

BRINJAL



Infestation of brinjal shoot borer

Brinjal shoot and fruit borer (*Leucinodes orbonalis*) are the most important insects in cultivation of brinjal as these may cause more than 80% damage if left unprotected. Farmers often resort to frequent insecticide application and spending approximately Rs 12,000 to 15,000 per season on insecticides. This increases the insecticide resistant level without much satisfactory control of the pest. The Indian Institute of Vegetable Research (IIVR), Varanasi has developed Sex Pheromone based Integrated Pest Management (IPM) Technique in which there is least use of insecticides and thus reduces the chances of health hazards caused by insecticides residues. Besides, the cost of plant protection is also less compared to chemical insecticides. The natural enemies are more abundant causing higher parasitization of the pest.



Sex pheromone baited traps in brinjal field

PACKAGE OF PRACTICES

- Keep seedlings free from pest infestation by raising the nursery under nylon net cover.
- Treat the seedlings by putting the root zone in Imidacloprid solution (1 ml/lit) for 3 hours.
- Starting from 25 days after transplanting, remove and destroy the borer infested shoots at weekly interval along with the insect larvae.
- Install sex pheromone baited pheromone traps @ 100/ha at 10 m distance from each other and 5 m away from the crop border. Plastic funnel trap may be used for trapping the moths. The traps should be installed at such height that the pheromone septa remains just above the plant canopy. Increase the height periodically to retain the relative height of the traps as the plants grow taller. The septa should be

changed at 50–60 days interval. The trapped moths should be killed at weekly interval.

- Remove the dry leaves at weekly interval and keep the crop clean.
- During each harvesting, the early infested fruits should be plucked and the larvae inside the fruits should be killed.

ECONOMICS

In comparison to farmer's practice of applying insecticide mixtures atleast 5–6 times per month, by adopting sex pheromone based IPM technique, the damage can be reduced by 20–25%.

AVAILABILITY OF SEX PHEROMONE AND PHEROMONE TRAP

Sex pheromone septa and pheromone trap of brinjal shoot and fruit borer may be had from Bio Control Research Laboratories, Pest Control (India) Limited, 36/2, Sriramahalli, Rajankunte (P.O.) P.O. Box No. 6426 Yelahanka, Bangalore 560 064.

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