

Bermudagrass

[*Cynodon dactylon* (L.) Pers.]

DESCRIPTION

Bermudagrass is a medium- to fine-textured warm-season turfgrass that spreads by rhizomes and stolons. It has excellent heat, drought, and salt tolerance but does not do well in shade. Bermudagrass is the most widely used species on athletic fields and golf course fairways/tee boxes due to its high wear tolerance and rapid recovery. It can also be a very invasive and hard to control weed in some turf settings. Bermudagrass can be confused with nimblewill. However, nimblewill



has a membranous ligule, which can be distinguished from the hairy ligule of bermudagrass. Bermudagrass is also often confused with zoysiagrass, but zoysiagrass has hairs standing upright on the leaf blade, whereas bermudagrass does not. Zoysiagrass is also stiff to the touch and offers more resistance to your hand than bermudagrass. Zoysiagrass leaf vernation is rolled whereas bermudagrass leaf vernation is folded. There are many different hybrids of bermudagrass that range from fine to coarse in leaf texture. As a weed, bermudagrass is sometimes referred to as wiregrass.

Characteristic	Description
Seedhead / Flower	raceme; 3-5 spikes that join at the top of a main stem.
Vernation Type	leaves folded in the bud
Ligule Type	fringe of hairs 0.04 - 0.12 inches (1 - 3 mm) long
Growth Season / Life Cycle	warm season turf or perennial weed
Auricle Type	absent
Leaf Blade Tip Shape	sharp-pointed; sparsely hairy, edges rough, leaf blade soft
Leaf Blade Width	0.06 - 0.1 inches (1.5 - 3 mm) wide
Stolon Presence	present; stout
Rhizome Presence	present; stout
Collar Type	continuous; not hairy, may be hairy on edges
Sheath Margin	open
Sheath Type	sheath is sparsely hairy; flattened to round, loose



bermudagrass (as a weed)



bermudagrass ligule, auricle

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

Most turfgrasses are difficult to control within another turfgrass. Therefore, turf managers should select clean seed or vegetative sources for establishment, use an adapted turfgrass species and cultivar for their location, and use proper mowing and fertilization techniques to maintain a dense, actively growing, desired turf. Digging or removal with hand or mechanical equipment, for example a sod cutter, is one way to control undesired perennial turfgrasses. You may spot treat an infested area with an appropriate non-selective herbicide, realizing it will also kill the desired turfgrass.

CHEMICAL CONTROL

Bermudagrass can be controlled in tall fescue or zoysiagrass turf. Monthly applications of fenoxaprop (Acclaim Extra) plus triclopyr (Turflon Ester) from June through September will gradually phase out the bermudagrass. Do not apply triclopyr to zoysiagrass unless some injury can be tolerated.

Fusilade II (fluazifop) can be applied in the spring and fall for bermudagrass suppression in tall fescue, and can be applied monthly from June through September in zoysiagrass. Even though zoysiagrass injury does occur, it should recover pretty quickly.

Nonselective herbicides will control bermudagrass, but the desired turfgrass will have to be reestablished.

Postemergence herbicides:

Herbicide	Tolerant Turfs ⁽¹⁾	Average Efficacy Rating ⁽²⁾	Range of Trial Efficacy Values, %	Number of Trials	Products ⁽³⁾
fenoxaprop & fluazifop & triclopyr**	f	E	77 - 100	4	Acclaim Extra & Fusilade II & Turflon Ester
fenoxaprop & triclopyr	f, r	G	53 - 100	22	Acclaim Extra & Turflon Ester
fluazifop & triclopyr**	f	G	44 - 99	19	Fusilade II & Turflon Ester
clethodim**	c	G	70 - 96	4	Envoy

** 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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