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Potato: Late blight

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

Biology

Late blight of potato is caused by a fungus which also causes disease on tomato, eggplant, and other members of the potato family (Solanaceae). Gray-green, water-soaked spots appear on leaves and stems. These quickly enlarge into dark blotches which may be surrounded by a pale green margin. During moist weather, a sparse, whitish fungal growth may be seen on the underside of leaf lesions. Tubers may be infected either by spores washed into the soil or during harvest. Infected tubers show areas of somewhat metallic brown or purple discoloration followed by a brownish dry or wet rot. Disease development is favored by cool, rainy weather and may be more severe under sprinkler irrigation. The fungus overwinters primarily on potato tubers and is spread by wind.

Management Options

Non-Chemical Management

- ~ Plant only healthy, disease-free seedlings.
- ~ Do not plant potatoes and tomatoes in close proximity.
- ~ Remove infected plants or plant parts when symptoms are noticed to reduce spread of disease.
- ~ Diseased plant materials should be destroyed or buried deeply (two feet or more).
- ~ Remove plant debris from the garden in the fall. Do not compost diseased materials.
- ~ Space plantings to provide good air circulation.
- ~ Avoid overhead watering.
- ~ Do not dig tubers from infected vines until at least two weeks after vines are completely dead (no green stems remaining). Avoid injuring tubers.

Select non-chemical management options as your first choice!

Chemical Management

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

Apply at first sign of late blight. Make repeat applications according to label directions. Copper products offer limited control and their use alone to control late blight is not recommended. Copper fungicide applications can be alternated with other fungicide applications.

Listed below are examples of pesticides that are legal in Washington. Always read and follow all label directions.

- ~ Agri-Fos Systemic Fungicide
 - active ingredient: mono- and di-potassium salts of phosphorous acid
 - EPA reg no: 71962-1-54705
- ~ Bonide Copper Fungicide Spray or Dust RTU [Organic]
 - active ingredient: basic copper sulfate
 - EPA reg no: 4-58
- ~ Bonide Fung-onil Multi-Purpose Fungicide Conc
 - active ingredient: chlorothalonil
 - EPA reg no: 60063-9-4
- ~ Bonide Liquid Copper Fungicide Conc/Organic Gardening
 - active ingredient: copper octanoate
 - EPA reg no: 67702-2-4
- ~ GardenTech Daconil Fungicide Conc
 - active ingredient: chlorothalonil
 - EPA reg no: 67572-82-71004
- ~ Monterey Liqui-Cop Copper Fungicidal Garden Spray
 - active ingredient: copper-ammonia complex

- EPA reg no: 54705-7
- ~ Ortho Max Garden Disease Control Conc
 - active ingredient: chlorothalonil
 - EPA reg no: 239-2522
- ~ Soap-Shield Flowable Liquid Copper Fungicide [Organic]
 - active ingredient: copper octanoate
 - EPA reg no: 67702-2-56872
- ~ This list may not include all products registered for this use.

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Images



~ Caption: *Potato late blight foliar symptoms*
~ Photo by: *R.S. Byther*



~ Caption: *Potato late blight sporulation on underside of leaf*
~ Photo by: *R.S. Byther*



~ Caption: *Potato late blight infection on tuber*
~ Photo by: *R.S. Byther*