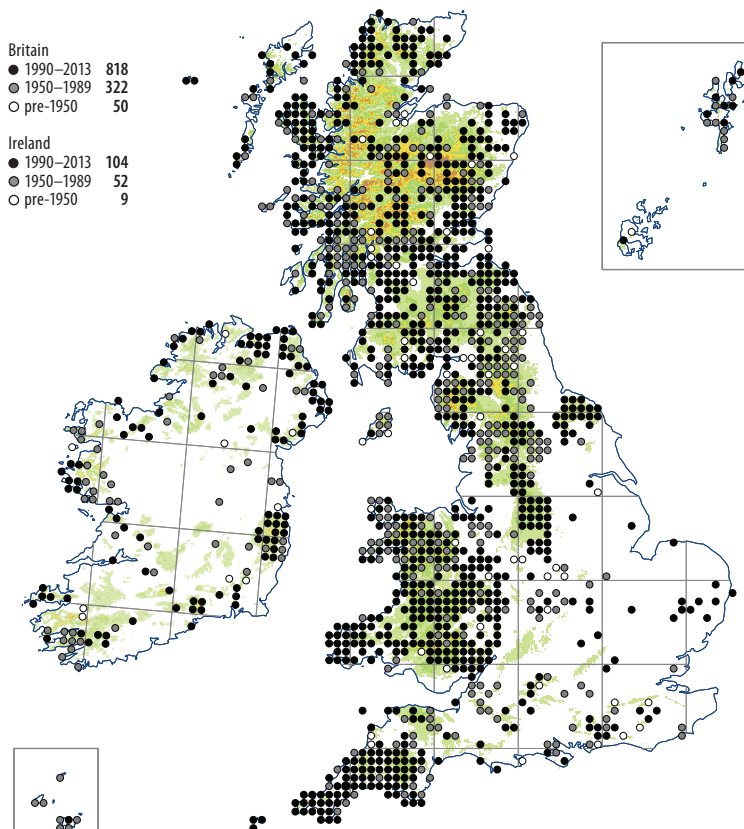


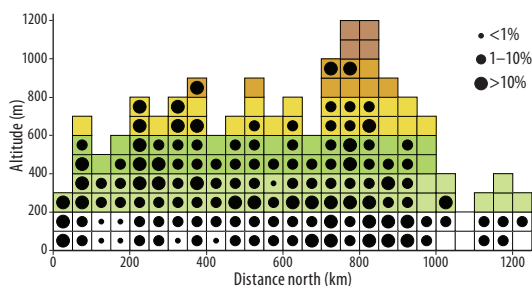
Grimmia trichophylla



A calcifuge moss forming cushions or tufts on dry, exposed, base-poor hard rocks of various types from granite to sandstone, only very rarely on basic substrates such as weathered concrete. It thrives in open situations and under light shade, occupying a range of aspects on horizontal to steeply inclined surfaces, both by the coast and inland. Its varied habitats include cliffs, crags and tors, Sarsen stones, glacial erratics, isolated boulders and rocks in moorland, heathland, fields and deciduous and coniferous woodland, and on hill and mountain sides. It grows in scree, on rocks by streams, on walls in open countryside and urban areas, and sometimes on bridges, tombstones and other stonework. It is associated with a range of species including *Andreaea rothii*, *Grimmia decipiens*, *G. longirostris*, *Hedwigia stellata* and *Racomitrium heterostichum*. Altitudinal range: 0–600 m (*G. trichophylla* s.s.), 0–750 m (*G. trichophylla* s.l.).

Dioicous; capsules are rare, mature from spring to summer. Multicellular sessile gemmae are occasionally present on the proximal and distal dorsal and ventral lamina and nerve of the upper leaves (Porley & Pressel, 2012).

Grimmia trichophylla is a very variable taxon, with many named forms. The situation in Britain and Ireland is clearer following the revision of the *trichophylla* group in Europe (Maier, 2002a). Nomenclaturally var. *robusta* and var. *subsquarrosa* have been synonymised with *G. lisa*, var. *stirtonii* with *G. trichophylla* s.s. (Maier, 2010) and var. *tenuis* with *G. muehlenbeckii* (Smith, 1992). The map includes all records assigned to *G. trichophylla* s.l. and *G. trichophylla* s.s., but because of previous taxonomic confusion not those assigned to other varieties. It is likely to be substantially correct.



Circumpolar Wide-temperate. Distributed throughout most of Europe north to about 66° N in Fennoscandia but very rare in Russia, and many of the records from southern Europe probably belong to *G. dissimulata* or *G. meridionalis* (Müll. Hal.) E. Maier. Macaronesia, N Africa. Middle East, SW Asia. N America, C and S America, Hawaii. S and E Africa. The precise global distribution requires elucidation, but material named *G. trichophylla* from Australasia is *G. consobrina* Kunze ex Müll. Hal. (Maier, 2010).

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