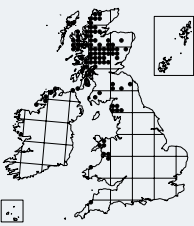


# *Gymnomitrium concinnatum*

Braided Frostwort



**Identification** *G. concinnatum* is very small, forming lax or dense mats or turfs of upright or prostrate stems. Occasionally it forms dense cushions. It is usually greenish- or yellow-brown, often with reddish tints and frequently silvery because of the colourless margins to the leaf. The shoots are very small, up to 0.5 mm wide and 15 mm long, almost round in cross-section, and only slightly club-shaped. Leaves are less than 1 mm long, and densely overlap and appress to the stem. They are bilobed with a short, open notch to one-third of the leaf length, but usually less, and short, acute lobes which are sometimes very shortly and abruptly pointed. Observing the shape of the leaves is made easier by drying and carefully breaking the stem to reveal a leaf tip.

**Similar species** Easily distinguished from *Marsupella* (pp. 155–161) by the shoots rounded in cross-section, with appressed and overlapping leaves completely hiding the stem, and the usually colourless margins of the leaves. *G. obtusum* (p. 163) has blunt lobes, an acute notch closed at the base, and more often occurs in dense, grey-green cushions. *G. apiculatum* (Paton, p. 337) is very similar to small, dark forms of *G. concinnatum*, but is often tinted red-green, has short, sharply pointed lobes (often eroded), thinner, colourless margins and the leaves are less densely appressed and overlapping. *G. corallioides* (Paton, p. 333) has grey, club-shaped shoots on which the leaves are soon eroded and very difficult to see, even when dry. It tends to grow on very friable rock at high altitudes.

**Habitat** A montane species of rocks and mineral soil in a variety of sites, both exposed and sheltered. It is most frequent in the hepatic-rich crust with least willow (*Salix herbacea*) that forms at the margin of very late-lying snow, or on gravel terraces in fell fields, but it also occurs lower down on crags, in gullies and in scree. Usually high in the mountains with sporadic occurrences on lower ground in north and west Scotland.