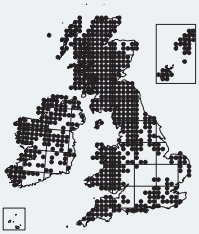
Sphagnum capillifolium subsp. *capillifolium*/subsp. *rubellum*

Acute-leaved/Red Bog-moss

Section Acutifolia



Stem leaf
(subsp. *capillifolium*)

Identification

S. capillifolium is split into two subspecies, though elsewhere in Europe and North America, these are interpreted as full species. Intermediate forms occur, so not all specimens will be identifiable to sub-species. However, typical examples of the two subspecies differ in several characters, and can be identified in the field. Shoots of both sub-species are small to medium in size. The plants are all or mostly red, except if shaded, when they are green.

S. capillifolium subsp. *capillifolium*

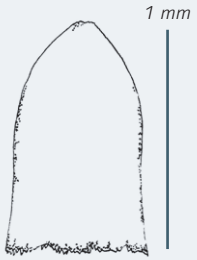
Occurs in dense, firm, sometimes large hummocks. Individual shoots are often very slender, but packed tightly together, with convex to hemispherical capitula; hence the surface of the hummock is bumpy, like cauliflower florets, not smooth. Hummocks are so dense that it is difficult to extract single shoots with your fingers. Branch leaves are not (or scarcely) in straight lines and are straight (not turned to one side). On moist shoots, most branch stems cannot be seen through the branch leaves. Spreading branches are long, with a tapering, down-turned, white tip, consisting of elongated leaves without any pigmentation. Stem leaves are triangular at the tip, more than 1.2 mm long. Capsules are frequent.

S. capillifolium subsp. *rubellum* (*S. rubellum*)

Grows in extensive, loose carpets or in soft hummocks from which it is easy to extract single shoots by hand. Capitula are almost to markedly flat-topped and stellate. Some upper spreading branches are curved near the tip, as viewed from above, with leaves in straight lines, and turned to one side, especially towards the branch tip. On moist shoots, most branch stems are clearly visible through the branch leaves. If spreading branches have a white tip, this does not consist of elongated leaves. Stem leaves are somewhat rounded at the tip, less than 1.2 mm long. Capsules are rare.

Photos Gordon Rothero (above left) & Des Callaghan *Drawings* Sharon Pilkington
Text Andy Amphlett & Sandy Payne

Stem leaf
(subsp. *rubellum*)



Similar species

As a species, the highly coloured forms on bogs are easily identified. No other all-red Acutifolia *Sphagnum* is likely in such a habitat. However, elsewhere, more care is required when making an identification. Subsp. *rubellum*, with its more or less flat-topped stellate capitula and branch leaves in straight lines, may suggest *S. warnstorfii* (p. 287) or *S. russowii* (p. 285). The former has straight branches with straight leaves, is usually vividly crimson and grows in base-rich flushes. When dry, the branch leaves of subsp. *rubellum* are slightly spreading, but very few are even slightly recurved, whereas in *S. warnstorfii* most dry branch leaves are obviously recurved. *S. russowii* has a terminal bud, is often a larger and stiffer plant, with fascicles more spread out along the stem, and at least some stem leaves are truncate across the tip. The rounded capitula of subsp. *capillifolium* may suggest *S. quinquefarium*, but that species has most fascicles with 3 spreading branches. Green forms of *S. capillifolium* in woodland can be confirmed by examining the shape of the stem leaves.

Habitat

The distribution and relative abundance of the two subspecies is not well-known, and many records are for the aggregate species. Subsp. *rubellum* is thought to be the commoner in the British Isles, while in Europe, subsp. *capillifolium* is the more boreal-continental of the two subspecies. *S. capillifolium* grows on bogs and heathland, in wet woodland, on well-drained mineral soils and shallow peat in humid places, for example in native pinewoods and on north-east- to north-west-facing, heather-dominated banks.