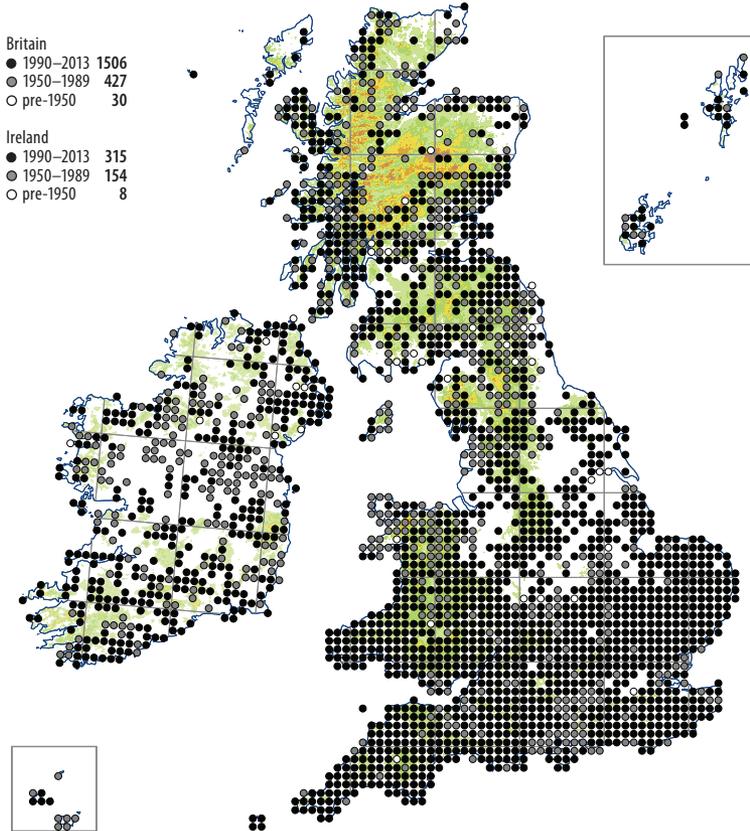


# Zygodon viridissimus

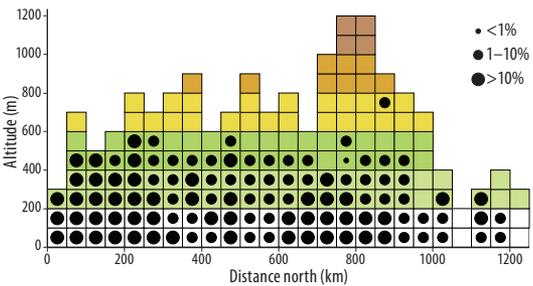


Forming dense cushions or patches as an epiphyte, but avoiding deep shade and strongly acid bark. It is frequent on ash, oak, sycamore, field maple, elder and willow, less common on beech and a wide range of other species, often associated with *Frullania dilatata*, *Metzgeria furcata*, *Hypnum cupressiforme* and *Orthotrichum* spp. It is also widespread on sheltered but well-lit natural outcrops of limestone, sandstone and basic igneous rocks; it is tolerant of sea spray and is particularly characteristic of coastal rocks, sometimes in exposed places. It is frequent on old stone and mortared walls, as in churchyards and on bridges, especially on their sheltered sides, and also on brick and concrete. Associates on walls include *Didymodon rigidulus*, *Grimmia pulvinata*, *Homalothecium sericeum* and *Tortula muralis*. Altitudinal range: 0–560 m.

As an epiphyte it was less affected by air pollution than many *Orthotrichum* species, though it disappeared from trees in regions suffering high levels of pollution. Following recent reductions in SO<sub>2</sub> levels it is now widespread on trees in these areas.

Dioicous; capsules are rare to occasional, mature in spring. Gemmae are almost always present on the stems and are also produced on the protonema in culture (Whitehouse, 1987).

Var. *stirtonii* is distinguished by its excurrent leaf nerve but its status is uncertain. It is sometimes treated as a separate species. However in a study of Dutch material, van der Pluijm (2012) found evidence that the two forms cross-fertilise each other and produce hybrid sporophytes, and concluded that they should be treated as varieties. In Britain and Ireland var. *stirtonii* is usually found in rupestral habitats and only rarely on trees. It is not mapped separately here.



European Temperate. Widespread in Europe north to Iceland and C Finland, east to the Baltic States, Ukraine and Caucasus. Macaronesia, N Africa. Turkey. Russian Far East, Japan. North-eastern N America. The wider distribution is uncertain because many reports (including those from the Mediterranean region) are of the species in a broad sense and refer to *Zygodon rupestris* or other taxa. In the broad sense it is widespread across the Northern Hemisphere.

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