

No.

9100044



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, 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.)

BEAN

'Gold Mine'

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 ninety-two.

Attest

Kenneth Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Edward Madigan
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions on reverse)

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).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) ASGROW SEED COMPANY		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO. XP B230	3. VARIETY NAME GOLD MINE
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) 7000 Portage Road 9652 - 190 - 18 Kalamazoo, MI 49001		5. PHONE (Include area code) 616\384-2353	FOR OFFICIAL USE ONLY PVPO NUMBER 9100044 F I L I N G Date Dec. 10, 1990 Time <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M. F E E S Filing and Examination Fee: \$ 2150 Date Dec. 10, 1990 R E C E I V E D Certificate Fee: \$ 250. Date June 15, 1992
6. GENUS AND SPECIES NAME Phaseolus vulgaris	7. FAMILY NAME (Botanical) Leguminosae		
8. CROP KIND NAME (Common Name) Garden Bean	9. DATE OF DETERMINATION December 15, 1985		
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		
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Kathy L. Ward 9652-190-18 Kalamazoo, MI 49001			

616\384-2353
PHONE (Include area code):

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)

a. Exhibit A, Origin and Breeding History of the Variety.
 b. Exhibit B, Novelty Statement.
 c. Exhibit C, Objective Description of Variety.
 d. Exhibit D, Additional Description of Variety.
 e. Exhibit E, Statement of the Basis of Applicant's Ownership.
 f. Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office **11/15/90**
 g. Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States."

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 (If "NO," skip to item 18 below)

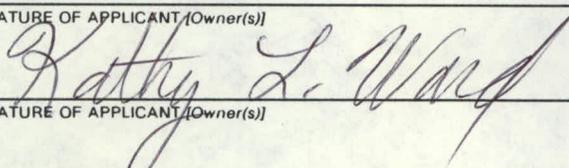
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
 YES NO

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," through Plant Variety Protection Act Patent Act. Give date: _____)
 NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
 YES (If "YES," give names of countries and dates)
 NO **Offered for sale in the U.S. April 16, 1990**

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 (Owner(s)) 	CAPACITY OR TITLE Administrator Asgrow Vegetable Research	DATE 11/28/90
SIGNATURE OF APPLICANT (Owner(s))	CAPACITY OR TITLE	DATE

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A,B,C,E; (3) at least 2,500 viable untreated seeds; (4) check, drawn on a U.S. bank, payable to "Treasurer of the United States" in the amount of \$2,150 (\$250 filing fee and \$1,900 examination fee). (See section 180.175 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for 30 days, then returned to the applicant as unfiled. Mail application and other requirements to: Plant Variety Protection Office, AMS, USDA, Rm. 500, NAL Building, 10301 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the Application are self-explanatory unless noted below. Corrections on the Application form and Exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a Certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$250 for issuance of the Certificate.

Plant Variety Protection Office
Telephone: 301/344-2518

ITEM

9. Give the date when there has been at least a tentative determination that the variety has been sexually reproduced with recognized characteristics, whether or not the novelty of those characteristics has been determined. [See section 41(d) of the Plant Variety Protection Act (Act).]
- 14a. 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. (See sections 41 and 52 of the Act.)
- 14b. 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 are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons which clearly indicate novelty.
- 14c. Exhibit C forms are available from the PVPO; specify crop kind. Fill in the Exhibit C (Objective Description of Variety form) to describe your variety.
- 14d. Optional additional characteristics and/or photographs: Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 14e. Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.
15. 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 this affirmative decision after the variety has either been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified the applicant may change the choice. (See section 180.16 of the Regulations and Rules of Practice.)
19. See sections 41 (i, j) and 42 of the Act and section 180.7 of the Regulations and Rules of Practice for eligibility requirements.

NOTES:

It is the responsibility of the applicant/owner to keep the PVPO informed of any change of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment is \$25. [See section 101 of the Act, and sections 180.130, 180.131, 180.132, and 180.175(h) of the Regulations and Rules of Practice.]

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Seed Branch, AMS, USDA, Rm. 213, Building 306, Beltsville Agricultural Research Center-- East, Beltsville, MD 20705. Telephone: 301/344-2089.

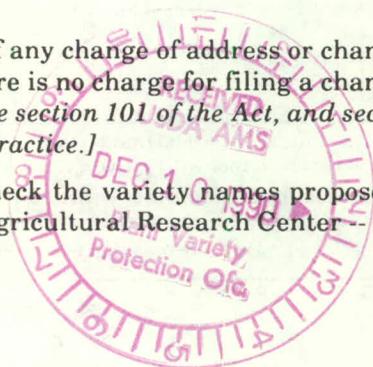


EXHIBIT A

Origin and Breeding History of Goldmine (XP B230), garden bean.

Goldmine (XP-B230) was developed at Asgrow's Western Breeding Station (WBS) in Twin Falls, Idaho. Goldmine was developed by backcrossing moderate halo blight resistance into XP-B91. Moderate halo blight resistance was determined to be stable in 1985. Observation for phenotypic trueness was demonstrated in 1985.

History:

- 6/79: Parental lines XP-B91 and breeding line HB 5-1 were planted in the greenhouse and crosses were made. The moderate source of halo blight resistance in breeding line HB 5-1 was derived from HBR 72, released from the University of Wisconsin.
- 11/79: The F_1 seed was planted in the greenhouse and advanced one generation.
- 3/80: The F_2 seed was planted and screened for halo blight resistance. Resistant plants were backcrossed to the recurrent parent XP-B91.
- 7/80: BC_1 seed was sown and backcrossed to the recurrent parent.
- 11/80: BC_2 seed was sown and backcrossed to the recurrent parent.
- 3/81: BC_3 seed was sown and advanced one generation.
- 6/81: BC_3S_1 seed was planted and screened for halo blight resistance. Resistant plants were backcrossed to the recurrent parent.
- 9/81: BC_4 seed was sown and backcrossed to the recurrent parent.
- 12/81: BC_5 seed was sown and advanced one generation.
- 3/82: BC_5S_1 seed was planted and screened for halo blight resistance. Resistant plants were backcrossed to the recurrent parent.
- 6/82: BC_6 seed was sown and advanced one generation.
- 9/82: BC_6S_1 seed was sown and screened for halo blight resistance. Only the resistant plants were advanced.
- 1/83: BC_6S_2 seed was sown and screened for halo blight resistance. The resistant lines were advanced.

Exhibit A

- 6/83 BC₆S₃ lines were planted to the field and selected for horticultural quality.
- 6/15/84: Selected lines were planted to the field. The progenies of these selected lines were bulked under R84 11801B based upon phenotypic uniformity.
- 6/5/85: The bulk was confirmed to be phenotypically uniform and breeding true. One hundred single plant selection were harvested.
- 11/2/85: The 100 plant selections were screened for moderate halo blight resistance during the winter. The resistant lines were bulked under R85 4212 and all subsequent increases of Goldmine can be traced back to this bulk.

As is true with other garden beans, a small percentage of variants or other offtypes can occur within commercially acceptable limits for almost and characteristic during the course of repeated multiplications.

EXHIBIT B

Novelty Statement Concerning Goldmine (XP-B230)

Goldmine is a wax snap bean with moderate halo blight resistance developed by backcrossing resistance into XP-B91.

The commercial variety that most clearly resembles Goldmine is Goldrush. The trait that most clearly distinguishes the two varieties includes, but may not be limited to, their reaction to halo blight. Goldmine has moderate resistance to halo blight, Goldrush does not have resistance.

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)	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) 7000 Portage Road 9652-190-18 Kalamazoo, MI 49001	PVPO NUMBER 9100044
	VARIETY NAME OR TEMPORARY DESIGNATION Gold Mine (XPB-230)

Place numbers in the boxes (e.g. 0 8 9) 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:

2 1 = Field (dry-edible) 2 = Garden

2. MARKET MATURITY:

6 8 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													
 1 No. days earlier than	<table style="width:100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px 5px;"> } 1 = Tendercrop</td> <td style="border: 1px solid black; padding: 2px 5px;"> } 2 = Kentucky Wonder</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 5px;"> } 3 = Kinghorn Wax</td> <td style="border: 1px solid black; padding: 2px 5px;"> } 4 = White Kidney</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 5px;"> } 5 = Michelite 62</td> <td style="border: 1px solid black; padding: 2px 5px;"> } 6 = Dwarf Horticultural</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 5px;"> } 7 = Bush Blue Lake 290</td> <td style="border: 1px solid black; padding: 2px 5px;"> } 8 = Other (specify below)</td> </tr> <tr> <td style="padding: 5px;">..... Same as .. 8</td> <td style="padding: 5px; text-align: center;"><u>Goldrush</u></td> </tr> <tr> <td style="padding: 5px;"> No. days later than</td> <td style="padding: 5px; text-align: center;">(PVP7700097)</td> </tr> </table>	} 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) Same as .. 8	<u>Goldrush</u>	 No. days later than	(PVP7700097)
} 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)												
..... Same as .. 8	<u>Goldrush</u>												
 No. days later than	(PVP7700097)												

3. PLANT:

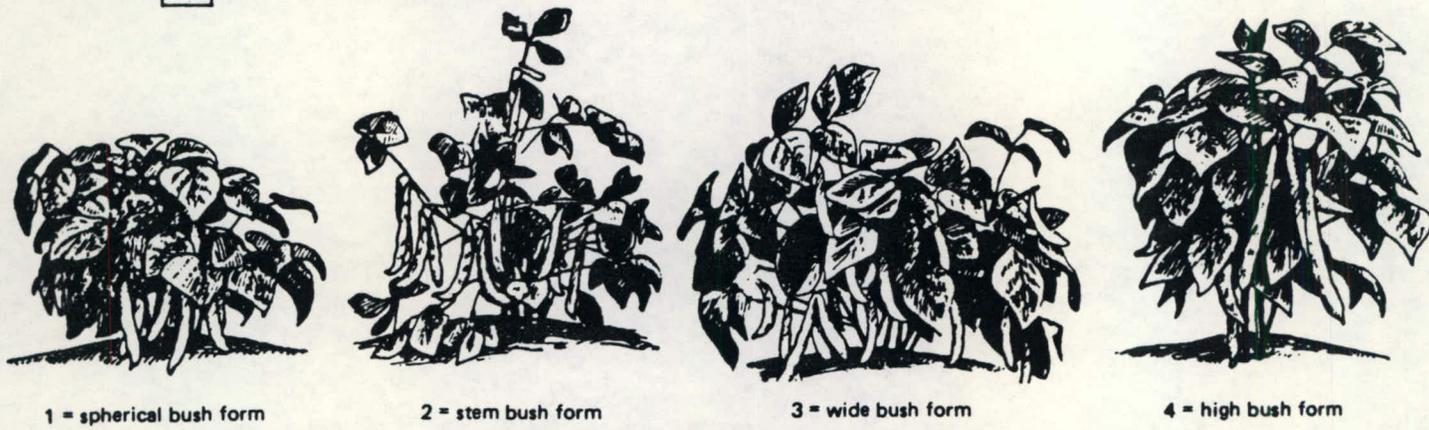
1 1 = Determinate	2 = Indeterminate						
 3 5 cm height							
 1 cm shorter than	<table style="width:100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px 5px;"> } comparison variety from above</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 5px;"> } Same as .. 8</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 5px;"> } } comparison variety from above</td> </tr> </table>	} comparison variety from above	} Same as .. 8	} } comparison variety from above			
} comparison variety from above							
} Same as .. 8							
} } comparison variety from above							
..... cm taller than							
3 9 cm spread	 2 Number primary branches near base						
 cm narrower than	<table style="width:100%; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px 5px;"> } comparison variety from above</td> <td style="border: 1px solid black; padding: 2px 5px;"> } Branching habit:</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 5px;"> } width same as ... 8</td> <td style="border: 1px solid black; padding: 2px 5px;"> } 1 = compact 2 = open</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px 5px;"> } } cm wider than</td> <td></td> </tr> </table>	} comparison variety from above	} Branching habit:	} width same as ... 8	} 1 = compact 2 = open	} } cm wider than	
} comparison variety from above		} Branching habit:					
} width same as ... 8		} 1 = compact 2 = open					
} } cm wider than							
 cm wider than							
1 Main stalk: 1 = brittle 2 = wiry	 1 = stout 2 = thin						

5

3. PLANT: (Cont'd)

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

4 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:

2 1 = smooth 2 = wrinkled

1 1 = dull 2 = glossy

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

1 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:

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

4 7 Days to 50% bloom

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

4 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
-----	-----28-----	-----	58	-----14-----	-----

3 sieve	<input type="checkbox"/> <input type="checkbox"/>	cm length	<input type="checkbox"/> <input type="checkbox"/>	mm width	<input type="checkbox"/> <input type="checkbox"/>	mm thickness
4 sieve	<input type="checkbox"/> 1 <input type="checkbox"/> 3	cm length	<input type="checkbox"/> 9 <input type="checkbox"/> 0	mm width	<input type="checkbox"/> 8 <input type="checkbox"/> 8	mm thickness
5 sieve	<input type="checkbox"/> <input type="checkbox"/>	cm length	<input type="checkbox"/> <input type="checkbox"/>	mm width	<input type="checkbox"/> <input type="checkbox"/>	mm thickness
6 sieve	<input type="checkbox"/> <input type="checkbox"/>	cm length	<input type="checkbox"/> <input type="checkbox"/>	mm width	<input type="checkbox"/> <input type="checkbox"/>	mm thickness

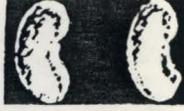
- 3 Cross section pod shape: 1 = flat 2 = oval 3 = round 4 = heart
- 2 Creaseback: 1 = present 2 = absent
- 2 Pubescence: 1 = none 2 = sparse 3 = considerable
- 2 Spur: 1 = straight 2 = slightly curved 3 = curved
- 1 Constrictions: 1 = none 2 = slight 3 = deep
- 1 Pod flesh: 1 = light 2 = medium 3 = dark
- 9.0 mm spur length
- 1 Fiber: 1 = none 2 = sparse 3 = considerable
- 7 Number of seeds per pod
- 1 Surface: 1 = smooth 2 = rough
- 2 Suture string: 1 = present 2 = absent
- 1 Seed development (Snap Bean): 1 = slow 2 = medium 3 = fast
- 1 Machine harvest: 1 = adapted 2 = not adapted
- 1 Pod flavor: (1) Standard (Tendercrop)
 (2) Mild Blue Lake (BBL 274)
 (3) Strong Blue Lake (Pole FM1)
 (4) Mild Romano (Roma)
 (5) Strongy Romano (Pole Romano)
 (6) Other (specify) _____

7. SEED COAT COLOR:

- 1 1 = Monochrome 2 = Polychrome 1 1 = shiny 2 = dull
- 1 Primary color: } 1 = white 2 = yellow 3 = buff 4 = tan
- Secondary color: } 5 = brown 6 = pink 7 = red 8 = purple
 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) _____
- 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

- 1 Side view:   

1 = oval to oblong 2 = round 3 = reniform

7

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

2 1 = truncate ends 2 = rounded ends

2 1 gm/100 seed

1 gm/100 seed lighter than 8 }
 gm/100 seed same as } comparison variety from page one
 gm/100 seed heavier than }

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

1 Flowers 1 Stems 1 Pods 1 Seeds 1 Leaves

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

- | | |
|---|--|
| <input type="checkbox"/> 1 Anthracnose (specify race below) _____ | <input type="checkbox"/> 0 Fuscou blight |
| <input type="checkbox"/> 0 Rust (specify race below) _____ | <input type="checkbox"/> 0 Red node virus |
| <input type="checkbox"/> 0 Powdery mildew | <input type="checkbox"/> 0 Pod mottle virus |
| <input type="checkbox"/> 0 Fusarium root rot | <input type="checkbox"/> 2 Bean common mosaic virus (specify strain below) _____ |
| <input type="checkbox"/> 0 Pythium root rot | <input type="checkbox"/> Mosaic mottle |
| <input type="checkbox"/> 0 Rhizoctonia root rot | <input checked="" type="checkbox"/> X Black root |
| <input type="checkbox"/> 0 Pythium wilt | <input type="checkbox"/> 0 Bean yellow mosaic virus |
| <input type="checkbox"/> 0 Angular leaf spot | <input type="checkbox"/> 0 Curly top |
| <input type="checkbox"/> 0 Bacterial wilt | <input type="checkbox"/> Other (specify below) _____ |
| <input type="checkbox"/> 2 Halo blight (specify race below) <u>moderate resistance to races 1 & 2</u> | |

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

- | | |
|--|--|
| <input type="checkbox"/> 0 Aphids | <input type="checkbox"/> 0 Root knot nematode |
| <input type="checkbox"/> 0 Leaf hopper | <input type="checkbox"/> 0 Seed corn maggot |
| <input type="checkbox"/> 0 Lygus | <input type="checkbox"/> 0 Thrips |
| <input type="checkbox"/> 0 Pod borer | <input type="checkbox"/> 0 Weavils |
| | <input type="checkbox"/> 0 Other (specify below) _____ |

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

0 Heat 0 Cold 0 Drought 0 Air pollution

13. COMMENTS:

9100044

Asgrow Seed Company
PVP Application
28 November 1990

EXHIBIT E

STATEMENT OF THE BASIS OF APPLICANT'S OWNERSHIP

XP B230 was developed by John D. Atkin & David M. Webster, Asgrow Plant Breeders. 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.