## New weeds,

Once you control one pest species, another may be ready and able to fill the niche.

## new woes

By BERT McCARTY, Ph.D

urf managers have seen an increase or shift of new weeds in the last five to 10 years. Many of our traditional troublesome weeds now have adequate control measures, but new weeds seem to have taken their place. Possible explanations for this shift include:

▶ Significant increase in the use of preemergence herbicides, especially on fertilizer carrier. These herbicides do an excellent job on most grass weeds, but allow other weeds such as sedges and many broadleaves to escape and thrive.

▶ Significant reduction in the use of traditional postemergence herbicides which provided adequate control of most weeds. Examples include MSMA, DSMA, and 2,4-D. These materials provided good general weed control at very reasonable prices. With the reduction in their use, many previous non-troublesome plants have now become major weeds.

▶ Overwatering of many turf sites favors the presence of certain weeds such as sedges and annual bluegrass. In moist soils these weeds have the natural ecological advantage over the turf. This has been further aggravated by recent hurricanes and tropical depressions in the South which have led to higher than normal soil moisture.

Some weeds that have become problems for turf managers in recent years include:

Spreading dayflower (Commelina diffusa): summer annual; fleshy, smooth stems; flowers with three blue petals; reproduces by seed and stem fragments; prefers moist habitats.

Torpedograss (*Panicum repens*): perennial grass; robust, sharply pointed, creeping rhizomes; reproduces primarily by rhizomes.

Doveweed (Murdannia nudiflora): summer annual; fleshy, creeping stems rooting at nodes; leaves alternate; small, inconspicuous blue to purple flowers; reproduces by seed.

Smutgrass (Sporobolus indicus): clumping peren-

nial grass, leaf blades flat, very thin; seed often infected with black fungus, smut.

Mat Lippia (Matchweed) (Phyla nodiflora): mat-forming perennial broadleaf with prostrate growth habits, 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 a long stalk resembling a match head; reproduces by seed and stolons; prefers sandy coastal plains.

Chamberbitter (Niruri, Gripeweed)





(Phyllanthus urinaria): small, erect summer annual broadleaf weed, escaped from ornamental industry; leaves oblong, arranged in two rows; flowers inconspicuous; fruit green, warty, without a stalk, attached directly to underside of branch; reproduces by seed.

Thin (Bull) Paspalum (Paspalum setaceum): clump-forming perennial

grass; leaf blades flat, hairy to almost smooth with a fringe of stiff hairs along margins; common in sandy soils; reproduces by seed & clump fragments.

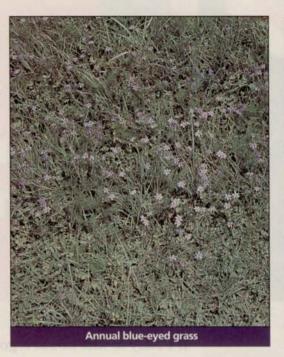
Annual Sedge (Water Sedge) (Cyperus compressus): summer annual sedge; seedhead is a cluster of flat greenish, glossy spikes, at top of bare stems with a few long leaves; tolerates close mowing; reproduces by seed.

Annual Blue-eyed-grass (Sisyrinchium rosulatum): winter annual, member of iris family; mistaken as goosegrass, has zigzag-shaped stems; leaves flat, light green, all clustered at the base; flowers pale purple to with with a rose-purple eye ring; reproduces by seed; other Sisyrinchium spp. occur.

Longstalked Phyllanthus (Phyllanthus tenellus): erect perennial broadleaf weed, escaped from ornamental industry; leaves arranged in two rows; flowers inconspicuous; fruit green, smooth, round on long stalks from the leaf axils; reproduces by seed.

Lawn Burweed (Spurweed) (Soliva pterosperma): low-growing, freely branched winter annual broadleaf weed; leaves opposite, twice divided into narrow segments of lobes; flowers small and inconspicuous; fruits have sharp spines; reproduces by seed.

Annual bluegrass (*Poa annua*): several biotypes now exist including triazine-tolerant (atrazine/simazine) biotype; perennial biotype; pronomide-resistant/tolerant biotype.







—the author is an associate professor at Clemson University, Clemson, SC. To learn more about weeds in the Southeast, he suggests the publication Weeds of Southern Turfgrass available from Clemson University, Extension Service, Room 82, Poole Agriculture Center, Clemson, SC 29034-0311. \$8 per copy.