



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

BEAN

'Bush Blue Lake 92'



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 16th day of March in  
the year of our Lord one thousand nine  
hundred and seventy-eight

*Alfred*  
*Spencer*  
Acting  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*B. B. Dyer*  
Secretary of Agriculture

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

SEE 780119

1a. TEMPORARY DESIGNATION OF VARIETY  XP-B 92	1b. VARIETY NAME  Bush Blue Lake 92	FOR OFFICIAL USE ONLY	
		PV NUMBER 7700098	
2. KIND NAME  Garden Bean	3. GENUS AND SPECIES NAME  Phaseolus vulgaris	FILING DATE 8-30-77	TIME 3:00 A.M. (P.M.)
		FEE RECEIVED \$ 250.00	DATE 8-30-77
4. FAMILY NAME (BOTANICAL)  Leguminosae	5. DATE OF DETERMINATION  August, 1975	\$ 250.00	8-30-77
		\$ 250.00	1-18-78
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  
Unit 9630-190-1  
7000 Portage Road  
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  NO14B. Does the applicant(s) specify that this variety be limited as to number of generations?  YES  NO14C. If "Yes," to 14B, how many generations of production beyond breeder seed?  FOUNDATION  REGISTERED  CERTIFIED15. 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.

July 27, 1977  
(DATE)

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

1

(DATE)

(SIGNATURE OF APPLICANT)

## 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.)

Asgrow Seed Company  
Garden Bean, ~~XP-B-92~~  
*Bush Blue Lake 92*

7700098

EXHIBIT A--Origin and Breeding History of ~~XP-B92~~ Garden Bean  
*Bush Blue Lake 92*

The original cross, Eagle x Thor, was made in 1970, and ~~XP-B92~~ <sup>*Bush Blue Lake 92*</sup> has been developed by straight selection from this cross. In August, 1975, it was determined that this line is distinct and that it has considerable potential as a large sieve Bush Blue Lake for the mid-west.

In 1976, the line performed very well in trials and a small increase was made. The line appeared to be very uniform and breeding true. A relatively small number of progenies were practically identical. Four hundred single plants were harvested in 1976, and progenies are being grown in 1977 to produce our "Breeder's Seed".

This line was designated ~~XP-B92~~ <sup>*Bush Blue Lake 92*</sup> on August 17, 1976.

~~XP-B92~~ <sup>*Bush Blue Lake 92*</sup> is a stable, true breeding line. We have found no variants, except for the flat pod mutation, which occurs in all round podded varieties known to us.

*JAT 780119*

J.D. Atkin  
6/10/77

EXHIBIT B--Novelty Statement Concerning ~~XP-B92~~ Garden Bean  
*Bush Blue Lake 92*

To our knowledge, the commercial Bush Blue Lake variety most similar to ~~XP-B92~~ is Thor. Comparative characteristics which make ~~XP-B92~~ *Bush Blue Lake 92* a distinct variety include, but are not restricted to, the following:

1. ~~XP-B92~~ *Bush Blue Lake 92* is much earlier than Thor.
2. ~~XP-B92~~ *Bush Blue Lake 92* pods are smaller sieve size than Thor.

Replicated yield trials are conducted at Twin Falls where sections of the four replications are harvested every two or three days starting when the crop is not quite ready for commercial processing harvest and continuing until the crop is over mature. Sieve size is determined by bulking the pods from all four replications and running them through a commercial Chisholm-Ryder Bean Grader and then weighing the different sizes. Pod length is determined by measuring 25 sieve size five pods taken at random. Percent seed is derived in conjunction with the fiber test where it is necessary to work with 100 grams of deseeded pods from canned samples. The seed removed in deseeding the pods is weighed and the percent seed is calculated.

Data from the 1976 trials are summarized in the accompanying table.

HARVEST DATE	THOR				<i>Bush Blue Lake 92</i> <del>XP-B-92</del>			
	LBS/ACRE	5% SIEVE & OVER	% SEED 5's 6's		LBS/ACRE	5% SIEVE & OVER	% SEED 5's 6's	
7/31/76					7,500	12	3.5	
8/3/76					11,500	37	4.4	
8/5/76					> 11,400	53	4.7	6.2
8/7/76	8,100	61	2.1		14,800	57	7.5	
8/9/76	> 10,900	81	3.0		16,100	68	6.5	8.5
8/11/76	12,500	86	2.7 4.8					

The data indicate that ~~XP-B92~~ *Bush Blue Lake 92* is much earlier than Thor. ~~XP-B92~~ *Bush Blue Lake 92* has consistently higher percent seed than Thor, even though sieve sizes are smaller. This indicates that ~~XP-B92~~ *Bush Blue Lake 92* pods are actually older and this is excellent evidence that ~~XP-B92~~ *Bush Blue Lake 92* is:

1. Considerably earlier than Thor
2. Smaller sieve than Thor

J.D. Atkin  
 6/8/77

JEA 78019

~~VF B92~~ Bush Blue Lake 92

Set 780119

FORM GR-470-10  
(10-2-72)

UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

EXHIBIT C  
(Bean)

GRAIN DIVISION  
HYATTSVILLE, MARYLAND 20782

OBJECTIVE DESCRIPTION OF VARIETY  
BEAN (PHASEOLUS VULGARIS)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S) Asgrow Seed Company	FOR OFFICIAL USE ONLY
	PVPO NUMBER 7700098
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)  Kalamazoo, Michigan 49001	VARIETY NAME OR TEMPORARY DESIGNATION Bush Blue Lake 92

Place the appropriate number that describes the varietal character of this variety in the boxes below.  
Place a zero in first box (e.g. 0 8 9 or 0 9 ) when number is either 99 or less or 9 or less.

1. TYPE:

<input type="text" value="1"/>	1 = SNAPBEAN	2 = GREEN SHELL	3 = DRY EDIBLE	4 = MULTIPURPOSE
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2. SEASON AND REGION OF ADAPTABILITY IN THE U.S.:

<input type="text" value="2"/>	Grows best during:	1 = SPRING	2 = SUMMER	3 = FALL	4 = WINTER
<input type="text" value="6"/>	Best adapted in:	1 = NORTHWEST 5 = SOUTHWEST	2 = NORTHCENTRAL 6 = MOST REGIONS	3 = NORTHEAST	4 = SOUTHEAST

3. MATURITY (Days from seeding to first harvest):

<input type="text" value="6"/> <input type="text" value="8"/>	GREEN PODS	<input type="text"/> <input type="text"/>	GREEN SHELLS	<input type="text"/> <input type="text"/>	DRY SEEDS
<input type="text" value="0"/> <input type="text" value="2"/>	NO. DAYS EARLIER THAN	<input type="text" value="1"/>	1 = TENDERCROP 4 = WHITE KIDNEY 7 = BUSH BLUE LAKE	2 = KENTUCKY WONDER 5 = MICHELITE 62	3 = KINGHORN WAX 6 = DWARF HORTI-CULTURAL 8 = OTHER (Specify)
<input type="text"/> <input type="text"/>	NO. DAYS LATER THAN	<input type="text"/>			

4. PLANT:

<input type="text" value="1"/>	1 = DETERMINATE, ERECT BUSH 3 = DETERMINATE, SEMIPOLE	2 = DETERMINATE, SPRAWLING BUSH 4 = INDETERMINATE, POLE
<input type="text" value="0"/> <input type="text" value="4"/> <input type="text" value="8"/>	CM. HEIGHT OR LENGTH OF VINE FROM PRIMARY LEAF NODE	
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="4"/>	NUMBER PRIMARY BRANCHES PER MAIN STALK	<input type="text" value="4"/> <input type="text" value="8"/> CM. SPREAD
<input type="text" value="1"/>	Branching habit: 1 = COMPACT 2 = OPEN	<input type="text" value="0"/> <input type="text" value="4"/> NUMBER INTERNODES ON MAIN STALK BETWEEN PRIMARY LEAF AND BASE OF TERMINAL INFLORESCENCE
<input type="text" value="0"/> <input type="text" value="2"/>	CM. LENGTH OF FIRST INTERNODE ABOVE PRIMARY LEAF	<input type="text" value="0"/> <input type="text" value="7"/> MM. STALK DIAMETER ABOVE FIRST TRIFOLIATE LEAF
<input type="text" value="2"/>	Main stalk: 1 = BRITTLE 2 = WIREY <input type="text" value="1"/> 1. STOUT 2 THIN	
<input type="text" value="2"/>	Flower position: }	1 = LOW, CONCENTRATED 2 = HIGH, CONCENTRATED 3 = SCATTERED
<input type="text" value="2"/>	Pod Position: }	

5. LEAVES:

<input type="text" value="2"/>	1 = SMOOTH 2 = WRINKLED	<input type="text" value="1"/> 1 = DULL 2 = GLOSSY	<input type="text" value="2"/> Thickness: 1 = THIN 2 = MEDIUM 3 = THICK
<input type="text" value="3"/>	Size: 1 = SMALL (Earliwax) 2 = MEDIUM 3 = LARGE (Tendercrop)	<input type="text" value="12"/> CM. PETIOLE LENGTH (To basal leaflets of first trifoliolate leaf)	
<input type="text" value="2"/>	Tip shape of center leaflet: 1 = ROUNDED 2 = TAPER POINTED 3 = SHARP POINTED		
<input type="text" value="2"/>	PUBESCENCE - Dorsal: }	1 = NONE 2 = SLIGHT 3 = CONSIDERABLE	
<input type="text" value="2"/>	PUBESCENCE - Ventral: }		
<input type="text" value="3"/>	Color: 1 = LIGHT GREEN (Bountiful) 2 = MEDIUM GREEN 3 = DARK GREEN (Bush Blue Lake)		4

7700098

6. FLOWERS:

1 Color: 1 = WHITE 2 = CREAM 3 = PINK 4 = LILAC 5 = PURPLE  
6 = OTHER (Specify) \_\_\_\_\_

2 Racemes: 1 = LONG 2 = MEDIUM 3 = SHORT 5 NUMBER FLOWERS PER RACEME

7. FRESH PODS: (Edible maturity, averages for 10 pods)

2 Color: 1 = LIGHT GREEN (Bountiful) 2 = MEDIUM GREEN (Tendergreen) 3 = DARK GREEN (Wade)  
4 = LIGHT YELLOW (Brittlewax) 5 = GOLDEN YELLOW (Cherokee Wax) 6 = GREEN-RED VARIAGATED (Horticultural)  
7 = OTHER (Specify) \_\_\_\_\_

1 5 CM. LENGTH 0 9 MM. WIDTH (Between sutures) 1 0 MM. THICKNESS 0 9  $\frac{\text{WIDTH}}{\text{THICKNESS}} \times 10$

3 Cross section pod shape: 1 = FLAT 2 = OVAL 3 = CREASEBACK 4 = ROUND

2 Curvature: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED 2 Pubescence: 1 = NONE 2 = SPARSE 3 = CONSIDERABLE

1 Constrictions: 1 = NONE 2 = SLIGHT 3 = DEEP 2 Spur: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

2 Surface: 1 = SHINY 2 = DULL 1 Surface: 1 = SMOOTH 2 = BLISTERED

2 Pod flesh: 1 = LIGHT 2 = DARK 1 Pod flesh: 1 = FIRM 2 = WATERY

11 MM. SPUR LENGTH 2 Suture string: 1 = PRESENT 2 = ABSENT

2 Fiber: 1 = NONE 2 = SPARSE 3 = CONSIDERABLE 1 Seed development: 1 = SLOW 2 = MEDIUM 3 = FAST

6 NUMBER OF SEEDS PER POD NUMBER PODS PER PLANT (Once over harvest)

NUMBER MARKETABLE PODS PER PLANT (Once over harvest) 2 Machine harvest: 1 = ADAPTED 2 = NOT ADAPTED

8. SEED COAT COLOR:

1 1 = MONOCHROME 2 = POLYCHROME 1 1 = SHINY 2 = DULL

1 Primary color: 1 = WHITE 2 = YELLOW 3 = BUFF 4 = TAN  
5 = BROWN 6 = PINK 7 = RED 8 = PURPLE  
Secondary color: 9 = BLUE 10 = BLACK 11 = OTHER (Specify) \_\_\_\_\_

Color pattern: 1 = SPLASHED 2 = MOTTLED 3 = STRIPED 4 = FLECKED 5 = DOTTED

Secondary color location: 1 = HILAR RING 2 = HILAR SURFACE  
3 = STROPHIOLE 4 = MICROPYLE  
5 = SIDES 6 = DORSAL SURFACE  
7 = NOT RESTRICTED TO ANY AREA 8 = COMBINATION OF LOCATIONS (Specify) \_\_\_\_\_

1 Hilar ring: 1 = NOT PRESENT 2 = NARROW 3 = BUTTERFLY SHAPED

1 Vein-like under coat pattern: 1 = ABSENT 2 = PRESENT

9. SEED SHAPE AND SIZE:

1 Hilum view: 1 = ELLIPTICAL 2 = OVAL 3 = ROUND 3 Side view: 1 = OVAL 2 = ROUND  
3 = KIDNEY 4 = TRUNCATE ENDS

4 Cross section: 1 = ELLIPTICAL 2 = OVAL 32 GM. WEIGHT PER 100 SEEDS  
3 = CORDATE 4 = ROUND

4 Classification: 1 = PEA 2 = MEDIUM 3 = MARROW 4 = KIDNEY 5 = PINTO

0 6 MM. WIDTH (Dorsal to ventral) 0 6 MM. THICKNESS (Side to side)

1 4 MM. LENGTH 0 1 0  $\frac{\text{WIDTH}}{\text{THICKNESS}} \times 10$

10. ANTHOCYANIN: (1 = Absent 2 = Present):

FLOWERS       STEMS       PODS       SEEDS       LEAVES

11. DISEASE RESISTANCE (0 = Not tested; 1 = Susceptible; 2 = Resistant):

<input type="checkbox"/> RUST (Specify race) _____	<input type="checkbox"/> ANGULAR LEAF SPOT
<input type="checkbox"/> BACTERIAL WILT	<input checked="" type="checkbox"/> COMMON BEAN MOSAIC
<input type="checkbox"/> ANTHRACNOSE	<input type="checkbox"/> YELLOW BEAN MOSAIC
<input type="checkbox"/> SOUTHERN BEAN MOSAIC	<input type="checkbox"/> FUSARIUM ROOT ROT
<input type="checkbox"/> CURLY TOP	<input checked="" type="checkbox"/> N.Y. 15 BEAN MOSAIC
<input type="checkbox"/> POWDERY MILDEW	<input type="checkbox"/> BEAN MOSAIC VIRUS 4
<input type="checkbox"/> HALO BLIGHT	<input type="checkbox"/> FUSCOUS BLIGHT
<input type="checkbox"/> ALFALFA MOSAIC VIRUS	<input type="checkbox"/> ALFALFA MOSAIC VIRUS 2
<input type="checkbox"/> POD MOTTLE VIRUS	<input type="checkbox"/> RED NODE VIRUS
<input type="checkbox"/> ROOT KNOT NEMATODE	<input type="checkbox"/> OTHER (Specify) _____

12. INSECT RESISTANCE: (0 = Not tested; 1 = Susceptible; 2 = Resistant)

<input type="checkbox"/> APHIDS	<input type="checkbox"/> LEAF HOPPERS
<input type="checkbox"/> POD BORER	<input type="checkbox"/> LYGUS
<input type="checkbox"/> THRIPS	<input type="checkbox"/> WEAVILS
<input type="checkbox"/> SEED CORN MAGGOT	<input type="checkbox"/> OTHER (Specify) _____

13. PHYSIOLOGICAL RESISTANCE: (0 = Not tested; 1 = Susceptible; 2 = Resistant)

HEAT       COLD       DROUGHT       OTHER (Specify) \_\_\_\_\_

REFERENCES: The following publications may be used as a reference in completing this form:

1. Beans of New York. Vol. 1 Part II of Vegetables of New York. U.P. Hedrick et al. J. B. Lyon Company, Albany, N.Y. 1931.
2. Yarnell, S. H., Cyto genetics of the Vegetable Crops IV. Legumes. Bot. Rev. 31:247 - 330. 1965.
3. USDA Yearbook of Agriculture. 1937.

COLOR: Nickerson's or any recognized color fan may be used to determine the colors.