

The Bedstraws

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Smooth Bedstraw, *Galium mollugo* L.

Catchweed bedstraw, *Galium aparine* L.

False cleavers, *Galium spurium* L.

The bedstraws and false cleavers are weeds mostly of hay fields and pastures, where they are highly competitive. Livestock usually avoid these weeds, although some will eat them. Bedstraws are slightly toxic. They give hay a slight odor. Bedstraws and false cleavers all look very similar having square stems with whorls of six to eight small narrow leaves, except that smooth bedstraw does not have the backwards curving stiff hairs on its leaves and stems. Smooth and Catchweed bedstraw typically has white flowers, while false cleavers typically has yellow to yellow-green flowers. All have very small flowers with four petals. Smooth bedstraw is a perennial plant with a branching taproot and woody rhizomes.



Catchweed bedstraw stem and leaves (Cornell Univ.).



Catchweed bedstraw flowers (Univ. of Wisc)

Although bedstraws respond to high fertility, in particular phosphorus, they tolerate low pH and low fertility well. As a result, they are most problematic in poorly maintained fields and pastures. Catchweed bedstraw and false cleavers mostly germinate in the spring and fall, but can germinate in the summer as well. Catchweed bedstraw and false cleavers that emerge late in the season will overwinter as winter annuals and produce seed in the spring. The seeds of smooth bedstraw are viable mostly for one year, and the other two species are viable for only two years. Seed can emerge from deep in the soil, about 2 inches and sometimes more. Plants prefer moist conditions and sun, although they can adapt to shady conditions.

Bedstraws and false cleavers can be controlled by intensively managing fields and pastures with the proper soil pH, good fertility, and multiple harvests each season. Since smooth bedstraw seeds die in one year, prevent plants from producing seed for one year. Then in the second year use herbicides or crop rotation to kill the perennial bedstraw. Annual catchweed bedstraw and false cleavers can be controlled by plowing under seed and rotating to a hay crop for a couple of years. The most effective herbicide is triclopyr. However, since this herbicide

remains active in the manure of animals consume treated hay or pasture, it is only labeled for use in pastures and non-crop areas. If hay is treated with triclopyr, the manure from those animals may affect broadleaf plants wherever the manure or compost is spread.

Bedstraws and false cleavers are a nectar source for beneficial insects. Bedstraws are host plants for various herbaceous insects.

References:

- Cornell Weed Profiles, <https://cals.cornell.edu/weed-science/weed-profiles>
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- “Controlling Smooth Bedstraw in Hayfields and Pastures”, Univ. of Maine, <https://cpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/e/1628/files/2016/03/IPM-Controlling-Smooth-Bedstraw-in-Hayfields-1c904e9.pdf>
- “Smooth Bedstraw”, Victorian Resources Online, [https://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/weeds_smooth-bedstraw#:~:text=Ottauquechee%20NRCD%202002\).-G.,certain%20times%20of%20the%20year.](https://vro.agriculture.vic.gov.au/dpi/vro/vrosite.nsf/pages/weeds_smooth-bedstraw#:~:text=Ottauquechee%20NRCD%202002).-G.,certain%20times%20of%20the%20year.)