No. 7300065

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Peterson Seed Division
Pioneer Hi-Bred International, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PLANT VARIETY PROTECTION OFFICE · U.S. DEPARTMENT OF AGRICULTURE

SOYBEAN

'Peterson 85'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* eighth *day of* April *in the year of our Lord one thousand nine hundred and* seventy-five

Attest:

S. F. Rollin

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Earl L. Butz

Secretary of Agriculture

FORM GR-470
(12-13-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY
Peterson 85	Soybean	PV NUMBER 73065
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE 2-22-73 / TIME 12:00 P.M.
Glycine max	Leguminosae	FEE RECEIVED $ 250 / BALANCE DUE $ 00.00
	5. DATE OF DETERMINATION	$ 250 / $ 00.00
	January, 1972	$ 250 / $ 00.00

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
PIONEER HI-BRED INTERNATIONAL, INC. Peterson Seed ~~Co., Inc.~~ DIVISION. RJS Dr. C.R. Weber (Breeder)	3261 W. Airline Highway Waterloo, Iowa 50701	319-234-0335

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Minnesota	June, 1960

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

~~Mr. L.A. Peterson~~
~~Peterson Seed Co., Inc.~~
~~3261 W. Airline Highway~~
~~Waterloo, Iowa 50701~~

DR. CLARK JENNINGS,
DIRECTOR OF RESEARCH
PIONEER HI-BRED INTERNATIONAL, INC.
PETERSON SEED DIVISION
3261 WEST AIRLINE HIGHWAY
WATERLOO, IOWA 50701 RJS

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

[X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*

[X] 13B. Exhibit B, Botanical Description of the Variety

RJS [X] 13C. Exhibit C, Objective Description of the Variety

[X] 13D. Exhibit D, Data Indicative of Novelty

[X] 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [X] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [ ] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

Feb 7, 1973 (DATE) — C.R. Weber (SIGNATURE OF APPLICANT)

(DATE) — (SIGNATURE OF APPLICANT)

#73065

Revised Attachements: Peterson 85 Soybeans (January 3, 1975)

12.A Peterson 85 originated from a cross of Provar x (Amsoy x P.I. 248, 404). it is an F_5 derived plant selection that has been tested three years. In the second year of test a small increase was made. It is uniform within for maturity, height, pubescence and hila color. It has been further increased and tested in 1973.

12.B Peterson 85 has purple flowers, gray pubescence, tan pod color, dull seed coat luster, yellow seed coat and buff hilum. It is uniform in growth and in plant and seed characteristics. Peterson 85 yields over three bushels per acre more than Wirth, matures two days earlier, is three inches shorter, lodges considerably less and has a larger seed. Peterson 85 is higher in protein and lower in oil than Wirth.

12.C See Objective Description of Variety (Glycine Max).

12.D As compared with Wirth, Peterson 85 is extremely short and lodging resistant with a height of 30 inches versus 33 for Wirth and lodging score of 1.8 versus 2.4 for Wirth. It is similar in seed size to Wirth and has an Iodine number of 130 (vs. 134.8 for Wirth). Peterson 85 is inferior in seed quality to Wirth. A 10 day old seedling of Peterson 85 grown under constant light in a growth chamber (500 foot candles using VHO Gro Lux lights) at 25 degrees centrigrade and a humidity between 85 & 90% has a seedling length of 236 MM, a cotyledon length of 21 MM and a cotyledon width of 12 MM vs 240 MM, 21 MM and 11 MM respectively for Wirth.

12.E The Peterson Soybean Seed Division of Pioneer Hi-Bred International, INc. is the sole owner of "Peterson 85" soybean variety.

bp

#73065

PIONEER

PIONEER HI-BRED INTERNATIONAL, INC.
PETERSON SEED DIVISION
3261 WEST AIRLINE HIGHWAY, WATERLOO, IOWA 50701/PHONE (AC 319) 234-0335

Appendix B

Supplement ot Exhibit D (Application No. 73065) for Peterson 85 soybeans.

July 16, 1974

Additional indications of novelty of Peterson 85 when compared with Wirth include the following:

	Peterson 85	Wirth
Flower color	purple	purple
Pubescence color	gray	tawny
Pod color	tan	brown
Hilum color	buff	black
Seed coat	dull	shiny

Peterson™ BRAND Seed

Peterson Seed Company warrants that seeds sold have been labeled as required under State and Federal Laws and that they conform to the label as required under State and Federal Seed Laws and that they conform to the label descriptions. No liability hereunder shall be asserted unless the buyer or user reports to the warrantor within a reasonable period after discovery (not to exceed 30 days), any conditions that might lead to a complaint. OUR LIABILITY ON THIS

73065

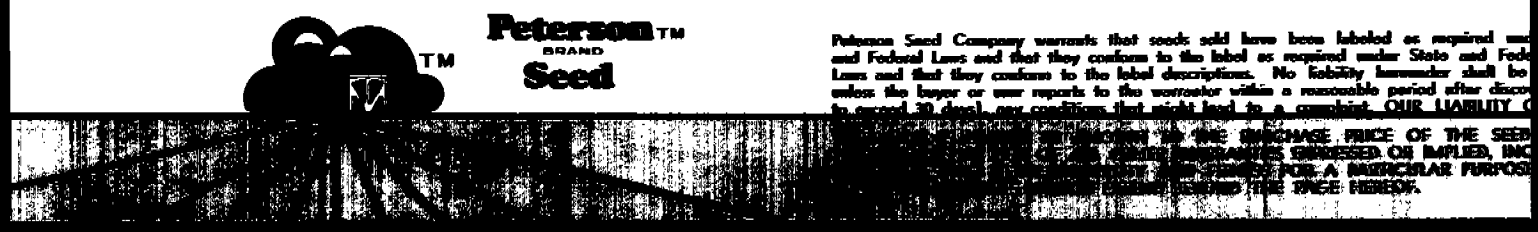
PIONEER.

PIONEER HI-BRED INTERNATIONAL, INC.
PETERSON SEED DIVISION
3261 WEST AIRLINE HIGHWAY, WATERLOO, IOWA 50701/PHONE (AC 319) 234-0335

August 27, 1974

Supplement to Exhibit D (Application No. 73065) for Peterson 85 (P85) soybeans.

In our opinion, P85 most closely resembles the variety, Wirth. The similarities and differences between these two varieties are outlined in the Supplement to Exhibit D dated July 16, 1974.



FORM GR-470-2
(6-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Soybean)

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN *(GLYCINE MAX)*

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S) PIONEER HI-BRED INTERNATIONAL, INC. ~~Co.~~ DIVISION
Peterson Seed RJS

ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code)*
3261 West Airline Highway
Waterloo, Iowa 50701

FOR OFFICIAL USE ONLY
PVPO NUMBER 73065
VARIETY NAME OR TEMPORARY DESIGNATION 'Peterson 85'

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. SEED SHAPE: [1] 1 = SPHERICAL 2 = SPHERICAL FLATTENED 3 = ELONGATE 4 = OTHER *(Specify)*

2. SEED COAT COLOR: [1] 1 = YELLOW 2 = GREEN 3 = BROWN 4 = BLACK 5 = OTHER *(Specify)*
SHADE: [2] 1 = LIGHT 2 = MEDIUM 3 = DARK

3. SEED COAT LUSTER: [1] 1 = DULL 2 = SHINY

4. SEED SIZE [21] GRAMS PER 100 SEEDS

5. HILUM COLOR. [1] 1 = BUFF 2 = YELLOW 3 = BROWN 4 = GRAY 5 = IMPERFECT BLACK 6 = BLACK 7 = OTHER *(Specify)*
SHADE: [3] 1 = LIGHT 2 = MEDIUM 3 = DARK

6. COTYLEDON COLOR: [1] 1 = YELLOW 2 = GREEN

7. LEAFLET SIZE *(See Reverse)*: [1] 1 = SMALL 2 = MEDIUM 3 = LARGE

8. LEAFLET SHAPE: [1] 1 = OVATE 2 = OBLONG 3 = LANCEOLATE 4 = ELLIPTICAL 5 = OTHER *(Specify)*

9. LEAF COLOR *(See reverse)*: [2] 1 = LIGHT GREEN 2 = MEDIUM GREEN 3 = DARK GREEN

10. FLOWER COLOR: [2] 1 = WHITE 2 = PURPLE 3 = OTHER *(Specify)*

11. POD COLOR: [1] 1 = TAN 2 = BROWN 3 = BLACK

12. POD SET: [1] 1 = SCATTERED 2 = CONCENTRATED

13. PLANT PUBESCENCE COLOR: [1] 1 = GRAY 2 = BROWN 3 = OTHER *(Specify)*
SHADE: [2] 1 = LIGHT 2 = MEDIUM 3 = DARK

14. PLANT TYPES *(See Reverse)*: [1] 1 = SLENDER 2 = BUSHY 3 = INTERMEDIATE

15. PLANT HABIT: [2] 1 = DETERMINATE 2 = INDETERMINATE 3 = OTHER *(Specify)*

16. HYPOCOTYL COLOR: [2] 1 = GREEN 2 = PURPLE

17. SEED PROTEIN: [—] 1 = A 2 = B

18. NUMBER OF DAYS TO FLOWERING *(Place a zero in first box (e.g. [0][9]) when days are 9 or less.)* [50]

19. MATURITY GROUP: [3] 1 = 00 2 = 0 3 = I 4 = II 5 = III 6 = IV 7 = V 8 = VI 9 = VII 10 = VIII

20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT *(Growth Chamber)* **AT 25° C.** *(Place a zero in first box (e.g. [0][2]) when size is 9 mm. or less.)*
[236] MM. LENGTH OF SEEDLING [21] MM. LENGTH OF COTYLEDON [12] MM. WIDTH OF COTYLEDON

21. DISEASE: *(Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)*

[0] BACTERIAL PUSTULE	[0] SOYBEAN CYST	[0] DOWNY MILDEW	[0] PURPLE STAIN	[0] POD AND STEM BLIGHT	[0] ROOT KNOT
[0] FROGEYE	[0] STEM CANKER	[0] PHYTO-PHTHORA	[0] BROWN STEM ROT	[0] TARGET SPOT	[0] BROWN SPOT
[0] BUD BLIGHT	[0] WILDFIRE	[0] RHIZOCTONIA ROT	[ ] OTHER *(Specify)*		

FORM GR-470 (REVERSE)

RECEIVED
FEB 22 1973
OF AGRICULTURE

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.

13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.

13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

73065

FORM GR-470-2 (REVERSE)

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	HARK	Petiole angle	HARK
Leaf shape	HARK	Seed size	HARK
Leaf color	PROVAR	Seed shape	HARK
Leaf surface	PROVAR	Seedling pigmentation	WIRTH

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

VARIETY	NO. OF DAYS TO MATURITY	LODGING SCORE	PLANT HEIGHT	LEAF SIZE		CONTENT		AVERAGE NO. OF PODS PER PLANT	IODINE NO.
				Width	Length	Protein	Oil		
PETERSON 85 Submitted	111	1.8	30	—	—	43.6	19.8%	DEPENDS ON	130.0
Name of similar variety WIRTH	113	2.4	33	—	—	43.2	20.9	PLANTING RATE	134.8

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR	VARIETY
Light Green	"Ada"
Medium Green	"Wilkin"
Dark Green	"Swift"

LEAF SIZE: The following varieties may be used as a guide to identify the relative size leaves.

SIZE	VARIETY
Small	"Amsoy"
Medium	"Bonus"
Large	"Anoka"

PLANT TYPE: The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Wirth"
Bushy	"Adelphia"