

BENGALGRAM

Varieties

Desi: Nandyala Gram 49 (NBeG 49), Dheera (NBeG 47), Nandyala Sanaga1 (NBeG 3), JG 11 and JAKI 9218.

Kabuli : Nandyala Gram 119 (NBeG 119), KAK 2, Vihar (Phule G 95311) and LBeG 7 (Lam sanaga),

Extra large seeded kabuli: MNK 1 and Kripa

Sowing: October to November

Soils : Medium to deep black soils

Seed rate: 85-90 kg/ha (Desi); 100-110 kg/ha (kabuli);
130-150 kg/ha (Extra large seed kabuli)

Spacing : 30 x 10 cm

Fertilizers: 20 kg N, 50 kg P₂O₅, 40 kg S/ha as basal dose. Application of 50 kg/ha

Intercultivation: Twice at 20 and 30 DAS

Weed Control : spray pendimethalin at 2.5 to 3.5 lt/ha immediately after sowing or the next day to check the weed growth for the first 20-25 days.

Irrigation : Rainfed, but one or two light irrigations at branching and pod formation stage will increase the yields by 15-20%.

**Pest
control:
Helicoverpa
pod borer:**

Adopt IPM practices against *Helicoverpa*

- Follow strip cropping of bengalgram with coriander (8:2 or 16:4)
- Sow four rows of sorghum all round the plot
- Transplant 50-100 marigold seedlings all round the plot
- Monitoring with pheromone traps @ 10/ha to target the pest at right stages.
- Use bird perches (50/ha)
- Use neem formulations for insect repelling (NSKE 5%) or neem oil 2.5 L/ha soon after the pest occurrence.
- Use bio-pesticides like Bt 1 kg/ha and NPV 500 LE/ha twice at an



interval of 7-10 days in the evening hours.

- If necessary spray chlorpyrifos 2.5 ml or quinalphos 2 ml or acephate 1 g per litre. In severe case, spray spinosad 0.35 ml or rynaxypyr 0.2 ml or indoxacarb @ 1 ml per litre.

Spodoptera exigua:

The incidence of *S.exigua* generally appears at early vegetative stage i.e upto 20-30 days after sowing. Larvae damage the lower leaves by scraping. In severe cases, foliage will drop down. Prophylactic spray of neem oil 3000 ppm 5 ml/ litre at 15 DAS and as curative measure spray either monocrotophos 1.6 ml or acephate 1.0 g or quinalphos 2.0 ml or thiodicarb 1 g per litre.

Diseases

Wilt :

- Seed treatment with *Trichoderma* (8 g/kg) or captan or thiram 2.5g/kg seed or Carbendazim 3 g/kg or Vitavax power 1.5g/kg or Tebuconazole 1.5 g/kg.
- Grow resistant varieties such as NBeG 3, N BeG 47, N BeG 49, JG 11, and JAKI9218.
- Apply developed *Trichoderma viride* (80 kg well decomposed FYM + 20 kg neem cake + 2- 3kg *Trichoderma viride* incubate for 25-30 days in shade) at the time of sowing.
- Follow 3-4 year crop rotation with Sorghum, Bajra, Setaria or Maize.