New herbicides for 2011

S THE CALENDAR TURNS each year, new herbicides are introduced into the marketplace. Many of these herbicides may benefit individuals managing cool- and warm-season athletic fields. Some of the new herbicides that will be available in 2011 are outlined below.

Specticle (active ingredient- indaziflam) is a new preemergence herbicide from Bayer Environmental Science labeled for use on warm-season turf at rates of 2.5 to 5 oz/A. Research at the University of Tennessee has found that Specticle provides effective preemergence control of crabgrass (Digitaria spp.) and annual bluegrass (Poa annua) at lower use rates than other preemergence herbicides. This herbicide is also labeled preemergence control of goosegrass (Eleusine indica).

Individuals should use caution when applying Specticle to athletic field turf. This herbicide has a longer residual than other preemergence herbicides; thus, there are label restrictions pertaining to not only overseeding but establishing new warm-season turfgrass from stolons/sprigs or sod. Depending on application rate, turfgrass managers cannot overseed for 8 to 12 months after treatment with Specticle. Furthermore, the product label currently states that turfgrass managers must delay sprigging or sodding for 2 and 4 months after application, respectively.

Imprelis (active ingredient- aminocyclopyrachlor) is a new postemergence herbicide from DuPont labeled for broadleaf weed control in cool-season turfgrasses, as well as zoysiagrass (Zoysia japonica) and centipedegrass (Eremochloaophiuroides). Application rates for cool-season turfgrass range from 3 to 4.5 floz/A. On warm-season turfgrass, application rates cannot exceed 3 floz/A, mowing heights must be greater than ½ inch, and some temporary turfgrass injury must be tolerated. Similar to Specticle, this herbicide will provide effective weed control at a lower application rate than has been used with similar chemistries (i.e., mixtures of 2,4-D + MCPP + dicamba). Imprelis is labeled for use on golf courses, athletic fields, sod farms, as well as residential and commercial turf.

In research trials conducted at the University of Tennessee, seedling tall fescue and perennial ryegrass have shown tolerance to Imprelis applications for weed control. Applications of Imprelis at labeled rates have not affected perennial ryegrass or tall fescue establishment. Similarly, application of Imprelis at labeled rates 1 to 2 weeks after seeding has not been injurious either. Many athletic field managers may benefit from these attributes. Other commonly used broadleaf weed control herbicides (e.g., mixtures of 2,4-D + MCPP + dicamba) require individuals to delay seeding for 3 to 4 weeks after application and restrict applications to newly seeded stands until the second or third mowing.

Additionally, research conducted at the University of Tennessee has demonstrated that Imprelis can be tank-mixed with Acclaim Extra (from Bayer-active ingredient is fenoxaprop) to provide cool-season turfgrass managers with an option for postemergence broadleaf weed and smooth crabgrass control.

SquareOne (active ingredients- carfentrazone + quinclorac) is a new postemergence herbicide mixture from FMC labeled for control of certain grassy and broadleaf weeds in warm- and cool-season turfgrass as soon as 7 to 14 days after seeding. Square-One is labeled for use on golf courses, athletic fields, sod farms, as well as residential and commercial turf. Application rates of SquareOne range from 8 to 18 oz/A.

Celsius (active ingredients- thiencarbazone + iodosulfuron + dicamba) is a new postemergence herbicide mixture from Bayer labeled for use on select warm-season turfgrasses at rates of 2.5 to 4.9 oz/A; however, turfgrass managers cannot exceed 7.4 oz/A in a single year. Celsius is not labeled for use on seashore paspalum (Paspalum vaginatum); thus, turfgrass managers with seashore paspalum athletic fields (or bermudagrass fields heavily infested with

seashore paspalum) should select an alternative herbicide for broadleaf weed control.

Celsius is labeled for the control of a wide range of broadleaf and grassy weeds. Preliminary research at the University of Tennessee and the University of Georgia has also observed postemergence activity on dallisgrass (Paspalum dilatatum) following applications of Celsius in mixtures with Revolver (active ingredient foramsulfuron); however, it is not clear at this time whether these treatments will provide effective, long-term control.

Blindside (active ingredients- sulfen**trazone + metsulfuron)** is a postemergence herbicide mixture FMC labeled for broadleaf weed control on certain cool- and warm-season turfgrasses at rates of 3.25 to 10 oz/A. Avoid applying Blindside to any cool-season turfgrasses under stress, as temporary injury can occur after application.

Blindside is labeled for use on golf courses, athletic fields, sod farms, as well as residential and commercial turf. Research at the University of Tennessee has reported that applications of Blindside can increase the speed of ground ivy (Glechoma hederacea) and Virginia buttonweed (Diodia virginiana) control compared to Manor (active ingredient metsulfuron) alone.

Many of these herbicides will provide athletic field managers with new options for broadleaf and grassy weed control in 2011. Always refer to the product label for specific information on proper use, tank-mixing compatibility and turfgrass tolerance.

Mention of trade names or commercial products in this publication is solely for the purpose of providing specific information and does not imply recommendation or endorsement by the University of Tennessee Institute of Agriculture. For more information on turfgrass weed control, visit the University of Tennessee's turfgrass weed science web site at www.tennesseeturfgrassweeds.org.

Dr. Jim Brosnan is assistant professor-turfgrass weed science and Greg Breeden is weed science extension assistant at the University of Tennessee.