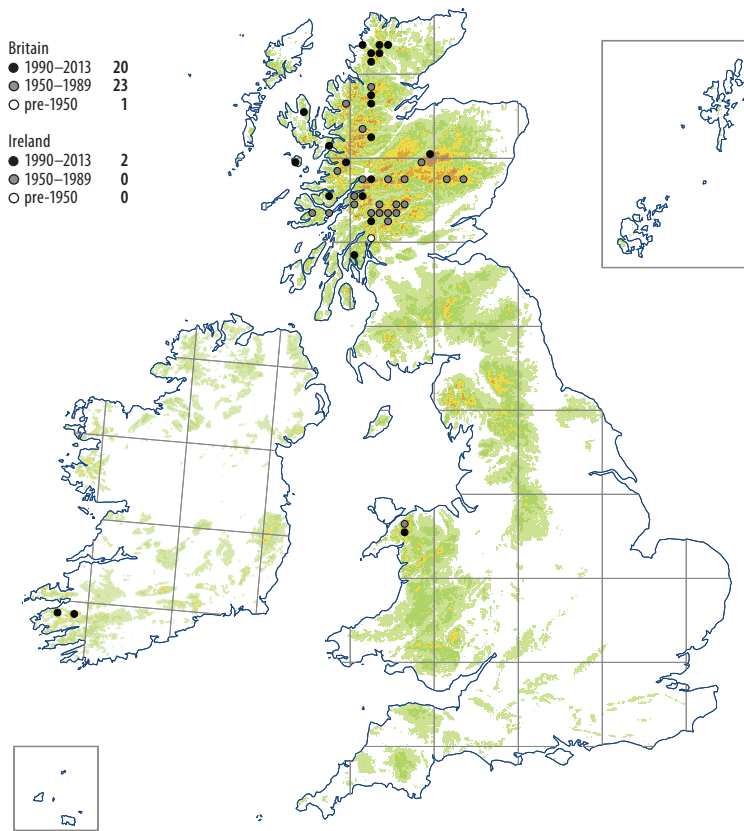


Isopterygiopsis muelleriana



Forming pale, white or yellow-green patches or scattered stems in very sheltered crevices at the base of crags or less frequently in block scree; the crevices where it occurs are usually very humid but only rarely subject to direct irrigation. Drier crevices in otherwise damp areas at the base of moderately calcareous crags are favoured sites but populations always seem to be small and fragmented. Sites in the higher hills are often at the base of large crags with a north to north-east aspect where snow probably lies late but it also occurs at lower altitudes and some sites are in ravines. The most frequent of a long list of associates are *Dryopteris* cf. *filix-mas*, *Diplophyllum albicans*, *Jungermannia* spp., *Amphidium lapponicum*, *Heterocladium heteropterum* var. *heteropterum*, *Plagiothecium undulatum*, *Tortella tortuosa*, *Trichostomum tenuirostre* and *Philonotis fontana*. Altitudinal range: 150–970 m.

It can be overlooked as *Pseudotaxiphyllum elegans* and is probably under-recorded in the Scottish Highlands; it is unlikely that the high proportion of pre-1990 records has any significance.

Dioicous; capsules are unknown in Britain and Ireland. Axillary gemmae are occasionally present.

Suboceanic Boreal-montane. A montane species, in the mountains of W, C and E Europe, north to S Norway and the N Urals, south to N Spain, the Alps and the Balkan and Carpathian mountains. Turkey, Georgia, Iran. Widespread in the Northern Hemisphere but rare in the Arctic. India, Himalaya, Siberia to the Russian Far East, China and Japan. N America (Alaska south to Mexico), Greenland. E Africa.

G.P. Rothero

