Rhynchothestegium rotundifolium
Round-leaved Feather-moss

Identification
This smallish to medium-sized, irregularly branched moss has ascending branches. Its very broad leaves are distinctive. They are circular to broadly oval or egg-shaped, to 1.5 times longer than wide or a little more (about 3.5 mm long and 2.5 mm wide), but sometimes almost as wide as long, and terminate in a broad, short point. They are erect or spreading, only slightly concave, so that the shoots are never cylindrical. When dry, they become distinctly shrunken and twisted, exposing the stem. The leaves have a single nerve. Capsules (1–1.5 mm long), which are often present, have a curved, oblong outline and a beaked lid. The seta is smooth.

Similar Species
Many other pleurocarps with similarly broad leaves are either aquatic (e.g. some species of Hygrohypnum, pp. 730–734), or have strongly concave leaves. In R. confertum (p. 761), the leaves are about twice as long as wide and not shrunken and twisted when dry. Oxyrrhynchium hians (p. 768) has rather broad leaves, but they are not much altered on drying, and its shoots are normally pinnately branched.

Habitat
R. rotundifolium is very rare in Britain and is known only from two sites in calcareous districts where it grows on roots and tree bases and on stones. On the continent it is often associated with historic buildings. This species should not be collected.