

Root knot nematode

What crops does it affect?

Root knot nematode (*Meloidogyne enterolobii*, syn. *M. mayaguensis*) is considered to be a highly polyphagous species, with a host range similar to that of *M. incognita* (Yang and Eisenback, 1983).

The most frequently recorded hosts include many vegetables, such as tomato, pepper and watermelon, guava, potato, broccoli, celery, pumpkin and ornamental plants.

Which part of the plant will be damaged?

Roots and tubers.

What should I look for?

Root knot nematode affects growth, yield, lifespan and tolerance to environmental stresses of infested plants. Above ground symptoms include yellowing and wilt while the roots have large galls.

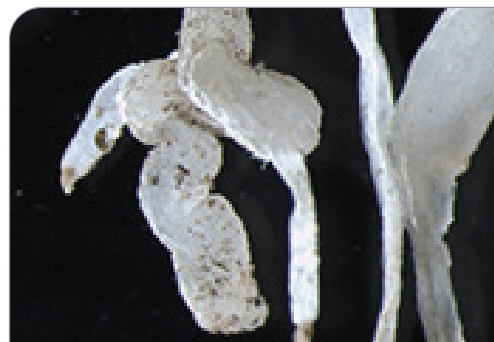
Infested plants are stunted and may wilt; leaves may yellow or display a dull colour. Affected plants have a reduced root system which is abnormally branched and brownish in colour.

At flowering or later, minute white, yellow or brown spheres or cysts, about the size of a pin head (0.5mm) may be seen on the outside of roots. Damage to the crop varies from small patches of poor growing plants to complete crop failure.

Infested plants first occur in isolated patches and these become larger with each new crop if potatoes are continually grown on the infested site. In light infestations, potato plants may show no above ground symptoms, but yield can be reduced. Light infestations can reduce tuber size, whereas heavy infestations reduce both number and size of tubers. Affected plants can occur in patches bordered by relatively healthy plants.

How does it spread?

Root knot nematode is a highly pathogenic and aggressive invasive species of economic significance. As a root knot nematode species, it can spread with soil and planting material. The cysts can be carried in infested soils and growing media, soil that is attached to machinery, tools, footwear or planting material.



Knot in root hair caused by root knot nematode

Source: Onions Australia, 2018



Nematode damage to a potato

Source: DAFF Archive, Bugwood.org



Guava root knot nematode female

Source: Will Rutter, USDA-ARS

If you see anything unusual, call the **Exotic Plant Pest Hotline** on **1800 084 881**.

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