

## **NATIONAL TURFGRASS EVALUATION PROGRAM**

The National Turfgrass Evaluation Program (NTEP) is designed to develop and coordinate uniform evaluation trials of turfgrass varieties and promising selections in the United States and Canada. Test results can be used by national companies and plant breeders to determine the broad picture of the adaptation of a cultivar. Results can also be used to determine if a cultivar is well adapted to a local area or level of turf maintenance.

Briefly, the NTEP is a self-supporting, non-profit program, sponsored by the Beltsville Agricultural Research Center and the National Turfgrass Federation, Inc. Program policy is made by a policy committee consisting of one member from each of the four (4) Regional Turfgrass Research Committees in the United States, one member from the Lawn Seed Division of the American Seed Trade Association, one member from the United States Golf Association (USGA) Green Section, one member from the Golf Course Superintendents Assoc. of America (GCSAA), one member for the Turfgrass Producers International (TPI), one member from the Turfgrass Breeders Association and an executive director. The program does not make variety recommendations. However, the data from tests can be used by extension specialists and others for making recommendations.

The policy committee is responsible for determining program policy including, (1) requirements for submission of entries, (2) scheduling tests, (3) evaluation methods, (4) selecting standard or control test entries, (5) setting entry fees, (6) coordinating tests in their respective regions, (7) establishing guidelines for publication and data distribution and (8) scheduling committee meetings.

Executive Director - Kevin N. Morris, National Turfgrass Evaluation Program, Inc.

### **CURRENT POLICY COMMITTEE MEMBERS:**

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## **A Guide to NTEP Turfgrass Ratings**

### **Introduction**

The quality and scientific merit of NTEP data is extremely important. However, the evaluation of turfgrass species and cultivars is a difficult and complex issue. Furthermore, turfgrass evaluation is generally a subjective process based on visual estimates of factors, like genetic color, stand density, leaf texture, uniformity and quality. These factors can not be measured in the same way as other agricultural crops. Turfgrass quality is not a measure of yield or nutritive value. Turfgrass quality is a measure of aesthetics (i.e. density, uniformity, texture, smoothness, growth habit and color), and functional use. The most common way of assessing turfgrass quality is a visual rating system that is based on the turfgrass evaluator's judgement.

### **General Considerations**

Most visual ratings collected on NTEP trials are based on a 1 to 9 rating scale. One is the poorest or lowest and 9 is the best or highest rating. However, a few characteristics, such as winter kill or percent living ground cover, are rated on a percentage basis, again by using the evaluator's judgement. Most disease ratings found in NTEP reports will use the 1-9 scale, 9=no disease except where the evaluator made a judgement of the percentage of disease in each plot. Percent disease data will be found in separate tables and will normally not be included with disease data using the 1-9 scale.

### **Turfgrass Quality**

Turfgrass Quality is based on 9 being outstanding or ideal turf and 1 being poorest or dead. A rating of 6 or above is generally considered acceptable. A quality rating value of 9 is reserved for a perfect or ideal grass, but it also can reflect an absolutely outstanding treatment plot. The NTEP requires quality ratings on a monthly basis. Quality ratings take into account the aesthetic and functional aspects of the turf. Quality ratings are not based on color alone, but on a combination of color, density, uniformity, texture, and disease or environmental stress.

Turfgrass quality ratings are grouped and presented by region, management level, a particular stress (shade, traffic, etc.) and in some cases, by individual location (starting with 2001 data, data from each location will be posted separately as well on the NTEP web site, <http://www.ntep.org>). Also available now is a summary table (Appendix) in the back of this report. This summary table includes various statistical measures not previously compiled for NTEP reports. For an explanation of this table and these changes, please go to the NTEP web site at <http://www.ntep.org/pdf/grandmean.mem.pdf>.

### **Other Ratings**

More detailed information on the ratings of specific characteristics can be found on the NTEP web site at <http://www.ntep.org/reports/ratings.htm>.

## 2010 NATIONAL PERENNIAL RYEGRASS TEST

### LOCATIONS SUBMITTING DATA FOR 2013

<u>State</u>	<u>Location</u>	<u>Code</u>
Illinois	Urbana	IL1
Iowa	Ames	IA1
Maryland	College Park	MD1
Massachusetts	Amherst	MA1
Michigan	East Lansing	MI1
Minnesota	St. Paul	MN1
Missouri	Columbia	MO1
Nebraska	Mead	NE1
New Jersey	Adelphia	NJ2
Oregon	Corvallis	OR1
Virginia	Blacksburg	VA1
Virginia	Blacksburg (Traffic Study)	VA2

**2010 NATIONAL PERENNIAL RYEGRASS TEST  
Entries and Sponsors**

Entry No.	Name	Sponsor	Entry No.	Name	Sponsor
* 1	Rinovo	Semillas Fito	*46	Excellence (ISG-31)	Integrated Seeds
2	CL 11601	The Scotts Company	47	A-35	Allied Seeds
* 3	Pizzazz 2 GLR (PR 909)	Turf Merchants, Inc.	48	CS-PR66	Columbia Seeds
* 4	Pangea GLR (CL 11701)	Turf Merchants, Inc.	*49	Pillar (CST)	Columbia Seeds
* 5	Sunstreaker (APR 2036)	Brett Young Seeds Ltd.	50	JR-178	Jacklin Seed by Simplot®
* 6	Linn	Standard Entry	51	JR-192	Jacklin Seed by Simplot®
* 7	Uno	Standard Entry	*52	SR 4650 (PSRX-3701)	Seed Research of Oregon
8	DLF LGD-3026	DLF International Seeds	*53	Karma (PICK 10401)	Pickseed USA, Inc.
9	DLF LGD-3022	DLF International Seeds	*54	Mach I	Standard Entry
*10	Sideways (PSRX-S84)	Seed Research of Oregon	55	RAD-PR62	Radix Research
*11	Wicked (SRX-4RHD)	Seed Research of Oregon	56	RAD-PR55R	Lewis Seed
*12	Playoff 2 (P02)	John Deere Landscapes	*57	Riptide (IS-PR 409)	Brett Young Seeds Ltd.
*13	Evolution (S85)	John Deere Landscapes	*58	Bandalore (IS-PR 463)	DLF International Seeds
14	LTP-RAE	Lebanon Turf Products	*59	Thrive (IS-PR 469)	DLF International Seeds
*15	Allante	Ledeboer Seed/Pro-Turf Solutions-OVS	*60	Hancock (IS-PR 479)	DLF International Seeds
*16	Insight	Ledeboer Seed/Pro-Turf Solutions-OVS	*61	Stamina (IS-PR 487)	DLF International Seeds
*17	Sienna	Ledeboer Seed/Pro-Turf Solutions-OVS	*62	Monsieur (IS-PR 488)	DLF International Seeds
*18	Brightstar SLT	Standard Entry	*63	Banfield (IS-PR 489)	DLF International Seeds
19	CL 307	Pennington Seed Company	*64	Aspire (IS-PR 491)	DLF International Seeds
20	APR 2320	Pennington Seed Company	*65	Diligent (IS-PR 492)	DLF International Seeds
*21	Haven (APR 2038)	Smith Seed Services	66	DLF LGT 4182	DLF International Seeds
*22	Green Supreme (PPG-PR 121)	Ampac Seed Company	*67	Seductive (ISG-30)	Integrated Seeds
23	PPG-PR 128	Integra Turf, Inc.	*68	Salinas II (PST-204D)	Landmark Native Seeds
*24	Fastball RGL (PPG-PR 133)	Mountain View Seeds	69	PST-2NKM	Pure-Seed Testing
*25	Stellar 3GL (PPG-PR 134)	Mountain View Seeds	70	PST-2DR9	Pure-Seed Testing
26	LTP-PR 135	Lebanon Turf Products	*71	Pacific GEM (PST-2MG7)	Pure-Seed Testing
27	PPG-PR 136	Lewis Seed	72	PST-2TQL	Pure-Seed Testing
*28	Premium (PPG-PR 137)	Columbia Seeds	*73	Dominator (PST-2AG4)	Brett Young Seeds Ltd.
*29	Amazing A+ (PPG-PR 138)	Ampac Seed Company	*74	MANHATTAN 6 GLR (PST-2MAGS)	Turf Merchants, Inc.
*30	Apple SGL (PPG-PR 140)	Mountain View Seeds	75	PST-2K9	The Scotts Company
31	PPG-PR 142	Peak Plant Genetics	76	PST-2BNS	Landmark Native Seeds
*32	Provost (PPG-PR 143)	Columbia Seeds	77	PST-2ACR	The Scotts Company
*33	Grand Slam GLD (PPG-PR 164)	Mountain View Seeds	*78	Rio Vista	Burlingham Seeds
34	PPG-PR 165	Peak Plant Genetics	*79	Octane	Burlingham Seeds
35	BAR Lp 10969	Barenbrug USA	*80	Bonneville	Burlingham Seeds
36	BAR Lp 10972	Barenbrug USA	81	PSRX-4CAGL	Pickseed USA & Seed Research of OR
37	BAR Lp 10970	Barenbrug USA	82	GO-DHS	Grassland Oregon
38	PST-2NJK	Barenbrug USA	83	GO-PR60	Grassland Oregon
39	BAR Lp 7608	Barenbrug USA	*84	Sox Fan (GM3)	Landmark Native Seeds
*40	Pinnacle	Standard Entry	85	PRX-4GM1	Pickseed USA & Seed Research of OR
41	APR 2445	ProSeeds Marketing	86	SR4660ST (SRX-4MSH)	Seed Research of Oregon
*42	Fiesta 4	Standard Entry	87	Pick 4DFHM	Pickseed USA, Inc.
43	GO-G37	Grassland Oregon	*88	Palmer V	Standard Entry
44	Prominent (CS-20)	Columbia Seeds			
45	Vintage (ISG-36)	Integrated Seeds			

\* COMMERCIALY AVAILABLE IN THE USA IN 2014

TABLE A.

2013 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN  
THE 2010 NATIONAL PERENNIAL RYEGRASS TEST

LOCATION	SOIL TEXTURE	SOIL PH	SOIL PHOSPHOROUS (LBS/ACRE)	SOIL POTASSIUM (LBS/ACRE)	NITROGEN (LBS/1000 SQ FT)	SUN OR SHADE	MOWING HEIGHT (IN)	IRRIGATION PRACTICED
IA1	SANDY CLAY LOAM	7.1-7.5	0-60	241-375	2.1-3.0	FULL SUN	2.6-3.0	TO PREVENT STRESS
IL1	SILT LOAM AND SILT	6.1-6.5	0-60	376-500	3.1-4.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
MA1	LOAM	5.6-6.0	0-60	241-375	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MD1	SILT LOAM AND SILT	6.1-6.5	61-150	151-240	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MI1	-	-	-	-	-	-	-	-
MN1	SILTY CLAY LOAM	6.6-7.0	0-60	151-240	2.1-3.0	FULL SUN	1.6-2.0	ONLY DURING SEVERE STRESS
MO1	SILTY CLAY LOAM	5.6-6.0	61-150	151-240	2.1-3.0	FULL SUN	2.1-2.5	ONLY DURING SEVERE STRESS
NE1	SILTY CLAY AND CLAY	6.6-7.0	0-60	241-375	1.1-2.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
NJ2	SANDY LOAM	6.1-6.5	271-450	241-375	2.1-3.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
OR1	SILTY CLAY LOAM	5.6-6.0	61-150	241-375	4.1-5.0	FULL SUN	1.6-2.0	TO PREVENT STRESS
VA1	SILT LOAM AND SILT	6.1-6.5	0-60	0-150	2.1-3.0	FULL SUN	1.1-1.5	ONLY DURING SEVERE STRESS
VA2	SILT LOAM AND SILT	6.1-6.5	0-60	0-150	2.1-3.0	FULL SUN	1.1-1.5	ONLY DURING SEVERE STRESS

TABLE B.

## LOCATIONS AND DATA COLLECTED IN 2013

LOCATION	JANUARY QUALITY RATING	FEBRUARY QUALITY RATING	MARCH QUALITY RATING	APRIL QUALITY RATING	MAY QUALITY RATING	JUNE QUALITY RATING	JULY QUALITY RATING	AUGUST QUALITY RATING	SEPTEMBER QUALITY RATING	OCTOBER QUALITY RATING	NOVEMBER QUALITY RATING	DECEMBER QUALITY RATING	GENETIC COLOR	SPRING GREENUP	LEAF TEXTURE
IA1					X	X	X	X	X	X			X		
IL1				X	X	X	X	X	X	X			X	X	
MA1				X	X	X	X	X	X	X	X		X		
MD1				X	X	X	X			X	X	X			
MI1				X	X	X	X	X	X	X			X		
MN1						X									
MO1			X	X	X	X	X	X	X	X	X		X		X
NE1				X	X	X	X	X	X	X			X	X	
NJ2				X	X	X	X	X	X	X			X	X	
OR1	X	X	X	X	X	X	X	X	X	X	X	X	X		
VA1				X	X	X	X	X	X	X					
VA2				X	X	X	X	X		X	X				

TABLE B. (CONT'D)

## LOCATIONS AND DATA COLLECTED IN 2013

LOCATION	WEAR TOLERANCE	FALL DENSITY	PERCENT COVER SPRING	PERCENT COVER SUMMER	STEM RUST	POA ANNUA COUNTS	WINTER KILL RATINGS
IA1							
IL1							
MA1	X	X				X	
MD1							
MI1							
MN1							X
MO1				X	X		
NE1							
NJ2							
OR1							
VA1			X	X			
* VA2							

\* MORE TRAFFIC DATA FOR VA2 IN TABLE 6.

TABLE 1.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS  
GROWN AT ELEVEN LOCATIONS IN THE U.S.  
2013 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	IA1	IL1	MA1	MD1	MI1	MN1	M01	NE1	NJ2	OR1	VA1	MEAN
PST-2BNS	6.3	5.8	6.0	6.0	6.5	3.0	6.1	6.2	5.6	6.3	6.8	5.9
* ASPIRE (IS-PR 491)	5.9	6.2	5.9	5.4	6.9	4.0	6.1	6.1	6.2	6.4	5.2	5.9
* PANGEA GLR (CL 11701)	6.4	5.8	6.2	7.0	6.8	1.3	6.3	5.7	6.1	6.2	6.6	5.8
* WICKED (SRX-4RHD)	5.9	6.3	5.9	6.0	6.5	2.7	6.0	5.7	5.8	6.4	6.6	5.8
* GRAND SLAM GLD (PPG-PR 164)	6.1	5.8	6.8	5.5	6.8	1.7	6.5	5.9	5.9	6.6	6.1	5.8
* STELLAR 3GL (PPG-PR 134)	6.1	6.2	5.9	5.3	6.5	3.7	6.0	5.8	5.5	6.1	6.3	5.8
* UNO	5.5	6.0	5.6	5.5	6.6	3.7	5.9	6.3	5.8	6.1	6.3	5.7
PST-2NKM	6.2	6.4	5.5	5.5	6.9	4.0	5.6	5.7	5.1	5.8	6.4	5.7
* THRIVE (IS-PR 469)	6.3	6.4	6.0	5.4	6.2	1.7	6.5	5.9	5.8	6.4	6.2	5.7
* SUNSTREAKER (APR 2036)	5.1	6.0	6.2	6.0	6.5	3.0	5.9	5.7	5.5	6.1	6.2	5.7
* KARMA (PICK 10401)	6.1	6.2	6.2	6.0	6.8	1.0	5.9	5.9	5.6	6.2	6.2	5.6
* EVOLUTION (S85)	5.7	6.0	5.8	6.0	6.9	1.0	6.2	5.3	5.6	6.4	6.7	5.6
* STAMINA (IS-PR 487)	5.9	6.0	6.1	5.4	6.9	2.3	6.1	5.3	4.9	6.2	6.2	5.6
* GREEN SUPREME (PPG-PR 121)	6.1	6.1	6.1	5.8	6.3	2.3	5.5	5.9	5.4	6.3	5.5	5.6
* AMAZING A+ (PPG-PR 138)	5.7	5.6	6.2	5.2	6.9	3.3	5.6	5.5	5.1	6.3	5.8	5.6
* APPLE SGL (PPG-PR 140)	5.8	6.0	6.0	5.8	6.6	4.0	5.5	5.4	4.3	6.0	6.0	5.6
* SR 4650 (PSRX-3701)	5.6	6.1	6.0	6.5	7.1	1.0	5.3	5.8	5.4	6.1	6.2	5.6
* RIPTIDE (IS-PR 409)	4.5	5.5	6.0	4.6	6.9	3.7	5.7	6.0	5.7	6.4	6.2	5.6
* SIDEWAYS (PSRX-S84)	5.6	6.0	5.8	6.1	6.3	1.7	5.9	5.9	5.3	6.1	6.3	5.6
SR4660ST (SRX-4MSH)	6.0	6.1	6.0	5.2	6.7	2.0	5.6	6.1	5.3	5.6	6.5	5.6
LTP-PR 135	5.4	6.0	6.2	5.8	6.5	2.3	5.8	5.8	4.9	6.3	6.1	5.6
RAD-PR55R	5.6	5.4	5.2	4.1	6.8	4.3	5.5	6.0	5.2	6.4	6.4	5.5
* PROVOST (PPG-PR 143)	4.8	6.1	6.0	5.9	6.9	3.0	6.0	5.5	4.5	6.3	5.9	5.5
APR 2320	6.2	5.8	5.5	3.0	6.8	5.0	5.8	5.8	5.4	6.0	5.7	5.5
* BANFIELD (IS-PR 489)	5.8	5.5	5.6	5.3	6.6	2.3	5.7	5.8	5.6	6.4	6.0	5.5
* PALMER V	5.3	5.8	5.5	4.9	6.4	3.0	5.4	6.0	5.8	6.3	6.2	5.5
PSRX-4CAGL	4.8	5.6	6.0	5.0	6.5	4.0	6.0	5.8	5.2	6.1	5.5	5.5
* SOX FAN (GM3)	5.2	5.4	5.8	4.9	6.6	3.7	5.0	6.0	5.0	6.2	6.5	5.5
PPG-PR 136	5.8	5.6	6.1	6.0	6.6	1.0	5.7	5.6	5.5	6.1	6.1	5.5
* BANDALORE (IS-PR 463)	5.4	5.7	5.6	5.4	6.1	1.3	6.0	6.0	6.4	6.3	5.8	5.5
CL 11601	6.1	6.1	5.5	6.8	6.8	1.3	5.6	5.3	4.8	5.9	5.9	5.5
* RIO VISTA	5.2	6.0	6.1	5.7	6.7	1.3	5.9	6.1	5.4	6.3	5.2	5.5
PPG-PR 165	5.5	6.1	5.9	6.1	6.7	1.3	5.5	5.6	5.4	6.1	5.8	5.5
* HAVEN (APR 2038)	5.2	5.4	5.3	5.9	6.4	3.0	5.4	6.0	5.0	6.0	6.3	5.5
JR-178	5.1	5.9	6.1	5.2	6.7	2.0	5.9	5.9	5.2	6.2	5.8	5.5
* SALINAS II (PST-204D)	5.5	5.7	5.2	4.4	6.7	2.7	5.7	6.0	5.4	6.0	6.7	5.5
CL 307	5.4	5.5	5.8	6.4	6.6	1.3	6.0	6.0	5.0	6.0	5.9	5.5
PST-2NJK	5.5	6.0	5.3	5.3	6.9	2.0	5.6	5.6	4.8	5.9	7.0	5.4
* DILIGENT (IS-PR 492)	5.3	6.3	5.8	5.5	6.5	1.0	6.6	5.6	5.1	6.3	5.8	5.4
* PIZZAZZ 2 GLR (PR 909)	5.2	5.8	6.4	5.8	6.8	1.0	6.2	5.3	5.4	6.3	5.5	5.4
PRX-4GM1	5.4	5.5	5.7	5.6	6.6	4.0	5.3	4.8	4.9	6.1	6.0	5.4
* OCTANE	5.9	5.2	5.8	5.6	6.6	1.3	6.3	5.7	5.5	6.2	5.6	5.4
* PREMIUM (PPG-PR 137)	5.6	6.1	5.8	5.5	6.5	1.7	5.5	5.5	5.2	6.1	6.0	5.4
PST-2K9	5.5	5.5	5.5	5.4	6.6	2.0	5.7	5.8	5.6	5.9	6.0	5.4
APR 2445	5.3	5.7	5.5	5.0	6.4	1.3	5.6	5.7	5.9	6.2	6.8	5.4
* FASTBALL RGL (PPG-PR 133)	5.3	6.0	5.9	5.2	6.4	1.3	5.9	5.8	5.2	6.3	6.1	5.4
GO-PR60	5.8	5.4	5.3	3.9	6.5	2.3	6.2	6.0	5.5	6.2	6.5	5.4



TABLE 1. (CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS  
GROWN AT ELEVEN LOCATIONS IN THE U.S.

2013 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	IA1	IL1	MA1	MD1	MI1	MN1	MO1	NE1	NJ2	OR1	VA1	MEAN
* PACIFIC GEM (PST-2MG7)	6.1	5.6	5.6	5.0	6.3	2.0	5.5	5.9	4.8	6.1	6.6	5.4
CS-PR66	5.2	5.4	5.5	4.8	6.2	2.7	5.6	6.1	5.1	6.1	6.4	5.4
* BONNEVILLE	5.7	5.2	5.3	5.3	6.8	3.0	6.0	5.3	4.6	6.3	5.6	5.4
* RINOVO	4.7	6.0	6.3	5.5	6.2	1.0	5.9	5.8	5.7	6.3	5.5	5.4
PPG-PR 142	5.9	5.7	5.7	6.0	6.6	2.3	5.3	5.3	4.4	6.1	5.6	5.4
* PILLAR (CST)	5.8	5.7	6.3	5.2	6.4	1.7	6.0	6.0	4.3	6.1	5.4	5.4
BAR LP 10970	6.1	5.8	5.6	4.7	6.5	1.3	5.4	5.7	5.4	6.1	6.2	5.3
* DOMINATOR (PST-2AG4)	5.2	5.4	5.3	4.0	6.6	3.7	5.3	5.4	5.4	6.0	6.5	5.3
* MONSIEUR (IS-PR 488)	4.8	5.4	5.3	5.7	6.4	2.0	5.5	5.8	5.1	6.4	6.3	5.3
DLF LGD-3022	5.2	5.0	5.4	5.8	6.5	2.7	5.2	5.9	4.8	6.0	6.1	5.3
PST-2DR9	5.4	5.1	5.0	5.1	6.7	2.0	5.5	5.6	5.1	6.3	6.6	5.3
BAR LP 10969	5.2	5.5	5.1	3.4	6.9	4.0	5.6	5.5	5.4	5.8	5.9	5.3
PPG-PR 128	4.9	5.7	5.7	5.1	6.7	2.3	5.6	5.8	4.7	6.1	5.5	5.3
JR-192	5.8	6.3	5.8	3.8	6.7	2.0	6.0	6.0	4.4	6.0	5.5	5.3
* FIESTA 4	5.3	5.5	6.0	4.5	6.4	1.0	5.5	5.4	5.7	6.4	6.3	5.3
* HANCOCK (IS-PR 479)	5.8	6.1	5.7	4.0	6.7	1.3	5.7	6.0	4.4	6.4	5.8	5.3
PST-2TQL	5.3	5.8	5.2	3.7	7.1	2.0	5.6	5.6	5.5	5.8	6.0	5.2
BAR LP 10972	4.9	4.9	5.3	3.8	6.3	4.7	5.4	5.4	4.9	5.8	6.1	5.2
PST-2ACR	5.8	5.9	4.8	4.6	6.2	1.7	5.5	5.6	4.9	5.8	6.4	5.2
LTP-RAE	5.6	5.1	5.5	4.7	6.7	1.7	5.5	5.8	4.8	6.2	5.5	5.2
* MANHATTAN 6 GLR (PST-2MAGS)	4.9	6.1	5.4	5.1	6.4	1.0	5.8	5.9	4.7	6.1	5.6	5.2
RAD-PR62	6.2	5.0	5.7	3.5	5.8	2.0	5.8	6.0	4.8	6.0	5.8	5.1
* PLAYOFF 2 (P02)	5.3	5.6	5.0	4.9	6.2	2.0	5.4	5.7	4.4	6.2	5.9	5.1
A-35	5.8	5.2	5.0	4.2	6.0	2.3	5.3	5.9	4.4	6.4	5.7	5.1
* BRIGHTSTAR SLT	4.9	5.5	5.4	3.7	6.7	2.7	5.4	5.9	4.2	5.6	6.0	5.1
* SEDUCTIVE (ISG-30)	5.6	5.2	5.1	3.6	6.2	2.0	5.5	5.7	4.2	6.3	5.9	5.0
GO-G37	5.3	5.3	5.2	3.7	6.0	2.0	5.7	5.8	4.5	6.0	5.8	5.0
* ALLANTE	5.3	5.9	5.9	3.7	6.4	1.3	5.6	5.4	4.0	5.8	5.3	5.0
* EXCELLENCE (ISG-31)	5.5	5.0	5.0	3.7	6.3	2.0	5.1	5.8	4.4	6.2	5.6	5.0
PICK 4DFHM	4.4	5.8	5.3	4.6	6.2	1.0	5.2	5.8	4.3	5.8	5.8	4.9
* INSIGHT	4.7	5.4	5.4	2.6	6.6	3.3	5.5	5.4	4.4	6.0	4.6	4.9
* PROMINENT (CS-20)	5.4	4.9	5.1	3.7	6.2	2.3	5.2	5.9	4.0	6.1	5.2	4.9
DLF LGT 4182	5.8	4.5	3.9	3.4	5.9	1.3	5.7	5.5	5.1	6.1	6.5	4.9
* VINTAGE (ISG-36)	4.9	5.2	4.9	4.0	6.0	1.3	5.5	6.0	4.0	6.3	5.4	4.9
BAR LP 7608	5.6	4.9	5.4	2.2	6.6	3.0	5.3	5.6	3.6	5.8	5.6	4.9
* MACH I	4.2	5.3	5.0	3.0	6.2	2.3	5.3	6.0	5.0	6.0	5.2	4.9
DLF LGD-3026	4.2	5.1	5.2	4.7	5.9	1.3	5.3	5.5	4.3	6.2	5.7	4.9
* SIENNA	4.4	5.4	6.1	2.4	6.6	1.7	5.7	5.5	4.3	6.1	4.5	4.8
* PINNACLE	5.4	5.4	5.0	3.1	5.7	3.7	4.4	5.7	3.0	5.3	5.7	4.8
GO-DHS	4.6	5.0	4.7	2.4	5.9	1.3	5.4	5.8	4.1	5.7	5.8	4.6
* LINN	4.6	2.8	2.8	2.1	2.1	1.0	2.6	5.9	1.0	4.6	3.7	3.0
LSD VALUE	1.3	0.7	0.6	0.9	0.6	2.5	0.6	0.6	0.8	0.3	1.0	0.3
C.V. (%)	15.3	7.9	7.0	11.5	5.5	67.7	7.1	6.7	10.2	3.0	10.9	12.4

\* COMMERCIALY AVAILABLE IN THE USA IN 2014

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.  
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 2.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS  
GROWN AT TWO LOCATIONS 1/  
IN THE NORTHEAST REGION  
2013 DATA  
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	MA1	NJ2	MEAN	NAME	MA1	NJ2	MEAN
GRAND SLAM GLD (PPG-PR 164)	6.8	5.9	6.3	PRX-4GM1	5.7	4.9	5.3
PANGEA GLR (CL 11701)	6.2	6.1	6.1	SALINAS II (PST-204D)	5.2	5.4	5.3
ASPIRE (IS-PR 491)	5.9	6.2	6.1	BAR LP 10969	5.1	5.4	5.3
BANDALORE (IS-PR 463)	5.6	6.4	6.0	PILLAR (CST)	6.3	4.3	5.3
RINOVO	6.3	5.7	6.0	PROVOST (PPG-PR 143)	6.0	4.5	5.3
KARMA (PICK 10401)	6.2	5.6	5.9	RAD-PR62	5.7	4.8	5.3
THRIVE (IS-PR 469)	6.0	5.8	5.9	RAD-PR55R	5.2	5.2	5.2
PIZZAZZ 2 GLR (PR 909)	6.4	5.4	5.9	PPG-PR 128	5.7	4.7	5.2
FIESTA 4	6.0	5.7	5.9	SIENNA	6.1	4.3	5.2
RIPTIDE (IS-PR 409)	6.0	5.7	5.8	MONSIEUR (IS-PR 488)	5.3	5.1	5.2
SUNSTREAKER (APR 2036)	6.2	5.5	5.8	PACIFIC GEM (PST-2MG7)	5.6	4.8	5.2
WICKED (SRX-4RHD)	5.9	5.8	5.8	HAVEN (APR 2038)	5.3	5.0	5.2
PST-2BNS	6.0	5.6	5.8	APPLE SGL (PPG-PR 140)	6.0	4.3	5.2
PPG-PR 136	6.1	5.5	5.8	LTP-RAE	5.5	4.8	5.2
RIO VISTA	6.1	5.4	5.8	CL 11601	5.5	4.8	5.1
GREEN SUPREME (PPG-PR 121)	6.1	5.4	5.8	BAR LP 10972	5.3	4.9	5.1
EVOLUTION (S85)	5.8	5.6	5.7	JR-192	5.8	4.4	5.1
SR 4650 (PSRX-3701)	6.0	5.4	5.7	DLF LGD-3022	5.4	4.8	5.1
APR 2445	5.5	5.9	5.7	PST-2DR9	5.0	5.1	5.1
STELLAR 3GL (PPG-PR 134)	5.9	5.5	5.7	PPG-PR 142	5.7	4.4	5.1
UNO	5.6	5.8	5.7	HANCOCK (IS-PR 479)	5.7	4.4	5.0
PPG-PR 165	5.9	5.4	5.7	MANHATTAN 6 GLR (PST-2MAGS)	5.4	4.7	5.0
AMAZING A+ (PPG-PR 138)	6.2	5.1	5.7	PST-2NJK	5.3	4.8	5.0
SR4660ST (SRX-4MSH)	6.0	5.3	5.6	MACH I	5.0	5.0	5.0
JR-178	6.1	5.2	5.6	ALLANTE	5.9	4.0	5.0
OCTANE	5.8	5.5	5.6	BONNEVILLE	5.3	4.6	5.0
PALMER V	5.5	5.8	5.6	INSIGHT	5.4	4.4	4.9
PSRX-4CAGL	6.0	5.2	5.6	GO-G37	5.2	4.5	4.9
BANFIELD (IS-PR 489)	5.6	5.6	5.6	PST-2ACR	4.8	4.9	4.8
SIDEWAYS (PSRX-S84)	5.8	5.3	5.6	PICK 4DFHM	5.3	4.3	4.8
PST-2K9	5.5	5.6	5.6	BRIGHTSTAR SLT	5.4	4.2	4.8
FASTBALL RGL (PPG-PR 133)	5.9	5.2	5.6	DLF LGD-3026	5.2	4.3	4.7
LTP-PR 135	6.2	4.9	5.5	PLAYOFF 2 (P02)	5.0	4.4	4.7
STAMINA (IS-PR 487)	6.1	4.9	5.5	A-35	5.0	4.4	4.7
PREMIUM (PPG-PR 137)	5.8	5.2	5.5	EXCELLENCE (ISG-31)	5.0	4.4	4.7
BAR LP 10970	5.6	5.4	5.5	SEDUCTIVE (ISG-30)	5.1	4.2	4.7
DILIGENT (IS-PR 492)	5.8	5.1	5.4	PROMINENT (CS-20)	5.1	4.0	4.6
APR 2320	5.5	5.4	5.4	DLF LGT 4182	3.9	5.1	4.5
CL 307	5.8	5.0	5.4	BAR LP 7608	5.4	3.6	4.5
SOX FAN (GM3)	5.8	5.0	5.4	VINTAGE (ISG-36)	4.9	4.0	4.5
GO-PR60	5.3	5.5	5.4	GO-DHS	4.7	4.1	4.4
PST-2TQL	5.2	5.5	5.3	PINNACLE	5.0	3.0	4.0
CS-PR66	5.5	5.1	5.3	LINN	2.8	1.0	1.9
PST-2NKM	5.5	5.1	5.3				
DOMINATOR (PST-2AG4)	5.3	5.4	5.3	LSD VALUE	0.6	0.8	0.5
				C.V. (%)	7.0	10.2	8.6

- 1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).  
2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 3.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS  
GROWN AT THREE LOCATIONS 1/  
IN THE TRANSITION REGION  
2013 DATA  
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	MD1	MO1	VA1	MEAN	NAME	MD1	MO1	VA1	MEAN
PANGEA GLR (CL 11701)	7.0	6.3	6.6	6.6	ASPIRE (IS-PR 491)	5.4	6.1	5.2	5.6
EVOLUTION (S85)	6.0	6.2	6.7	6.3	GREEN SUPREME (PPG-PR 121)	5.8	5.5	5.5	5.6
PST-2BNS	6.0	6.1	6.8	6.3	PILLAR (CST)	5.2	6.0	5.4	5.5
WICKED (SRX-4RHD)	6.0	6.0	6.6	6.2	AMAZING A+ (PPG-PR 138)	5.2	5.6	5.8	5.5
SIDEWAYS (PSRX-S84)	6.1	5.9	6.3	6.1	RIPTIDE (IS-PR 409)	4.6	5.7	6.2	5.5
CL 307	6.4	6.0	5.9	6.1	GO-PR60	3.9	6.2	6.5	5.5
CL 11601	6.8	5.6	5.9	6.1	PSRX-4CAGL	5.0	6.0	5.5	5.5
SUNSTREAKER (APR 2036)	6.0	5.9	6.2	6.1	MANHATTAN 6 GLR (PST-2MAGS)	5.1	5.8	5.6	5.5
GRAND SLAM GLD (PPG-PR 164)	5.5	6.5	6.1	6.0	PST-2ACR	4.6	5.5	6.4	5.5
THRIVE (IS-PR 469)	5.4	6.5	6.2	6.0	PALMER V	4.9	5.4	6.2	5.5
SR 4650 (PSRX-3701)	6.5	5.3	6.2	6.0	SOX FAN (GM3)	4.9	5.0	6.5	5.5
KARMA (PICK 10401)	6.0	5.9	6.2	6.0	FIESTA 4	4.5	5.5	6.3	5.4
DILIGENT (IS-PR 492)	5.5	6.6	5.8	6.0	BAR LP 10970	4.7	5.4	6.2	5.4
PPG-PR 136	6.0	5.7	6.1	6.0	PPG-PR 128	5.1	5.6	5.5	5.4
PST-2NJK	5.3	5.6	7.0	5.9	PLAYOFF 2 (P02)	4.9	5.4	5.9	5.4
LTP-PR 135	5.8	5.8	6.1	5.9	RAD-PR55R	4.1	5.5	6.4	5.3
STAMINA (IS-PR 487)	5.4	6.1	6.2	5.9	DOMINATOR (PST-2AG4)	4.0	5.3	6.5	5.3
PROVOST (PPG-PR 143)	5.9	6.0	5.9	5.9	DLF LGD-3026	4.7	5.3	5.7	5.3
UNO	5.5	5.9	6.3	5.9	LTP-RAE	4.7	5.5	5.5	5.3
STELLAR 3GL (PPG-PR 134)	5.3	6.0	6.3	5.9	PICK 4DFHM	4.6	5.2	5.8	5.2
HAVEN (APR 2038)	5.9	5.4	6.3	5.9	DLF LGT 4182	3.4	5.7	6.5	5.2
PIZZAZZ 2 GLR (PR 909)	5.8	6.2	5.5	5.9	HANCOCK (IS-PR 479)	4.0	5.7	5.8	5.2
MONSIEUR (IS-PR 488)	5.7	5.5	6.3	5.8	BAR LP 10972	3.8	5.4	6.1	5.1
PST-2NKM	5.5	5.6	6.4	5.8	PST-2TQL	3.7	5.6	6.0	5.1
APR 2445	5.0	5.6	6.8	5.8	JR-192	3.8	6.0	5.5	5.1
OCTANE	5.6	6.3	5.6	5.8	A-35	4.2	5.3	5.7	5.1
PPG-PR 165	6.1	5.5	5.8	5.8	GO-G37	3.7	5.7	5.8	5.0
BANDALORE (IS-PR 463)	5.4	6.0	5.8	5.7	BRIGHTSTAR SLT	3.7	5.4	6.0	5.0
FASTBALL RGL (PPG-PR 133)	5.2	5.9	6.1	5.7	RAD-PR62	3.5	5.8	5.8	5.0
SR4660ST (SRX-4MSH)	5.2	5.6	6.5	5.7	VINTAGE (ISG-36)	4.0	5.5	5.4	5.0
APPLE SGL (PPG-PR 140)	5.8	5.5	6.0	5.7	SEDUCTIVE (ISG-30)	3.6	5.5	5.9	5.0
PST-2DR9	5.1	5.5	6.6	5.7	BAR LP 10969	3.4	5.6	5.9	4.9
PACIFIC GEM (PST-2MG7)	5.0	5.5	6.6	5.7	ALLANTE	3.7	5.6	5.3	4.9
PST-2K9	5.4	5.7	6.0	5.7	APR 2320	3.0	5.8	5.7	4.8
DLF LGD-3022	5.8	5.2	6.1	5.7	EXCELLENCE (ISG-31)	3.7	5.1	5.6	4.8
PREMIUM (PPG-PR 137)	5.5	5.5	6.0	5.7	PROMINENT (CS-20)	3.7	5.2	5.2	4.7
BANFIELD (IS-PR 489)	5.3	5.7	6.0	5.7	GO-DHS	2.4	5.4	5.8	4.6
JR-178	5.2	5.9	5.8	5.6	MACH I	3.0	5.3	5.2	4.5
RINOVO	5.5	5.9	5.5	5.6	PINNACLE	3.1	4.4	5.7	4.4
PPG-PR 142	6.0	5.3	5.6	5.6	BAR LP 7608	2.2	5.3	5.6	4.4
RIO VISTA	5.7	5.9	5.2	5.6	INSIGHT	2.6	5.5	4.6	4.2
BONNEVILLE	5.3	6.0	5.6	5.6	SIENNA	2.4	5.7	4.5	4.2
SALINAS II (PST-204D)	4.4	5.7	6.7	5.6	LINN	2.1	2.6	3.7	2.8
PRX-4GM1	5.6	5.3	6.0	5.6					
CS-PR66	4.8	5.6	6.4	5.6	LSD VALUE	0.9	0.6	1.0	0.5
					C.V. (%)	11.5	7.1	10.9	10.0

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 4. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS  
 GROWN AT FIVE LOCATIONS 1/  
 IN THE NORTH CENTRAL REGION  
 2013 DATA  
 TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	IA1	IL1	MI1	MN1	NE1	MEAN
APR 2320	6.2	5.8	6.8	5.0	5.8	5.9
PST-2NKM	6.2	6.4	6.9	4.0	5.7	5.8
ASPIRE (IS-PR 491)	5.9	6.2	6.9	4.0	6.1	5.8
STELLAR 3GL (PPG-PR 134)	6.1	6.2	6.5	3.7	5.8	5.7
RAD-PR55R	5.6	5.4	6.8	4.3	6.0	5.6
UNO	5.5	6.0	6.6	3.7	6.3	5.6
PST-2BNS	6.3	5.8	6.5	3.0	6.2	5.6
APPLE SGL (PPG-PR 140)	5.8	6.0	6.6	4.0	5.4	5.5
BAR LP 10969	5.2	5.5	6.9	4.0	5.5	5.4
AMAZING A+ (PPG-PR 138)	5.7	5.6	6.9	3.3	5.5	5.4
WICKED (SRX-4RHD)	5.9	6.3	6.5	2.7	5.7	5.4
SR4660ST (SRX-4MSH)	6.0	6.1	6.7	2.0	6.1	5.4
SOX FAN (GM3)	5.2	5.4	6.6	3.7	6.0	5.4
JR-192	5.8	6.3	6.7	2.0	6.0	5.4
GREEN SUPREME (PPG-PR 121)	6.1	6.1	6.3	2.3	5.9	5.3
PSRX-4CAGL	4.8	5.6	6.5	4.0	5.8	5.3
RIPTIDE (IS-PR 409)	4.5	5.5	6.9	3.7	6.0	5.3
SALINAS II (PST-204D)	5.5	5.7	6.7	2.7	6.0	5.3
PALMER V	5.3	5.8	6.4	3.0	6.0	5.3
STAMINA (IS-PR 487)	5.9	6.0	6.9	2.3	5.3	5.3
THRIVE (IS-PR 469)	6.3	6.4	6.2	1.7	5.9	5.3
PROVOST (PPG-PR 143)	4.8	6.1	6.9	3.0	5.5	5.3
SUNSTREAKER (APR 2036)	5.1	6.0	6.5	3.0	5.7	5.3
DOMINATOR (PST-2AG4)	5.2	5.4	6.6	3.7	5.4	5.3
PRX-4GM1	5.4	5.5	6.6	4.0	4.8	5.2
GRAND SLAM GLD (PPG-PR 164)	6.1	5.8	6.8	1.7	5.9	5.2
BAR LP 10972	4.9	4.9	6.3	4.7	5.4	5.2
HAVEN (APR 2038)	5.2	5.4	6.4	3.0	6.0	5.2
BANFIELD (IS-PR 489)	5.8	5.5	6.6	2.3	5.8	5.2
PST-2NJK	5.5	6.0	6.9	2.0	5.6	5.2
GO-PR60	5.8	5.4	6.5	2.3	6.0	5.2
HANCOCK (IS-PR 479)	5.8	6.1	6.7	1.3	6.0	5.2
KARMA (PICK 10401)	6.1	6.2	6.8	1.0	5.9	5.2
PANGEA GLR (CL 11701)	6.4	5.8	6.8	1.3	5.7	5.2
LTP-PR 135	5.4	6.0	6.5	2.3	5.8	5.2
BONNEVILLE	5.7	5.2	6.8	3.0	5.3	5.2
PINNACLE	5.4	5.4	5.7	3.7	5.7	5.2
PPG-PR 142	5.9	5.7	6.6	2.3	5.3	5.2
PACIFIC GEM (PST-2MG7)	6.1	5.6	6.3	2.0	5.9	5.2
PST-2TQL	5.3	5.8	7.1	2.0	5.6	5.2
CS-PR66	5.2	5.4	6.2	2.7	6.1	5.1
BRIGHTSTAR SLT	4.9	5.5	6.7	2.7	5.9	5.1
CL 11601	6.1	6.1	6.8	1.3	5.3	5.1
BAR LP 7608	5.6	4.9	6.6	3.0	5.6	5.1
SR 4650 (PSRX-3701)	5.6	6.1	7.1	1.0	5.8	5.1

TABLE 4. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS  
 (CONT'D) GROWN AT FIVE LOCATIONS 1/  
 IN THE NORTH CENTRAL REGION  
 2013 DATA  
 TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	IA1	IL1	MI1	MN1	NE1	MEAN
PILLAR (CST)	5.8	5.7	6.4	1.7	6.0	5.1
JR-178	5.1	5.9	6.7	2.0	5.9	5.1
SIDEWAYS (PSRX-S84)	5.6	6.0	6.3	1.7	5.9	5.1
INSIGHT	4.7	5.4	6.6	3.3	5.4	5.1
PPG-PR 128	4.9	5.7	6.7	2.3	5.8	5.1
BAR LP 10970	6.1	5.8	6.5	1.3	5.7	5.1
PREMIUM (PPG-PR 137)	5.6	6.1	6.5	1.7	5.5	5.1
PST-2K9	5.5	5.5	6.6	2.0	5.8	5.1
RIO VISTA	5.2	6.0	6.7	1.3	6.1	5.1
A-35	5.8	5.2	6.0	2.3	5.9	5.1
DLF LGD-3022	5.2	5.0	6.5	2.7	5.9	5.1
PST-2ACR	5.8	5.9	6.2	1.7	5.6	5.1
PPG-PR 165	5.5	6.1	6.7	1.3	5.6	5.0
RAD-PR62	6.2	5.0	5.8	2.0	6.0	5.0
EVOLUTION (S85)	5.7	6.0	6.9	1.0	5.3	5.0
PLAYOFF 2 (P02)	5.3	5.6	6.2	2.0	5.7	5.0
FASTBALL RGL (PPG-PR 133)	5.3	6.0	6.4	1.3	5.8	5.0
CL 307	5.4	5.5	6.6	1.3	6.0	5.0
PST-2DR9	5.4	5.1	6.7	2.0	5.6	5.0
LTP-RAE	5.6	5.1	6.7	1.7	5.8	5.0
OCTANE	5.9	5.2	6.6	1.3	5.7	4.9
DILIGENT (IS-PR 492)	5.3	6.3	6.5	1.0	5.6	4.9
SEDUCTIVE (ISG-30)	5.6	5.2	6.2	2.0	5.7	4.9
PROMINENT (CS-20)	5.4	4.9	6.2	2.3	5.9	4.9
EXCELLENCE (ISG-31)	5.5	5.0	6.3	2.0	5.8	4.9
PPG-PR 136	5.8	5.6	6.6	1.0	5.6	4.9
BANDALORE (IS-PR 463)	5.4	5.7	6.1	1.3	6.0	4.9
APR 2445	5.3	5.7	6.4	1.3	5.7	4.9
MANHATTAN 6 GLR (PST-2MAGS)	4.9	6.1	6.4	1.0	5.9	4.9
GO-G37	5.3	5.3	6.0	2.0	5.8	4.9
ALLANTE	5.3	5.9	6.4	1.3	5.4	4.9
MONSIEUR (IS-PR 488)	4.8	5.4	6.4	2.0	5.8	4.9
PIZZAZZ 2 GLR (PR 909)	5.2	5.8	6.8	1.0	5.3	4.8
MACH I	4.2	5.3	6.2	2.3	6.0	4.8
RINOVO	4.7	6.0	6.2	1.0	5.8	4.8
SIENNA	4.4	5.4	6.6	1.7	5.5	4.7
FIESTA 4	5.3	5.5	6.4	1.0	5.4	4.7
VINTAGE (ISG-36)	4.9	5.2	6.0	1.3	6.0	4.7
PICK 4DFHM	4.4	5.8	6.2	1.0	5.8	4.6
DLF LGT 4182	5.8	4.5	5.9	1.3	5.5	4.6
GO-DHS	4.6	5.0	5.9	1.3	5.8	4.5
DLF LGD-3026	4.2	5.1	5.9	1.3	5.5	4.4
LINN	4.6	2.8	2.1	1.0	5.9	3.3
LSD VALUE	1.3	0.7	0.6	2.5	0.6	0.6
C.V. (%)	15.3	7.9	5.5	67.7	6.7	16.3

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 5.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH  
MONTH GROWN AT CORVALLIS, OR (PACIFIC REGION) 1/  
2013 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
GRAND SLAM GLD (PPG-PR 164)	6.0	6.0	7.0	7.7	7.0	6.3	7.3	7.0	6.7	6.3	6.3	5.7	6.6
HANCOCK (IS-PR 479)	5.7	5.7	7.0	8.0	7.0	6.3	7.3	7.0	6.0	6.0	6.0	5.3	6.4
ASPIRE (IS-PR 491)	6.0	6.0	7.0	8.0	7.0	6.0	7.0	7.0	6.3	5.7	5.7	5.7	6.4
MONSIEUR (IS-PR 488)	5.7	6.0	7.0	8.0	7.0	6.0	7.0	6.7	6.0	6.0	6.0	6.0	6.4
FIESTA 4	5.7	5.7	6.7	7.7	7.0	6.3	7.3	6.7	6.0	6.0	6.0	6.0	6.4
WICKED (SRX-4RHD)	6.0	6.0	7.0	8.0	7.0	6.3	7.0	6.3	6.0	6.0	6.0	5.3	6.4
A-35	5.7	5.7	6.7	7.7	7.3	6.3	7.3	7.0	6.3	5.7	5.7	5.3	6.4
RIPTIDE (IS-PR 409)	6.0	6.0	7.0	8.0	7.0	6.3	7.3	6.7	6.3	5.3	5.3	5.3	6.4
THRIVE (IS-PR 469)	5.7	5.7	6.7	7.7	7.0	6.7	7.7	7.0	6.0	5.7	5.7	5.3	6.4
EVOLUTION (S85)	5.7	6.0	7.0	8.0	7.0	6.3	7.0	6.7	6.0	6.0	5.7	5.0	6.4
BANFIELD (IS-PR 489)	5.7	5.7	7.0	8.0	7.0	6.0	7.0	7.0	6.0	5.7	5.7	5.7	6.4
RAD-PR55R	6.0	6.0	7.0	7.3	7.0	6.7	7.7	6.7	5.7	5.7	5.7	5.0	6.4
AMAZING A+ (PPG-PR 138)	5.7	6.0	7.0	7.7	7.0	6.0	7.0	7.0	6.0	5.7	5.7	5.3	6.3
BANDALORE (IS-PR 463)	5.7	5.7	7.0	8.0	7.0	6.3	7.3	7.0	6.0	5.3	5.3	5.3	6.3
GREEN SUPREME (PPG-PR 121)	5.7	5.7	6.7	7.7	7.0	6.0	7.0	7.0	6.3	6.0	5.7	5.3	6.3
PALMER V	5.7	5.7	7.0	8.0	7.0	6.0	7.0	6.7	6.0	5.7	5.7	5.7	6.3
RIO VISTA	5.7	6.0	7.0	7.7	7.0	5.7	7.0	7.0	6.3	5.7	5.7	5.3	6.3
VINTAGE (ISG-36)	5.3	5.3	6.3	7.3	7.3	6.3	7.3	7.0	6.0	6.0	6.0	5.7	6.3
PST-2BNS	5.7	5.7	6.7	7.3	7.0	6.3	7.3	6.7	6.0	5.7	5.7	5.7	6.3
RINOVO	5.7	5.7	6.7	7.7	7.0	6.7	7.7	7.0	5.7	5.3	5.3	5.3	6.3
PST-2DR9	6.0	6.0	7.0	7.7	7.0	6.0	7.0	7.0	6.0	5.3	5.3	5.3	6.3
PIZZAZZ 2 GLR (PR 909)	5.7	5.3	6.7	7.7	7.0	6.0	7.0	7.0	6.0	5.7	5.7	5.7	6.3
SEDUCTIVE (ISG-30)	5.7	5.3	6.3	7.3	7.3	6.0	7.0	6.7	6.0	6.0	6.0	5.7	6.3
FASTBALL RGL (PPG-PR 133)	5.7	5.7	6.7	7.7	7.0	6.0	7.0	6.7	6.0	5.7	5.7	5.7	6.3
LTP-PR 135	5.7	5.7	7.0	8.0	7.0	6.0	7.0	7.0	6.0	5.3	5.3	5.3	6.3
BONNEVILLE	5.3	6.0	7.0	7.3	6.7	6.0	7.0	6.7	6.0	5.7	5.7	5.7	6.3
DILIGENT (IS-PR 492)	5.3	5.3	7.0	8.0	7.0	6.0	7.0	6.7	6.0	5.7	5.7	5.3	6.3
PROVOST (PPG-PR 143)	5.7	5.7	7.0	8.0	7.0	6.0	7.0	6.3	6.0	5.7	5.3	5.3	6.3
APR 2445	5.3	5.3	6.3	7.0	7.0	6.0	7.0	6.7	6.0	6.0	6.0	6.0	6.2
JR-178	5.7	5.7	6.7	7.7	7.0	6.0	7.0	7.0	6.0	5.3	5.3	5.3	6.2
KARMA (PICK 10401)	5.7	5.7	6.7	7.3	7.0	6.0	7.0	7.0	6.3	5.7	5.3	5.0	6.2
LTP-RAE	5.7	5.7	7.0	8.0	7.0	6.0	7.0	6.3	5.7	5.7	5.3	5.3	6.2
PANGEA GLR (CL 11701)	5.3	5.3	6.3	7.3	7.0	6.3	7.3	7.0	6.0	5.7	5.7	5.3	6.2
SOX FAN (GM3)	5.3	5.3	6.3	7.3	7.0	6.3	7.3	7.0	6.3	5.7	5.3	5.0	6.2
DLF LGD-3026	5.7	5.7	7.0	8.0	7.0	6.0	7.0	6.7	6.0	5.0	5.0	5.0	6.2
EXCELLENCE (ISG-31)	5.3	5.3	6.3	7.3	7.0	6.0	7.0	7.0	6.0	5.7	5.7	5.3	6.2
GO-PR60	5.0	5.0	6.0	7.0	7.0	6.3	7.3	7.0	6.0	6.0	6.0	5.3	6.2
OCTANE	5.7	5.7	7.0	7.7	7.0	5.7	6.7	6.7	6.0	5.3	5.3	5.3	6.2
PLAYOFF 2 (P02)	5.3	5.3	7.0	8.0	7.0	6.3	7.3	7.0	5.7	5.3	5.0	4.7	6.2
STAMINA (IS-PR 487)	5.3	5.7	7.0	8.0	7.0	6.0	7.0	6.7	5.7	5.3	5.0	5.3	6.2
SUNSTREAKER (APR 2036)	5.0	5.7	6.7	7.7	7.0	6.0	7.0	7.0	6.0	5.3	5.0	5.3	6.1
DLF LGT 4182	5.0	5.3	6.3	7.0	7.0	6.3	7.3	6.7	6.0	5.7	5.7	5.3	6.1
MANHATTAN 6 GLR (PST-2MAGS)	5.3	5.3	6.3	7.0	7.0	6.0	7.0	7.0	6.0	5.7	5.7	5.3	6.1
PILLAR (CST)	5.7	5.3	6.7	7.7	7.0	6.0	7.0	7.0	5.7	5.3	5.3	5.0	6.1
SIDEWAYS (PSRX-S84)	5.3	5.7	7.0	7.7	7.0	5.7	7.0	6.7	5.7	5.7	5.3	5.0	6.1
SR 4650 (PSRX-3701)	5.0	5.0	6.7	7.7	7.0	6.0	7.0	7.0	6.0	5.7	5.3	5.3	6.1

TABLE 5. (CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH  
MONTH GROWN AT CORVALLIS, OR (PACIFIC REGION) 1/  
2013 DATA

## TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/

NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
STELLAR 3GL (PPG-PR 134)	5.3	5.7	7.0	8.0	7.0	6.0	7.0	6.7	6.0	5.0	5.0	5.0	6.1
CS-PR66	5.3	5.3	6.3	7.3	7.0	6.0	7.0	7.0	6.0	5.7	5.7	5.0	6.1
PPG-PR 136	5.3	5.0	6.7	7.7	7.0	6.0	7.0	7.0	6.0	5.3	5.3	5.3	6.1
PSRX-4CAGL	5.3	5.0	6.3	7.3	7.0	6.0	7.0	7.0	6.0	5.7	5.7	5.3	6.1
PPG-PR 128	5.3	5.3	6.3	7.3	7.0	5.7	6.7	6.7	6.0	5.7	5.7	5.7	6.1
PREMIUM (PPG-PR 137)	5.7	5.3	6.3	7.3	7.0	6.0	7.0	7.0	6.0	5.3	5.3	5.0	6.1
PROMINENT (CS-20)	5.3	5.3	6.3	7.0	7.0	6.0	7.0	6.7	6.0	6.0	5.7	5.0	6.1
PPG-PR 165	5.3	5.7	7.0	8.0	7.0	6.0	7.0	7.0	5.0	5.0	5.0	5.0	6.1
BAR LP 10970	5.0	5.3	6.7	7.3	7.0	6.0	7.0	7.0	5.7	5.3	5.3	5.0	6.1
PACIFIC GEM (PST-2MG7)	5.3	5.0	6.0	7.0	7.0	6.0	7.0	7.0	6.0	5.7	5.7	5.0	6.1
PPG-PR 142	5.3	5.3	6.7	7.7	7.0	6.0	7.0	6.7	5.7	5.3	5.0	5.0	6.1
SIENNA	5.3	5.3	7.0	8.0	7.0	6.0	7.0	6.3	5.7	5.0	5.0	5.0	6.1
UNO	5.0	5.3	6.3	7.3	7.0	5.7	7.0	7.0	6.0	5.3	5.3	5.3	6.1
PRX-4GM1	5.3	5.3	6.7	7.7	7.0	5.7	6.7	6.7	6.0	5.3	5.3	5.0	6.1
CL 307	5.0	5.0	6.3	7.3	7.0	6.0	7.0	7.0	6.0	5.3	5.3	5.0	6.0
DLF LGD-3022	5.3	5.3	6.3	7.3	7.0	6.0	7.0	7.0	6.0	5.0	5.0	5.0	6.0
SALINAS II (PST-204D)	5.7	5.7	6.7	7.7	7.0	5.7	6.7	6.3	6.0	5.0	5.0	5.0	6.0
GO-G37	5.3	5.0	6.7	7.7	7.0	5.7	7.0	6.7	6.0	5.3	5.3	4.7	6.0
INSIGHT	5.7	5.7	7.0	8.0	7.0	5.7	6.7	6.0	5.7	5.0	5.0	5.0	6.0
DOMINATOR (PST-2AG4)	5.0	5.0	6.7	7.7	7.0	6.0	7.0	6.7	6.0	5.0	5.0	5.0	6.0
HAVEN (APR 2038)	5.0	5.3	7.0	8.0	6.7	5.3	6.7	6.7	6.0	5.3	5.0	5.0	6.0
MACH I	6.0	5.3	6.3	7.0	7.7	6.0	7.0	6.3	5.7	5.0	5.0	4.7	6.0
RAD-PR62	5.0	5.0	6.0	7.0	7.0	6.0	7.0	7.0	6.0	5.3	5.3	5.3	6.0
APR 2320	5.0	5.0	6.0	7.0	7.0	6.3	7.3	6.7	6.0	5.3	5.0	5.0	6.0
JR-192	5.0	5.0	6.3	7.3	7.0	6.0	7.0	7.0	6.0	5.0	5.0	5.0	6.0
APPLE SGL (PPG-PR 140)	5.3	5.0	7.0	8.0	7.0	5.7	6.7	6.7	5.3	5.0	5.0	5.0	6.0
CL 11601	5.3	5.3	6.3	7.3	7.0	5.3	6.7	6.7	6.0	5.0	5.0	5.3	5.9
PST-2K9	5.0	5.3	6.3	7.0	7.0	5.7	7.3	7.0	5.7	5.0	5.0	5.0	5.9
PST-2NJK	5.0	5.0	6.3	7.3	6.7	6.0	7.0	6.3	5.7	5.0	5.0	5.0	5.9
PST-2ACR	5.0	5.0	6.0	7.0	7.0	5.3	7.0	7.0	5.7	5.0	5.0	5.0	5.8
BAR LP 10972	5.0	5.0	6.0	7.0	7.0	5.7	6.7	6.7	5.7	5.0	5.0	5.0	5.8
BAR LP 10969	5.0	4.7	6.0	7.0	7.0	6.0	7.0	6.7	5.7	5.0	5.0	4.7	5.8
PICK 4DFHM	4.7	5.0	6.0	7.0	7.0	5.7	6.7	6.7	5.7	5.3	5.0	5.0	5.8
PST-2TQL	5.0	4.7	6.0	7.0	7.0	6.0	7.0	6.7	5.3	5.0	5.0	5.0	5.8
PST-2NKM	5.0	5.0	6.3	7.3	7.0	5.7	6.7	6.3	5.3	5.0	5.0	4.7	5.8
ALLANTE	5.0	4.7	6.7	8.0	7.0	5.7	6.7	6.3	5.3	5.0	4.7	4.3	5.8
BAR LP 7608	5.0	5.0	6.3	7.3	7.0	5.7	6.7	6.3	5.7	5.0	5.0	4.3	5.8
GO-DHS	4.7	4.3	5.7	6.7	7.0	6.0	7.0	6.3	6.0	5.0	5.0	5.0	5.7
SR4660ST (SRX-4MSH)	5.0	4.7	6.0	7.0	7.0	5.7	6.7	6.7	5.3	4.7	4.7	4.3	5.6
BRIGHTSTAR SLT	4.7	4.7	6.3	7.3	6.3	6.0	7.0	6.3	5.0	5.0	4.7	4.3	5.6
PINNACLE	4.3	4.7	6.0	7.0	6.0	5.0	6.3	6.3	5.0	5.0	4.3	4.0	5.3
LINN	5.0	4.3	5.0	5.0	4.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.6
LSD VALUE	0.8	0.8	0.7	0.7	0.3	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.3
C.V. (%)	8.7	9.0	6.3	5.6	2.5	6.9	5.3	6.2	5.9	8.2	8.2	8.4	3.0

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 6. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS IN THE 2010 NATIONAL PERENNIAL RYEGRASS TEST AT BLACKSBURG (TRAFFIC STUDY), VA 1/ 2013 DATA  
TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

NAME	QUALITY RATINGS								MEAN
	APR	MAY	JUN	JUL	AUG	OCT	NOV		
PST-2NJK	6.7	6.7	8.0	5.7	6.7	6.3	6.0	6.6	
SALINAS II (PST-204D)	7.0	6.0	7.3	7.7	7.0	5.3	5.0	6.5	
PACIFIC GEM (PST-2MG7)	6.3	6.0	7.7	6.3	6.0	6.3	6.0	6.4	
APR 2445	6.7	6.0	8.3	7.0	6.7	4.7	4.7	6.3	
EVOLUTION (S85)	6.0	6.7	6.7	7.7	6.7	5.7	4.3	6.2	
BRIGHTSTAR SLT	6.7	5.7	7.7	7.3	6.0	4.7	4.7	6.1	
DOMINATOR (PST-2AG4)	6.0	5.3	7.3	7.3	6.3	5.7	5.0	6.1	
GRAND SLAM GLD (PPG-PR 164)	5.0	6.7	5.3	5.0	5.7	7.7	7.3	6.1	
PANGEA GLR (CL 11701)	6.3	6.3	5.7	7.0	6.7	5.3	5.3	6.1	
PST-2BNS	7.0	5.7	8.0	7.3	6.7	4.3	4.0	6.1	
PST-2DR9	6.7	6.3	8.3	6.7	6.0	4.7	4.3	6.1	
PST-2NKM	5.7	6.7	8.3	7.3	4.7	5.3	5.0	6.1	
SUNSTREAKER (APR 2036)	6.0	5.7	6.3	6.3	7.0	5.3	5.7	6.0	
CS-PR66	6.7	6.3	7.3	6.3	5.7	5.0	4.7	6.0	
DLF LGT 4182	7.3	6.0	6.7	6.0	6.0	5.3	5.0	6.0	
GO-PR60	6.0	6.3	6.7	6.0	6.7	5.3	5.3	6.0	
PST-2ACR	6.3	6.7	7.0	7.0	6.0	4.3	4.7	6.0	
SIDEWAYS (PSRX-S84)	6.0	6.3	7.3	6.3	6.7	4.7	4.3	6.0	
UNO	5.3	6.3	6.7	6.0	6.3	5.7	6.0	6.0	
WICKED (SRX-4RHD)	5.7	6.7	7.3	7.7	6.0	4.7	4.3	6.0	
APR 2320	6.3	6.7	7.3	7.0	5.3	4.0	4.3	5.9	
BAR LP 10970	6.7	6.3	7.0	7.0	6.0	4.0	4.0	5.9	
BAR LP 10972	5.7	5.7	6.3	6.0	7.3	5.0	5.0	5.9	
CL 11601	6.3	4.3	6.0	6.3	6.0	6.0	6.3	5.9	
DLF LGD-3022	6.3	5.3	7.0	6.3	6.0	5.0	5.0	5.9	
MONSIEUR (IS-PR 488)	6.7	5.3	7.7	6.3	7.0	4.3	3.7	5.9	
KARMA (PICK 10401)	6.3	5.3	6.3	6.0	5.3	6.3	5.3	5.9	
PALMER V	6.0	6.7	6.0	5.7	7.0	5.0	5.0	5.9	
PPG-PR 136	5.3	5.7	6.3	5.7	6.0	6.0	6.3	5.9	
SR4660ST (SRX-4MSH)	5.0	6.3	8.0	7.0	6.0	4.7	4.0	5.9	
CL 307	5.3	6.3	6.3	5.3	5.7	5.7	6.0	5.8	
FIESTA 4	5.0	5.7	7.3	6.7	6.7	4.7	4.3	5.8	
GO-DHS	5.7	5.3	6.0	5.0	5.7	6.3	6.3	5.8	
HAVEN (APR 2038)	6.7	6.3	7.3	6.3	4.7	4.7	4.3	5.8	
RAD-PR55R	6.0	5.0	7.0	6.0	6.3	5.3	4.7	5.8	
THRIVE (IS-PR 469)	5.7	6.0	6.7	5.7	6.0	5.3	5.3	5.8	
LTP-PR 135	5.7	5.7	6.0	5.0	6.3	5.7	5.7	5.7	
PLAYOFF 2 (P02)	6.0	5.0	6.7	6.7	5.7	5.0	4.7	5.7	
PPG-PR 165	5.3	6.0	5.3	5.7	5.7	6.0	5.7	5.7	
PST-2TQL	5.7	5.7	7.3	7.0	5.3	4.3	4.7	5.7	
SR 4650 (PSRX-3701)	6.0	6.0	6.7	8.0	5.0	4.3	3.7	5.7	
BAR LP 10969	5.7	6.3	6.0	6.3	6.0	4.0	5.0	5.6	
EXCELLENCE (ISG-31)	6.3	4.3	6.7	5.7	5.3	5.7	5.3	5.6	
GO-G37	5.7	5.3	7.0	5.3	5.3	5.0	5.3	5.6	
PRX-4GM1	6.0	5.7	6.0	6.0	5.3	5.0	5.0	5.6	
SEDUCTIVE (ISG-30)	6.0	6.0	7.0	6.3	5.3	4.7	3.7	5.6	
STELLAR 3GL (PPG-PR 134)	6.0	7.0	6.3	6.3	5.3	4.3	4.0	5.6	



TABLE 6. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS IN THE  
(CONT'D) 2010 NATIONAL PERENNIAL RYEGRASS TEST AT BLACKSBURG (TRAFFIC STUDY), VA 1/  
2013 DATA

TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

NAME	QUALITY RATINGS							
	APR	MAY	JUN	JUL	AUG	OCT	NOV	MEAN
APPLE SGL (PPG-PR 140)	4.7	6.7	6.3	6.3	5.7	4.7	4.0	5.5
FASTBALL RGL (PPG-PR 133)	6.0	6.3	7.0	5.7	6.0	4.3	3.3	5.5
RIPTIDE (IS-PR 409)	6.3	6.3	6.0	5.5	6.3	4.0	3.7	5.5
MANHATTAN 6 GLR (PST-2MAGS)	5.7	5.7	6.3	6.0	4.3	5.3	5.0	5.5
PREMIUM (PPG-PR 137)	6.0	6.0	6.0	5.3	6.3	5.0	4.0	5.5
PST-2K9	6.0	6.3	8.3	6.3	5.0	3.7	3.0	5.5
SOX FAN (GM3)	5.7	6.0	7.0	5.7	6.3	3.7	4.3	5.5
A-35	6.0	4.7	6.7	6.7	6.0	3.7	4.3	5.4
HANCOCK (IS-PR 479)	7.0	5.3	7.0	5.7	5.7	3.3	3.7	5.4
DILIGENT (IS-PR 492)	6.0	6.3	7.0	7.0	4.3	3.7	3.3	5.4
JR-178	6.7	5.7	7.0	6.3	4.7	3.7	3.7	5.4
RAD-PR62	5.7	6.7	6.7	5.0	5.0	4.7	4.0	5.4
STAMINA (IS-PR 487)	6.0	6.0	7.7	7.3	4.7	2.7	3.3	5.4
AMAZING A+ (PPG-PR 138)	5.7	5.7	6.3	5.7	6.0	4.3	3.7	5.3
DLF LGD-3026	5.7	5.3	5.7	4.7	6.0	5.0	5.0	5.3
PPG-PR 128	5.7	5.3	5.3	4.7	6.0	5.0	5.0	5.3
PROVOST (PPG-PR 143)	5.3	5.7	4.3	5.3	6.3	5.3	5.0	5.3
BANDALORE (IS-PR 463)	5.7	5.3	6.0	6.0	5.3	4.0	4.0	5.2
BAR LP 7608	6.3	6.0	6.0	5.7	5.0	4.0	3.7	5.2
GREEN SUPREME (PPG-PR 121)	5.7	5.7	5.0	5.0	5.7	5.0	4.3	5.2
PICK 4DFHM	5.3	5.0	6.0	6.3	5.7	4.3	4.0	5.2
PINNACLE	5.7	6.3	6.0	5.0	5.0	4.7	4.0	5.2
BANFIELD (IS-PR 489)	6.3	5.0	6.3	6.3	5.0	3.7	3.3	5.1
JR-192	5.7	5.7	7.0	7.3	3.7	3.3	3.3	5.1
LTP-RAE	6.0	4.7	6.3	5.7	5.3	3.7	4.3	5.1
PIZZAZZ 2 GLR (PR 909)	6.0	4.7	5.3	5.7	6.0	4.3	4.0	5.1
RINOV0	6.7	4.3	6.3	6.3	4.7	4.3	3.3	5.1
VINTAGE (ISG-36)	6.3	5.0	6.3	5.0	4.7	4.3	4.3	5.1
BONNEVILLE	5.3	5.0	5.7	6.3	4.7	4.3	4.0	5.0
MACH I	6.7	5.0	5.7	4.7	4.3	5.3	3.7	5.0
OCTANE	5.0	6.0	6.0	6.0	4.7	3.7	3.3	5.0
PILLAR (CST)	5.7	4.7	5.7	6.3	5.3	3.7	3.3	5.0
PPG-PR 142	5.0	5.7	5.0	5.7	5.0	5.0	4.0	5.0
PSRX-4CAGL	6.7	5.0	5.0	5.3	4.7	4.3	4.0	5.0
RIO VISTA	5.3	4.7	5.3	6.0	5.0	4.0	3.7	4.9
ASPIRE (IS-PR 491)	5.7	4.3	6.7	7.3	3.3	3.0	3.0	4.8
PROMINENT (CS-20)	5.3	4.3	5.7	5.0	5.3	3.7	4.0	4.8
ALLANTE	5.3	5.7	6.3	4.3	5.3	2.7	3.0	4.7
INSIGHT	5.0	4.3	4.7	4.3	5.0	3.0	3.7	4.3
SIENNA	6.0	5.0	4.7	4.7	3.3	2.0	2.3	4.0
LINN	3.7	3.3	3.7	4.0	3.7	3.0	2.3	3.4
LSD VALUE	1.9	4.0	4.2	2.8	4.7	4.6	3.7	1.1
C.V. (%)	13.5	20.4	21.8	19.4	24.1	31.6	30.9	10.4

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 6. (CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS IN THE  
2010 NATIONAL PERENNIAL RYEGRASS TEST AT BLACKSBURG (TRAFFIC STUDY), VA 1/  
2013 DATA

TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

NAME	QUALITY	INITIAL	INITIAL	BEFORE TRAFFIC		MID-SEASON TRAFFIC		END OF TRAFFIC		2-WKS POST TRAFFIC	
	2-WKS (NOV) AFTER TRAFFIC	% GREEN APR	% BARE APR	% GREEN AUG	% STRAW AUG	% GREEN OCT	% STRAW OCT	IN EARLY % GREEN	NOVEMBER % STRAW	IN MID-NOVEMBER % GREEN	% STRAW
PST-2NJK	5.7	80.0	20.0	99	0.0	68.3	31.7	73.3	26.7	56.7	43.3
SALINAS II (PST-204D)	5.3	85.0	15.0	96	3.3	61.7	38.3	55.0	45.0	55.0	45.0
PACIFIC GEM (PST-2MG7)	6.0	81.7	18.3	99	0.0	71.7	28.3	66.7	33.3	71.7	28.3
APR 2445	5.0	88.3	11.7	99	0.0	58.3	41.7	48.3	51.7	43.3	56.7
EVOLUTION (S85)	5.0	81.7	18.3	96	3.3	58.3	41.7	50.0	50.0	58.3	41.7
BRIGHTSTAR SLT	4.7	88.3	11.7	96	3.3	51.7	48.3	51.7	48.3	58.3	41.7
DOMINATOR (PST-2AG4)	6.0	91.7	8.3	99	0.0	63.3	36.7	60.0	40.0	63.3	36.7
GRAND SLAM GLD (PPG-PR 164)	6.7	88.3	11.7	99	0.0	66.7	33.3	73.3	26.7	78.3	21.7
PANGEA GLR (CL 11701)	5.0	83.3	16.7	96	3.3	66.7	33.3	48.3	51.7	63.3	36.7
PST-2BNS	4.7	85.0	15.0	99	0.0	46.7	53.3	51.7	48.3	48.3	51.7
PST-2DR9	4.3	86.7	13.3	96	3.3	55.0	45.0	53.3	46.7	50.0	50.0
PST-2NKM	5.3	86.7	13.3	96	3.3	65.0	35.0	63.3	36.7	61.7	38.3
SUNSTREAKER (APR 2036)	6.0	88.3	11.7	99	0.0	61.7	38.3	61.7	38.3	58.3	41.7
CS-PR66	4.7	78.3	21.7	99	0.0	55.0	45.0	51.7	48.3	56.7	43.3
DLF LGT 4182	5.3	71.7	28.3	99	0.0	66.7	33.3	53.3	46.7	55.0	45.0
GO-PR60	5.0	90.0	10.0	99	0.0	56.7	43.3	58.3	41.7	58.3	41.7
PST-2ACR	4.7	85.0	15.0	96	3.3	53.3	46.7	53.3	46.7	55.0	45.0
SIDEWAYS (PSRX-S84)	4.0	85.0	15.0	99	0.0	53.3	46.7	45.0	55.0	48.3	51.7
UNO	6.3	75.0	25.0	99	0.0	61.7	38.3	66.7	33.3	61.7	38.3
WICKED (SRX-4RHD)	4.0	80.0	20.0	99	0.0	48.3	51.7	46.7	53.3	45.0	55.0
APR 2320	4.3	90.0	10.0	93	6.7	70.0	30.0	45.0	55.0	46.7	53.3
BAR LP 10970	4.3	86.7	13.3	99	0.0	50.0	50.0	45.0	55.0	50.0	50.0
BAR LP 10972	4.3	90.0	10.0	99	0.0	50.0	50.0	55.0	45.0	53.3	46.7
CL 11601	6.3	88.3	11.7	96	3.3	66.3	33.3	63.3	36.7	61.7	38.3
DLF LGD-3022	5.3	76.7	23.3	99	0.0	61.7	38.3	53.3	46.7	50.0	50.0
MONSIEUR (IS-PR 488)	3.3	78.3	21.7	96	3.3	45.0	55.0	45.0	55.0	41.7	58.3
KARMA (PICK 10401)	5.3	75.0	25.0	96	3.3	66.7	33.3	60.0	40.0	58.3	41.7
PALMER V	5.0	85.0	15.0	99	0.0	55.0	45.0	63.3	36.7	56.7	43.3
PPG-PR 136	6.3	78.3	21.7	99	0.0	68.3	31.7	68.3	31.7	75.0	25.0
SR4660ST (SRX-4MSH)	4.3	86.7	13.3	99	0.0	55.0	45.0	48.3	51.7	53.3	46.7
CL 307	6.3	86.7	13.3	96	3.3	65.0	35.0	63.3	36.7	70.0	30.0
FIESTA 4	5.3	73.3	26.7	99	0.0	53.3	46.7	50.0	50.0	53.3	46.7
GO-DHS	5.7	81.7	18.3	99	0.0	68.3	31.7	70.0	30.0	75.0	25.0
HAVEN (APR 2038)	5.0	83.3	16.7	93	6.7	48.3	51.7	55.0	45.0	51.7	48.3
RAD-PR55R	5.3	73.3	26.7	96	3.3	61.7	38.3	50.0	50.0	58.3	41.7
THRIVE (IS-PR 469)	5.3	80.0	20.0	96	3.3	60.0	40.0	66.7	33.3	60.0	40.0
LTP-PR 135	5.7	81.7	18.3	96	3.3	60.0	40.0	66.7	33.3	60.0	40.0
PLAYOFF 2 (P02)	4.3	83.3	16.7	96	3.3	55.0	45.0	51.7	48.3	46.7	53.3
PPG-PR 165	5.7	80.0	20.0	96	3.3	65.0	35.0	61.7	38.3	68.3	31.7
PST-2TQL	4.3	83.3	16.7	96	3.3	50.0	50.0	45.0	55.0	46.7	53.3
SR 4650 (PSRX-3701)	4.0	70.0	30.0	96	3.3	33.3	66.7	36.7	63.3	48.3	51.7
BAR LP 10969	4.7	76.7	23.3	96	3.3	55.0	45.0	56.7	43.3	56.7	43.3
EXCELLENCE (ISG-31)	4.7	91.7	8.3	99	0.0	55.0	45.0	53.3	46.7	53.3	46.7
GO-G37	6.0	81.7	18.3	99	0.0	56.7	43.3	61.7	38.3	61.7	38.3
PRX-4GM1	5.0	90.0	10.0	99	0.0	53.3	46.7	51.7	48.3	53.3	46.7
SEDUCTIVE (ISG-30)	5.3	78.3	21.7	96	3.3	55.0	45.0	41.7	58.3	50.0	50.0
STELLAR 3GL (PPG-PR 134)	4.7	93.3	6.7	96	3.3	50.0	50.0	48.3	51.7	50.0	50.0

TABLE 6. (CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS IN THE  
2010 NATIONAL PERENNIAL RYEGRASS TEST AT BLACKSBURG (TRAFFIC STUDY), VA 1/  
2013 DATA

TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

NAME	QUALITY	INITIAL	INITIAL	BEFORE TRAFFIC	MID-SEASON TRAFFIC	END OF TRAFFIC	2-WKS POST TRAFFIC				
	2-WKS (NOV) AFTER TRAFFIC	% GREEN APR	% BARE APR	% GREEN AUG	% STRAW AUG	IN EARLY NOVEMBER % GREEN	IN MID-NOVEMBER % STRAW				
APPLE SGL (PPG-PR 140)	5.0	81.7	18.3	96.0	3.3	51.7	48.3	46.7	53.3	50.0	50.0
FASTBALL RGL (PPG-PR 133)	4.0	90.0	10.0	99.0	0.0	46.7	53.3	38.3	61.7	45.0	55.0
RIPTIDE (IS-PR 409)	4.0	80.0	20.0	99.0	0.0	40.0	60.0	38.3	61.7	40.0	60.0
MANHATTAN 6 GLR (PST-2MAGS)	5.7	93.3	6.7	93.0	6.7	56.7	43.3	56.7	43.3	56.7	43.3
PREMIUM (PPG-PR 137)	5.0	86.7	13.3	96.0	3.3	53.3	46.7	41.7	58.3	60.0	40.0
PST-2K9	3.3	83.3	16.7	96.0	3.3	40.0	60.0	30.0	70.0	40.0	60.0
SOX FAN (GM3)	4.3	83.3	16.7	99.0	0.0	48.3	51.7	51.7	48.3	46.7	53.3
A-35	4.0	70.0	30.0	96.0	3.3	50.0	50.0	53.3	46.7	43.3	56.7
HANCOCK (IS-PR 479)	3.3	86.7	13.3	99.0	0.0	35.0	65.0	38.3	61.7	46.7	53.3
DILIGENT (IS-PR 492)	3.3	83.3	16.7	96.0	3.3	41.7	58.3	38.3	61.7	40.0	60.0
JR-178	3.7	76.7	23.3	96.0	3.3	45.0	55.0	36.7	63.3	36.7	63.3
RAD-PR62	4.0	76.7	23.3	93.0	6.7	60.0	40.0	41.7	58.3	50.0	50.0
STAMINA (IS-PR 487)	3.7	78.3	21.7	96.0	3.3	36.7	63.3	30.0	70.0	40.0	60.0
AMAZING A+ (PPG-PR 138)	4.3	81.7	18.3	96.0	3.3	46.7	53.3	35.0	65.0	48.3	51.7
DLF LGD-3026	5.7	63.3	36.7	93.0	6.7	58.3	41.7	53.3	46.7	53.3	46.7
PPG-PR 128	4.7	68.3	31.7	96.0	3.3	58.3	41.7	55.0	45.0	53.3	46.7
PROVOST (PPG-PR 143)	6.0	85.0	15.0	99.0	0.0	61.7	38.3	53.3	46.7	55.0	45.0
BANDALORE (IS-PR 463)	4.0	76.7	23.3	96.0	3.3	50.0	50.0	43.3	56.7	40.0	60.0
BAR LP 7608	4.0	81.7	18.3	93.0	6.7	40.0	60.0	38.3	61.7	45.0	55.0
GREEN SUPREME (PPG-PR 121)	3.7	90.0	10.0	93.0	6.7	48.3	51.7	53.3	46.7	50.0	50.0
PICK 4DFHM	5.3	85.0	15.0	99.0	0.0	48.3	51.7	53.3	46.7	55.0	45.0
PINNACLE	5.0	68.3	31.7	96.0	3.3	53.3	46.7	51.7	48.3	51.7	48.3
BANFIELD (IS-PR 489)	3.7	81.7	18.3	93.0	6.7	50.0	50.0	40.0	60.0	40.0	60.0
JR-192	3.3	85.0	15.0	90.0	10.0	41.7	58.3	35.0	65.0	36.7	63.3
LTP-RAE	4.3	70.0	30.0	96.0	3.3	43.3	56.7	46.7	53.3	46.7	53.3
PIZZAZZ 2 GLR (PR 909)	4.3	73.3	26.7	96.0	3.3	55.0	45.0	48.3	51.7	51.7	48.3
RINOVO	4.7	83.3	16.7	93.0	6.7	48.3	51.7	43.3	56.7	48.3	51.7
VINTAGE (ISG-36)	5.0	76.7	23.3	96.0	3.3	50.0	50.0	50.0	50.0	50.0	50.0
BONNEVILLE	4.0	75.0	25.0	93.0	6.7	46.7	53.3	41.7	58.3	45.0	55.0
MACH I	4.7	66.7	33.3	99.0	0.0	50.0	50.0	40.0	60.0	50.0	50.0
OCTANE	4.0	88.3	11.7	93.0	6.7	45.0	55.0	36.7	63.3	41.7	58.3
PILLAR (CST)	3.3	56.7	43.3	96.0	3.3	43.3	56.7	38.3	61.7	38.3	61.7
PPG-PR 142	5.3	81.7	18.3	96.0	3.3	63.3	36.7	48.3	51.7	56.7	43.3
PSRX-4CAGL	5.0	85.0	15.0	96.0	3.3	48.3	51.7	38.3	61.7	58.3	41.7
RIO VISTA	3.3	80.0	20.0	93.0	6.7	50.0	50.0	40.0	60.0	48.3	51.7
ASPIRE (IS-PR 491)	3.0	75.0	25.0	93.0	6.7	40.0	60.0	28.3	71.7	33.3	66.7
PROMINENT (CS-20)	4.0	85.0	15.0	99.0	0.0	40.0	60.0	43.3	56.7	45.0	55.0
ALLANTE	2.7	76.7	23.3	99.0	0.0	25.0	75.0	31.7	68.3	31.7	68.3
INSIGHT	3.0	76.7	23.3	93.0	6.7	33.3	66.7	35.0	65.0	38.3	61.7
SIENNA	2.3	66.7	33.3	90.0	10.0	18.3	81.7	21.7	78.3	26.7	73.3
LINN	2.7	56.7	43.3	99.0	0.0	33.3	66.7	31.7	68.3	28.3	71.7
LSD VALUE	6.5	24.9	24.9	11.2	12.4	51.1	51.2	40.6	40.6	42.3	42.3
C.V. (%)	34.8	12.8	54.0	3.7	146.4	30.5	33.7	31.7	30.6	28.7	30.3

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.  
STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 7. GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/  
2013 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/

NAME	IA1	IL1	MA1	MI1	MO1	NE1	NJ2	OR1	MEAN
VINTAGE (ISG-36)	7.0	8.0	9.0	7.3	7.7	7.0	9.0	7.7	7.8
A-35	8.3	7.0	8.7	7.0	7.3	7.0	8.7	7.7	7.7
SEDUCTIVE (ISG-30)	8.0	6.7	9.0	7.0	7.0	6.7	8.7	7.3	7.5
EXCELLENCE (ISG-31)	8.0	7.0	8.7	7.3	6.7	7.0	8.3	7.0	7.5
GO-DHS	7.7	6.7	9.0	6.7	7.3	6.7	8.7	7.0	7.5
PANGEA GLR (CL 11701)	8.0	6.3	7.7	7.0	6.7	7.0	8.7	7.3	7.3
GO-G37	7.3	6.7	8.3	6.3	7.0	7.0	8.7	7.0	7.3
PROMINENT (CS-20)	6.3	7.0	8.7	6.7	7.3	7.0	8.7	6.7	7.3
GO-PR60	8.0	6.0	8.3	6.7	7.3	6.7	7.3	7.7	7.3
DLF LGT 4182	7.3	7.0	7.7	6.7	6.7	6.7	7.7	7.3	7.1
HANCOCK (IS-PR 479)	7.3	6.7	7.3	7.0	7.0	6.3	8.0	7.0	7.1
PSRX-4CAGL	7.0	6.3	7.7	7.0	6.3	6.7	7.3	7.3	7.0
FIESTA 4	6.3	7.0	7.7	6.3	6.3	7.0	8.0	7.0	7.0
MACH I	6.7	6.3	7.7	6.7	7.0	7.0	7.7	6.7	7.0
RAD-PR55R	7.3	6.0	7.7	6.7	6.7	6.7	8.0	6.7	7.0
THRIVE (IS-PR 469)	7.0	6.3	7.7	6.0	7.0	7.0	7.7	7.0	7.0
APR 2445	7.3	6.7	7.7	6.0	7.0	6.3	7.7	6.7	6.9
CS-PR66	7.0	6.0	7.7	7.0	6.7	7.0	7.0	7.0	6.9
EVOLUTION (S85)	7.7	5.7	6.7	6.3	7.0	6.7	8.0	7.0	6.9
PACIFIC GEM (PST-2MG7)	7.3	6.0	6.7	6.3	6.7	7.0	7.3	7.3	6.8
DOMINATOR (PST-2AG4)	6.7	6.3	7.3	6.3	6.7	7.0	7.3	7.0	6.8
MANHATTAN 6 GLR (PST-2MAGS)	7.0	6.0	7.7	6.0	6.3	7.0	7.7	7.0	6.8
OCTANE	7.7	6.3	6.3	6.3	7.3	7.0	6.7	7.0	6.8
CL 307	6.7	6.3	7.7	6.7	6.0	6.7	7.3	7.0	6.8
ASPIRE (IS-PR 491)	7.3	6.0	7.0	6.0	6.7	6.7	7.7	7.0	6.8
APR 2320	7.3	6.0	7.0	6.3	6.3	6.7	7.3	7.0	6.8
PPG-PR 136	6.7	5.3	7.0	6.7	6.3	7.0	8.0	7.0	6.8
AMAZING A+ (PPG-PR 138)	7.3	6.0	6.7	6.3	5.3	7.0	8.0	7.0	6.7
RIO VISTA	7.3	6.0	6.3	6.7	6.7	6.7	7.3	6.7	6.7
RIPTIDE (IS-PR 409)	6.7	6.0	7.3	7.0	6.3	6.3	7.0	6.7	6.7
RINOVO	7.3	5.7	7.0	6.0	6.3	7.0	7.0	7.0	6.7
BANFIELD (IS-PR 489)	7.7	6.0	6.3	6.3	6.3	6.7	7.0	7.0	6.7
LTP-RAE	8.0	5.7	7.0	6.0	6.7	6.3	7.0	6.3	6.6
PPG-PR 142	7.0	5.7	6.7	6.0	6.3	7.0	7.3	7.0	6.6
PST-2ACR	7.7	5.7	7.0	6.7	5.7	6.7	6.7	7.0	6.6
PST-2DR9	7.0	5.7	7.0	6.0	5.7	7.0	7.7	7.0	6.6
SR 4650 (PSRX-3701)	6.7	6.0	6.7	6.0	6.7	7.0	7.0	7.0	6.6
DILIGENT (IS-PR 492)	7.3	5.7	7.3	6.0	6.7	6.7	6.7	6.7	6.6
SIDEWAYS (PSRX-S84)	7.3	6.0	7.0	6.0	6.7	6.7	6.7	6.7	6.6
JR-178	6.7	6.0	6.7	6.0	6.3	7.0	7.0	7.0	6.6
MONSIEUR (IS-PR 488)	7.7	6.0	7.0	6.0	6.0	7.0	6.0	7.0	6.6
PREMIUM (PPG-PR 137)	7.0	6.0	6.7	6.3	5.7	7.0	7.0	7.0	6.6
DLF LGD-3026	6.0	6.7	8.0	6.0	5.3	6.3	7.7	6.7	6.6
PPG-PR 128	7.7	6.3	7.0	6.0	6.0	6.7	6.3	6.7	6.6
PROVOST (PPG-PR 143)	8.0	5.7	6.7	6.0	5.7	6.7	7.0	7.0	6.6

TABLE 7. GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/  
(CONT'D) 2013 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/

NAME	IA1	IL1	MA1	MI1	MO1	NE1	NJ2	OR1	MEAN
RAD-PR62	7.3	5.3	7.3	6.7	6.3	6.0	6.7	7.0	6.6
STELLAR 3GL (PPG-PR 134)	7.7	5.7	6.7	6.3	5.7	6.7	7.3	6.7	6.6
GRAND SLAM GLD (PPG-PR 164)	6.7	6.3	6.7	6.3	6.0	6.7	6.7	7.0	6.5
GREEN SUPREME (PPG-PR 121)	7.7	5.3	6.3	6.0	6.0	7.0	7.0	7.0	6.5
UNO	7.0	5.3	7.0	6.0	5.7	6.7	7.7	7.0	6.5
BONNEVILLE	7.7	5.7	7.0	6.3	6.0	6.3	6.3	6.7	6.5
PST-2NJK	6.7	6.3	6.7	6.0	6.0	7.0	7.0	6.3	6.5
BANDALORE (IS-PR 463)	7.0	5.7	6.7	6.0	6.0	6.7	7.0	7.0	6.5
LTP-PR 135	6.7	6.0	6.0	6.0	6.7	6.7	7.0	7.0	6.5
PALMER V	6.7	6.3	6.7	6.3	5.7	6.3	7.3	6.7	6.5
SOX FAN (GM3)	6.7	6.0	7.3	6.0	5.3	6.7	6.7	7.0	6.5
PRX-4GM1	7.0	5.7	6.7	6.0	6.0	6.3	6.7	7.0	6.4
SALINAS II (PST-204D)	6.7	6.0	6.0	6.0	6.0	6.7	7.3	6.7	6.4
PICK 4DFHM	7.0	6.0	6.7	6.0	6.3	6.7	6.0	6.7	6.4
PIZZAZZ 2 GLR (PR 909)	6.0	6.0	7.0	6.0	6.0	6.7	6.7	7.0	6.4
PPG-PR 165	6.7	5.3	6.7	6.3	6.3	7.0	6.0	7.0	6.4
PST-2BNS	7.3	5.3	6.3	6.3	6.3	7.0	6.0	6.7	6.4
PILLAR (CST)	6.7	6.0	6.0	6.0	6.0	7.0	6.0	7.0	6.3
PLAYOFF 2 (P02)	7.0	6.0	7.0	6.3	5.7	6.7	5.3	6.7	6.3
PST-2K9	7.0	6.0	6.0	6.0	6.0	6.7	6.0	7.0	6.3
SUNSTREAKER (APR 2036)	6.3	5.7	6.7	6.7	6.0	6.0	6.0	7.0	6.3
BAR LP 10970	6.7	6.0	7.0	6.0	5.3	7.0	5.3	7.0	6.3
KARMA (PICK 10401)	6.7	6.0	6.3	6.3	5.7	6.3	6.0	7.0	6.3
WICKED (SRX-4RHD)	7.7	6.0	6.0	6.3	5.3	6.7	6.3	6.0	6.3
APPLE SGL (PPG-PR 140)	7.3	6.0	6.3	6.0	5.7	6.7	5.7	6.7	6.3
BAR LP 10972	7.0	5.7	6.3	6.0	5.7	6.0	6.7	6.7	6.3
CL 11601	7.7	6.0	6.0	6.7	5.3	6.0	5.3	6.7	6.2
JR-192	6.0	6.0	6.0	6.0	5.7	7.0	6.0	7.0	6.2
PST-2NKM	7.3	5.3	6.0	6.0	5.3	7.0	6.3	6.3	6.2
PST-2TQL	6.3	5.7	6.3	6.3	5.3	7.0	6.3	6.3	6.2
FASTBALL RGL (PPG-PR 133)	7.0	5.7	6.0	6.3	5.3	6.3	6.3	6.7	6.2
SR4660ST (SRX-4MSH)	7.0	5.0	6.7	6.0	5.7	7.0	5.7	6.7	6.2
DLF LGD-3022	6.3	5.7	7.0	6.0	5.0	6.7	5.7	7.0	6.2
HAVEN (APR 2038)	7.0	5.7	6.3	5.3	5.7	6.7	6.0	6.7	6.2
STAMINA (IS-PR 487)	6.7	5.3	6.7	6.3	5.3	6.7	5.7	6.7	6.2
SIENNA	7.3	5.7	5.7	5.7	5.7	6.3	6.3	6.3	6.1
BAR LP 10969	6.3	5.0	5.7	6.0	6.0	6.3	6.0	6.7	6.0
INSIGHT	7.0	5.3	5.3	6.0	5.3	6.7	5.7	6.0	5.9
BRIGHTSTAR SLT	6.3	5.3	6.0	6.0	5.3	7.0	5.0	6.0	5.9
ALLANTE	6.3	5.3	5.7	5.7	5.0	6.7	5.3	6.3	5.8
BAR LP 7608	6.7	5.7	6.3	5.7	5.0	6.3	4.0	6.3	5.8
PINNACLE	5.7	4.7	5.0	5.0	4.7	7.0	1.7	5.7	4.9
LINN	6.0	3.0	3.0	3.0	4.0	6.7	1.0	5.0	4.0
LSD VALUE	1.4	0.9	0.9	0.7	1.1	0.8	1.2	0.7	0.4
C.V. (%)	12.1	9.0	8.5	7.2	11.0	7.8	11.0	6.6	9.4

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 8.

 SPRING GREENUP RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/  
 2013 DATA

SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN 2/

NAME	IL1	NE1	NJ2	MEAN	NAME	IL1	NE1	NJ2	MEAN
PINNACLE	6.7	6.7	9.0	7.4	RIO VISTA	6.7	6.0	6.3	6.3
DLF LGT 4182	7.0	7.0	7.3	7.1	SOX FAN (GM3)	6.7	6.3	6.0	6.3
LINN	6.0	6.0	9.0	7.0	VINTAGE (ISG-36)	7.0	6.7	5.3	6.3
BAR LP 10969	7.0	6.7	7.0	6.9	SUNSTREAKER (APR 2036)	6.7	6.3	5.7	6.2
GO-G37	8.0	6.3	6.3	6.9	ASPIRE (IS-PR 491)	6.3	6.7	5.7	6.2
CL 307	6.7	7.0	6.7	6.8	EXCELLENCE (ISG-31)	6.7	6.0	6.0	6.2
DOMINATOR (PST-2AG4)	7.0	6.7	6.7	6.8	FASTBALL RGL (PPG-PR 133)	6.7	6.0	6.0	6.2
BAR LP 10970	7.0	7.0	6.3	6.8	PIZZAZZ 2 GLR (PR 909)	6.7	6.3	5.7	6.2
PANGEA GLR (CL 11701)	6.7	6.3	7.3	6.8	PPG-PR 136	6.7	6.7	5.3	6.2
BAR LP 10972	6.7	6.7	6.7	6.7	PRX-4GM1	6.7	6.3	5.7	6.2
FIESTA 4	7.0	6.7	6.3	6.7	PST-2BNS	6.7	6.0	6.0	6.2
GO-DHS	6.3	7.0	6.7	6.7	PST-2K9	6.0	6.7	6.0	6.2
MONSIEUR (IS-PR 488)	6.7	6.7	6.7	6.7	STELLAR 3GL (PPG-PR 134)	7.0	6.0	5.7	6.2
RAD-PR55R	7.0	6.7	6.3	6.7	BONNEVILLE	6.3	6.0	6.3	6.2
RINOVO	7.0	6.7	6.3	6.7	PST-2NKM	6.3	6.3	6.0	6.2
SEDUCTIVE (ISG-30)	7.0	7.0	6.0	6.7	CS-PR66	6.7	6.0	5.7	6.1
GO-PR60	6.3	6.7	6.7	6.6	GRAND SLAM GLD (PPG-PR 164)	6.7	6.0	5.7	6.1
PICK 4DFHM	6.7	7.0	6.0	6.6	RAD-PR62	6.0	6.7	5.7	6.1
PST-2NJK	7.0	7.0	5.7	6.6	HANCOCK (IS-PR 479)	6.7	6.3	5.3	6.1
BANDALORE (IS-PR 463)	6.3	6.3	7.0	6.6	PROMINENT (CS-20)	7.0	6.0	5.3	6.1
INSIGHT	6.3	7.0	6.3	6.6	PST-2DR9	6.0	6.3	6.0	6.1
PALMER V	7.0	6.3	6.3	6.6	SR466OST (SRX-4MSH)	6.7	6.3	5.3	6.1
SALINAS II (PST-204D)	6.3	7.0	6.3	6.6	STAMINA (IS-PR 487)	6.3	7.0	5.0	6.1
UNO	7.0	6.3	6.3	6.6	ALLANTE	6.3	7.0	4.7	6.0
PSRX-4CAGL	6.7	6.7	6.0	6.4	SR 4650 (PSRX-3701)	6.0	6.7	5.3	6.0
PST-2ACR	6.7	6.0	6.7	6.4	DLF LGD-3026	5.7	6.7	5.3	5.9
APR 2320	6.3	7.0	6.0	6.4	EVOLUTION (S85)	6.7	6.3	4.7	5.9
APR 2445	6.3	6.0	7.0	6.4	PPG-PR 142	7.0	6.7	4.0	5.9
BANFIELD (IS-PR 489)	6.7	6.3	6.3	6.4	PPG-PR 165	6.3	6.7	4.7	5.9
BRIGHTSTAR SLT	6.3	6.3	6.7	6.4	SIENNA	6.3	6.7	4.7	5.9
DILIGENT (IS-PR 492)	7.3	6.3	5.7	6.4	PLAYOFF 2 (P02)	6.3	6.3	5.0	5.9
HAVEN (APR 2038)	7.0	6.0	6.3	6.4	LTP-PR 135	6.3	6.3	4.7	5.8
MACH I	6.7	6.3	6.3	6.4	LTP-RAE	6.3	6.0	5.0	5.8
THRIVE (IS-PR 469)	6.3	6.7	6.3	6.4	OCTANE	5.7	6.3	5.3	5.8
WICKED (SRX-4RHD)	6.3	6.3	6.7	6.4	PACIFIC GEM (PST-2MG7)	6.0	6.3	5.0	5.8
A-35	7.0	6.7	5.3	6.3	PILLAR (CST)	6.3	6.3	4.7	5.8
BAR LP 7608	6.0	6.7	6.3	6.3	PROVOST (PPG-PR 143)	7.0	6.0	4.0	5.7
CL 11601	6.7	6.3	6.0	6.3	APPLE SGL (PPG-PR 140)	6.3	6.7	3.7	5.6
GREEN SUPREME (PPG-PR 121)	7.0	6.3	5.7	6.3	DLF LGD-3022	6.0	6.3	4.3	5.6
RIPTIDE (IS-PR 409)	7.0	6.3	5.7	6.3	JR-178	6.0	6.3	4.3	5.6
KARMA (PICK 10401)	6.7	7.0	5.3	6.3	JR-192	6.3	6.3	4.0	5.6
MANHATTAN 6 GLR (PST-2MAGS)	6.0	7.0	6.0	6.3	SIDEWAYS (PSRX-S84)	6.3	6.3	4.0	5.6
PPG-PR 128	7.0	6.3	5.7	6.3	AMAZING A+ (PPG-PR 138)	6.3	6.0	3.7	5.3
PREMIUM (PPG-PR 137)	7.0	6.3	5.7	6.3					
PST-2TQL	6.7	6.3	6.0	6.3	LSD VALUE	1.0	0.8	1.8	0.7
					C.V. (%)	9.4	8.1	18.9	12.5

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 9.

LEAF TEXTURE RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/  
2013 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE 2/

NAME	MO1	NAME	MO1
SIENNA	7.3	WICKED (SRX-4RHD)	6.3
THRIVE (IS-PR 469)	7.0	AMAZING A+ (PPG-PR 138)	6.0
A-35	6.7	APPLE SGL (PPG-PR 140)	6.0
ALLANTE	6.7	SUNSTREAKER (APR 2036)	6.0
HANCOCK (IS-PR 479)	6.7	APR 2320	6.0
INSIGHT	6.7	ASPIRE (IS-PR 491)	6.0
JR-178	6.7	BANDALORE (IS-PR 463)	6.0
LTP-RAE	6.7	BANFIELD (IS-PR 489)	6.0
PALMER V	6.7	BAR LP 10969	6.0
RINOVO	6.7	BAR LP 10970	6.0
SR4660ST (SRX-4MSH)	6.7	CL 11601	6.0
BAR LP 10972	6.3	CL 307	6.0
BAR LP 7608	6.3	DLF LGD-3026	6.0
BONNEVILLE	6.3	EVOLUTION (S85)	6.0
BRIGHTSTAR SLT	6.3	FASTBALL RGL (PPG-PR 133)	6.0
CS-PR66	6.3	FIESTA 4	6.0
DILIGENT (IS-PR 492)	6.3	GRAND SLAM GLD (PPG-PR 164)	6.0
DLF LGD-3022	6.3	GREEN SUPREME (PPG-PR 121)	6.0
EXCELLENCE (ISG-31)	6.3	MACH I	6.0
GO-DHS	6.3	MONSIEUR (IS-PR 488)	6.0
GO-PR60	6.3	PACIFIC GEM (PST-2MG7)	6.0
HAVEN (APR 2038)	6.3	PICK 4DFHM	6.0
RIPTIDE (IS-PR 409)	6.3	PLAYOFF 2 (P02)	6.0
JR-192	6.3	PPG-PR 142	6.0
KARMA (PICK 10401)	6.3	PROVOST (PPG-PR 143)	6.0
LTP-PR 135	6.3	PST-2ACR	6.0
MANHATTAN 6 GLR (PST-2MAGS)	6.3	PST-2BNS	6.0
OCTANE	6.3	PST-2NJK	6.0
PANGEA GLR (CL 11701)	6.3	RAD-PR62	6.0
PILLAR (CST)	6.3	RIO VISTA	6.0
PPG-PR 128	6.3	SALINAS II (PST-204D)	6.0
PPG-PR 136	6.3	SEDUCTIVE (ISG-30)	6.0
PPG-PR 165	6.3	SR 4650 (PSRX-3701)	6.0
PREMIUM (PPG-PR 137)	6.3	STAMINA (IS-PR 487)	6.0
PROMINENT (CS-20)	6.3	STELLAR 3GL (PPG-PR 134)	6.0
PRX-4GM1	6.3	UNO	6.0
PSRX-4CAGL	6.3	APR 2445	5.7
PST-2DR9	6.3	DLF LGT 4182	5.7
PST-2K9	6.3	DOMINATOR (PST-2AG4)	5.7
PST-2NKM	6.3	GO-G37	5.7
PST-2TQL	6.3	PINNACLE	5.7
RAD-PR55R	6.3	PIZZAZZ 2 GLR (PR 909)	5.7
SIDEWAYS (PSRX-S84)	6.3	LINN	4.7
SOX FAN (GM3)	6.3		
VINTAGE (ISG-36)	6.3	LSD VALUE	0.8
		C.V. (%)	7.8

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 10. WEAR TOLERANCE RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/  
2013 DATA

WEAR TOLERANCE RATINGS 1-9; 9=MAXIMUM TOLERANCE 2/

NAME	MA1	NAME	MA1
GREEN SUPREME (PPG-PR 121)	7.7	PRX-4GM1	6.0
SUNSTREAKER (APR 2036)	7.3	PST-2NJK	6.0
DILIGENT (IS-PR 492)	7.3	PST-2TQL	6.0
AMAZING A+ (PPG-PR 138)	7.0	RAD-PR55R	6.0
FIESTA 4	7.0	RAD-PR62	6.0
OCTANE	7.0	SEDUCTIVE (ISG-30)	6.0
PIZZAZZ 2 GLR (PR 909)	7.0	SOX FAN (GM3)	6.0
THRIVE (IS-PR 469)	7.0	VINTAGE (ISG-36)	6.0
DLF LGD-3026	6.7	BAR LP 10969	5.7
GO-PR60	6.7	BAR LP 10970	5.7
GRAND SLAM GLD (PPG-PR 164)	6.7	CL 11601	5.7
HANCOCK (IS-PR 479)	6.7	EXCELLENCE (ISG-31)	5.7
RIPTIDE (IS-PR 409)	6.7	HAVEN (APR 2038)	5.7
MANHATTAN 6 GLR (PST-2MAGS)	6.7	LTP-PR 135	5.7
PALMER V	6.7	PPG-PR 128	5.7
PANGEA GLR (CL 11701)	6.7	PPG-PR 136	5.7
RINOVO	6.7	PST-2K9	5.7
A-35	6.3	PST-2NKM	5.7
ASPIRE (IS-PR 491)	6.3	SIDEWAYS (PSRX-S84)	5.7
BANDALORE (IS-PR 463)	6.3	SIENNA	5.7
BANFIELD (IS-PR 489)	6.3	SR 4650 (PSRX-3701)	5.7
BONNEVILLE	6.3	UNO	5.7
CL 307	6.3	INSIGHT	5.3
JR-178	6.3	JR-192	5.3
PROVOST (PPG-PR 143)	6.3	LTP-RAE	5.3
PSRX-4CAGL	6.3	PREMIUM (PPG-PR 137)	5.3
PST-2BNS	6.3	PROMINENT (CS-20)	5.3
RIO VISTA	6.3	PST-2ACR	5.3
STAMINA (IS-PR 487)	6.3	SR4660ST (SRX-4MSH)	5.3
STELLAR 3GL (PPG-PR 134)	6.3	WICKED (SRX-4RHD)	5.3
APPLE SGL (PPG-PR 140)	6.0	DLF LGD-3022	5.0
APR 2445	6.0	GO-DHS	5.0
BRIGHTSTAR SLT	6.0	PINNACLE	5.0
CS-PR66	6.0	PLAYOFF 2 (P02)	5.0
DOMINATOR (PST-2AG4)	6.0	PST-2DR9	5.0
EVOLUTION (S85)	6.0	SALINAS II (PST-204D)	5.0
FASTBALL RGL (PPG-PR 133)	6.0	ALLANTE	4.7
GO-G37	6.0	APR 2320	4.7
KARMA (PICK 10401)	6.0	BAR LP 10972	4.7
MONSIEUR (IS-PR 488)	6.0	MACH I	4.7
PACIFIC GEM (PST-2MG7)	6.0	BAR LP 7608	4.3
PICK 4DFHM	6.0	DLF LGT 4182	4.3
PILLAR (CST)	6.0	LINN	3.7
PPG-PR 142	6.0		
PPG-PR 165	6.0	LSD VALUE	1.1
		C.V. (%)	11.7

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.



TABLE 11.

FALL DENSITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/  
2013 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 2/

NAME	MA1	NAME	MA1
ALLANTE	7.0	RIO VISTA	6.0
GRAND SLAM GLD (PPG-PR 164)	6.7	SIDEWAYS (PSRX-S84)	6.0
INSIGHT	6.7	SOX FAN (GM3)	6.0
KARMA (PICK 10401)	6.7	STAMINA (IS-PR 487)	6.0
RINOVO	6.7	THRIVE (IS-PR 469)	6.0
SIENNA	6.7	UNO	6.0
SR4660ST (SRX-4MSH)	6.7	APPLE SGL (PPG-PR 140)	5.7
BONNEVILLE	6.3	APR 2320	5.7
CL 11601	6.3	BANDALORE (IS-PR 463)	5.7
CL 307	6.3	DLF LGD-3022	5.7
GREEN SUPREME (PPG-PR 121)	6.3	DLF LGD-3026	5.7
RIPTIDE (IS-PR 409)	6.3	EVOLUTION (S85)	5.7
JR-178	6.3	EXCELLENCE (ISG-31)	5.7
MACH I	6.3	GO-G37	5.7
PIZZAZZ 2 GLR (PR 909)	6.3	GO-PR60	5.7
PPG-PR 128	6.3	HAVEN (APR 2038)	5.7
PPG-PR 136	6.3	JR-192	5.7
PREMIUM (PPG-PR 137)	6.3	MANHATTAN 6 GLR (PST-2MAGS)	5.7
PRX-4GM1	6.3	PACIFIC GEM (PST-2MG7)	5.7
PST-2BNS	6.3	PALMER V	5.7
PST-2NKM	6.3	PLAYOFF 2 (P02)	5.7
SEDUCTIVE (ISG-30)	6.3	PST-2DR9	5.7
SR 4650 (PSRX-3701)	6.3	SALINAS II (PST-204D)	5.7
WICKED (SRX-4RHD)	6.3	A-35	5.3
AMAZING A+ (PPG-PR 138)	6.0	SUNSTREAKER (APR 2036)	5.3
ASPIRE (IS-PR 491)	6.0	APR 2445	5.3
BANFIELD (IS-PR 489)	6.0	BAR LP 10970	5.3
BAR LP 10969	6.0	BAR LP 10972	5.3
BAR LP 7608	6.0	GO-DHS	5.3
BRIGHTSTAR SLT	6.0	OCTANE	5.3
CS-PR66	6.0	PANGEA GLR (CL 11701)	5.3
DILIGENT (IS-PR 492)	6.0	PINNACLE	5.3
DOMINATOR (PST-2AG4)	6.0	PST-2K9	5.3
FASTBALL RGL (PPG-PR 133)	6.0	PST-2NJK	5.3
FIESTA 4	6.0	PST-2TQL	5.3
HANCOCK (IS-PR 479)	6.0	RAD-PR55R	5.3
LTP-PR 135	6.0	RAD-PR62	5.3
LTP-RAE	6.0	STELLAR 3GL (PPG-PR 134)	5.3
MONSIEUR (IS-PR 488)	6.0	VINTAGE (ISG-36)	5.3
PICK 4DFHM	6.0	DLF LGT 4182	5.0
PILLAR (CST)	6.0	PROMINENT (CS-20)	5.0
PPG-PR 142	6.0	PST-2ACR	5.0
PPG-PR 165	6.0	LINN	3.0
PROVOST (PPG-PR 143)	6.0		
PSRX-4CAGL	6.0	LSD VALUE	0.9
		C.V. (%)	10.1

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 12.

PERCENT LIVING GROUND COVER (SUMMER) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/  
2013 DATA

LIVING GROUND COVER RATINGS 1-9; 9=MAXIMUM COVER 2/

NAME	MO1	VA1	MEAN	NAME	MO1	VA1	MEAN
GO-DHS	98.3	99.0	98.7	SOX FAN (GM3)	86.7	99.0	92.8
PROVOST (PPG-PR 143)	96.3	99.0	97.7	WICKED (SRX-4RHD)	86.7	99.0	92.8
UNO	96.3	99.0	97.7	PST-2TQL	89.3	96.0	92.7
DLF LGT 4182	95.7	99.0	97.3	PACIFIC GEM (PST-2MG7)	85.7	99.0	92.3
SUNSTREAKER (APR 2036)	94.0	99.0	96.5	AMAZING A+ (PPG-PR 138)	88.3	96.0	92.2
PILLAR (CST)	97.0	96.0	96.5	CL 307	88.3	96.0	92.2
PST-2ACR	97.0	96.0	96.5	HANCOCK (IS-PR 479)	85.0	99.0	92.0
GO-PR60	93.7	99.0	96.3	INSIGHT	90.7	93.0	91.8
PST-2NKM	96.7	96.0	96.3	JR-192	93.7	90.0	91.8
BAR LP 10972	93.3	99.0	96.2	DILIGENT (IS-PR 492)	87.3	96.0	91.7
PANGEA GLR (CL 11701)	96.3	96.0	96.2	KARMA (PICK 10401)	87.3	96.0	91.7
PST-2NJK	93.3	99.0	96.2	PREMIUM (PPG-PR 137)	87.3	96.0	91.7
GRAND SLAM GLD (PPG-PR 164)	93.0	99.0	96.0	APR 2320	90.0	93.0	91.5
BAR LP 10969	95.7	96.0	95.8	DOMINATOR (PST-2AG4)	83.3	99.0	91.2
SALINAS II (PST-204D)	95.7	96.0	95.8	RINOVO	89.0	93.0	91.0
ALLANTE	91.7	99.0	95.3	SR 4650 (PSRX-3701)	85.7	96.0	90.8
CL 11601	94.7	96.0	95.3	PALMER V	82.3	99.0	90.7
EXCELLENCE (ISG-31)	91.7	99.0	95.3	LTP-PR 135	85.0	96.0	90.5
GO-G37	91.7	99.0	95.3	LTP-RAE	85.0	96.0	90.5
PPG-PR 136	91.7	99.0	95.3	DLF LGD-3022	81.7	99.0	90.3
PSRX-4CAGL	94.7	96.0	95.3	HAVEN (APR 2038)	87.7	93.0	90.3
FASTBALL RGL (PPG-PR 133)	91.3	99.0	95.2	BAR LP 7608	86.7	93.0	89.8
SR4660ST (SRX-4MSH)	91.3	99.0	95.2	GREEN SUPREME (PPG-PR 121)	86.7	93.0	89.8
THRIVE (IS-PR 469)	94.3	96.0	95.2	PPG-PR 128	83.3	96.0	89.7
A-35	94.0	96.0	95.0	RAD-PR62	85.0	93.0	89.0
PLAYOFF 2 (P02)	94.0	96.0	95.0	CS-PR66	78.3	99.0	88.7
PST-2K9	93.3	96.0	94.7	MACH I	78.3	99.0	88.7
RAD-PR55R	93.3	96.0	94.7	PICK 4DFHM	78.3	99.0	88.7
BRIGHTSTAR SLT	93.0	96.0	94.5	PROMINENT (CS-20)	77.7	99.0	88.3
PIZZAZZ 2 GLR (PR 909)	93.0	96.0	94.5	BANFIELD (IS-PR 489)	81.7	93.0	87.3
BAR LP 10970	89.3	99.0	94.2	DLF LGD-3026	81.7	93.0	87.3
BANDALORE (IS-PR 463)	91.7	96.0	93.8	RIPTIDE (IS-PR 409)	73.3	99.0	86.2
PST-2DR9	91.7	96.0	93.8	JR-178	75.7	96.0	85.8
STAMINA (IS-PR 487)	91.7	96.0	93.8	APR 2445	72.3	99.0	85.7
SIDEWAYS (PSRX-S84)	88.3	99.0	93.7	PINNACLE	75.0	96.0	85.5
ASPIRE (IS-PR 491)	94.0	93.0	93.5	PPG-PR 165	75.0	96.0	85.5
MANHATTAN 6 GLR (PST-2MAGS)	94.0	93.0	93.5	MONSIEUR (IS-PR 488)	74.0	96.0	85.0
EVOLUTION (S85)	90.7	96.0	93.3	VINTAGE (ISG-36)	73.3	96.0	84.7
PPG-PR 142	90.7	96.0	93.3	SEDUCTIVE (ISG-30)	71.7	96.0	83.8
STELLAR 3GL (PPG-PR 134)	90.7	96.0	93.3	SIENNA	76.7	90.0	83.3
BONNEVILLE	93.3	93.0	93.2	OCTANE	73.0	93.0	83.0
PST-2BNS	87.3	99.0	93.2	LINN	63.3	99.0	81.2
APPLE SGL (PPG-PR 140)	90.0	96.0	93.0				
RIO VISTA	93.0	93.0	93.0	LSD VALUE	18.1	6.4	9.6
FIESTA 4	86.7	99.0	92.8	C.V. (%)	12.8	4.1	9.1
PRX-4GM1	86.7	99.0	92.8				

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 13. STEM RUST RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/  
2013 DATA

STEM RUST RATINGS 1-9; 9=NO DISEASE 2/

NAME	MO1	NAME	MO1
EVOLUTION (S85)	6.7	PLAYOFF 2 (P02)	4.3
STELLAR 3GL (PPG-PR 134)	6.7	PPG-PR 128	4.3
BANFIELD (IS-PR 489)	6.3	PPG-PR 142	4.3
BONNEVILLE	6.3	PROMINENT (CS-20)	4.3
KARMA (PICK 10401)	6.3	PST-2ACR	4.3
OCTANE	6.3	PST-2DR9	4.3
PANGEA GLR (CL 11701)	6.3	SOX FAN (GM3)	4.3
GREEN SUPREME (PPG-PR 121)	6.0	VINTAGE (ISG-36)	4.3
PPG-PR 136	6.0	SUNSTREAKER (APR 2036)	4.0
RIO VISTA	6.0	BAR LP 10969	4.0
STAMINA (IS-PR 487)	6.0	GO-PR60	4.0
CL 11601	5.7	PST-2BNS	4.0
CL 307	5.7	SALINAS II (PST-204D)	4.0
SR 4650 (PSRX-3701)	5.7	ASPIRE (IS-PR 491)	3.7
AMAZING A+ (PPG-PR 138)	5.3	BANDALORE (IS-PR 463)	3.7
PIZZAZZ 2 GLR (PR 909)	5.3	BAR LP 10970	3.7
EXCELLENCE (ISG-31)	5.0	DLF LGT 4182	3.7
GRAND SLAM GLD (PPG-PR 164)	5.0	DOMINATOR (PST-2AG4)	3.7
PILLAR (CST)	5.0	GO-G37	3.7
PPG-PR 165	5.0	HAVEN (APR 2038)	3.7
PST-2K9	5.0	MACH I	3.7
SEDUCTIVE (ISG-30)	5.0	PRX-4GM1	3.7
SIDEWAYS (PSRX-S84)	5.0	SR4660ST (SRX-4MSH)	3.7
A-35	4.7	CS-PR66	3.3
APPLE SGL (PPG-PR 140)	4.7	HANCOCK (IS-PR 479)	3.3
DILIGENT (IS-PR 492)	4.7	RIPTIDE (IS-PR 409)	3.3
FASTBALL RGL (PPG-PR 133)	4.7	MANHATTAN 6 GLR (PST-2MAGS)	3.3
LINN	4.7	PICK 4DFHM	3.3
LTP-RAE	4.7	PSRX-4CAGL	3.3
MONSIEUR (IS-PR 488)	4.7	PST-2NKM	3.3
PREMIUM (PPG-PR 137)	4.7	RAD-PR62	3.3
PROVOST (PPG-PR 143)	4.7	SIENNA	3.3
PST-2NJK	4.7	UNO	3.3
RINOVO	4.7	BAR LP 10972	3.0
THRIVE (IS-PR 469)	4.7	DLF LGD-3026	3.0
WICKED (SRX-4RHD)	4.7	GO-DHS	3.0
ALLANTE	4.3	INSIGHT	3.0
APR 2320	4.3	JR-192	3.0
APR 2445	4.3	PST-2TQL	3.0
DLF LGD-3022	4.3	BRIGHTSTAR SLT	2.7
FIESTA 4	4.3	PINNACLE	2.7
JR-178	4.3	BAR LP 7608	2.3
LTP-PR 135	4.3	RAD-PR55R	2.0
PACIFIC GEM (PST-2MG7)	4.3		
PALMER V	4.3	LSD VALUE	1.7
		C.V. (%)	24.3

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 14.

POA ANNUA COUNTS OF PERENNIAL RYEGRASS CULTIVARS 1/  
2013 DATA

## POA ANNUA COUNTS PER PLOT 2/

NAME	MA1	NAME	MA1
DLF LGT 4182	78.0	PLAYOFF 2 (P02)	15.7
LINN	48.0	PST-2NJK	15.7
GO-DHS	44.0	APR 2445	15.3
PST-2ACR	40.3	PPG-PR 142	15.3
SEDUCTIVE (ISG-30)	39.3	PRX-4GM1	15.3
PST-2TQL	36.7	RAD-PR62	15.3
RAD-PR55R	35.7	JR-192	15.0
BAR LP 7608	33.0	SR4660ST (SRX-4MSH)	15.0
DLF LGD-3026	33.0	SOX FAN (GM3)	14.3
CL 307	32.0	PPG-PR 136	13.3
HAVEN (APR 2038)	31.0	ASPIRE (IS-PR 491)	13.0
PROMINENT (CS-20)	30.7	BRIGHTSTAR SLT	13.0
EXCELLENCE (ISG-31)	29.7	INSIGHT	13.0
BONNEVILLE	28.7	CL 11601	12.7
SALINAS II (PST-204D)	28.7	KARMA (PICK 10401)	12.3
MONSIEUR (IS-PR 488)	26.0	APPLE SGL (PPG-PR 140)	12.0
VINTAGE (ISG-36)	25.7	GREEN SUPREME (PPG-PR 121)	12.0
CS-PR66	24.7	PILLAR (CST)	12.0
DILIGENT (IS-PR 492)	23.3	PST-2BNS	11.7
HANCOCK (IS-PR 479)	23.0	BAR LP 10972	11.3
MACH I	22.7	WICKED (SRX-4RHD)	11.0
GO-G37	22.3	LTP-RAE	10.3
BAR LP 10970	22.0	PSRX-4CAGL	10.3
GO-PR60	21.3	PST-2NKM	10.3
MANHATTAN 6 GLR (PST-2MAGS)	21.0	EVOLUTION (S85)	10.0
PICK 4DFHM	21.0	ALLANTE	9.3
A-35	20.7	PANGEA GLR (CL 11701)	9.3
PST-2DR9	20.3	PPG-PR 165	9.0
PREMIUM (PPG-PR 137)	20.0	RINOVO	9.0
THRIVE (IS-PR 469)	19.3	FASTBALL RGL (PPG-PR 133)	8.7
APR 2320	18.7	SR 4650 (PSRX-3701)	8.7
BANFIELD (IS-PR 489)	18.7	STAMINA (IS-PR 487)	8.3
SIDEWAYS (PSRX-S84)	18.7	PST-2K9	8.0
JR-178	18.3	GRAND SLAM GLD (PPG-PR 164)	7.7
DLF LGD-3022	18.0	SUNSTREAKER (APR 2036)	7.0
DOMINATOR (PST-2AG4)	18.0	LTP-PR 135	7.0
OCTANE	18.0	RIO VISTA	7.0
RIPTIDE (IS-PR 409)	17.7	UNO	7.0
PPG-PR 128	17.0	AMAZING A+ (PPG-PR 138)	6.3
PACIFIC GEM (PST-2MG7)	16.7	PIZZAZZ 2 GLR (PR 909)	6.0
STELLAR 3GL (PPG-PR 134)	16.7	PROVOST (PPG-PR 143)	5.0
BAR LP 10969	16.3	PINNACLE	4.7
FIESTA 4	16.3	SIENNA	3.3
PALMER V	16.3		
BANDALORE (IS-PR 463)	15.7	LSD VALUE	12.3
		C.V. (%)	41.6

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 15. WINTER KILL RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/  
2013 DATA

WINTER KILL RATINGS 1-9; 9=NONE 2/

NAME	MN1	NAME	MN1
GO-DHS	2.7	THRIVE (IS-PR 469)	1.7
BAR LP 10969	2.3	WICKED (SRX-4RHD)	1.7
BAR LP 10972	2.3	BANDALORE (IS-PR 463)	1.3
BAR LP 7608	2.3	BANFIELD (IS-PR 489)	1.3
DLF LGT 4182	2.3	DLF LGD-3022	1.3
DOMINATOR (PST-2AG4)	2.3	EVOLUTION (S85)	1.3
PROMINENT (CS-20)	2.3	FIESTA 4	1.3
PSRX-4CAGL	2.3	GREEN SUPREME (PPG-PR 121)	1.3
RAD-PR55R	2.3	LTP-RAE	1.3
UNO	2.3	MANHATTAN 6 GLR (PST-2MAGS)	1.3
A-35	2.0	PICK 4DFHM	1.3
APPLE SGL (PPG-PR 140)	2.0	PPG-PR 142	1.3
APR 2320	2.0	PPG-PR 165	1.3
ASPIRE (IS-PR 491)	2.0	PROVOST (PPG-PR 143)	1.3
BONNEVILLE	2.0	PST-2ACR	1.3
HANCOCK (IS-PR 479)	2.0	PST-2DR9	1.3
HAVEN (APR 2038)	2.0	SOX FAN (GM3)	1.3
INSIGHT	2.0	STAMINA (IS-PR 487)	1.3
RIPTIDE (IS-PR 409)	2.0	ALLANTE	1.0
PINNACLE	2.0	CL 11601	1.0
PRX-4GM1	2.0	CL 307	1.0
PST-2NKM	2.0	DILIGENT (IS-PR 492)	1.0
RAD-PR62	2.0	DLF LGD-3026	1.0
SALINAS II (PST-204D)	2.0	FASTBALL RGL (PPG-PR 133)	1.0
VINTAGE (ISG-36)	2.0	GRAND SLAM GLD (PPG-PR 164)	1.0
AMAZING A+ (PPG-PR 138)	1.7	JR-178	1.0
SUNSTREAKER (APR 2036)	1.7	KARMA (PICK 10401)	1.0
APR 2445	1.7	LINN	1.0
BAR LP 10970	1.7	LTP-PR 135	1.0
BRIGHTSTAR SLT	1.7	MONSIEUR (IS-PR 488)	1.0
CS-PR66	1.7	OCTANE	1.0
EXCELLENCE (ISG-31)	1.7	PANGEA GLR (CL 11701)	1.0
GO-G37	1.7	PILLAR (CST)	1.0
GO-PR60	1.7	PIZZAZZ 2 GLR (PR 909)	1.0
JR-192	1.7	PLAYOFF 2 (P02)	1.0
MACH I	1.7	PPG-PR 136	1.0
PACIFIC GEM (PST-2MG7)	1.7	PREMIUM (PPG-PR 137)	1.0
PALMER V	1.7	PST-2K9	1.0
PPG-PR 128	1.7	PST-2NJK	1.0
PST-2BNS	1.7	RIO VISTA	1.0
PST-2TQL	1.7	SIDEWAYS (PSRX-S84)	1.0
RINOVO	1.7	SIENNA	1.0
SEDUCTIVE (ISG-30)	1.7	SR 4650 (PSRX-3701)	1.0
SR4660ST (SRX-4MSH)	1.7		
STELLAR 3GL (PPG-PR 134)	1.7	LSD VALUE	1.0
		C.V. (%)	39.4

1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).

2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

APPENDIX TABLE. SUMMARY OF TURFGRASS QUALITY RATINGS FOR PERENNIAL RYEGRASS CULTIVARS \*/  
 2013 DATA  
 TURFGRASS QUALITY RATINGS 1 9; 9=IDEAL TURF \*\*/

NAME	QUALITY MEAN 1/	MAXIMUM IN TOP 25% 2/	NAME	QUALITY MEAN 1/	MAXIMUM IN TOP 25% 2/
A-35	5.1	9.1	MONSIEUR (IS-PR 488)	5.3	27.3
ALLANTE	5.0	0.0	OCTANE	5.4	27.3
AMAZING A+ (PPG-PR 138)	5.6	36.4	PACIFIC GEM (PST-2MG7)	5.4	18.2
APPLE SGL (PPG-PR 140)	5.6	27.3	PALMER V	5.5	36.4
SUNSTREAKER (APR 2036)	5.7	36.4	PANGEA GLR (CL 11701)	5.8	63.6
APR 2320	5.5	27.3	PICK 4DFHM	4.9	0.0
APR 2445	5.4	18.2	PILLAR (CST)	5.4	27.3
ASPIRE (IS-PR 491)	5.9	72.7	PINNACLE	4.8	9.1
BANDALORE (IS-PR 463)	5.5	36.4	PIZZAZZ 2 GLR (PR 909)	5.4	36.4
BANFIELD (IS-PR 489)	5.5	18.2	PLAYOFF 2 (P02)	5.1	0.0
BAR LP 10969	5.3	18.2	PPG-PR 128	5.3	9.1
BAR LP 10970	5.3	9.1	PPG-PR 136	5.5	27.3
BAR LP 10972	5.2	9.1	PPG-PR 142	5.4	18.2
BAR LP 7608	4.9	9.1	PPG-PR 165	5.5	18.2
BONNEVILLE	5.4	27.3	PREMIUM (PPG-PR 137)	5.4	9.1
BRIGHTSTAR SLT	5.1	0.0	PROMINENT (CS-20)	4.9	0.0
CL 11601	5.5	36.4	PROVOST (PPG-PR 143)	5.5	54.5
CL 307	5.5	27.3	PRX-4GM1	5.4	9.1
CS-PR66	5.4	18.2	PSRX-4CAGL	5.5	27.3
DILIGENT (IS-PR 492)	5.4	18.2	PST-2ACR	5.2	9.1
DLF LGD-3022	5.3	9.1	PST-2BNS	5.9	72.7
DLF LGD-3026	4.9	0.0	PST-2DR9	5.3	18.2
DLF LGT 4182	4.9	9.1	PST-2K9	5.4	9.1
DOMINATOR (PST-2AG4)	5.3	18.2	PST-2NJK	5.4	27.3
EVOLUTION (S85)	5.6	54.5	PST-2NKM	5.7	45.5
EXCELLENCE (ISG-31)	5.0	0.0	PST-2TQL	5.2	18.2
FASTBALL RGL (PPG-PR 133)	5.4	0.0	RAD-PR55R	5.5	45.5
FIESTA 4	5.3	27.3	RAD-PR62	5.1	18.2
GO-DHS	4.6	0.0	RINOVO	5.4	36.4
GO-G37	5.0	0.0	RIO VISTA	5.5	36.4
GO-PR60	5.4	36.4	SALINAS II (PST-204D)	5.5	27.3
GRAND SLAM GLD (PPG-PR 164)	5.8	54.5	SEDUCTIVE (ISG-30)	5.0	0.0
GREEN SUPREME (PPG-PR 121)	5.6	45.5	SIDEWAYS (PSRX-S84)	5.6	18.2
HANCOCK (IS-PR 479)	5.3	27.3	SIENNA	4.8	9.1
HAVEN (APR 2038)	5.5	36.4	SOX FAN (GM3)	5.5	27.3
INSIGHT	4.9	9.1	SR 4650 (PSRX-3701)	5.6	36.4
RIPTIDE (IS-PR 409)	5.6	45.5	SR4660ST (SRX-4MSH)	5.6	45.5
JR-178	5.5	9.1	STAMINA (IS-PR 487)	5.6	36.4
JR-192	5.3	27.3	STELLAR 3GL (PPG-PR 134)	5.8	54.5
KARMA (PICK 10401)	5.6	54.5	THRIVE (IS-PR 469)	5.7	54.5
LINN	3.0	0.0	UNO	5.7	36.4
LTP-PR 135	5.6	18.2	VINTAGE (ISG-36)	4.9	18.2
LTP-RAE	5.2	0.0	WICKED (SRX-4RHD)	5.8	63.6
MACH I	4.9	9.1			
MANHATTAN 6 GLR (PST-2MAGS)	5.2	9.1	LSD VALUE	0.3	
			C.V. (%)	12.4	

\*/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN.  
 STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).  
 \*\*/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.  
 1/ MEAN AN AVERAGE OF ALL THE TURFGRASS QUALITY RATINGS FROM ALL LOCATIONS.  
 2/ MAXIMUM IN TOP 25% THE PERCENTAGE OF LOCATIONS WHERE THAT ENTRY FINISHED IN THE TOP 25% OF ALL ENTRIES.