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Pea: Aphanomyces root rot

Use Integrated Pest Management (IPM) for successful plant problem management.

Biology

Aphanomyces root rot is caused by a fungus which attacks the underground portions of the plant. The lower stem and roots initially show long, soft, water-soaked lesions which can spread throughout the root system, affecting the outer portion of the roots (cortex). The cortex tissue softens and turns dark brown before it dies and sloughs off. Above ground, the plant is yellowish and stunted, produces few or no pods, and eventually dies back. Root rots tend to affect plants in low-lying areas and in soils with poor drainage. The fungus persists in the soil for many years even when host plants (peas, alfalfa, beans) are not present.

Management Options

Non-Chemical Management

~ Rotate crops. Do not plant related crops (i.e. peas, beans) in the same location for at least three years.
~ Plant in well-drained soils. Use raised beds or add organic matter to soils to help improve drainage.
~ Do not overwater, especially in heavy soils.
~ Remove and destroy or discard (do not compost) diseased plants, including root systems.
~ Do not move infested soil to non-infested areas.

Select non-chemical management options as your first choice!

Chemical Management

IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides

None recommended

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Images

~ Caption: Aphanomyces root rot on pea
~ Photo by: N.J. Grunwald