

Goosegrass

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Goosegrass *Eleusine indica* (L.) Gaertn.

Also known as: white crabgrass, bullgrass, crowfootgrass, crowsfoot grass, Indian goosegrass, wiregrass and silver crabgrass.

Classification and Description

Goosegrass is a member of the Poaceae family or grass family and is a summer annual. The most obvious characteristic of goosegrass is its very flat stem. Another unique characteristic of goosegrass when compared to other weedy grasses is the very white color of the crown and lower stems as the plant matures. Goosegrass can grow to heights of 2½ feet. Tennessee producers sometimes misidentify it as a crabgrass. The reason for this is that goosegrass and crabgrass have similar emergence patterns – both have membranous ligules and similar-shaped leaves. However, goosegrass is darker green, with a whitish, silvery color near its flattened stem base. Another difference between the two grass species is that crabgrass has hair on the upper leaf surface and goosegrass does not. Goosegrass typically emerges from April to September and reproduces by seeds.

Historical

Goosegrass is native to Eurasia, but it has been a troublesome weed in Tennessee row crops for several decades. Goosegrass can be found throughout the state in agronomic crops, pastures, orchards, roadsides and waste areas. Goosegrass has some history of developing resistance to herbicides. In the Mid-South, there are biotypes of this weed that are resistant to the dinitroaniline herbicides like Treflan® and Prowl®. In Malaysia there are biotypes of goosegrass resistant to glyphosate and ALS-inhibiting herbicides. In Brazil, as well as Malaysia, there are biotypes of this weed that are resistant to ACC-inhibiting herbicides like Select®, Poast® and Fusilade®.

Weed Status and Injury

Goosegrass can be found across Tennessee in most agricultural fields, homeowner lawns, waste areas, roadsides and pastures. If it emerges with or shortly after a crop, it can be a very competitive weed. Even if it emerges late in the growing season, it can produce enough biomass to hinder harvest.



Identified by white crown and flat lower stems



Goosegrass emerging with cotton

Worldwide, it is considered to be one of the five most troublesome weeds and has been reported to be a problem for 46 different crop species in more than 60 countries.



Goosegrass competing with soybeans

Management Considerations

Goosegrass is a consistent problem in row-crop agriculture in most of the Mid-South. In Tennessee, goosegrass will emerge from April through August. This large window of potential emergence makes it difficult to manage. In-crop systemic herbicides like glyphosate will do a good job controlling what has emerged, but have no residual to control later emergence. The most consistent control of goosegrass can be achieved with a full rate of a herbicide applied preemergence, followed by a post emergence application. Please refer to Extension PB 1580, **Weed Control Manual for Tennessee Row Crops**, for information about goosegrass control with specific herbicides.

References

- Gleason, H. A. and A. Cronquist. 1963. Manual of vascular plants.
- Heap, I.M. 2005. International survey of herbicide-resistant weeds. www.weedscience.com.html.
- Holm, L. G., D. L. Plucknett, J. V. Pancho and J. P. Herberger. 1977. The world's worst weeds – distribution and biology. Honolulu: The University Press of Hawaii. Pp. 47-53.
- Lim, J. L. and J. Ngim. 2000. A first report of glyphosate-resistance goosegrass [*Eleusine indica* (L.) Gaertn] in Malaysia. *Pest Manag. Sci.* 56:336-339.

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