Turf-type Tall Fescue Cultivar Study

RFR-A1333

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

Introduction

The National Turfgrass Evaluation Program (NTEP) conducts trials throughout the United States on turfgrass adaptation. This trial was established in September 2012 as a part of the NTEP program. Data will be collected over the next five years. This was the first year data was collected on this trial. It contained 16 turf-type tall fescue cultivars.

Materials and Methods

The individual plots measure 5 ft × 5 ft and the study was replicated three times. Quality ratings were conducted monthly in 2013. Ratings were based on a scale of 9=best quality and 1=lowest quality. A rating of six

or above was considered to be acceptable. The plots were irrigated to ensure establishment. Over the next four years, the plots will only be irrigated to prevent dormancy.

Results and Discussion

Table 1 contains turf quality ratings for the 2013 season. The mean quality rating was calculated for each cultivar. There were significant differences in the mean quality ratings for the year. We will continue to take data for four more years. The data also is submitted to NTEP each year and it will be included in their yearly report with data from all of the other states that are conducting this trial. Their data can be found at ntep.org.

Acknowledgements

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

Table 1.Turf-type tall fescue quality ratings.

	Cultivar	Quality							
No.		May	June	July	Aug	Sept	Oct	Mean Q	
1	Terrano	5.3	5.7	6.7	7.0	6.7	7.0	6.4	
2	Ky-31	5.3	5.7	6.0	6.0	6.0	6.0	5.8	
3	Regenerate	6.3	6.3	7.7	7.7	8.0	7.7	7.3	
4	Fesnova	4.7	6.0	7.0	6.3	7.0	7.0	6.3	
5	ZW 44	4.7	4.7	6.3	6.3	7.3	7.3	6.1	
6	W45	5.0	5.3	6.0	6.3	7.0	7.3	6.2	
7	U43	5.3	5.7	6.3	6.7	7.3	7.0	6.4	
8	LSD	5.0	6.0	6.7	6.7	7.0	7.3	6.4	
9	Aquaduct	4.3	5.7	6.0	6.0	6.7	6.7	5.9	
10	Catalyst	6.3	6.7	7.3	7.7	7.3	7.3	7.1	
11	Marauder	4.3	4.7	5.3	5.3	6.3	6.3	5.4	
12	Warhawk	5.3	5.3	6.3	6.3	6.7	6.3	6.1	
13	Annihilator	4.7	5.7	6.3	6.3	6.7	6.3	6.0	

Table 1.Turf-type tall fescue quality ratings (continued).

	<u> </u>	quality ratings (continued). Quality							
No.	Cultivar	May	June	July	Aug	Sept	Oct	Mean Q	
14	Comp. Res.	4.0	5.0	6.0	6.0	6.3	6.7	5.7	
15	204 Res. Blk4	5.3	6.3	6.3	6.3	7.0	6.7	6.3	
16	JS 819	4.7	5.7	6.0	6.7	7.0	6.7	6.1	
17	JS 818	5.3	6.3	6.7	7.0	6.7	7.0	6.5	
18	JS 809	5.0	6.0	6.3	6.7	7.3	7.7	6.5	
19	JS 916	4.7	5.0	5.3	6.0	6.7	6.3	5.7	
20	JS 825	5.3	6.7	7.3	7.0	7.0	7.0	6.7	
21	MET 1	4.7	6.0	6.0	7.3	7.7	7.3	6.5	
22	F711	5.3	5.7	6.3	6.7	7.0	7.0	6.3	
23	IS-TF 291	5.0	6.0	5.7	6.7	7.3	7.0	6.3	
24	IS-TF 276 M2	6.0	5.7	6.7	6.7	7.3	7.0	6.6	
25	IS-TF 305 SEL	5.0	5.7	6.0	6.7	6.3	6.3	6.0	
26	IS-TF 269 SEL	5.0	5.7	5.3	6.3	7.0	6.7	6.0	
27	IS-TF 282 M2	4.0	4.7	5.0	5.7	6.0	6.3	5.3	
28	IS-TF 284 M2	3.7	4.7	5.7	6.3	7.0	6.7	5.7	
29	OR-21	5.3	6.0	6.0	6.3	7.3	7.3	6.4	
30	TY 10	4.3	5.3	5.3	6.0	6.7	7.0	5.8	
31	Exp TF-09	5.3	6.0	6.7	7.3	7.0	7.3	6.6	
32	SRX-TPC	5.3	6.3	6.3	6.7	7.3	7.0	6.5	
33	PSG-WE1	4.0	5.0	5.7	6.0	7.0	6.7	5.7	
34	Pick-W43	5.0	5.7	6.3	7.0	7.3	7.7	6.5	
35	Grade 3	5.0	6.0	6.0	6.3	7.3	7.3	6.3	
36	PSG-PO1	4.0	4.7	5.7	6.7	6.7	6.7	5.7	
37	U45	5.0	5.7	6.0	6.7	7.0	6.7	6.2	
38	B23	5.0	5.7	7.0	7.3	7.3	7.0	6.6	
39	ATF 1612	4.7	5.3	6.3	6.3	7.0	7.0	6.1	
40	ATF 1704	5.0	5.3	6.3	6.0	6.7	7.0	6.1	
41	Burl TF-2	5.3	5.7	6.3	6.3	8.0	7.0	6.4	
42	Burl TF-136	5.3	5.7	6.0	6.7	7.3	7.7	6.4	
43	LTP-FSD	5.0	6.0	6.7	7.0	7.0	7.0	6.4	
44	LTP-TWUU	5.3	6.0	6.3	7.0	7.3	7.7	6.6	
45	LTP-F5DPDR	4.3	4.7	6.0	6.7	7.0	7.0	5.9	
46	IS-TF 289	4.7	5.3	6.7	7.0	7.3	7.3	6.4	
47	MET 6 SEL	4.0	5.0	5.7	6.3	6.7	6.7	5.7	
48	IS-TF 330	4.0	5.0	5.7	5.7	7.0	6.7	5.7	
49 50	TF-287	5.0	5.3	6.0	6.0	6.3	6.7	5.9	
50 51	IS-TF 307 SEL	4.7	5.0	5.7	6.0	7.0	6.7	5.8	
51 52	IS-TF 308 SEL	4.0	4.7	5.7	6.0	6.7	6.7	5.6	
52 53	IS-TF 311	4.0	4.7	5.0	5.3	6.7	6.3	5.3	
53 54	IS-TF 285	4.7	5.0	5.7	6.0	6.7	6.7	5.8	
	IS-TF 310 SEL	3.7	5.0	5.3	5.3	6.0	6.0	5.2	
55 56	IS-TF 272 ATF 1736	4.3	5.0	5.7	6.0	7.0	6.7	5.8	
50 57		4.3	5.0	6.0	7.0	7.3	6.7	6.1	
3/	ATF 1754	5.3	6.3	7.0	6.3	7.3	7.7	6.7	

Table 1.Turf-type tall fescue quality ratings (continued).

		quality ratings (continued). Quality							
No.	Cultivar	May	June	July	Aug	Sept	Oct	Mean Q	
58	Hemi	4.3	5.3	5.7	6.3	7.0	7.0	5.9	
59	Firebird 2	5.3	5.3	6.0	6.3	6.7	6.3	6.0	
60	Bullseye	5.3	5.7	6.0	6.7	7.3	7.0	6.3	
61	PST-5EV2	4.3	5.7	6.3	6.7	7.3	7.0	6.2	
62	PST-5GRB	5.0	5.7	6.3	6.7	7.0	7.0	6.3	
63	PST-5SALT	5.7	5.7	6.7	6.7	7.0	7.3	6.5	
64	PST-5SDT	5.7	6.3	6.7	7.0	7.0	6.7	6.6	
65	PST-5DZP	4.0	4.7	5.3	5.7	6.0	6.3	5.3	
66	PST-5RO5	4.3	5.0	6.0	6.0	6.7	6.7	5.8	
67	PST-5BPO	5.7	6.7	7.0	7.0	6.7	7.3	6.7	
68	PST-5BRK	5.0	6.0	7.0	6.7	7.3	7.0	6.5	
69	DB1	4.7	5.0	6.3	6.0	6.7	6.7	5.9	
70	RZ2	5.0	5.3	6.0	6.3	7.0	7.0	6.1	
71	TD1	5.7	5.7	6.3	6.3	7.7	7.0	6.4	
72	DZ1	5.0	5.7	6.0	6.7	7.0	7.7	6.3	
73	T31	4.0	4.7	5.0	6.0	6.3	6.3	5.4	
74	PSG-GSD	5.3	6.0	6.7	7.3	7.0	7.0	6.6	
75	PSG-8BP2	4.3	5.0	6.3	6.3	6.3	6.7	5.8	
76	PSG-TT4	4.3	5.0	6.0	6.3	6.3	6.7	5.8	
77	Faith	5.3	5.3	5.7	6.3	7.0	7.0	6.1	
78	K12-13	3.7	4.0	4.3	4.7	6.0	6.0	4.8	
79	K12-05	3.7	4.3	5.3	5.7	6.0	6.7	5.3	
80	PPG-TF-156	4.7	5.3	5.7	6.0	6.3	6.7	5.8	
81	PPG-TF-157	6.0	5.7	6.7	6.3	7.0	7.3	6.5	
82	PPG-TF-169	5.3	5.3	6.3	7.0	7.3	7.0	6.4	
83	PPG-TF-170	5.3	5.7	6.0	6.3	6.7	6.3	6.1	
84	PPG-TF-137	6.0	6.0	6.7	7.3	7.0	7.7	6.8	
85	PPG-TF-135	5.0	5.3	6.0	6.7	7.0	7.3	6.2	
86	PPG-TF-115	3.0	4.7	5.3	5.7	6.0	6.3	5.2	
87	PPG-TF-105	6.0	6.0	7.0	7.0	7.3	7.0	6.7	
88	PPG-TF-172	4.7	5.0	6.0	6.3	6.7	7.0	5.9	
89	PPG-TF-151	5.0	5.7	6.3	6.7	6.7	6.7	6.2	
90	PPG-TF-152	4.3	5.3	6.0	5.7	6.7	7.0	5.8	
91	PPG-TF-148	4.3	5.3	5.7	6.7	6.3	6.3	5.8	
92	PPG-TF-150	5.0	5.7	6.0	6.3	7.7	7.0	6.3	
93	Bizem	5.0	5.3	6.3	6.7	7.0	6.7	6.2	
94	CCR2	4.7	5.7	6.3	6.7	7.0	7.3	6.3	
95	MET-3	4.7	5.0	6.0	6.3	7.0	6.7	5.9	
96	W41	5.3	6.3	7.0	7.0	6.7	7.0	6.6	
97	PPG-TF-145	4.3	5.0	5.3	6.0	6.3	6.3	5.6	
98	PPG-TF-138	3.7	4.7	5.7	6.3	6.3	6.0	5.4	
99	PPG-TF-139	5.3	5.0	6.3	6.3	7.0	7.0	6.2	
100	PPG-TF-142	3.7	5.0	5.3	6.0	6.7	6.3	5.5	
101	RAD-TF-89	5.0	5.7	5.3	6.0	7.0	7.0	6.0	

Table 1.Turf type tall fescue quality ratings (continued).

		Quality							
No.	Cultivar	May	June	July	Aug	Sept	Oct	Mean Q	
102	RAD-TF-92	4.3	5.3	6.3	6.3	7.0	7.0	6.1	
103	GO-DFR	4.7	5.7	6.3	6.3	7.0	7.0	6.2	
104	K12-MCD	6.0	6.7	7.0	7.7	8.0	7.7	7.2	
105	PST-5EX2	5.0	5.3	6.0	6.7	7.0	7.0	6.2	
106	PST-5MVD	5.0	6.0	6.0	7.0	6.7	7.0	6.3	
107	RAD-TF-83	4.3	4.3	4.7	5.3	6.0	6.0	5.1	
108	RAD-TF-88	4.3	5.3	5.3	6.0	7.0	6.7	5.8	
109	BAR Fa 120878	4.3	5.3	6.0	6.0	6.7	6.0	5.7	
110	BAR Fa 121089	4.3	5.0	5.7	6.0	6.7	6.3	5.7	
111	BAR Fa 121091	4.0	5.0	5.3	5.7	6.7	6.7	5.6	
112	BAR Fa 121095	4.7	5.3	5.7	6.0	6.3	6.7	5.8	
113	PST-R5NW	4.7	5.7	6.0	6.3	7.0	6.7	6.1	
114	Burl TF-69	4.7	5.0	5.3	6.0	6.3	6.7	5.7	
115	Falcon IV	5.7	6.7	6.7	7.0	7.3	7.0	6.7	
116	Falcon V	4.0	5.0	5.7	7.0	7.3	7.0	6.0	
	LSD 0.05	1.5	1.4	1.3	1.2	1.1	NS	1.0	

Quality rated on a 1 to 9 scale with 9=best quality, 1=lowest quality, and 6=lowest commercially acceptable.