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TSL

biosciences
eastern and central africa



ILRI
INTERNATIONAL
INSTITUTION FOR
RESEARCH IN
RICE



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AfricaRice
Rice science at the service of Africa
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IRRI
INTERNATIONAL RICE RESEARCH INSTITUTE

UoA DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System



Rice leaf folders (*Cnaphalocrocis medinalis*, Guenee)

Factsheets for Rice Production, East Africa

Biology

- The pest is a small brownish – orange coloured moth with 1-2 distinct dark wavy lines on the brownish fore and hind wings.
- Both wings have a dark brown to grey band on their outer margin.
- The eggs are laid singly or in pairs on the under surface of tender leaf blades.
- The incubation period is 4 - 7 days.
- The pale yellowish green larva becomes full grown in 15 - 27 days and pupates inside the leaf roll. Pupal period is 6 - 8 days.
- Total life-cycle varies from 25 - 42 days.

Geographical Distribution

- Rice leaf folders have been reported in all rice growing areas.



Fig 1. Adult moth (IRRI Rice Knowledge Bank)



Fig 2. Larvae of rice leaf folder

Damage on rice crop

- The larva rolls the leaf blade by fastening its edges and the leaf tip to the basal part of the leaf blade and feeds from inside by scraping.
- In a severely infested field the whole crop gives a sickly appearance with white patches.
- The infestation at boot leaf stage of the crop sometimes results in heavy loss of grain yield.



Fig 3. Symptoms on rice leaf (IRRI Rice Knowledge Bank)



Fig 4. Folded leaf on rice plant (IRRI Rice Knowledge Bank)

Management Strategies

1. Cultural control

- Early planting may help to avoid greater degrees of leaf damage.
- Wider spacing (22.5 x 20 cm and 30 x 20 cm) and use of fertilizers as recommended (refer to sheet on rice establishment) minimizes leaf damage.
- Encourage predators through conservation of patches of natural vegetation.
- Avoid shaded areas

2. Biological control

- Use of neem based insecticides (Achook, Nematon, Nimbecidine)
- Enhance the activities of predators and parasitoids of leaf folders.

3. Chemical control

- Use insecticides when we have 10% infestation.

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