

Soil Management to Reduce Bacterial Foot Rot on Rice

Recognize the problem

The first symptom of infection is the development of small water-soaked lesions on the leaf sheath. The bacteria spread into nodes, stems and roots. Finally, the stems turn black, rot and may collapse. The leaf blade also turns yellow and produces a rotten smell which is typical for the disease and can help to distinguish foot rot from other pests such as stem borers and Brown planthoppers. The yield loss caused by foot rot may reach 30-40%.

Background

Foot rot is more severe at high temperatures, high humidity and high levels of nitrogen. The disease is also more common in fields with a poor drainage system and soil oxidation. Hybrid varieties can be more susceptible to foot rot than local varieties.

Management

- To reduce the spread of disease from field to field, irrigation systems must be controlled so that water from the infested field does not cross over to the non-infested field
- To increase soil ventilation, inter-cultivation is needed. This should be done approximately 25 days after transplanting
- Potash (56lb/acre) and Gypsum (6 viss /acre) are applied to get better soil conditions

Bacterial foot rot symptoms. (Photo by IRRI)



Stem and root rot symptom of Bacterial foot rot. (Photo by PPD)



Scientific name(s) > *Dickeya chrysanthemi*

The recommendations in this factsheet are relevant to: Myanmar [Burma]



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