



भारत अन्न
ICAR

Banana Stem Weevil



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Banana stem weevil, *Odoiporus longicollis* (Olivier)

In banana and plantains, more than 15 insect pests have been reported of which, the banana stem weevil, *Odoiporus longicollis* (Olivier) is the major pest causing considerable damage depending upon the stage of the crop, infestation leads to 10-90% yield loss.

Distribution

Banana stem weevil is distributed in North-Eastern hills region, West Bengal, Assam, Tamil Nadu, Kerala, Andhra Pradesh and Karnataka. Cultivars such as Nendran, Red banana, Karpuravalli, Poovan, Thellachakarakeli are found to be highly susceptible to this pest.

Symptoms

Presence of small holes and jelly exudation on the stem indicates the grub activity inside the stem. The apodous larvae are responsible for riddling of the pseudostem and causing serious damage (Fig.1). In



Fig. 2



Fig. 1

the advanced stage of infestation the severely affected plant breaks or

topples along with the bunch (Fig.2).

Life cycle

Eggs are laid inside the air chambers of the leaf sheath through the slits cut on leaf sheath. Incubation period ranges from 5-8 days. Larval period lasts for 26 days and the pupal period including pre emergence resting period of adult lasts for about 20-24 days.

Integrated pest management

- ♦ Weed free cultivation helps in reducing the spread of infestation.
- ♦ Remove the old and dried leaves.
- ♦ After harvest remove the pseudostem and treat it with insecticide, Carbaryl (2g/l) to kill the egg laying weevils.
- ♦ Collect adult weevils by using banana pseudostem traps (i) longitudinal split (30cm length) (ii) disc-on-stump trap @ 40/ha. (Fig.3&4).
- ♦ Longitudinal split pseudostem traps

The harvested plants are cut into pseudostem traps. Split the pseudostem



Fig. 3



Fig. 4

of 30-45cm length longitudinally into two halves and the cut portion of the stem is kept on the soil surface near the plant. Such traps @ 100/ha can be kept in the garden. The traps are checked once in a week, trapped weevils are collected and killed.

◆ Disc-on-stump trap

The disc-on-stump traps are made by cutting harvested stump of 25cm above the ground level and keep a 10cm thick circular stem over the stump as indicated in the plate. In between the disc and stump few pebbles are to be kept so that the weevils can make entry and the plant volatiles can dissipate in the air.

◆ These traps can help the farmers to monitor the weevil activity in a garden and continuous trapping can control the pest. By increasing the number of traps, the efficiency of weevil catch can be increased. Available banana cultivar in the infested garden can be used for trapping.

◆ Keep the split portion facing the ground. Collect the weevils and kill.

◆ Inject 4 ml of solution (Monocrotophos 150 ml in 350 ml of wa-



Fig. 5

ter) using stem injector at 2 and 4 feet above the ground level at 30° angle. Injection can be given from fifth month to flowering stage (Fig.5).

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