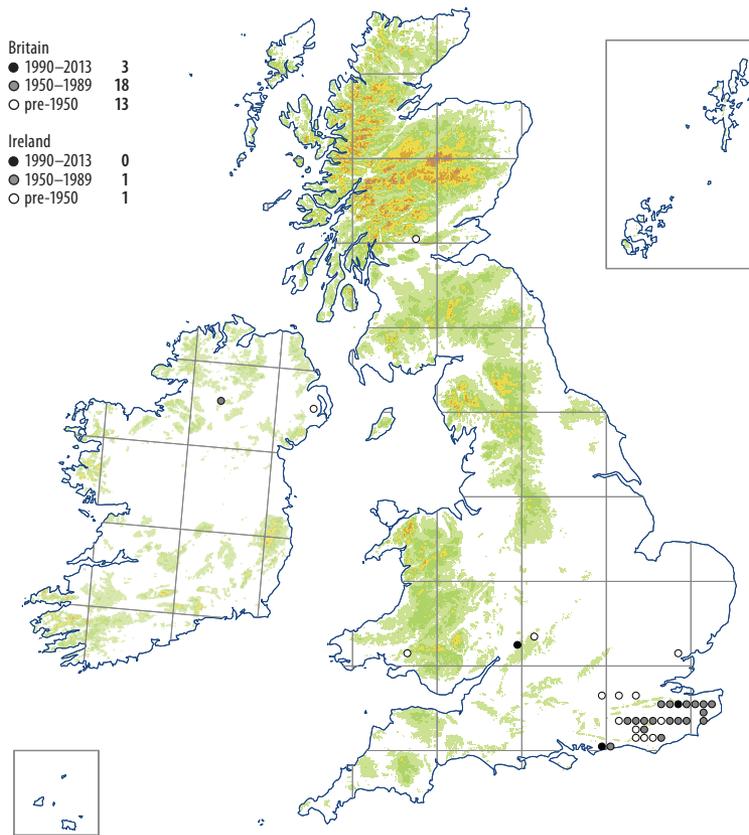


Atrichum angustatum



In the Weald of Kent and Sussex and adjacent areas this was a plant of damp non-calcareous loamy soil on bare ground and ruts on rides and paths in ancient woodland, where it was at one time locally abundant with associates such as *Anagallis minima*, *Galium saxatile*, *Radiola linooides*, *Fossombronia wondraczekii*, *Lophozia incisa* and *Nardia scalaris* (Rose, 1975a). At one of its most recent sites in Sussex it grew on a south-facing clayey bank on a slope in an old quarry under a light canopy of birch, oak, sycamore and hazel, and at its extant site in Gloucestershire it occurs with *Dicranella heteromalla* on sandy soil at the entrance to a disused rabbit burrow. At many localities its occurrence has been sporadic and possibly transitory. In Surrey it formerly occurred on heaths and commons; in Wales its site was probably a river bank. In Co. Tyrone it was found in a disused sand pit, and in Co. Down on earth or sods on a wall top. Altitudinal range: 60–280 m.

In spite of its once extensive occurrence in Kent and Sussex, it has undergone a catastrophic decline and had not been recorded in SE England and Ireland since 2001. However a small population was refound in Gloucestershire in 2011 (Bell *et al.*, 2013; Lansdown, 2014). The reasons for its decline are unclear but evidently include the disappearance of suitably open sites such as traditional woodland rides, or a deterioration in their quality.

Dioicous; capsules are rare. Rhizoidal tubers have been reported from Austria by Suanjak (1999).

The material from Gloucestershire appeared intermediate between *A. undulatum* and *A. angustatum* in the field, possibly because of immature growth, but was confirmed by DNA barcoding. It is possible that similar plants are overlooked elsewhere.

European Temperate. Most of Europe north to Iceland and S Sweden and east to European Russia, south to Portugal, Sicily and Greece. Macaronesia (Azores, Madeira, Canary Islands). Turkey, Caucasus, Iran. Eastern N America.

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