Millet Phyllosticta Leaf Blight

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Identification and Life Cycle

Phyllosticta leaf blight of millet is caused by the fungus *Phyllosticta penicillariae*. Little is known about the conditions that favor disease development, but the pathogen is disseminated by air-borne spores and movement of infested crop debris. The pathogen survives between millet crops in and on infested crop debris and contaminated seed.

Plant Response and Damage

Phyllosticta leaf blight affected plants are stunted, yellow, and have numerous small lesions. These lesions have dark brown margins surrounding a light brown necrotic center. Individual lesions may coalesce, giving leaves a tattered appearance. Leaf margins are often necrotic. Small, dark fungal fruiting bodies (pycnidia) are apparent in diseased tissues. Yield loss estimates are not available for the High Plains.

Management Approaches

Biological Control

No biological control strategies have been developed for Phyllosticta leaf blight.

Cultural Control

Cultural control practices have not been developed for Phyllosticta leaf blight, but a three-year or longer crop rotation, incorporation of infested crop debris, and the planting of pathogen free-seed likely will reduce disease incidence and severity.

Chemical Control

Broad spectrum seed treatments should be used routinely.

Product List for Phyllosticta Leaf Blight:

Pesticide	5	Rate per	100 lb seed	Application	Remarks	
				Frequency (days)		

High Plains IPM Guide, a cooperative effort of the University of Wyoming, University of Nebraska, Colorado State University and Montana State University.

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Captan—various formulations available						
Captan 75	6-9 oz	Seed treatment	Broad spectrum, but weak against <i>Pythium</i>			
Fludioxonil						
Maxim 4FS	0.034-0.068 fl oz	Seed treatment	Suppression of <i>Fusarium</i> and <i>Rhizoctonia</i> spp.			
Thiram						
42-S Thiram	8 fl oz	Seed treatment	Broad spectrum			
Thiram 50WP	8 oz	Seed treatment	Broad spectrum			

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Categories: Millet, Disease, Phyllosticta Leaf Blight

Date: 03/22/2005