



भाकृ अनुप
ICAR

Banana Corm Weevil



National Research Centre For Banana

(Indian Council of Agricultural Research)

Thogamalai Road, Thayanur Post

Tiruchirapalli -620 102, Tamil Nadu, India

Banana corm weevil, *Cosmopolites sordidus* Germar

Out of the 15 insect pests recorded on banana and plantains, banana corm weevil is a serious pest which limit the production and productivity of bananas. The weevil infests the corm one or two months after planting and the damage is not seen visibly, hence plant do not receive any control measures at early stage.

Distribution

Corm weevil infestation is noticed in almost all the banana growing areas such as Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, West Bengal, Bihar and North- Eastern hills region. Most of the commercial cultivars like Malbhog, Robusta, Thellachakarakeli, Nendran, Karpooravalli and Red banana are susceptible to this pest.

Symptoms

Infestation at early stage reduce the plant vigour. Early stage symptoms include sick appearance and yellow lines on the leaf (Fig.1) whereas in the advanced stage of infestation,



Fig. 1

plant show tapering of stem at the crown region, reduction in leaf size, poor bunch formation and choked throat appearance of



Fig. 2

bunch due to riddling by the grubs inside the corm (Fig.2).

Life cycle

The adult weevils lay eggs singly into the corm. Eggs are laid superficially in the surface and crevices of the corm. Incubation period is 7 - 14 days. Larval stage lasts for two to six weeks. Pupation is completed in a week.

Integrated pest management

- ◆ Weed free cultivation is essential to avoid the spread of weevils
- ◆ Remove the old and dried leaves.
- ◆ Remove the pseudostem after harvest and treat it with Carbaryl (2g/l.)
- ◆ P a r i n g (Fig.3) to remove the adult weevils and



Fig. 3

grubs from the corm. Apply Carbofuran 3G (40g/plant) before planting.

- ◆ Before planting, treat the suckers with

Monocrotophos (14 ml in litre of water) for 30 minutes (Fig.4).



Fig. 4

- ◆ Collect adult weevils by using banana pseudostem traps both (i) longitudinal split trap (30cm length) (ii) disc-on-stump trap @100/ha.

- ◆ Longitudinal split pseudostem traps

The split pseudostem traps can be made from the harvested plants. Split the pseudostem having a length of 30-45cm longitudinally into two halves and it is important to keep the cut portion of the stem on the soil surface near the plant (Fig.5).



Fig. 5

Such traps @ 100/ha can be kept in the garden. After one week check the traps, collect and kill the trapped weevils.

- ◆ Disc-on-stump trap

The disc-on-stump traps are made by cutting harvested stump at the ground level and keep a 10cm thick circular stem over

the stump as indicated (Fig.6). In between the disc and stump few pebbles can be kept so that the weevils can make entry and the plant volatiles can dissipate in the air. These traps can also be kept @100/ha.



Fig. 6

- **Corm trap**

After harvest, the corm should be dug out and made into four or five pieces and these cut bits should be kept near the plant base @25 traps/acre. It is important to keep cut surface facing ground.

Since the corm weevil infests 2-3 months old plants, it is advised to keep the trap from second month after planting.

These traps can help the farmers to monitor the weevil activity in a garden and continuous trapping can control the pest. Minimum of 100traps/ha can be kept for trapping. Available banana cultivar in the infested



Fig. 7

garden can be used for trapping. It is important to keep the split portion facing the ground, collect the weevils and destroy.

- ♦ Keep pheromone trap @ 25 traps/ha, collect the trapped weevils and destroy (Fig.7).

Prepared by :

B. Padmanaban
R. Rajeswari

For further details contact :

The Director,
National Research Centre For Banana
(Indian Council of Agricultural Research)
Thogamalai Road, Thayanur Post
Tiruchirapalli -620 102, Tamil Nadu, India
Ph : 0431 - 2618106.
Website : www.nrcb-india.org