

Geranium, Carolina

[*Geranium carolinianum* L.]

DESCRIPTION

Carolina geranium is a winter annual or biennial weed that is also called cranesbill because the fruits have a conspicuous "beak" about ½ inch long. The leaves are deeply five- to seven-lobed and each lobe is again lobed and bluntly toothed. The flower is white to lavender and borne two to several together on stalks from the upper nodes. It blooms mostly in April and May.



Characteristic	Description
Growth Season	winter annual or biennial weed
Growth Habit	upright; basal rosette of leaves, stems erect
Leaflet Number	one
Leaf Margin	deeply five- to seven-lobed and each lobe is again lobed and bluntly toothed
Leaf Hairs	none
Leaf/Leaflet Shape	heart/kidney/spade
Leaf Width	1 inch to greater than 2 inches
Leaf Venation	palmate
Leaf Arrangement	usually alternate near base, opposite above
Root Type	taproot
Flower Color	blue/purple or white



Carolina geranium



Carolina geranium leaf arrangement

Note: Still not sure this is the right weed? [The Turf & Weed Identification Decision Aid](#) may help. Check the TurfFiles [glossary](#) for definitions of unfamiliar terms.

CULTURAL CONTROL

Proper turf management is important for biennial broadleaf weed control. Maintain a dense, actively growing turf through proper mowing, fertilizing, and watering practices. Mow at the proper height for your

selected adapted turfgrass. Coring and traffic control reduce compaction and encourage desirable turfgrass competition. It is best to control this biennial broadleaf weed in spring or fall, if actively growing at these times.

CHEMICAL CONTROL

Two, three, and four way broadleaf herbicides control Carolina geranium in the fall or spring. Metsulfuron (Manor, Blade, etc.) and trifloxysulfuron (Monument) also provide control.

Postemergence herbicides:

Herbicide	Tolerant Turfs ⁽¹⁾	Average Efficacy Rating ⁽²⁾	Range of Trial Efficacy Values, %	Number of Trials	Products ⁽³⁾
metsulfuron	be, sa, z	E	98 - 100	7	Escort**, Manor
2,4-D & dicamba & mecoprop	bk, f, r, z	E	100	6	MEC Amine-D*, Trimec Bentgrass, Trimec Classic, Trimec Southern, Triplet
trifloxysulfuron-sodium	be, z	E	89 - 100	4	Monument
2,4-D & dicamba & fluroxypyr	ba, bc, be, bk, f, r, sa, z	E	100	3	Escalade
2,4-D & carfentrazone & dicamba & mecoprop	ba, bc, be, bk, f, r, z	E	100	2	Speed Zone, Speed Zone Southern
chlorsulfuron	bc, be, bk	E	85 - 95	2	Corsair
clopyralid & triclopyr**	be, bk, c, f, r, z	E	99 - 100	2	Confront
dicamba & MCPA & mecoprop*	bc, be, bk, f, r, z	E	100	2	TRI-POWER
2,4-D & clopyralid & dicamba**	ba, bc, be, bk, f, r, z	E	100	1	Millenium Ultra 2
2,4-D & dicamba & fluroxypyr & mecoprop	bk, f, r, z	E	100	1	Spotlight & Trimec Southern
2,4-D & dicamba & mecoprop & sulfentrazone	bc, bk, f, r, z	E	100	1	Dismiss & Trimec Classic, Surge*
citrus oil		E	94	1	Nature's Avenger
fluroxypyr & metsulfuron	sa, z	E	100	1	Manor & Spotlight
sulfosulfuron	ba, be, c, sa, z	E	96	1	Certainty
glyphosate		G	78 - 100	2	Glyphosate Original, Roundup, Touchdown Pro**
clove oil & sodium lauryl sulfate**		G	81	1	BurnOut RTU
fluroxypyr	ba, bk, c, f, r, sa, z	F	61 - 85	2	Spotlight

* For use only by or under the supervision of a certified applicator, or by commercial nursery, turf, and landscape personnel.

** Not for application to residential lawns.

Footnotes:

(1) **Turfgrass Codes:**

ba bahiagrass

bc	bentgrass, creeping
be	bermudagrass
bk	bluegrass, Kentucky
c	centipedegrass
f	fescue, tall
r	ryegrass, perennial
sa	St. Augustinegrass
z	zoysiagrass
blank	No turfgrass in the database is completely tolerant. Check label to see if chemical can be used at a reduced rate or during the dormant season on your turfgrass.

(2) **Efficacy Ratings:**

E	excellent control (90 to 100%)
G	good control (80 to 90%)
F	fair control (70 to 80%)

Efficacy ratings are based on herbicide trials performed by weed scientists at North Carolina State University between 1997 and 2007. The number of trials included in the efficacy ratings is displayed in the next-to-last column. The higher this number, the more confidence can be placed in the efficacy values. Trials may have involved sequential applications of one or more chemical. Details of individual trials (herbicide rates, dates of application, environmental conditions at time of application, etc) can be viewed on the TurfFiles web site, through the [Turf Weed Management Decision Aid](#).

Efficacy ratings for chemicals lacking trial data are from "[Pest Management Strategic Plan for Turfgrass in the Southern United States](#)," a summary of a workshop for turf experts from multiple universities held in Griffin, GA in October, 2004. The workshop was sponsored by the Southern Region Integrated Pest Management Center.

- (3) Recommendations of specific chemicals are based upon information on the manufacturer's label and performance in a limited number of trials. Because environmental conditions and methods of application may vary widely, performance of the chemical will not always conform to the safety and pest control standards indicated by experimental data. The order in which brand names are given is not an indication of a recommendation or criticism.

Recommendations for the use of agricultural chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services does not imply endorsement by North Carolina State University or discrimination against similar products or services not mentioned. Other brand names may be labeled for use on turfgrasses. Individuals who use agricultural chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical. For assistance, contact your county's Cooperative Extension agent.

Links contained in this document:

Glossary: <http://www.turffiles.ncsu.edu/Glossary.aspx>

Pest Management Strategic Plan: <http://www.ipmcenters.org/pmsp/pdf/SouthernTurfgrass.pdf>

Turf & Weed Identification Decision Aid: <http://www.turffiles.ncsu.edu/turfid/>

Turf Weed Management Decision Aid: <http://www.turffiles.ncsu.edu/turfweedmgmt/>

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