

Golden potato cyst nematode

Globodera rostochiensis RO1 strain



Plant Health
AUSTRALIA

ESTABLISHED PEST

What crops does it affect?

Potato, tomato and eggplant.

Which part of the plant will be damaged?

Roots.

What should I look for?

Nematodes are small worm-shaped organisms, <1mm in length, which inhabit soil and attack plant roots. The cysts of golden potato cyst nematode are white, yellow or golden in colour when they first form on roots and become tan brown in colour when they mature.

Look for leaf wilting and discoloration, root cysts and reduced root system, yield reduction and smaller potatoes, dwarfing of plants and early senescence. At flowering or later, minute white, yellow or brown spheres or cysts about the size of a pin head (0.5mm) can be seen on the outside of roots. Damage to the crop varies from small patches of poor growing plants to complete crop failure. Potato cyst nematode is not greatly influenced by soil type and temperature because the nematode thrives wherever potatoes are grown.

How does it spread?

Potato cyst nematode is a soil-borne pest and is spread by transport of infested soil. For example, cysts can be carried in soil adhering to seed potatoes, farm machinery, implements, boots, crates and plant material, particularly bulbs. Cysts can also be transported by wind and flood water. Locally, potato cyst nematode is usually dispersed by farming activities including sharing farm equipment contaminated with infested soil.

Distribution in Australia

Found in Victoria (only the RO1 strain has been recorded).

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State movement controls or impacted markets

No potatoes are permitted to enter the Gin Gin and south-west potato growing areas in Western Australia (except from Tasmania).



Potato plant on right infected with the potato cyst nematode compared to healthy plant on left.

Christopher Hogger, Bugwood.org



Comparison of *Globodera rostochiensis* and *Globodera pallida*: females of *G. pallida* turn directly to brown cysts whereas *G. rostochiensis* females change from yellow to gold before they turn brown.

Ulrich Zunke, Bugwood.org