Rice Gall Midge

Recognize the problem
The rice gall midge (GM) forms a tubular gall at the base of tillers, causing elongation of leaf sheaths called onion leaf or silver shoot. Stunting and leaf deformity, wilting and rolling are also symptoms observed on plants affected by drought, potassium deficiency, salinity, ragged stunt virus, orange leaf virus and tungro virus diseases. The rolled leaves can also be associated with the symptoms caused by rice thrips. To confirm cause of problem, check for presence of insect. Particularly, elongate-tubular eggs and maggot-like larvae feeding inside developing tillers.

Background
The Asian rice gall midge is found in irrigated or rain-fed wetland rice environment during the tillering stage of the rice crop. It is also common in upland and deep-water rice. The adults are nocturnal and they are easily collected using light traps. During the dry season, the insect remains dormant in the pupa stage. They become active again when the buds start growing after the rains. The population density of the Asian rice gall midge is favoured mainly by cloudy or rainy weather, cultivation of high-tillering varieties, intensive management practices, and low parasitization.

Management
- If available, use resistant varieties, e.g. Car 3. Contact your local agriculture office for up-to-date lists of varieties available.
- Plough the ratoon of the previous crop and remove.
- Remove alternate host plants around rice field.
- Plant early, at the beginning of the rainy season
- Encourage biological control agents: wasps (parasitize the larvae), mites (feed on eggs), spiders (feed on adults), by using less pesticide sprays and planting more flowering plant around the rice field.
- Use sticky board with oil or glue next to light to attract adult GM
- Time insecticide applications accurately to control outbreak by spraying on emergence of rice gall brood.

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) > Orseolia oryzae

The recommendations in this factsheet are relevant to: Cambodia