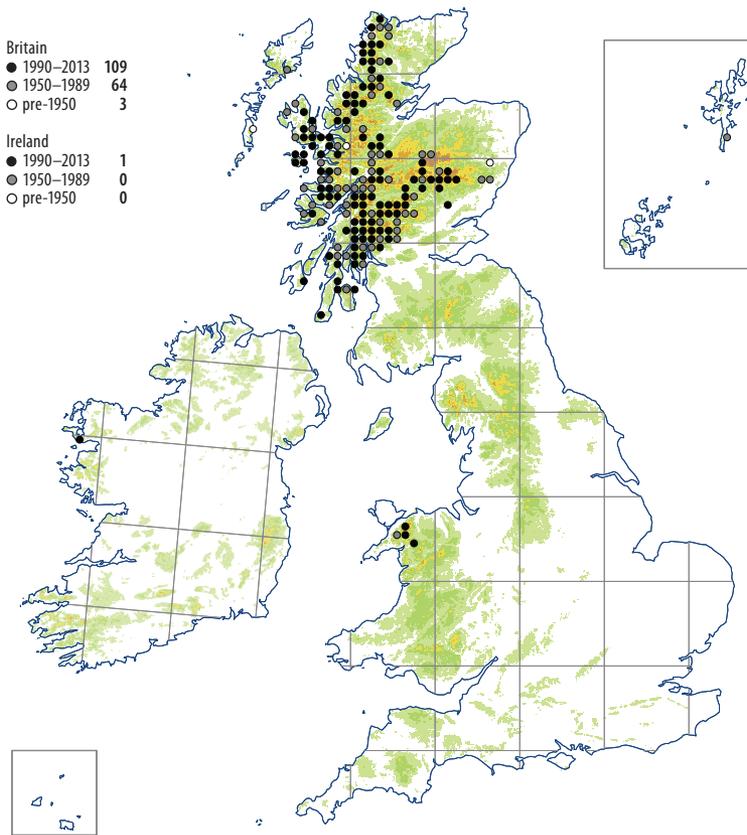


# Molendoa warburgii



A mostly montane species growing in loose patches or as scattered stems, more rarely in dense tufts, on wet rocks. It commonly occurs at the edge of streams and by waterfalls, but also on irrigated surfaces and on rocks kept moist by seepage. There is a tendency to grow on soft or crumbling rock. The substrate is usually base-rich, and rock types on which it has been recorded include mica-schist, limestone and basalt in Scotland, and volcanic tuff in Wales. The Irish population is on schist at the base of north-facing crags. Base-poor rock may also be colonised when enriched by seepage. Although normally in natural habitats, including upland cliffs and ravines at lower altitudes, it also been found on wet slabs in a west Highland quarry. It occurs commonly with *Blindia acuta*, and other recorded associates include *Eremonotus myriocarpus* and *Gymnostomum aeruginosum*. Altitudinal range: 5–1100 m.

The species is easily overlooked and for a long time was confused with *Gymnostomum calcareum*. It had been collected at least as early as 1871, but was not described until a century later (Crundwell & Hill, 1977). Its range was already well circumscribed in the 1991–1994 Atlas, and most subsequent additions have filled in the gaps.

Dioicous; most Scottish plants are female, but the Welsh population is entirely male; capsules are very rare, mature in spring and early summer. Gemmae occur in the axils of the older leaves (Long, 1982a).

Oceanic Boreal-montane. Outside Britain and Ireland known only from isolated localities in SW Norway, the Faeroes, Iceland, and in China (Yunnan).

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