

Brown spot on Rice

Recognize the problem

Brown spot disease can occur at all rice stages and on different parts of the rice plant. The symptoms are very clear on the leaf and the most common symptom is the brown spots on the leaves (Fig. 1). Seedling blight can occur when infected seeds are used. Typical classical brown spot symptoms are observed at tillering stage and beyond. These include small and circular foliar lesions that are initially dark brown to purple-brown.

Background

The disease is common in soils that are poorly drained or low in plant nutrients. The pathogen can survive on infected rice straw, stubbles, weeds, and seeds, and cause brown spot on the subsequent crop. The spores are airborne, allowing the pathogen to spread quickly. These spores survive on infected seeds. Unregulated seed exchange, poor seed quality and poor hygiene can facilitate the spread of the disease.

Management

- Use certified healthy seeds
- Improve soil fertility by applying silica-based food
- Remove infected rice straw and weed hosts such as *Echinochloa* spp. and *Leersia hexandra*
- Use resistant varieties where available
- Use seed treatments with fungicides such as benomyl or with hot water
- Carbendazim, tricyclazole and Mancozeb can be used as field sprays

Figure 1: Brown Spot lesion on leaves. (Photo by IRRI)



Figure 2: Brown spot lesion on rice crops. (Photo by IRRI)



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) > *Cochliobolus miyabeanus* (syn. *Bipolaris oryzae*, *Helminthosporium oryzae*)

The recommendations in this factsheet are relevant to: Cambodia



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