

Root-Knot Nematodes

Recognize the problem

Root-knot nematodes are small, thread-like worms that live in the soil and get food from sucking root sap. They are very difficult to see, even with a hand lens, but you can see the swellings (called "knots") that they cause.

These root swellings block the movement of water and nutrients, resulting in short and weak plants. It also causes plants to respond poorly to fertilizers or watering.

Nematode attack makes it easier for other germs to get into the plant.

The affected plants appear as irregular patches on the field.

Background

Root-knot nematodes like living in the roots of many crops, including tobacco, beans, tomato, okra, cucumber, melon, carrot, gourds, passion fruit, lettuce, peppers, potatoes and coffee. You should avoid planting vulnerable crops for 2-3 years if your field has had root-knot nematode attack.

The nematodes can also live in soil. If nematodes are exposed to sunlight during tillage this may help to kill them.

Management

Non-chemical control

- Use clean, healthy seeds or seedlings. Also, if using seed beds use clean potting material and keep the seed beds away from fields with root-knot nematodes.
- Remove and destroy plants from your field that have root-knot nematodes, particularly the roots.
- Practice crop rotation with crops that root-knot nematodes don't like e.g. garlic, onion and cereals; grow them for at least two years before planting a crop nematodes like. They will have nothing to eat and eventually die.
- Deep plough the soil and expose the soil to sun for one month before planting.

Available chemicals are not safe. They are also not affordable for small scale farmers.

Root-knot nematodes on roots.
(Photo by Kengap Horticulture)



Scientific name(s) > *Meloidogyne* spp.

The recommendations in this factsheet are relevant to: many countries where this pest or problem is present



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