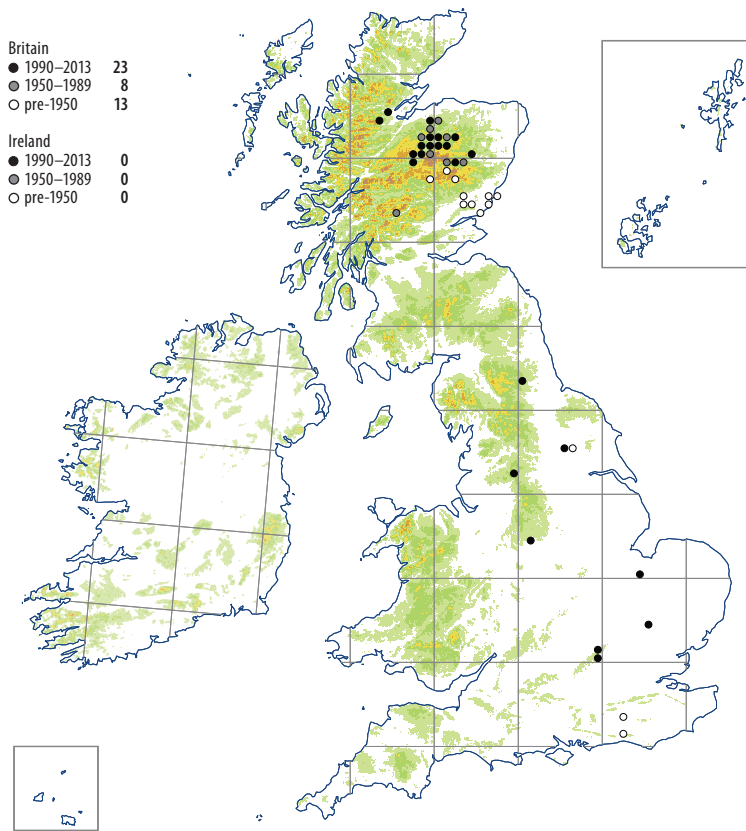


Orthotrichum speciosum



An epiphyte, found on the branches of old hazel and juniper shrubs and on the trunks and branches of a range of trees in well-illuminated sites. Host trees include ash, birch, poplar, rowan, willow, sycamore and wych elm, and in Scotland aspen is a very characteristic host. Associated species include *Frullania dilatata*, *Radula complanata*, *Amblystegium serpens*, *Homalothecium sericeum*, *Hypnum cupressiforme*, *Ulota bruchii* and *U. drummondii*, as well as other *Orthotrichum* spp. In NE Scotland it has also been found associated with *Pterigynandrum filiforme*. Recent sites in England have been on ash trees by a disused railway and in woodland, on willow in scrub and at the edge of woodland, on willows on river banks, and on apple and pear trees in orchards. The first British record was from 'trees and stones' and a specimen collected early in the 20th century

was apparently growing on the stonework of a bridge. Altitudinal range: 0–340 m.

Autoicous; capsules are common, mature in summer.

The population in NE Scotland has long been stable, but in England *O. speciosum* almost (perhaps entirely) disappeared during the industrial era. The prediction in the 1991–1994 Atlas that it might recolonise eastern England following reduction in SO₂ levels has been partly fulfilled, although occurrences are still rare and scattered.

Circumpolar Boreo-arctic montane. Widespread and generally common almost throughout Europe, including the Mediterranean region, and extending north to Svalbard; frequent on rocks and trees in some northern areas with a more continental climate than Britain and Ireland (e.g. southern Scandinavia) and growing on rocks and dry earth in the tundra. N Africa (absent from Macaronesia). Turkey, Cyprus. Widespread across the Northern Hemisphere, especially in the Arctic and boreal zones.

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