

REDGRAM

Varieties

Medium duration: LRG 52, LRG 41, LRG 38, LRG 30, ICP 8863, ICPL 332, ICPL 87119,

ICPL 85063, TRG 22.

Short duration : ICPL 84031 (Durga), ICPL 85010 and CORG 9701

Wilt resistant varieties: ICP 8863 and ICPL 87119.

SMD resistant varieties: ICPL 87119, BSMR 736 and BSMR 853.

Soils/areas: All types of soils with good drainage. Saline soils are not suitable.

Land preparation : Land should be prepared to fine tilth by ploughing 2 to 3 times followed by harrowing.

Seed rate : Medium duration varieties : 5-10 kg/ha

Rabi : 12-15 kg/ha

Spacing : Medium duration varieties : 150/ 240 x 20 cm (depending on soil type)

Short duration varieties : 90 x 20 cm (black soils) or 60 x 20 cm (light soils)

Rabi : 45-60 x 10 cm rainfed: 90 x 10 cm under ID conditions

Sowing/planting :

Kharif: 15th June – August.

Rabi : September 20th to October 20th

Manures and fertilizers :

Kharif: Apply 20 N + 50 P2O5 kg/ha as basal dose.

Rabi: 20 kg N and 50 kg P2O5/ha as basal+ 20 kg N as top dressing at 25 DAS

Intercultivation : Twice at 30 and 60 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 (or) spraying of imazethapyr 750 ml/ha at 25-30 DAS followed by intercultivation at 50-55 DAS.

INTERGRATED PEST MANAGEMENT OF *HELICOVERPA* ON REDGRAM

I. CULTURAL

- Summer ploughing
- Avoid mono-cropping
- Follow crop rotation
- Cultivate tolerant/recouping varieties (LRG 41, ICPL 332, ICPL 84060, LRG 38 and LRG 30) **Grow intercrops** : Maize, Sorghum, Soybean, Gingelly, Greengram, Blackgram, Dry paddy and Bajra.

II. MECHANICAL

- Monitor with Pheromone traps 10/ha
- Dislodge the larvae by shaking the plants

III. BIOLOGICAL

- Release Trichogramma twice at weekly intervals 65,000/ha
- Keep bird perches 50/ha up to flowering stage
- Spray NPV and B.T. (NPV 500 LE/ha or B.T. 1 kg/ha)

IV. PLANT PRODUCTS

- Use Neem oil 5 ml/l or NSKE 50 ml/l

V. SYNTHETIC PESTICIDES

- Follow need based application
- Avoid cocktail mixtures.
- Aim the sprayings at early instars
- Chlorpyriphos 2.5 ml or quinolphos 2 ml or acephate 1 g or spinosad 0.3 ml or emamectin benzoate 0.4 g per litre alternatively during the flowering & pod formation stage.
- Ensure thorough coverage (400-500 l/ha)
- Discourage synthetic pyrethroids
- Avoid sub-lethal dosage
- Adopt community approach

Maruca Pod borer: Spray a combination of chlorpyriphos 2.5 ml + nuvan 1ml/lit at flowering stage, spinosad 0.3 ml or emamectin benzoate 0.4 g or chlorantraniliprole 0.3 ml or flubendiamide 0.2ml per litre in case of severe infestation.

Pod fly : Monocrotophos 1.6 ml or acephate 1 g or profenophos 2.0 ml or dimethote 2.0 ml or thiacloprid 0.7 ml per litre at the time of pod formation and development stages on need basis.



Disease management : Wilt :

- Deep summer ploughing
 - Follow 3-4 year crop rotation with Sorghum/Maize/Bajra.
 - Grow resistant/tolerant varieties, ICPL 87119, ICP 8863, WRG 65, PRG 158, PRG 176 and LRG 52.\
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- Seed treatment with captan or thiram 2.5 g/kg seed or Carbendazim 3 g/kg and *Trichoderma* (8 g/kg)
 - Apply developed *Trichoderma viride* (80 kg well decomposed FYM + 20 kg neem cake
+ 2- 3 kg *Trichoderma viride* incubate for 25-30 days in shade) at the time of sowing.

Sterility mosaic virus :

- Grow resistant varieties, BSMR 853, BSMR 736 and ICPL 87119.
- Spray dicofol @ 5 ml/l or profenophos 3 ml/l to control mite vectors

Macrophomina blight:

- Grow resistant varieties, MRG 66 and MRG 1004.

Post harvest technology:

- Properly dried produce can be stored in nylon bag, polythene lined gunny bag or compactly knitted gunny bag upto a period of 180 days.