

National Turfgrass Evaluation Program (NTEP) 2010 Perennial Ryegrass Variety Trial

2012 Progress Report

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The National Turfgrass Evaluation Program sponsors variety trials throughout the continental U. S. and Canada using uniform testing procedures. The objective is to evaluate and identify cultivars (varieties) that perform best under the different and diverse environmental conditions (climatic, soil, and cultural) associated with the many NTEP locations cooperating as part of the program. NTEP publishes annual reports that summarize the results collected at the 25 or more NTEP sites such as the University of Massachusetts. The NTEP data is made available on line at www.ntep.org and is used by turfgrass specialist and practitioners to help recommend and select varieties that grow best at their specific location. NTEP evaluates turfgrasses adapted to both cool-season (northern latitudes) and warm-season (southern latitudes) areas.

The 2010 NTEP Perennial Ryegrass Test was seeded from October 12 to 18, 2010. There are 88 varieties represented in the test including 3 replications for each entry (cultivar) for a grand total of 264 plots. Turfgrass quality (TQ) ratings (1 to 9 scale, 9=best) is taken throughout the growing season along with wear tolerance, color and density ratings. Data is presented in Table 1. All data is ordered according to TQ from highest to lowest. Wear tolerance ratings increased with TQ and density while TQ ratings increased with density. Mach I and Rinova are the only commercially available entries that provided acceptable TQ while none of the entries that were acceptable in wear tolerance are commercially available.

Acceptable TQ (≥ 6.0)

S-PR 492, GO-PR60, PPG-PR 121, PPG-PR 138, PPG-PR 165, CL 11601, Mach I, Rinova, IS-PR 463, BAR Lp 7608. Commercially available honorable mention: Fiesta 4, Insight, Palmer V, and Sienna.

Acceptable wear tolerance (≥ 6.0)

GO-PR60, IS-PR 479, APR 2306, DLF LGD-3022, BAR Lp 10970, JR-192, 2NJK. Commercially available honorable mention: Allante, Brightstar SLT, and Mach I.

Cultural Practices:

- **Mowing height:** 0.5 inches with reel mower, 3 mowings per week.
- **Fertility:** 3.5 lbs N/1,000 ft²/year.
- **Irrigation:** to prevent drought stress.
- **Fungicides:** preventative.



RIVER ROAD

TURF- FARM FENCE

2010 NATIONAL TURFGRASS EVALUATION PROGRAM PERENNIAL RYEGRASS VARIETY TRIAL

<p>Block C</p>	<p>Block B</p>	<p>Block A</p>
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2010 NATIONAL TURFGRASS EVALUATION PROGRAM PERENNIAL RYEGRASS VARIETY TRIAL

BLOCK A				PLOT PLAN							ENTRY NUMBER				PLOTS 3 by 6 ft		
78	68	54	71	46	4	40	60	17	5	8	31	87	25	16	72	82	20
27	32	1	51	43	3	24	36	26	18	50	42	35	59	53	21	63	69
75	11	7	33	14	84	38	47	76	34	85	55	15	81	49	37	13	74
64	29	45	88	52	28	83	22	44	79	2	41	70	58	9	6	65	30
57	80	10	73	23	61	77	12	56	66	39	67	48	62	19	86		

2010 NATIONAL TURFGRASS EVALUATION PROGRAM PERENNIAL RYEGRASS VARIETY TRIAL

BLOCK B				PLOT PLAN							ENTRY NUMBER				PLOTS 3 by 6 ft		
43	49	58	70	22	52	71	40	57	29	47	42	66	79	24	4	30	77
6	65	21	51	15	87	48	23	69	45	3	78	81	13	20	25	44	82
56	36	11	74	84	1	16	26	86	73	32	5	9	61	55	17	67	33
75	18	63	2	28	59	64	62	46	12	31	34	54	68	60	38	10	85
35	88	41	14	72	80	83	7	39	19	76	50	53	8	37	27		

2010 NATIONAL TURFGRASS EVALUATION PROGRAM PERENNIAL RYEGRASS VARIETY TRIAL

BLOCK C				PLOT PLAN						ENTRY NUMBER				PLOTS 3 by 6 ft			
78	8	11	29	80	33	56	74	48	22	1	18	46	30	41	40	63	61
5	20	32	88	69	14	28	27	6	71	59	16	19	53	39	4	55	75
52	23	2	82	58	17	85	83	37	47	50	64	43	13	12	7	26	10
86	51	68	81	36	49	79	67	34	76	31	73	60	24	62	35	65	87
21	45	72	44	57	38	42	9	70	77	54	66	15	25	3	84		

Table 1. 2010 NTEP Perennial Ryegrass Test: wear, color, density, turfgrass quality (TQ).

Entry Number Name†	1 to 9, 9=highest				TQ Rank 1=best
	Wear	Color	Density	2011 TQ	
65 IS-PR 492	5.33	7.00	6.33	6.52	1.00
83 GO-PR60	6.00	7.00	6.33	6.29	2.00
22 PPG-PR 121	5.33	5.67	6.33	6.19	3.00
29 PPG-PR 138	5.33	6.00	6.00	6.14	4.50
34 PPG-PR 165	5.67	6.00	6.67	6.14	4.50
2 CL 11601	5.00	5.00	6.67	6.10	6.50
54 Mach I	5.67	7.33	6.67	6.10	6.50
1 Rinovo	5.00	6.00	6.33	6.05	8.50
58 IS-PR 463	5.33	6.00	6.33	6.05	8.50
39 BAR Lp 7608	5.00	5.00	5.67	6.00	10.50
48 CS-PR66	4.67	6.67	6.67	6.00	10.50
16 Insight	4.67	5.33	7.33	5.95	14.50
27 PPG-PR 136	5.00	6.33	6.33	5.95	14.50
42 Fiesta 4	5.00	6.33	6.33	5.95	14.50
56 RAD-PR55R	4.67	7.33	6.00	5.95	14.50
79 CL-301	5.33	5.67	6.33	5.95	14.50
81 PSRX-4CAGL	5.67	7.00	6.00	5.95	14.50
11 SRX-4RHD	4.67	5.33	5.67	5.90	20.50
17 Sienna	4.67	5.33	6.67	5.90	20.50
28 PPG-PR 137	5.00	6.00	6.33	5.90	20.50
59 IS-PR 469	4.33	6.00	6.33	5.90	20.50
60 IS-PR 479	6.00	6.33	6.33	5.90	20.50
88 Palmer V	5.33	6.33	6.00	5.90	20.50
31 PPG-PR 142	5.00	6.00	6.00	5.86	24.50
76 PST-2BNS	5.00	5.33	6.33	5.86	24.50
5 APR 2306	6.00	6.00	6.00	5.81	27.50
49 CST	5.00	6.00	6.33	5.81	27.50
64 IS-PR 491	5.67	6.33	6.33	5.81	27.50
85 PRX-4GM1	5.33	6.00	6.00	5.81	27.50
9 DLF LGD-3022	6.00	6.67	5.33	5.76	32.00
18 Brightstar SLT	5.67	5.00	6.67	5.76	32.00
45 ISG-36	5.00	8.67	6.67	5.76	32.00
62 IS-PR 488	5.33	6.33	6.33	5.76	32.00
67 ISG-30	5.00	7.67	5.67	5.76	32.00
30 PPG-PR 140	4.67	5.67	6.33	5.71	37.00
33 PPG-PR 164	4.00	5.67	5.67	5.71	37.00
37 BAR Lp 10970	6.00	6.00	6.00	5.71	37.00
52 PSRX-3701	4.33	5.67	6.67	5.71	37.00
57 IS-PR 409	5.00	6.33	6.33	5.71	37.00
68 PST-204D	5.33	5.33	5.33	5.67	40.00
20 APR 2320	5.33	6.33	6.67	5.62	42.00
24 PPG-PR 133	5.00	5.67	6.00	5.62	42.00
44 CS-20	5.67	7.33	6.00	5.62	42.00
7 Uno	5.00	6.00	6.00	5.57	47.00

Table 1. 2011 NTEP Perennial Ryegrass Test: wear, color, density, turfgrass quality (TQ).

Entry Number Name†	1 to 9, 9=highest				TQ Rank 1=best 1 to 88
	Wear	Color	Density	2011 TQ	
32 PPG-PR 143	4.67	5.67	5.33	5.57	47.00
43 GO-G37	5.67	7.33	5.67	5.57	47.00
51 JR-192	6.00	5.67	6.33	5.57	47.00
70 PST-2DR9	5.33	6.33	6.33	5.57	47.00
78 Rio Vista	4.33	6.00	5.67	5.57	47.00
86 SRX-4MSH	4.33	6.33	6.00	5.57	47.00
26 LTP-PR 135	5.33	5.33	6.00	5.52	52.50
41 APR 2445	4.67	6.00	6.33	5.52	52.50
61 IS-PR 487	5.00	5.33	5.33	5.52	52.50
87 Pick 4DFHM	5.00	6.00	6.00	5.52	52.50
3 PR 909	5.33	5.67	6.00	5.48	58.00
4 CL 11701	4.33	5.67	5.67	5.48	58.00
10 PSRX-S84	5.33	5.33	5.67	5.48	58.00
15 Allante	5.67	5.00	6.67	5.48	58.00
23 PPG-PR 128	5.00	6.00	5.67	5.48	58.00
25 PPG-PR 134	4.00	6.00	5.67	5.48	58.00
53 Pick 10401	4.00	5.33	6.33	5.48	58.00
12 P02	5.33	5.67	5.67	5.43	65.50
13 S85	4.67	6.33	5.67	5.43	65.50
35 BAR Lp 10969	5.67	5.33	6.00	5.43	65.50
38 2NJK	6.00	5.33	5.67	5.43	65.50
46 ISG-31	5.33	7.33	6.00	5.43	65.50
47 A-35	4.00	8.00	6.00	5.43	65.50
50 JR-178	5.00	5.67	5.67	5.43	65.50
71 PST-2MG7	5.67	6.33	5.67	5.43	65.50
55 RAD-PR62	5.33	6.00	5.67	5.38	71.00
73 PST-2AG4	6.33	6.00	6.00	5.38	71.00
75 PST-2K9	5.33	6.00	5.67	5.38	71.00
63 IS-PR 489	4.33	6.00	5.33	5.33	74.50
69 PST-2NKM	4.33	5.67	5.67	5.33	74.50
72 PST-2TQL	4.33	5.67	5.67	5.33	74.50
84 GM3	5.00	6.33	5.67	5.33	74.50
19 CL 307	4.00	6.67	6.33	5.29	77.00
8 DLF LGD-3026	4.67	7.67	5.67	5.24	78.50
40 Pinnacle	4.67	4.00	5.33	5.24	78.50
21 APR 2028	4.67	5.67	5.33	5.19	80.50
74 PST-2MAGS	4.67	6.33	5.67	5.19	80.50
82 GO-DHS	4.33	7.33	5.33	5.10	82.00
14 LTP-RAE	4.67	6.00	5.67	4.95	83.50
80 Bonneville	4.00	6.00	5.00	4.95	83.50
36 BAR Lp 10972	5.67	5.67	5.33	4.90	85.00
77 PST-2ACR	5.33	6.33	5.00	4.81	86.00
66 DLF LGT 4182	4.67	7.00	5.00	4.19	87.00
6 Linn	3.67	3.00	3.67	3.52	88.00
LSD§	0.95	0.85	0.86	0.67	-
Range	3.67 to 6.33	3.00 to 8.67	3.07 to 7.33	3.52 to 6.52	1 to 88

†See entry listing and plot plan for field trial location of corresponding entry.

§Any two cultivars that differ in value exceeding LSD (0.05) are statistically significant.