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**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

Exhibit C

**OBJECTIVE DESCRIPTION OF VARIETY
Lima Bean (*Phaseolus lunatus*)**

NAME OF APPLICANT (S)	TEMPORARY OR EXPERIMENTAL DESIGNATION	VARIETY NAME
ADDRESS (Street and No. or RD No., City, State, Zip Code and Country)		FOR OFFICIAL USE ONLY
		PVPO NUMBER

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 (i.e., or) when the number is either 99 or less or 9 or less.

1. TYPE:

1 = Green Shell 2 = Dry Edible 3 = Dual Purpose

2. REGION OF ADAPTABILITY IN THE U.S.:

Best Adapted in: 1 = Northwest 2 = North Central 3 = Northeast 4 = Southeast 5 = Southwest
6 = Most Regions

3. MATURITY: (Days from Seeding to First Harvest)

<input type="text"/> Green Shells	<input type="text"/> <input type="text"/> Dry Seeds	
<input type="text"/> No. of Days Earlier Than	}	1 = Henderson Bush 2 = Thaxter 3 = Burpee's Improved Bush
<input type="text"/> No. of Days Later Than		4 = Sieva 5 = Florida Butter 6 = King of the Garden
		7 = Other (Specify) _____

4. PLANT:

<input type="text"/> 1 = Determinate, Erect Bush 4 = Indeterminate, Pole	2 = Determinate, Sprawling Bush	3 = Determinate, Semipole
<input type="text"/> <input type="text"/> <input type="text"/> cm Height	<input type="text"/> <input type="text"/> cm Length of First Internode Above Primary Leaf	
<input type="text"/> <input type="text"/> cm Spread	<input type="text"/> <input type="text"/> Number of Internodes on Main Stalk Between Primary Leaf and Base of Terminal Inflorescence	
<input type="text"/> mm Stalk Diameter Above First Trifoliolate Leaf		
<input type="text"/> Main Stalk: 1 = Brittle 2 = Wirey	<input type="text"/> Main Stalk: 1 = Stout 2 = Thin	
<input type="text"/> Flower Position: }	1 = Low, Concentrated 2 = High, Concentrated 3 = Scattered	
<input type="text"/> Pod Position: }		

5. LEAVES:

<input type="checkbox"/>	1 = Smooth	2 = Wrinkled	<input type="checkbox"/>	1 = Dull	2 = Glossy
<input type="checkbox"/>	Thickness	1 = Thin	2 = Medium	3 = Thick	
<input type="checkbox"/>	cm Petiole Length (To Basal Leaflets of First Trifoliate Leaf)				
<input type="checkbox"/>	Size:	1 = Small (Sieva)	2 = Medium	3 = Large (Prizetaker)	
<input type="checkbox"/>	Tip Shape of Center Leaflet:	1 = Rounded	2 = Taper Pointed	3 = Sharp Pointed	
<input type="checkbox"/>	Pubescence – Dorsal:	}	1 = None	2 = Slight	3 = Considerable
<input type="checkbox"/>	Pubescence – Ventral				
<input type="checkbox"/>	Color:	1 = Gray Green	2 = Medium Green (Burpee's Improved Bush)	3 = Dark Green (Sieva)	

6. FLOWERS:

<input type="checkbox"/>	Color:	1 = White	2 = Cream	3 = Pink	4 = Lilac	5 = Purple	6 = Other (Specify) _____
<input type="checkbox"/>	Racemes:	cm to Base of Terminal Floret	<input type="checkbox"/>	<input type="checkbox"/>	Number of Flowers per Raceme		

7. FRESH PODS:

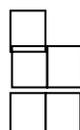
<input type="checkbox"/>	Color:	1 = Light Green (Thaxter)	2 = Medium Green (Florida Butter)	3 = Dark Green (Thorogreen Early)	4 = Other (Specify) _____		
<input type="checkbox"/>	cm Length:	<input type="checkbox"/>	mm Width (Between Sutures)	<input type="checkbox"/>	mm Thickness	<input type="checkbox"/>	$\frac{\text{Width}}{\text{Thickness}} \times 10$
<input type="checkbox"/>	Cross Section Pod Shape:	1 = Flat	2 = Oval	3 = Round	<input type="checkbox"/>	Curvature:	1 = Straight 2 = Slightly Curved 3 = Curved
<input type="checkbox"/>	mm Spur Length				<input type="checkbox"/>	Spur:	1 = Straight 2 = Slightly Curved 3 = Curved
<input type="checkbox"/>	Surface:	1 = Shiny	2 = Dull		<input type="checkbox"/>	Surface:	1 = Smooth 2 = Blistered
<input type="checkbox"/>	Pubescence:	1 = None	2 = Sparse	3 = Considerable	<input type="checkbox"/>	Number of Seeds per Pod	
<input type="checkbox"/>	Number of Pods per Plant (Once over Harvest)				<input type="checkbox"/>	Machine Harvest:	1 = Adapted 2 = Not Adapted
<input type="checkbox"/>	Condition of Pods at Once-Over Harvest:	<input type="checkbox"/>	% Dry	<input type="checkbox"/>	% Yellow	<input type="checkbox"/>	% Green

8. SEEDS:

<input type="checkbox"/>	1 = Monochrome	2 = Polychrome	<input type="checkbox"/>	1 = Shiny	2 = Dull		
<input type="checkbox"/>	Primary Color:	1 = White	2 = Greenish White	3 = Green	4 = Yellow	5 = Buff	6 = Tan
<input type="checkbox"/>	Secondary Color:	7 = Brown	8 = Pink	9 = Red	10 = Purple	11 = Black	12 = Other _____
<input type="checkbox"/>	Color Pattern:	1 = Splashed	2 = Mottled	3 = Striped	4 = Flecked	5 = Dotted	
<input type="checkbox"/>	Secondary Color Location:	1 = Hilar Ring	2 = Hilar Surface	3 = Strophiole	4 = Micropyle	5 = Sides	
<input type="checkbox"/>		6 = Dorsal Surface	7 = Not Restricted to any Area	8 = Combination of Locations (Specify) _____			
<input type="checkbox"/>	Hilar Ring:	1 = Not Present	2 = Narrow	<input type="checkbox"/>	Vein-like Under Coat Pattern:		
<input type="checkbox"/>		3 = Wide	4 = Butterfly Shaped		1 = Absent	2 = Present	
<input type="checkbox"/>	Cotyledon Color:	1 = White	2 = Pale Green	3 = Green	<input type="checkbox"/>	Seed Coat:	1 = SMO 2 = WRN

9. SEED SHAPE AND SIZE:

<input type="checkbox"/>	Hilum View	1 = Flat	2 = Elliptical	<input type="checkbox"/>	Side View	1 = Oval	2 = Round
<input type="checkbox"/>		3 = Oval	4 = Round			3 = Kidney	4 = Truncate Ends
<input type="checkbox"/>	Cross Section:	1 = Flat	2 = Elliptical	3 = Oval	<input type="checkbox"/>	gm Weight per 100 Seeds	
<input type="checkbox"/>		4 = Round					
<input type="checkbox"/>	Classification:	1 = Sieva	2 = Intermediate	3 = Fordhook			

9. SEED SHAPE AND SIZE: (continued)

Classification: 1 = Sieva 2 = Intermediate 3 = Fordhook

mm Width (Dorsal to Ventral)

mm Thickness (Side to Side)

mm Length

$$\frac{\text{Width}}{\text{Thickness}} \times 10$$
10. ANTHOCYANIN: (1 = Absent, 2 = Present)

Flowers

Stem

Pods

Seeds

Leaves

11. DISEASE RESISTANCE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

Rust (Specify Race)

Angular Leaf Spot

Bacterial Wilt

Common Bean Mosaic

Anthracnose

Lima Bean Mosaic

Southern Bean Mosaic

Fusarium Root Rot

Curly Top

N.Y. 15 Bean Mosaic

Downy Mildew

Powdery Mildew

Bean Mosaic Virus 4

Halo Blight

Fucous Blight

Alfalfa Mosaic Virus

Alfalfa Mosaic Virus 2

Pod Mottle Virus

Red Node Virus

Root Knot Nematode

Other (Specify) _____

12. INSECT RESISTANCE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

Aphids

Leaf Hoppers

Pod Borer

Lygus

Thrips

Weavils

Seed Corn Maggot

Other (Specify) _____

13. PSYCHOLOGICAL RESISTANCE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

Heat

Cold

Drought

Other (Specify) _____

REFERENCES:

The following publications may be used as references 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, NY 1931.
2. Yarnell, S.H., Cytogenetics of the Vegetable Crops IV. Legumes. Bot. Rev. 31:247-330. 1965.
3. USDA Yearbook of Agriculture. 1937.

Color: Nickersons or any recognized color fan may be used to determine colors.

COMMENTS::