

**An advisory  
on  
Delphacid plant hopper *Eoerysa flavocapitata* of sugarcane**

During the course of periodic surveys of sugarcane fields in Muzaffarnagar district in western Uttar Pradesh. A black Delphacid plant hopper, *Eoerysa flavocapitata* has been observed on sugarcane to cause much damage to crop. The general appearance of adults is blackish (fig-1). Newly hatched nymphs are pale green in colour with red eyes (fig-2) and advanced stages were smoky in colour (fig-3). Both stages (adult and nymphs) are remaining concealed in leaf funnel of sugarcane plants and suck the plant sap. Some sort of oozing of honey dew was observed on under surface of newly opened leaves that acted as good media for the development of black sooty mould and under surface of most of the leaves were covered by mould. In spite of yield loss, it made the green top of cane unfit as cattle feed.



Fig-1: Adult Plant hopper



Fig-2: Newly emerged nymph



Fig-3: Nymph with wing pads



Fig-4: Black sooty mould on under surface of leaf



Fig-5: Cane top affected with black sooty mould



Fig-6: Affected clump

**Biology:** After mating that takes place at night, one female hopper may lay 150 to 200 eggs in leaf tissue bordering the mid rib of young leaves. Eggs hatch in about 6-10 days. There are five nymphal instars before adult stage.

**Nature of damage:** Both nymphs and adult stages of plant hopper remain concealed in whorls and suck the plant sap from leaves and excrete a sticky honey dew on the outer surface of the unfurled leaves that appears as under surface on opening of the leaf. Black sooty mould develops on honey dew that interferes with photosynthesis and results in yellowing of leaves and significant reduction in cane yield. Affected green top (*Angola*) becomes unfit to be fed by cattle. It has been narrated by local farmers that their cattle become ill after feeding on affected green top and animals stop feeding of such green tops.

**Control Measures:** Being a sucking insect pest, it can be controlled well with systemic insecticides.

- Foliar spray with Dimethoate 30 EC, @ 0.15 % or 500 ml formulation in 800 liters of water/ha.
- If incidence is very severe then contact insecticide preferably dusts like Fenethrothion or Fenvalerate may be dusted @ 20-25 kg/ha or foliar spray with Quinalphos 25 % EC @ 0.05% suspension or 800-1000 ml formulation in 600 to 800 litres of water with the target of whorl (leaf funnel).
- A number of predatory insects, Coccinellid Lady Bird Beetles, Syrphid fly and *Chrysoperla canea* etc. may be protected / preserved in cane fields. If activity of these predatory insects and spider is good then use of contact insecticides should be prohibited strictly.

**Note:** At the time of insecticide application safety precaution should be taken up.