Management of Bacterial leaf blight on rice

Recognize the problem

Bacterial leaf blight (BLB) usually occurs in the summer-autumn crop season and is more severe during the rainy period. It can cause heavy losses if no management measures are applied. Lesions begin as water-soaked stripes (pale green) on the leaf blades and later stripes would increase in length and width becoming yellow to greyish-white. The infected leaves will later dry up. Infected leaves will produce milky water drops in the early morning. The milky water drops contain the bacteria, and will become yellow after they dry up.

The damage caused by BLB. (Photo by Rui map Zheng, Bugwood.org, CC BY-NC)

Background

- The disease is caused by bacteria which are dispersed by water (rain, dew) and enter the plant through damaged leaves and stomata. Stormy and rainy conditions make the problem more serious.
- The disease will become serious in susceptible varieties, especially in hybrid rice and where nitrogen fertiliser has been overused.
- There are almost no highly effective bactericides to control the disease. Planting resistant varieties will reduce disease damage.

Symptoms of BLB. (Photo by Rui map Zheng, Bugwood.org, CC BY-NC)

Management

- Plant resistant varieties (Xi21, Xi23, etc.)
- Proper use of fertilizer, especially nitrogen. Please follow instruction given by seed companies for specific varieties.
- Sanitation: remove weed hosts, rice straws, ratoons, and unwanted seedlings
- Keep the water level low during the severe flooding period
- Chemical control: apply Bion (active ingredient: acibenzolar-s-methyl) before damage is seen, to induce resistance
- Use Xantocin (active ingredient: Bronopol), or Starner (Active ingredient: Oxolinic acid). Follow the recommendations given by producers.

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) > ***Xanthomonas oryzae* pv. *oryzae***

The recommendations in this factsheet are relevant to: Vietnam

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Edited by Plantwise.