

PESTS OF MAIZE

Major Pests				
1.	Maize shootfly	<i>Atherigona orientalis</i>	Muscidae	Diptera
2.	Stem borer	<i>Chilo partellus</i>	Crambidae	Lepidoptera
3.	Pink stem borer	<i>Sesamia inferens</i>	Noctuidae	Lepidoptera
4.	Cornworm/Earworm	<i>Helicoverpa armigera</i>	Noctuidae	Lepidoptera
5.	Web worm	<i>Cryptoblabes gnidiella</i>	Pyraustidae	Lepidoptera
6.	Aphid	<i>Rhopalosiphum maidis</i>	Aphididae	Hemiptera
7.	Shoot bug	<i>Peregrinus maidis</i>	Delphacidae	Hemiptera

1. Maize shootfly: *Atherigona orientalis*



Host range: Maize, sorghum, ragi and bajra

Damage symptoms

- The maggot feeds on the young growing shoots resulting in “dead hearts”.

Management

- Grow resistant cultivars like DMR 5, NCD, VC 80
- Furrow application of phorate granules 10 G 10 kg/ha (or) lindane 6 G 25 kg per ha

2. Stem borer: *Chilo partellus*



Host range: Jowar, bajra, sugarcane and rice

Damage symptoms

- It infests the crop a month after sowing and up to emergence of cobs.
- Central shoot withering leading to “dead heart” is the typical damage symptom.
- Bore holes are visible on the stem near the nodes.
- Young larva crawls and feeds on tender folded leaves causing typical “shot hole” symptom.
- Affected parts of stem may show internally tunnelling caterpillars.

Management

- Grow resistant cultivars like Him 129, Ganga 4,5,7 and 9, Ganga safed 2, Deccan 101 and 103, Him 123, Ageti, C 1, 3 and 7, Kanchan, Kundan
- Sow lab or cowpea as an intercrop to minimise the stem borer damage (Maize : Lablab 4:1).
- Set up light trap till midnight to attract and kill the stemborer moths.
- Mix any one of the following insecticides with sand to make up the total quantity of 50 kg and apply in the leaf whorls - phorate 10 G 8 kg, carbofuran 3 G 17 kg, carbaryl + lindane 4G 20 kg, endosulfan 4 D 10 kg (or) spray endosulfan 35 EC 750 ml (or) carbaryl 50 WP 1 kg (500 L. spray fluid/ha).
- Collect the stubbles after harvest and burn to destroy diapausing borers.

3. Pink stem borer: *Sesamia inferens*



Host range: Sorghum, maize, rice, wheat, sugarcane, bajra, ragi and guinea grass.

Damage symptoms

- Pink larva enters into the stem causing dead heart symptom similar to that of stem borer.

Management

- Grow resistant cultivars like Deccan 101 and 103
- Spray endosulfan 35 EC 1.0 L/ha. at every 20 days interval after germination of the crop.

4. corn worm / Earworm: *Helicoverpa armigera*



Damage symptoms

- Larva feeds on silk and developing grains.

Management: Apply at silk drying stage either carbaryl 10 D 25 kg/ha (or) spray carbaryl 50% WP 1.0 kg. /ha in 500-600 L of water per ha. Repeat the insecticidal application 15 days later

5. Web worm: *Cryptoblabes gnidiella*



Damage symptoms

- The larva first feeds on the lemma of the flowers scraping the chlorophyll and later on the milky grains.
- The caterpillar causes damage by constructing webs on maize cobs and feeding on the flowers and grains.

Management: Spray monocrotophos 36 SL (or) endosulfan 35 EC 1 l/ha.

6. Aphid: *Rhopalosiphum maidis*





Host range: Sorghum, maize, ragi

Damage symptoms

- Colonies of aphids are seen in central leaf whorl, stems, or in panicles.
- The young and adults suck the plant juice. This frequently causes yellowish mottling of the leaves and marginal leaf necrosis.
- The aphid produces an abundance of honeydew on which molds grow.
- The aphid also transmits maize dwarf mosaic virus.

Management: Spray the base of attacked plants with a contact (or) systemic insecticide like dimethoate 30 EC or methyl demeton 25 EC 500 ml in 500 L of water

7. Shoot bug: *Peregrinus maidis*

Host range: Sorghum, maize, rice, millets

Damage symptoms

- Injury to the plants is caused by the adults and nymphs which suck sap from them.
- The attacked plants become unhealthy, stunted and yellow and leaves wither from top downwards.
- Panicle formation is inhibited, and the plants die if attack is severe.
- Honeydew secreted by the bug causes growth of sooty mould on leaves.

Management: Spray 500 ml dimethoate 30 EC or methyl demeton 25 EC in 500 L of water per ha.

Minor Pests

1.	Climbing cut worm	<i>Mythimna separata</i>	Damage symptoms: Irregular feeding of leaves
2.	Ash weevil	<i>Myloccerus</i> sp.,	Damage symptoms: The larva feeds on the secondary roots and adults on leaves
3.	Phadka grasshopper	<i>Hieroglyphus nigrorepletus</i>	Damage symptoms: The larva feeds on the secondary roots and adults on leaves
4.	Leafhopper	<i>Pyrilla perpusilla</i>	Damage symptoms: It can cause severe damage when long spells of rainy or cloudy days are prevalent. As high nitrogen application favours multiplication