Growth forms of Cylindrobasidium laeve

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n the 24th January 2014 I noticed some small, whitish, brackets growing on the side of a large fallen Fagus branch by the side of a riverside footpath near Winchester, Hampshire, VC11. Closer examination showed the growth to be pendulous with a narrow point of attachment (Fig. 1). They were soft and easily rubbed off the substrate, so a collection was made. The presumed fertile surfaces (no pores were visible) were laid face down on a microscope slide and left overnight. A dense white spore deposit was found of ellipsoid to tear-drop shaped spores which markedly varied in both shape and size. The spores did not match anything pileate in my literature. A resupinate with a tuberculate surface had also been noticed growing on the same branch very close to the first collection (Fig. 2). On my next visit to the site the resupinate was also collected. This dropped spores identical to the first collection, although again very variable.

I showed these photos to Alick Henrici who recognised the strange little brackets in Fig.1. Both photos show forms of the common corticioid species *Cylindrobasidium laeve*, formerly known as *C. evolvens* (e.g. in Breitenbach & Kränzlin 1986, Fig. 92). On vertical surfaces this usually grows effuso-reflexed as the name 'evolvens' suggests, i.e. with a narrow projecting ridge along its upper edge. It is also often fully resupinate as in Fig. 2, but the distinctive form of young material shown in Fig. 1 appears to be uncommon. This form was treated for a long time in Britain as a species in its own right, *Cladoderris minima*, on which Alick has kindly supplied the following note.

Alick Henrici writes:

Graham did well to realise within seven days that Fig. 1 merely illustrates an abnormal form of a usually corticioid species. It took 81 years from Berkeley & Broome (1878) describing *Cladoderris minima* as a new species from Scotland (Glamis) to Reid (1959) publishing its true identity. In the interim *C. minima* survived as a rare and mysterious member of the British mycota, not helped by Massee (1892) who



Fig. 1. Mystery on a Fagus log. 24 January, 2014. Photograph © Graham Mattock.

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Fig. 2. Cylindrobasidium laeve at another point on the the same log as in Fig. 1, seven days later. Photograph © Graham Mattock.

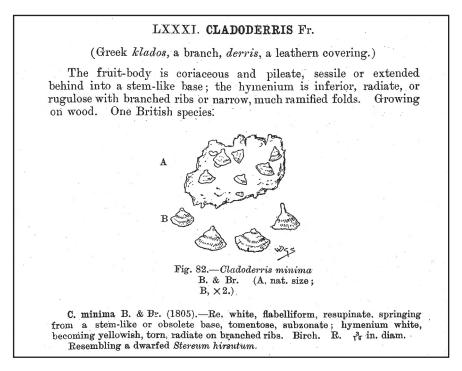


Fig.3. *Cladoderris*. Reproduced from Ramsbottom's *Handbook of the Larger British Fungi*. The drawing by Worthington Smith is a copy of one made of the type collection by its collector, the Rev. John Stevenson. Note that 1805 is not a date, merely Ramsbottom's species number.

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described and illustrated 'sausage-shaped' (evidently collapsed) spores. Its treatment in Ramsbottom (1944) is reproduced here as Fig. 3. It has to be admitted that the French experts Bourdot & Galzin (1928) were quicker to understand its true nature. They also gave it a name of its own, but merely as a growth form: *Corticium laeve* forma *cucullata* (meaning 'hooded'). For full details of its history see Reid (1962) pp. 114–116.

I have seen no discussion of what conditions might give rise to this form, but the collections at Kew provide strong evidence that it chiefly occurs in winter. The type of *Cladoderris minima* was collected in December. The other collection so named (from Yorkshire in September 1923) is the sole exception. The remaining six collections noted as 'pileate form' or 'forma *cucullata*' of *Corticium evolvens* or *C. laeve* were all made in either January (4) or February (2). They come from a variety of sites in southern England between 1928 and 1974. Forty years later Graham's January collection is another fitting this pattern.

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Fungi in the news

Fungi help to increase rainforest diversity and composition

In a recent report in *Nature* Vol. 506, Issue 7486: 85–88, research by Robert Bagchi *et al.* suggests that specialised natural enemies such as fungal pathogens and insect herbivores maintain the high diversity in dense tropical rainforests by targeting dominant plant species and increasing their mortality. Pests and diseases tend to transmit most effectively when plants are growing close together, as they do in rainforests. Co-author Owen Lewis told the BBC that "this acts as a negative feedback mechanism, so if one species becomes too abundant locally then it tends to get hammered by the pests and diseases and this then gives rarer species a chance because they tend to be less affected.

The study looked at seedling plots across 36 sampling stations in the Chiquibul Forest Reserve, Belize. It was carried out by scientists at Oxford University and Sheffield University and funded by the Natural Environment Research Council (NERC). Part of the experimental process involved spraying plots with water, fungicides or insecticides every week for 17 months. They found that the fungicide Amistar® dealt a significant blow to diversity, reducing the effective number of species by 16%. While the insecticide did change the composition of surviving species, it did not have an overall impact on diversity.

Fungi really are intricately involved in countless aspects of our lives and the life of most organisms on this planet. This study serves to underline just how important they are.

Editor