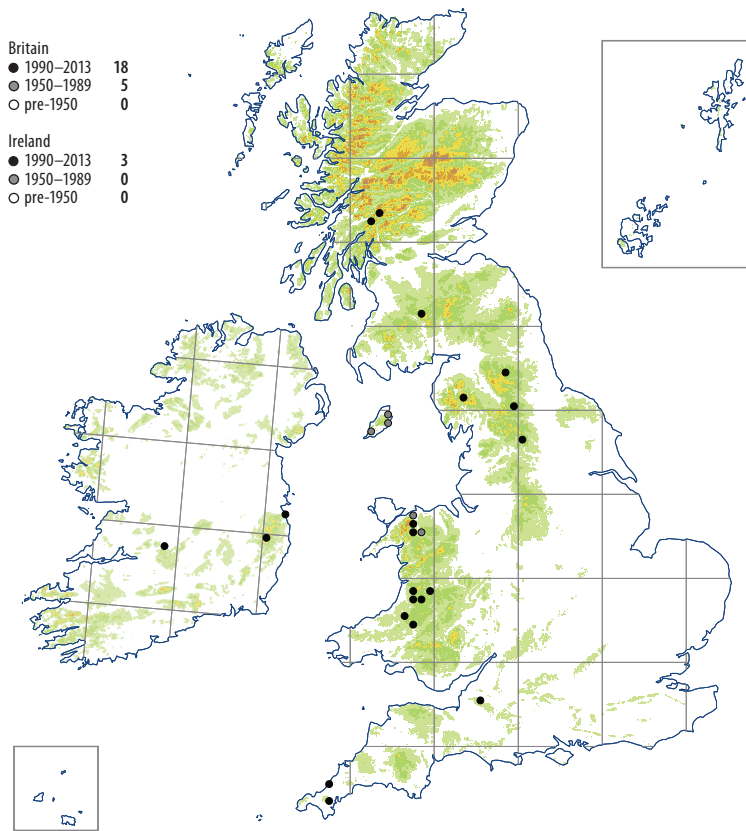


# Ditrichum plumbicola



This species is restricted to fine-textured lead-mine spoil that is largely devoid of vascular plants. It occurs in small pure patches or as scattered shoots, in the open or in the shelter of shrubs or small stones, sometimes with *Weissia controversa* var. *densifolia*, which is also characteristic of soils with a high lead content. Other recorded associates are *Cephaloziella* spp., *Diplophyllum albicans*, *Nardia scalaris*, *Solenostoma gracillimum*, *Bryum pallens*, *B. pseudotriquetrum*, *Ceratodon purpureus*, *Dicranella varia*, *Didymodon fallax*, *D. rigidulus*, *Polytrichum aloides*, *P. piliferum* and *Scopelophila cataractae*. It is limited to acid ground, and in N Wales was found to occur on soils with pH values of 4.5 to 6.5 (Hill, 1988). It fails to colonise more highly calcareous mine waste. This may explain its apparent absence from some old lead-mining areas such as the limestone dales of the Peak District and the Clwydian Range in NE Wales. Altitudinal range: 0–460 m.

With the cessation of lead-mining, new substrates are no longer being created for colonisation and this may threaten the long-term future of the species. Even on existing mine waste, the natural processes of leaching and succession, as well as landscaping and planting, combine to reduce the extent of suitable ground, although mechanical disturbance can expose toxic substrate at known sites. Rumsey & Crouch (2010) provide a detailed account of its status in the Mendips.

Inflorescences and capsules are unknown. Vegetative propagation occurs by means of rhizoidal tubers (Arts, 1994; see also Rowntree *et al.*, 2007), and presumably by stem fragmentation.

The earliest collection of *Ditrichum plumbicola* was made in the Isle of Man in 1914 but it was not recognised as distinct until Crundwell (1976b) described it many years later. On the basis of DNA analysis Frahm *et al.* (2008) did not consider it to be distinct from *D. lineare*, but Sotiaux & Vanderpoorten (2011) argued against this conclusion. Bell *et al.* (2013) likewise found molecular support for the specific status of *D. plumbicola*, although a few specimens had been wrongly identified.

Oceanic Temperate. Outside Britain and Ireland, known only from SW Germany and Belgium.

R.D. Porley, rev. T.L. Blockeel

