Diseases of Iris

Purdue University Cooperative Extension Service
DISEASES OF IRIS

The iris was named for the Greek goddess of the rainbow and was venerated in ancient Egypt. It is believed by botanists that the "lilies of the field" in Biblical lands were really irises, and one of our names for the older garden iris was "Fleur-de-lis."

There are several destructive diseases of the iris that may spoil anticipated blooms or destroy the plant completely.

Leafspot

The most common and most widely distributed disease of iris is leafspot. It is generally responsible for the ragged appearance of iris in mid-summer, and is sometimes serious enough to cause premature death of the foliage. Repeated attacks for several consecutive seasons will weaken the iris plant, may be responsible for the plant's failure to produce satisfactory blooms, and may occasionally kill the plant.

Leafspot on iris becomes evident in late May. It takes the form of small, grayish-brown spots with water-soaked margins. These initial infections will increase in size and number until they involve a large portion of the leaf surface. After the plants bloom, the leafspots enlarge more rapidly, run together and destroy many leaves prematurely. The older spots become gray in the center surrounded by a reddish-brown border.

Iris leafspots are caused by several fungi (Phyllosticta iridis, Alternaria iridicola and Didymella macropora) which live as parasites in the infected spots on the foliage. Microscopic spores are produced from the center of each spot during damp weather. These may be seen with a strong hand lens as black, hair-like growths. They are splashed to the surface of healthy leaves by rains or watering and develop into many new leafspot infections. Iris leafspot fungi live through the winter months in dead, diseased leaves, which serve as a source of infection the following spring.

Sanitation is a major step towards preventing leafspot. Late in the fall or before growth starts in the spring, rake up and burn all plant debris around the iris. During the early summer, destroy all foliage showing extensive leafspot development.

In years of frequent spring and early summer rains, 4 to 6 sprays at 7 to 10 day intervals will be needed to control leafspot. Spraying should start when the new growth is 4 to 6 inches high and should be discontinued just before the first blossoms open.

Any of the following fungicides will prevent leafspot:

Phalan-2 tablespoonsful per gallon of water.
Captan (Orthocide)--2 1/2 tablespoonsful per gallon of water.
Zineb (Parzate or Dithane Z-78)--2 tablespoonsful per gallon of water.
Maneb (Manzate or Dithane M-22)--1 1/2 tablespoonsful per gallon of water.

Adding 1/2 teaspoonful of liquid household soap to each gallon of spray will help improve leafspot control.

Cooperative Extension Service PURDUE UNIVERSITY Lafayette, Indiana
Department of Botany and Plant Pathology, Life Science Building
Crown and Rhizome Rots

Recently, these diseases have become destructive in many gardens, especially to new hybrid iris varieties. A typical symptom of crown and rhizome rots is wilting and yellowing of leaves just when the plants are ready to bloom. Close examination will show that the bases of the leaves have rotted off near the soil line. Later in the season the crown will rot and the entire plant may be destroyed. Several organisms are responsible for crown and rhizome rot of iris, including *Sclerotium delphini*, *Botrytis convoluta*, *Penicillium* sp. and *Erwinia caratovora*.

The following suggestions will help reduce crown and rhizome rot damage.

First, use only healthy, disease-free iris rhizomes from disease-free beds. Don’t plant them in shady locations and avoid crowding. Before planting new rhizomes, dip them in a 1:1000 solution of bichloride of mercury. A 1:1000 solution of bichloride of mercury is prepared by dissolving a 7.3 grain corrosive sublimate tablet available at drugstores, in 7 1/2 gallons of water.

If diseased plants appear in established iris beds, immediately dig them out, and drench the surrounding soil with corrosive sublimate solution. CORROSIVE SUBLIMATE IS POISONOUS. KEEP IN LABELED CONTAINER AND OUT OF REACH OF SMALL CHILDREN AND PETS.

How to Recognize Iris Leafspot

General appearance

Close-up