

Plant Disease Notes

Root-Knot Nematodes

ANR-880

Nearly 40 species of root-knot nematodes, *Meloidogyne* spp., have been described, and physiological races exist among many of them. Root-knot nematodes have a wide host range (more than 2,000 species) that includes many cultivated crops as well as many weed species.

Symptoms. When root-knot nematode populations are high, plants are often stunted and may wilt during dry conditions or during the hottest part of the day.

Detecting root-knot in the field is easy: simply examine the roots of symptomatic plants. The nematodes cause knots or galls to develop on both large and small roots. Knots vary from the size of a pinhead to an inch in diameter. Nematodes damage the root system by disrupting the flow of water and nutrients and by causing wounds that give access to diseases such as *Fusarium* wilt.

Persistence and Transmission. Nematodes survive in the soil from

year to year and become active as soil temperatures increase in the spring.

Control. Root-knot nematodes can be controlled by the following strategies:

- Plant nematode resistant varieties for the most effective control of root-knot nematodes.
- Rotate susceptible crops with grasses and clean fallow during the off-season to reduce nematode populations.
- Use soil fumigation to reduce damaging population levels temporarily (one growing season).
- Use soil solarization to reduce nematode populations when environmental conditions are favorable for its use.
- Plant a nematode suppressive crop, such as marigolds, to minimize nematode damage.

Contact your county Extension agent for information on soil fumigation, soil solarization, and nematode suppressive crops.



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Use chemicals **only** according to the directions on the label. Follow all directions, precautions, and restrictions that are listed.

For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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Web Only, **Revised Sept 2004**, ANR-880

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