Sugarcane Early shoot borer

Recognize the problem
The sugarcane early shoot borer is a serious problem in sugarcane. 1-3 month old crops are highly susceptible. The caterpillars of the shoot borer cause dead hearts in young plants. The young plants with dead hearts formed at shoot stage can be pulled out easily. The canes are damaged and also produce a foul odour. The central whorl of leaves dries up in the damaged plants.

Background
The symptoms described above are caused by an insect called a shoot borer. The adults, which are small pale greyish brown moths, lay white flat eggs in clusters of 8-60 eggs in 3 to 5 rows on the under surface of the leaf sheaths. The larvae, which hatch from the eggs in 1-6 days, get scattered and enter the stem by making a hole just above the ground level. It becomes fully grown in 25-30 days and pupates inside the stem. An adult moth emerges after 6-8 days. The total life cycle is completed in 35-40 days. The bore holes can be seen above the ground level.

Management
- Destroy the crop residues after harvest
- Plant early to avoid infestation
- Intercrop with Daincha (Agathi)
- Remove and destroy the dried shoots
- Complete inundative releases of the egg parasitoid *Trichogramma chilonis* @ 50,000/ha from the first month of planting at 7-10 day intervals till one month prior to harvest
- At the 30th, 45th and 60th day of crop growth, spray granulosis virus of sugarcane shoot borer (*Chilo infuscattellus*) (8-10 inclusion bodies/ml) at 500 litres/ha
- Soil application of granules of cartap hydrochloride at 1 kg a.i./ha at planting followed by another application on 45th day for late planted crop
- Cartap hydrochloride 4G and chlorpyriphos 10G at 1 kg a.i./ha as a whorl application at 35th and 65th day are also found to be effective

Scientific name(s) > *Chilo infuscattellus*

When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

The recommendations in this factsheet are relevant to: India