**Weissia longifolia**
Crisp Beardless-moss

**Identification**
This is different from the more familiar *W. controversa* as it has spherical capsules that do not shed their lid on a very short seta hidden by long, sheathing leaves that arise from beside the base of the seta. These short (less than 1 cm tall), long-leaved (up to 4 mm), fertile shoots are mixed in among short-leaved (about 2.5 mm), non-fertile shoots in quite dense tufts, and a tuft may need to be broken up to find the capsules. The yellow-green colour and curled leaves when dry are typical of *Weissia*, but also make the tufts look like a *Trichostomum* or *Tortella* species. Two varieties are recognized: var. *longifolia* and var. *angustifolia*. A microscope is needed to distinguish them.

**Similar species**
The spherical capsules and very short setae are shared by three rarer British species. *W. sterilis* (p. 426) grows in tall (up to 2 cm), loose tufts of branched stems, usually with several capsules per plant. Shoots of *W. multicapsularis* (Smith, p. 273) show an abrupt transition from short, spreading lower leaves to long, erect upper leaves surrounding the hidden capsule. It grows on disturbed, non-calcareous soil. The very rare *W. levieri* (Smith, p. 275) resembles *W. longifolia*, but its hidden capsules shed their lid. It grows on bare, calcareous soil in unshaded, south-facing places near the coast. The very rare and probably extinct *W. × mittenii* (Smith, p. 273) differs in its capsule being held almost clear of the leaves. *Phascum cuspidatum* (p. 486) has shorter, wider leaves with an excurrent nerve. *Acaulon muticum* (p. 492) has shorter, wider leaves that come together at the tip to completely hide the capsules, and is brown rather than yellow-green. *Trichostomum brachydontium* (p. 433) and *Tortella flavovirens* (p. 432) have plane leaf margins.

**Habitat**
Var. *longifolia* grows on damp, non-calcareous ground, especially stubble fields. Var. *angustifolia* favours drier, lime-rich places, particularly calcareous grassland and disused limestone quarries and chalk pits.

Photos David Holyoak (left) & Fred Rumsey (right) Drawings Richard Lansdown Text Sam Bosanquet