Cercospora Leaf Spot of Hydrangea

Dr. Green Thumb
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Diagnosis

This disease of hydrangea is caused by the microorganism *Cercospora hydrangeae*. This particular microscopic disease organism belongs to a large group of fungi that may attack numerous garden annuals and perennials in the landscape. Other leaf-spotting fungal organisms that can also affect hydrangea include *Septoria* sp., *Phyllosticta* sp., and *Corynespora* sp. This disease affects smooth, panicle, oakleaf-, and bigleaf-type hydrangeas in landscape plantings. The fungus produces microscopic spores that are responsible for spread of the organism and disease initiation on susceptible plants. These spores may be dispersed by the fungus and carried on wind currents or splashing water for considerable distances from the source.

Symptoms

Unlike many leaf-spotting fungi, initial infection occurs somewhat later in the growing season after the leaves have fully expanded. Midsummer conditions in Arkansas often contribute to disease onset and severity. This is the time of year that symptoms become apparent in the landscape and even in nurseries. Rainfall is a major contributing factor in disease activity. The first symptom that is usually seen is small purple leaf spots on the upper surface of the leaf. Spots then develop a tan to gray center with a purple or brown halo. Many leaf spots tend to make the leaf blade turn a yellow-green color. Symptoms usually appear from May through October in Arkansas. The disease becomes most apparent in the early fall months.

Numerous leaf spots may often make the plant unsightly and can lead to premature defoliation, which in turn reduces overall plant vigor. Infected plant material, such as leaves, is an important source for subsequent infections. The fungus may easily over-winter on infected plant material on the plant or on the soil surface beneath the plant.

Prescription

To minimize disease activity, hydrangea plants should be spaced in such a manner as to allow good air circulation for drying of the leaves. If plants are irrigated from above, it should be done early in the morning to facilitate rapid drying of plant surfaces. During the season, growers can pick off and destroy infected leaves when the plant is dry. A good cleanup before spring is very helpful. Destruction of plant debris can help reduce sources for infections. In addition to good sanitation and irrigation management, several fungicides are useful in protecting healthy plant material from fungus infection. These materials may be cost effective on high-value plants that develop the disease each year. Those materials that contain the active ingredients myclobutanil, chlorothalonil, mancozeb, or thiophanate-methyl are most effective when applied prior to or at the first evidence of disease symptoms. Multiple applications may be necessary. Application information for these and other fungicides is provided on individual container labels.

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