

Lawn Burweed

Factsheet | HGIC 2323 | **Updated:** August 20, 2021

Nothing designates spring's arrival like walking barefoot on a lawn of lush, green grass. This pleasant experience can often turn into a painful, sticky situation with the presence of lawn burweed. Other names for this weed are spurweed and stickerweed. Lawn burweed (*Soliva sessilis*) is a winter annual that germinates throughout thin turf in the fall months as temperatures cool. It remains small and inconspicuous during the cold winter months. However, as temperatures warm in the early spring, lawn burweed initiates a period of rapid growth and begins to form spine-tipped burs in the leaf axils. The seed is contained within the hooked bur.

Description

Lawn burweed is a low-growing, freely branched winter annual. It has opposite, sparsely hairy leaves that are twice divided into narrow segments or lobes.

Leaves are approximately ½- to 1½-inches long and ¼- to ½-inch wide. It has small (¼ inch or less in width), inconspicuous flowers in the spring. It attains an overall diameter of 6 inches and a height of 3 to 4 inches. The most prominent identifying characteristic of lawn burweed is its spine-tipped burs, often hard to see but easily felt.



Lawn burweed (*Soliva sessilis*) leaves and fruiting head.

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Lawn burweed (*Soliva sessilis*) growth habit.

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Cultural Control

Maintain a healthy, dense lawn by fertilizing and liming according to soil test results and mowing at the proper height and frequency for the specific turfgrass in the lawn. Healthy lawn grasses can outcompete burweed for light, water, and nutrients and reduce the level of infestation. For more information on growing healthy turfgrass, see [HGIC 1201, Fertilizing](#)

[Lawns; HGIC 1205, Mowing Lawns](#); and [HGIC 1207, Watering Lawns](#).

Chemical Control

Post-emergence Control: The key factor to effectively controlling lawn burweed is to apply a post-emergence herbicide during the winter months of December, January, and February. The weed is smaller and easier to control during this time of year and has not yet developed the spine-tipped burs. Control is not impossible in March, April, and

May, but the spines have already formed by this time and will remain after the weed dies. Because lawn burweed is a winter annual, it will begin to die in late spring as air temperatures reach 90 °F. Once the weed has reached a more mature state, multiple herbicide applications may be necessary, which increases the potential for turfgrass injury. Dead or alive, lawn burweed poses a painful problem. The only solution to this is early identification and control.

Table 1. Turf Tolerance to Post-emergence Herbicides for Lawn Burweed Control.

Herbicide	Bermudagrass	Centipedegrass	St. Augustinegrass	Tall Fescue	Zoysiagrass
atrazine	D	S	S	NR	NR
(3- way) 2,4-D + MCPP + dicamba	S	I	I	S	S
metsulfuron	S	S	S-I	NR	S
thiencarbazone, iodosulfuron, & dicamba ¹	S	S	S ²	NR	S
<p>S=Safe at labeled rates I= Intermediate safety, use at reduced rates NR= Not registered for use on and or damages this turfgrass D=Fully dormant turf only. However, during the warmer winter weather of recent years, bermudagrass lawns have not gone fully dormant in South Carolina. Note: Do not apply post-emergence herbicides, except Celsius WG Herbicide, to lawns during the spring green-up of turfgrass. ¹ This mix of active ingredients requires the addition of 2 teaspoons of a non-ionic surfactant (that is, a wetter-sticker agent to aid in weed control, and added at 0.25% by volume) per gallon of water, such as Hi-Yield Spreader Sticker, Southern Ag Surfactant for Herbicides, or Bonide Turbo Spreader Sticker. ² Spot treatments to St. Augustinegrass at temperatures above 90 °F may cause temporary growth regulation.</p>					

A **three-way herbicide** may be used on bermudagrass, zoysiagrass, centipedegrass, St. Augustinegrass, and tall fescue. The active ingredients of a three-way herbicide typically include the

following three broadleaf weed killers: 2,4-D, dicamba, and mecoprop (MCPP). Products that contain a higher percentage of dicamba and mecoprop will more effectively control lawn

burweed. 2,4-D controls this weed less well.

Herbicides containing **2,4-D** should be applied at a reduced rate on St. Augustinegrass and centipedegrass to prevent damage to these lawns. If a second application is needed, apply the herbicide in spot treatments. Repeated applications of a three-way herbicide should be spaced according to label directions. Read the label for the rate to use on each turfgrass species. See Table 2 for examples of brands and products for use on residential lawns.

In addition to three-way herbicides, there are several other herbicides that can be used for lawn burweed control in home lawns. **Atrazine** may be used for weed control in centipedegrass and St. Augustinegrass. Atrazine applied in November will have post-emergence activity against newly sprouted lawn burweed seedlings and also will have pre-emergence activity against those that have not yet germinated during the fall. Do not apply atrazine to lawns in areas with a high water table. Do not apply atrazine herbicides within two times the width of the drip line of desirable hardwood trees and shrubs. See Table 2 for examples of brands and products for use on residential lawns.

The herbicide mix of **thiencarbazone, iodosulfuron, and dicamba**, as found in Celsius WG Herbicide, is selective to control many broadleaf weeds and several grass weeds in all four of the common warm-season grasses. It cannot be used in fescue lawns but can be used to remove fescue from warm-season lawns. Apply when lawn burweed is actively growing and again 2 to 4 weeks later. Adding a non-ionic surfactant, such as Southern Ag Surfactant for Herbicides or Hi-Yield Spreader Sticker Non-Ionic Surfactant, will increase control. Celsius

WG Herbicide is safe to apply during spring green-up of warm season grasses.

Metsulfuron, such as in Quali-Pro MSM Turf Herbicide, gives very good control of lawn burweed in bermudagrass, centipedegrass, St. Augustinegrass, and zoysiagrass lawns. Quali-Pro Fahrenheit Herbicide also contains metsulfuron along with dicamba. For these two professional products, a non-ionic surfactant, such as Southern Ag Surfactant for Herbicides, Hi-Yield Spreader Stickers non-ionic surfactant, or Bonide Turbo Spreader Sticker, is required at 2 teaspoons per gallon of spray mix for best control. A non-ionic surfactant will help the herbicide adhere to the leaves for increased penetration.

Do not apply metsulfuron to lawn if overseeded with annual ryegrass or overseed for 8 weeks after application. Metsulfuron may cause temporary yellowing of turfgrass. Do not apply metsulfuron to turfgrass under heat and drought stress. Do not plant woody ornamentals in treated areas for one year after the application of metsulfuron. Do not apply metsulfuron herbicides within two times the width of the drip line of desirable hardwood trees and shrubs. Do not apply metsulfuron herbicides when high temperatures are above 85 °F.

CAUTION: Most post-emergence herbicides should not be applied during spring transition (green-up of lawn) or when air temperatures exceed 90 °F as this may cause severe damage to the turfgrass. A newly seeded lawn should be mowed a minimum of three times before applying an herbicide.

Note: Read and follow all label instructions when using herbicides. Repeat applications 10 to 14 days apart may be required for acceptable control

by post-emergence herbicides. Do not mow within 48 hours after the application of most herbicides. Most post-emergence herbicides need to dry on the leaf surface before irrigation or rainfall occurs.

Pre-emergence Control: Isoxaben is a pre-emergence herbicide for control of lawn burweed, as well as many winter broadleaf weeds in bermudagrass, centipedegrass, St. Augustinegrass, zoysiagrass, and tall fescue. Apply isoxaben in late September to early

October before the winter weeds germinate. A repeat application may be needed 8 weeks later if there is a heavy infestation of weeds. Do not reseed or overseed within 60 days of last application, and do not apply to newly seeded lawns until the lawn has been mowed three times. Granular pre-emergence herbicides must be activated by ½ inch of rainfall or irrigation as soon as possible after application. See Table 2 for examples of brands and products for use on residential lawns.

Table 2. Herbicides to Control Lawn Burweed in Residential Turfgrass.

Brands & Specific Products	Herbicide Active Ingredients	% Active Ingredient in Product	Turfgrass Labeled for Use
Ferti-lome Weed-Out Lawn Weed Killer (Concentrate)	2,4-D Mecoprop Dicamba	5.88% 5.45% 1.21%	St. Augustinegrass Centipedegrass Bermudagrass Zoysiagrass Tall Fescue
Southern Ag Lawn Weed Killer with Trimec® (Concentrate)	2,4-D Mecoprop Dicamba	3.05% 5.30% 1.29%	St. Augustinegrass Centipedegrass Bermudagrass Zoysiagrass Tall Fescue
Bayer BioAdvanced Southern Weed Killer for Lawns Concentrate; & RTS ¹	2,4-D Mecoprop Dicamba	7.59% 1.83% 0.84%	St. Augustinegrass Centipedegrass Bermudagrass Zoysiagrass Tall Fescue
Bonide Weed Beater Lawn Weed Killer Concentrate	2,4-D Mecoprop Dicamba	7.59% 1.83% 0.84%	St. Augustinegrass Centipedegrass Bermudagrass Zoysiagrass Tall Fescue
Gordon's Trimec Lawn Weed Killer Concentrate	2,4-D Mecoprop Dicamba	7.59% 1.83% 0.84%	St. Augustinegrass Centipedegrass Bermudagrass Zoysiagrass Tall Fescue
Spectracide Weed Stop for Lawns Concentrate	2,4-D Mecoprop Dicamba	7.59% 1.83% 0.84%	St. Augustinegrass Centipedegrass Bermudagrass Zoysiagrass Tall Fescue
Ortho Weed B Gon Weed Killer for Lawns Concentrate; & RTS ¹ & Ortho WeedClear Weed Killer for Lawns Concentrate	2,4-D MCPA Dicamba	8.658% 2.127% 0.371%	St. Augustinegrass Centipedegrass Bermudagrass Zoysiagrass Tall Fescue

Hi-Yield Atrazine Weed Killer	Atrazine	4.0%	St. Augustinegrass Centipedegrass
Southern Ag Atrazine St Augustine Weed Killer	Atrazine	4.0%	St Augustinegrass Centipedegrass
Celsius WG Herbicide	Thiencarbazone Iodosulfuron Dicamba	8.7% 1.9% 57.4%	St Augustinegrass Centipedegrass Bermudagrass Zoysiagrass
Quali-Pro MSM Turf Herbicide ⁶ (for professional use)	Metsulfuron	60%	St Augustinegrass Centipedegrass Bermudagrass Zoysiagrass
Quali-Pro Fahrenheit (for professional use)	Metsulfuron Dicamba	5.00% 33.00%	St Augustinegrass Centipedegrass Bermudagrass Zoysiagrass
Ferti-lome Weed Out Broadleaf Weed Control with Gallery (granules)	Isoxaben (pre-emergence) Use 4.6 to 5.7 lbs for 1000 sq ft of lawn per application	0.38%	St Augustinegrass Centipedegrass Bermudagrass Zoysiagrass Tall Fescue

Note: There are many broadleaf weed killers in the stores, and many are similar to the 3-way herbicides, but have additional weed killer ingredients added. They may also work to control lawn burweed, but these additional components often restrict to which type of lawn they can be applied. Read the label.

¹ RTS = Ready to Spray (a hose-end sprayer bottle)

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