Controlling Perennial Grasses

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Consistently, lawn care and grounds managers report that eliminating weeds from their customers' properties is their number one problem to solve. Some indicate that broadleaves are more troublesome, while others claim grassy weeds are more menacing.

Yellow nutsedge is not technically a grassy weed, though many clients view it as one.
Photos by John Fech, UNL.

Weeds are a problem for several reasons. They compete for water and nutrients, they cause turf stands to be thinned and, possibly most importantly, they are found to be objectionable because they are different from the desirable turfgrass. This is the case for both broadleaf and grassy weeds; grassy weeds are just a little more subtle about being a pest.

Grass species often thought of as weeds

Some grassy weeds are narrower in texture than traditional turfgrasses being grown, such as creeping bentgrass, but the majority are coarser. Of course, beauty is in the eye of the beholder, but many folks who are trying to grow a

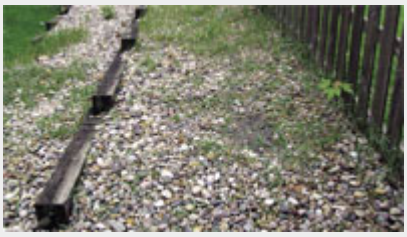
Kentucky bluegrass lawn consider any other grass—tall fescue, orchard grass, smooth bromegrass, quackgrass and nimblewill—to be a weed.

Genetic improvements and selections over the years have led to the development of turf-type tall fescue cultivars that rival Kentucky bluegrass for desirability of texture. Yet, even as such, older “pasture-type” tall fescue cultivars such as K-31, Alta and Fawn possess a much coarser texture, and are considered weeds if they are present in a turf-type tall fescue lawn.

Problems with selectivity

Until recently, little was available in terms of weed control products that would help eliminate perennial grasses from the desirable ones. Two main methods were available, each with serious limitations.

In the early days, hand removal was about the only real effective method of eliminating unwanted grasses from turf stands. The process involved using a sod spade or tile spade to pop the crown of the undesired grass plant from the sod. While immediate results were realized, this proved to be inefficient because it was labor-intensive, and in many cases, if all of the roots/rhizomes/crown was not removed, regrowth of the undesirable plant would occur, and the need for hand weeding would again rear its ugly head.



Unfortunately, mulch over weed fabric is only a short-term solution; it is not reliable for long-term control.

In the early ’70s, the glyphosate-based herbicide Roundup appeared on the market, creating another option for control of grassy weeds. This procedure was also a bit on the crude side, in that Roundup is nonselective and kills most green plants it is applied to. After the undesirable grass began going off-color in response to the application, reseeding the affected areas with the desired species helped reestablish the turf stand without the presence of grassy weeds. While this was considered to be an improvement over hand removal, the downside was that approximately two to three weeks was required for the process.

Recent developments

Recent developments have led to more options for turf managers. Demand for selective removal of undesirable grassy weeds remained high in the ’80s and ’90s, so many efforts were undertaken to develop products that would kill

grasses of a different texture than the common desirable turfgrass species.

Mesotrione (Tenacity) is an herbicide registered in 2008 for golf courses and sod farms and federally registered for commercial applicator residential use in 2009. State registrations for residential use are pending. Tenacity is unique chemistry with unique selectivity. It is safe on cool-season grasses, except creeping bentgrass, when used as directed. Our trials have shown good to excellent control of creeping bentgrass, nimblewill and windmillgrass in Kentucky bluegrass, and good to excellent control of a laundry list of broadleaf weeds, crabgrass and foxtail. Tenacity requires sequential applications for optimal control of target weeds. Another unique property of Tenacity is safety at seeding. We have tested applications at planting for safety on Kentucky bluegrass, perennial ryegrass and tall fescue with excellent results. Work at other universities has shown control, albeit inconsistent depending on application timing, for annual bluegrass.

Sulfosulfuron (Certainty) is safe on most warm-season grasses, and cool-season grasses Kentucky bluegrass and creeping bentgrass. It is an excellent yellow nutsedge product and will also selectively remove rough bluegrass, tall fescue and quackgrass from Kentucky bluegrass. For those wanting to maintain pure stands of Kentucky bluegrass, Certainty offers selectivity for difficult-to-control perennial grasses. We have also tested Certainty for selective removal of rough bluegrass in creeping bentgrass fairways with acceptable results.

Foramsulfuron (Revolver), trifloxysulfuron (Monument) and flazasulfuron (Katana) are excellent tools to selectively remove cool-season grasses from labeled warm-season grasses. The products also have good to excellent control for many broadleaf weeds and sedges.

Chlorsulfuron (Corsair) is labeled for selective removal of tall fescue and perennial ryegrass in a multitude of cool-season grasses and bermudagrass.

Timing

The key to control is finding the most vulnerable stage for the weed and selecting the best product to eliminate it.

In general, fall treatments for broadleaf weeds are preferred. For grassy weeds, the best timing is when they are first spotted. Postemergence applications are much more effective if the plant doesn’t have a chance to develop a root mass and a mature crown.

Application techniques

For grassy weeds, spot-spraying is a wise herbicide strategy. Scout turf areas routinely, especially if they are known hot spots, areas that are especially prone to weed invasion. Such areas include hell strips, thin turf stands and compacted soils.

Whenever possible, try to maximize the amount of surface area on the leaves of grassy weeds. For example, avoid mowing the day before application. If mown three days before, sufficient time will pass to allow regrowth of the

target weeds. If the weeds are drought-stressed, timing an application post-rain or irrigation often increases success. Many managers have also improved control when the affected area is lightly fertilized prior to herbicide application if the area was not already fertilized.

The pesticide label

Read the label before applying. A thorough understanding of the label instructions is crucial to successful weed control. Typical recommendations that a herbicide formulator may make via the label are the need for a surfactant or other spray adjuvant, adjustments to the pH of the tank water, optimal water carrier volume and restrictions on the total quantity that should be applied in a year’s time.

A simple, but important, piece of information from the label is the rate. Use only the rate that is called for. Using a higher rate than specified on the label is illegal.

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