

Scientific name

Cnaphalocrocis medinalis

What it does

Leaf folder caterpillars fold a rice leaf around themselves and attach the leaf margins together with silk strands.

They feed inside the folded leaf creating longitudinal white and transparent streaks on the blade.

Why and where it occurs

Heavy use of fertilizer encourages rapid multiplication of the insect. High humidity and shady areas of the field, and the presence of grassy weeds from rice fields and surrounding borders favor the development of the pest.

Expanded rice areas with irrigation systems, multiple rice cropping and insecticide induced resurgences are important factors in the insect's abundance.

The rice leaf folders occur in all rice environments and are more abundant during the rainy seasons. They are commonly found in shady areas and areas where rice is heavily fertilized. In tropical rice areas, they are active year-round, whereas in temperate countries they are active from May to October. The adults are nocturnal and during the day, they stay under shade to escape predation. Moths fly short distances when disturbed.

How to identify

Check for the following symptoms:

- Longitudinal and transparent whitish streaks on damaged leaves
- Tubular folded leaves
- Leaf tips sometimes fastened to the basal part of leaf
- Heavily infested fields appear scorched with many folded leaves

Check for presence of insects, particularly during tillering to flowering.

- Disc-shaped ovoid eggs laid singly
- Young larvae feeding on the base of the youngest unopened leaves
- Folded leaves enclosing the feeding larvae
- Present of fecal matter

How to manage

The following are cultural practices that prevent leaf folder outbreaks:

- Use resistant varieties. Contact your local agriculture office for an up-to-date list of available varieties.
- Follow rice with a different crop, or fallow period.
- Avoid ratooning.
- Flood and plough field after harvesting if possible.
- Remove grassy weeds from fields and borders.
- Reduce density of planting.
- Use balanced fertilizer rates.
- Swipe a spindled stick on the crop to open the folded leaves so that the larvae is exposed to predators.
- Release Trichogramma egg parasitoids 50,000/acre, starting from 20-25 DAT for 3 times at 7-10 days interval.
- Spray chlorantraniliprole 18.5sc @0.4ml/L of water, cartap hydrochloride 50%sp @2g/L of water.

In most cases, chemical control is not advisable. See a crop protection specialist for guidance specific to your situation.

Learn More

Visit Rice Based Cropping Systems Knowledge Bank www.rkbodisha.in



Longitudinal white and transparent streaks are evident on damaged leaves by leaf folder



Larva folds the leaf by attaching silk strands to each edge of the blade



The adult moth can be distinguished by the bands on the front wings