

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:

Mr. Aaron Kuenzi, Mountain View Seeds.
Mr. Ryan Jeffries, Columbia Seeds, Inc.
Dr. Mike Kenna, USGA Green Section
Dr. Jason Kruse, University of Florida
Dr. David Kopec, University of Arizona
Mr. Gary Wilbur, Oakwood Sod Farms
Mr. Mark Johnson, Golf Course Superintendents Assoc. of America
Dr. Eric Watkins, University of Minnesota
Mr. Steve Reid, DLF Pickseed USA
Dr. Scott Ebdon, University of Massachusetts

FOR ADDITIONAL REPORTS OR INFORMATION CONTACT:

Kevin Morris, Executive Director
National Turfgrass Evaluation Program
Beltsville Agricultural Research Center-West
Building 005, Room 307
Beltsville, Maryland 20705
kmorris@ntep.org
www.ntep.org

CONTENTS

2016 National Perennial Ryegrass Test - 2017 data

LOCATIONS SUBMITTING DATA FOR 2017.....	1
NATIONAL PERENNIAL RYEGRASS TEST, 2016 - Entries and Sponsors.....	2
Table A - 2017 Locations, Site Descriptions and Management Practices in the 2016 National Perennial Ryegrass Test.....	3
Table B - Locations and Data Collected in 2017.....	4
Table 1 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown in Location Performance Index (LPI) Group 1.....	6
Table 2 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown in Location Performance Index (LPI) Group 2.....	8
Table 3 - Mean Turfgrass Quality and Other Ratings of Perennial Ryegrass Cultivars Grown at Five Locations in the U.S. Using Schedule A.....	11
Table 4 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Three Locations in the U.S. Using Schedule B.....	14
Table 5 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Six Locations in the U.S. Using Schedule C.....	16
Table 6 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Two Locations in the Northeast Region.....	20
Table 7 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Three Locations in the Transition Region.....	21
Table 8 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Six Locations in the North Central Region.....	23
Table 9 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Logan, UT.....	26
Table 10 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars For Each Month Grown at Fresno, CA.....	29
Table 11 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars For Each Month Grown at Corvallis, OR.....	32
Table 12 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown Under Stress at Amherst, MA.....	35
Table 13 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown Under Traffic Stress at Corvallis, OR.....	38
Table 14 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown Under Traffic Stress at Blacksburg, VA.....	40

CONTENTS (continued)

Table 15 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown Under Drought Stress at Logan, UT.....	43
Table 16 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars For Salt Tolerance Study in Greenhouse at Fort Collins, CO.....	46
Table 17 - Genetic Color Ratings of Perennial Ryegrass Cultivars.....	49
Table 18 - Spring Greenup Ratings of Perennial Ryegrass Cultivars.....	52
Table 19 - Seedling Vigor Ratings of Perennial Ryegrass Cultivars.....	54
Table 20 - Percent Living Ground Cover (Spring) Ratings of Perennial Ryegrass Cultivars.....	57
Table 21 - Percent Living Ground Cover (Fall) Ratings of Perennial Ryegrass Cultivars.....	59
Table 22 - Crown Rust Ratings of Perennial Ryegrass Cultivars.....	61
Table 23 - Gray Leaf Spot Ratings of Perennial Ryegrass Cultivars.....	63
Table 24 - Pink Snow Mold Ratings of Perennial Ryegrass Cultivars.....	65
Table 25 - Fall Color Ratings in November of Perennial Ryegrass Cultivars.....	67
Table 26 - Percent Establishment Ratings of Perennial Ryegrass Cultivars.....	69
Table 27 - Percent Establishment Ratings of Perennial Ryegrass Cultivars in Fargo, ND.....	72
Table 28 - Percent Establishment Ratings of Perennial Ryegrass Cultivars in Logan, UT.....	74
Table 29 - Percent Divot Recovery Ratings of Perennial Ryegrass Cultivars in Lexington, KY.....	76
Table 30 - Winter Kill Ratings of Perennial Ryegrass Cultivars.....	79
Table 31 - Quality Ratings of Perennial Ryegrass Cultivars in December	81
Appendix Table - Summary of Turfgrass Quality Ratings of Perennial Ryegrass Cultivars.....	83

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>.

2016 NATIONAL PERENNIAL RYEGRASS TEST

LOCATIONS SUBMITTING DATA FOR 2017

State	Location	Code
California	Fresno	CA7
Colorado	Ft. Collins (Salt Tolerance)	CO1
Connecticut	Storrs	CT1
Illinois	Urbana	IL1
Iowa	Ames	IA1
Kentucky	Lexington	KY1
Kansas	Manhattan	KS1
Massachusetts	Amherst (Traffic)	MA1
Michigan	East Lansing	MI1
Minnesota	St. Paul	MN1
Missouri	Columbia	MO1
Nebraska	Mead	NE1
New Jersey	Adelphia	NJ2
North Dakota	Fargo	ND1
Oregon	Corvallis	OR1
Oregon	Corvallis (Traffic)	OR2
Utah	Logan	UT1
Utah	Logan (Drought)	UT2
Virginia	Blacksburg	VA1
Virginia	Blacksburg (Traffic)	VA2
Wisconsin	Madison	WI1

2016 NATIONAL PERENNIAL RYEGRASS TEST

Entries and Sponsors

Entry #	Name	Sponsor	Entry #	Name	Sponsor	Entry #	Name	Sponsor
1	021	The Scotts Miracle-Gro Co.	40	APR2616	Pennington Seed	*79	Furlong (LTP-FCB)	Lebanon Seaboard Corp.
2	BSP-17	Bailey Seed & Grain LLC	41	GO-141	Grassland Oregon	80	BAR LP 6117	Barenbrug USA
3	BSWH	Bailey Seed & Grain LLC	42	GO-142	Grassland Oregon	81	BAR LP 6131	Barenbrug USA
4	BSP-25	Bailey Seed & Grain LLC	43	GO-143	Grassland Oregon	82	BAR LP 6159	Barenbrug USA
*5	Savant	Ledeboer Seed LLC	44	APR2612	ProSeeds Marketing	83	BAR LP 6233	Barenbrug USA
6	LPB-SD-105	Ledeboer Seed LLC	45	APR3060	Pennington Seed	84	PST-2FOXY	Pure-Seed Testing, Inc.
*7	Saguaro	Ledeboer Seed LLC	46	AMP-R1	AMPAC Seed Co.	*85	Silver Sport (PST-2CRP)	Rose Agri-Seed, Inc.
8	LPB-SD-104	Ledeboer Seed LLC	47	DLFPS-236/3546	DLF Pickseed USA, Inc	86	PST-2EGAD	Pure-Seed Testing, Inc.
*9	Mensa	Ledeboer Seed LLC	48	DLFPS-236/3547	DLF Pickseed USA, Inc	*87	Gray Hawk (PST-2FIND)	Pure-Seed Testing, Inc.
10	LPB-SD-101	Ledeboer Seed LLC	49	DLFPS-236/3548	DLF Pickseed USA, Inc	88	PST-2GTD	Pure-Seed Testing, Inc.
11	LPB-SD-102	Ledeboer Seed LLC	50	PR-6-15	Columbia Seeds	89	PST-2BDT	Grassland Oregon
12	LPB-SD-103	Ledeboer Seed LLC	51	DLFPS-236/3550	DLF Pickseed USA, Inc	90	PST-2MAY	Pure-Seed Testing, Inc.
13	DLFPS-236/3540	DLF Pickseed USA, Inc	52	DLFPS-236/3552	DLF Pickseed USA, Inc	*91	Gray Wolf (PST-2GAL)	Rose Agri-Seed, Inc.
14	DLFPS-236/3542	DLF Pickseed USA, Inc	53	023	Brett Young Seeds	92	PST-2PDA	Pure-Seed Testing, Inc.
15	DLFPS-236/3544	DLF Pickseed USA, Inc	54	FP2	Turf Merchants, Inc.	93	PST-2A2	Pure-Seed Testing, Inc.
*16	Intense	Landmark Turf & Native Seed	55	02BS2	Brett Young Seeds	94	DLFPS-236/3553	DLF Pickseed USA, Inc.
*17	Xcelerator	Landmark Turf & Native Seed	56	RRT	The Scotts Miracle-Gro Co	95	DLFPS-236/3554	DLF Pickseed USA, Inc.
18	UF3	Landmark Turf & Native Seed	*57	Slider LS (PPG-PR 241)	Mountain View Seeds	96	PR-5-16	Columbia Seeds
19	JR-123	Jacklin Seed by Simplot	*58	Fastball 3GL (PPG-PR 329)	Mountain View Seeds	97	BAR LP 6158	Barenbrug USA
20	JR-747	Jacklin Seed by Simplot	59	PPG-PR 331	Turf Merchants, Inc	98	BAR LP 6162	Barenbrug USA
21	JR-888	Jacklin Seed by Simplot	*60	Derby Xtreme	Standard	99	BAR LP 6164	Barenbrug USA
22	DLFPS-236/3541	DLF Pickseed USA, Inc	*61	Apple 3GL (PPG-PR 339)	Mountain View Seeds	100	BAR LP 6165	Barenbrug USA
23	DLFPS-236/3543	DLF Pickseed USA, Inc	*62	Slugger 3GL (PPG-PR 343)	Mountain View Seeds	*101	Overdrive 5G	Burlingham Seeds, LLC.
24	DLFPS-236/3545	DLF Pickseed USA, Inc	63	PPG-PR 360	Integra Turf	102	02BS1	ProSeeds Marketing
*25	Evolve	SiteOne Landscape Supply	64	PPG-PR 367	Mountain View Seeds	103	CPN	Columbia Seeds
26	MRSLS-PR16	SiteOne Landscape Supply	65	PPG-PR 370	Lewis Seed Company	104	JR-197	Jacklin Simplot
27	PL2	SiteOne Landscape Supply	66	PPG-PR 371	Turf Merchants, Inc.	105	DLFPS-238/3014	DLF Pickseed USA, Inc.
28	MRSLS-PR15	SiteOne Landscape Supply	67	PPG-PR 372	Columbia Seeds	*106	Pepper II (RAD-PR 103)	Lewis Seed Company
29	SNX	Smith Seed Services	68	PPG-PR 385	Mountain View Seeds	107	RAD-PR 112	Bailey Seed
*30	Signet	Smith Seed Services	*69	Homerun LS (PPG-PR 419)	Mountain View Seeds	*108	UMPQUA	Vista Seed Partners LLC
*31	Shield (02BS4)	Smith Seed Services	70	PPG-PR 420	Peak Plant Genetics LLC.	*109	Seabiscuit	Lebanon Seaboard Corp.
32	CS-6	Columbia Seeds	71	PPG-PR 421	Proseeds Marketing	*110	Man O'War	Lebanon Seaboard Corp.
33	DLFPS-236/3556	DLF Pickseed USA, Inc	72	PPG-PR 422	Columbia Seeds	*111	Pharaoh	Lebanon Seaboard Corp.
*34	ASP0116EXT	Allied Seed LLC	73	PPG-PR 423	Peak Plant Genetics, LLC	*112	Allstar III	Standard
*35	ASP0117 (A-PR15)	Allied Seed LLC	74	PPG-PR 424	Peak Plant Genetics, LLC	*113	Brightstar SLT	Standard
*36	ASP0118GL (A-4G)	Allied Seed LLC	*75	Karma	Standard	*114	Linn	Standard
*37	ASP0218 (A-6D)	Allied Seed LLC	*76	SR 4650	Standard			
38	NP-3	Pennington Seed	77	DLFPS-236/3538	DLF Pickseed USA, Inc.			
39	NP-2	Pennington Seed	*78	Grand Slam GLD	Standard			

*COMMERCIALLY AVAILABLE IN THE USA IN 2018

TABLE A.

2017 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN
THE 2016 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
CA7	SANDY LOAM	6.6-7.0	0-60	0-150	1.1-2.0	FULL SUN	3.6-4.0	TO PREVENT DORMANCY
CO1	-	-	-	-	-	-	-	-
CT1	SANDY LOAM	6.1-6.5	61-150	151-240	-	FULL SUN	1.1-1.5	TO PREVENT STRESS
IA1	SANDY CLAY LOAM	7.1-7.5	0-60	0-150	2.1-3.0	FULL SUN	2.6-3.0	TO PREVENT DORMANCY
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
KS1	-	-	-	-	-	-	-	-
KY1	SILT LOAM AND SILT	6.1-6.5	451+	241-375	0.0-1.0	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
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	-	-	-	-	-	-	-	-
ND1	SILTY CLAY AND CLAY	7.1-7.5	0-60	151-240	2.1-3.0	FULL SUN	2.1-2.5	TO PREVENT DORMANCY
NE1	SILTY CLAY AND CLAY	7.1-7.5	0-60	376-500	3.1-4.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
NJ2	SANDY LOAM	6.1-6.5	271-450	376-500	4.1-5.0	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	2.1-2.5	TO PREVENT DORMANCY
OR2	SILTY CLAY LOAM	5.6-6.0	61-150	241-375	4.1-5.0	FULL SUN	2.1-2.5	TO PREVENT DORMANCY
UT1	SILT LOAM AND SILT	7.1-7.5	0-60	151-240	-	FULL SUN	2.6-3.0	TO PREVENT STRESS
UT2	SILT LOAM AND SILT	7.1-7.5	0-60	151-240	-	FULL SUN	2.6-3.0	TO PREVENT DORMANCY
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
WI1	SILT LOAM AND SILT	7.1-7.5	-	-	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY

TABLE B.

LOCATIONS AND DATA COLLECTED IN 2017

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	WEAR TOLERANCE
CA7	X	X	X	X	X	X	X	X	X	X	X	X			
CO1					X	X	X	X	X	X	X	X		X	
CT1															
IA1				X	X	X	X	X	X	X	X	X		X	
IL1				X	X	X	X	X	X	X	X	X		X	X
KS1															
KY1				X	X	X	X	X	X	X	X	X			
MA1					X	X	X	X	X	X	X	X			X
MI1						X	X	X	X	X	X	X			
MN1					X	X	X	X	X	X	X	X		X	
MO1					X	X	X	X	X	X	X	X		X	
ND1											X				
NE1		X	X	X	X	X	X	X	X	X	X	X		X	X
NJ2		X	X	X	X	X	X	X	X	X	X	X		X	
OR1		X	X	X	X	X	X	X	X	X	X	X		X	X
OR2															
UT1		X	X	X	X	X	X	X	X	X	X	X		X	
UT2		X	X	X	X	X	X	X	X	X	X	X		X	X
VA1		X	X	X	X	X	X	X	X	X	X	X			
VA2		X	X	X	X	X	X	X	X	X	X	X		X	
WI1			X	X	X	X	X	X	X	X	X	X		X	

TABLE B. (CONT'D)

LOCATION	SEEDLING VIGOR	SPRING DENSITY	PERCENT COVER SPRING	PERCENT COVER FALL	CROWN RUST	LOCATIONS AND DATA COLLECTED IN 2017						QUALITY DECEMBER 2016	PERCENT ESTABLISHMENT SUMMER	ESTABLISHMENT FALL	RATINGS SEPTEMBER	OCTOBER	
						GRAY SPOT	PINK MOLD	FALL COLOR NOVEMBER	MOWING QUALITY	PERCENT ESTABLISH- MENT	WINTER KILL						
* CA7	X																
* CO1														X			
CT1												X					
IA1	X																
IL1																	
KS1	X							X									
* KY1	X									X							
MA1											X						
MI1										X							
MN1												X					
MO1	X			X								X			X		
ND1														X		X	
NE1												X					
NJ2						X		X									
OR1																	
OR2									X								
UT1									X								
UT2															X		X
* VA1							X										
* VA2		X		X													
WI1											X						

* MORE DATA FOR CO1, KY1 AND VA2 IN TABLE 16, 14 AND 29.

TABLE 1.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
 GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1 **/
 2017 DATA

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

NAME	#	ENTRY	NJ2	MN1	CT1	MEAN	NAME	#	ENTRY	NJ2	MN1	CT1	MEAN
NP-2		39	6.8	6.0	7.3	6.7	*APPLE 3GL (PPG-PR 339)	61	5.7	5.3	6.8	6.0	
*FURLONG (LTP-FCB)		79	6.7	5.9	7.3	6.6	JR-123	19	5.8	5.3	6.7	6.0	
PPG-PR 424		74	6.6	5.9	7.3	6.6	DLFPS-236/3553	94	5.7	5.3	6.8	6.0	
PPG-PR 423		73	6.5	5.8	7.2	6.5	PR-5-16	96	5.7	5.3	6.8	5.9	
PPG-PR 331		59	6.4	5.8	7.2	6.5	DLFPS-236/3545	24	5.7	5.3	6.8	5.9	
DLFPS-236/3556		33	6.6	5.7	7.1	6.5	APR2616	40	5.7	5.3	6.7	5.9	
023		53	6.5	5.8	7.1	6.5	*GRAY HAWK (PST-2FIND)	87	5.7	5.3	6.8	5.9	
PPG-PR 372		67	6.4	5.7	7.2	6.4	DLFPS-236/3538	77	5.6	5.3	6.8	5.9	
PL2		27	6.4	5.7	7.1	6.4	PPG-PR 367	64	5.6	5.2	6.7	5.9	
DLFPS-236/3546		47	6.5	5.7	7.1	6.4	*UMPQUA	108	5.5	5.2	6.7	5.8	
*HOMERUN LS (PPG-PR 419)		69	6.3	5.7	7.1	6.4	DLFPS-236/3550	51	5.6	5.2	6.7	5.8	
*XCELERATOR		17	6.3	5.6	7.1	6.3	*PHARAOH	111	5.5	5.2	6.7	5.8	
NP-3		38	6.3	5.6	7.0	6.3	*GRAY WOLF (PST-2GAL)	91	5.5	5.2	6.7	5.8	
PPG-PR 421		71	6.2	5.6	7.1	6.3	021	1	5.5	5.2	6.7	5.8	
PPG-PR 420		70	6.2	5.6	7.1	6.3	*MAN O WAR	110	5.5	5.2	6.7	5.8	
DLFPS-236/3543		23	6.2	5.6	7.0	6.3	DLFPS-236/3544	15	5.4	5.1	6.7	5.7	
PPG-PR 360		63	6.2	5.6	7.0	6.3	*SEABISCUIT	109	5.4	5.1	6.6	5.7	
DLFPS-236/3547		48	6.2	5.6	7.0	6.2	*GRAND SLAM GLD	78	5.3	5.1	6.6	5.7	
DLFPS-236/3540		13	6.1	5.6	7.0	6.2	PST-2FOXY	84	5.3	5.1	6.6	5.7	
DLFPS-236/3541		22	6.2	5.5	6.9	6.2	DLFPS-236/3552	52	5.3	5.1	6.6	5.7	
PPG-PR 422		72	6.1	5.6	7.0	6.2	*DERBY XTREME	60	5.4	5.0	6.5	5.6	
DLFPS-236/3554		95	5.9	5.6	7.1	6.2	PST-2BDT	89	5.4	5.0	6.5	5.6	
*FASTBALL 3GL (PPG-PR 329)		58	6.1	5.5	6.9	6.2	PPG-PR 385	68	5.3	5.0	6.5	5.6	
*OVERDRIVE 5G		101	6.0	5.5	6.9	6.1	02BS1	102	5.2	5.0	6.5	5.6	
FP2		54	6.0	5.5	7.0	6.1	LFB-SD-102	11	5.2	5.0	6.5	5.6	
PR-6-15		50	6.0	5.5	6.9	6.1	*KARMA	75	5.4	4.9	6.4	5.6	
*SIGNET		30	6.0	5.5	6.9	6.1	*ASPO117 (A-PR15)	35	5.2	5.0	6.5	5.6	
PPG-PR 370		65	5.9	5.5	6.9	6.1	PST-2PDA	92	5.2	4.9	6.5	5.5	
RRT		56	6.0	5.5	6.9	6.1	PST-2EGAD	86	5.1	5.0	6.5	5.5	
CPN		103	5.9	5.5	6.9	6.1	PST-2MAY	90	5.1	4.9	6.5	5.5	
*SLUGGER 3GL (PPG-PR 343)		62	5.9	5.4	6.9	6.1	PST-2GTD	88	5.0	4.9	6.5	5.5	
*SHIELD (02BS4)		31	5.9	5.4	6.9	6.1	*SAGUARO	7	5.1	4.8	6.3	5.4	
*SLIDER LS (PPG-PR 241)		57	5.9	5.4	6.9	6.1	*MENSA	9	5.0	4.8	6.4	5.4	
02BS2		55	5.9	5.4	6.9	6.1	RAD-PR 112	107	4.9	4.8	6.3	5.4	
JR-197		104	5.9	5.4	6.8	6.1	JR-888	21	4.9	4.8	6.3	5.3	
*SR 4650		76	5.9	5.4	6.8	6.0	APR3060	45	4.9	4.7	6.3	5.3	
*INTENSE		16	5.9	5.4	6.8	6.0	BAR LP 6164	99	4.7	4.7	6.3	5.3	
*SILVER SPORT (PST-2CRP)		85	5.8	5.4	6.9	6.0	CS-6	32	4.8	4.7	6.2	5.2	
DLFPS-236/3542		14	5.8	5.4	6.9	6.0	*ALLSTAR III	112	4.8	4.6	6.2	5.2	
PST-2A2		93	5.9	5.4	6.8	6.0	*ASP0118GL (A-4G)	36	4.7	4.6	6.2	5.2	
UF3		18	5.9	5.3	6.8	6.0	LFB-SD-104	8	4.9	4.6	6.1	5.2	
DLFPS-236/3548		49	5.8	5.4	6.8	6.0	BSP-17	2	4.8	4.6	6.2	5.2	
PPG-PR 371		66	5.7	5.4	6.9	6.0	*EVOLVE	25	4.8	4.6	6.2	5.2	

TABLE 1.
(CONT'D) TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1 **/
2017 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	# ENTRY	NJ2	MN1	CT1	MEAN
LPB-SD-103	12	4.7	4.6	6.2	5.2
*PEPPER II (RAD-PR 103)	106	4.5	4.6	6.2	5.1
BAR LP 6159	82	4.6	4.6	6.2	5.1
JR-747	20	4.7	4.5	6.1	5.1
LPB-SD-101	10	4.5	4.6	6.2	5.1
*ASP0218 (A-6D)	37	4.6	4.6	6.2	5.1
*ASP0116EXT	34	4.5	4.5	6.2	5.1
MRSL-PR15	28	4.5	4.5	6.1	5.0
MRSL-PR16	26	4.5	4.5	6.1	5.0
LPB-SD-105	6	4.5	4.5	6.1	5.0
BAR LP 6233	83	4.5	4.5	6.1	5.0
BAR LP 6117	80	4.3	4.5	6.1	5.0
GO-142	42	4.5	4.4	6.0	5.0
GO-141	41	4.4	4.4	6.1	5.0
BAR LP 6158	97	4.5	4.4	6.0	5.0
AMP-R1	46	4.5	4.4	6.0	4.9
SNX	29	4.3	4.4	6.0	4.9
APR2612	44	4.3	4.3	6.0	4.8
*SAVANT	5	4.1	4.4	6.1	4.8
GO-143	43	4.2	4.3	5.9	4.8
BSP-25	4	4.1	4.3	5.9	4.8
BWH	3	3.9	4.1	5.8	4.6
BAR LP 6131	81	3.7	4.1	5.8	4.5
*BRIGHTSTAR SLT	113	3.8	4.0	5.7	4.5
DLFPS-238/3014	105	3.3	3.7	5.4	4.2
BAR LP 6165	100	3.3	3.7	5.5	4.2
BAR LP 6162	98	2.4	3.2	5.0	3.5
*LINN	114	0.7	1.6	3.4	1.9
LSD VALUE		0.9	0.9	0.9	0.9
C.V. (%)		10.6	11.2	8.6	10.0

* COMMERCIALLY AVAILABLE IN THE USA IN 2018

** ENTRIES WITHIN THIS TABLE ARE ORDERED BY THE OVERALL MEAN AND HAVE SIMILAR TURF QUALITY PERFORMANCES IN ALL TEST LOCATIONS INCLUDED IN THIS LPI GROUP. IF YOUR STATE IS NOT REPRESENTED, THEN CHOOSE A LPI GROUP THAT CONTAINS A LOCATION AND MANAGEMENT SIMILAR TO YOUR PLANTING CONDITIONS. FOR MORE INFORMATION ON LPI, GO TO WWW.NTEP.ORG/LPI_Q&A.PDF

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.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 */
2017 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/											MEAN
	KY1	WI1	NE1	OR1	MI1	UT1	IL1	MO1	VA1	CA7	IA1	
DLFPS-236/3554	7.1	6.2	5.5	7.6	5.8	5.9	7.6	4.4	6.8	6.6	6.7	6.6
CPN	6.9	6.0	5.2	7.3	5.5	5.7	7.4	4.1	6.5	6.2	6.4	6.4
PR-5-16	6.9	6.0	5.2	7.3	5.6	5.7	7.4	4.1	6.5	6.3	6.5	6.3
GRAY WOLF (PST-2GAL)	6.9	5.9	5.2	7.3	5.5	5.7	7.4	4.1	6.5	6.3	6.5	6.3
OVERDRIVE 5G	6.9	5.9	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.2	6.3	6.3
UMPQUA	6.8	5.9	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.3	6.4	6.3
DLFPS-236/3553	6.8	5.9	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.2	6.3	6.3
PHARAOH	6.8	5.9	5.1	7.2	5.4	5.6	7.3	4.0	6.4	6.2	6.4	6.2
PST-2A2	6.8	5.9	5.1	7.2	5.4	5.5	7.2	3.9	6.3	6.1	6.2	6.2
JR-197	6.8	5.8	5.1	7.1	5.4	5.5	7.2	3.9	6.3	6.1	6.2	6.2
PPG-PR 331	7.1	6.1	5.4	7.4	5.7	5.8	7.5	4.2	6.5	6.3	6.4	6.2
PPG-PR 424	7.1	6.2	5.4	7.4	5.7	5.8	7.5	4.2	6.5	6.2	6.4	6.2
PST-2MAY	6.7	5.8	5.1	7.2	5.4	5.6	7.3	4.0	6.5	6.3	6.5	6.2
SEABISCUIT	6.7	5.8	5.1	7.2	5.4	5.5	7.2	4.0	6.4	6.2	6.4	6.2
PPG-PR 372	7.0	6.1	5.4	7.4	5.6	5.8	7.5	4.1	6.5	6.3	6.4	6.2
HOMERUN LS (PPG-PR 419)	7.0	6.1	5.4	7.4	5.6	5.8	7.5	4.1	6.5	6.3	6.4	6.2
PPG-PR 371	6.9	6.0	5.3	7.4	5.6	5.7	7.4	4.2	6.6	6.4	6.5	6.2
FURLONG (LTP-FCB)	7.1	6.1	5.4	7.4	5.6	5.7	7.4	4.1	6.5	6.2	6.3	6.2
MAN O WAR	6.7	5.8	5.1	7.1	5.4	5.5	7.2	3.9	6.3	6.1	6.3	6.2
PPG-PR 420	7.0	6.1	5.3	7.4	5.6	5.7	7.4	4.1	6.5	6.3	6.4	6.2
SILVER SPORT (PST-2CRP)	6.9	6.0	5.3	7.3	5.6	5.7	7.4	4.1	6.5	6.3	6.4	6.1
PPG-PR 421	7.0	6.0	5.3	7.3	5.6	5.7	7.4	4.1	6.5	6.2	6.4	6.1
DLFPS-236/3540	7.0	6.0	5.3	7.3	5.6	5.7	7.4	4.1	6.5	6.2	6.4	6.1
02BS1	6.7	5.7	5.0	7.1	5.4	5.5	7.2	3.9	6.3	6.2	6.3	6.1
NP-2	7.1	6.1	5.3	7.4	5.6	5.7	7.4	4.1	6.4	6.1	6.2	6.1
DLFPS-236/3542	6.9	6.0	5.2	7.3	5.6	5.7	7.4	4.1	6.5	6.3	6.4	6.1
PPG-PR 370	6.9	6.0	5.3	7.3	5.6	5.7	7.4	4.1	6.5	6.3	6.4	6.1
SLUGGER 3GL (PPG-PR 343)	6.9	6.0	5.3	7.3	5.6	5.7	7.4	4.1	6.5	6.3	6.4	6.1
FP2	6.9	6.0	5.3	7.3	5.6	5.7	7.4	4.1	6.5	6.2	6.4	6.1
PPG-PR 422	6.9	6.0	5.3	7.3	5.6	5.7	7.4	4.1	6.5	6.2	6.4	6.1
PEPPER II (RAD-PR 103)	6.6	5.7	5.0	7.1	5.4	5.5	7.2	4.0	6.4	6.3	6.5	6.1
XCELERATOR	6.9	6.0	5.3	7.3	5.5	5.7	7.4	4.0	6.4	6.2	6.3	6.1
DLFPS-236/3544	6.8	5.9	5.2	7.3	5.5	5.6	7.3	4.1	6.5	6.3	6.5	6.1
APPLE 3GL (PPG-PR 339)	6.9	5.9	5.2	7.3	5.5	5.6	7.3	4.1	6.5	6.2	6.4	6.1
DLFPS-236/3538	6.8	5.9	5.2	7.3	5.5	5.6	7.3	4.1	6.5	6.3	6.4	6.1
BAR LP 6164	6.6	5.7	5.0	7.1	5.3	5.5	7.2	4.0	6.4	6.3	6.4	6.1
DLFPS-236/3545	6.8	5.9	5.2	7.3	5.5	5.6	7.3	4.1	6.5	6.3	6.4	6.1
PST-2EGAD	6.7	5.8	5.1	7.2	5.5	5.6	7.3	4.1	6.5	6.4	6.5	6.1
DLFPS-236/3552	6.8	5.9	5.2	7.2	5.5	5.6	7.3	4.1	6.5	6.3	6.5	6.1
PPG-PR 423	7.0	6.0	5.3	7.3	5.5	5.6	7.3	4.0	6.4	6.1	6.2	6.1
DLFPS-236/3543	6.9	6.0	5.2	7.3	5.5	5.6	7.3	4.0	6.4	6.1	6.3	6.1
PST-2GTD	6.7	5.8	5.1	7.2	5.5	5.6	7.3	4.1	6.5	6.3	6.5	6.1
GRAY HAWK (PST-2FIND)	6.8	5.9	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.2	6.4	6.1

TABLE 2. (CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
 GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 */
 2017 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/											
	KY1	WI1	NE1	OR1	MI1	UT1	IL1	MO1	VA1	CA7	IA1	MEAN
PL2	6.9	6.0	5.2	7.3	5.5	5.6	7.3	4.0	6.4	6.1	6.2	6.0
PST-2PDA	6.6	5.6	4.9	7.0	5.3	5.4	7.1	3.8	6.2	6.0	6.2	6.0
NP-3	6.9	6.0	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.1	6.2	6.0
RAD-PR 112	6.5	5.6	4.9	7.0	5.3	5.4	7.1	3.9	6.3	6.1	6.3	6.0
PST-2FOXY	6.7	5.8	5.1	7.2	5.4	5.6	7.3	4.0	6.4	6.3	6.4	6.0
023	6.9	6.0	5.2	7.2	5.5	5.6	7.3	4.0	6.3	6.0	6.2	6.0
02BS2	6.8	5.9	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.1	6.3	6.0
RRT	6.8	5.9	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.1	6.3	6.0
PR-6-15	6.8	5.9	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.1	6.3	6.0
DLFPS-236/3547	6.9	5.9	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.1	6.2	6.0
DLFPS-236/3548	6.8	5.9	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.2	6.3	6.0
SLIDER LS (PPG-PR 241)	6.8	5.9	5.2	7.2	5.5	5.6	7.3	4.0	6.4	6.1	6.3	6.0
021	6.8	5.8	5.1	7.2	5.4	5.5	7.3	4.0	6.4	6.2	6.3	6.0
PPG-PR 367	6.8	5.8	5.1	7.2	5.4	5.5	7.2	4.0	6.4	6.2	6.3	6.0
SAVANT	6.5	5.6	5.0	7.1	5.4	5.5	7.2	4.0	6.5	6.4	6.6	6.0
GRAND SLAM GLD	6.7	5.8	5.1	7.2	5.4	5.5	7.2	4.0	6.4	6.2	6.4	6.0
PST-2BDT	6.5	5.6	4.9	6.9	5.2	5.3	7.0	3.7	6.1	5.9	6.1	6.0
DLFPS-236/3550	6.7	5.8	5.1	7.2	5.4	5.5	7.2	4.0	6.4	6.2	6.3	6.0
SHIELD (02BS4)	6.8	5.9	5.1	7.2	5.4	5.5	7.2	3.9	6.3	6.1	6.2	6.0
FASTBALL 3GL (PPG-PR 329)	6.8	5.9	5.1	7.2	5.4	5.5	7.2	3.9	6.3	6.1	6.2	6.0
PPG-PR 360	6.8	5.9	5.1	7.2	5.4	5.5	7.2	3.9	6.3	6.0	6.2	6.0
LPB-SD-102	6.7	5.8	5.0	7.1	5.4	5.5	7.2	4.0	6.4	6.2	6.3	6.0
BAR LP 6117	6.5	5.6	5.0	7.1	5.3	5.5	7.2	4.0	6.4	6.3	6.5	5.9
SIGNET	6.8	5.8	5.1	7.1	5.4	5.5	7.2	3.9	6.3	6.0	6.1	5.9
APR2616	6.7	5.8	5.1	7.1	5.4	5.5	7.2	3.9	6.3	6.0	6.2	5.9
SR 4650	6.7	5.8	5.1	7.1	5.4	5.5	7.2	3.9	6.3	6.0	6.1	5.9
DLFPS-236/3546	6.8	5.9	5.1	7.1	5.4	5.5	7.2	3.8	6.2	5.9	6.0	5.9
DLFPS-236/3556	6.8	5.9	5.1	7.1	5.4	5.5	7.2	3.8	6.2	5.9	6.0	5.9
LPB-SD-101	6.5	5.6	4.9	7.0	5.3	5.4	7.1	3.9	6.3	6.2	6.4	5.9
ASP0116EXT	6.5	5.6	4.9	7.0	5.3	5.4	7.1	3.9	6.3	6.2	6.4	5.9
DLFPS-236/3541	6.8	5.8	5.1	7.1	5.3	5.4	7.1	3.8	6.2	5.9	6.1	5.9
INTENSE	6.7	5.8	5.0	7.1	5.3	5.4	7.1	3.8	6.2	6.0	6.1	5.9
PPG-PR 385	6.6	5.7	5.0	7.0	5.3	5.4	7.1	3.8	6.2	6.1	6.2	5.9
JR-123	6.7	5.7	5.0	7.0	5.3	5.4	7.1	3.8	6.2	6.0	6.1	5.8
BAR LP 6159	6.5	5.6	4.9	7.0	5.2	5.4	7.1	3.9	6.3	6.2	6.3	5.8
BAR LP 6131	6.3	5.4	4.8	7.0	5.2	5.3	7.1	3.9	6.4	6.3	6.5	5.8
ASP0117 (A-PR15)	6.6	5.7	4.9	7.0	5.3	5.4	7.1	3.8	6.2	6.0	6.2	5.8
JR-888	6.5	5.6	4.9	7.0	5.2	5.4	7.1	3.8	6.3	6.1	6.3	5.8
SNX	6.4	5.5	4.8	7.0	5.2	5.3	7.1	3.9	6.3	6.2	6.4	5.8
ASP0118GL (A-4G)	6.5	5.6	4.9	7.0	5.2	5.4	7.1	3.8	6.3	6.1	6.3	5.8
APR3060	6.5	5.6	4.9	7.0	5.2	5.4	7.1	3.8	6.2	6.1	6.2	5.8
MRSI-PR16	6.4	5.5	4.8	6.9	5.2	5.3	7.0	3.8	6.3	6.1	6.3	5.8
DERBY XTREME	6.6	5.6	4.9	7.0	5.2	5.3	7.1	3.8	6.2	6.0	6.1	5.8
ALLSTAR III	6.3	5.4	4.7	6.8	5.0	5.1	6.8	3.6	6.0	5.8	6.0	5.8

TABLE 2. (CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 */
2017 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/											
	KY1	WI1	NE1	OR1	MI1	UT1	IL1	MO1	VA1	CA7	IA1	MEAN
UF3	6.6	5.7	5.0	7.0	5.2	5.3	7.0	3.7	6.1	5.9	6.0	5.8
GO-141	6.4	5.5	4.8	6.9	5.2	5.3	7.0	3.8	6.2	6.1	6.3	5.8
MENSA	6.5	5.6	4.9	6.9	5.2	5.3	7.0	3.8	6.2	6.0	6.2	5.8
ASP0218 (A-6D)	6.4	5.5	4.8	6.9	5.2	5.3	7.0	3.8	6.2	6.1	6.2	5.8
LPB-SD-105	6.4	5.5	4.8	6.9	5.1	5.3	7.0	3.8	6.2	6.1	6.2	5.7
CS-6	6.4	5.5	4.8	6.9	5.2	5.3	7.0	3.7	6.2	6.0	6.2	5.7
BAR LP 6158	6.2	5.3	4.6	6.7	5.0	5.1	6.8	3.6	6.0	5.9	6.0	5.7
BAR LP 6233	6.4	5.5	4.8	6.9	5.1	5.3	7.0	3.7	6.2	6.1	6.2	5.7
MRSI-PR15	6.4	5.5	4.8	6.9	5.1	5.3	7.0	3.7	6.2	6.0	6.2	5.7
SAGUARO	6.5	5.5	4.8	6.9	5.1	5.3	7.0	3.7	6.1	5.9	6.1	5.7
APR2612	6.3	5.4	4.7	6.8	5.1	5.2	6.9	3.7	6.1	6.0	6.2	5.7
BRIGHTSTAR SLT	6.2	5.2	4.6	6.7	5.0	5.1	6.8	3.7	6.1	6.0	6.2	5.7
EVOLVE	6.4	5.5	4.8	6.8	5.1	5.2	6.9	3.7	6.1	5.9	6.1	5.7
BSP-25	6.3	5.4	4.7	6.8	5.1	5.2	6.9	3.7	6.1	6.1	6.2	5.7
LPB-SD-103	6.4	5.4	4.7	6.8	5.1	5.2	6.9	3.7	6.1	5.9	6.1	5.7
BSP-17	6.3	5.4	4.7	6.8	5.1	5.2	6.9	3.7	6.1	5.9	6.1	5.7
KARMA	6.4	5.5	4.8	6.8	5.1	5.2	6.9	3.6	6.0	5.8	5.9	5.6
GO-143	6.2	5.3	4.7	6.8	5.0	5.2	6.9	3.7	6.1	6.0	6.1	5.6
GO-142	6.3	5.3	4.7	6.8	5.0	5.1	6.8	3.6	6.0	5.9	6.1	5.6
BWH	6.2	5.3	4.6	6.7	5.0	5.1	6.8	3.6	6.1	6.0	6.2	5.6
BAR LP 6165	6.0	5.1	4.5	6.7	4.9	5.1	6.8	3.6	6.1	6.1	6.2	5.6
AMP-R1	6.2	5.3	4.6	6.7	5.0	5.1	6.8	3.6	6.0	5.9	6.0	5.6
DLFPS-238/3014	6.0	5.1	4.5	6.6	4.9	5.0	6.7	3.6	6.0	6.0	6.2	5.6
JR-747	6.2	5.3	4.6	6.7	4.9	5.0	6.8	3.5	5.9	5.7	5.9	5.5
LPB-SD-104	6.2	5.3	4.6	6.7	4.9	5.0	6.7	3.5	5.9	5.7	5.9	5.5
BAR LP 6162	5.8	4.9	4.3	6.5	4.8	4.9	6.6	3.5	6.0	6.1	6.2	5.4
LINN	4.3	3.4	2.8	5.0	3.3	3.4	5.1	2.0	4.5	4.6	4.8	3.9
LSD VALUE	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
C.V. (%)	8.5	9.8	11.2	8.0	10.6	10.3	7.9	14.5	8.9	9.2	9.0	9.5

* ENTRIES WITHIN THIS TABLE ARE ORDERED BY THE OVERALL MEAN AND HAVE SIMILAR TURF QUALITY PERFORMANCES IN ALL TEST LOCATIONS INCLUDED IN THIS LPI GROUP. IF YOUR STATE IS NOT REPRESENTED, THEN CHOOSE A LPI GROUP THAT CONTAINS A LOCATION AND MANAGEMENT SIMILAR TO YOUR PLANTING CONDITIONS. FOR MORE INFORMATION ON LPI, GO TO WWW.NTEP.ORG/LPI_Q&A.PDF

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 FIVE LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE A" *
 2017 DATA

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

NAME	IL1	KY1	MI1	NE1	NJ2	MEAN
NP-2	7.4	6.7	5.9	5.4	6.9	6.5
FURLONG (LTP-FCB)	7.3	7.1	5.6	5.0	7.3	6.4
PPG-PR 423	7.7	6.7	5.7	5.5	6.5	6.4
PPG-PR 424	7.6	7.1	5.3	5.3	6.6	6.4
023	7.2	6.7	5.7	5.7	6.5	6.3
DLFPS-236/3540	7.4	6.9	5.6	5.6	6.2	6.3
PPG-PR 371	7.3	7.0	5.3	5.5	6.4	6.3
HOMERUN LS (PPG-PR 419)	7.2	7.2	5.4	5.6	6.2	6.3
PPG-PR 421	7.4	7.2	5.2	5.2	6.3	6.3
DLFPS-236/3556	7.5	6.9	5.7	5.1	6.2	6.3
SILVER SPORT (PST-2CRP)	6.9	6.9	5.7	5.5	6.3	6.3
PPG-PR 420	7.6	6.9	5.4	5.1	6.3	6.3
PR-6-15	7.4	6.8	5.9	5.3	5.9	6.3
DLFPS-236/3554	7.6	7.1	5.3	5.4	5.8	6.3
XCELERATOR	7.6	6.9	5.6	5.2	6.0	6.3
PPG-PR 331	7.4	6.9	5.8	5.0	6.1	6.2
SLUGGER 3GL (PPG-PR 343)	7.6	6.9	5.4	5.0	6.3	6.2
DLFPS-236/3547	7.5	7.2	5.1	4.9	6.4	6.2
DLFPS-236/3543	7.1	6.9	5.6	5.4	6.2	6.2
FASTBALL 3GL (PPG-PR 329)	7.1	6.9	5.6	5.6	6.0	6.2
PL2	7.7	7.0	5.5	5.0	6.0	6.2
DLFPS-236/3542	7.6	6.7	5.3	5.1	6.3	6.2
DLFPS-236/3546	7.3	6.9	5.5	5.0	6.3	6.2
PPG-PR 372	7.1	7.0	5.5	5.3	6.1	6.2
JR-197	7.3	6.7	5.4	5.6	6.0	6.2
RRT	6.9	6.8	5.6	5.4	6.3	6.2
SLIDER LS (PPG-PR 241)	7.2	6.8	5.3	5.5	6.0	6.2
CPN	7.3	6.7	5.3	5.7	5.9	6.2
DLFPS-236/3541	6.9	6.9	5.2	5.3	6.5	6.2
DLFPS-236/3552	7.2	6.9	5.6	5.4	5.6	6.2
SIGNET	7.2	6.8	5.7	5.0	6.1	6.1
APR2616	7.2	6.6	5.4	5.4	6.0	6.1
PST-2A2	7.4	6.9	5.7	4.7	5.9	6.1
NP-3	7.4	6.5	5.7	4.6	6.4	6.1
PST-2BDT	6.9	7.0	5.4	5.9	5.5	6.1
APPLE 3GL (PPG-PR 339)	7.6	6.8	5.7	4.9	5.7	6.1
DLFPS-236/3544	7.6	6.8	5.2	5.4	5.6	6.1
SHIELD (02BS4)	6.6	6.9	5.8	5.4	5.8	6.1
DLFPS-236/3548	7.5	6.9	5.6	4.3	6.3	6.1
PPG-PR 422	7.5	6.8	5.2	5.0	5.9	6.1
PPG-PR 370	6.7	7.0	5.4	5.2	6.0	6.1
DLFPS-236/3545	7.2	6.8	5.2	5.4	5.9	6.1
PPG-PR 360	7.2	6.8	5.2	5.0	6.3	6.1
PHARAOH	7.2	6.7	5.4	5.2	5.8	6.1

TABLE 3.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 GROWN AT FIVE LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE A" *
 2017 DATA

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

NAME	IL1	KY1	MI1	NE1	NJ2	MEAN
GRAY WOLF (PST-2GAL)	7.1	6.8	5.3	5.3	5.9	6.1
DLFPS-236/3550	7.2	6.6	5.6	5.1	5.8	6.1
OVERDRIVE 5G	7.2	6.7	5.1	5.4	5.9	6.1
FP2	6.7	6.7	5.3	5.6	6.0	6.0
PST-2GTD	7.4	6.6	5.6	5.2	5.4	6.0
021	6.9	6.5	5.7	5.0	6.1	6.0
SR 4650	6.8	7.0	5.3	5.4	5.7	6.0
INTENSE	7.2	6.5	5.0	5.3	6.2	6.0
DLFPS-236/3538	7.0	6.9	5.6	5.1	5.5	6.0
PST-2FOXY	7.7	6.8	5.2	5.0	5.4	6.0
02BS2	7.0	6.8	5.6	4.9	5.8	6.0
SEABISCUIT	7.4	6.7	5.7	4.7	5.6	6.0
PR-5-16	7.2	7.0	5.3	5.1	5.3	6.0
UMPQUA	7.4	6.8	5.5	4.6	5.6	6.0
DLFPS-236/3553	7.0	7.0	5.2	5.0	5.5	6.0
PST-2MAY	7.5	6.5	5.2	4.9	5.6	5.9
GRAND SLAM GLD	7.1	6.8	5.6	4.9	5.3	5.9
MENSA	7.3	6.9	5.5	5.1	4.8	5.9
MAN O WAR	7.2	6.5	5.4	4.8	5.7	5.9
02BS1	7.3	6.7	4.8	4.9	5.9	5.9
ASP0118GL (A-4G)	7.8	6.5	5.1	5.0	5.1	5.9
PPG-PR 367	6.7	6.9	5.5	5.0	5.5	5.9
PEPPER II (RAD-PR 103)	7.9	6.6	5.3	4.5	5.0	5.9
KARMA	7.1	6.7	4.9	5.0	5.7	5.9
DERBY XTREME	7.2	6.6	5.3	5.0	5.3	5.9
PPG-PR 385	7.4	6.6	5.1	4.6	5.6	5.9
UF3	7.1	6.6	5.2	4.8	5.8	5.9
LPB-SD-102	6.8	6.8	5.6	5.8	4.4	5.9
JR-123	6.9	6.8	5.1	4.9	5.7	5.9
PST-2EGAD	7.4	6.5	5.1	5.2	5.0	5.8
PST-2PDA	6.8	6.6	5.5	5.0	5.3	5.8
GRAY HAWK (PST-2FIND)	7.1	6.4	5.4	5.0	5.2	5.8
ASP0117 (A-PR15)	7.3	6.6	5.2	4.9	5.0	5.8
ASP0116EXT	7.5	6.9	5.6	4.6	4.4	5.8
SAGUARO	6.9	6.4	5.5	5.3	4.6	5.7
SAVANT	6.9	6.4	5.6	5.7	4.0	5.7
ALLSTAR III	7.1	6.4	5.4	4.8	5.0	5.7
JR-888	6.9	6.2	5.6	5.6	4.2	5.7
BAR LP 6159	6.8	6.6	5.6	5.1	4.4	5.7
MRSL-PR16	7.8	6.4	5.2	4.5	4.5	5.7
BAR LP 6164	7.2	6.4	5.4	4.8	4.7	5.7
APR2612	7.2	6.6	5.3	4.4	4.8	5.7
BAR LP 6233	6.8	6.4	5.2	5.2	4.6	5.7
LPB-SD-101	6.9	6.6	5.4	5.6	3.8	5.6
RAD-PR 112	7.8	6.6	4.7	4.1	4.9	5.6

TABLE 3.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT FIVE LOCATIONS IN THE U.S. 1/
MAINTAINED USING "SCHEDULE A" *
2017 DATA

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

NAME	IL1	KY1	MI1	NE1	NJ2	MEAN
BAR LP 6117	7.1	6.5	5.2	5.0	4.3	5.6
EVOLVE	6.9	6.2	5.5	4.9	4.4	5.6
LPB-SD-103	7.2	6.4	4.9	5.0	4.5	5.6
CS-6	7.3	6.6	5.4	4.0	4.5	5.6
ASP0218 (A-6D)	7.5	6.4	4.9	4.4	4.7	5.6
APR3060	6.5	6.6	5.1	4.9	4.8	5.6
SNX	7.6	6.6	5.2	4.1	4.4	5.6
MRSL-PR15	7.3	6.4	5.3	4.4	4.3	5.6
AMP-R1	7.6	6.8	5.1	3.7	4.6	5.5
GO-142	7.2	6.5	4.8	4.7	4.5	5.5
BSP-25	7.5	6.3	5.4	4.0	4.4	5.5
BWH	7.4	6.3	5.4	4.7	3.7	5.5
GO-141	7.0	6.3	5.3	4.9	3.9	5.5
GO-143	7.4	6.5	4.6	4.6	4.2	5.5
LPB-SD-105	6.5	5.9	5.5	5.8	3.7	5.5
LPB-SD-104	5.9	6.6	5.4	4.9	4.5	5.4
BAR LP 6158	6.8	6.5	4.9	4.4	4.4	5.4
BRIGHTSTAR SLT	7.2	6.1	5.5	5.0	3.3	5.4
BSP-17	7.2	6.1	5.3	4.2	4.2	5.4
JR-747	6.2	6.6	4.9	5.1	4.0	5.4
BAR LP 6131	7.0	6.5	5.2	4.8	3.2	5.3
BAR LP 6165	6.4	6.1	4.7	5.0	3.8	5.2
DLFPS-238/3014	6.7	6.0	4.3	4.2	3.2	4.9
BAR LP 6162	7.1	6.0	4.3	4.1	2.9	4.9
LINN	2.8	3.1	3.2	3.0	1.0	2.6
LSD VALUE	0.7	0.4	0.7	0.7	0.7	0.3
C.V. (%)	6.3	4.2	7.7	8.9	8.4	7.0

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.

**/ SCHEDULE A (HIGH MAINTENANCE/FAIRWAY)
0.5 - 0.75 INCH MOWING HEIGHT
0.5 - 0.75 lb. N/1000 SQ. FT PER GROWING MONTH
IRRIGATION TO PREVENT STRESS OR DORMANCY
FUNGICIDES USE ONLY IF SEVERE STAND LOSS IS POSSIBLE
WEED AND INSECTICIDES CONTROL TO PREVENT STAND LOSS

TABLE 4.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT THREE LOCATIONS IN THE U.S. 1/
MAINTAINED USING "SCHEDULE B" *
2017 DATA

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

NAME	OR1	VA1	WI1	MEAN	NAME	OR1	VA1	WI1	MEAN
DLFPS-236/3545	7.4	7.0	6.8	7.0	021	7.3	6.3	5.8	6.5
PPG-PR 424	7.4	6.7	6.7	6.9	PPG-PR 360	7.2	6.3	6.0	6.5
PPG-PR 423	7.2	6.5	7.0	6.9	DLFPS-236/3552	7.3	6.8	5.3	6.5
DLFPS-236/3554	7.1	7.1	6.2	6.8	DLFPS-238/3014	6.7	6.5	6.2	6.5
DLFPS-236/3548	7.4	6.8	6.1	6.8	02BS2	7.3	5.8	6.3	6.5
PR-5-16	7.0	6.8	6.4	6.8	PPG-PR 385	6.9	6.6	5.9	6.5
SLUGGER 3GL (PPG-PR 343)	7.3	7.0	5.9	6.7	PST-2EGAD	7.0	6.6	5.7	6.5
PST-2A2	7.3	6.5	6.4	6.7	APPLE 3GL (PPG-PR 339)	7.4	6.0	6.0	6.5
PPG-PR 367	7.3	6.6	6.2	6.7	DLFPS-236/3547	7.3	6.5	5.5	6.5
DLFPS-236/3553	7.3	6.5	6.4	6.7	SHIELD (02BS4)	7.2	6.5	5.5	6.4
PPG-PR 421	7.2	6.8	6.1	6.7	SAVANT	7.1	5.6	6.6	6.4
PST-2FOXY	7.3	6.5	6.3	6.7	SIGNET	7.0	6.5	5.8	6.4
DLFPS-236/3538	7.1	6.9	6.0	6.7	JR-197	7.3	6.0	6.0	6.4
NP-3	7.3	6.5	6.3	6.7	PEPPER II (RAD-PR 103)	7.1	6.8	5.4	6.4
FP2	7.3	6.9	5.9	6.7	FASTBALL 3GL (PPG-PR 329)	7.0	6.2	6.0	6.4
SILVER SPORT (PST-2CRP)	6.9	6.9	6.2	6.7	DLFPS-236/3541	7.4	6.4	5.4	6.4
UMPQUA	7.2	6.8	6.0	6.7	MAN O WAR	7.4	6.1	5.8	6.4
OVERDRIVE 5G	7.3	6.5	6.2	6.7	GRAY WOLF (PST-2GAL)	7.0	6.8	5.3	6.4
SR 4650	7.1	6.7	6.2	6.7	023	7.2	6.3	5.7	6.4
HOMERUN LS (PPG-PR 419)	7.1	6.8	6.0	6.6	GRAND SLAM GLD	7.1	6.5	5.6	6.4
PPG-PR 331	7.2	6.4	6.3	6.6	EVOLVE	6.8	6.7	5.7	6.4
PPG-PR 420	7.3	7.0	5.6	6.6	JR-888	6.7	6.0	6.4	6.4
PPG-PR 372	7.4	6.7	5.8	6.6	LPB-SD-101	7.1	5.8	6.0	6.3
RRT	7.3	6.3	6.1	6.6	DLFPS-236/3542	7.5	6.5	5.0	6.3
SEABISCUIT	7.3	6.5	6.0	6.6	DLFPS-236/3543	7.3	6.3	5.4	6.3
FURLONG (LTP-FCB)	7.3	6.2	6.2	6.6	GRAY HAWK (PST-2FIND)	7.3	5.8	6.0	6.3
PPG-PR 371	7.2	6.8	5.8	6.6	PST-2GTD	7.2	6.6	5.2	6.3
PPG-PR 370	7.1	6.7	6.0	6.6	BSP-25	7.0	6.3	5.7	6.3
XCELERATOR	7.2	6.3	6.2	6.6	APR2612	6.7	6.0	6.2	6.3
CPN	7.3	6.6	5.9	6.6	BAR LP 6131	6.4	6.5	6.0	6.3
NP-2	7.3	6.3	6.0	6.6	DERBY XTREME	7.2	6.2	5.5	6.3
DLFPS-236/3546	7.0	6.4	6.2	6.6	GO-141	6.7	6.3	5.8	6.3
PR-6-15	7.3	6.3	6.0	6.5	02BS1	7.2	6.5	5.1	6.3
INTENSE	7.3	6.4	6.0	6.5	RAD-PR 112	7.3	6.3	5.1	6.2
PHARAOH	7.3	6.3	6.0	6.5	PST-2MAY	7.2	5.9	5.6	6.2
BAR LP 6117	7.1	7.0	5.5	6.5	PST-2PDA	6.9	6.4	5.4	6.2
DLFPS-236/3550	7.3	6.4	6.0	6.5	SNX	7.0	6.3	5.4	6.2
PL2	7.1	6.4	6.0	6.5	SAGUARO	6.9	6.1	5.6	6.2
DLFPS-236/3544	7.4	6.8	5.4	6.5	LPB-SD-105	7.1	4.9	6.6	6.2
DLFPS-236/3540	7.2	6.3	6.1	6.5	BAR LP 6164	6.8	6.6	5.1	6.2
DLFPS-236/3556	7.2	6.3	6.0	6.5	BAR LP 6165	6.6	7.1	4.9	6.2
APR2616	7.3	6.7	5.5	6.5	GO-142	6.8	6.1	5.7	6.2
SLIDER LS (PPG-PR 241)	7.4	6.2	6.0	6.5	MRSI-PR15	6.8	5.8	5.9	6.2
PPG-PR 422	7.4	6.1	6.0	6.5	CS-6	6.8	6.0	5.7	6.2

TABLE 4. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 (CONT'D) GROWN AT THREE LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE B" *
 2017 DATA

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

NAME	OR1	VA1	WI1	MEAN
JR-747	7.1	5.8	5.5	6.1
PST-2BDT	7.1	6.0	5.3	6.1
BAR LP 6162	6.4	7.1	4.9	6.1
ASP0117 (A-PR15)	6.9	6.1	5.3	6.1
JR-123	7.2	6.1	5.0	6.1
ASP0218 (A-6D)	6.9	5.9	5.6	6.1
KARMA	6.9	6.2	5.2	6.1
UF3	7.2	5.7	5.3	6.1
ALLSTAR III	6.8	5.6	5.8	6.1
APR3060	6.6	6.4	5.1	6.1
LPB-SD-104	7.2	5.3	5.6	6.1
LPB-SD-102	7.4	5.1	5.7	6.1
MENSA	7.2	5.3	5.6	6.0
ASP0116EXT	7.0	6.5	4.7	6.0
MRSI-PR16	6.7	6.4	5.0	6.0
BAR LP 6233	6.5	6.2	5.3	6.0
LPB-SD-103	7.1	5.1	5.7	6.0
BAR LP 6158	6.5	6.3	5.0	6.0
BAR LP 6159	6.4	6.1	5.2	5.9
ASP0118GL (A-4G)	7.0	5.8	4.9	5.9
AMP-R1	6.6	6.1	5.0	5.9
GO-143	6.9	6.1	4.6	5.9
BRIGHTSTAR SLT	6.4	5.9	5.0	5.8
BWH	7.0	5.3	4.7	5.7
BSP-17	7.0	4.7	5.0	5.6
LINN	5.9	4.5	3.4	4.6
LSD VALUE	0.3	1.1	1.3	0.6
C.V. (%)	3.0	10.6	14.1	9.7

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.

*/ SCHEDULE B (MEDIUM MAINTENANCE/ATHLETIC FIELD)

1.0 - 2.0 INCH MOWING HEIGHT
 0.5 - 1 lb. N/1000 SQ.FT. PER GROWING MONTH (HIGH RATE ONLY DURING ESTABLISHMENT)
 IRRIGATION ONLY DURING SEVERE STRESS OR TO PREVENT DORMANCY
 FUNGICIDES ONLY TO PREVENT SEVERE STAND LOSS
 WEED AND INSECT CONTROL TO PREVENT STAND LOSS

TABLE 5. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 GROWN AT SIX LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE C" *
 2017 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/						MEAN
	CA7	CT1	IA1	MN1	MO1	UT1	
DLFPS-236/3554	6.6	7.1	6.9	5.9	4.2	6.2	6.2
PPG-PR 331	6.4	7.5	6.4	6.2	4.1	6.0	6.1
PPG-PR 372	6.5	7.4	6.8	6.3	4.0	5.5	6.1
GRAY HAWK (PST-2FIND)	6.8	6.9	6.6	6.3	4.1	5.5	6.0
PPG-PR 422	6.7	7.6	6.4	5.7	4.3	5.4	6.0
FURLONG (LTP-FCB)	6.3	7.1	6.9	5.4	4.5	5.7	6.0
HOMERUN LS (PPG-PR 419)	6.3	7.1	6.0	5.8	4.3	6.1	6.0
NP-2	5.9	7.2	6.4	6.1	4.0	6.1	5.9
PPG-PR 370	6.5	7.4	6.3	5.0	4.1	6.1	5.9
PPG-PR 424	6.2	7.1	6.3	5.9	4.2	5.8	5.9
FP2	6.1	6.8	6.5	5.8	4.6	5.6	5.9
PPG-PR 420	6.2	7.6	6.8	5.5	4.2	5.1	5.9
DLFPS-236/3542	6.4	6.9	6.6	4.8	4.3	6.3	5.9
DLFPS-236/3543	5.9	7.1	6.4	5.7	4.3	5.9	5.9
GRAY WOLF (PST-2GAL)	6.7	7.2	6.9	4.6	4.1	5.9	5.9
DLFPS-236/3540	6.4	7.2	6.7	5.4	3.8	5.6	5.8
O2BS2	6.7	7.0	6.1	5.4	4.0	5.8	5.8
FR-5-16	6.3	7.1	6.3	5.7	4.3	5.3	5.8
XCELERATOR	6.0	7.6	6.1	5.5	3.9	6.0	5.8
CPN	6.3	6.7	6.8	5.9	3.9	5.4	5.8
PL2	6.0	7.6	6.1	6.0	4.2	5.1	5.8
PPG-PR 421	6.5	6.9	6.3	5.6	3.8	5.7	5.8
APPLE 3GL (PPG-PR 339)	6.9	6.7	6.1	5.7	4.1	5.4	5.8
Q23	6.1	7.6	6.2	5.5	4.2	5.2	5.8
LPB-SD-102	6.3	6.5	6.8	6.2	3.3	5.7	5.8
OVERDRIVE 5G	6.3	7.0	6.4	5.7	4.0	5.4	5.8
PST-2EGAD	6.1	6.7	6.9	5.1	4.4	5.6	5.8
PPG-PR 371	6.8	6.7	6.4	4.3	4.4	6.0	5.8
PPG-PR 360	5.5	7.1	6.4	5.3	4.2	6.1	5.8
NP-3	5.9	6.9	6.3	5.5	4.0	6.0	5.8
JR-123	6.2	7.0	5.6	5.5	4.7	5.5	5.8
DLFPS-236/3547	6.0	6.9	6.4	5.3	4.3	5.4	5.7
PST-2MAY	6.5	6.3	6.8	4.3	4.1	6.4	5.7
DLFPS-236/3538	5.6	6.8	6.6	5.4	4.7	5.4	5.7
SILVER SPORT (PST-2CRP)	6.1	6.4	6.9	5.1	4.0	5.8	5.7
SHIELD (O2BS4)	5.8	7.2	6.6	5.4	3.8	5.4	5.7
DLFPS-236/3553	6.1	6.6	6.1	5.6	4.5	5.3	5.7
UMPQUA	6.2	6.6	6.9	5.4	3.7	5.4	5.7
UF3	6.2	7.1	5.9	5.6	4.0	5.4	5.7
SLUGGER 3GL (PPG-PR 343)	6.4	6.5	6.4	5.2	3.7	5.9	5.7
GRAND SLAM GLD	6.3	6.7	6.8	5.3	3.8	5.1	5.7
BSP-17	5.4	6.3	6.3	5.5	4.0	6.4	5.7
DLFPS-236/3544	6.1	6.2	6.7	5.3	4.3	5.3	5.7
SLIDER LS (PPG-PR 241)	6.1	6.5	6.2	5.5	3.8	5.8	5.7

TABLE 5.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 GROWN AT SIX LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE C" *
 2017 DATA

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

NAME	CA7	CT1	IA1	MN1	MO1	UT1	MEAN
BAR LP 6164	7.0	6.2	6.4	5.4	3.8	5.1	5.7
PPG-PR 367	6.3	6.7	6.1	5.4	3.7	5.7	5.7
RRT	5.9	6.9	6.5	4.8	4.0	5.8	5.7
MAN O WAR	7.0	6.7	6.5	5.3	3.8	4.6	5.6
FASTBALL 3GL (PPG-PR 329)	5.9	6.8	6.0	5.4	4.1	5.7	5.6
PST-2GTD	6.6	6.8	6.6	4.3	4.1	5.4	5.6
APR3060	6.8	6.6	6.2	5.1	3.9	5.3	5.6
02BS1	6.8	6.7	6.8	4.3	4.1	5.2	5.6
021	6.4	6.2	6.7	4.8	3.8	5.9	5.6
FR-6-15	6.1	6.7	6.1	5.7	3.8	5.3	5.6
PHARAOH	6.4	7.2	6.4	4.3	4.0	5.4	5.6
RAD-PR 112	6.3	6.2	6.3	5.2	3.7	6.0	5.6
DLFPS-236/3552	6.3	6.7	6.0	4.5	4.5	5.6	5.6
DLFPS-236/3546	5.6	7.0	5.6	5.8	4.3	5.3	5.6
PPG-PR 423	5.1	7.3	6.5	5.3	3.7	5.8	5.6
ASP0117 (A-PR15)	6.4	6.4	6.2	5.8	4.1	4.6	5.6
SIGNET	6.3	6.9	5.9	5.3	3.7	5.4	5.6
DLFPS-236/3556	5.7	7.2	5.9	6.1	3.5	5.0	5.6
JR-197	5.9	6.6	6.3	5.4	4.2	5.0	5.6
DLFPS-236/3548	6.2	6.8	6.3	4.7	4.0	5.4	5.6
DLFPS-236/3541	6.4	6.4	5.5	5.4	3.7	6.0	5.6
DLFPS-236/3550	6.6	6.5	6.0	4.9	3.6	5.9	5.6
BAR LP 6159	6.3	5.9	6.3	5.2	3.8	5.7	5.5
SEABISCUIT	6.5	6.9	6.6	4.7	3.8	4.9	5.5
DLFPS-236/3545	6.2	6.6	6.0	4.8	4.0	5.5	5.5
FST-2FOXY	5.9	6.3	6.3	5.0	4.5	5.0	5.5
INTENSE	6.1	6.8	6.1	5.0	3.7	5.3	5.5
LPB-SD-101	6.5	6.3	5.9	5.4	3.4	5.4	5.5
SR 4650	5.5	6.9	6.0	5.4	3.5	5.6	5.5
PST-2A2	6.5	6.9	5.8	5.1	3.5	4.9	5.5
ASP0116EXT	6.3	5.7	6.6	5.2	3.5	5.6	5.5
FST-2PDA	6.5	6.7	6.0	4.8	3.9	4.9	5.5
APR2616	5.7	6.4	6.1	5.0	3.9	5.5	5.4
BAR LP 6117	6.3	5.9	6.0	4.7	4.3	5.5	5.4
ASP0218 (A-6D)	5.9	6.6	6.2	4.1	4.0	5.8	5.4
JR-888	6.1	6.3	5.6	5.6	3.8	5.2	5.4
PEPPER II (RAD-PR 103)	5.8	5.8	6.4	4.0	4.1	6.4	5.4
SAVANT	6.8	6.5	6.1	3.6	3.5	6.0	5.4
PPG-PR 385	5.8	6.5	6.4	4.4	3.8	5.5	5.4
DERBY XTREME	5.6	6.8	5.9	4.8	3.9	5.4	5.4
CS-6	6.0	5.8	5.9	5.3	3.8	5.6	5.4
ASP0118GL (A-4G)	6.2	6.1	6.8	4.3	3.5	5.6	5.4
LPB-SD-105	5.4	6.1	6.6	5.3	3.3	5.6	5.4
GO-141	6.0	6.3	5.8	4.9	3.9	5.4	5.4
MRSL-PR16	6.4	5.7	6.4	4.9	3.4	5.6	5.4

TABLE 5.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 GROWN AT SIX LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE C" *
 2017 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/						MEAN
	CA7	CT1	IA1	MN1	MO1	UT1	
SNX	5.9	6.1	6.5	4.1	3.9	5.8	5.4
BAR LP 6131	6.6	6.1	6.0	4.5	3.6	5.3	5.4
LPB-SD-103	5.5	5.9	6.4	4.9	3.3	6.0	5.3
MEENSA	6.2	6.2	5.8	5.0	3.5	5.3	5.3
SAGUARO	5.4	6.1	6.0	5.5	3.2	5.7	5.3
MRSL-PR15	5.8	6.6	6.3	4.3	3.8	5.0	5.3
BAR LP 6233	5.9	5.8	6.7	4.6	4.0	4.7	5.3
GO-143	6.4	6.1	5.6	4.3	3.8	5.2	5.2
BAR LP 6158	6.1	6.2	5.8	4.5	3.8	4.9	5.2
FST-2BDT	5.4	6.1	6.1	4.8	3.8	4.9	5.2
KARMA	5.8	6.2	5.8	4.5	4.1	4.7	5.2
BWH	5.3	6.4	6.4	3.7	3.2	5.9	5.2
EVOLVE	5.6	6.3	5.6	4.9	3.8	4.8	5.1
AMP-R1	5.7	5.7	6.2	4.4	3.4	5.4	5.1
BRIGHTSTAR SLT	5.5	6.1	6.4	4.5	3.6	4.7	5.1
JR-747	5.2	6.1	5.4	5.2	2.9	6.0	5.1
LPB-SD-104	5.4	5.9	5.6	4.9	3.5	5.2	5.1
GO-142	6.4	5.9	5.4	4.4	3.8	4.6	5.1
ALLSTAR III	6.1	5.8	5.8	4.4	3.3	5.0	5.1
BSP-25	5.8	5.7	6.0	3.8	3.5	5.4	5.0
APR2612	5.9	5.3	6.1	3.6	3.6	5.3	5.0
DLFPS-238/3014	5.0	5.6	6.3	3.4	4.3	4.7	4.9
BAR LP 6165	6.1	4.7	6.6	3.8	3.5	4.4	4.8
BAR LP 6162	6.0	5.1	6.0	2.3	3.8	4.3	4.6
LINN	5.5	4.1	5.3	1.4	2.9	2.9	3.7
LSD VALUE	1.1	0.9	1.0	1.5	0.7	0.8	0.4
C.V. (%)	10.9	9.0	10.0	18.1	10.9	9.5	11.5

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.

*/ SCHEDULE C (HOME LAWN)

1.5 - 2.5 INCH MOWING HEIGHT
 0.3 - 0.5 lb. N/1000 SQ.FT. PER GROWING MONTH
 NO IRRIGATION, IRRIGATION ONLY DURING SEVERE STRESS OR TO PREVENT DORMANCY
 NO FUNGICIDES OR INSECTICIDES USED
 WEED CONTROL TO PREVENT SIGNIFICANT STAND LOSS

TABLE 6.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 GROWN AT TWO LOCATIONS 1/
 IN THE NORTHEAST REGION
 2017 DATA

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

NAME	CT1	NJ2	MEAN	NAME	CT1	NJ2	MEAN
FURLONG (LTP-FCB)	7.1	7.3	7.2	PR-6-15	6.7	5.9	6.3
023	7.6	6.5	7.1	DLFPS-236/3545	6.6	5.9	6.2
NP-2	7.2	6.9	7.0	SEABISCUIT	6.9	5.6	6.2
PPG-PR 420	7.6	6.3	6.9	SLIDER LS (PPG-PR 241)	6.5	6.0	6.2
PPG-PR 423	7.3	6.5	6.9	APR2616	6.4	6.0	6.2
PPG-PR 424	7.1	6.6	6.8	PR-5-16	7.1	5.3	6.2
PL2	7.6	6.0	6.8	MAN O WAR	6.7	5.7	6.2
PPG-PR 331	7.5	6.1	6.8	APPLE 3GL (PPG-PR 339)	6.7	5.7	6.2
XCELERATOR	7.6	6.0	6.8	DLFPS-236/3538	6.8	5.5	6.2
PPG-PR 372	7.4	6.1	6.8	DLFPS-236/3550	6.5	5.8	6.1
PPG-PR 370	7.4	6.0	6.7	021	6.2	6.1	6.1
PPG-PR 422	7.6	5.9	6.7	DLFPS-236/3552	6.7	5.6	6.1
DLFPS-236/3556	7.2	6.2	6.7	PST-2GTD	6.8	5.4	6.1
DLFPS-236/3540	7.2	6.2	6.7	UMPQUA	6.6	5.6	6.1
DLFPS-236/3547	6.9	6.4	6.7	PPG-PR 367	6.7	5.5	6.1
NP-3	6.9	6.4	6.7	DLFPS-236/3553	6.6	5.5	6.1
PPG-PR 360	7.1	6.3	6.7	PPG-PR 385	6.5	5.6	6.1
DLFPS-236/3546	7.0	6.3	6.6	GRAY HAWK (PST-2FIND)	6.9	5.2	6.0
DLFPS-236/3542	6.9	6.3	6.6	DERBY XTREME	6.8	5.3	6.0
HOMERUN LS (PPG-PR 419)	7.1	6.2	6.6	GRAND SLAM GLD	6.7	5.3	6.0
DLFPS-236/3543	7.1	6.2	6.6	PST-2MAY	6.3	5.6	6.0
PPG-PR 421	6.9	6.3	6.6	PST-2PDA	6.7	5.3	6.0
RRT	6.9	6.3	6.6	KARMA	6.2	5.7	5.9
PPG-PR 371	6.7	6.4	6.6	DLFPS-236/3544	6.2	5.6	5.9
GRAY WOLF (PST-2GAL)	7.2	5.9	6.5	PST-2EGAD	6.7	5.0	5.9
DLFPS-236/3548	6.8	6.3	6.5	PST-2FOXY	6.3	5.4	5.9
SHIELD (02BS4)	7.2	5.8	6.5	PST-2BDT	6.1	5.5	5.8
SIGNET	6.9	6.1	6.5	ASP0117 (A-PR15)	6.4	5.0	5.7
INTENSE	6.8	6.2	6.5	APR3060	6.6	4.8	5.7
PHARAOH	7.2	5.8	6.5	ASP0218 (A-6D)	6.6	4.7	5.6
DLFPS-236/3554	7.1	5.8	6.5	ASP0118GL (A-4G)	6.1	5.1	5.6
OVERDRIVE 5G	7.0	5.9	6.5	RAD-PR 112	6.2	4.9	5.5
DLFPS-236/3541	6.4	6.5	6.4	MENSA	6.2	4.8	5.5
FASTBALL 3GL (PPG-PR 329)	6.8	6.0	6.4	LPB-SD-102	6.5	4.4	5.5
UF3	7.1	5.8	6.4	MRSLS-PR15	6.6	4.3	5.5
02BS2	7.0	5.8	6.4	BAR LP 6164	6.2	4.7	5.4
PST-2A2	6.9	5.9	6.4	PEPPER II (RAD-PR 103)	5.8	5.0	5.4
SLUGGER 3GL (PPG-PR 343)	6.5	6.3	6.4	ALLSTAR III	5.8	5.0	5.4
FP2	6.8	6.0	6.4	EVOLVE	6.3	4.4	5.4
JR-123	7.0	5.7	6.4	SAGUARO	6.1	4.6	5.3
SILVER SPORT (PST-2CRP)	6.4	6.3	6.3	BAR LP 6158	6.2	4.4	5.3
02BS1	6.7	5.9	6.3	SNX	6.1	4.4	5.3
JR-197	6.6	6.0	6.3	BSP-17	6.3	4.2	5.3
SR 4650	6.9	5.7	6.3	SAVANT	6.5	4.0	5.3
CPN	6.7	5.9	6.3	JR-888	6.3	4.2	5.2

TABLE 6.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT TWO LOCATIONS 1/
IN THE NORTHEAST REGION

2017 DATA

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

NAME	CT1	NJ2	MEAN
BAR LP 6233	5.8	4.6	5.2
LPB-SD-103	5.9	4.5	5.2
LPB-SD-104	5.9	4.5	5.2
CS-6	5.8	4.5	5.2
GO-142	5.9	4.5	5.2
BAR LP 6159	5.9	4.4	5.2
AMP-R1	5.7	4.6	5.2
GO-143	6.1	4.2	5.1
MRSL-PR16	5.7	4.5	5.1
GO-141	6.3	3.9	5.1
BAR LP 6117	5.9	4.3	5.1
BWH	6.4	3.7	5.1
ASP0116EXT	5.7	4.4	5.0
LPB-SD-101	6.3	3.8	5.0
APR2612	5.3	4.8	5.0
JR-747	6.1	4.0	5.0
BSP-25	5.7	4.4	5.0
LPB-SD-105	6.1	3.7	4.9
BRIGHTSTAR SLT	6.1	3.3	4.7
BAR LP 6131	6.1	3.2	4.6
DLFPS-238/3014	5.6	3.2	4.4
BAR LP 6165	4.7	3.8	4.2
BAR LP 6162	5.1	2.9	4.0
LINN	4.1	1.0	2.6
LSD VALUE	0.9	0.7	0.6
C.V. (%)	9.0	8.4	8.8

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 7.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT THREE LOCATIONS 1/
IN THE TRANSITION REGION

2017 DATA

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

NAME	KY1	MO1	VA1	MEAN	NAME	KY1	MO1	VA1	MEAN
DLFPS-236/3554	7.1	4.2	7.1	6.2	GRAND SLAM GLD	6.8	3.8	6.5	5.7
DLFPS-236/3538	6.9	4.7	6.9	6.1	PPG-PR 385	6.6	3.8	6.6	5.7
HOMERUN LS (PPG-PR 419)	7.2	4.3	6.8	6.1	XCELERATOR	6.9	3.9	6.3	5.7
PPG-PR 371	7.0	4.4	6.8	6.1	NP-3	6.5	4.0	6.5	5.7
PR-5-16	7.0	4.3	6.8	6.1	SIGNET	6.8	3.7	6.5	5.7
FP2	6.7	4.6	6.9	6.0	KARMA	6.7	4.1	6.2	5.7
DLFPS-236/3547	7.2	4.3	6.5	6.0	NP-2	6.7	4.0	6.3	5.7
DLFPS-236/3552	6.9	4.5	6.8	6.0	DLFPS-236/3541	6.9	3.7	6.4	5.6
PPG-PR 420	6.9	4.2	7.0	6.0	SEABISCUIT	6.7	3.8	6.5	5.6
DLFPS-236/3553	7.0	4.5	6.5	6.0	APR3060	6.6	3.9	6.4	5.6
DLFPS-236/3544	6.8	4.3	6.8	6.0	PST-2A2	6.9	3.5	6.5	5.6
PPG-PR 424	7.1	4.2	6.7	6.0	PST-2PDA	6.6	3.9	6.4	5.6
PPG-PR 370	7.0	4.1	6.7	6.0	DLFPS-236/3540	6.9	3.8	6.3	5.6
SILVER SPORT (PST-2CRP)	6.9	4.0	6.9	6.0	APPLE 3GL (PPG-PR 339)	6.8	4.1	6.0	5.6
PPG-PR 421	7.2	3.8	6.8	6.0	JR-197	6.7	4.2	6.0	5.6
FURLONG (LTP-FCB)	7.1	4.5	6.2	5.9	PHARAOH	6.7	4.0	6.3	5.6
BAR LP 6117	6.5	4.3	7.0	5.9	PR-6-15	6.8	3.8	6.3	5.6
PST-2FOXY	6.8	4.5	6.5	5.9	BAR LP 6164	6.4	3.8	6.6	5.6
PPG-PR 372	7.0	4.0	6.7	5.9	BAR LP 6162	6.0	3.8	7.1	5.6
DLFPS-236/3545	6.8	4.0	7.0	5.9	ASP0116EXT	6.9	3.5	6.5	5.6
GRAY WOLF (PST-2GAL)	6.8	4.1	6.8	5.9	DLFPS-238/3014	6.0	4.3	6.5	5.6
SLUGGER 3GL (PPG-PR 343)	6.9	3.7	7.0	5.9	PPG-PR 423	6.7	3.7	6.5	5.6
DLFPS-236/3548	6.9	4.0	6.8	5.9	ASP0117 (A-PR15)	6.6	4.1	6.1	5.6
JR-123	6.8	4.7	6.1	5.9	PST-2BDT	7.0	3.8	6.0	5.6
DLFPS-236/3546	6.9	4.3	6.4	5.9	SLIDER LS (PPG-PR 241)	6.8	3.8	6.2	5.6
PST-2EGAD	6.5	4.4	6.6	5.9	SNX	6.6	3.9	6.3	5.6
PL2	7.0	4.2	6.4	5.8	DERBY XTREME	6.6	3.9	6.2	5.6
DLFPS-236/3542	6.7	4.3	6.5	5.8	DLFPS-236/3556	6.9	3.5	6.3	5.6
DLFPS-236/3543	6.9	4.3	6.3	5.8	BAR LP 6165	6.1	3.5	7.1	5.6
PEPPER II (RAD-PR 103)	6.6	4.1	6.8	5.8	DLFPS-236/3550	6.6	3.6	6.4	5.6
PPG-PR 331	6.9	4.1	6.4	5.8	EVOLVE	6.2	3.8	6.7	5.6
UMPQUA	6.8	3.7	6.8	5.8	BAR LP 6131	6.5	3.6	6.5	5.5
PST-2GTD	6.6	4.1	6.6	5.8	BAR LP 6233	6.4	4.0	6.2	5.5
SHIELD (02BS4)	6.9	3.8	6.5	5.8	BAR LP 6158	6.5	3.8	6.3	5.5
02BS1	6.7	4.1	6.5	5.8	021	6.5	3.8	6.3	5.5
PPG-PR 360	6.8	4.2	6.3	5.7	INTENSE	6.5	3.7	6.4	5.5
PPG-PR 367	6.9	3.7	6.6	5.7	02BS2	6.8	4.0	5.8	5.5
PPG-PR 422	6.8	4.3	6.1	5.7	GO-141	6.3	3.9	6.3	5.5
CPN	6.7	3.9	6.6	5.7	BAR LP 6159	6.6	3.8	6.1	5.5
SR 4650	7.0	3.5	6.7	5.7	RAD-PR 112	6.6	3.7	6.3	5.5
APR2616	6.6	3.9	6.7	5.7	PST-2MAY	6.5	4.1	5.9	5.5
FASTBALL 3GL (PPG-PR 329)	6.9	4.1	6.2	5.7	GO-143	6.5	3.8	6.1	5.5
OVERDRIVE 5G	6.7	4.0	6.5	5.7	CS-6	6.6	3.8	6.0	5.5
RRT	6.8	4.0	6.3	5.7	GO-142	6.5	3.8	6.1	5.5
023	6.7	4.2	6.3	5.7	MAN O WAR	6.5	3.8	6.1	5.4

TABLE 7.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT THREE LOCATIONS 1/
IN THE TRANSITION REGION

2017 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	KY1	MO1	VA1	MEAN
AMP-R1	6.8	3.4	6.1	5.4
ASP0218 (A-6D)	6.4	4.0	5.9	5.4
GRAY HAWK (PST-2FIND)	6.4	4.1	5.8	5.4
APR2612	6.6	3.6	6.0	5.4
UF3	6.6	4.0	5.7	5.4
MRSL-PR16	6.4	3.4	6.4	5.4
BSP-25	6.3	3.5	6.3	5.3
JR-888	6.2	3.8	6.0	5.3
MRSL-PR15	6.4	3.8	5.8	5.3
ASP0118GL (A-4G)	6.5	3.5	5.8	5.3
LPB-SD-101	6.6	3.4	5.8	5.3
SAGUARO	6.4	3.2	6.1	5.2
MENSA	6.9	3.5	5.3	5.2
BRIGHTSTAR SLT	6.1	3.6	5.9	5.2
SAVANT	6.4	3.5	5.6	5.2
LPB-SD-104	6.6	3.5	5.3	5.1
ALLSTAR III	6.4	3.3	5.6	5.1
JR-747	6.6	2.9	5.8	5.1
LPB-SD-102	6.8	3.3	5.1	5.1
BSP-17	6.1	4.0	4.7	5.0
BWH	6.3	3.2	5.3	5.0
LPB-SD-103	6.4	3.3	5.1	4.9
LPB-SD-105	5.9	3.3	4.9	4.7
LINN	3.1	2.9	4.5	3.5
LSD VALUE	0.4	0.7	1.1	0.4
C.V. (%)	4.2	10.9	10.6	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 8. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 GROWN AT SIX LOCATIONS 1/
 IN THE NORTH CENTRAL REGION
 2017 DATA
 TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	IA1	IL1	MI1	MN1	NE1	WI1	MEAN
PPG-PR 423	6.5	7.7	5.7	5.3	5.5	7.0	6.3
DLFPS-236/3554	6.9	7.6	5.3	5.9	5.4	6.2	6.2
NP-2	6.4	7.4	5.9	6.1	5.4	6.0	6.2
PPG-PR 424	6.3	7.6	5.3	5.9	5.3	6.7	6.2
PPG-PR 331	6.4	7.4	5.8	6.2	5.0	6.3	6.2
LPB-SD-102	6.8	6.8	5.6	6.2	5.8	5.7	6.1
CPN	6.8	7.3	5.3	5.9	5.7	5.9	6.1
DLFPS-236/3540	6.7	7.4	5.6	5.4	5.6	6.1	6.1
PPG-PR 372	6.8	7.1	5.5	6.3	5.3	5.8	6.1
FR-6-15	6.1	7.4	5.9	5.7	5.3	6.0	6.1
FURLONG (LTP-FCB)	6.9	7.3	5.6	5.4	5.0	6.2	6.1
GRAY HAWK (PST-2FIND)	6.6	7.1	5.4	6.3	5.0	6.0	6.1
SILVER SPORT (PST-2CRP)	6.9	6.9	5.7	5.1	5.5	6.2	6.1
LPB-SD-105	6.6	6.5	5.5	5.3	5.8	6.6	6.1
DLFPS-236/3556	5.9	7.5	5.7	6.1	5.1	6.0	6.1
PL2	6.1	7.7	5.5	6.0	5.0	6.0	6.0
XCELERATOR	6.1	7.6	5.6	5.5	5.2	6.2	6.0
PPG-PR 420	6.8	7.6	5.4	5.5	5.1	5.6	6.0
JR-197	6.3	7.3	5.4	5.4	5.6	6.0	6.0
HOMERUN LS (PPG-PR 419)	6.0	7.2	5.4	5.8	5.6	6.0	6.0
PPG-PR 421	6.3	7.4	5.2	5.6	5.2	6.1	6.0
PR-5-16	6.3	7.2	5.3	5.7	5.1	6.4	6.0
OVERDRIVE 5G	6.4	7.2	5.1	5.7	5.4	6.2	6.0
Q23	6.2	7.2	5.7	5.5	5.7	5.7	6.0
APPLE 3GL (PPG-PR 339)	6.1	7.6	5.7	5.7	4.9	6.0	6.0
UMPOUA	6.9	7.4	5.5	5.4	4.6	6.0	6.0
FP2	6.5	6.7	5.3	5.8	5.6	5.9	6.0
NP-3	6.3	7.4	5.7	5.5	4.6	6.3	6.0
SLIDER LS (PPG-PR 241)	6.2	7.2	5.3	5.5	5.5	6.0	6.0
PPG-PR 422	6.4	7.5	5.2	5.7	5.0	6.0	6.0
DLFPS-236/3538	6.6	7.0	5.6	5.4	5.1	6.0	6.0
JR-888	5.6	6.9	5.6	5.6	5.6	6.4	5.9
DLFPS-236/3544	6.7	7.6	5.2	5.3	5.4	5.4	5.9
FASTBALL 3GL (PPG-PR 329)	6.0	7.1	5.6	5.4	5.6	6.0	5.9
PST-2FOXY	6.3	7.7	5.2	5.0	5.0	6.3	5.9
DLFPS-236/3543	6.4	7.1	5.6	5.7	5.4	5.4	5.9
SLUGGER 3GL (PPG-PR 343)	6.4	7.6	5.4	5.2	5.0	5.9	5.9
DLFPS-236/3546	5.6	7.3	5.5	5.8	5.0	6.2	5.9
DLFPS-236/3545	6.0	7.2	5.2	4.8	5.4	6.8	5.9
DLFPS-236/3553	6.1	7.0	5.2	5.6	5.0	6.4	5.9
PST-2EGAD	6.9	7.4	5.1	5.1	5.2	5.7	5.9
SHIELD (02BS4)	6.6	6.6	5.8	5.4	5.4	5.5	5.9
02BS2	6.1	7.0	5.6	5.4	4.9	6.3	5.9
RRT	6.5	6.9	5.6	4.8	5.4	6.1	5.9
LPB-SD-101	5.9	6.9	5.4	5.4	5.6	6.0	5.9

TABLE 8. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 (CONT'D) GROWN AT SIX LOCATIONS 1/
 IN THE NORTH CENTRAL REGION

2017 DATA
 TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	IA1	IL1	MI1	MN1	NE1	WI1	MEAN
GRAND SLAM GLD	6.8	7.1	5.6	5.3	4.9	5.6	5.9
SR 4650	6.0	6.8	5.3	5.4	5.4	6.2	5.9
FST-2A2	5.8	7.4	5.7	5.1	4.7	6.4	5.9
MAN O WAR	6.5	7.2	5.4	5.3	4.8	5.8	5.8
PPG-PR 360	6.4	7.2	5.2	5.3	5.0	6.0	5.8
O21	6.7	6.9	5.7	4.8	5.0	5.8	5.8
SEABISCUIT	6.6	7.4	5.7	4.7	4.7	6.0	5.8
PPG-PR 367	6.1	6.7	5.5	5.4	5.0	6.2	5.8
ASP0117 (A-PR15)	6.2	7.3	5.2	5.8	4.9	5.3	5.8
DLFPS-236/3547	6.4	7.5	5.1	5.3	4.9	5.5	5.8
SAGUARO	6.0	6.9	5.5	5.5	5.3	5.6	5.8
SIGNET	5.9	7.2	5.7	5.3	5.0	5.8	5.8
APR2616	6.1	7.2	5.4	5.0	5.4	5.5	5.8
DLFPS-236/3550	6.0	7.2	5.6	4.9	5.1	6.0	5.8
PPG-PR 371	6.4	7.3	5.3	4.3	5.5	5.8	5.8
PPG-PR 370	6.3	6.7	5.4	5.0	5.2	6.0	5.8
PHARAOH	6.4	7.2	5.4	4.3	5.2	6.0	5.8
INTENSE	6.1	7.2	5.0	5.0	5.3	6.0	5.8
DLFPS-236/3548	6.3	7.5	5.6	4.7	4.3	6.1	5.8
SAVANT	6.1	6.9	5.6	3.6	5.7	6.6	5.8
DLFPS-236/3542	6.6	7.6	5.3	4.8	5.1	5.0	5.7
GRAY WOLF (PST-2GAL)	6.9	7.1	5.3	4.6	5.3	5.3	5.7
PST-2BDT	6.1	6.9	5.4	4.8	5.9	5.3	5.7
MENSA	5.8	7.3	5.5	5.0	5.1	5.6	5.7
FST-2GTD	6.6	7.4	5.6	4.3	5.2	5.2	5.7
BAR LP 6164	6.4	7.2	5.4	5.4	4.8	5.1	5.7
BAR LP 6159	6.3	6.8	5.6	5.2	5.1	5.2	5.7
FST-2MAY	6.8	7.5	5.2	4.3	4.9	5.6	5.7
ASP0116EXT	6.6	7.5	5.6	5.2	4.6	4.7	5.7
DLFPS-236/3552	6.0	7.2	5.6	4.5	5.4	5.3	5.7
LPB-SD-103	6.4	7.2	4.9	4.9	5.0	5.7	5.7
PPG-PR 385	6.4	7.4	5.1	4.4	4.6	5.9	5.7
BAR LP 6233	6.7	6.8	5.2	4.6	5.2	5.3	5.6
MRSL-PR16	6.4	7.8	5.2	4.9	4.5	5.0	5.6
ASP0118GL (A-4G)	6.8	7.8	5.1	4.3	5.0	4.9	5.6
DLFPS-236/3541	5.5	6.9	5.2	5.4	5.3	5.4	5.6
UF3	5.9	7.1	5.2	5.6	4.8	5.3	5.6
DERBY XTREME	5.9	7.2	5.3	4.8	5.0	5.5	5.6
BRIGHTSTAR SLT	6.4	7.2	5.5	4.5	5.0	5.0	5.6
FST-2PDA	6.0	6.8	5.5	4.8	5.0	5.4	5.6
CS-6	5.9	7.3	5.4	5.3	4.0	5.7	5.6
PEPPER II (RAD-PR 103)	6.4	7.9	5.3	4.0	4.5	5.4	5.6
GO-141	5.8	7.0	5.3	4.9	4.9	5.8	5.6
BSP-17	6.3	7.2	5.3	5.5	4.2	5.0	5.6
BAR LP 6131	6.0	7.0	5.2	4.5	4.8	6.0	5.6
EVOLVE	5.6	6.9	5.5	4.9	4.9	5.7	5.6

TABLE 8.
(CONT'D)MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT SIX LOCATIONS 1/
IN THE NORTH CENTRAL REGION2017 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	IA1	IL1	MI1	MN1	NE1	WI1	MEAN
MRSL-PR15	6.3	7.3	5.3	4.3	4.4	5.9	5.6
BAR LP 6117	6.0	7.1	5.2	4.7	5.0	5.5	5.6
RAD-PR 112	6.3	7.8	4.7	5.2	4.1	5.1	5.6
ALLSTAR III	5.8	7.1	5.4	4.4	4.8	5.8	5.5
O2BS1	6.8	7.3	4.8	4.3	4.9	5.1	5.5
JR-123	5.6	6.9	5.1	5.5	4.9	5.0	5.5
APR3060	6.2	6.5	5.1	5.1	4.9	5.1	5.5
APR2612	6.1	7.2	5.3	3.6	4.4	6.2	5.5
SNX	6.5	7.6	5.2	4.1	4.1	5.4	5.5
ASP0218 (A-6D)	6.2	7.5	4.9	4.1	4.4	5.6	5.5
KARMA	5.8	7.1	4.9	4.5	5.0	5.2	5.4
BSP-25	6.0	7.5	5.4	3.8	4.0	5.7	5.4
LPB-SD-104	5.6	5.9	5.4	4.9	4.9	5.6	5.4
JR-747	5.4	6.2	4.9	5.2	5.1	5.5	5.4
BWH	6.4	7.4	5.4	3.7	4.7	4.7	5.4
GO-142	5.4	7.2	4.8	4.4	4.7	5.7	5.4
AMP-R1	6.2	7.6	5.1	4.4	3.7	5.0	5.3
BAR LP 6158	5.8	6.8	4.9	4.5	4.4	5.0	5.2
BAR LP 6165	6.6	6.4	4.7	3.8	5.0	4.9	5.2
GO-143	5.6	7.4	4.6	4.3	4.6	4.6	5.2
DLFPS-238/3014	6.3	6.7	4.3	3.4	4.2	6.2	5.2
BAR LP 6162	6.0	7.1	4.3	2.3	4.1	4.9	4.8
LINN	5.3	2.8	3.2	1.4	3.0	3.4	3.2
LSD VALUE	1.0	0.7	0.7	1.5	0.7	1.3	0.4
C.V. (%)	10.0	6.3	7.7	18.1	8.9	14.1	11.1

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 9.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR EACH MONTH GROWN AT LOGAN, UT 1/
2017 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/							
	APR	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
PST-2MAY	4.7	7.3	7.3	6.0	6.7	7.7	5.3	6.4
PEPPER II (RAD-PR 103)	4.7	7.0	7.7	6.0	7.3	7.7	4.7	6.4
BSP-17	5.0	7.3	7.3	5.7	7.3	7.0	5.0	6.4
DLFPS-236/3542	4.3	7.3	6.7	5.7	7.3	7.7	5.0	6.3
DLFPS-236/3554	4.7	7.7	7.0	5.3	7.3	7.3	4.3	6.2
PPG-PR 360	5.0	7.3	7.0	6.3	6.3	6.7	4.3	6.1
HOMERUN LS (PPG-PR 419)	5.0	6.7	6.7	5.7	7.0	7.0	5.0	6.1
NP-2	5.7	6.7	6.7	5.3	6.3	7.3	5.0	6.1
PPG-PR 370	4.7	7.7	6.7	5.0	7.0	6.7	5.0	6.1
SAVANT	4.7	6.7	6.3	5.3	7.7	6.7	5.0	6.0
PPG-PR 331	4.0	6.3	6.7	6.0	7.0	7.0	5.3	6.0
RAD-PR 112	4.7	7.0	7.3	5.0	7.3	7.0	4.0	6.0
JR-747	4.7	8.0	7.3	6.0	6.0	6.3	3.7	6.0
PPG-PR 371	5.3	6.7	7.0	5.3	6.0	7.0	4.7	6.0
XCELERATOR	5.0	7.3	6.7	4.7	6.7	6.7	5.0	6.0
DLFPS-236/3541	4.3	6.3	6.7	5.3	7.0	6.7	5.3	6.0
LPB-SD-103	5.0	7.0	6.3	5.0	6.7	6.7	5.0	6.0
NP-3	5.0	6.3	6.0	6.0	6.7	7.0	4.7	6.0
DLFPS-236/3543	5.0	6.3	6.0	5.3	7.0	7.3	4.3	5.9
GRAY WOLF (PST-2GAL)	5.0	6.3	6.0	5.7	7.0	6.7	4.7	5.9
BWH	5.3	8.0	6.7	4.7	6.0	6.0	4.3	5.9
DLFPS-236/3550	5.0	7.3	6.3	5.0	5.7	7.3	4.3	5.9
SLUGGER 3GL (PPG-PR 343)	4.3	7.7	7.0	5.3	6.0	6.3	4.3	5.9
021	5.0	6.7	5.3	6.0	6.3	6.7	5.0	5.9
02BS2	5.0	6.7	5.3	5.7	6.7	6.3	5.0	5.8
ASP0218 (A-6D)	4.7	6.3	6.3	5.7	6.7	6.3	4.7	5.8
SLIDER LS (PPG-PR 241)	4.3	7.0	7.0	5.3	6.3	6.0	4.7	5.8
RRT	4.7	6.0	6.3	5.0	6.7	7.0	5.0	5.8
PPG-PR 424	5.3	6.7	6.7	4.3	6.0	6.7	5.0	5.8
PPG-PR 423	4.7	6.7	7.0	4.7	6.0	7.0	4.3	5.8
SILVER SPORT (PST-2CRP)	4.0	6.0	7.0	5.3	6.7	6.7	4.7	5.8
SNX	5.7	7.3	6.7	4.7	5.3	6.3	4.3	5.8
LPB-SD-102	4.7	6.0	6.7	5.0	6.3	6.7	4.7	5.7
BAR LP 6159	4.7	7.3	6.7	5.3	6.0	6.0	4.0	5.7
FURLONG (LTP-FCB)	3.7	5.7	6.3	5.7	6.7	7.0	4.7	5.7
FASTBALL 3GL (PPG-PR 329)	4.3	6.7	5.7	5.3	6.3	6.3	5.0	5.7
PPG-PR 367	4.3	6.7	6.0	5.0	6.0	6.3	5.3	5.7
PPG-PR 421	3.7	6.0	6.3	5.3	7.0	7.0	4.3	5.7
SAGUARO	4.0	6.3	6.7	5.3	6.3	6.3	4.7	5.7
DLFPS-236/3540	4.7	7.3	6.0	4.7	6.0	6.7	4.0	5.6
DLFPS-236/3552	4.0	6.3	6.3	5.7	6.7	6.7	3.7	5.6
FP2	4.7	7.0	6.0	4.7	6.0	6.3	4.7	5.6
LPB-SD-105	3.7	6.3	6.7	5.7	5.7	6.7	4.7	5.6
ASP0118GL (A-4G)	5.3	6.7	5.7	5.3	5.3	6.0	4.7	5.6
ASP0116EXT	4.3	5.7	6.7	5.3	6.3	5.7	5.0	5.6

TABLE 9.
(CONT'D)TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR EACH MONTH GROWN AT LOGAN, UT 1/
2017 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/							
	APR	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
CS-6	4.3	7.0	6.3	5.7	5.3	5.3	5.0	5.6
MRSL-PR16	3.3	6.7	6.7	5.7	6.3	5.7	4.7	5.6
PST-2EGAD	5.0	6.7	5.7	4.7	5.7	6.7	4.7	5.6
SR 4650	4.7	6.7	6.0	4.7	5.3	7.0	4.7	5.6
APR2616	4.0	7.0	6.3	5.0	6.0	6.3	4.0	5.5
BAR LP 6117	4.3	6.7	5.7	5.0	7.0	6.0	4.0	5.5
PPG-PR 372	3.7	6.3	7.0	5.3	5.3	6.3	4.7	5.5
GRAY HAWK (PST-2FIND)	4.3	6.3	6.3	5.0	5.7	6.3	4.3	5.5
JR-123	5.0	7.0	6.0	4.7	5.0	6.0	4.7	5.5
DLFPS-236/3545	4.0	5.7	6.0	5.0	6.0	7.0	4.7	5.5
PPG-PR 385	5.3	6.0	5.3	5.3	5.7	6.3	4.3	5.5
LPB-SD-101	4.7	6.3	6.0	4.3	5.3	6.7	4.7	5.4
SIGNET	4.7	6.7	6.3	5.0	5.3	5.7	4.3	5.4
BSP-25	3.7	5.7	6.7	5.7	5.7	6.3	4.3	5.4
DERBY XTREME	4.3	6.0	6.0	4.0	5.3	7.0	5.3	5.4
DLFPS-236/3547	4.3	6.3	6.0	5.0	5.3	6.3	4.7	5.4
PPG-PR 422	3.7	5.3	6.0	5.0	6.0	7.0	5.0	5.4
SHIELD (02BS4)	4.3	6.7	6.3	4.7	6.3	5.3	4.0	5.4
AMP-R1	4.0	6.0	6.0	4.7	6.0	6.3	4.7	5.4
CPN	5.3	6.0	6.0	4.3	4.7	6.7	4.7	5.4
DLFPS-236/3538	3.7	5.0	5.7	5.3	7.0	6.0	5.0	5.4
DLFPS-236/3548	3.7	6.3	6.7	5.3	5.7	6.0	4.0	5.4
GO-141	3.7	7.0	6.0	5.3	5.3	6.0	4.3	5.4
OVERDRIVE 5G	6.0	6.3	6.0	4.0	5.3	5.7	4.3	5.4
PHARAOH	6.0	6.3	6.0	3.7	5.0	7.0	3.7	5.4
APPLE 3GL (PPG-PR 339)	4.3	5.7	6.3	4.7	5.3	6.3	5.0	5.4
PST-2GTD	4.3	6.0	6.7	5.0	5.3	6.0	4.3	5.4
UF3	5.3	5.7	5.3	5.0	5.3	6.3	4.7	5.4
UMPQUA	5.7	5.3	5.3	4.7	5.7	6.3	4.7	5.4
APR2612	3.7	5.3	5.7	5.3	6.3	6.3	4.7	5.3
BAR LP 6131	4.7	6.3	5.3	4.3	6.7	5.7	4.3	5.3
DLFPS-236/3544	3.7	5.3	5.3	5.7	6.3	6.3	4.7	5.3
DLFPS-236/3553	4.3	6.7	6.0	4.7	5.7	6.0	4.0	5.3
MENSA	3.7	6.7	6.7	4.3	6.0	5.7	4.3	5.3
PR-5-16	3.7	5.3	6.0	5.3	6.3	6.0	4.7	5.3
APR3060	3.3	6.0	6.0	6.0	6.0	5.3	4.3	5.3
DLFPS-236/3546	4.0	7.0	7.0	4.3	5.0	5.7	4.0	5.3
INTENSE	5.0	5.3	5.3	4.7	5.3	7.0	4.3	5.3
PR-6-15	3.7	7.0	5.7	4.0	5.3	6.3	5.0	5.3
023	3.7	4.7	5.3	5.0	6.0	7.0	5.0	5.2
02BS1	4.3	5.3	5.7	4.3	5.3	7.0	4.3	5.2
GO-143	3.7	6.0	5.3	4.7	6.0	6.0	4.7	5.2
LPB-SD-104	3.7	5.7	6.0	4.7	6.0	6.0	4.3	5.2
JR-888	4.3	6.7	6.3	4.7	5.3	5.3	3.7	5.2
BAR LP 6164	3.7	5.7	5.7	4.7	5.7	6.0	4.7	5.1
GRAND SLAM GLD	4.3	6.0	5.3	4.7	6.0	5.7	4.0	5.1

TABLE 9.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR EACH MONTH GROWN AT LOGAN, UT 1/
2017 DATA

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

NAME	APR	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
PL2	4.7	5.7	5.7	4.0	5.3	6.0	4.3	5.1
PPG-PR 420	3.7	6.0	5.7	4.7	5.7	5.7	4.3	5.1
MRSL-PR15	4.3	7.0	6.3	4.7	4.7	5.3	3.0	5.0
PST-2FOXY	3.7	5.7	5.7	4.3	6.0	5.7	4.3	5.0
ALLSTAR III	4.3	5.3	5.0	4.3	5.3	6.0	4.7	5.0
DLFPS-236/3556	4.3	5.0	6.3	4.7	4.7	5.7	4.3	5.0
JR-197	3.7	5.7	5.3	4.7	5.3	5.7	4.3	5.0
BAR LP 6158	4.7	6.3	5.7	4.0	5.3	4.7	3.7	4.9
PST-2BDT	3.7	6.0	5.7	4.0	4.7	5.7	4.7	4.9
PST-2PDA	4.7	4.3	5.0	5.0	5.7	5.7	4.0	4.9
PST-2A2	4.0	6.3	5.7	4.3	4.7	5.3	4.0	4.9
SEABISCUIT	4.3	5.0	5.7	4.0	5.3	5.0	4.7	4.9
EVOLVE	5.3	6.0	5.0	4.3	4.3	5.3	3.0	4.8
KARMA	4.0	5.3	5.3	4.3	4.7	5.7	3.7	4.7
BAR LP 6233	5.7	5.0	4.3	4.7	4.3	4.7	4.0	4.7
BRIGHTSTAR SLT	5.3	5.7	5.7	3.7	3.3	5.3	3.7	4.7
DLFPS-238/3014	4.3	5.7	5.7	4.3	3.7	5.0	4.0	4.7
ASPO117 (A-PR15)	4.0	6.0	5.7	4.0	3.7	5.0	4.0	4.6
MAN O WAR	4.7	5.7	5.0	4.0	4.3	5.0	3.7	4.6
GO-142	3.7	6.7	5.0	3.7	3.7	5.7	3.7	4.6
BAR LP 6165	4.3	4.7	4.7	5.0	4.0	4.3	4.0	4.4
BAR LP 6162	4.7	5.0	5.0	4.3	3.7	4.3	3.3	4.3
LINN	6.3	1.7	2.7	2.3	2.7	2.3	2.3	2.9
LSD VALUE	1.4	1.8	1.3	1.3	1.6	1.5	1.2	0.8
C.V. (%)	19.0	18.2	13.0	16.5	17.3	15.0	16.6	9.5

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 10.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR EACH MONTH GROWN AT FRESNO, CA 1/
2017 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
MAN O WAR	8.0	7.7	8.0	7.0	7.3	5.3	5.3	5.3	7.3	7.7	7.3	8.0	7.0
BAR LP 6164	7.3	6.7	6.7	6.7	7.3	5.7	5.3	5.7	8.7	8.3	7.7	8.0	7.0
APPLE 3GL (PPG-PR 339)	7.3	7.0	7.7	7.7	6.0	4.7	5.0	5.3	8.3	8.0	7.7	7.7	6.9
GRAY HAWK (PST-2FIND)	7.7	7.7	8.0	7.0	6.3	4.7	4.0	5.0	8.3	8.3	7.3	7.7	6.8
APR3060	7.3	6.7	7.0	6.7	6.3	4.7	4.7	5.3	8.7	8.3	8.0	7.7	6.8
02BS1	7.7	7.7	7.7	7.3	6.7	4.3	4.3	4.7	7.7	8.0	7.7	7.3	6.8
PPG-PR 371	7.3	7.3	7.3	6.7	6.3	4.3	4.3	5.0	8.3	8.3	8.3	7.3	6.8
SAVANT	7.0	7.3	7.0	6.7	6.3	5.0	4.7	5.0	7.3	8.0	8.0	8.7	6.8
02BS2	7.0	7.0	7.0	6.0	6.0	4.7	5.0	5.0	8.0	8.3	8.3	8.3	6.7
GRAY WOLF (PST-2GAL)	6.7	6.7	6.7	5.7	6.3	5.0	4.7	5.0	8.7	8.7	8.3	7.7	6.7
PPG-PR 422	8.0	7.7	8.0	7.3	6.3	4.3	3.7	5.0	7.3	8.0	7.7	6.7	6.7
DLFPS-236/3554	7.3	7.3	7.3	5.7	6.3	5.0	4.3	4.7	8.0	8.0	7.7	7.3	6.6
BAR LP 6131	7.0	6.7	8.0	7.3	5.3	3.7	3.7	5.3	9.0	8.3	7.3	7.0	6.6
PST-2GTD	6.7	6.3	6.3	5.7	6.3	5.0	5.0	5.3	8.3	8.3	7.7	7.7	6.6
DLFPS-236/3550	7.0	6.7	7.0	6.3	6.3	4.7	4.3	5.0	8.3	8.0	7.3	7.7	6.6
PST-2A2	8.3	8.0	8.3	6.3	5.7	4.3	4.0	4.3	6.7	7.3	7.7	7.3	6.5
PST-2MAY	7.7	7.3	7.3	6.0	6.7	4.7	4.3	4.7	7.3	7.7	7.3	7.3	6.5
LPB-SD-101	7.3	6.3	6.7	7.3	6.3	5.0	5.0	5.3	7.0	7.0	7.3	7.3	6.5
PPG-PR 370	6.3	6.3	6.7	6.7	7.0	4.7	4.3	5.0	8.0	8.0	7.7	7.3	6.5
PPG-PR 421	6.7	6.0	6.7	6.7	6.7	5.0	4.7	5.0	8.3	7.7	7.0	7.7	6.5
PPG-PR 372	6.0	6.3	6.3	7.3	6.3	4.7	4.7	5.3	8.0	8.0	7.0	7.7	6.5
PST-2PDA	7.0	7.0	7.0	6.3	7.3	4.7	4.0	4.7	7.7	7.7	6.7	7.7	6.5
SEABISCUIT	7.0	7.0	6.3	6.7	6.3	4.7	4.3	5.0	8.0	8.0	7.3	7.0	6.5
PPG-PR 331	7.0	6.7	6.7	5.7	5.3	4.3	4.0	5.3	8.3	8.3	7.7	8.0	6.4
PHARAOH	7.0	6.3	7.0	6.7	6.3	4.7	4.7	5.0	7.7	7.7	7.3	7.0	6.4
021	6.7	6.3	6.3	6.0	5.7	5.3	5.3	5.3	8.0	8.0	7.0	7.0	6.4
ASPO117 (A-PR15)	6.0	6.0	6.0	6.0	6.7	5.0	4.7	4.7	8.3	8.3	8.3	7.0	6.4
DLFPS-236/3541	6.3	6.7	7.0	6.0	5.7	4.7	5.0	5.0	8.0	8.0	7.3	7.3	6.4
SLUGGER 3GL (PPG-PR 343)	7.3	6.3	6.7	5.7	5.7	4.3	4.0	5.0	8.0	8.3	8.0	7.7	6.4
DLFPS-236/3540	6.7	6.3	6.0	6.7	6.7	4.7	4.7	5.0	8.0	7.7	6.7	7.7	6.4
DLFPS-236/3542	7.7	7.0	7.3	5.3	6.3	4.3	3.7	4.7	7.3	7.7	7.3	8.0	6.4
GO-143	8.0	7.3	6.7	4.7	6.3	4.3	4.0	4.7	8.0	8.0	6.7	7.7	6.4
MRSL-PR16	7.7	7.0	7.3	5.0	5.7	4.0	3.7	4.7	8.0	8.0	7.7	7.7	6.4
GO-142	8.3	7.7	7.7	7.0	7.0	4.3	3.7	4.3	7.0	6.7	6.0	6.7	6.4
BAR LP 6159	7.0	7.0	7.0	6.7	6.0	5.0	4.7	5.0	7.0	6.7	6.3	7.3	6.3
CPN	6.3	6.3	6.7	6.0	5.7	4.3	4.0	5.0	8.3	8.3	7.0	7.7	6.3
DLFPS-236/3552	6.7	6.3	6.0	5.3	6.0	4.3	4.3	5.3	8.7	8.3	7.0	7.3	6.3
GRAND SLAM GLD	6.3	5.7	6.3	7.3	5.7	4.7	4.7	5.3	7.3	8.0	7.3	7.0	6.3
FURLONG (LTP-FCB)	6.3	6.0	5.7	4.7	6.7	4.7	4.3	5.0	8.0	8.3	8.3	7.7	6.3
HOMERUN LS (PPG-PR 419)	7.7	7.3	7.3	5.3	6.3	3.7	3.3	4.3	7.7	8.0	7.3	7.3	6.3
SIGNET	6.7	6.3	6.7	6.3	6.3	4.7	4.3	4.3	6.7	7.7	8.0	7.7	6.3
ASPO116EXT	6.7	6.3	6.0	4.3	7.0	5.7	4.7	5.3	7.7	7.7	6.3	7.7	6.3
BAR LP 6117	7.3	7.0	6.7	6.3	6.3	4.0	3.7	4.7	8.0	7.7	6.7	7.0	6.3
LPB-SD-102	7.3	7.0	7.0	6.3	6.7	4.7	4.0	4.3	6.7	7.0	7.0	7.3	6.3
PPG-PR 367	6.7	6.7	6.7	5.7	6.3	4.7	4.3	4.3	7.0	7.3	7.7	8.0	6.3

TABLE 10.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR EACH MONTH GROWN AT FRESNO, CA 1/
2017 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
OVERDRIVE 5G	7.0	7.0	6.7	7.0	6.3	4.0	3.7	4.3	7.0	7.7	7.0	7.3	6.3
PR-5-16	6.3	7.3	7.3	7.0	6.3	4.3	4.0	4.7	7.0	7.0	6.7	7.0	6.3
RAD-PR 112	7.3	7.3	6.3	6.3	7.3	4.0	3.7	4.3	7.7	7.3	6.7	6.7	6.3
JR-123	6.7	6.7	7.0	6.7	6.7	4.7	3.7	4.7	7.0	7.0	7.7	6.3	6.2
PPG-PR 420	7.0	7.0	7.0	4.7	5.3	4.3	4.3	4.7	7.7	7.3	7.0	8.3	6.2
UF3	6.3	6.0	6.3	5.7	6.7	4.7	4.3	5.0	7.0	7.7	7.3	7.7	6.2
MENSA	6.3	6.0	6.3	5.0	6.0	5.3	5.3	5.3	7.3	7.7	7.0	6.7	6.2
DLFPS-236/3545	6.0	6.0	6.0	6.0	7.0	4.7	4.0	4.3	7.0	8.0	8.0	7.3	6.2
ASP0118GL (A-4G)	7.0	6.3	6.7	5.3	5.3	4.0	4.0	5.0	8.3	8.0	7.0	7.0	6.2
DLFPS-236/3548	6.7	6.3	6.7	6.0	6.3	4.7	4.3	4.7	7.3	7.0	7.0	7.0	6.2
PPG-PR 424	7.3	7.3	6.7	6.0	6.3	4.0	4.0	4.7	7.0	6.7	6.7	7.3	6.2
UMPQUA	7.7	7.7	7.7	6.3	5.7	4.0	4.0	4.0	6.3	6.7	7.0	7.0	6.2
DLFPS-236/3544	6.3	6.3	6.7	7.0	6.3	4.0	3.3	4.3	6.7	7.7	7.3	7.7	6.1
SLIDER LS (PPG-PR 241)	6.3	5.3	6.0	5.3	6.7	5.0	4.7	5.0	7.3	7.7	7.3	7.0	6.1
SILVER SPORT (PST-2CRP)	5.3	6.3	6.7	4.7	7.3	5.3	5.0	5.7	6.3	6.7	7.3	7.0	6.1
INTENSE	7.3	6.7	7.3	6.0	5.3	4.0	4.0	4.3	6.7	7.3	7.3	7.0	6.1
PST-2EGAD	7.0	6.3	6.3	5.3	5.7	4.3	4.3	4.3	7.7	7.7	7.0	7.3	6.1
023	4.7	6.3	5.7	5.7	6.3	5.3	5.0	5.3	7.7	7.3	6.3	7.7	6.1
BAR LP 6165	7.0	6.3	6.7	6.3	6.7	4.0	3.7	4.0	7.3	7.7	7.3	6.3	6.1
DLFPS-236/3553	6.7	6.3	6.0	5.7	6.3	4.0	3.7	4.0	7.0	7.7	7.7	8.3	6.1
ALLSTAR III	7.0	6.7	6.7	6.3	6.3	4.0	3.3	4.0	7.0	7.7	7.0	7.0	6.1
BAR LP 6158	7.7	7.0	6.7	5.7	5.3	4.3	3.7	4.7	8.3	7.0	6.0	6.7	6.1
FP2	6.0	5.3	6.0	6.3	6.7	4.3	4.0	4.7	7.3	7.7	7.3	7.3	6.1
JR-888	7.3	7.0	7.7	6.3	6.0	4.7	4.0	4.3	6.3	6.3	6.0	7.0	6.1
PR-6-15	6.7	6.7	6.7	6.3	6.0	3.7	2.7	4.0	7.7	7.7	7.3	7.7	6.1
CS-6	7.0	6.0	6.3	5.0	5.7	4.0	3.7	4.7	8.0	7.3	7.3	7.3	6.0
GO-141	7.0	8.0	7.3	6.0	6.0	4.0	4.0	4.0	6.7	7.0	6.0	6.3	6.0
DLFPS-236/3547	6.7	6.3	6.0	4.0	5.7	3.7	3.3	4.7	8.0	8.7	7.7	7.3	6.0
PL2	6.3	5.7	6.0	5.7	6.0	4.3	4.0	4.7	6.7	7.3	7.7	7.7	6.0
BAR LP 6162	7.0	6.3	6.3	5.7	6.0	4.3	4.3	4.7	7.7	7.3	6.0	6.0	6.0
XCELERATOR	6.7	6.3	6.7	5.7	6.7	5.0	4.3	4.7	7.0	6.7	5.7	6.3	6.0
JR-197	6.7	6.7	6.3	6.0	6.3	4.0	3.7	3.7	6.3	7.0	7.3	7.3	5.9
DLFPS-236/3543	6.7	5.7	6.3	6.3	5.3	4.3	4.3	4.3	7.7	7.0	6.3	7.0	5.9
PST-2FOXY	5.7	6.0	5.3	4.7	6.0	4.3	4.0	4.3	7.7	7.7	8.0	7.7	5.9
BAR LP 6233	6.7	6.7	7.0	6.3	6.0	4.0	4.0	4.3	6.0	6.7	7.0	6.3	5.9
NP-2	6.0	5.7	5.7	4.3	6.0	4.3	4.3	4.7	6.7	7.3	8.0	8.0	5.9
NP-3	6.3	6.0	6.7	5.7	5.7	4.0	3.7	4.7	7.0	7.3	6.7	7.3	5.9
FASTBALL 3GL (PPG-PR 329)	7.0	6.3	6.3	5.3	5.0	3.7	3.3	4.3	6.7	8.0	8.0	7.0	5.9
RRT	7.0	6.3	6.0	5.0	6.3	4.7	4.0	4.7	6.7	7.0	6.3	6.7	5.9
ASP0218 (A-6D)	7.3	6.7	6.7	6.7	5.3	3.7	3.7	4.3	6.7	6.3	6.0	7.0	5.9
APR2612	5.7	6.0	6.0	4.7	5.3	4.0	3.7	4.3	7.7	7.7	7.7	7.7	5.9
SNX	7.3	6.7	6.7	6.7	6.0	4.0	3.7	4.0	6.0	6.7	6.3	6.3	5.9
SHIELD (02BS4)	6.3	6.3	6.0	5.0	6.0	4.0	3.3	4.0	7.3	7.3	7.0	7.3	5.8
MRSL-PR15	5.3	6.0	5.7	5.0	6.0	4.3	4.3	5.0	7.7	7.0	6.0	7.0	5.8
PPG-PR 385	6.0	6.3	6.3	4.7	6.0	4.3	4.0	4.0	7.0	7.0	6.7	7.0	5.8
PEPPER II (RAD-PR 103)	6.0	5.3	5.0	4.0	6.0	4.3	3.7	4.0	7.7	8.0	7.7	7.7	5.8

TABLE 10.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR EACH MONTH GROWN AT FRESNO, CA 1/
2017 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
BSP-25	6.7	5.7	5.7	5.7	5.7	4.0	3.7	4.3	7.7	7.7	6.3	6.3	5.8
KARMA	6.3	5.7	6.3	6.0	7.0	3.7	3.3	3.7	6.7	7.0	6.0	7.3	5.8
APR2616	6.7	6.3	7.0	5.0	5.3	4.3	4.0	4.3	6.0	6.7	6.7	6.3	5.7
AMP-R1	7.0	6.3	6.0	5.7	5.0	3.3	3.3	4.0	7.0	7.3	6.3	6.7	5.7
DLFPS-236/3556	6.3	5.7	6.3	5.7	6.0	4.0	3.3	3.7	6.0	6.7	7.0	7.3	5.7
DLFPS-236/3546	6.0	5.3	5.0	4.3	5.7	4.0	3.7	4.3	7.0	7.0	7.3	7.7	5.6
EVOLVE	6.3	6.0	6.3	5.7	6.3	3.3	2.7	3.7	6.7	7.0	6.7	6.3	5.6
DERBY XTREME	6.3	5.7	5.3	6.3	6.3	4.0	3.0	4.0	6.0	7.0	6.7	6.0	5.6
DLFPS-236/3538	6.7	6.3	5.7	6.0	6.3	4.3	3.3	3.7	5.7	6.0	5.7	7.0	5.6
BRIGHTSTAR SLT	6.7	6.3	6.0	5.3	5.7	4.0	3.7	4.3	6.0	6.3	5.3	6.7	5.5
SR 4650	6.3	6.0	6.0	4.7	5.3	4.0	3.0	3.7	6.3	7.3	6.7	7.0	5.5
LINN	8.0	7.3	6.7	6.3	5.7	3.0	2.7	4.3	5.3	6.3	5.7	4.7	5.5
LPB-SD-103	6.3	5.7	5.7	5.0	6.0	3.7	3.3	3.7	7.0	6.7	6.3	6.7	5.5
PPG-PR 360	5.7	5.3	5.0	4.7	5.7	4.3	3.7	4.0	7.7	7.7	5.7	6.7	5.5
BSP-17	6.7	6.0	5.7	5.0	5.7	3.3	3.0	4.0	6.7	6.7	6.7	6.0	5.4
LPB-SD-104	5.3	5.3	5.0	6.3	5.7	4.3	4.3	4.3	5.7	6.0	6.0	6.7	5.4
LPB-SD-105	6.0	6.0	5.7	5.3	5.7	4.7	4.3	4.7	5.7	6.0	5.3	5.7	5.4
PST-2BDT	6.0	6.0	6.7	6.0	5.7	3.0	2.7	3.3	5.3	6.3	7.0	7.0	5.4
SAGUARO	5.3	6.0	5.7	4.7	6.0	4.7	4.0	4.3	5.7	6.7	6.0	6.0	5.4
BWH	5.0	5.3	5.3	4.7	6.0	3.7	3.7	4.0	6.3	6.7	6.3	7.0	5.3
JR-747	6.3	6.3	6.0	6.0	4.7	3.7	3.7	4.0	5.7	5.3	4.7	6.0	5.2
PPG-PR 423	5.3	5.0	5.0	5.3	5.0	3.7	3.0	3.7	5.3	6.7	6.7	6.3	5.1
DLFPS-238/3014	5.3	6.0	6.3	5.3	5.0	3.3	3.0	3.3	4.7	6.0	6.3	5.3	5.0
LSD VALUE	1.6	1.7	1.9	2.3	1.6	1.5	1.7	1.4	2.0	1.8	2.0	1.7	1.1
C.V. (%)	15.0	16.5	18.4	24.0	16.2	21.4	26.9	19.3	17.6	14.7	17.5	14.7	10.9

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.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR EACH MONTH GROWN AT CORVALLIS, OR 1/
2017 DATA

NAME	APR	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/									
		MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	
DLFPS-236/3542	7.3	8.0	8.0	7.0	8.0	8.0	7.3	7.3	6.7	7.5	
APPLE 3GL (PPG-PR 339)	7.0	8.0	8.0	7.3	8.0	8.0	7.3	7.0	6.0	7.4	
SLIDER LS (PPG-PR 241)	7.0	8.0	8.0	7.7	7.7	7.7	7.0	7.0	6.3	7.4	
DLFPS-236/3541	7.0	8.0	8.0	7.3	7.7	8.0	7.3	7.0	6.0	7.4	
DLFPS-236/3544	7.0	8.0	8.0	7.0	8.0	8.0	7.0	7.0	6.3	7.4	
DLFPS-236/3545	7.0	7.7	7.7	7.3	8.0	7.7	7.3	7.3	6.3	7.4	
DLFPS-236/3548	7.0	8.0	8.0	7.3	8.0	8.0	7.0	7.0	6.0	7.4	
LPB-SD-102	7.0	8.0	8.0	7.0	8.0	8.0	7.0	7.0	6.3	7.4	
MAN O WAR	7.0	8.0	8.0	7.0	8.0	8.0	7.0	7.0	6.3	7.4	
PPG-PR 372	7.0	8.0	8.0	7.7	7.7	8.0	7.0	7.0	6.0	7.4	
PPG-PR 422	7.0	8.0	8.0	7.7	8.0	7.7	7.0	7.0	6.0	7.4	
PPG-PR 424	7.0	8.0	8.0	7.7	7.7	7.7	7.3	7.0	6.0	7.4	
021	7.0	8.0	8.0	7.3	7.7	7.7	7.0	7.0	6.3	7.3	
DLFPS-236/3543	7.0	8.0	8.0	7.0	7.7	7.3	7.3	7.3	6.3	7.3	
DLFPS-236/3547	7.0	8.0	8.0	7.0	8.0	8.0	7.0	7.0	6.0	7.3	
DLFPS-236/3552	7.3	8.0	8.0	7.7	7.3	7.7	7.0	7.0	6.0	7.3	
NP-2	7.0	8.0	8.0	7.3	8.0	7.7	7.0	7.0	6.0	7.3	
OVERDRIVE 5G	7.0	7.7	7.7	7.3	8.0	8.0	7.0	7.0	6.3	7.3	
PHARAOH	7.0	8.0	8.0	7.3	7.7	8.0	7.0	7.0	6.0	7.3	
SLUGGER 3GL (PPG-PR 343)	7.0	7.7	8.0	7.7	7.3	7.7	7.3	7.0	6.3	7.3	
PPG-PR 367	6.7	8.0	8.0	7.7	7.7	7.7	7.0	7.0	6.3	7.3	
PST-2A2	7.0	8.0	8.0	7.3	7.7	7.7	7.0	7.0	6.3	7.3	
RAD-PR 112	7.0	8.0	8.0	8.0	8.0	7.7	6.7	6.7	6.0	7.3	
RRT	7.0	8.0	8.0	7.7	8.0	8.0	7.0	6.7	5.7	7.3	
FURLONG (LTP-FCB)	8.0	8.0	8.0	7.0	7.3	7.7	6.7	6.7	6.3	7.3	
PPG-PR 420	7.0	8.0	8.0	7.7	7.7	7.7	6.7	6.7	6.3	7.3	
PR-6-15	7.0	8.0	8.0	7.0	8.0	7.7	7.0	7.0	6.0	7.3	
SEABISCUIT	6.7	8.0	8.0	7.0	7.7	8.0	7.3	7.0	6.0	7.3	
CPN	7.0	7.7	7.7	7.3	8.0	7.7	7.0	6.7	6.3	7.3	
DLFPS-236/3550	7.0	8.0	8.0	7.0	7.7	7.7	7.0	7.0	6.0	7.3	
FP2	7.0	8.0	8.0	7.3	7.7	8.0	6.7	6.7	6.0	7.3	
GRAY HAWK (PST-2FIND)	7.0	8.0	8.0	7.0	7.7	7.7	7.0	7.0	6.0	7.3	
INTENSE	6.7	8.0	8.0	7.3	7.7	7.7	7.0	7.0	6.0	7.3	
JR-197	7.0	8.0	8.0	7.7	8.0	7.7	6.7	6.7	5.7	7.3	
PST-2FOXY	6.7	8.0	8.0	7.3	7.7	7.7	7.0	7.0	6.0	7.3	
02BS2	6.7	8.0	8.0	7.0	7.7	7.7	7.0	7.0	6.3	7.3	
APR2616	6.7	8.0	8.0	7.0	7.7	8.0	7.0	7.0	6.0	7.3	
DLFPS-236/3553	7.0	8.0	8.0	7.0	7.7	7.7	7.0	7.0	6.0	7.3	
NP-3	6.7	8.0	8.0	7.3	8.0	8.0	6.7	6.7	6.0	7.3	
SHIELD (02BS4)	6.7	8.0	8.0	7.0	7.7	7.3	7.0	7.0	6.3	7.2	
PPG-PR 423	6.7	8.0	8.0	7.7	8.0	7.7	6.7	6.7	5.7	7.2	
PST-2MAY	7.0	8.0	8.0	7.0	7.7	7.7	7.0	6.7	6.0	7.2	
023	7.0	8.0	8.0	7.0	7.3	7.7	7.0	7.0	6.0	7.2	
DLFPS-236/3556	7.0	8.0	8.0	7.7	7.7	7.7	6.7	6.7	5.7	7.2	
JR-123	7.0	8.0	8.0	7.3	7.7	7.7	7.0	6.7	5.7	7.2	
LPB-SD-104	7.3	8.0	8.0	7.0	7.7	7.7	7.0	6.7	5.7	7.2	

TABLE 11.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR EACH MONTH GROWN AT CORVALLIS, OR 1/
2017 DATA

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

NAME	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PPG-PR 360	7.0	8.0	8.0	7.3	7.7	7.7	7.0	6.7	5.7	7.2
PST-2GTD	7.0	8.0	8.0	7.0	7.7	7.3	7.0	7.0	6.0	7.2
UF3	7.0	7.7	7.7	7.0	8.0	7.7	7.0	7.0	6.0	7.2
XCELERATOR	7.0	7.7	7.7	7.0	8.0	7.7	7.0	7.0	6.0	7.2
02BS1	6.3	7.7	7.7	7.7	7.7	7.7	7.0	7.0	6.0	7.2
DLFPS-236/3540	6.3	8.0	8.0	7.0	8.0	7.7	7.0	6.7	6.0	7.2
MENSA	7.0	7.7	7.7	7.0	8.3	7.7	6.7	6.7	6.0	7.2
PPG-PR 421	6.7	7.7	7.7	7.3	7.7	7.7	7.0	7.0	6.0	7.2
DERBY XTREME	7.0	7.7	8.0	7.3	7.7	7.7	7.0	6.7	5.7	7.2
PPG-PR 331	7.0	8.0	8.0	7.0	7.3	7.3	7.0	7.0	6.0	7.2
PPG-PR 371	7.0	8.0	8.0	7.0	7.7	7.7	7.0	6.7	5.7	7.2
UMPQUA	6.7	7.3	7.7	7.3	7.7	7.7	7.0	7.0	6.3	7.2
GRAND SLAM GLD	6.3	8.0	8.0	7.0	7.3	7.7	7.0	7.0	6.0	7.1
JR-747	6.7	8.0	8.0	7.0	8.0	7.7	6.7	6.7	5.7	7.1
LPB-SD-101	6.3	8.0	8.0	7.0	7.7	7.7	7.0	6.7	6.0	7.1
LPB-SD-105	6.7	8.0	8.0	7.0	8.0	8.0	7.0	6.3	5.3	7.1
PL2	7.0	8.0	8.0	7.3	7.3	7.7	6.7	6.7	5.7	7.1
HOMERUN LS (PPG-PR 419)	6.7	8.0	8.0	7.0	7.7	7.7	7.0	7.0	6.0	7.1
BAR LP 6117	7.0	8.0	8.0	7.7	7.3	7.7	6.3	6.3	5.7	7.1
DLFPS-236/3538	7.0	8.0	8.0	7.0	7.3	7.3	7.0	6.7	5.7	7.1
DLFPS-236/3554	6.7	8.0	8.0	7.0	7.7	7.3	6.7	6.7	6.0	7.1
PST-2BDT	7.0	7.3	7.3	7.0	7.7	7.7	7.0	7.0	6.0	7.1
LPB-SD-103	6.3	8.0	8.0	7.0	8.0	7.7	7.0	6.3	5.3	7.1
PPG-PR 370	7.0	7.7	7.7	7.0	7.7	7.3	6.7	6.7	6.0	7.1
PEPPER II (RAD-PR 103)	7.0	8.0	8.0	7.0	7.3	7.0	6.7	6.7	6.0	7.1
SAVANT	6.7	7.7	7.7	7.3	7.7	7.7	6.7	6.7	5.7	7.1
SR 4650	6.7	7.7	7.7	7.0	7.3	7.3	7.0	7.0	6.0	7.1
GRAY WOLF (PST-2GAL)	7.0	7.7	7.7	7.0	7.7	7.3	6.7	6.7	5.7	7.0
FASTERBALL 3GL (PPG-PR 329)	6.7	7.0	7.0	7.0	7.7	8.0	7.0	7.0	6.0	7.0
PR-5-16	7.0	7.7	7.7	7.0	7.3	7.3	7.0	6.7	5.7	7.0
PST-2EGAD	6.0	7.3	7.7	7.7	7.3	7.3	7.0	7.0	6.0	7.0
ASP0118GL (A-4G)	7.0	7.7	7.7	7.7	7.3	7.0	6.3	6.3	6.0	7.0
ASP0116EXT	7.0	7.7	7.7	7.0	7.7	7.0	6.7	6.3	6.0	7.0
BSP-25	7.0	8.0	8.0	7.7	7.3	7.0	6.0	6.0	6.0	7.0
DLFPS-236/3546	7.0	8.0	8.0	7.0	7.3	7.3	6.3	6.3	5.7	7.0
SIGNET	7.0	7.3	7.3	7.0	7.7	7.3	7.0	6.7	5.7	7.0
BSP-17	6.7	7.7	7.7	7.7	8.0	7.3	6.0	6.0	5.7	7.0
BWH	7.0	7.7	7.7	7.0	8.0	7.0	6.3	6.3	5.7	7.0
SNX	7.0	7.3	7.3	7.0	8.0	7.3	6.3	6.3	6.0	7.0
ASP0117 (A-PR15)	7.0	7.3	7.3	7.3	7.7	7.0	6.3	6.3	6.0	6.9
SAGUARO	6.7	7.3	7.7	7.3	7.3	7.7	6.7	6.3	5.3	6.9
GO-143	7.0	7.3	7.3	7.3	7.3	7.3	6.3	6.3	5.7	6.9
SILVER SPORT (PST-2CRP)	7.0	7.3	7.7	7.7	7.0	7.0	6.3	6.3	5.7	6.9
ASP0218 (A-6D)	7.0	7.3	7.3	7.3	7.0	7.0	6.3	6.3	6.0	6.9
KARMA	6.7	7.7	7.7	7.0	7.3	7.3	6.3	6.3	5.3	6.9
PPG-PR 385	6.7	7.3	7.3	7.0	7.7	7.3	6.7	6.3	5.3	6.9

TABLE 11.
(CONT'D)TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR EACH MONTH GROWN AT CORVALLIS, OR 1/
2017 DATA

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

NAME	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PST-2PDA	6.0	7.0	7.0	7.0	7.3	7.3	7.0	7.0	6.0	6.9
BAR LP 6164	6.3	7.7	7.7	7.3	7.0	7.0	6.3	6.3	5.7	6.8
CS-6	6.7	7.0	7.3	7.3	7.3	7.0	6.3	6.3	6.0	6.8
MRSL-PR15	6.7	7.3	7.3	7.0	7.3	7.3	6.3	6.3	5.7	6.8
ALLSTAR III	6.7	7.3	7.3	7.0	7.7	7.0	6.3	6.3	5.3	6.8
GO-142	6.3	7.3	7.3	7.0	7.7	7.0	6.3	6.3	5.7	6.8
EVOLVE	6.3	6.7	7.3	7.3	7.0	7.3	6.7	6.7	5.7	6.8
GO-141	7.0	7.3	7.3	7.0	7.0	7.0	6.3	6.3	5.3	6.7
APR2612	6.3	7.3	7.3	7.0	7.0	7.0	6.3	6.3	5.7	6.7
DLFPS-238/3014	6.0	7.3	7.3	7.0	7.3	7.0	6.3	6.3	5.7	6.7
JR-888	6.0	7.3	7.3	7.0	7.7	7.3	6.7	6.0	5.0	6.7
MRSL-PR16	7.0	7.0	7.0	7.0	7.3	7.0	6.0	6.0	6.0	6.7
APR3060	6.7	7.3	7.3	7.0	7.0	7.0	6.0	6.0	5.3	6.6
AMP-R1	7.0	7.3	7.3	7.0	7.0	7.0	5.7	5.7	5.3	6.6
BAR LP 6165	5.7	7.0	7.0	7.0	7.0	7.0	6.7	6.3	5.3	6.6
BAR LP 6158	6.3	7.0	7.0	7.0	7.0	7.0	6.3	6.0	5.0	6.5
BAR LP 6233	6.0	7.0	7.0	7.0	7.3	7.0	6.3	6.0	5.0	6.5
BAR LP 6159	6.0	7.0	7.0	7.0	7.0	7.0	6.0	6.0	5.0	6.4
BAR LP 6131	6.0	7.0	7.0	7.0	7.0	6.7	6.3	6.0	5.0	6.4
BAR LP 6162	6.3	7.0	7.0	7.0	7.0	6.0	6.0	6.0	5.3	6.4
BRIGHTSTAR SLT	6.3	7.0	7.0	6.7	7.0	6.3	6.0	6.0	5.0	6.4
LINN	5.0	6.3	6.3	6.0	6.0	6.0	6.0	6.0	5.0	5.9
LSD VALUE	0.6	0.6	0.6	0.6	0.8	0.7	0.7	0.7	0.8	0.3
C.V. (%)	5.5	4.6	4.5	5.2	6.2	6.1	6.4	6.6	8.5	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 12. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT AMHERST, MA 1/
2017 DATA
TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

NAME	WEAR TOLERANCE	MOW QUALITY	PERCENT ESTABLISHMENT	JUL	QUALITY AUG	RATINGS SEP	OCT	MEAN
PPG-PR 424	4.3	6.7	53.3	7.0	7.0	6.7	6.3	6.8
DLFPS-236/3547	5.3	5.0	53.3	6.0	7.0	6.7	6.7	6.6
PPG-PR 331	5.3	5.7	63.3	7.0	6.7	6.7	6.0	6.6
02BS2	5.7	7.0	50.0	6.0	6.7	6.7	6.7	6.5
DLFPS-236/3544	5.0	6.3	56.7	6.3	7.0	6.3	6.3	6.5
INTENSE	5.7	5.0	43.3	6.0	6.7	7.0	6.3	6.5
PHARAOH	5.7	7.0	53.3	6.3	7.0	6.3	6.3	6.5
PPG-PR 421	5.0	5.7	60.0	6.0	6.7	6.7	6.7	6.5
DLFPS-236/3546	6.0	6.0	50.0	6.0	6.0	7.0	6.7	6.4
CPN	5.7	5.0	56.7	6.3	6.0	6.7	6.0	6.3
DLFPS-236/3556	5.0	7.7	33.3	5.7	6.7	6.7	6.0	6.3
FP2	6.3	8.0	40.0	6.0	7.0	6.7	5.7	6.3
JR-123	6.0	7.3	53.3	5.3	6.3	6.7	6.7	6.3
JR-197	6.0	4.7	46.7	6.0	6.0	6.3	6.7	6.3
NP-2	5.0	7.7	46.7	6.7	6.7	6.0	5.7	6.3
PR-6-15	5.3	7.0	46.7	5.7	6.7	6.7	6.0	6.3
BSP-25	5.7	6.7	50.0	6.0	7.0	6.3	5.3	6.2
DLFPS-236/3545	6.0	7.3	46.7	5.3	6.3	6.7	6.3	6.2
PL2	5.0	7.0	46.7	5.3	6.0	7.0	6.3	6.2
SLUGGER 3GL (PPG-PR 343)	5.0	5.0	53.3	5.7	6.3	6.3	6.3	6.2
PPG-PR 422	5.3	7.3	43.3	6.0	6.7	6.0	6.0	6.2
PST-2A2	6.0	6.7	56.7	5.7	6.3	6.3	6.3	6.2
SNX	5.7	6.7	46.7	6.0	6.7	6.0	6.0	6.2
023	5.3	7.7	58.3	5.7	6.3	6.0	6.3	6.1
DERBY XTREME	5.7	5.3	50.0	5.7	6.0	6.3	6.3	6.1
NP-3	5.7	5.7	46.7	5.3	6.3	6.3	6.3	6.1
FASTBALL 3GL (PPG-PR 329)	6.0	7.3	43.3	5.3	6.3	6.3	6.3	6.1
APPLE 3GL (PPG-PR 339)	6.0	6.0	56.7	6.0	6.0	6.0	6.3	6.1
PPG-PR 385	4.7	4.3	53.3	6.3	6.0	6.0	6.0	6.1
PST-2BDT	5.7	6.3	43.3	5.7	6.7	6.0	6.0	6.1
PST-2MAY	5.3	7.0	33.3	5.7	6.0	6.7	6.0	6.1
XCELERATOR	5.3	6.7	60.0	5.7	5.7	6.7	6.3	6.1
ASP0118GL (A-4G)	7.0	5.7	45.0	5.7	6.0	6.3	6.0	6.0
ASP0218 (A-6D)	5.7	6.7	50.0	5.7	6.3	6.0	6.0	6.0
DLFPS-236/3540	7.3	7.3	46.7	5.7	6.7	6.0	5.7	6.0
DLFPS-236/3550	5.7	6.7	56.7	5.7	6.0	6.3	6.0	6.0
DLFPS-236/3552	7.0	6.0	43.3	6.0	5.3	6.3	6.3	6.0
GRAND SLAM GLD	6.3	6.3	56.7	5.7	5.7	6.7	6.0	6.0
MAN O WAR	6.0	7.0	56.7	5.0	5.7	7.0	6.3	6.0
PPG-PR 367	5.3	7.7	36.7	6.0	6.0	6.0	6.0	6.0
PPG-PR 372	6.0	5.7	53.3	6.0	6.0	6.0	6.0	6.0
SILVER SPORT (PST-2CRP)	5.3	7.0	43.3	5.7	6.0	6.3	6.0	6.0
PST-2FOXY	5.7	6.7	46.7	5.0	6.3	6.3	6.3	6.0
PST-2FDA	5.7	6.3	43.3	5.7	6.3	6.0	6.0	6.0
RAD-PR 112	6.0	7.0	36.7	4.7	6.7	6.7	6.0	6.0
021	5.3	6.7	60.0	5.3	6.0	6.0	6.3	5.9

TABLE 12.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT AMHERST, MA 1/
2017 DATA

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

NAME	WEAR TOLERANCE	MOW QUALITY	PERCENT ESTABLISHMENT	JUL	QUALITY AUG	RATINGS SEP	OCT	MEAN
ASP0117 (A-PR15)	5.0	7.0	50.0	5.7	6.0	6.0	6.0	5.9
AMP-R1	6.3	6.7	56.7	5.7	6.3	6.0	5.7	5.9
DLFPS-236/3543	5.7	5.7	56.7	5.0	5.7	6.3	6.7	5.9
DLFPS-236/3554	5.7	6.3	45.0	5.3	6.3	6.0	6.0	5.9
PPG-PR 360	5.0	7.0	53.3	5.3	6.0	6.3	6.0	5.9
PPG-PR 423	5.3	7.0	43.3	5.7	6.0	6.3	5.7	5.9
02BS1	6.0	6.7	43.3	5.0	6.0	6.0	6.0	5.8
SHIELD (02BS4)	5.0	4.7	43.3	5.7	5.7	6.3	5.7	5.8
BSP-17	6.3	7.0	46.7	5.0	5.7	6.3	6.0	5.8
BWH	5.0	7.3	46.7	6.0	5.7	5.7	5.7	5.8
DLFPS-236/3538	5.0	5.7	43.3	6.0	5.3	6.3	5.7	5.8
DLFPS-236/3541	5.3	6.7	40.0	5.0	6.3	6.3	5.7	5.8
DLFPS-236/3548	5.3	5.7	53.3	5.7	6.7	5.7	5.3	5.8
DLFPS-236/3553	5.0	5.7	56.7	5.3	6.0	6.3	5.7	5.8
MRSL-PR15	5.7	5.0	53.3	5.7	5.7	6.0	5.7	5.8
SLIDER LS (PPG-PR 241)	5.0	5.3	63.3	5.7	6.0	5.7	5.7	5.8
PPG-PR 371	5.3	5.7	50.0	5.3	5.7	6.3	6.0	5.8
PPG-PR 420	5.7	5.7	56.7	6.0	5.7	6.0	5.7	5.8
PST-2GTD	5.0	5.7	50.0	5.7	6.3	6.0	5.3	5.8
RRT	6.0	6.7	43.3	5.3	5.7	5.7	6.3	5.8
SEABISCUIT	4.7	4.3	63.3	5.3	6.3	6.0	5.7	5.8
SR 4650	6.0	6.7	56.7	6.0	6.0	5.7	5.7	5.8
CS-6	5.0	6.3	40.0	5.0	6.0	6.0	5.7	5.7
GO-143	5.7	5.0	36.7	5.7	6.0	5.7	5.3	5.7
MRSL-PR16	5.3	6.7	50.0	5.3	5.7	6.0	5.7	5.7
OVERDRIVE 5G	5.7	6.0	46.7	5.3	5.7	6.0	5.7	5.7
HOMERUN LS (PPG-PR 419)	5.3	6.0	46.7	4.7	6.0	6.0	6.0	5.7
PR-5-16	5.3	4.7	50.0	5.3	5.7	5.7	6.0	5.7
SIGNET	5.0	6.3	56.7	5.7	5.7	5.7	5.7	5.7
UF3	5.0	7.3	36.7	5.0	5.7	5.7	6.3	5.7
UMPQUA	5.3	5.0	46.7	5.3	5.7	6.0	5.7	5.7
DLFPS-236/3542	6.0	4.7	43.3	5.0	5.7	6.3	5.3	5.6
EVOLVE	5.7	5.3	66.7	5.3	5.3	6.0	5.7	5.6
LPB-SD-102	5.0	5.3	56.7	5.0	5.3	6.7	5.3	5.6
LPB-SD-103	5.3	6.3	46.7	5.0	6.0	6.0	5.3	5.6
LPB-SD-104	5.3	6.3	33.3	5.7	5.7	5.7	5.3	5.6
LPB-SD-105	4.7	4.0	30.0	5.0	6.0	6.0	5.3	5.6
FURLONG (LTP-FCB)	5.0	5.0	46.7	5.3	5.3	6.0	5.7	5.6
MENSA	4.3	4.7	53.3	5.3	5.7	5.7	5.7	5.6
PPG-PR 370	5.3	6.3	40.0	5.3	5.3	6.0	5.7	5.6
PST-2EGAD	4.3	7.3	36.7	5.3	6.0	5.7	5.3	5.6
GRAY WOLF (PST-2GAL)	5.3	5.7	46.7	5.3	5.7	5.7	5.7	5.6
APR2616	5.7	7.3	46.7	5.0	5.3	6.3	5.3	5.5
BAR LP 6164	5.0	6.0	40.0	5.3	6.0	5.3	5.3	5.5
GO-142	5.3	5.0	40.0	5.3	5.7	5.7	5.3	5.5
KARMA	5.0	6.3	20.0	5.0	5.7	5.7	5.7	5.5

TABLE 12. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 (CONT'D) GROWN UNDER TRAFFIC STRESS AT AMHERST, MA 1/
 2017 DATA

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

NAME	WEAR TOLERANCE	MOW QUALITY	PERCENT ESTABLISHMENT	JUL	QUALITY RATINGS AUG	SEP	OCT	MEAN
APR2612	5.0	6.7	35.0	5.3	5.3	5.7	5.3	5.4
APR3060	5.0	4.7	53.3	5.3	5.7	5.7	5.0	5.4
ASP0116EXT	4.3	5.7	53.3	5.7	5.7	5.3	5.0	5.4
BRIGHTSTAR SLT	5.0	4.3	63.3	5.0	5.3	5.7	5.7	5.4
GRAY HAWK (PST-2FIND)	4.7	5.3	66.7	5.3	5.0	5.7	5.7	5.4
SAGUARO	5.3	4.7	46.7	5.3	5.0	5.7	5.7	5.4
ALLSTAR III	6.0	6.7	40.0	5.3	5.7	5.0	5.3	5.3
BAR LP 6131	4.7	4.3	50.0	5.0	5.3	5.7	5.0	5.3
BAR LP 6158	4.7	4.7	40.0	5.0	5.3	5.7	5.3	5.3
GO-141	4.7	4.7	56.7	5.0	5.7	5.3	5.3	5.3
JR-747	4.0	4.3	56.7	5.0	5.0	5.7	5.3	5.3
LPB-SD-101	4.0	4.3	46.7	5.3	5.0	5.3	5.3	5.3
PEPPER II (RAD-PR 103)	5.0	7.0	38.3	5.0	5.7	5.3	5.3	5.3
BAR LP 6233	5.0	4.3	46.7	5.0	5.3	5.3	5.0	5.2
JR-888	5.0	5.7	53.3	5.0	5.0	5.3	5.3	5.2
BAR LP 6117	5.0	6.7	46.7	5.0	5.7	5.3	4.3	5.1
BAR LP 6159	5.7	5.3	50.0	4.7	5.7	5.3	4.7	5.1
SAVANT	5.0	6.7	40.0	5.0	5.0	5.3	5.0	5.1
BAR LP 6165	4.7	4.7	33.3	4.7	4.7	5.3	5.3	5.0
DLFPS-238/3014	4.3	6.0	30.0	4.3	5.3	5.0	5.3	5.0
BAR LP 6162	4.0	5.3	26.7	4.3	5.0	5.0	5.3	4.9
LINN	3.3	3.7	13.3	4.0	3.0	3.3	3.0	3.3
LSD VALUE	1.1	1.1	16.7	1.0	0.8	0.7	0.8	0.5
C.V. (%)	12.0	12.1	19.9	10.1	8.6	7.2	8.6	5.3

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 13.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 GROWN UNDER TRAFFIC STRESS AT CORVALLIS, OR 1/
 2017 DATA
 TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/

NAME	OCT	NOV	DEC	MEAN	NAME	OCT	NOV	DEC	MEAN
DLFPS-236/3541	6.7	6.7	6.0	6.4	PST-2PDA	6.0	6.0	5.3	5.8
DLFPS-236/3552	6.3	6.3	6.0	6.2	RRT	6.0	6.0	5.3	5.8
LPB-SD-102	6.3	6.3	6.0	6.2	BAR LP 6117	6.0	6.0	5.0	5.7
SLUGGER 3GL (PPG-PR 343)	6.3	6.3	6.0	6.2	CPN	6.0	6.0	5.0	5.7
DLFPS-236/3542	6.3	6.3	5.7	6.1	DLFPS-236/3538	6.0	6.0	5.0	5.7
DLFPS-236/3550	6.3	6.3	5.7	6.1	DLFPS-236/3554	5.7	5.7	5.7	5.7
FP2	6.3	6.3	5.7	6.1	GRAND SLAM GLD	6.0	6.0	5.0	5.7
MAN O WAR	6.3	6.3	5.7	6.1	LPB-SD-105	6.0	6.0	5.0	5.7
PPG-PR 422	6.3	6.3	5.7	6.1	PPG-PR 360	6.0	6.0	5.0	5.7
PPG-PR 424	6.3	6.3	5.7	6.1	PPG-PR 367	5.7	5.7	5.7	5.7
PST-2EGAD	6.0	6.3	6.0	6.1	PPG-PR 420	5.7	5.7	5.7	5.7
DLFPS-236/3540	6.3	6.3	5.3	6.0	GRAY HAWK (PST-2FIND)	6.0	6.0	5.0	5.7
DLFPS-236/3544	6.3	6.3	5.3	6.0	SAGUARO	6.0	6.0	5.0	5.7
PST-2A2	6.0	6.0	6.0	6.0	SAVANT	6.0	6.0	5.0	5.7
SEABISCUIT	6.0	6.0	6.0	6.0	UF3	6.0	6.0	5.0	5.7
02BS1	6.0	6.0	5.7	5.9	BAR LP 6164	5.7	5.7	5.3	5.6
SHIELD (02BS4)	6.0	6.0	5.7	5.9	DLFPS-236/3545	5.7	5.7	5.3	5.6
DERBY XTREME	6.0	6.0	5.7	5.9	DLFPS-236/3547	5.7	5.7	5.3	5.6
DLFPS-236/3553	6.0	6.0	5.7	5.9	DLFPS-236/3556	5.7	5.7	5.3	5.6
LPB-SD-101	5.7	6.0	6.0	5.9	EVOLVE	5.7	5.7	5.3	5.6
FURLONG (LTP-FCB)	6.0	6.0	5.7	5.9	JR-123	5.7	5.7	5.3	5.6
NP-2	6.0	6.0	5.7	5.9	APPLE 3GL (PPG-PR 339)	5.3	5.7	5.7	5.6
OVERDRIVE 5G	6.0	6.0	5.7	5.9	PPG-PR 371	5.7	5.7	5.3	5.6
PPG-PR 331	6.0	6.0	5.7	5.9	GRAY WOLF (PST-2GAL)	5.7	5.7	5.3	5.6
PPG-PR 372	6.0	6.0	5.7	5.9	ASP0117 (A-PR15)	5.3	5.7	5.3	5.4
PR-5-16	6.0	6.0	5.7	5.9	BAR LP 6131	5.3	5.7	5.3	5.4
PST-2BDT	6.0	6.0	5.7	5.9	GO-141	5.7	5.7	5.0	5.4
PST-2FOXY	6.0	6.0	5.7	5.9	JR-747	5.7	5.7	5.0	5.4
UMPQUA	6.0	6.0	5.7	5.9	LPB-SD-103	6.0	5.7	4.7	5.4
021	6.0	6.0	5.3	5.8	MRSI-PR15	5.3	5.7	5.3	5.4
02BS2	5.7	6.0	5.7	5.8	PPG-PR 370	5.7	5.7	5.0	5.4
BAR LP 6158	6.0	6.0	5.3	5.8	HOMERUN LS (PPG-PR 419)	5.7	5.7	5.0	5.4
BAR LP 6165	6.0	6.0	5.3	5.8	RAD-PR 112	5.3	5.7	5.3	5.4
DLFPS-236/3543	6.0	6.0	5.3	5.8	ASP0116EXT	5.3	5.3	5.3	5.3
DLFPS-236/3548	6.0	6.0	5.3	5.8	GO-142	5.7	5.7	4.7	5.3
INTENSE	6.0	6.0	5.3	5.8	KARMA	5.3	5.3	5.3	5.3
LPB-SD-104	6.0	6.0	5.3	5.8	XCELERATOR	5.7	5.7	4.7	5.3
MENSA	6.0	6.0	5.3	5.8	023	5.3	5.3	5.0	5.2
NP-3	6.0	6.0	5.3	5.8	ASP0118GL (A-4G)	5.3	5.3	5.0	5.2
PHARAOH	5.7	6.0	5.7	5.8	ASP0218 (A-6D)	5.3	5.3	5.0	5.2
PL2	6.0	6.0	5.3	5.8	ALLSTAR III	5.3	5.3	5.0	5.2
SLIDER LS (PPG-PR 241)	6.0	6.0	5.3	5.8	APR2616	5.3	5.3	5.0	5.2
FASTERBALL 3GL (PPG-PR 329)	6.0	6.0	5.3	5.8	BAR LP 6159	5.3	5.3	5.0	5.2
PPG-PR 421	5.7	6.0	5.7	5.8	BSP-25	5.0	5.3	5.3	5.2
PR-6-15	6.0	6.0	5.3	5.8	CS-6	5.3	5.3	5.0	5.2
PST-2GTD	6.0	6.0	5.3	5.8	DLFPS-236/3546	5.3	5.3	5.0	5.2
PST-2MAY	6.0	6.0	5.3	5.8	GO-143	5.3	5.3	5.0	5.2

TABLE 13.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT CORVALLIS, OR 1/
2017 DATA

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

NAME	OCT	NOV	DEC	MEAN
JR-197	5.0	5.3	5.3	5.2
SILVER SPORT (PST-2CRP)	5.3	5.3	5.0	5.2
SIGNET	5.3	5.3	5.0	5.2
PPG-PR 385	5.3	5.3	4.7	5.1
PPG-PR 423	5.3	5.3	4.7	5.1
PEPPER II (RAD-PR 103)	5.3	5.3	4.7	5.1
BWH	5.0	5.0	5.0	5.0
DLFPS-238/3014	5.0	5.0	5.0	5.0
JR-888	5.0	5.0	5.0	5.0
MRSL-PR16	5.0	5.0	5.0	5.0
SNX	5.0	5.0	5.0	5.0
SR 4650	5.0	5.0	5.0	5.0
APR2612	5.0	5.0	4.7	4.9
APR3060	5.0	5.0	4.7	4.9
BAR LP 6162	5.0	5.0	4.7	4.9
BAR LP 6233	5.0	5.0	4.7	4.9
BRIGHTSTAR SLT	5.0	5.0	4.7	4.9
BSP-17	4.7	5.0	5.0	4.9
AMP-R1	4.7	4.7	4.7	4.7
LINN	4.7	4.7	4.3	4.6
LSD VALUE	1.0	0.9	1.5	0.9
C.V. (%)	8.8	8.5	10.4	8.1

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 14.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT BLACKSBURG, VA 1/
2017 DATA
TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

NAME	APR	QUALITY RATINGS					QUALITY RATINGS			2-WEEKS		BEFORE TRAFFIC		MIDDLE OF TRAFFIC		LAST TRAFFIC	
		APR	MAY	JUN	JUL	AUG	SEP	BEFORE TRAFFIC	MIDDLE TRAFFIC	LAST TRAFFIC	AFTER TRAFFIC	% GREEN COVER	% BARE COVER	% GREEN COVER	% BARE COVER	% GREEN COVER	% BARE COVER
PEPPER II (RAD-PR 103)	6.0	5.7	7.0	5.7	8.0	7.3	2.7	3.3	3.0	3.0	26.7	72.3	60.0	40.0	63.3	35.7	
EVOLVE	5.3	5.7	7.0	5.7	8.3	7.3	3.3	3.7	3.7	28.3	70.7	60.0	40.0	61.7	37.3		
BAR LP 6233	5.3	5.3	7.7	6.0	6.7	6.0	3.0	3.3	3.3	3.3	23.3	75.7	55.0	45.0	60.0	39.0	
DLFPS-236/3542	5.7	6.0	7.7	5.7	8.0	6.7	3.0	3.3	3.3	3.3	28.3	70.7	58.3	41.7	60.0	39.0	
BAR LP 6158	6.3	5.7	6.3	5.0	6.7	6.3	3.3	3.3	3.3	3.3	28.3	70.7	56.7	43.3	58.3	40.7	
PST-2FOXY	5.3	5.3	7.3	5.0	7.7	7.0	3.3	3.0	3.0	3.0	25.0	74.0	55.0	45.0	58.3	40.7	
GRAY WOLF (PST-2GAL)	7.0	6.0	7.3	6.0	8.0	7.0	2.7	3.3	3.3	3.3	21.7	77.3	56.7	43.3	58.3	40.7	
BAR LP 6165	6.0	5.7	7.7	5.7	8.3	7.7	3.3	3.7	3.7	3.7	25.0	74.0	56.7	43.3	56.7	42.3	
HOMERUN LS (PPG-PR 419)	6.3	6.0	7.3	6.0	8.7	7.0	3.3	3.3	3.3	3.3	31.7	67.3	55.0	45.0	56.7	42.3	
02BS1	5.7	5.3	6.0	6.0	7.7	7.0	3.0	3.3	3.0	3.0	26.7	72.3	55.0	45.0	55.0	44.0	
SHIELD (02BS4)	5.7	5.7	6.7	6.0	8.3	7.0	2.7	3.3	3.3	3.3	20.0	79.0	50.0	50.0	55.0	50.7	
APR3060	5.3	5.7	7.3	6.0	7.3	6.3	3.0	3.3	3.3	3.3	21.7	77.3	53.3	46.7	55.0	44.0	
PST-2EGAD	5.7	5.0	6.3	5.0	8.0	7.7	3.3	3.3	3.3	3.3	21.7	77.3	51.7	48.3	55.0	44.0	
SEABISCUIT	6.3	6.0	7.7	6.0	7.0	6.3	3.0	3.3	3.3	3.3	25.0	74.0	53.3	46.7	55.0	44.0	
ASP0117 (A-PR15)	4.7	4.3	6.3	5.3	7.3	7.0	3.0	3.0	3.0	3.0	26.7	72.3	53.3	46.7	53.3	45.7	
DLFPS-238/3014	6.3	5.7	7.3	6.0	6.7	6.3	3.0	3.3	2.7	2.7	25.0	74.0	51.7	48.3	53.3	45.7	
ASP0218 (A-6D)	6.0	5.7	6.0	5.0	8.3	6.3	2.7	3.3	3.3	3.3	28.3	70.7	48.3	51.7	51.7	47.3	
CPN	6.3	5.7	7.3	6.0	8.0	6.7	2.7	3.0	3.0	3.0	28.3	70.7	50.0	50.0	51.7	47.3	
DLFPS-236/3544	6.0	6.0	7.0	6.0	9.0	7.3	3.0	3.3	3.3	3.3	23.3	75.7	51.7	48.3	51.7	47.3	
BAR LP 6159	6.0	5.7	7.0	4.7	6.7	6.0	3.0	3.0	3.0	3.0	21.7	77.3	46.7	53.3	50.0	49.0	
GO-141	5.7	6.0	6.7	5.0	7.0	6.7	3.0	3.0	3.0	3.0	26.7	72.3	50.0	50.0	50.0	49.0	
XCELERATOR	5.7	6.0	7.3	6.0	7.3	6.0	2.7	3.0	3.0	3.0	26.7	72.3	50.0	50.0	50.0	49.0	
DLFPS-236/3545	5.3	5.7	7.0	6.7	9.0	7.7	3.3	3.0	3.0	3.0	28.3	70.7	48.3	51.7	48.3	50.7	
JR-123	5.7	6.0	7.3	4.3	7.0	6.3	3.0	2.7	2.7	2.7	25.0	74.0	48.3	51.7	48.3	50.7	
BSP-17	4.0	4.7	5.7	3.7	5.0	4.7	2.3	2.3	2.3	2.3	21.7	77.3	45.0	55.0	46.7	52.3	
PR-5-16	7.0	6.0	7.7	6.3	8.0	7.0	3.3	3.3	3.3	3.3	23.3	75.7	45.0	55.0	46.7	52.3	
SNX	6.0	5.3	6.7	4.7	6.7	6.3	3.3	3.0	3.0	3.0	20.0	79.0	38.3	61.7	46.7	52.3	
DLFPS-236/3543	6.0	5.7	7.3	6.0	7.0	6.3	3.0	2.7	2.7	2.7	18.3	80.7	43.3	56.7	45.0	54.0	
PPG-PR 370	6.0	5.3	7.7	6.0	8.0	7.0	3.0	3.0	3.0	3.0	26.7	72.3	43.3	56.7	45.0	54.0	
PPG-PR 420	6.7	6.3	7.3	5.3	8.3	7.3	2.7	2.7	2.7	2.7	28.3	70.7	45.0	55.0	45.0	54.0	
PPG-PR 421	6.3	6.3	8.0	6.3	8.0	6.3	2.7	2.7	2.7	2.7	30.0	69.0	41.7	58.3	45.0	54.0	
MRSL-PR16	6.0	5.7	6.7	4.3	7.3	7.3	3.3	2.7	2.7	2.7	25.0	74.0	43.3	56.7	43.3	55.7	
PPG-PR 371	5.7	5.7	7.3	6.7	8.3	7.0	3.0	3.0	3.0	3.0	25.0	74.0	43.3	56.7	43.3	55.7	
GRAY HAWK (PST-2FIND)	5.3	5.0	7.3	5.0	6.0	5.7	2.7	2.7	2.7	2.7	18.3	80.7	38.3	61.7	43.3	55.7	
SIGNET	6.0	5.7	6.0	5.0	7.7	7.0	3.0	2.7	2.7	2.7	28.3	70.7	43.3	56.7	43.3	55.7	
DLFPS-236/3547	6.0	5.3	7.7	6.3	7.3	6.7	2.7	2.7	2.7	2.7	18.3	80.7	40.0	60.0	41.7	57.3	
PHARAOH	6.0	5.0	7.0	7.0	7.7	6.0	2.3	2.3	2.3	2.3	18.3	80.7	40.0	60.0	41.7	57.3	
PPG-PR 360	6.7	6.7	8.0	6.3	6.7	5.3	2.7	2.7	2.7	2.7	21.7	77.3	41.7	58.3	41.7	57.3	
PPG-PR 422	6.7	5.7	7.3	6.3	6.3	5.7	2.0	2.7	2.7	2.7	18.3	80.7	38.3	61.7	41.7	57.3	
BSP-25	5.7	5.7	6.3	6.3	6.7	6.3	2.7	2.3	2.3	2.3	23.3	75.7	40.0	60.0	40.0	59.0	
BWH	5.3	5.3	5.7	4.3	6.0	5.3	2.3	2.3	2.3	2.3	16.7	82.3	40.0	60.0	40.0	59.0	
CS-6	5.3	5.7	6.7	5.0	6.0	6.0	2.7	2.3	2.3	2.3	21.7	77.3	38.3	61.7	40.0	59.0	
DLFPS-236/3550	6.3	6.3	6.3	4.7	8.0	6.7	3.0	2.7	2.7	2.7	25.0	74.0	40.0	60.0	40.0	59.0	
FP2	6.0	6.0	7.3	6.3	8.3	7.0	3.0	2.7	2.7	2.7	20.0	79.0	40.0	60.0	40.0	59.0	
GO-142	6.3	5.7	6.3	4.7	7.0	6.0	2.3	2.7	2.7	2.7	23.3	75.7	36.7	63.3	40.0	59.0	
SLUGGER 3GL (PPG-PR 343)	7.3	6.7	7.7	7.0	7.3	6.3	2.7	2.3	2.3	2.3	20.0	79.0	40.0	60.0	40.0	59.0	

TABLE 14.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT BLACKSBURG, VA 1/
2017 DATA
TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

NAME	QUALITY RATINGS						QUALITY RATINGS			2-WEEKS		BEFORE TRAFFIC		MIDDLE OF TRAFFIC		LAST TRAFFIC	
	APR	MAY	JUN	JUL	AUG	SEP	BEFORE TRAFFIC	MIDDLE TRAFFIC	LAST TRAFFIC	AFTER TRAFFIC	% GREEN COVER	% BARE COVER	% GREEN COVER	% BARE COVER	% GREEN COVER	% BARE COVER	
PPG-PR 367	6.0	5.3	7.0	6.7	7.7	6.7	2.3	2.7	2.7	2.7	20.0	79.0	40.0	60.0	40.0	59.0	
PR-6-15	5.7	5.7	6.7	5.0	6.7	6.3	2.7	2.7	2.7	2.7	18.3	80.7	38.3	61.7	40.0	59.0	
UF3	4.3	5.3	6.0	5.7	6.3	5.7	3.0	2.7	2.7	2.7	23.3	75.7	40.0	60.0	40.0	59.0	
UMPQUA	5.7	5.3	7.7	6.3	8.0	7.3	3.0	3.0	3.0	3.0	20.0	79.0	38.3	61.7	40.0	59.0	
ASP0118GL (A-4G)	5.3	5.3	6.3	5.3	6.7	6.0	2.3	2.7	2.7	2.7	20.0	79.0	36.7	63.3	38.3	60.7	
APR2616	6.3	5.3	7.7	6.3	7.0	6.7	3.0	3.0	3.0	3.0	20.0	79.0	36.7	63.3	38.3	60.7	
ASP0116EXT	5.0	5.0	6.0	5.0	8.0	7.7	3.0	3.0	3.0	3.0	30.0	69.0	36.7	63.3	38.3	60.7	
BAR LP 6164	6.3	5.7	7.3	6.0	8.0	6.7	2.7	2.7	2.7	2.7	18.3	80.7	33.3	66.7	38.3	60.7	
PPG-PR 424	6.0	5.7	7.3	6.7	7.3	6.7	3.0	3.0	3.0	3.0	25.0	74.0	38.3	61.7	38.3	60.7	
SILVER SPORT (PST-2CRP)	6.3	6.3	8.0	6.7	7.7	7.0	2.7	3.3	3.0	3.0	18.3	80.7	48.3	51.7	37.7	61.3	
DLFPS-236/3538	7.0	6.0	8.3	6.0	7.7	6.7	2.0	2.3	2.3	2.3	16.7	82.3	36.7	63.3	36.7	62.3	
DLFPS-236/3552	6.7	6.7	7.3	6.0	8.3	7.0	2.3	2.7	2.7	2.7	21.7	77.3	36.7	63.3	36.7	62.3	
DLFPS-236/3553	7.0	6.3	7.0	5.7	7.0	6.3	2.7	2.7	2.7	2.7	15.0	84.0	35.0	65.0	36.7	62.3	
DLFPS-236/3554	6.7	6.0	7.3	6.7	8.7	7.3	2.7	2.7	2.7	2.7	16.7	82.3	35.0	65.0	36.7	62.3	
AMP-R1	5.3	5.3	6.3	4.7	6.7	6.3	2.3	2.7	2.7	2.7	20.0	79.0	33.3	66.7	35.0	64.0	
BAR LP 6162	6.7	6.0	7.0	7.0	7.3	7.0	3.3	2.7	2.7	2.7	25.0	74.0	33.3	66.7	35.0	64.0	
BRIGHTSTAR SLT	6.3	5.3	6.0	4.7	6.3	5.7	2.0	2.0	2.0	2.0	20.0	79.0	30.0	70.0	35.0	64.0	
DLFPS-236/3548	6.3	6.0	7.7	6.0	6.7	6.7	3.0	2.7	2.7	2.7	18.3	80.7	35.0	65.0	35.0	64.0	
GRAND SLAM GLD	6.3	6.0	7.3	6.3	7.0	6.0	2.7	2.3	2.3	2.3	20.0	79.0	35.0	65.0	35.0	64.0	
NP-3	5.3	6.0	6.7	6.3	7.7	6.7	2.7	2.3	2.3	2.3	18.3	80.7	33.3	66.7	35.0	64.0	
DLFPS-236/3556	5.3	5.3	7.3	5.3	7.3	6.7	2.7	2.3	2.3	2.3	21.7	77.3	30.0	70.0	33.3	65.7	
PL2	6.3	5.7	7.7	5.3	7.0	6.7	2.7	2.3	2.3	2.3	18.3	80.7	33.3	66.7	33.3	65.7	
RRT	6.3	6.7	6.3	5.7	7.7	6.3	2.0	2.0	2.0	2.0	21.7	77.3	33.3	66.7	33.3	65.7	
BAR LP 6131	5.7	6.0	7.3	5.3	7.0	6.7	2.7	2.7	2.7	2.7	16.7	82.3	31.7	68.3	31.7	67.3	
DLFPS-236/3540	6.3	6.3	7.7	5.0	6.7	6.0	3.0	2.7	2.7	2.7	23.3	75.7	31.7	68.3	31.7	67.3	
PST-2BDT	5.7	5.7	6.7	5.0	6.0	6.0	2.7	2.3	2.3	2.3	23.3	75.7	30.0	70.0	31.7	67.3	
PST-2GTD	6.7	5.7	6.7	6.3	7.3	6.7	2.3	2.3	2.3	2.3	18.3	80.7	30.0	70.0	31.7	67.3	
PPG-PR 385	6.7	5.7	7.7	5.7	7.3	6.7	2.7	2.7	2.7	2.7	20.0	79.0	36.7	63.3	31.0	68.0	
ALLSTAR III	5.7	5.3	6.0	5.0	6.3	5.7	2.3	2.7	2.7	2.7	16.7	82.3	30.0	70.0	30.0	69.0	
BAR LP 6117	6.3	6.0	7.7	6.0	8.3	7.3	3.0	2.7	2.7	2.7	20.0	79.0	28.3	71.7	30.0	69.0	
JR-197	6.0	5.7	6.7	5.3	7.0	6.0	2.3	2.7	2.7	2.7	15.0	84.0	28.3	71.7	30.0	69.0	
OVERDRIVE 5G	6.3	6.0	6.7	5.7	6.7	6.7	2.7	2.7	2.7	2.7	20.0	79.0	26.7	73.3	30.0	69.0	
PST-2MAY	5.3	5.0	7.3	5.7	6.0	5.7	2.7	2.3	2.3	2.3	18.3	80.7	28.3	71.7	30.0	69.0	
021	6.0	5.7	6.3	5.7	6.7	6.3	2.7	2.0	2.0	2.0	20.0	79.0	27.7	72.3	29.3	69.7	
DLFPS-236/3541	6.7	6.0	7.3	5.3	7.0	6.3	2.3	2.0	2.0	2.0	11.7	87.3	29.0	71.0	29.0	70.0	
GO-143	5.3	5.7	6.3	4.7	7.7	6.7	2.3	1.7	1.7	21.7	77.3	28.3	71.7	28.3	70.7		
RAD-PR 112	6.3	6.0	6.0	5.3	5.7	6.0	2.0	2.3	2.3	2.3	15.0	84.0	26.7	73.3	28.3	70.7	
MRSL-PR15	5.7	5.3	6.7	5.0	7.3	6.0	2.0	2.3	2.3	2.3	10.0	89.0	25.0	75.0	26.7	72.3	
SLIDER LS (PPG-PR 241)	5.7	5.3	6.3	6.0	7.7	6.3	2.0	2.0	2.0	2.0	18.3	80.7	23.3	76.7	26.7	72.3	
PPG-PR 331	6.3	6.3	7.0	6.3	7.0	5.7	2.0	2.0	2.0	2.0	20.0	79.0	26.7	73.3	26.7	72.3	
PPG-PR 372	6.3	6.0	7.3	6.7	7.7	6.7	2.3	2.0	2.0	2.0	16.7	82.3	26.7	73.3	26.7	72.3	
KARMA	7.0	6.7	8.0	6.0	6.7	5.7	1.7	2.0	2.0	2.0	13.3	85.7	25.0	75.0	25.0	74.0	
MAN O WAR	6.3	6.0	6.7	5.7	5.7	5.3	1.7	2.0	2.0	2.0	16.7	82.3	21.7	78.3	25.0	74.0	
APPLE 3GL (PPG-PR 339)	5.7	5.0	7.0	6.0	7.0	6.0	2.0	2.0	2.0	2.0	18.3	80.7	23.3	76.7	25.0	74.0	
SR 4650	6.0	5.7	7.3	6.3	8.0	7.0	2.0	1.7	1.7	1.7	18.3	80.7	25.0	75.0	25.0	74.0	

TABLE 14.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT BLACKSBURG, VA 1/
2017 DATA
TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/

NAME	APR	MAY	QUALITY RATINGS				QUALITY RATINGS			2-WEEKS		BEFORE TRAFFIC		MIDDLE OF TRAFFIC		LAST TRAFFIC	
			JUN	JUL	AUG	SEP	BEFORE TRAFFIC	MIDDLE TRAFFIC	LAST TRAFFIC	AFTER TRAFFIC	% GREEN COVER	% BARE COVER	% GREEN COVER	% BARE COVER	% GREEN COVER	% BARE COVER	
JR-747	6.3	6.3	6.3	5.0	5.7	5.3	1.7	1.7	1.7	1.7	13.3	85.7	22.3	77.7	24.0	75.0	
JR-888	6.7	6.0	8.3	5.7	5.3	5.0	2.0	1.7	1.7	1.7	13.3	85.7	23.3	76.7	23.3	75.7	
PPG-PR 423	6.3	5.7	7.7	6.7	6.3	6.0	2.3	2.0	2.0	2.0	16.7	82.3	23.3	76.7	23.3	75.7	
PST-2PDA	6.7	5.7	7.3	5.3	7.3	6.7	2.7	2.3	2.3	2.3	15.0	84.0	23.3	76.7	23.3	75.7	
02BS2	5.0	5.3	6.3	5.3	7.0	5.7	2.7	2.0	2.0	2.0	25.0	74.0	21.7	78.3	21.7	77.3	
DLFPS-236/3546	5.7	5.7	7.3	6.0	6.3	6.3	2.3	2.3	2.3	2.3	21.7	77.3	21.7	78.3	21.7	77.3	
023	6.7	6.3	7.7	5.0	6.7	6.0	2.0	1.7	1.7	1.7	16.7	82.3	18.3	81.7	20.0	79.0	
APR2612	5.7	5.7	7.0	5.7	6.3	6.0	2.3	1.7	1.7	1.7	16.7	82.3	20.0	80.0	20.0	79.0	
FURLONG (LTP-FCB)	6.7	5.7	7.7	6.7	6.3	5.7	2.0	1.7	1.7	1.7	16.7	82.3	18.3	81.7	20.0	79.0	
NP-2	5.7	5.3	7.3	6.7	6.7	6.0	2.0	1.7	1.7	1.7	16.7	82.3	18.3	81.7	20.0	79.0	
PST-2A2	6.0	5.7	7.0	5.3	6.7	6.7	2.3	2.0	2.0	2.0	16.7	82.3	20.0	80.0	20.0	79.0	
DERBY XTREME	6.7	5.7	6.7	5.7	7.3	6.0	1.3	1.7	1.7	1.7	11.7	87.3	17.7	82.3	19.3	79.7	
SAGUARO	6.0	6.0	7.3	5.0	7.0	6.0	1.7	1.7	1.7	1.7	13.3	85.7	16.7	83.3	18.3	80.7	
LPB-SD-101	6.3	5.7	8.3	5.0	5.3	5.0	2.0	1.7	1.7	1.7	11.7	87.3	14.0	86.0	15.7	83.3	
LPB-SD-105	5.0	5.3	7.0	5.3	4.3	3.7	1.3	1.3	1.3	1.3	15.0	84.0	15.7	84.3	15.7	83.3	
INTENSE	6.0	6.7	7.7	7.0	5.7	5.7	2.3	1.7	1.7	1.7	16.7	82.3	13.3	86.7	15.0	84.0	
FASTBALL 3GL (PPG-PR 329)	6.0	5.7	7.7	5.7	7.0	6.3	2.3	1.7	1.7	1.7	23.3	75.7	15.0	85.0	15.0	84.0	
MENSA	6.3	6.0	7.7	5.0	5.0	4.0	1.3	1.3	1.3	1.3	10.0	89.0	11.3	88.7	13.0	86.0	
SAVANT	5.3	6.3	8.0	6.0	5.0	4.7	1.7	1.3	1.3	1.3	11.7	87.3	12.3	87.7	12.3	86.7	
LPB-SD-102	5.3	5.3	8.0	5.0	4.0	4.0	1.3	1.0	1.0	1.0	11.7	87.3	7.7	92.3	7.7	91.3	
LPB-SD-104	6.3	5.7	8.0	4.3	4.7	4.3	1.7	1.0	1.0	1.0	6.7	92.3	5.0	95.0	6.7	92.3	
LPB-SD-103	6.0	6.3	8.0	4.3	4.3	4.0	1.0	1.0	1.0	1.0	10.0	89.0	4.0	96.0	5.7	93.3	
LINN	5.0	5.0	6.7	3.0	3.7	3.7	1.0	1.0	1.0	1.0	5.0	94.0	4.0	96.0	4.0	95.0	
LSD VALUE	3.1	1.9	2.7	2.2	3.3	2.3	1.7	1.6	1.6	1.6	19.5	19.5	50.9	50.9	55.7	57.0	
C.V. (%)	15.3	11.3	13.1	17.6	20.3	17.1	29.1	31.1	30.8	30.9	37.2	9.5	54.9	29.5	55.2	31.8	

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 15.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER DROUGHT STRESS AT LOGAN, UT 1/

2017 DATA

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

NAME	SPRING GREENUP	PINK SNOW MOLD	PERCENT ESTABLISHMENT SEPTEMBER	OCTOBER	APR	MAY	JUN	QUALITY JUL	RATINGS AUG	SEP	OCT	MEAN
DLFPS-236/3554	8.0	6.3	40.0	86.7	5.0	6.7	7.0	4.3	5.7	6.0	4.0	5.5
DLFPS-236/3542	7.3	6.3	40.0	86.7	5.3	7.0	7.3	3.3	5.0	5.7	4.3	5.4
SILVER SPORT (PST-2CRP)	7.7	7.3	36.7	83.3	4.7	6.7	6.3	3.0	6.3	6.0	5.0	5.4
BAR LP 6164	8.0	6.0	43.3	90.0	6.0	6.7	6.3	3.3	4.7	5.7	4.7	5.3
DLFPS-236/3540	8.0	6.3	36.7	86.7	5.3	6.7	6.7	3.3	5.0	5.7	4.0	5.2
DLFPS-236/3544	7.7	6.0	36.7	80.0	5.0	5.7	6.3	4.0	5.3	5.3	5.0	5.2
SAVANT	7.7	5.7	50.0	89.7	5.7	6.0	6.7	4.3	4.7	5.3	4.0	5.2
DLFPS-236/3547	8.0	6.3	40.0	90.0	5.0	5.7	6.3	4.0	5.0	5.3	4.3	5.1
LPB-SD-104	7.7	5.7	43.3	86.7	4.3	6.3	6.7	4.7	5.0	5.7	3.0	5.1
MENSA	7.7	6.0	43.3	93.0	5.0	7.0	7.0	3.7	4.3	5.0	4.0	5.1
SLIDER LS (PPG-PR 241)	7.7	5.3	40.0	83.0	4.7	5.7	6.3	5.0	5.0	5.0	4.3	5.1
PPG-PR 370	8.3	6.0	46.7	93.0	5.7	6.3	6.0	3.3	5.0	5.3	4.0	5.1
PPG-PR 421	8.0	6.7	46.7	92.7	4.7	6.7	6.7	3.3	4.3	5.7	4.3	5.1
PPG-PR 423	7.7	5.7	43.3	86.7	5.3	7.0	6.7	4.0	4.7	4.7	3.7	5.1
APR3060	7.0	6.7	36.7	79.7	4.7	7.0	5.7	3.7	5.0	4.7	4.3	5.0
BSP-25	8.0	6.3	43.3	93.0	5.0	6.3	7.3	4.0	4.0	4.7	3.3	5.0
DLFPS-236/3538	8.0	6.7	33.3	83.3	4.7	6.3	6.0	3.3	4.3	5.7	4.3	5.0
DLFPS-236/3556	7.7	6.3	40.0	86.3	5.3	5.3	6.0	3.7	5.0	5.3	4.3	5.0
INTENSE	7.7	6.0	40.0	86.7	5.7	5.0	7.0	3.7	4.7	5.0	4.0	5.0
JR-197	7.7	6.0	50.0	83.3	4.3	6.0	6.7	4.3	4.7	5.3	3.7	5.0
LPB-SD-102	7.3	5.0	43.3	86.7	4.7	6.3	7.3	4.3	4.3	4.7	3.3	5.0
NP-2	7.3	5.3	40.0	86.3	5.0	5.7	7.0	4.0	4.3	5.0	4.3	5.0
PPG-PR 420	7.7	5.3	46.7	93.0	5.3	6.3	7.0	3.3	4.0	4.7	4.0	5.0
GRAY WOLF (PST-2GAL)	8.0	5.7	36.7	86.3	5.0	6.0	5.0	4.3	5.0	5.7	4.3	5.0
PST-2MAY	8.0	6.3	36.7	89.7	4.7	5.7	7.3	3.0	4.7	5.7	4.3	5.0
SNX	7.3	7.0	36.7	76.7	4.3	6.0	6.0	3.3	4.3	6.3	4.3	5.0
ASP0117 (A-PR15)	7.7	6.7	46.7	89.7	5.0	5.3	6.3	4.0	5.0	4.7	4.0	4.9
BSP-17	7.7	6.3	40.0	90.0	5.0	6.3	6.3	3.0	4.3	5.0	4.0	4.9
CS-6	7.0	6.0	40.0	83.0	4.3	5.7	6.7	4.0	4.3	5.0	4.3	4.9
DLFPS-236/3543	7.7	7.0	33.3	86.7	5.0	5.0	6.7	3.7	4.7	5.0	4.3	4.9
JR-747	7.3	4.7	43.3	90.0	5.0	7.0	7.0	3.7	4.0	4.0	3.3	4.9
NP-3	8.0	5.7	43.3	92.7	5.0	5.3	6.0	3.3	4.7	5.0	4.7	4.9
PPG-PR 331	8.0	5.7	36.7	93.0	5.3	5.0	5.7	3.7	4.3	5.7	4.3	4.9
PPG-PR 360	8.0	6.0	43.3	90.0	5.3	6.0	7.0	3.3	3.7	4.7	4.0	4.9
GRAY HAWK (PST-2FIND)	7.7	6.7	36.7	79.7	4.3	5.3	6.3	3.7	4.7	5.0	4.7	4.9
RAD-PR 112	7.7	6.7	33.3	86.3	5.0	6.3	6.3	3.3	4.3	4.3	4.3	4.9
SAGUARO	7.7	6.0	36.7	86.7	5.0	7.0	6.0	3.3	3.7	4.7	4.3	4.9
LPB-SD-103	8.0	5.7	36.7	89.7	5.0	6.7	6.3	3.3	4.0	4.3	3.7	4.8
LPB-SD-105	7.7	7.0	30.0	66.7	4.3	5.7	6.0	3.3	4.7	5.3	4.3	4.8
PHARAOH	7.3	5.7	40.0	83.0	4.3	5.0	6.0	3.3	4.7	5.3	5.0	4.8
APPLE 3GL (PPG-PR 339)	7.7	5.3	43.3	86.3	5.0	6.0	5.7	3.7	4.3	5.0	4.0	4.8
SLUGGER 3GL (PPG-PR 343)	7.3	6.3	36.7	76.7	5.0	6.3	6.0	3.7	4.3	4.7	3.7	4.8
PST-2A2	7.7	7.0	36.7	73.3	4.3	6.3	5.3	3.7	4.0	5.0	5.0	4.8
SIGNET	7.3	6.3	40.0	83.0	4.7	6.3	6.3	3.0	4.0	4.3	4.7	4.8
021	7.7	6.0	43.3	83.3	4.3	6.7	6.7	3.0	3.7	4.7	4.0	4.7
02BS2	7.7	6.7	40.0	83.3	4.7	5.3	6.3	3.3	4.3	4.3	4.3	4.7
APR2612	7.3	6.3	40.0	76.7	4.3	6.3	6.0	3.7	4.0	4.7	3.7	4.7

TABLE 15.
(CONT'D)MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER DROUGHT STRESS AT LOGAN, UT 1/
2017 DATA

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

NAME	SPRING GREENUP	PINK SNOW MOLD	PERCENT ESTABLISHMENT	OCTOBER	APR	MAY	JUN	QUALITY JUL	RATINGS AUG	SEP	OCT	MEAN
APR2616	8.0	6.0	43.3	90.0	5.7	6.3	5.7	3.0	3.7	4.3	4.0	4.7
BAR LP 6117	7.7	5.7	36.7	86.7	5.3	6.0	6.3	3.3	4.0	4.3	3.7	4.7
DLFPS-236/3541	8.0	6.0	36.7	86.7	5.7	6.0	6.0	2.7	3.3	4.7	4.3	4.7
LPB-SD-101	7.0	5.7	36.7	86.3	4.7	5.7	6.0	3.0	4.3	5.0	4.0	4.7
MRSL-PR15	8.0	6.3	46.7	93.0	5.3	6.7	6.3	2.7	3.3	4.7	4.0	4.7
MRSL-PR16	8.0	5.3	40.0	86.7	5.3	6.0	6.7	3.0	3.3	4.3	4.0	4.7
PPG-PR 372	7.7	6.7	33.3	76.7	5.0	5.0	5.7	4.0	4.3	4.7	4.3	4.7
PPG-PR 385	7.3	5.7	40.0	86.7	5.3	5.7	5.7	3.0	4.0	5.0	4.3	4.7
PPG-PR 422	8.0	6.0	40.0	86.3	5.7	5.7	5.3	3.7	3.7	4.7	4.3	4.7
PR-5-16	7.3	6.0	43.3	86.7	5.0	6.3	6.3	2.7	3.3	4.7	4.3	4.7
PST-2PDA	7.7	5.7	40.0	90.0	5.3	5.3	5.0	3.0	4.7	5.0	4.3	4.7
UF3	7.7	6.7	43.3	83.3	4.7	6.0	6.0	4.0	4.3	4.7	3.3	4.7
BRIGHTSTAR SLT	8.0	5.3	40.0	90.0	5.7	5.3	5.0	2.7	4.3	5.0	4.0	4.6
DLFPS-236/3553	7.3	6.0	40.0	76.7	4.3	5.7	6.7	4.0	3.7	4.0	3.7	4.6
FP2	7.7	6.3	46.7	93.0	5.0	5.7	5.7	3.7	3.7	4.3	4.0	4.6
GRAND SLAM GLD	7.3	6.7	43.3	83.3	4.7	6.3	5.7	3.0	4.0	5.3	3.3	4.6
JR-888	7.3	5.7	33.3	76.7	4.3	6.0	5.3	3.0	4.3	4.7	4.7	4.6
OVERDRIVE 5G	7.7	6.3	43.3	90.0	5.3	6.0	5.3	2.7	3.7	5.0	4.3	4.6
RRT	8.0	6.3	40.0	86.7	5.7	6.3	5.7	3.3	3.3	4.0	3.7	4.6
ASP0218 (A-6D)	8.0	5.7	43.3	90.0	5.7	6.7	6.3	2.7	3.0	4.0	3.3	4.5
AMP-R1	7.7	6.0	43.3	89.7	5.0	6.0	6.0	3.0	3.7	4.3	3.7	4.5
DLFPS-236/3550	7.7	6.3	40.0	80.0	4.7	6.0	6.0	3.0	3.3	4.3	4.0	4.5
PPG-PR 367	8.0	6.7	40.0	86.7	5.0	5.7	5.3	3.7	3.7	4.0	4.0	4.5
PPG-PR 424	7.7	6.3	40.0	86.7	5.7	6.0	6.3	2.7	3.3	4.0	3.7	4.5
PST-2FOXY	7.3	5.0	33.3	86.7	4.7	6.3	6.0	2.7	3.7	4.0	4.0	4.5
SEABISCUIT	8.0	5.3	46.7	89.7	5.7	5.7	5.7	3.0	3.7	4.3	3.7	4.5
023	6.7	4.7	56.7	93.0	4.3	5.7	6.7	3.0	3.3	4.0	3.7	4.4
ALLSTAR III	7.7	5.7	40.0	80.0	5.0	5.3	6.0	2.7	3.7	4.0	4.0	4.4
BAR LP 6158	8.0	5.7	43.3	89.7	6.0	5.0	5.7	3.0	4.0	3.7	3.3	4.4
DLFPS-236/3545	7.7	6.3	36.7	83.3	5.3	6.0	5.7	2.3	3.3	4.3	3.7	4.4
JR-123	7.3	6.7	36.7	83.3	5.3	5.3	6.3	3.3	3.3	4.3	3.0	4.4
FASTBALL 3GL (PPG-PR 329)	8.0	6.3	40.0	86.7	5.7	5.7	5.7	3.0	3.7	3.7	3.7	4.4
HOMERUN LS (PPG-PR 419)	7.7	6.7	56.7	93.0	5.7	5.7	6.0	2.7	3.0	4.0	3.7	4.4
PST-2EGAD	7.3	6.0	36.7	83.3	5.0	5.0	5.3	3.3	3.7	4.3	4.0	4.4
ASP0118GL (A-4G)	8.0	5.7	46.7	85.0	5.0	6.3	6.0	2.7	3.3	3.7	3.3	4.3
ASP0116EXT	7.7	5.7	36.7	80.0	5.0	6.7	5.7	2.3	3.3	3.3	3.7	4.3
BAR LP 6131	7.3	5.3	40.0	83.3	5.3	4.7	5.0	3.7	4.0	3.7	3.7	4.3
BAR LP 6159	7.0	6.3	43.3	83.0	5.0	6.0	5.3	3.3	3.7	3.7	3.0	4.3
BAR LP 6162	7.7	6.3	26.7	76.3	5.0	5.3	5.7	3.7	3.3	4.0	3.3	4.3
BAR LP 6233	8.0	5.7	46.7	86.3	5.7	5.0	6.0	3.3	3.0	4.0	3.3	4.3
KARMA	7.3	6.3	36.7	83.3	5.0	6.3	5.7	2.7	3.0	4.0	3.3	4.3
MAN O WAR	8.0	5.0	46.7	86.7	5.0	5.7	5.3	3.3	3.0	4.3	3.7	4.3
PR-6-15	7.3	8.3	36.7	70.0	4.0	5.3	5.3	3.3	4.0	4.3	3.7	4.3
PST-2GTD	7.7	5.7	33.3	83.3	4.7	4.3	4.3	3.3	4.7	4.7	4.0	4.3
PEPPER II (RAD-PR 103)	7.3	7.0	23.3	73.3	4.7	4.7	6.0	3.7	3.3	4.0	3.7	4.3
SHIELD (02BS4)	7.3	5.0	43.3	93.0	5.0	5.7	5.3	3.3	2.7	3.7	3.7	4.2
BWH	8.0	6.7	36.7	73.3	4.7	5.0	4.3	3.0	3.7	4.3	4.3	4.2

TABLE 15.
(CONT'D)MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER DROUGHT STRESS AT LOGAN, UT 1/
2017 DATA

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

NAME	SPRING GREENUP	PINK SNOW MOLD	PERCENT SEPTEMBER	ESTABLISHMENT OCTOBER	APR	MAY	JUN	JUL	AUG	QUALITY RATINGS SEP	OCT	MEAN
CPN	7.7	5.7	46.7	86.3	5.3	4.7	5.3	3.3	3.7	4.0	3.3	4.2
GO-141	7.7	5.7	36.7	83.3	5.0	6.0	6.0	3.0	3.0	3.7	2.7	4.2
GO-142	7.3	6.0	43.3	96.0	5.0	6.0	5.0	2.7	3.3	4.0	3.3	4.2
FURLONG (LTP-FCB)	7.3	7.3	36.7	86.7	5.0	6.3	5.3	2.7	3.0	3.7	3.3	4.2
PST-2BDT	7.7	6.7	36.7	80.0	4.3	5.0	4.3	3.7	3.7	5.0	3.7	4.2
UMPQUA	7.7	5.3	43.3	92.7	5.7	4.7	5.3	3.0	3.3	4.0	3.7	4.2
DLFPS-238/3014	7.7	6.3	33.3	70.0	5.0	4.7	5.3	3.3	3.3	3.7	3.7	4.1
PL2	8.0	5.7	40.0	89.7	5.3	5.3	4.3	3.0	3.3	4.0	3.7	4.1
PPG-PR 371	8.0	6.7	40.0	89.7	5.0	5.7	5.7	3.0	2.7	3.7	3.3	4.1
EVOLVE	7.3	6.0	43.3	76.3	5.3	4.3	4.3	3.0	3.3	4.3	3.7	4.0
SR 4650	7.3	6.0	50.0	90.0	5.0	6.0	5.7	3.0	2.7	3.0	3.0	4.0
XCELERATOR	7.0	7.0	30.0	63.3	3.7	4.3	4.7	3.3	4.0	4.3	4.0	4.0
DLFPS-236/3546	7.3	6.3	36.7	73.3	4.3	4.3	5.0	2.3	3.0	4.3	4.0	3.9
02BS1	7.7	7.0	30.0	76.3	4.7	4.3	5.3	2.7	3.0	3.0	3.0	3.7
DLFPS-236/3548	7.3	6.3	33.3	69.7	3.7	4.3	5.3	3.5	4.5	4.0	4.5	3.7
BAR LP 6165	7.7	6.3	30.0	69.7	4.3	3.0	4.0	3.5	4.0	3.7	2.7	3.5
DERBY XTREME	7.7	6.7	33.3	83.3	5.3	5.3	5.0	2.3	2.0	2.7	2.0	3.5
DLFPS-236/3552	7.0	7.3	33.3	66.7	3.0	3.3	4.7	3.7	4.0	4.0	3.0	3.5
GO-143	7.3	7.0	30.0	66.7	3.7	4.0	3.7	3.0	5.0	4.0	3.5	3.3
LINN	8.3	5.0	33.3	90.0	6.0	2.7	3.3	2.7	2.3	2.0	2.3	3.0
LSD VALUE	2.2	1.9	26.8	42.4	2.9	2.3	2.0	2.2	2.8	2.7	1.9	1.3
C.V. (%)	6.9	13.5	21.2	13.3	16.7	18.8	16.5	23.1	26.5	22.7	19.6	12.7

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 16.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR SALT TOLERANCE STUDY IN GREENHOUSE AT FORT COLLINS, CO 1/
2017 DATA

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

NAME	QUALITY RATINGS OF THE SALT TREATMENT 3/					QUALITY RATINGS OF THE CONTROL 4/					PERCENT OF QUALITY (TREATMENT OVER CONTROL)				
	8_DS	12_DS	16_DS	20_DS	24_DS	8_DS	12_DS	16_DS	20_DS	24_DS	8_DS	12_DS	16_DS	20_DS	24_DS
SAVANT	8.2	7.1	7.3	7.0	4.7	8.7	8.7	8.8	8.7	8.9	94.3	82.0	82.3	80.5	52.6
DLFPS-236/3548	8.1	7.1	7.4	7.2	4.5	8.7	8.7	8.8	8.7	8.9	93.1	80.9	84.2	82.1	50.8
GO-141	8.0	6.9	7.2	6.9	4.0	8.7	8.7	8.8	8.7	8.9	92.0	78.9	81.1	79.4	45.1
GO-142	8.0	6.9	7.2	7.1	3.8	8.7	8.7	8.8	8.7	8.9	92.0	79.0	81.1	80.9	43.3
ALLSTAR III	7.9	6.9	7.3	6.6	3.7	8.6	8.7	8.8	8.7	8.9	91.9	79.3	83.0	75.6	41.4
DLFPS-236/3540	8.2	7.3	7.1	7.0	3.7	8.7	8.7	8.8	8.7	8.9	94.3	83.2	80.8	80.2	41.3
DLFPS-236/3550	7.9	7.0	7.3	7.2	3.7	8.7	8.7	8.8	8.7	8.9	91.2	79.2	83.0	82.5	41.4
LPB-SD-102	8.2	7.1	7.2	6.8	3.5	8.7	8.6	8.8	8.8	8.9	94.3	82.7	81.2	77.6	39.4
MAN O WAR	8.0	6.9	7.4	6.8	3.3	8.7	8.7	8.8	8.7	8.9	91.9	79.0	83.4	77.9	37.6
PR-6-15	8.1	7.0	7.3	7.2	3.3	8.7	8.7	8.8	8.7	8.9	92.4	80.2	83.0	82.5	37.6
DLFPS-236/3542	8.2	7.2	7.3	7.0	3.2	8.7	8.7	8.8	8.7	8.9	94.6	82.1	82.3	80.2	35.6
DLFPS-236/3547	8.0	7.0	7.2	7.2	3.2	8.7	8.7	8.8	8.7	8.9	92.3	80.8	81.9	82.1	35.8
MENSA	8.2	7.0	7.1	6.8	3.2	8.7	8.7	8.8	8.6	8.9	93.9	80.8	80.4	78.8	35.6
PPG-PR 371	8.2	7.0	7.3	7.0	3.2	8.7	8.7	8.8	8.7	8.9	93.5	79.8	83.0	80.1	35.7
PPG-PR 385	8.1	7.1	7.4	7.0	3.2	8.7	8.7	8.8	8.7	8.9	92.8	80.9	83.8	80.4	35.7
DLFPS-238/3014	7.7	6.8	7.2	6.8	3.0	8.6	8.6	8.8	8.7	8.9	89.6	78.8	81.1	77.5	33.8
GO-143	8.1	6.9	7.2	7.1	3.0	8.7	8.7	8.8	8.7	8.9	92.4	79.3	81.5	80.9	33.9
LPB-SD-103	8.2	7.3	7.2	6.8	3.0	8.7	8.7	8.8	8.7	8.9	94.7	83.2	81.5	77.5	33.9
PR-5-16	8.1	7.2	7.3	7.1	3.0	8.7	8.7	8.8	8.7	8.9	93.2	82.1	82.3	80.9	33.9
PEPPER II (RAD-PR 103)	8.0	6.9	7.1	6.8	3.0	8.7	8.7	8.8	8.7	8.9	92.3	78.9	80.0	77.5	33.8
XCELERATOR	8.1	7.1	7.1	7.0	3.0	8.7	8.6	8.8	8.7	8.9	92.8	82.6	80.8	80.2	33.8
023	8.0	7.1	7.3	7.0	2.8	8.7	8.7	8.8	8.7	8.9	92.0	80.9	82.6	80.5	32.0
CPN	8.0	6.9	7.2	6.7	2.8	8.6	8.7	8.8	8.7	8.9	92.3	79.3	81.1	77.1	31.9
DLFPS-236/3546	8.0	7.0	7.4	7.2	2.8	8.7	8.7	8.8	8.7	8.9	92.3	79.8	83.4	82.9	32.0
LPB-SD-101	8.2	7.1	7.2	6.7	2.8	8.7	8.6	8.8	8.8	8.9	94.3	81.9	81.2	76.8	31.9
LPB-SD-105	8.2	7.0	7.1	6.7	2.8	8.7	8.7	8.8	8.8	8.9	94.3	80.8	80.8	76.8	31.9
PPG-PR 331	7.9	7.0	7.1	6.7	2.8	8.7	8.7	8.8	8.7	8.9	90.8	79.8	80.0	76.7	32.0
02BS1	8.0	6.8	6.9	6.1	2.7	8.6	8.7	8.8	8.7	8.9	92.7	78.6	78.1	69.4	30.0
BRIGHTSTAR SLT	7.8	6.9	7.0	6.5	2.7	8.6	8.6	8.8	8.7	8.9	90.8	79.9	80.2	74.8	30.7
DERBY XTREME	7.9	6.9	7.1	6.9	2.7	8.7	8.7	8.8	8.7	8.9	91.1	79.7	80.0	79.0	30.1
DLFPS-236/3538	8.0	6.9	6.2	4.9	2.7	8.7	8.6	8.8	8.7	8.9	91.6	79.6	70.1	56.0	30.1
APPLE 3GL (PPG-PR 339)	8.2	7.2	7.4	7.0	2.7	8.7	8.7	8.8	8.7	8.9	93.9	82.5	83.4	80.4	30.1
PPG-PR 372	8.1	7.0	7.2	6.9	2.7	8.7	8.7	8.8	8.7	8.9	93.1	79.8	81.9	79.7	30.1
PPG-PR 423	8.1	7.0	7.4	6.1	2.7	8.7	8.7	8.8	8.7	8.9	93.1	80.2	84.1	70.2	30.0
SAGUARO	8.2	6.9	7.2	6.9	2.7	8.6	8.6	8.8	8.8	8.9	95.3	80.4	81.1	78.7	30.0
AMP-R1	8.0	7.0	7.4	7.2	2.5	8.7	8.7	8.8	8.7	8.9	91.6	80.9	83.4	82.1	28.2
APR2612	8.0	6.9	7.1	7.1	2.5	8.6	8.7	8.8	8.7	8.9	93.0	79.0	80.4	80.9	28.3
DLFPS-236/3544	8.3	7.2	7.2	7.0	2.5	8.7	8.7	8.8	8.7	8.9	94.7	83.1	81.5	79.8	28.1
DLFPS-236/3552	8.0	6.9	7.3	7.1	2.5	8.7	8.7	8.8	8.7	8.9	92.0	79.1	82.3	80.9	28.1
JR-197	8.0	6.9	7.3	6.6	2.5	8.7	8.6	8.8	8.7	8.9	92.3	79.6	82.7	75.6	28.1
SLUGGER 3GL (PPG-PR 343)	8.1	7.0	7.2	7.0	2.5	8.7	8.7	8.8	8.7	8.9	93.1	79.8	81.1	79.8	28.2
PPG-PR 360	8.1	7.0	6.7	5.6	2.5	8.7	8.7	8.8	8.7	8.9	93.1	79.8	75.8	63.7	28.2
HOMERUN LS (PPG-PR 419)	8.1	7.0	7.3	6.6	2.5	8.7	8.7	8.8	8.7	8.9	92.4	80.2	82.2	75.2	28.2
RAD-PR 112	8.0	6.9	7.3	7.0	2.5	8.7	8.7	8.8	8.7	8.9	91.9	79.3	83.0	80.2	28.2
RRT	7.9	7.1	7.3	7.1	2.5	8.7	8.7	8.8	8.7	8.9	90.8	80.6	83.0	81.3	28.3
SLIDER LS (PPG-PR 241)	8.0	7.0	7.2	6.7	2.4	8.7	8.7	8.8	8.7	8.9	92.0	79.8	81.5	77.1	27.1
SEABISCUIT	7.9	7.1	7.3	6.6	2.4	8.6	8.6	8.8	8.7	8.9	92.3	82.6	82.2	75.9	27.0

TABLE 16.
CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR SALT TOLERANCE STUDY IN GREENHOUSE AT FORT COLLINS, CO 1/
2017 DATA

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

NAME	QUALITY RATINGS OF THE SALT TREATMENT 3/					QUALITY RATINGS OF THEN CONTROL					PERCENT OF QUALITY (TREATMENT OVER CONTROL)				
	8_DS	12_DS	16_DS	20_DS	24_DS	8_DS	12_DS	16_DS	20_DS	24_DS	8_DS	12_DS	16_DS	20_DS	24_DS
APR3060	8.1	7.0	7.3	7.0	2.3	8.7	8.7	8.8	8.7	8.9	92.8	80.5	82.7	80.1	26.4
DLFPS-236/3543	8.2	7.1	7.3	6.8	2.3	8.7	8.8	8.8	8.6	8.9	93.9	80.6	82.6	79.2	26.4
DLFPS-236/3554	8.2	7.1	7.4	7.1	2.3	8.7	8.7	8.8	8.7	8.9	93.5	81.3	83.8	80.9	25.7
INTENSE	8.3	7.3	7.1	6.9	2.3	8.7	8.8	8.8	8.7	8.9	95.1	83.3	80.8	78.6	26.3
LPB-SD-104	8.2	7.0	7.0	6.7	2.3	8.6	8.7	8.8	8.7	8.9	95.0	80.5	79.6	76.4	26.2
PHARAOH	7.9	6.7	7.3	6.4	2.3	8.7	8.7	8.8	8.7	8.9	91.5	77.4	82.3	73.7	26.3
PPG-PR 370	8.1	7.1	7.3	7.0	2.3	8.7	8.7	8.8	8.7	8.9	93.1	80.9	83.0	80.8	26.3
PPG-PR 420	8.1	6.9	7.4	7.2	2.3	8.7	8.7	8.8	8.7	8.9	93.1	78.6	83.4	82.4	26.3
PST-2A2	8.2	7.2	7.3	6.9	2.3	8.7	8.7	8.8	8.7	8.9	94.3	82.1	82.3	79.4	26.4
GRAY WOLF (PST-2GAL)	8.2	7.2	7.4	7.1	2.3	8.7	8.7	8.8	8.7	8.9	94.3	82.8	84.2	81.3	26.4
PST-2PDA	8.1	7.1	7.2	6.9	2.3	8.7	8.7	8.8	8.7	8.9	93.2	81.3	81.5	79.4	26.4
FASTBALL 3GL (PPG-PR 329)	8.0	7.1	7.2	7.0	2.2	8.7	8.7	8.8	8.7	8.9	92.0	80.9	81.9	80.6	24.4
PST-2EGAD	8.1	7.1	7.4	7.0	2.2	8.7	8.7	8.8	8.7	8.9	93.1	81.7	83.8	80.6	24.5
DLFPS-236/3545	8.2	7.2	7.2	6.6	2.1	8.7	8.7	8.8	8.7	8.9	93.9	82.1	81.5	76.6	23.4
BAR LP 6159	8.1	7.0	7.3	6.6	2.0	8.7	8.7	8.8	8.7	8.9	93.1	80.8	82.7	76.0	22.6
BWH	8.2	7.3	7.2	6.9	2.0	8.6	8.7	8.8	8.6	8.9	95.4	83.9	82.2	79.9	22.5
JR-123	8.2	7.1	7.1	6.8	2.0	8.7	8.8	8.8	8.7	8.9	94.2	81.4	80.4	78.2	22.5
GRAY HAWK (PST-2FIND)	8.2	7.0	7.3	7.1	2.0	8.7	8.6	8.8	8.7	8.9	93.5	81.8	83.0	81.7	22.6
UF3	8.2	7.0	7.2	6.7	2.0	8.7	8.8	8.8	8.7	8.9	93.9	80.2	81.9	76.7	22.5
OVERDRIVE 5G	8.0	7.0	7.0	5.4	1.9	8.6	8.6	8.8	8.7	8.9	92.6	81.4	79.6	62.4	21.4
021	8.3	7.3	7.3	6.8	1.8	8.7	8.6	8.8	8.7	8.9	95.0	85.0	82.6	78.9	20.7
02BS2	8.0	7.0	7.2	7.0	1.8	8.7	8.7	8.8	8.7	8.9	91.6	80.5	81.9	80.5	20.7
FP2	8.0	7.0	7.3	7.0	1.8	8.7	8.7	8.8	8.7	8.9	92.0	80.6	82.6	80.6	20.7
PL2	8.2	7.1	7.3	6.8	1.8	8.7	8.7	8.8	8.7	8.9	93.9	80.9	82.6	77.9	20.7
PPG-PR 367	8.1	6.9	7.1	6.2	1.8	8.7	8.7	8.8	8.7	8.9	93.1	79.4	80.0	71.7	20.7
PPG-PR 424	8.1	6.9	7.4	6.8	1.8	8.7	8.7	8.8	8.7	8.9	92.7	79.4	84.2	77.9	20.7
PST-2GTD	8.1	7.2	7.3	7.2	1.8	8.7	8.8	8.8	8.7	8.9	93.5	81.7	82.7	82.1	20.7
PST-2MAY	8.2	7.0	7.4	6.7	1.8	8.7	8.7	8.8	8.7	8.9	93.5	80.5	83.4	76.8	20.7
SIGNET	8.2	7.0	7.4	7.0	1.8	8.7	8.7	8.8	8.7	8.9	93.9	80.5	83.4	79.8	20.7
GRAND SLAM GLD	8.1	7.0	7.3	5.1	1.7	8.7	8.7	8.8	8.7	8.9	92.8	80.8	82.3	58.3	19.6
PST-2FOXY	8.1	7.3	7.3	6.8	1.7	8.7	8.7	8.8	8.7	8.9	93.5	83.2	82.2	77.9	18.8
DLFPS-236/3553	8.2	7.1	7.3	6.7	1.6	8.7	8.7	8.8	8.7	8.9	93.5	81.3	83.0	76.4	17.7
NP-2	8.1	6.9	7.4	6.3	1.6	8.7	8.7	8.8	8.7	8.9	92.7	79.4	83.4	71.8	18.1
SR 4650	8.0	6.9	7.4	6.9	1.6	8.7	8.7	8.8	8.7	8.9	92.0	79.7	83.4	78.6	17.7
ASP0118GL (A-4G)	8.2	7.2	7.4	6.7	1.5	8.7	8.7	8.8	8.7	8.9	93.9	82.5	83.8	76.4	17.0
BAR LP 6164	7.9	6.9	7.3	6.3	1.5	8.6	8.7	8.8	8.7	8.9	91.5	78.7	82.6	72.5	17.0
BAR LP 6233	8.1	7.0	7.4	5.2	1.5	8.7	8.6	8.8	8.7	8.9	93.5	80.8	83.4	60.0	17.0
DLFPS-236/3556	8.2	7.1	7.3	6.0	1.5	8.7	8.7	8.8	8.7	8.9	94.3	81.7	82.2	69.1	17.0
KARMA	8.1	6.8	7.3	6.6	1.5	8.7	8.7	8.8	8.7	8.9	92.4	78.2	83.0	75.2	16.9
PPG-PR 422	8.1	7.0	7.4	6.7	1.5	8.7	8.8	8.8	8.7	8.9	92.4	79.4	83.4	76.7	16.9
SILVER SPORT (PST-2CRP)	8.1	7.1	7.3	6.3	1.5	8.7	8.7	8.8	8.7	8.9	93.1	81.3	83.0	72.6	16.9
BAR LP 6117	7.9	6.9	7.3	6.8	1.4	8.7	8.5	8.8	8.7	8.9	91.2	81.2	83.0	77.5	16.2
EVOLVE	8.2	7.0	7.1	6.4	1.4	8.7	8.7	8.8	8.7	8.9	93.9	80.9	80.4	72.9	15.8
BAR LP 6131	8.0	7.1	7.4	6.6	1.3	8.6	8.6	8.8	8.7	8.9	92.3	81.9	83.4	75.2	15.1
BAR LP 6165	7.8	6.5	6.9	5.0	1.3	8.4	8.4	8.8	8.6	8.9	92.8	77.9	78.5	57.2	15.1
CS-6	8.2	7.1	7.2	6.3	1.3	8.7	8.7	8.8	8.7	8.9	94.6	80.9	81.1	73.1	15.1
DLFPS-236/3541	8.2	7.0	7.3	6.0	1.3	8.7	8.8	8.8	8.7	8.9	94.3	79.5	82.7	69.1	15.0

TABLE 16.
(CONT'D)MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
FOR SALT TOLERANCE STUDY IN GREENHOUSE AT FORT COLLINS, CO 1/
2017 DATA

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

NAME	QUALITY RATINGS OF THE SALT TREATMENT 3/					QUALITY RATINGS OF THE CONTROL					PERCENT OF QUALITY (TREATMENT OVER CONTROL)				
	8_DS	12_DS	16_DS	20_DS	24_DS	8_DS	12_DS	16_DS	20_DS	24_DS	8_DS	12_DS	16_DS	20_DS	24_DS
JR-747	8.0	7.0	7.0	6.1	1.3	8.7	8.6	8.8	8.7	8.9	92.3	80.7	79.6	69.5	15.0
PST-2BDT	8.2	7.2	7.4	7.1	1.3	8.7	8.7	8.8	8.7	8.9	93.5	82.5	83.8	80.9	15.0
BSP-25	8.2	7.2	7.1	6.6	1.2	8.6	8.6	8.8	8.6	8.9	95.0	83.9	80.3	76.8	13.2
JR-888	8.0	6.8	7.0	4.8	1.2	8.7	8.6	8.8	8.7	8.9	92.3	79.1	79.2	55.4	13.1
FURLONG (LTP-FCB)	8.0	6.9	7.2	5.0	1.2	8.7	8.6	8.8	8.7	8.9	91.2	80.7	81.9	57.6	13.9
MRSL-PR15	8.1	7.1	7.3	5.9	1.2	8.7	8.7	8.8	8.6	8.9	93.1	81.3	82.7	68.6	13.9
PPG-PR 421	8.1	6.9	7.4	6.9	1.2	8.7	8.7	8.8	8.7	8.9	92.8	78.6	84.2	79.4	13.2
UMPOUA	7.8	6.8	7.2	6.4	1.2	8.6	8.6	8.8	8.7	8.9	90.7	78.4	81.1	72.9	13.1
ASP0117 (A-PR15)	8.1	7.0	7.2	5.1	1.1	8.7	8.7	8.8	8.7	8.9	93.5	79.8	81.9	58.9	12.4
SNX	8.1	7.1	7.3	5.6	1.1	8.7	8.7	8.8	8.7	8.9	93.5	80.9	83.0	64.6	12.4
BAR LP 6162	7.9	6.9	7.3	6.9	1.0	8.6	8.7	8.8	8.7	8.9	91.8	79.4	82.6	79.0	11.3
BSP-17	8.2	7.4	7.2	5.5	1.0	8.6	8.7	8.8	8.7	8.9	95.0	85.1	81.4	63.2	11.3
LINN	7.6	6.4	6.1	4.0	1.0	8.2	8.1	8.6	8.6	8.8	92.3	78.6	70.5	46.1	11.3
MRSL-PR16	8.2	7.1	7.3	6.9	1.0	8.7	8.8	8.8	8.7	8.9	93.9	80.6	83.0	78.6	11.3
ASP0116EXT	8.2	7.1	7.3	6.7	0.9	8.7	8.7	8.8	8.7	8.9	93.9	81.3	82.7	76.8	10.2
ASP0218 (A-6D)	8.1	7.0	7.3	6.8	0.8	8.7	8.7	8.8	8.7	8.9	93.1	80.2	83.0	78.3	8.6
APR2616	8.2	7.1	7.3	6.8	0.8	8.7	8.7	8.8	8.7	8.9	94.2	81.2	82.7	77.5	9.4
BAR LP 6158	7.8	6.8	7.2	6.5	0.8	8.6	8.7	8.8	8.7	8.9	90.3	77.9	81.9	74.4	9.4
SHIELD (02BS4)	8.1	7.0	7.4	6.9	0.7	8.7	8.7	8.8	8.7	8.9	93.5	79.8	83.4	78.7	7.5
NP-3	8.2	6.9	7.1	6.5	0.7	8.7	8.7	8.8	8.7	8.9	93.9	79.0	80.7	74.1	7.5
LSD VALUE	0.2	0.4	0.8	2.4	3.8	0.1	0.2	0.0	0.2	0.0	3.2	8.3	9.4	28.6	43.2
C.V. (%)	1.5	2.6	3.9	13.3	58.5	0.6	1.0	0.2	0.6	0.1	1.6	3.0	3.8	13.4	58.6

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 17.

GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

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

NAME	CT1	IA1	IL1	MI1	MN1	MO1	NE1	NJ2	OR1	UT1	WI1	MEAN
BWH	8.3	5.7	8.3	8.0	6.0	5.7	7.0	9.0	8.0	7.7	9.0	7.5
BSP-17	8.7	5.3	8.3	7.7	5.0	7.0	7.0	9.0	8.0	7.3	8.7	7.5
ASP0116EXT	9.0	4.3	7.7	8.0	5.0	5.7	6.7	9.0	8.0	7.7	8.7	7.2
BSP-25	8.3	5.7	8.0	7.3	4.7	6.3	6.7	8.0	8.0	7.7	8.7	7.2
SNX	8.3	5.3	8.0	7.7	5.0	7.0	6.7	8.0	8.0	7.0	8.0	7.2
MRSL-PR16	7.3	5.7	8.0	7.7	5.3	6.3	7.0	7.0	8.0	7.3	8.0	7.1
LPB-SD-104	7.3	5.3	8.0	7.0	4.7	6.7	7.0	8.0	8.0	6.3	8.0	6.9
DLFPS-236/3542	7.7	5.0	7.3	7.0	6.7	6.3	6.3	8.0	7.7	7.0	7.0	6.9
PEPPER II (RAD-PR 103)	6.7	5.3	8.0	8.0	5.3	5.7	7.0	6.0	7.3	8.3	8.0	6.9
PPG-PR 360	6.7	5.7	8.3	7.0	4.7	6.0	6.3	8.0	7.3	7.7	7.7	6.8
PPG-PR 423	6.7	5.3	8.0	7.0	5.7	5.0	6.3	9.0	7.0	7.7	7.7	6.8
ASP0118GL (A-4G)	7.7	5.3	7.7	7.3	5.3	5.7	6.3	8.0	8.0	6.7	7.0	6.8
SLUGGER 3GL (PPG-PR 343)	6.3	5.7	7.7	7.0	4.7	6.0	5.7	9.0	8.0	7.3	7.7	6.8
RAD-PR 112	7.7	5.3	7.7	7.3	4.7	6.0	6.0	6.0	7.7	8.7	8.0	6.8
ASP0218 (A-6D)	7.3	5.0	7.0	7.7	5.0	5.7	6.7	8.0	8.0	6.3	7.7	6.8
PST-2BDT	7.0	4.3	8.0	7.0	6.0	5.7	6.3	8.0	7.3	7.0	7.7	6.8
CS-6	7.0	4.7	7.3	7.0	6.0	6.7	6.3	8.0	7.3	5.7	8.0	6.7
DLFPS-236/3544	5.7	6.0	8.0	7.0	5.7	6.3	5.7	8.7	7.3	6.7	7.0	6.7
LPB-SD-102	7.3	5.3	8.0	6.7	5.3	6.0	6.7	7.0	7.7	7.3	6.7	6.7
LPB-SD-103	6.7	5.0	8.3	6.7	5.3	6.0	6.3	8.0	7.0	7.3	7.3	6.7
PPG-PR 370	7.3	6.0	8.0	6.7	4.0	5.0	6.7	9.0	7.3	6.7	7.3	6.7
SILVER SPORT (PST-2CRP)	5.3	5.3	8.0	7.0	4.0	6.3	6.7	9.0	7.3	7.0	8.0	6.7
DLFPS-236/3554	5.7	5.7	7.7	7.0	5.0	5.3	6.7	8.0	7.3	7.7	7.7	6.7
LPB-SD-105	7.0	5.7	8.3	6.0	5.3	6.0	6.3	8.0	7.0	7.0	7.0	6.7
NP-2	6.3	5.7	7.7	7.3	6.0	6.3	6.0	7.0	7.0	7.3	7.0	6.7
AMP-R1	7.3	4.7	7.7	7.3	5.0	5.7	6.3	8.0	7.7	6.7	7.3	6.7
FURLONG (LTP-FCB)	6.0	6.0	7.3	7.0	5.3	5.7	5.3	9.0	7.7	7.0	7.0	6.7
SAGUARO	6.0	4.7	7.7	7.0	6.0	5.7	6.0	8.0	7.0	7.3	7.7	6.6
DLFPS-236/3541	6.7	5.0	8.0	7.0	4.7	6.0	6.3	7.0	7.3	7.7	7.0	6.6
DLFPS-236/3543	6.7	5.3	7.7	7.0	5.0	5.3	6.3	7.0	7.0	8.0	7.3	6.6
APPLE 3GL (PPG-PR 339)	6.7	5.7	8.0	7.0	5.0	4.7	6.0	8.0	7.3	7.3	7.0	6.6
PPG-PR 422	6.7	6.7	7.7	7.0	4.7	5.0	5.3	9.0	7.0	7.0	6.7	6.6
DLFPS-236/3552	6.0	5.0	8.0	7.0	5.3	6.0	6.3	8.0	7.7	6.3	7.0	6.6
FP2	5.3	5.0	7.3	7.0	5.7	6.0	6.0	9.0	7.0	7.0	7.3	6.6
PR-6-15	6.0	5.3	7.3	7.0	4.7	6.3	6.3	8.0	7.3	6.3	7.7	6.6
RRT	6.3	5.3	7.7	7.0	5.3	5.0	6.0	8.0	7.3	6.7	7.7	6.6
APR2612	6.0	6.0	8.0	7.3	5.3	5.7	6.3	7.0	7.0	6.0	7.7	6.6
GO-143	7.0	4.7	7.7	7.3	5.3	5.7	6.7	7.0	7.7	6.3	7.0	6.6
SLIDER LS (PPG-PR 241)	6.3	5.3	7.3	7.0	6.0	5.7	6.0	8.0	7.3	6.3	7.0	6.6
PL2	7.3	5.3	7.7	7.0	5.3	5.3	5.3	7.7	7.3	7.0	6.7	6.5
CPN	6.0	6.0	8.0	7.0	4.7	6.0	5.7	9.0	7.0	6.3	6.3	6.5
DLFPS-236/3545	5.0	4.7	7.3	7.0	5.0	6.3	6.0	9.0	7.0	7.3	7.3	6.5
DLFPS-236/3548	6.7	5.3	7.3	7.0	4.7	6.3	5.3	8.0	7.7	6.3	7.3	6.5
GRAY WOLF (PST-2GAL)	6.3	6.0	8.3	7.0	4.0	5.3	6.3	8.0	7.0	7.3	6.3	6.5
NP-3	6.7	5.7	7.3	6.3	4.7	6.0	5.3	9.0	7.0	6.7	7.3	6.5

TABLE 17. (CONT'D)

GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

NAME	GENETIC COLOR RATINGS 1-9; 9=DARK GREEN											MEAN
	CT1	IA1	IL1	MI1	MN1	MO1	NE1	NJ2	OR1	UT1	WI1	
FASTBALL 3GL (PPG-PR 329)	5.7	5.0	7.3	7.0	5.3	6.3	6.0	9.0	7.0	6.7	6.7	6.5
PPG-PR 424	5.3	6.0	8.0	7.0	5.3	6.0	5.3	8.0	7.3	6.3	7.3	6.5
XCELERATOR	6.0	5.7	8.0	7.0	5.7	6.0	5.7	7.0	7.0	7.0	7.0	6.5
APR3060	7.0	6.0	7.3	7.3	5.7	5.7	6.3	7.3	7.0	5.0	7.3	6.5
GO-141	6.0	4.3	7.7	7.3	5.0	7.0	6.7	7.0	7.0	6.7	7.3	6.5
02BS1	5.3	5.7	7.7	7.0	6.0	5.3	6.3	7.0	7.0	6.7	7.7	6.5
DLFPS-236/3540	6.7	4.7	8.0	6.7	5.0	5.7	6.0	8.0	7.0	7.0	7.0	6.5
DLFPS-236/3550	6.3	4.7	7.7	7.0	5.7	5.3	6.0	8.0	7.3	7.0	6.7	6.5
MENSA	7.0	4.3	7.7	6.7	5.0	6.0	6.0	8.0	7.3	6.0	7.7	6.5
PPG-PR 371	6.0	6.0	7.7	7.0	5.3	6.0	6.0	8.0	7.0	6.0	6.7	6.5
HOMERUN LS (PPG-PR 419)	6.3	5.3	7.7	7.0	5.0	5.3	6.0	9.0	7.0	6.3	6.7	6.5
DERBY XTREME	6.3	4.0	8.0	7.0	5.0	6.3	6.0	7.0	7.7	7.3	7.0	6.5
DLFPS-236/3546	6.3	4.7	7.7	7.3	4.3	5.7	5.7	9.0	7.0	7.0	7.0	6.5
PST-2MAY	6.7	5.3	7.3	7.0	5.3	5.3	6.0	8.0	7.0	6.3	7.3	6.5
DLFPS-236/3547	5.7	5.3	7.3	7.3	5.0	6.3	5.3	9.0	7.3	6.0	6.7	6.5
PST-2FOXY	6.0	5.0	7.3	7.0	4.3	5.3	6.7	8.0	7.3	6.3	8.0	6.5
INTENSE	6.3	5.3	7.7	7.0	6.0	6.0	6.0	7.0	7.0	6.3	6.7	6.5
PPG-PR 331	6.0	6.0	7.7	7.0	5.0	5.7	5.7	7.0	7.0	6.7	7.7	6.5
PPG-PR 420	5.7	6.3	7.3	7.0	5.3	6.0	5.7	7.0	7.3	6.3	7.3	6.5
DLFPS-236/3538	6.0	5.7	8.3	7.0	6.0	5.0	6.0	7.0	7.0	6.3	6.7	6.5
DLFPS-236/3553	6.0	4.7	8.0	6.7	5.0	5.7	5.7	9.0	7.7	5.3	7.3	6.5
GRAY HAWK (PST-2FIND)	7.0	5.7	7.3	6.7	4.3	5.7	6.0	7.0	7.3	7.0	7.0	6.5
JR-197	6.3	5.0	8.0	6.7	5.3	5.3	6.0	8.0	7.0	6.3	7.0	6.5
PHARAOH	5.3	4.7	7.3	7.0	6.3	5.3	6.3	8.0	7.0	6.0	7.7	6.5
PPG-PR 372	6.3	5.7	7.0	7.0	5.3	6.0	6.0	8.0	7.0	5.7	7.0	6.5
PST-2EGAD	5.7	6.3	8.0	7.0	4.0	6.0	6.0	7.0	7.0	6.7	7.3	6.5
02BS2	5.3	5.3	7.7	7.0	6.0	5.7	5.3	8.0	7.0	6.3	7.0	6.4
APR2616	5.7	5.7	8.0	7.3	4.7	6.0	6.0	7.0	7.0	6.0	7.3	6.4
SR 4650	6.0	4.7	8.0	7.0	5.3	6.3	5.7	8.0	7.0	6.0	6.7	6.4
PST-2A2	5.7	4.3	8.3	7.0	4.3	5.7	6.0	8.0	7.7	6.3	7.0	6.4
UMPQUA	4.7	5.7	8.0	6.7	6.0	5.7	5.7	9.0	7.0	5.7	6.3	6.4
021	6.0	6.0	7.7	7.0	5.7	4.7	5.7	7.0	7.0	6.3	7.0	6.4
023	6.0	5.7	7.7	6.3	4.0	5.7	5.0	9.0	7.0	6.7	7.0	6.4
SHIELD (02BS4)	6.0	6.0	8.0	7.0	5.7	5.0	6.0	8.0	7.0	5.3	6.0	6.4
ASP0117 (A-PR15)	7.3	5.0	7.3	7.0	5.3	3.7	6.0	8.0	7.3	5.7	7.3	6.4
MRSL-PR15	7.7	5.3	6.7	7.0	4.3	6.0	6.3	7.0	7.7	4.3	7.7	6.4
PST-2GTD	6.7	5.7	6.7	7.0	4.7	5.0	5.3	8.0	7.0	7.0	7.0	6.4
UF3	5.7	6.0	7.3	7.0	4.7	5.3	6.0	9.0	7.0	5.3	6.3	6.3
OVERDRIVE 5G	6.3	5.3	7.7	7.0	5.7	6.0	5.7	6.0	7.7	5.3	7.0	6.3
PPG-PR 421	6.3	5.0	7.3	7.0	5.0	4.7	6.0	7.0	7.0	7.0	7.3	6.3
GRAND SLAM GLD	5.7	5.7	7.7	7.0	5.3	5.0	5.7	9.0	7.0	5.3	6.0	6.3
PPG-PR 367	5.3	4.3	7.0	7.0	5.3	5.0	6.0	9.0	7.0	6.3	6.7	6.3
DLFPS-236/3556	6.0	5.3	8.7	6.7	5.3	5.3	5.3	7.0	7.0	5.7	6.3	6.2
GO-142	6.3	4.3	7.3	7.3	5.0	5.7	5.7	7.0	7.3	6.3	6.3	6.2
BAR LP 6117	6.0	5.7	8.0	7.0	5.3	6.0	5.3	6.0	7.3	5.7	6.0	6.2
SIGNET	6.3	5.0	6.7	7.0	5.0	6.0	5.3	8.0	7.0	5.7	6.3	6.2

TABLE 17. (CONT'D)

GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

NAME	GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/											
	CT1	IA1	IL1	MI1	MN1	MO1	NE1	NJ2	OR1	UT1	WI1	MEAN
ALLSTAR III	5.0	4.3	8.0	7.0	5.3	5.7	5.7	7.0	7.0	5.7	7.3	6.2
KARMA	5.3	4.0	8.0	6.7	5.0	5.3	6.0	8.0	7.0	5.3	7.0	6.2
PR-5-16	5.7	5.7	7.0	6.3	5.3	4.7	6.0	5.7	7.0	6.5	7.7	6.1
BAR LP 6159	6.3	5.7	7.3	6.7	5.0	6.0	5.7	6.0	7.0	5.0	6.7	6.1
JR-123	5.0	4.3	7.0	7.0	5.7	5.7	6.0	7.3	7.0	5.3	6.7	6.1
MAN O WAR	5.7	5.3	7.3	7.0	5.3	5.0	5.7	7.0	7.0	5.3	6.3	6.1
SEABISCUIT	5.0	5.3	7.7	7.0	5.0	4.7	6.0	7.0	7.0	5.3	6.7	6.1
BAR LP 6164	5.3	6.0	7.0	6.7	4.0	5.0	5.7	7.0	7.0	6.0	7.0	6.1
JR-747	6.3	4.0	7.3	7.0	3.3	6.0	6.7	6.0	7.0	6.0	7.0	6.1
BAR LP 6158	6.0	5.3	7.7	6.7	4.3	5.3	6.0	6.0	7.0	5.0	7.0	6.0
LPB-SD-101	6.7	4.7	7.3	6.7	4.0	5.0	5.3	7.0	7.0	6.0	6.7	6.0
BAR LP 6131	5.3	6.3	7.3	6.7	5.0	5.7	5.0	7.0	7.0	4.7	6.3	6.0
PPG-PR 385	5.3	6.7	7.0	7.0	4.3	5.0	5.0	7.0	7.0	5.3	6.7	6.0
BAR LP 6162	4.3	6.7	7.7	6.7	4.7	4.7	6.0	9.0	7.0	3.3	6.0	6.0
BRIGHTSTAR SLT	5.7	5.0	7.3	6.7	5.3	5.7	5.7	7.0	7.0	4.7	6.0	6.0
PST-2PDA	5.3	5.0	8.0	6.7	4.7	5.3	5.3	7.0	7.0	5.3	6.3	6.0
SAVANT	5.3	6.0	7.3	6.3	5.0	4.7	5.7	6.0	7.0	6.0	6.3	6.0
EVOLVE	7.0	4.7	7.7	6.0	4.7	6.0	5.3	4.7	7.0	4.7	6.0	5.8
JR-888	5.7	4.7	7.0	6.3	6.0	5.7	4.7	6.0	7.0	4.7	5.7	5.8
DLFPS-238/3014	6.0	6.3	6.0	6.3	4.7	5.3	5.0	7.0	7.0	3.7	5.7	5.7
BAR LP 6233	4.0	7.0	7.3	6.0	5.0	5.0	4.7	7.0	7.0	3.3	5.0	5.6
BAR LP 6165	4.0	7.7	6.3	6.0	5.0	4.7	3.3	2.3	7.0	3.0	4.0	4.8
LINN	2.7	6.7	4.3	4.0	4.7	4.3	3.0	1.0	6.0	1.0	3.0	3.7
LSD VALUE	1.5	1.5	1.3	0.6	1.9	1.8	0.8	0.2	0.5	1.5	1.2	0.4
C.V. (%)	14.7	17.1	10.6	5.1	23.2	19.6	8.7	1.9	4.6	15.0	10.2	12.3

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 18.

SPRING GREENUP RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

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

NAME	IL1	NE1	UT1	MEAN	NAME	IL1	NE1	UT1	MEAN
NP-2	8.7	4.3	8.0	7.0	INTENSE	8.7	3.7	7.3	6.6
JR-123	8.3	4.3	8.0	6.9	SLUGGER 3GL (PPG-PR 343)	8.7	4.0	7.0	6.6
LPB-SD-102	8.3	5.0	7.3	6.9	PPG-PR 371	8.0	4.3	7.3	6.6
PEPPER II (RAD-PR 103)	9.0	4.7	7.0	6.9	PPG-PR 422	8.7	4.0	7.0	6.6
RAD-PR 112	8.7	4.3	7.7	6.9	PST-2A2	8.7	4.0	7.0	6.6
XCELERATOR	8.7	4.3	7.7	6.9	BAR LP 6117	8.3	4.0	7.0	6.4
BWH	9.0	4.3	7.3	6.9	DLFPS-236/3546	8.3	4.0	7.0	6.4
LPB-SD-103	8.0	4.3	8.3	6.9	DLFPS-236/3548	8.3	4.0	7.0	6.4
PHARAOH	8.3	4.0	8.0	6.8	LPB-SD-104	8.0	4.7	6.7	6.4
PR-6-15	8.3	5.0	7.0	6.8	PPG-PR 421	8.3	4.0	7.0	6.4
SEABISCUIT	8.3	4.0	8.0	6.8	SAVANT	7.7	4.0	7.7	6.4
ASP0218 (A-6D)	8.3	4.7	7.3	6.8	SNX	7.7	4.0	7.7	6.4
BAR LP 6158	8.7	4.0	7.7	6.8	ASP0118GL (A-4G)	8.0	3.7	7.7	6.4
DLFPS-236/3542	8.3	4.7	7.3	6.8	DERBY XTREME	8.3	3.7	7.3	6.4
PPG-PR 423	9.0	4.0	7.3	6.8	DLFPS-236/3538	8.0	4.0	7.3	6.4
APR2616	8.7	4.3	7.0	6.7	DLFPS-236/3550	8.0	4.0	7.3	6.4
ASP0116EXT	8.0	4.7	7.3	6.7	DLFPS-236/3556	8.7	4.0	6.7	6.4
BSP-17	8.3	4.7	7.0	6.7	FP2	8.0	4.0	7.3	6.4
BSP-25	8.7	4.0	7.3	6.7	SLIDER LS (PPG-PR 241)	7.7	4.3	7.3	6.4
CPN	8.3	4.3	7.3	6.7	PPG-PR 370	8.0	4.0	7.3	6.4
DLFPS-236/3541	8.0	4.7	7.3	6.7	HOMERUN LS (PPG-PR 419)	8.0	4.0	7.3	6.4
DLFPS-236/3547	8.7	4.3	7.0	6.7	PPG-PR 424	8.0	4.0	7.3	6.4
DLFPS-236/3553	8.3	4.0	7.7	6.7	SR 4650	8.7	3.7	7.0	6.4
GO-143	8.7	4.3	7.0	6.7	UF3	8.0	3.7	7.7	6.4
JR-197	8.3	4.3	7.3	6.7	021	8.0	3.7	7.3	6.3
LPB-SD-105	8.3	4.7	7.0	6.7	02BS1	8.3	4.0	6.7	6.3
OVERDRIVE 5G	8.0	4.3	7.7	6.7	02BS2	7.7	3.7	7.7	6.3
PST-2FOXY	8.7	4.3	7.0	6.7	ASP0117 (A-PR15)	7.7	4.0	7.3	6.3
SILVER SPORT (PST-2CRP)	8.3	4.3	7.3	6.7	ALLSTAR III	8.0	4.0	7.0	6.3
DLFPS-236/3540	8.3	4.3	7.0	6.6	AMP-R1	8.0	4.0	7.0	6.3
DLFPS-236/3545	8.3	4.0	7.3	6.6	APR2612	8.7	3.7	6.7	6.3
DLFPS-236/3552	8.3	4.3	7.0	6.6	BAR LP 6159	7.3	4.0	7.7	6.3
DLFPS-236/3554	8.3	4.0	7.3	6.6	BAR LP 6164	8.0	4.0	7.0	6.3
GO-141	8.3	4.0	7.3	6.6	BRIGHTSTAR SLT	7.3	4.3	7.3	6.3
GRAY WOLF (PST-2GAL)	8.0	4.0	7.7	6.6	CS-6	7.7	4.0	7.3	6.3
MAN O WAR	8.3	4.0	7.3	6.6	DLFPS-236/3543	7.7	4.3	7.0	6.3
MRSL-PR16	8.3	4.3	7.0	6.6	KARMA	8.3	3.7	7.0	6.3
PL2	8.3	3.7	7.7	6.6	LPB-SD-101	7.7	4.0	7.3	6.3
PPG-PR 360	8.3	4.0	7.3	6.6	FURLONG (LTP-FCB)	8.0	4.0	7.0	6.3
PPG-PR 367	8.3	3.7	7.7	FASTBALL 3GL (PPG-PR 329)	8.0	3.7	7.3	6.3	
RRT	8.0	4.0	7.7	6.6	PPG-PR 420	8.0	4.0	7.0	6.3
SAGUARO	8.3	4.3	7.0	6.6	PR-5-16	8.0	3.7	7.3	6.3
UMPOUA	7.7	4.0	8.0	6.6	PST-2EGAD	7.7	3.3	8.0	6.3
DLFPS-236/3544	8.7	4.0	7.0	6.6	PST-2MAY	8.3	3.3	7.3	6.3
GRAND SLAM GLD	8.0	4.3	7.3	6.6	SIGNET	7.7	3.7	7.7	6.3
					JR-747	7.3	4.7	6.7	6.2

TABLE 18.
(CONT'D)SPRING GREENUP RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

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

NAME	IL1	NE1	UT1	MEAN
JR-888	7.7	4.0	7.0	6.2
MENSA	7.7	4.0	7.0	6.2
NP-3	7.7	4.0	7.0	6.2
PPG-PR 331	8.0	4.0	6.7	6.2
APPLE 3GL (PPG-PR 339)	8.3	4.0	6.3	6.2
PPG-PR 385	7.7	3.3	7.7	6.2
PST-2GTD	8.0	4.0	6.7	6.2
APR3060	8.0	3.7	7.0	6.2
MRSL-PR15	8.0	3.7	7.0	6.2
PST-2BDT	7.7	4.0	6.7	6.1
SHIELD (02BS4)	7.3	3.7	7.3	6.1
BAR LP 6162	7.7	3.3	7.3	6.1
EVOLVE	7.3	3.7	7.3	6.1
GO-142	8.0	3.7	6.7	6.1
023	7.7	4.0	6.3	6.0
BAR LP 6131	7.3	3.7	7.0	6.0
BAR LP 6165	7.0	3.7	7.3	6.0
BAR LP 6233	7.0	3.3	7.7	6.0
GRAY HAWK (PST-2FIND)	7.0	3.7	7.3	6.0
PPG-PR 372	7.3	4.3	6.3	6.0
PST-2PDA	7.0	3.7	7.3	6.0
DLFPS-238/3014	6.7	3.0	7.7	5.8
LINN	6.0	3.0	8.0	5.7
LSD VALUE	1.0	0.8	0.9	0.5
C.V. (%)	7.5	12.6	7.8	8.7

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 19.

SEEDLING VIGOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

SEEDLING VIGOR RATINGS 1-9; 9=MAXIMUM VIGOR 2/

NAME	CA7	IA1	KS1	KY1	MO1	MEAN
CPN	6.7	7.7	7.0	6.0	6.0	6.7
GRAY HAWK (PST-2FIND)	7.0	7.3	7.0	5.7	6.3	6.7
UMPQUA	7.3	5.3	8.0	6.3	6.3	6.7
SEABISCUIT	6.0	7.7	6.3	6.7	6.3	6.6
SIGNET	6.3	8.0	7.0	5.7	6.0	6.6
EVOLVE	6.7	7.0	6.7	6.3	6.0	6.5
PPG-PR 421	6.3	7.0	7.7	5.7	6.0	6.5
SAVANT	6.0	7.0	6.7	6.3	6.7	6.5
DLFPS-236/3556	6.7	7.3	6.7	5.3	6.0	6.4
JR-888	7.3	6.3	6.7	6.0	5.7	6.4
OVERDRIVE 5G	6.7	6.3	7.3	5.7	6.0	6.4
PL2	6.0	7.0	6.7	5.7	6.7	6.4
HOMERUN LS (PPG-PR 419)	7.0	7.3	6.7	5.3	5.7	6.4
PPG-PR 424	6.0	7.3	7.0	5.3	6.3	6.4
ASP0117 (A-PR15)	5.7	7.0	7.3	5.7	6.0	6.3
GRAND SIAM GLD	5.7	7.0	7.7	6.0	5.3	6.3
PPG-PR 331	6.7	5.7	7.7	6.0	5.7	6.3
SHIELD (02BS4)	6.3	7.3	6.7	6.0	5.3	6.3
BRIGHTSTAR SLT	5.7	7.7	6.7	5.7	5.7	6.3
APPLE 3GL (PPG-PR 339)	7.7	4.7	7.0	6.0	6.0	6.3
PPG-PR 422	7.3	5.7	6.7	5.7	6.0	6.3
ASP0116EXT	6.3	7.3	6.3	5.3	6.0	6.3
BAR LP 6117	7.7	5.3	6.7	6.3	5.3	6.3
PHARAOH	6.0	6.3	7.0	6.0	6.0	6.3
PST-2PDA	6.0	7.0	6.7	6.3	5.3	6.3
023	5.7	6.7	7.0	6.0	5.7	6.2
JR-197	6.7	6.7	6.3	5.7	5.7	6.2
SNX	6.3	7.0	6.7	5.7	5.3	6.2
JR-747	7.0	5.7	7.3	5.0	5.7	6.1
LPB-SD-101	7.0	5.0	7.7	5.7	5.3	6.1
MAN O WAR	7.3	5.0	6.3	6.0	6.0	6.1
NP-2	5.0	6.3	7.0	6.0	6.3	6.1
02BS2	6.0	5.7	7.0	6.0	5.7	6.1
BAR LP 6159	5.3	5.7	7.3	6.3	5.7	6.1
BAR LP 6233	7.0	6.3	6.3	5.7	5.0	6.1
PPG-PR 423	4.0	6.3	7.3	7.0	5.7	6.1
BSP-17	6.7	5.7	6.0	6.0	5.7	6.0
ASP0118GL (A-4G)	7.0	6.0	6.3	5.7	5.0	6.0
DLFPS-236/3554	7.3	4.7	6.3	6.0	5.7	6.0
MRSL-PR16	6.7	6.3	6.3	5.7	5.0	6.0
PPG-PR 370	6.0	4.3	7.7	6.0	6.0	6.0
PPG-PR 385	5.3	5.7	7.7	5.3	6.0	6.0
PST-2A2	8.0	6.3	5.0	5.3	5.3	6.0
XCELERATOR	6.7	6.3	6.3	5.3	5.3	6.0
ALLSTAR III	5.7	6.3	6.7	5.7	5.3	5.9

TABLE 19.
(CONT'D)SEEDLING VIGOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

NAME	SEEDLING VIGOR RATINGS 1-9; 9=MAXIMUM VIGOR 2/					
	CA7	IA1	KS1	KY1	MO1	MEAN
BWH	4.7	6.7	7.0	5.3	6.0	5.9
GO-141	7.0	4.3	7.0	5.7	5.7	5.9
GO-142	7.0	4.7	7.0	5.7	5.3	5.9
FURLONG (LTP-FCB)	5.7	7.0	6.0	5.7	5.3	5.9
PPG-PR 372	6.0	5.3	7.0	5.7	5.7	5.9
SR 4650	4.7	7.7	6.3	5.0	6.0	5.9
INTENSE	6.3	6.0	6.3	5.7	5.3	5.9
LPB-SD-102	7.0	5.0	6.3	6.0	5.3	5.9
ASP0218 (A-6D)	7.0	5.7	5.7	6.0	5.0	5.9
NP-3	5.0	6.0	7.0	5.7	5.7	5.9
UF3	6.0	5.7	6.0	6.0	5.7	5.9
021	6.3	6.0	6.0	5.0	6.0	5.9
FASTBALL 3GL (PPG-PR 329)	6.0	5.0	7.3	5.7	5.3	5.9
PPG-PR 371	6.3	4.3	7.0	5.7	6.0	5.9
APR2616	6.3	5.0	6.7	5.3	5.7	5.8
DLFPS-236/3547	6.3	5.0	7.0	5.7	5.0	5.8
FP2	6.0	5.3	6.7	5.7	5.3	5.8
BAR LP 6158	6.0	5.3	6.3	6.3	5.0	5.8
DERBY XTREME	4.3	6.3	6.3	6.0	5.7	5.7
DLFPS-236/3540	6.0	4.7	7.3	4.7	6.0	5.7
DLFPS-236/3545	6.3	4.7	7.0	5.7	5.0	5.7
GO-143	7.0	4.3	6.0	5.7	5.7	5.7
MRSL-PR15	5.3	6.3	5.7	5.7	5.7	5.7
BAR LP 6131	6.3	5.0	6.7	5.3	5.3	5.7
BAR LP 6164	6.7	4.3	6.3	5.3	6.0	5.7
DLFPS-236/3541	6.3	4.3	6.7	6.3	5.0	5.7
DLFPS-236/3553	5.7	5.3	6.3	5.3	6.0	5.7
DLFPS-236/3542	6.0	5.3	6.7	4.7	5.7	5.7
PPG-PR 360	5.0	4.0	7.7	5.7	6.0	5.7
AMP-R1	6.3	4.3	6.7	6.0	5.0	5.7
BSP-25	6.3	4.7	6.3	5.7	5.3	5.7
SLUGGER 3GL (PPG-PR 343)	5.7	4.7	7.3	5.3	5.3	5.7
PPG-PR 367	6.3	4.0	7.0	5.3	5.7	5.7
PR-5-16	5.7	4.3	6.3	6.0	6.0	5.7
RRT	6.0	5.3	7.0	5.3	4.7	5.7
CS-6	5.7	5.0	6.7	6.0	4.7	5.6
DLFPS-236/3544	5.7	5.3	6.7	5.3	5.0	5.6
GRAY WOLF (PST-2GAL)	6.0	5.3	5.7	5.3	5.7	5.6
JR-123	6.3	4.0	7.0	5.3	5.3	5.6
MENSA	5.3	5.0	6.7	6.0	5.0	5.6
SLIDER LS (PPG-PR 241)	4.7	5.3	7.0	5.7	5.3	5.6
PST-2EGAD	5.7	5.3	6.3	5.3	5.3	5.6
LPB-SD-103	6.0	4.7	6.7	5.3	5.0	5.5
PPG-PR 420	6.7	5.3	6.0	5.3	4.3	5.5
PR-6-15	6.7	5.0	6.7	4.3	5.0	5.5
APR3060	6.0	4.7	7.0	5.0	4.7	5.5

TABLE 19.
(CONT'D)SEEDLING VIGOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

NAME	SEEDLING VIGOR RATINGS 1-9; 9=MAXIMUM VIGOR 2/					
	CA7	IA1	KS1	KY1	MO1	MEAN
DLFPS-236/3543	5.7	4.0	6.7	5.7	5.3	5.5
PST-2MAY	7.0	4.3	.	5.3	5.0	5.4
DLFPS-236/3538	5.0	5.0	5.7	5.7	5.7	5.4
SAGUARO	5.0	4.7	6.0	6.0	5.3	5.4
02BS1	6.3	6.0	5.0	5.3	4.3	5.4
DLFPS-236/3548	6.3	4.0	6.3	6.0	4.3	5.4
DLFPS-236/3550	6.3	3.3	6.7	6.3	4.3	5.4
DLFPS-236/3552	6.7	3.7	5.7	5.7	5.0	5.3
PST-2BDT	5.0	5.7	6.3	5.0	4.7	5.3
PST-2GTD	5.7	4.0	6.7	5.3	4.7	5.3
BAR LP 6165	6.7	3.7	6.0	5.0	4.3	5.1
APR2612	5.7	3.7	6.3	4.7	5.0	5.1
BAR LP 6162	6.7	3.0	5.7	5.7	4.3	5.1
LPB-SD-104	4.7	4.3	6.0	5.3	5.0	5.1
LPB-SD-105	4.7	5.3	6.3	5.0	4.0	5.1
RAD-PR 112	6.7	3.3	5.7	4.7	4.7	5.0
PST-2FOXY	5.3	3.3	6.0	5.3	5.0	5.0
SILVER SPORT (PST-2CRP)	5.3	3.7	6.7	5.0	4.0	4.9
DLFPS-238/3014	5.0	4.0	6.3	5.0	4.3	4.9
DLFPS-236/3546	4.3	3.3	7.0	5.0	4.7	4.9
KARMA	5.0	4.3	.	5.3	4.3	4.8
LINN	6.3	3.7	4.7	4.3	4.0	4.6
PEPPER II (RAD-PR 103)	4.0	3.0	5.7	5.0	5.0	4.5
LSD VALUE	2.1	1.8	1.2	1.4	1.4	0.7
C.V. (%)	21.1	20.5	11.2	15.5	16.2	17.1

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 20. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/							
NAME	MO1	VA1	MEAN	NAME	MO1	VA1	MEAN
DLFPS-236/3547	97.0	99.0	98.0	DLFPS-236/3541	93.3	99.0	96.2
DLFPS-236/3546	96.0	99.0	97.5	DLFPS-236/3544	93.3	99.0	96.2
DLFPS-236/3552	96.0	99.0	97.5	DLFPS-236/3545	93.3	99.0	96.2
GRAY WOLF (PST-2GAL)	96.0	99.0	97.5	DLFPS-236/3550	93.3	99.0	96.2
LPB-SD-101	96.0	99.0	97.5	DLFPS-236/3556	93.3	99.0	96.2
SLIDER LS (PPG-PR 241)	96.0	99.0	97.5	INTENSE	93.3	99.0	96.2
PR-5-16	96.0	99.0	97.5	KARMA	93.3	99.0	96.2
02BS2	95.0	99.0	97.0	LPB-SD-102	93.3	99.0	96.2
ASPO118GL (A-4G)	95.0	99.0	97.0	LPB-SD-103	93.3	99.0	96.2
ASPO117 (A-PR15)	95.0	99.0	97.0	FURLONG (LTP-FCB)	93.3	99.0	96.2
CPN	95.0	99.0	97.0	MAN O WAR	93.3	99.0	96.2
DLFPS-236/3542	95.0	99.0	97.0	MENSA	93.3	99.0	96.2
DLFPS-238/3014	95.0	99.0	97.0	MRSPL-PR16	93.3	99.0	96.2
GO-142	95.0	99.0	97.0	PHARAOH	93.3	99.0	96.2
GRAY HAWK (PST-2FIND)	95.0	99.0	97.0	PPG-PR 331	93.3	99.0	96.2
LPB-SD-104	95.0	99.0	97.0	PPG-PR 367	93.3	99.0	96.2
NP-3	95.0	99.0	97.0	PPG-PR 370	93.3	99.0	96.2
OVERDRIVE 5G	95.0	99.0	97.0	PPG-PR 371	93.3	99.0	96.2
PL2	95.0	99.0	97.0	PPG-PR 423	93.3	99.0	96.2
SLUGGER 3GL (PPG-PR 343)	95.0	99.0	97.0	PST-2BDT	93.3	99.0	96.2
PPG-PR 385	95.0	99.0	97.0	PST-2PDA	93.3	99.0	96.2
HOMERUN LS (PPG-PR 419)	95.0	99.0	97.0	PEPPER II (RAD-PR 103)	93.3	99.0	96.2
FR-6-15	95.0	99.0	97.0	RRT	93.3	99.0	96.2
PST-2GTD	95.0	99.0	97.0	SAGUARO	93.3	99.0	96.2
SILVER SPORT (PST-2CRP)	95.0	99.0	97.0	SAVANT	93.3	99.0	96.2
SR 4650	95.0	99.0	97.0	UMPQUA	93.3	99.0	96.2
023	94.3	99.0	96.7	DLFPS-236/3538	92.7	99.0	95.8
DLFPS-236/3548	94.3	99.0	96.7	DLFPS-236/3554	92.7	99.0	95.8
DLFPS-236/3553	94.3	99.0	96.7	PPG-PR 421	92.7	99.0	95.8
FP2	94.3	99.0	96.7	021	91.7	99.0	95.3
GO-141	94.3	99.0	96.7	02BS1	91.7	99.0	95.3
GO-143	94.3	99.0	96.7	ASPO218 (A-6D)	91.7	99.0	95.3
LPB-SD-105	94.3	99.0	96.7	ALLSTAR III	91.7	99.0	95.3
NP-2	94.3	99.0	96.7	APR2616	91.7	99.0	95.3
APPLE 3GL (PPG-PR 339)	94.3	99.0	96.7	APR3060	91.7	99.0	95.3
PPG-PR 372	94.3	99.0	96.7	ASPO116EXT	91.7	99.0	95.3
PPG-PR 422	94.3	99.0	96.7	BAR LP 6158	91.7	99.0	95.3
SHIELD (02BS4)	93.3	99.0	96.2	BAR LP 6159	91.7	99.0	95.3
AMP-R1	93.3	99.0	96.2	BAR LP 6162	91.7	99.0	95.3
APR2612	93.3	99.0	96.2	BAR LP 6233	91.7	99.0	95.3
BAR LP 6131	93.3	99.0	96.2	BRIGHTSTAR SLT	91.7	99.0	95.3
BAR LP 6164	93.3	99.0	96.2	BSP-25	91.7	99.0	95.3
BAR LP 6165	93.3	99.0	96.2	DLFPS-236/3543	91.7	99.0	95.3
CS-6	93.3	99.0	96.2	EVOLVE	91.7	99.0	95.3
DERBY XTREME	93.3	99.0	96.2	GRAND SLAM GLD	91.7	99.0	95.3
DLFPS-236/3540	93.3	99.0	96.2	JR-747	91.7	99.0	95.3

TABLE 20. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
(CONT'D) 2017 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/

NAME	MO1	VA1	MEAN
JR-888	91.7	99.0	95.3
MRSL-PR15	91.7	99.0	95.3
FASTBALL 3GL (PPG-PR 329)	91.7	99.0	95.3
PPG-PR 360	91.7	99.0	95.3
PPG-PR 420	91.7	99.0	95.3
PPG-PR 424	91.7	99.0	95.3
PST-2A2	91.7	99.0	95.3
PST-2EGAD	91.7	99.0	95.3
SEABISCUIT	91.7	99.0	95.3
SIGNET	91.7	99.0	95.3
SNX	91.7	99.0	95.3
XCELERATOR	91.7	99.0	95.3
BAR LP 6117	90.0	99.0	94.5
BWH	90.0	99.0	94.5
JR-123	90.0	99.0	94.5
JR-197	90.0	99.0	94.5
PST-2FOXY	90.0	99.0	94.5
PST-2MAY	90.0	99.0	94.5
RAD-PR 112	90.0	99.0	94.5
UF3	90.0	99.0	94.5
LINN	91.7	90.0	90.8
BSP-17	92.7	86.0	89.3
LSD VALUE	4.6	3.4	2.9
C.V. (%)	3.1	2.1	2.6

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 21. PERCENT LIVING GROUND COVER (FALL) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	VA1	NAME	VA1
021	99.0	GO-141	99.0
023	99.0	GO-142	99.0
02BS1	99.0	GO-143	99.0
02BS2	99.0	GRAND SLAM GLD	99.0
SHIELD (02BS4)	99.0	GRAY HAWK (PST-2FIND)	99.0
ASP0118GL (A-4G)	99.0	GRAY WOLF (PST-2GAL)	99.0
ASP0218 (A-6D)	99.0	INTENSE	99.0
ASP0117 (A-PR15)	99.0	JR-123	99.0
ALLSTAR III	99.0	JR-197	99.0
AMP-R1	99.0	JR-747	99.0
APR2612	99.0	JR-888	99.0
APR2616	99.0	KARMA	99.0
APR3060	99.0	LPB-SD-101	99.0
ASP0116EXT	99.0	LPB-SD-102	99.0
BAR LP 6117	99.0	LPB-SD-103	99.0
BAR LP 6131	99.0	LPB-SD-104	99.0
BAR LP 6158	99.0	LPB-SD-105	99.0
BAR LP 6159	99.0	FURLONG (LTP-FCB)	99.0
BAR LP 6162	99.0	MAN O WAR	99.0
BAR LP 6164	99.0	MENSA	99.0
BAR LP 6165	99.0	MRSL-PR15	99.0
BAR LP 6233	99.0	MRSL-PR16	99.0
BRIGHTSTAR SLT	99.0	NP-2	99.0
BSP-25	99.0	NP-3	99.0
BWH	99.0	OVERDRIVE 5G	99.0
CPN	99.0	PHARAOH	99.0
CS-6	99.0	PL2	99.0
DERBY XTREME	99.0	SLIDER LS (PPG-PR 241)	99.0
DLFPS-236/3538	99.0	FASTBALL 3GL (PPG-PR 329)	99.0
DLFPS-236/3540	99.0	PPG-PR 331	99.0
DLFPS-236/3541	99.0	APPLE 3GL (PPG-PR 339)	99.0
DLFPS-236/3542	99.0	SLUGGER 3GL (PPG-PR 343)	99.0
DLFPS-236/3543	99.0	PPG-PR 360	99.0
DLFPS-236/3544	99.0	PPG-PR 367	99.0
DLFPS-236/3545	99.0	PPG-PR 370	99.0
DLFPS-236/3546	99.0	PPG-PR 371	99.0
DLFPS-236/3547	99.0	PPG-PR 372	99.0
DLFPS-236/3548	99.0	PPG-PR 385	99.0
DLFPS-236/3550	99.0	HOMERUN LS (PPG-PR 419)	99.0
DLFPS-236/3552	99.0	PPG-PR 420	99.0
DLFPS-236/3553	99.0	PPG-PR 421	99.0
DLFPS-236/3554	99.0	PPG-PR 422	99.0
DLFPS-236/3556	99.0	PPG-PR 423	99.0
DLFPS-238/3014	99.0	PPG-PR 424	99.0
EVOLVE	99.0	PR-5-16	99.0
FP2	99.0	PR-6-15	99.0

TABLE 21. PERCENT LIVING GROUND COVER (FALL) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
(CONT'D) 2017 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	VAL
PST-2A2	99.0
PST-2BDT	99.0
PST-2EGAD	99.0
PST-2FOXY	99.0
PST-2GTD	99.0
PST-2MAY	99.0
PST-2PDA	99.0
PEPPER II (RAD-PR 103)	99.0
RAD-PR 112	99.0
RRT	99.0
SAGUARO	99.0
SAVANT	99.0
SEABISCUIT	99.0
SIGNET	99.0
SILVER SPORT (PST-2CRP)	99.0
SNX	99.0
SR 4650	99.0
UF3	99.0
UMPQUA	99.0
XCELERATOR	99.0
LINN	97.7
BSP-17	87.7
LSD VALUE	3.0
C.V. (%)	1.9

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 22. CROWN RUST RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

CROWN RUST RATINGS 1-9; 9=NO DISEASE 2/			
NAME	NJ2	NAME	NJ2
FURLONG (LTP-FCB)	8.3	KARMA	5.0
DLFPS-236/3547	8.0	MENSA	5.0
CPN	7.7	SIGNET	5.0
HOMERUN LS (PPG-PR 419)	7.7	APR2612	4.7
PPG-PR 424	7.7	INTENSE	4.7
SILVER SPORT (PST-2CRP)	7.7	SLIDER LS (PPG-PR 241)	4.7
UMPQUA	7.7	PPG-PR 370	4.7
DLFPS-236/3545	7.3	PPG-PR 372	4.7
FASTBALL 3GL (PPG-PR 329)	7.3	PPG-PR 420	4.7
023	7.0	PPG-PR 421	4.7
SHIELD (02BS4)	7.0	PST-2FOXY	4.7
DLFPS-236/3546	7.0	DLFPS-236/3540	4.3
DLFPS-236/3553	7.0	DLFPS-236/3542	4.3
PL2	7.0	DLFPS-236/3548	4.3
PPG-PR 367	7.0	PPG-PR 331	4.3
UF3	7.0	APPLE 3GL (PPG-PR 339)	4.3
DLFPS-236/3544	6.7	PST-2MAY	4.3
MAN O WAR	6.7	RRT	4.3
NP-2	6.7	APR2616	4.0
XCELERATOR	6.7	APR3060	4.0
021	6.3	BAR LP 6162	4.0
BAR LP 6165	6.3	GRAND SLAM GLD	4.0
BAR LP 6233	6.3	JR-888	4.0
FP2	6.3	ASP0117 (A-PR15)	3.7
JR-197	6.3	BAR LP 6164	3.7
SLUGGER 3GL (PPG-PR 343)	6.3	DLFPS-236/3543	3.7
SR 4650	6.3	DLFPS-236/3550	3.7
02BS2	6.0	DLFPS-236/3554	3.7
NP-3	6.0	GRAY HAWK (PST-2FIND)	3.7
PPG-PR 371	6.0	LINN	3.7
PPG-PR 385	6.0	LPB-SD-104	3.7
PPG-PR 423	6.0	LPB-SD-105	3.7
DLFPS-236/3556	5.7	PR-5-16	3.7
OVERDRIVE 5G	5.7	PST-2BDT	3.7
PHARAOH	5.7	PST-2GTD	3.7
PPG-PR 422	5.7	SAVANT	3.7
PR-6-15	5.7	BAR LP 6131	3.3
PST-2A2	5.7	DLFPS-236/3538	3.3
SEABISCUIT	5.7	AMP-R1	3.0
02BS1	5.3	BAR LP 6158	3.0
GRAY WOLF (PST-2GAL)	5.3	BSP-17	3.0
PPG-PR 360	5.3	LPB-SD-102	3.0
DLFPS-236/3541	5.0	LPB-SD-103	3.0
DLFPS-238/3014	5.0	MRSL-PR16	3.0
JR-123	5.0	SAGUARO	3.0
		ASP0118GL (A-4G)	2.7

TABLE 22. CROWN RUST RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
(CONT'D) 2017 DATA

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

NAME	NJ2
ASP0218 (A-6D)	2.7
BAR LP 6159	2.7
BRIGHTSTAR SLT	2.7
DLFPS-236/3552	2.7
LPB-SD-101	2.7
PST-2EGAD	2.7
PST-2PDA	2.7
RAD-PR 112	2.7
ALLSTAR III	2.3
BWH	2.3
CS-6	2.3
DERBY XTREME	2.3
EVOLVE	2.3
GO-142	2.3
MRSI-PR15	2.3
PEPPER II (RAD-PR 103)	2.3
ASP0116EXT	2.0
BSP-25	2.0
GO-143	2.0
JR-747	2.0
SNX	2.0
GO-141	1.7
BAR LP 6117	1.3
LSD VALUE	1.9
C.V. (%)	26.2

- 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 23. GRAY LEAF SPOT RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

GRAY LEAF SPOT RATINGS 1-9; 9=NO DISEASE 2/

NAME	NJ2	NAME	NJ2
KARMA	9.0	PPG-PR 371	7.3
02BS1	8.7	PR-5-16	7.3
DLFPS-236/3553	8.7	PST-2GTD	7.3
JR-197	8.7	RRT	7.3
NP-3	8.7	UF3	7.3
SLUGGER 3GL (PPG-PR 343)	8.7	APR2616	7.0
PPG-PR 423	8.7	DLFPS-236/3543	7.0
DLFPS-236/3542	8.3	INTENSE	7.0
DLFPS-236/3545	8.3	SLIDER LS (PPG-PR 241)	7.0
FP2	8.3	PST-2EGAD	7.0
GRAY WOLF (PST-2GAL)	8.3	SR 4650	7.0
NP-2	8.3	DLFPS-236/3552	6.7
PPG-PR 367	8.3	MAN O WAR	6.7
PPG-PR 421	8.3	HOMERUN LS (PPG-PR 419)	6.7
PPG-PR 422	8.3	SEABISCUIT	6.7
PR-6-15	8.3	DLFPS-236/3550	6.3
SIGNET	8.3	PPG-PR 385	6.3
021	8.0	PST-2FOXY	6.3
02BS2	8.0	UMPQUA	6.3
DLFPS-236/3544	8.0	DERBY XTREME	6.0
DLFPS-236/3546	8.0	DLFPS-236/3548	6.0
DLFPS-236/3556	8.0	PST-2BDT	6.0
JR-123	8.0	PST-2MAY	6.0
FASTBALL 3GL (PPG-PR 329)	8.0	SHIELD (02BS4)	5.7
APPLE 3GL (PPG-PR 339)	8.0	DLFPS-236/3540	5.7
SILVER SPORT (PST-2CRP)	8.0	DLFPS-236/3554	5.7
023	7.7	RAD-PR 112	5.7
DLFPS-236/3538	7.7	GO-142	5.3
DLFPS-236/3547	7.7	GRAY HAWK (PST-2FIND)	5.3
FURLONG (LTP-FCB)	7.7	ASP0118GL (A-4G)	5.0
OVERDRIVE 5G	7.7	BAR LP 6158	5.0
PHARAOH	7.7	ASP0218 (A-6D)	4.7
PL2	7.7	ASP0117 (A-PR15)	4.7
PPG-PR 360	7.7	BAR LP 6164	4.7
PPG-PR 370	7.7	CS-6	4.7
PPG-PR 372	7.7	EVOLVE	4.7
PPG-PR 420	7.7	GRAND SLAM GLD	4.7
PPG-PR 424	7.7	MRSL-PR15	4.7
PST-2A2	7.7	PEPPER II (RAD-PR 103)	4.7
PST-2PDA	7.7	ALLSTAR III	4.3
XCELERATOR	7.7	SNX	4.3
APR2612	7.3	AMP-R1	4.0
CPN	7.3	APR3060	4.0
DLFPS-236/3541	7.3	BAR LP 6233	4.0
PPG-PR 331	7.3	MRSL-PR16	4.0
		BAR LP 6117	3.7

TABLE 23. GRAY LEAF SPOT RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
(CONT'D) 2017 DATA

GRAY LEAF SPOT RATINGS 1-9; 9=NO DISEASE 2/

NAME	NJ2
BAR LP 6159	3.7
GO-143	3.7
LPB-SD-103	3.7
BSP-25	3.3
GO-141	3.3
LPB-SD-104	3.3
ASP0116EXT	2.7
BSP-17	2.7
JR-747	2.7
LPB-SD-102	2.7
MENSA	2.7
BAR LP 6162	2.3
BAR LP 6165	2.3
DLFPS-238/3014	2.3
SAGUARO	2.3
JR-888	2.0
BAR LP 6131	1.7
BRIGHTSTAR SLT	1.7
BWH	1.7
LPB-SD-101	1.7
LPB-SD-105	1.3
SAVANT	1.3
LINN	1.0
LSD VALUE	1.5
C.V. (%)	16.1

- 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 24.

PINK SNOW MOLD RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

PINK SNOW MOLD RATINGS 1-9; 9=NO DISEASE 2/

NAME	UT1	NAME	UT1
BAR LP 6162	7.7	NP-3	5.7
PPG-PR 424	7.7	OVERDRIVE 5G	5.7
02BS1	7.3	PR-6-15	5.7
DLFPS-238/3014	7.3	PST-2A2	5.7
BSP-17	7.0	PST-2EGAD	5.7
DLFPS-236/3543	6.7	SNX	5.7
GO-142	6.7	UMPQUA	5.7
FURLONG (LTP-FCB)	6.7	APR2612	5.3
PPG-PR 367	6.7	CPN	5.3
PEPPER II (RAD-PR 103)	6.7	DLFPS-236/3547	5.3
02BS2	6.3	DLFPS-236/3548	5.3
ASP0118GL (A-4G)	6.3	GO-141	5.3
BAR LP 6165	6.3	GRAND SLAM GLD	5.3
BSP-25	6.3	INTENSE	5.3
DLFPS-236/3541	6.3	KARMA	5.3
BAR LP 6159	6.0	FASTBALL 3GL (PPG-PR 329)	5.3
DLFPS-236/3538	6.0	APPLE 3GL (PPG-PR 339)	5.3
DLFPS-236/3540	6.0	SLUGGER 3GL (PPG-PR 343)	5.3
DLFPS-236/3544	6.0	PPG-PR 371	5.3
DLFPS-236/3545	6.0	PST-2MAY	5.3
DLFPS-236/3550	6.0	XCELERATOR	5.3
DLFPS-236/3553	6.0	021	5.0
DLFPS-236/3554	6.0	ALLSTAR III	5.0
EVOLVE	6.0	BWH	5.0
MRSL-PR15	6.0	DLFPS-236/3542	5.0
PHARAOH	6.0	GRAY HAWK (PST-2FIND)	5.0
PPG-PR 331	6.0	MAN O WAR	5.0
PPG-PR 370	6.0	PL2	5.0
PPG-PR 372	6.0	SLIDER LS (PPG-PR 241)	5.0
PPG-PR 385	6.0	PPG-PR 360	5.0
HOMERUN LS (PPG-PR 419)	6.0	PPG-PR 423	5.0
PPG-PR 421	6.0	SAGUARO	5.0
PST-2GTD	6.0	ASP0117 (A-PR15)	4.7
RAD-PR 112	6.0	APR2616	4.7
SILVER SPORT (PST-2CRP)	6.0	BAR LP 6131	4.7
SR 4650	6.0	BAR LP 6164	4.7
UF3	6.0	LPB-SD-102	4.7
SHIELD (02BS4)	5.7	PPG-PR 420	4.7
APR3060	5.7	PR-5-16	4.7
CS-6	5.7	PST-2FOXY	4.7
GO-143	5.7	AMP-R1	4.3
JR-123	5.7	BAR LP 6158	4.3
JR-197	5.7	BRIGHTSTAR SLT	4.3
LPB-SD-103	5.7	DLFPS-236/3546	4.3
NP-2	5.7	DLFPS-236/3556	4.3
		FP2	4.3

TABLE 24.
(CONT'D)PINK SNOW MOLD RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

PINK SNOW MOLD RATINGS 1-9; 9=NO DISEASE 2/

NAME	UT1
GRAY WOLF (PST-2GAL)	4.3
LPB-SD-101	4.3
PPG-PR 422	4.3
PST-2BDT	4.3
SAVANT	4.3
SEABISCUIT	4.3
SIGNET	4.3
ASP0218 (A-6D)	4.0
ASP0116EXT	4.0
BAR LP 6117	4.0
MENSA	4.0
RRT	4.0
DERBY XTREME	3.7
DLFPS-236/3552	3.7
PST-2PDA	3.7
BAR LP 6233	3.3
JR-888	3.3
023	3.0
LINN	3.0
LPB-SD-104	3.0
MRSL-PR16	2.7
LPB-SD-105	2.3
JR-747	1.3
LSD VALUE	2.6
C.V. (%)	30.9

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 25. FALL COLOR (NOVEMBER) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

FALL COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

NAME	IL1	NAME	IL1
BWH	7.3	023	6.3
PR-6-15	7.3	ASP0118GL (A-4G)	6.3
PEPPER II (RAD-PR 103)	7.3	ASP0218 (A-6D)	6.3
021	7.0	APR2612	6.3
02BS1	7.0	ASP0116EXT	6.3
APR2616	7.0	BAR LP 6131	6.3
BAR LP 6162	7.0	BAR LP 6158	6.3
CPN	7.0	BAR LP 6233	6.3
GO-143	7.0	BRIGHTSTAR SLT	6.3
FURLONG (LTP-FCB)	7.0	BSP-17	6.3
NP-3	7.0	DERBY XTREME	6.3
SLUGGER 3GL (PPG-PR 343)	7.0	DLFPS-236/3538	6.3
PST-2A2	7.0	DLFPS-236/3540	6.3
PST-2FOXY	7.0	DLFPS-236/3541	6.3
PST-2MAY	7.0	DLFPS-236/3542	6.3
PST-2PDA	7.0	DLFPS-236/3548	6.3
ALLSTAR III	6.7	DLFPS-236/3550	6.3
BAR LP 6117	6.7	GO-141	6.3
BSP-25	6.7	GO-142	6.3
CS-6	6.7	GRAY HAWK (PST-2FIND)	6.3
DLFPS-236/3547	6.7	GRAY WOLF (PST-2GAL)	6.3
DLFPS-236/3554	6.7	INTENSE	6.3
DLFPS-238/3014	6.7	LPB-SD-101	6.3
FP2	6.7	LPB-SD-103	6.3
LPB-SD-102	6.7	LPB-SD-105	6.3
MAN O WAR	6.7	MENSA	6.3
MRSLS-PR15	6.7	NP-2	6.3
OVERDRIVE 5G	6.7	PL2	6.3
PHARAOH	6.7	PPG-PR 370	6.3
SLIDER LS (PPG-PR 241)	6.7	PPG-PR 372	6.3
FASTBALL 3GL (PPG-PR 329)	6.7	PPG-PR 422	6.3
APPLE 3GL (PPG-PR 339)	6.7	PPG-PR 424	6.3
PPG-PR 360	6.7	SAGUARO	6.3
PPG-PR 367	6.7	SEABISCUIT	6.3
PPG-PR 371	6.7	SIGNET	6.3
PPG-PR 385	6.7	SILVER SPORT (PST-2CRP)	6.3
PPG-PR 423	6.7	UMPQUA	6.3
PR-5-16	6.7	XCELERATOR	6.3
PST-2BDT	6.7	SHIELD (02BS4)	6.0
PST-2EGAD	6.7	ASP0117 (A-PR15)	6.0
PST-2GTD	6.7	AMP-R1	6.0
RRT	6.7	BAR LP 6165	6.0
SAVANT	6.7	DLFPS-236/3543	6.0
SNX	6.7	DLFPS-236/3544	6.0
UF3	6.7	DLFPS-236/3552	6.0
		DLFPS-236/3553	6.0

TABLE 25.
(CONT'D)FALL COLOR (NOVEMBER RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

FALL COLOR RATINGS 1-9; 9=COMPLETE COLOR RETENTION 2/

NAME	1/L1
EVOLVE	6.0
JR-197	6.0
KARMA	6.0
LPB-SD-104	6.0
MRSI-PR16	6.0
PPG-PR 331	6.0
HOMERUN LS (PPG-PR 419)	6.0
PPG-PR 420	6.0
PPG-PR 421	6.0
RAD-PR 112	6.0
SR 4650	6.0
APR3060	5.7
BAR LP 6159	5.7
BAR LP 6164	5.7
DLFPS-236/3545	5.7
DLFPS-236/3546	5.7
DLFPS-236/3556	5.7
GRAND SLAM GLD	5.7
JR-123	5.7
JR-747	5.7
02BS2	5.3
JR-888	5.3
LINN	3.0
LSD VALUE	1.1
C.V. (%)	11.0

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 26. PERCENT ESTABLISHMENT RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA 2/

NAME	CT1	MI1	MO1	NE1	WI1	MEAN
023	80.0	65.0	98.0	60.0	66.7	73.9
02BS2	75.0	76.7	94.0	56.7	63.3	73.1
SAVANT	71.7	70.0	91.7	63.3	68.3	73.0
GRAY HAWK (PST-2FIND)	73.3	71.7	95.7	60.0	63.3	72.8
LPB-SD-102	75.0	70.0	93.3	63.3	61.7	72.7
PR-6-15	68.3	76.7	97.3	63.3	56.7	72.5
PPG-PR 331	75.0	71.7	91.7	56.7	66.7	72.3
BAR LP 6233	75.0	71.7	94.0	63.3	56.7	72.1
DLFPS-236/3545	73.3	71.7	92.3	63.3	60.0	72.1
021	70.0	73.3	94.0	56.7	65.0	71.8
DLFPS-236/3556	70.0	71.7	96.7	60.0	60.0	71.7
RRT	76.7	71.7	91.7	56.7	61.7	71.7
NP-2	66.7	76.7	93.0	56.7	63.3	71.3
PPG-PR 371	66.7	68.3	92.7	60.0	68.3	71.2
DLFPS-236/3538	66.7	75.0	90.7	60.0	63.3	71.1
XCELERATOR	66.7	70.0	95.7	60.0	63.3	71.1
PPG-PR 424	66.7	71.7	97.0	60.0	60.0	71.1
JR-888	63.3	73.3	91.7	63.3	63.3	71.0
CPN	63.3	75.0	96.0	60.0	60.0	70.9
ASP0117 (A-PR15)	65.0	71.7	94.0	56.7	66.7	70.8
EVOLVE	80.0	71.7	95.0	56.7	50.0	70.7
DLFPS-236/3546	65.0	70.0	95.7	56.7	65.0	70.5
GRAND SLAM GLD	76.7	68.3	89.0	60.0	58.3	70.5
BAR LP 6159	65.0	75.0	91.7	56.7	63.3	70.3
CS-6	73.3	73.3	93.3	50.0	61.7	70.3
PHARAOH	70.0	66.7	91.7	56.7	66.7	70.3
ASP0116EXT	70.0	73.3	90.0	60.0	58.3	70.3
PPG-PR 423	65.0	70.0	94.7	60.0	61.7	70.3
PST-2A2	70.0	70.0	91.0	60.0	60.0	70.2
SR 4650	76.7	70.0	94.3	60.0	50.0	70.2
GO-141	66.7	63.3	97.3	56.7	66.7	70.1
PPG-PR 360	68.3	71.7	92.3	56.7	61.7	70.1
DLFPS-236/3552	68.3	73.3	96.3	56.7	55.0	69.9
SLUGGER 3GL (PPG-PR 343)	71.7	75.0	94.0	56.7	51.7	69.8
SLIDER LS (PPG-PR 241)	71.7	68.3	92.3	56.7	60.0	69.8
PPG-PR 372	73.3	68.3	94.0	56.7	56.7	69.8
SEABISCUIT	68.3	73.3	95.7	56.7	55.0	69.8
INTENSE	80.0	65.0	93.7	56.7	53.3	69.7
MAN O WAR	70.0	68.3	93.3	60.0	56.7	69.7
APPLE 3GL (PPG-PR 339)	66.7	75.0	90.0	53.3	63.3	69.7
PST-2PDA	71.7	71.7	93.3	53.3	58.3	69.7
DLFPS-236/3550	65.0	66.7	96.0	60.0	60.0	69.5
JR-747	63.3	73.3	94.3	56.7	60.0	69.5
PL2	66.7	68.3	92.7	63.3	56.7	69.5
FURLONG (LTP-FCB)	61.7	73.3	94.0	56.7	61.7	69.5
HOMERUN LS (PPG-PR 419)	68.3	66.7	95.7	60.0	56.7	69.5
LPB-SD-101	58.3	73.3	93.3	60.0	61.7	69.3
PPG-PR 421	61.7	70.0	93.3	63.3	58.3	69.3

TABLE 26.
(CONT'D)PERCENT ESTABLISHMENT RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA 2/

NAME	CT1	MI1	MO1	NE1	WI1	MEAN
BAR LP 6131	61.7	68.3	90.7	60.0	65.0	69.1
GO-142	65.0	65.0	95.7	56.7	63.3	69.1
PPG-PR 420	70.0	66.7	94.0	60.0	55.0	69.1
PR-5-16	63.3	71.7	94.0	60.0	56.7	69.1
SAGUARO	65.0	73.3	94.0	56.7	56.7	69.1
SIGNET	60.0	73.3	92.3	60.0	60.0	69.1
SNX	71.7	63.3	93.7	56.7	60.0	69.1
BWH	66.7	68.3	90.0	53.3	66.7	69.0
MENSA	66.7	73.3	91.7	50.0	63.3	69.0
PPG-PR 422	63.3	68.3	96.3	53.3	63.3	68.9
PPG-PR 370	68.3	68.3	91.0	60.0	56.7	68.9
SHIELD (02BS4)	66.7	70.0	94.0	56.7	56.7	68.8
BAR LP 6117	68.3	68.3	90.0	60.0	56.7	68.7
BAR LP 6164	63.3	68.3	95.0	56.7	60.0	68.7
DLFPS-236/3543	65.0	66.7	94.0	56.7	60.0	68.5
DLFPS-236/3547	63.3	68.3	95.7	63.3	51.7	68.5
LPB-SD-105	51.7	73.3	93.3	66.7	56.7	68.3
UF3	68.3	68.3	91.7	56.7	56.7	68.3
DLFPS-236/3540	61.7	66.7	95.7	60.0	56.7	68.1
FP2	66.7	61.7	94.0	63.3	55.0	68.1
LPB-SD-103	63.3	68.3	92.3	60.0	56.7	68.1
FASTBALL 3GL (PPG-PR 329)	63.3	70.0	90.7	60.0	56.7	68.1
NP-3	60.0	73.3	94.0	50.0	63.3	68.1
OVERDRIVE 5G	58.3	65.0	97.0	56.7	63.3	68.1
BSP-17	66.7	70.0	90.0	50.0	63.3	68.0
UMPQUA	68.3	68.3	90.0	56.7	56.7	68.0
PPG-PR 367	61.7	71.7	96.3	56.7	53.3	67.9
BRIGHTSTAR SLT	65.0	68.3	92.3	56.7	56.7	67.8
GRAY WOLF (PST-2GAL)	63.3	66.7	94.0	60.0	55.0	67.8
PPG-PR 385	63.3	65.0	95.7	53.3	61.7	67.8
ALLSTAR III	70.0	61.7	91.7	60.0	55.0	67.7
LPB-SD-104	60.0	70.0	94.7	50.0	63.3	67.6
DLFPS-236/3553	66.7	66.7	92.3	60.0	51.7	67.5
APR2616	66.7	70.0	90.0	53.3	56.7	67.3
DLFPS-236/3542	63.3	63.3	94.0	56.7	58.3	67.1
AMP-R1	58.3	68.3	91.7	50.0	66.7	67.0
DLFPS-236/3541	60.0	66.7	93.3	60.0	55.0	67.0
MRSL-PR16	58.3	71.7	90.0	56.7	58.3	67.0
MRSL-PR15	56.7	71.7	91.7	50.0	63.3	66.7
DERBY XTREME	65.0	68.3	92.7	56.7	50.0	66.5
JR-197	58.3	70.0	92.3	56.7	55.0	66.5
ASP0118GL (A-4G)	58.3	71.7	90.0	50.0	61.7	66.3
APR3060	66.7	70.0	91.7	50.0	53.3	66.3
GO-143	63.3	66.7	91.0	53.3	56.7	66.2
BSP-25	58.3	70.0	94.0	46.7	60.0	65.8
PST-2BDT	70.0	66.7	92.3	60.0	40.0	65.8
PST-2EGAD	65.0	60.0	89.0	60.0	55.0	65.8
DLFPS-236/3548	65.0	66.7	96.7	53.3	46.7	65.7

TABLE 26. PERCENT ESTABLISHMENT RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
(CONT'D) 2017 DATA 2/

NAME	CT1	MI1	MO1	NE1	WI1	MEAN
ASP0218 (A-6D)	60.0	68.3	91.3	50.0	56.7	65.3
PST-2GTD	61.7	66.7	95.7	50.0	51.7	65.1
JR-123	63.3	70.0	90.0	53.3	48.3	65.0
LINN	75.0	58.3	90.0	56.7	45.0	65.0
DLFPS-236/3544	60.0	65.0	92.3	56.7	50.0	64.8
BAR LP 6158	66.7	66.7	90.0	53.3	46.7	64.7
SILVER SPORT (PST-2CRP)	53.3	60.0	93.3	56.7	60.0	64.7
KARMA	66.7	65.0	95.0	53.3	43.3	64.7
PST-2MAY	61.7	61.7	90.0	53.3	56.7	64.7
APR2612	53.3	68.3	92.3	46.7	61.7	64.5
RAD-PR 112	63.3	55.0	93.3	56.7	51.7	64.0
PST-2FOXY	56.7	68.3	85.0	56.7	53.3	64.0
DLFPS-236/3554	58.3	60.0	90.7	53.3	56.7	63.8
PEPPER II (RAD-PR 103)	53.3	61.7	90.0	53.3	60.0	63.7
DLFPS-238/3014	63.3	58.3	95.7	46.7	50.0	62.8
02BS1	63.3	60.0	91.7	56.7	40.0	62.3
BAR LP 6162	60.0	55.0	90.7	53.3	48.3	61.5
BAR LP 6165	50.0	60.0	89.0	60.0	46.7	61.1
LSD VALUE	13.9	10.6	6.6	10.4	15.0	5.2
C.V. (%)	13.2	9.6	4.4	11.3	16.1	10.6

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 27.

PERCENT ESTABLISHMENT RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
AT FARGO, ND 2/
2017 DATA

NAME	SUMMER	FALL	MEAN	NAME	SUMMER	FALL	MEA
GO-143	73.3	85.0	79.2	PST-2EGAD	45.0	60.0	52.5
EVOLVE	71.7	85.0	78.3	APR2612	46.7	56.7	51.7
BAR LP 6165	73.3	81.7	77.5	DLFPS-236/3544	36.7	65.0	50.8
PST-2GTD	71.7	80.0	75.8	PST-2BDT	46.7	55.0	50.8
RAD-PR 112	68.3	81.7	75.0	021	43.3	56.7	50.0
DLFPS-236/3541	66.7	76.7	71.7	DLFPS-236/3552	43.3	55.0	49.2
SEABISCUIT	63.3	75.0	69.2	DLFPS-236/3547	40.0	56.7	48.3
LPB-SD-105	60.0	75.0	67.5	BRIGHTSTAR SLT	41.7	53.3	47.5
APR3060	61.7	71.7	66.7	GO-142	41.7	51.7	46.7
PST-2FOXY	58.3	75.0	66.7	DLFPS-236/3545	38.3	53.3	45.8
DLFPS-236/3538	58.3	73.3	65.8	GRAY HAWK (PST-2FIND)	41.7	50.0	45.8
ALLSTAR III	56.7	73.3	65.0	PPG-PR 421	38.3	53.3	45.8
AMP-R1	56.7	73.3	65.0	DLFPS-236/3546	38.3	48.3	43.3
XCELERATOR	51.7	78.3	65.0	BAR LP 6131	36.7	48.3	42.5
PPG-PR 331	55.0	73.3	64.2	BAR LP 6158	35.0	50.0	42.5
PPG-PR 367	50.0	78.3	64.2	PST-2MAY	36.7	46.7	41.7
PPG-PR 423	55.0	73.3	64.2	LPB-SD-102	31.7	50.0	40.8
SNX	53.3	75.0	64.2	MRSL-PR15	35.0	46.7	40.8
UF3	56.7	71.7	64.2	ASP0118GL (A-4G)	35.0	45.0	40.0
CS-6	55.0	71.7	63.3	CPN	33.3	45.0	39.2
DLFPS-236/3553	55.0	71.7	63.3	RRT	33.3	45.0	39.2
PPG-PR 371	51.7	75.0	63.3	JR-888	28.3	48.3	38.3
PPG-PR 372	51.7	75.0	63.3	PL2	31.7	45.0	38.3
BAR LP 6164	58.3	66.7	62.5	PPG-PR 360	26.7	50.0	38.3
FP2	56.7	68.3	62.5	PPG-PR 420	33.3	43.3	38.3
PHARAOH	53.3	71.7	62.5	APPLE 3GL (PPG-PR 339)	33.3	41.7	37.5
PST-2PDA	53.3	71.7	62.5	BAR LP 6162	33.3	40.0	36.7
NP-2	48.3	75.0	61.7	PPG-PR 370	28.3	45.0	36.7
PPG-PR 422	55.0	68.3	61.7	SLUGGER 3GL (PPG-PR 343)	30.0	43.3	36.7
SILVER SPORT (PST-2CRP)	56.7	66.7	61.7	DLFPS-236/3540	28.3	43.3	35.8
UMPQUA	56.7	66.7	61.7	DLFPS-236/3548	30.0	41.7	35.8
02BS2	50.0	71.7	60.8	DERBY XTREME	30.0	40.0	35.0
SLIDER LS (PPG-PR 241)	51.7	68.3	60.0	DLFPS-236/3543	28.3	41.7	35.0
PST-2A2	51.7	66.7	59.2	NP-3	26.7	43.3	35.0
SHIELD (02BS4)	50.0	68.3	59.2	C2BS1	31.7	36.7	34.2
DLFPS-236/3550	48.3	68.3	58.3	BSP-17	28.3	40.0	34.2
BAR LP 6233	51.7	63.3	57.5	PR-5-16	30.0	38.3	34.2
ASP0218 (A-6D)	48.3	65.0	56.7	PR-6-15	30.0	38.3	34.2
DLFPS-236/3554	51.7	60.0	55.8	DLFPS-238/3014	28.3	38.3	33.3
GO-141	48.3	63.3	55.8	FASTBALL 3GL (PPG-PR 329)	23.3	43.3	33.3
HOMERUN LS (PPG-PR 419)	46.7	65.0	55.8	OVERDRIVE 5G	26.7	38.3	32.5
LPB-SD-103	48.3	63.3	55.8	SR 4650	28.3	36.7	32.5
JR-123	45.0	65.0	55.0	BWH	23.3	40.0	31.7
ASP0117 (A-PR15)	45.0	61.7	53.3	PEPPER II (RAD-PR 103)	26.7	36.7	31.7
BSP-25	45.0	61.7	53.3	APR2616	25.0	36.7	30.8
DLFPS-236/3556	43.3	63.3	53.3	PPG-PR 385	21.7	38.3	30.0
GRAY WOLF (PST-2GAL)	48.3	56.7	52.5	SIGNET	21.7	35.0	28.3
JR-197	48.3	56.7	52.5	023	23.3	30.0	26.7

TABLE 27.
CONT'D)

PERCENT ESTABLISHMENT RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
AT FARGO, ND 2/
2017 DATA

NAME	SUMMER	FALL	MEAN
BAR LP 6159	20.0	28.3	24.2
MAN O WAR	21.7	26.7	24.2
MENSA	18.3	28.3	23.3
LINN	18.3	25.0	21.7
ASP0116EXT	16.7	25.0	20.8
GRAND SLAM GLD	16.7	21.7	19.2
LPB-SD-104	11.7	26.7	19.2
FURLONG (LTP-FCB)	13.3	18.3	15.8
DLFPS-236/3542	10.0	18.3	14.2
KARMA	11.7	16.7	14.2
PPG-PR 424	11.7	16.7	14.2
BAR LP 6117	11.7	15.0	13.3
JR-747	10.0	16.7	13.3
LPB-SD-101	6.7	15.0	10.8
SAGUARO	6.7	15.0	10.8
INTENSE	5.0	15.0	10.0
SAVANT	6.7	11.7	9.2
MRSL-PR16	5.0	11.7	8.3
C.V. (%)	16.7	12.3	13.4
LSD VALUE	9.4	9.2	8.8

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 28.

 PERCENT ESTABLISHMENT RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
 AT LOGAN, UT 2/
 2017 DATA

NAME	SEPTEMBER	OCTOBER	MEAN	NAME	SEPTEMBER	OCTOBER	MEAN
SIGNET	46.7	80.0	63.3	GRAY HAWK (PST-2FIND)	36.7	63.3	50.0
PHARAOH	50.0	73.3	61.7	INTENSE	36.7	63.3	50.0
NP-2	46.7	73.3	60.0	LPB-SD-102	36.7	63.3	50.0
SR 4650	53.3	66.7	60.0	PPG-PR 367	33.3	66.7	50.0
UF3	46.7	70.0	58.3	PR-6-15	43.3	56.7	50.0
023	40.0	73.3	56.7	UMPQUA	36.7	63.3	50.0
BAR LP 6233	40.0	73.3	56.7	021	33.3	63.3	48.3
CPN	46.7	66.7	56.7	02BS2	33.3	63.3	48.3
JR-747	43.3	70.0	56.7	CS-6	36.7	60.0	48.3
OVERDRIVE 5G	36.7	76.7	56.7	DLFPS-236/3545	33.3	63.3	48.3
PPG-PR 371	43.3	70.0	56.7	FASTBALL 3GL (PPG-PR 329)	36.7	60.0	48.3
ASP0116EXT	43.3	66.7	55.0	JR-888	36.7	60.0	48.3
ASP0118GL (A-4G)	40.0	70.0	55.0	PST-2PDA	33.3	63.3	48.3
BAR LP 6158	40.0	70.0	55.0	SLIDER LS (PPG-PR 241)	36.7	60.0	48.3
BAR LP 6159	40.0	70.0	55.0	ASP0218 (A-6D)	33.3	60.0	46.7
BSP-17	43.3	66.7	55.0	BAR LP 6131	33.3	60.0	46.7
BWH	43.3	66.7	55.0	BAR LP 6165	30.0	63.3	46.7
DLFPS-236/3550	36.7	73.3	55.0	BSP-25	36.7	56.7	46.7
EVOLVE	46.7	63.3	55.0	DERBY XTREME	33.3	60.0	46.7
PPG-PR 370	40.0	70.0	55.0	DLFPS-236/3538	33.3	60.0	46.7
SAVANT	36.7	73.3	55.0	DLFPS-236/3548	33.3	60.0	46.7
SNX	40.0	70.0	55.0	DLFPS-236/3553	33.3	60.0	46.7
APR2616	40.0	66.7	53.3	DLFPS-236/3554	33.3	60.0	46.7
BAR LP 6117	40.0	66.7	53.3	GRAY WOLF (PST-2GAL)	30.0	63.3	46.7
DLFPS-236/3541	36.7	70.0	53.3	LINN	26.7	66.7	46.7
DLFPS-236/3556	40.0	66.7	53.3	MRSL-PR16	30.0	63.3	46.7
FP2	40.0	66.7	53.3	PEPPER II (RAD-PR 103)	33.3	60.0	46.7
HOMERUN LS (PPG-PR 419)	43.3	63.3	53.3	PPG-PR 360	30.0	63.3	46.7
NP-3	40.0	66.7	53.3	PPG-PR 420	33.3	60.0	46.7
PPG-PR 423	36.7	70.0	53.3	PPG-PR 422	36.7	56.7	46.7
APPLE 3GL (PPG-PR 339)	36.7	66.7	51.7	PST-2A2	33.3	60.0	46.7
BRIGHTSTAR SLT	36.7	66.7	51.7	PST-2BDT	36.7	56.7	46.7
DLFPS-236/3542	36.7	66.7	51.7	RAD-PR 112	30.0	63.3	46.7
DLFPS-236/3543	40.0	63.3	51.7	ASP0117 (A-PR15)	30.0	60.0	45.0
GRAND SLAM GLD	33.3	70.0	51.7	BAR LP 6162	30.0	60.0	45.0
JR-123	33.3	70.0	51.7	BAR LP 6164	33.3	56.7	45.0
JR-197	43.3	60.0	51.7	DLFPS-236/3547	33.3	56.7	45.0
LPB-SD-101	36.7	66.7	51.7	GO-142	33.3	56.7	45.0
LPB-SD-103	33.3	70.0	51.7	MENSA	30.0	60.0	45.0
PPG-PR 385	36.7	66.7	51.7	PL2	26.7	63.3	45.0
PPG-PR 424	40.0	63.3	51.7	PPG-PR 331	33.3	56.7	45.0
PST-2EGAD	36.7	66.7	51.7	PR-5-16	30.0	60.0	45.0
PST-2MAY	36.7	66.7	51.7	PST-2GTD	36.7	53.3	45.0
SHIELD (02BS4)	43.3	60.0	51.7	AMP-R1	26.7	60.0	43.3
XCELERATOR	36.7	66.7	51.7	APR2612	30.0	56.7	43.3
ALLSTAR III	33.3	66.7	50.0	DLFPS-236/3552	33.3	53.3	43.3
DLFPS-236/3540	40.0	60.0	50.0	FURLONG (LTP-FCB)	30.0	56.7	43.3
GO-143	43.3	56.7	50.0	LPB-SD-104	30.0	56.7	43.3

TABLE 28.
(CONT'D)

PERCENT ESTABLISHMENT RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
AT LOGAN, UT 2/
2017 DATA

NAME	SEPTEMBER	OCTOBER	MEAN
MAN O WAR	30.0	56.7	43.3
MRSI-PR15	33.3	53.3	43.3
PPG-PR 372	30.0	56.7	43.3
PPG-PR 421	30.0	56.7	43.3
SAGUARO	30.0	56.7	43.3
SEABISCUIT	30.0	56.7	43.3
02BS1	30.0	53.3	41.7
GO-141	23.3	56.7	40.0
LPB-SD-105	23.3	56.7	40.0
RRT	23.3	56.7	40.0
SILVER SPORT (PST-2CRP)	30.0	50.0	40.0
DLFPS-236/3544	26.7	50.0	38.3
DLFPS-238/3014	26.7	50.0	38.3
KARMA	26.7	50.0	38.3
APR3060	23.3	50.0	36.7
SLUGGER 3GL (PPG-PR 343)	20.0	53.3	36.7
DLFPS-236/3546	23.3	43.3	33.3
PST-2FOXY	20.0	43.3	31.7
C.V. (%)	25.6	14.6	16.1
LSD VALUE	23.5	21.2	18.0

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 29.

PERCENT DIVOT RECOVERY RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2016 NATIONAL PERENNIAL RYEGRASS TEST AT LEXINGTON, KY 2/
2017 DATA

NAME	MAY 3	MAY 24	JUNE 14	JUNE 29	JULY 19	AUGUST 2	AUGUST 15	AUGUST 31	SEPT. 20	OCTOBER 15	OCTOBER 31	MEAN
DLFPS-236/3546	85.0	92.0	94.0	94.7	95.3	96.3	96.0	95.3	95.7	93.3	93.0	93.7
GRAY WOLF (PST-2GAL)	84.7	91.3	94.7	96.3	96.0	97.7	96.7	95.0	94.7	92.3	90.0	93.6
DLFPS-236/3547	84.0	90.0	92.7	93.7	95.0	96.7	94.7	95.3	96.0	94.0	95.3	93.4
DLFPS-236/3545	86.7	91.7	94.7	96.3	96.0	97.3	94.0	94.3	94.3	91.0	90.0	93.3
XCELERATOR	83.3	90.0	93.0	94.0	96.0	97.7	96.3	95.7	95.0	92.7	92.3	93.3
PPG-PR 424	88.3	88.3	91.7	93.3	94.7	97.7	93.3	95.0	95.0	93.7	92.3	93.0
DLFPS-236/3553	83.7	90.0	92.3	93.0	95.3	98.0	96.7	95.3	94.3	92.7	89.3	92.8
PPG-PR 420	83.7	90.3	93.7	94.3	95.3	96.7	96.0	94.7	94.3	92.3	88.7	92.7
HOMERUN LS (PPG-PR 419)	83.0	90.0	92.7	93.3	96.3	97.0	96.0	94.7	94.0	91.3	90.7	92.6
DLFPS-236/3556	82.3	89.3	92.7	94.0	95.7	97.0	96.0	95.0	94.3	92.3	89.0	92.5
FP2	81.7	89.7	94.3	95.3	97.0	97.0	97.0	95.7	93.7	89.3	85.3	92.4
PPG-PR 372	83.0	91.7	95.3	96.0	96.3	97.7	95.3	94.0	90.3	88.7	87.7	92.4
PST-2A2	84.7	92.0	94.0	94.3	96.3	96.0	95.0	93.7	91.7	89.7	89.3	92.4
DLFPS-236/3543	86.0	90.3	93.3	95.3	95.7	96.7	95.0	93.7	92.7	90.3	86.3	92.3
PPG-PR 370	81.7	89.7	92.7	94.0	95.7	97.3	97.0	94.0	93.0	90.3	87.0	92.0
SR 4650	85.0	90.3	94.0	94.0	94.7	96.3	95.3	94.7	92.0	89.7	85.7	92.0
02BS2	82.0	90.7	94.0	95.0	95.7	97.0	96.0	93.0	92.7	88.0	87.0	91.9
PPG-PR 367	80.3	88.0	93.0	94.0	95.7	97.0	96.0	95.7	94.0	89.7	87.0	91.8
PR-5-16	80.7	88.7	93.0	94.7	95.3	97.3	95.0	94.0	92.7	91.3	87.3	91.8
APR2612	83.0	88.0	93.3	94.7	95.3	95.7	94.7	94.7	94.0	90.0	85.7	91.7
FURLONG (LTP-FCB)	84.3	90.0	93.3	94.0	96.0	96.3	94.7	93.0	91.3	87.7	87.3	91.6
PPG-PR 331	84.7	89.0	92.0	92.7	95.3	97.0	94.0	93.7	92.7	90.0	87.0	91.6
PPG-PR 371	83.0	88.3	92.3	93.0	95.0	96.7	93.7	93.0	93.0	91.0	88.3	91.6
BAR LP 6233	84.0	88.7	94.0	94.7	95.7	96.0	92.3	92.0	90.0	89.0	90.0	91.5
DLFPS-236/3554	83.7	90.0	92.0	93.0	94.0	95.7	93.0	93.3	92.7	90.7	88.0	91.5
FASTBALL 3GL (PPG-PR 329)	81.7	89.0	92.3	94.0	95.0	95.0	92.0	93.0	93.7	90.7	90.0	91.5
SEABISCUIT	83.3	88.0	91.3	91.3	93.3	96.3	94.3	94.7	93.7	89.3	90.0	91.4
ASP0117 (A-PR15)	84.7	90.3	93.0	93.7	92.0	94.3	93.3	93.3	91.7	89.3	88.7	91.3
SHIELD (02BS4)	83.7	91.3	93.0	95.3	96.0	96.7	92.3	90.7	88.7	87.0	89.0	91.2
PPG-PR 421	83.3	89.3	93.3	94.3	95.0	96.7	93.3	93.7	91.0	87.7	85.3	91.2
BAR LP 6165	87.0	90.7	95.3	93.7	91.7	93.7	95.0	93.7	93.0	86.3	80.7	91.0
JR-123	87.3	90.7	93.3	94.0	94.3	95.3	92.3	91.3	90.0	86.0	86.0	91.0
UMPQUA	82.0	88.3	92.3	94.0	95.7	97.7	94.7	94.0	90.3	88.3	83.7	91.0
023	81.7	88.7	92.7	93.7	95.7	97.0	92.3	91.7	90.3	89.7	86.7	90.9
DLFPS-236/3552	82.0	89.3	92.7	93.7	95.3	96.0	93.3	92.3	90.7	86.7	87.7	90.9
PPG-PR 422	81.7	88.3	91.3	92.7	94.3	94.0	93.7	94.0	92.7	89.3	87.7	90.9
DLFPS-236/3541	83.0	89.0	92.3	93.7	95.0	96.3	92.7	92.7	90.3	87.7	86.7	90.8
PPG-PR 360	86.3	89.7	93.3	94.0	95.0	96.0	92.3	91.7	89.3	85.3	83.3	90.6
DLFPS-236/3540	81.7	86.0	89.3	90.3	93.7	95.7	94.7	94.0	93.0	89.0	87.7	90.5
DLFPS-236/3550	82.7	88.3	91.7	92.7	94.0	95.3	93.7	92.0	90.0	87.3	83.7	90.1
PL2	83.7	88.7	91.7	92.3	92.3	93.7	92.0	91.3	91.7	86.0	87.7	90.1
SLIDER LS (PPG-PR 241)	81.0	87.3	91.3	93.0	95.3	96.0	92.3	91.7	90.0	88.0	84.7	90.1
PST-2BDT	80.0	88.3	91.0	93.0	95.3	96.3	95.0	94.0	90.3	84.7	82.3	90.0
DLFPS-236/3538	81.0	89.0	93.3	94.7	96.3	97.0	92.7	89.0	88.0	85.7	82.0	89.9
DLFPS-236/3548	84.3	88.3	91.3	91.0	92.3	95.3	94.0	92.3	90.0	87.7	82.0	89.9
CPN	83.7	89.7	93.3	94.3	95.3	95.0	92.3	90.0	87.3	85.7	80.0	89.7
PST-2FOXY	80.3	85.7	91.0	92.0	94.0	96.0	93.7	91.7	90.7	86.7	82.3	89.5
PR-6-15	83.0	87.3	90.0	90.7	90.7	94.3	94.0	91.7	91.7	86.3	84.0	89.4

TABLE 29. (CONT'D)

PERCENT DIVOT RECOVERY RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2016 NATIONAL PERENNIAL RYEGRASS TEST AT LEXINGTON, KY 2/
2017 DATA

NAME	MAY 3	MAY 24	JUNE 14	JUNE 29	JULY 19	AUGUST 2	AUGUST 15	AUGUST 31	SEPT. 20	OCTOBER 15	OCTOBER 31	MEAN
JR-197	82.7	89.0	92.0	94.0	94.7	94.0	90.0	88.7	87.7	84.0	84.7	89.2
APPLE 3GL (PPG-PR 339)	84.0	88.0	89.0	91.0	92.3	94.3	93.7	90.7	89.7	84.7	84.0	89.2
SIGNET	83.7	90.3	93.3	95.0	95.3	93.3	90.0	88.7	84.7	84.0	83.3	89.2
02BS1	81.3	88.0	91.7	94.0	95.0	94.3	93.0	89.0	88.7	83.0	82.3	89.1
ASP0118GL (A-4G)	81.7	87.7	92.3	93.0	93.7	95.3	92.7	89.3	88.3	83.7	82.3	89.1
OVERDRIVE 5G	81.7	89.0	92.0	93.3	96.3	95.0	90.7	89.3	89.0	83.3	80.7	89.1
GRAND SLAM GLD	85.0	91.3	93.3	94.7	92.7	93.3	89.7	87.7	84.3	82.7	82.3	88.8
AMP-R1	81.7	87.7	92.7	93.3	94.3	93.7	91.3	90.7	89.0	81.3	79.7	88.7
MAN O WAR	84.7	86.7	88.7	89.0	91.3	93.7	92.7	90.3	90.7	86.0	81.7	88.7
NP-3	85.0	88.3	92.0	93.7	94.3	95.3	90.3	88.7	86.3	82.0	79.7	88.7
DLFPS-236/3542	83.0	87.7	89.7	91.0	92.3	95.3	93.3	92.0	86.7	84.0	79.7	88.6
DERBY XTREME	84.0	89.7	92.7	94.3	93.7	93.7	90.7	88.3	85.7	78.3	81.3	88.4
PHARAOH	82.3	89.0	91.3	92.7	93.0	95.7	93.7	90.3	85.3	81.3	78.0	88.4
APR3060	79.7	86.7	91.3	92.7	94.3	95.0	91.7	91.3	88.7	80.7	79.7	88.3
SLUGGER 3GL (PPG-PR 343)	83.7	85.7	87.3	89.0	91.7	92.7	92.7	90.0	89.3	86.7	82.3	88.3
CS-6	80.3	88.7	92.3	92.0	92.0	90.3	89.3	89.3	89.0	82.7	83.7	88.2
MENSA	83.3	89.3	93.0	93.7	96.0	96.3	94.3	89.7	80.7	80.0	74.3	88.2
ASP0116EXT	81.3	87.7	91.7	92.7	92.7	93.7	92.0	90.0	86.0	79.3	81.7	88.1
SILVER SPORT (PST-2CRP)	83.3	87.0	89.0	89.0	92.3	94.0	92.0	92.0	87.3	82.7	80.0	88.1
021	83.0	85.0	86.3	89.3	92.7	94.7	93.7	91.3	87.3	83.3	81.7	88.0
DLFPS-236/3544	81.0	84.7	87.3	88.7	91.0	93.7	91.3	91.3	89.7	85.3	84.0	88.0
INTENSE	81.7	87.7	90.7	92.7	94.3	93.7	92.0	88.0	85.0	81.3	81.3	88.0
NP-2	85.3	91.0	93.3	94.0	94.3	93.3	88.0	87.3	82.7	81.0	78.0	88.0
RRT	79.3	89.3	92.0	92.7	93.7	93.7	89.7	88.3	86.3	81.0	81.7	88.0
KARMA	83.3	87.0	89.3	91.3	92.0	93.0	91.0	88.3	88.0	84.7	79.0	87.9
BAR LP 6117	82.3	89.7	92.3	93.7	94.0	92.3	90.3	89.0	86.7	80.3	75.7	87.8
APR2616	80.3	86.0	91.3	92.7	93.3	95.0	90.0	90.0	87.3	80.0	78.7	87.7
PST-2GTD	78.7	88.0	92.3	93.7	94.0	94.0	92.3	88.7	86.7	77.7	76.0	87.5
LPB-SD-102	86.7	90.3	94.0	94.7	95.3	96.3	92.7	90.3	76.3	74.7	70.0	87.4
PST-2MAY	83.7	90.7	93.0	93.0	93.7	93.0	88.7	87.0	82.7	75.0	79.0	87.2
GO-143	81.0	88.3	91.3	93.0	92.7	91.0	89.0	88.7	84.3	80.0	78.7	87.1
UF3	82.7	86.7	90.0	92.3	93.7	81.3	93.3	90.3	88.7	80.3	78.7	87.1
PST-2EGAD	78.7	83.7	88.3	90.7	92.3	93.7	92.3	89.7	87.0	82.3	78.7	87.0
PPG-PR 385	78.3	85.7	90.3	91.7	93.7	93.3	91.3	87.7	84.3	80.3	79.3	86.9
PST-2PDA	79.7	86.0	89.7	91.7	92.3	92.3	89.3	88.7	87.3	81.7	77.0	86.9
GRAY HAWK (PST-2FIND)	84.0	88.0	93.0	93.3	92.7	91.0	89.0	86.3	83.0	77.3	76.0	86.7
PEPPER II (RAD-PR 103)	82.7	88.3	90.3	92.3	94.0	91.0	88.7	86.0	83.0	77.3	78.3	86.5
BAR LP 6131	82.3	86.7	93.3	93.7	93.3	90.3	88.7	85.3	78.3	77.3	76.7	86.0
RAD-PR 112	81.0	87.3	89.7	91.3	91.7	91.7	87.3	85.3	84.0	77.7	77.7	85.9
PPG-PR 423	80.7	84.7	88.7	89.0	90.0	90.7	87.7	86.3	83.3	82.0	81.3	85.8
BAR LP 6164	80.3	84.3	89.7	90.7	92.0	94.0	89.3	85.7	81.3	76.7	75.7	85.4
MRSL-PR16	82.3	85.3	86.3	87.7	88.7	90.0	88.0	87.0	85.7	78.7	80.0	85.4
ALLSTAR III	82.7	90.0	93.3	93.3	94.0	93.7	88.7	85.0	77.7	69.7	67.3	85.0
GO-142	76.3	85.0	88.3	89.3	91.0	90.3	88.3	85.0	83.3	79.7	78.7	85.0
LPB-SD-103	86.0	88.3	93.0	93.3	93.7	95.0	91.0	82.7	74.0	69.3	68.0	84.9
BAR LP 6158	78.3	82.7	88.3	90.0	91.7	92.7	87.7	86.0	81.3	76.0	77.7	84.8
SNX	80.0	86.0	89.0	90.3	92.0	90.7	87.3	83.3	82.7	74.0	73.3	84.4
ASP0218 (A-6D)	81.3	85.0	87.3	89.0	90.7	91.7	87.0	85.7	80.3	72.7	71.7	83.8

TABLE 29. (CONT'D)

PERCENT DIVOT RECOVERY RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
 2016 NATIONAL PERENNIAL RYEGRASS TEST AT LEXINGTON, KY 2/
 2017 DATA

NAME	MAY 3	MAY 24	JUNE 14	JUNE 29	JULY 19	AUGUST 2	AUGUST 15	AUGUST 31	SEPT. 20	OCTOBER 15	OCTOBER 31	MEAN
SAVANT	88.7	93.7	94.7	96.7	96.7	93.7	87.7	77.0	68.7	61.3	63.0	83.8
BAR LP 6159	80.3	86.3	89.7	91.3	90.3	93.0	90.0	84.7	76.0	73.0	66.0	83.7
JR-747	82.3	89.3	93.3	93.0	91.7	89.0	85.3	81.3	75.7	70.7	66.7	83.5
LPB-SD-101	84.3	90.3	93.3	93.7	94.3	95.3	91.0	83.3	69.7	62.3	61.0	83.5
MRSI-PR15	74.7	83.3	87.3	89.0	91.7	92.3	86.7	83.0	80.3	76.0	74.3	83.5
GO-141	81.0	88.0	93.0	93.3	91.3	88.0	82.3	80.7	76.0	73.3	67.0	83.1
JR-888	82.7	90.3	92.7	94.0	94.3	91.0	86.3	79.7	71.0	66.3	63.7	82.9
EVOLVE	81.0	83.0	87.3	89.3	89.0	90.7	88.3	83.0	79.0	70.3	68.7	82.7
LPB-SD-104	86.0	89.0	91.3	92.7	94.7	92.0	85.7	81.7	69.7	65.3	61.0	82.6
SAGUARO	87.0	91.0	94.7	95.7	94.3	90.7	85.7	77.7	65.7	57.3	61.0	81.9
BSP-25	82.3	87.0	90.3	91.7	90.7	89.0	82.3	80.3	71.3	65.3	69.7	81.8
BSP-17	81.3	82.7	84.0	86.3	86.7	88.0	86.3	81.0	76.0	69.0	75.3	81.5
DLFPS-238/3014	77.7	82.0	89.0	90.3	88.7	86.3	80.3	79.7	72.7	67.0	65.0	79.9
BRIGHTSTAR SLT	79.0	85.7	90.3	90.3	88.7	89.0	83.3	67.3	59.7	51.7	59.0	76.7
BAR LP 6162	79.7	78.3	83.3	84.3	78.7	82.3	79.3	73.3	69.7	63.0	66.0	76.2
LPB-SD-105	87.0	92.0	94.7	96.0	93.0	86.3	73.3	61.7	49.0	42.0	44.7	74.5
BWH	77.3	81.0	81.3	84.3	85.3	84.0	77.3	72.3	62.0	52.3	57.0	74.0
LINN	73.0	78.7	89.0	91.3	78.7	61.0	53.0	36.3	42.0	31.3	42.0	61.5
LSD VALUE	5.7	8.2	10.5	11.6	5.6	7.1	8.7	10.3	12.7	14.2	15.1	6.6
C.V. (%)	3.6	4.1	4.0	3.8	3.3	4.5	5.7	7.2	9.2	10.8	11.2	4.6

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 30.

WINTER KILL RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

WINTER KILL RATINGS 1-9; 9=LEAST KILL 2/

NAME	MN1	NAME	MN1
LPB-SD-102	7.7	PR-5-16	6.0
BAR LP 6164	7.3	PST-2PDA	6.0
DLFPS-236/3554	7.3	UMPQUA	6.0
OVERDRIVE 5G	7.3	ASP0116EXT	5.7
SHIELD (02BS4)	7.0	BAR LP 6158	5.7
BAR LP 6233	7.0	CS-6	5.7
CPN	7.0	DLFPS-236/3538	5.7
JR-888	7.0	DLFPS-236/3546	5.7
PPG-PR 331	7.0	DLFPS-236/3547	5.7
APPLE 3GL (PPG-PR 339)	7.0	GO-141	5.7
HOMERUN LS (PPG-PR 419)	7.0	JR-747	5.7
SR 4650	7.0	FURLONG (LTP-FCB)	5.7
UF3	7.0	SLIDER LS (PPG-PR 241)	5.7
BSP-17	6.7	FASTBALL 3GL (PPG-PR 329)	5.7
DLFPS-236/3556	6.7	PPG-PR 360	5.7
GRAY HAWK (PST-2FIND)	6.7	PPG-PR 420	5.7
INTENSE	6.7	SIGNET	5.7
JR-123	6.7	XCELERATOR	5.7
LPB-SD-101	6.7	DERBY XTREME	5.3
PL2	6.7	JR-197	5.3
PPG-PR 372	6.7	LPB-SD-103	5.3
RAD-PR 112	6.7	MENSA	5.3
ASP0117 (A-PR15)	6.3	SLUGGER 3GL (PPG-PR 343)	5.3
BRIGHTSTAR SLT	6.3	PPG-PR 385	5.3
DLFPS-236/3540	6.3	PPG-PR 423	5.3
EVOLVE	6.3	PST-2EGAD	5.3
GRAND SLAM GLD	6.3	PST-2FOXY	5.3
NP-2	6.3	RRT	5.3
PPG-PR 424	6.3	SILVER SPORT (PST-2CRP)	5.3
PR-6-15	6.3	021	5.0
PST-2A2	6.3	02BS2	5.0
SAGUARO	6.3	ALLSTAR III	5.0
023	6.0	AMP-R1	5.0
BAR LP 6131	6.0	APR2616	5.0
BAR LP 6159	6.0	APR3060	5.0
DLFPS-236/3541	6.0	DLFPS-236/3544	5.0
DLFPS-236/3543	6.0	DLFPS-236/3545	5.0
DLFPS-236/3553	6.0	GO-142	5.0
FP2	6.0	MRSL-PR15	5.0
MAN O WAR	6.0	PPG-PR 370	5.0
MRSL-PR16	6.0	PST-2BDT	5.0
NP-3	6.0	SEABISCUIT	5.0
PPG-PR 367	6.0	02BS1	4.7
PPG-PR 421	6.0	ASP0218 (A-6D)	4.7
PPG-PR 422	6.0	BAR LP 6117	4.7
		DLFPS-236/3542	4.7

TABLE 30. WINTER KILL RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
(CONT'D) 2017 DATA

WINTER KILL RATINGS 1-9; 9=LEAST KILL 2/

NAME	MN1
DLFPS-236/3548	4.7
DLFPS-236/3550	4.7
DLFPS-236/3552	4.7
GRAY WOLF (PST-2GAL)	4.7
LPB-SD-104	4.7
LPB-SD-105	4.7
PHARAOH	4.7
PPG-PR 371	4.7
PST-2GTD	4.7
ASP0118GL (A-4G)	4.3
BAR LP 6165	4.3
GO-143	4.3
KARMA	4.3
PST-2MAY	4.3
SNX	4.3
BWH	4.0
SAVANT	4.0
BSP-25	3.7
DLFPS-238/3014	3.7
PEPPER II (RAD-PR 103)	3.7
APR2612	3.3
LINN	2.7
BAR LP 6162	2.3
LSD VALUE	2.7
C.V. (%)	30.5

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 31.

QUALITY (DECEMBER 2016) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2017 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL 2/

NAME	CA7	NAME	CA7
BSP-17	8.7	JR-747	7.3
BAR LP 6117	8.3	LPB-SD-102	7.3
GO-141	8.3	NP-3	7.3
GO-143	8.3	OVERDRIVE 5G	7.3
LPB-SD-101	8.3	PHARAOH	7.3
PPG-PR 331	8.3	FASTBALL 3GL (PPG-PR 329)	7.3
APPLE 3GL (PPG-PR 339)	8.3	PPG-PR 370	7.3
PR-6-15	8.3	PPG-PR 424	7.3
UMPOUA	8.3	PST-2BDT	7.3
ASP0218 (A-6D)	8.0	PST-2FOXY	7.3
APR3060	8.0	SNX	7.3
ASP0116EXT	8.0	023	7.0
BAR LP 6165	8.0	02BS1	7.0
CPN	8.0	02BS2	7.0
DLFPS-236/3554	8.0	ASP0117 (A-PR15)	7.0
GO-142	8.0	APR2616	7.0
JR-197	8.0	BAR LP 6131	7.0
LINN	8.0	BAR LP 6158	7.0
MAN O WAR	8.0	BAR LP 6159	7.0
MRSI-PR16	8.0	DLFPS-236/3541	7.0
PPG-PR 367	8.0	DLFPS-236/3542	7.0
HOMERUN LS (PPG-PR 419)	8.0	DLFPS-236/3543	7.0
PPG-PR 420	8.0	DLFPS-236/3552	7.0
PST-2MAY	8.0	GRAND SLAM GLD	7.0
SHIELD (02BS4)	7.7	GRAY WOLF (PST-2GAL)	7.0
ASP0118GL (A-4G)	7.7	INTENSE	7.0
ALLSTAR III	7.7	JR-123	7.0
AMP-R1	7.7	PPG-PR 421	7.0
BAR LP 6162	7.7	PST-2PDA	7.0
BAR LP 6233	7.7	SAVANT	7.0
CS-6	7.7	SR 4650	7.0
DLFPS-236/3550	7.7	BSP-25	6.7
EVOLVE	7.7	DLFPS-236/3547	6.7
GRAY HAWK (PST-2FIND)	7.7	DLFPS-236/3548	6.7
JR-888	7.7	KARMA	6.7
SLUGGER 3GL (PPG-PR 343)	7.7	FURLONG (LTP-FCB)	6.7
PPG-PR 371	7.7	PL2	6.7
PST-2A2	7.7	PPG-PR 385	6.7
SEABISCUIT	7.7	PST-2EGAD	6.7
SIGNET	7.7	RAD-PR 112	6.7
021	7.3	UF3	6.7
BAR LP 6164	7.3	XCELERATOR	6.7
DLFPS-236/3545	7.3	APR2612	6.3
DLFPS-236/3556	7.3	BRIGHTSTAR SLT	6.3
FP2	7.3	DLFPS-236/3540	6.3
		DLFPS-236/3544	6.3

TABLE 31. QUALITY (DECEMBER 2016) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
(CONT'D) 2017 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL 2/

NAME	CA7
DLFPS-238/3014	6.3
LPB-SD-103	6.3
MENSA	6.3
MRSIL-PR15	6.3
NP-2	6.3
SLIDER LS (PPG-PR 241)	6.3
PPG-PR 372	6.3
PR-5-16	6.3
PST-2GTD	6.3
RRT	6.3
DLFPS-236/3538	6.0
DLFPS-236/3546	6.0
DLFPS-236/3553	6.0
LPB-SD-105	6.0
PPG-PR 360	6.0
SAGUARO	6.0
SILVER SPORT (PST-2CRP)	6.0
DERBY XTREME	5.7
LPB-SD-104	5.7
PPG-PR 422	5.7
BWH	5.3
PPG-PR 423	5.3
PEPPER II (RAD-PR 103)	5.3
LSD VALUE	1.9
C.V. (%)	16.9

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 */
 2017 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/
021	5.8	28.6	EVOLVE	5.5	9.5
023	5.8	33.3	FP2	6.0	38.1
02BS1	5.7	19.0	GO-141	5.5	4.8
02BS2	5.9	23.8	GO-142	5.4	4.8
SHIELD (02BS4)	5.8	33.3	GO-143	5.3	0.0
ASP0118GL (A-4G)	5.5	9.5	GRAND SLAM GLD	5.7	9.5
ASP0218 (A-6D)	5.5	9.5	GRAY HAWK (PST-2FIND)	5.7	14.3
ASP0117 (A-PR15)	5.6	14.3	GRAY WOLF (PST-2GAL)	5.9	33.3
ALLSTAR III	5.4	4.8	INTENSE	5.8	14.3
AMP-R1	5.3	4.8	JR-123	5.7	19.0
APR2612	5.4	9.5	JR-197	5.9	23.8
APR2616	5.7	14.3	JR-747	5.3	4.8
APR3060	5.6	9.5	JR-888	5.6	23.8
ASP0116EXT	5.5	14.3	KARMA	5.5	5.0
BAR LP 6117	5.6	14.3	LINN	3.6	4.8
BAR LP 6131	5.5	9.5	LPB-SD-101	5.6	14.3
BAR LP 6158	5.4	4.8	LPB-SD-102	5.7	33.3
BAR LP 6159	5.5	4.8	LPB-SD-103	5.4	4.8
BAR LP 6162	5.1	14.3	LPB-SD-104	5.3	4.8
BAR LP 6164	5.7	19.0	LPB-SD-105	5.4	14.3
BAR LP 6165	5.3	19.0	FURLONG (LTP-FCB)	6.0	47.6
BAR LP 6233	5.4	4.8	MAN O WAR	5.8	19.0
BRIGHTSTAR SLT	5.2	0.0	MENSA	5.5	9.5
BSP-17	5.4	9.5	MRSL-PR15	5.5	4.8
BSP-25	5.4	14.3	MRSL-PR16	5.5	4.8
BWH	5.2	4.8	NP-2	6.0	47.6
CPN	5.9	28.6	NP-3	5.9	28.6
CS-6	5.5	4.8	OVERDRIVE 5G	5.9	28.6
DERBY XTREME	5.6	9.5	PHARAOH	5.9	23.8
DLFPS-236/3538	5.9	38.1	PL2	5.9	33.3
DLFPS-236/3540	6.0	42.9	SLIDER LS (PPG-PR 241)	5.8	23.8
DLFPS-236/3541	5.8	28.6	FASTBALL 3GL (PPG-PR 329)	5.8	14.3
DLFPS-236/3542	5.9	42.9	PPG-PR 331	6.1	52.4
DLFPS-236/3543	5.9	47.6	APPLE 3GL (PPG-PR 339)	5.8	33.3
DLFPS-236/3544	5.9	47.6	SLUGGER 3GL (PPG-PR 343)	5.9	47.6
DLFPS-236/3545	5.8	28.6	PPG-PR 360	5.8	19.0
DLFPS-236/3546	5.8	33.3	PPG-PR 367	5.8	14.3
DLFPS-236/3547	5.9	33.3	PPG-PR 370	5.9	38.1
DLFPS-236/3548	5.7	33.3	PPG-PR 371	5.9	42.9
DLFPS-236/3550	5.8	14.3	PPG-PR 372	6.0	42.9
DLFPS-236/3552	5.8	42.9	PPG-PR 385	5.6	9.5
DLFPS-236/3553	5.8	23.8	HOMERUN LS (PPG-PR 419)	6.0	42.9
DLFPS-236/3554	6.1	61.9	PPG-PR 420	6.0	47.6
DLFPS-236/3556	5.8	38.1	PPG-PR 421	6.0	42.9
DLFPS-238/3014	5.2	14.3	PPG-PR 422	6.0	38.1

APPENDIX TABLE.
(CONT'D)SUMMARY OF TURFGRASS QUALITY RATINGS FOR PERENNIAL RYEGRASS CULTIVARS */
2017 DATA
TURFGRASS QUALITY RATINGS 1 9; 9=IDEAL TURF **/

NAME	QUALITY MEAN 1/	MAXIMUM IN TOP 25% 2/
PPG-PR 423	5.9	33.3
PPG-PR 424	6.1	57.1
PR-5-16	5.9	38.1
PR-6-15	5.8	19.0
PST-2A2	5.8	38.1
PST-2BDT	5.6	19.0
PST-2EGAD	5.7	19.0
PST-2FOXY	5.8	19.0
PST-2GTD	5.7	23.8
PST-2MAY	5.8	30.0
PST-2PDA	5.6	4.8
PEPPER II (RAD-PR 103)	5.7	23.8
RAD-PR 112	5.6	19.0
RRT	5.8	23.8
SAGUARO	5.5	4.8
SAVANT	5.5	28.6
SEABISCUIT	5.8	28.6
SIGNET	5.7	9.5
SILVER SPORT (PST-2CRP)	5.9	42.9
SNX	5.5	19.0
SR 4650	5.7	19.0
UF3	5.6	9.5
UMPQUA	5.8	23.8
XCELERATOR	5.8	38.1
C.V. (%)	9.6	
LSD VALUE	0.2	

*/ 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.