



## WORLDVEG-GRSU CHARACTERIZATION RECORD SHEET

Crop: *Lablab* spp.  
 Plot No. : \_\_\_\_\_ Accession No. : \_\_\_\_\_  
 Sowing Date: \_\_\_\_\_ Name: \_\_\_\_\_  
 Transplanting Date: \_\_\_\_\_ Species: \_\_\_\_\_  
 Location: \_\_\_\_\_ Origin: \_\_\_\_\_

### **VEGETATIVE DATA**

- Lab01** Emerging cotyledon color \_\_\_\_\_  
 1 = White 2 = Green 3 = Purple
- Lab02** Hypocotyl color \_\_\_\_\_  
 1 = Green 2 = Purple
- Lab03** Main stem pigmentation (at 4-6 weeks after planting) \_\_\_\_\_  
 0 = No pigmentation 3 = Localized to nodes  
 5 = Extensive 7 = Almost solid
- Lab04** Clear markings along veins of fully developed primary leaves \_\_\_\_\_  
 0 = Absent 3 = Narrow 7 = Wide X = Mixture
- Lab05** Vein color of fully developed primary leaves (on inner face) \_\_\_\_\_  
 1 = Green 2 = Purple X = Mixture
- Lab06** Leaf anthocyanin \_\_\_\_\_  
 0 = Absent + = Present
- Lab07** Leaf color intensity (4-6 weeks after planting) \_\_\_\_\_  
 3 = Pale green 5 = Intermediate green 7 = Dark green
- Lab08** Leaf hairiness (density) (on inner surface of first fully expanded leaves from tip) \_\_\_\_\_  
 0 = Glabrous 3 = Slightly pubescent  
 5 = Moderately pubescent 7 = Highly pubescent
- Lab09** Ramification index (if determinate type - 6 weeks after planting) \_\_\_\_\_  
 3 = Long internodes on main stems, few lateral branches, type Fordhook  
 5 = Intermediate  
 7 = Short internodes on main stems, numerous lateral branches, type  
 Henderson

- Lab10** Branch orientation (if determinate type - see Figure 1.) \_\_\_\_\_
- 3 = Short and erect lateral branches
  - 5 = Branches tending to be perpendicular to main stem, medium in length
  - 7 = First lateral branches long and spreading over ground

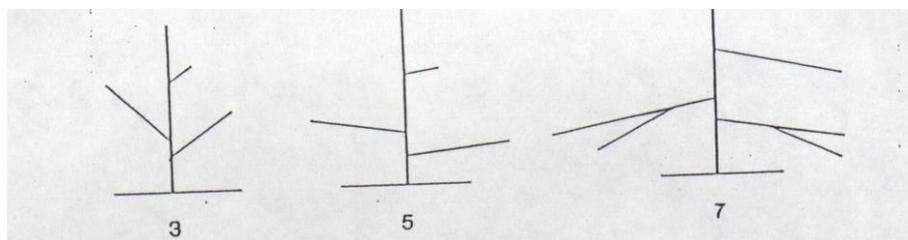


Figure 1. Branch orientation.

- Lab11** Ramification index (if indeterminate type - 6 weeks after planting) \_\_\_\_\_
- 1 = One main stem, none or few short lateral branches
  - 3 = One main stem, few lateral branches starting from the first nodes
  - 5 = Two or three main stems starting from the first nodes
  - 7 = Two or three main stems and other lateral branches
  - 9 = Densely branched

- Lab12** Length from hypocotyl base to fully expanded (primary leaves - 10 random plants in cm) \_\_\_\_\_
- \_\_\_\_\_

- Lab13** Plant height (if determinate type) \_\_\_\_\_
- (in cm, on 10 random, mature plants, from cotyledon scar to tip of plant)
- \_\_\_\_\_

- Lab14** Leaf persistence - when 90% of pods are ripe \_\_\_\_\_
- 3 = Few leaves remaining
  - 5 = Intermediate
  - 7 = Most leaves remaining

- Lab15** Growth habit \_\_\_\_\_
- 1 = Determinate bush
  - 2 = Intermediate semi-climber
  - 3 = Indeterminate climber
  - 4 = Other (specify) \_\_\_\_\_

- Lab16** Leaflet length \_\_\_\_\_
- (measured on the terminal leaflet of third trifoliate leaf from pulvinus to leaf tip)
- 3 = 5-7 cm
  - 5 = 7.1-11 cm
  - 7 = 11.1-15 cm

**Lab17** Leaflet shape

(Measured on the terminal leaflet of third trifoliate leaf according to the ratio of length (l) to width (w). See Figure 2.)

	l/w
1 = Round	1.5
3 = Ovate	1.5-2
5 = Ovate-lanceolate	2.3
7 = Lanceolate	3-6
9 = Linear-lanceolate	6

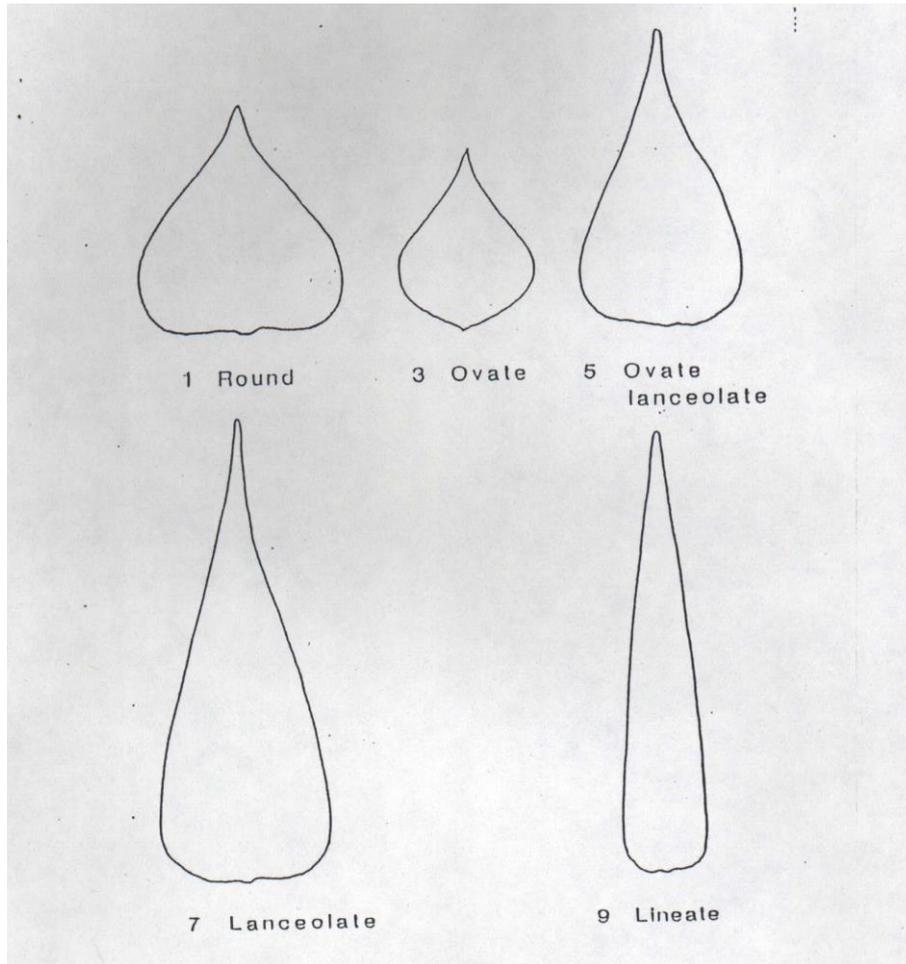


Figure 2. Leaf shape.

**Lab18** Days to maturity (from emergence to stage when 90% of pods are ripe)

**INFLORESCENCE & FRUIT DATA**

**Lab19** Number of nodes on main stem before first raceme \_\_\_\_\_  
(Average from 10 random plants: if determinate type, from cotyledon scar to last leaf; if indeterminate type, from cotyledon scar to first flowering node.)  
\_\_\_\_\_

**Lab20** Days to flowering \_\_\_\_\_  
(from emergence to stage when 50% of plants have begun to flower)

**Lab21** Flower bud size (just before opening, see Figure 3.) (cm) \_\_\_\_\_  
3 = Small (3.6-4.5) 5 = Medium (5.6-6.5) 7 = Large (7.6-8.5)

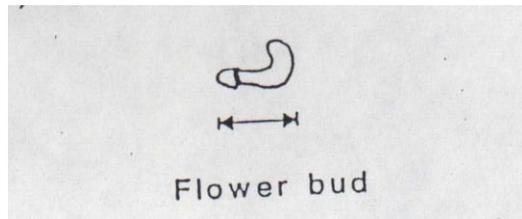


Figure 3. Flower bud size.

**Lab22** Color of flower keel (color of tip) \_\_\_\_\_  
1 = Greenish 2 = Tinged (pink or purple) 3 = white

**Lab23** Color of flower standard (upper part of inner side) \_\_\_\_\_  
1 = White 3 = Light pink 5 = Deep pink to purple 7 = Violet

**Lab24** Color of flower wings \_\_\_\_\_  
1 = White 3 = Light pink 5 = Deep pink to purple 7 = Violet

**Lab25** Hairiness of standard (outer face of freshly opened flower) \_\_\_\_\_  
0 = Absent 3 = Sparsely hairy on tip  
5 = Moderately hairy 7 = Densely hairy all over

**Lab26** Wing opening (freshly opened flower) \_\_\_\_\_  
0 = Parallel wings; closed 3 = Intermediate opening  
7 = Wings widely diverging

**Lab27** Number of nodes per raceme \_\_\_\_\_  
(One raceme from each of 10 plants at pod filling period; if determinate type, one terminal raceme; if indeterminate type, one lateral raceme - 6th from apex.)  
\_\_\_\_\_

**Lab28** Raceme length \_\_\_\_\_  
(In cm, one raceme from each of 10 plants at pod filling period; if determinate type, one terminal raceme; if indeterminate type, one lateral raceme - 6th from apex.)  
\_\_\_\_\_

**Lab29** Raceme position (at fully expanded green pod stage) \_\_\_\_\_  
 3 = Within foliage                      5 = Intermediate  
 7 = Emerging from leaf canopy

**Lab30** Duration of flowering \_\_\_\_\_  
 (from first flowers to stage where 50% of plants have finished flowering)

**Lab31** Pod curvature (of fully expanded immature pod, see Figure 4.) \_\_\_\_\_  
 0 = Straight    3 = Slightly curved    5 = Curved

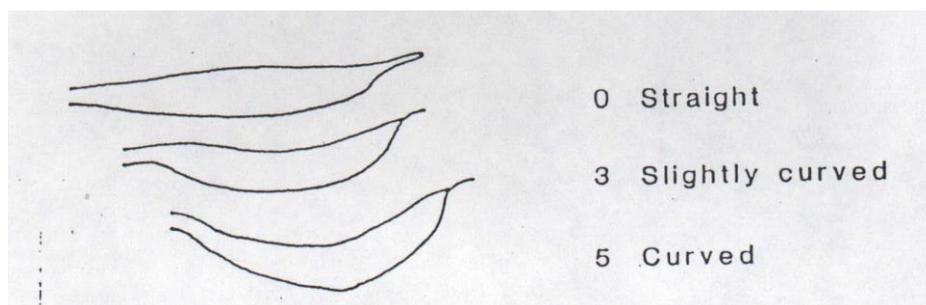


Figure 4. Pod curvature.

**Lab32** Pod pubescence (on fully expanded immature pods) \_\_\_\_\_  
 0 = Glabrous    + = Pubescent

**Lab33** Pod beak shape (on fully expanded immature pods, see Figure 5.) \_\_\_\_\_  
 1 = Short beak              2 = Medium length beak  
 3 = Long beak              4 = Thick beak

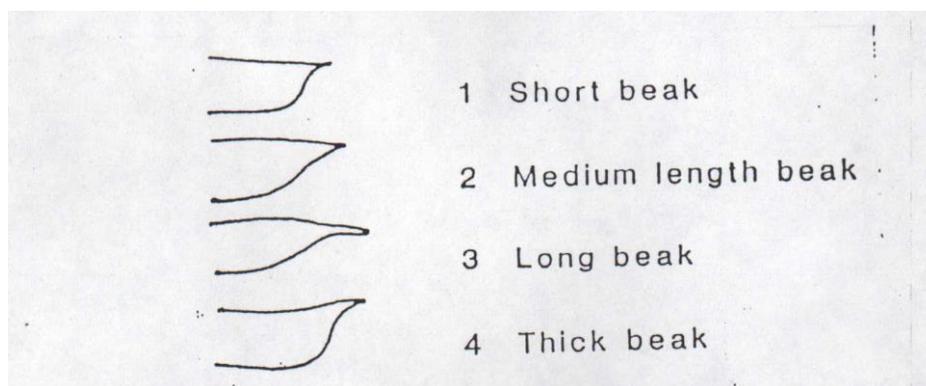


Figure 5. Pod beak shape.

**Lab34** Position of pod bearing racemes \_\_\_\_\_  
 1 = Mainly concentrated at the base  
 2 = Mainly concentrated in the middle  
 3 = Mainly concentrated at the top  
 4 = Evenly distributed throughout the plant  
 5 = Variably distributed

**Lab35** Orientation of pod bearing racemes (at maturity) \_\_\_\_\_  
 1 = Upright    2 = Prostrate

- Lab36** Pod dehiscence (at maturity) \_\_\_\_\_  
 0 = Non- shattering + = Shattering
- Lab37** Days to mature pod \_\_\_\_\_  
 (from emergence to stage when 50% of plants have mature pods)
- Lab38** Pod color (of mature pods) \_\_\_\_\_  
 1 = Light green 2 = Green  
 3 = Green with purple suture 4 = Purple
- Lab39** Pod length \_\_\_\_\_  
 (In cm, average of 10 randomly chosen mature pods. If pods are curved,  
 measure the longest straight line from base to tip of pods.)  
 \_\_\_\_\_
- Lab40** Pod width \_\_\_\_\_  
 (In cm, of the largest width from 10 randomly chosen, mature pods)  
 \_\_\_\_\_
- Lab41** Number of locules per pod \_\_\_\_\_  
 (ovule attachment on 10 randomly chosen pods)  
 \_\_\_\_\_

**SEED DATA**

- Lab42** Number of seeds per pod \_\_\_\_\_  
 (average from 10 randomly chosen ripe pods)  
 \_\_\_\_\_
- Lab43** Seed germination within pods (radicle emergence) \_\_\_\_\_  
 0 = Absent + = Present
- Lab44** Splitting of seed testa \_\_\_\_\_  
 0 = Absent + = Present
- Lab45** Texture of seed testa \_\_\_\_\_  
 (transverse ridges may exist radiating from the hilum to the opposite edge of  
 seed)  
 3 = Smooth 5 = Moderately ridged 7 = Markedly ridged
- Lab46** Cotyledon color (of ripe seeds) \_\_\_\_\_  
 1 = White 2 = Green 3 = Brown  
 4 = Purple 5 = Black 6 = Other (buff)

**Lab47** Background color (the lightest color) \_\_\_\_\_  
1 = White            2 = Grey            3 = Yellow            4 = Buff  
5 = Light brown    6 = Black            7 = Other (purple)    X = Mixture

**Lab48** Pattern color \_\_\_\_\_  
(Eye always included: if bicolored pattern consider only the lightest color of the pattern.)  
0 = No pattern    1 = Light brown    2 = Dark brown    3 = Black

**Lab49** Shape of seed (Seed taken from middle of pod, see Figure 6.) \_\_\_\_\_

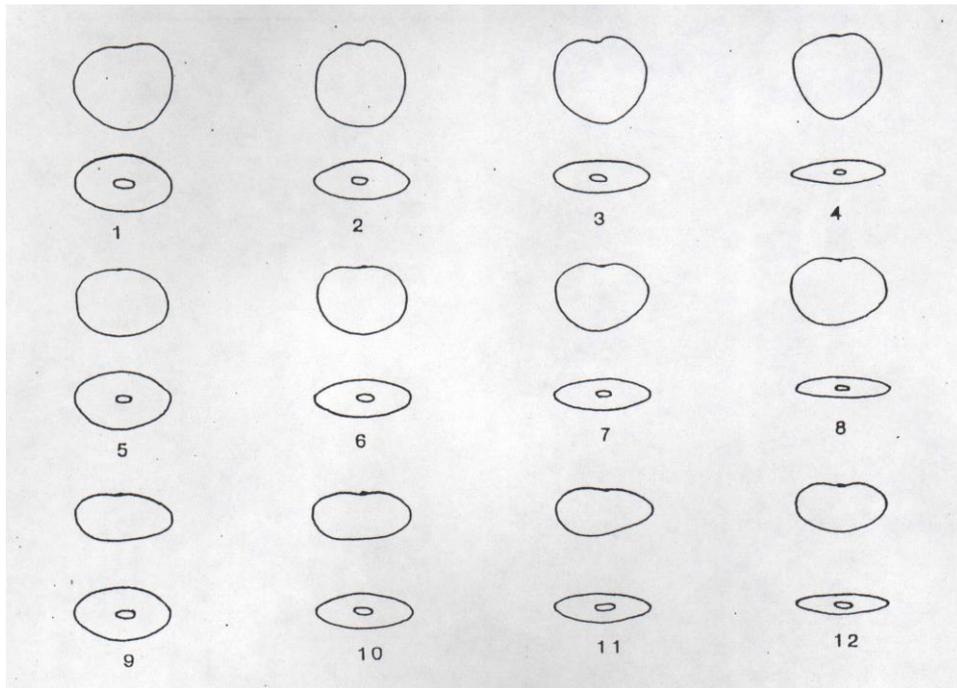


Figure 6. Shape of seed.

**Lab50** Seed length (In mm, average of 10 ripe seeds chosen at random) \_\_\_\_\_  
\_\_\_\_\_

**Lab51** Seed width (In mm, average of 10 ripe seeds chosen at random) \_\_\_\_\_  
\_\_\_\_\_

**Lab52** 100 seeds weight (gm, moisture content 12-14%) \_\_\_\_\_

## PEST AND DISEASE SUSCEPTIBILITY

In each case, it is important to state the origin of the infection or infestation, i.e. natural, field inoculation, laboratory test (specify). Record such information in the NOTES descriptor.

These are coded on a 1-9 scale, where

3 = Low susceptibility

5 = Medium susceptibility

7 = High susceptibility

### PEST

Record the name of the pest infecting the plant, if possible determine the species of the pest. Use the rating scale stated above.

### DISEASES

Record the name of the disease, causal organism (genus and species). Use the rating scale stated above.

Fungi

Bacteria

Virus and mycoplasma

Nematode