

Guava root-knot nematode

What is it

Guava root-knot nematode (GRKN) or *Meloidogyne enterolobii* is an aggressive microscopic parasitic worm with a broad host range which includes many important horticultural and agricultural crops, ornamental plants and some weed species.

The pest is considered significant because of its wide host range, high reproduction rate, severity of induced galling (growths) and impacts on yields in preferred hosts (reduced both qualitatively and quantitatively).

Host

A number of crops, ornamental plants and weeds are known hosts. Some of the main hosts include:

Banana	Cucumber	Paw paw / papaya	Sweet potato
Capsicum	Eggplant	Pumpkin	Tomato
Chilli	Guava	Snake bean	Watermelon
Cotton	Onions	Soybean	Zucchini

Symptoms

Typical symptoms of GRKN infection include galling (growths or knotting) on roots caused by the pest feeding.

As root-knot nematode numbers increase and plant root systems become more damaged, the plant's ability to uptake nutrients and water is affected. Above ground affects (stunted growth, wilting and the yellowing of leaves) can often be mistaken for water or nutrient deficiency, so it's important to 'check your roots' for signs of the pest.

The stress associated with root damage also makes plants more prone to secondary pathogens and other diseases. Therefore, losses caused by root-knot nematodes often go unidentified because symptoms are difficult to identify above the ground.

Crops are more likely to show symptoms late in the season after nematode populations have had time to build-up.



Check your roots

If you think you may have affected host plants or weeds, please submit a root sample to our Plant Pathology Team for a free diagnosis.

There are several root-knot nematode species belonging to the *Meloidogyne* genus that are common in Australia, so it is important to test samples to confirm species. Testing can take 2-3 weeks.

Once diagnosis is confirmed one of the Plant Biosecurity Team will be in touch with the result, and next steps, including any advice on management or control.

Please avoid removing plants or soil from the property. If you need to do so, please contact the Plant Biosecurity Team first on **08 8999 2118** or email Plantbiosecurity@nt.gov.au

How to submit a sample

1. Take a small cutting from the plants root-system.
2. Shake any excess soil off and place it in a plastic zip seal/lock bag.
3. For extra protection please double bag the sample.
4. Fill in the [sample submission form](#) and either post or deliver to Berrimah Farm Science Precinct.

Postal address:

GPO Box 3000

Darwin NT 0801

Delivery address:

Berrimah Farm, BAL Bld

Makagon Rd, Berrimah NT 0828



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