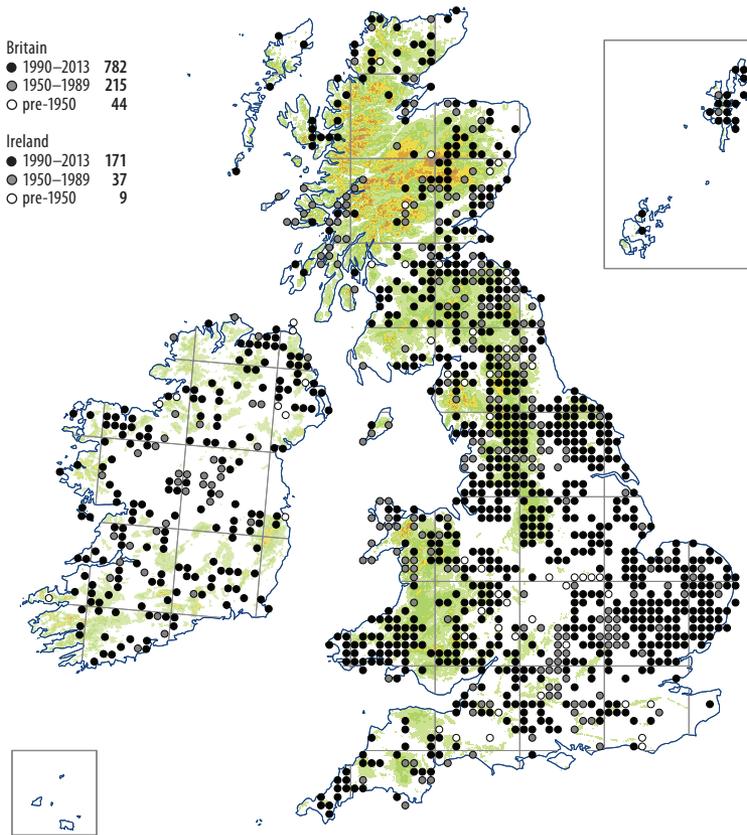


Orthotrichum cupulatum



A calcicole, found in a similar range of natural and artificial habitats to *Orthotrichum anomalum* and often accompanied by that species. It grows on flat limestone rocks and boulders, stone and mortared walls, parapets of bridges, flat tomb-tops, concrete walls and blocks and on roof tiles. A common habitat, especially in upland areas, is on boulders, silty branches and exposed roots of trees by streams and rivers. It has even been recorded in abundance on silty horizontal iron flanges on the lower side of a cattle grid. In the drier south-east of England, *O. cupulatum* differs from *O. anomalum* in its tendency to prefer damper, shadier sites near water, although thriving populations can be found in other sites; further north and west the two species appear to have very similar ecological requirements although *O. cupulatum* is almost always scarcer and it is less common in dry exposed places. Altitudinal range: 0–620 m.

Like *O. anomalum* it has shown an upward trend in records since 1990. This is due to increased recording in villages and churchyards, and better coverage in under-recorded districts, but also to a real increase in and near conurbations.

Autoicous; capsules are abundant, mature in spring and early summer. Gemmae are produced on the protonema in culture (Whitehouse, 1987).

Plants with hairless calyptrae growing on stream and river banks have been recorded in the past as var. *riparium* but they have not been recorded consistently and intermediates occur. It is not currently treated as distinct in Britain and Ireland.

Eurosiberian Temperate. Europe north to Iceland and NW Norway (mainly southern in Fennoscandia) and NW Russia. Macaronesia, N Africa. Turkey and the Near East, Caucasus to S Siberia. N America, south to Mexico. Southern S America, Australia, New Zealand.

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