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Onions, Garlic: Downy mildew

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

Biology

Downy mildew is a fungal disease affecting onions and related species, including weedy species. Leaves initially develop pale, elongate patches. The spots may be water-soaked at first, then later appear somewhat purplish. The spots become covered with a downy, grayish or white fungal growth. Affected leaves often die back. Bulbs of affected plants are smaller than normal and of poor quality. Infected bulbs may become shriveled and discolored in storage, or may sprout prematurely. Cool, damp weather favors spread of the disease.

Management Options

Non-Chemical Management

- ~ Plant disease-free materials in well-drained soils.
- ~ Rotate crops. Do not plant onions and related crops into the same locations each year. Allow at least three years before replanting susceptible crops in a location which was previously diseased.
- ~ Space plantings to provide good air circulation.
- ~ Avoid overhead watering.
- ~ Remove and destroy diseased plants and debris. Destroy or discard (do not compost) diseased materials.
- ~ Control weeds in and around the garden.

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 when plants are 4 to 6 inches tall and repeat at 7- to 10-day intervals. Copper products can damage foliage.

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

- ~ Bonide Liquid Copper Fungicide Conc/Organic Gardening
 - active ingredient: copper octanoate
 - EPA reg no: 67702-2-4
- ~ 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: Downy mildew on onion
~ Photo by: R.S. Byther*