

The South's ornery new weeds

Use the latest control strategies for the newest, nastiest weeds in warm-season turfgrass.

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Turf managers have seen an increase in "new" weeds in the last 5 to 10 years. Previous tough-to-control weeds such as crabgrass, goosegrass, chickweed and henbit caused many turf managers to lose their jobs. Today, however, many of these weeds have adequate control measures, but new weeds have taken their place. Possible explanations for this shift include:

- ▶ Significant increase in the use of pre-emergence herbicides, especially on fertilizer carriers, which do an excellent job on most grass weeds, but allow other weeds to escape and thrive.
- ▶ Significant reduction in the use of traditional post-emergence herbicides which provided adequate control of most weeds, such as MSMA, DSMA and 2,4-D, which provided good general weed control at reasonable prices.
- ▶ Overwatering, which favors certain weeds such as sedges and annual bluegrass, giving these weeds the advantage over the turf.

Up-and-coming weeds

Post-emergence herbicide control options are listed. You, however, must decide if these herbicides can be safely applied to the particular turfgrass species in your area.

Spreading dayflower (*Commelina diffusa*)

- ▶ Summer annual with fleshy, smooth stems; flowers with three blue petals; reproduces by seed and stem fragments; prefers moist habitats
- ▶ Occurs from Massachusetts, Missouri, Indiana, south into Florida and west to Texas, Kansas and Oklahoma.
- ▶ Products containing atrazine or simazine applied twice 30 days apart. Prompt (a pre-mix of atrazine and Basagran) also works well. Tank mixes of MSMA or DSMA with Sencor or multiple

Spreading dayflower



application of two- or three-way broadleaf herbicide mixtures also provide good control but can cause phytotoxicity to certain turfgrass species.

Doveweed (*Murdannia nudiflora*)

► Summer annual with fleshy, creeping stems rooting at nodes; alternate leaves; small, inconspicuous blue to purple flowers; reproduces by seed

► Occurs from North Carolina south through Florida, west into Texas

► Control the same as spreading dayflower

Torpedograss (*Panicum repens*)

► Perennial grass; robust, sharply pointed, creeping rhizomes; reproduces primarily by rhizomes

► Occurs along the North Carolina coasts on golf courses south throughout Florida west into

Texas

► Nonselective control is with at least 3 applications of glyphosate (Roundup Pro) spaced 3 weeks apart. Other nonselective control involves fumigating with methyl bromide and re-planting. Selective control

(or suppression) has recently become available with quinclorac (Drive). Drive should be applied 2 or 3 times spaced 3 to 4 weeks apart. Expect some minor temporary turfgrass discoloration.

Smutgrass (*Sporobolus indicus*)

► Clumping perennial grass; leaf blades flat, very thin; seed often infected with black fungus (or smut); reproduces by seed

► Occurs from Virginia into Florida, west to Texas, inland to Oklahoma and Missouri

► Selective control has been very elusive. Summer atrazine or simazine applications provide about 50% control, but expect temporary turfgrass damage. TFC lists smutgrass, but control is often very erratic with this product. Nonselective control is spot spraying or rope wicking glyphosate (Roundup). If rope wicking, treat in two directions.

Mat lippia or matchweed (*Phyla nodiflora*)

► Mat-forming perennial broadleaf plant with prostrate growing, hairy stems; stems rooting at nodes; leaves opposite with large teeth towards the tip; flowers rose-purple or white, in a head at tip of



Smut fungi on smutgrass seedhead.

a long stalk, resembling a match head; reproduces by seed and stolons

► Prefers sandy coastal plains and occurs from Pennsylvania to Florida, Arkansas, Oklahoma, Texas, California and Hawaii

► Products containing atrazine or simazine applied twice 30 days apart. Prompt (a pre-mix of atrazine and Basagran) also works well. Products containing two- or three-way broadleaf herbicide mixtures applied at least twice 7 days apart also work in tolerant turfgrasses.

Annual blue-eyed-grass (*Sisyrinchium rosulatum*)

► Winter annual, member of the Iris family; appears similar to goosegrass except it is a cool-season annual; leaves flat, light green, all clustered at the base; has zigzag-shaped stems; flowers pale purple to white with a rose-purple eye ring; reproduces by seed

► Occurs from North Carolina south into Florida and west to Texas and Arkansas.

► Products containing atrazine or simazine applied twice 30 days apart. Prompt (a pre-mix of atrazine and Basagran) also works well. Sencor also provides excellent control in tolerant turfgrasses. Products containing two- or three-way broadleaf herbicide mixtures applied at least twice 7 days apart also work.

Chamberbitter (Niruri, Gripeweed) (*Phyllanthus urinaria*)

► Small, erect summer annual broadleaf weed, escaped from ornamental industry; leaves oblong, arranged in two rows; flowers inconspicuous (not showy); fruit green, warty, without a stalk, attached

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Torpedograss

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Chamberbitter

directly to underside of branch; reproduces by seed

► Occurs in the southeastern United States west to Texas

► Control products the same as matchweed. Treat when plants are small.

Thin or bull paspalum (*Paspalum setaceum*)

► Clump-forming perennial grass; leaf blades flat, hairy to almost smooth with a fringe of stiff hairs along the leaf margins; common in sandy soils; reproduces by seed and clump fragments

► Occurs throughout the coastal plains from Long Island to Florida, west to New Mexico and Colorado, north through Nebraska, Ohio and Tennessee

► Repeat applications of MSMA or DSMA are required every 7 days until complete control is achieved.

Lawn burweed or spurweed (*Soliva pterisperma*)

► Low-growing, freely branched winter annual broadleaf weed; leaves opposite, twice divided into narrow segments or lobes; flowers small and inconspicuous; fruits have sharp spines; reproduces by seed

► Occurs in most southern states from North Carolina to Florida, west to Texas

► Pre-emergence or post-emergence applications of simazine or atrazine provide

excellent control. Prompt and Sencor also work well in tolerant turfgrasses. Repeat applications of two- or three-way broadleaf herbicide mixtures also provide control. Key to control is applications in fall when weeds are small.

Annual or water sedge (*Cyperus compressus*)

► Summer annual sedge; seedhead is a cluster of flat greenish, glossy spikes at the top of bare stems; tolerates close mowing heights; reproduces by seed

► Occurs from Minnesota, Ohio and New York, south through Florida and west to Texas

► Basagran, Image, Manage all provide good control.

Repeat applications of MSMA or DSMA also work.

Annual bluegrass, perennial biotype (*Poa annua* var. *reptans*)

► Similar to annual biotypes except the perennial biotypes produce less seedheads, often produce short stolons and form larger patches compared to annual biotypes; perennial biotypes occur from the transition zone northward where bentgrass is



Annual sedge

grown year-round as greens; triazine (atrazine/simazine) tolerant biotype occur

► In bentgrass greens, selective control is very erratic. Growth regulators such as paclobutrazol (Scotts Turf Enhancer) applied twice in fall 30 days apart followed by 2 or 3 applications in spring allows bentgrass to eventually out-compete the Poa. Several years of this program may be necessary and the treated Poa takes on a characteristic yellow-green appearance following application.

Kyllinga (*Kyllinga* spp.)

► Perennials: perennial or green kyllinga (*K. brevifolia*); *K. gracillima* = *K. brevifolioides* (no common name); white kyllinga (*K. nemoralis*)

► Annuals: annual kyllinga, *K. odorata* = *C. sesquiflorus* (acts as an annual in United States but is a short-lived perennial in the tropics); *K. pumila* and *K. squamulata* (no common names)

► Appear similar to nutsedges except kyllinga does not form underground nutlets; perennial kyllinga species form weed patches from stolons.

► Most kyllinga species occur from Delaware and Rhode Island south through the Carolina into Florida, west to Texas, California and in Hawaii. Currently, white kyllinga is thought to be restricted in the United States to Hawaii, however, it probably can survive in portions of the mainland including southern California and south Florida.

► Annual kyllinga species can be controlled with Basagran, Image, Manage or repeat applications of MSMA or DSMA. Perennial species require repeat applications of Image, Image + MSMA or Manage.

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Annual kyllinga