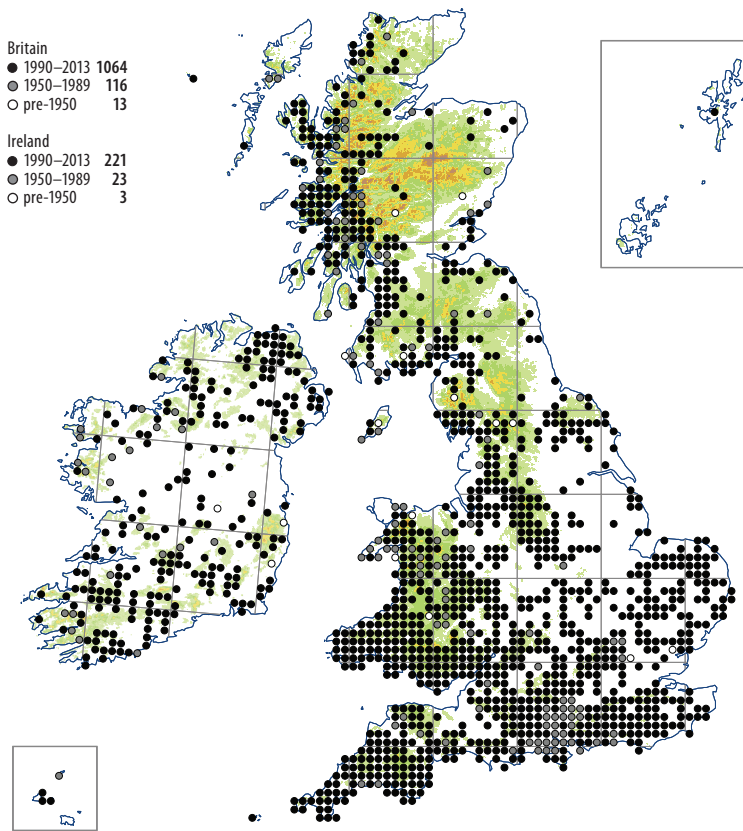


Zygodon conoideus



An epiphyte which is common on ash, elder, sallow, sycamore and willow, but also on oak, beech, birch and many other trees. It is most often found in humid sheltered places in deciduous woodland, in scrub, and on stream banks, and can be the dominant epiphyte in some wet willow woodlands. It is common on nutrient- and base-rich bark, but is less demanding in this respect than *Zygodon viridissimus*. Associates include *Frullania dilatata*, *Metzgeria consanguinea*, *M. furcata*, *M. violacea*, *Microlejeunea ulicina*, *Cryphaea heteromalla*, *Hypnum andoi*, *H. cupressiforme*, *Neckera pumila*, *Orthotrichum* spp. and *Z. viridissimus*. It is recorded rarely on base-rich rock and masonry, but this is not a typical habitat. Even more unusual is its occurrence on thatched roofs in Glamorgan, and perhaps elsewhere. Altitudinal range: 0–430 m.

Zygodon conoideus has increased dramatically in recent decades, especially in central and eastern parts of England. While this is partly explained by reduced levels of SO₂ pollution, climatic factors may also be involved. In Ireland, however, and perhaps other areas, much of the apparent increase may be due to higher levels of recording activity. It has enjoyed a similar spectacular increase in the Netherlands (van der Pluijm, 2012).

Dioicous; capsules are abundant in western regions, rather rare towards the east, mature in spring. Vegetative propagation is by narrowly fusiform gemmae, which are almost always present on the stems and on the often extensive perennial protonema (Pressel & Duckett, unpublished). Gemmae have also been observed on the protonema in culture (Whitehouse, 1987).

A form with rounded leaf apices was discovered at a single site in Surrey in 1991 and has been described as var. *lingulatus* (Edwards *et al.*, 2000). It occurred on beech and Turkey oak and appears to be a stable genetic variant, but has not been found in any additional localities.

Oceanic Temperate. An Atlantic species, in W Europe from Spain and Portugal to the Faeroes, S Scandinavia, eastern Germany and Switzerland, doubtfully in Greece (Corfu). Azores, Madeira, Canary Islands. North-eastern N America.

M.C.F. Proctor, rev. T.L. Blockeel

