

Golden Nematode

Globodera rostochiensis (Wollenweber, 1923) Behrens, 1975

Primary hosts

Potatoes, tomatoes and eggplant and other members of the Solanaceae plant family, such as nightshade.

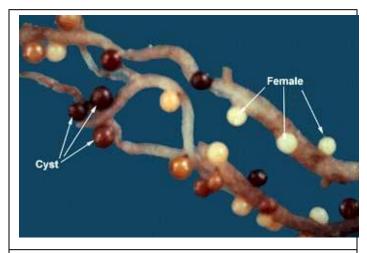


Photo: www.agf.gov.bc.ca/cropprot/goldennema.htm

filled with eggs and becomes a cyst after she dies.

Symptoms

Symptoms are similar to those caused by other soil borne pathogens: stunting, yellowing, and poor vigor. Affected plants are usually in round areas in the field. A laboratory examination is needed to positively identify this nematode pest.

On roots, the females will be present as tiny white round objects, about the size of a grain of sand. Her body is

Life cycle

Cysts can survive up to 20 years in soil and contain hundreds of eggs. Eggs require exudates from host roots to hatch. After hatching the juveniles enter the host roots and feed and grow to maturity. Male nematodes then leave the root, but females remain attached and grow large enough to see. They are fertilized by the male nematodes in the soil, which then die. The females make eggs, and their bodies become hardened shells around the eggs after their death.

Current geographic distribution

Widespread worldwide; in the US, only found in New York.

Impact in Oregon

Very high. Cysts persist in soils, crop losses may be high, and there are adverse regulatory impacts.