

Botrytis Blight of Peony

Mary Ann Hansen, Extension Plant Pathologist, Department of Plant Pathology, Physiology and Weed Science, Virginia Tech

Botrytis blight is a common fungal disease that confronts the peony grower each spring. The fungus *Botrytis cinerea* blights stems, buds, and leaves and can cause plants to look unsightly, especially in wet springs. This fungus causes disease on a wide variety of herbaceous and woody ornamentals, as well as vegetables and small fruits. It is sometimes referred to as “gray mold” because of the conspicuous, fluffy, gray fungal growth that forms on infected plant parts.

Symptoms

In early spring young peony stalks may suddenly wilt and fall over. Buds may turn black and dry up (Fig. 1). Larger buds that are infected later in the spring turn brown and become covered with a brown or gray mass of fungal spores (Fig. 2). Flowers may fail to open. Usually the stalks below infected buds and flowers are rotted for short distances below the necks. Large, irregular, dark brown blotches may also occur on the leaves. In severe cases, crown and root rot may occur; however, these symptoms are not as common as aboveground symptoms. In wet weather the diseased plant parts soon become covered with a grayish, felty growth of fungus spores. Small, black sclerotia may form on the base of infected stalks or in other infected portions of plants that have fallen to the ground. Sclerotia are the overwintering structures of the fungus.

Bud and flower symptoms are often confused with injury from an insect called thrips. If thrips are the

cause, these insects can usually be shaken from among the petals onto a piece of paper. The presence of tiny, orange, scurrying insects barely visible to the naked eye confirms the presence of thrips. Thrips do not cause the leaf blotches or stem rot associated with Botrytis blight.

Control

Cultural Control

Sanitary measures are the most effective means of control. Because the fungus sporulates so prolifically on infected plant parts, it is important to remove and destroy all infected parts as soon as they appear. In the fall, cut all stalks at ground level or below, removing as much of the stalk as possible without injuring the bud. Remove pruned plant tissue from the area and discard.

Chemical Control

Several fungicides are available for control of Botrytis blight. Fungicides containing the active ingredients, mancozeb or thiophanate methyl, and labeled for use on ornamental plants in the landscape can be used preventatively to control this disease in home landscapes. Care should be taken to follow label instructions regarding the number of times a given fungicide may be used per season. Certain fungicides, when used excessively, can favor development of fungicide-resistance in the pathogen. Botrytis is very prone to developing resistance to fungicides that have a single-site mode of action. Refer to the Virginia Pest Management Guide for Home Grounds and Ornamentals (<http://pubs.ext.vt.edu/456/456-018/456-018.html>) for current fungicide information for home landscapes or to the Virginia Pest Management Guide for Horticultural and Forest Crops (<http://pubs.ext.vt.edu/456/456-017/456-017.html>) for fungicide recommendations for commercial nurseries.



Fig. 1 Tips of peony stalks blighted by *Botrytis cinerea*. (Photo by M.A. Hansen)



Fig.2 Fluffy, grayish sporulation of *Botrytis cinerea* on diseased plant tissue. (Photo by M.A. Hansen)

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