

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

SOYBEAN

'A2575'



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 ninth day of May in the year of our Lord one thousand nine hundred and seventy-seven

Attest:

[Signature]
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

[Signature]
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY XP-2376	1b. VARIETY NAME A2575 r/s	FOR OFFICIAL USE ONLY	
		PV NUMBER	7700034
2. KIND NAME Soybean	3. GENUS AND SPECIES NAME Glycine Max	FILING DATE	TIME 11:45 A.M.
		FEE RECEIVED	DATE
4. FAMILY NAME (BOTANICAL) Leguminosae	5. DATE OF DETERMINATION 1973	\$ 250.00	1-31-77
		\$ 250.00	2-28-77
		\$ 250.00	3-30-77
6. NAME OF APPLICANT(S) Asgrow Seed Company	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Kalamazoo, Michigan 49001	8. TELEPHONE AREA CODE AND NUMBER (616) 385-6605	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Delaware	11. DATE OF INCORPORATION March 22, 1968

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, Michigan 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.

Janey 17 1977
(DATE)

John A. Batcha
(SIGNATURE OF APPLICANT)

00001
(SIGNATURE OF APPLICANT)

A 2575 R/S

EXHIBIT A

Origin and Breeding History of the Variety

1969 - Original Cross Made at Ames, Iowa.

C1453 x Amsoy 71

1970 - 9 F₁ plants grown in Iowa.

1970-71 - F₂ and F₃ generations grown in Puerto Rico and maintained in bulk populations.

1972 - F₄ bulk population grown in Iowa.

Single plant selections were threshed individually for F₅ progeny rows.

1973 - From 243 F₅ progeny rows of the C1453 x Amsoy 71 cross, progeny row 0-75-71-11629 was selected. All plants within this progeny appeared uniform. The line was designated C73-50916 and advanced to preliminary yield tests.

1974 - The F₆ line C73-50916 was grown in Preliminary II Yield test at two locations - Ames, Iowa and Oxford, Indiana. C73-50916 was selected for its high yield and other desirable agronomic characteristics. C73-50916 was found to be segregating for pod color and therefore 250 plants with tan pod color were selected and threshed individually.

1975 - C73-50916 was evaluated in the Advanced Strain II at 8 locations. It again was selected for its outstanding yield. 250 plant rows were grown from the tan pod color plants selected in 1974. 246 of these rows produced all tan podded plants. Thirty of these plant rows were bulked for Breeder seed.

1976 - C73-50916 was designated ^{A 2575} XP2376 because of its early maturity II rating. ~~XP2376~~ was grown at 10 locations in the Strain II tests, (as well as in several management studies. ^{A 2575} XP2376 was entered in State tests in Iowa, Minnesota, Illinois and Indiana.

One generation of Breeder seed was grown in Delray Beach, Florida, during the winter of 1976. It was routinely checked for genetic off types and was found to be genetically pure. The Basic seed class was produced at Clarion, Iowa, in 1976. Some 180 bushels were produced. Again, no segregation for any plant or seed characteristics was noticed.

Asgrow Seed Company
Soybean ~~XP2376~~

A2575 R/S

7700034

EXHIBIT B
Novelty Statement

To our knowledge the varieties that most closely resemble ~~XP2376~~^{A2575} are Amsoy 71 and Wells. The characteristics which make ~~XP2376~~^{A2575} different than Amsoy 71 and Wells include but are not restricted to seed hilum color. In addition, seed protein peroxidase level for ~~XP2376~~^{A2575} and Wells are different as indicated below.

1. Hilum Color

~~XP2376~~^{A2575} - Buff colored hilum
Amsoy 71 - Yellow colored hilum
Wells - Imperfect black hilum

2. Seed Protein Peroxidase Levels (as determined by Dr. Ted Hymowitz
at University of Illinois in 1976)

	<u>Peroxidase*</u>
XP2376 ^{A2575}	H
Wells	L
Amsoy 71	H

* H = high activity

L = low activity

January 17, 1977

00003

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (GLYCINE MAX)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S) Asgrow Seed Company	FOR OFFICIAL USE ONLY
	PVPO NUMBER 7700034
ADDRESS (Street and No., or R.F.D. No.; City, State, and ZIP Code) Kalamazoo, Michigan 49001	VARIETY NAME OR TEMPORARY DESIGNATION XP 2576

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

18 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. 09) when days are 9 or less.)

19. MATURITY GROUP:

4 1 = 00 2 = 0 3 = I 4 = II 5 = III
6 = IV 7 = V 8 = VI 9 = VII 10 = VIII

Planted May 10 5 9

20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C. (Place a zero in first box (e.g. 02) when size is 9 mm. or less.)

1 3 7 MM. LENGTH OF SEEDLING 2 2 MM. LENGTH OF COTYLEDON 1 2 MM. WIDTH OF COTYLEDON

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

<input checked="" type="checkbox"/> BACTERIAL PUSTULE	<input checked="" type="checkbox"/> SOYBEAN CYST	<input type="checkbox"/> DOWNY MILDEW	<input type="checkbox"/> PURPLE STAIN	<input type="checkbox"/> POD AND STEM BLIGHT	<input type="checkbox"/> ROOT KNOT
<input checked="" type="checkbox"/> FROGEYE	<input checked="" type="checkbox"/> STEM CANKER	<input checked="" type="checkbox"/> PHYTO-PHTHORA	<input type="checkbox"/> BROWN STEM ROT	<input type="checkbox"/> TARGET SPOT	<input type="checkbox"/> BROWN SPOT
<input checked="" type="checkbox"/> BUD BLIGHT	<input type="checkbox"/> WILDFIRE	<input type="checkbox"/> RHIZOCTONIA ROT	<input type="checkbox"/> OTHER (Specify)		

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Wells	Petiole angle	Wells
Leaf shape	Wells	Seed size	Amsoy 71
Leaf color	Amsoy 71	Seed shape	Amsoy 71
Leaf surface	Amsoy 71	Seedling pigmentation	Amsoy 71

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		
A2376 A2575 N/S Submitted	146	1.8	35	mm 8.5	mm 6	39.6	21.6%	89	-
Name of similar variety Wells	145	1.7	35	8.0	6	40.1	21.5	82	-

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"

Upjohn

THE UPJOHN COMPANY

MEDICINE... DESIGNED FOR HEALTH... PRODUCED WITH CARE
KALAMAZOO, MICHIGAN 49001
D-U-N-S NUMBER 00-532-0742

No. 0555191 74-42
724

REFERENCE

CHECK NO:
555191

CHECK DATE
05 23 83

PAY THIS AMOUNT
*****218.00

PAY TWO HUNDRED EIGHTEEN AND NO/100 *****
DOLLARS *****

TO THE ORDER OF

US TREASURER

WASHINGTON

DC 20220

THE FIRST NATIONAL BANK AND TRUST COMPANY OF MICHIGAN
KALAMAZOO, MICHIGAN

Copies + authentication

7600063	7700034	8000086
7600064	7700059	8000147
7700006	7700100	8000149
7700007	7700111	8100081
	7900037	8100082
		8100083

⑈0555191⑈ ⑆07240042⑆ 023 02941 3⑈

THIS DOCUMENT VOID UNLESS BORDER IS DARK BLUE AND BACKGROUND IS LIGHT BLUE

PV# 7600063 \$32

PV# 7600064 \$16

PV# 7700006 \$14

PV# 7700007 \$12

PV# 7700034 \$12

7700059 \$14

7700100 \$14

7700111 \$14

7900037 \$14

PV# 8000086 \$14

8000147 \$12

8000148 \$12

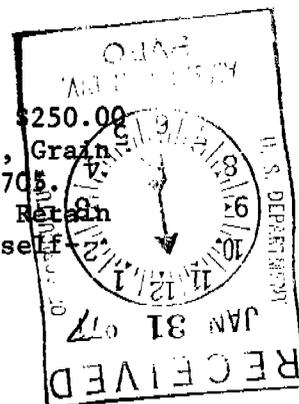
8100081 \$12

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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.)