## Pottiales

## Tortula subulata

Awl-leaved Screw-moss

Key 162



1 cm

Identification This species seems large to be a Tortula, although its shoots are short (about 5 mm tall). Each is composed of a rosette of large (3-6 mm long), bluntly oblong, bright, mid-green leaves which point well-away from the stem when moist. These are widest above the middle and have a shortly excurrent, yellowish nerve. The leaf margins have a pale border of long, narrow cells that contrasts with the rest of the leaf. Very long (up to 9 mm), narrowly cylindrical capsules are commonly produced in spring and summer, held on a tall (2-3 cm), stout, dark red seta. Several varieties of this species have been described (Smith, p. 346), which are best distinguished microscopically.

Similar species Encalypta species (pp. 555–559) also have large, broad leaves, but these tend to be a paler green and lack a border. *T. muralis* (p. 479) has shorter (2–3.5 mm long) leaves which have silvery excurrent nerves. Trichostomum brachydontium (p. 433) may also be misidentified as T. subulata, but T. subulata nearly always has capsules (or is beginning to produce them), and *Trichostomum brachydontium* lacks a border. The apparently rare Tortula schimperi (T. subulata var. angustata) (Field Bryology 94, 21–22) can only be distinguished from *T. subulata* by microscopical examination; T. schimperi has smaller mid-leaf cells and a leaf border 2 or 3 cells thick, whereas the leaf border of *T. subulata* is only 1 cell thick. *T. marginata* (p. 477) is much smaller than T. subulata, with leaves only 1.75–2.5 mm long. T. inermis (Journal of Bryology 31, 174–179) is known from one site in Scotland, and differs in having leaf margins recurved to the tip, and the marginal cells mostly wider than long. The leaves of Dialytrichia mucronata (p. 446) have thickened margins, and capsules are rare.

Habitat T. subulata grows on well-drained, often base-rich or lime-rich soil on rock ledges and wall tops, in crevices of rock, on steep banks by roads and in woodland, and by tree bases in the flood zone of streams and rivers.