

Goosegrass

Solution Sheet

The Problem

Goosegrass (*Eleusine indica*) is a tough, dark-green, clumped summer annual, generally with a “whitish to silverish” coloration at the center of the plant, which is the source of another of its common names, “silver crabgrass”. It thrives in wet, compacted soils, such as those adjacent to cart paths or walkup areas to tees and greens. Goosegrass can withstand golf green mowing heights. It reproduces by seeds that germinate in spring when soil temperatures at 4-inch depth reach 63-65°F for 24 continuous hours. This often corresponds to the flowering of dogwoods and azaleas. Alternating warm and cool temperatures also highly favor germination, which is typically 2-4 weeks later in spring than crabgrass germination. Germination occurs when seeds are on the soil surface, but no germination occurs at 3-inch depths. Thousands of seeds are produced annually per plant, and these can remain viable for 6 or more years, are produced annually per plant. Goosegrass perennates in subtropical regions lacking sufficient yearly frosts to kill it. Herbicide resistance has been reported with the dinitroaniline herbicides, glyphosate, oxadiazon, fluazifop-ethyl and diquat, but only in isolated instances. Rotating between herbicides with different modes-of-action is the best means of preventing, or at least delaying, resistance occurrence.

What to Look For

Goosegrass is most frequently found in high-traffic areas where the turfgrass cover is thin. Stems are often compressed (flattened), originating from a central point and forming a mat-like rosette, but not rooting down at the nodes like crabgrass. Leaf blades are smooth on both surfaces, occasionally with a few hairs near the base, and have folded vernation. Leaf sheaths have white margins. A short-toothed, membranous ligule is visible at the base of the leaf blade, divided at the center. Auricles are absent. Often leaf blades are frayed by dull mowers and tips develop a whitish cast. Seedhead spikelets are in two rows on 2-13 branches, resembling a “zipper”, which form from mid-summer until frost. Flower branches are windmill-like in that they emerge from a common point.



Goosegrass in thinned turf with characteristic “zipper”-like seedhead (Envu).

The Solution

Preemergence Solutions

In warm-season turf, goosegrass control begins with an application of a preemergence herbicide. Key Envu solutions for preemergence control include Ronstar® and Specticle®. Both products should be applied prior to typically anticipated germination in late winter/early spring. Ronstar is the industry standard on warm- or cool-season turf. Ronstar can be sprayed or spread on dormant warm-season turf even before winterkill status has been confirmed since it can be sprigged into successfully. Ronstar on fertilizer can be used on cool-season turf and on non-dormant warm-season turf. Goosegrass control also has been excellent with Specticle, but should be used only on well-established turf that isn't affected by nematode damage, spring dead spot, insufficient establishment, winter kill, shade, etc. If these conditions exist, wait to apply Specticle until turf has recovered or consider Ronstar® instead.

Postemergence Solutions

For postemergence control of goosegrass, Revolver® and Tribute® Total can be used in bermudagrass and zoysiagrass. Other postemergence herbicides in bermudagrass and zoysiagrass golf turf include Sencor® tank-mixed with MSMA. Selective goosegrass control in seashore paspalum is currently unavailable, though spot applying rock salt is often used to control it. On cool-season turf, Acclaim® Extra is the preferred Envu option. On sites with traditionally heavy goosegrass populations, programs including both pre-and postemergence products are typically required for sufficient control.

Preemergence Goosegrass Control Options

Solution*	Rate (per acre)	Application Note
Specticle FLO	6.0 - 10.0 fl. oz.	Specticle is an excellent preemergence option for goosegrass control, plus outstanding control of other annual grassy and broadleaf weeds, in addition to annual forms of sedges. Apply late winter/ early spring prior to goosegrass germination. One application typically provides season-long control, however split applications should be considered in sub-tropical and tropical areas where goosegrass germination occurs over a much longer period. In addition, Specticle can be used in programs with Ronstar.
Specticle G	100-200 lbs.	
Ronstar FLO	2.5 - 3.8 qts.	Use only on dormant bermudagrass or zoysiagrass golf turf. Ronstar should be applied in late winter/early spring prior to germination and prior to turf green up. Ronstar FLO is often tank-mixed with a non-selective herbicide like glyphosate to control winter weeds in dormant turf and provides preemergence goosegrass and crabgrass control.
Ronstar on Fertilizer	1.5 - 3.0 lbs. ai	Ronstar should be applied in late winter/early spring, prior to germination. Ronstar is often impregnated on custom-blended fertilizers. Split applications should be used in sub-tropical and tropical areas. Ronstar is also labeled for use on bermudagrass sprigs during establishment.

*See label for additional details and restrictions regarding use in California.

Postemergence Goosegrass Control Options

Solution*	Rate (per acre)	Application Note
Revolver	4.4-26.2 oz.	Revolver provides postemergence control of goosegrass in bermudagrass and zoysiagrass. Revolver at lower rates is also labeled for use on bermudagrass greens. Repeat applications may be required. Do not apply on or adjacent to desirable cool-season grasses.
Tribute Total	3.2 oz.	Tribute Total provides postemergence control of goosegrass in bermudagrass and zoysiagrass. Tribute Total can also be used to control a wide variety of hard-to-control weeds like tropical signalgrass, doveweed, Virginia buttonweed, yellow and purple nutsedge, and dallisgrass. Include methylated seed oil (MSO) and ammonium sulfate in the spray solution. Make a repeat application when necessary, approximately 4-6 weeks after the first application. To prevent new goosegrass plants from emerging, apply this product as a tank mixture with Specticle FLO herbicide.
Sencor** 75%	0.33 - 0.66 lbs.	Water in immediately. When combined with MSMA on actively-growing bermudagrass, Sencor will control goosegrass as well as crabgrass, sandbur and dallisgrass. A repeat application 7-10 days following the first may be needed for control of mature plants. Apply only to vigorously growing turf not under environmental (e.g., moisture) stress. Some temporary (-1 week) discoloration may follow use. Do not use Sencor on turf mowed less than one-half inch.
Acclaim Extra**	3.5 - 28.0 fl. oz.	Acclaim Extra is labeled for use on cool-season turf as well as zoysiagrass for postemergence control of goosegrass, as well as crabgrass. Use lower rates on smaller weeds, higher rates on larger ones. See label for specific rate information depending on weed size. Repeat applications may be required.

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**Use not permitted in California.