

Lettuce downy mildew (209)

Summary

- Worldwide distribution. Temperate and sub-tropical countries. On lettuce and relatives in daisy family, and weeds. An important disease.
- Round to angular spots, light green to yellow, merging and turning brown, sometime soft and slimy. Spores on the underside.
- Spread is by spores in wind over long distances.
- Cultural control: in nursery – avoid overcrowding; in field - avoid overlapping crops; 2-3-year rotation; spacing; drip irrigation; weed; collect trash and burn after harvest.
- Chemical control: copper, mancozeb, or chlorothalonil (protectants); or metalaxyl (systemic) with mancozeb (or alternating with mancozeb).

Common Name

Lettuce downy mildew

Scientific Name

Bremia lactucae; there are several strains of the oomycete.

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Information (and Photo 1) from *Diseases of vegetable crops in Australia* (2010). Editors, Denis Persley, et al. CSIRO Publishing; and from CABI (2014) *Bremia lactucae* (downy mildew of lettuce). Crop Protection Compendium (<https://www.cabi.org/cpc/datasheet/9937>); and from Scheufele S (undated) Lettuce, Septoria blight. The Center for Agriculture, Food, and the Environment. University of Massachusetts Amherst. (<https://ag.umass.edu/vegetable/fact-sheets/lettuce-septoria-blight>). Photos 2&3 Kohler F, et al. (1997) *Diseases of cultivated crops in Pacific Island countries*. South Pacific Commission. Pirie Printers Pty Limited, Canberra, Australia.

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Photo 1. Brown patches on lettuce caused by downy mildew, *Bremia lactucae*.



Photo 2. Downy mildew, *Bremia lactucae*, on lettuce showing sporulating areas between the main veins.



Photo 3. Magnified part of Photo 2, showing the spores of downy mildew, *Bremia lactucae*, on lettuce.

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