

Globodera rostochiensis

Synonyms

- Golden nematode (GN)

Plant hosts

The major hosts of golden potato cyst nematode are *Solanum tuberosum* (potato) and *Lycopersicon esculentum* (tomato). There are many weeds that are also susceptible to the pathogen.

Symptoms

Golden potato cyst nematodes, in common with other cyst nematodes, do not cause specific symptoms of infestation. Initially, crops will display patches of poor growth and these plants may show chlorosis and wilting. In heavily infested soils, plants have reduced root systems and often grow poorly due to nutrient deficiencies and to water stress. Plants may senesce prematurely as they are more susceptible to infection by fungi such as *Verticillium sp.* when heavily infested by potato cyst nematodes.

When the tubers are harvested there will be a yield loss and tubers will be smaller. To be confident that these symptoms are caused by potato cyst nematodes and to give an indication of population density, soil samples must be taken or the females or cysts must be observed directly on the host roots.



Cysts on potato roots.

Image courtesy of Ulrich Zunke

Transmission

The golden potato cyst nematode is primarily spread by the transport of cysts in infested soil. Infested soil adhering to farm equipment, seed potatoes, nursery stock, flower bulbs, and potatoes can spread the pathogen from an infested area to a clean area.

Geographic distribution

Golden potato cyst nematode is distributed worldwide. In the United States, it is found only in New York.

Applicable regulations

[Federal Domestic Quarantine Order](#)