

Tuber Blemish Diseases: Black Dot

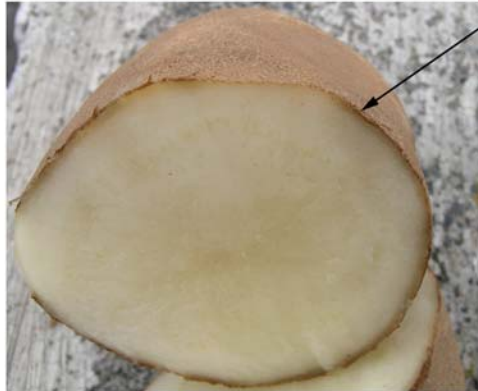
See also: <http://www.potatoes.com/research.cfm>



Brown, silvery, and sometimes pinkish lesions affect the periderm of the tuber, but rarely cause damage beneath the skin.



Small microsclerotia (overwintering structures) look like 'black dots' on the tuber surface, and are most easily seen with a microscope.



Management

1. Avoid planting infected seed.
2. Maintain good crop rotations of at least 3 years out of potato and other plants in the Solanaceae.
3. Maintain good crop fertility and soil health.
4. Promote good root health by not overwatering and avoiding soil compaction.

General Information

Causal agent: *Colletotrichum coccodes*

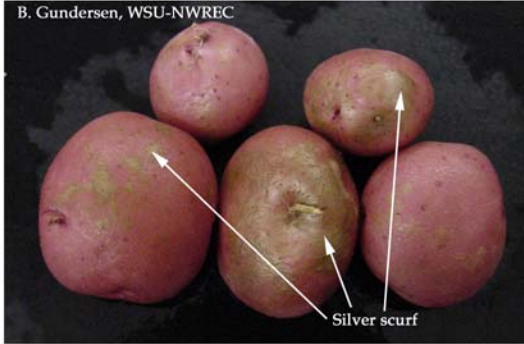
Biology: Pathogen of potato and relatives such as nightshades, tomato, and pepper. Overwinters in soil on plant debris or non-harvested tubers. Affected tubers occur consistently in some fields.

Dispersal: Seed tubers are commonly infected, and provide the most common way that black dot moves from field to field. Once soils are infested, they remain infested for some time.

Washington State Potato Commission (Phone: 509-765-8845)

Tuber Blemish Diseases: Silver Scurf

See also: <http://www.potatoes.com/research.cfm>



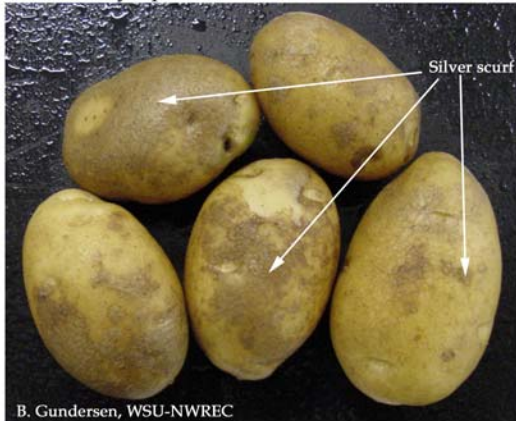
Symptoms on cultivar Chieftan

Silver scurf lesions can vary from brown to silvery grey in color, depending on potato cultivar.



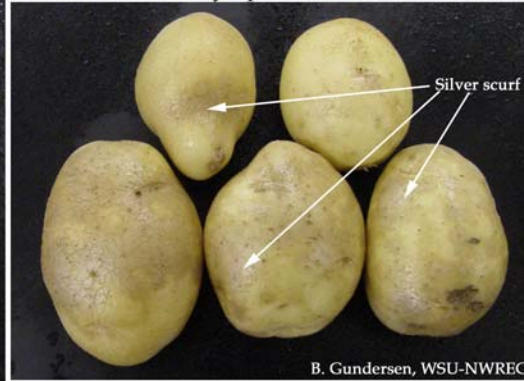
Silver scurf conidiophores on tuber surface bearing spores -- very different from black dot fruiting structures.

Symptoms on cultivar Russet Norkotah



B. Gundersen, WSU-NWREC

Symptoms on cultivar Cascade



B. Gundersen, WSU-NWREC

Management

1. Buy seed without silver scurf infections. If in doubt about your seed, have it tested.
2. Seed treatments containing thiophanate-methyl (e.g. TopsMZ) or fludioxonil (e.g. Maxim) can reduce infection on daughter tubers, but do not guarantee a clean crop if grown from heavily infected seed.
3. Disinfect storage buildings and all seed handling machinery.
4. Harvest soon after skin set to avoid infection of additional tubers.
5. Storage: avoid mixing lots with low and high infection rates; minimize storage time for infected lots; avoid opening & closing storage buildings containing infected lots.

General Information

Causal agent: *Helminthosporium solani*

Biology: *H. solani* is a fungal pathogen of potato tubers, but can likely survive in the soil as a saprophyte. Infection occurs during the growing season from either seed-based inoculum, or from soil inoculum. Damage by silver scurf worsens during storage by spreading on and between tubers.

Dispersal: Silver scurf is distributed mostly on seed tubers, and is in fact commonly found on them. It is suspected to also move via contaminated soil.

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