

Common Scab of Potato

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Symptoms

Common scab of potato is caused by a common soil-inhabiting bacterium, *Streptomyces scabies*. The disease does not cause yield losses, damage the flesh, or affect consumption of the potatoes. However, its appearance is undesirable and decreases the quality and value of the potato.

Scab is easily identified. Small, rough, reddish or brown corky lesions form on the skin of the tuber. These lesions may be raised, or slightly sunken and wart-like in appearance. Lesions on susceptible varieties are usually deep and can extend $\frac{1}{4}$ inch into the tuber. Lesions on resistant varieties are generally superficial. Scab lesions can be associated with, or masked by, injuries caused by potato flea beetles or nematodes. Such damage usually appears as corky, winding trails, slightly enlarged bumps and/or small holes in the tuber.



Figure 1. Potato tuber infected with common scab. (photo courtesy of Clemson University, USDA Cooperative Extension Slide Series, www.ipmages.org)

Conditions Favoring Disease

Streptomyces scabies is sensitive to soil moisture, pH, and temperature. Dry soils with a pH 5.5 to 7.5, and soil temperatures between 68 degrees and 72 degrees Fahrenheit are most conducive to scab development. Under most circumstances, common scab is not a problem in soils

with a pH lower than 5.5. *Streptomyces scabies* can persist for many years in soils that had heavy applications of manure or where barnyards were located.

For more information contact Megan Kennelly, Plant Pathologist, Kansas State University, at kennelly@ksu.edu

Control

Management option	Comments
Resistant varieties	Planting a resistant variety is the most practical control method. Resistant varieties include Norchip, Norgold Russet, Reliance, Russet Burbank, Shurchip, Norland, Hi-Plains, Pungo, Redskin, Russet Sebago, Shoshoni, and Superior
Crop rotation	Rotate to a crop other than potatoes for at least 3 to 4 years, plant grains, corn, or alfalfa. Avoid planting radishes, beets, carrots, and red clover.
Irrigation	Maintain moisture near field capacity during 6 weeks following tuber set.
Fertilization	Avoid applying manure, ashes, lime, or other organic material to fields before planting. Maintain soil pH lower than 5.5.
Chemical treatment	No pesticides are currently recommended to manage common scab.

Information from the *Midwest Vegetable Production Guide for Commercial Growers* (2008)

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