कुलार्वेदभार्दे मीर भुदार्श्वेमारोमा बीदमालभाष्ट्रमा बीदमादर र्श्वेदिर एद्वावना



NATIONAL PLANT PROTECTION CENTRE

DEPARTMENT of AGRICULTURE
MINISTRY of AGRICULTURE & LIVESTOCK
SEMTOKHA



Date: 3 April 2025

NPPC/ADM/41/2024-2025/325

Advisory note on Chilli Pod Borer (Helicoverpa armigera) management in Chilli

This is to notify you about the management of Chilli Pod Borer in chili, as the cultivation has already begun in some areas, while others are starting. Chili pod borer is an important pest as larvae bore into chili pods, causing direct damage to fruits and making them unmarketable. The greatest damage is typically observed early in the year (spring), coinciding with the active growing period of the chili plant. Severe infestation can result in substantial yield losses if not effectively managed.

Management measures

1. Early Detection Using Sex Pheromone Traps

- Install pheromone traps to detect adult male moth activity.
- Moth captures indicate the onset of egg-laying.

2. Mass Trapping Using Sex Pheromone Traps

- Implement mass trapping at the community level to attract and capture male moths. This method helps reduce the pest population by preventing mating and reproduction.
 - Install 2 pheromone traps per Langdo or 5 pheromone traps per acre as soon as flowering starts to monitor and mass-trap adult male chili pod horers
 - The Economic Threshold Level is reached when 8–10 moths are caught per day, indicating a potential outbreak.
- It is essential to coordinate trapping efforts at the community level, ensuring that neighboring farmers participate in the program to achieve effective pest control across the region.

3. Monitoring

- **Start monitoring early:** Begin monitoring the pods as soon as the chili plants start to form pods.
- Look for signs of infestation: Infested pods will have small entry holes, with black or brown frass (insect droppings) around the holes.
- **Hand-pick and destroy:** Immediately hand-pick and destroy any infested pods to prevent the pest from spreading.
- Watch for premature pod drop: As larvae mature, infested pods may naturally drop off the plants. Be sure to collect and destroy these dropped pods to reduce the pest population.

P.O. Box: 670, Semtokha Tele: 351016/351655 Fax: 351656 E-mail: nppcsemtokha@gmail.com ww.nppc.gov.bt

कुलार्वेद अप्टें मीर खुर खेंचा देवा के देशाल अलिद भी के देश दर खें देर देश कवी



NATIONAL PLANT PROTECTION CENTRE DEPARTMENT of AGRICULTURE

MINISTRY of AGRICULTURE & LIVESTOCK SEMTOKHA



4. Chemical Control:

- Accurate timing of insecticide sprays is important to target young larvae feeding on leaves and flowers before they bore into pods.
- Apply Chlorantraniliprole 18.5 % SC: 3 ml in 10 liters of water or Emamectin benzoate 5% SG: 2 g/10 liters of water) to target the early larval stage.
- Once larvae enter the pods, they are protected from insecticide sprays, making chemical control challenging and often ineffective.
- To avoid resistance buildup and effective control, advise farmers to alternate between these two insecticides (cited above) rather than relying on just one continuously.
- Advise farmers to wear the appropriate Personal Protective Equipment (PPE) while spraying. This includes gloves, masks, goggles, and protective clothing to safeguard from exposure to chemicals.

Refer to the link for detailed pest biology and management

https://pestsofbhutan.nppc.gov.bt/crop-and-pest-identification/insects/chilli-pod-borer/

Please contact the following plant protection officials for technical support.

- 1. ARDC Samtenlling: CM Dhimal- 17 976 283 and Ratu Kinley-17 316 511
- 2. ARDC Bajo: Ugyen Dema- 17 793 667 and Thinley Wangmo- 77 225 788
- 3. ARDC Wengkhar: Kuengha Wangchuk 17 740 519
- 4. Entomology program, NPPC
 - Tshelthrim Zangpo 77732252
 - Sonam Gyelsten 17 564 124
 - Tshencho Dem 77 977 202
 - Jigme Wangchuk 17 850 782

Jary ju

Yeshey Dema
Program Director

P.O. Box: 670, Semtokha Tele: 351016/351655 Fax: 351656 E-mail: nppcsemtokha@qmail.com ww.nppc.gov.bt