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Southern Blight (*Sclerotium rolfsii*)

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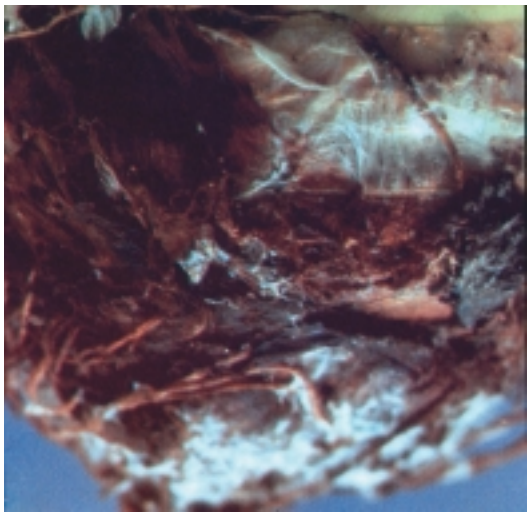
Southern Blight, (*Sclerotium rolfsii*) is a soil fungus that is capable of attacking many crop and ornamental plants. It can be found in most soils in the warm tropical and subtropical regions. Plants most commonly affected are beans, carrots, corn, cucurbits, crucifers, eggplant, onions, peppers, potatoes, radish, sweet potatoes, taro, tomatoes, yams, and various ornamentals.

The southern blight fungus (common name in the U.S.) can cause various types of damage to plants, such as seedling blight or damping-off, an infection of the emerging plant at the soil level or below, which kills the seedlings. The fungus can also cause root rot, tuber rot, stem cankers, and fruit rot. It can cause leaf spots on yams as well.

The most common symptom is a dark brown lesion on plant stems near the soil level. Then wilting and yellowing of the lower leaves follows, and finally a whitish growth develops on the infected area, which will form tiny white seed-like structures (called sclerotia) that later turn brown. The fungal growth, together with the sclerotia, can allow the fungus to survive in the soil between planting seasons.

An abundance of organic matter that is not well decomposed in the soil, such as crop residues, can be used by the southern blight fungus to survive in the absence of live plants. Some rainfall (or irrigation) following a period of drought favors growth of the fungus in the soil.



Base of taro plant infected by Southern Blight fungus

Control

- Work the soil well to make sure that crop residues break down quickly.
- Don't allow organic matter to pile up near the stems of your plants.
- The use of black plastic mulch reduces the southern blight problem.
- Crop rotation with grasses helps reduce the amount of fungus in the soil.
- Foliar sprays with fungicides to control leaf diseases will keep the leaves green for a longer time, and this reduces the amount of organic matter on the soil surface during the cropping season.

If the use of chemicals is required or if further information is desired, consult an Extension Agent at your local land grant institution. On Guam you may also consult the Guam Fruit and Vegetable Pesticide Guide for current recommendations and permissible uses.

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