Virginia Cooperative Extension

Plant Disease Fact Sheets

2000 PUBLICATION 450-600W

Iris Leaf Spot

Mary Ann Hansen*

Heterosporium leaf spot, or iris leaf spot, is the most common disease of iris in Virginia. It is caused by the fungus *Didymellina macrospora*, which is also known as *Heterosporium iridis*.

Although the fungus attacks bulbous iris most frequently, it can also cause severe damage to rhizomatous iris. Leaf spotting is most conspicuous on the upper half of the leaves toward the end of the season after the blooming period.

Symptoms

The first evidence of this disease is the appearance of small brown spots with water-soaked margins near the leaf tips. During the early part of the season, these spots are not conspicuous, but after blooming, the spots enlarge rapidly, coalesce, and may cause death of the leaf from the tip back (Fig. 1). As the spots enlarge, they become oval-shaped and tend to lose their water-soaked margin. Later the spots turn a yellow to reddish-brown color with characteristic gray centers. Although the fungus does not attack the bulbs or rhizomes, premature killing of the leaves can sufficiently weaken the underground parts so as to cause a gradual death of the entire plant.

Fig. 1. Leaf spots and tip death caused by the fungus Heterosporium iridis. *(Photo by M. A. Hansen)*

Disease Cycle

The fungus overwinters on dead iris leaves. Spores spread from old plant debris in the spring and initiate new infections. Fungal spores (Fig. 2) produced in leaf spots during the growing season are spread by splashing rain.

Fig. 2. Microscopic spores of Heterosporium iridis. *(Photo by M. A. Hansen)*

Control

Cultural Control

Removing and burning or burying all diseased leaves in the fall will greatly reduce the amount of fungal inoculum available for infection the following spring and frequently will provide sufficient disease control.

Chemical Control

Under severe disease conditions, a fungicide spray program is recommended. Usually 4 to 6 sprays of a fungicide containing chlorothalonil (e.g. Daconil 2787), mancozeb (e.g. Fore, Dithane, or Penncozeb), or trifloxystrobin (e.g. Compass) starting when the leaves are 4 to 6 inches high and repeated at 7 to 10 day intervals, will control the disease. Because of the waxy nature of iris leaves it is important to add either a commercial spreader-sticker or 1/4 teaspoon of a household liquid detergent to each gallon of spray to aid in wetting the foliage. Refer to the current Virginia *Pest Management Guide for Home Grounds and Animals* (VCE Publication 456-018), http://www.ext.vt.edu/pubs/pmg/, for details on fungicide control and for information on the proper use of pesticides and fungicides.

Disclaimer

Commercial products are named in this publication for informational purposes only. Virginia Cooperative Extension does not endorse these products and does not intend discrimination against other products which also may be suitable.

*Extension Plant Pathologist, Department of Plant Pathology, Physiology and Weed Science, Virginia Tech