

Plant Pathology Fact Sheet

Iris Diseases

by John Hartman

Many Kentucky gardens feature iris plantings; these flowers are popular and well adapted. Iris plants are susceptible to several diseases.

Leaf Spots

DIDYMELLINA LEAF SPOT

The fungus *Mycosphaerella macrospora* (formerly called *Didymellina macrospora*) causes the most prevalent leaf spot. On the leaves, oval spots with reddish-brown margins and gray centers (FIGURE 1.) can



FIGURE 1. DIDYMELLINA LEAF SPOT

become so numerous that leaves become blighted and die (FIGURE 2). If the center of the gray spot is examined closely, dark fungal growth of *Heterosporium iridis*, the imperfect stage of the fungus, can usually be seen (FIGURE 3).

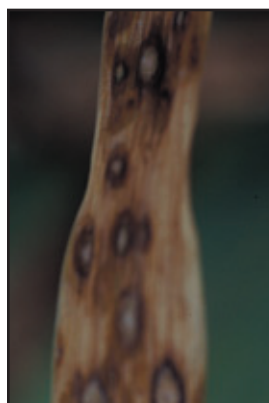


FIGURE 2. BLIGHTED,
DEAD IRIS LEAF

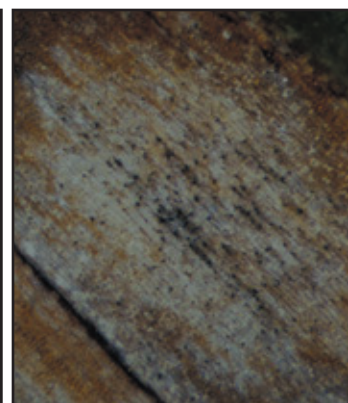


FIGURE 3. CLOSE-UP OF LEAF
SPOT LESION

BACTERIAL LEAF SPOT

Bacterial leaf spot caused by *Xanthomonas tardicrescens* shows symptoms similar to those of the fungal leaf spot without the fungal growth. Similar to the fungal leaf spot, bacterial leaf spots have a water-soaked appearance. This disease occurs less frequently in Kentucky, but can also cause blighting.

RUST

Rust disease results in rusty-red pustules appearing on either side of affected leaves. The fungus, *Puccinia iridis*, can cause considerable damage to several iris varieties.

CONTROLLING LEAF SPOTS

To control leaf spot diseases, remove blighted leaves during the season, and remove and destroy all foliage in the fall.

Fungicides containing chlorothalonil, mancozeb, myclobutanil, propiconazole, or triadimefon can be used to protect iris from *Didymellina* leaf spot. Check to be sure that iris leaf spots are on the label. A spreader-sticker may be added to the spray because iris leaves are very waxy. Fungicides will not control bacterial leaf spot.

Rhizome and Bulb Rots

BACTERIAL SOFT ROT

Bacterial soft rot is a serious rhizome disease that can appear in newly planted as well as mature iris plantings. *Erwinia carotovora* causes a foul-smelling soft decay of the rhizome. The bacterium gains entrance into the plant through wounds in young leaves made by young larvae of the iris borer. Soft rot is prevented by planting healthy rhizomes and eliminating the iris borers.

FUNGAL RHIZOME AND CROWN ROTS

Botrytis convoluta and *Sclerotium rolfsii* are two fungi that can cause rhizome and crown rot diseases of iris. The former produces irregular black sclerotia in the decaying rhizome, while the latter produces small spherical sclerotia on the rotted leaf bases. Neither produces a foul-smelling decay. Remove and destroy affected rhizomes.

FUNGAL BULB ROTS

Several other diseases such as black rot, ink spot, Fusarium basal rot, and blue mold cause decays of bulbous iris. Sort out and destroy diseased bulbs as they occur.

(Revised 11-05)