Pacific Pests, Pathogens and Weeds - Online edition

Cabbage grey leaf spot (310)

Summary

- Worldwide distribution. On plants in the cabbage family, especially Chinese cabbage and mustards. Important fungal disease, similar to cabbage black leaf spot (**see Fact Sheet no. 133**).
- Damage: (i) seed infections cause pre- and post-emergence damping-off (**see Fact Sheet no. 47**); (ii) seed infection; and (iii) spots on head and/or outer leaves unsightly reducing quality and shelf life.
- Grey leaf and stem spots, circular or irregular, mostly between veins, up to 25 mm diameter, with concentric rings, producing spores below. Centre of spots fall out with age.
- Dark, sunken rots occur on heads of broccoli and cauliflower.
- Spread by water splash, in wind-driven rain, on seed.
- Cultural control: seed - hot water (50°C for 25-30 minutes; nursery hygiene: clean trays, pasteurise soil or use soilless mixes, and discard infected seedlings; weed; space plants to allow air movement; avoid overhead irrigation; collect and destroy debris after harvest; crop rotation.
- Chemical control: seed - captan or thiram; field - chlorothalonil, copper or mancozeb.

Photo 1. Cabbage grey leaf spot, *Alternaria brassicae*.

Photo 2. Grey leaf spot, *Alternaria brassicae*, on cabbage. Note the concentric rings typical of *Alternaria* infections.

Photo 3. Grey leaf spot, *Alternaria brassicae* on cabbage.

Common Name

Cabbage grey leaf spot

Scientific Name

Alternaria brassicae. Another *Alternaria* fungus, *Alternaria brassicicola*, cabbage black leaf spot, also occurs, and causes similar symptoms (**see Fact Sheet no. 133**). Microscopic examination of the spores is needed to distinguish between the two species (Photo 4).

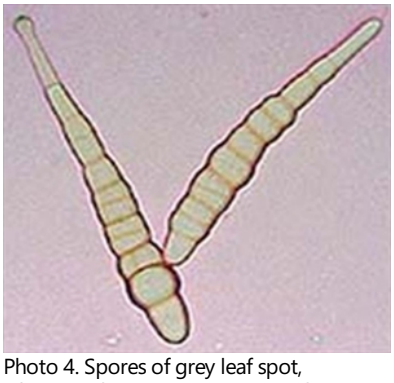
Photo 4. Spores of grey leaf spot, *Alternaria brassicae*. Compare with spores of *Alternaria brassicicola* (**see Fact Sheet 319**).

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Information from *Diseases of vegetable crops in Australia* (2010). Editors, Denis Persley, *et al*. CSIRO Publishing; and Gerlach WWP (1988) *Plant diseases of Western Samoa*. Samoan German Crop Protection Project, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) Gmbh, Germany; and (including Photo 4) Eric McKenzie (2013) *Alternaria brassicae*: PaDIL - (http://www.padil.gov.au). Photo 1 Gerald Holmes, California Polytechnic State University at San Luis Obispo, Bugwood.org. Photo 2 Yuan-Min Shen, Taichung District Agricultural Research and Extension Station, Bugwood.org. Photo 3 Howard F. Schwartz, Colorado State University, Bugwood.org.

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