Millet

Cercospora Leaf Spot

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Identification and Life Cycle

Cercospora leaf spot of millet is caused by the fungus Cercospora penniseti (syn. C. apii). Little is known about the disease cycle, inoculum sources, or how the pathogen overwinters. Related Cercospora spp. are known to infect their hosts when high temperatures (77 to 95ºC) coincide with high humidity (90-95% relative humidity) or free moisture on leaves. Little or no infection occurs when temperatures are below 60ºC. The pathogen is likely spread by splashing rain and irrigation water and, to a lesser degree, by wind. The fungus may survive between millet crops in and on infected crop residue as spores (conidia) and fungal mycelial masses (stromata), weeds, and perhaps on alternate hosts.

Plant Response and Damage

Cercospora leaf spot symptoms generally develop late in the growing season (September or October) on leaves and stems. Lesions tend to be small and oval, but may be oblong to rectangular in shape. Lesions tend to have pale tan to gray centers with prominent black dots (fungal fruiting structures), and may be covered with a silvery layer of spores during wet weather. Stem lesions are similar to leaf lesions, but tend to be longer. The disease generally causes little yield loss in the High Plains region since symptoms develop late in the growing season.

Management Approaches

Biological Control

No biological control strategies have been developed for Cercospora leaf spot.

Cultural Control

Varieties appear to differ in their reaction to Cercospora leaf spot, and highly susceptible varieties should be avoided. Crop rotation, sanitation of crop debris, and weed control may also help to reduce the disease.

Chemical Control

No chemical controls are available or needed for Cercospora leaf spot.

Categories: Millet, Disease, Cercospora Leaf Spot

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