Green Height Bentgrass Cultivar Trial-20

RFR-A2013

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Introduction

This is the final year of data from the green height bentgrass trial established in the fall of 2014. 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 experimentals. The trial was killed in August to make way for new trials.

Materials and Methods

The mowing height is 0.14-in. 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. The area was irrigated as needed to prevent moisture stress.

Results and Discussion

Spring greenup was rated using a 9 to 1 scale with 9 = dark and 1 = light green. The visual quality was evaluated monthly in 2020 from April through August (Table 1). Brown Patch was rated in July on a scale of 9 = mostdisease and 1 = no disease. 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 = lowestacceptable 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 data in each column must vary before these are considered to be different from one another. NS means there were no significant differences in that column.

Acknowledgements

Appreciation is extended to the NTEP organization for funding to conduct this project.

Table 1. Quality, genetic color, and brown patch ratings for the green height bentgrass trial-2020.

	Quality ^a						_	
Cultivar	April	May	June	July	Aug	Mean	BrownP ^b	Spring G ^c
Luminary	7	7	7	5	3	6	5	8
DLFPS-AP/3054	7	7	7	5	3	6	6	7
DLFPS-AP/3018	5	8	7	8	7	7	3	6
DLFPS-AP/3056	6	7	6	5	3	6	6	7
DLFPS-AP/3058	7	7	7	7	7	7	5	8
DLFPS-AP/3059	6	7	7	6	3	6	6	7
Pure Select	6	7	8	7	5	6	2	5
Penn A-1	6	7	8	6	4	6	6	7
Penncross	6	6	6	7	8	7	4	7
L-93XD	6	6	7	6	2	5	3	6
Armor	5	7	7	6	4	6	5	5
Kingdom	5	6	6	6	7	6	2	5
Nightlife	5	6	7	7	5	6	5	6
V-8	6	7	7	7	6	7	4	7
GDE	6	7	8	7	8	7	2	6
DC-1	7	8	8	8	7	8	2	7
PST-ROPS	6	7	7	5	4	6	5	6
Shark	5	7	8	7	6	6	4	6
Barracuda	7	7	7	7	5	6	3	8
Declaration	6	7	7	7	4	6	3	8
LSD 0.05 ^d	2	NS	1	2	3	1	NS	1

 $^{^{}a}$ Quality rated on a 1 to 9 scale with 9 = best quality, 1 = worst quality, and 6 = lowest acceptable quality.

^bBrown Patch disease: 1 = no disease and 9 = worst.

^cSpring greenup rated on a 1 to 9 scale with 9 = dark, 1 = light green.

^dLSD = least significant difference at the 95% confidence level.