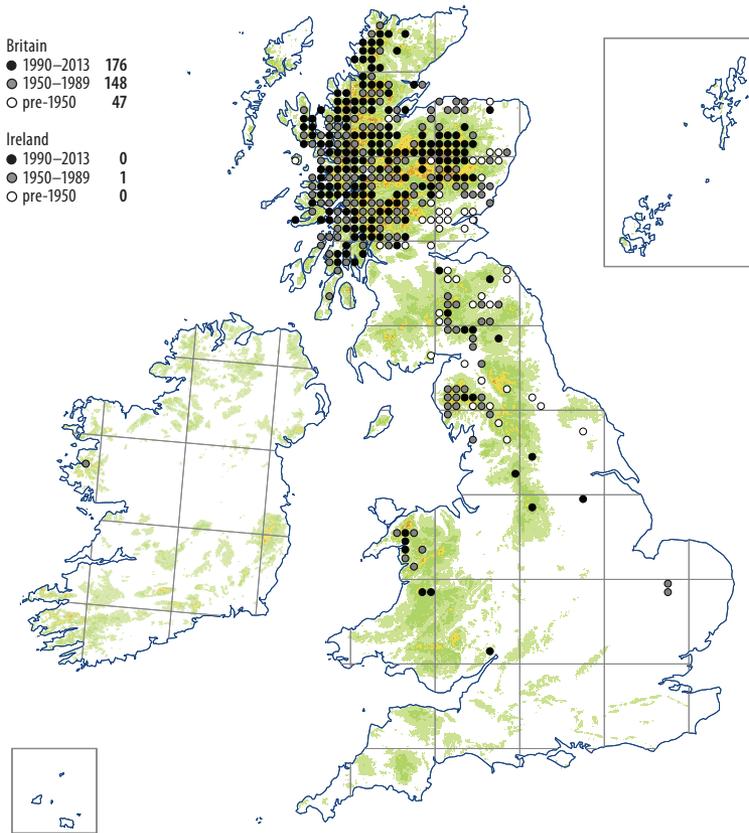


# *Ptilium crista-castrensis*



Most frequent on acid, damp, peaty or humus-rich soil in shaded situations on the ground and on boulders in natural or semi-natural pine, birch, oak, or birch-hazel woods, growing with *Barbilophozia barbata*, *Hylocomium splendens*, *H. umbratum*, *Plagiothecium undulatum*, *Pleurozium schreberi* and *Rhytidiadelphus loreus*. It also occurs under heather on steep north- to east-facing block-strewn slopes, associated with *Breutelia chrysocoma*, *Campylopus setifolius* and a wide range of large leafy liverworts such as *Bazzania tricrenata*, *Herbertus hutchinsiae* and *Scapania gracilis*. It is less frequent in other damp montane sites such as moss-rich turf on steep north- to east-facing slopes, shaded recesses between boulders in stable block screes, unburnt heather moor, and shaded, mildly basic ledges in low-lying wooded ravines. At the southern edge of its range it has been recorded in conifer plantations in Derbyshire,

Gloucestershire and East Anglia, where it has possibly been introduced by human activities. However its occurrence in willow carr in lowland Lincolnshire and on an inclined willow by a pool in Calderdale (SW Yorkshire) suggests that at least some of these small isolated populations represent natural colonisation from spores from continental Europe. In common with some other boreal species such as *Barbilophozia hatcheri* and *Ptilidium ciliare* it is rare or absent in W Ireland and the Outer Hebrides. Altitudinal range: 0–915 m.

The southern populations are sporadic, but the recent discovery of several new sites in England within a short period suggests that such occurrences may be increasing.

Diocious; capsules are very rare, autumn.

Circumpolar Boreal-montane. Widespread and with a characteristic boreal-montane distribution in Europe, south to the Pyrenees and Balkan mountains. Turkey. Circumboreal, extending north to the Arctic and south in Eurasia to the Himalaya, Yunnan (China), Japan, and in N America to Colorado and North Carolina.

*H.J.B. Birks, rev. T.L. Blockeel*

