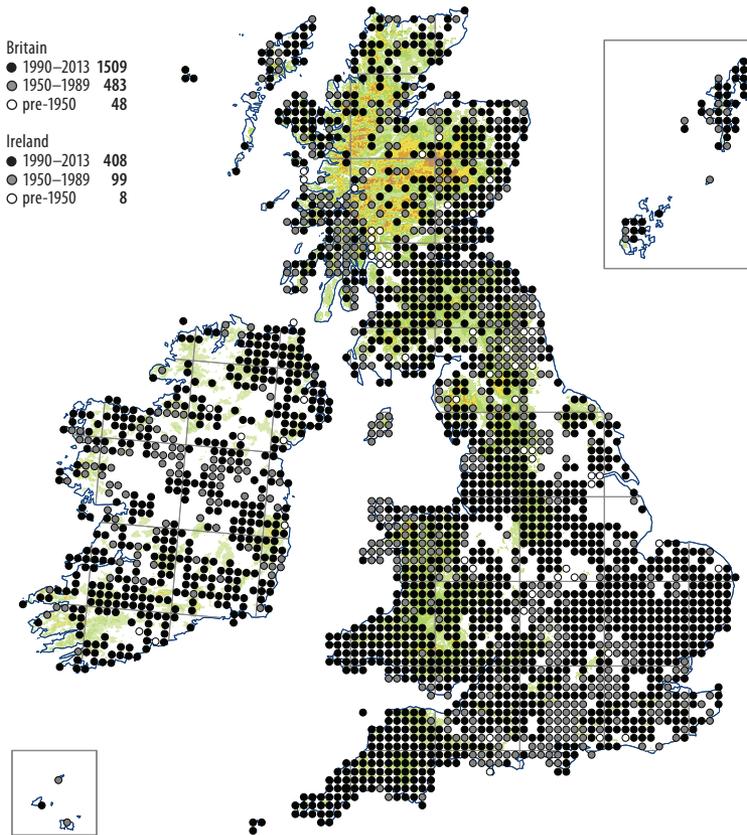


Didymodon rigidulus

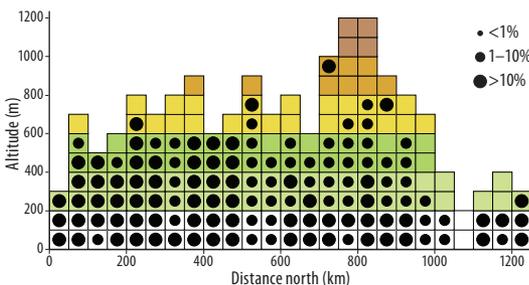


A common species in the lowlands, more scattered at higher altitudes, on a wide variety of calcareous and base-rich rocks. It occurs widely on natural outcrops of limestone and other basic rocks in open to lightly shaded situations on crags and near streams, but less regularly than some other calcicolous rock species. It is more plentiful on man-made structures, and is particularly characteristic of old mortared walls. It also colonises concrete, brickwork, roof tiles and paving stones, associated with *Didymodon insulanus*, *Grimmia pulvinata*, *Orthotrichum anomalum*, *Schistidium crassipilum*, *Tortula muralis* and many other species. In drier regions it tends to grow in places where there is some shelter or shade, but in wetter areas is common out in the open. Unlike some other species of the genus, it is less often found on old tarmac and gravel. Altitudinal range: 0–1035 m.

The records show a steadily increasing trend, partly from increased recording in villages and churchyards, and coverage is now very much more complete than in the 1991–1994 Atlas.

Dioicous; capsules are frequent, maturing in winter and spring. Gemmae are often abundant on protonema in the leaf axils and are produced on the protonema in culture (Pressel & Duckett, unpublished).

Although typical forms are readily identified in the field, *D. rigidulus* is rather variable and is sometimes mistaken for *D. nicholsonii* and other species of the genus. A small form with wider leaves and mammillose cells occurs on calcareous crags in Scotland and was at one time thought to be a distinct species, *D. mamillosus* (Crundwell, 1976a).



Circumpolar Boreo-temperate. Almost throughout Europe, north to Iceland and N Norway, but rare in the Mediterranean region. Possibly Macaronesia, but recently revised records from there refer to other species (J. Kučera, pers. comm.). N Africa. SW Asia, including the Arabian Peninsula. N, C and E Asia, Japan. N America south to Mexico. Also reported from northern S America and C Africa.

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