

Leiocolea rutheana

Fen Notchwort



Identification This very rare liverwort has been discovered at a handful of new sites in recent years, so its identification features should be learnt by habitat surveyors. It is so rare that it must not be collected from known sites. It is a medium-sized or large leafy liverwort (shoots 2–5 mm wide) that grows through or over brown mosses in rich fens. It is the same pale green colour as other *Leiocolea* species, sometimes with brown tinges, and has the sharply pointed to rounded, bilobed leaves (up to about 3 mm wide and 2–3 mm long) and strong scent typical of the genus (don't confuse with the peppery smell of *Lophocolea bidentata* though). It is monoicous, unlike most *Leiocolea* species, and the backs of the leaves diagnostically run down the stem below the curve. Var. *rutheana* is distinctive in the field thanks to its large underleaves with long teeth, each composed of a row of cells; var. *laxa* has small underleaves.

Similar species Fertile plants differ from *L. bantriensis* (p. 124) in being monoicous, not dioicous, so sack-shaped male bracts should be sought below the perianth. Non-fertile var. *rutheana* can be provisionally identified by its large underleaves with long teeth, but fertile material would be needed to confirm a new colony. The only other monoicous *Leiocolea* is *L. gillmanii* (Paton, p. 218). *L. gillmanii* is rare on moist, calcareous rocks, in calcareous soil in flushes, fens, beside watercourses and in dune-slacks in northern Britain. The backs of the leaves do not run down onto the stem in *L. gillmanii*.

Habitat Both varieties of *L. rutheana* grow among *Campyllum stellatum*, *Scorpidium* species, *Tomentypnum nitens* and other mosses that are characteristic of rich fens at a very small number of strongly calcareous British and Irish fens. It is worth looking carefully for *L. rutheana* if you find *Tomentypnum*. All but one of the colonies in Norfolk are now extinct.