

Brown spot on Rice

Recognize the problem

The disease can occur at all rice stages and on different parts of the rice plant. The symptom begins on leaves as small brown spots, which then develop into round or oval brown spots in later stages (Fig. 1). Seedling blight can occur when infected seeds are used. This disease also damages rice grains, causing brown spots and black discolouration on the grains. Typical classical brown spot symptoms are observed at tillering stage and beyond: 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 nutrient. The pathogen can survive on infected rice straw, stubbles, weeds, and seeds, and cause brown spots on the subsequent crop. The spores are air-borne, 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 healthy seeds.
- Improve soil fertility especially silica-based fertilizer.
- Remove infected rice straw and weed hosts such as *Echinochloa* spp., *Leersia hexandra*.
- Use of resistant varieties where available.
- Seed treatments with fungicides such as captan or chitosanor with hot water (53-54 C) for 10-12 minutes. Carbendazim, tricyclazole and Mancozeb can be used as field sprays.

Fig 1. Brown Spot lesion on leaves. (Photo by www.IRRI.org)



Fig 2. Brown spot lesion on rice crops. (Photo by www.IRRI.org)



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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