No. 8700080

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 eighteen 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, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT ETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'A0358'

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, D. C. *this* 31st *day of* July *in the year of our Lord one thousand nine hundred and* eighty-seven.

Attest:

Kenneth A. Evans

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Richard E. Lyng

Secretary of Agriculture

Asgrow Seed Company
PVP Application - Soybean A0358
January, 1987

APPROVAL EXPIRES 2-28-88

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

FORM APPROVED: OMB NO. 0581-0055

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

1. NAME OF APPLICANT(S) Asgrow Seed Company	2. TEMPORARY DESIGNATION XP0358	3. VARIETY NAME A0358
4. ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)* 9620-190-25 Gull Road, Building 190 Kalamazoo, Michigan 49001	5. PHONE *(Include area code)* 616-385-6605	FOR OFFICIAL USE ONLY PVPO NUMBER 8700080
6. GENUS AND SPECIES NAME Glycine max	7. FAMILY NAME *(Botanical)* Leguminosae	FILING DATE March 4, 1987 TIME ☐ A.M. ☐ P.M.
8. KIND NAME Soybean	9. DATE OF DETERMINATION September 1983	FEES RECEIVED AMOUNT FOR FILING $ 1800.00 DATE February 24, 1987 AMOUNT FOR CERTIFICATE $ 200.00 DATE July 2, 1987
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)* Corporation		
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware		12. DATE OF INCORPORATION March 22, 1968

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS
John A. Batcha 9620-190-25
Asgrow Seed Company
Gull Road, Building 190
Kalamazoo, Michigan 49001
PHONE *(Include area code)*:

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED
- a. ☒ Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- b. ☒ Exhibit B, Novelty Statement.
- c. ☒ Exhibit C, Objective Description of Variety *(Request form from Plant Variety Protection Office.)*
- d. ☐ Exhibit D, Additional Description of Variety.
- e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership.

15. 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) of the Plant Variety Protection Act.)* ☐ Yes *(If "Yes," answer items 16 and 17 below)* ☒ No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ Yes ☐ No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? ☐ Foundation ☐ Registered ☐ Certified

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? ☐ Yes *(If "Yes," give date)* ☒ No

19. HAS THE VARIETY BEEN RELEASED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES ? ☐ Yes *(If "Yes," give names of countries and dates)* ☒ No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request 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 Protection Act.

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

SIGNATURE OF APPLICANT John A. Batcha	DATE February 20, 1987
SIGNATURE OF APPLICANT	DATE

FORM LS-470 (3-86) *Edition of 7-84 obsolete.*

8700080

Asgrow Seed Company
PVP Application A0358 Soybean
January 1987

EXHIBIT A

Origin and Breeding History of A0358

Pedigree:	Evans/(A1564//Corsoy/Mack)
1981	Cross was made at Ames, Iowa.
1981-82	F_1 and F_2 generations grown at Delray Beach, Florida.
1982	F_3 generation was grown at Ames, Iowa. One hundred and twenty F_3 plants were selected from the bulk population and threshed individually.
1983	Ninty-four F_3-derived progeny rows in the F_4 generation were grown at Redwood Falls, Minnesota. In September 1983 progeny row S810364-A831560 was selected and harvested in bulk. The seeds were checked and verified for uniform seed coat luster and hilum color. It was in September 1983 that S811364-A831560 was determined to be a stable and unique line.
1984	S810364-A831560 was entered into the 84PO52 yield test as entry 13 which was grown at Benson and Hancock, Minnesota. It produced uniform stands and was selected for its high yield and early Group O maturity.
1984-85	Forty-eight hand selected F_5 plants with gray pubescence, brown pods and seed with dull seed coat and yellow hila were bulked and sent to Puerto Rico for an increase. Fifteen pounds of seed was harvested.
1985	S810364-A831560 was entered into the 85V010 yield test as entry 13 which was grown at five locations in Minnesota and North Dakota and entered into the 85V050 yield test as entry 18 which was grown at eight locations in Minnesota, North Dakota and Ontario. A 0.33 acre field of S810364-A831560 was grown at Redwood Falls, Minnesota, in 1985. Fifteen units of breeder seed was harvested. X WGRG S810364-A831560 was assigned the designation XP0358.

1986

XP0358 was entered into the 86V010 as entry 4 which was grown at five locations in Minnesota, South Dakota, and North Dakota and entered into the 86V050 as entry 7 which was grown at eight locations in Minnesota, South Dakota, North Dakota and Ontario.

A seven acre field of XP0358 was grown at Redwood Falls, Minnesota, and 259 fifty-pound units of cleaned seed was produced (Lot APG3935A).

XP0358 was nominated for release and full production and assigned the desigantion A0358.

Yield trial evaluations in 1984, 1985 and 1986 and seed production in 1985 and 1986 indicate that A0358 is uniform and stable. As with other soybean varieties, variants can occur for almost any character during the course of repeated sexual production.

Asgrow Seed Company
PVP Application A0358 Soybean
January 1987

EXHIBIT B

Novelty Statement Concerning A0358 Soybean

To our knowledge the soybean varieties that most closely resemble A0358 are Ozzie and Evans. Characteristics which differentiate, but are not necessarily restricted to the following:

1. Flower Color:	A0358 = White
	Ozzie = Purple
	Evans = White
2. Reactions to Powdery Mildew (Microsphaera diffusa):	A0358 = Resistant
	Ozzie = Susceptible
	Evans = Resistant
3. Number of days maturity:	A0358 = 114
	Ozzie = 114
	Evans = 117
	LSD(.05) = 0.6
4. Lodging Score: 1 = Erect, 5 = Prostrate	A0358 = 1.8
	Ozzie = 1.3
	Evans = 2.0
	LSD(.05) = 0.2
5. Height (cm):	A0358 = 87.3
	Ozzie = 84.8
	Evans = 94.3
	LSD(.05) = 2.9

The number of days maturity, lodging score and height are from the 1985-86 V050 Asgrow trials.

Asgrow Seed Company
PVP Application - Soybean A0358
January, 1987

FORM APPROVED: OMB NO. 0581-0055

EXHIBIT C
(Soybean)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (Glycine max L.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Asgrow Seed Company	XP0358	A0358

ADDRESS *(Street and No., or R.F.D. No., City, State, and Zip Code)*
9620-190-25
Gull Road, Building 190
Kalamazoo, Michigan 49001

FOR OFFICIAL USE ONLY
PVPO NUMBER
8700080

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g., [0][9]). Starred characters ★ are considered fundamental to an adequate soybean variety description. Other characters should be described when information is available.

1. SEED SHAPE:

[2]

1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)
2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)
4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

★ 2. SEED COAT COLOR: (Mature Seed)

[1] 1 = Yellow 2 = Green 3 = Brown 4 = Black 5 = Other *(Specify)* _____

3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

[1] 1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy'; 'Gasoy 17')

★ 4. SEED SIZE: (Mature Seed)

[1][4] Grams per 100 seeds

★ 5. HILUM COLOR: (Mature Seed)

[2] 1 = Buff 2 = Yellow 3 = Brown 4 = Gray 5 = Imperfect Black 6 = Black 7 = Other *(Specify)* _____

★ 6. COTYLEDON COLOR: (Mature Seed)

[1] 1 = Yellow 2 = Green

★ 7. SEED PROTEIN PEROXIDASE ACTIVITY:

[1] 1 = Low 2 = High

★ 8. SEED PROTEIN ELECTROPHORETIC BAND:

[2] 1 = Type A ($SP1^a$) 2 = Type B ($SP1^b$)

★ 9. HYPOCOTYL COLOR:

[1] 1 = Green only ('Evans'; 'Davis') 2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')
3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')
4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

★ 10. LEAFLET SHAPE:

[3] 1 = Lanceolate 2 = Oval 3 = Ovate 4 = Other *(Specify)* _____

11. LEAFLET SIZE:

[2] 1 = Small ('Amsoy 71'; 'A5312') 2 = Medium ('Corsoy 79'; 'Gasoy 17') 3 = Large ('Crawford'; 'Tracy')

12. LEAF COLOR:

[2] 1 = Light Green ('Weber'; 'York') 2 = Medium Green ('Corsoy 79'; 'Braxton') 3 = Dark Green ('Gnome'; 'Tracy')

★ **13. FLOWER COLOR:**

[1] 1 = White 2 = Purple 3 = White with purple throat

★ **14. POD COLOR:**

[2] 1 = Tan 2 = Brown 3 = Black

★ **15. PLANT PUBESCENCE COLOR:**

[1] 1 = Gray 2 = Brown (Tawny)

16. PLANT TYPES:

[2] 1 = Slender ('Essex'; 'Amsoy 71') 2 = Intermediate ('Amcor'; 'Braxton') 3 = Bushy ('Gnome'; 'Govan')

★ **17. PLANT HABIT:**

[3] 1 = Determinate ('Gnome'; 'Braxton') 2 = Semi-Determinate ('Will') 3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

★ **18. MATURITY GROUP:**

[0][3] 1 = 000 2 = 00 3 = 0 4 = I 5 = II 6 = III 7 = IV 8 = V 9 = VI 10 = VII 11 = VIII 12 = IX 13 = X

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

BACTERIAL DISEASES:

★ [0] Bacterial Pustule *(Xanthomonas phaseoli* var. *sojensis)*

★ [0] Bacterial Blight *(Pseudomonas glycinea)*

★ [0] Wildfire *(Pseudomonas tabaci)*

FUNGAL DISEASES:

★ [0] Brown Spot *(Septoria glycines)*

Frogeye Leaf Spot *(Cercospora sojina)*

★ [0] Race 1 [ ] Race 2 [ ] Race 3 [ ] Race 4 [ ] Race 5 [ ] Other *(Specify)* _____

[0] Target Spot *(Corynespora cassiicola)*

[0] Downy Mildew *(Peronospora trifoliorum* var. *manshurica)*

[2] Powdery Mildew *(Microsphaera diffusa)*

★ [1] Brown Stem Rot *(Cephalosporium gregatum)*

[0] Stem Canker *(Diaporthe phaseolorum* var. *caulivora)*

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19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

FUNGAL DISEASES: (Continued)

★ [0] Pod and Stem Blight *(Diaporthe phaseolorum* var; *sojae)*

[0] Purple Seed Stain *(Cercospora kikuchii)*

[0] Rhizoctonia Root Rot *(Rhizoctonia solani)*

Phytophthora Rot *(Phytophthora megasperma* var. *sojae)*

★ [2] Race 1 [2] Race 2 [1] Race 3 [1] Race 4 [1] Race 5 [1] Race 6 [1] Race 7

[1] Race 8 [1] Race 9 [ ] Other *(Specify)* _____

VIRAL DISEASES:

[0] Bud Blight (Tobacco Ringspot Virus)

[0] Yellow Mosaic (Bean Yellow Mosaic Virus)

★ [0] Cowpea Mosaic (Cowpea Chlorotic Virus)

[0] Pod Mottle (Bean Pod Mottle Virus)

★ [0] Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

Soybean Cyst Nematode *(Heterodera glycines)*

★ [1] Race 1 [1] Race 2 [1] Race 3 [1] Race 4 [ ] Other *(Specify)* _____

[0] Lance Nematode *(Hoplolaimus Colombus)*

★ [0] Southern Root Knot Nematode *(Meloidogyne incognita)*

★ [0] Northern Root Knot Nematode *(Meloidogyne Hapla)*

[0] Peanut Root Knot Nematode *(Meloidogyne arenaria)*

[0] Reniform Nematode *(Rotylenchulus reniformis)*

[ ] OTHER DISEASE NOT ON FORM *(Specify)*: _____

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

★ [1] Iron Chlorosis on Calcareous Soil

[ ] Other *(Specify)* _____

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

[0] Mexican Bean Beetle *(Epilachna varivestis)*

[0] Potato Leaf Hopper *(Empoasca fabae)*

[ ] Other *(Specify)* _____

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	Evans	Seed Coat Luster	Evans
Leaf Shape	Evans	Seed Size	
Leaf Color	Evans	Seed Shape	Evans
Leaf Size	Evans	Seedling Pigmentation	Evans

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23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/ POD
				CM Width	CM Length	% Protein	% Oil		
Submitted A0358	114	1.8	87.3	7.2	10.0	38.9	19.8	14.0	2.7
Name of Similar Variety Evans	117	2.0	94.3	6.5	9.8	38.5	20.8	16.0	2.4

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A_2 in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

Data from 1985-86 V050 Asgrow trials and the protein and oil is from the 1986 Ontario 2800 Heat Unit License Trial.

RECEIVED
FEB 24 1987
Plant Variety Protection Office

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EXHIBIT E

Statement of the Basis of Applicant's Ownership

A0358 was originated and developed Alan K. Walker, Asgrow Plant Breeder. By agreement between employee and Asgrow Seed Company, all rights to any invention, discovery, or development made by an employee are assigned to the Company. No rights to such invention, discovery, or development are retained by the employee.