

**(ix) FODDER COWPEA (*Vigna unguiculata*)**
**A. CROP IMPROVEMENT**  
**I. SEASON AND VARIETIES**

Zone District/ Season	Month	Varieties
<b>Irrigated</b>		
Erode, Madurai, Dindigul, Theni, Cuddalore, Villupuram and Tiruvannamalai	June-July	CO 9

**II. PARTICULARS OF FODDER COWPEA VARIETIES**

PARTICULARS	CO 9
Year of Release	2016
Year of Notification	SO.1379(E)/ 27.03.2018
Parentage	Cross derivative from CO 5 x Bundel Lobia 2
Duration (Days)	50-55
Green fodder yield (t/ha)	23
Seed yield (kg/ha)	745
<b>Morphological characters</b>	
Plant height (cm)	130-140
No. of branches	4-5
Leaf length (cm)	12.0
Leaf width (cm)	10.0
Leaf stem ratio	
<b>Quality characters</b>	
Dry matter content (%)	16.86
Crude protein content (%)	21.56

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## **B. CROP MANAGEMENT**

### **I. GREEN FODDER PRODUCTION**

#### **1. Soil**

All types of soils with good drainage.

#### **2. Preparatory cultivation**

- Plough twice with an iron plough and three or four times with country plough to obtain good tilth.
- Form ridges and furrows of 6 m length and 30 cm apart. If ridges and furrows are not made, form beds of size 20 m<sup>2</sup> depending on the availability of water.

#### **3. Sowing**

- Seed treatment: Treat the seeds with 3 packets (600 g) of *Rhizobium* and 3 packets (600 g) *Phosphobacteria* before sowing.
- Seed rate: 25 kg/ha.
- Spacing: 30 x 15 cm

#### **4. Nutrient management**

- Spread FYM or compost at 12.5 t/ha and incorporate the manure into the soil during ploughing
- Apply NPK fertilizer as per soil test recommendations as far as possible. If the soil testing is not done, follow the blanket recommendations of 25:40:20 kg NPK/ha.
- Apply full dose of NPK basally before sowing.

#### **5. Irrigation management**

Irrigate immediately after sowing, life irrigation on third day and thereafter once in ten days.

#### **6. Weed management**

Hoeing and weeding are given as and when necessary.

#### **7. Plant protection**

As per CIB&RC, insecticide is not recommended for the management of pests in fodder crops. No insecticide is registered/label claimed against the pests of fodder crops.

#### **8. Harvesting**

Harvest at 50 - 55 days after sowing (50% flowering stage).

## 9. Green fodder yield

As green fodder under irrigated conditions, a pure crop yields about 18-25 t/ha of green fodder.

## II. SEED PRODUCTION

### Land requirement

- Land should be free of volunteer plants. The previous crop should not be the same variety or other varieties of the same crop. It can be the same variety if it is certified as per the procedures of certification agency.

### Isolation

- For certified / quality seed production, leave a distance of 25 m all around the field from the same and other varieties of the crop.

### Sowing Season

- October to January.

### Pre-sowing seed treatment

- Scarify the seeds with conc.  $\text{H}_2\text{SO}_4$  acid @ 200 ml / kg for 4 min.
- After scarification, soak the seeds in  $\text{KNO}_3$  @ 0.25 % for 3 h to improve germination.

### Seed grading

- Grade the seeds using BSS 16 x 16 wire mesh sieve.

### Storage

- Store the seeds in gunny or cloth bags for short term storage (8 - 9 months) with a seed moisture content of 9 - 10 %.
- Store the seeds in polylined gunny bag for medium term storage (12 - 15 months) with a seed moisture content of 8 - 9 %.
- Store the seeds in 700 gauge polythene bag for long term storage (more than 15 months) with a seed moisture content less than 8 %.