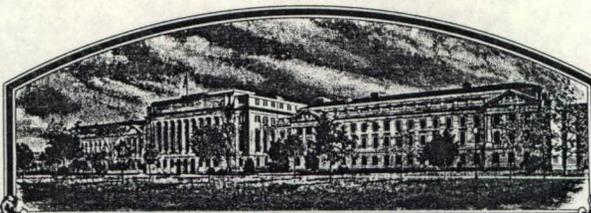


No.

840006



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Asgro 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 VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (ACT OF OCTOBER 3, 1930, CH. 356, 46 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Midland'

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 30th day of June in the year of our Lord one thousand nine hundred and eighty-six.

Attest:

Kenneth H. ...
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Richard E. Lyng
Secretary of Agriculture



1985



APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY T7901		1b. VARIETY NAME Midland		FOR OFFICIAL USE ONLY	
				PV NUMBER 8400006	
2. KIND NAME Dry Edible Field Bean		3. GENUS AND SPECIES NAME Phaseolus Vulgaris L.		FILING DATE 10/28/83	TIME <input checked="" type="checkbox"/> A.M. 2:30 P.M.
4. FAMILY NAME (BOTANICAL) Leguminosae		5. DATE OF DETERMINATION September 1980		FEE RECEIVED \$ 1,000 \$ 500.	DATE 10/28/83 <u>6/5/86</u>
6. NAME OF APPLICANT(S) Asgrow Seed Company		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Kalamazoo, MI 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 9620 190 25 Asgrow Seed Company Kalamazoo, MI 49001					
13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:					
<input checked="" type="checkbox"/> 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)					
<input checked="" type="checkbox"/> 13B. Exhibit B, Novelty Statement.					
<input checked="" type="checkbox"/> 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)					
<input type="checkbox"/> 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.) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO		14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED			
15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (If "Yes," give name of countries and dates.)					
15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (If "Yes," give name of countries and dates.)					
16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					
17. The applicant(s) declare(s) that a viable sample of basic seed 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 Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.					

October 7, 1983
 (DATE)

John A. Batcha
 (SIGNATURE OF APPLICANT)
 Mr. John A. Batcha

(DATE)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, 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 uniformity and 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, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

Asgrow Seed Company
Plant Variety Protection Application
Dry Edible Field Bean - Midland
October 7, 1983

8400006

EXHIBIT A

Origin and Breeding History

Midland, tested as T7901 was developed by W.G. Thompson & Sons Ltd. from a cross of Seafarer x 74 F1-2 at the Harrow Research Station. F3 seed was obtained by W.G. Thompson Ltd. in April 1977. Single plants were selected in 1977 and advanced by single seed descent for two generations in the greenhouse. Observation rows were harvested in 1978 and multiplied in the greenhouse. T7901 was entered into the Ontario Field Bean Trials in 1979 and 1980. It was supported for license in January 1981 by the Ontario Field Bean Committee.

Asgrow Seed Company acquired the variety Midland from W.G. Thompson & Sons, Ltd. for the United States on December 17, 1982.

Observations indicate Midland is uniform and stable within commercially acceptable limits. As is true with other dry edible field bean varieties, a small percentage of variants or offtypes can occur within commercially acceptable limits, for almost any characteristic during the course of repeated multiplication.

mga

Asgrow Seed Company
Plant Variety Protection Application
Dry Edible Field Bean - Midland
October 7, 1983

8400006

EXHIBIT B

Novelty Statement

To our knowledge, the variety which most closely resembles Midland is Kentwood. Characteristics which distinguish Midland from Kentwood included, but are not necessarily restricted to the following:

Maturity⁽¹⁾ - days from planting.

<u>Midland</u>	<u>Kentwood</u>
93	96

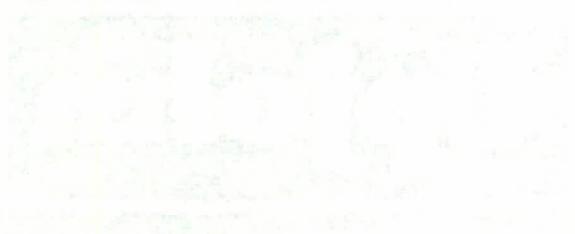
Resistance to Race #15 Common Bean Mosaic Virus⁽²⁾

Midland - Resistant
Kentwood - Susceptible

- (1) Based on 18 station-year tests conducted in Canada by the Ontario Field Bean Committee.
- (2) Tests conducted in Canada by the Ontario Field Bean Committee.

mga

1875



U.S. DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE
 LIVESTOCK, POULTRY, GRAIN & SEED DIVISION
 BELTSVILLE, MARYLAND 20705

EXHIBIT C
 (Bean)

OBJECTIVE DESCRIPTION OF VARIETY
 BEAN (*Phaseolus vulgaris* L.)

NAME OF APPLICANT(S) Asgrow Seed Company	FOR OFFICIAL USE ONLY
	PVPO NUMBER 8400006
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) John A. Batcha 9620 190 25 Kalamazoo, MI 49001	VARIETY NAME OR TEMPORARY DESIGNATION

Place numbers in the boxes (e.g.) for the characters that best describe this variety. Measured data should be for SPACED PLANTS. Ranges may also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____ . The location of test area is _____ . Please answer questions appropriate for your variety if the information is available.

1. TYPE:

1 = Field (dry-edible) 2 = Garden

2. MARKET MATURITY:

Days to edible pods Days to green shells

Days to dry seeds

Heat units to edible pods Heat units to green shells

Heat units to dry seeds

No. days earlier than }
 Same as .. }
 No. days later than }

1 = Tendercrop 2 = Kentucky Wonder
 3 = Kinghorn Wax 4 = White Kidney
 5 = Michelite 62 6 = Dwarf Horticultural
 7 = Bush Blue Lake 290 8 = Other (specify below)

3. PLANT:

1 = Determinate 2 = Indeterminate

cm height

cm shorter than }
 Same as .. } comparison variety from above

cm taller than }

cm spread Number primary branches near base

cm narrower than }
 width same as ... } comparison variety from above

cm wider than }

Main stalk: 1 = brittle 2 = wirey 1 = stout 2 = thin

Branching habit:
 1 = compact 2 = open

4

000000

3. PLANT: (Cont'd)

3 Pod position: 1 = low 2 = high 3 = scattered

3 Bush form (illustrated below):



1 = spherical bush form



2 = stem bush form



3 = wide bush form



4 = high bush form

5 = other (specify) _____

4. LEAVES:

1 1 = smooth 2 = wrinkled

1 1 = dull 2 = glossy

2 Size: 1 = small (Earliwax) 2 = medium 3 = large (Tendercrop)

3 Color: 1 = light green (as light or lighter than Bountiful) 2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)

5. FLOWERS:

1 Color: 1 = white 2 = cream 3 = pink 4 = lilac 5 = purple 6 = Other (specify) _____

5 0 Days to 50% bloom

6. FRESH PODS: (Edible maturity, average for 20 pods)

2 Exterior color: 1 = light green (as light or lighter than Bountiful)
2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)
4 = light yellow (Brittlewax)
5 = golden yellow (Cherokee Wax)
6 = green-red variegated (Horticultural)
7 = other (specify) _____

% Sieve size distribution at optimum maturity for non-flat pods

Note:

- 1 = 4.76 mm to 5.76 mm
- 2 = 5.76 mm to 7.34 mm
- 3 = 7.34 mm to 8.34 mm
- 4 = 8.34 mm to 9.53 mm
- 5 = 9.53 mm to 10.72 mm
- 6 = 10.72 mm or larger

	1	2	3	4	5	6

3 sieve	<input type="text"/>	cm length	<input type="text"/>	mm width	<input type="text"/>	mm thickness
4 sieve	<input type="text"/>	cm length	<input type="text"/>	mm width	<input type="text"/>	mm thickness
5 sieve	<input type="text"/>	cm length	<input type="text"/>	mm width	<input type="text"/>	mm thickness
6 sieve	<input type="text"/>	cm length	<input type="text"/>	mm width	<input type="text"/>	mm thickness

6. FRESH PODS: (Cont'd)

3 Cross section pod shape: 1 = flat 2 = oval 3 = round 4 = heart

1 Creaseback: 1 = present 2 = absent

1 Pubescence: 1 = none 2 = sparse 3 = considerable

2 Spur: 1 = straight 2 = slightly curved 3 = curved

1 Constrictions: 1 = none 2 = slight 3 = deep

1 Pod flesh: 1 = light 2 = medium 3 = dark

7 mm spur length

1 Fiber: 1 = none 2 = sparse 3 = considerable

6 Number of seeds per pod

1 Surface: 1 = smooth 2 = rough

1 Suture string: 1 = present 2 = absent

2 Seed development (Snap Bean): 1 = slow 2 = medium 3 = fast

1 Machine harvest: 1 = adapted 2 = not adapted

6 Pod flavor: (1) Standard (Tendercrop)
 (2) Mild Blue Lake (BBL 274)
 (3) Strong Blue Lake (Pole FM1)
 (4) Mild Romano (Roma)
 (5) Strong Romano (Pole Romano)
 (6) Other (specify) Michelite 62

7. SEED COAT COLOR:

1 1 = Monochrome 2 = Polychrome 2 1 = shiny 2 = dull

1 Primary color: 1 = white 2 = yellow 3 = buff 4 = tan

11 Secondary color: 5 = brown 6 = pink 7 = red 8 = purple None
 9 = blue 10 = black 11 = other (specify) _____

1 Color Pattern: 1 = none 2 = splashed 3 = mottled 4 = striped 5 = flecked 6 = dotted

Secondary color location: 1 = hilar ring 2 = ventral surface
 3 = sides 4 = dorsal surface
 5 = not restricted to any area 6 = combination of location (specify below)
 None

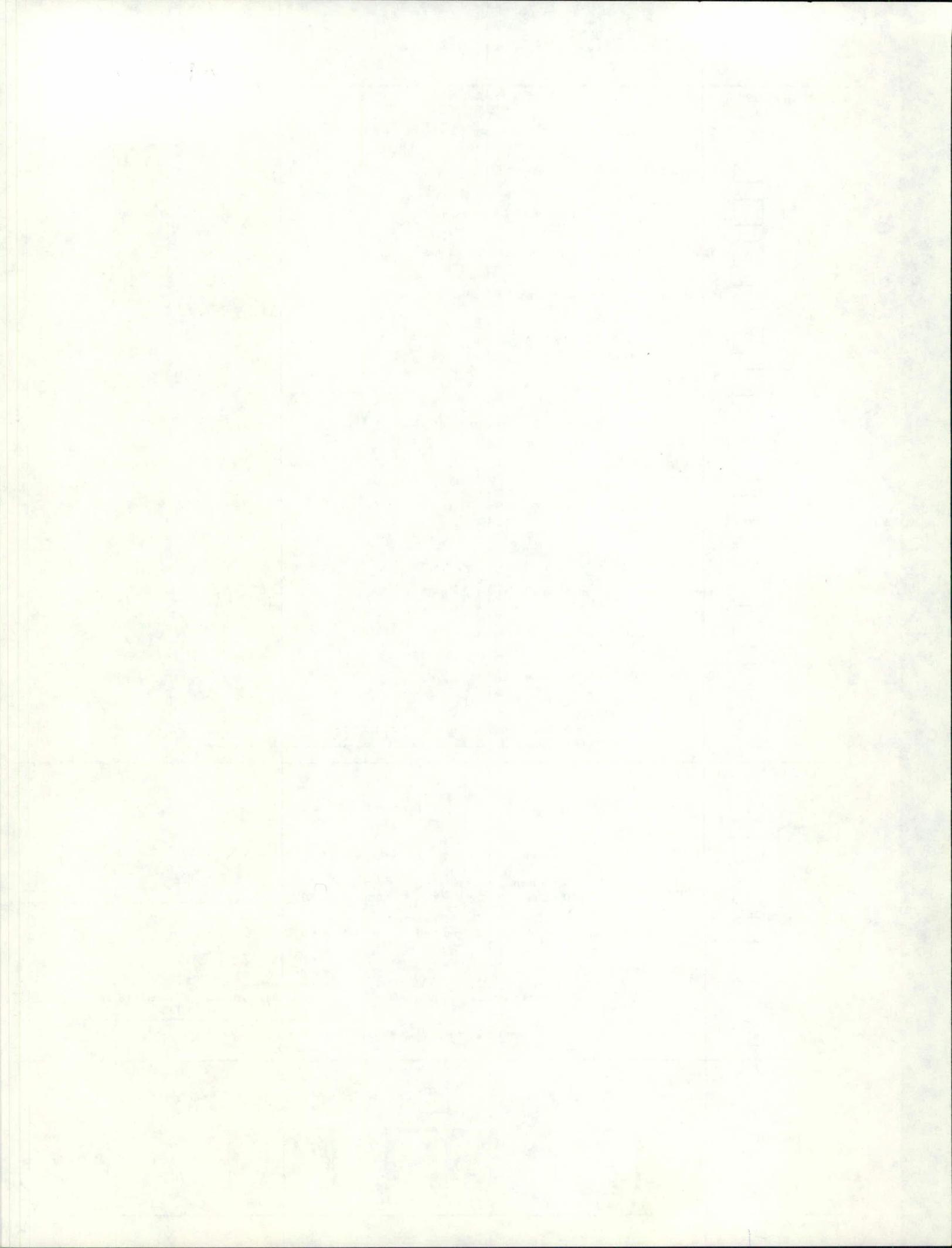
1 Hilar ring on colored seeds: 1 = absent 2 = narrow 3 = butterfly shaped

8. SEED SHAPE AND SIZE:

2 Hilum view: 1 = elliptical 2 = oval 3 = round 2 Cross section: 1 = elliptical 2 = oval 3 = cordate 4 = round



6



8. SEED SHAPE AND SIZE: (Cont'd)

2 1 = truncate ends 2 = rounded ends

1 7 gm/100 seed

0 4 gm/100 seed lighter than 5

..... gm/100 seed same as

gm/100 seed heavier than

} comparison variety from page one

9. ANTHOCYANIN: (1 = absent 2 = present)

0 Flowers

0 Stems

0 Pods

0 Seeds

0 Leaves

10. DISEASE RESISTANCE (0 = not tested 1 = susceptible 2 = resistant):

2 Anthracnose (specify race below)

0 Rust (specify race below)

0 Powdery mildew

0 Fusarium root rot

0 Pythium root rot

0 Rhizoctonia root rot

0 Pythium wilt

0 Angular leaf spot

0 Bacterial wilt

1 Halo blight (specify race below)

1 Fuscous blight

0 Red node virus

0 Pod mottle virus

2 Bean common mosaic virus (specify strain below)
Race 1 & 15

0 Mosaic mottle

0 Black root

0 Bean yellow mosaic virus

0 Curly top

Other (specify below)

B race only (as per 2/19/86 letter from J. Batcwa AB 5/5/86)

11. INSECT RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

0 Aphids

0 Leaf hopper

0 Lygus

0 Pod borer

0 Root knot nematode

0 Seed corn maggot

0 Thrips

0 Weevils

Other (specify below)

12. PHYSIOLOGICAL RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

0 Heat

0 Cold

0 Drought

0 Air pollution

13. COMMENTS:

Handwritten notes in red ink, possibly a signature or date, located in the center of the page.



Asgrow Seed Company

84-8

Transfer of Plant Variety Protection Act Rights

Asgrow Seed Company, a Delaware Corporation with its principle place of business at 2605 E. Kilgore Road, Kalamazoo MI 49001, is the owner of the Plant Variety Protection Act Certificates and applications for certificates listed on and attached as Exhibit A to this document (the "Certificates and Applications").

For good and valuable consideration, receipt of which is hereby acknowledged, Asgrow hereby transfers all of its right, title and interest in and to the Certificates and Applications and to all rights relating thereto under the Plant Variety Protection Act to Seminis Vegetable Seeds, Inc., a California corporation, whose principle place of business is at 1905 Lirio Street, Saticoy, CA 93007-4206.

Dated: January 31, 1997

Asgrow Seed Company

By: Norman A Braksik
Norman A. Braksik
President

00-20

SECURITY AGREEMENT

By

SEMINIS VEGETABLE SEEDS, INC.,

SEMINIS, INC.

and

THE DOMESTIC SUBSIDIARIES PARTY HERETO,
as Grantors,

and

CITICORP NORTH AMERICA, INC.,
as Collateral Agent

Dated as of September 29, 2003

*Original document filed in front office.
(52 pages)*

