

2014

Perennial Ryegrass Cultivar Study

Nick E. Christians

Iowa State University, nchris@iastate.edu

Daniel J. Strey

Iowa State University, dstrey@iastate.edu

Evan J. Alderman

Iowa State University, alderman@iastate.edu

Follow this and additional works at: http://lib.dr.iastate.edu/farms_reports



Part of the [Agricultural Science Commons](#), [Agriculture Commons](#), and the [Horticulture Commons](#)

Recommended Citation

Christians, Nick E.; Strey, Daniel J.; and Alderman, Evan J., "Perennial Ryegrass Cultivar Study" (2014). *Iowa State Research Farm Progress Reports*. 2003.

http://lib.dr.iastate.edu/farms_reports/2003

This report is brought to you for free and open access by Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State Research Farm Progress Reports by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

Perennial Ryegrass Cultivar Study

Abstract

The National Turfgrass Evaluation Program (NTEP) conducts trials throughout the United States on turfgrass adaptation. This trial was established in September 2010 as a part of the NTEP program. It contains 88 perennial ryegrass cultivars.

Keywords

Horticulture, Turfgrass

Disciplines

Agricultural Science | Agriculture | Horticulture

Perennial Ryegrass Cultivar Study

RFR-A1331

Nick Christians, university professor
Dan Strey, research associate
Evan Alderman, student
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 2010 as a part of the NTEP program. It contains 88 perennial ryegrass cultivars.

Materials and Methods

The individual plots measure 5 ft × 5 ft and the study was replicated three times. Genetic color ratings were conducted in June, red thread ratings were conducted in July, and gray leaf spot ratings were conducted in September. Quality ratings were conducted monthly in 2012. Ratings were based on a scale of 9=best quality and 1=lowest quality.

A rating of six or above is considered to be acceptable.

Results and Discussion

Table 1 contains genetic color ratings, and quality ratings for the 2013 season. The mean quality rating was calculated for each cultivar. This was a non-irrigated trial and was dormant through much of the season, which accounts for the lack of significant differences in quality ratings until the September and October rating dates. There also were significant differences in the mean quality ratings for the year. We will continue to take data for one more year. The data also is submitted to NTEP each year, and it will be included in their yearly report with data from all 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. Perennial ryegrass quality ratings.

No.	Cultivar	Genetic color	Quality						Mean Q
			May	June	July	Aug	Sept	Oct	
1	Rinovo	7	5	5	4	5	4	5	5
2	CL 11601	8	6	6	7	6	6	6	6
3	PR 909	6	6	5	4	5	5	6	5
4	CL 11701	8	6	6	6	6	6	8	6
5	Apr 2036	6	6	5	5	5	4	6	5
6	Linn	6	3	3	6	6	5	3	5
7	Uno	7	6	5	5	6	5	6	6
8	DLF LGD-3026	6	4	5	3	4	4	5	4
9	DLF LGD-3022	6	5	5	5	5	5	6	5
10	PSRX-S84	7	7	6	4	4	6	6	6
11	SRX-4RHD	8	6	6	6	6	6	6	6
12	P02	7	5	5	4	6	6	6	5
13	S85	8	6	6	5	5	6	6	6

Table 1. Perennial ryegrass quality ratings (continued).

No.	Cultivar	Genetic color	Quality						Mean Q
			May	June	July	Aug	Sept	Oct	
14	LTP-RAE	8	5	5	5	6	5	6	6
15	Allante	6	6	5	5	6	5	6	5
16	Insight	7	5	5	5	4	4	5	5
17	Sienna	7	5	4	4	4	4	5	4
18	Brightstar SLT	6	5	6	4	5	4	5	5
19	CL 307	7	6	6	5	5	5	7	5
20	Apr 2320	7	6	6	6	6	6	7	6
21	Apr 2038	7	5	5	6	5	5	6	5
22	PPG-PR 121	8	6	6	5	6	6	7	6
23	PPG-PR 128	8	5	5	5	5	5	5	5
24	PPG-PR 133	7	6	5	5	5	5	5	5
25	PPG-PR 134	8	6	6	5	6	6	7	6
26	LTP-PR 135	7	5	6	4	5	5	7	5
27	PPG-PR 136	7	6	6	5	5	5	7	6
28	PPG-PR 137	7	5	6	5	5	6	7	6
29	PPG-PR 138	7	6	5	5	6	5	6	6
30	PPG-PR 140	7	6	6	6	6	6	6	6
31	PPG-PR 142	7	6	7	5	6	5	6	6
32	PPG-PR 143	8	5	5	4	5	5	5	5
33	PPG-PR 164	7	6	6	6	7	6	6	6
34	PPG-PR 165	7	6	5	6	6	5	6	6
35	BAR Lp 10969	6	6	5	4	4	5	6	5
36	BAR Lp 10972	7	6	5	5	5	4	6	5
37	BAR Lp 10970	7	5	6	6	6	6	6	6
38	2NJK	7	6	5	5	5	6	6	6
39	BAR Lp 7608	7	6	6	5	5	5	6	6
40	Pinnacle	6	5	5	6	6	6	5	5
41	APR 2445	7	5	5	5	6	5	6	5
42	Fiesta 4	6	6	5	5	4	4	7	5
43	GO-G37	7	6	5	5	5	5	6	5
44	CS-20	6	6	6	5	5	5	6	5
45	ISG-36	7	5	5	4	5	4	6	5
46	ISG-31	8	5	5	5	6	5	7	6
47	A-35	8	6	6	5	6	5	7	6
48	CS-PR66	7	6	6	5	5	4	6	5
49	CST	7	6	5	6	6	5	6	6
50	JR-178	7	5	5	4	5	5	6	5
51	JR-192	6	6	7	5	5	5	7	6
52	PSRX-3701	7	6	6	5	5	5	7	6
53	Pick 10401	7	6	7	6	6	6	7	6
54	Mach I	7	5	4	4	4	4	5	4
55	RAD-PR62	7	5	7	6	7	6	7	6

Table 1. Perennial ryegrass quality ratings (continued).

No.	Cultivar	Genetic Color	Quality						Mean Q
			May	June	July	Aug	Sept	Oct	
56	RAD-PR55R	7	6	6	5	5	5	7	6
57	IS-PR 409	7	5	5	3	4	4	6	5
58	IS-PR 463	7	6	6	4	5	5	6	5
59	IS-PR 469	7	7	7	6	6	6	6	6
60	IS-PR 479	7	6	6	5	5	5	7	6
61	IS-PR 487	7	6	7	5	6	6	6	6
62	IS-PR 488	8	5	5	5	5	4	5	5
63	IS-PR 489	8	6	5	5	6	5	7	6
64	IS-PR 491	7	6	6	5	6	6	7	6
65	IS-PR 492	7	6	5	4	5	5	6	5
66	DLF LGT 4182	7	7	7	5	6	5	7	6
67	ISG-30	8	6	6	4	6	5	7	6
68	PST-204D	7	5	5	5	6	6	6	6
69	PST-2NKM	7	6	6	6	7	6	7	6
70	PST-2DR9	7	6	5	5	6	5	6	5
71	PST-2MG7	7	7	6	5	6	5	7	6
72	PST-2TQL	6	5	6	5	5	5	6	5
73	PST-2AG4	7	6	5	4	5	5	6	5
74	PST-2MAGS	7	5	5	4	4	5	6	5
75	PST-2K9	7	5	6	6	4	6	6	6
76	PST-2BNS	7	8	6	6	7	6	6	6
77	PST-2ACR	8	5	6	6	6	6	7	6
78	Rio Vista	7	6	5	5	5	5	6	5
79	Octane	8	6	6	6	6	6	5	6
80	Bonneville	8	6	5	6	6	6	6	6
81	PSRX-4CAGL	7	4	6	4	5	4	6	5
82	GO-DHS	8	5	4	4	4	5	7	5
83	GO-PR60	8	6	6	6	6	5	5	6
84	GM3	7	5	5	5	5	6	6	5
85	PRX-4GM1	7	5	5	5	6	5	6	5
86	SRX-4MSH	7	6	6	6	6	7	7	6
87	Pick 4DFHM	7	5	4	5	4	4	5	4
88	Palmer V	7	5	5	4	5	5	7	5
LSD 0.05		NS	NS	NS	NS	NS	1	2	1

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