



University of California Cooperative Extension – Kern County

# NEWS RELEASE

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## SOUTHERN BLIGHT

Warm weather can be perfect conditions for several diseases of vegetables. Most growers and consultants think of cold wet weather as ideal conditions for plant diseases, but there are a few plant diseases that only become an issue when the weather becomes hot. And the Central Valley of California certainly can become hot in the summer.

Southern Blight is one such disease that becomes an issue every summer. Potatoes growers with late fields are all too familiar with this disease. But it can occur on all vegetable crops growing in the summer months. Lately it seems to be affecting tomatoes more.

Southern blight is caused by a soil borne fungus called Sclerotium rolfsii. Sometimes the disease is simply call “rolfsii”. It survives in the soil as small hard bodies of fungal tissue call sclerotia that resemble alfalfa seed. The sclerotia will germinate under warm moist conditions when a host plant is nearby. The fungus will primarily attack a plant at the soil line which makes its identification fairly easy. There a tan mass of fungal growth can be seen with a mass of alfalfa seed sized sclerotia. The sclerotia will be initially white in color but become brown as they mature. The sclerotia will be extremely numerous.

As the infection progresses plants will wilt and eventually die. But inspection of the infected plants will show fungal growth and numerous sclerotia on the plant at the soil line. Tomato fruit on the soil surface will also become infected as well potato tubers. But again, Southern blight has a very wide host range and can infest many vegetable plants including, onions, garlic, beans, peppers etc.

Southern blight is often not noticed until it is wide spread in a field. But the disease was likely there previous years. Once the sclerotia become too numerous in a field then disease becomes noticeable. Each infected plant can literally produce tens of thousands of sclerotia. Within a season or two, Southern blight can be serious enough to cause an entire loss of a field. Under warm conditions (86°F and greater) it can progress very rapidly.

Control of Southern blight can be difficult. Deep plowing will bury the sclerotia and get it away from attacking plants at the soil line. Crop rotations to non-host plants such as small grains will help to

significantly reduce sclerotia levels in the field. There are fungicides that can be used at planting that help manage this disease. But once sclerotia levels become too numerous in a field, then fumigation will need to be considered. Metam sodium will control Southern blight but the costs of fumigation may limit its option in some situations.

Scouting the fields during the summer months to determine if Southern blight is present will allow for options to be taken before the sclerotia levels become too numerous.

