Green Height Bentgrass Cultivar Trial

RFR-A1522

Nick Christians, university professor Dan Strey, research associate Department of Horticulture

Introduction

This is the first year of data from the green height bentgrass trial established in the fall of 2014. The study began the season at 0.5 in. mowing height and was reduced to 3/16-in. during the season. This is a National Turfgrass Evaluation Program (NTEP) trial and is being conducted at several research stations in the United States. It contains 20 seeded cultivars, including a number of the newest experimental cultivars.

Materials and Methods

The cultivars are maintained with a fertilizer program of 1/4 lb N applied at 14-day intervals with a total of 3-4 lb of N/1,000 ft² per growing season. Fungicides are used as needed in a preventive program. Herbicides and insecticides are applied as needed.

Results and Discussion

The visual quality was evaluated monthly in 2015 from April through October (Table 1). The values listed under each month in Table 1 are the averages of visual quality ratings made on three replicated plots. Visual quality was based on a scale of 9 to 1: 9 = best quality, 6 =lowest acceptable quality, and 1 =worst quality. The yearly average of the monthly data for each cultivar was calculated and is listed in the last column (Mean). The last row states the LSD (least significant difference), which is a statistical measurement of how widely the datum in each column must vary before they are considered to be different from one another. Genetic color was rated using a 9 to 1 scale with 9 = dark and 1 = light green.

This was the grow-in season for this trial and the reduction in mowing height reduced the quality of each plot through much of the season. It was not until September that significant differences in quality were found among cultivars. The 2016 season will be the first that evaluations will be made on mature plots.

No.	Cultivar	Genetic color	Quality ratings ¹							
			April	May	June	July	Aug	Sept	Oct	Mean
1	Luminary	6	4	5	5	6	6	6	6	5
2	DLFPS-AP/3054	7	4	5	6	6	6	5	4	5
3	DLFPS-AP/3018	7	4	5	6	5	6	5	5	5
4	DLFPS-AP/3056	7	4	5	6	6	6	5	5	5
5	DLFPS-AP/3058	8	4	5	5	6	7	5	6	5
6	DLFPS-AP/3059	7	4	5	5	5	6	6	6	5
7	Pure Select	7	5	6	6	6	6	5	5	6
8	Penn A-1	6	5	5	6	5	6	5	6	5
9	Penncross	6	4	5	5	5	5	6	6	5
10	L-93XD	7	3	4	5	6	6	5	5	5
11	Armor	8	4	5	6	6	6	6	5	5
12	Kingdom	9	4	5	6	6	7	6	5	6
13	Nightlife	9	4	5	6	6	7	6	4	5
14	V-8	7	5	6	6	6	7	5	6	6
15	GDE	6	4	5	6	6	7	5	5	5
16	DC-1	7	4	5	6	6	6	5	4	5
17	PST-ROPS	6	4	5	5	6	6	5	5	5
18	Shark	7	4	5	6	6	5	5	5	5
19	Barracuda	7	4	5	6	6	6	6	5	5
20	Declaration	6	4	5	6	6	6	5	5	5
	LSD 0.05	NS	NS	NS	NS	NS	NS	1	1	NS

Table 1. Quality and genetic color rating for the green height creeping bentgrass trial-2015.

Image: Top 10.05Image: Top 10.05Image: Top 10.05Image: Top 10.05Image: Top 10.05Image: Top 10.05Image: Top 10.05Top 10.05Top 10.05Top 10.05Top 10.05Top 10.05Top 10.05Image: Top 10.05Top 10.05Top 10.05Top 10.05Top 10.05Top 10.05Top 10.05Image: Top 10.05Top 10.05Top 10.05Top 10.05Top 10.05Top 10.05Image: Top 10.05Top 10.05Top 10.05Top 10.05Top 10.05Image: Top 10.05Top 10.05Top 10.05Top 10.05Image: Top 10.05Top 10.05Top 10.05Top 10.05Image: Top 10.05Top 10.05Image: T