Created in Cambodia, November 2012 (Revised August 2018)



Leaf folder management in rice

Recognize the problem

Leaf folders are caterpillars of a moth. The caterpillars roll leaves around their bodies and feed inside the tube. The feeding creates a see-through or transparent area on the leaf. They feed inside the folded leaf creating longitudinal white and transparent streaks on the blade. The caterpillars are yellow to green. Heavily infested fields appear scorched and have many folded leaves.

Background

Rice leaf folder is a common pest and can be found in all rice growth stages. The most damaging stage is during tillering as this can reduce the yield of the crop. The caterpillars can survive between rice crops by feeding on weeds around the bunds. High nitrogen fertilizer creates lots of new growth which encourages the moth to grow and multiply. The life cycle of leaf folder is about 1.5 months (egg-5days, larvae-25days, pupa-7days and adult moth-10days).

Management

- Encourage predators such as spider, parasitic wasps, predatory beetles, frogs and dragon fly
- Use thorn wood on the leaves when hot weather to chase insect away.
- Rice crops can usually recover from early damage when enough water and fertilizer are applied. If infestations are high (>50%) during tillering, insecticide sprays may be helpful.
- Reduce density of planting.
- Remove grassy weeds from fields and borders.
- Flood and plow field after harvesting if possible.
- Rotate rice with a different crop, or have a fallow period.
- Apply insecticides such as alpha-cypermethrin, Abamectin 2%, or Cartap hydrochloride to kill the larvae. Note: excessive insecticide use can promote the build-up of other crop pests such as Brown Plant Hopper. Apply following the manufactures recommendations on the label.

Leaf fold opened to show leaf folder caterpillar. (Photo by Rob Reeder, CABI)



Leaves have white streaks and are folded and stuck together by the caterpillar. (Photo by Rob Reeder, CABI)



When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval.

Scientific name(s) > Cnaphalocrocis medinalis

The recommendations in this factsheet are relevant to: Cambodia



Authors: General Directorate of Agriculture (GDA)

No. 54B/49F, St. 395-656, Sangkat Teuk La Ak, Khan Toul Kork, Phnom Penh

tel: +855 23 631 9 070

Edited by Plantwise.