

Betony, Florida

[*Stachys floridana* Shuttlew. ex Benth.]

DESCRIPTION

Florida betony is a hard-to-control perennial weed that emerges in the fall and becomes a problem in late winter and spring. It is easily recognized by the very characteristic white tuber that resembles a rattlesnake rattle. This weed also has square stems and produces white to pink flowers in the spring. It is found in the southern United States west to Texas and north to Virginia.



Characteristic	Description
Growth Season	perennial weed
Growth Habit	upright
Leaflet Number	one
Leaf Margin	serrated/toothed
Leaf Hairs	none
Leaf/Leaflet Shape	heart/kidney/spade
Leaf Width	1/2 - 1 inch
Leaf Venation	palmate
Leaf Arrangement	opposite
Root Type	fibrous; very distinctive white rattlesnake tubers
Flower Color	white to pink



Florida betony leaf arrangement



Florida betony, rattlesnake tuber

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

Perennial broadleaf turf weeds are capable of living more than two years. They thrive in weak, thin turf; golf fairways and roughs; home lawns; playfields; and industrial grounds. Proper turf maintenance is the

key to control of this weed. First, select adapted turfgrass cultivars for your area and then properly fertilize, mow, and water to encourage dense growth.

CHEMICAL CONTROL

Florida betony is a very difficult weed to control. In tolerant warm season turf, atrazine may be used in December and again in March at 1 lb ai/acre. Repeat applications of two, three, or four way broadleaf herbicides will usually provide only partial control.

Preemergence herbicides:

Herbicide	Tolerant Turfs ⁽¹⁾	Average Efficacy Rating ⁽²⁾	Range of Trial Efficacy Values, %	Number of Trials	Products ⁽³⁾
atrazine*	be, c, sa, z	E		0	AAtrex 4L

Postemergence herbicides:

Herbicide	Tolerant Turfs ⁽¹⁾	Average Efficacy Rating ⁽²⁾	Range of Trial Efficacy Values, %	Number of Trials	Products ⁽³⁾
glyphosate		E		0	Glyphosate Original, Roundup, Touchdown Pro**
2,4-D & triclopyr*	bk, f, r	G	90	1	Chaser
dicamba	ba, be, bk, f, r, z	G		0	Banvel, Clarity, Vanquish
dicamba & MCPA & triclopyr	ba, bc, be, bk, f, r, z	F	68 - 72	2	Cool Power, Horsepower
2,4-D	be, bk, f, r, z	F		0	2,4-D amine, Solution Water Soluble

* 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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