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Broccoli, Cole crops: Downy mildew

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

Biology

Downy mildew is a fungal disease typically found on leaves of broccoli, cabbage, and other plants in the mustard family including weeds. Leaves first show pale green to yellowish spots on the upper surface which turn more yellow as they enlarge. The underside of infected areas later develop grayish to white fungal growth. Stems of broccoli may also be affected, showing spots on the outside and brown to purple streaks internally. Heads of broccoli and cauliflower may be dark brown or black inside, while cabbage heads may show small, sunken, black spots. Downy mildew development is favored by cool, humid weather.

Management Options

Non-Chemical Management

- ~ Rotate crops yearly.
- ~ Plant in well-drained soils and avoid overhead watering.
- ~ Space plantings to provide good air circulation.
- ~ Remove infected plants and plant parts. Destroy or discard (do not compost) diseased plant tissue.

Select non-chemical management options as your first choice!

Chemical Management

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

Make first application as soon as seedlings appear unless label specifies otherwise. Apply at 7-day intervals. Copper products may cause flecking damage on the leaves of some cabbage cultivars.

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

- ~ Bi-Carb Old-Fashioned Fungicide [Organic]
 - active ingredient: *potassium bicarbonate*
 - EPA reg no: 54705-10
- ~ Bonide Copper Fungicide Spray or Dust RTU [Organic]
 - active ingredient: *basic copper sulfate*
 - EPA reg no: 4-58
- ~ 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 broccoli
~ Photo by: R.S. Byther*