**Scapania undulata**  
Water Earwort

This typically large (shoots 1.5–5 mm wide and often several centimetres long; leaves 1–3 mm long), flaccid-looking *Scapania* has rounded leaf lobes appressed to each other, a straight keel, a front lobe that does not run down onto the stem and a back lobe that does. It is usually dark green, but may be bright mid-green, reddish- or yellowish-green; some forms in exposed places are bright purple.

*S. undulata* is very variable and could be confused with *S. irrigua* (p. 173). However, *S. undulata* has appressed leaves and a back lobe that runs down onto the stem, whereas *S. irrigua* lacks these two features. *S. undulata* might also be confused with two rare species, and can only be reliably distinguished using microscopic characters, although field characters may suggest their identities: *S. paludicola* (Paton, p. 368) has a very strongly arched keel and occasionally brown gemmae (usually absent), whilst *S. uliginosa* (p. 177) has front lobes that run well down onto the stem, a strongly arched keel and shoot tips that curve backwards. Generally, if a *Scapania* from a very wet place does not perfectly match another species, it is likely to be *S. undulata*.

*S. undulata* is the commonest British *Scapania*, and often abundant in wet places. Its most typical habitats are rocks in streams and rivers, and flushes and springheads in the uplands. On springheads it often grows as great spongy mounds. It can also occur in a wide range of other habitats, including damp sand, gravel or soil on the sides of streams or ditches, in old quarries or in woodland. *S. undulata* sometimes grows on decaying logs in humid woodland, but this is an atypical habitat.