XHT1042

University of Wisconsin Garden Facts

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# Southern Blight

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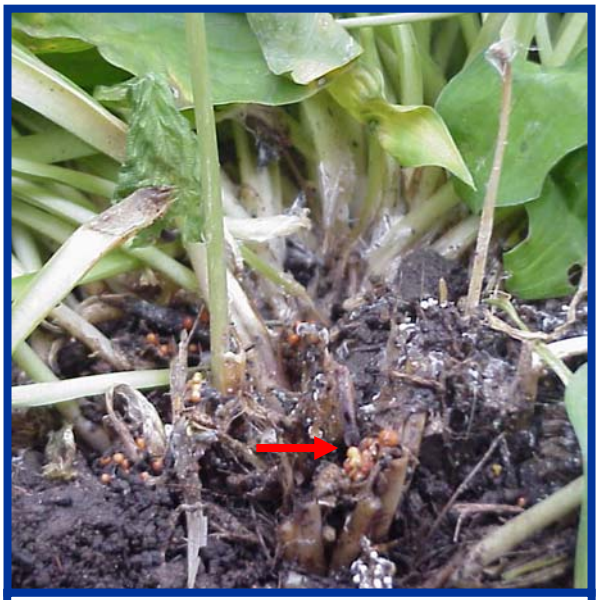
***What is Southern blight?*** *Southern blight is a serious, and typically lethal, fungal disease that is most common in the tropics and subtropics. This disease also can cause damage in the southern U.S., and can even become a problem in temperate states like Wisconsin during periods of warm, moist weather. Southern blight has a wide host range, affecting over 500 plant species. Vegetable and fruit hosts include tomato, pepper, onion, beet, rhubarb, strawberry, lettuce, cucumber, melon, carrot, asparagus and parsley. Ornamental hosts include aster, dahlia, daylily, gladiolus, hosta, impatiens, peony, petunia, rose, rudbeckia, salvia, sedum and viola. Small woody ornamentals can be susceptible as well.*



***The Southern blight fungus produces large numbers of spherical, light tan to dark red resting structures called sclerotia (red arrow).***

***What does Southern blight look like?*** *Southern blight initially leads to a water-soaked appearance on lower leaves, or a water-soaked lesion (spot) on lower stems. Any plant part that is near, or in contact with, the soil may become infected. Infected plants yellow and wilt, often within days of infection, particularly when the weather is moist and warm (80 to 95°F). Fruit rots, crown rots and root rots are also typical symptoms of the disease. Thick mats of white fungal threads (called mycelia) may grow from infected tissue, and typically radiate from the plant onto the soil surface. Sclerotia (small spherical structures that are about the size of mustard seeds) develop on infected tissue and on the soil surface. Sclerotia range in color from light tan to dark reddish-brown.*

***Where does Southern blight come from?*** *Southern blight is caused by the fungus Sclerotium rolfsii, which lives in soil, on plant debris and on weed hosts. The fungus can be spread through movement of infested soil, infected plants and contaminated irrigation water, and by use of contaminated tools. In Wisconsin, S. rolfsii most likely enters gardens on infected nursery stock or infested mulch. Freezing temperatures will kill S. rolfsii mycelia, while sclerotia can survive at temperatures above approximately 14ºF.*

***How can I save a plant with Southern blight?*** *Infected plants, as well as soil from six inches beyond an infested area, should be removed. Bury any remaining sclerotia eight to 12 inches to reduce the length of time that they will survive in the soil. Grow non-susceptible plants (e.g., larger woody ornamentals) in the affected area for two to three years following an infestation to allow time for sclerotia to die naturally. Fungicides containing triadimefon may be effective for control of Southern blight. However, these products will likely be more effective if applied as preventive treatments rather than in an attempt to "cure" existing disease.*

***How can I prevent Southern blight in the future?*** *Inspect new plants prior to transplanting for sclerotia and mycelia, and throw away diseased plants. Avoid mulches that might be contaminated with S. rolfsii. S. rolfsii thrives in moist conditions. Therefore, thin existing gardens or space plants farther apart in new gardens to improve airflow and promote rapid drying of foliage.*

***For more information on Southern blight:*** *Contact your county Extension agent.*



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A complete inventory of University of Wisconsin Garden Facts is available at the University of Wisconsin-Extension Horticulture website: wihort.uwex.edu.

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