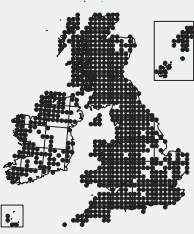


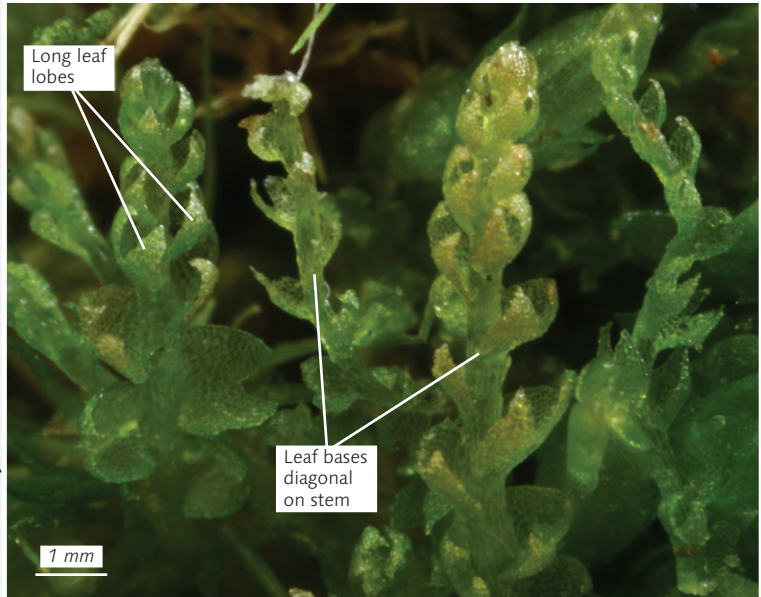
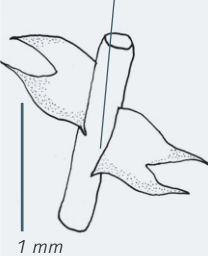
# *Cephalozia bicuspidata*

Two-horned Pincerwort

Key 56



Leaf insertion runs diagonally across stem



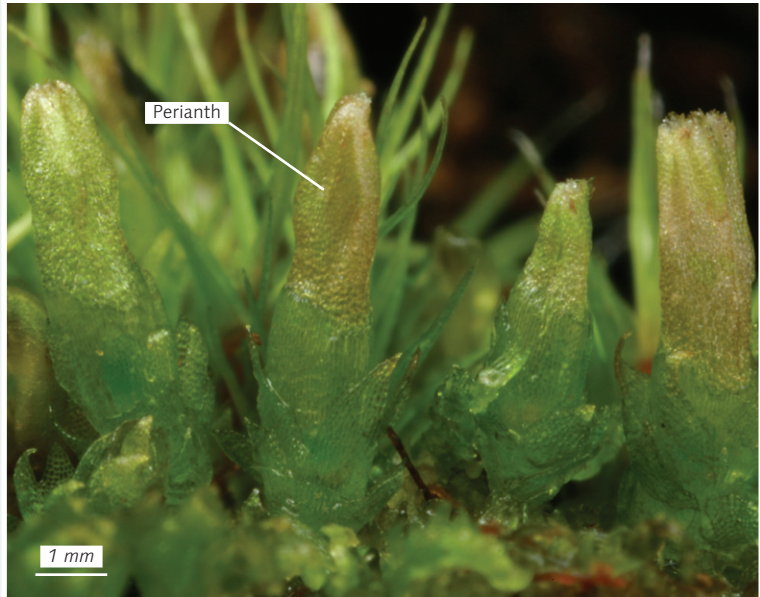
## Identification

*Cephalozia* species can be difficult to distinguish from each other. They are small, translucent, with 2-lobed leaves and no underleaves. Sexuality and the characters of bracts and perianths are crucial for identification; female shoots are generally prominent if present, but male shoots, identified by the sack-like bracts surrounding spherical male organs, are rather inconspicuous. Pure patches are much more likely to include fertile shoots than are isolated shoots growing among other bryophytes, so should be targeted for collection. More than one *Cephalozia* species may sometimes grow together, which can present interesting challenges.

*C. bicuspidata* is the commonest species, and grows in a wide range of habitats. Learning its distinctive features thoroughly will enable the presence of other *Cephalozia* species to be more readily recognized. Its shoots are about 0.5–1.5 mm wide, with leaves rather less than 1 mm long and wide. It has leaves that run diagonally across the stem, unlike those of most *Cephalozia* species, which run along the stem. Shoots of *C. bicuspidata* may be extremely slender, but still have these characteristic diagonally inserted leaves. It is often green, but may have red, brown or even almost black pigmentation and usually has deeply divided leaves, with sharply pointed lobes. Male and female organs occur on the same shoot, so *C. bicuspidata* is often fertile, with large female bracts that are sometimes toothed; the perianth mouth is sharply toothed and these teeth may be several cells long.

## Similar species

*C. leucantha* (Paton, p. 108) is small (shoots 0.2–0.4 mm wide), almost white to pale or yellowish-green, with minute (0.2 mm long and wide), distant leaves that often have an upper lobe that is larger than the lower one. Unlike *C. bicuspidata*, *C. leucantha* is dioicous. It grows in peatlands (e.g. on the sides and banks of ditches



and streams), and more rarely on rotting wood in the north and west. *C. ambigua* (Paton, p. 100) is restricted to a few high mountains in Scotland. Like *C. bicuspidata*, it has diagonally inserted leaves extending to the cells that form the midline on the upper surface of the stem. This feature, which can easily be seen through a hand lens, distinguishes *C. bicuspidata* and *C. ambigua* from all other British members of the genus. *C. ambigua* is very small (shoots less than 0.5 mm wide, with leaves 0.3–0.4 mm long and wide), but can only be confidently distinguished from small *C. bicuspidata* by microscopical measurements of its smaller bract, leaf and outer layer of stem cells.

*Cephaloziella* species (pp. 104–108) are generally smaller, more opaque plants, and many have underleaves. *Cladopodiella francisci* (p. 99) has shallowly lobed leaves, underleaves and oil bodies. The pale *Pleurocladula albescens* (p. 100) has large, distinctive underleaves, as does *Hygrobiella laxifolia* (p. 101).

**Habitat** *C. bicuspidata* is widely distributed in a range of acidic habitats that overlap most other British *Cephalozia* species. It is found on organic substrates such as peat and rotting wood, as well as damp, inorganic mineral soils and damp rocks. *C. bicuspidata* is occasionally found in limestone districts where earth banks are leached by water.