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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  
Cowpea (*Vigna unguiculata* L.(Walp.))**

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

**PLEASE READ ALL INSTRUCTIONS CAREFULLY:**

Place the appropriate number that describes the varietal characters typical of this variety in the spaces below.

Place a zero in the first box (e.g.  or  ) when number is either 99 or less or 9 or less.

<p><b>1. PLANT HABIT AT GREEN SHELL STAGE:</b></p> <p><input type="text"/> 1 = Erect   2 = Semierect   3 = Procumbent 4 = Prostrate</p>	<p><b>2. PLANT SIZE:</b></p> <p><input type="text"/> cm High at Maturity</p>												
<p><b>3. STEM COLOR:</b></p> <p><input type="text"/> 1 = Green   2 = Purple</p>	<p><b>4. NODE COLOR:</b></p> <p><input type="text"/> 1 = Green   2 = Purple</p>												
<p><b>5. FOLIAGE:</b></p> <p><input type="text"/> 1 = Open   2 = Compact</p>	<p><b>6. LEAF COLOR:</b></p> <p><input type="text"/> 1 = Light Green   2 = Medium Green   3 = Dark Green</p>												
<p><b>7. LEAF SURFACE:</b></p> <p><input type="text"/> 1 = Smooth   2 = Blistered</p>	<p><input type="text"/> 1 = Dull   2 = Glossy</p>												
<p><b>8. FLOWER COLOR:</b></p> <p><input type="text"/> 1 = Purple   2 = Lavender   3 = Tinged   4 = White</p>	<p><b>9. FIRST FLOWERING:</b></p> <p><input type="text"/><input type="text"/> Number of Days</p>												
<p><b>10. POD:</b></p> <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"> <p><input type="text"/> Placement: 1 = Below Foliage   2 = Above Foliage 3 = At Foliage Level</p> </td> <td style="width:50%; border: none;"> <p><input type="text"/> Location: 1 = Scattered   2 = Bunched</p> </td> </tr> <tr> <td style="border: none;"> <p><input type="text"/><input type="text"/> cm Long   <input type="text"/><input type="text"/> mm Wide</p> </td> <td style="border: none;"> <p><input type="text"/> Curvature 1 = Straight   2 = Curved</p> </td> </tr> <tr> <td style="border: none;"> <p><input type="text"/> Constrictions: 1 = None   2 = Slight   3 = Deep</p> </td> <td style="border: none;"> <p><input type="text"/> Surface (Green shell maturity) 1 = Dull   2 = Glossy</p> </td> </tr> <tr> <td colspan="2" style="border: none;"> <p><input type="text"/> Color (Green Shell Maturity): 1 = Silver-green   2 = Green   3 = Light Purple   4 = Dark Purple</p> </td> </tr> <tr> <td colspan="2" style="border: none;"> <p><input type="text"/> Color (Dry maturity): 1 = White   2 = Straw   3 = Drab   4 = Purple</p> </td> </tr> <tr> <td colspan="2" style="border: none;"> <p><input type="text"/> Cross Section (Green Shell Stage Width/Height): 1 = (1: &lt;)   2 = (1: &gt;)   3 = (1:1)</p> </td> </tr> </table>		<p><input type="text"/> Placement: 1 = Below Foliage   2 = Above Foliage 3 = At Foliage Level</p>	<p><input type="text"/> Location: 1 = Scattered   2 = Bunched</p>	<p><input type="text"/><input type="text"/> cm Long   <input type="text"/><input type="text"/> mm Wide</p>	<p><input type="text"/> Curvature 1 = Straight   2 = Curved</p>	<p><input type="text"/> Constrictions: 1 = None   2 = Slight   3 = Deep</p>	<p><input type="text"/> Surface (Green shell maturity) 1 = Dull   2 = Glossy</p>	<p><input type="text"/> Color (Green Shell Maturity): 1 = Silver-green   2 = Green   3 = Light Purple   4 = Dark Purple</p>		<p><input type="text"/> Color (Dry maturity): 1 = White   2 = Straw   3 = Drab   4 = Purple</p>		<p><input type="text"/> Cross Section (Green Shell Stage Width/Height): 1 = (1: &lt;)   2 = (1: &gt;)   3 = (1:1)</p>	
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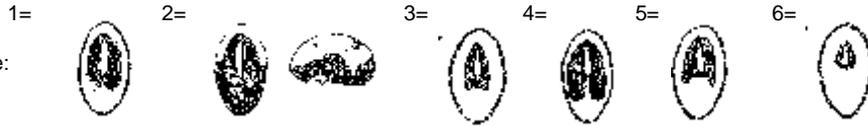
**11. SEED:**

Number of Seeds Per Pod

Shape (see Page 3) 1 = Kidney 2 = Ovate to Ovoid 3 = Crowder  
4 = Globose 5 = Rhomboid

mm Long

mm Wide  Hilar Eye Type:



gm per 1000 Seeds

SPECKLED      BLOTCH      NARROW      BIG      SMALL      VERY SMALL

Coat: 1 = Wrinkled  
2 = Smooth

Color Pattern: 1 = Single Color 2 = Patterned 3 = Marbled 4 = Speckled

Primary Color (Single Color or Basic Color): 1 = Purple 2 = Black 3 = Dull Black 4 = Blue 5 = Red  
6 = Coffed 7 = Maroon 8 = Buff or Clay 9 = Pink 10 = White

SECONDARY COLORS PRODUCING THE PATTERN, MARBLING OR SPECKLING (Enter a zero in boxes where the colors do not identify the secondary colors.):

1 = Purple       2 = Black       3 = Dull Black       4 = Blue       5 = Red  
 6 = Coffee       7 = Maroon       8 = Buff       9 = Pink       0 = White

**12. DISEASE RESISTANCE (0 = Untested; 1 = Susceptible; 2 = Resistant):**

- |   |  |  |   |
|---|--|--|---|
| <input type="checkbox"/> Fusarium Wilt              | <input type="checkbox"/> Root Knot Nematode    | <input type="checkbox"/> Charcoal Rot                  | <input type="checkbox"/> Zonate Leaf Spot           |
| <input type="checkbox"/> Red Leaf Spot              | <input type="checkbox"/> Powdery Mildew        | <input type="checkbox"/> Cowpea Chlorotic Mottle Virus | <input type="checkbox"/> Southern Bean Mosaic Virus |
| <input type="checkbox"/> Bean Yellow Mosaic Virus   | <input type="checkbox"/> Cucumber Mosaic Virus | <input type="checkbox"/> Bean Pod Mottle Virus         | <input type="checkbox"/> Soybean Cyst Nematode      |
| <input type="checkbox"/> Cowpea Yellow Mosaic Virus | <input type="checkbox"/> Bacterial Canker      | <input type="checkbox"/> Cercospora Leaf Spot          | <input type="checkbox"/> Sting Nematode             |
| <input type="checkbox"/> Rust                       | <input type="checkbox"/> Southern Blight       | <input type="checkbox"/> Root Rot                      | <input type="checkbox"/> Other (Specify) _____      |

**13. INSECT:**

- |   |   |  |  |
|---|---|--|--|
| <input type="checkbox"/> Mexican Bean Beetle    | <input type="checkbox"/> Cowpea Aphid           | <input type="checkbox"/> Cowpea Curculio       | <input type="checkbox"/> Stink Bugs    |
| <input type="checkbox"/> Lesser Cornstalk Borer | <input type="checkbox"/> European Cornborer     | <input type="checkbox"/> Corn Earworm          | <input type="checkbox"/> Beet Armyworm |
| <input type="checkbox"/> Thrips                 | <input type="checkbox"/> Serpentine Leaf Miners | <input type="checkbox"/> Other (Specify) _____ |  |

**14. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLE THAT SUBMITTED:**

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant size		Plant habit	
Pod size		Plant pigmentation	
No. days to maturity		Seed coloration	

Instructions

GENERAL: The following publications may be used as a reference aid for completing this form:

- C. V. Piper, 1912, *Agricultural Varieties of Cowpea and Related Species*, U.S.D.A., Bulletin No. 229.
- L. L. Ligon, 1958, *Characteristics of Cowpea Varieties*, Oklahoma State University, Bulletin B-518.
- W. J. Spillman and W. J. Sando, 1929, *Mendelian Factors in the Cowpea*, papers of the Michigan Academy of Science Arts and Letters, Vol XI.

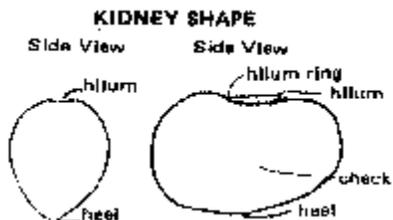
LEAF COLOR: Any recognized color chart may be used to determine the leaf color of the described variety. The following cowpea varieties may be used as a guide to identify colors listed:

1. Light Green – Texas Cream 40
2. Medium Green – Big Boy
3. Dark Green – California Blackeye #5.

FLOWER COLOR: White flower should be treated with a one percent solution of hydrochloric acid to determine if anthocyanin is present. If color appears as a result of the test, classify as tinged.

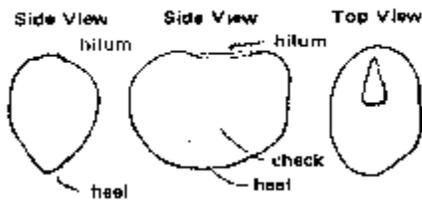
TERMS USED TO DESCRIBE SHAPES:

KIDNEY SHAPE



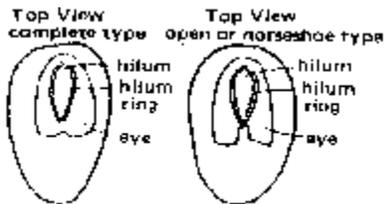
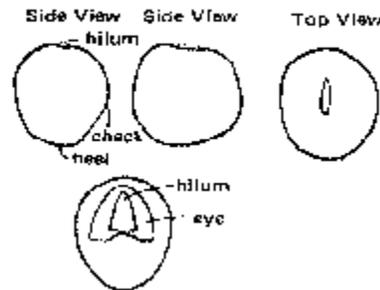
OVATE to OVOID SHAPES

OVATE to OVOID SHAPES



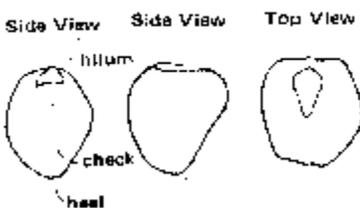
GLUBOSE

GLOBOSE



CROWDER

CROWDER



RHOMBOID

RHOMBOID

