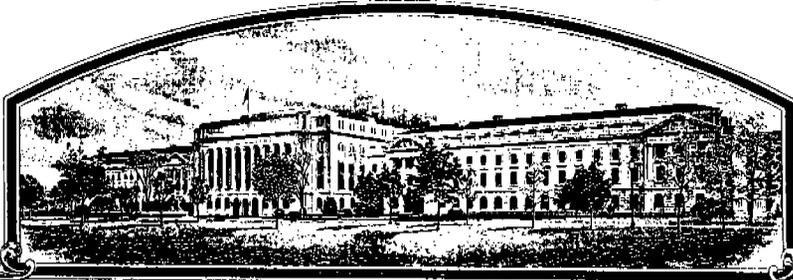


No.

7700059



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrow Seed Company

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 (T. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'A 3585'



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 14th day of June in the year of our Lord one thousand nine hundred and seventy-seven

Attest:

S. J. Rollin
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Bob Berglund
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY <p style="text-align: center;">XP 3585</p>		1b. VARIETY NAME <p style="text-align: center;">A 3585</p>		FOR OFFICIAL USE ONLY PV NUMBER <p style="text-align: center;">7790059</p>	
2. KIND NAME <p style="text-align: center;">Soybean</p>		3. GENUS AND SPECIES NAME <p style="text-align: center;">Glycine max</p>		FILING DATE <p style="text-align: center;">4-12-77</p>	TIME <p style="text-align: center;">4:00 P.M.</p>
4. FAMILY NAME (BOTANICAL) <p style="text-align: center;">Leguminosae</p>		5. DATE OF DETERMINATION <p style="text-align: center;">1973</p>		FEE RECEIVED \$ 250.00	DATE 4-12-77
6. NAME OF APPLICANT(S) <p style="text-align: center;">Asgrow Seed Company</p>		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <p style="text-align: center;">Kalamazoo, Michigan 49001</p>		\$ 250.00	DATE 4-12-77
				\$ 250.00	DATE 6-9-77
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) <p style="text-align: center;">Corporation</p>			10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION <p style="text-align: center;">Delaware</p>		11. DATE OF INCORPORATION <p style="text-align: center;">March 22, 1968</p>

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:
John A. Batcha
Asgrow Seed Company
7000 Portage Road
Unit 9630-190-1
Kalamazoo, MI 49001

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:
- 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
 - 13B. Exhibit B, Novelty Statement.
 - 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
 - 13D. Exhibit D, Additional Description of the Variety.

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 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

15. Does the applicant(s) agree to the publication of his/her (their) name(s) and address in the Official Journal? YES NO

16. The applicant(s) declare(s) 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) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) 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 Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

3-7-77
(DATE)

John A. Batcha
(SIGNATURE OF APPLICANT)

John A. Batcha, Mgr., Inventory & Dist.

(DATE)

00001
(SIGNATURE OF APPLICANT)

00:7
MAR 18 1977

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, National Agricultural Library, Beltsville, Maryland 20705. (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 Give the date the applicant determined that he had a new variety based on (1) the definition in Section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give (1), the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. (2), the details of subsequent stages of selection and multiplication. (3), the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4), evidence of stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties; (1) identify these varieties and state all differences objectively; (2) Attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form for all characteristics, for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe; such as; plant habit, plant color, disease resistance, etc.
- 14A If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled or published or the certificate has been issued. However, if the applicant specifies "NO", he may change his choice. (See Section 180.15 of the Regulations and Rules of Practice.)

EXHIBIT A

13 A Origin & Breeding History of A3585:

- 1968 Original cross L66L-140 * CUTLER
L66L-140 = (Wayne * L57-0034)
L57-0034 = (Clark * Adams)
- 1969 F1 grown in Iowa
- 1969-70 F2 and F3 grown in Puerto Rico
- 1970 F4 grown as bulk in Iowa. Single Plants selected
- 1971 F5 Progeny row 0349-71-25415 selected which eventually became A3585. Plants within the selected progeny row were uniform for height, maturity, flower and pubescence color
- 1972 F6 bulk plant row grown in Preliminary Tests in Iowa - planted in two row plot and replicated twice at one location.
- 1973 F7 Retest - replicated yield tests ran in Iowa. C73-52409 experimental designation given to XP3585. All plants within test plots of A3585 were uniform.
- 1974 Advanced Yield Tests conducted at locations in Iowa and Indiana.
- 1974-75 Breeder seed increased in Florida.
- 1976 Tested in Asgrow and State Yield Tests.

March 3, 1977

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EXHIBIT B

13 B Novelty Statement

To our knowledge, A3585 is most similar to the variety Williams. The characteristics which make A3585 different than Williams include but are not restricted to the following:

(1) Flower Color

Williams	White flower
A3585	Purple flower

(2) Hypocotyl Elongation

Hypocotyl Elongation tests as described by Burris and Fehr in Crop Science, 1970, were conducted by Asgrow. The following results were found.

	Lot #	Germ	# Plants Emerged in 10 Days			Emerg-		Rating
			Rep			Out of 75		
			I	II	III	Total %		
A3585	1	94	20	25	24	69	92	1
	2	90	21	22	23	66	88	1
Williams	1	94	11	5	4	20	27	4
	2	90	6	6	7	19	25	4

March 3, 1977

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OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (GLYCINE MAX)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

ASGROW SEED COMPANY

ADDRESS (Street and No., or R.F.D. No.; City, State, and ZIP Code)

Kalamazoo, Michigan 49001

FOR OFFICIAL USE ONLY

PVPO NUMB

7700059

VARIETY NAME OR TEMPORARY DESIGNATION

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

1. SEED SHAPE:

1 = SPHERICAL 2 = SPHERICAL FLATTENED 3 = ELONGATE 4 = OTHER (Specify)

2. SEED COAT COLOR:

1 = YELLOW 2 = GREEN 3 = BROWN 4 = BLACK 5 = OTHER (Specify) SHADE: 1 = LIGHT 2 = MEDIUM 3 = DARK

3. SEED COAT LUSTER:

1 = DULL 2 = SHINY

4. SEED SIZE

1 7 GRAMS PER 100 SEEDS

5. HILUM COLOR:

1 = BUFF 2 = YELLOW 3 = BROWN 4 = GRAY 5 = IMPERFECT BLACK 6 = BLACK 7 = OTHER (Specify) SHADE: 1 = LIGHT 2 = MEDIUM 3 = DARK

6. COTYLEDON COLOR:

1 = YELLOW 2 = GREEN

7. LEAFLET SIZE (See Reverse):

1 = SMALL 2 = MEDIUM 3 = LARGE

8. LEAFLET SHAPE:

1 = OVATE 2 = OBLONG 3 = LANCEOLATE 4 = ELLIPTICAL 5 = OTHER (Specify)

9. LEAF COLOR (See reverse):

1 = LIGHT GREEN 2 = MEDIUM GREEN 3 = DARK GREEN

10. FLOWER COLOR:

1 = WHITE 2 = PURPLE 3 = OTHER (Specify)

11. POD COLOR:

1 = TAN 2 = BROWN 3 = BLACK

12. POD SET:

1 = SCATTERED 2 = CONCENTRATED

13. PLANT PUBESCENCE COLOR:

1 = GRAY 2 = BROWN 3 = OTHER (Specify)

SHADE:

1 = LIGHT 2 = MEDIUM 3 = DARK

14. PLANT TYPES (See Reverse):

1 = SLENDER 2 = BUSHY 3 = INTERMEDIATE

15. PLANT HABIT:

1 = DETERMINATE 2 = INDETERMINATE 3 = OTHER (Specify)

16. HYPOCOTYL COLOR:

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.)

6 1

19. MATURITY GROUP:

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.)

1 5 0 MM. LENGTH OF SEEDLING

2 0 MM. LENGTH OF COTYLEDON

1 2 MM. WIDTH OF COTYLEDON

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

0 BACTERIAL PUSTULE

1 SOYBEAN CYST

1 DOWNY MILDEW

2 PURPLE STAIN

1 POD AND STEM BLIGHT

1 ROOT KNOT

0 FROGEYE

0 STEM CANKER

1 PHYTO-PHTHORA

0 BROWN STEM ROT

1 TARGET SPOT

2 BROWN SPOT

0 BUD BLIGHT

0 WILDFIRE

0 RHIZOCTONIA ROT

OTHER (Specify)

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Williams	Petiole angle	Williams
Leaf shape	Williams	Seed size	Wayne
Leaf color	Williams	Seed shape	Williams
Leaf surface	Williams	Seedling pigmentation	Calland

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		
Submitted	143	1.4	34	6.5	10	39.3	22.0%	84	N/A
Name of similar variety Williams	142	1.7	32	7	11	41.9	21.7	82	N/A

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"

EXHIBIT D

13 D Additional Description of the Variety

Additional information which may be helpful in describing A3585 follows:

	<u>Maturity</u> <u>(days)</u>	<u>Pod</u> <u>Color</u>	<u>Pubesc.</u> <u>Color</u>	<u>Phytophthora</u> <u>Rx.</u>	<u>Hilum</u> <u>Color</u>	<u>Flower</u> <u>Color</u>
Wayne	0	BR	BR	Toler.	BL	W
Calland	+3	BR	BR	Resist.	BL	P
Williams	+5	TN	T	Toler.	LB	W
A3585	+6	TN	T	Susc.	BL	P

Plant Habit: A3585 is a large leafed type plant similar to Williams but it is 2 inches shorter than Williams. A3585 has exceptional lodging resistance - as good as or better than Williams, and much superior to Wayne or Calland. The seed hilum color is darker than Williams.

March 3, 1977

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