

Controlling rough bluegrass (*Poa trivialis*)**May 18, 2017**

Rough bluegrass (*Poa trivialis*) is a perennial, cool-season grass that is a problematic weed in cool-season turfs in the northern U.S.A. Differences in color, texture, and growth habit may make rough bluegrass noticeable in spring and fall, but the species is often most noticeable as it declines (more than other species) in summer months. Unsightly patches of brown turf are left in its wake, and may be mistaken for summer diseases. Even worse, there are almost no effective chemical control strategies in cool-season turfs (especially for athletic fields and home lawns). It's imperative to identify rough bluegrass early, and deploy *effective* control strategies.

Rough bluegrass ID. Rough bluegrass has the characteristic midrib and “boat-shaped” leaf tip of other bluegrasses. It is distinguishable from annual bluegrass or Kentucky bluegrass because of stolons and the tapering leaf tip (similar to perennial ryegrass) caused by converging leaf margins (*the leaf margins of annual bluegrass and Kentucky bluegrass are parallel, which causes a more noticeable boat shape at the tip*).



Figure 1. *Left:* the midrib of a rough bluegrass leaf (left) vs. a prominently veined tall fescue leaf (right). *Middle:* the tapering leaf tip of rough bluegrass (left) vs. that of Kentucky bluegrass (right). *Right:* a patch of rough bluegrass in perennial ryegrass.

Cultural control. Beyond typical management to encourage healthy turf, there are four things to consider culturally.

1. *Mow as high as practical.* In some of my research, mowing a new tall fescue lawn at ≥ 3.0 inches reduced rough bluegrass coverage up to 57% after three years compared to mowing at 1.5 inches.
2. *Please grow turf on the drier end of the soil-moisture spectrum.* Rough bluegrass will wilt sooner than creeping bentgrass, Kentucky bluegrass, perennial ryegrass, or tall fescue. Using wilt-based irrigation for your desirable species should ensure an irrigation deficit for rough bluegrass. Turn off the automatic controller, and irrigate when your turf wilts (and only in areas that are wilting).
3. *Overseed* areas where rough bluegrass declines to increase competition.
4. *Understand that controlling rough bluegrass in a moist, shady area will be difficult* – it will outcompete other turfs in these areas.

Selective control

1. *Velocity (bispribac-sodium) is currently the only herbicide labeled for selective rough bluegrass control in cool-season turf.*
2. *Application of Velocity is only legal on sod farms and golf courses.*
3. *The efficacy of Velocity usually increases at air temperatures >75°F, but desirable turf may be injured at temperatures >90°F. Therefore, treatment is recommended in spring to midsummer, or in early fall.*
4. *Carefully select a rate and application interval. In research, Velocity SG has reduced rough bluegrass 73% or more with four applications at 3.0, 4.5, or 6.0 oz./A, as long as warm temperatures followed treatment. Label recommendation for a slow conversion: apply Velocity at 2.0 oz./A up to five times every 7 to 14 days. Label recommendation for a rapid conversion: apply Velocity up to four times every 14 to 21 days at 6 oz./A.*
5. *Before seeding. Velocity may be safely applied two weeks before seeding creeping bentgrass, Kentucky bluegrass, or perennial ryegrass.*
6. *After seeding. Velocity is safe on spring- or fall-seeded creeping bentgrass as early as seven days after emergence at rates up to 6.0 oz./A.*
7. *Sometimes Velocity doesn't work well. Following identical applications and similar post-application weather in different locations, I've seen anywhere from 14 to 90% control with Velocity.*
8. *Certainty (sulfosulfuron) is no longer labeled for use in creeping bentgrass or Kentucky bluegrass.*

Nonselective control

1. *Rough bluegrass is most consistently controlled with glyphosate in spring. In research, I've consistently seen 69 to 99% control with spring applications. In contrast, midsummer applications provided 14 to 91% control, and late-summer applications were marginally more effective (42 to 94% control).*
2. *No matter when you treat, seed or sod to reduce the reestablishment of rough bluegrass, and the new establishment of other weeds.*
3. *It's often necessary to use glyphosate in the same areas over multiple years to achieve control.*

Bottom line – golf course fairways. For large infestations, consider beginning a renovation with Velocity applications in midsummer, followed by multiple glyphosate applications in late summer before seeding. Then, apply Velocity as soon as one week following seeding – at least with creeping bentgrass – to limit rough bluegrass reestablishment. For smaller infestations, consider spot treating with glyphosate followed by reseeding or the physical removal of rough bluegrass followed by spot sodding. Alternatively, utilize multiple spot applications of Velocity beginning in spring to midsummer and interseed with creeping bentgrass, Kentucky bluegrass, or perennial ryegrass beginning no sooner than two weeks following the last treatment.

Bottom line – athletic fields and home lawns. For large infestations, make multiple glyphosate applications in late summer before seeding. Spot treat smaller infestations in spring or late summer, and seed or spot sod treated areas.

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