POST-EMERGENT HERBICIDE Q&A

For an overview of post-emergence weed control, including herbicide selection and overall application strategies *SportsTurf* recently sought the insights of Ken Hutto, technical service manager at FMC Professional Solutions.

SportsTurf: Have there been noticeable changes in post-emergent control results since MSMA was banned?

Hutto: MSMA was a valuable tool for postemergence weed control. It provided effective control of annual and perennial grass weeds, but could also be used for nutsedge, kyllinga, and certain broadleaf weeds.

The biggest void created when MSMA restrictions were issued was getting effective postemergence perennial grass control, most notably of dallisgrass. Since then, controlling dallisgrass has changed dramatically, not only because of the products now available, but because of when those products are applied. MSMA was solely used in the summer months, but some of the newer products are recommended for use in the fall and early summer for effective dallisgrass control. It is a change in application philosophy.

SportsTurf: Please share your general post-emergent herbicide strategies for cool-season and warm-season athletic turf.

Hutto: Establishing a competitive turf is a must for successful long-term weed control. A close second is correct weed identification. What looks like crabgrass may not be crabgrass! Many grasses without a seedhead look like crabgrass. If you do not know what you are dealing with, how will you know what products are most effective?

◀ Ken Hutto, PhD

Not all grass herbicides control all grasses. Likewise, some broadleaf weed materials will control prostrate knotweed better than others. In general, postemergence herbicides are most effective when the target weeds are in young growth stages. Depending on the sport, turf type and weed, sports turf managers may not be able to make postemergence treatments during this life cycle stage due to play. If possible, delay mowing events one day on each side of the application to ensure maximum herbicide absorption into the target weed.

Resistant weeds are becoming more and more prevalent, so rotating modes-of-action is important if other options are labeled for use in the desired turf. When interseeding, be aware of seeding restrictions on herbicide labels, as some postemergence herbicides may negatively impact new seedling establishment if applied too early in seedling development.

Lastly, don't forget about cultural practices! Aerifying high traffic areas to alleviate compacted areas will aid in reducing environments conducive to goosegrass.

SportsTurf: Are there different products and/or strategies for post-emergence control of grassy weeds and broadleaf weeds?

Hutto: There are probably more broadleaf weed herbicide options than grass herbicide options. Choosing the right postemergence herbicide will depend upon what weed spectrum you are dealing with.

Your most common th ree-way postemergence broadleaf weed herbicides can be used in most cool and warm-season turf and can be very effective. However, having such a wide range of turf tolerance is not always the case for postemergence grass herbicides.

For example, Solitare herbicide can be used for postemergence crabgrass, broadleaf, and nutsedge control in both cool and warm-season turf. Some sulfonylurea herbicides can be used for goosegrass control, but only in warm-season turf. Some of the newer "bleaching" herbicides are primarily labeled for cool-season turfgrass use.

Understanding your weed spectrum and what products are available for use in your specific turfgrass will be a big part in developing an effective weed-control strategy.

SportsTurf: Are there any new post-emergent herbicides near market that you can discuss?

Hutto: FMC is always working diligently to bring the next customer driven innovation to market. Our goal is to help turfgrass managers be more efficient in their weed-control programs. ■

Hutto joined FMC in 2007. He received a Bachelor of Science degree in Microbiology from Auburn University and Master of Science and Doctorate degrees in Weed Science specializing in Turfgrass Weed Management from Mississippi State University. After receiving his PhD, he worked at the University of Florida as a post-doctoral research associate at the West Florida Research and Education Center, conducting research in turfgrass science.

POST-EMERGENT HERBICIDE Q&A

For an overview of post-emergence weed control, including herbicide selection and overall application strategies *SportsTurf* recently sought the insights of Dean Mosdell, PhD, field technical manager — west, at Syngenta Lawn & Garden.

SportsTurf: Have there been noticeable changes in post-emergent control results since MSMA was banned?

Mosdell: Weed control strategies have changed slightly. MSMA provided an inexpensive solution for many monocot weeds. Strategies may have greater emphasis on making pre-emergence more effective, such as timing or split/multiple applications. There are several post-emergence herbicides available for warm and cool-season turf, but are narrow in spectrum and/or safety on various turf species. The biggest gap in weed control without MSMA is dallisgrass control in cool-season turf.

SportsTurf: Please share your general post-emergent herbicide strategies for cool-season and warm-season athletic turf.

Mosdell: Selection is based on weeds present and turf type. Any strategy would need to consider turf type, weed targets and best timing for weed control that works into the use schedule and maintenance program of the athletic field.

SportsTurf: In general, what is the best strategy for post-emergence weed control?

Mosdell: Again, strategy would be based on weeds present and turf type. Dicot weeds can be controlled with pre-mixes of growth-regulating-type herbicides such as 2,4-D, dicamba, triclopyr, MCPA and others. There are numerous mixes that vary in ratios and components of these herbicides to improve the safety on certain turf types. There are fewer options to control grass weeds post-emergence. The most common summer annual grass is crabgrass. Options for control include products that contain quinclorac, or Tenacity and Acclaim herbicides. On warm-season turf, other options include ALS-inhibiting herbicides such as Monument or pre-mixes of several of these ALS herbicides. Older triazine chemistry is still used on warm-season turfgrasses. It's important to read the label for safety on turf species as they vary widely and mixtures may further reduce labeled turf species.

SportsTurf: Are there different products and/or strategies for post-emergence control of grassy weeds and broadleaf weeds?

Mosdell: Yes, with few exceptions most post-emergence herbicides are effective on either dicots or monocot weed species. Tenacity herbicide, with pre- and post-emergence activity, will control crabgrass as well as dandelion, oxalis and speedwells. In the herbicide screening process it is difficult to select for a broad spectrum grass herbicide to control a grass weed in turfgrasses since their physiology is similar. An effective strategy is to use a pre-emergence herbicide and treat any escapes of grass weeds with a post-emergence. There are man y effective post-emergence herbicides to control dicot weeds. Best strategy is to maintain a healthy turf stand and control any dicot weeds that pop-up with a broadleaf herbicide. There are many to choose from depending on weed species and turf type.

» I think in the near term there will be mixtures of post-emergence herbicides, similar to the broadleaf herbicide products, to improve spectrum, efficacy and turf safety. With the loss of MSMA in several markets, opportunities exist for new post-emergence grass herbicides.

SportsTurf: Are there any new post-emergent herbicides near market that you can discuss?

Mosdell: I think in the near term there will be mixtures of post-emergence herbicides, similar to the broadleaf herbicide products, to improve spectrum, efficacy and turf safety. With the loss of MSMA in several markets, opportunities exist for new post-emergence grass herbicides. ■

Dean Mosdell, Ph.D. is field technical manager <dash> west, for the Syngenta Lawn & Garden. His responsibilities include product stewardship, field testing and technical support of Syngenta products in turf markets for the western United States. Mosdell has more than 25 years of experience in developing plant growth regulating products for application on turfgrasses, including the introduction of the first PGR for fine turf. He holds both a BS and an MS degree in Agronomy (Turfgrass Specialty), from Virginia Tech in Blacksburg, Va., and a Ph.D from Purdue University in West Lafayette, Ind.

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