



Invasive Species Issues

May 2020

Synchytrium endobioticum, potato wart

Synchytrium endobioticum is the fungus that causes potato wart disease. Potato wart is a devastating disease of potatoes and is found throughout Africa, Asia, Europe, and South America, as well as New Zealand and parts of Canada. Potato wart has been found in and eradicated from Maryland, Pennsylvania, and West Virginia.

Hosts and Damage

Potato (*Solanum tuberosum*) and wild *Solanum* species are hosts for potato wart. Potato wart infections can occur on tuber eyes, stolon tips, and the base of stems. Potato wart does not infect roots. Warty outgrowths, sometimes described as “cauliflower-like”, develop at infection sites rendering the tubers unsalable. As the outgrowths age, they begin to decay, releasing spores into the soil where they can lead to additional infections in the current year or be a source for infection in the future. Symptoms of potato wart are most visible on below-ground parts of the plants. Reduced plant vigor may be observed on the above-ground portion of plants.



Synchytrium endobioticum, warts, potato tubers, Central Sciences Laboratory, Harpenden, British Crown, Bugwood.org

Symptoms of potato wart can resemble those of other diseases, including other fungal diseases such as powdery scab which causes superficial powdery lesions on the skin of the potato or potato smut which is visible as brown specks within the potato flesh. None of these diseases are known to occur in Alaska. Plant samples should be submitted to a diagnostic lab for identification.



Spongospora subterranea, powdery scab, potato, Sandra Jensen, Cornell University, Bugwood.org



Thecaphora solani, potato smut, potato, William M. Brown Jr., Bugwood.org

