

The Back and Forth Battle Between Creeping Bentgrass and Annual Wintergrass: Cultural



In the ongoing battle between creeping bentgrass and annual wintergrass (*Poa annua*), turfgrass managers influence the outcome through cultural programs, plant growth regulators (PGRs) and selective herbicide programs. In this issue of TechNotes-SH cultural practices are discussed.

CULTURAL

Exploiting differences between creeping bentgrass and annual wintergrass growth habits through cultural practices can drastically influence the make-up of a creeping bentgrass/annual wintergrass turf. Management practices that favor creeping bentgrass over annual wintergrass include:

Irrigation: Creeping bentgrass has a deeper root system than annual wintergrass. Thus watering deeply and infre-

quently favors creeping bentgrass over annual wintergrass.

Irrigating when creeping bentgrass approaches wilt (bluish) favors creeping bentgrass because conditions are often too dry a condition for annual wintergrass to grow.

Fertilization: Excessive nitrogen fertilization tends to favor annual wintergrass over creeping bentgrass. Fertilize adequately but not excessively.

Low light conditions: Annual wintergrass is more photosynthetically efficient than creeping bentgrass under low light (shade) conditions. Shade favors annual wintergrass growth as much as 25% more than creeping bentgrass. Thus, tree removal to increase light penetration and duration to the turf favors creeping bentgrass.

Soil compaction: Although creeping bentgrass can grow on compacted soils, in the presence of annual wintergrass it is a non-

competitor. Relieving compaction will help slow annual wintergrass encroachment.

Traffic and Wear: Concentrated wear areas favor the encroachment of annual wintergrass. Disperse wear or traffic patterns on the turf. Clean-up patterns or tight turning areas for mowers become areas predisposed to annual wintergrass invasion. Switching to walk-behind mowers often helps reduce wear areas on putting greens.

Cultivar selection: The creeping bentgrass cultivar influences the rate of annual wintergrass invasion. The high shoot density creeping bentgrass like "Penn A4", "G6", and "A1" are more resistant to annual wintergrass invasion than the less dense cultivars like Penncross.

These cultural management practices can help slow the rate of annual wintergrass invasion but not necessarily exclude invasion.

Questions?

If you have questions about the Syngenta TechNotes—SH contact Sam Hole at sam.hole@syngenta.com, your local Nuturf representative or visit www.greencast.com.au