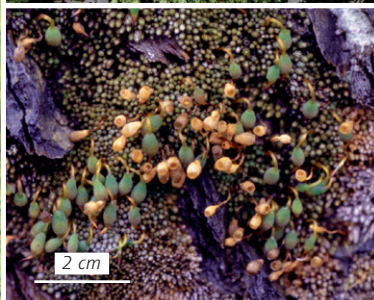
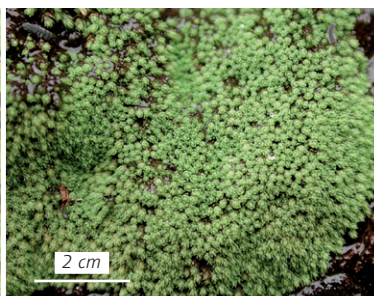
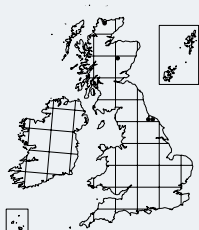


Mielichhoferia elongata

Elongate Copper-moss



Identification Forms very dense, often extensive, somewhat glossy, glaucous, yellow-green patches (sometimes blackened by its toxic environment), which are rusty brown below. Shoots grow up to about 1 cm tall. Opening a cushion reveals many years of annual growth zones. Individual stems are slender and very fragile, with small, erect, appressed and overlapping leaves that are 0.4–0.5 mm long, narrowly egg-shaped, finely and weakly toothed above and have an acute tip. The nerve is quite broad, but ends well below the tip. Capsules are rarely produced, as most contiguous patches are of one sex. Setae are short, yellowish and strongly curved in the upper part, so the distinctive, fawn, pear-shaped capsules lie more or less horizontally on the surface of the cushion.

Similar species Most similar in leaf structure to species of *Pohlia* (pp. 603–611) or *Bryum* (pp. 581–599), but in colour and dense tufting is reminiscent of *Conostomum tetragonum* (p. 632), which differs in its narrower leaves with excurrent nerve and 5-sided shoots. The combination of habit and habitat means that *M. elongata* is only likely to be confused with its rarer relative *M. mielichhoferiana* (Smith, p. 591). This has narrower leaves that tend to point in one direction and forms smaller, more open patches; its individual shoots are more robust. It has longer, more erect, reddish setae, but these have never been found in Britain. It is less obvious than *M. elongata* and more closely resembles *Pohlia* species, so is quite possibly overlooked.

Habitat *M. elongata* is a species of cool, humid sites, often in shade, and restricted to rock crevices and clefts in extremely acidic, metal-rich rocks. Regarded as a copper-loving moss, at its Yorkshire site it is found on exposed ridges of extremely iron-rich Liassic shales. Metalliferous sites where it is likely to occur can often be identified by the discoloured rock. However, *M. elongata* is apparently absent from mine workings and areas of spoil. *M. mielichhoferiana* also grows on metal-rich rock in the mountains.