U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE

OBJECTIVE DESCRIPTION OF VARIETY
Garden Bean (*Phaseolus vulgaris* L.)

<table>
<thead>
<tr>
<th>NAME OF APPLICANT (S)</th>
<th>TEMPORARY OR EXPERIMENTAL DESIGNATION</th>
<th>VARIETY NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS (Street and No. or RD No., City, State, Zip Code, and Country)</td>
<td>FOR OFFICIAL USE ONLY</td>
<td>PVPO NUMBER</td>
</tr>
</tbody>
</table>

**PLEASE READ ALL INSTRUCTIONS CAREFULLY:**

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g., 0 9 9 or 0 9) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties centered in the same trial. Measured data should be for SPACED PLANTS. Ranges should also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: ________________________________.

Please answer all questions for your variety; lack of response may delay progress of your application.

**1. TYPE:**

- 1 = Garden
- 2 = Flageolet
- 3 = Romano

**2. MARKET MATURITY:**

- Days to Edible Pods
- Heat Units to Edible Pods
- Number of Days Earlier Than
- Same As
- Number of Days Later Than
- Comparison Varieties

- 1 = Tender crop
- 2 = Kentucky Wonder
- 3 = Gold rush
- 4 = Slenderette
- 5 = Gitana
- 6 = Provider
- 7 = Bush Blue Lake 290
- 8 = Other (Specify Below)

**3. PLANT:**

- cm Spacing Between Plants in a Row
- Habit
  - 1 = Determinate
  - 2 = Indeterminate, Erect Stem and Branches
  - 3 = Indeterminate with Weak and Prostrate Stem and Branches
  - 4 = Indeterminate Climbing Habit with Weak, Long, and Twisted Stem and Branches
- cm Height
- cm Shorter Than
- Same Height As
- cm Taller Than

Use Comparison Varieties from Section 2
3. **PLANT**: (continued)

- cm Spread
- cm Narrower Than [ ]
- Same Width As [ ]
- cm Wider Than [ ]
  
  **Comparison Variety**

- Pod Position: 1 = Low  2 = High  3 = Scattered
- 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**:

- Surface: 1 = Dull  2 = Glossy  3 = Indeterminate
- Size: 1 = Small (Gitana)  2 = Medium  3 = Large (Tender Crop)
- Color: 1 = Light Green (as Light or Lighter than Gold Rush)  2 = Medium Green  3 = Dark Green (as Dark or Darker than Bush Blue Lake 290)

5. **ANTHOCYANIN PIGMENT**:

- Flowers [ ] 1 = Absent  2 = Present
- Leaves [ ]
- Stems [ ]
- Pods [ ]
- Peduncles [ ]
- Nodes [ ]

6. **FLOWER COLOR AND DAYS TO BLOOM**:

- Color of Standard
- Color of Wings
- Color of Keel
- Days to 50% Bloom

**Flower Color Choices**

1 = White  2 = Cream  3 = Pink  4 = Lilac  5 = Purple  6 = Blue  7 = Other (Specify) ____________________________

7. **PODS** (Edible Maturity):

- Exterior Color: (Fresh)
  1 = Light Green (as Light or Lighter than Provider)
  2 = Medium Green
  3 = Dark Green (as Dark or Darker than Bush Blue Lake 290)
  4 = Yellow (Gold Rush)
  5 = Green-red Variegated (Horticultural)
  6 = Other (Specify) ____________________________

- Processed Pods (Exterior Color): 1 = Light (Tender Crop)  2 = Dark (Bush Blue Lake 290)

- Dry Pod Color: 1 = Buckskin (Sprite)  2 = Green, Persistent Chlorophyll (Hystyle)
7. PODS (continued):

Cross Section Pod Shape: 1 = Flat  2 = Heart (Pear)  3 = Round  4 = Figure Eight

Crease Back: 1 = Present  2 = Absent

Pubescence: 1 = None (Slenderette)  2 = Sparse  3 = Considerable (Provider or Sprite)

Constriction (Interlocular Cavitation): 1 = None  2 = Slight  3 = Deep

Fiber: 1 = None (Bush Blue Lake 290)  2 = Sparse  3 = Considerable (Sprite)

Number of Seeds per Pod

Suture String: 1 = Present  2 = Absent

Seed Development: 1 = Slow (Bush Blue Lake 290)  2 = Medium  3 = Fast (Provider)

Machine Harvest: 1 = Adapted  2 = Not Adapted

Percent sieve size distribution at optimum maturity for not-flat pods

<table>
<thead>
<tr>
<th>4.76 to 5.76mm</th>
<th>5.76 to 7.34mm</th>
<th>7.34 to 8.34mm</th>
<th>8.34 to 9.53mm</th>
<th>9.53 to 10.72 mm</th>
<th>&gt;10.72mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>% cm Length</td>
<td>% mm width</td>
<td>% mm width</td>
<td>% mm width</td>
<td>% mm width</td>
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8. SEED COLOR:

Seed Coat Luster: 1 = Shiny  2 = Dull  3 = Semi-Shiny  4 = Variable

Seed Coat: 1 = Monochrome  2 = Polychrome

Primary Color: 1 = White  2 = Yellow  3 = Buff  4 = Tan  5 = Brown  6 = Pink  7 = Red  8 = Purple
9 = Blue  10 = Black  11 = Other

Secondary Color: 1 = White  2 = Yellow  3 = Buff  4 = Tan  5 = Brown  6 = Pink  7 = Red  8 = Purple
9 = Blue  10 = Black  11 = Other

Seed Coat Pattern: 1 = Solid  2 = Splashed  3 = Mottled  4 = Striped  5 = Flecked  6 = Dotted

Hilar Ring: 1 = Absent  2 = Present

Hilar Ring Color: 1 = White  2 = Yellow  3 = Buff  4 = Tan  5 = Brown  6 = Pink  7 = Red  8 = Purple
9 = Blue  10 = Black  11 = Other

9. SEED SHAPE AND SIZE:

Hilum View: 1 = Elliptical  2 = Oval  3 = Round

Cross Section: 1 = Elliptical  2 = Oval  3 = Cordate  4 = Round
9. SEED SHAPE AND SIZE: (continued)

- Side View:
  - 1 = Oval to Oblong
  - 2 = Round
  - 3 = Reniform

- gm/100 Seeds
- gm/100 Seeds Lighter Than
- gm/100 Seeds Same As
- Comparison Variety
- gm/100 Seeds Heavier Than

10. DISEASE RESISTANCE: 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

- Anthracnose (*Colletotrichum lindemuthianum*)
  - Race Alpha
  - Race Beta
  - Race Gamma
  - Race Delta
  - Race Epsilon
  - Race Lambda
  - Race Kappa
  - Specify Race

- Bean Rust (*Uromyces appendiculatus*)
  - Race 38
  - Race 39
  - Race 40
  - Race 44
  - Race 45
  - Race 46
  - Race 49
  - Race 50
  - Race 51
  - Race 52
  - Race 56
  - Race 59
  - Race 72

- Powdery Mildew (*Erysiphe polygoni*)
- Fusarium Root Rot (*Fusarium solani* f. sp. *phaseoli*)
- Pythium Root Rot (*Pythium* spp.)
- Aphanomyces Root Rot (*Aphanomyces euteiches*)
- Rhizoctonia Root Rot (*Rhizoctonia solani*)
- Pythium Blight or Aereal Pytium (*Pythium ultimum*)
- Angular Leaf Spot (*Isariopsis griseola*)
- Bacterial Wilt (*Corynebacterium flaccumfaciens* subsp. *flaccumfaciens*)
- Bacterial Brown Spot (*Pseudomonas syringae* pv. *syringae*)
- Common Bacterial Blight (*Xanthomonas campestris* pv. *phaseoli*)
- Halo Blight (*Pseudomonas syringae* pv. *phaseicola*)
  - Race 1
  - Race 2

- Clover Yellow Vein Virus (CYVV)
- Bean Common Mosaic Virus (BCMV)
  - BV1
  - NY15
  - NL2
  - NL3
  - NL4
  - NL8
  - Florida
  - Idaho
  - Mexican
  - Western
  - Type
  - Other (Specify)
10. DIEAES (Continued):

- Yellow Bean Mosaic Virus (BYMV)
- Curly Top Virus (BCTV)
- Other (Specify Disease and Race or Strain)

11. INSECT RESISTANCE: 0 = Not Tested  1 = Susceptible  2 = Resistant  3 = Intermediate  4 = Tolerant

- Aphid
- Leafhopper
- Lygus
- Pod Borer
- Root Knot Nematode
- Seed Corn Maggot
- Thrips
- Weevils
- Other (Specify)

12. PHYSIOLOGICAL RESISTANCE: 0 = Not Tested  1 = Susceptible  2 = Resistant  3 = Intermediate  4 = Tolerant

- Heat
- Cold
- Drought
- Air Pollution
- Ozone
- Other (Specify)

COLOR: Royal Horticultural Society Colour Chart; Munsell book of color or any recognized color fan may be used to determine color of the described variety.

13. COMMENTS: