

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

## 2011 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](http://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 ratings (1 to 9 scale, 9=best) will be taken throughout the growing season over the next 5-year period. Wear will be applied in the fall of 2011 and each year of the 5 year test period. No data will be available until the 2012 reporting year. Percent cover during establishment is shown in Table 1 along with turfgrass quality recorded in June 2011.

### Cultural Practices:

- **Mowing height:** 0.5 inches with reel mower, 3 mowings per week.
- **Fertility:** 3.5 lbs N/1,000 ft<sup>2</sup>/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> |
|----------------|----------------|----------------|

**2010 NATIONAL TURFGRASS EVALUATION PROGRAM PERENNIAL RYEGRASS VARIETY TRIAL**

| <b>BLOCK A</b>   |    |    |    |    |    |    |    |    |    | <b>ENTRY NUMBER</b> |    |    |    |    | <b>PLOTS 3 by 6 ft</b> |    |    |
|------------------|----|----|----|----|----|----|----|----|----|---------------------|----|----|----|----|------------------------|----|----|
| <b>PLOT PLAN</b> |    |    |    |    |    |    |    |    |    | 87                  | 25 | 16 | 72 | 82 | 20                     |    |    |
| 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**

|    |    | PLOT PLAN |    |    |    |    |    |    |    |    |    | ENTRY NUMBER |    |    |    | PLOTS 3 by 6 ft |    |    |
|----|----|-----------|----|----|----|----|----|----|----|----|----|--------------|----|----|----|-----------------|----|----|
|    |    | 49        | 58 | 70 | 22 | 52 | 71 | 40 | 57 | 29 | 47 | 42           | 66 | 79 | 24 | 4               | 30 | 77 |
| 43 |    |           |    |    |    |    |    |    |    |    |    |              |    |    |    |                 |    |    |
| 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** **PLOTS 3 by 6 ft**

| PLOT PLAN |    |    |    |    |    |    |    |    |    | ENTRY NUMBER |    |    |    |    |    |    |    |
|-----------|----|----|----|----|----|----|----|----|----|--------------|----|----|----|----|----|----|----|
| 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: Percent cover and turfgrass quality (TQ).**

| Entry Number<br>Name† | Percent cover |      |      |         | June TQ |
|-----------------------|---------------|------|------|---------|---------|
|                       | April         | May  | June | Average | 1 to 9  |
| 65 IS-PR 492          | 60.0          | 93.3 | 98.3 | 83.9    | 6.67    |
| 29 PPG-PR 138         | 60.0          | 95.0 | 98.3 | 84.4    | 6.33    |
| 34 PPG-PR 165         | 70.0          | 93.3 | 96.7 | 86.7    | 6.33    |
| 54 Mach I             | 50.0          | 88.3 | 95.0 | 77.8    | 6.33    |
| 56 RAD-PR55R          | 46.7          | 91.7 | 95.0 | 77.8    | 6.33    |
| 83 GO-PR60            | 53.3          | 90.0 | 95.0 | 79.4    | 6.33    |
| 2 CL 11601            | 66.7          | 96.7 | 98.3 | 87.2    | 6.00    |
| 16 Insight            | 50.0          | 86.7 | 95.0 | 77.2    | 6.00    |
| 22 PPG-PR 121         | 53.3          | 91.7 | 95.0 | 80.0    | 6.00    |
| 28 PPG-PR 137         | 66.7          | 93.3 | 98.3 | 86.1    | 6.00    |
| 33 PPG-PR 164         | 56.7          | 85.0 | 93.3 | 78.3    | 6.00    |
| 60 IS-PR 479          | 46.7          | 85.0 | 91.7 | 74.4    | 6.00    |
| 62 IS-PR 488          | 56.7          | 91.7 | 96.7 | 81.7    | 6.00    |
| 64 IS-PR 491          | 50.0          | 88.3 | 95.0 | 77.8    | 6.00    |
| 1 Rinovo              | 56.7          | 86.7 | 93.3 | 78.9    | 5.67    |
| 4 CL 11701            | 53.3          | 86.7 | 98.3 | 79.4    | 5.67    |
| 7 Uno                 | 50.0          | 88.3 | 95.0 | 77.8    | 5.67    |
| 10 PSRX-S84           | 50.0          | 90.0 | 93.3 | 77.8    | 5.67    |
| 11 SRX-4RHD           | 50.0          | 86.7 | 96.7 | 77.8    | 5.67    |
| 17 Sienna             | 50.0          | 85.0 | 95.0 | 76.7    | 5.67    |
| 26 LTP-PR 135         | 53.3          | 90.0 | 96.7 | 80.0    | 5.67    |
| 27 PPG-PR 136         | 63.3          | 91.7 | 96.7 | 83.9    | 5.67    |
| 30 PPG-PR 140         | 56.7          | 91.7 | 95.0 | 81.1    | 5.67    |
| 31 PPG-PR 142         | 53.3          | 88.3 | 93.3 | 78.3    | 5.67    |
| 35 BAR Lp 10969       | 53.3          | 85.0 | 93.3 | 77.2    | 5.67    |
| 39 BAR Lp 7608        | 53.3          | 86.7 | 93.3 | 77.8    | 5.67    |
| 42 Fiesta 4           | 50.0          | 83.3 | 93.3 | 75.6    | 5.67    |
| 48 CS-PR66            | 56.7          | 83.3 | 93.3 | 77.8    | 5.67    |
| 49 CST                | 53.3          | 91.7 | 96.7 | 80.6    | 5.67    |
| 52 PSRX-3701          | 66.7          | 91.7 | 95.0 | 84.4    | 5.67    |
| 57 IS-PR 409          | 46.7          | 88.3 | 95.0 | 76.7    | 5.67    |
| 58 IS-PR 463          | 50.0          | 90.0 | 96.7 | 78.9    | 5.67    |
| 59 IS-PR 469          | 50.0          | 83.3 | 91.7 | 75.0    | 5.67    |
| 61 IS-PR 487          | 43.3          | 86.7 | 93.3 | 74.4    | 5.67    |
| 63 IS-PR 489          | 50.0          | 88.3 | 96.7 | 78.3    | 5.67    |
| 67 ISG-30             | 50.0          | 90.0 | 93.3 | 77.8    | 5.67    |
| 76 PST-2BNS           | 56.7          | 90.0 | 95.0 | 80.6    | 5.67    |
| 85 PRX-4GM1           | 56.7          | 93.3 | 96.7 | 82.2    | 5.67    |
| 88 Palmer V           | 46.7          | 85.0 | 95.0 | 75.6    | 5.67    |
| 3 PR 909              | 56.7          | 80.0 | 91.7 | 76.1    | 5.33    |
| 5 APR 2306            | 50.0          | 91.7 | 95.0 | 78.9    | 5.33    |
| 8 DLF LGD-3026        | 43.3          | 83.3 | 91.7 | 72.8    | 5.33    |
| 9 DLF LGD-3022        | 50.0          | 90.0 | 95.0 | 78.3    | 5.33    |
| 12 P02                | 53.3          | 90.0 | 93.3 | 78.9    | 5.33    |

**Table 1. 2010 NTEP Perennial Ryegrass Test: Percent cover and turfgrass quality (TQ).**

| Entry Number<br>Name† | Percent cover |              |              |              | June TQ      |
|-----------------------|---------------|--------------|--------------|--------------|--------------|
|                       | April         | May          | June         | Average      | 1 to 9       |
| 13 S85                | 50.0          | 88.3         | 93.3         | 77.2         | 5.33         |
| 18 Brightstar SLT     | 56.7          | 90.0         | 96.7         | 81.1         | 5.33         |
| 23 PPG-PR 128         | 56.7          | 85.0         | 91.7         | 77.8         | 5.33         |
| 24 PPG-PR 133         | 56.7          | 86.7         | 93.3         | 78.9         | 5.33         |
| 25 PPG-PR 134         | 53.3          | 86.7         | 93.3         | 77.8         | 5.33         |
| 38 2NJK               | 46.7          | 88.3         | 93.3         | 76.1         | 5.33         |
| 40 Pinnacle           | 50.0          | 91.7         | 98.3         | 80.0         | 5.33         |
| 41 APR 2445           | 46.7          | 83.3         | 93.3         | 74.4         | 5.33         |
| 43 GO-G37             | 50.0          | 85.0         | 91.7         | 75.6         | 5.33         |
| 46 ISG-31             | 43.3          | 91.7         | 91.7         | 75.6         | 5.33         |
| 47 A-35               | 46.7          | 86.7         | 91.7         | 75.0         | 5.33         |
| 50 JR-178             | 53.3          | 86.7         | 91.7         | 77.2         | 5.33         |
| 51 JR-192             | 60.0          | 88.3         | 93.3         | 80.6         | 5.33         |
| 68 PST-204D           | 50.0          | 88.3         | 95.0         | 77.8         | 5.33         |
| 71 PST-2MG7           | 53.3          | 86.7         | 93.3         | 77.8         | 5.33         |
| 73 PST-2AG4           | 53.3          | 90.0         | 93.3         | 78.9         | 5.33         |
| 74 PST-2MAGS          | 36.7          | 83.3         | 93.3         | 71.1         | 5.33         |
| 78 Rio Vista          | 50.0          | 83.3         | 95.0         | 76.1         | 5.33         |
| 79 CL-301             | 63.3          | 93.3         | 98.3         | 85.0         | 5.33         |
| 80 Bonneville         | 46.7          | 85.0         | 91.7         | 74.4         | 5.33         |
| 81 PSRX-4CAGL         | 53.3          | 81.7         | 95.0         | 76.7         | 5.33         |
| 87 Pick 4DFHM         | 53.3          | 86.7         | 95.0         | 78.3         | 5.33         |
| 15 Allante            | 53.3          | 83.3         | 91.7         | 76.1         | 5.00         |
| 32 PPG-PR 143         | 56.7          | 81.7         | 93.3         | 77.2         | 5.00         |
| 37 BAR Lp 10970       | 40.0          | 75.0         | 90.0         | 68.3         | 5.00         |
| 44 CS-20              | 50.0          | 80.0         | 90.0         | 73.3         | 5.00         |
| 45 ISG-36             | 56.7          | 81.7         | 90.0         | 76.1         | 5.00         |
| 53 Pick 10401         | 56.7          | 86.7         | 95.0         | 79.4         | 5.00         |
| 55 RAD-PR62           | 43.3          | 83.3         | 93.3         | 73.3         | 5.00         |
| 70 PST-2DR9           | 56.7          | 88.3         | 91.7         | 78.9         | 5.00         |
| 72 PST-2TQL           | 40.0          | 83.3         | 91.7         | 71.7         | 5.00         |
| 75 PST-2K9            | 43.3          | 85.0         | 95.0         | 74.4         | 5.00         |
| 84 GM3                | 56.7          | 88.3         | 93.3         | 79.4         | 5.00         |
| 86 SRX-4MSH           | 56.7          | 88.3         | 91.7         | 78.9         | 5.00         |
| 14 LTP-RAE            | 50.0          | 73.3         | 90.0         | 71.1         | 4.67         |
| 19 CL 307             | 56.7          | 88.3         | 93.3         | 79.4         | 4.67         |
| 20 APR 2320           | 53.3          | 83.3         | 88.3         | 75.0         | 4.67         |
| 21 APR 2038           | 50.0          | 76.7         | 88.3         | 71.7         | 4.67         |
| 36 BAR Lp 10972       | 30.0          | 63.3         | 83.3         | 58.9         | 4.67         |
| 69 PST-2NKM           | 46.7          | 80.0         | 91.7         | 72.8         | 4.67         |
| 82 GO-DHS             | 46.7          | 81.7         | 88.3         | 72.2         | 4.67         |
| 77 PST-2ACR           | 40.0          | 81.7         | 90.0         | 70.6         | 4.33         |
| 6 Linn                | 50.0          | 78.3         | 85.0         | 71.1         | 4.00         |
| 66 DLF LGT 4182       | 36.7          | 75.0         | 85.0         | 65.6         | 4.00         |
| LSD§                  | 13.1          | 11.6         | 6.3          | 8.5          | 1.07         |
| Range                 | 30.0 to 70.0  | 63.3 to 96.7 | 83.3 to 98.3 | 58.9 to 87.2 | 4.00 to 6.67 |

†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.