

Giant taro leaf spot (188)

Common Name

Giant taro leaf spot

Scientific Name

Mycosphaerella alocasiae; the asexual name is *Passalora colocasiae*.

Distribution

South and Southeast Asia, Oceania. It is recorded from American Samoa, Federated States of Micronesia, Fiji, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Vanuatu, and Wallis & Futuna.

Hosts

Giant taro (*Alocasia macrorrhizos*)

Symptoms & Life Cycle

Infections take place when the leaves are young, but the spots do not develop until the leaves are mature. They start as small round flecks, sunken and grey with a raised brown border, increasing up to 8 mm diameter, but much smaller when the leaf is heavily infected (Photos 1&2). Sometimes they have a yellow halo. Small black dots are present in the middle of the grey centres, especially on the upper surface of the leaves; these are the fruiting bodies containing large numbers of spores.

Spread of the spores occurs in wind-blown rain.

Impact

Only the old leaves are infected by the fungus, making it unlikely that it affects corm yield to any great extent, although leaves with severe infections die prematurely.

Detection & inspection

Look for small round spots with grey centres and brown borders on the oldest leaves. Look for black dots in the centre of the spots.

Management

No control measures are recommended for this disease. The disease only affects older leaves, and so it is unlikely that corm yields are reduced to any great extent; the application of control measures would be uneconomic.



Photo 1. Large number of small round leaf spots, *Mycosphaerella alocasiae*, up to 8 mm diameter,



Photo 2. Large number of small round leaf spots, *Mycosphaerella alocasiae*, up to 8 mm diameter,



Photo 3. Spots on leaf of giant taro, *Mycosphaerella alocasiae*, showing spots of difference sizes, up to 8 mm diameter, with grey centres and brown borders.



Photo 4. Spots on leaf of giant taro, *Mycosphaerella alocasiae*. Note that the margin of the leaf are first to be infected, and that one side of the leaf is infected first because of the way the leaf unfurls.

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Information (and Photo 2) McKenzie E (2013) *Mycosphaerella alocasiae*: PaDIL - (<http://www.padil.gov.au>). Photo 3 Kohler F, et al. (1997) *Diseases of cultivated crops in Pacific Island countries*. South Pacific Commission. Pirie Printers Pty Limited, Canberra, Australia. Photo 4 Fred Brooks, University of Hawaii, Bugwood.org.

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