

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Gallatin Valley Seed Company
A Division of Rogers Brothers 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. 2321 ET SEQ.)

BEAN

'BBL 109'



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 5th day of June in the year of our Lord one thousand nine hundred and eighty.

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

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 H 109-3		1b. VARIETY NAME BBL 109		FOR OFFICIAL USE ONLY	
				PV NUMBER 8000049	
2. KIND NAME Snap Bean		3. GENUS AND SPECIES NAME <u>Phaseolus vulgaris</u> L.		FILING DATE 1/28/80	TIME 1:00 A.M. P.M.
4. FAMILY NAME (BOTANICAL) Leguminosae		5. DATE OF DETERMINATION 1970		FEE RECEIVED \$ 500. \$ 250.00	DATE 1/28/80 5/15/80
6. NAME OF APPLICANT(S) Gallatin Valley Seed Co. a division of Rogers Bro. Seed Company		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P.O. Box 167 Twin Falls, ID 83301		8. TELEPHONE AREA CODE AND NUMBER (208)733-8222	
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 February 25, 1975
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Same as above.					

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

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? YES NO (If "Yes," give name of countries and dates.)

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? YES 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? YES 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.

January 9, 1980

(DATE)

William S. Albert

PRESIDENT (SIGNATURE OF APPLICANT)

January 9, 1980

(DATE)

Calvin R. Lamborn

RESEARCH DIRECTOR (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.

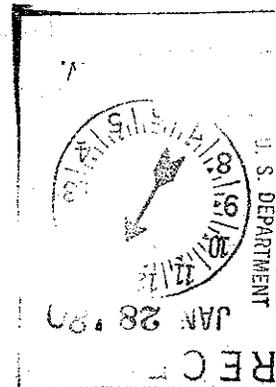
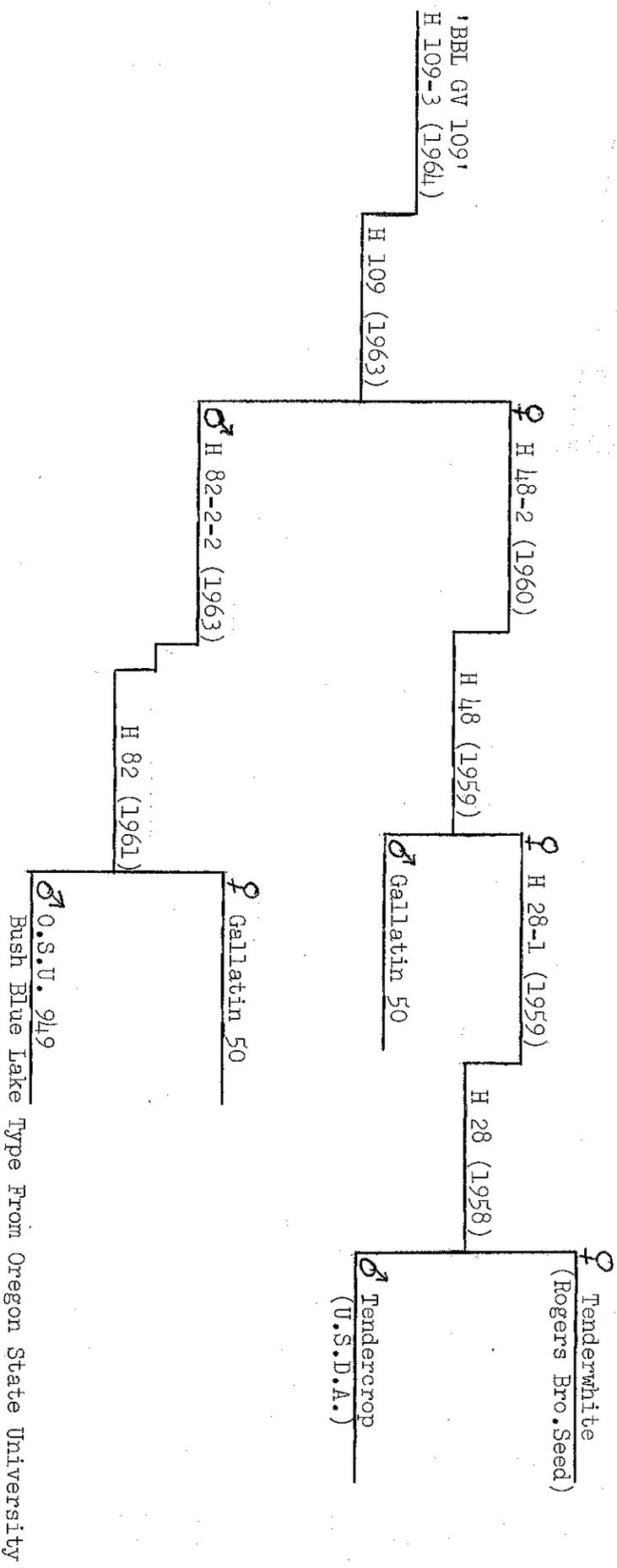


EXHIBIT A, 1,

Pedigree Chart For: 'BBL GV 109' Snap Bean



Data compiled from breeding records of
Gallatin Valley Seed Company.

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EXHIBIT A.2

DETAILS OF SELECTION, MULTIPLICATION AND SAMPLING OF "BBL 109" SNAP BEAN

The Pedigree chart for BBL 109 is enclosed as Exhibit A.1. As this chart indicates, BBL 109 had its origin as a single plant selection from the F₂ generation of the cross as shown on the chart. Uniformity at such an early date in the generations following an original cross is very unusual, since stability is normally not accomplished until approximately the F₅ generation. Nevertheless, subsequent generations evaluated during annual plantings from 1965, forward through 1969, revealed remarkable uniformity within the line.

Carefully rogued seed was planted in amounts of 4½ pounds in 1970, and 65 pounds were harvested. By 1973, harvest of 5,315 pounds had been produced within our research program and the bulk of that seed was set aside for another three years while small sample testing was being accomplished.

During 1975 and 1976, a total of 1,900 pounds was made available to cooperating food processors to conduct small field plantings to determine area of adaptability and acceptability for the canning and freezing industry.

During the next couple of years, further field testing with additional co-operators in more geographic areas brought mixed results as to acceptability for the food processing industry.

Interest for 'BBL 109' had not stabilized and since it fit into the general pattern of the Early Gallatin variety, it was not commercially merchandised until 1979. Sufficient interest was evidenced by 1979, on the part of the food processing industry, however, so that the first catalog sheets of 'BBL 109' were printed and distributed in February of 1979, and this new variety was thus launched into the commercial sales program of Gallatin Valley Seed Co.

It should be emphasized that at all times Gallatin has continued to maintain control over the 'BBL 109' bean variety for all seed distributed for field testing, processed quality evaluation, and marking clearly printed on each bag tag with a notification of our intent to gain Plant Variety Protection. Because of the interest demonstrated by potential volume users of this new variety, Plant Variety Protection is now being applied for.

EXHIBIT A.2 con't.

VARIANTS IN 'BBL 109'

'BBL 109' has a tendency to mutate to flat pods and stringed beans similar to other varieties. Our stock maintenance program should keep their percentages below 0.5 percent. Their frequency could be considered nearly insignificant or referred to as only trace amounts.

EXHIBIT B.

8000049

Novelty Statement (BBL 109)

'BBL 109' is most similar to the variety 'Early Gallatin'. It has three characteristics which are significantly different. The blanched pod color of 'BBL 109' is darker and brighter than 'Early Gallatin'. (The color of 'BBL 109' matches closely to No. 141B and 'Early Gallatin's' to No. 143 A to B of the R.H.S. Color Chart of The Royal Horticultural Society of London). The petiole length (to basal leaflets of first trifoliate leaf) of 'BBL 109' averages 20 cm. (range from 17-23 cm.) and 'Early Gallatin' has an average length of 13 cm. (ranges from 10-16 cm.). 'BBL 109' is resistant to Peanut Stunt Virus while 'Early Gallatin' is susceptible. (Data supplied by Dr. Jack Meiners).

Variety Name
BBL 109

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) GALLATIN VALLEY SEED COMPANY	FOR OFFICIAL USE ONLY
	PVPO NUMBER 8000049
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) P.O. Box 167 Twin Falls, ID 83301	VARIETY NAME OR TEMPORARY DESIGNATION BBL 109

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: Royal Horticultural Society. The location of test area is Twin Falls, Idaho. 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)

Early Gallatin

3. PLANT:

1 = Determinate 2 = Indeterminate

cm height

cm shorter than

..... Same as

cm taller than

cm spread

Number primary branches near base

cm narrower than

..... width same as

cm wider than

Branching habit:
1 = compact 2 = open

Main stalk: 1 = brittle 2 = wirey

1 = stout 2 = thin

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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:

1 1 = smooth 2 = wrinkled

1 1 = dull 2 = glossy

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

2 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) _____

Days to 50% bloom

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

3 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="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"/>	<input type="checkbox"/>	cm length	<input type="checkbox"/>	<input type="checkbox"/>	mm width	<input type="checkbox"/>	<input type="checkbox"/>	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

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6. FRESH PODS: (Cont'd)

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

1 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

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

1 9 mm spur length

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

6 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

2 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) _____

7. SEED COAT COLOR:

1 1 = Monochrome 2 = Polychrome 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

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

1 Side view:



1 = oval to oblong

2 = round

3 = reniform

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

2 = truncate ends 2 = rounded ends

3 0 gm/100 seed

gm/100 seed lighter than

gm/100 seed same as 8 comparison variety from page one

gm/100 seed heavier than

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

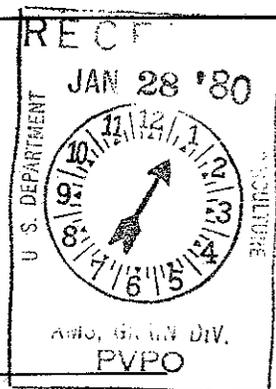
1 Flowers 1 Stems 1 Pods 1 Seeds 1 Leaves

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

<input type="checkbox"/> 0 Anthracnose (specify race below)	<input type="checkbox"/> 0 Fuscos blight
<input type="checkbox"/> 0 Rust (specify race below)	<input type="checkbox"/> 0 Red node virus
<input type="checkbox"/> 0 Powdery mildew	<input checked="" type="checkbox"/> 2 Pod mottle virus
<input type="checkbox"/> 0 Fusarium root rot	<input checked="" type="checkbox"/> 2 <u>Bean common mosaic virus (specify strain below)</u> BV 1 & N.Y. 15
<input type="checkbox"/> 0 Pythium root rot	<input type="checkbox"/> 0 Mosaic mottle
<input type="checkbox"/> 0 Rhizoctonia root rot	<input type="checkbox"/> 0 Black root
<input type="checkbox"/> 0 Pythium wilt	<input type="checkbox"/> 0 Bean yellow mosaic virus
<input type="checkbox"/> 0 Angular leaf spot	<input checked="" type="checkbox"/> 1 Curly top
<input type="checkbox"/> 0 Bacterial wilt	<input checked="" type="checkbox"/> 2 <u>Other (specify below)</u> Peanut Stunt Virus
<input type="checkbox"/> 0 Halo blight (specify race below)	

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 <u>Other (specify below)</u>



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

0 Heat 0 Cold 0 Drought 0 Air pollution

13. COMMENTS: Not all data was available because an older form (GR-470-12) was used.

EXHIBIT D.
Description of 'BBL 109'

'BBL 109' has a sturdy, erect plant type with the pods concentrated in the upper part of the bush. It is basically similar to 'Early Galatin' but has 'BlueLake' breeding in its background. It's blanched pod color is also brighter and darker.

'BBL 109' produces it crop of green beans in 55 days. The pods average 14.5 cm. long and 9.3 cm. wide. The pods are round to slightly creas-back, smooth and straight. It is resistant to BV 1, NY 15, Pod Mottle, and Peanut Stunt Virus. The seed is white and averages about 1,500 per pound.



BBL 109

Gallatin Valley developed this outstanding high quality and yielding variety as a Blue Lake Early Gallatin type.

The plants are sturdy, erect and concentrate in upper set. The pods' size, shape, fleshiness, slow seed and fiber development are identical to Early Gallatin with a slightly brighter and darker color. This bean cans and freezes beautifully. The variety is well adapted to high density harvesting.

This bean is resistant to BV1, NY15 and Pod mottle virus.

MATURITY - 55 days. PLANT - Sturdy, erect and compact. PODS - 5.75 x .37 in., round to slightly creaseback; smooth and straight. SEEDS - White; 1500 per lb.



**GALLATIN VALLEY
SEED CO.**

P. O. BOX 167 TWIN FALLS, IDAHO 83301