

7. **Flea beetle:** *Cryptocephalus schestedti* : Chrysomelidae: Coleoptera

*Monolepta signata*: Chrysomelidae: Coleoptera

Symptom of attack: Shot holes.

Nature of damage: The pest occurs in small number is feeding on the leaves. It nibbles small holes on the leaves.

Life stages: *C. schestedti*: This is an yellow beetle with long black streak. *M. signata*: Adult is a black beetle with four yellow spots.

### III. SAP FEEDERS

8. **Shoot bug** : *Peregrinus maidis* : Delphacidae: Hemiptera

Symptom of attack: The leaves turn yellow due to sucking; plants become weak and the yield goes down. The mid rib of the leaves become red due to egg laying and may dry up subsequently.

Nature of damage: Both adults and nymphs suck the plant sap from the leaves and cause the shoot to dry. They feed gregariously within the leaf sheaths. It is not a serious pest, but sometimes causes appreciable damage.

Life stages: It is a small active, grayish brown bug. Colonies of this bug (both adults and nymphs) live within the whorl of the central leaf or in the root region. This pest is very common in Coimbatore during summer. The large black ant attends these insects.

9. **Plant lice:** *Rhopalosiphum maidis*, *Longinuis sacchari* : Aphididae: Hemiptera

Nature of damage: Nymphs and adults suck plant sap from the leaf, leaf sheath and inflorescence. They occur in cluster and may cause severe damage to inflorescence by hampering pollination. The aphid colony secretes honeydew in plenty.

Life stages: The former one is yellow with dark green legs and lives inside the central leaf. The latter is creamy and lives on the under the surface of lower leaves. These are not serious pests. Reproduction parthenogenetic. Cloudy and humid weather favours reproduction.

10. **Earhead bug:** *Calocoris angustatus* : Miridae: Hemiptera

Symptom of damage: No external symptom will be visible. The earheads should be tapped either on the palm or a piece of cardboard. A number of brownish or greenish nymphs and adults can be seen. On the developing grains small brownish spots will be visible. In severe infestation, the grains get shriveled without maturing and the earheads appear uneven.

Nature of damage: The adults and nymphs live inside the earhead and suck the milky fluid from the tender ripening grains. Due to the feeding, the grains get shriveled and chaffy and thus unfit for sowing and for consumption. No damage is caused to fully ripened grains. A reduction of 15 – 30% in the yield was estimated due to its attack. Usually high yielding varieties with compact earheads (Chitrai cholam) are subjected to more infestation than the loose earheads.

Egg: The female bug thrusts shining pale yellowish cigar shaped eggs into the tender tissues of the shoot between glumes in the centre of the florets.