

**WHAT TO LOOK FOR?**

Small dark discomycetes (<0.5 mm diam.) on dead culms and leaves of deergrass (*Trichophorum cespitosum* s.l., Cyperaceae). Apothecia are distinctive in possessing 1-septate ascospores (13-16 x 3-3.5 µm), and paraphyses (often forked) with dark tips.

**WHEN TO LOOK?**

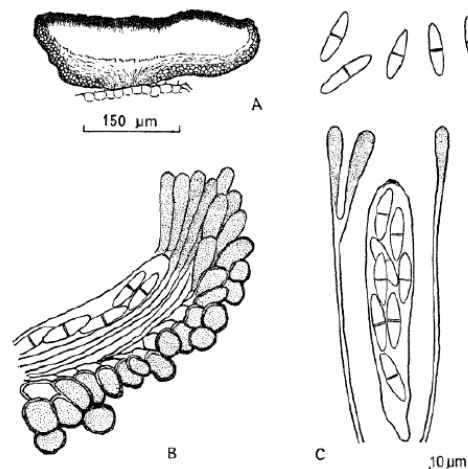
May to late June, based on collections in the FRDBI and Kew to date. One collection probably assignable to this species was also found in October.

**WHERE TO LOOK?**

To be found in dense populations of *Trichophorum cespitosum* s.l., on dead leaves and culms in boggy habitats, wet heath or moor. Fruiting is probably restricted to damp/wet conditions. Since the original description, the species concept of *T. cespitosum* has been divided into *T. cespitosum*, *T. germanicum* and a hybrid of the two (Swan, 1999), and it is not known on which species or hybrid *M. fuscoparaphysata* was originally described.

The host distribution depicted below probably includes both species and the hybrid. *T. germanicum* tolerates a wider range of habitats compared to *T. cespitosum*; and is reportedly far more common. The latter may be confined to less stagnant areas with some water movement and base enrichment. At this stage, the best approach is to examine any well-established population of any *Trichophorum* species.

*Mollisia fuscoparaphysata*



Graddon, W. D. "Some new discomycetes on Cyperaceae." *Kew Bulletin*(1977): 511-516.

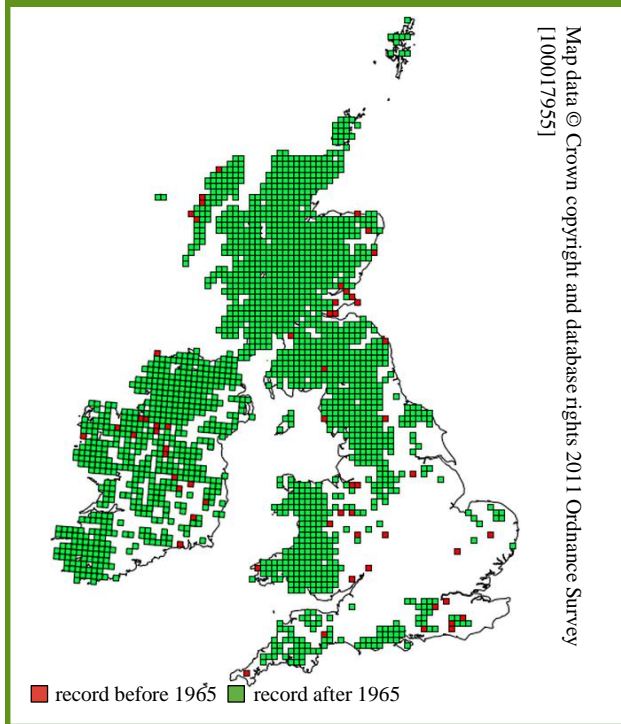
FIG. 1. *Mollisia fuscoparaphysata*. A, median section; B, median section, margin enlarged; C, ascus, spores and paraphyses. Graddon 2365.

*Trichophorum cespitosum*

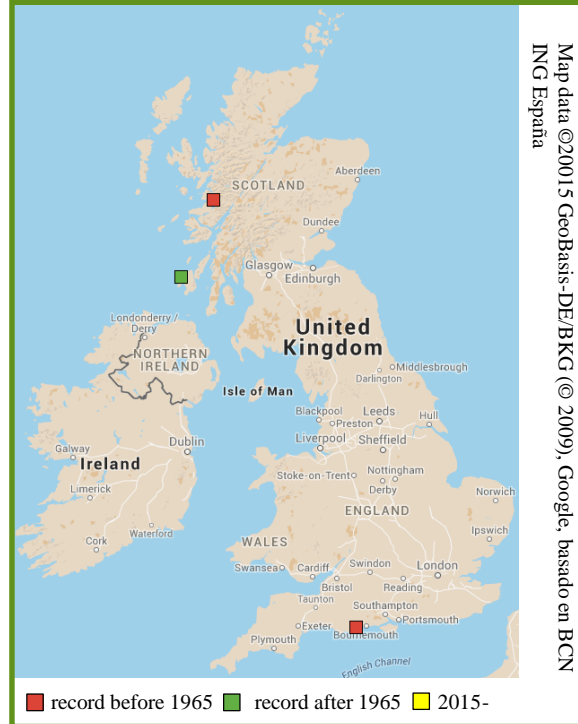


Images by user:HermannSchachner (main) and user:Meneerke bloem (inset) (Wikipedia Commons), CC BY 2.0.

*Trichophorum cespitosum* s.l. – known distribution



*Mollisia fuscoparaphysata*– known distribution



# *Mollisia fuscoparaphysata*

## General description

Apothecia scattered, superficial, up to 350 µm diam.; entirely brown, smooth. Excipulum composed of globose cells, outside brown, inside pale. Asci up to 70 x 12 µm, 8-spored, clavate, ascus pore reaction blue in iodine (assumed to be Lugol's solution). Ascospores 13-16 x 3-3.5 µm, fusiform to ellipsoidal, 1-septate. Paraphyses protruding up to 15 µm beyond the asci; filamentous, 1-2 µm diam., tips up to 5 µm diam., dark-pigmented [apparently with a dark gelatinous coating], often forked. Presumably described from exsiccates. Anamorph unknown, but may include a phialidic anamorph resembling *Phialocephala*, or *Phialophora*.

Notes: description derived from Graddon, (1977).

## Habitat

Wet peaty habitats such as bogs or drainage channels. Very little specific information is available.

## Conservation status

Not formally assessed. Only 3 sites in GB&I are known. May well be under-recorded bearing in mind that the habitat is not targeted by many mycologists and the broad distribution of its host(s).

## Associations

The type specimen was found on culms and leaves of *Trichophorum cespitosum* (Cyperaceae). Material probably referable to this species been reported from dead *Molinia* leaves from two sites in Scotland [included in the known site list to the right], and also from *Carex limosa* in France. It might therefore not be strongly host-specific.

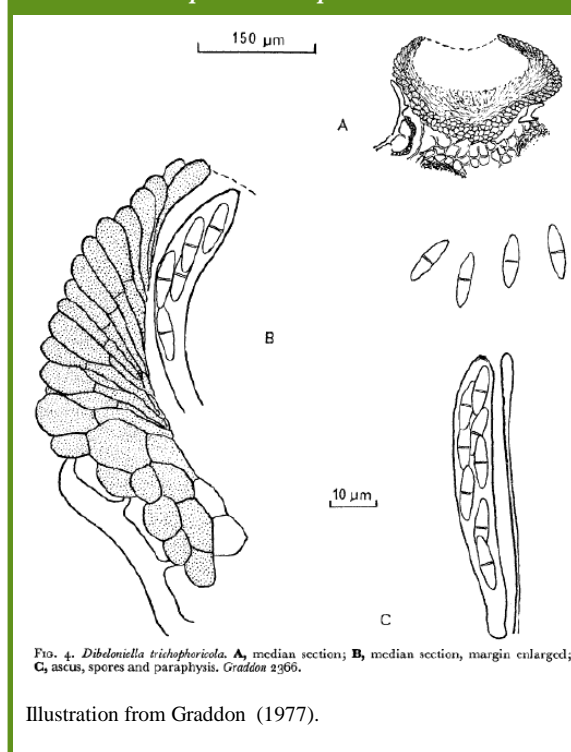
## Look-alikes

Two similar species have also been reported from *Trichophorum cespitosum*: *Niptera trichophoricola* and *Niptera eriophori*.

*Niptera trichophoricola* has similar ascospore morphology (1-septate, 10-14 x 3 µm) and ascus size (60 x 9-10 µm), and has only been reported from *Trichophorum cespitosum*. Differentiating characters include paraphyses that are hyaline and non-forked, smaller apothecia (200 µm vs 350 µm), and a reported fruiting period in August to October. However, the fungi appear similar enough to suspect that they are the same species. If not, records and collections would still be of interest as it is equally rarely reported.

*Niptera eriophori* has been more frequently reported in GB, from a number of other sedge and grass hosts, and can be distinguished by the larger ascospores (18-22 x 5-7.5 µm).

Look-alike: *Niptera trichophoricola*



## Known sites in GB&I

- West of Sanaigmore, north end of the Rhinns peninsula, Isle of Islay, Argyll and Bute VC:102, Scotland. 1987, coll.: R.W.G. Dennis. Grid ref: NR27F or NR26J (approx).
- Between Loch Eilt and Loch Beoraid, West Inverness-shire VC:97, Scotland. 1964, coll.: R.W.G. Dennis. Grid ref: NM7983 or NM7984 (approx.).
- Morden Bog, Swanage, Dorset VC:9, England. 1961, coll.: K.A. Pirozynski. Grid ref: SY9191 or SY9192 (approx.). **Holotype**. Refound in 2014 by Bryan Edwards, details to be confirmed.

## Literature

- Graddon, W. D. (1977). Some new discomycetes on Cyperaceae. *Kew Bulletin* 31 (3): 511-516.
- Swan, G. A. (1999). Identification, distribution and a new nothosubspecies of *Trichophorum cespitosum* (L.) Hartman (Cyperaceae) in the British Isles and NW Europe. *Watsonia* 22 (3): 209-233.

## Links

Online images of a living *M. fuscoparaphysata* collection can be viewed at H.-O. Baral's online image database at: <http://www.invivoveritas.de/dvd-download/> (folders Helotiales / m Mollisiaceae / Niptera).

Detailed descriptions of *Trichophorum* and other sedges can be found at: <http://cyperaceae.e-monocot.org/>.