

Slender Bedstraw

Galium pumilum

Slender Bedstraw is part of the Bedstraw (Rubiaceae) family. It is a spreading plant growing up to 20-30 cm tall with a smooth four-angled stem. The 14-18 mm long lanceolate narrow leaves are arranged in whorls of 5-7 up the stem, and have mucronate tips with a few backward-pointing prickles along the edge. Small cream flowers, up to 3 mm across, are clustered in a long open terminal spikelet. The fruits are round, 1.5 mm in diameter, hairless with dome-shaped warts.



© Jen Gilbert

Limestone Bedstraw *Galium sternerii* is often confused with Slender Bedstraw. However, Slender Bedstraw is more compact and mat-forming with shorter flowering shoots of 10-20 cm. The leaves of Limestone Bedstraw are similar with mucronate tips, but have a greater number of backward-pointing prickles. The fruits are slightly smaller, 1.3 mm in diameter, hairless and with pointed warts. Slender Bedstraw is southern in distribution, whereas Limestone Bedstraw has a northern distribution and is common on the carboniferous limestone of the Yorkshire Dales.

Lifecycle

Slender Bedstraw is a mat-forming perennial plant and is thought to spread from rhizomes or stolons just below the moss layer of the grasslands where it occurs. Each flower only produces two seeds, thus it has a low reproduction rate. The seed may be short-lived like other members of the Bedstraw family.

Habitat

Slender Bedstraw prefers short swards associated with thin calcareous soils. Ideal conditions are where the vegetation is kept naturally open through exposure or on anthills which may be slightly desiccated. Disturbance by grazing and mowing also creates suitable conditions. It can also grow on limestone spoil heaps.

Plants associated with Slender Bedstraw include Quaking Grass *Briza media*, Ladies Bedstraw *Galium verum*, Rough Hawkbit *Leontodon hispidus*, Fairy-flax *Linum catharticum*, Bird's-foot-trefoil *Lotus corniculatus* and Salad Burnet *Poterium sanguisorba*.

Distribution

Historical records are unreliable and changes in distribution are difficult to assess due to mis-identification with Limestone Bedstraw in the past. Populations of Slender Bedstraw are restricted to the chalk soils of the North Downs, South Downs and Salisbury Plain, and the Limestone soils of the Mendip Hills and Cotswolds. It is also very rarely found on the Oxfordshire part of the historical Berkshire Downs and in the Chilterns.

GB status and rarity

Endangered

Protection under the law

This plant is included as a species "of principal importance for the purpose of conserving biodiversity" under Section 41 (England) of the Natural Environment and Rural Communities Act 2006.

It was classified as Endangered in both the Great Britain Vascular Plant Red List and in the England Vascular Plant Red List.

Survey method

Slender Bedstraw should be counted as individual plants if they can be separated from one another, or as clumps or mats where separation is not possible, during June-July when in flower. Individual plants may be difficult to identify as Slender Bedstraw has a scrambling nature. In small populations, it may be worth counting the number of flowering stems, and noting an indication of abundance within a measured area if plants are widely spread out.

Reasons for decline

Slender Bedstraw is thought to have declined due to lack of grazing which allows the sward to become coarse and rank and can lead to the development of scrub woodland. Intensive management, such as close mowing or overgrazing alongside high levels of recreational management can also lead to a decline in Slender Bedstraw as it is unable to flower and set seed replenishing the soil seed bed.

Habitat management for Slender Bedstraw

Slender Bedstraw prefers thin, short light and airy vegetation, with an abundance of brashy base-rock material. Ideal conditions seem to have 20-25% bare ground which minimises competition from coarser growing plants and provides areas for seeds to germinate directly adjacent to the mother plant.

Scrub management to remove any canopy layer, and reinstatement of mixed grazing - cattle, horses, sheep and rabbits - in early spring and late summer will reduce rank growth.

Mowing or strimming can be used as a form of management around plants, but should not be too close to catch the mother plant. Around the plant, strimming should be as short as possible scalping away 20-25% of the vegetation to leave bare ground. Care should be taken not to scalp root plates.

Where sites have high numbers of visitors, reducing recreational activities may allow Slender Bedstraw to grow and flower.



Slender Bedstraw distribution across Britain and Ireland. The data used to create this map has been provided under license from the Botanical Society of Britain and Ireland (BSBI) and accessed from the Society's online database.



© Jen Gilbert