

Hormiactis cap spotting of mushrooms

Background of the detection

An uncommon fungus which causes a cap spotting disease of mushrooms was recently recorded for the first time on a commercial mushroom farm in Australia.

The fungus was identified as a *Hormiactis* species, which is normally a soil saprophyte but is pathogenic on mushrooms. The spoilage it causes through cap spotting can render mushrooms unsaleable.

Overseas reports suggest that the fungus causes infrequent, localised disease on mushroom farms.

Symptoms

The symptoms caused by *Hormiactis* sp. are similar to those of cobweb disease (*Dactylium dendroides*) (Fig.1), particularly the dense, white mycelial growth.



Fig.1. Mushrooms affected by cobweb disease (*Dactylium dendroides*), with the characteristic white mycelial growth. The area circled in red shows the cap spotting symptom similar to that caused by the *Hormiactis* fungus.

Cap spotting most often occurs when the surface of the cap remains wet for a few hours.

Deformities of the mushroom may also result from infection by the fungus.

Summary of current situation

Information about *Hormiactis* cap spotting is limited at present. However, it is considered that it behaves in a similar way to cobweb disease (*Dactylium dendroides*), the spores of which are easily released and quickly spread throughout the crop via the air handling system.

Control of *Hormiactis* cap spotting will most likely be achieved through the use of an evaporating atmosphere. However, a grower relying on relative humidity to control evaporation may not have enough capacity in the air at 18°C to give sufficient evaporation.

If absolute humidity control is in use, this can be adjusted to give a two-degree difference, which at 18°C will provide more than enough capacity. However, some growers may not have adequate temperature control to use this method.

You can assist in developing our knowledge of this pathogen by reporting any symptoms similar to those shown in Fig.1 and submitting samples for diagnosis through your local Department of Agriculture or the Australian Mushroom Growers' Association.

Reference

T.R Fermor. *Hormiactis alba*, an uncommon fungal pathogen of the cultivated mushroom *Agaricus bisporus*. Glasshouse Crops Research Institute Annual Report, University of Warwick UK.

To report suspect pests and diseases, call the Exotic Plant Pest Hotline:

1 800 084 881

For further information, visit the Plant Standards web page:

www.dpi.vic.gov.au/psb