

Sandbur

[*Cenchrus incertus* M.A. Curtis]

DESCRIPTION

Sandbur can be a very troublesome weed in warm-season turf species. It is easily identified by the seedhead, which is a spike of tiny burs that can hurt when touched. This weed thrives in sandy soils, but can be controlled with certain herbicides when in the seedling stage.



| Characteristic | Description |
|----------------------------|--|
| Seedhead / Flower | spike; burs that occur all along a spike-like seedhead |
| Vernation Type | leaves folded in the bud |
| Ligule Type | fringe of hairs 0.04 inches (1 mm) long, with 0.08 inch (2 mm) long hairs on each side |
| Growth Season / Life Cycle | summer annual or perennial weed |
| Auricle Type | absent |
| Leaf Blade Tip Shape | sharp-pointed; thin, flat, usually not hairy |
| Leaf Blade Width | 0.08 - 0.24 inches (2 - 6 mm) wide |
| Stolon Presence | none, but stems decumbent |
| Rhizome Presence | present; very short |
| Collar Type | divided by midrib, distinct |
| Sheath Margin | |
| Sheath Type | flattened; sheath is usually not hairy |



sandbur seed (bur)



sandbur sheath

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

Sandbur can be a very troublesome weed in warm-season turf species. It is easily identified by the seedhead, which is a spike of tiny burs. This weed thrives in sandy soils. Maintaining a dense, vigorous turf is the first step in effective weed control. Cultural and management practices that enhance turfgrass growth generally reduce weed competition and encroachment. First, select adapted turfgrass cultivars for your area and then properly fertilize, mow, and water to encourage dense growth.

CHEMICAL CONTROL

Sandbur is difficult to control. Partial control can be achieved preemergence with proflaminate (Barricade) and other dinitroaniline herbicides. Postemergence control is achieved with repeat applications of MSMA. However, MSMA will be phased out in 2009.

Preemergence herbicides:

| Herbicide | Tolerant Turfs ⁽¹⁾ | Average Efficacy Rating ⁽²⁾ | Range of Trial Efficacy Values, % | Number of Trials | Products ⁽³⁾ |
|---------------|--------------------------------|--|-----------------------------------|------------------|--|
| bensulide | ba, bc, be, bk, c, f, r, sa, z | G | | 0 | Bensumec, Betasan |
| oryzalin | ba, be, c, f, sa, z | G | | 0 | Quali-Pro Oryzalin, Surflan A.S. |
| pendimethalin | ba, be, bk, c, f, r, sa, z | G | | 0 | Pendulum, PRE-M, Scott's Turf Builder With Halts |
| oxadiazon*** | bc, be, bk, f, r, sa, z | F | | 0 | Quali-Pro Oxadiazon, Ronstar |

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** |
| fenoxaprop | bk, f, r, z | G-E | | 0 | Acclaim Extra |
| metribuzin | be | G | | 0 | Sencor 75 Turf |
| MSMA*** | be, r | G | | 0 | MSMA (various brands) |
| sethoxydim | c | G | | 0 | Vantage |
| imazaquin | be, c, sa, z | F | | 0 | Image |

* 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.

*** MSMA will be phased out in 2009.

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.turf-files.ncsu.edu/Glossary.aspx>

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

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

Turf Weed Management Decision Aid: <http://www.turf-files.ncsu.edu/turfweedmgmt/>

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