



Advisory No: RC 2019/03

Date: 18th September 2019

PEST ALERT:

Preparedness on Management of Army worm, *Mythimna separata* and *Spodoptera* species in Meghalaya

In regular monitoring, adult moths of Oriental army worm, *Mythimna separata* are being observed near light sources during September 2019. Since the current climatic conditions are conducive for the rapid growth and multiplication of *Mythimna separata* and different *Spodoptera* species particularly in rice fields, the extension functionaries, state government officials and related workers are advised to sensitize the farmers on constant monitoring and management of these pests in early stages to prevent outbreak situations.



Armyworms are the important pest of rice, maize and several other host crops, often appear in outbreak form and cause huge losses. Generally they occur either singly or in combination of genus, *Spodoptera* and *Mythimna* (Lepidoptera: Noctuidae). Since they move in swarm or army, they are commonly referred as **Swarming caterpillar/Army worm**. They are voracious feeder and often cause severe losses in short period during vegetative and grain filling stage of rice, thus constant monitoring and immediate attention are needed to manage this pest species in time.

Factors Affecting Population Build Up:

- Prolonged dry condition followed by heavy rainfall favours its outbreak.
- Wind and rain storm helps in migration of moths to long distances.
- Pest occurs throughout the year on alternate hosts and move to paddy in *kharif* season
- Heavy rainfall leads to high mortality of larval population.

Management strategies suggested by ICAR-NCIPM, New Delhi and ICAR-CRRI, Cuttack

- Deep ploughing the field in summer exposes the hibernating larvae and pupae for predation by birds.
- Since pest occurs during rainy season, proper monitoring through light traps/ Pheromone traps should be started from July onwards to know its early infestation
- Remove excess weeds from the field and bunds, which serve as important alternate hosts
- Flooding the nurseries and small fields brings out the larvae to the surface, which get predated by the birds.
- Ensure alternate wetting and drying of the fields.
- Avoid excess use of nitrogen.
- Use of bamboo perches facilitates predation by birds.
- In case of severe infestation, small plots can be isolated and the movement of the caterpillars can be prevented by digging a trench around the infested field wherever possible.
- As the moths of swarming caterpillars are attracted towards light, therefore, light traps can also be utilized for mass trapping of the moths
- Management strategies should be initiated at early stage of infestation on community basis to prevent its further spread.
- Fields adjacent to infested areas must be treated to check further spread
- Additional information is available on the following links:

http://www.ncipm.res.in/NCIPMPDFs/Publication/Swarming_caterpillar.pdf

<http://icar-nrri.in/wp-content/uploads/2018/07/5.-Swarming-Caterpillars-in-Rice-Status-and-their-Management-2.pdf>