Renovation of perennial rygegrass turf to seeded bermudagrass. (C05-williams105120-Oral)

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Abstract:

Field trials in 2000 and 2001 tested herbicides and plant growth regulators (PGR) during renovation of Lolium perenne L.(PR) to seeded Cynodon dactylon L. Pers.(SB). The herbicides glyphosate and pronamide, and the PGRs trinexapac-ethyl, ethephon, paclobutrazol, and flurprimidol were applied at label rates to stands of PR. 'Mirage' and 'Yukon' SB were seeded either 1 or 7 days after applications. SB establishment, first-winter survival, and turf quality were rated and compared to an untreated control. Results indicated that only applications of glyphosate resulted in acceptable renovation of PR to SB, but also resulted in significantly lower (P < 0.05) turfgrass quality during transition. Applications of pronamide resulted in significantly less (P<0.05) SB transition than glyphosate, but pronamide plots maintained higher turf quality. None of the PRGs applied had a significant effect (P>0.05) on SB transition. There were no significant effects (P>0.05) due to timing of seeding. First-winter survival was significantly higher (P<0.05) with Yukon than with Mirage. We conclude that among the chemistries tested, only applications of glyphosate resulted in acceptable transition of PR to SB, but a significant reduction of turf quality should be expected during the transition.

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