

2003 Green Height Bentgrass Cultivar Trial

N.E. Christians and R.A. St. John

This is the first year of data from the green height bentgrass trial established in the fall of 2003. The area is maintained at a 3/16-inch mowing height. This is a National Turfgrass Evaluation Program (NTEP) trial and is being conducted at several research stations in the U.S. It contains 26 seeded cultivars, including a number of experimentals. Most of the plots are creeping bentgrass, with the exception of SR 7200, Legendary, IS-AC 1, EFD, Vesper, and Greenwich which are velvet bentgrasses.

The cultivars are maintained with a fertilizer program of 1/4 lb N applied at 14-day intervals with a total of 4 lbs of N/1000 ft²/growing season. Fungicides are used as needed in a preventative program. Herbicides and insecticides are applied as needed.

The visual quality was evaluated monthly in 2004 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 first cultivar listed in Table 1 had the highest average visual quality rating for the entire 2003 season. The cultivars are listed in descending order by average quality. 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.

Percent establishment data (PctEstab) were taken in late-fall 2003. Data for leaf texture (LeafTex) and genetic color (GenColor) were collected in June 2004. Genetic color was rated using a 9 to 1 scale with 9 = dark and 1 = light green.

Table 1. The 2004 visual quality and other ratings for cultivars in the 1998 Green Height Bentgrass Trial. SR 7200, Legendary, IS-AC 1, EFD, Vesper, and Greenwich which are velvet bentgrasses. All other cultivars are creeping bentgrasses.

Bentgrass Cultivar	GenColor	LeafTex	PctEstab	-----Visual Quality-----							Mean
				Apr	May	Jun	Jul	Aug	Sep	Oct	
235050	7.3	8.3	70.0	6.0	6.3	7.0	7.7	7.7	9.0	9.0	7.5
T-1	8.0	7.0	73.3	5.7	5.3	7.0	7.3	7.7	8.7	9.0	7.2
23R	7.3	8.3	76.7	6.0	6.3	6.7	7.3	8.3	6.7	8.3	7.1
DSB	7.3	8.0	61.7	5.7	5.7	6.7	7.0	8.0	8.7	8.3	7.1
Declaration	7.7	8.0	70.0	6.0	5.7	6.3	6.7	8.0	8.3	8.3	7.0
IS-AP 9	7.7	7.3	63.3	6.0	5.7	6.0	7.0	7.3	9.0	7.3	6.9
Penn A-1	7.0	8.0	76.7	5.7	5.0	6.0	7.3	8.0	8.7	7.7	6.9
Independence	7.3	7.0	70.0	5.3	5.0	6.3	7.0	7.3	8.0	7.7	6.7
SRX 1GD	7.3	7.0	65.0	5.3	6.0	6.3	6.7	7.3	7.3	7.7	6.7
Alpha	7.3	7.3	65.0	5.7	6.0	6.0	6.0	7.0	8.3	6.7	6.5
Benchmark DSR	7.3	6.7	68.3	5.3	5.7	5.7	5.7	7.3	8.3	7.0	6.4
Bengal	7.0	7.3	70.0	5.3	5.7	5.7	6.3	6.3	8.0	7.3	6.4
CY-2	7.3	7.3	60.0	5.3	5.0	5.7	6.3	7.0	8.0	7.3	6.4
A03-EDI	6.7	7.7	73.3	5.3	5.3	6.3	6.3	6.3	7.3	7.0	6.3
Kingpin (9200)	6.7	6.7	66.7	5.3	5.7	5.3	6.0	7.3	7.7	7.0	6.3
LS-44	7.7	7.0	71.7	5.3	5.0	5.7	6.3	7.0	7.3	7.7	6.3
13-M	6.3	8.0	73.3	5.3	5.3	5.7	6.0	6.7	8.0	6.3	6.2
SRX 1GPD	6.7	7.7	61.7	4.7	5.0	5.3	6.3	6.0	7.7	8.3	6.2
Pennlinks II	7.3	7.7	73.3	5.7	6.0	6.3	6.0	6.3	6.3	5.7	6.0
Penncross	6.7	6.0	75.0	6.0	5.7	5.7	5.7	5.3	6.0	6.0	5.8
Legendary	6.0	9.0	61.7	4.7	5.0	4.7	6.0	5.0	7.0	7.7	5.7
Greenwich	6.3	8.7	56.7	4.7	5.3	4.7	5.3	6.0	6.3	6.0	5.5
IS-AC 1	6.0	9.0	65.0	5.0	4.3	4.7	5.7	4.7	6.3	7.7	5.5
EFD	6.7	8.7	63.3	4.0	4.3	4.7	5.3	5.3	7.0	7.0	5.4
Vesper	7.0	7.7	46.7	4.0	4.3	4.7	5.7	4.7	6.0	7.0	5.2
SR 7200	7.0	8.3	48.3	4.0	4.0	4.3	4.7	5.0	6.0	7.0	5.0
CV	9.8	9.7	11.1	12.0	13.9	10.1	10.7	13.3	9.7	9.9	6.2
LSD	1.6	1.3	13.0	1.2	1.6	0.9	1.2	1.5	1.2	1.2	0.6