

Knotweed, Prostrate

[*Polygonum aviculare* L.]

DESCRIPTION

Prostrate knotweed is a low-growing summer annual or perennial which is very competitive in compacted soils. It is often a problem along driveways, sidewalks, and beaten paths. The slender stems radiate from a central taproot and produce a tough mat-like growth. Leaves are dull, blue green, small, smooth and arranged alternately along the stem. This weed germinates with the first warm temperatures in the spring. Newly emerging seedlings are often mistaken for grasses in very early stages of development.



Characteristic	Description
Growth Season	summer annual or perennial weed
Growth Habit	prostrate, spreading; mat-forming
Leaflet Number	one
Leaf Margin	smooth
Leaf Hairs	none
Leaf/Leaflet Shape	linear/oblong/oval/egg-shaped/elliptical
Leaf Width	1/2 - 1 inch
Leaf Venation	pinnate
Leaf Arrangement	alternate
Root Type	taproot
Flower Color	white to pinkish in color



prostrate knotweed nodes, leaves



prostrate knotweed

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

Prostrate knotweed is very competitive in infertile and compacted soils and often invades turfgrasses along driveways, sidewalks, and beaten paths across lawns. 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 weed in late spring or early summer because it is easier to control at this time and the turf will have a greater chance of recovering the areas previously occupied by weeds.

CHEMICAL CONTROL

Knotweed is controlled with postemergence two, three and four way broadleaf herbicides applied in the spring.

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
bensulide	ba, bc, be, bk, c, f, r, sa, z	G		0	Bensumec, Betasan
isoxaben	ba, bc, be, bk, c, f, r, sa, z	G		0	Gallery 75
oxadiazon***	bc, be, bk, f, r, sa, z	G		0	Quali-Pro Oxadiazon, Ronstar
simazine	be, c, sa, z	G		0	Princep
oryzalin	ba, be, c, f, sa, z	F		0	Quali-Pro Oryzalin, Surflan A.S.

Postemergence 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
dicamba	ba, be, bk, f, r, z	E		0	Banvel, Clarity, Vanquish
glyphosate		E		0	Glyphosate Original, Roundup, Touchdown Pro**
metsulfuron	be, sa, z	E		0	Escort**, Manor
fluroxypyr	ba, bk, c, f, r, sa, z	G		0	Spotlight
metribuzin	be	G		0	Sencor 75 Turf
2,4-D & triclopyr*	bk, f, r	F		0	Chaser

* 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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