

Sugarcane Top Borer

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Texonomy of Sugarcane Top Borer

Technical Name – *Scripophaga nivella*

Family – Pyraustidae

Order – Lepidoptera

Distribution of Sugarcane Top Borer

It is one of the most destructive and major pest of sugarcane in India , Pakistan and China .

Identification of sugarcane Top Borer

Eggs: Eggs are dull white , oval ,laid in overlapping cluster under surface of the leaf.

Larvae: Larvae are 35 mm long , creamy dull white ar yellow and brown head.

Pupa: Pupa is cylindrical in shope and pale yellow in colour Pupation takes place in the cane and pupal period lasts for about a week .

Adult: Adult moths are creamy ar pure white in colour with crimson coloured anal tuft of hairs in females . Males are slightly with span of 25-30 mm.

Life cycle of sugarcane Top Borer

- The Top Borer breeds from march to November.
- Feamble lay about 150 eggs in clusters on the lower surface of leaf.
- The eggs are cvers under a silken cap. Egg hatch in 1 week and larvae live for 4-5 week.
- Pupation occus within canes, making a chamber.
- This insect has 4-5 generation in a year.

Damage of sugarcane Top Borer

- Young larvae bare into the midrib , leving red markings and small holes on the leaves .
- Then the larvae tunnel in the upper partion of the stem , resulting in drying of the central shoot , causing “dead heart”
- With the death of central shoot , side branches start growing from a lower node , giving a characteristic “bunchy top ” appearance to the plant.
- Quality & quantity of juices also reduced.

IPM of Sugarcane Top Borer

Cultural /Mechanical Control

- Early plantation
- Manuring
- Trash mulching and earthing up
- Use resistance varieties



- Removal of infested cane
- Eggs masses and infested parts should be collected and destroyed.
- Installation of sex pheromone traps for monitoring and mass trapping of top borer.
- Use of light traps

Biological Control

- Biological control was successfully attempted by mass release programmes of exotic species of *Trichogramma*. The following parasitoids have been recorded on this pest:
- Eggs parasitoids *Trichogramma Japonicum* (T.J.) @1,00,000/ha

Chemical Control

- Chemical control is not satisfactory although 0.2% Malathion, Endosulfan or phorate if timed with egg laying gives some control.
- Dusting with 10% BHC, dieldrin or endrin or 3% carbofuran timed with moth emergence is recommended.
- F.M.C Chemical Coragen (Chlorantraniliprole 18.5% w/w SC) 200 L Water as Dranching.
- IFFCO –MC Chemical Shirasagi (Fipronil 40% + Imidacloprid 40% WG) 400 L / ha water as spray.