

# Crown Rot of Ajuga and Hosta

Dr. Green Thumb

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Crown rot can be a persistent and severe disease problem for Ajuga (*Ajuga reptans*) and Hosta (*Hosta sp*) plantings throughout the south. The crown rot disease is caused by the fungus *Sclerotium rolfsii*. This fungus is considered a soil-inhabiting organism, meaning it is able to survive indefinitely on dead plant material in the soil. *Sclerotium rolfsii* produces small spheres, about the size of mustard seed. These “seeds” enable the fungus to survive for long periods in the soil. As they mature, they change from white, to light tan, to brown. These hard structures (sclerotia) fall from the infected plant stems onto the soil. They can often be seen in the rotted areas at the bases of infected plants. In addition to infected transplants, the fungus can also be spread by contaminated tools, infested soil, and moving water.

This fungal disease can severely damage established Ajuga and Hosta within a week. The disease is most commonly restricted to the warm, humid southern United States. Common herbaceous landscape ornamentals that are susceptible to this disease include; *Caladium*, *Phlox*, *Vinca* (periwinkle), *Hemerocallis* (daylily) and *Viola* (pansy). In addition to ornamentals, *Sclerotium rolfsii* can infect many fruits and vegetables.

Symptoms of disease include the presence of blighted lower leaves, often yellow at the margins. The discoloration rapidly progresses to the bases of the leaves followed by leaf collapse. The base of the plant develops a soft mushy rot. Leaves can easily be pulled from the crown area. Cottony white threads of the fungus form a “fan” shape on the petioles or stems at the base of the infected plant. On Hosta, the leaf petioles are very vulnerable to the fungus. Sometimes the fungal threads form a fluffy white mat that can be seen growing directly on the soil surface near the infected plants.

The most effective tool in the management of this crown rot disease is avoidance. Close inspection of plant material before planting, prompt removal and destruction of infected plants, and selecting plants that are less susceptible to the disease are helpful. Plants should be examined closely for yellow or wilted leaves near the bottom of the plant. Look for the white threads and sclerotia on the stems or petioles. Once established in the soil, the fungus is difficult to control.

Fungicides containing pentachloronitrobenzene (PCNB), flutolanil (Contrast) are labeled for this disease on many ornamentals, however, these may only be available through commercial pesticide dealers rather than garden centers and retail stores.

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