

Spike-rushes *Eleocharis* ~ field key

The UK has seven species:

Two robust species:

- *Eleocharis palustris* Common Spike-rush
- *Eleocharis mamillata* subsp. *austriaca* Northern Spike-rush

Two medium-sized species:

- *Eleocharis uniglumis* Slender Spike-rush
- *Eleocharis multicaulis* Many-stalked Spike-rush

One smaller species:

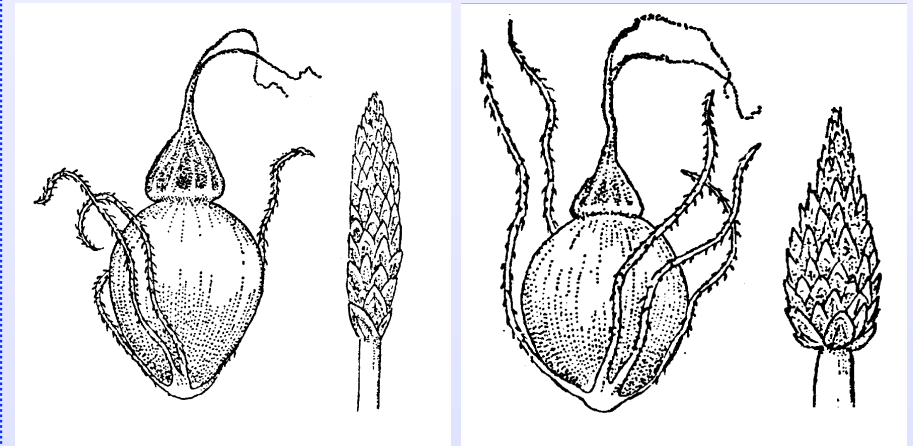
- *Eleocharis quinqueflora* Few-flowered Spike-rush

Two small species:

- *Eleocharis acicularis* Needle Spike-rush
- *Eleocharis parvula* Dwarf Spike-rush

The key overleaf requires *flowering/fruiting stems*. For *vegetative* material there is advice on the website at

www.edencroft2.demon.co.uk



nuts, style-bases, bristles and spikelets of
E. palustris

E. mamillata subsp. *austriaca*

Key to fertile spike-rushes

- 1a** two basal glumes sterile (i.e. not enclosing flowers/fruit), each enclosing half of base of spikelet or little more; stigmas 2 only; stems typically more than 1 mm diameter, often to 40 cm tall **2**
- 1b** single sterile basal glume, enclosing most, or all, of base of spikelet; stigmas 2 or 3; stems often less than 1 mm diameter, usually less (often much less) than 40 cm tall **3**
- 2a** spikelets various shapes, rarely strongly conical in outline; style-base greatly swollen; bristles mostly 4; stem-base often red-flushed (common) .. *palustris*
- 2b** spikelets often conical in outline; style-base not greatly swollen; bristles mostly 5(-6); stem-base not red-flushed (rare) *mamillata*
- 3a** stigmas 2; nuts 2-sided or oval in section *uniglumis*
- 3b** stigmas 3; nuts bluntly 3-sided..... **4**
- 4a** more robust plants: mature stems often more than 10 cm and more than 0.5 mm diameter **5**
- 4b** small and slender plants: mature stems rarely more than 10 cm and up to 0.5 mm diameter **6**
- 5a** uppermost sheath obliquely truncate, with ± acute point; lowest glume ca. ¼ length of elongated spikelet (which has 10+ glumes or nuts); style-base with a 'neck' at junction with nut..... *multicaulis*
- 5b** uppermost sheath ± transversely truncate; lowest glume ½ length or more of shorter spikelet (which has up to 7 glumes or nuts); style-base narrow and confluent with nut..... *quinqueflora*
- 6a** rhizomes not ending in a tuber; stems very slender (to 0.3 mm); spikelets with up to 15 glumes; lowest glume up to ½ length of spikelet; not on estuarial mud *acicularis*
- 6b** rhizomes whitish and ending in a small tuber; stems up to 0.5 mm diameter; spikelets with up to 9 glumes; lowest glume ½ or more length of spikelet; only on estuarial mud (very rare) *parvula*

Notes

When counting bristles remember that in the flowers there are also the three filaments of the stamens arising from the base of the nut. They may persist as thin hair-like structures and be difficult to distinguish from bristles without a x20 lens and good light.

The filaments lack the minute rearward-curved hooks characterising bristles.

Bristles arise from a narrow collar at the base of the nut, whilst the filaments arise from between this collar and the nut.

Range and habitat

Eleocharis palustris Common Spike-rush: frequent and widespread; all sorts of marshy places

Eleocharis mamillata subspecies *austriaca* Northern Spike-rush: very local in S Scotland and N England; oxbow pools, ditches, etc., by upland rivers; sometimes in calmer sections of the river itself

Eleocharis uniglumis Slender Spike-rush: locally frequent; saltmarshes, sheltered estuary mud, and other coastal habitats; rarer inland in mineral-rich mires and seepages, open marshes, etc.

Eleocharis multicaulis Many-stalked Spike-rush: locally frequent in the west; shallow pools and ditches in basin mires, both flowing and stagnant; seepage areas on valley-sides, etc.

Eleocharis quinqueflora Few-flowered Spike-rush: frequent in the west and north; mainly upland, in mineral-rich seepages, etc.

Eleocharis acicularis Needle Spike-rush: local, mainly in the south; various open wet places - can grow submerged in rivers, etc.

Eleocharis parvula Dwarf Spike-rush: very local indeed: south coast England; Cardigan Bay; Dornoch Firth; Co. Londonderry; estuarial mud, shallow tidal pans in saltmarshes

For much more information on identification, etc., visit

www.edencroft2.demon.co.uk

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[There is a contact page on the website.]