

Lost and Found Fungi Datasheet Hypocreopsis lichenoides



WHAT TO LOOK FOR?

Flat, fleshy, irregularly lobed, orange-brown, finger-like stroma growing by radiating from a central point, up to 10 cm diam., approx 0.5 cm thick, clinging closely to bark. On twigs and branches of woody plants, particularly willow (*Salix*). Probably indistinguishable from *H. rhododendri* without microscopic examination of ascospores, although *H. lichenoides* has been described with a frosted or mealy surface in some states of maturity due to the presence of an anamorph. Records of either, or specimens identified as "*Hypocreopsis* sp.", would be extremely useful to the project.

WHEN TO LOOK?

Year-round, but particularly September to May. Structures may persist for months.

WHERE TO LOOK?

Wet willow carrs, shady damp willow thickets on boggy land, or near streams or lakes. Usually found on, but not exclusive to, *Salix. Hypocreopsis lichenoides* is considered to be parasitic on the fungus *Hymenochaete tabacina*, and presence of the host may indicate likely habitats for new surveys. Dense thickets and closely growing trees with dead intertwining branches, in which fallen dead twigs have become entangled, may be plausible places to investigate, especially if there are indications of twigs/branches fused together.

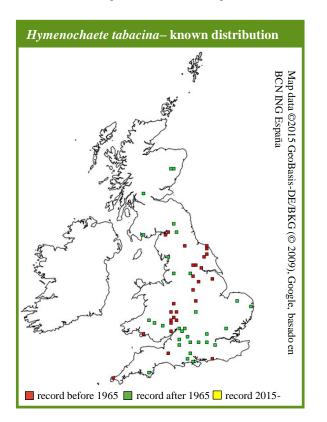






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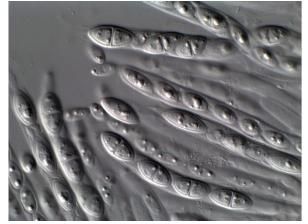
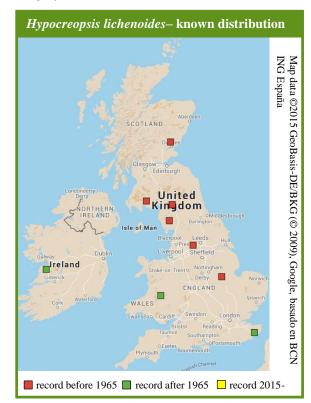


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Hypocreopsis lichenoides

General description

Stromata consisting of branching flattened finger-like lobes that grow from a central point and wrap around twigs and branches, up to a diameter of 10cm; lobes approx 3 mm thick; yellow-orange to dark brown, darker towards centre; top surface with immersed perithecia that protrude slightly; asci cylindrical to clavate with 8 spores, 80-90 x ca12 μ m; spores ellipsoidal, curving slightly, with obtuse to \pm acute ends, 1-septate, hyaline, appearing smooth but with very minute warts, (20-)25-30 x 8-9 μ m. Stromata may also produce globose asexual conidia (previously described as *Stromatocrea cerebriforme*) visible as patches of brown or reddish-brown mealy powder under a hand-lens.

Note: description adapted from Seaver (1910), Ainsworth (2003) and Stasińska (2004).

Habitat:

Wet woodlands, shady damp dense willow thickets on boggy land, or near streams or lakes.

Conservation status

Classed as Critically Endangered / B in the current but unofficial Red Data List of Threatened British Fungi (Evans et al., 2006). No sites in GB&I are currently known for certain to hold a population of this species. Only three sites in GB&I have been reported in the past 50 years, and voucher specimens have been obtained for only one.

Associations

Considered to be a parasite of the fungus *Hymenochaete* tabacina (link), which is largely crustlike but also with upturned edges that develop into unstalked shelf-like caps. This species can "glue" colonized aerial deadwood together in thickets and tree canopies, and can be recognised by its distinctive tobacco-brown colour, lack of pores, and the presence of setae (hairs) visible on the hymenial surface with a 15 x or 20x hand lens. Often, but not always, reported from *Salix*.



Look-alikes

Hypocreopsis rhododendri is morphologically very similar to *H. lichenoides*, but is thought to parasitise *Hymenochaete corrugata*, and often occurs on hazel (*Corylus*). Can be differentiated by its mature ascospores, which are more spherical, wider (12-17(-25) x 12-13(-17) μ m), develop a thick roughened "warty" outer layer, and which are often fused together in chains.

It should be noted that the identity of the host tree is not necessarily a conclusive character. *H. rhododendri* has been recorded infrequently on *Salix*, while *H. lichenoides* has been recorded from *Corylus*, and both species have been recorded on other tree types. In order to distinguish the two, ascospores from fertile stromata can be collected in situ without removal of the stromata, by putting a microscope slide over the stromatal surface, and then creating a damp atmosphere (damp tissue covered in a plastic tub). These can then be stored and later examined. Alternatively, identification of the host *Hymenochaete* (if visible) may strongly suggest which species it is. Look for a tobacco brown fungus crust with upturned edges and maybe small shelf-like caps near the *Hypocreopsis* stromata, which would indicate *H. lichenoides*.

Known sites in GB&I

Historical populations have been reported in England from Lancaster (VC:43), Lincolnshire (VC: 53), Yorkshire (VC:63), Westmorland (VC:69), and Cumberland (VC: 70); in Scotland from Forfar (VC: 90). Several of these sites have been reinvestigated in recent years without success.

The most recent sightings were from a site in the Republic of Ireland, Clare (VC: H9) in 2006, a Radnorshire site (VC: 43) in 1993, and an East Kent site (VC: 15) in 1968.

Literature

- Ainsworth, A. M. (2003). Report on hazel gloves *Hypocreopsis rhododendri*, a UK BAP ascomycete fungus (with reference to willow gloves *H. lichenoides*). English Nature. (link)
- Evans, S., Henrici, A. and Ing. B. (2006). "The Red Data List of Threatened British Fungi: Preliminary Assessment." Unpublished report. British Mycological Society. Manchester. (<u>link</u>)
- Stasińska, M. (2004). Hypocreopsis lichenoides P. Karst. (Fungi, Ascomycetes), new to Poland. Acta Societatis Botanicorum Poloniae, 73(2): 135-137. (link)
- Seaver, F. J. (1910). The Hypocreales of North America: III. Mycologia, 2(2): 48-92.

Links

≻Björn Wergen's ascomycete website (http://www.sites.google.com/site/ funghiparadise) featuring both *Hypocreopsis lichenoides*, and *H. rhododendri* (click on names for links).

For more information, questions, queries or corrections, contact: Dr. Brian Douglas (<u>b.douglas@kew.org</u>), or visit the Lost and Found Fungi project website (<u>http://fungi.myspecies.info/content/lost-found-fungi-project</u>).