



>> **SUMMER SOFTBALL CAMP** at the University of Tennessee's Sherri Parker Lee Stadium. Photo taken at the 2011 STMA Regional Conference in Knoxville.

New herbicides for 2012

NEW HERBICIDES are continually being introduced into the marketplace. Many of these new herbicides may benefit sports field managers maintaining cool- and warm-season turfgrass athletic fields. The following information outlines several herbicides that entered the marketplace in 2011 as well as other materials that will be introduced in 2012.

Specticle (active ingredient is indaziflam) is a new preemergence herbicide from Bayer Environmental Sciences that was originally released for commercial sale in 2011. Specticle is labeled for use on warm-season turf at rates of 2.5 to 5 oz/A. This herbicide 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 preemergence weed control.

Research at the University of Tennessee has found that Specticle provides effective preemergence control of crabgrass (*Digitaria* spp.), annual bluegrass (*Poa annua*) and goosegrass (*Eleusine indica*) at lower use rates than traditional preemergence herbicides. Research conducted in 2011 at Tennessee illustrated that Specticle provides postemergence control of non-tillered smooth crabgrass similar to Dimension (active ingredient is dithiopyr). Data also suggest that Specticle provides postemergence control of non-tillered annual bluegrass as well.

Individuals should use caution when applying Specticle to athletic field turf. This herbicide has a longer residual than other preemergence herbi-

cides, which could be problematic in high wear areas. There are label restrictions pertaining to not only overseeding but establishing new warm-season turfgrass from stolons/sprigs or sod. Label restrictions also prevent turfgrass managers from overseeding with perennial ryegrass 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 (Anonymous, 2010).

Tribute Total is a new postemergence herbicide from Bayer Environmental Sciences that will be introduced for commercial sale in 2012. Tribute Total will be labeled for use in warm-season turfgrass only. Research at the University of Tennessee has found fall applications of Tribute Total to control dallisgrass (*Paspalum dilatatum*) similar to MSMA. Studies have also shown Tribute Total to be an effective option for yellow nutsedge (*Cyperus esculentus*) and Virginia buttonweed (*Diodia virginiana*) control, as well as annual bluegrass and overseeded perennial ryegrass.

Xonerate (active ingredient is amicarbazone) is a new postemergence herbicide from Arysta LifeSciences that will be introduced for commercial sale in 2012. Xonerate will be labeled for use on mature Kentucky bluegrass, perennial ryegrass (*Lolium perenne*), tall fescue, and bermudagrass (*Cynodon* spp.) among other cool- and warm-season species. Application rates for Kentucky bluegrass, perennial ryegrass, and tall fescue range from 2 to 4 oz/A, while this herbicide can be applied to bermudagrass at rates of 3 to 10 oz/A.

Research at Tennessee has found single applications of amicarbazone to effectively control several winter annual broadleaf weed species at 7.5 oz/A, along with sequential applications at rates greater than 5 oz/A. Tank mixtures of amicarbazone + proflam applied in spring have also been shown to provide postemergence control of winter annual weeds and preemergence control of smooth crabgrass.

Xonerate will be marketed for selective annual bluegrass control in labeled cool- and warm-season turf species. Effective control programs may require sequential applications. Sports field managers should apply Xonerate in the spring of the year after annual bluegrass has resumed active growth. Research data in Tennessee and Georgia suggest that fall applications should be avoided. Labeling also restricts Xonerate applications when daytime air temperatures are expected to exceed 85°F.

Studies at the University of Tennessee in 2011 illustrated that a single application of Xonerate plus Tenacity (active ingredient is mesotrione) controlled annual bluegrass similar to sequential applications of Tenacity alone. This concept will be researched in further detail in 2012.

Many of these herbicides will provide athletic field managers with new options for weed control in 2012. 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's Institute of Agriculture. For more information on turfgrass weed control, visit the University of Tennessee's turfgrass weed science website at www.tennesseeturfgrassweeds.org. ■

References

Anonymous. 2010. Specticle 20 WSP herbicide label. Bayer Environmental Sciences. Research Triangle Park, NC. Available at: <http://www.backedbybayer.com>

Dr. Jim Brosnan is assistant professor, turfgrass weed science, and a co-director of the University of Tennessee's Center for Athletic Field Safety. Greg Breeden is weed science extension assistant at U of T in Knoxville.