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EC59-1822 Plant Diseases: Peony Blight

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Peony Blight

Botrytis blight is the most important disease of peonies in Nebraska. Each year it causes great disappointment to many hopeful flower gardeners who in early spring envision large, beautiful peonies for Memorial Day.

SYMPTOMS

This disease affects buds, stems and leaves. Young shoots in all stages of growth, up to and including the buds, may suddenly wilt and fall over. Examination reveals a soft, brown to black rot of the stem that may extend down to, and in some instances below, the surface of the soil.
Infected small buds stop growth and turn black. Older buds turn brown and fail to open and often the petals become watery and matted. The stalk for several inches below infected flowers is usually killed.

The leaves are usually attacked later than other parts of the plants. Large, irregular spots with dark and light brown appear. These spots vary considerably in size and may involve the entire leaflet.

CAUSE

Botrytis blight is caused by a fungus which lives from one season to the next on old diseased foliage. During spring rains the fungus becomes active and produces a tremendous amount of spores (fungus seeds). These spores are produced on the surface of the old plant material where they are easily caught up by air currents and distributed. Those which lodge on the young peony plants germinate and produce infection if moisture is present on the surface of the plant. More spores form in the new infection sites. So long as there is a great deal of moisture causing the foliage to remain moist most of the time, reinfection will continue.
CONTROL

1. Control should begin with a thorough clean-up of the old stems, leaves, and other plant debris in the fall. This sanitary measure will greatly reduce the amount of the disease organism in the vicinity of the plants and will make it much easier to control the disease through spraying. In the spring any wilted or rotted shoots should be destroyed as soon as detected.

2. The shoots should be sprayed as they come through the ground. Following are recommended materials:

   - **Captan** - 2 tablespoons per gallon.
   - **Zineb** - 2 tablespoons per gallon.
   - **Ferbam** - 2 tablespoons per gallon.
   - **Manzate** - 1 tablespoon per gallon.

   Copper containing fungicide such as Bordeaux mixture - use at rate recommended by manufacturer.

   Spray every two weeks until near blossoming. Add a regular household detergent such as Dreft, Vel, etc. to the spray solution at the rate of 1 teaspoonful per gallon if a wetting agent has not already been incorporated in the packaged material.