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

**Sports Turf:** 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.

**Sports Turf:** 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.

**Sports Turf:** 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.

**Sports Turf:** 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 many 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.

**Sports Turf:** 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 — 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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