

LOUISIANA PLANT PATHOLOGY

DISEASE IDENTIFICATION AND MANAGEMENT SERIES

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Narrow Brown Leaf Spot of Rice

Cercospora janseana (Racib.) O. Const *C. oryzae* Miyake
(teleomorph *Sphaerulina oryzina* K. Hara)

Narrow brown leaf spot of rice, caused by the fungus *Cercospora janseana*, varies in severity from year to year and is more severe as rice plants approach maturity.

Leaf spotting may become very severe on the more susceptible varieties, and the disease causes severe leaf necrosis. Premature ripening, yield reduction and reduced milling can occur.

Symptoms include short, linear, brown lesions found most commonly on leaf blades (Figure 1). Symptoms also occur on leaf sheaths, pedicels and glumes. Leaf lesions are 2 millimeters to 10 millimeters long and about 1 millimeter wide. The lesions tend to be narrower, shorter and darker brown on resistant varieties and wider and lighter brown with gray necrotic centers on susceptible varieties. Abundant sporulation occurs on the lesions during extended wet periods (Figure 2).

On upper leaf sheaths, symptoms are similar to those found on the leaf. On lower sheaths, the symptom is a “net blotch” or spot in which cell walls are dark brown and intracellular areas are tan to yellow (Figure 3).

The primary factors affecting disease development are (1) susceptibility of varieties to one or more prevalent pathogenic races, (2) prevalence of pathogenic races on leading varieties and (3) growth stage. Although rice plants are susceptible at all stages of growth, the plants are more susceptible from panicle emergence to maturity.

Differences in susceptibility among rice varieties are commonly observed, but resistance is an unreliable control method since new races develop readily. The current version of LSU AgCenter Pub. 2270, “Rice Varieties and Management Tips,” has up-to-date varietal resistance ratings.

Fungicides containing propiconazole show activity against narrow brown leaf spot and should be applied between boot and heading growth stages. Ask an LSU AgCenter extension agent in your parish for the latest information for *Cercospora* management.



Figure 1. Typical leaf symptoms of narrow brown leaf spot.



Figure 2. Spores of *Cercospora janseana* from leaf lesions.

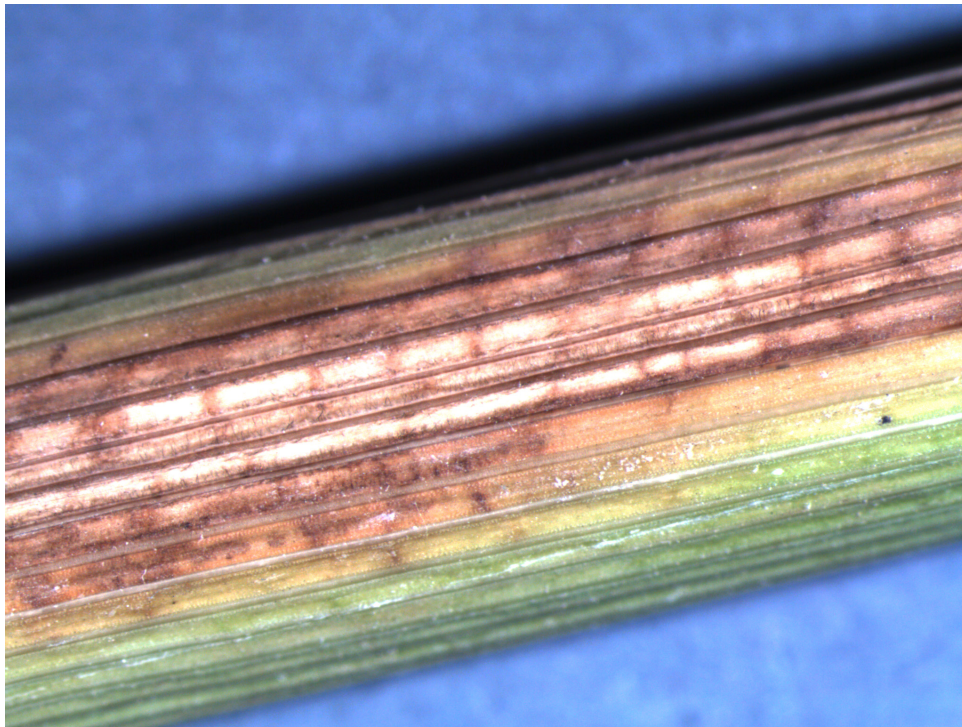


Figure 3. Cercospora net blotch symptoms.

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Authors

Don Groth, Ph.D., Professor
Rice Research Station

Clayton Hollier, Ph.D., Professor
Department of Plant Pathology and
Crop Physiology

Louisiana State University Agricultural Center, William B. Richardson, Chancellor
Louisiana Agricultural Experiment Station, David J. Boethel, Vice Chancellor and Director
Louisiana Cooperative Extension Service, Paul D. Coreil, Vice Chancellor and Director

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