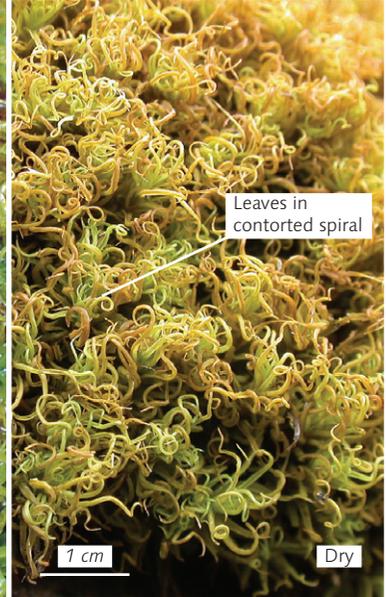
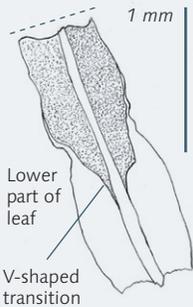
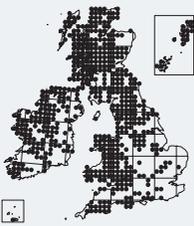


Tortella tortuosa

Frizzled Crisp-moss

Key 132, 186, 210, 220, 230



Identification

T. tortuosa grows in yellow-green tufts or turfs several centimetres in depth. When moist, the long (up to 6–7 mm), narrow leaves have wavy margins. When dry, the leaves shrivel into a distinctive, contorted spiral. Pulling off a few leaves with the fingernails reveals the abrupt V-shaped transition between the colourless basal cells and the upper cells, visible through a hand lens.

Similar species

Few other mosses can be confused with large, typical plants of *T. tortuosa*. Fragile-leaved forms, which occur occasionally in upland areas, are similar to *T. bambergeri* (p. 429). Small tufts in gorges may look similar to *Trichostomum tenuirostre* (p. 435) and non-fertile *Diphyscium foliosum* (p. 338), which are darker green and lack the V-shaped cell transition of *Tortella*. Young plants on stone are similar to *T. inflexa* (p. 431), but have spreading rather than vertically held leaves. Forms growing on the ground are similar to *Pleurochaete squarrosa* (p. 438), but that has its leaves bent back from a sheathing base. The uncommon *T. densa* (Smith, p. 281) has its upper leaves curled and nearly erect when dry (not strongly curled and contorted, as in *T. tortuosa*). It forms dull green patches or tufts. The rare *T. fragilis* (Smith, p. 281) also has leaves that are rigid and almost straight when dry; most lose the tip, which is very fragile. Note, however, that *T. tortuosa* usually has some broken leaves, and *T. bambergeri* usually also has many broken leaves. Young leaves of *T. fragilis* that have not yet lost the tip have a distinctively bristle-shaped tip.

Habitat

A strong calcicole, favouring limestone districts, but also growing on base-rich sandstone and calcareous dune sand. *T. tortuosa* may be found as tufts on boulders, limestone walls, scree or limestone pavement, as larger patches on cliffs or in gorges, or forming turfs in calcareous or dune grassland. Colonies on rock tend to be found in more humid positions than *T. bambergeri* and *T. nitida*.