



Super Science



// IN CONTROL

The experimental site to examine annual bluegrass reduction using flurprimidol, nitrogen regime and a soil surfactant

PURDUE STUDIES ANNUAL BLUEGRASS CONTROL

By William Tudor

Creeping bentgrass greens often are invaded by annual bluegrass. Management tools have potential to minimize annual bluegrass encroachment, but their interactions are not well understood. These include root-absorbed plant growth regulators such as flurprimidol (Cutless), fertility source (46-0-0 vs. 20-20-20), nitrogen application rate (0.15 vs. 0.30 lbs. N/1000 ft²) and soil surfactants.

This three-year field study evaluated the effects of twice monthly applications of the aforementioned products and treatment combinations. Treatments were applied during active growth to a native-soil research green with approximately 30 percent annual bluegrass. The most effective annual bluegrass reductions occurred wherever flurprimidol was applied. When it wasn't applied, a fertilizer source and rate effect were measured. Annual bluegrass decreased roughly 25 percent when 46-0-0 was applied at either rate. By contrast, applying 20-20-20 fertilizer increased annual bluegrass 84 percent at the high application rate.

This study demonstrates the potential for flurprimidol to reduce amounts of annual bluegrass and the potential influence of fertilizer source and rate on annual bluegrass invasion.

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ON THE MOVE

JOSEPH YOUNG, PH.D., JOINS TEXAS TECH FACULTY

Joseph "Joey" Young has joined the faculty at Texas Tech University as an assistant professor of turfgrass science. Young earned his bachelor of science in Golf Course and Sports Turf Management in 2006 and his master of science in Turfgrass Pathology in 2009, both from Mississippi State University. He received his doctorate from the University of Arkansas this past December.



Young's research background is unique, ranging from fungicide resistance evaluations to turfgrass physiology under different mowing, rolling and foot traffic treatments. He plans to focus his research efforts on reducing water use and determining species, cultivars and management practices to maintain quality turfgrass in western Texas.

“DEMAND FROM GOLFERS FOR A MORE COMPETITIVE PLAYING SURFACE, COUPLED WITH MERCURY-BASED PESTICIDE RESTRICTIONS, HAS MADE BENTGRASS PUTTING GREENS IDEAL HABITATS FOR MOSS.”

J. Scott McElroy, Ph.D., and Steven Borst, Ph.D.

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