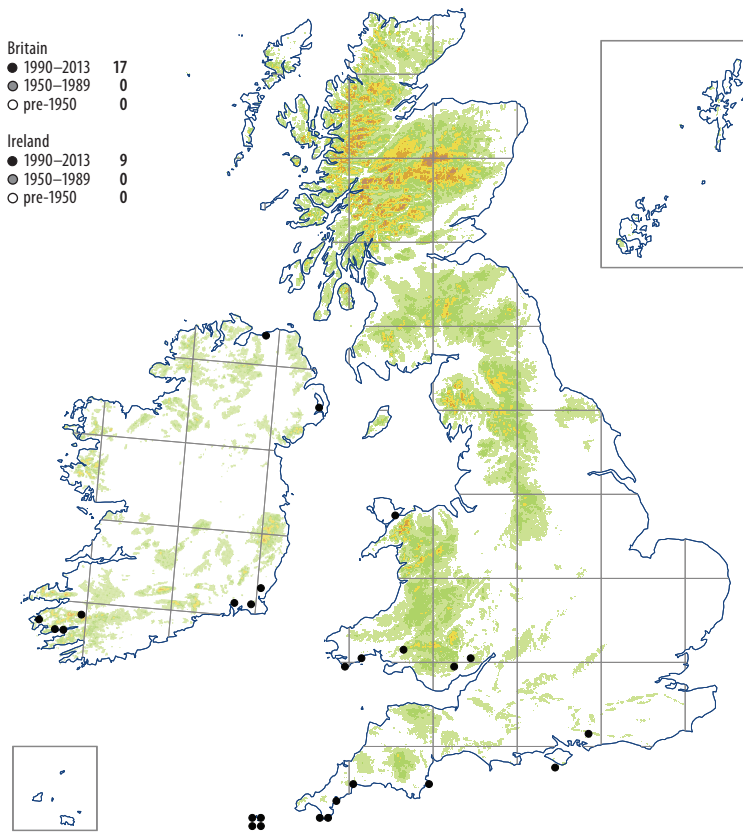


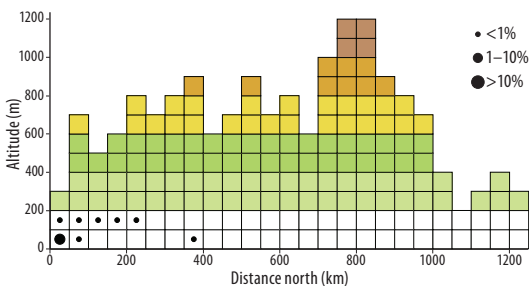
Sematophyllum substrumulosum



The principal habitat of this moss is on decorticated conifer logs (Bosanquet, 2013), where it almost always grows with *Lophocolea heterophylla*, and occasionally with *L. bidentata* and *Hypnum cupressiforme*. These logs are usually in conifer plantations or mixed woodland, but one record is from a pile of logs at a theme park on the Isle of Wight, and two Cornish records are from conifer stumps in churchyards. It occurs on yew at Kingley Vale in Sussex, and the colony there now extends over nearly 1 km of the valley on yew branches and twigs, as well as on blackthorn, clematis and a rotten patch on an ash trunk (Matcham *et al.*, 2005). On the Isles of Scilly it is well established and widespread on logs, living and fallen pine trunks, wooden benches and even in rabbit burrows on coastal slopes. A further niche in S Wales is the stems of ancient gorse bushes in a coastal conifer plantation. Altitudinal range: 5–160 m.

The first published report came from the Isles of Scilly in 1996 (Holyoak, 1996), but it had already been collected in Sussex in 1964 (Een, 2004). Records from a few sites in the south-west of England, Ireland and Wales by 2006 were followed by more distant occurrences to the north and east. The map certainly under-represents the distribution because colonies are usually small and need to be consciously searched for. It is clearly expanding its range in Britain and Ireland, aided by its abundant wind-borne spores. However the Kingley Vale colony may represent a long-standing outlier, similar to those of *Bartramia stricta* and other Mediterranean species in Britain.

Monoicous. Capsules are abundant, young from September to December, maturing between December and July, and remaining from the previous generation until at least September.



Oceanic Southern-temperate. South-western and Mediterranean in Europe until the 1990s, east to the W Balkan coast; there has been a subsequent range expansion through France to the Netherlands, Belgium, Britain and Ireland. A non-fruited *Sematophyllum* from eastern Russia has recently been identified as *S. substrumulosum* (Ignatova *et al.*, 2009).

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