

## Globodera pallida

### Synonyms

- PCN
- Pale potato cyst nematode
- Potato cyst nematode

### Plant hosts

Pale potato cyst nematodes (PCN) feed on Solanaceous plants, especially *Lycopersicon esculentum* (tomato), *Solanum tuberosum* (potato), and *S. melongena* (aubergine).

### Symptoms

Potato cyst nematodes, in common with other cyst nematodes, do not cause specific symptoms of infection. Initially, crops display patches of poor growth and affected plants may show chlorosis and wilting, with poor top growth. Good top growth is essential for photosynthesis and production of sufficient nutrients for the health of the plant and production of new tubers. Affected plants suffer up to 28% yield loss and tubers are smaller. To be confident that these symptoms are caused by pale potato cyst nematode 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 roots.

### Transmission

This nematode has no natural means of dispersal. It can only move short distances when juveniles are attracted to susceptible host roots in the soil.

PCN can be spread into new areas as cysts on seed potatoes, nursery stock, soil, flower bulbs, or on potatoes for consumption or processing (only if the latter may be planted or waste soil isn't properly disposed of). Contaminated soil adhering to equipment, containers, or vehicle tires is a known means of spread. Flooding of infected fields may also transport PCN to neighboring fields.

### Geographic distribution

Pale potato cyst nematode is distributed worldwide, especially in cool-temperate areas. In the United States, it is found only in Idaho. In Canada, it has been reported in Newfoundland, British Columbia, and Labrador.

### Applicable regulations

[Federal Domestic Quarantine Order](#)