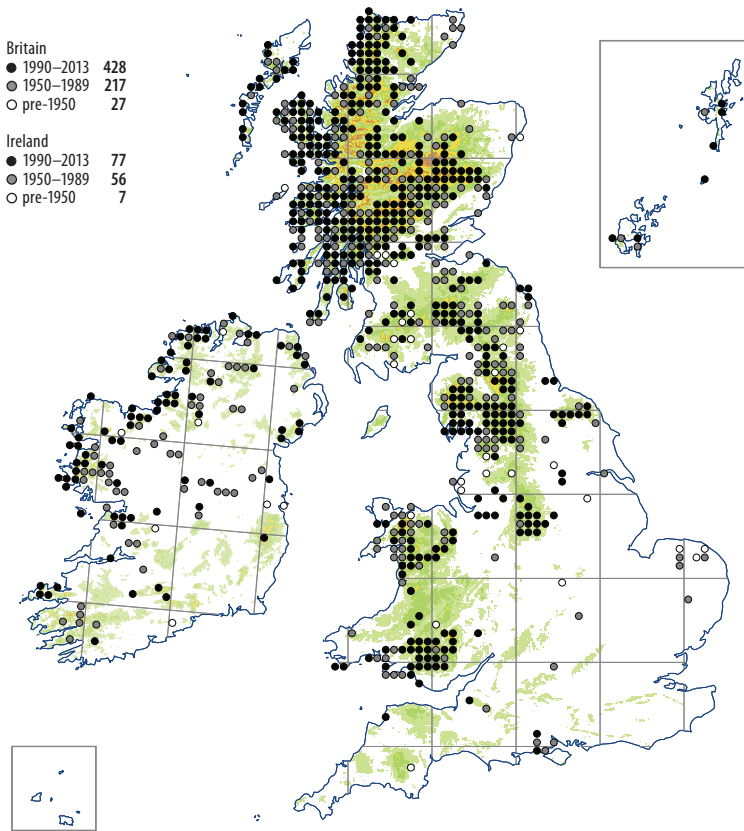


Preissia quadrata



Found on a wide variety of basic substrates, including soil in calcareous fens and flushes, dune slacks, moist or dry rocks and cliffs, and the crumbling mortar of walls. It grows on basalt, gabbro, limestone, sandstone and schistose rocks, especially where they are lightly shaded in gullies, under overhangs or in earthy crevices, and is a frequent plant in calcareous upland areas. Prominent patches on damp upland rock faces have species such as *Anoetangium aestivum*, *Blindia acuta*, *Fissidens osmundoides* and *Gymnostomum aeruginosum* as regular associates. *Preissia* appears to be slower to colonise dune slacks than *Aneura pinguis* and *Petalophyllum ralfsii*, but it is often one of the most prominent bryophytes in slightly more mature, species-rich slacks. Its colonisation ability is also demonstrated by occasional records from disused limestone quarries, wall mortar and forestry tracks

surfaced with limestone chippings. Altitudinal range: 0–1000 m.

Preissia quadrata has declined over the last 50 years, especially in lowland England where it has always been a rare species of vulnerable fens. Some dune populations have also been lost in Wales.

Normally dioicous, sometimes autoicous; sporophytes are occasional, archegoniophores are present for several months, but the sporophytes mature over a much shorter period.

Confused occasionally with *Reboulia hemisphaerica*, and perhaps with *Conocephalum salebrosum* in the past, but there are unlikely to be many erroneous records.

Circumpolar Boreo-arctic montane. Europe from Svalbard southwards, but rare in the Mediterranean region; Russia, C Asia, China, Japan, Himalaya; N America, Greenland.

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