

(revision date:6/3/2014)

Potato: Verticillium wilt (Potato early dying)

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

Biology

Verticillium wilt is caused by a fungus commonly found in the soil. Many species of plants are affected by Verticillium, but tomato and potato are favored hosts. Typically, the fungus attacks the roots and moves throughout the plant via the vascular system. Infected plants may wilt, sometimes along only one side. Other symptoms include premature yellowing and death of plants beginning at the base and progressing upward ("early maturity"). Discoloration of the vascular tissues is noticeable when cuts are made into the stem. Some tubers from infected plants may show a light brown discoloration in the vascular tissues. When tubers are cut across the stem end, this discoloration shows as a discontinuous ring of brown about 1/4"-1/2" beneath the skin.

Management Options

Non-Chemical Management

- ~ Plant healthy seed.
- ~ Plant wilt-resistant varieties such as 'Desiree'. 'Katahdin' is considered moderately resistant. Certain varieties may not be suitable for western Washington.
- ~ Crop rotation may be useful, but do not plant potato or tomato (except resistant varieties) in infested soil.
- ~ Proper fertilization can help reduce severity of the symptoms.
- ~ Control weed hosts (including nightshades) in and around the garden.
- ~ Clean up plant debris and destroy or discard (do not compost) diseased materials.

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: *Verticillium wilt (early dying) on potato*
~ Photo by: *R.S. Byther*



~ Caption: *Vascular discoloration from Verticillium wilt on impatiens*
~ Photo by: *R.S. Byther*