

## **CLUSTER BEAN or GUAR (*Cyamopsis tetragonaloba*):** *A Leguminous Fodder*

Clusterbean is an annual, erect herb growing to a height of 1-2 m with trifoliolate leaves and rose coloured flowers. It is indigenous to India and cultivated in all parts of India. It is a drought resistant vegetable cum fodder crop suitable for cultivation in arid and semi-arid regions. It is a soil restorative crop, especially suitable for light sandy or alluvial soil.

Being leguminous in nature it produces much palatable green fodder. 17-20% C.P., 42-48% neutral detergent fibre, 37-42% acid detergent fibre, 23.5-25.3% cellulose and 8-12% hemi cellulose.

**Soil and its preparation:** Light textured sandy to sandy loam soils with adequate drainage are ideally suited for its growth. The field should be prepared by 2-3 harrowing to ensure a leveled and weed free soil surface.

**Sowing time:** *Summer* crop is sown in March-April under irrigated conditions, *Kharif* sowings is done in June-July with the onset of monsoon, under north Indian conditions for a lush higher fodder yields. However, in southern parts of the country *Rabi* sowings can be done in October-November.

**Varieties :** Bundel Guar-1, BG-2, BG-3, FS-227, HFC-110, 156, Guar-80, Maru Guar.

**Seed rate and sowing method:** Sowing is done in lines 25 cm apart using a seed rate of 35 kg/ha. In dryland semi arid regions, where moisture stress is common phenomenon sowing is recommended in 30-40 cm apart rows with reduced seed rate of 25-30 kg/ha to have a low plant population. The seed should be sown with *Kaira* under irrigated conditions and *Pora* in drylands.

**Fertilizer:** Cowpea should be fertilized with 20 Kg N + 50 Kg P<sub>2</sub>O<sub>5</sub>/ha at sowing time.

**Irrigation:** Summer crop needs 3-4 irrigations whereas rainy season crop generally does not require any irrigation. However, if long dry spell prevails, one or two irrigation may be provided. Rabi season crop in southern India needs 3-4 irrigations.

**Weed control: Mechanical:** One operation with weeder cum mulcher at 3-4 weeks crop stage is very useful for checking weed growth.

**Chemical:** Pre-plant soil incorporation of Nitralin @ 0.75 kg a.i. /ha has been found effective.

**Harvesting and yield:** The crop should be harvested at bloom to pod formation stage (60-75 days after sowing). A good crop of cluster bean yield 30-35 tons green fodder yield /ha.

For detail information please contact to:-

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