Post-emergence use suggestions

• Apply post-emergence herbicides to small, actively-growing weeds. Perennial and annual weeds that are growing under good soil moisture conditions at moderate air temperatures are easier to control than weeds that are stressed due to adverse environmental conditions.

• Target the application to coincide with good soil moisture conditions at air temperatures of 60-90° F. Applications on cold, wintery days, or to drought-stressed weeds will result in poor weed control.

• Post-emergence herbicide use should be avoided when turfgrasses and weeds are stressed due to high air temperatures or drought.

The tolerance of warm-season turfgrasses to post-emergence herbicides decreases at air temperatures greater than 90° F when turfgrasses are drought-stressed or when they are growing under high soil moisture and high relative humidity conditions.

• Herbicides that contain 2,4-D, dicamba, mecoprop, dichlorprop, imazaquin, MSMA and DSMA should not be applied at high air temperatures (greater than 90° F), since there is an increased risk of unacceptable turfgrass injury. Always follow the most restrictive warning on the label. additionally, the tolerance of warm-season turfgrasses to herbicides is generally lower during spring green-up than when the turfgrass is dormant or after full green-up. Fortunately, research has shown that the decrease in turfgrass quality that may result from the use of post-emergence herbicides during green-up is temporary and persists for 2 to 6 weeks after application. If a dense weed population requires a post-emergence herbicide during green-up, use only the lowest recommended or one-half the recommended rate to minimize herbicide injury to the turfgrass. If needed, the application can be repeated after full green-up.

• Single applications at high rates generally cause more turfgrass injury than repeat applications at low rates.

Additionally, single, high rate applications often do not control perennial weeds. The repeat application is usually made at intervals of seven to 14 days after the first application, or when regrowth of the weed is noted.

• Mowing schedules must be coordinated with post-emergence herbicide applications. Generally, mowing should be delayed three to four days before or after a post-emergence herbicide application to increase the leaf surface area of the weed and spray deposition. The delay after application is necessary to allow adequate time for herbicide absorption and translocation in the target weed species.

• Do not apply post-emergence herbicides immediately before rainfall or irrigation. Rainfall or irrigation immediately after application can wash the herbicide from the treated weed foliage and decrease control. On irrigated sites, watering drought-stressed weeds one to two days before a post-emergence herbicide application will usually improve control of the problem weeds species.

• Use surfactants and crop oil concentrates according to label directions.

• Calibrate all spray equipment and train the operator.

— Dr. Murphy

Problem weeds

Common bermudagrass. Unless desired, common bermudagrass is an aggressive, competitive weed. Multiple applications of Vantage can suppress bermudagrass in centipedegrass. In zoysiagrass, repeat applications of Acclaim at three-week intervals during the summer months will suppress it.. Prograss can be used to suppress actively-growing common bermudagrass in St. Augustinegrass.

Bahiagrass. Repeat applications of MSMA or DSMA at seven- to 10-day intervals will control bahiagrass in MSMA/DSMA-tolerant turfgrasses. In centipedegrass, repeat applications of Vantage at 10-1

Dallisgrass. A perennial, dallisgrass is hard to control. In bermudagrass or zoysiagrass, 2-4 repeat applications of MSMA or DSMA will be necessary. Also an non-ionic surfactant should be used with MSMA or DSMA to control dallisgrass. Applications should be made when dallisgrass is growing under good soil moisture conditions. Staying on the application schedule (2-4 applications, each at a 5- to 10-day interval) will be required to control dallisgrass.

Nutsedge(s). Basagran T/O will provide good control of yellow nutsedge, but not of purple nutsedge. Monthly applications of MSMA or DSMA in tolerant turfgrasses in the late spring and summer months can suppress the growth of both species. With the exception of bahiagrass and carpetgrass, Image can be used in warm-season turfgrasses for yellow and purple nutsedge control. MSMA to Image generally improves nutsedge control in MSMA-tolerant turfgrasses.

A repeat application, 6- to 8-weeks after the first, of Image or Image+MSMA is required to control nutsedge during the summer months. Manage (halosulfuron) is now registered for nutsedge control in warm-season turfgrasses. Manage provides good to excellent control of purple and yellow nutsedge. A repeat application 6- to 10-weeks after the first application may be needed for season-long control. Warm-season turfgrasses have excellent tolerance to Manage.

Virginia Button weed. The most difficult to control broadleaf weed in southern turfgrasses. This warm-season perennial reproduces by seed, cut plant pieces, and fleshy roots. Research shows that repeat applications, at intervals of three to six weeks, of a two-way or three-way herbicide is needed in the summer to suppress Virginia buttonweed.

Research in Mississippi shows that 2,4-D undergoes more translocation to the roots of Virginia buttonweed than other broadleaf herbicides. Therefore, two-way or three-way herbicides with a high concentration of 2,4-D may provide better Virginia buttonweed control than products low in 2,4-D or products that do not contain,4-D.

Wild garlic. Fall (November) plus a winter (January-February) application of 2,4-D or two-way or three-way products that contain a phenoxy herbicide or dicamba over a two to three year period will control wild garlic. Early- to mid-winter applications of Image have also provided good to excellent control of emerged wild garlic.

—Dr. Murphy