Home Lawn Seeding Mixtures and Timing Trial

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Introduction

Many lawn care professionals and homeowners debate when is the best time to establish a yard in Iowa, and how much more work and inputs it will take if planted at the wrong time of year. Additionally, so many different turfgrass species are sold that a side-by-side comparison of seed mixtures and planting dates are needed. The objectives of this study were to compare turfgrass seed that is locally, commercially available and commonly used, and planting timings. This is the first of a two-year study.

Materials and Methods

Research was conducted at the Iowa State University Horticulture Research Station. The ground was cleared of all vegetative cover before planting with a nonselective herbicide (glyphosate).

The experimental design was a two by six factorial design. Two planting dates will be used (October 4, 2016 and Spring 2017) with six seed mixtures or species (Pennington

Smart Seed Sun and Seed; Scotts Turf Builder Grass Seed Sun and Shade Mix + Watersmart Plus; Scotts Turf Builder Grass Seed Landscapers Mix; Sta-Green Sun and Shade Mix; 5 Iron Perennial Ryegrass; and Gulf annual ryegrass).

Each treatment was planted following proper seeding rates on the label with a slit seeder for maximum seed-to-soil contact. Plot size is 4 ft by 31 ft.

Because establishment times are already known for each turfgrass species used, digital image analysis (DIA) will be performed to track the cover of green tissue throughout the summer. These pictures will be collected weekly and the data will be used to track turfgrass performance and color throughout the summer.

Additional data collected will include the number and type of weeds in each plot, the presence of turfgrass diseases, and overall visual turfgrass quality on a one-to-nine scale, with one being poor and nine being excellent. A visual turfgrass quality of six or better is deemed acceptable.

Results and Discussion

Data will be taken starting May 2017 after the spring planting date.

Table 1. Plot map of home lawn seeding mixtures and timing trial.

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Plot 112 5 Iron P Rye Spring Planting	Plot 212 Sta-Green Mix Fall Planting	Plot 312 Gulf Annual Ryegrass Fall Planting
Plot 111 Scotts Landscape Mix Spring Planting	Plot 211 Scotts Turf Builder Mix Fall Planting	Plot 311 5 Iron P Ryegrass Fall Planting
Plot 110 Pennington Mix Spring Planting	Plot 210 Scotts Landscapers Mix Spring Planting	Plot 310 Gulf Annual Ryegrass Spring Planting
Plot 109 Sta-Green Spring Planting	Plot 209 Scotts Turf Builder Mix Spring Planting	Plot 309 5 Iron P Ryegrass Spring Planting
Plot 108 Scotts Turf Builder Mix Spring Planting	Plot 208 Gulf Annual Ryegrass Spring Planting	Plot 308 Sta-Green Mix Fall Planting
Plot 107 Gulf Annual Ryegrass Spring Planting	Plot 207 Gulf Annual Ryegrass Fall Planting	Plot 307 Pennington Mix Fall Planting
Plot 106 Scotts Landscapers Mix Fall Planting	Plot 206 Pennington Mix Fall Planting	Plot 306 Pennington Mix Spring Planting
Plot 105 Pennington Mix Fall Planting	Plot 205 Sta-Green Mix Spring Planting	Plot 305 Scotts Turf Builder Mix Spring Planting
Plot 104 Sta-Green Mix Fall Planting	Plot 204 5 Iron P Ryegrass Fall Planting	Plot 304 Scotts Turf Builder Mix Fall Planting
Plot 103 Scotts Turf Builder Fall Planting	Plot 203 5 Iron P Ryegrass Spring Planting	Plot 303 Scotts Landscaper Mix Fall Planting
Plot 102 Gulf Annual Ryegrass Fall Planting	Plot 202 Pennington Mix Spring Planting	Plot 302 Sta-Green Mix Spring Planting
Plot 101 5 Iron P Rye Fall Planting	Plot 201 Scotts Landscapers Mix Fall Planting	Plot 301 Scotts Landscapers Mix Spring Planting