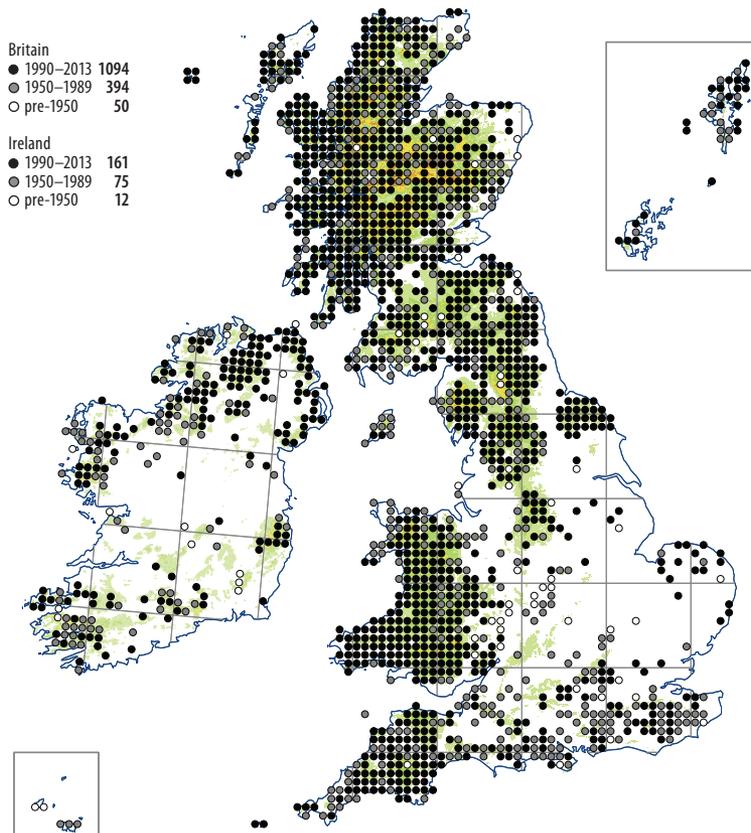


Dicranum majus



A characteristic species of sheltered acid to mildly basic turf on the ground and on turf-covered boulders in oak, birch or coniferous woodland. It is common in natural rocky woodlands, particularly upland oak woods, but also occurs on the ground in lowland woodlands, and it may colonise mature conifer plantations where the canopy is not too dense, or persist under larch in newer plantations. It is not confined to woodlands, being widespread on rock ledges and on steep slopes from the lowlands to the high mountains, in open but sheltered sites, especially those facing north to east. It avoids strongly calcareous substrates, and on limestone and other strongly basic rocks it is usually restricted to deep humus on ledges. Less frequently it grows on the ground among boulders on moorland, and on heathy banks in quarries. Frequent woodland associates are *Mnium hornum*, *Polytrichastrum formosum*, *Rhytidiadelphus loreus*

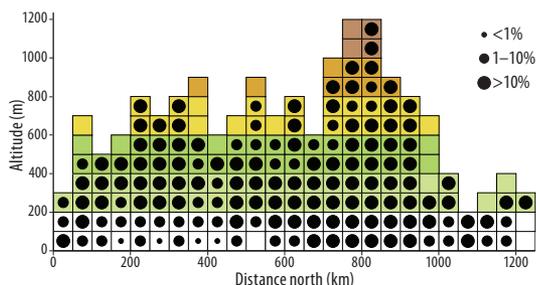
and *Thuidium tamariscinum*. On mountains it grows with *Polytrichastrum alpinum* and *R. loreus*. Altitudinal range: 0–915 m.

In spite of its large size and conspicuous appearance, it was under-recorded in the 1991–1994 Atlas, and its mapped distribution is now much more complete.

Diocious with dwarf male plants; capsules are frequent in high-rainfall areas, rare elsewhere, mature in winter.

Hedenäs *et al.* (2006) found that two forms of *D. majus* occur in Europe, a southern form in which the upper part of the leaf has a submarginal band of bistratose cells and many dorsal spines, and a northern form in which the lamina is smooth and unistratose. The northern form does not yet have a formal name and its detailed distribution is unknown. The southern form is the common plant in Britain and Ireland.

Circumpolar Boreo-temperate. C, N and E Europe, rare in the south to N Spain, N Italy and Montenegro, very rare in the Mediterranean region (reported from Sardinia). Macaronesia (Azores). Turkey, Caucasus, Siberia, E Asia, south to Taiwan, Japan. N America, south to Washington State and Rhode Island.



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