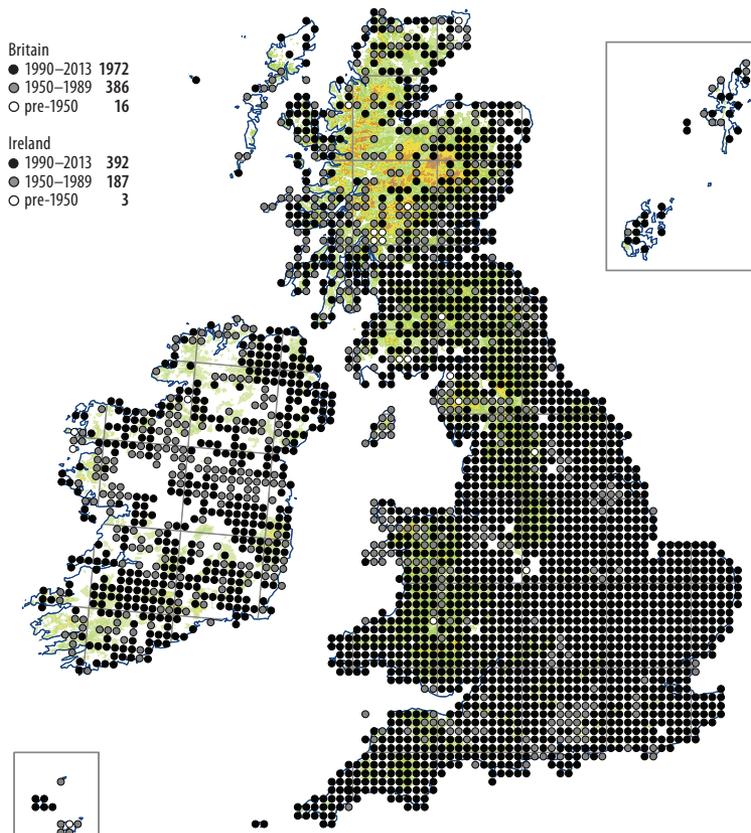


# Grimmia pulvinata



This is a predominantly basiphile pioneer species, on horizontal to vertical surfaces and in crevices of rocks and calcareous masonry. A thermophyte, it usually grows in open sunny situations where it regularly experiences desiccation but can tolerate shade. It is especially characteristic of mortared and limestone-capped stone or brick walls in cities and towns. It is common on concrete edifices such as bridges, reservoir dams, flood defence structures, canals, bunkers and fence-posts, even in remote locations far from human habitation. It colonises a vast range of other man-made structures, such as tomb and gravestones, church walls, roof tiles and garden statuary. More rarely it is found on tarmac. A broad range of associates occurs in such sites, including *Grimmia dissimulata* and *G. tergestina*, and *Bryum capillare*, *Didymodon rigidulus*, *Orthotrichum anomalum*, *Schistidium crassipilum* and *Tortula muralis*. In its more natural

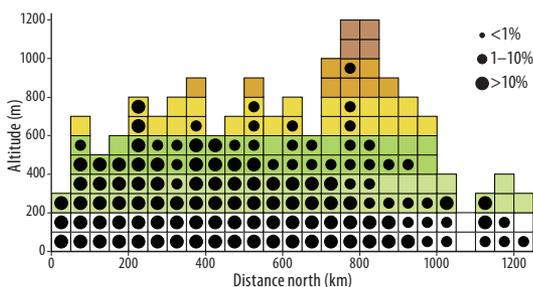
settings it occurs on ultrabasic to mildly acid rocks, including serpentine (often with *G. liseae*), dolerite and granite, on limestone outcrops (with *G. orbicularis*) and boulders, in flint scree over chalk and on slaty cliffs by the sea (in the west with *Coscinodon cribrosus*). It is also found occasionally as an epiphyte, occurring as scattered tufts on a wide range of tree species. Altitudinal range: 0–675 m.

Although more tolerant of atmospheric pollution than many mosses, it was previously excluded from the centre of large conurbations by SO<sub>2</sub> pollution (Gilbert, 1968). It has recolonised these areas in recent decades and its occurrence as an epiphyte perhaps reflects a concomitant expansion in its range of substrates.

Autoicous; capsules are abundant, mature in late spring.

Var. *africana* was formerly recognised in Britain and Ireland but was incompletely mapped. It is not currently considered distinct from the type.

Circumpolar Southern-temperate. A near cosmopolitan species which is so widely naturalised that its native range is obscure. Common throughout most of Europe, particularly in the lowlands to about 64° N. Macaronesia. N Africa. SW Asia, Georgia to Kazakhstan and Kyrgyzstan, C Asia, east to China. N and S America. E and S Africa. Australia, Tasmania and New Zealand.



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