

Bacterial Leaf Streak on Rice

Recognize the problem

Symptoms initially appear as narrow, water-soaked lesions between leaf veins (Fig.1). The lesions are translucent (can see through) when held against the light. Later, lesions become brown and cover the entire leaf when the disease is very severe (Fig. 2) in which case they resemble bacterial leaf blight. Under wet conditions, yellow droplets of bacterial ooze which look like beads may be observed on the surface of leaves. It damages on vegetative growing stage.

Background

Bacterial leaf streak can be spread by wind, rain, irrigation water and diseased seeds; mostly it occurs in areas with high temperature and humidity. Sowing infected seeds may produce infected seedlings and contribute to inoculum and disease transfer from one cropping season to another. The pathogen infects several species of wild rice and can survive on infected crop residues, volunteer plants, and weeds. Frequent rainfall favours the disease. Rain splash facilitates the dispersal of bacteria from infected leaves and causes infection on neighbouring healthy tissues.

Management

- Plant resistant varieties (if available) in disease prone areas.
- Use certified healthy seeds and treat seeds with hot water.
- Keep fields clean.
- Remove weed hosts and plough under rice stubble.
- Apply a balanced amount of plant nutrients, especially nitrogen.
- Ensure good drainage of flooded fields and nurseries.
- In irrigated rice areas, avoid draining from an infected field to another rice field.
- Dry the field during the fallow period to kill the bacteria and reduce the amount of inoculum in the soil and plant residues.
- When yield is affected, a copper-based fungicide applied at heading stage can be effective in controlling the disease.

Fig 1. Water-soaked and green lesions of bacterial leaf streak. (Photo by www.irri.org)



Fig 2. Enlarged and coalesced lesions of bacterial leaf streak. (Photo by IRRI)



Scientific name(s) > *Xanthomonas oryzae pv. oryzicola*

The recommendations in this factsheet are relevant to: Cambodia



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