Created in Vietnam, June 2013



## Panicle Rice Mites

## **Recognize the problem**

The panicle rice mite (PRM) feeds on rice from seedling to grain maturity. PRM infests panicles, leaf veins and leaf sheaths (and so is also sometimes known as rice sheath mite). Feeding takes place behind the leaf sheath. The feeding lesion can be detected by purple-brown discoloration of the leaf sheath. When a new leaf begins development, a female will move to the new leaf sheath, produce male offspring and then establish a new feeding lesion. This continues until the mite reaches the leaf nearest the stem.

## Background

Adults of PRM are small (0.2 - 1 mm), are translucent to pale brown in colour and have 8 legs. The male has elongated rear legs and are shorter than females.

Females can lay 50 eggs outside the leaf sheath. Eggs are clear in colour and oval-shaped. Unfertilized eggs will hatch as males. The eggs hatch in 2-4 days and there is an active larval stage lasting about 1 day and a quiescent stage lasting 2 days. An entire lifecycle can be completed in 10 - 13 days (egg 1-2 days, larva 4-5 days, adult 5-6 days).

Hot and dry weather favours for development of PRM.

## **Management**

- After harvesting, spread straw to burn before ploughing the field
- Leave the field fallow for two weeks after harvest
- Transplant seedlings in rows with reasonable density
- Use fertile soil with balanced N-P-K ratio
- Protect natural enemies on paddy field (spiders, endo-parasitoid wasp, etc.)
- Rotation with bean or legume plants to break PRM life cycle
- Scout fields to know the dynamics of PRM populations to give effective control methods
- Use an insecticide spray such as Nissorun (hexythyazox), Kinalux (quinalphos), Kumulus (sulphur), Comite (propargite) or Danitol-S 50EC (fenpropathrin). Before spraying, flood the field to make mites move up the plant

Damages by PRM on rice plant. (Photo by Natalie Hummel, Louisiana State University AgCenter, Bugwood.org, CC BY-NC)



Damages by PRM on rice plant. (Photo by Lalnunpuii Parte, Krishi Vigyan Kendra, Bugwood.org, CC BY-NC)



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) > Steneotarsonemus spinki

The recommendations in this factsheet are relevant to: Vietnam

**plantwise Vietnam** 

Authors: Le Minh Nam, Bui Tien Dung, Nguyen Van Sy, Hoang Thi Thuy

Hung Yen Plant Protection Sub-Department tel: 0988163070 email: nambvtvhy@gmail.com

Edited by Plantwise.