl | B | Bl | Br | Ob | Fleck | | |
| 424.032 | IV | P | T | A | N | Bl | Db | Bl | Bl | Ob | Fleck | | |
| 424.033 | IV | P | T | A | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 424.034 | IV | P | T | A | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 424.036 | IV | P | T | A | N | Bl | Lb | Bl | Bl | Ov | Fleck | | |
| 424.038A | IV | P | T | A | N | Bl | Lb | Bl | Bl | Ov | Fleck | | |
| 424.051A | IV | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 424.051B | IV | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 424.063 | IV | P | T | Va | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 424.067 | IV | P | T | A | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |

Table 3
Agronomic data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Twining date (mmdd) | Flower date (mmdd) | Maturity date (mmdd) | Height (cm) | Leaflet length lower (mm) | Leaflet length upper (mm) | Leaflet shape lower | Leaflet shape upper | Pod length (mm) | Seed weight (cg/sd) | SMV (score) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 407.288 | 628* | 725* | 910 | 54 | 38 | 39* | 0.43* | 0.42 | 22 | 1.2 | 4 |
| 407.289 | 624 | 724 | 907 | 118* | 42 | 46 | 0.45* | 0.27 | 22 | 1.2 | 4 |
| 407.290 | 625 | 725 | 910 | 74* | 45 | 44 | 0.48* | 0.30 | 25 | 2.0 | 3 |
| 407.291 | 626 | 721 | 908 | 63 | 39 | 39 | 0.47* | 0.35 | 22 | 1.8 | 2 |
| 407.292 | 628 | 726* | 910 | 62* | 35 | 38 | 0.54* | 0.33* | 23 | 1.6 | 4 |
| 407.293 | 626 | 727* | 909* | 88* | 45 | 43* | 0.35* | 0.29 | 23* | 1.7* | 4 |
| 407.294 | 619 | 722 | 906 | 70 | 29 | 33* | 0.56* | 0.40 | 22 | 1.7 | 4 |
| 407.295 | 627* | 727 | 909 | 86 | 45 | 35 | 0.50* | 0.38* | 21 | 1.6 | 3 |
| 407.296 | 625 | 805 | 914 | 91* | 48 | 54* | 0.45* | 0.28 | 22 | 1.3 | 3 |
| 407.297 | 624 | 718* | 914 | 80* | 49 | 43* | 0.52* | 0.41* | 21 | 1.2 | 3 |
| 407.298 | 702* | 724* | 917 | 79* | 48 | 51* | 0.46* | 0.32 | 22 | 1.2 | 2 |
| 407.299 | 626 | 727 | 913 | 76 | 54 | 48* | 0.40 | 0.32 | 19 | 1.1 | 3 |
| 407.320 | 703 | 823 | 1009* | 86 | 53 | 43 | 0.63* | 0.33 | 26 | 2.0 | 4 |
| 407.321 | 705* | 822 | 1012 | 73 | 51 | 44 | 0.46* | 0.34 | 25 | 1.5 | 3 |
| 423.988 | 621 | 625* | 811* | 56* | 56 | 59* | 0.36* | 0.22 | 24 | 2.1* | 4 |
| 423.989A | 620 | 623 | 812* | 69* | 47 | 55* | 0.38 | 0.23 | 24 | 2.1* | 3 |
| 423.989B | 627* | 701* | 824* | 60* | 43 | 42* | 0.44 | 0.34 | 26* | 2.0 | 4 |
| 423.990A | 629 | 701* | 818 | 55* | 41* | 39 | 0.43 | 0.21 | 24 | 1.7* | 4 |
| 423.990B | 625 | 702 | 816 | 56* | 28 | 36* | 0.44 | 0.28* | 23 | 1.4 | 4 |
| 423.991 | 625 | 701 | 817 | 38 | 31 | 32* | 0.41 | 0.40* | 22 | 1.4 | 4 |
| 423.992 | 625 | 626 | 811* | 47 | 41 | 49* | 0.41 | 0.28 | 25 | 2.0* | 4 |
| 423.993 | 628* | 627* | 814* | 38 | 40 | 37 | 0.47 | 0.22 | 23 | 1.5 | 5 |
| 423.994 | 623 | 701 | 816 | 68* | 38 | 36* | 0.43 | 0.29 | 24 | 1.5 | 4 |
| 423.995 | 619 | 625 | 812* | 60* | 40 | 50* | 0.44 | 0.17 | 22 | 1.9 | 4 |
| 423.996 | 620 | 624* | 813* | 56 | 42 | 46* | 0.39 | 0.29 | 24 | 1.9 | 4 |
| 423.997 | 621 | 625 | 810* | 55* | 45 | 56* | 0.43 | 0.25 | 22 | 1.9* | 4 |
| 423.998 | 624 | 626 | 811* | 59* | 41 | 54* | 0.43 | 0.32 | 24 | 1.9* | 5 |
| 423.999A | 628 | 628 | 812* | 42 | 45 | 56* | 0.45 | 0.29 | 24 | 1.8* | 4 |
| 423.999B | 622 | 626 | 813* | 55* | 43 | 41* | 0.47 | 0.30* | 28 | 1.8* | 5 |
| 424.000 | 626* | 628 | 814* | 28 | 38 | 43 | 0.48 | 0.29 | 24 | 1.9* | 4 |
| 424.001 | 629* | 630* | 813* | 42 | 42 | 49* | 0.49 | 0.32 | 27* | 3.3* | 4 |
| 424.002 | 619 | 629 | 812 | 53* | 40 | 44* | 0.44* | 0.26 | 23 | 1.6 | 4 |
| 424.003 | 620 | 626 | 812 | 47* | 45 | 52* | 0.41 | 0.24 | 24 | 1.9* | 4 |
| 424.004A | 625 | 816 | 925 | 127* | 60 | 54* | 0.55* | 0.43 | 26 | 2.1 | 4 |
| 424.004B | 625 | 814 | 925 | 120* | 59 | 54* | 0.54* | 0.39 | 26 | 1.8 | 2 |
| 424.005 | 717* | 730* | 1006 | 81 | 83 | 62 | 0.41 | 0.32 | 30 | 3.7* | 2 |
| 424.006A | 702 | 830 | 1011* | 121 | 49 | 42 | 0.65* | 0.57* | 26 | 1.6 | 4 |
| 424.006B | 630 | 831 | 1011* | 121 | 56 | 40 | 0.57 | 0.46 | 27 | 1.5 | 2 |
| 424.032 | 702 | 820 | 1008* | 74 | 47 | 36 | 0.61 | 0.47 | 24 | 2.0 | 4 |
| 424.033 | 704 | 822 | 1006* | 62 | 39 | 31 | 0.74* | 0.42 | 24 | 1.8 | 5 |
| 424.034 | 630 | 823 | 1009 | 91* | 52 | 38 | 0.68 | 0.46 | 25 | 1.8 | 4 |
| 424.036 | 630 | 820 | 1008* | 93 | 51 | 37 | 0.63* | 0.41 | 25 | 1.9 | 4 |
| 424.038A | 707 | 824 | 1009 | 67 | 45 | 38 | 0.71 | 0.44 | 25 | 1.8 | 4 |
| 424.051A | 626 | 819 | 1009* | 84 | 41 | 34 | 0.64* | 0.43 | 26 | 2.3 | 4 |
| 424.051B | 623 | 817 | 1006* | 82* | 43 | 36 | 0.63 | 0.47 | 25 | 2.6 | 4 |
| 424.063 | 702 | 822 | 1011 | 104* | 48 | 35 | 0.55 | 0.45 | 24 | 1.7 | 3 |
| 424.067 | 629 | 818 | 1011 | 83 | 54 | 44 | 0.55 | 0.45 | 25 | 1.8 | 4 |

Table 4
Seed composition data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Maturity group | Protein (%) | Oil (%) | Palmitic (%) | Stearic (%) | Oleic (%) | Linoleic (%) | Linolenic (%) | Other (%) |
|---|---|---|---|---|---|---|---|---|---|
| 407.288 | II | 49.8 | 8.9 | 13.1 | 3.1 | 11.1 | 55.3 | 17.4 | 0.1 |
| 407.289 | II | 49.6 | 9.5 | 13.3 | 2.9 | 12.1 | 54.7 | 17.0 | 0.1 |
| 407.290 | II | 49.9 | 10.0 | 14.0 | 2.9 | 13.3 | 53.6 | 16.3 | 0.1 |
| 407.291 | II | 49.0 | 10.6 | 13.4 | 3.1 | 15.1 | 53.6 | 14.8 | 0.1 |
| 407.292 | II | 48.8 | 10.1 | 12.7 | 3.0 | 14.7 | 54.3 | 15.3 | 0.1 |
| 407.293 | II | 49.1 | 10.2 | 13.1 | 2.8 | 12.1 | 54.5 | 17.5 | 0.1 |
| 407.294 | II | 51.2 | 8.7 | 13.5 | 2.9 | 12.2 | 53.8 | 17.7 | 0.1 |
| 407.295 | II | 48.4 | 10.4 | 13.5 | 2.9 | 11.8 | 55.4 | 16.5 | 0.1 |
| 407.296 | II | 47.9 | 9.0 | 12.7 | 2.8 | 11.2 | 55.6 | 17.9 | 0.0 |
| 407.297 | II | 49.6 | 8.6 | 12.9 | 2.8 | 10.3 | 56.1 | 18.0 | 0.1 |
| 407.298 | II | 48.3 | 9.3 | 12.7 | 2.9 | 10.7 | 56.2 | 17.5 | 0.1 |
| 407.299 | II | 48.8 | 8.9 | 13.2 | 3.0 | 12.6 | 54.1 | 17.2 | 0.1 |
| 407.320 | IV | 49.5 | 9.8 | 13.4 | 2.9 | 13.9 | 55.9 | 13.9 | 0.2 |
| 407.321 | IV | 49.7 | 9.4 | 13.8 | 3.0 | 11.2 | 54.7 | 17.3 | 0.1 |
| 423.988 | 00 | 48.4 | 11.0 | 11.5 | 3.3 | 16.0 | 56.6 | 12.6 | 0.1 |
| 423.989A | 00 | 48.1 | 10.9 | 11.5 | 3.2 | 15.2 | 57.7 | 12.6 | 0.1 |
| 423.989B | 0 | 47.1 | 11.2 | 12.1 | 3.3 | 12.2 | 58.3 | 14.1 | 0.1 |
| 423.990A | 0 | 47.6 | 10.0 | 12.8 | 3.3 | 12.2 | 57.0 | 14.8 | 0.0 |
| 423.990B | 0 | 45.4 | 8.2 | 13.0 | 3.7 | 11.5 | 56.7 | 15.3 | 0.0 |
| 423.991 | 0 | 49.0 | 9.1 | 13.0 | 3.4 | 11.9 | 56.7 | 15.3 | 0.0 |
| 423.992 | 00 | 47.6 | 11.3 | 12.6 | 2.9 | 12.8 | 56.4 | 15.3 | 0.1 |
| 423.993 | 00 | 46.5 | 11.0 | 11.8 | 3.7 | 18.3 | 55.3 | 11.0 | 0.0 |
| 423.994 | 0 | 48.5 | 9.8 | 13.0 | 3.4 | 11.3 | 56.9 | 15.5 | 0.1 |
| 423.995 | 0 | 47.7 | 11.2 | 13.6 | 3.8 | 17.4 | 54.0 | 11.2 | 0.1 |
| 423.996 | 00 | 48.3 | 11.0 | 11.7 | 3.1 | 14.3 | 57.8 | 13.2 | 0.1 |
| 423.997 | 00 | 48.0 | 10.7 | 12.5 | 2.7 | 13.0 | 56.6 | 15.2 | 0.1 |
| 423.998 | 00 | 46.9 | 11.0 | 12.6 | 2.8 | 12.6 | 57.2 | 15.0 | 0.1 |
| 423.999A | 00 | 47.9 | 10.2 | 12.6 | 2.7 | 11.8 | 57.4 | 15.7 | 0.1 |
| 423.999B | 00 | 47.5 | 10.2 | 12.6 | 2.7 | 11.4 | 57.7 | 15.7 | 0.1 |
| 424.000 | 00 | 47.4 | 9.4 | 12.8 | 2.7 | 13.0 | 56.7 | 14.7 | 0.1 |
| 424.001 | 00 | 44.4 | 14.1 | 13.0 | 3.1 | 20.9 | 51.7 | 11.4 | 0.1 |
| 424.002 | 00 | 49.3 | 10.4 | 12.9 | 3.0 | 13.5 | 55.1 | 15.7 | 0.0 |
| 424.003 | 00 | 46.7 | 11.0 | 13.4 | 3.4 | 17.4 | 54.7 | 11.2 | 0.1 |
| 424.004A | II | 49.9 | 9.2 | 13.9 | 2.9 | 13.2 | 52.9 | 17.2 | 0.1 |
| 424.004B | II | 50.1 | 9.1 | 13.7 | 2.7 | 11.1 | 54.4 | 18.1 | 0.1 |
| 424.005 | IV | 46.3 | 12.6 | 14.4 | 3.4 | 12.7 | 56.5 | 13.1 | 0.1 |
| 424.006A | IV | 50.3 | 9.0 | 14.3 | 3.0 | 10.1 | 52.7 | 20.0 | 0.0 |
| 424.006B | IV | 50.9 | 8.9 | 13.6 | 2.5 | 8.9 | 52.6 | 22.5 | 0.0 |
| 424.032 | IV | 52.0 | 8.5 | 15.3 | 3.1 | 11.0 | 53.8 | 17.0 | 0.0 |
| 424.033 | IV | 52.7 | 8.7 | 15.1 | 3.2 | 10.9 | 53.9 | 17.0 | 0.0 |
| 424.034 | IV | 50.6 | 9.3 | 14.1 | 3.1 | 11.7 | 54.7 | 16.5 | 0.0 |
| 424.036 | IV | 49.5 | 9.7 | 14.0 | 3.0 | 12.6 | 54.2 | 16.2 | 0.0 |
| 424.038A | IV | 49.1 | 10.7 | 12.5 | 3.1 | 11.7 | 59.9 | 13.0 | 0.0 |
| 424.051A | IV | 49.9 | 9.3 | 14.0 | 3.2 | 12.9 | 55.6 | 14.5 | 0.0 |
| 424.051B | IV | 49.8 | 9.7 | 13.9 | 3.2 | 13.5 | 55.6 | 14.0 | 0.0 |
| 424.063 | IV | 49.8 | 9.2 | 14.1 | 3.1 | 11.7 | 54.7 | 16.6 | 0.0 |
| 424.067 | IV | 50.8 | 9.5 | 14.6 | 3.1 | 15.7 | 50.9 | 15.7 | 0.0 |

Table 1
Identification and origin information for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| PI No. | Accession name | Foreign or collector No. | Country of acquisition | Country of origin | Year introduced | Maturity group |
|---|---|---|---|---|---|---|
| 424.068 | | 74049 | South Korea | South Korea | 1978 | IV |
| 424.071 | | 74052 | South Korea | South Korea | 1978 | IV |
| 424.079 | | 74079 | South Korea | South Korea | 1978 | IV |
| 424.088 | | 74088 | South Korea | South Korea | 1978 | IV |
| 424.091A | | 74091 | South Korea | South Korea | 1978 | IV |
| 424.091B | | 74091 | South Korea | South Korea | 1978 | IV |
| 424.116 | | 74116 | South Korea | South Korea | 1978 | IV |
| 440.913A | | | China | China | 1980 | II |
| 440.913B | | | China | China | 1980 | II |
| 447.003A | | 50204 | China | China | 1980 | 0 |
| 447.003B | | 50204 | China | China | 1980 | I |
| 447.004 | | 50368 | China | China | 1980 | III |
| 458.535 | | | China | China | 1981 | 0 |
| 458.536 | | | China | China | 1981 | 0 |
| 458.537A | | | China | China | 1981 | 000 |
| 458.537B | | | China | China | 1981 | 000 |
| 458.538 | | | China | China | 1981 | 000 |
| 458.539A | | | China | China | 1981 | 000 |
| 458.539B | | | China | China | 1981 | 0 |
| 458.540A | | | China | China | 1981 | 0 |
| 458.540B | | | China | China | 1981 | 0 |
| 458.540C | | | China | China | 1981 | 0 |
| 458.540D | | | China | China | 1981 | 0 |
| 464.866A | | Long 79-0009 | China | China | 1982 | 00 |
| 464.866B | | Long 79-0009 | China | China | 1982 | 00 |
| 464.867 | | Long 79-0304 | China | China | 1982 | 000 |
| 464.868A | | Long 79-0402 | China | China | 1982 | 00 |
| 464.868B | | Long 79-0402 | China | China | 1982 | 00 |
| 464.869A | | Long 79-1809 | China | China | 1982 | 0 |
| 464.869B | | Long 79-1809 | China | China | 1982 | 0 |
| 464.870 | | Long 79-3313 | China | China | 1982 | 000 |
| 464.871A | | Long 79-5801 | China | China | 1982 | 0 |
| 464.871B | | Long 79-5801 | China | China | 1982 | 0 |
| 464.871C | | Long 79-5801 | China | China | 1982 | 0 |
| 464.889A | | Gong di 685 | China | China | 1982 | II |
| 464.889B | | Gong di 685 | China | China | 1982 | II |
| 464.889C | | Gong di 685 | China | China | 1982 | II |
| 464.890A | | Gong di 2019 | China | China | 1982 | II |
| 464.890B | | Gong di 2019 | China | China | 1982 | I |
| 464.891A | | Gong di 2022 | China | China | 1982 | I |
| 464.891B | | Gong di 2022 | China | China | 1982 | II |
| 464.891C | | Gong di 2022 | China | China | 1982 | II |
| 464.892 | | Gong di 2024 | China | China | 1982 | I |
| 464.925A | | LS-001 | China | China | 1982 | 0 |
| 464.925B | | LS-001 | China | China | 1982 | 0 |
| 464.925C | | LS-001 | China | China | 1982 | I |
| 464.926 | | LS-004 | China | China | 1982 | 000 |

Table 2
Descriptive data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Maturity group | Flower color | Pubescence | | | Pod color | Seed coat | | Hilum color | Seed shape | Other traits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Color | Form | Density | | Luster | Color | | | Seed | Leaf | Plant |
| 424.068 | IV | P | T | A | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 424.071 | IV | P | T | A | N | Bl | B | Bl | Bl | Ob | | | |
| 424.079 | IV | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 424.088 | IV | P | T | A | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 424.091A | IV | P | T | Va | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 424.091B | IV | P | T | A | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 424.116 | IV | P | T | Sa | N | Bl | Lb | Bl | Bl | Ob | Fleck | | |
| 440.913A | II | P | T | Va | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 440.913B | II | P | T | Va | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 447.003A | 0 | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 447.003B | I | P | T | Va | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 447.004 | III | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 458.535 | 0 | P | T | A | N | Bl | B | Bl | Bl | Ob | | | |
| 458.536 | 0 | P | T | E | N | Bl | B | Bl | Bl | Ov | | | |
| 458.537A | 000 | P | T | Va | N | Bl | Lb | Bl | Bl | Ob | | | |
| 458.537B | 000 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 458.538 | 000 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 458.539A | 000 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 458.539B | 0 | P | T | A | N | Bl | B | Bl | Bl | Ob | | | |
| 458.540A | 0 | P | T | Sa | N | Bl | Db | Bl | Bl | Ob | | | |
| 458.540B | 0 | P | T | Sa | N | Bl | Db | Bl | Bl | Ov | | | |
| 458.540C | 0 | P | T | Sa | N | Bl | Db | Bl | Bl | Ov | | | |
| 458.540D | 0 | P | T | Sa | N | Bl | B | Bl | Bl | Ov | | | 4sd |
| 464.866A | 00 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 464.866B | 00 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 464.867 | 000 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 464.868A | 00 | P | T | Sa | N | Bl | B | Bl | Bl | Ov | | | |
| 464.868B | 00 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 464.869A | 0 | P | T | E | N | Bl | B | Bl | Bl | Ov | | | |
| 464.869B | 0 | P | T | E | N | Bl | Db | Bl | Bl | Ov | | | |
| 464.870 | 000 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 464.871A | 0 | P | T | Sa | N | Bl | B | Bl | Bl | Ov | | | |
| 464.871B | 0 | P | T | Sa | N | Bl | B | Bl | Bl | Ov | | | |
| 464.871C | 0 | P | T | Sa | N | Bl | B | Bl | Bl | Ov | | | |
| 464.889A | II | P | T | Va | N | Bl | Db | Bl | Bl | Ov | | | |
| 464.889B | II | P | T | Va | N | Bl | Db | Bl | Bl | Ov | | | |
| 464.889C | II | P | T | Va | N | Bl | Db | Bl | Bl | Ov | | | |
| 464.890A | II | P | T | Sa | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 464.890B | I | P | T | Sa | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 464.891A | I | P | T | Va | N | Bl | B | Bl | Bl | Ov | | | |
| 464.891B | II | P | T | E | N | Bl | B | Bl | Bl | Ov | | | 4sd |
| 464.891C | II | P | T | E | N | Bl | B | Bl | Bl | Ov | | | |
| 464.892 | I | P | T | Va | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 464.925A | 0 | P | T | E | N | Bl | B | Bl | Bl | Ov | | | |
| 464.925B | 0 | P | T | E | N | Bl | Db | Bl | Bl | Ov | | | |
| 464.925C | I | P | T | Sa | N | Bl | B | Bl | Bl | Ov | | | |
| 464.926 | 000 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |

Table 3
Agronomic data for USDA wild soybean germplasm in maturity groups
000 to IV, PI 65.549 to PI 483.464

| Entry | Twining date (mmdd) | Flower date (mmdd) | Maturity date (mmdd) | Height (cm) | Leaflet length lower (mm) | Leaflet length upper (mm) | Leaflet shape lower | Leaflet shape upper | Pod length (mm) | Seed weight (cg/sd) | SMV (score) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 424.068 | 630 | 817 | 1008* | 100* | 43 | 37 | 0.70 | 0.49 | 24 | 2.0 | 4 |
| 424.071 | 624 | 818 | 1007* | 102* | 50 | 35 | 0.60* | 0.51 | 27 | 2.4 | 4 |
| 424.079 | 629* | 817 | 1007* | 104* | 49 | 40 | 0.63* | 0.47 | 25 | 1.6 | 4 |
| 424.088 | 625 | 819 | 1010* | 70 | 54 | 46 | 0.54 | 0.34 | 27 | 2.0 | 4 |
| 424.091A | 630 | 824 | 1010* | 85 | 53 | 40 | 0.46 | 0.40 | 27 | 2.2 | 5 |
| 424.091B | 630 | 825* | 1010* | 107* | 55 | 38 | 0.57 | 0.43* | 27 | 2.2 | 4 |
| 424.116 | 702 | 826 | 1017 | 92 | 57* | 44 | 0.62* | 0.45 | 25 | 1.8 | 4 |
| 440.913A | 620 | 730 | 917 | 93* | 41 | 40* | 0.48* | 0.35 | 24 | 1.4 | 3 |
| 440.913B | 623 | 726 | 917 | 82 | 41 | 37 | 0.52* | 0.36* | 24 | 1.4 | 3 |
| 447.003A | 623 | 707 | 825* | 63* | 37 | 37* | 0.52 | 0.35* | 23 | 1.2 | 4 |
| 447.003B | 623 | 711 | 901 | 79* | 31 | 47* | 0.56 | 0.28 | 23 | 1.5 | 5 |
| 447.004 | 622 | 731 | 919 | 115 | 49 | 44* | 0.53* | 0.38 | 23 | 1.5 | 4 |
| 458.535 | 625 | 630 | 817 | 45 | 37 | 33 | 0.48 | 0.30 | 24 | 1.7* | 5 |
| 458.536 | 623 | 717* | 830* | 68* | 29 | 32* | 0.67 | 0.31 | 23 | 1.4 | 2 |
| 458.537A | 620 | 623 | 808* | 61 | 45 | 49* | 0.49 | 0.31 | 26* | 1.8* | 3 |
| 458.537B | 621 | 624 | 808 | 55* | 49 | 48* | 0.39 | 0.27 | 25 | 2.0* | 3 |
| 458.538 | 623 | 627 | 802 | 38 | 50 | 43 | 0.41 | 0.34 | 26 | 1.9* | 4 |
| 458.539A | 623 | 626 | 809* | 54 | 47 | 44 | 0.39 | 0.33 | 24 | 1.9* | 3 |
| 458.539B | 625 | 628 | 816 | 51 | 36 | 34* | 0.53 | 0.38 | 25 | 1.7 | 4 |
| 458.540A | 620 | 709 | 825 | 87* | 38* | 37* | 0.44 | 0.41 | 22 | 1.9 | 3 |
| 458.540B | 618 | 711 | 826 | 72* | 35 | 34* | 0.60* | 0.37 | 21* | 1.8 | 4 |
| 458.540C | 620 | 708 | 825 | 91* | 42 | 40* | 0.50 | 0.39 | 24 | 1.7 | 4 |
| 458.540D | 621 | 708 | 823 | 84* | 33 | 38* | 0.54 | 0.36 | 22 | 1.5 | 4 |
| 464.866A | 627 | 629 | 815 | 52* | 39 | 44* | 0.53 | 0.40* | 24 | 1.6 | 5 |
| 464.866B | 704 | 707* | 817 | 15 | 23 | 24 | 0.57 | 0.49* | 20 | 1.5 | 5 |
| 464.867 | 625 | 627 | 809* | 43 | 44 | 42* | 0.41 | 0.37* | 25* | 1.7* | 4 |
| 464.868A | 625 | 712 | 821 | 80* | 38 | 36* | 0.54 | 0.28 | 22 | 1.4 | 5 |
| 464.868B | 625 | 629 | 815 | 55* | 35 | 38* | 0.52* | 0.39 | 24 | 1.6 | 4 |
| 464.869A | 623 | 718 | 830 | 93* | 39 | 37* | 0.51 | 0.36 | 22 | 1.2 | 2 |
| 464.869B | 621 | 718 | 901 | 80* | 39 | 42* | 0.60 | 0.28 | 23 | 1.4 | 3 |
| 464.870 | 625 | 629 | 810* | 50* | 52* | 55* | 0.34 | 0.28 | 26 | 1.7* | 4 |
| 464.871A | 621 | 715 | 830 | 87* | 36* | 38* | 0.53 | 0.45 | 22 | 1.6 | 4 |
| 464.871B | 623 | 715 | 829 | 66 | 41 | 43* | 0.47* | 0.33 | 22 | 1.6 | 4 |
| 464.871C | 620 | 706* | 826 | 87* | 37* | 41* | 0.50* | 0.39 | 23 | 1.7 | 4 |
| 464.889A | 623 | 728 | 913 | 93* | 36 | 39* | 0.55* | 0.42 | 22 | 1.5 | 3 |
| 464.889B | 624 | 730* | 920* | 88* | 40 | 36 | 0.53* | 0.45* | 23 | 1.5 | 3 |
| 464.889C | 619 | 728 | 915 | 106* | 47 | 42* | 0.51* | 0.42* | 23 | 1.6 | 2 |
| 464.890A | 625 | 725 | 913 | 90* | 50 | 49* | 0.49* | 0.37* | 22 | 1.7 | 2 |
| 464.890B | 625 | 720 | 907 | 100* | 41 | 46* | 0.46* | 0.34 | 25 | 1.9 | 2 |
| 464.891A | 624 | 717 | 905 | 74* | 39* | 35* | 0.42 | 0.40 | 22* | 1.5 | 3 |
| 464.891B | 620 | 726 | 913 | 105* | 52 | 38* | 0.55* | 0.44 | 23 | 1.6 | 2 |
| 464.891C | 621 | 725 | 912 | 92* | 44 | 40 | 0.53 | 0.40* | 24 | 1.6 | 2 |
| 464.892 | 626 | 719 | 906 | 85* | 45* | 63* | 0.38* | 0.31 | 23 | 1.3 | 2 |
| 464.925A | 621 | 718 | 830* | 100* | 40 | 51* | 0.53 | 0.33 | 23 | 1.4 | 3 |
| 464.925B | 621 | 717 | 901 | 121* | 40 | 52* | 0.54 | 0.32 | 22 | 1.5 | 2 |
| 464.925C | 622 | 720* | 904 | 94* | 44 | 39* | 0.46 | 0.24 | 24 | 1.9 | 4 |
| 464.926 | 624 | 626 | 811* | 34 | 44* | 40 | 0.48 | 0.29 | 23 | 2.1 | 4 |

Table 4
Seed composition data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Maturity group | Protein (%) | Oil (%) | Palmitic (%) | Stearic (%) | Oleic (%) | Linoleic (%) | Linolenic (%) | Other (%) |
|---|---|---|---|---|---|---|---|---|---|
| 424.068 | IV | 50.8 | 9.4 | 14.4 | 3.1 | 16.3 | 51.2 | 15.2 | 0.1 |
| 424.071 | IV | 49.7 | 9.4 | 13.7 | 3.0 | 12.8 | 55.4 | 15.2 | 0.0 |
| 424.079 | IV | 49.6 | 9.0 | 14.3 | 3.1 | 11.9 | 56.1 | 14.8 | 0.0 |
| 424.088 | IV | 51.8 | 8.4 | 13.9 | 2.9 | 11.8 | 55.1 | 16.3 | 0.1 |
| 424.091A | IV | 50.3 | 9.5 | 13.5 | 3.3 | 12.4 | 56.3 | 14.5 | 0.0 |
| 424.091B | IV | 49.9 | 9.6 | 13.4 | 3.2 | 12.5 | 56.3 | 14.8 | 0.0 |
| 424.116 | IV | 48.2 | 10.0 | 13.3 | 3.2 | 12.8 | 53.9 | 17.0 | 0.0 |
| 440.913A | II | 47.8 | 9.1 | 13.0 | 2.6 | 10.0 | 56.0 | 18.6 | 0.0 |
| 440.913B | II | 47.9 | 10.2 | 12.8 | 2.6 | 10.2 | 56.2 | 18.2 | 0.1 |
| 447.003A | 0 | 48.9 | 9.6 | 14.1 | 2.9 | 11.0 | 55.2 | 16.8 | 0.0 |
| 447.003B | I | 47.7 | 11.4 | 13.3 | 3.0 | 12.0 | 55.0 | 16.9 | 0.0 |
| 447.004 | III | 46.9 | 10.1 | 13.4 | 3.1 | 12.2 | 54.3 | 17.1 | 0.0 |
| 458.535 | 0 | 48.3 | 9.7 | 13.5 | 3.5 | 16.9 | 53.6 | 12.8 | 0.0 |
| 458.536 | 0 | 51.4 | 9.1 | 13.7 | 3.2 | 11.3 | 53.4 | 18.4 | 0.0 |
| 458.537A | 000 | 50.1 | 10.3 | 12.3 | 2.6 | 12.3 | 57.1 | 15.8 | 0.1 |
| 458.537B | 000 | 47.9 | 11.4 | 12.4 | 2.6 | 12.2 | 57.1 | 15.8 | 0.1 |
| 458.538 | 000 | 47.8 | 10.5 | 12.4 | 2.6 | 12.9 | 56.6 | 15.6 | 0.1 |
| 458.539A | 000 | 48.2 | 11.4 | 12.4 | 2.7 | 11.6 | 57.6 | 15.8 | 0.0 |
| 458.539B | 0 | 48.4 | 10.2 | 13.4 | 3.2 | 12.6 | 55.5 | 15.4 | 0.0 |
| 458.540A | 0 | 49.4 | 9.2 | 13.9 | 3.2 | 11.9 | 55.3 | 15.8 | 0.0 |
| 458.540B | 0 | 49.1 | 9.4 | 13.9 | 3.2 | 12.1 | 55.5 | 15.3 | 0.0 |
| 458.540C | 0 | 49.0 | 9.3 | 13.6 | 3.2 | 12.3 | 55.3 | 15.6 | 0.1 |
| 458.540D | 0 | 48.8 | 9.3 | 13.9 | 3.2 | 11.1 | 55.5 | 16.5 | 0.0 |
| 464.866A | 00 | 48.0 | 8.9 | 13.3 | 3.0 | 16.5 | 54.0 | 13.2 | 0.1 |
| 464.866B | 00 | 47.3 | 9.0 | 13.4 | 3.3 | 15.0 | 55.2 | 13.3 | 0.0 |
| 464.867 | 000 | 47.1 | 10.0 | 12.6 | 2.7 | 10.9 | 57.6 | 16.3 | 0.1 |
| 464.868A | 00 | 46.0 | 8.5 | 13.7 | 3.1 | 10.8 | 56.4 | 16.2 | 0.1 |
| 464.868B | 00 | 47.7 | 10.1 | 12.5 | 2.9 | 11.5 | 56.8 | 16.4 | 0.0 |
| 464.869A | 0 | 50.4 | 9.6 | 13.6 | 3.0 | 11.1 | 54.0 | 18.5 | 0.0 |
| 464.869B | 0 | 51.1 | 9.4 | 13.1 | 2.8 | 10.5 | 54.5 | 19.3 | 0.0 |
| 464.870 | 000 | 47.2 | 9.9 | 12.8 | 2.6 | 11.2 | 57.4 | 16.1 | 0.1 |
| 464.871A | 0 | 48.5 | 9.1 | 13.8 | 3.2 | 12.0 | 54.5 | 16.7 | 0.0 |
| 464.871B | 0 | 48.7 | 9.1 | 13.9 | 3.2 | 11.4 | 54.8 | 16.8 | 0.1 |
| 464.871C | 0 | 48.1 | 10.6 | 13.7 | 3.2 | 11.6 | 55.6 | 15.9 | 0.0 |
| 464.889A | II | 48.6 | 9.2 | 12.3 | 2.7 | 11.0 | 57.2 | 16.9 | 0.0 |
| 464.889B | II | 47.8 | 9.8 | 12.4 | 2.7 | 11.2 | 56.8 | 17.0 | 0.0 |
| 464.889C | II | 48.4 | 9.5 | 12.9 | 2.8 | 10.8 | 54.9 | 18.6 | 0.0 |
| 464.890A | II | 51.0 | 8.8 | 13.6 | 2.8 | 10.2 | 52.6 | 20.8 | 0.1 |
| 464.890B | I | 48.7 | 10.8 | 13.3 | 3.0 | 11.9 | 54.1 | 18.0 | 0.1 |
| 464.891A | I | 50.3 | 9.1 | 13.7 | 3.1 | 12.7 | 53.5 | 17.1 | 0.0 |
| 464.891B | II | 49.8 | 8.7 | 13.6 | 3.0 | 11.4 | 53.2 | 18.9 | 0.0 |
| 464.891C | II | 51.4 | 8.9 | 13.0 | 2.8 | 11.6 | 55.0 | 17.8 | 0.0 |
| 464.892 | I | 47.5 | 10.3 | 13.4 | 3.1 | 13.6 | 53.9 | 16.1 | 0.0 |
| 464.925A | 0 | 49.8 | 9.9 | 13.2 | 2.9 | 11.3 | 54.0 | 18.9 | 0.0 |
| 464.925B | 0 | 50.2 | 9.3 | 13.3 | 2.9 | 11.4 | 54.0 | 18.4 | 0.0 |
| 464.925C | I | 50.6 | 10.5 | 13.0 | 3.4 | 13.3 | 55.1 | 15.2 | 0.1 |
| 464.926 | 000 | 47.1 | 12.2 | 12.7 | 2.7 | 14.6 | 56.3 | 13.7 | 0.0 |

Table 1
Identification and origin information for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| PI No. | Accession name | Foreign or collector No. | Country of acquisition | Country of origin | Year introduced | Maturity group |
|---|---|---|---|---|---|---|
| 464.927A | | LS-005 | China | China | 1982 | 000 |
| 464.927B | | LS-005 | China | China | 1982 | 000 |
| 464.927C | | LS-005 | China | China | 1982 | 000 |
| 464.928 | | LS-008 | China | China | 1982 | 00 |
| 464.929A | | LS-009 | China | China | 1982 | 0 |
| 464.929B | | LS-009 | China | China | 1982 | 0 |
| 468.396A | | | China | China | 1982 | IV |
| 468.396B | | | China | China | 1982 | IV |
| 468.397A | | | China | China | 1982 | IV |
| 468.397B | | | China | China | 1982 | IV |
| 468.398A | | | China | China | 1982 | IV |
| 468.398B | | | China | China | 1982 | IV |
| 468.398C | | | China | China | 1982 | IV |
| 468.399A | | | China | China | 1982 | IV |
| 468.399B | | | China | China | 1982 | IV |
| 468.399C | | | China | China | 1982 | IV |
| 468.400A | | | China | China | 1982 | IV |
| 468.400B | | | China | China | 1982 | IV |
| 468.904 | | | China | China | 1982 | 00 |
| 468.905 | | | China | China | 1982 | 0 |
| 468.906 | | | China | China | 1982 | 0 |
| 468.907 | | | China | China | 1982 | I |
| 468.908 | | | China | China | 1982 | 000 |
| 468.909 | | | China | China | 1982 | 00 |
| 468.910 | | | China | China | 1982 | 00 |
| 468.911 | | | China | China | 1982 | 00 |
| 468.912 | | | China | China | 1982 | 00 |
| 468.913 | | | China | China | 1982 | 00 |
| 468.916 | | | China | China | 1982 | III |
| 468.917 | | | China | China | 1982 | III |
| 468.918 | | | China | China | 1982 | III |
| 468.919 | | | China | China | 1982 | III |
| 479.744 | | Gong di 50003-2 | China | China | 1983 | I |
| 479.745 | | Gong di 50029-2 | China | China | 1983 | I |
| 479.746A | | Gong di 50062 | China | China | 1983 | II |
| 479.746B | | Gong di 50062 | China | China | 1983 | II |
| 479.747 | | Gong di 50093-1 | China | China | 1983 | III |
| 479.748 | | Gong di 50107-3 | China | China | 1983 | II |
| 479.749 | | Gong di 50326-2 | China | China | 1983 | III |
| 479.750 | | Gong di 50344 | China | China | 1983 | I |
| 479.751 | | Gong di 50351-1 | China | China | 1983 | III |
| 479.752 | | Gong di 50388-2 | China | China | 1983 | I |
| 479.753A | | Gong di 50396-1 | China | China | 1983 | II |
| 479.753B | | Gong di 50396-1 | China | China | 1983 | II |
| 479.767 | | Long 79-1809 | China | China | 1983 | I |
| 479.768 | | Long 79-3313-1 | China | China | 1983 | 0 |
| 479.769 | | Long 79-5801 | China | China | 1983 | 0 |

Table 2
Descriptive data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Maturity group | Flower color | Pubescence | | | Pod color | Seed coat | | Hilum color | Seed shape | Other traits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Color | Form | Density | | Luster | Color | | | Seed | Leaf | Plant |
| 464.927A | 000 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 464.927B | 000 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 464.927C | 000 | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 464.928 | 00 | P | T | Va | N | Bl | Db | Bl | Bl | Ob | | | |
| 464.929A | 0 | P | T | Sa | N | Bl | B | Bl | Bl | Ov | | | |
| 464.929B | 0 | P | T | Sa | N | Bl | B | Bl | Bl | Ov | | | |
| 468.396A | IV | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 468.396B | IV | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 468.397A | IV | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 468.397B | IV | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 468.398A | IV | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 468.398B | IV | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 468.398C | IV | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 468.399A | IV | P | T | A | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 468.399B | IV | P | T | Va | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 468.399C | IV | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 468.400A | IV | P | T | Va | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 468.400B | IV | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 468.904 | 00 | P | T | Va | N | Br | I | Bl | Bl | Ov | | Na | Sw,4sd |
| 468.905 | 0 | P | T | A | N | Br | S | Bl | Bl | Ov | | Na | Sw,4sd |
| 468.906 | 0 | P | T | Va | N | Br | S | Bl | Bl | Ov | | Na | Sw |
| 468.907 | I | W | T | Sa | N | Br | B | Bl | Bl | Nr | Fleck | Na | Sw,4sd |
| 468.908 | 000 | W | T | E | N | Br | Db | Bl | Bl | Nr | | Na | Sw |
| 468.909 | 00 | P | T | Sa | N | Br | I | Bl | Bl | Ov | | Na | Sw |
| 468.910 | 00 | P | T | E | N | Br | Db | Bl | Bl | Ov | | Na | Sw,4sd |
| 468.911 | 00 | P | T | A | N | Br | I | Bl | Bl | Ov | | Na | Sw |
| 468.912 | 00 | P | T | Va | N | Br | Db | Bl | Bl | Nr | | Na | Sw,4sd |
| 468.913 | 00 | P | Ng | A | N | Br | D | Br | Br | Ov | | | Sw |
| 468.916 | III | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 468.917 | III | P | T | A | N | Bl | Db | Bl | Bl | Ob | Fleck | | |
| 468.918 | III | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 468.919 | III | P | T | Sa | N | Bl | S | Bl | Bl | Ob | Fleck | | |
| 479.744 | I | P | T | Sa | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 479.745 | I | P | T | Sa | N | Bl | Db | Bl | Bl | Ob | Fleck | | |
| 479.746A | II | P | T | A | N | Bl | Lb | Bl | Bl | Ov | Fleck | | |
| 479.746B | II | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 479.747 | III | P | T | Va | N | Bl | B | Bl | Bl | Ob | | | |
| 479.748 | II | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 479.749 | III | P | T | Va | N | Bl | Db | Bl | Bl | Ob | Fleck | | |
| 479.750 | I | P | T | E | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 479.751 | III | P | T | Va | N | Bl | Db | Bl | Bl | Ob | Fleck | | |
| 479.752 | I | P | T | Va | N | Bl | B | Bl | Bl | Ov | | | |
| 479.753A | II | P | T | A | N | Bl | B | Bl | Bl | Ov | | | |
| 479.753B | II | P | T | Sa | N | Bl | Db | Bl | Bl | Ob | | | |
| 479.767 | I | P | T | Sa | N | Bl | B | Bl | Bl | Ov | | | |
| 479.768 | 0 | P | T | Va | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 479.769 | 0 | P | T | Va | N | Bl | Db | Bl | Bl | Ov | | | |

Table 3
Agronomic data for USDA wild soybean germplasm in maturity groups
000 to IV, PI 65.549 to PI 483.464

| Entry | Twining date (mmdd) | Flower date (mmdd) | Maturity date (mmdd) | Height (cm) | Leaflet Length lower (mm) | Leaflet Length upper (mm) | Leaflet shape lower | Leaflet shape upper | Pod length (mm) | Seed weight (cg/sd) | SMV (score) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 464.927A | 625 | 627 | 812* | 46* | 42 | 41* | 0.44 | 0.31 | 25 | 1.9* | 3 |
| 464.927B | 623 | 625 | 811* | 50 | 55 | 60* | 0.39 | 0.31 | 24 | 1.8* | 4 |
| 464.927C | 623 | 628 | 812 | 61* | 48* | 43* | 0.38 | 0.33 | 26* | 1.6* | 3 |
| 464.928 | 625 | 628 | 817 | 78* | 39 | 39* | 0.47* | 0.44* | 24 | 1.6 | 4 |
| 464.929A | 623 | 716 | 830* | 70* | 41 | 43* | 0.54* | 0.42* | 22 | 1.6 | 4 |
| 464.929B | 623 | 715 | 826 | 64* | 33 | 36* | 0.57 | 0.38 | 22 | 1.7 | 5 |
| 468.396A | 702 | 817 | 1004 | 68 | 40 | 35 | 0.47 | 0.29 | 23 | 1.5 | 4 |
| 468.396B | 702 | 817 | 1004 | 77 | 41 | 38 | 0.51* | 0.27 | 24 | 1.6 | 4 |
| 468.397A | 628 | 822* | 1004 | 131* | 51 | 42 | 0.50* | 0.34 | 27 | 1.4 | 3 |
| 468.397B | 627 | 822* | 1004 | 93* | 40 | 35 | 0.45* | 0.30 | 25 | 1.4* | 3 |
| 468.398A | Agronomic data not available | | | | | | | | | | |
| 468.398B | Agronomic data not available | | | | | | | | | | |
| 468.398C | Agronomic data not available | | | | | | | | | | |
| 468.399A | 703 | 820 | 1006 | 101* | 40 | 36 | 0.49* | 0.35 | 26 | 1.7 | 2 |
| 468.399B | 705 | 819 | 1001 | 89 | 40 | 36 | 0.50 | 0.35 | 25 | 1.1 | 1 |
| 468.399C | 707* | 820 | 1002 | 96 | 40 | 35* | 0.58* | 0.33 | 25 | 1.2 | 1 |
| 468.400A | 629 | 816 | 1001 | 101* | 36 | 32 | 0.58* | 0.30 | 25 | 1.5 | 3 |
| 468.400B | 704 | 816 | 1004 | 128* | 46 | 33 | 0.52 | 0.31 | 24 | 1.5 | 1 |
| 468.904 | 617 | 701 | 823* | 104* | 56 | 66* | 0.43 | 0.38 | 30* | 3.5* | 1 |
| 468.905 | 618 | 703 | 825* | 93* | 47* | 42* | 0.30 | 0.29 | 28* | 3.1* | 2 |
| 468.906 | 620 | 706* | 829* | 69 | 49 | 48* | 0.41 | 0.36 | 30 | 3.7* | 4 |
| 468.907 | 628 | 712 | 903 | 110* | 98 | 67* | 0.39 | 0.29 | 35 | 4.1 | 2 |
| 468.908 | 618 | 622 | 811* | 78 | 60* | 58* | 0.41 | 0.32 | 31 | 3.7* | 2 |
| 468.909 | 618 | 704* | 823* | 105* | 49 | 53* | 0.32 | 0.32 | 32 | 3.1 | 2 |
| 468.910 | 618 | 626 | 822* | 86 | 54 | 65* | 0.37 | 0.30 | 32 | 4.3* | 1 |
| 468.911 | 618 | 629 | 817* | 93* | 46 | 60* | 0.41 | 0.28 | 31* | 3.5* | 1 |
| 468.912 | 617 | 623 | 815* | 83* | 45 | 55* | 0.42* | 0.32 | 31 | 3.6* | 3 |
| 468.913 | 618 | 626 | 819* | 87 | 48 | 50* | 0.46 | 0.34 | 33 | 3.3* | 3 |
| 468.916 | 628 | 806 | 920 | 93 | 39 | 37 | 0.55 | 0.33 | 20 | 1.3 | 3 |
| 468.917 | 624 | 807 | 921 | 95* | 50 | 39 | 0.55* | 0.47 | 22 | 2.0 | 4 |
| 468.918 | 625 | 803 | 920 | 71 | 45 | 38 | 0.45 | 0.31 | 20 | 1.3 | 3 |
| 468.919 | 626 | 728 | 918 | 152 | 66 | 64* | 0.46* | 0.31 | 28* | 2.9 | 4 |
| 479.744 | 625 | 716 | 831 | 63 | 31 | 19 | 0.45 | 0.47 | 19 | 1.2 | 3 |
| 479.745 | 625 | 716 | 831 | 47 | 26 | 24 | 0.42 | 0.38 | 19 | 2.3 | 4 |
| 479.746A | 625 | 720 | 908 | 58 | 39 | 31 | 0.36 | 0.35 | 24 | 1.4 | 3 |
| 479.746B | 625 | 720 | 908 | 58 | 39 | 31 | 0.36 | 0.35 | 24 | 1.5 | 3 |
| 479.747 | 627 | 725 | 917 | 59 | 43 | 30 | 0.42 | 0.40 | 24 | 1.5 | 4 |
| 479.748 | 702 | 725 | 908 | 61 | 37 | 31 | 0.32 | 0.35 | 23 | 1.0 | 4 |
| 479.749 | 620 | 725 | 920 | 92 | 48 | 32 | 0.35 | 0.25 | 25 | 1.9 | 4 |
| 479.750 | 620 | 713 | 827 | 42 | 31 | 18 | 0.42 | 0.39 | 24 | 1.3 | 4 |
| 479.751 | 709 | 808 | 925 | 43 | 37 | 34 | 0.59 | 0.41 | 22 | 1.8 | 4 |
| 479.752 | 625 | 713 | 902 | 66 | 53 | 28 | 0.32 | 0.39 | 23 | 1.1 | 3 |
| 479.753A | 702 | 725 | 915 | 61 | 46 | 32 | 0.33 | 0.25 | 23 | 1.8 | 4 |
| 479.753B | 702 | 725 | 915 | 61 | 46 | 32 | 0.33 | 0.25 | 23 | 1.8 | 3 |
| 479.767 | 620 | 716 | 827 | 46 | 28 | 24 | 0.54 | 0.42 | 26 | 1.5 | 3 |
| 479.768 | 620 | 701 | 815 | 45 | 37 | 23 | 0.35 | 0.30 | 23 | 1.5 | 3 |
| 479.769 | 622 | 716 | 819 | 45 | 31 | 24 | 0.45 | 0.38 | 21 | 1.7 | 3 |

Table 4
Seed composition data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Maturity group | Protein (%) | Oil (%) | Palmitic (%) | Stearic (%) | Oleic (%) | Linoleic (%) | Linolenic (%) | Other (%) |
|---|---|---|---|---|---|---|---|---|---|
| 464.927A | 000 | 48.8 | 10.9 | 12.8 | 2.9 | 12.6 | 56.8 | 15.0 | 0.0 |
| 464.927B | 000 | 47.6 | 10.4 | 12.6 | 2.6 | 11.6 | 57.1 | 16.2 | 0.1 |
| 464.927C | 000 | 49.6 | 10.1 | 14.4 | 3.6 | 14.3 | 53.4 | 14.4 | 0.1 |
| 464.928 | 00 | 47.9 | 9.8 | 13.4 | 3.2 | 11.1 | 58.6 | 15.4 | 0.1 |
| 464.929A | 0 | 48.1 | 9.7 | 13.8 | 3.1 | 11.4 | 55.1 | 16.7 | 0.2 |
| 464.929B | 0 | 45.1 | 7.3 | 14.0 | 3.0 | 12.2 | 55.3 | 15.5 | 0.0 |
| 468.396A | IV | 44.8 | 12.3 | 13.6 | 3.4 | 13.9 | 54.9 | 14.3 | 0.1 |
| 468.396B | IV | 45.1 | 12.1 | 13.6 | 3.3 | 14.1 | 55.0 | 14.1 | 0.0 |
| 468.397A | IV | 47.9 | 10.2 | 13.5 | 2.8 | 12.5 | 55.0 | 16.3 | 0.0 |
| 468.397B | IV | 47.7 | 10.5 | 13.5 | 2.8 | 12.9 | 55.1 | 15.8 | 0.1 |
| 468.398A | IV | Seed composition data not available | | | | | | | |
| 468.398B | IV | Seed composition data not available | | | | | | | |
| 468.398C | IV | Seed composition data not available | | | | | | | |
| 468.399A | IV | 48.1 | 9.3 | 14.0 | 2.9 | 11.0 | 54.7 | 17.4 | 0.0 |
| 468.399B | IV | 45.5 | 10.1 | 13.1 | 3.3 | 11.7 | 53.8 | 18.3 | 0.0 |
| 468.399C | IV | 46.2 | 9.2 | 13.1 | 3.3 | 11.3 | 54.2 | 18.1 | 0.0 |
| 468.400A | IV | 46.8 | 10.6 | 13.7 | 3.7 | 13.4 | 55.2 | 14.2 | 0.1 |
| 468.400B | IV | 49.1 | 10.1 | 13.7 | 3.0 | 11.2 | 55.3 | 16.8 | 0.1 |
| 468.904 | 00 | 48.0 | 12.0 | 12.6 | 2.6 | 15.3 | 55.1 | 14.4 | 0.1 |
| 468.905 | 0 | 44.3 | 12.7 | 13.6 | 2.9 | 14.3 | 55.8 | 13.4 | 0.1 |
| 468.906 | 0 | 45.0 | 13.4 | 13.4 | 2.8 | 16.7 | 54.7 | 12.5 | 0.1 |
| 468.907 | I | 46.6 | 13.9 | 13.1 | 3.2 | 11.9 | 55.4 | 16.3 | 0.1 |
| 468.908 | 000 | 45.1 | 13.9 | 11.8 | 3.1 | 15.5 | 56.7 | 13.0 | 0.1 |
| 468.909 | 00 | 47.4 | 12.1 | 12.7 | 2.7 | 14.3 | 55.5 | 14.8 | 0.1 |
| 468.910 | 00 | 46.0 | 13.6 | 11.2 | 3.1 | 25.7 | 49.5 | 10.7 | 0.1 |
| 468.911 | 00 | 47.9 | 11.8 | 12.7 | 2.7 | 16.5 | 53.6 | 14.4 | 0.1 |
| 468.912 | 00 | 46.8 | 14.4 | 12.2 | 3.2 | 16.5 | 57.2 | 11.0 | 0.1 |
| 468.913 | 00 | 45.4 | 13.2 | 13.9 | 2.4 | 16.9 | 55.3 | 11.6 | 0.1 |
| 468.916 | III | 47.8 | 9.0 | 14.0 | 3.0 | 12.4 | 54.6 | 17.1 | 0.0 |
| 468.917 | III | 49.4 | 10.0 | 13.9 | 2.9 | 12.4 | 54.9 | 16.0 | 0.0 |
| 468.918 | III | 47.2 | 10.0 | 12.8 | 2.8 | 15.9 | 53.1 | 15.4 | 0.1 |
| 468.919 | III | 46.8 | 13.5 | 14.6 | 2.9 | 14.6 | 55.7 | 12.4 | 0.0 |
| 479.744 | I | 49.1 | 8.6 | 12.7 | 2.7 | 12.3 | 54.3 | 17.9 | 0.0 |
| 479.745 | I | 50.7 | 10.6 | 12.6 | 3.1 | 8.9 | 56.2 | 19.1 | 0.0 |
| 479.746A | II | 49.7 | 8.8 | 12.7 | 3.3 | 14.5 | 53.6 | 15.9 | 0.0 |
| 479.746B | II | 50.7 | 9.3 | 14.5 | 3.3 | 12.2 | 53.3 | 16.7 | 0.0 |
| 479.747 | III | 51.6 | 8.7 | 13.6 | 3.1 | 11.8 | 53.7 | 17.8 | 0.0 |
| 479.748 | II | 47.3 | 9.6 | 13.2 | 3.1 | 14.2 | 52.0 | 17.5 | 0.0 |
| 479.749 | III | 49.9 | 9.8 | 13.0 | 2.9 | 10.9 | 56.4 | 16.9 | 0.0 |
| 479.750 | I | 47.7 | 9.8 | 12.6 | 2.8 | 8.7 | 53.3 | 22.6 | 0.0 |
| 479.751 | III | 49.0 | 9.0 | 14.5 | 2.7 | 11.1 | 56.1 | 15.5 | 0.1 |
| 479.752 | I | 49.9 | 7.5 | 12.8 | 2.8 | 10.5 | 53.5 | 20.4 | 0.0 |
| 479.753A | II | 50.6 | 9.8 | 13.5 | 3.1 | 12.4 | 54.3 | 16.8 | 0.0 |
| 479.753B | II | 50.6 | 8.5 | 13.2 | 3.2 | 11.7 | 54.5 | 17.3 | 0.0 |
| 479.767 | I | 50.6 | 8.6 | 13.2 | 3.0 | 15.8 | 55.6 | 12.4 | 0.0 |
| 479.768 | 0 | 49.5 | 9.7 | 12.8 | 3.2 | 9.9 | 55.3 | 18.7 | 0.1 |
| 479.769 | 0 | 47.8 | 7.2 | 13.4 | 3.0 | 10.6 | 55.1 | 17.9 | 0.0 |

Table 1
Identification and origin information for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| PI No. | Accession name | Foreign or collector No. | Country of acquisition | Country of origin | Year introduced | Maturity group |
|---|---|---|---|---|---|---|
| 483.071A | | | China | China | 1983 | IV |
| 483.071B | | | China | China | 1983 | IV |
| 483.459 | | | China | China | 1984 | I |
| 483.460A | | | China | China | 1984 | III |
| 483.460B | | | China | China | 1984 | III |
| 483.460C | | | China | China | 1984 | IV |
| 483.461 | | | China | China | 1984 | II |
| 483.462A | | | China | China | 1984 | IV |
| 483.462B | | | China | China | 1984 | IV |
| 483.463 | | | China | China | 1984 | III |
| 483.464A | | | China | China | 1984 | III |
| 483.464B | | | China | China | 1984 | III |

Table 2
Descriptive data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Maturity group | Flower color | Pubescence | | | Pod color | Seed coat | | Hilum color | Seed shape | Other traits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Color | Form | Density | | Luster | Color | | | Seed | Leaf | Plant |
| 483.071A | IV | P | T | Sa | N | Bl | B | Bl | Bl | Ob | | | |
| 483.071B | IV | P | T | Sa | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 483.459 | I | P | T | Sa | Sp | Br | I | Bl | Bl | Ov | Fleck | | Sw |
| 483.460A | III | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 483.460B | III | P | T | A | N | Bl | B | Bl | Bl | Nr | Fleck | | |
| 483.460C | IV | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 483.461 | II | P | T | A | N | Bl | B | Bl | Bl | Ov | Fleck | | |
| 483.462A | IV | P | T | A | N | Bl | B | Bl | Bl | Ov | | | |
| 483.462B | IV | P | T | A | N | Bl | B | Bl | Bl | Ob | | | |
| 483.463 | III | P | T | Va | N | Bl | Db | Bl | Bl | Ov | Fleck | | |
| 483.464A | III | P | T | Va | N | Bl | B | Bl | Bl | Ob | Fleck | | |
| 483.464B | III | P | T | Va | N | Bl | B | Bl | Bl | Ob | Fleck | | |

Table 3
Agronomic data for USDA wild soybean germplasm in maturity groups
000 to IV, PI 65.549 to PI 483.464

| Entry | Twining date (mmdd) | Flower date (mmdd) | Maturity date (mmdd) | Height (cm) | Leaflet length lower (mm) | Leaflet length upper (mm) | Leaflet shape lower | Leaflet shape upper | Pod length (mm) | Seed weight (cg/sd) | SMV (score) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 483.071A | 629 | 813 | 1006 | 76 | 32 | 28 | 0.38 | 0.29 | 23 | 1.3 | 3 |
| 483.071B | 629 | 813 | 1006 | 76 | 32 | 28 | 0.38 | 0.29 | 23 | 1.3 | 3 |
| 483.459 | 623 | 713 | 903 | 58 | 51 | 47 | 0.71 | 0.47 | 33 | 5.9 | 2 |
| 483.460A | 618 | 806 | 925 | 103 | 56 | 40 | 0.34 | 0.28 | 26 | 1.3 | 3 |
| 483.460B | 618 | 806 | 925 | 103 | 56 | 40 | 0.34 | 0.28 | 26 | 1.0 | 2 |
| 483.460C | 618 | 806 | 925 | 103 | 56 | 40 | 0.34 | 0.28 | 26 | 1.3 | 2 |
| 483.461 | 629 | 716 | 905 | 48 | 27 | 23 | 0.67 | 0.30 | 22 | 1.2 | 4 |
| 483.462A | 622 | 808 | 927 | 72 | 54 | 37 | 0.35 | 0.30 | 24 | 1.6 | 3 |
| 483.462B | 622 | 808 | 927 | 72 | 54 | 37 | 0.35 | 0.30 | 24 | 1.9 | 4 |
| 483.463 | 704 | 803 | 922 | 59 | 31 | 26 | 0.39 | 0.27 | 20 | 1.2 | 4 |
| 483.464A | 627 | 725 | 1002 | 48 | 28 | 26 | 0.43 | 0.35 | 21 | 1.6 | 4 |
| 483.464B | 627 | 725 | 1002 | 48 | 28 | 26 | 0.43 | 0.35 | 21 | 2.0 | 5 |

Table 4
Seed composition data for USDA wild soybean germplasm in maturity groups 000 to IV, PI 65.549 to PI 483.464

| Entry | Maturity group | Protein (%) | Oil (%) | Palmitic (%) | Stearic (%) | Oleic (%) | Linoleic (%) | Linolenic (%) | Other (%) |
|---|---|---|---|---|---|---|---|---|---|
| 483.071A | IV | 44.2 | 12.0 | 12.9 | 2.8 | 14.0 | 55.5 | 14.8 | 0.0 |
| 483.071B | IV | 42.1 | 13.3 | 12.8 | 3.7 | 14.9 | 54.6 | 13.9 | 0.1 |
| 483.459 | I | 44.7 | 14.2 | 14.6 | 2.8 | 9.0 | 54.8 | 18.7 | 0.0 |
| 483.460A | III | 47.6 | 10.4 | 13.1 | 3.1 | 11.8 | 55.8 | 16.1 | 0.0 |
| 483.460B | III | 47.7 | 7.8 | 13.5 | 2.9 | 10.1 | 52.5 | 21.0 | 0.0 |
| 483.460C | IV | 47.0 | 10.6 | 12.7 | 3.2 | 12.7 | 55.2 | 16.3 | 0.0 |
| 483.461 | II | 49.5 | 9.0 | 12.5 | 2.9 | 12.1 | 55.0 | 17.5 | 0.0 |
| 483.462A | IV | 44.6 | 11.8 | 13.3 | 3.4 | 14.8 | 53.2 | 15.3 | 0.1 |
| 483.462B | IV | 46.6 | 10.8 | 13.4 | 3.4 | 14.3 | 53.7 | 15.2 | 0.0 |
| 483.463 | III | 46.1 | 10.5 | 12.6 | 2.9 | 12.2 | 56.1 | 16.1 | 0.0 |
| 483.464A | III | 47.3 | 11.6 | 14.8 | 3.2 | 15.5 | 53.4 | 13.0 | 0.0 |
| 483.464B | III | 48.5 | 11.0 | 15.1 | 3.8 | 18.3 | 50.9 | 11.8 | 0.0 |