

Epibryon plagiochilae in south Wales: an overlooked British bryophilous fungus

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During the October 2005 British Mycological Society (BMS) meeting in Abergavenny, Mariko Parslow of Kew asked me to keep an eye out for little, black, spider-like fungi on the leaves of *Plagiochila* during my bryophyte recording in south Wales. Sure enough, the following autumn I spotted several of these characteristic perithecia on a sample of *P. asplenioides* from a disused limestone quarry at West Williamston in south Pembrokeshire (v.-c. 45). I sent them to Kew, where Brian Spooner confirmed that they were *Epibryon plagiochilae* (Ascomycota, Pseudoperisporiaceae) (Figure 1). To my surprise he said that they were the first confirmed British record, although the BMS database holds a record of *E. bryophilum* on *Plagiochila* from East Sutherland in 1990 that seems likely to have been *E. plagiochilae* as well. The species is widespread elsewhere in Europe and is the only external *Epibryon* on *Plagiochila*, although *E. endocarpon* is said to live within the cells of *Plagiochila* and *E. pedinophylli* lives on *Pedinophyllum*.

I assumed that this would prove to be an unusual one-off record as I had never noticed the little 'spiders' before and nor, it seemed, had other British bryologists. I was therefore surprised to find more *Epibryon plagiochilae* on almost the next colony of *Plagiochila asplenioides* that I checked. Most pleasingly, it was readily recognisable in the field with a x20 lens, making further checking quite straight-

forward. Over the next two months I recorded *E. plagiochilae* on four of the 12 colonies of *P. asplenioides* that I found in Pembrokeshire (three of those which lacked it were small colonies of just a few stems) and on two of three colonies of *P. porelloides*. As it was clearly quite frequent in Pembrokeshire, I alerted a few other people and was pleased when Graham Motley found it on *P. porelloides* at the Wyndcliff in Monmouthshire (v.-c. 35). Recording elsewhere in Monmouthshire over Christmas produced a few more records, and I also found it in a coastal woodland in Cardiganshire. Finally, I checked my herbarium, in the hope that I had unwittingly collected *Epibryon plagiochilae* in the past. It held one affected specimen of *P. as-*



Figure 1. *Epibryon plagiochilae*. Photo: Sam D.S. Bosanquet.

pleniooides from Monmouthshire; two specimens of unaffected *P. porelloides* from Monmouthshire and Carmarthenshire (v.-c. 44); and seven south Wales specimens of *P. britannica*, four of which supported *E. plagiochilae* (one from Monmouthshire, one from Glamorgan (v.-c. 41)) and two from Breconshire (v.-c. 42)). In all, *E. plagiochilae* has been recorded at 19 sites in 13 hectads in the southern half of Wales (Figure 2). This involves 22 records from all months of the year between August and April. My first collection, on *P. aspleniooides* from West Williamston, and two others, on *P. aspleniooides* and *P. porelloides* from Loveston (Pembrokeshire), have been deposited in the Kew Herbarium.

In contrast to the high proportion of specimens of *Plagiochila britannica* in my herbarium that supported *Epibryon plagiochilae*, none of those of *Pedinophyllum interruptum* (1 checked), *Plagiochila carringtonii* (1), *P. atlantica* (2), *P. spinulosa* (4), *P. punctata* (8), *P. bifaria* (14) or *P. exigua* (5) included the *Epibryon*. This supports the view that *E. plagiochilae* is restricted to Section *Plagiochila*. In addition, three collections of *P. britannica* from East Perthshire (v.-c. 89) and one from Fermanagh (v.-c. H33) did not hold it, although that may be due to mid-summer collection or just bad luck.

BBS members are urged to check any *Plagiochila* that they find for *Epibryon plagiochilae* and to report any records of it to me or to Brian Spooner at Kew (with supporting specimens). There is considerable potential for discovering other bryophilous fungi new to Britain, as was recently demonstrated by Richard Fisk when he found *Bryostroma*

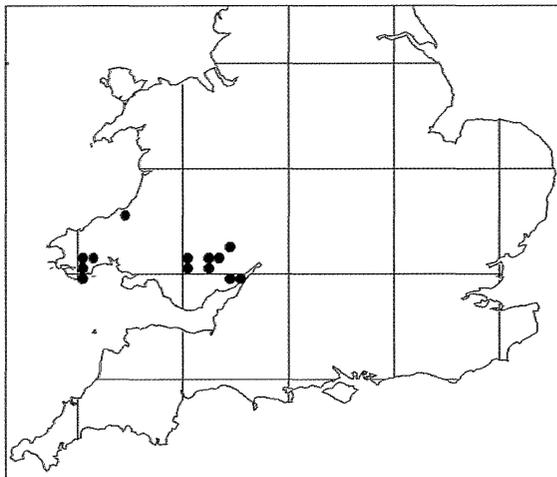


Figure 2. British records of *Epibryon plagiochilae* up to the end of 2006.

trichostomi (Fisk, 2000). Most of the European members of *Epibryon* are unknown here: Ellis & Ellis (1988) report only *E. bryophilum* (on *Aulacomnium*, *Diphyscium*, *Jungermannia*, *Polytrichum*, etc.) and *E. casaresii* (on *Mnium*, *Scapania*, etc.), whilst the BMS database also includes one record of *E. interlamellare* on *Polytrichum* and two of *E. diaphanum* on *Thuidium*. Species that await discovery in Britain include *E. pedinophylli* on *Pedinophyllum*, *E. metzgeriae* on *Apometzgeria*, *E. hypophyllum* on the underside of *Radula complanata* and *E. pogonati-urnigeri* on *Pogonatum*.

References

- Ellis MB, Ellis JP. 1988. *Microfungi on miscellaneous substrates. New enlarged edition.* London & Sydney: Croom Helm.
- Fisk RJ. 2000. An interesting pyrenomycete growing on *Ceratodon purpureus*. *Bulletin of the British Bryological Society* 74: 41.