## Orthotrichum rivulare/sprucei

River/Spruce's Bristle-moss

Key 275



O. rivulare





O. sprucei



Identification These two riparian Orthotrichum species look alike. Both are dark, almost blackishgreen, have a blunt leaf tip, and tend to be encrusted with silt. O. rivulare grows as irregularly branched tufts, usually 1-3 cm tall, whereas O. sprucei forms patches of less than 1 cm tall shoots. The leaves of both species are 3-4 mm long. With a 20 hand lens it is possible to see that the leaf cells of O. sprucei are considerably larger than those of O. rivulare or O. affine. O. rivulare and O. sprucei both have dark brown ripe capsules with 8 reflexed outer peristome teeth. Unripe capsules (2 mm long) are partly covered by a hairless, green calyptra.

Similar species Various other Orthotrichum species grow on riverside trees, albeit above the zone of regular inundation. None has the blunt leaf tip of O. rivulare and O. sprucei. O. affine (p. 647) on riparian trees can become dark green, like O. rivulare and O. sprucei, in which case careful checking of the leaf tip and stomata on the capsules may be necessary. O. cupulatum (p. 657) is most like large O. rivulare, but differs in its acute leaf tip and 16 erect outer peristome teeth. Syntrichia latifolia (p. 501) is another blunt-leaved acrocarp of silty trees; its leaves are much broader and rounder. Schistidium rivulare (p. 507) often has curved leaves, and its capsules are not furrowed when dry.

Habitat O. rivulare and O. sprucei both grow on trees by silty rivers; O. rivulare is also sometimes found on riverside rocks or masonry. In general, O. sprucei is the rarer plant, as it is restricted to very silty zones of large lowland rivers. However, it can be abundant.