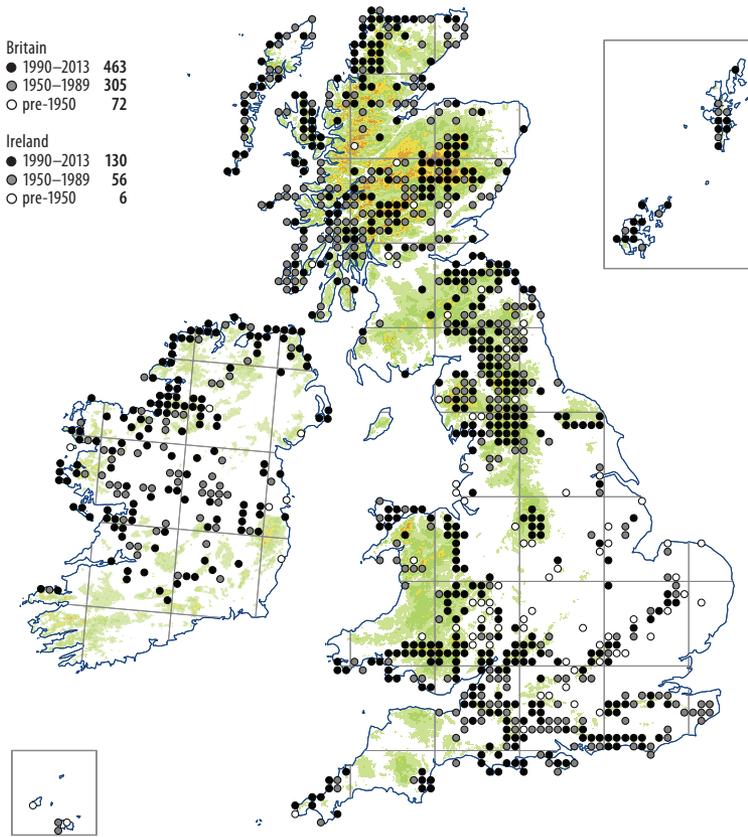


Ditrichum gracile



A calcicole moss of open to lightly shaded habitats. It is often present in unimproved chalk and limestone grassland, including disused pits, quarries and earthworks, in thin or sometimes rather dense but low turf, in association with *Campyliadelphus chrysophyllus*, *Ctenidium molluscum*, *Fissidens adianthoides*, *F. dubius*, *Homalothecium lutescens* and *Trichostomum crispulum*. Preston *et al.* (2009) in a study of the chalk grassland of Salisbury Plain found that it was one of the species that had a preference for sites subject to light or intermittent disturbance and with a history of grazing. On harder rocks it occurs with *Tortella tortuosa* in scree and on soil-covered boulders and old derelict walls. *Rhytidium rugosum* sometimes grows with it on the northern limestones, and also in a distinctive rabbit-grazed Breckland community with *Encalypta vulgaris*. Other habitats include sea cliffs, montane rock ledges, gravelly ground, sand

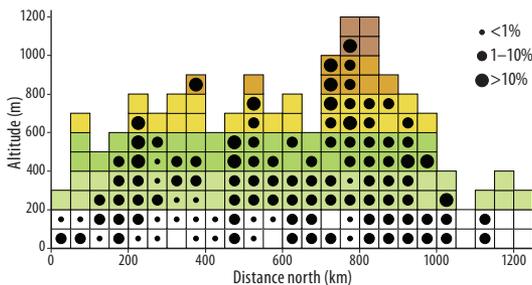
dunes and machair. In some northern and western areas it is occasionally found in ruderal habitats on old concrete, rubble by roads and in car parks, and in gravelly driveways. Altitudinal range: 0–1160 m.

It has decreased in lowland England from the loss of open calcareous grassland, in-filling of old pits and scrub invasion. In contrast it has considerable colonising ability in northern and western areas, as shown by its occurrence in ruderal habitats.

Dioicous; male plants are rare and capsules very rare, known only from old reports which may refer either to *Ditrichum gracile* or *D. flexicaule*. Unlike *D. flexicaule*, it appears not to produce attenuate innovations.

It is closely related to *D. flexicaule* (see notes under that species) and was not recorded separately until Frisvoll (1985) recognised it as a distinct entity in Europe. The map treats older records of *D. flexicaule* s.l. as *D. gracile* provided that there is no record of *D. flexicaule* s.s. in the same hectad.

Circumpolar Boreo-temperate. Widespread in Europe but still incompletely known, north to Iceland and Svalbard, but mainly western in Scandinavia, south to the mountains of the Mediterranean region. Turkey. Siberia, Himalaya, China, eastern Asia, Malesia, Japan. N and C America, western S America. New Zealand.



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