



# Potato scab on Irish potatoes

*Streptomyces scabiei*

	Prevention	Monitoring	Direct Control	Direct Control	Restrictions
 <p>Ready to harvest tuber with rough surface due to scab infection (Clemson University-USDA Cooperative Extension Slide Series, Bugwood.org)</p>  <p>Tubers with scab symptoms. (Photo by Florida Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Bugwood.org)</p>	<ul style="list-style-type: none"> <li>• Potato scab is a soil-borne disease</li> <li>• Plant certified disease-free seed-tubers of tolerant varieties, e.g. Arnova, Caruso, Derby, Faluka, Jelly, Manitou, Musica and Royal varieties from KALRO Tigoni, Kisima Farm.</li> <li>• Disinfect infected seed tubers through heat-treatment (10 min in water at 55°C) before planting</li> <li>• Four years' rotation of potatoes with maize, beans, onions or kales and NOT tomato, eggplant, carrot or spinach to reduce the levels of soil-borne bacterium inoculum in potato field</li> <li>• If the disease is known from your area, then do not apply manure to potato fields, as it can increase scab infection</li> <li>• Maintain soil pH levels at 5.0-5.2 by applying fertilizer such as DAP to reduce soil acidity</li> <li>• Irrigate to field capacity or to saturation, avoiding standing water during the 2 to 6 weeks following tuber formation</li> </ul>	<ul style="list-style-type: none"> <li>• Potato scab is a bacterial disease that affects the tubers.</li> <li>• Optimum temperature for infection is 20-22°C, but disease can occur in soil within a range of 10-31°C.</li> <li>• Begin to search for infection symptoms usually at onset of tuberization</li> <li>• No clear symptoms can be seen on the stems or leaves. Therefore, randomly select 4 plants from each 10th row of plants per acre at 6-8 weeks after planting, shovel away the soil a bit and remove 1-3 tubers per plant. Then look for circular scab lesions or look for large scabby areas on the tuber</li> <li>• Look for corky, deeply pitted (rough surfaces) areas on the potato tubers, roughly circular, 5-10 mm diameter.</li> </ul>	<ul style="list-style-type: none"> <li>• Isolate the diseased area by fencing-off (marking the affected area with string on boundary) to warn people not to enter and therefore not to spread the bacteria to non-infested field parts</li> <li>• Cover infected plant in a sack, uproot and bury (at least 50 cm deep) outside the field immediately. Be careful not the spread the disease</li> </ul>	<ul style="list-style-type: none"> <li>• There is no chemical control option available against this disease</li> </ul>	<ul style="list-style-type: none"> <li>• Always consult recent list of registered pesticides at Pest Control Product Board (<a href="http://www.pcbp.org">www.pcbp.org</a>)</li> </ul>