

Rice caseworm (*Nymphula depunctalis* Guenee)

Biology

- Adult moths get attracted to standing water and light and lay eggs on young seedlings.
- Transplanting infected young seedlings favors development of the insect.
- Adults are nocturnal and are attracted by light therefore paddy fields near lighted towns are prone to infestations.
- Multiply in delayed crop under stagnant water.
- Caterpillars hang on leaf edges in a tubular case.
- Severe infestation occur on dwarf, compact, high yielding varieties during rainy season.

Geographical Distribution

- In Kenya it can be found in (Ahero, Bunyala, Kirinyanga, Kisumu, Kilifi, and Kwale counties), Tanzania (Morogoro, Kilimanjaro, Arusha, Mbeya, Moshi) and Uganda. (lake Kioga, Buguri, butalenja and lira districts)

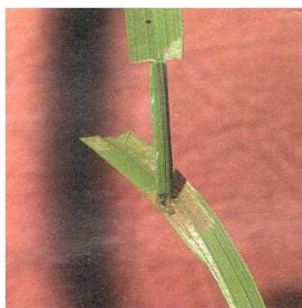


Fig 1. Stem damage (IRRI Rice Knowledge bank)



Fig 2, Ladder like appearance on damaged rice (IRRI Rice Knowledge bank)

Damage on rice crop

- Feeds on rice at seedling and tillering stages resulting in stunting of the plant.
- Feeding of the worm cuts leaves at right angles similar to those cut by a pair of scissors.
- Cut leaves are seen floating in water
- Skeletonized leaf tissues that appear ladder like and leaves become serrated.
- Attack of 25% of scraped leaves in the first month after transplanting result in 10% yield loss



Fig 3. Rice caseworm moth (IRRI Rice Knowledge bank)

Management Strategies

1. Cultural Control methods

- Monitor regularly the crop to detect ladder cases in field margins and standing water
- Practice early and synchronized planting.
- Sprinkle kerosene and drag a rope on the surface of water to remove floating larva cases
- Practice proper water management. Ensure good drainage for three days, since larvae cannot survive without water.
- Level the field as accurately as possible and start the crop in 7-10 cm of water. Increase the water depth slowly after the leaves begin to grow upright

2. Biological control

- Release egg parasitoid *Trichogramma* spp at a rate of 50,000 to 100,000 eggs per acre

3. Chemical control

- Spray when there is infection by using Alpha-Cypermethrin 100g/L (e.g. Bestox at 10ml/20L of water)