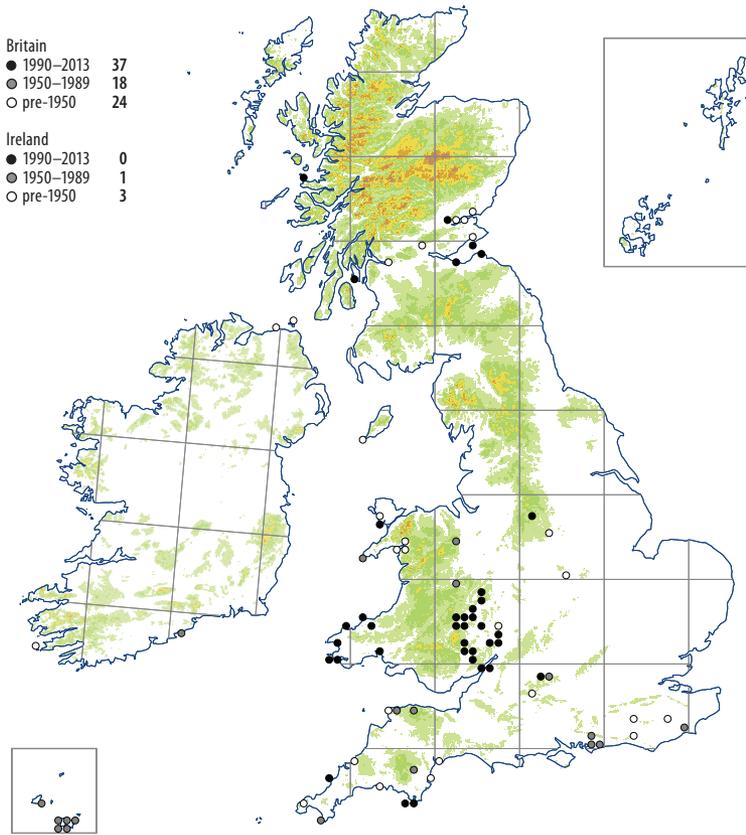
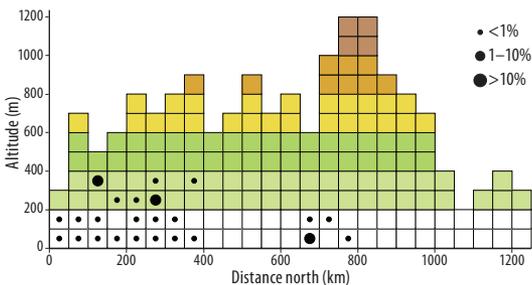


Grimmia laevigata



This predominantly lowland species forms hoary-grey cushions or more extensive patches on flat or steeply inclined, acid to slightly basic rock and stonework. It is markedly tolerant of desiccation, favouring xeric, sunny aspects. It occurs on sandstone and on a range of igneous rocks (including basalt, serpentine and dolerite), on cliffs and slabs often near the coast, in quarries, on boulders and Sarsen stones, on stone roof tiles and more rarely on gravestones. It sometimes grows with other *Grimmia* species, such as *G. lisae*, *G. decipiens* and in the Welsh Marches with *G. ovalis* on south-facing sandstone roof tiles. Other associates are few but *Hedwigia ciliata* and *H. stellata* are reported. Altitudinal range: 10–315 m.

Although there have been losses, particularly in southern England, northern Wales and in Ireland, many new records



have been made in recent years, particularly from roof tiles in the Welsh Marches. *G. laevigata* is believed to be decreasing in lowland Europe, possibly due to acid deposition and eutrophication (Dierßen, 2001). For such a cosmopolitan moss it shows remarkably little morphological variation across its range. Genetic studies of Californian populations have however revealed two distinct geographically overlapping cryptic species (Fernandez *et al.*, 2006) and it is unknown if this or a similar pattern is replicated world-wide.

Dioicous; capsules are rare in Britain and unknown in Ireland, mature in spring.

Circumpolar Southern-temperate. A subcosmopolitan moss present on every continent except Antarctica. In Europe from southern Sweden and Norway south to the Iberian Peninsula and the Mediterranean region (where it is locally abundant). Macaronesia, N Africa. SW Asia. Present throughout warmer parts of the world including E and S Africa, Mascarenes, much of Asia, the Americas, Australia, New Zealand and Hawaii.

A.J.E. Smith, rev. R.D. Porley