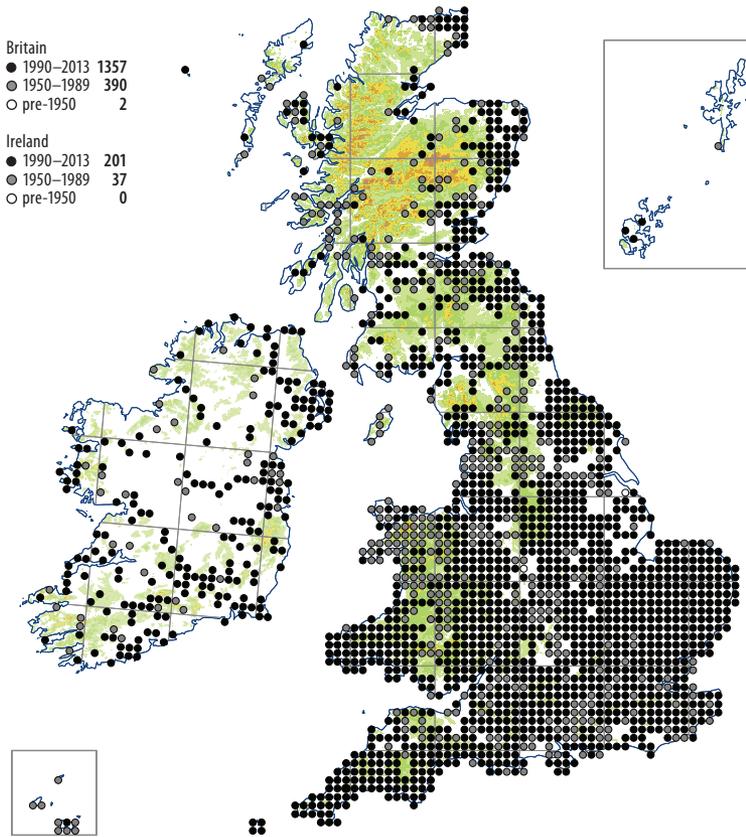


Bryum rubens



Common on slightly acid to highly basic disturbed soils in a wide range of habitats, including gardens, soil heaps, banks, molehills in pastures, churchyards, sand dunes, cliff tops, roadsides, woodland rides and waste ground. It is frequent in most types of arable field (Preston *et al.*, 2010), often abundant and tolerating considerable fertiliser applications, occurring with *Tortula truncata* and few other mosses in the most eutrophicated fields. Altitudinal range: 0–540 m.

Diocious; both sexes are widespread in Britain and Ireland and capsules are frequent, mature in spring. Rhizoidal tubers are often frequent on all but young plants, some of them commonly on short rhizoid initials at the base of the stem. Its tubers often form a large part of the bryophyte 'diaspore bank' in soils, germinating when the soil is disturbed (During

& ter Horst, 1983; During *et al.*, 1988; Risse, 1988a). Bulbils and filiform axillary gemmae are absent. The protonema is transient; gemmae are produced on the protonema, and tubers are sometimes produced on the protonema in culture (Pressel *et al.*, 2007).

Although described on the basis of English material by Mitten in 1856, it was not distinguished clearly from *Bryum subapiculatum* until the revision of the '*Bryum erythrocarpum* complex' by Crundwell & Nyholm (1964), and early records are therefore few. It is easier to identify in the field than the other, small tuber-bearing species of *Bryum* and its distribution is therefore much better known, but it is nevertheless still often overlooked and hence somewhat under-recorded.

European Temperate. Widespread in Europe from C Norway and S Sweden southwards to Portugal, Spain, Italy, the Balkans and Caucasus. Macaronesia, N Africa (Tunisia), Turkey. Known elsewhere in Pakistan, India, Japan, N America (rare, presumably introduced), Brazil (Ochi & Mahu, 1988) and New Zealand (presumably introduced).

D.T. Holyoak

