

Potato Cyst Nematode

Globodera pallida

Native of South America, the Potato Cyst Nematode was first introduced to Idaho in 2006. A pest of potatoes and tomatoes, it infests the feeder roots but does not infest the potato tuber. It is **not yet present in Rhode Island**.



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Identifying Features:

Adult nematodes are sedentary and sausage-shaped. Females eventually become "sac-like." Their posteriors protrude from the host's roots and are visible as tiny white, yellow or brown embedded objects. Once a female dies, their body hardens to form the cyst.

In spring, when the roots of the host crop exude chemicals, eggs are stimulated to hatch. Moving between soil particles and locates, the juvenile nematode invades the roots of the host plant, where it will then undergo three additional larval stages.

Cysts may contain up to 500 eggs. When nematode eggs are in the cyst they can remain viable for up to 30 years, even without a host plant.

Damage:

- Infected potato plants may show signs of yellowing, wilting or death in foliage.
- Potato tuber size may be affected.
- Cysts, ½ mm in diameter and white, yellow, golden or brown in color, dependent upon the developmental stage and species of nematode present, are clearly visible on the roots of plants.

Information Sources

Federal Register, Potato Cyst Nematode: Quarantine and Regulations, Vol. 72, No. 176. September 12, 2007. Department of Agriculture Animal and Plant Health Inspection Service. <<http://www.agri.idaho.gov/Categories/NewsEvents/Documents/PCNInterimRule.pdf>>.

Guideline on Surveillance and Phytosanitary Actions for the Potato Cyst Nematodes: Globodera rostochiensis and Globodera pallida: Version 13.4 May 2008. 24 February 2009. <http://www.aphis.usda.gov/plant_health/plant_pest_info/nematode/downloads/potato_guidelines.pdf>.

White Potato-cyst Nematode, Globodera pallida. 24 February 2009 <<http://pest.ceris.purdue.edu/searchpest.php?selectName=NEFBBC>>.

Image Sources

White Potato-cyst Nematode, Globodera pallida. 24 February 2009 <<http://www.insectimages.org/search/action.cfm?q=globodera%20pallida>>.