

Bluegrass, Annual

[*Poa annua* L.]

DESCRIPTION

Annual bluegrass is a light green bunch-type to slightly spreading winter annual weedy grass. Some subspecies exist which are classified as short-lived perennials (*Poa annua* ssp. *reptans*). These perennial types are particularly evident in bentgrass golf greens. One reason annual bluegrass is so unsightly is its ability to produce a light colored seedhead even at very low mowing heights.



Characteristic	Description
Seedhead / Flower	light-colored panicle seedhead
Vernation Type	leaves folded in the bud
Ligule Type	membranous; sharp pointed entire, 0.04 - 0.12 inches (1 - 3 mm) long
Growth Season / Life Cycle	winter annual weed
Auricle Type	absent
Leaf Blade Tip Shape	boat shaped; smooth above and below, not glossy, light green; two distinct, clear lines, one on each side of the midrib
Leaf Blade Width	0.08 - 0.1 inches (2 - 3 mm) wide
Stolon Presence	absent
Rhizome Presence	absent
Collar Type	divided; distinct, not hairy, V-shaped
Sheath Margin	open part way only
Sheath Type	flattened; slightly sharply creased



annual bluegrass ligule



boat shaped leaf tip

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

Management practices that encourage annual bluegrass persistence include: 1) excessively close mowing; 2) shallow, frequent irrigation; 3) poor soil drainage; 4) improperly timed fertilization; 5) aerifying or dethatching during primary periods of germination; 6) use of heavy equipment causing compaction; and 7) shade.

CHEMICAL CONTROL

Preemergence herbicides applied in the late summer or early fall before annual bluegrass emerges give effective control in home lawns, athletic fields, and golf course fairways, rough, etc.. However, many preemergence herbicides prevent seeding of cool-season turf species in home lawns or overseeding on golf courses. Annual bluegrass can be effectively controlled in dormant bermudagrass with glyphosate, simazine or atrazine. (Simazine and atrazine can also be used in other warm-season turf species). Recently-registered sulfonylurea herbicides such as Monument, Revolver, and TranXit GTA provide excellent postemergence control in fall or winter in non-overseeded warm-season turfgrass species. All sulfonylurea herbicides exhibit reduced efficacy when applied under cool conditions or when cool conditions are present after application, and this problem is exacerbated with Revolver. An unacceptable level of control may be observed under unfavorable weather conditions. In overseeded turfgrasses, preemergence herbicides such as Barricade applied eight weeks prior to overseeding offer annual bluegrass control.

Preemergence herbicides are not effective on the perennial subspecies which may be more common in bentgrass such as golf course putting greens; however, research suggests long-term use of some plant growth regulators may shift the competition in favor of the bentgrass over the perennial subspecies of annual bluegrass. Therefore, a well-planned program involving plant growth regulators may increase the bentgrass/bluegrass ratio in putting greens.

Preemergence herbicides:

Herbicide	Tolerant Turfs ⁽¹⁾	Average Efficacy Rating ⁽²⁾	Range of Trial Efficacy Values, %	Number of Trials	Products ⁽³⁾
prodiamine & rimsulfuron**	be	E	76 - 100	10	Barricade & TranXit GTA
benefin & trifluralin	ba, bc, be, bk, c, f, r, sa, z	E	94 - 98	4	Team, Team Pro
pronamide*	be	E	89 - 95	2	Kerb
atrazine*	be, c, sa, z	E		0	AAtrex 4L
simazine	be, c, sa, z	E		0	Princep
ethofumesate*	bk, f, r, sa	G-E		0	Prograss
prodiamine	bc, be, bk, c, f, r, sa, z	G	63 - 100	34	Barricade, Lesco Stonewall, Quali-Pro Prodiamine, RegalKade
oxadiazon***	bc, be, bk, f, r, sa, z	G	48 - 100	29	Quali-Pro Oxadiazon, Ronstar
pendimethalin	ba, be, bk, c, f, r, sa, z	G	61 - 99	17	Pendulum, PRE-M, Scott's Turf Builder With Halts
rimsulfuron**	be	G	70 - 98	9	TranXit GTA
oryzalin	ba, be, c, f, sa, z	G	69 - 95	5	Quali-Pro Oryzalin, Surflan A.S.

Preemergence herbicides:

Herbicide	Tolerant Turfs ⁽¹⁾	Average Efficacy Rating ⁽²⁾	Range of Trial Efficacy Values, %	Number of Trials	Products ⁽³⁾
oxadiazon & prodiamine*	bc, be, bk, c, f, r, sa, z	G	81	1	Barricade & Ronstar**, RegalStar II
metolachlor	ba, be, c, sa, z	G		0	Pennant Magnum
bensulide	ba, bc, be, bk, c, f, r, sa, z	F		0	Bensumec, Betasan

Postemergence herbicides:

Herbicide	Tolerant Turfs ⁽¹⁾	Average Efficacy Rating ⁽²⁾	Range of Trial Efficacy Values, %	Number of Trials	Products ⁽³⁾
trifloxysulfuron-sodium	be, z	E	85 - 100	21	Monument
foramsulfuron	be, z	E	80 - 100	11	Revolver
pronamide*	be	E	83 - 100	10	Kerb
diquat & glyphosate		E	100	2	QuikPRO, QuikPRO & Roundup, Reward Landscape and Aquatic & Touchdown Pro**
prodiamine & trifloxysulfuron-sodium	be, z	E	100	2	Barricade & Monument
rimsulfuron**	be	G	60 - 100	22	TranXit GTA
metribuzin	be	G	61 - 100	2	Sencor 75 Turf
glyphosate		F	60 - 100	23	Glyphosate Original, Roundup, Touchdown Pro**
atrazine*	be, c, sa, z	F	36 - 100	15	AAtrex 4L
prodiamine	bc, be, bk, c, f, r, sa, z	F	70 - 84	3	Barricade, Lesco Stonewall, Quali-Pro Prodiamine, RegalKade
atrazine & sulfosulfuron*	be, c, sa, z	F	71 - 88	2	AAtrex 4L & Certainty

* 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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