Creeping Bentgrass Fairway Cultivar Evaluation Trial

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Objective

Evaluate new cultivars of creeping bentgrass over repeated years maintained as a fairway height-of-cut as part of the National Turfgrass Evaluation Program (NTEP) ancillary trial.

Materials and Methods

It contains 19 seeded cultivars, 11 of which are new experimental cultivars. Planted in full sun with 5' by 5' plots. Planted on September 24, 2020, and is replicated three times. Fertility was applied at 0.25 lb. N per 1000 ft.^{2} monthly (April-October) using a granular fertilizer. Mowing height is 0.400 inches and plots are cut three times per week. Digital images were taken monthly to determine percent green cover. Digital images were captured with the use of a light box to ensure a consistent lighting. Images were scanned using Turf Analyzer to obtain percent cover. Color (1=light green color, 6=acceptable, and 9=dark green color), density (1=no turf, 6=acceptable, and 9=full turf stand), and turfgrass quality (1=poor, 6=acceptable quality, and 9=ideal) were rated visually. Color, cover, and density results are not presented here.

Data collection will continue through 2025.

Results and Discussion

Significant differences existed between cultivars for percent cover (data not shown), color (data not shown) and quality during the growing season. The values listed under each month in Table 1 are the averages of the visual turfgrass quality. The last row states the Fisher's 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.

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Table 1. Turfgrass quality data for creeping bentgrass fairway height cultivar evaluation trial, 2023.

	Visual turfgrass quality[a]							
Cultivar	**April**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov**
Penncross	5.3	6.0	6.3	7.0	6.0	6.0	7.3	6.0
Chinook (H10G-OP)	5.7	6.3	6.0	7.0	6.0	6.0	7.3	6.0
007XK	6.3	6.3	6.3	5.7	6.0	6.0	7.0	6.0
S1	6.0	6.0	6.0	6.0	6.0	5.7	7.3	6.0
TourPro	5.7	6.0	6.3	6.7	6.0	5.7	7.3	6.0
Piranha	6.3	6.0	6.0	6.0	5.7	5.7	7.3	6.0
Barracuda	6.3	6.0	6.3	6.7	6.0	6.0	7.3	6.0
Musket	5.7	6.0	5.7	6.0	6.0	6.0	7.3	6.0
Shark	5.7	6.0	6.3	6.0	5.7	6.0	7.0	5.7
Match Play	6.3	6.0	6.0	6.0	6.0	6.0	7.0	6.0
DLF-AP-3084	6.0	6.3	6.0	6.3	6.0	5.7	7.3	6.0
PVF-PV-1	5.7	6.3	6.0	6.3	6.0	5.7	7.7	5.7
PVF-PV-2	6.0	6.3	6.0	6.7	6.0	6.0	7.7	6.0
LNS 19	6.3	5.7	6.3	6.7	6.0	5.7	7.3	4.3
PPG-AP-MTV1	6.0	6.0	6.0	6.0	6.0	5.5	7.5	6.0
PPG-AP-MTV2	5.7	6.0	6.3	6.3	6.0	6.0	7.3	6.0
PST-0MRN	5.7	6.7	6.7	7.3	6.0	6.0	7.3	6.0
PST-0R20	6.3	6.7	6.0	6.3	6.3	6.0	7.7	6.0
PST-RODS	6.3	6.3	6.0	6.3	6.3	5.0	7.3	5.7
$LSD_{(0.05)}$[b]	1.0	0.9	0.6	1.1	0.4	0.6	0.9	1.2

[a]Visual turfgrass quality was determined by monthly ratings on a 1-9 scale (1=poor and 6=acceptable).

[b]Means were separated using Fisher's LSD.