

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. Cole Thompson, USGA Green Section
Dr. Charles Fontanier, Oklahoma State University
Dr. Alec Kowalewski, Oregon State University
Mr. Mike Selman, Buena Vista Turf Farm
Mr. Mark Johnson, Golf Course Superintendents Assoc. of America
Dr. Aaron Patton, Purdue University
Mr. Steve Reid, DLF Pickseed USA
Mr. Steve Rackliffe, University of Connecticut

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 - 2019 data

LOCATIONS SUBMITTING DATA FOR 2019.....	1
NATIONAL PERENNIAL RYEGRASS TEST, 2016 - Entries and Sponsors.....	2
Table A - 2019 Locations, Site Descriptions and Management Practices in the 2016 National Perennial Ryegrass Test.....	3
Table B - Locations and Data Collected in 2019.....	4
Table 1 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown in Fourteen Locations in the US.....	5
Table 2 - Mean Turfgrass Quality and Other Ratings of Perennial Ryegrass Cultivars Grown at Five Locations in the U.S. Maintained Using Schedule A.....	8
Table 3 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Two Locations in the U.S. Maintained Using Schedule B.....	11
Table 4 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Seven Locations in the U.S. Maintained Using Schedule C.....	13
Table 5 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Two Locations in the Northeast Region.....	16
Table 6 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Five Locations in the Transition Region.....	18
Table 7 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Four Locations in the North Central Region.....	20
Table 8 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown at Logan, UT in the Upper West/Mountain Region.....	22
Table 9 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars For Each Month Grown at Fresno, CA in the Southwest Region.....	25
Table 10 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars For Each Month Grown at Corvallis, OR in the Pacific Region.....	28
Table 11 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown Under Traffic Stress at Corvallis, OR.....	31
Table 12 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown Under Traffic Stress at Blacksburg, VA.....	34
Table 13 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown Under Traffic Stress at Madison, WI.....	37
Table 14 - Mean Turfgrass Quality Ratings of Perennial Ryegrass Cultivars Grown Under Reduced Irrigation at Logan, UT	40
Table 15 - Genetic Color Ratings of Perennial Ryegrass Cultivars.....	43
Table 16 - Spring Greenup Ratings of Perennial Ryegrass Cultivars.....	46

CONTENTS (continued)

Table 17 - Percent Living Ground Cover (Spring) Ratings of Perennial Ryegrass Cultivars.....	48
Table 18 - Percent Living Ground Cover (Fall) Ratings of Perennial Ryegrass Cultivars.....	50
Table 19 - Red Thread Ratings of Perennial Ryegrass Cultivars.....	51
Table 20 - Fall Color Ratings in November of Perennial Ryegrass Cultivars.....	52
Table 21 - Winter Kill Ratings of Perennial Ryegrass Cultivars.....	53
Appendix Table - Summary of Turfgrass Quality Ratings of Perennial Ryegrass Cultivars.....	54

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 2019

State	Location	Code
California	Fresno	CA7
Connecticut	Storrs	CT1
Illinois	Urbana	IL1
Iowa	Ames	IA1
Kansas	Manhattan	KS1
Kentucky	Lexington	KY1
Maryland	College Park	MD1
Minnesota	St. Paul	MN1
Missouri	Columbia	MO1
Nebraska	Mead	NE1
New Jersey	Adelphia	NJ2
Oregon	Corvallis	OR1
Oregon	Corvallis (Traffic)	OR2
Utah	Logan	UT1
Utah	Logan (Drought)	UT2
Virginia	Blacksburg	VA1
Virginia	Blacksburg (Traffic)	VA2
Wisconsin	Madison (Traffic)	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	Hatrick (BSP-17)	Bailey Seed & Grain LLC	41	GO-141	Grassland Oregon	80	BAR LP 6117	Barenbrug USA
*3	Fireball (BWH)	Bailey Seed & Grain LLC	*42	Belize 2 (GO-142)	Grassland Oregon	81	BAR LP 6131	Barenbrug USA
*4	Tee-Me-Up (BSP-25)	Bailey Seed & Grain LLC	*43	Cayman (GO-143)	Grassland Oregon	82	BAR LP 6159	Barenbrug USA
*5	Savant	Columbia Seeds	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	Columbia Seeds	*46	Green Supreme+ (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	Paragon 2 GLR (FP2)	Turf Merchants, Inc.	93	PST-2A2	Pure-Seed Testing, Inc.
*16	Intense	Landmark Turf & NS	55	02BS2	Brett Young Seeds	94	DLFPS-236/3553	DLF Pickseed USA, Inc.
*17	Xcelerator	Landmark Turf & NS	*56	Alloy (RRT)	The Scotts Miracle-Gro Co	*95	Fiesta Cinco (DLFPS-236/3554)	DLF Pickseed USA, Inc.
*18	Spike GLS (UF3)	Landmark Turf & NS	*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	Paradox GLR (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	AllStar Fore (DLFPS-236/3541)	DLF Pickseed USA, Inc	*61	Apple 3GL (PPG-PR 339)	Mountain View Seeds	100	BAR LP 6165	Barenbrug USA
*23	SR 4700 (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	MRS�-PR16	SiteOne Landscape Supply	65	PPG-PR 370	Lewis Seed Company	104	JR-197	Jacklin Simplot by Simplot
27	PL2	SiteOne Landscape Supply	66	PPG-PR 371	Turf Merchants, Inc.	105	DLFPS-238/3014	DLF Pickseed USA, Inc.
28	MRS�-PR15	SiteOne Landscape Supply	67	PPG-PR 372	Columbia Seeds	*106	Pepper II (RAD-PR 103)	Lewis Seed Company
*29	Nexus GT (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	Superstar GL (PPG-PR 420)	Mountain View Seeds	*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	Columbia Seeds & Barenbrug USA	*112	Allstar III	Standard
*35	ASP0117 (A-PR15)	Allied Seed LLC	*74	Stellar 4GL (PPG-PR 424)	Mountain View Seeds	*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			

*COMMERCIALY AVAILABLE IN 2020 IN THE US OR ANY OTHER COUNTRY

TABLE A.

2019 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	7.1-7.5	0-60	0-150	1.1-2.0	FULL SUN	2.6-3.0	TO PREVENT DORMANCY
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	SILTY CLAY LOAM	7.1-7.5	61-150	151-240	2.1-3.0	FULL SUN	0.0-0.5	NO IRRIGATION
KY1	SILT LOAM AND SILT	5.6-6.0	451+	241-375	1.1-2.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
MD1	SILT LOAM AND SILT	6.1-6.5	61-150	151-240	2.1-3.0	FULL SUN	2.6-3.0	TO PREVENT DORMANCY
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	-	-	-	-	-	-	-	-
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	241-375	2.1-3.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
OR1	SILTY CLAY LOAM	5.6-6.0	61-150	241-375	4.1-5.0	FULL SUN	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 2019

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
CA7	X	X	X	X	X	X	X	X	X	X	X	X
CT1					X	X	X	X	X	X		
IA1				X	X	X	X	X	X	X		
IL1				X	X	X	X	X	X	X		
KS1				X	X	X	X	X	X	X		
KY1			X	X	X	X	X	X	X	X	X	
MD1					X		X		X	X		
MN1					X	X	X	X	X	X		
MO1				X	X	X	X	X	X	X		
NE1				X	X	X	X	X	X	X		
NJ2				X	X	X	X	X	X	X	X	
OR1	X	X	X	X	X	X	X	X	X	X	X	X
OR2	X	X	X	X	X	X	X	X	X	X	X	X
UT1				X	X	X	X	X	X	X		
UT2				X	X	X	X	X	X	X		
VA1					X	X	X	X	X	X		
VA2					X	X	X	X	X	X		
WI1					X	X	X	X	X	X		

TABLE B.
(CONT'D)

LOCATIONS AND DATA COLLECTED IN 2019

LOCATION	GENETIC COLOR	SPRING GREENUP	PERCENT COVER SPRING	PERCENT COVER FALL	RED THREAD	FALL COLOR NOVEMBER	WINTER KILL RATINGS
CA7	X						
CT1	X	X					
IA1	X						
IL1	X	X				X	X
KS1	X						
KY1							
MD1					X		
MN1	X						
MO1			X				
NE1	X	X					
NJ2	X						
OR1	X						
OR2							
UT1	X	X					
UT2		X					
VA1			X	X			
* VA2							
WI1							

* MORE DATA FOR VA2 IN TABLE 12.

TABLE 1.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT FOURTEEN LOCATIONS IN THE U.S. **/
2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	ENTRY #	CA7	CT1	IA1	IL1	KS1	KY1	MD1	MN1	MO1	NE1	NJ2	OR1	UT1	VA1	MEAN
PPG-PR 421	71	5.8	7.2	7.4	7.5	5.7	6.4	5.7	5.2	5.4	5.4	6.6	6.6	7.2	6.7	6.3
*SLUGGER 3GL (PPG-PR 343)	62	5.6	7.1	7.2	7.7	5.5	6.3	5.4	5.7	4.8	4.9	6.8	6.8	7.1	6.9	6.3
*FIESTA CINCO (DLFPS-236/3554)	95	5.2	7.3	7.6	7.9	5.0	6.3	5.7	6.2	5.5	5.2	6.2	6.4	6.9	6.3	6.3
PL2	27	5.6	6.9	7.2	8.1	4.8	6.3	6.0	6.3	5.6	5.1	6.3	6.4	6.7	6.3	6.3
DLFPS-236/3547	48	5.2	7.2	7.7	7.6	5.4	6.3	5.2	5.7	4.7	5.0	6.8	6.9	6.5	6.7	6.2
PPG-PR 423	73	5.3	7.1	7.2	7.9	4.9	6.3	5.2	5.9	4.9	5.3	6.3	6.6	6.8	6.9	6.2
DLFPS-236/3546	47	5.7	7.3	7.4	7.6	5.4	6.4	4.9	6.2	5.7	4.8	6.1	6.7	6.7	5.7	6.2
PPG-PR 372	67	5.4	6.7	7.1	7.6	4.5	6.2	5.3	6.3	4.9	5.2	6.2	7.0	7.0	6.7	6.2
*FASTBALL 3GL (PPG-PR 329)	58	5.1	6.5	7.0	7.8	5.3	6.1	6.0	5.4	5.6	5.3	5.8	6.8	6.9	6.1	6.1
*FURLONG (LTP-FCB)	79	5.8	6.7	7.5	5.1	5.4	6.2	4.5	5.7	5.5	5.3	7.1	6.9	7.4	6.6	6.1
PPG-PR 422	72	5.5	7.0	7.3	7.6	4.9	6.0	5.2	5.8	5.1	5.2	5.7	6.9	6.5	6.9	6.1
DLFPS-236/3544	15	5.7	6.8	7.3	7.7	5.2	6.0	5.5	6.2	4.7	5.2	5.4	6.8	6.6	6.3	6.1
NP-3	38	5.7	7.2	7.0	8.3	5.0	6.1	4.9	5.9	5.6	4.8	5.9	6.8	6.6	5.7	6.1
PR-6-15	50	5.3	6.7	7.6	7.8	5.0	5.9	5.1	6.0	4.3	5.3	6.1	6.7	6.9	6.7	6.1
PPG-PR 371	66	5.2	6.9	7.2	7.4	5.3	5.9	5.6	4.4	6.1	5.1	5.8	6.7	6.9	6.8	6.1
NP-2	39	6.1	6.3	7.2	8.0	5.0	6.2	5.1	5.7	4.8	5.1	6.1	6.7	6.8	5.8	6.1
PPG-PR 367	64	6.1	6.7	6.6	7.7	4.8	5.5	5.7	6.1	4.6	5.2	5.5	7.3	6.4	6.8	6.1
*SR 4700 (DLFPS-236/3543)	23	5.7	7.5	7.7	5.3	5.0	6.3	5.8	5.3	4.6	5.1	6.6	6.8	6.8	6.3	6.0
*XCELERATOR	17	4.8	6.7	7.1	8.1	4.7	6.0	5.2	5.6	4.9	4.8	6.0	6.8	6.7	7.3	6.0
*APPLE 3GL (PPG-PR 339)	61	4.9	7.4	6.4	7.3	5.3	6.2	5.5	5.9	5.4	5.1	5.5	6.8	6.5	6.2	6.0
*SHIELD (02BS4)	31	5.7	6.9	7.1	8.0	5.0	6.1	6.0	5.1	5.3	5.0	5.7	6.6	6.2	5.9	6.0
DLFPS-236/3556	33	5.6	6.4	6.5	8.0	4.9	6.4	5.6	6.0	4.8	5.1	5.6	6.7	6.2	6.6	6.0
*SUPERSTAR GL (PPG-PR 420)	70	5.1	7.1	7.3	5.4	5.3	6.2	5.2	5.4	5.8	5.3	5.8	6.7	6.7	7.1	6.0
DLFPS-236/3548	49	5.1	6.9	7.2	7.7	5.1	6.0	5.6	5.4	5.4	5.0	5.4	6.4	6.4	6.6	6.0
JR-197	104	5.8	7.1	7.5	5.6	5.3	6.0	4.6	5.7	4.5	5.3	6.8	7.1	6.1	6.6	6.0
*HOMERUN LS (PPG-PR 419)	69	4.9	7.4	6.9	7.6	5.0	6.0	5.1	5.4	4.8	5.3	5.2	6.8	6.8	6.9	6.0
*STELLAR 4GL (PPG-PR 424)	74	5.5	7.4	7.4	5.5	4.8	6.0	5.1	6.0	4.3	5.1	5.9	6.9	7.0	6.8	6.0
*GRAY WOLF (PST-2GAL)	91	5.5	6.7	6.9	7.9	5.1	6.1	5.1	4.4	5.1	5.1	5.8	6.6	6.9	6.7	6.0
DLFPS-236/3550	51	5.6	7.1	6.8	7.6	5.0	6.1	5.3	5.4	4.4	5.1	5.2	6.4	6.8	6.5	5.9
*OVERDRIVE 5G	101	5.6	6.8	7.1	8.1	4.7	5.6	4.5	5.7	3.8	5.2	6.1	6.9	6.5	6.5	5.9
DLFPS-236/3552	52	5.6	7.2	7.0	5.4	5.0	6.1	5.9	4.6	5.4	5.3	6.0	6.7	6.8	6.2	5.9
DLFPS-236/3545	24	5.4	7.0	7.0	5.6	5.2	6.3	5.5	4.9	4.7	5.2	6.0	6.9	6.3	6.6	5.9
PPG-PR 370	65	5.1	7.1	7.1	5.5	5.0	6.3	5.4	5.2	5.1	5.2	5.8	6.7	7.0	6.2	5.9
PST-2FOXY	84	6.2	7.1	7.0	5.6	5.1	6.0	5.6	5.3	5.0	5.1	4.8	6.8	6.8	6.3	5.9
PR-5-16	96	5.8	6.5	7.2	5.9	5.0	5.9	4.8	5.8	5.1	5.3	5.6	6.5	6.4	6.7	5.9
*ALLOY (RRT)	56	5.1	7.3	7.2	3.3	5.3	6.2	5.7	5.3	5.1	4.9	6.4	6.8	7.3	6.5	5.9
02BS2	55	5.9	6.7	6.7	3.2	5.4	6.3	6.4	5.7	5.3	5.1	6.1	6.8	6.9	5.7	5.9
APR2616	40	5.6	6.7	6.8	7.9	4.7	5.9	5.2	5.3	4.5	5.1	5.0	6.3	6.8	6.7	5.9
*PARADOX GLR (PPG-PR 331)	59	5.6	6.7	6.7	7.9	5.0	6.4	4.3	6.2	4.6	5.1	4.7	6.6	6.7	5.7	5.9
DLFPS-236/3540	13	5.5	6.6	6.8	7.7	4.9	6.0	4.9	5.6	4.6	5.2	5.3	6.6	6.3	6.1	5.9
DLFPS-236/3538	77	5.6	6.9	7.7	3.2	5.3	5.8	5.3	5.6	6.3	4.9	5.5	6.3	6.5	7.1	5.9
*SPIKE GLS (UF3)	18	5.1	6.6	6.7	5.6	4.9	5.9	5.3	5.9	5.3	5.0	5.9	6.9	6.6	6.4	5.8
PPG-PR 360	63	4.9	6.9	7.1	5.2	5.2	5.9	5.8	5.2	4.8	5.1	6.0	6.6	6.9	6.2	5.8
DLFPS-236/3542	14	5.2	6.9	7.1	5.7	5.2	5.8	5.4	4.4	3.9	5.1	6.0	6.7	7.1	7.1	5.8
SILVER SPORT (PST-2CRP)	85	5.1	6.1	7.3	5.7	5.3	6.1	4.9	5.7	4.7	5.3	5.9	6.6	6.9	6.1	5.8

TABLE 1.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT FOURTEEN LOCATIONS IN THE U.S. **/
2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	ENTRY #	CA7	CT1	IA1	IL1	KS1	KY1	MD1	MN1	MO1	NE1	NJ2	OR1	UT1	VA1	MEAN
CPN	103	5.3	6.9	7.0	5.3	4.9	5.9	4.3	6.3	4.7	5.2	5.5	6.9	6.7	6.9	5.8
BAR LP 6164	99	6.1	6.3	7.2	7.7	5.2	6.0	5.3	4.7	4.8	5.1	4.5	6.3	5.9	6.3	5.8
*ALLSTAR FORE (DLFPS-236/3541)	22	5.9	6.8	6.5	3.4	5.2	6.4	5.8	5.7	4.1	5.0	6.3	6.9	6.5	6.7	5.8
PST-2A2	93	5.2	6.8	6.8	7.8	5.0	5.9	4.7	5.4	2.9	4.9	5.7	6.8	6.9	6.0	5.8
PST-2MAY	90	5.4	6.6	7.1	5.4	.	6.2	5.3	4.8	4.9	4.9	5.0	6.4	6.8	6.0	5.8
*UMPQUA	108	4.6	6.7	7.7	5.5	4.7	5.9	5.2	6.1	3.8	5.0	5.9	6.7	6.3	6.6	5.8
*INTENSE	16	5.3	6.5	6.7	7.9	4.7	5.3	5.5	4.4	3.5	5.0	5.8	6.6	6.6	6.9	5.8
DLFPS-236/3553	94	5.5	6.1	7.0	5.5	5.0	5.6	4.8	5.4	5.0	5.0	6.4	6.6	6.6	6.1	5.7
*ASP0118GL (A-4G)	36	5.4	6.7	6.8	7.4	4.9	6.0	4.9	4.7	4.8	4.7	4.8	6.6	6.4	5.8	5.7
*SR 4650	76	5.4	6.4	6.7	8.0	5.0	6.1	3.9	5.8	3.5	5.1	5.2	6.4	6.6	5.7	5.7
BAR LP 6117	80	6.0	6.2	6.7	8.0	5.1	5.7	4.8	4.5	5.0	5.0	4.3	6.3	6.3	6.1	5.7
PST-2GTD	88	5.8	6.9	7.3	3.4	5.1	6.3	5.3	4.9	4.7	5.3	5.2	6.5	6.2	6.8	5.7
PPG-PR 385	68	5.5	6.4	7.1	5.3	5.3	5.9	4.4	4.8	5.1	5.0	5.3	6.2	6.2	6.9	5.7
*PHARAOH	111	5.0	7.4	7.2	5.5	4.8	5.7	4.9	4.6	4.5	5.1	5.2	6.7	6.6	6.3	5.7
*PARAGON 2 GLR (FP2)	54	5.8	6.2	7.1	5.3	4.6	5.7	4.3	5.8	5.1	5.0	5.4	6.7	6.7	5.9	5.7
*SIGNET	30	5.5	6.8	6.9	5.0	5.4	5.9	4.8	4.9	4.4	5.0	5.8	6.1	6.5	6.2	5.7
*KARMA	75	5.2	6.4	6.1	7.9	.	5.8	4.5	5.2	3.9	5.1	5.0	6.5	6.1	5.8	5.7
PST-2BDT	89	5.8	7.1	6.7	5.6	4.9	5.9	4.6	4.9	4.9	5.1	5.0	6.5	6.2	6.0	5.7
*ASP0218 (A-6D)	37	5.7	6.3	5.8	7.8	4.9	6.0	5.0	4.3	5.2	4.7	3.7	6.6	7.0	6.2	5.6
JR-123	19	5.6	6.6	6.0	5.4	5.5	5.4	5.6	5.0	5.0	4.8	4.8	6.5	6.7	5.8	5.6
*SEABISCUIT	109	5.6	6.7	7.3	3.5	5.2	5.9	5.3	4.8	5.3	5.0	5.3	6.6	6.2	6.2	5.6
*ASP0117 (A-PR15)	35	5.2	6.1	7.0	5.5	5.2	6.0	4.9	5.8	4.2	4.9	5.0	6.5	6.5	5.9	5.6
02BS1	102	4.7	6.3	7.0	5.6	5.0	5.7	4.4	4.7	3.9	5.0	5.7	6.9	6.6	6.7	5.6
*SLIDER LS (PPG-PR 241)	57	5.5	6.8	6.9	3.2	4.9	6.4	5.1	5.4	4.9	5.3	5.0	6.4	6.1	6.2	5.6
*ASP0116EXT	34	5.9	5.8	7.0	7.8	4.8	5.8	4.7	4.9	3.5	4.5	3.8	6.2	6.8	6.4	5.6
023	53	6.0	6.4	7.0	3.0	4.6	5.9	4.6	5.6	4.7	4.8	5.5	6.6	6.6	6.6	5.6
021	1	5.3	6.4	7.6	3.1	4.8	5.7	5.9	5.2	4.1	4.9	5.4	6.7	6.4	6.4	5.6
PST-2EGAD	86	5.4	6.4	6.8	5.5	4.6	6.1	5.5	4.8	4.2	5.4	4.5	6.4	6.3	5.9	5.6
MRSL-PR16	26	6.1	5.5	7.0	5.4	5.0	6.1	4.8	4.7	4.7	4.6	4.5	6.4	6.4	6.4	5.5
PST-2PDA	92	5.5	6.1	7.0	7.7	5.4	5.8	4.2	4.6	3.3	5.0	5.1	6.1	6.0	5.9	5.5
CS-6	32	5.6	5.9	6.1	8.0	4.6	5.8	4.6	5.4	3.5	4.6	4.0	6.5	6.8	6.1	5.5
BAR LP 6233	83	5.0	6.0	7.2	5.2	5.0	5.9	4.8	4.8	4.9	5.2	4.8	6.1	5.8	6.7	5.5
*GRAY HAWK (PST-2FIND)	87	5.4	6.1	6.8	5.3	5.1	6.0	4.7	5.2	3.9	5.1	4.9	6.4	6.4	6.0	5.5
BAR LP 6158	97	5.6	5.8	7.0	7.9	5.2	5.6	4.0	4.2	5.0	4.6	4.4	5.7	5.8	6.3	5.5
APR3060	45	5.9	6.1	6.6	5.6	5.0	5.8	4.3	4.8	4.9	5.1	4.7	5.8	5.9	6.7	5.5
*DERBY XTREME	60	5.3	6.4	6.1	7.7	4.4	5.6	4.3	5.0	3.6	5.1	4.5	6.6	6.4	5.5	5.5
*GRAND SLAM GLD	78	5.9	6.9	7.1	1.0	4.9	5.7	5.7	5.1	4.4	5.0	5.4	6.4	6.6	6.5	5.5
BAR LP 6131	81	5.9	5.8	6.9	7.4	4.8	5.4	4.4	4.6	4.6	5.0	3.4	6.0	5.7	6.4	5.4
BAR LP 6159	82	5.6	5.9	6.9	5.5	5.0	5.6	4.7	4.7	5.0	5.0	4.0	6.0	6.2	5.5	5.4
RAD-PR 112	107	4.8	5.6	7.3	7.6	5.0	5.6	4.5	3.9	3.8	4.3	4.1	6.7	6.8	5.4	5.4
APR2612	44	5.5	5.9	6.6	5.4	5.2	5.9	4.7	3.9	4.6	4.8	5.0	6.3	6.1	5.4	5.4
*TEE-ME-UP (BSP-25)	4	4.9	5.7	6.8	7.9	5.0	5.7	4.8	3.4	4.1	4.4	4.2	6.4	6.5	5.7	5.4
*EVOLVE	25	5.3	6.3	5.9	5.3	4.9	5.9	5.3	4.4	4.3	4.9	4.5	6.0	5.8	6.5	5.4
*HATRICK (BSP-17)	2	4.9	5.9	7.1	5.8	5.0	5.6	5.3	4.1	4.8	4.3	3.9	6.4	6.6	5.3	5.4
*FIREBALL (BWH)	3	5.3	5.8	6.7	8.0	4.9	5.5	4.3	3.7	4.6	4.7	3.2	6.6	6.7	5.2	5.4
BAR LP 6165	100	4.9	5.2	7.6	7.5	4.3	5.6	4.2	3.9	4.4	5.0	4.7	6.0	5.0	6.8	5.4

TABLE 1.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT FOURTEEN LOCATIONS IN THE U.S. **/
2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	ENTRY #	CA7	CT1	IA1	IL1	KS1	KY1	MD1	MN1	MO1	NE1	NJ2	OR1	UT1	VA1	MEAN
MRSL-PR15	28	5.3	5.9	6.4	5.7	5.0	5.7	4.7	4.0	3.8	4.9	4.4	6.2	6.9	5.9	5.3
*NEXUS GT (SNX)	29	5.2	5.5	6.6	5.5	5.2	5.9	4.7	4.0	4.8	4.6	3.5	6.3	6.6	6.1	5.3
*PEPPER II (RAD-PR 103)	106	5.4	6.0	7.0	5.5	5.1	5.4	4.1	3.6	5.1	4.5	3.7	6.6	6.4	5.9	5.3
*SAGUARO	7	4.9	5.9	5.8	7.6	4.5	5.2	3.7	5.6	3.8	4.9	4.3	6.2	6.6	5.1	5.3
*GREEN SUPREME+ (AMP-R1)	46	5.4	6.0	6.3	5.5	5.2	5.9	4.5	4.4	4.7	4.0	3.6	6.2	6.5	5.4	5.3
DLFPS-238/3014	105	4.9	5.8	7.0	7.7	5.3	4.9	4.4	3.3	5.4	4.2	3.2	6.3	5.3	5.8	5.3
*CAYMAN (GO-143)	43	5.1	6.0	6.0	5.5	5.5	5.6	4.5	3.8	4.9	4.7	3.2	6.2	6.7	5.9	5.2
*MENSA	9	4.7	6.2	6.3	8.0	4.6	4.9	3.4	4.8	3.2	4.7	4.8	6.2	6.3	4.5	5.2
GO-141	41	5.1	6.3	6.0	5.8	4.6	5.4	4.0	4.9	2.9	4.7	3.8	6.0	6.4	6.4	5.2
LPB-SD-103	12	4.5	5.9	6.2	8.1	4.6	5.1	3.2	5.2	2.0	4.9	4.4	6.4	6.3	5.2	5.1
*MAN O'WAR	110	5.4	6.6	7.4	1.0	4.7	5.7	4.5	4.9	3.2	4.7	5.1	6.7	6.3	5.8	5.1
*BELIZE 2 (GO-142)	42	5.4	6.4	5.6	3.2	5.0	5.7	5.0	4.3	3.4	4.9	4.0	6.3	6.3	6.3	5.1
LPB-SD-102	11	4.2	6.4	6.5	7.4	4.3	4.9	3.6	4.9	2.2	4.7	4.6	6.8	6.5	4.7	5.1
LPB-SD-101	10	4.0	6.3	5.9	7.9	4.6	4.6	3.3	5.8	2.6	4.8	3.9	6.4	6.1	5.4	5.1
*ALLSTAR III	112	5.4	6.4	6.0	5.6	4.8	5.1	3.6	3.7	3.7	5.0	4.2	6.3	6.3	5.0	5.1
BAR LP 6162	98	5.2	5.7	6.2	7.6	4.6	5.2	4.3	1.9	4.6	4.5	3.0	5.6	5.6	6.2	5.0
JR-747	20	4.1	5.9	5.2	7.7	4.4	4.7	2.9	4.1	2.9	5.0	4.3	6.4	6.6	5.8	5.0
*SAVANT	5	3.9	6.0	6.0	7.5	4.5	5.2	2.8	4.1	3.4	4.8	4.3	6.2	6.2	4.4	4.9
JR-888	21	4.7	5.7	6.0	3.3	4.5	5.2	3.3	5.4	4.3	4.9	4.1	6.2	5.9	5.2	4.9
*BRIGHTSTAR SLT	113	4.7	5.6	6.4	5.1	4.9	5.1	3.1	4.4	4.1	4.8	3.2	5.9	6.0	4.6	4.8
LPB-SD-105	6	4.4	5.5	6.5	5.2	4.0	4.8	2.4	4.7	3.4	4.9	3.8	6.4	6.3	4.5	4.8
LPB-SD-104	8	4.2	5.9	6.2	5.4	4.6	4.9	2.8	3.7	1.7	4.9	4.7	6.1	6.4	4.7	4.7
*LINN	114	3.9	3.7	4.6	2.0	3.6	2.6	1.0	1.0	2.7	3.1	1.0	5.3	2.9	3.2	2.9
LSD VALUE		1.2	0.8	0.8	4.4	0.8	0.5	1.0	1.5	1.5	0.4	0.9	0.5	0.6	1.2	0.4
C.V. (%)		14.1	7.5	7.1	43.9	10.4	5.2	12.5	18.2	21.2	5.5	11.1	4.9	5.6	11.9	16.5

* COMMERCIALY AVAILABLE IN THE USA IN 2020

** 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. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 GROWN AT FIVE LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE A" *
 2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/					MEAN
	IL1	KS1	KY1	NE1	NJ2	
PPG-PR 421	7.5	5.7	6.4	5.4	6.6	6.3
SLUGGER 3GL (PPG-PR 343)	7.7	5.5	6.3	4.9	6.8	6.2
DLFPS-236/3547	7.6	5.4	6.3	5.0	6.8	6.2
PPG-PR 423	7.9	4.9	6.3	5.3	6.3	6.1
PL2	8.1	4.8	6.3	5.1	6.3	6.1
FIESTA CINCO (DLFPS-236/3554)	7.9	5.0	6.3	5.2	6.2	6.1
NP-2	8.0	5.0	6.2	5.1	6.1	6.1
FASTBALL 3GL (PPG-PR 329)	7.8	5.3	6.1	5.3	5.8	6.1
DLFPS-236/3546	7.6	5.4	6.4	4.8	6.1	6.1
NP-3	8.3	5.0	6.1	4.8	5.9	6.0
PR-6-15	7.8	5.0	5.9	5.3	6.1	6.0
DLFPS-236/3556	8.0	4.9	6.4	5.1	5.6	6.0
GRAY WOLF (PST-2GAL)	7.9	5.1	6.1	5.1	5.8	6.0
PPG-PR 372	7.6	4.5	6.2	5.2	6.2	5.9
KARMA	7.9	.	5.8	5.1	5.0	5.9
OVERDRIVE 5G	8.1	4.7	5.6	5.2	6.1	5.9
SHIELD (02BS4)	8.0	5.0	6.1	5.0	5.7	5.9
XCELERATOR	8.1	4.7	6.0	4.8	6.0	5.9
DLFPS-236/3544	7.7	5.2	6.0	5.2	5.4	5.9
PPG-PR 371	7.4	5.3	5.9	5.1	5.8	5.9
PPG-PR 422	7.6	4.9	6.0	5.2	5.7	5.9
APPLE 3GL (PPG-PR 339)	7.3	5.3	6.2	5.1	5.5	5.9
SR 4650	8.0	5.0	6.1	5.1	5.2	5.9
PST-2A2	7.8	5.0	5.9	4.9	5.7	5.8
HOMERUN LS (PPG-PR 419)	7.6	5.0	6.0	5.3	5.2	5.8
DLFPS-236/3548	7.7	5.1	6.0	5.0	5.4	5.8
FURLONG (LTP-FCB)	5.1	5.4	6.2	5.3	7.1	5.8
DLFPS-236/3540	7.7	4.9	6.0	5.2	5.3	5.8
PARADOX GLR (PPG-PR 331)	7.9	5.0	6.4	5.1	4.7	5.8
JR-197	5.6	5.3	6.0	5.3	6.8	5.8
DLFPS-236/3550	7.6	5.0	6.1	5.1	5.2	5.8
PST-2PDA	7.7	5.4	5.8	5.0	5.1	5.8
PPG-PR 367	7.7	4.8	5.5	5.2	5.5	5.7
INTENSE	7.9	4.7	5.3	5.0	5.8	5.7
APR2616	7.9	4.7	5.9	5.1	5.0	5.7
BAR LP 6164	7.7	5.2	6.0	5.1	4.5	5.7
SILVER SPORT (PST-2CRP)	5.7	5.3	6.1	5.3	5.9	5.7
SR 4700 (DLFPS-236/3543)	5.3	5.0	6.3	5.1	6.6	5.7
DLFPS-236/3545	5.6	5.2	6.3	5.2	6.0	5.7
BAR LP 6117	8.0	5.1	5.7	5.0	4.3	5.6
SUPERSTAR GL (PPG-PR 420)	5.4	5.3	6.2	5.3	5.8	5.6
ASP0118GL (A-4G)	7.4	4.9	6.0	4.7	4.8	5.6
DLFPS-236/3542	5.7	5.2	5.8	5.1	6.0	5.6
BAR LP 6158	7.9	5.2	5.6	4.6	4.4	5.6

TABLE 2. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
(CONT'D) GROWN AT FIVE LOCATIONS IN THE U.S. 1/
MAINTAINED USING "SCHEDULE A" *
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/					MEAN
	IL1	KS1	KY1	NE1	NJ2	
PPG-PR 370	5.5	5.0	6.3	5.2	5.8	5.6
DLFPS-236/3552	5.4	5.0	6.1	5.3	6.0	5.5
PR-5-16	5.9	5.0	5.9	5.3	5.6	5.5
DLFPS-236/3553	5.5	5.0	5.6	5.0	6.4	5.5
PPG-PR 360	5.2	5.2	5.9	5.1	6.0	5.5
STELLAR 4GL (PPG-PR 424)	5.5	4.8	6.0	5.1	5.9	5.5
DERBY XTREME	7.7	4.4	5.6	5.1	4.5	5.5
SIGNET	5.0	5.4	5.9	5.0	5.8	5.4
SPIKE GLS (UF3)	5.6	4.9	5.9	5.0	5.9	5.4
TEE-ME-UP (BSP-25)	7.9	5.0	5.7	4.4	4.2	5.4
LPB-SD-103	8.1	4.6	5.1	4.9	4.4	5.4
BAR LP 6165	7.5	4.3	5.6	5.0	4.7	5.4
O2BS1	5.6	5.0	5.7	5.0	5.7	5.4
UMPQUA	5.5	4.7	5.9	5.0	5.9	5.4
ASP0218 (A-6D)	7.8	4.9	6.0	4.7	3.7	5.4
MENSA	8.0	4.6	4.9	4.7	4.8	5.4
CS-6	8.0	4.6	5.8	4.6	4.0	5.4
PST-2MAY	5.4	.	6.2	4.9	5.0	5.4
PPG-PR 385	5.3	5.3	5.9	5.0	5.3	5.4
CPN	5.3	4.9	5.9	5.2	5.5	5.3
ASP0116EXT	7.8	4.8	5.8	4.5	3.8	5.3
RAD-PR 112	7.6	5.0	5.6	4.3	4.1	5.3
PST-2FOXY	5.6	5.1	6.0	5.1	4.8	5.3
ASP0117 (A-PR15)	5.5	5.2	6.0	4.9	5.0	5.3
PST-2BDT	5.6	4.9	5.9	5.1	5.0	5.3
SAGUARO	7.6	4.5	5.2	4.9	4.3	5.3
SAVANT	7.5	4.5	5.2	4.8	4.3	5.3
GRAY HAWK (PST-2FIND)	5.3	5.1	6.0	5.1	4.9	5.3
PHARAOH	5.5	4.8	5.7	5.1	5.2	5.3
APR2612	5.4	5.2	5.9	4.8	5.0	5.3
ALLSTAR FORE (DLFPS-236/3541)	3.4	5.2	6.4	5.0	6.3	5.2
FIREBALL (BWH)	8.0	4.9	5.5	4.7	3.2	5.2
JR-747	7.7	4.4	4.7	5.0	4.3	5.2
O2BS2	3.2	5.4	6.3	5.1	6.1	5.2
APR3060	5.6	5.0	5.8	5.1	4.7	5.2
BAR LP 6233	5.2	5.0	5.9	5.2	4.8	5.2
ALLOY (RRT)	3.3	5.3	6.2	4.9	6.4	5.2
PST-2EGAD	5.5	4.6	6.1	5.4	4.5	5.2
PARAGON 2 GLR (FP2)	5.3	4.6	5.7	5.0	5.4	5.2
BAR LP 6131	7.4	4.8	5.4	5.0	3.4	5.2
JR-123	5.4	5.5	5.4	4.8	4.8	5.2
LPB-SD-102	7.4	4.3	4.9	4.7	4.6	5.2
LPB-SD-101	7.9	4.6	4.6	4.8	3.9	5.2
MRS�-PR15	5.7	5.0	5.7	4.9	4.4	5.1
MRS�-PR16	5.4	5.0	6.1	4.6	4.5	5.1

TABLE 2. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
(CONT'D) GROWN AT FIVE LOCATIONS IN THE U.S. 1/
MAINTAINED USING "SCHEDULE A" *
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/					MEAN
	IL1	KS1	KY1	NE1	NJ2	
EVOLVE	5.3	4.9	5.9	4.9	4.5	5.1
DLFPS-238/3014	7.7	5.3	4.9	4.2	3.2	5.1
PST-2GTD	3.4	5.1	6.3	5.3	5.2	5.1
BAR LP 6159	5.5	5.0	5.6	5.0	4.0	5.0
BAR LP 6162	7.6	4.6	5.2	4.5	3.0	5.0
SEABISCUIT	3.5	5.2	5.9	5.0	5.3	5.0
SLIDER LS (PPG-PR 241)	3.2	4.9	6.4	5.3	5.0	5.0
DLFPS-236/3538	3.2	5.3	5.8	4.9	5.5	4.9
NEXUS GT (SNX)	5.5	5.2	5.9	4.6	3.5	4.9
ALLSTAR III	5.6	4.8	5.1	5.0	4.2	4.9
HATRICK (BSP-17)	5.8	5.0	5.6	4.3	3.9	4.9
LPB-SD-104	5.4	4.6	4.9	4.9	4.7	4.9
CAYMAN (GO-143)	5.5	5.5	5.6	4.7	3.2	4.9
GO-141	5.8	4.6	5.4	4.7	3.8	4.9
GREEN SUPREME+ (AMP-R1)	5.5	5.2	5.9	4.0	3.6	4.8
PEPPER II (RAD-PR 103)	5.5	5.1	5.4	4.5	3.7	4.8
021	3.1	4.8	5.7	4.9	5.4	4.8
023	3.0	4.6	5.9	4.8	5.5	4.8
BRIGHTSTAR SLT	5.1	4.9	5.1	4.8	3.2	4.6
BELIZE 2 (GO-142)	3.2	5.0	5.7	4.9	4.0	4.6
LPB-SD-105	5.2	4.0	4.8	4.9	3.8	4.5
JR-888	3.3	4.5	5.2	4.9	4.1	4.4
GRAND SLAM GLD	1.0	4.9	5.7	5.0	5.4	4.4
MAN O'WAR	1.0	4.7	5.7	4.7	5.1	4.2
LINN	2.0	3.6	2.6	3.1	1.0	2.5
LSD VALUE	4.4	0.8	0.5	0.4	0.9	0.9
C.V. (%)	43.9	10.4	5.2	5.5	11.1	23.9

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.

3/ SCHEDULE A
MOWING HEIGHT: 2.5"-0.75"
NITROGEN: 0.5-0.75lbs/1000sq. ft./GROWING MONTH
IRRIGATION: TO PREVENT VISUAL DROUGHT STRESS OR DORMANCY
FUNGICIDE USE ONLY IF SEVERE STAND LOSS IS POSSIBLE
WEED AND INSECT CONTROL TO PREVENT STAND LOSS

TABLE 3.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT TWO LOCATIONS IN THE U.S. 1/
MAINTAINED USING "SCHEDULE B" *
2019 DATA

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

NAME	OR1	VA1	MEAN	NAME	OR1	VA1	MEAN
PPG-PR 367	7.3	6.8	7.0	FASTBALL 3GL (PPG-PR 329)	6.8	6.1	6.4
XCELERATOR	6.8	7.3	7.0	BAR LP 6165	6.0	6.8	6.4
CFN	6.9	6.9	6.9	MRS-L-PR16	6.4	6.4	6.4
PPG-PR 422	6.9	6.9	6.9	BAR LP 6233	6.1	6.7	6.4
DLFPS-236/3542	6.7	7.1	6.9	PPG-PR 360	6.6	6.2	6.4
SUPERSTAR GL (PPG-PR 420)	6.7	7.1	6.9	PST-2A2	6.8	6.0	6.4
JR-197	7.1	6.6	6.9	SEABISCUIT	6.6	6.2	6.4
SLUGGER 3GL (PPG-PR 343)	6.8	6.9	6.9	ASP0218 (A-6D)	6.6	6.2	6.4
HOMERUN LS (PPG-PR 419)	6.8	6.9	6.8	PL2	6.4	6.3	6.3
PPG-PR 372	7.0	6.7	6.8	FIESTA CINCO (DLFPS-236/3554)	6.4	6.3	6.3
STELLAR 4GL (PPG-PR 424)	6.9	6.8	6.8	DLFPS-236/3553	6.6	6.1	6.3
DLFPS-236/3547	6.9	6.7	6.8	SILVER SPORT (PST-2CRP)	6.6	6.1	6.3
ALLSTAR FORE (DLFPS-236/3541)	6.9	6.7	6.8	ASP0116EXT	6.2	6.4	6.3
02BS1	6.9	6.7	6.8	BELIZE 2 (GO-142)	6.3	6.3	6.3
PPG-PR 423	6.6	6.9	6.8	DLFPS-236/3540	6.6	6.1	6.3
PPG-PR 371	6.7	6.8	6.8	SLIDER LS (PPG-PR 241)	6.4	6.2	6.3
DLFPS-236/3545	6.9	6.6	6.8	BAR LP 6164	6.3	6.3	6.3
FURLONG (LTP-FCB)	6.9	6.6	6.8	PARAGON 2 GLR (FP2)	6.7	5.9	6.3
INTENSE	6.6	6.9	6.8	PEPPER II (RAD-PR 103)	6.6	5.9	6.3
OVERDRIVE 5G	6.9	6.5	6.7	MAN O'WAR	6.7	5.8	6.3
PR-6-15	6.7	6.7	6.7	APR3060	5.8	6.7	6.3
DLFPS-236/3538	6.3	7.1	6.7	CS-6	6.5	6.1	6.3
SPIKE GLS (UF3)	6.9	6.4	6.7	EVOLVE	6.0	6.5	6.3
PST-2GTD	6.5	6.8	6.7	SHIELD (02BS4)	6.6	5.9	6.3
PPG-PR 421	6.6	6.7	6.6	02BS2	6.8	5.7	6.3
UMPQUA	6.7	6.6	6.6	NP-2	6.7	5.8	6.3
ALLOY (RRT)	6.8	6.5	6.6	BAR LP 6131	6.0	6.4	6.2
GRAY WOLF (PST-2GAL)	6.6	6.7	6.6	GO-141	6.0	6.4	6.2
DLFPS-236/3556	6.7	6.6	6.6	NP-3	6.8	5.7	6.2
PR-5-16	6.5	6.7	6.6	PST-2BDT	6.5	6.0	6.2
023	6.6	6.6	6.6	PST-2MAY	6.4	6.0	6.2
PPG-PR 385	6.2	6.9	6.6	ASP0118GL (A-4G)	6.6	5.8	6.2
DLFPS-236/3544	6.8	6.3	6.6	GRAY HAWK (PST-2FIND)	6.4	6.0	6.2
PST-2FOXY	6.8	6.3	6.5	NEXUS GT (SNX)	6.3	6.1	6.2
SR 4700 (DLFPS-236/3543)	6.8	6.3	6.5	ASP0117 (A-PR15)	6.5	5.9	6.2
021	6.7	6.4	6.5	JR-123	6.5	5.8	6.2
PHARAOH	6.7	6.3	6.5	PARADOX GLR (PPG-PR 331)	6.6	5.7	6.2
DLFPS-236/3548	6.4	6.6	6.5	SIGNET	6.1	6.2	6.2
APR2616	6.3	6.7	6.5	BAR LP 6117	6.3	6.1	6.2
APPLE 3GL (PPG-PR 339)	6.8	6.2	6.5	DLFPS-236/3546	6.7	5.7	6.2
DLFPS-236/3550	6.4	6.5	6.5	KARMA	6.5	5.8	6.2
GRAND SLAM GLD	6.4	6.5	6.5	PST-2EGAD	6.4	5.9	6.2
PPG-PR 370	6.7	6.2	6.4	RAD-PR 112	6.7	5.4	6.1
DLFPS-236/3552	6.7	6.2	6.4	SR 4650	6.4	5.7	6.1

TABLE 3. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 (CONT'D) GROWN AT TWO LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE B" *
 2019 DATA

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

NAME	OR1	VA1	MEAN
JR-747	6.4	5.8	6.1
TEE-ME-UP (BSP-25)	6.4	5.7	6.1
MDSL-PR15	6.2	5.9	6.0
DERBY XTREME	6.6	5.5	6.0
DLFPS-238/3014	6.3	5.8	6.0
CAYMAN (GO-143)	6.2	5.9	6.0
PST-2PDA	6.1	5.9	6.0
BAR LP 6158	5.7	6.3	6.0
BAR LP 6162	5.6	6.2	5.9
LPB-SD-101	6.4	5.4	5.9
FIREBALL (BWH)	6.6	5.2	5.9
APR2612	6.3	5.4	5.8
GREEN SUPREME+ (AMP-R1)	6.2	5.4	5.8
HATRICK (BSP-17)	6.4	5.3	5.8
LPB-SD-103	6.4	5.2	5.8
BAR LP 6159	6.0	5.5	5.8
LPB-SD-102	6.8	4.7	5.7
JR-888	6.2	5.2	5.7
ALLSTAR III	6.3	5.0	5.6
SAGUARO	6.2	5.1	5.6
LPB-SD-105	6.4	4.5	5.5
LPB-SD-104	6.1	4.7	5.4
MENSA	6.2	4.5	5.3
SAVANT	6.2	4.4	5.3
BRIGHTSTAR SLT	5.9	4.6	5.3
LINN	5.3	3.2	4.3
LSD VALUE	0.5	1.2	0.6
C.V. (%)	4.9	11.9	8.9

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.

3/ SCHEDULE B
 MOWING HEIGHT: 1.0"-2.0"
 NITROGEN: 0.5-1.0lbs/1000sq. ft./GROWING MONTH
 IRRIGATION: TO PREVENT DORMANCY, ONLY DURING SEVERE STRESS OR NONE
 FUNGICIDE USE ONLY IF SEVERE STAND LOSS IS POSSIBLE
 WEED AND INSECT CONTROL TO PREVENT STAND LOSS

TABLE 4. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 GROWN AT SEVEN LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE C" *
 2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/								
NAME	CA7	CT1	IA1	MD1	MN1	MO1	UT1	MEAN
FIESTA CINCO (DLFPS-236/3554)	5.2	7.3	7.6	5.7	6.2	5.5	6.9	6.3
PL2	5.6	6.9	7.2	6.0	6.3	5.6	6.7	6.3
PPG-PR 421	5.8	7.2	7.4	5.7	5.2	5.4	7.2	6.3
DLFPS-236/3546	5.7	7.3	7.4	4.9	6.2	5.7	6.7	6.3
DLFPS-236/3538	5.6	6.9	7.7	5.3	5.6	6.3	6.5	6.3
02BS2	5.9	6.7	6.7	6.4	5.7	5.3	6.9	6.2
SR 4700 (DLFPS-236/3543)	5.7	7.5	7.7	5.8	5.3	4.6	6.8	6.2
ALLOY (RRT)	5.1	7.3	7.2	5.7	5.3	5.1	7.3	6.2
FURLONG (LTP-FCB)	5.8	6.7	7.5	4.5	5.7	5.5	7.4	6.1
PST-2FOXY	6.2	7.1	7.0	5.6	5.3	5.0	6.8	6.1
DLFPS-236/3544	5.7	6.8	7.3	5.5	6.2	4.7	6.6	6.1
SLUGGER 3GL (PPG-PR 343)	5.6	7.1	7.2	5.4	5.7	4.8	7.1	6.1
NP-3	5.7	7.2	7.0	4.9	5.9	5.6	6.6	6.1
PPG-PR 372	5.4	6.7	7.1	5.3	6.3	4.9	7.0	6.1
STELLAR 4GL (PPG-PR 424)	5.5	7.4	7.4	5.1	6.0	4.3	7.0	6.1
SUPERSTAR GL (PPG-PR 420)	5.1	7.1	7.3	5.2	5.4	5.8	6.7	6.1
DLFPS-236/3552	5.6	7.2	7.0	5.9	4.6	5.4	6.8	6.1
PPG-PR 423	5.3	7.1	7.2	5.2	5.9	4.9	6.8	6.1
FASTBALL 3GL (PPG-PR 329)	5.1	6.5	7.0	6.0	5.4	5.6	6.9	6.1
PPG-PR 422	5.5	7.0	7.3	5.2	5.8	5.1	6.5	6.0
DLFPS-236/3547	5.2	7.2	7.7	5.2	5.7	4.7	6.5	6.0
SHIELD (02BS4)	5.7	6.9	7.1	6.0	5.1	5.3	6.2	6.0
PPG-PR 367	6.1	6.7	6.6	5.7	6.1	4.6	6.4	6.0
PPG-PR 371	5.2	6.9	7.2	5.6	4.4	6.1	6.9	6.0
DLFPS-236/3548	5.1	6.9	7.2	5.6	5.4	5.4	6.4	6.0
APPLE 3GL (PPG-PR 339)	4.9	7.4	6.4	5.5	5.9	5.4	6.5	6.0
NP-2	6.1	6.3	7.2	5.1	5.7	4.8	6.8	6.0
PPG-PR 370	5.1	7.1	7.1	5.4	5.2	5.1	7.0	6.0
PR-6-15	5.3	6.7	7.6	5.1	6.0	4.3	6.9	6.0
GRAND SLAM GLD	5.9	6.9	7.1	5.7	5.1	4.4	6.6	6.0
PPG-PR 360	4.9	6.9	7.1	5.8	5.2	4.8	6.9	5.9
PR-5-16	5.8	6.5	7.2	4.8	5.8	5.1	6.4	5.9
DLFPS-236/3550	5.6	7.1	6.8	5.3	5.4	4.4	6.8	5.9
SPIKE GLS (UF3)	5.1	6.6	6.7	5.3	5.9	5.3	6.6	5.9
JR-197	5.8	7.1	7.5	4.6	5.7	4.5	6.1	5.9
ALLSTAR FORE (DLFPS-236/3541)	5.9	6.8	6.5	5.8	5.7	4.1	6.5	5.9
PST-2GTD	5.8	6.9	7.3	5.3	4.9	4.7	6.2	5.9
HOMERUN LS (PPG-PR 419)	4.9	7.4	6.9	5.1	5.4	4.8	6.8	5.9
SEABISCUIT	5.6	6.7	7.3	5.3	4.8	5.3	6.2	5.9
DLFPS-236/3556	5.6	6.4	6.5	5.6	6.0	4.8	6.2	5.9
CPN	5.3	6.9	7.0	4.3	6.3	4.7	6.7	5.9
PST-2MAY	5.4	6.6	7.1	5.3	4.8	4.9	6.8	5.9
PARAGON 2 GLR (FP2)	5.8	6.2	7.1	4.3	5.8	5.1	6.7	5.8
DLFPS-236/3545	5.4	7.0	7.0	5.5	4.9	4.7	6.3	5.8

TABLE 4. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 (CONT'D) GROWN AT SEVEN LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE C" *
 2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/							MEAN
	CA7	CT1	IA1	MD1	MN1	MO1	UT1	
XCELERATOR	4.8	6.7	7.1	5.2	5.6	4.9	6.7	5.8
021	5.3	6.4	7.6	5.9	5.2	4.1	6.4	5.8
023	6.0	6.4	7.0	4.6	5.6	4.7	6.6	5.8
APR2616	5.6	6.7	6.8	5.2	5.3	4.5	6.8	5.8
SLIDER LS (PPG-PR 241)	5.5	6.8	6.9	5.1	5.4	4.9	6.1	5.8
SILVER SPORT (PST-2CRP)	5.1	6.1	7.3	4.9	5.7	4.7	6.9	5.8
PARADOX GLR (PPG-PR 331)	5.6	6.7	6.7	4.3	6.2	4.6	6.7	5.8
JR-123	5.6	6.6	6.0	5.6	5.0	5.0	6.7	5.8
GRAY WOLF (PST-2GAL)	5.5	6.7	6.9	5.1	4.4	5.1	6.9	5.8
UMPQUA	4.6	6.7	7.7	5.2	6.1	3.8	6.3	5.8
DLFPS-236/3553	5.5	6.1	7.0	4.8	5.4	5.0	6.6	5.8
DLFPS-236/3540	5.5	6.6	6.8	4.9	5.6	4.6	6.3	5.8
PHARAOH	5.0	7.4	7.2	4.9	4.6	4.5	6.6	5.8
PST-2BDT	5.8	7.1	6.7	4.6	4.9	4.9	6.2	5.7
BAR LP 6164	6.1	6.3	7.2	5.3	4.7	4.8	5.9	5.7
DLFPS-236/3542	5.2	6.9	7.1	5.4	4.4	3.9	7.1	5.7
OVERDRIVE 5G	5.6	6.8	7.1	4.5	5.7	3.8	6.5	5.7
SIGNET	5.5	6.8	6.9	4.8	4.9	4.4	6.5	5.7
ASP0117 (A-PR15)	5.2	6.1	7.0	4.9	5.8	4.2	6.5	5.7
ASP0118GL (A-4G)	5.4	6.7	6.8	4.9	4.7	4.8	6.4	5.7
PPG-PR 385	5.5	6.4	7.1	4.4	4.8	5.1	6.2	5.7
PST-2EGAD	5.4	6.4	6.8	5.5	4.8	4.2	6.3	5.6
BAR LP 6117	6.0	6.2	6.7	4.8	4.5	5.0	6.3	5.6
ASP0218 (A-6D)	5.7	6.3	5.8	5.0	4.3	5.2	7.0	5.6
MRSL-PR16	6.1	5.5	7.0	4.8	4.7	4.7	6.4	5.6
BAR LP 6159	5.6	5.9	6.9	4.7	4.7	5.0	6.2	5.6
HATRICK (BSP-17)	4.9	5.9	7.1	5.3	4.1	4.8	6.6	5.6
PST-2A2	5.2	6.8	6.8	4.7	5.4	2.9	6.9	5.5
ASP0116EXT	5.9	5.8	7.0	4.7	4.9	3.5	6.8	5.5
BAR LP 6233	5.0	6.0	7.2	4.8	4.8	4.9	5.8	5.5
INTENSE	5.3	6.5	6.7	5.5	4.4	3.5	6.6	5.5
GRAY HAWK (PST-2FIND)	5.4	6.1	6.8	4.7	5.2	3.9	6.4	5.5
APR3060	5.9	6.1	6.6	4.3	4.8	4.9	5.9	5.5
SR 4650	5.4	6.4	6.7	3.9	5.8	3.5	6.6	5.5
MAN O'WAR	5.4	6.6	7.4	4.5	4.9	3.2	6.3	5.5
CS-6	5.6	5.9	6.1	4.6	5.4	3.5	6.8	5.4
BAR LP 6131	5.9	5.8	6.9	4.4	4.6	4.6	5.7	5.4
GREEN SUPREME+ (AMP-R1)	5.4	6.0	6.3	4.5	4.4	4.7	6.5	5.4
PEPPER II (RAD-PR 103)	5.4	6.0	7.0	4.1	3.6	5.1	6.4	5.4
02BS1	4.7	6.3	7.0	4.4	4.7	3.9	6.6	5.4
KARMA	5.2	6.4	6.1	4.5	5.2	3.9	6.1	5.4
APR2612	5.5	5.9	6.6	4.7	3.9	4.6	6.1	5.3
BAR LP 6158	5.6	5.8	7.0	4.0	4.2	5.0	5.8	5.3
NEXUS GT (SNX)	5.2	5.5	6.6	4.7	4.0	4.8	6.6	5.3
EVOLVE	5.3	6.3	5.9	5.3	4.4	4.3	5.8	5.3

TABLE 4. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 (CONT'D) GROWN AT SEVEN LOCATIONS IN THE U.S. 1/
 MAINTAINED USING "SCHEDULE C" *
 2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/									
NAME	CA7	CT1	IA1	MD1	MN1	MO1	UT1	MEAN	
DERBY XTREME	5.3	6.4	6.1	4.3	5.0	3.6	6.4	5.3	
FIREBALL (BWH)	5.3	5.8	6.7	4.3	3.7	4.6	6.7	5.3	
MRSL-PR15	5.3	5.9	6.4	4.7	4.0	3.8	6.9	5.3	
CAYMAN (GO-143)	5.1	6.0	6.0	4.5	3.8	4.9	6.7	5.3	
RAD-PR 112	4.8	5.6	7.3	4.5	3.9	3.8	6.8	5.3	
PST-2PDA	5.5	6.1	7.0	4.2	4.6	3.3	6.0	5.2	
BELIZE 2 (GO-142)	5.4	6.4	5.6	5.0	4.3	3.4	6.3	5.2	
SAGUARO	4.9	5.9	5.8	3.7	5.6	3.8	6.6	5.2	
DLFPS-238/3014	4.9	5.8	7.0	4.4	3.3	5.4	5.3	5.2	
TEE-ME-UP (BSP-25)	4.9	5.7	6.8	4.8	3.4	4.1	6.5	5.1	
GO-141	5.1	6.3	6.0	4.0	4.9	2.9	6.4	5.1	
JR-888	4.7	5.7	6.0	3.3	5.4	4.3	5.9	5.1	
ALLSTAR III	5.4	6.4	6.0	3.6	3.7	3.7	6.3	5.0	
BAR LP 6165	4.9	5.2	7.6	4.2	3.9	4.4	5.0	5.0	
MENSA	4.7	6.2	6.3	3.4	4.8	3.2	6.3	5.0	
LPB-SD-102	4.2	6.4	6.5	3.6	4.9	2.2	6.5	4.9	
BRIGHTSTAR SLT	4.7	5.6	6.4	3.1	4.4	4.1	6.0	4.9	
LPB-SD-101	4.0	6.3	5.9	3.3	5.8	2.6	6.1	4.9	
BAR LP 6162	5.2	5.7	6.2	4.3	1.9	4.6	5.6	4.8	
LPB-SD-103	4.5	5.9	6.2	3.2	5.2	2.0	6.3	4.8	
LPB-SD-105	4.4	5.5	6.5	2.4	4.7	3.4	6.3	4.7	
SAVANT	3.9	6.0	6.0	2.8	4.1	3.4	6.2	4.6	
JR-747	4.1	5.9	5.2	2.9	4.1	2.9	6.6	4.5	
LPB-SD-104	4.2	5.9	6.2	2.8	3.7	1.7	6.4	4.4	
LINN	3.9	3.7	4.6	1.0	1.0	2.7	2.9	2.8	
LSD VALUE	1.2	0.8	0.8	1.0	1.5	1.5	0.6	0.4	
C.V. (%)	14.1	7.5	7.1	12.5	18.2	21.2	5.6	12.1	

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.

3/ SCHEDULE C
 MOWING HEIGHT: 1.5"-2.5"
 NITROGEN: 0.3-0.5lbs/1000sq. ft./GROWING MONTH
 IRRIGATION: NONE, ONLY DURING SEVERE STRESS OR TO PREVENT DORMANCY
 FUNGICIDE OR INSECTICIDE USE OR NONE
 WEED CONTROL TO PREVENT SIGNIFICANT STAND LOSS

TABLE 5.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT TWO LOCATIONS 1/
IN THE NORTHEAST REGION
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 1/			NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/		
	CT1	NJ2	MEAN		CT1	NJ2	MEAN
SR 4700 (DLFPS-236/3543)	7.5	6.6	7.1	DLFPS-236/3544	6.8	5.4	6.1
DLFPS-236/3547	7.2	6.8	7.0	PPG-PR 367	6.7	5.5	6.1
JR-197	7.1	6.8	6.9	PST-2BDT	7.1	5.0	6.1
SLUGGER 3GL (PPG-PR 343)	7.1	6.8	6.9	PR-5-16	6.5	5.6	6.1
PPG-PR 421	7.2	6.6	6.9	PST-2GTD	6.9	5.2	6.1
FURLONG (LTP-FCB)	6.7	7.1	6.9	02BS1	6.3	5.7	6.0
ALLOY (RRT)	7.3	6.4	6.9	SILVER SPORT (PST-2CRP)	6.1	5.9	6.0
FIESTA CINCO (DLFPS-236/3554)	7.3	6.2	6.7	DLFPS-236/3556	6.4	5.6	6.0
PPG-PR 423	7.1	6.3	6.7	SEABISCUIT	6.7	5.3	6.0
DLFPS-236/3546	7.3	6.1	6.7	DLFPS-236/3540	6.6	5.3	6.0
STELLAR 4GL (PPG-PR 424)	7.4	5.9	6.6	023	6.4	5.5	6.0
DLFPS-236/3552	7.2	6.0	6.6	021	6.4	5.4	5.9
PL2	6.9	6.3	6.6	PST-2FOXY	7.1	4.8	5.9
NP-3	7.2	5.9	6.5	SLIDER LS (PPG-PR 241)	6.8	5.0	5.9
ALLSTAR FORE (DLFPS-236/3541)	6.8	6.3	6.5	PPG-PR 385	6.4	5.3	5.9
DLFPS-236/3545	7.0	6.0	6.5	APR2616	6.7	5.0	5.9
PPG-PR 360	6.9	6.0	6.5	MAN O'WAR	6.6	5.1	5.8
APPLE 3GL (PPG-PR 339)	7.4	5.5	6.4	SR 4650	6.4	5.2	5.8
PPG-PR 372	6.7	6.2	6.4	PST-2MAY	6.6	5.0	5.8
OVERDRIVE 5G	6.8	6.1	6.4	PARAGON 2 GLR (FP2)	6.2	5.4	5.8
PPG-PR 370	7.1	5.8	6.4	ASP0118GL (A-4G)	6.7	4.8	5.8
SUPERSTAR GL (PPG-PR 420)	7.1	5.8	6.4	PARADOX GLR (PPG-PR 331)	6.7	4.7	5.7
02BS2	6.7	6.1	6.4	JR-123	6.6	4.8	5.7
DLFPS-236/3542	6.9	6.0	6.4	KARMA	6.4	5.0	5.7
PR-6-15	6.7	6.1	6.4	PST-2PDA	6.1	5.1	5.6
PPG-PR 422	7.0	5.7	6.4	ASP0117 (A-PR15)	6.1	5.0	5.5
SIGNET	6.8	5.8	6.3	APR2612	5.9	5.0	5.5
PPG-PR 371	6.9	5.8	6.3	GRAY HAWK (PST-2FIND)	6.1	4.9	5.5
UMPQUA	6.7	5.9	6.3	PST-2EGAD	6.4	4.5	5.5
XCELERATOR	6.7	6.0	6.3	LPB-SD-102	6.4	4.6	5.5
HOMERUN LS (PPG-PR 419)	7.4	5.2	6.3	MENSA	6.2	4.8	5.5
PHARAOH	7.4	5.2	6.3	DERBY XTREME	6.4	4.5	5.5
SHIELD (02BS4)	6.9	5.7	6.3	BAR LP 6233	6.0	4.8	5.4
DLFPS-236/3553	6.1	6.4	6.3	BAR LP 6164	6.3	4.5	5.4
PST-2A2	6.8	5.7	6.3	APR3060	6.1	4.7	5.4
SPIKE GLS (UF3)	6.6	5.9	6.2	EVOLVE	6.3	4.5	5.4
GRAY WOLF (PST-2GAL)	6.7	5.8	6.2	ALLSTAR III	6.4	4.2	5.3
NP-2	6.3	6.1	6.2	LPB-SD-104	5.9	4.7	5.3
CPN	6.9	5.5	6.2	BAR LP 6117	6.2	4.3	5.2
DLFPS-236/3538	6.9	5.5	6.2	MRSL-PR15	5.9	4.4	5.2
INTENSE	6.5	5.8	6.2	BELIZE 2 (GO-142)	6.4	4.0	5.2
DLFPS-236/3548	6.9	5.4	6.2	SAVANT	6.0	4.3	5.1
GRAND SLAM GLD	6.9	5.4	6.2	LPB-SD-103	5.9	4.4	5.1
FASTBALL 3GL (PPG-PR 329)	6.5	5.8	6.1	JR-747	5.9	4.3	5.1
DLFPS-236/3550	7.1	5.2	6.1	SAGUARO	5.9	4.3	5.1

TABLE 5. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 (CONT'D) GROWN AT TWO LOCATIONS 1/
 IN THE NORTHEAST REGION
 2019 DATA

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

NAME	CT1	NJ2	MEAN
GO-141	6.3	3.8	5.1
BAR LP 6158	5.8	4.4	5.1
LPB-SD-101	6.3	3.9	5.1
ASP0218 (A-6D)	6.3	3.7	5.0
CS-6	5.9	4.0	5.0
MRSL-PR16	5.5	4.5	5.0
BAR LP 6159	5.9	4.0	5.0
TEE-ME-UP (BSP-25)	5.7	4.2	4.9
JR-888	5.7	4.1	4.9
BAR LP 6165	5.2	4.7	4.9
HATRICK (BSP-17)	5.9	3.9	4.9
RAD-PR 112	5.6	4.1	4.8
ASP0116EXT	5.8	3.8	4.8
PEPPER II (RAD-PR 103)	6.0	3.7	4.8
GREEN SUPREME+ (AMP-R1)	6.0	3.6	4.8
LPB-SD-105	5.5	3.8	4.6
BAR LP 6131	5.8	3.4	4.6
CAYMAN (GO-143)	6.0	3.2	4.6
DLFPS-238/3014	5.8	3.2	4.5
NEXUS GT (SNX)	5.5	3.5	4.5
FIREBALL (BWH)	5.8	3.2	4.5
BRIGHTSTAR SLT	5.6	3.2	4.4
BAR LP 6162	5.7	3.0	4.4
LINN	3.7	1.0	2.4
LSD VALUE	0.8	0.9	0.6
C.V. (%)	7.5	11.1	9.1

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 6.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT FIVE LOCATIONS 1/
IN THE TRANSITION REGION
2019 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	KS1	KY1	MD1	MO1	VA1	MEAN	NAME	KS1	KY1	MD1	MO1	VA1	MEAN
PPG-PR 421	5.7	6.4	5.7	5.4	6.7	6.0	NP-3	5.0	6.1	4.9	5.6	5.7	5.4
DLFPS-236/3538	5.3	5.8	5.3	6.3	7.1	6.0	GRAND SLAM GLD	4.9	5.7	5.7	4.4	6.5	5.4
PPG-PR 371	5.3	5.9	5.6	6.1	6.8	5.9	SILVER SPORT (PST-2CRP)	5.3	6.1	4.9	4.7	6.1	5.4
SUPERSTAR GL (PPG-PR 420)	5.3	6.2	5.2	5.8	7.1	5.9	MRS-L-PR16	5.0	6.1	4.8	4.7	6.4	5.4
FASTBALL 3GL (PPG-PR 329)	5.3	6.1	6.0	5.6	6.1	5.8	STELLAR 4GL (PPG-PR 424)	4.8	6.0	5.1	4.3	6.8	5.4
02BS2	5.4	6.3	6.4	5.3	5.7	5.8	JR-197	5.3	6.0	4.6	4.5	6.6	5.4
SLUGGER 3GL (PPG-PR 343)	5.5	6.3	5.4	4.8	6.9	5.8	NP-2	5.0	6.2	5.1	4.8	5.8	5.4
PL2	4.8	6.3	6.0	5.6	6.3	5.8	021	4.8	5.7	5.9	4.1	6.4	5.4
ALLOY (RRT)	5.3	6.2	5.7	5.1	6.5	5.8	PR-6-15	5.0	5.9	5.1	4.3	6.7	5.4
DLFPS-236/3548	5.1	6.0	5.6	5.4	6.6	5.7	APR2616	4.7	5.9	5.2	4.5	6.7	5.4
FIESTA CINCO (DLFPS-236/3554)	5.0	6.3	5.7	5.5	6.3	5.7	EVOLVE	4.9	5.9	5.3	4.3	6.5	5.4
APPLE 3GL (PPG-PR 339)	5.3	6.2	5.5	5.4	6.2	5.7	SIGNET	5.4	5.9	4.8	4.4	6.2	5.4
DLFPS-236/3552	5.0	6.1	5.9	5.4	6.2	5.7	NEXUS GT (SNX)	5.2	5.9	4.7	4.8	6.1	5.3
DLFPS-236/3545	5.2	6.3	5.5	4.7	6.6	5.7	BAR LP 6117	5.1	5.7	4.8	5.0	6.1	5.3
SHIELD (02BS4)	5.0	6.1	6.0	5.3	5.9	5.7	APR3060	5.0	5.8	4.3	4.9	6.7	5.3
DLFPS-236/3547	5.4	6.3	5.2	4.7	6.7	5.6	CPN	4.9	5.9	4.3	4.7	6.9	5.3
PST-2GTD	5.1	6.3	5.3	4.7	6.8	5.6	DLFPS-236/3553	5.0	5.6	4.8	5.0	6.1	5.3
ALLSTAR FORE (DLFPS-236/3541)	5.2	6.4	5.8	4.1	6.7	5.6	ASP0118GL (A-4G)	4.9	6.0	4.9	4.8	5.8	5.3
FURLONG (LTP-FCB)	5.4	6.2	4.5	5.5	6.6	5.6	DLFPS-236/3540	4.9	6.0	4.9	4.6	6.1	5.3
PPG-PR 423	4.9	6.3	5.2	4.9	6.9	5.6	023	4.6	5.9	4.6	4.7	6.6	5.3
XCELERATOR	4.7	6.0	5.2	4.9	7.3	5.6	CAYMAN (GO-143)	5.5	5.6	4.5	4.9	5.9	5.3
DLFPS-236/3556	4.9	6.4	5.6	4.8	6.6	5.6	PST-2EGAD	4.6	6.1	5.5	4.2	5.9	5.3
PST-2MAY	.	6.2	5.3	4.9	6.0	5.6	ASP0117 (A-PR15)	5.2	6.0	4.9	4.2	5.9	5.3
DLFPS-236/3546	5.4	6.4	4.9	5.7	5.7	5.6	PHARAOH	4.8	5.7	4.9	4.5	6.3	5.3
PPG-PR 422	4.9	6.0	5.2	5.1	6.9	5.6	PST-2BDT	4.9	5.9	4.6	4.9	6.0	5.3
SR 4700 (DLFPS-236/3543)	5.0	6.3	5.8	4.6	6.3	5.6	UMPQUA	4.7	5.9	5.2	3.8	6.6	5.2
GRAY WOLF (PST-2GAL)	5.1	6.1	5.1	5.1	6.7	5.6	BAR LP 6158	5.2	5.6	4.0	5.0	6.3	5.2
SEABISCUIT	5.2	5.9	5.3	5.3	6.2	5.6	HATRICK (BSP-17)	5.0	5.6	5.3	4.8	5.3	5.2
PST-2FOXY	5.1	6.0	5.6	5.0	6.3	5.6	PARADOX GLR (PPG-PR 331)	5.0	6.4	4.3	4.6	5.7	5.2
PPG-PR 370	5.0	6.3	5.4	5.1	6.2	5.6	DLFPS-238/3014	5.3	4.9	4.4	5.4	5.8	5.2
PPG-PR 360	5.2	5.9	5.8	4.8	6.2	5.6	INTENSE	4.7	5.3	5.5	3.5	6.9	5.2
DLFPS-236/3544	5.2	6.0	5.5	4.7	6.3	5.6	BAR LP 6159	5.0	5.6	4.7	5.0	5.5	5.2
HOMERUN LS (PPG-PR 419)	5.0	6.0	5.1	4.8	6.9	5.6	02BS1	5.0	5.7	4.4	3.9	6.7	5.1
SPIKE GLS (UF3)	4.9	5.9	5.3	5.3	6.4	5.6	APR2612	5.2	5.9	4.7	4.6	5.4	5.1
PPG-PR 385	5.3	5.9	4.4	5.1	6.9	5.5	GREEN SUPREME+ (AMP-R1)	5.2	5.9	4.5	4.7	5.4	5.1
PPG-PR 372	4.5	6.2	5.3	4.9	6.7	5.5	PEPPER II (RAD-PR 103)	5.1	5.4	4.1	5.1	5.9	5.1
BAR LP 6164	5.2	6.0	5.3	4.8	6.3	5.5	BAR LP 6131	4.8	5.4	4.4	4.6	6.4	5.1
PR-5-16	5.0	5.9	4.8	5.1	6.7	5.5	GRAY HAWK (PST-2FIND)	5.1	6.0	4.7	3.9	6.0	5.1
SLIDER LS (PPG-PR 241)	4.9	6.4	5.1	4.9	6.2	5.5	PARAGON 2 GLR (FP2)	4.6	5.7	4.3	5.1	5.9	5.1
PPG-PR 367	4.8	5.5	5.7	4.6	6.8	5.5	BELIZE 2 (GO-142)	5.0	5.7	5.0	3.4	6.3	5.1
DLFPS-236/3542	5.2	5.8	5.4	3.9	7.1	5.5	TEE-ME-UP (BSP-25)	5.0	5.7	4.8	4.1	5.7	5.1
JR-123	5.5	5.4	5.6	5.0	5.8	5.5	BAR LP 6165	4.3	5.6	4.2	4.4	6.8	5.0
ASP0218 (A-6D)	4.9	6.0	5.0	5.2	6.2	5.5	ASP0116EXT	4.8	5.8	4.7	3.5	6.4	5.0
BAR LP 6233	5.0	5.9	4.8	4.9	6.7	5.4	MRS-L-PR15	5.0	5.7	4.7	3.8	5.9	5.0
DLFPS-236/3550	5.0	6.1	5.3	4.4	6.5	5.4	KARMA	.	5.8	4.5	3.9	5.8	5.0

TABLE 6. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 (CONT'D) GROWN AT FIVE LOCATIONS 1/
 IN THE TRANSITION REGION
 2019 DATA
 TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	KS1	KY1	MD1	MO1	VA1	MEAN
OVERDRIVE 5G	4.7	5.6	4.5	3.8	6.5	5.0
BAR LP 6162	4.6	5.2	4.3	4.6	6.2	5.0
FIREBALL (BWH)	4.9	5.5	4.3	4.6	5.2	4.9
PST-2PDA	5.4	5.8	4.2	3.3	5.9	4.9
CS-6	4.6	5.8	4.6	3.5	6.1	4.9
PST-2A2	5.0	5.9	4.7	2.9	6.0	4.9
RAD-PR 112	5.0	5.6	4.5	3.8	5.4	4.9
SR 4650	5.0	6.1	3.9	3.5	5.7	4.8
MAN O'WAR	4.7	5.7	4.5	3.2	5.8	4.8
GO-141	4.6	5.4	4.0	2.9	6.4	4.7
DERBY XTREME	4.4	5.6	4.3	3.6	5.5	4.7
JR-888	4.5	5.2	3.3	4.3	5.2	4.5
SAGUARO	4.5	5.2	3.7	3.8	5.1	4.4
ALLSTAR III	4.8	5.1	3.6	3.7	5.0	4.4
BRIGHTSTAR SLT	4.9	5.1	3.1	4.1	4.6	4.3
JR-747	4.4	4.7	2.9	2.9	5.8	4.2
MENSA	4.6	4.9	3.4	3.2	4.5	4.1
LPB-SD-101	4.6	4.6	3.3	2.6	5.4	4.1
SAVANT	4.5	5.2	2.8	3.4	4.4	4.0
LPB-SD-103	4.6	5.1	3.2	2.0	5.2	4.0
LPB-SD-102	4.3	4.9	3.6	2.2	4.7	3.9
LPB-SD-105	4.0	4.8	2.4	3.4	4.5	3.8
LPB-SD-104	4.6	4.9	2.8	1.7	4.7	3.7
LINN	3.6	2.6	1.0	2.7	3.2	2.6
LSD VALUE	0.8	0.5	1.0	1.5	1.2	0.5
C.V. (%)	10.4	5.2	12.5	21.2	11.9	12.6

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 7.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT FOUR LOCATIONS 1/
IN THE NORTH CENTRAL REGION
2019 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/

NAME	IA1	IL1	MN1	NE1	MEAN	NAME	IA1	IL1	MN1	NE1	MEAN
FIESTA CINCO (DLFPS-236/3554)	7.6	7.9	6.2	5.2	6.7	MENSA	6.3	8.0	4.8	4.7	6.0
PL2	7.2	8.1	6.3	5.1	6.7	INTENSE	6.7	7.9	4.4	5.0	6.0
PR-6-15	7.6	7.8	6.0	5.3	6.7	BAR LP 6131	6.9	7.4	4.6	5.0	6.0
DLFPS-236/3544	7.3	7.7	6.2	5.2	6.6	CPN	7.0	5.3	6.3	5.2	6.0
PPG-PR 372	7.1	7.6	6.3	5.2	6.6	SAGUARO	5.8	7.6	5.6	4.9	5.9
PPG-PR 423	7.2	7.9	5.9	5.3	6.6	BAR LP 6158	7.0	7.9	4.2	4.6	5.9
OVERDRIVE 5G	7.1	8.1	5.7	5.2	6.5	ASP0118GL (A-4G)	6.8	7.4	4.7	4.7	5.9
NP-2	7.2	8.0	5.7	5.1	6.5	FURLONG (LTP-FCB)	7.5	5.1	5.7	5.3	5.9
DLFPS-236/3546	7.4	7.6	6.2	4.8	6.5	LPB-SD-102	6.5	7.4	4.9	4.7	5.9
DLFPS-236/3547	7.7	7.6	5.7	5.0	6.5	SUPERSTAR GL (PPG-PR 420)	7.3	5.4	5.4	5.3	5.8
NP-3	7.0	8.3	5.9	4.8	6.5	SR 4700 (DLFPS-236/3543)	7.7	5.3	5.3	5.1	5.8
PPG-PR 422	7.3	7.6	5.8	5.2	6.5	ASP0117 (A-PR15)	7.0	5.5	5.8	4.9	5.8
PARADOX GLR (PPG-PR 331)	6.7	7.9	6.2	5.1	6.4	PARAGON 2 GLR (FP2)	7.1	5.3	5.8	5.0	5.8
DLFPS-236/3556	6.5	8.0	6.0	5.1	6.4	SPIKE GLS (UF3)	6.7	5.6	5.9	5.0	5.8
SR 4650	6.7	8.0	5.8	5.1	6.4	PPG-PR 370	7.1	5.5	5.2	5.2	5.8
PPG-PR 367	6.6	7.7	6.1	5.2	6.4	RAD-PR 112	7.3	7.6	3.9	4.3	5.8
PPG-PR 421	7.4	7.5	5.2	5.4	6.4	PST-2FOXY	7.0	5.6	5.3	5.1	5.8
XCELERATOR	7.1	8.1	5.6	4.8	6.4	FIREBALL (BWH)	6.7	8.0	3.7	4.7	5.8
FASTBALL 3GL (PPG-PR 329)	7.0	7.8	5.4	5.3	6.4	DLFPS-236/3553	7.0	5.5	5.4	5.0	5.7
SLUGGER 3GL (PPG-PR 343)	7.2	7.7	5.7	4.9	6.4	DLFPS-236/3545	7.0	5.6	4.9	5.2	5.7
DLFPS-236/3540	6.8	7.7	5.6	5.2	6.3	PPG-PR 360	7.1	5.2	5.2	5.1	5.7
DLFPS-236/3548	7.2	7.7	5.4	5.0	6.3	ASP0218 (A-6D)	5.8	7.8	4.3	4.7	5.6
HOMERUN LS (PPG-PR 419)	6.9	7.6	5.4	5.3	6.3	SAVANT	6.0	7.5	4.1	4.8	5.6
SHIELD (02BS4)	7.1	8.0	5.1	5.0	6.3	DLFPS-236/3542	7.1	5.7	4.4	5.1	5.6
APR2616	6.8	7.9	5.3	5.1	6.2	BAR LP 6233	7.2	5.2	4.8	5.2	5.6
PST-2A2	6.8	7.8	5.4	4.9	6.2	PST-2EGAD	6.8	5.5	4.8	5.4	5.6
DLFPS-236/3550	6.8	7.6	5.4	5.1	6.2	TEE-ME-UP (BSP-25)	6.8	7.9	3.4	4.4	5.6
APPLE 3GL (PPG-PR 339)	6.4	7.3	5.9	5.1	6.2	PHARAOH	7.2	5.5	4.6	5.1	5.6
BAR LP 6164	7.2	7.7	4.7	5.1	6.2	DLFPS-236/3552	7.0	5.4	4.6	5.3	5.6
LPB-SD-103	6.2	8.1	5.2	4.9	6.1	GRAY HAWK (PST-2FIND)	6.8	5.3	5.2	5.1	5.6
LPB-SD-101	5.9	7.9	5.8	4.8	6.1	PST-2MAY	7.1	5.4	4.8	4.9	5.6
UMPQUA	7.7	5.5	6.1	5.0	6.1	PST-2BDT	6.7	5.6	4.9	5.1	5.6
GRAY WOLF (PST-2GAL)	6.9	7.9	4.4	5.1	6.1	PPG-PR 385	7.1	5.3	4.8	5.0	5.6
KARMA	6.1	7.9	5.2	5.1	6.1	02BS1	7.0	5.6	4.7	5.0	5.6
BAR LP 6117	6.7	8.0	4.5	5.0	6.1	DLFPS-238/3014	7.0	7.7	3.3	4.2	5.5
PST-2PDA	7.0	7.7	4.6	5.0	6.0	BAR LP 6159	6.9	5.5	4.7	5.0	5.5
CS-6	6.1	8.0	5.4	4.6	6.0	APR3060	6.6	5.6	4.8	5.1	5.5
PPG-PR 371	7.2	7.4	4.4	5.1	6.0	JR-747	5.2	7.7	4.1	5.0	5.5
PR-5-16	7.2	5.9	5.8	5.3	6.0	SIGNET	6.9	5.0	4.9	5.0	5.5
JR-197	7.5	5.6	5.7	5.3	6.0	MRS1-PR16	7.0	5.4	4.7	4.6	5.4
ASP0116EXT	7.0	7.8	4.9	4.5	6.0	HATRICK (BSP-17)	7.1	5.8	4.1	4.3	5.3
SILVER SPORT (PST-2CRP)	7.3	5.7	5.7	5.3	6.0	DLFPS-236/3538	7.7	3.2	5.6	4.9	5.3
STELLAR 4GL (PPG-PR 424)	7.4	5.5	6.0	5.1	6.0	LPB-SD-105	6.5	5.2	4.7	4.9	5.3
BAR LP 6165	7.6	7.5	3.9	5.0	6.0	GO-141	6.0	5.8	4.9	4.7	5.3
DERBY XTREME	6.1	7.7	5.0	5.1	6.0	JR-123	6.0	5.4	5.0	4.8	5.3

TABLE 7. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
(CONT'D) GROWN AT FOUR LOCATIONS 1/
IN THE NORTH CENTRAL REGION
2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/					
NAME	IA1	IL1	MN1	NE1	MEAN
MRS1-PR15	6.4	5.7	4.0	4.9	5.3
PST-2GTD	7.3	3.4	4.9	5.3	5.2
02BS2	6.7	3.2	5.7	5.1	5.2
ALLOY (RRT)	7.2	3.3	5.3	4.9	5.2
021	7.6	3.1	5.2	4.9	5.2
SLIDER LS (PPG-PR 241)	6.9	3.2	5.4	5.3	5.2
NEXUS GT (SNX)	6.6	5.5	4.0	4.6	5.2
APR2612	6.6	5.4	3.9	4.8	5.2
BRIGHTSTAR SLT	6.4	5.1	4.4	4.8	5.2
SEABISCUIT	7.3	3.5	4.8	5.0	5.1
ALLSTAR FORE (DLFPS-236/3541)	6.5	3.4	5.7	5.0	5.1
PEPPER II (RAD-PR 103)	7.0	5.5	3.6	4.5	5.1
EVOLVE	5.9	5.3	4.4	4.9	5.1
023	7.0	3.0	5.6	4.8	5.1
ALLSTAR III	6.0	5.6	3.7	5.0	5.1
GREEN SUPREME+ (AMP-R1)	6.3	5.5	4.4	4.0	5.1
LPB-SD-104	6.2	5.4	3.7	4.9	5.0
BAR LP 6162	6.2	7.6	1.9	4.5	5.0
CAYMAN (GO-143)	6.0	5.5	3.8	4.7	5.0
JR-888	6.0	3.3	5.4	4.9	4.9
GRAND SLAM GLD	7.1	1.0	5.1	5.0	4.6
MAN O'WAR	7.4	1.0	4.9	4.7	4.5
BELIZE 2 (GO-142)	5.6	3.2	4.3	4.9	4.5
LINN	4.6	2.0	1.0	3.1	2.7
LSD VALUE	0.8	4.4	1.5	0.4	1.2
C.V. (%)	7.1	43.9	18.2	5.5	25.6

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.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT LOGAN, UT (IN THE UPPER WEST/MOUNTAIN REGION) 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/							
	APR	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
FURLONG (LTP-FCB)	6.3	7.3	6.7	7.3	7.7	8.0	8.7	7.4
ALLOY (RRT)	6.0	7.3	6.0	7.0	7.3	8.3	9.0	7.3
PPG-PR 421	6.3	6.7	6.3	7.3	7.0	8.3	8.3	7.2
DLFPS-236/3542	7.0	7.3	6.0	6.3	6.3	7.7	9.0	7.1
SLUGGER 3GL (PPG-PR 343)	6.3	7.7	6.3	6.0	6.7	8.0	8.7	7.1
PPG-PR 372	6.3	6.7	6.7	6.0	6.7	8.3	8.7	7.0
STELLAR 4GL (PPG-PR 424)	6.3	6.3	6.3	6.7	6.7	8.7	8.3	7.0
ASP0218 (A-6D)	7.3	6.0	5.7	6.0	6.3	8.7	9.0	7.0
PPG-PR 370	7.0	7.0	6.3	5.7	6.3	8.3	8.0	7.0
FASTBALL 3GL (PPG-PR 329)	6.0	6.3	6.0	6.0	6.7	8.7	8.7	6.9
GRAY WOLF (PST-2GAL)	6.3	6.7	6.0	6.3	6.7	7.7	8.7	6.9
PST-2A2	6.7	7.0	5.3	6.3	6.7	8.3	8.0	6.9
SILVER SPORT (PST-2CRP)	5.7	6.7	5.7	6.7	7.0	8.0	8.7	6.9
02BS2	6.0	6.0	5.3	6.7	7.7	7.7	8.7	6.9
FIESTA CINCO (DLFPS-236/3554)	7.0	7.0	6.0	5.7	6.3	7.7	8.3	6.9
PPG-PR 360	6.3	6.0	6.3	6.3	6.7	7.7	8.7	6.9
PPG-PR 371	6.3	6.7	5.7	6.7	6.7	8.0	8.0	6.9
PR-6-15	6.3	6.3	6.3	7.0	6.0	7.7	8.3	6.9
MRSL-PR15	6.3	6.3	5.7	6.3	6.7	7.7	9.0	6.9
APR2616	7.0	6.0	5.7	5.7	7.0	7.7	8.7	6.8
ASP0116EXT	6.0	6.0	6.0	5.3	6.7	9.0	8.7	6.8
DLFPS-236/3552	6.0	7.3	6.0	6.0	6.3	8.0	8.0	6.8
CS-6	6.7	6.7	5.7	6.3	5.7	7.7	9.0	6.8
DLFPS-236/3550	6.7	6.3	5.3	7.0	7.3	7.3	7.7	6.8
HOMERUN LS (PPG-PR 419)	5.7	6.3	6.0	5.7	7.0	8.3	8.7	6.8
NP-2	6.3	6.3	6.3	6.0	5.3	8.7	8.7	6.8
PPG-PR 423	6.3	6.7	6.3	6.0	6.3	8.0	8.0	6.8
PST-2FOXY	7.3	6.3	5.3	6.3	6.0	7.7	8.3	6.8
PST-2MAY	6.0	6.3	5.7	6.3	7.3	7.3	8.3	6.8
RAD-PR 112	8.0	6.0	6.3	5.3	5.3	8.3	8.0	6.8
SR 4700 (DLFPS-236/3543)	6.7	6.0	6.3	6.3	6.3	7.7	8.0	6.8
DLFPS-236/3546	6.0	6.3	5.7	6.3	6.3	7.7	8.7	6.7
PARADOX GLR (PPG-PR 331)	6.3	5.7	5.3	5.7	7.0	8.3	8.7	6.7
SUPERSTAR GL (PPG-PR 420)	6.0	6.3	5.7	6.7	5.7	8.3	8.3	6.7
CPN	6.0	6.0	5.3	6.3	6.7	8.3	8.3	6.7
PL2	6.7	6.3	6.0	5.7	5.7	8.3	8.3	6.7
XCELERATOR	5.3	6.3	6.0	6.0	6.7	8.3	8.3	6.7
CAYMAN (GO-143)	6.3	6.0	5.7	5.7	6.0	8.0	9.0	6.7
FIREBALL (BWH)	7.0	6.3	5.3	5.3	6.3	7.7	8.7	6.7
JR-123	6.0	6.3	5.7	6.0	7.3	7.7	7.7	6.7
PARAGON 2 GLR (FP2)	6.7	6.3	5.7	5.3	6.7	8.0	8.0	6.7
DLFPS-236/3544	6.7	6.3	6.0	5.3	6.0	8.0	8.0	6.6
INTENSE	6.7	6.3	5.3	5.7	6.0	7.7	8.7	6.6
NP-3	6.0	6.3	6.3	6.0	5.7	7.7	8.3	6.6
SR 4650	5.3	6.3	5.3	5.7	6.3	9.0	8.3	6.6
023	5.7	6.0	6.0	5.7	6.7	7.7	8.3	6.6

TABLE 8.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT LOGAN, UT (IN THE UPPER WEST/MOUNTAIN REGION) 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/								MEAN
	APR	MAY	JUN	JUL	AUG	SEP	OCT		
02BS1	6.7	6.3	5.7	5.3	6.0	8.0	8.0	6.6	
DLFPS-236/3553	6.0	6.3	5.0	6.0	6.3	7.7	8.7	6.6	
GRAND SLAM GLD	6.3	6.3	5.7	5.3	6.3	7.7	8.3	6.6	
HATRICK (BSP-17)	7.0	5.7	5.7	5.7	6.0	7.7	8.3	6.6	
NEXUS GT (SNX)	6.3	6.3	5.7	6.0	5.7	7.3	8.7	6.6	
SAGUARO	6.7	6.3	6.0	5.3	6.0	7.7	8.0	6.6	
SPIKE GLS (UF3)	5.7	6.3	5.7	6.3	6.0	8.0	8.0	6.6	
JR-747	4.7	5.7	6.3	6.7	6.3	8.0	8.3	6.6	
PHARAOH	5.7	6.3	5.7	6.3	6.7	7.7	7.7	6.6	
ALLSTAR FORE (DLFPS-236/3541)	7.0	6.3	6.0	5.0	5.7	7.7	8.0	6.5	
APPLE 3GL (PPG-PR 339)	5.7	6.7	5.7	5.7	6.0	7.7	8.3	6.5	
OVERDRIVE 5G	6.0	6.7	6.0	6.0	6.0	7.0	8.0	6.5	
DLFPS-236/3547	6.3	6.0	5.7	6.3	6.3	7.3	7.7	6.5	
LPB-SD-102	4.3	5.7	6.3	6.3	7.0	8.0	8.0	6.5	
PPG-PR 422	6.3	5.7	5.3	6.0	6.3	8.0	8.0	6.5	
SIGNET	6.3	5.7	6.3	5.3	5.7	8.0	8.3	6.5	
GREEN SUPREME+ (AMP-R1)	6.0	6.0	5.7	6.0	5.3	7.7	8.7	6.5	
TEE-ME-UP (BSP-25)	7.0	5.7	6.0	5.7	5.0	7.3	8.7	6.5	
ASP0117 (A-PR15)	7.0	6.7	6.0	5.7	5.3	7.7	7.0	6.5	
DLFPS-236/3538	6.3	7.0	5.7	5.3	6.0	7.3	7.7	6.5	
ASP0118GL (A-4G)	6.7	5.7	5.7	5.7	5.3	7.7	8.3	6.4	
DERBY XTREME	4.7	6.0	5.7	6.0	6.0	8.0	8.7	6.4	
DLFPS-236/3548	6.0	7.0	5.7	5.7	6.0	7.3	7.3	6.4	
GO-141	6.0	6.3	5.3	5.3	5.3	8.0	8.7	6.4	
LPB-SD-104	4.7	5.3	5.7	6.0	6.3	8.7	8.3	6.4	
PEPPER II (RAD-PR 103)	6.0	6.0	6.0	5.3	5.7	8.0	8.0	6.4	
PPG-PR 367	6.3	6.3	5.3	5.0	7.0	7.0	8.0	6.4	
PR-5-16	5.7	6.0	6.0	5.7	6.0	7.7	8.0	6.4	
GRAY HAWK (PST-2FIND)	5.3	5.7	6.0	5.3	6.0	8.0	8.3	6.4	
MRSL-PR16	6.3	5.3	5.0	5.7	5.7	8.0	8.7	6.4	
021	5.7	5.3	6.0	6.0	5.7	7.7	8.3	6.4	
ALLSTAR III	6.7	5.7	5.3	5.7	5.7	7.0	8.3	6.3	
BELIZE 2 (GO-142)	7.0	5.3	4.7	5.3	6.0	8.0	8.0	6.3	
DLFPS-236/3540	5.3	6.0	5.7	6.7	6.0	7.3	7.3	6.3	
BAR LP 6117	7.3	6.7	5.0	5.0	5.3	7.3	7.3	6.3	
DLFPS-236/3545	6.3	6.0	5.3	5.3	5.7	7.7	7.7	6.3	
LPB-SD-103	5.7	6.0	6.0	5.3	6.0	7.3	7.7	6.3	
MAN O'WAR	6.3	5.7	5.7	5.7	5.7	7.7	7.3	6.3	
MENSA	5.3	5.0	6.7	5.7	5.7	8.0	7.7	6.3	
PST-2EGAD	6.0	6.0	5.0	5.7	5.7	7.3	8.3	6.3	
UMPQUA	6.0	6.3	5.7	6.0	5.7	7.0	7.3	6.3	
LPB-SD-105	4.0	5.0	6.0	6.3	6.7	8.0	8.0	6.3	
DLFPS-236/3556	6.3	5.7	6.0	5.7	5.3	7.3	7.3	6.2	
PPG-PR 385	6.0	6.7	5.3	5.7	5.3	7.0	7.7	6.2	
PST-2GTD	5.3	5.7	6.0	6.0	5.7	7.3	7.3	6.2	
BAR LP 6159	6.3	6.0	5.3	5.0	6.0	7.3	7.3	6.2	

TABLE 8.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT LOGAN, UT (IN THE UPPER WEST/MOUNTAIN REGION) 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/							
	APR	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
PST-2BDT	6.3	6.3	5.3	5.3	5.0	7.3	7.7	6.2
SAVANT	4.3	5.0	5.7	6.0	6.7	7.7	8.0	6.2
SEABISCUIT	5.7	5.0	5.0	6.0	6.7	7.3	7.7	6.2
SHIELD (02BS4)	5.3	5.7	5.3	5.3	6.0	7.3	8.3	6.2
APR2612	4.7	5.3	5.7	5.7	6.0	7.7	8.0	6.1
SLIDER LS (PPG-PR 241)	5.0	6.3	6.0	5.3	4.7	7.3	8.3	6.1
JR-197	6.3	6.0	4.7	5.3	6.0	7.3	7.3	6.1
KARMA	5.3	5.7	5.3	6.0	6.0	7.0	7.3	6.1
LPB-SD-101	4.7	5.3	5.3	5.7	6.3	7.7	7.7	6.1
PST-2PDA	6.0	5.3	4.7	5.7	5.3	7.3	8.0	6.0
BRIGHTSTAR SLT	6.3	6.0	4.7	5.0	5.3	7.0	7.7	6.0
APR3060	5.0	5.3	5.3	5.3	5.7	7.0	7.7	5.9
JR-888	5.0	4.7	5.3	5.3	5.0	8.0	8.0	5.9
BAR LP 6164	5.7	5.0	5.0	5.7	5.3	6.7	7.7	5.9
BAR LP 6233	5.7	5.0	4.7	5.3	6.3	6.3	7.3	5.8
EVOLVE	5.7	5.3	4.7	5.3	5.0	6.7	8.0	5.8
BAR LP 6158	5.7	5.3	5.3	6.0	6.0	5.3	7.0	5.8
BAR LP 6131	5.7	5.7	4.7	5.7	5.3	6.3	6.3	5.7
BAR LP 6162	5.0	4.7	5.0	5.7	4.7	6.7	7.3	5.6
DLFPS-238/3014	5.7	4.7	5.7	4.7	4.3	6.0	6.3	5.3
BAR LP 6165	4.3	4.3	5.3	4.7	4.0	5.3	7.0	5.0
LINN	2.7	2.0	2.7	3.3	2.7	3.0	4.0	2.9
LSD VALUE	1.5	1.1	1.1	1.3	1.7	1.2	1.1	0.6
C.V. (%)	15.9	11.8	12.5	14.1	17.2	9.8	8.8	5.6

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 9.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT FRESNO, CA (IN THE SOUTHWEST REGION) 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
PST-2FOXY	7.3	7.3	6.7	6.0	5.0	4.3	4.3	5.0	6.3	7.0	7.3	7.3	6.2
NP-2	7.7	8.0	7.7	5.0	4.7	4.3	4.3	4.3	5.7	6.3	7.7	8.0	6.1
MDSL-PR16	7.0	7.7	6.3	5.7	5.3	4.7	4.0	4.3	6.0	7.0	7.7	7.3	6.1
BAR LP 6164	6.7	6.7	7.0	6.3	5.3	4.3	3.7	5.3	6.3	7.0	7.3	6.7	6.1
PPG-PR 367	7.0	6.7	6.7	5.7	5.3	4.3	4.0	5.0	6.3	7.3	7.3	7.0	6.1
BAR LP 6117	6.7	6.3	6.7	6.7	5.3	4.7	4.7	5.3	6.3	6.7	6.7	6.3	6.0
023	6.7	6.3	6.7	6.0	5.7	5.0	4.7	5.0	6.0	6.7	7.0	6.7	6.0
02BS2	6.7	7.3	7.3	6.7	5.3	4.3	4.3	4.0	5.0	5.7	7.0	7.3	5.9
APR3060	6.7	6.7	7.0	6.0	5.0	4.0	4.0	4.7	6.0	7.0	7.3	6.7	5.9
BAR LP 6131	6.3	6.3	6.7	6.0	5.7	5.0	4.7	4.7	6.0	6.7	6.7	6.3	5.9
ALLSTAR FORE (DLFPS-236/3541)	7.0	6.7	6.7	6.0	5.0	4.3	4.3	4.7	5.7	6.3	7.0	7.0	5.9
ASPO116EXT	6.7	7.7	6.7	6.0	5.0	4.0	3.7	4.7	5.7	6.3	7.0	7.0	5.9
GRAND SLAM GLD	6.7	6.3	6.0	6.0	5.3	4.7	4.7	4.7	6.0	6.3	6.7	7.0	5.9
PST-2GTD	7.0	6.7	6.7	6.0	5.3	4.3	4.3	4.3	5.3	6.0	7.0	7.0	5.8
PPG-PR 421	6.3	6.3	6.3	6.3	4.7	4.3	4.3	4.3	5.7	7.0	7.3	6.7	5.8
PARAGON 2 GLR (FP2)	6.7	7.3	6.3	5.7	5.3	4.0	3.7	4.3	5.7	6.3	7.0	7.0	5.8
PST-2BDT	6.3	7.7	6.7	5.7	4.3	4.0	3.3	5.0	6.3	7.0	6.7	6.3	5.8
FURLONG (LTP-FCB)	7.0	7.3	6.7	6.0	5.0	4.0	4.3	4.0	5.3	6.0	6.7	6.7	5.8
JR-197	6.7	7.0	6.0	6.0	5.3	4.3	4.3	4.0	5.3	6.0	7.0	7.0	5.8
PR-5-16	6.7	6.7	6.0	6.0	5.3	4.3	3.7	4.7	6.0	6.3	6.7	6.7	5.8
DLFPS-236/3544	6.3	7.0	6.3	5.0	4.7	4.3	4.0	4.7	5.7	6.3	7.0	7.0	5.7
DLFPS-236/3546	6.7	7.0	6.0	4.3	4.7	3.7	4.0	5.0	6.0	6.3	7.3	7.3	5.7
ASPO218 (A-6D)	6.7	6.7	6.3	6.0	5.3	4.0	3.3	4.0	5.7	6.7	6.7	6.7	5.7
NP-3	5.7	6.3	6.0	5.7	5.7	4.7	4.7	5.0	5.7	6.0	6.3	6.3	5.7
SHIELD (02BS4)	6.0	6.0	6.0	6.3	5.3	4.7	4.3	5.0	5.7	6.0	6.3	6.3	5.7
SR 4700 (DLFPS-236/3543)	6.0	6.7	5.7	5.3	5.3	4.3	4.3	4.0	5.7	7.0	7.0	6.7	5.7
BAR LP 6158	6.7	6.3	7.0	5.7	5.0	4.0	3.3	4.3	5.7	6.3	6.7	6.7	5.6
DLFPS-236/3556	6.7	6.3	6.3	6.0	4.7	3.7	3.7	4.7	5.7	6.0	7.0	7.0	5.6
OVERDRIVE 5G	6.3	6.7	6.0	5.3	5.0	4.0	4.0	4.7	6.0	6.3	6.7	6.7	5.6
BAR LP 6159	6.3	6.3	6.3	6.0	5.3	4.3	4.0	4.7	5.3	5.3	6.7	6.7	5.6
JR-123	6.7	7.0	6.0	5.0	5.0	4.3	4.0	4.7	5.3	6.0	6.7	6.7	5.6
PL2	6.0	6.7	6.3	6.3	5.7	4.7	3.7	4.3	5.3	5.7	6.3	6.3	5.6
DLFPS-236/3550	6.3	6.7	5.7	5.7	5.0	4.7	4.7	4.3	5.3	6.0	6.3	6.3	5.6
SLUGGER 3GL (PPG-PR 343)	6.7	7.3	7.0	5.3	5.0	3.7	3.0	4.3	5.3	5.3	7.0	7.0	5.6
APR2616	6.7	6.7	6.3	5.7	5.3	4.0	3.3	4.0	5.0	5.7	7.0	7.0	5.6
CS-6	6.0	7.3	7.0	5.7	5.0	4.0	3.0	4.7	5.3	5.7	6.3	6.7	5.6
PARADOX GLR (PPG-PR 331)	6.3	6.3	6.3	5.3	5.0	4.0	4.0	4.3	5.7	6.3	6.7	6.3	5.6
SEABISCUIT	6.3	6.3	6.3	5.3	5.0	4.0	4.0	4.7	5.7	6.3	6.3	6.3	5.6
DLFPS-236/3538	6.0	5.7	5.7	6.0	5.7	4.7	4.7	4.0	5.3	6.3	6.3	6.3	5.6
DLFPS-236/3552	6.0	6.7	6.0	5.0	5.0	4.3	4.0	4.3	5.7	6.7	6.7	6.3	5.6
DLFPS-236/3553	6.0	6.3	5.7	5.7	5.0	4.3	4.3	5.0	5.7	6.0	6.3	6.0	5.5
APR2612	6.7	7.0	6.3	5.0	5.0	4.3	4.0	4.0	5.0	5.7	6.7	6.7	5.5
GRAY WOLF (PST-2GAL)	6.3	7.0	6.3	6.0	4.7	3.7	3.7	4.3	5.3	6.0	6.3	6.3	5.5
PPG-PR 385	6.0	5.3	5.3	5.7	5.3	4.7	4.3	4.7	5.3	6.0	6.7	6.7	5.5
PST-2PDA	6.3	6.3	6.3	5.3	4.7	4.0	4.0	5.0	5.3	5.7	6.3	6.7	5.5

TABLE 9.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT FRESNO, CA (IN THE SOUTHWEST REGION) 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
SLIDER LS (PPG-PR 241)	6.3	7.0	5.7	5.3	5.0	4.3	4.3	4.3	5.0	5.3	6.7	6.7	5.5
DLFPS-236/3540	6.0	6.3	5.7	5.7	5.0	4.3	4.3	4.3	5.3	6.0	6.3	6.3	5.5
PPG-PR 422	6.3	6.7	6.0	5.7	5.3	4.0	4.0	4.3	5.3	6.0	6.0	6.0	5.5
SIGNET	6.3	6.0	6.0	5.7	5.3	4.3	3.7	4.3	5.3	6.0	6.3	6.3	5.5
STELLAR 4GL (PPG-PR 424)	6.3	6.7	6.0	5.0	5.0	4.3	4.0	4.3	5.3	6.0	6.3	6.3	5.5
PEPPER II (RAD-PR 103)	6.0	6.3	6.0	5.0	5.0	4.0	4.0	4.3	5.3	6.0	6.7	6.7	5.4
ALLSTAR III	6.3	6.7	6.3	6.0	5.0	4.0	3.7	4.0	5.0	5.7	6.3	6.3	5.4
DLFPS-236/3545	6.0	6.7	5.7	5.3	5.3	4.3	3.7	4.3	5.3	6.0	6.3	6.3	5.4
GRAY HAWK (PST-2FIND)	6.0	6.0	5.7	5.7	5.0	4.3	3.7	4.3	5.3	6.0	6.7	6.7	5.4
MAN O'WAR	6.0	6.7	6.0	5.7	4.7	4.0	3.7	4.3	5.3	6.0	6.7	6.3	5.4
BELIZE 2 (GO-142)	6.3	6.0	6.0	5.3	5.3	4.3	3.7	4.3	5.3	5.7	6.3	6.3	5.4
PST-2EGAD	6.3	6.3	6.0	5.3	5.0	4.0	3.7	4.3	5.0	5.7	6.7	6.7	5.4
PST-2MAY	6.7	6.3	6.3	5.0	4.7	4.0	4.0	4.0	5.0	5.7	6.3	6.7	5.4
ASP0118GL (A-4G)	6.0	6.3	5.7	5.3	5.0	4.0	4.0	4.0	5.3	6.0	6.3	6.3	5.4
GREEN SUPREME+ (AMP-R1)	5.7	6.7	6.0	5.7	5.0	3.7	3.3	4.3	5.3	6.0	6.3	6.3	5.4
PPG-PR 372	6.0	6.0	5.3	5.3	5.0	4.0	4.0	4.3	5.3	6.3	6.3	6.3	5.4
SR 4650	6.3	6.7	6.0	5.3	5.0	4.0	3.3	4.3	5.3	5.3	6.3	6.3	5.4
DERBY XTREME	6.0	7.0	6.0	5.3	5.0	3.7	3.7	4.0	5.3	5.7	6.3	6.0	5.3
FIREBALL (BWH)	5.7	8.0	5.7	5.7	5.3	4.0	3.3	4.0	5.0	5.7	5.7	6.0	5.3
PPG-PR 423	6.7	6.3	6.3	5.3	5.0	3.7	3.3	4.3	5.0	5.3	6.3	6.3	5.3
PR-6-15	6.3	6.7	5.7	5.3	5.0	4.0	4.0	4.3	4.7	5.0	6.0	6.7	5.3
021	6.3	6.0	6.0	5.0	4.7	4.0	4.0	4.3	5.0	5.3	6.3	6.3	5.3
EVOLVE	5.7	5.7	5.7	5.3	5.0	4.0	4.0	4.7	5.7	5.7	6.0	6.0	5.3
INTENSE	6.0	7.0	5.7	5.0	4.7	3.7	3.3	4.3	5.3	6.0	6.3	6.0	5.3
MRSL-PR15	6.0	6.3	6.3	5.3	5.0	4.0	3.7	4.0	5.0	5.7	6.0	6.0	5.3
CPN	6.0	6.7	6.0	5.3	4.7	3.7	3.3	4.3	5.3	5.7	6.0	6.0	5.3
DLFPS-236/3547	5.7	6.7	6.0	5.0	4.7	3.7	3.7	3.7	5.0	6.0	6.7	6.0	5.2
KARMA	5.7	6.0	6.0	5.3	5.0	4.3	4.3	4.0	5.0	5.3	6.0	5.7	5.2
DLFPS-236/3542	6.0	6.3	5.3	5.3	5.0	3.7	3.0	4.3	5.7	6.0	6.0	6.0	5.2
FIESTA CINCO (DLFPS-236/3554)	5.7	6.7	5.7	5.3	5.0	3.7	3.7	4.0	5.3	6.0	6.0	5.7	5.2
PPG-PR 371	5.7	6.3	6.0	5.3	4.7	4.3	4.3	4.0	4.7	5.0	6.0	6.0	5.2
ASP0117 (A-PR15)	6.0	7.3	5.3	4.7	4.3	3.7	3.7	4.0	5.0	5.7	6.3	6.0	5.2
BAR LP 6162	5.0	5.7	5.7	5.7	5.0	4.0	3.7	4.7	5.3	6.0	5.7	5.7	5.2
NEXUS GT (SNX)	6.0	6.7	5.7	4.7	4.7	3.7	3.7	4.0	5.0	5.3	6.3	6.3	5.2
PST-2A2	5.7	6.3	5.7	5.3	4.7	3.7	3.3	4.3	5.3	5.7	6.0	6.0	5.2
ALLOY (RRT)	5.3	6.3	5.0	4.7	4.7	4.0	4.0	4.7	5.3	5.7	6.0	6.0	5.1
SUPERSTAR GL (PPG-PR 420)	5.7	6.0	5.7	5.0	5.0	4.0	3.7	4.0	5.0	5.7	6.0	6.0	5.1
GO-141	5.7	6.3	5.7	5.7	5.3	4.3	3.7	3.7	4.7	5.3	5.7	5.7	5.1
DLFPS-236/3548	5.7	6.7	5.3	5.0	4.7	4.0	4.0	4.0	4.7	5.3	6.0	6.0	5.1
PPG-PR 370	6.0	6.0	5.7	5.7	5.0	4.0	3.7	3.7	4.7	5.3	5.7	6.0	5.1
CAYMAN (GO-143)	6.0	6.0	5.0	5.7	4.7	3.3	3.3	4.0	5.0	5.3	6.3	6.3	5.1
SILVER SPORT (PST-2CRP)	5.3	6.7	5.7	4.7	4.7	4.0	3.7	4.0	5.0	5.7	6.0	5.7	5.1
SPIKE GLS (UF3)	6.0	6.3	5.3	5.0	5.0	4.0	3.7	3.7	4.7	5.3	6.0	6.0	5.1
FASTBALL 3GL (PPG-PR 329)	6.7	6.7	6.0	5.0	4.3	3.3	3.0	3.7	4.7	5.0	6.0	6.3	5.1
BAR LP 6233	5.0	5.3	5.7	5.0	5.0	4.0	3.7	4.7	5.3	5.7	5.7	5.3	5.0
PHARAOH	5.3	6.3	5.0	5.0	5.0	4.3	3.7	4.0	5.0	5.3	5.7	5.7	5.0

TABLE 9.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT FRESNO, CA (IN THE SOUTHWEST REGION) 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
APPLE 3GL (PPG-PR 339)	5.3	6.3	5.3	5.3	5.0	3.7	3.3	4.0	4.7	5.0	5.7	5.7	4.9
HATRICK (BSP-17)	5.3	7.3	5.0	4.7	4.3	3.7	3.3	4.3	5.0	5.0	5.7	5.7	4.9
BAR LP 6165	5.3	4.7	5.7	4.7	4.7	3.7	3.3	3.7	5.3	6.0	6.0	5.7	4.9
PPG-PR 360	5.7	6.7	5.0	5.0	4.7	3.7	3.3	4.0	4.7	4.7	5.7	5.7	4.9
TEE-ME-UP (BSP-25)	5.3	6.0	5.0	4.7	4.7	3.7	3.3	3.7	4.7	5.7	6.0	6.0	4.9
DLFPS-238/3014	4.7	5.7	5.3	5.3	5.0	4.0	3.7	4.0	4.7	5.3	5.3	5.3	4.9
HOMERUN LS (PPG-PR 419)	5.3	6.7	4.7	4.7	4.7	4.0	3.3	4.0	5.0	5.3	5.3	5.3	4.9
SAGUARO	5.7	5.3	5.0	4.7	4.7	4.0	3.3	4.3	5.0	5.0	5.7	5.7	4.9
RAD-PR 112	5.7	6.3	5.3	5.0	4.3	3.3	3.3	3.7	4.3	5.0	5.7	6.0	4.8
XCELERATOR	5.3	6.3	5.0	4.7	4.3	3.3	3.3	4.0	4.7	5.3	5.3	5.3	4.8
02BS1	5.3	6.3	4.7	4.3	4.3	3.7	3.7	3.7	4.7	5.3	5.3	5.3	4.7
JR-888	5.3	5.7	6.0	4.7	4.7	3.7	3.0	3.3	4.7	5.0	5.3	5.3	4.7
MENSA	5.3	5.3	5.0	4.0	3.7	3.0	3.0	4.0	5.3	5.7	6.0	5.7	4.7
BRIGHTSTAR SLT	5.3	5.7	5.3	5.0	4.7	3.3	2.7	3.3	4.3	5.0	5.7	5.7	4.7
UMPQUA	5.0	5.7	5.0	5.0	4.7	3.7	3.0	3.3	4.3	5.0	5.0	5.0	4.6
LPB-SD-103	5.3	5.3	5.0	4.0	4.0	3.3	3.3	3.7	4.7	5.0	5.3	5.3	4.5
LPB-SD-105	5.7	5.0	4.0	3.3	3.7	3.3	3.0	3.7	4.7	5.0	5.7	5.7	4.4
LPB-SD-104	5.0	5.0	4.0	3.7	3.7	3.3	3.3	3.3	4.3	5.0	5.0	5.0	4.2
LPB-SD-102	4.7	4.7	4.3	3.7	3.7	3.0	3.3	3.7	4.7	4.7	5.0	4.7	4.2
JR-747	4.7	5.3	4.3	3.7	4.0	3.3	3.3	3.3	4.0	4.3	4.7	4.7	4.1
LPB-SD-101	4.3	4.3	4.0	3.7	3.7	3.0	3.0	3.7	4.7	4.7	4.7	4.7	4.0
LINN	4.0	3.7	4.0	4.0	4.0	3.0	2.7	3.0	4.3	5.0	5.0	4.0	3.9
SAVANT	4.7	4.0	4.0	3.7	3.7	3.0	3.0	3.3	4.0	4.0	4.7	4.7	3.9
LSD VALUE	1.7	1.6	1.9	1.3	1.0	1.1	1.2	1.6	1.5	1.7	1.6	1.6	1.2
C.V. (%)	17.9	15.2	20.1	15.6	13.0	16.8	20.3	23.0	18.3	18.4	16.2	16.3	14.1

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 10.

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT CORVALLIS, OR (PACIFIC REGION) 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PPG-PR 367	7.0	7.0	7.3	7.0	7.7	7.7	8.0	7.7	7.7	7.3	6.3	6.3	7.3
JR-197	7.0	7.3	7.3	6.7	7.3	7.3	7.7	7.3	7.3	7.0	6.3	6.7	7.1
PPG-PR 372	7.0	6.7	7.0	7.0	7.0	7.0	7.7	7.7	7.7	7.3	6.0	5.7	7.0
PPG-PR 422	7.0	6.3	6.7	6.3	7.3	7.3	7.7	7.7	7.7	7.0	6.3	6.0	6.9
OVERDRIVE 5G	7.0	7.3	7.0	6.7	7.3	7.3	7.7	7.3	7.3	6.7	6.0	5.7	6.9
CPN	6.7	6.7	7.0	6.7	7.3	7.7	7.7	7.0	7.0	7.0	6.0	6.3	6.9
DLFPS-236/3547	7.0	7.0	7.0	6.7	7.3	7.0	7.3	7.3	7.3	7.3	6.0	5.7	6.9
SPIKE GLS (UF3)	6.7	6.7	7.0	6.7	7.3	7.3	7.3	7.0	7.0	7.0	6.7	6.3	6.9
FURLONG (LTP-FCB)	6.7	6.7	7.0	7.0	7.3	7.3	7.3	7.0	7.3	7.0	6.0	6.0	6.9
DLFPS-236/3545	7.3	7.0	7.0	6.7	7.0	7.0	7.0	7.0	7.0	7.0	6.3	6.3	6.9
ALLSTAR FORE (DLFPS-236/3541)	7.0	6.3	7.0	7.0	7.0	6.7	7.3	7.3	7.3	7.3	6.3	5.7	6.9
02BS1	6.7	7.0	6.3	5.7	6.7	7.0	7.7	7.7	7.7	7.3	6.7	6.0	6.9
STELLAR 4GL (PPG-PR 424)	7.0	6.7	7.3	7.0	7.0	6.7	7.3	7.3	7.3	7.0	5.7	6.0	6.9
02BS2	7.0	6.3	7.0	7.0	7.0	7.0	7.3	7.0	7.3	7.0	6.0	6.0	6.8
PST-2FOXY	6.7	6.0	6.3	6.3	7.3	7.3	7.7	7.7	7.7	7.0	6.0	5.7	6.8
SLUGGER 3GL (PPG-PR 343)	7.0	7.0	7.0	6.7	7.3	7.0	7.3	7.0	7.0	6.7	6.0	5.3	6.8
DLFPS-236/3544	6.7	6.7	6.7	6.3	7.3	7.3	7.7	7.7	7.3	6.3	6.0	5.3	6.8
FASTBALL 3GL (PPG-PR 329)	6.3	6.3	6.7	6.3	7.0	7.0	7.7	7.7	7.7	7.0	6.0	5.7	6.8
LPB-SD-102	6.3	6.7	7.3	7.3	7.3	7.0	7.3	7.3	7.3	6.7	5.7	5.0	6.8
PST-2A2	6.7	6.7	7.0	7.0	7.0	6.7	7.3	7.3	7.3	6.7	6.0	5.7	6.8
ALLOY (RRT)	7.0	6.3	7.0	6.7	7.0	7.0	7.3	7.3	7.0	6.7	6.0	5.7	6.8
APPLE 3GL (PPG-PR 339)	6.7	6.3	6.7	6.7	7.0	7.0	7.3	7.3	7.3	7.0	6.0	5.7	6.8
HOMERUN LS (PPG-PR 419)	7.0	6.3	6.7	6.7	7.0	7.3	7.3	7.3	7.0	6.3	5.7	6.3	6.8
NP-3	6.7	6.7	7.0	6.7	7.3	7.3	7.3	7.0	7.0	6.7	6.0	5.3	6.8
SR 4700 (DLFPS-236/3543)	6.7	6.7	7.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.0	5.3	6.8
XCELERATOR	6.7	6.3	6.7	6.7	7.0	7.0	7.3	7.3	7.3	6.7	6.0	6.0	6.8
MAN O'WAR	6.7	6.3	7.0	7.0	7.0	6.7	7.0	7.0	7.0	7.0	6.0	6.0	6.7
PR-6-15	6.7	6.3	6.7	6.7	7.0	7.0	7.3	7.3	7.3	7.0	5.7	5.7	6.7
RAD-PR 112	7.0	6.7	7.0	7.0	7.0	6.3	7.0	7.0	7.0	7.0	6.3	5.3	6.7
UMPQUA	6.7	6.3	6.7	6.7	7.3	7.0	7.3	7.3	7.3	6.7	5.7	5.7	6.7
DLFPS-236/3542	7.0	6.3	6.3	6.3	6.7	6.7	7.3	7.7	7.7	7.0	6.0	5.7	6.7
PARAGON 2 GLR (FP2)	7.0	6.3	6.3	6.3	7.0	7.0	7.3	7.3	7.3	6.7	6.0	6.0	6.7
PHARAOH	6.3	6.7	7.0	6.7	6.7	6.3	7.3	7.3	7.3	7.0	6.0	6.0	6.7
PPG-PR 370	6.7	6.7	7.3	7.0	7.0	7.0	7.0	7.0	7.0	6.7	6.0	5.0	6.7
DLFPS-236/3552	7.0	6.3	6.7	6.7	7.0	7.0	7.0	7.0	7.0	7.0	6.0	5.7	6.7
PPG-PR 371	6.3	5.7	6.7	6.7	7.0	7.0	7.3	7.3	7.3	7.0	6.0	6.0	6.7
SUPERSTAR GL (PPG-PR 420)	6.7	6.0	6.7	6.7	7.0	7.0	7.3	7.3	7.3	6.7	6.0	5.7	6.7
021	7.0	6.7	7.0	6.7	7.0	7.0	7.3	7.3	7.0	6.0	5.3	5.7	6.7
DLFPS-236/3546	6.7	6.3	6.7	6.7	6.7	6.7	7.0	7.3	7.3	7.0	6.0	5.7	6.7
DLFPS-236/3556	7.0	6.7	6.7	6.3	7.0	7.0	7.0	7.0	7.0	7.0	6.0	5.3	6.7
NP-2	7.0	6.7	6.7	6.3	7.0	7.0	7.0	7.0	7.0	6.7	6.0	5.7	6.7
ASP0118GL (A-4G)	6.7	6.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.7	5.7	5.3	6.6
PARADOX GLR (PPG-PR 331)	6.7	6.0	6.7	6.7	7.3	7.3	7.3	7.0	7.0	6.3	6.0	5.3	6.6
PEPPER II (RAD-PR 103)	6.7	6.7	6.7	6.7	7.0	7.0	7.3	7.3	7.0	6.0	6.0	5.3	6.6
PPG-PR 423	6.7	6.3	6.7	6.7	7.0	7.0	7.0	7.0	7.0	6.7	6.0	5.7	6.6
023	6.7	6.7	7.0	6.7	7.0	6.7	7.0	7.0	7.0	6.3	6.0	5.3	6.6

TABLE 10.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT CORVALLIS, OR (PACIFIC REGION) 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
INTENSE	6.3	6.0	6.3	6.3	7.0	7.0	7.3	7.3	7.3	7.0	6.0	5.3	6.6
DERBY XTREME	6.7	6.0	6.7	6.7	7.0	7.0	7.0	7.0	7.0	6.7	6.0	5.3	6.6
FIREBALL (BWH)	6.3	6.3	7.0	7.0	7.0	6.7	7.0	7.0	7.0	6.3	6.0	5.3	6.6
GRAY WOLF (PST-2GAL)	6.7	6.3	6.7	6.7	7.0	7.0	7.0	6.7	7.0	6.7	6.0	5.3	6.6
PPG-PR 360	6.7	5.7	6.7	6.7	7.0	7.0	7.0	7.0	7.0	7.0	6.0	5.3	6.6
ASP0218 (A-6D)	6.3	6.7	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.3	5.3	5.0	6.6
DLFPS-236/3540	6.7	6.3	6.3	6.0	7.0	7.0	7.3	7.3	7.3	6.3	5.3	5.7	6.6
DLFPS-236/3553	6.7	6.0	7.0	7.0	7.0	6.7	7.0	7.0	7.0	6.3	6.0	5.0	6.6
PPG-PR 421	6.7	6.3	6.7	6.3	7.0	7.0	7.0	7.0	7.0	6.0	6.0	5.7	6.6
SEABISCUIT	6.7	6.3	6.3	6.0	6.7	6.7	7.0	7.0	7.0	7.0	6.0	6.0	6.6
SHIELD (02BS4)	6.3	6.7	6.7	6.3	7.0	6.7	7.0	7.0	7.0	6.7	5.7	5.7	6.6
SILVER SPORT (PST-2CRP)	6.3	6.3	6.3	6.0	7.0	7.0	7.0	7.0	7.0	7.0	5.7	6.0	6.6
JR-123	6.3	6.0	6.3	6.3	7.0	7.0	7.0	7.0	7.0	6.7	6.0	5.7	6.5
PST-2GTD	6.7	6.3	6.7	6.3	7.0	7.0	7.0	7.0	7.0	6.3	5.7	5.3	6.5
PR-5-16	6.3	6.3	7.0	7.0	7.0	6.0	7.0	7.0	7.0	6.3	6.0	5.0	6.5
ASP0117 (A-PR15)	6.0	6.0	6.7	6.7	7.0	6.7	7.0	7.0	7.0	6.7	5.7	5.3	6.5
KARMA	6.0	6.3	7.0	7.0	7.0	6.7	7.0	7.0	7.0	6.3	5.3	5.0	6.5
PST-2BDT	6.3	6.7	6.7	6.0	7.0	7.0	7.0	7.0	7.0	6.0	5.7	5.3	6.5
CS-6	6.3	6.3	7.0	6.7	7.0	6.7	7.0	7.0	7.0	6.0	5.7	5.0	6.5
SLIDER LS (PPG-PR 241)	6.7	6.0	6.7	6.7	7.0	6.7	7.0	7.0	7.0	6.3	5.7	4.7	6.4
LPB-SD-101	6.0	6.3	6.7	6.7	7.0	6.7	7.0	7.0	7.0	6.3	5.3	5.3	6.4
LPB-SD-105	6.0	6.0	7.0	7.0	7.0	6.7	7.3	7.3	7.3	6.3	5.3	4.0	6.4
PST-2MAY	6.3	6.0	6.3	6.0	7.0	7.0	7.0	7.0	7.0	7.0	5.7	5.0	6.4
SR 4650	6.7	6.0	6.7	6.7	6.7	6.7	7.0	7.0	7.0	6.0	5.7	5.3	6.4
DLFPS-236/3548	6.3	6.3	6.7	6.7	6.7	6.7	7.0	7.0	7.0	6.0	5.7	5.0	6.4
DLFPS-236/3550	6.3	5.7	6.3	6.3	7.0	7.0	7.0	6.7	6.7	6.7	6.0	5.3	6.4
GRAND SLAM GLD	6.3	5.7	6.3	6.3	6.7	6.7	7.0	7.0	7.0	6.7	6.0	5.3	6.4
GRAY HAWK (PST-2FIND)	6.0	6.0	6.3	6.3	7.0	7.0	7.0	7.0	7.0	6.3	6.0	5.0	6.4
PL2	6.3	6.3	6.3	6.3	6.7	6.7	7.0	6.7	6.7	6.3	6.0	5.7	6.4
PST-2EGAD	6.0	5.7	6.0	6.0	7.0	7.0	7.3	7.3	7.3	6.3	5.7	5.3	6.4
TEE-ME-UP (BSP-25)	6.3	6.7	6.7	6.7	7.0	6.3	6.7	6.7	6.7	6.3	5.3	5.7	6.4
LPB-SD-103	6.3	6.3	6.7	6.3	6.7	6.7	7.0	7.0	7.0	6.0	5.3	5.3	6.4
MRS-PR16	6.0	6.3	6.7	6.3	6.7	6.7	7.0	7.0	7.0	6.0	5.3	5.7	6.4
HATRICK (BSP-17)	6.0	6.0	6.7	7.0	7.0	6.3	7.0	7.0	7.0	6.0	5.0	5.7	6.4
FIESTA CINCO (DLFPS-236/3554)	5.7	6.0	6.7	6.7	7.0	6.7	7.0	7.0	7.0	6.0	5.7	5.0	6.4
JR-747	6.3	6.3	7.0	7.0	7.0	6.7	7.0	7.0	6.7	5.7	4.7	5.0	6.4
DLFPS-236/3538	6.0	5.7	6.7	7.0	7.0	6.3	7.0	7.0	6.7	5.7	5.7	5.0	6.3
NEXUS GT (SNX)	6.3	6.7	6.3	6.0	6.7	6.3	6.7	7.0	7.0	6.0	5.3	5.3	6.3
BELIZE 2 (GO-142)	6.3	6.3	6.3	6.0	6.7	6.7	6.7	6.7	6.7	6.3	5.3	5.7	6.3
APR2612	6.3	6.0	6.0	5.7	6.7	7.0	7.0	7.0	7.0	6.0	5.3	5.3	6.3
APR2616	6.3	6.3	6.3	6.0	6.7	6.7	7.0	7.0	6.7	6.0	5.0	5.3	6.3
BAR LP 6117	6.0	5.7	6.3	6.7	7.0	7.0	7.0	6.7	6.7	6.0	5.3	5.0	6.3
BAR LP 6164	5.7	6.0	6.3	6.0	7.0	7.0	7.0	7.0	7.0	6.0	5.3	5.0	6.3
ALLSTAR III	6.3	6.0	6.0	6.0	6.3	6.3	6.7	6.7	6.7	6.3	6.0	5.7	6.3
DLFPS-238/3014	5.7	6.3	6.3	6.0	6.7	6.7	6.7	6.7	6.7	6.0	5.7	5.7	6.3
ASP0116EXT	6.3	6.0	6.7	6.7	6.7	6.0	6.7	6.7	6.3	5.7	5.3	5.7	6.2

TABLE 10.
(CONT'D)

TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT CORVALLIS, OR (PACIFIC REGION) 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
GREEN SUPREME+ (AMP-R1)	6.0	5.7	6.0	6.0	6.7	7.0	7.0	6.7	6.7	6.3	5.7	5.0	6.2
JR-888	5.7	6.0	6.3	6.3	6.7	6.7	7.0	7.0	6.7	6.0	5.3	5.0	6.2
MRSI-PR15	5.7	6.0	6.3	6.3	7.0	7.0	7.0	6.7	6.3	5.7	5.0	5.3	6.2
SAVANT	5.3	6.0	6.7	6.7	6.7	6.3	7.0	7.0	7.0	6.3	5.3	4.0	6.2
PPG-PR 385	6.0	5.7	6.3	6.3	7.0	6.7	7.0	6.7	6.7	6.0	5.3	4.7	6.2
SAGUARO	5.7	6.0	6.3	6.3	6.7	6.3	6.7	6.7	6.7	6.3	5.7	5.0	6.2
CAYMAN (GO-143)	6.3	5.7	6.3	6.0	6.7	6.7	6.7	6.3	6.3	6.0	5.7	5.3	6.2
MENSA	6.3	6.0	6.7	6.7	6.7	6.7	6.7	6.3	6.0	5.7	5.0	5.3	6.2
PST-2PDA	6.0	6.0	6.0	6.0	6.7	6.7	7.0	7.0	7.0	6.0	5.0	4.3	6.1
SIGNET	6.0	5.7	6.3	6.3	6.7	6.3	6.7	6.7	6.7	6.3	5.3	4.7	6.1
BAR LP 6233	5.3	5.3	6.0	6.0	7.0	7.0	7.0	7.0	7.0	6.0	5.0	4.3	6.1
LPB-SD-104	5.3	5.7	6.7	6.7	7.0	6.3	7.0	7.0	6.7	5.3	4.7	4.7	6.1
BAR LP 6131	5.7	5.7	6.0	6.0	7.0	7.0	7.0	6.7	6.7	5.7	4.7	4.3	6.0
GO-141	5.3	5.3	6.0	6.0	6.7	6.7	7.0	7.0	6.7	5.7	5.0	5.0	6.0
BAR LP 6159	5.3	6.0	6.3	6.0	6.7	6.7	6.7	6.7	6.7	6.0	4.7	4.7	6.0
EVOLVE	6.0	6.0	6.0	6.0	6.3	6.3	6.7	6.7	6.7	6.0	5.0	4.7	6.0
BAR LP 6165	5.3	6.3	6.3	6.0	6.0	6.0	6.7	6.7	6.7	6.0	5.0	5.0	6.0
BRIGHTSTAR SLT	5.7	6.0	6.3	6.0	6.3	6.3	6.3	6.3	6.3	5.7	5.0	4.7	5.9
APR3060	5.3	5.3	5.7	5.7	6.3	6.7	7.0	6.3	6.3	5.7	4.7	4.7	5.8
BAR LP 6158	5.0	5.0	5.7	5.7	6.3	6.3	6.3	6.3	6.3	5.7	5.0	4.3	5.7
BAR LP 6162	5.0	5.3	6.0	6.0	6.0	6.0	6.0	5.7	5.7	5.7	5.3	5.0	5.6
LINN	5.3	5.3	5.3	5.0	6.0	6.0	6.0	5.3	5.3	5.0	4.3	4.7	5.3
LSD VALUE	0.8	1.4	1.0	0.8	0.6	0.8	0.7	0.7	0.7	0.7	0.8	1.0	0.5
C.V. (%)	8.2	14.3	9.5	7.2	5.5	7.4	6.1	6.5	6.1	6.9	8.3	11.9	4.9

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.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
 GROWN UNDER TRAFFIC STRESS AT CORVALLIS, OR 1/
 2019 DATA
 TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/

NAME	QUALITY RATINGS												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
PPG-PR 367	6.3	6.0	6.7	6.7	7.3	7.7	7.7	7.3	7.3	7.3	5.3	5.3	6.8
PPG-PR 422	6.0	6.3	6.7	6.3	7.0	7.3	8.0	8.0	7.7	7.0	5.3	5.3	6.8
DLFPS-236/3546	6.3	6.3	6.7	6.7	7.0	7.0	7.7	7.7	7.7	7.0	5.3	5.0	6.7
DLFPS-236/3547	6.7	6.3	6.7	6.7	7.3	7.3	7.7	7.3	7.3	6.7	5.0	5.3	6.7
DLFPS-236/3552	6.3	6.3	7.3	7.3	7.3	7.0	7.0	7.0	7.0	7.0	5.3	5.3	6.7
FURLONG (LTP-FCB)	7.0	6.3	7.0	7.0	7.0	7.0	7.3	7.3	7.3	7.0	5.3	5.0	6.7
JR-197	6.7	6.7	6.7	6.3	7.0	7.0	7.3	7.3	7.3	7.0	5.0	5.7	6.7
CPN	6.0	6.3	6.7	6.3	7.0	7.7	7.7	7.3	7.3	7.0	5.0	5.0	6.6
ALLSTAR FORE (DLFPS-236/3541)	6.3	6.3	6.7	6.7	7.0	6.7	7.3	7.3	7.3	7.0	5.3	5.3	6.6
DLFPS-236/3544	6.3	6.0	6.7	6.3	7.0	7.0	7.7	7.7	7.3	6.7	5.0	5.0	6.6
FASTBALL 3GL (PPG-PR 329)	6.3	6.3	6.3	6.0	7.0	7.0	7.7	7.7	7.7	7.0	5.0	5.0	6.6
OVERDRIVE 5G	6.7	6.7	6.7	6.7	7.0	7.0	7.3	7.3	7.3	7.0	5.0	5.0	6.6
PPG-PR 371	6.0	5.7	6.3	6.3	7.0	7.0	7.7	7.7	7.7	7.0	5.3	5.0	6.6
STELLAR 4GL (PPG-PR 424)	6.3	6.3	7.0	7.0	7.0	6.7	7.3	7.3	7.3	7.0	5.0	5.0	6.6
021	6.3	6.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.7	5.0	5.0	6.5
DLFPS-236/3542	6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.7	5.0	5.0	6.5
SR 4700 (DLFPS-236/3543)	6.3	6.0	6.7	6.7	7.0	7.0	7.0	7.0	7.0	7.0	5.0	5.0	6.5
DLFPS-236/3545	6.0	6.7	6.7	6.3	7.0	7.0	7.0	7.0	7.0	7.0	5.3	5.3	6.5
DLFPS-236/3548	6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.7	5.0	5.0	6.5
PARAGON 2 GLR (FP2)	6.0	6.0	6.3	6.3	7.0	7.0	7.3	7.3	7.3	7.0	5.3	5.0	6.5
PPG-PR 372	6.3	6.3	6.7	6.7	7.0	7.0	7.0	7.0	7.0	7.0	5.3	5.0	6.5
PPG-PR 421	6.0	6.3	7.0	6.7	7.0	7.0	7.3	7.3	7.0	6.3	4.7	5.3	6.5
PR-6-15	6.0	5.7	6.7	6.7	7.0	6.7	7.3	7.7	7.3	6.7	5.3	5.3	6.5
PST-2A2	6.0	6.0	6.7	6.7	6.7	6.7	7.3	7.3	7.3	7.0	5.3	5.3	6.5
PST-2FOXY	6.0	5.3	6.3	6.3	7.0	7.0	7.7	7.7	7.7	7.0	5.0	5.0	6.5
SLIDER LS (PPG-PR 241)	6.7	5.7	6.3	6.7	7.0	7.0	7.3	7.3	7.3	6.7	5.0	4.7	6.5
SLUGGER 3GL (PPG-PR 343)	6.3	6.7	6.7	6.7	7.0	6.7	7.0	7.0	7.0	6.7	5.0	5.3	6.5
023	6.0	6.0	6.3	6.3	6.7	6.7	7.3	7.3	7.3	6.7	5.0	4.7	6.4
02BS1	6.3	6.0	6.3	6.0	7.0	7.0	7.3	7.3	7.3	6.7	4.7	5.3	6.4
ALLOY (RRT)	6.3	6.0	6.7	6.7	6.7	6.7	7.3	7.3	7.3	6.3	5.3	4.7	6.4
APPLE 3GL (PPG-PR 339)	6.0	6.0	6.7	6.7	7.0	7.0	7.0	7.0	7.0	6.7	5.0	5.0	6.4
ASP0118GL (A-4G)	6.0	6.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.7	5.0	4.7	6.4
ASP0218 (A-6D)	6.0	6.3	6.7	6.7	7.0	7.0	7.0	7.0	7.0	6.0	4.7	5.0	6.4
DERBY XTREME	6.3	6.0	6.7	6.7	7.0	7.0	7.0	6.7	6.7	6.7	5.0	5.0	6.4
DLFPS-236/3556	6.0	6.0	6.3	6.3	7.0	7.0	7.0	7.0	7.0	7.0	5.3	4.7	6.4
HOMERUN LS (PPG-PR 419)	6.3	6.3	6.3	6.3	7.0	7.0	7.0	7.0	7.0	6.3	4.7	5.3	6.4
INTENSE	6.0	6.0	6.3	6.3	7.0	7.0	7.0	7.0	7.0	7.0	5.3	5.0	6.4
LPB-SD-101	6.0	6.3	6.7	6.7	7.0	7.0	7.3	7.0	7.0	6.0	4.3	5.0	6.4
LPB-SD-102	5.7	6.3	6.7	6.7	7.0	6.7	7.3	7.3	7.3	6.7	4.3	4.7	6.4
NP-2	6.0	6.3	6.3	6.3	7.0	7.0	7.0	7.0	7.0	6.7	5.0	5.3	6.4
NP-3	6.3	6.0	6.3	6.3	7.0	7.0	7.0	7.0	7.0	7.0	5.0	5.0	6.4
PHARAOH	6.3	6.0	6.3	6.3	6.7	6.7	7.3	7.3	7.3	7.0	5.0	5.0	6.4
PPG-PR 360	6.3	5.7	6.3	6.3	7.0	7.0	7.0	7.0	7.0	7.0	5.0	4.7	6.4
SUPERSTAR GL (PPG-PR 420)	6.3	6.0	6.3	6.3	6.7	6.7	7.3	7.3	7.3	7.0	5.0	5.0	6.4
PPG-PR 423	6.0	6.0	6.7	6.7	7.0	7.0	7.0	7.0	7.0	7.0	5.0	5.0	6.4
RAD-PR 112	6.0	6.3	6.7	6.7	6.7	6.7	7.0	7.0	7.0	6.7	5.0	5.0	6.4
SPIKE GLS (UF3)	5.7	5.7	6.0	6.0	7.0	7.0	7.3	7.3	7.3	7.0	5.0	5.0	6.4

TABLE 11.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT CORVALLIS, OR 1/
2019 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/

NAME	QUALITY RATINGS												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
TEE-ME-UP (BSP-25)	6.0	6.0	6.7	6.7	7.0	6.7	7.0	7.0	7.0	6.3	5.0	5.3	6.4
XCELERATOR	6.0	6.3	6.3	6.3	7.0	7.0	7.0	7.0	7.0	7.0	5.0	5.0	6.4
02BS2	6.0	5.7	6.3	6.3	7.0	7.0	7.0	6.7	7.0	7.0	5.0	5.0	6.3
CS-6	6.0	5.7	6.3	6.3	7.0	7.0	7.0	7.0	7.0	6.3	4.7	5.0	6.3
DLFPS-236/3540	6.0	6.0	6.0	6.0	6.7	6.7	7.0	7.0	7.0	6.7	5.0	5.3	6.3
GRAND SLAM GLD	5.7	5.3	6.0	6.0	6.3	6.7	7.3	7.3	7.3	6.7	5.3	5.0	6.3
GRAY HAWK (PST-2FIND)	6.0	5.7	6.3	6.3	7.0	7.0	7.0	7.0	7.0	6.7	5.0	5.0	6.3
GRAY WOLF (PST-2GAL)	6.0	5.7	6.3	6.3	7.0	7.0	7.0	7.0	7.0	6.7	5.0	5.0	6.3
JR-747	5.7	5.7	6.3	6.3	7.0	7.0	7.3	7.3	7.3	6.3	4.3	4.7	6.3
KARMA	5.7	6.0	6.7	6.7	6.7	6.7	7.0	7.0	7.0	6.7	4.7	4.7	6.3
MAN O'WAR	6.0	6.0	6.3	6.3	6.7	6.7	7.0	7.0	7.0	7.0	5.0	5.0	6.3
PARADOX GLR (PPG-PR 331)	6.0	6.0	6.3	6.3	7.0	7.0	7.0	6.7	6.7	6.3	5.0	5.3	6.3
PEPPER II (RAD-PR 103)	6.0	5.7	6.3	6.3	6.7	6.7	7.3	7.3	7.0	6.0	5.0	5.0	6.3
PL2	6.0	5.7	6.7	6.7	6.7	6.7	6.7	6.3	6.7	6.7	5.0	5.3	6.3
PPG-PR 370	5.7	5.7	6.7	6.7	6.7	6.7	7.0	7.0	7.0	6.7	5.0	5.0	6.3
PST-2GTD	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	6.7	5.0	5.0	6.3
PST-2MAY	5.7	5.7	6.3	6.3	7.0	7.0	7.0	7.0	7.0	7.0	4.7	5.0	6.3
SEABISCUIT	6.0	6.3	6.3	6.0	6.7	6.7	7.0	7.0	7.0	6.3	5.3	5.0	6.3
SILVER SPORT (PST-2CRP)	6.0	5.7	6.0	5.7	6.7	7.0	7.0	7.0	7.0	7.0	5.0	5.0	6.3
UMPQUA	6.3	5.7	6.3	6.3	6.3	6.3	7.0	7.0	7.0	6.7	5.3	5.0	6.3
ASP0117 (A-PR15)	6.0	5.7	6.7	6.7	6.7	6.3	6.7	6.7	6.7	6.3	4.7	5.0	6.2
DLFPS-236/3550	6.0	6.3	6.3	6.3	6.7	6.3	6.7	6.7	6.7	6.7	5.0	4.7	6.2
FIESTA CINCO (DLFPS-236/3554)	6.3	5.7	6.3	6.3	7.0	6.7	7.0	6.7	6.7	6.3	4.7	5.0	6.2
FIREBALL (BWH)	6.0	6.0	6.3	6.3	6.3	6.0	7.0	7.0	7.0	6.3	5.0	5.0	6.2
JR-123	5.7	5.3	6.3	6.3	7.0	6.7	7.0	7.0	7.0	6.7	5.0	4.7	6.2
LPB-SD-103	6.0	6.3	6.7	6.3	6.3	6.0	7.0	7.0	7.0	6.0	4.7	4.7	6.2
MENSA	6.0	6.0	6.7	6.7	7.0	6.3	7.0	7.0	7.0	6.0	4.0	4.7	6.2
MRSI-PR15	5.7	6.0	6.3	6.3	6.7	6.7	7.0	7.0	7.0	6.0	4.3	5.0	6.2
PST-2BDT	5.7	6.0	6.3	6.3	7.0	7.0	7.0	7.0	7.0	6.0	4.7	4.7	6.2
PST-2EGAD	6.3	5.7	6.0	6.0	7.0	7.0	7.0	7.0	7.0	6.3	4.7	4.7	6.2
SHIELD (02BS4)	6.0	6.0	6.0	6.0	6.7	6.7	6.7	6.7	7.0	7.0	4.3	5.0	6.2
SR 4650	6.0	5.7	6.7	6.7	6.7	6.7	7.0	6.7	6.7	6.0	4.7	5.0	6.2
BAR LP 6164	5.7	5.7	6.0	6.0	7.0	7.0	7.0	7.0	7.0	6.0	4.0	5.0	6.1
BAR LP 6233	5.3	5.7	6.3	6.0	7.0	7.0	7.0	7.0	7.0	6.0	4.0	4.7	6.1
DLFPS-236/3538	5.7	5.7	6.7	6.7	6.7	6.3	6.7	6.7	6.7	6.3	4.3	4.7	6.1
DLFPS-236/3553	6.0	5.7	6.0	6.0	6.7	6.7	7.0	7.0	7.0	6.3	4.3	4.7	6.1
HATRICK (BSP-17)	6.0	5.7	6.3	6.3	6.3	6.3	7.0	7.0	6.7	5.7	4.3	5.0	6.1
NEXUS GT (SNX)	5.7	5.3	6.3	6.3	6.7	6.3	7.0	7.0	7.0	6.0	5.0	5.0	6.1
PPG-PR 385	5.3	5.7	6.3	6.0	6.7	6.7	7.0	6.7	7.0	6.3	4.7	4.7	6.1
PR-5-16	6.0	6.0	6.3	6.3	6.3	6.0	7.0	7.0	7.0	6.3	4.7	4.7	6.1
SAGUARO	6.0	5.7	6.3	6.3	6.7	6.3	7.0	7.0	7.0	6.3	4.3	4.7	6.1
ASP0116EXT	5.7	5.7	6.0	6.0	6.7	6.7	6.7	6.7	6.7	6.0	4.7	5.0	6.0
BAR LP 6165	6.0	6.3	6.3	6.0	6.3	6.3	6.7	6.7	6.7	6.0	4.3	4.7	6.0
BELIZE 2 (GO-142)	5.7	5.3	6.0	6.0	6.7	6.7	6.7	6.7	6.7	6.3	4.7	5.0	6.0
CAYMAN (GO-143)	5.7	5.3	6.3	6.3	6.7	6.3	6.7	6.7	6.7	6.0	4.7	5.0	6.0
DLFPS-238/3014	5.3	6.0	6.0	6.0	6.7	6.7	6.7	6.7	6.7	6.0	4.0	5.3	6.0
JR-888	5.7	5.7	6.3	6.0	6.3	6.3	7.0	7.0	7.0	6.3	4.0	4.3	6.0

TABLE 11.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT CORVALLIS, OR 1/
2019 DATA
TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/

NAME	QUALITY RATINGS												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
LPB-SD-104	5.7	5.7	6.7	6.7	7.0	6.7	7.0	6.7	6.7	5.7	4.0	4.0	6.0
LPB-SD-105	6.0	5.7	6.0	6.0	6.3	6.3	7.0	7.0	7.0	6.0	4.3	4.0	6.0
MRS-L-PR16	5.7	5.3	6.0	6.0	6.7	6.7	6.7	6.7	6.7	6.0	4.7	5.0	6.0
SAVANT	5.7	5.7	6.3	6.3	6.7	6.0	6.7	7.0	7.0	6.3	4.0	4.3	6.0
SIGNET	5.7	5.3	6.0	6.0	6.3	6.3	7.0	7.0	7.0	6.3	4.0	4.7	6.0
APR2612	5.7	5.7	5.7	5.7	6.7	6.7	7.0	6.7	6.3	5.7	4.3	4.7	5.9
APR2616	5.3	5.3	5.7	5.7	6.7	6.7	6.7	6.7	6.7	6.3	4.3	5.0	5.9
BAR LP 6117	5.3	5.3	6.3	6.3	6.7	6.7	6.7	6.7	6.3	5.7	4.0	4.7	5.9
BAR LP 6131	5.3	5.7	6.0	6.0	7.0	7.0	7.0	6.3	6.3	5.3	4.0	4.3	5.9
BAR LP 6159	5.3	5.7	6.3	6.0	6.7	6.7	6.7	6.7	6.7	6.0	4.0	4.3	5.9
GREEN SUPREME+ (AMP-R1)	5.3	5.3	6.0	6.0	6.7	6.7	6.7	6.7	6.7	6.0	4.3	4.7	5.9
ALLSTAR III	5.3	5.7	6.0	6.0	6.3	5.7	6.3	6.3	6.3	6.0	4.7	5.0	5.8
BRIGHTSTAR SLT	5.0	5.3	6.0	6.0	6.3	6.3	6.7	6.7	6.7	5.7	4.0	4.3	5.8
EVOLVE	5.0	5.7	6.0	6.0	6.3	6.3	6.7	6.7	6.7	5.7	4.0	5.0	5.8
PST-2PDA	5.7	5.7	6.0	6.0	6.3	6.3	6.3	6.3	6.3	6.0	4.0	4.3	5.8
APR3060	5.0	5.3	5.3	5.3	6.3	6.3	6.7	6.7	6.7	5.7	4.0	4.7	5.7
GO-141	5.0	5.0	5.7	5.7	6.0	6.3	6.7	6.7	6.7	5.7	4.3	5.0	5.7
BAR LP 6158	5.0	5.0	5.7	5.7	6.3	6.3	6.3	6.3	6.3	6.3	4.0	4.3	5.6
BAR LP 6162	5.0	5.3	6.0	6.0	6.0	6.0	6.0	5.7	6.0	6.0	4.0	5.0	5.6
LINN	5.0	5.0	5.0	4.7	5.7	6.0	6.0	5.7	5.7	5.3	4.0	4.7	5.2
LSD VALUE	0.9	2.5	1.2	1.0	1.1	1.1	0.8	0.8	0.8	0.7	0.8	1.2	0.5
C.V. (%)	7.7	10.6	7.8	7.6	6.3	7.0	5.5	6.1	5.9	6.7	9.4	8.7	4.4

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

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

TABLE 12.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT BLACKSBURG, VA 1/
2019 DATA

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

NAME	MAY	QUALITY RATINGS				MEAN	QUALITY PRE TRAFFIC	PERCENT	PERCENT	QUALITY MIDTRAFFIC	PERCENT	PERCENT	QUALITY POST TRAFFIC	PERCENT	PERCENT	QUALITY 2 WEEKS POST TRAFFIC	PERCENT	PERCENT	QUALITY 2 WEEKS POST TRAFFIC
		GREEN COVER PRE TRAFFIC	BARE GROUND PRE TRAFFIC	GREEN COVER POST TRAFFIC	BARE GROUND POST TRAFFIC			GREEN COVER POST TRAFFIC	BARE GROUND POST TRAFFIC		GREEN COVER POST TRAFFIC	BARE GROUND POST TRAFFIC							
DLFPS-236/3542	8.3	8.7	6.0	7.3	7.6	7.3	96.0	3.3	7.0	91.0	8.3	7.0	94.3	5.0	7.0				
XCELERATOR	7.7	8.7	7.0	7.3	7.7	7.3	99.0	0.0	7.0	97.7	1.7	7.0	97.7	1.7	7.0				
BAR LP 6165	8.3	9.0	5.3	5.7	7.1	6.0	99.0	0.0	6.0	97.7	1.7	6.7	97.7	1.7	6.7				
BELIZE 2 (GO-142)	7.0	6.7	5.7	6.7	6.5	6.7	96.0	3.3	6.7	92.7	6.7	6.7	96.0	3.3	6.7				
ALLSTAR FORE (DLFPS-236/3541)	8.0	7.7	6.3	6.7	7.2	6.7	92.7	6.7	6.7	91.0	8.3	6.3	94.3	5.0	6.7				
SUPERSTAR GL (PPG-PR 420)	8.7	8.3	6.7	6.3	7.5	6.3	99.0	0.0	6.3	97.7	1.7	6.7	94.7	5.0	6.7				
PPG-PR 423	7.3	9.0	6.3	7.0	7.4	7.0	96.0	3.3	7.0	92.7	6.7	6.7	96.0	3.3	6.7				
APR3060	8.3	7.7	6.0	6.3	7.1	6.3	96.0	3.3	6.3	92.7	6.7	6.3	96.0	3.3	6.3				
BAR LP 6164	7.7	8.3	5.3	6.0	6.8	6.0	96.0	3.3	6.0	92.7	6.7	6.3	94.7	5.0	6.3				
CPN	8.3	8.3	6.7	6.0	7.3	6.0	99.0	0.0	6.3	99.0	0.0	6.3	99.0	0.0	6.3				
DLFPS-236/3538	8.0	8.7	7.0	6.3	7.5	6.3	99.0	0.0	6.3	99.0	0.0	6.3	99.0	0.0	6.3				
DLFPS-236/3547	7.3	8.7	7.0	6.3	7.3	6.3	97.7	1.7	6.3	94.3	5.0	6.3	96.0	3.3	6.3				
DLFPS-236/3548	7.7	8.0	5.7	6.7	7.0	6.7	94.7	5.0	6.7	88.0	11.7	6.3	93.0	6.7	6.3				
GRAY WOLF (PST-2GAL)	8.0	8.0	6.7	6.3	7.3	6.3	96.0	3.3	6.3	92.7	6.7	6.3	96.0	3.3	6.3				
HOMERUN LS (PPG-PR 419)	8.7	8.7	7.0	6.3	7.7	6.3	99.0	0.0	6.3	96.0	3.3	6.3	94.7	5.0	6.3				
INTENSE	7.0	9.0	7.0	7.0	7.5	7.0	97.7	1.7	6.7	94.3	5.0	6.7	96.0	3.3	6.3				
JR-197	6.7	9.0	7.0	6.0	7.2	6.0	99.0	0.0	6.0	97.7	1.7	6.3	97.7	1.7	6.3				
OVERDRIVE 5G	7.7	8.7	6.0	6.0	7.1	6.0	99.0	0.0	6.0	97.7	1.7	6.3	97.7	1.7	6.3				
PPG-PR 367	8.0	8.3	6.3	6.0	7.2	6.3	96.0	3.3	6.3	92.7	6.7	6.3	96.0	3.3	6.3				
PPG-PR 371	8.3	8.3	7.0	6.3	7.5	6.3	96.0	3.3	6.3	92.7	6.7	6.3	94.7	5.0	6.3				
PPG-PR 385	7.7	8.7	7.0	6.7	7.5	6.7	97.7	1.7	6.7	94.3	5.0	6.7	96.0	3.3	6.3				
STELLAR 4GL (PPG-PR 424)	8.7	8.0	7.3	6.3	7.6	6.3	99.0	0.0	6.3	97.7	1.7	6.3	94.7	5.0	6.3				
PR-6-15	8.0	8.0	6.0	6.0	7.0	6.0	99.0	0.0	6.3	99.0	0.0	6.3	99.0	0.0	6.3				
PST-2GTD	8.0	8.3	6.3	6.3	7.3	6.3	96.0	3.3	6.3	92.7	6.7	6.3	96.0	3.3	6.3				
SLUGGER 3GL (PPG-PR 343)	8.0	8.7	7.3	6.0	7.5	6.0	99.0	0.0	6.0	99.0	0.0	6.3	99.0	0.0	6.3				
021	7.0	7.7	6.7	5.7	6.8	5.7	96.0	3.3	5.7	92.7	6.7	6.0	96.0	3.3	6.0				
023	8.0	8.0	7.0	6.3	7.3	6.3	94.7	5.0	6.0	88.0	11.7	6.0	93.0	6.7	6.0				
02BS1	8.0	8.0	7.0	6.0	7.3	6.0	96.0	3.3	6.0	91.3	8.3	6.0	94.7	5.0	6.0				
APPLE 3GL (PPG-PR 339)	8.0	7.0	5.7	6.0	6.7	6.0	96.0	3.3	6.0	92.7	6.7	6.0	94.7	5.0	6.0				
APR2616	8.0	8.3	7.0	5.7	7.3	5.7	96.0	3.3	5.7	92.7	6.7	6.0	96.0	3.3	6.0				
ASP0116EXT	8.0	8.0	6.0	6.0	7.0	6.0	96.0	3.3	6.0	92.7	6.7	6.0	94.7	5.0	6.0				
BAR LP 6117	7.0	7.3	5.3	5.7	6.3	5.7	96.0	3.3	6.0	92.7	6.7	6.0	96.0	3.3	6.0				
BAR LP 6131	7.7	7.3	6.7	6.0	6.9	6.0	96.0	3.3	6.0	91.3	8.3	6.0	93.0	6.7	6.0				
BAR LP 6158	8.3	8.7	5.0	5.7	6.9	5.7	93.0	6.7	5.7	83.3	16.7	6.0	90.0	10.0	6.0				
BAR LP 6162	6.7	8.0	5.7	5.7	6.5	5.7	96.0	3.3	5.7	92.7	6.7	6.0	96.0	3.3	6.0				
BAR LP 6233	8.0	9.0	6.3	6.3	7.4	6.3	93.0	6.7	6.0	86.3	13.3	6.0	93.0	6.7	6.0				
DLFPS-236/3550	7.3	8.0	6.7	6.0	7.0	6.0	96.0	3.3	6.0	92.7	6.7	6.0	94.7	5.0	6.0				
FIESTA CINCO (DLFPS-236/3554)	7.7	8.0	6.0	5.7	6.8	5.7	93.0	6.7	5.7	84.7	15.0	6.0	93.0	6.7	6.0				
DLFPS-238/3014	7.3	7.0	5.0	5.3	6.2	5.3	91.7	8.3	5.3	83.3	16.7	6.0	90.0	10.0	6.0				
EVOLVE	8.0	7.3	7.0	6.0	7.1	6.0	94.7	5.0	6.3	88.0	11.7	6.0	93.0	6.7	6.0				
FASTBALL 3GL (PPG-PR 329)	7.0	6.7	6.3	6.0	6.5	6.0	94.7	5.0	6.0	88.0	11.7	6.0	93.0	6.7	6.0				
FURLONG (LTP-FCB)	7.7	8.7	6.3	6.3	7.3	6.3	97.7	1.7	6.0	92.7	6.7	6.0	96.0	3.3	6.0				
GO-141	7.0	8.3	6.0	5.7	6.8	5.7	99.0	0.0	5.7	97.7	1.7	6.0	97.7	1.7	6.0				
MRSI-PR16	8.0	7.7	5.7	6.0	6.8	6.0	96.0	3.3	6.0	92.7	6.7	6.0	96.0	3.3	6.0				
NEXUS GT (SNX)	7.3	7.3	5.7	5.7	6.5	5.7	96.0	3.3	6.0	92.7	6.7	6.0	96.0	3.3	6.0				
PHARAOH	7.3	8.3	6.3	6.0	7.0	6.0	91.3	8.3	6.0	83.0	16.7	6.0	89.7	10.0	6.0				
PL2	8.0	7.0	6.3	6.0	6.8	6.0	96.0	3.3	5.7	91.0	8.3	6.0	94.3	5.0	6.0				

TABLE 12.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT BLACKSBURG, VA 1/
2019 DATA

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

NAME	MAY	QUALITY RATINGS				QUALITY PRE TRAFFIC	PERCENT GREEN COVER PRE	PERCENT BARE GROUND PRE	QUALITY MIDTRAFFIC	PERCENT GREEN COVER POST	PERCENT BARE GROUND POST	QUALITY POST TRAFFIC	PERCENT GREEN COVER 2 WEEKS POST	PERCENT BARE GROUND 2 WEEKS POST	QUALITY 2 WEEKS POST TRAFFIC
		JUN	JUL	AUG	MEAN		TRAFFIC	TRAFFIC		TRAFFIC	TRAFFIC		TRAFFIC	TRAFFIC	
PPG-PR 421	7.7	8.3	6.7	6.0	7.2	6.0	96.0	3.3	6.0	92.7	6.7	6.0	96.0	3.3	6.0
PPG-PR 422	8.0	9.0	6.3	6.0	7.3	6.0	99.0	0.0	6.0	99.0	0.0	6.0	99.0	0.0	6.0
PR-5-16	8.0	8.7	7.0	6.0	7.4	6.0	96.0	3.3	6.0	92.7	6.7	6.0	96.0	3.3	6.0
PST-2BDT	7.7	7.3	5.3	5.7	6.5	5.7	94.7	5.0	5.7	88.0	11.7	6.0	93.0	6.7	6.0
UMPOUA	7.0	9.0	6.7	6.0	7.2	6.0	94.7	5.0	6.0	88.0	11.7	6.0	93.0	6.7	6.0
ALLOY (RRT)	7.7	8.7	6.7	5.3	7.1	5.7	93.0	6.7	5.7	86.3	13.3	5.7	93.0	6.7	5.7
CAYMAN (GO-143)	7.3	6.3	6.0	5.3	6.3	5.3	93.0	6.7	5.3	86.3	13.3	5.7	93.0	6.7	5.7
DLFPS-236/3540	7.3	7.0	6.0	5.3	6.4	5.3	91.3	8.3	5.3	84.7	15.0	5.7	89.7	10.0	5.7
SR 4700 (DLFPS-236/3543)	7.3	8.3	5.7	5.7	6.8	5.7	92.7	6.7	5.7	91.0	8.3	5.7	94.3	5.0	5.7
DLFPS-236/3545	8.0	8.0	7.0	5.7	7.2	5.7	93.0	6.7	6.0	86.3	13.3	5.7	93.0	6.7	5.7
DLFPS-236/3556	7.7	8.3	6.3	6.0	7.1	6.0	94.3	5.0	6.0	89.3	10.0	6.0	92.7	6.7	5.7
GRAND SLAM GLD	8.3	8.0	6.7	5.7	7.2	5.7	96.0	3.3	5.7	91.3	8.3	5.7	93.0	6.7	5.7
GRAY HAWK (PST-2FIND)	8.0	6.7	5.7	6.0	6.6	6.0	94.7	5.0	5.7	88.0	11.7	5.7	93.0	6.7	5.7
PEPPER II (RAD-PR 103)	8.3	8.0	4.0	4.7	6.3	5.0	94.7	5.0	5.0	89.7	10.0	5.7	93.0	6.7	5.7
PPG-PR 372	8.3	9.0	7.0	5.7	7.5	5.7	96.0	3.3	5.7	92.7	6.7	5.7	96.0	3.3	5.7
PST-2EGAD	7.3	8.0	4.7	5.3	6.3	5.3	93.0	6.7	5.3	86.3	13.3	5.7	93.0	6.7	5.7
PST-2MAY	8.0	7.7	5.3	5.7	6.7	5.7	93.0	6.7	5.7	86.3	13.3	5.7	91.7	8.3	5.7
SEABISCUIT	7.0	9.0	6.0	6.0	7.0	6.0	90.0	10.0	5.7	78.3	21.7	5.7	88.3	11.7	5.7
ASP0218 (A-6D)	8.3	7.0	6.0	5.3	6.7	5.3	99.0	0.0	5.7	99.0	0.0	5.7	99.0	0.0	5.3
CS-6	7.7	7.0	5.7	5.7	6.5	5.7	94.3	5.0	5.7	89.3	10.0	5.3	92.7	6.7	5.3
DLFPS-236/3544	8.0	8.0	6.7	5.3	7.0	5.3	93.0	6.7	5.3	86.3	13.3	5.3	93.0	6.7	5.3
DLFPS-236/3552	8.0	7.7	6.3	5.0	6.8	5.0	91.3	8.3	5.0	83.0	16.7	5.3	89.7	10.0	5.3
DLFPS-236/3553	8.0	8.0	6.3	5.3	6.9	5.3	90.0	10.0	5.3	80.0	20.0	5.3	90.0	10.0	5.3
FIREBALL (BWH)	5.7	6.0	4.0	5.3	5.3	5.3	92.7	6.7	5.3	87.7	11.7	5.3	89.7	10.0	5.3
GREEN SUPREME+ (AMP-R1)	6.7	6.7	5.0	4.7	5.8	4.7	93.0	6.7	4.7	86.3	13.3	5.3	93.0	6.7	5.3
JR-123	7.3	7.0	6.3	5.7	6.6	5.7	86.7	13.3	5.3	76.7	23.3	5.3	85.0	15.0	5.3
JR-747	6.7	7.0	6.0	5.3	6.3	5.3	89.7	10.0	5.3	84.7	15.0	5.3	89.7	10.0	5.3
LPB-SD-101	6.0	7.0	5.0	5.3	5.8	5.3	93.0	6.7	5.0	81.7	18.3	5.0	85.0	15.0	5.3
MAN O'WAR	6.7	7.3	6.0	5.7	6.4	5.7	90.0	10.0	5.7	78.3	21.7	5.3	86.7	13.3	5.3
NP-2	7.0	6.7	6.3	5.0	6.3	5.3	93.0	6.7	5.3	86.3	13.3	5.3	93.0	6.7	5.3
PPG-PR 370	8.0	8.7	5.7	4.7	6.8	4.7	96.0	3.3	4.7	92.7	6.7	5.3	94.7	5.0	5.3
PST-2A2	8.0	8.3	5.3	4.7	6.6	4.7	93.0	6.7	5.0	86.3	13.3	5.3	93.0	6.7	5.3
PST-2FOXY	8.3	7.7	6.7	5.3	7.0	5.3	91.7	8.3	5.3	81.7	18.3	5.3	90.0	10.0	5.3
PST-2PDA	8.0	8.0	5.0	5.3	6.6	5.3	91.3	8.3	5.3	83.0	16.7	5.3	89.7	10.0	5.3
RAD-PR 112	6.7	7.0	4.7	4.7	5.8	4.7	93.0	6.7	4.7	86.3	13.3	5.3	93.0	6.7	5.3
SHIELD (02BS4)	8.0	7.0	6.3	5.3	6.7	5.3	90.0	10.0	5.3	76.7	23.3	5.3	86.7	13.3	5.3
SPIKE GLS (UF3)	7.7	8.0	7.0	5.7	7.1	5.7	94.3	5.0	5.7	89.3	10.0	5.7	92.7	6.7	5.3
TEE-ME-UP (BSP-25)	7.0	7.0	5.7	5.0	6.2	5.0	93.0	6.7	5.0	84.7	15.0	5.3	91.3	8.3	5.3
ALLSTAR III	6.0	6.7	4.3	4.7	5.4	4.7	88.0	11.7	4.7	79.7	20.0	5.0	84.7	15.0	5.0
ASP0117 (A-PR15)	7.3	7.3	6.3	5.0	6.5	5.0	90.0	10.0	5.0	80.0	20.0	5.0	90.0	10.0	5.0
ASP0118GL (A-4G)	6.7	7.3	6.3	5.0	6.3	5.0	91.3	8.3	5.0	83.0	16.7	5.0	89.7	10.0	5.0
BAR LP 6159	7.3	8.0	4.7	4.0	6.0	4.0	91.3	8.3	4.0	81.7	18.3	5.0	86.7	13.3	5.0
JR-888	6.3	6.7	4.7	5.0	5.7	5.0	90.0	10.0	4.7	76.7	23.3	5.0	85.0	15.0	5.0
LPB-SD-103	6.0	7.0	4.3	5.3	5.7	5.3	86.7	13.3	5.0	78.3	21.7	5.0	86.7	13.3	5.0
MRSL-PR15	7.3	7.3	6.7	5.0	6.6	5.0	88.0	11.7	5.0	81.3	18.3	5.0	86.3	13.3	5.0
NP-3	7.7	7.0	6.0	4.7	6.3	4.7	90.0	10.0	4.7	80.0	20.0	5.0	90.0	10.0	5.0
PPG-PR 360	7.3	9.0	6.7	5.0	7.0	5.0	88.0	11.7	5.0	81.3	18.3	5.0	86.3	13.3	5.0

TABLE 12.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT BLACKSBURG, VA 1/
2019 DATA

NAME	QUALITY RATINGS					TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/					PERCENT GREEN COVER	PERCENT BARE GROUND	PERCENT GREEN COVER	PERCENT BARE GROUND	PERCENT GREEN COVER	PERCENT BARE GROUND	QUALITY
	MAY	JUN	JUL	AUG	MEAN	QUALITY PRE TRAFFIC	PERCENT GREEN COVER PRE TRAFFIC	PERCENT BARE GROUND PRE TRAFFIC	QUALITY MIDTRAFFIC	PERCENT GREEN COVER POST TRAFFIC	PERCENT BARE GROUND POST TRAFFIC	QUALITY POST TRAFFIC	PERCENT GREEN COVER 2 WEEKS POST TRAFFIC	PERCENT BARE GROUND 2 WEEKS POST TRAFFIC	QUALITY 2 WEEKS POST TRAFFIC		
SIGNET	8.0	8.0	6.3	5.0	6.8	5.0	91.3	8.3	5.0	83.0	16.7	5.0	89.7	10.0	5.0		
SILVER SPORT (PST-2CRP)	8.0	7.7	6.7	5.0	6.8	5.0	90.0	10.0	5.0	80.0	20.0	5.0	90.0	10.0	5.0		
SLIDER LS (PPG-PR 241)	8.0	8.7	6.0	5.0	6.9	5.0	91.3	8.3	5.0	83.0	16.7	5.0	89.7	10.0	5.0		
SR 4650	8.0	7.0	5.7	4.3	6.3	4.3	91.3	8.3	4.3	83.3	16.7	5.0	86.7	13.3	5.0		
02BS2	8.0	6.7	6.3	4.7	6.4	4.7	88.3	11.7	4.7	78.3	21.7	4.7	88.3	11.7	4.7		
APR2612	7.0	6.0	5.7	4.7	5.8	4.7	88.0	11.7	4.7	81.3	18.3	4.7	86.3	13.3	4.7		
DLFPS-236/3546	7.7	7.0	6.3	4.3	6.3	4.3	88.3	11.7	4.3	78.3	21.7	4.7	88.3	11.7	4.7		
HATRICK (BSP-17)	6.0	6.7	5.7	4.7	5.8	4.7	80.0	20.0	4.7	73.3	26.7	5.0	81.7	18.3	4.7		
KARMA	8.7	8.3	5.0	4.3	6.6	4.3	88.0	11.7	4.3	80.0	20.0	4.7	83.3	16.7	4.7		
LPB-SD-102	5.0	5.7	4.7	4.7	5.0	4.7	85.0	15.0	4.7	75.0	25.0	4.7	83.3	16.7	4.7		
LPB-SD-104	5.0	5.7	4.3	4.7	4.9	4.7	88.0	11.7	4.7	81.3	18.3	4.7	84.7	15.0	4.7		
PARADOX GLR (PPG-PR 331)	7.3	7.7	6.0	4.7	6.4	4.7	89.7	10.0	4.7	83.0	16.7	4.7	88.0	11.7	4.7		
PARAGON 2 GLR (FP2)	7.7	7.7	6.3	4.7	6.6	4.7	88.3	11.7	4.7	78.3	21.7	4.7	86.7	13.3	4.7		
SAGUARO	5.7	6.3	5.3	4.3	5.4	4.3	89.7	10.0	4.3	83.0	16.7	4.7	88.0	11.7	4.7		
LPB-SD-105	4.7	5.0	4.7	4.3	4.7	4.3	81.7	18.3	4.3	72.3	27.7	4.3	78.3	21.7	4.3		
MENSA	5.0	5.7	4.0	4.7	4.8	4.7	88.3	11.7	4.3	76.7	23.3	4.3	85.0	15.0	4.3		
BRIGHTSTAR SLT	6.0	6.7	4.3	3.3	5.1	3.3	85.0	15.0	3.3	71.7	28.3	4.0	81.7	18.3	4.0		
DERBY XTREME	8.0	7.3	6.0	4.0	6.3	4.0	83.3	16.7	4.0	73.3	26.7	4.0	80.0	20.0	4.0		
SAVANT	5.0	5.3	4.3	4.0	4.7	4.0	78.3	21.7	4.0	68.3	31.7	4.0	76.7	23.3	4.0		
LINN	4.0	5.3	2.7	2.3	3.6	2.3	65.0	35.0	2.3	55.0	45.0	3.0	58.3	41.7	3.0		
LSD VALUE	1.9	1.9	3.2	2.6	1.3	2.7	12.2	13.0	2.6	23.7	24.8	2.3	14.2	15.0	2.2		
C.V. (%)	13.8	13.5	20.9	19.8	11.1	20.1	6.5	97.0	19.8	11.9	84.7	17.2	7.6	90.0	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 13. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT MADISON, WI 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/						MEAN
	MAY	JUN	JUL	AUG	SEP	OCT	
DLFPS-236/3556	3.7	6.0	5.3	6.0	6.0	6.0	5.5
PPG-PR 423	3.7	5.0	4.7	6.0	5.7	5.3	5.1
STELLAR 4GL (PPG-PR 424)	4.0	5.0	4.7	6.0	5.3	5.3	5.1
DLFPS-236/3545	4.0	5.3	4.7	5.7	5.7	4.7	5.0
PST-2A2	3.7	5.0	5.3	5.3	5.0	5.7	5.0
DLFPS-236/3538	3.0	5.0	5.0	5.7	5.0	6.0	4.9
FIESTA CINCO (DLFPS-236/3554)	3.7	5.7	4.7	5.7	5.7	4.3	4.9
NP-3	4.0	5.3	4.3	5.0	5.3	5.3	4.9
PL2	4.0	5.7	4.3	5.7	5.7	4.0	4.9
PST-2GTD	3.7	4.3	4.7	6.0	5.3	5.3	4.9
BAR LP 6233	3.3	5.3	5.0	6.0	5.7	3.7	4.8
JR-197	3.0	4.3	4.7	5.3	5.0	5.7	4.7
OVERDRIVE 5G	3.0	5.0	4.3	5.7	5.3	5.0	4.7
PPG-PR 421	3.0	5.3	4.3	5.3	4.7	5.3	4.7
SAGUARO	3.7	4.0	5.0	5.3	5.0	5.3	4.7
023	3.3	4.7	3.7	5.3	5.0	5.7	4.6
ASP0117 (A-PR15)	3.0	5.0	4.3	5.0	4.7	5.3	4.6
PPG-PR 360	3.0	4.7	4.3	6.0	5.0	4.3	4.6
PPG-PR 367	3.0	3.7	4.0	5.7	5.7	5.7	4.6
SAVANT	4.0	4.7	4.3	5.0	4.7	5.0	4.6
SILVER SPORT (PST-2CRP)	3.7	4.7	4.0	5.3	5.0	5.0	4.6
ASP0218 (A-6D)	3.0	4.7	4.0	5.7	4.7	5.0	4.5
INTENSE	3.7	4.3	4.7	5.7	4.0	4.7	4.5
PR-5-16	3.0	4.7	4.0	5.7	5.3	4.3	4.5
CS-6	3.7	4.3	3.7	5.3	5.0	4.3	4.4
DLFPS-238/3014	2.7	4.0	4.0	5.7	5.0	5.3	4.4
EVOLVE	3.0	4.7	3.7	5.0	5.3	4.7	4.4
KARMA	2.7	4.3	5.0	5.0	4.7	5.0	4.4
NP-2	3.0	4.7	4.0	5.3	5.0	4.7	4.4
XCELERATOR	3.3	4.7	4.0	4.7	4.7	5.0	4.4
021	3.7	4.0	3.3	5.0	4.7	5.0	4.3
02BS2	3.0	4.3	3.7	5.0	5.0	5.0	4.3
ALLSTAR III	4.0	5.0	3.7	5.7	4.3	3.3	4.3
BAR LP 6131	2.7	4.3	4.0	5.3	5.3	4.3	4.3
BAR LP 6165	2.7	3.7	4.3	5.7	4.7	5.0	4.3
DLFPS-236/3544	2.7	4.7	3.7	5.0	4.7	5.0	4.3
DLFPS-236/3547	2.3	4.3	4.0	5.0	4.7	5.7	4.3
DLFPS-236/3548	2.7	4.0	4.0	5.3	4.7	5.0	4.3
DLFPS-236/3553	2.7	4.0	4.0	5.0	4.3	6.0	4.3
HOMERUN LS (PPG-PR 419)	2.7	4.3	4.7	4.7	4.3	5.0	4.3
PPG-PR 370	3.0	4.3	3.7	5.0	5.0	5.0	4.3
PPG-PR 422	3.7	3.7	3.3	5.3	5.0	5.0	4.3
PR-6-15	3.0	4.3	4.0	5.0	4.7	5.0	4.3
PST-2BDT	2.7	3.7	4.0	5.3	5.0	5.0	4.3
SLIDER LS (PPG-PR 241)	3.3	3.7	3.3	5.3	4.7	5.3	4.3
APR2612	3.3	3.7	3.7	5.0	5.0	4.3	4.2
FASTBALL 3GL (PPG-PR 329)	2.7	4.3	3.3	5.3	5.0	4.7	4.2

TABLE 13. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
(CONT'D) GROWN UNDER TRAFFIC STRESS AT MADISON, WI 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/						
	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
LPB-SD-103	2.7	4.0	3.3	5.7	5.0	4.7	4.2
PST-2FOXY	3.3	4.0	3.7	5.0	5.0	4.0	4.2
PST-2PDA	2.7	4.0	3.7	5.3	5.0	4.3	4.2
SHIELD (02BS4)	2.7	4.3	3.7	5.3	4.7	4.3	4.2
ALLOY (RRT)	3.0	4.3	3.7	4.7	4.0	4.7	4.1
APPLE 3GL (PPG-PR 339)	2.3	3.7	3.3	5.3	4.7	5.0	4.1
APR2616	3.3	3.7	4.0	5.0	4.3	4.3	4.1
BELIZE 2 (GO-142)	2.7	4.3	4.0	5.7	4.0	4.0	4.1
DERBY XTREME	4.0	3.7	3.3	4.7	4.7	4.0	4.1
SR 4700 (DLFPS-236/3543)	2.7	3.7	3.7	4.7	4.7	5.3	4.1
MAN O'WAR	3.3	3.7	4.0	4.7	4.3	4.7	4.1
MRSL-PR16	2.3	4.0	3.7	5.0	4.7	5.0	4.1
PARADOX GLR (PPG-PR 331)	3.0	3.7	3.7	5.0	4.7	4.3	4.1
PHARAOH	2.7	3.7	4.0	5.3	4.7	4.3	4.1
PPG-PR 385	3.0	4.0	4.7	5.0	4.3	3.7	4.1
SIGNET	2.3	4.3	4.3	4.7	4.3	4.7	4.1
BAR LP 6164	2.7	4.0	3.7	4.7	4.3	4.7	4.0
CPN	3.0	3.7	3.3	5.0	4.3	4.7	4.0
ALLSTAR FORE (DLFPS-236/3541)	2.7	4.3	3.7	4.0	4.7	4.7	4.0
DLFPS-236/3552	2.7	3.7	4.3	5.0	4.3	4.0	4.0
FURLONG (LTP-FCB)	2.7	3.7	3.7	4.3	4.3	5.3	4.0
02BS1	2.7	3.7	3.3	4.3	5.0	4.7	3.9
APR3060	2.3	3.3	3.7	5.3	4.3	4.7	3.9
BAR LP 6158	2.3	3.7	3.0	5.0	4.3	5.0	3.9
BRIGHTSTAR SLT	2.7	3.3	3.7	5.3	4.0	4.3	3.9
DLFPS-236/3546	2.7	4.0	3.3	4.7	4.7	4.3	3.9
GO-141	2.3	4.3	4.0	5.0	4.0	4.0	3.9
GRAY HAWK (PST-2FIND)	2.7	3.7	3.3	5.0	4.7	4.0	3.9
HATRICK (BSP-17)	2.7	4.3	4.0	4.3	4.0	4.3	3.9
MRSL-PR15	3.0	4.3	3.3	4.3	4.0	4.7	3.9
PARAGON 2 GLR (FP2)	2.3	4.0	3.3	4.7	4.3	4.7	3.9
PPG-PR 371	2.3	3.3	3.7	5.0	4.7	4.3	3.9
SUPERSTAR GL (PPG-PR 420)	2.7	3.7	3.7	5.0	4.3	4.3	3.9
SEABISCUIT	2.7	3.3	4.0	4.3	4.3	4.7	3.9
TEE-ME-UP (BSP-25)	2.7	3.7	3.3	4.3	4.3	5.0	3.9
UMPQUA	3.0	3.7	3.0	5.0	4.7	4.3	3.9
DLFPS-236/3540	2.7	2.7	3.0	5.0	5.3	4.0	3.8
JR-888	2.7	3.7	3.7	4.7	4.0	4.3	3.8
MENSA	2.7	3.3	3.7	5.0	4.0	4.0	3.8
PST-2EGAD	2.7	3.3	3.3	5.0	4.0	4.7	3.8
SPIKE GLS (UF3)	2.7	3.3	3.7	4.3	4.0	5.0	3.8
SR 4650	3.0	3.3	3.3	4.0	4.3	5.0	3.8
BAR LP 6159	2.3	3.3	3.3	5.0	4.0	4.0	3.7
PPG-PR 372	2.0	3.3	3.0	4.7	4.3	4.7	3.7
PST-2MAY	2.3	3.3	3.7	4.3	4.0	4.7	3.7
FIREBALL (BWH)	2.0	3.3	3.0	4.3	4.0	5.0	3.6
LPB-SD-101	2.3	2.3	3.3	4.7	4.3	4.3	3.6

TABLE 13. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
(CONT'D) GROWN UNDER TRAFFIC STRESS AT MADISON, WI 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/						MEAN
	MAY	JUN	JUL	AUG	SEP	OCT	
PEPPER II (RAD-PR 103)	2.3	3.0	3.3	4.7	4.0	4.0	3.6
ASP0118GL (A-4G)	2.3	3.3	3.3	4.7	4.0	3.3	3.5
DLFPS-236/3542	2.7	3.3	3.0	4.0	3.7	4.3	3.5
BAR LP 6117	2.0	2.3	3.3	4.3	4.3	4.0	3.4
DLFPS-236/3550	2.7	3.7	3.0	4.3	3.7	3.3	3.4
GRAND SLAM GLD	2.0	3.0	3.0	4.3	4.0	4.0	3.4
LPB-SD-105	2.0	2.7	3.3	4.0	4.0	4.7	3.4
NEXUS GT (SNX)	2.3	3.0	3.0	4.7	3.3	4.0	3.4
SLUGGER 3GL (PPG-PR 343)	2.3	3.3	3.3	4.0	3.3	4.0	3.4
GRAY WOLF (PST-2GAL)	2.0	3.0	2.7	4.0	4.0	4.3	3.3
ASP0116EXT	2.0	3.0	2.7	4.0	3.7	3.7	3.2
BAR LP 6162	2.3	2.7	3.0	3.7	4.0	3.7	3.2
LPB-SD-102	2.3	2.7	3.0	4.3	3.3	3.7	3.2
RAD-PR 112	1.7	2.3	3.3	4.0	4.0	4.0	3.2
LPB-SD-104	1.7	2.7	2.7	3.7	3.3	4.0	3.0
CAYMAN (GO-143)	2.0	2.7	2.7	3.7	3.0	3.3	2.9
GREEN SUPREME+ (AMP-R1)	1.7	2.3	2.0	3.7	3.7	4.0	2.9
JR-123	2.3	2.7	2.3	3.7	3.7	3.0	2.9
JR-747	1.7	2.0	2.3	3.3	3.0	3.7	2.7
LINN	1.7	2.3	2.0	4.0	2.7	3.0	2.6
LSD VALUE	4.5	2.5	2.7	3.8	2.4	2.1	1.8
C.V. (%)	35.7	28.0	26.0	20.3	20.0	19.1	18.3

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

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

TABLE 14. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER DROUGHT STRESS AT LOGAN, UT 1/
2019 DATA

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

NAME	SPRING GREENUP	APR	MAY	QUALITY RATINGS						MEAN
				JUN	JUL	AUG	SEP	OCT		
RAD-PR 112	5.7	8.0	6.7	6.0	6.0	5.0	6.3	7.3	6.5	
PARAGON 2 GLR (FP2)	5.3	6.0	6.3	6.0	5.7	6.0	7.0	7.3	6.3	
STELLAR 4GL (PPG-PR 424)	5.0	6.0	6.3	6.0	5.7	6.0	6.7	7.3	6.3	
FIREBALL (BWH)	5.3	6.3	7.0	6.0	5.7	5.7	6.0	7.0	6.2	
HATRICK (BSP-17)	5.3	6.3	6.0	6.0	5.7	5.3	6.7	7.7	6.2	
NEXUS GT (SNX)	4.7	6.3	6.7	6.0	5.3	5.0	6.7	7.3	6.2	
PPG-PR 371	4.0	5.3	6.7	6.0	5.7	5.0	6.7	7.3	6.1	
SUPERSTAR GL (PPG-PR 420)	5.0	6.7	6.7	5.7	6.3	5.0	5.7	6.7	6.1	
APPLE 3GL (PPG-PR 339)	4.3	5.3	6.3	6.0	5.7	5.3	6.3	6.7	6.0	
APR2616	4.7	6.3	6.0	6.0	5.7	5.0	6.0	6.7	6.0	
ASPO116EXT	5.0	6.0	6.7	6.7	5.3	5.0	6.3	6.3	6.0	
ASPO218 (A-6D)	4.7	6.0	6.3	6.3	5.7	5.0	5.7	7.0	6.0	
ALLSTAR FORE (DLFPS-236/3541)	5.0	6.3	6.7	5.7	5.7	5.0	6.3	6.3	6.0	
DLFPS-236/3550	4.0	5.0	6.3	6.0	5.7	5.0	6.3	7.3	6.0	
GRAND SLAM GLD	4.0	6.0	6.7	6.3	6.3	4.7	5.7	6.7	6.0	
GRAY WOLF (PST-2GAL)	4.7	5.7	6.0	6.0	5.7	5.0	6.3	7.0	6.0	
HOMERUN LS (PPG-PR 419)	4.7	5.3	6.0	6.3	6.0	5.7	6.3	6.3	6.0	
PEPPER II (RAD-PR 103)	5.0	6.3	7.0	5.7	5.3	4.3	6.0	7.0	6.0	
PPG-PR 422	4.3	6.3	6.0	6.0	5.0	5.0	6.0	7.3	6.0	
PST-2A2	4.0	5.3	6.0	6.0	6.0	5.7	6.0	7.3	6.0	
SHIELD (02BS4)	5.0	6.3	5.7	5.7	5.3	5.0	6.3	7.3	6.0	
SILVER SPORT (PST-2CRP)	5.3	6.3	6.3	5.3	5.0	5.3	6.7	7.3	6.0	
SPIKE GLS (UF3)	4.7	5.3	6.0	6.0	5.7	5.0	6.3	7.3	6.0	
CPN	4.7	5.7	6.3	5.7	5.7	5.0	5.7	7.0	5.9	
DLFPS-236/3538	4.3	5.7	6.0	6.0	6.0	5.0	6.0	6.7	5.9	
FURLONG (LTP-FCB)	4.7	5.7	6.7	6.3	6.0	5.0	5.7	6.0	5.9	
GREEN SUPREME+ (AMP-R1)	5.7	7.0	6.0	5.7	5.3	4.3	5.7	7.3	5.9	
PARADOX GLR (PPG-PR 331)	4.0	5.3	6.0	5.7	5.3	5.3	6.3	7.0	5.9	
PPG-PR 367	5.3	7.0	6.0	5.3	4.7	4.7	6.3	7.0	5.9	
PPG-PR 370	4.7	5.7	6.3	5.7	6.0	5.0	5.7	6.7	5.9	
PPG-PR 423	4.7	5.7	6.3	6.3	6.0	4.7	5.3	6.7	5.9	
PST-2BDT	4.7	5.7	6.3	5.3	5.3	5.0	6.3	7.0	5.9	
SLUGGER 3GL (PPG-PR 343)	4.0	5.0	5.7	6.0	5.3	5.0	6.7	7.3	5.9	
TEE-ME-UP (BSP-25)	5.0	5.7	6.0	7.0	5.7	4.3	5.7	7.0	5.9	
021	5.0	6.3	5.7	5.7	5.7	5.0	5.7	6.3	5.8	
CAYMAN (GO-143)	5.0	7.0	6.0	5.0	5.5	5.0	5.5	6.5	5.8	
SR 4700 (DLFPS-236/3543)	4.7	5.7	6.3	6.3	5.3	5.3	5.3	6.3	5.8	
DLFPS-236/3544	4.7	5.0	6.0	6.0	5.7	5.0	6.0	6.7	5.8	
DLFPS-236/3553	5.0	6.0	6.0	6.0	5.3	4.7	5.7	6.7	5.8	
MRS�-PR16	5.7	6.7	6.7	6.0	5.0	4.7	5.0	6.3	5.8	
NP-2	4.7	5.0	5.7	5.7	6.0	5.3	5.7	7.0	5.8	
OVERDRIVE 5G	4.3	5.7	5.7	5.7	5.7	5.0	5.7	7.0	5.8	
PPG-PR 360	4.7	5.0	6.0	6.0	5.7	4.7	6.3	6.7	5.8	
PST-2GTD	5.3	6.0	6.0	5.3	5.7	4.7	5.7	7.0	5.8	
PST-2PDA	4.7	6.0	5.7	5.0	4.7	5.7	6.3	7.3	5.8	
SIGNET	4.0	4.7	5.7	6.0	5.7	5.0	6.7	7.0	5.8	
ALLOY (RRT)	4.0	5.0	6.3	5.7	5.3	5.0	6.0	6.3	5.7	

TABLE 14.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER DROUGHT STRESS AT LOGAN, UT 1/
2019 DATA

NAME	TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/								
	SPRING GREENUP	APR	MAY	QUALITY RATINGS				OCT	MEAN
				JUN	JUL	AUG	SEP		
APR2612	4.7	5.7	6.3	6.0	5.3	4.7	5.7	6.0	5.7
ASP0118GL (A-4G)	5.0	6.3	6.3	6.0	5.7	4.0	5.3	6.3	5.7
DERBY XTREME	4.3	5.7	6.3	5.7	4.7	4.7	6.0	6.7	5.7
DLFPS-236/3540	5.3	6.0	5.3	5.7	6.0	4.7	6.0	6.0	5.7
DLFPS-236/3548	4.0	5.3	6.0	5.7	5.0	5.0	6.0	7.0	5.7
FASTBALL 3GL (PPG-PR 329)	4.7	5.3	6.7	6.0	5.0	4.7	6.0	6.0	5.7
JR-123	5.0	5.7	6.3	5.3	5.3	5.0	6.0	6.3	5.7
PR-5-16	4.7	5.0	6.0	6.3	5.3	5.0	6.0	6.0	5.7
PST-2MAY	4.0	5.0	6.3	5.0	5.3	5.3	6.3	6.7	5.7
SR 4650	4.7	6.0	6.3	6.0	5.3	4.7	5.3	6.3	5.7
BAR LP 6159	5.3	6.7	6.0	4.7	4.7	5.0	5.7	6.7	5.6
GO-141	5.7	5.7	5.3	5.0	5.3	5.0	6.3	6.7	5.6
INTENSE	4.7	5.0	5.7	5.7	5.3	5.0	5.7	6.7	5.6
JR-197	4.3	5.0	6.3	5.7	5.3	4.7	6.0	6.3	5.6
MRSI-PR15	5.0	6.3	5.7	5.3	5.3	4.3	5.3	6.7	5.6
NP-3	4.3	5.0	5.7	5.3	5.0	5.3	6.3	6.7	5.6
PPG-PR 372	3.7	4.3	5.7	6.3	6.3	4.7	5.3	6.7	5.6
PPG-PR 385	5.0	5.7	5.3	6.0	5.3	4.0	6.0	7.0	5.6
PPG-PR 421	4.7	4.3	6.3	6.0	5.7	4.7	5.7	6.7	5.6
PR-6-15	4.3	4.3	6.3	6.0	5.3	5.0	5.3	7.0	5.6
PST-2FOXY	4.3	5.3	6.3	5.3	5.0	4.7	6.0	6.3	5.6
SAVANT	3.3	4.3	4.7	5.7	5.7	5.7	6.3	6.7	5.6
SEABISCUIT	4.7	5.7	5.7	4.7	4.7	5.3	6.7	6.7	5.6
02BS1	5.0	6.0	6.0	5.3	4.3	4.3	5.7	7.0	5.5
02BS2	4.7	6.0	6.0	5.7	5.0	4.3	5.3	6.3	5.5
ALLSTAR III	4.7	5.3	6.3	5.3	4.7	4.7	5.3	7.0	5.5
APR3060	4.3	5.3	5.7	6.0	5.7	4.3	5.7	6.0	5.5
ASP0117 (A-PR15)	4.0	4.3	5.7	6.0	5.7	4.7	6.0	6.0	5.5
BRIGHTSTAR SLT	5.0	5.7	5.7	5.3	4.7	5.0	5.7	6.3	5.5
DLFPS-236/3542	4.3	4.7	5.7	5.3	5.7	4.7	5.7	7.0	5.5
DLFPS-236/3545	4.0	4.7	5.7	5.7	5.3	4.7	5.7	7.0	5.5
DLFPS-236/3547	3.7	4.3	5.7	6.0	6.0	4.7	5.3	6.7	5.5
GRAY HAWK (PST-2FIND)	4.7	5.0	5.7	5.3	5.7	4.7	6.0	6.0	5.5
MAN O'WAR	4.3	5.0	5.0	5.7	5.7	5.0	6.0	6.3	5.5
PHARAOH	4.7	6.0	6.0	5.7	5.3	4.3	5.3	6.0	5.5
UMPQUA	4.7	6.0	5.7	5.3	5.3	4.7	5.3	6.3	5.5
023	5.0	4.7	5.3	5.7	5.0	5.0	6.0	6.3	5.4
BAR LP 6164	5.7	5.0	5.7	5.0	5.7	5.0	5.3	6.3	5.4
BELIZE 2 (GO-142)	4.7	5.7	6.3	5.7	4.7	4.3	5.3	6.0	5.4
CS-6	5.0	5.7	5.7	5.0	4.7	4.3	6.0	6.7	5.4
DLFPS-236/3546	4.3	4.7	6.0	5.7	5.3	4.7	5.3	6.3	5.4
DLFPS-236/3556	5.0	4.7	5.7	5.3	5.7	4.7	5.3	6.3	5.4
KARMA	3.3	5.0	6.0	5.7	5.0	4.7	5.7	6.0	5.4
PST-2EGAD	5.3	5.7	5.0	4.7	5.3	4.7	5.7	6.7	5.4
SAGUARO	4.0	5.3	4.7	6.0	5.0	5.0	5.7	6.0	5.4
SLIDER LS (PPG-PR 241)	4.0	4.0	5.7	5.7	5.3	4.7	5.7	6.7	5.4
XCELERATOR	4.3	5.3	5.3	5.7	5.0	5.0	5.3	6.0	5.4

TABLE 14.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN UNDER DROUGHT STRESS AT LOGAN, UT 1/
2019 DATA

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

NAME	SPRING GREENUP	APR	MAY	QUALITY RATINGS			AUG	SEP	OCT	MEAN
				JUN	JUL					
BAR LP 6117	4.7	5.3	5.3	4.7	4.3	4.3	6.0	7.0	5.3	
DLFPS-236/3552	5.0	5.3	6.0	5.0	4.7	4.7	5.0	6.3	5.3	
LPB-SD-102	3.3	3.3	4.3	4.7	5.7	5.7	6.7	7.0	5.3	
LPB-SD-103	3.7	4.7	5.3	5.0	5.0	5.0	5.7	6.7	5.3	
PL2	4.7	5.7	5.3	5.0	4.0	5.0	6.0	6.0	5.3	
BAR LP 6158	5.3	6.0	5.0	5.0	4.7	4.0	5.3	6.7	5.2	
BAR LP 6233	4.7	5.0	5.0	5.0	4.7	4.7	5.7	6.3	5.2	
DLFPS-238/3014	4.7	5.0	4.3	4.3	5.7	5.0	5.7	6.3	5.2	
JR-888	4.0	3.7	4.3	5.7	5.0	5.3	6.0	6.7	5.2	
JR-747	3.3	3.3	4.3	5.0	6.0	5.0	6.0	6.3	5.1	
BAR LP 6131	4.7	4.7	5.3	4.7	4.7	4.3	5.3	6.3	5.0	
BAR LP 6162	5.0	5.3	5.0	4.3	5.0	4.0	5.0	6.3	5.0	
FIESTA CINCO (DLFPS-236/3554)	3.3	3.7	5.0	5.3	5.3	4.7	5.3	6.0	5.0	
EVOLVE	4.3	5.0	5.0	4.7	4.0	4.0	5.7	6.7	5.0	
MENSA	3.3	3.3	3.7	4.7	5.3	5.0	6.0	6.3	4.9	
LPB-SD-101	2.7	3.0	3.7	4.3	5.3	4.3	5.7	6.7	4.7	
LPB-SD-105	2.0	2.3	2.7	4.0	5.0	5.3	5.3	6.3	4.4	
BAR LP 6165	3.0	3.0	4.0	3.7	3.3	3.7	5.0	6.7	4.2	
LINN	4.0	2.7	2.3	3.0	4.0	4.0	6.3	6.7	4.1	
LPB-SD-104	2.3	2.3	2.3	4.0	4.3	4.0	5.0	6.0	4.0	
LSD VALUE	1.3	1.7	1.2	1.1	1.8	2.9	2.4	2.7	0.8	
C.V. (%)	15.6	18.6	13.2	11.1	13.8	14.8	12.0	10.5	7.7	

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 15.

GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2019 DATA

NAME	GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/										MEAN
	CA7	CT1	IA1	IL1	KS1	MN1	NE1	NJ2	OR1	UT1	
FIREBALL (BWH)	8.7	9.0	6.7	8.0	7.0	8.0	7.0	8.0	7.3	8.7	7.8
ASPO116EXT	7.7	9.0	6.3	7.7	6.7	7.7	7.0	9.0	7.0	9.0	7.7
RAD-PR 112	7.0	8.3	7.7	7.3	7.0	7.7	6.0	8.7	7.7	8.3	7.6
HATRICK (BSP-17)	8.3	9.0	7.0	6.0	7.0	7.0	7.0	7.3	8.0	8.7	7.5
TEE-ME-UP (BSP-25)	6.0	9.0	6.7	8.7	7.0	6.7	6.7	8.0	7.3	8.3	7.4
SLUGGER 3GL (PPG-PR 343)	7.3	7.0	7.3	8.0	7.0	6.7	6.0	8.3	7.3	8.0	7.3
CS-6	7.0	7.7	6.0	8.0	7.0	6.3	6.3	8.3	7.3	8.3	7.2
DLFPS-236/3544	6.7	7.0	7.3	7.7	7.0	7.3	5.7	8.3	7.3	8.0	7.2
INTENSE	7.3	7.3	7.3	8.0	7.0	6.3	6.0	8.0	7.3	7.7	7.2
PL2	6.7	7.7	7.7	8.0	6.7	7.0	6.0	7.3	7.0	8.3	7.2
PR-6-15	6.7	6.7	7.3	7.7	7.0	6.7	6.0	8.7	7.3	7.7	7.2
ASPO218 (A-6D)	6.7	8.0	6.0	7.3	7.0	6.3	6.0	8.3	7.0	8.7	7.1
FASTBALL 3GL (PPG-PR 329)	7.0	7.0	7.3	8.0	7.0	6.7	6.0	7.3	7.3	7.7	7.1
NP-2	7.7	7.0	7.0	8.3	7.0	6.7	5.7	7.7	7.0	7.3	7.1
ASPO118GL (A-4G)	6.3	8.0	6.7	7.7	7.0	6.0	6.0	7.3	7.3	8.7	7.1
DLFPS-236/3546	7.0	7.0	7.0	7.7	7.0	7.0	6.0	8.0	7.0	7.3	7.1
DLFPS-236/3547	6.3	6.0	8.0	7.7	7.0	6.7	6.0	8.3	7.3	7.7	7.1
PPG-PR 421	6.3	8.0	7.0	7.7	7.0	6.3	6.0	7.0	7.0	8.7	7.1
PPG-PR 422	6.3	7.3	7.0	8.0	7.0	6.3	6.0	8.0	7.7	7.3	7.1
XCELERATOR	6.3	7.3	7.3	8.3	7.0	5.3	5.7	8.3	7.3	8.0	7.1
MRSI-PR16	7.7	7.0	6.3	5.7	7.0	6.7	6.3	8.7	7.0	8.3	7.1
APR2616	6.0	7.3	7.0	7.7	7.0	6.0	6.3	7.7	7.3	8.0	7.0
PPG-PR 423	6.0	7.3	6.7	8.0	7.0	6.0	6.0	8.3	7.0	8.0	7.0
GRAY WOLF (PST-2GAL)	6.7	7.0	7.3	8.0	7.0	5.3	6.0	7.7	7.0	8.3	7.0
NP-3	6.7	7.3	7.0	8.3	7.0	6.3	5.7	7.7	7.0	7.3	7.0
MRSI-PR15	5.7	8.0	7.0	5.7	6.7	6.7	6.7	8.3	7.0	8.3	7.0
PARAGON 2 GLR (FP2)	7.7	7.0	6.3	5.3	6.7	7.7	6.0	8.7	7.3	7.3	7.0
PPG-PR 367	6.7	7.3	6.7	7.3	7.0	7.0	5.7	7.7	7.3	7.3	7.0
GREEN SUPREME+ (AMP-R1)	6.7	8.0	6.0	5.7	7.0	6.7	6.3	7.3	7.7	8.3	7.0
NEXUS GT (SNX)	7.3	8.0	6.7	5.7	7.0	6.7	6.0	7.3	7.0	8.0	7.0
PST-2BDT	6.3	7.7	7.3	5.7	6.7	6.7	6.0	8.3	7.0	8.0	7.0
SILVER SPORT (PST-2CRP)	6.0	7.7	8.0	5.3	7.0	7.0	6.0	7.7	7.0	8.0	7.0
DERBY XTREME	7.0	7.7	6.7	7.7	6.7	5.3	6.0	7.3	7.0	8.0	6.9
PPG-PR 371	6.3	6.7	6.7	7.0	7.0	6.7	5.7	8.3	7.3	7.7	6.9
O2BS1	6.7	7.0	6.3	5.3	7.0	7.0	6.3	8.0	7.7	8.0	6.9
DLFPS-236/3542	6.3	7.3	7.0	5.7	7.0	6.3	6.0	7.7	7.7	8.3	6.9
OVERDRIVE 5G	6.7	7.0	7.0	7.7	7.0	5.3	5.3	8.3	7.0	7.7	6.9
PEPPER II (RAD-PR 103)	5.7	8.7	7.3	5.7	6.7	5.7	6.3	7.0	7.3	8.7	6.9
PST-2FOXY	7.0	7.0	7.3	5.3	7.0	6.3	6.0	7.7	7.7	7.7	6.9
APPLE 3GL (PPG-PR 339)	6.3	7.3	6.3	7.7	7.0	5.7	6.0	7.7	7.3	7.3	6.9
DLFPS-236/3540	6.3	7.0	6.0	7.7	7.0	6.3	6.0	7.3	7.3	7.7	6.9
DLFPS-236/3545	7.0	7.0	6.7	5.7	7.0	6.7	6.0	8.0	7.0	7.7	6.9
PHARAOH	6.3	7.7	7.3	5.3	6.7	6.3	6.0	8.3	7.3	7.3	6.9
PPG-PR 360	6.7	7.7	6.3	5.7	7.0	6.3	6.0	8.0	7.7	7.3	6.9
PPG-PR 372	6.0	6.7	6.3	7.7	7.0	5.7	6.0	8.0	7.7	7.7	6.9

TABLE 15.
(CONT'D)

GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2019 DATA

NAME	GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/										MEAN
	CA7	CT1	IA1	IL1	KS1	MN1	NE1	NJ2	OR1	UT1	
APR2612	7.0	8.0	7.0	5.0	7.0	6.7	6.0	7.0	7.0	8.0	6.9
FURLONG (LTP-FCB)	7.0	7.0	7.7	5.3	7.0	7.0	5.0	7.7	7.0	8.0	6.9
JR-197	6.3	7.0	7.0	5.7	7.0	7.0	6.0	7.7	7.7	7.3	6.9
PST-2A2	5.7	6.3	7.0	8.0	7.0	6.0	5.7	8.0	7.7	7.3	6.9
ASP0117 (A-PR15)	7.3	7.3	6.0	5.3	7.0	6.3	6.0	8.0	7.0	8.0	6.8
DLFPS-236/3550	6.7	7.0	7.3	7.3	7.0	5.3	6.0	6.3	7.3	8.0	6.8
SR 4650	6.7	6.0	6.3	7.7	7.0	7.0	6.0	7.0	7.0	7.7	6.8
CAYMAN (GO-143)	6.0	7.7	6.7	5.7	7.0	6.3	6.7	7.0	7.0	8.0	6.8
FIESTA CINCO (DLFPS-236/3554)	6.0	7.0	7.3	7.3	7.0	5.7	6.0	6.7	7.0	8.0	6.8
HOMERUN LS (PPG-PR 419)	6.7	6.7	7.0	7.3	7.0	6.0	6.0	6.7	7.0	7.3	6.8
DLFPS-236/3556	5.7	7.0	7.0	8.0	7.0	6.3	5.3	7.3	7.0	6.7	6.7
PPG-PR 370	6.3	7.3	6.7	5.3	7.0	6.0	6.3	7.3	7.0	8.0	6.7
DLFPS-236/3548	7.0	7.3	7.0	7.0	7.0	5.3	6.0	6.7	7.0	7.0	6.7
SUPERSTAR GL (PPG-PR 420)	5.7	7.3	7.0	5.0	7.0	6.3	6.0	7.3	7.3	8.0	6.7
GO-141	5.7	7.7	6.7	5.7	7.0	5.3	6.0	7.3	7.3	8.0	6.7
ALLSTAR III	6.0	6.7	6.0	5.7	7.0	6.3	6.0	8.0	7.0	8.0	6.7
LPB-SD-103	5.3	7.0	6.7	8.7	6.3	5.0	6.0	7.3	7.0	7.3	6.7
MENSA	4.7	7.0	6.3	8.7	6.3	6.0	5.7	8.3	6.7	7.0	6.7
SPIKE GLS (UF3)	6.7	6.3	7.3	5.7	6.7	6.0	6.0	7.7	7.0	7.3	6.7
STELLAR 4GL (PPG-PR 424)	6.0	6.3	7.3	5.3	7.0	6.3	5.7	7.7	7.0	8.0	6.7
SHIELD (02BS4)	5.3	7.3	7.3	7.7	6.7	5.0	5.3	7.7	7.0	7.0	6.6
ALLSTAR FORE (DLFPS-236/3541)	6.0	7.7	7.3	3.3	7.0	6.0	6.0	8.0	7.3	7.7	6.6
ALLOY (RRT)	6.3	7.3	7.0	3.3	7.0	5.7	6.0	8.3	7.0	8.0	6.6
DLFPS-236/3552	6.0	7.7	7.3	5.3	7.0	5.7	6.0	6.3	7.0	7.7	6.6
PARADOX GLR (PPG-PR 331)	5.7	6.7	7.0	7.3	7.0	5.3	5.7	6.7	7.0	7.7	6.6
DLFPS-236/3553	6.0	6.7	6.7	5.3	6.7	7.0	6.0	6.7	7.0	7.7	6.6
JR-123	7.0	6.7	5.7	5.7	7.0	6.0	6.0	7.3	7.0	7.3	6.6
PST-2PDA	5.3	6.3	7.0	8.3	7.0	5.3	5.3	6.3	7.0	7.7	6.6
SR 4700 (DLFPS-236/3543)	6.7	7.3	8.0	5.3	7.0	5.0	5.7	6.3	7.0	7.3	6.6
APR3060	5.7	7.3	6.3	5.7	7.0	5.7	6.0	6.3	7.0	8.3	6.5
GRAY HAWK (PST-2FIND)	6.0	6.3	7.0	5.3	7.0	5.7	6.0	7.3	7.0	7.7	6.5
UMPQUA	5.7	7.0	7.3	5.3	7.0	6.7	6.0	5.7	7.3	7.3	6.5
PST-2EGAD	5.7	7.3	6.7	5.7	6.7	5.7	6.0	6.3	7.3	7.7	6.5
CPN	5.7	6.7	6.3	5.0	7.0	6.7	5.7	7.3	7.0	7.3	6.5
SAGUARO	5.3	6.3	6.0	8.0	6.3	5.0	5.7	7.0	7.0	7.7	6.4
SLIDER LS (PPG-PR 241)	6.3	7.7	6.3	3.3	7.0	6.0	6.0	7.0	7.0	7.7	6.4
PST-2MAY	6.3	6.7	7.3	5.0	.	6.0	6.0	6.0	7.0	7.3	6.4
LPB-SD-104	5.3	7.7	5.7	5.7	6.3	5.7	6.0	7.0	7.0	7.7	6.4
PST-2GTD	5.7	7.7	7.7	2.7	7.0	5.7	6.0	7.0	7.0	7.7	6.4
PR-5-16	6.7	6.7	7.3	5.0	7.0	4.7	5.7	6.3	7.0	7.3	6.4
BAR LP 6162	4.0	8.0	6.3	7.7	6.7	2.7	6.0	7.7	6.7	8.0	6.4
02BS2	6.3	6.0	6.7	3.3	7.0	6.7	5.7	7.3	7.0	7.3	6.3
SEABISCUIT	6.0	6.0	7.3	3.7	7.0	6.0	6.0	7.0	7.0	7.3	6.3
SIGNET	5.3	6.0	7.3	5.0	6.7	5.7	5.3	7.0	7.3	7.7	6.3
JR-747	5.3	7.0	5.3	7.7	6.0	5.0	5.7	7.0	7.0	7.3	6.3
KARMA	5.3	6.7	6.3	7.3	.	6.0	6.0	5.0	7.0	7.3	6.3

TABLE 15.
(CONT'D)

GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2019 DATA

NAME	GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/										MEAN
	CA7	CT1	IA1	IL1	KS1	MN1	NE1	NJ2	OR1	UT1	
MAN O'WAR	6.3	6.7	7.3	1.0	7.0	7.7	5.7	7.7	7.0	7.0	6.3
BAR LP 6164	4.7	7.0	7.3	7.3	6.7	4.7	5.7	5.3	7.0	7.3	6.3
LPB-SD-102	4.0	6.3	7.0	7.3	6.7	5.0	5.7	6.7	7.0	7.3	6.3
BAR LP 6117	4.7	6.7	6.0	7.3	6.7	4.7	6.0	6.3	7.0	7.3	6.3
DLFPS-238/3014	5.7	6.0	7.3	7.0	6.3	4.7	5.7	6.7	7.0	6.3	6.3
EVOLVE	5.0	6.7	5.7	5.0	6.3	6.0	5.7	7.3	7.0	7.3	6.2
PPG-PR 385	5.3	6.7	6.7	5.3	6.7	5.3	5.0	7.0	7.0	7.0	6.2
BELIZE 2 (GO-142)	5.0	8.0	6.0	3.3	7.0	5.3	6.0	6.7	7.0	7.7	6.2
GRAND SLAM GLD	6.3	6.7	7.0	1.0	7.0	5.7	6.0	7.0	7.0	8.0	6.2
021	5.7	7.0	6.3	3.0	6.7	6.0	5.3	6.7	7.0	7.7	6.1
BAR LP 6159	5.0	7.0	7.3	5.3	6.3	4.7	5.7	5.3	7.0	7.7	6.1
023	5.3	6.7	6.7	3.0	6.7	6.0	5.3	7.0	7.0	7.0	6.1
LPB-SD-105	5.0	6.3	6.3	5.3	6.3	5.0	5.7	6.3	7.0	7.3	6.1
BAR LP 6158	4.3	6.3	7.0	7.7	6.3	4.3	5.7	4.7	7.0	7.0	6.0
DLFPS-236/3538	5.0	7.0	7.7	3.3	7.0	4.7	5.7	5.7	7.0	7.3	6.0
BRIGHTSTAR SLT	5.0	5.7	6.7	5.0	6.7	4.7	5.3	5.0	7.0	7.3	5.8
LPB-SD-101	4.3	6.3	6.3	8.3	6.3	4.0	5.3	3.3	7.0	7.0	5.8
SAVANT	3.7	6.3	6.3	7.7	6.3	4.7	4.7	4.7	7.0	7.0	5.8
BAR LP 6131	4.7	6.0	6.3	7.0	6.3	4.3	4.7	4.3	7.0	6.7	5.7
BAR LP 6233	3.7	6.3	7.0	5.0	6.3	4.0	4.7	3.7	7.0	6.3	5.4
JR-888	4.0	6.0	6.0	3.3	6.3	4.3	4.7	4.3	7.0	6.3	5.2
BAR LP 6165	2.3	5.0	6.7	6.7	6.0	2.7	4.0	2.3	7.0	6.3	4.9
LINN	2.7	2.0	5.0	2.3	6.0	1.5	5.0	1.0	6.0	4.0	3.6
LSD VALUE	1.4	1.3	1.0	4.4	0.5	1.2	0.6	1.5	0.5	0.9	0.5
C.V. (%)	14.4	11.6	9.5	44.4	4.7	12.7	6.8	13.0	4.7	7.7	16.2

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 16.

 SPRING GREENUP RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
 2019 DATA

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

NAME	CT1	IL1	NE1	UT1	MEAN	NAME	CT1	IL1	NE1	UT1	MEAN
FASTBALL 3GL (PPG-PR 329)	7.0	8.0	5.3	5.7	6.5	PPG-PR 360	7.0	5.0	4.7	6.0	5.7
PARADOX GLR (PPG-PR 331)	7.0	7.7	4.7	6.3	6.4	PST-2BDT	7.3	5.3	4.3	5.7	5.7
PPG-PR 367	7.7	7.7	4.0	6.3	6.4	ALLSTAR III	7.3	5.3	4.0	6.0	5.7
PPG-PR 423	7.3	8.0	5.0	5.3	6.4	RAD-PR 112	5.3	7.0	3.7	6.7	5.7
ASPO218 (A-6D)	6.7	8.3	4.3	6.0	6.3	TEE-ME-UP (BSP-25)	5.3	8.0	3.3	6.0	5.7
PST-2PDA	7.3	7.7	4.3	6.0	6.3	02BS1	7.0	5.0	4.7	5.7	5.6
DLFPS-236/3544	7.0	7.7	4.0	6.3	6.3	KARMA	6.0	7.7	4.0	4.7	5.6
PPG-PR 421	7.0	7.7	5.0	5.3	6.3	PST-2FOXY	7.0	5.7	4.0	5.7	5.6
PPG-PR 422	6.7	7.0	5.3	6.0	6.3	DLFPS-236/3545	7.3	5.0	5.0	5.0	5.6
NP-2	7.0	7.7	4.7	5.3	6.2	PST-2MAY	7.0	6.0	4.0	5.3	5.6
OVERDRIVE 5G	6.3	8.0	4.7	5.7	6.2	STELLAR 4GL (PPG-PR 424)	7.3	5.3	4.7	5.0	5.6
SHIELD (02BS4)	6.7	8.0	4.3	5.7	6.2	UMPQUA	6.3	5.7	4.3	6.0	5.6
BAR LP 6164	7.3	7.7	4.3	5.3	6.2	GO-141	6.7	5.3	4.3	5.7	5.5
GRAY WOLF (PST-2GAL)	7.0	7.3	4.3	6.0	6.2	JR-197	6.7	5.3	4.3	5.7	5.5
INTENSE	7.0	7.3	4.3	6.0	6.2	PPG-PR 370	6.3	5.3	4.7	5.7	5.5
FIREBALL (BWH)	6.7	8.0	3.7	6.0	6.1	ASP0117 (A-PR15)	7.0	5.3	4.3	5.3	5.5
PL2	6.7	7.7	4.3	5.7	6.1	LPB-SD-102	5.0	7.3	5.3	4.3	5.5
DLFPS-236/3540	7.7	7.3	5.0	4.3	6.1	02BS2	7.3	3.3	4.3	6.7	5.4
XCELERATOR	7.3	8.3	4.3	4.3	6.1	CAYMAN (GO-143)	6.0	5.0	4.7	6.0	5.4
LPB-SD-103	6.7	7.3	4.3	5.7	6.0	DLFPS-238/3014	5.7	6.7	4.0	5.3	5.4
NP-3	7.7	7.3	4.0	5.0	6.0	JR-123	6.7	5.7	3.7	5.7	5.4
PPG-PR 372	7.3	7.3	4.3	5.0	6.0	LPB-SD-101	5.3	7.3	4.3	4.7	5.4
SLUGGER 3GL (PPG-PR 343)	7.3	7.7	4.0	5.0	6.0	PST-2EGAD	6.7	4.7	4.7	5.7	5.4
APPLE 3GL (PPG-PR 339)	7.0	7.3	4.3	5.3	6.0	DLFPS-236/3542	7.0	5.3	4.3	5.0	5.4
ASP0116EXT	6.0	7.3	4.3	6.3	6.0	SUPERSTAR GL (PPG-PR 420)	6.3	5.3	4.7	5.3	5.4
DLFPS-236/3556	6.7	7.3	4.0	5.7	5.9	EVOLVE	6.7	5.0	4.7	5.0	5.3
HOMERUN LS (PPG-PR 419)	6.7	7.7	4.3	5.0	5.9	PEPPER II (RAD-PR 103)	6.7	5.7	4.0	5.0	5.3
PPG-PR 371	6.7	7.0	4.7	5.3	5.9	PHARAOH	7.7	5.0	4.0	4.7	5.3
PR-6-15	6.7	7.7	4.0	5.3	5.9	BAR LP 6159	6.0	5.0	4.0	6.3	5.3
DLFPS-236/3546	7.0	7.3	4.0	5.3	5.9	BAR LP 6233	6.3	5.0	4.3	5.7	5.3
DLFPS-236/3548	6.3	8.0	4.0	5.3	5.9	DLFPS-236/3552	6.3	5.3	4.3	5.3	5.3
SAGUARO	6.3	7.3	4.7	5.3	5.9	GREEN SUPREME+ (AMP-R1)	7.3	5.0	4.0	5.0	5.3
APR2616	6.0	7.7	4.7	5.0	5.8	MENSA	5.3	7.3	4.3	4.3	5.3
DLFPS-236/3547	6.7	7.7	4.3	4.7	5.8	MRSI-PR16	6.3	5.3	4.0	5.7	5.3
DLFPS-236/3550	6.7	7.0	4.0	5.7	5.8	SILVER SPORT (PST-2CRP)	6.3	5.0	4.3	5.7	5.3
ASP0118GL (A-4G)	6.0	7.0	4.3	6.0	5.8	APR3060	6.7	5.7	4.3	4.3	5.3
BAR LP 6117	5.7	7.7	4.0	5.7	5.8	BAR LP 6131	5.7	6.7	4.3	4.3	5.3
BAR LP 6158	6.7	7.3	4.0	5.0	5.8	BRIGHTSTAR SLT	6.0	5.3	4.0	5.7	5.3
PARAGON 2 GLR (FP2)	7.0	5.7	4.3	6.0	5.8	CPN	6.0	5.3	4.7	5.0	5.3
PST-2A2	6.0	7.3	4.0	5.7	5.8	DLFPS-236/3553	5.7	5.7	4.3	5.3	5.3
SIGNET	7.3	5.3	4.7	5.7	5.8	FURLONG (LTP-FCB)	6.3	5.3	4.0	5.3	5.3
SR 4650	6.0	7.7	4.0	5.3	5.8	HATRICK (BSP-17)	6.3	5.3	3.7	5.7	5.3
FIESTA CINCO (DLFPS-236/3554)	6.0	7.3	4.3	5.3	5.8	SAVANT	5.3	7.3	4.3	4.0	5.3
CS-6	6.0	6.7	4.0	6.0	5.7	BAR LP 6162	4.7	7.3	4.0	4.7	5.2
DERBY XTREME	6.0	7.7	4.3	4.7	5.7	GRAY HAWK (PST-2FIND)	6.3	5.0	4.7	4.7	5.2

TABLE 16. SPRING GREENUP RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
(CONT'D) 2019 DATA

NAME	SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN 2/				MEAN
	CT1	IL1	NE1	UT1	
NEXUS GT (SNX)	6.0	5.0	4.0	5.7	5.2
PR-5-16	6.7	5.3	4.0	4.7	5.2
SR 4700 (DLFPS-236/3543)	6.3	5.3	4.3	4.7	5.2
BAR LP 6165	6.0	6.7	3.7	4.0	5.1
023	7.0	3.0	4.3	6.0	5.1
APR2612	6.0	5.3	4.0	5.0	5.1
JR-747	5.0	7.3	4.0	4.0	5.1
MRS�-PR15	6.3	5.3	4.0	4.7	5.1
SEABISCUIT	7.7	3.0	4.3	5.3	5.1
SPIKE GLS (UF3)	6.0	5.3	4.3	4.7	5.1
ALLOY (RRT)	6.7	3.3	4.7	5.3	5.0
PPG-PR 385	5.7	5.0	4.0	5.0	4.9
SLIDER LS (PPG-PR 241)	6.7	3.0	5.0	4.7	4.8
PST-2GTD	6.7	3.0	4.7	4.7	4.8
ALLSTAR FORE (DLFPS-236/3541)	6.0	3.0	4.0	6.0	4.8
BELIZE 2 (GO-142)	6.0	3.0	4.3	5.7	4.8
DLFPS-236/3538	6.0	3.7	4.0	5.3	4.8
JR-888	6.3	3.0	4.7	5.0	4.8
LPB-SD-104	5.0	5.7	4.3	3.7	4.7
021	6.3	2.7	4.3	5.0	4.6
LPB-SD-105	4.7	5.0	4.3	4.0	4.5
GRAND SLAM GLD	6.7	1.0	4.7	5.3	4.4
LINN	5.3	3.0	3.0	5.3	4.2
MAN O'WAR	6.0	1.0	4.0	5.0	4.0
LSD VALUE	1.3	4.3	0.8	1.4	1.2
C.V. (%)	12.2	44.4	12.1	16.8	26.9

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 17.

PERCENT LIVING GROUND COVER (SPRING) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2019 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/

NAME	MO1	VA1	MEAN	NAME	MO1	VA1	MEAN
DLFPS-236/3538	81.7	99.0	90.3	APR2612	73.3	94.3	83.8
DLFPS-236/3552	81.7	99.0	90.3	021	68.3	99.0	83.7
02BS2	80.0	99.0	89.5	BAR LP 6131	68.3	99.0	83.7
BAR LP 6117	80.0	99.0	89.5	CPN	68.3	99.0	83.7
DLFPS-238/3014	80.0	99.0	89.5	EVOLVE	68.3	99.0	83.7
FURLONG (LTP-FCB)	80.0	99.0	89.5	NEXUS GT (SNX)	68.3	99.0	83.7
NP-3	80.0	99.0	89.5	NP-2	68.3	99.0	83.7
APPLE 3GL (PPG-PR 339)	78.3	99.0	88.7	PARADOX GLR (PPG-PR 331)	68.3	99.0	83.7
BAR LP 6159	78.3	99.0	88.7	PPG-PR 423	68.3	99.0	83.7
DLFPS-236/3545	78.3	99.0	88.7	PST-2GTD	68.3	99.0	83.7
FASTBALL 3GL (PPG-PR 329)	78.3	99.0	88.7	XCELERATOR	68.3	99.0	83.7
PPG-PR 371	78.3	99.0	88.7	ALLOY (RRT)	66.7	99.0	82.8
PR-5-16	78.3	99.0	88.7	BRIGHTSTAR SLT	66.7	99.0	82.8
PST-2MAY	78.3	99.0	88.7	CAYMAN (GO-143)	66.7	99.0	82.8
SEABISCUIT	78.3	99.0	88.7	GRAND SLAM GLD	66.7	99.0	82.8
SPIKE GLS (UF3)	78.3	99.0	88.7	GRAY HAWK (PST-2FIND)	66.7	99.0	82.8
BAR LP 6164	76.7	99.0	87.8	PARAGON 2 GLR (FP2)	66.7	99.0	82.8
BAR LP 6233	76.7	99.0	87.8	02BS1	65.0	99.0	82.0
DLFPS-236/3548	76.7	99.0	87.8	ASP0117 (A-PR15)	65.0	99.0	82.0
APR3060	75.0	99.0	87.0	ASP0118GL (A-4G)	65.0	99.0	82.0
PL2	75.0	99.0	87.0	DLFPS-236/3550	65.0	99.0	82.0
PPG-PR 370	75.0	99.0	87.0	JR-888	65.0	99.0	82.0
PPG-PR 422	75.0	99.0	87.0	PPG-PR 367	65.0	99.0	82.0
BAR LP 6158	73.3	99.0	86.2	PPG-PR 372	65.0	99.0	82.0
DLFPS-236/3544	73.3	99.0	86.2	PST-2FOXY	65.0	99.0	82.0
GRAY WOLF (PST-2GAL)	73.3	99.0	86.2	BAR LP 6165	63.3	99.0	81.2
HOMERUN LS (PPG-PR 419)	73.3	99.0	86.2	DLFPS-236/3547	63.3	99.0	81.2
PEPPER II (RAD-PR 103)	73.3	99.0	86.2	JR-197	63.3	99.0	81.2
PPG-PR 421	73.3	99.0	86.2	PR-6-15	63.3	99.0	81.2
SHIELD (02BS4)	73.3	99.0	86.2	PST-2EGAD	63.3	99.0	81.2
SLUGGER 3GL (PPG-PR 343)	73.3	99.0	86.2	SIGNET	63.3	99.0	81.2
BAR LP 6162	71.7	99.0	85.3	ALLSTAR FORE (DLFPS-236/3541)	66.7	94.3	80.5
DLFPS-236/3540	71.7	99.0	85.3	FIREBALL (BWH)	68.3	92.7	80.5
DLFPS-236/3546	71.7	99.0	85.3	023	61.7	99.0	80.3
DLFPS-236/3556	71.7	99.0	85.3	APR2616	61.7	99.0	80.3
GREEN SUPREME+ (AMP-R1)	71.7	99.0	85.3	DERBY XTREME	61.7	99.0	80.3
JR-123	71.7	99.0	85.3	DLFPS-236/3553	61.7	99.0	80.3
MRS1-PR16	71.7	99.0	85.3	INTENSE	61.7	99.0	80.3
SILVER SPORT (PST-2CRP)	71.7	99.0	85.3	PHARAOH	61.7	99.0	80.3
SLIDER LS (PPG-PR 241)	71.7	99.0	85.3	CS-6	60.0	99.0	79.5
ASP0218 (A-6D)	70.0	99.0	84.5	TEE-ME-UP (BSP-25)	60.0	97.7	78.8
FIESTA CINCO (DLFPS-236/3554)	70.0	99.0	84.5	PPG-PR 360	63.3	94.3	78.8
PPG-PR 385	70.0	99.0	84.5	ALLSTAR III	58.3	99.0	78.7
PST-2BDT	70.0	99.0	84.5	DLFPS-236/3542	58.3	99.0	78.7
STELLAR 4GL (PPG-PR 424)	70.0	99.0	84.5	KARMA	61.7	94.3	78.0
SUPERSTAR GL (PPG-PR 420)	70.0	99.0	84.5	BELIZE 2 (GO-142)	56.7	99.0	77.8

TABLE 17.
(CONT'D)

PERCENT LIVING GROUND COVER (SPRING) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2019 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/			
NAME	MO1	VA1	MEAN
RAD-PR 112	56.7	99.0	77.8
UMPQUA	56.7	99.0	77.8
HATRICK (BSP-17)	66.7	87.7	77.2
MRSL-PR15	60.0	94.3	77.2
OVERDRIVE 5G	55.0	99.0	77.0
SAGUARO	55.0	99.0	77.0
ASP0116EXT	53.3	99.0	76.2
MENSA	51.7	99.0	75.3
SR 4650	51.7	99.0	75.3
GO-141	48.3	99.0	73.7
PST-2A2	46.7	99.0	72.8
SR 4700 (DLFPS-236/3543)	50.0	94.3	72.2
PST-2PDA	45.0	99.0	72.0
MAN O'WAR	43.3	99.0	71.2
JR-747	46.7	94.3	70.5
SAVANT	53.3	85.0	69.2
LPB-SD-101	35.0	99.0	67.0
LPB-SD-105	45.0	85.0	65.0
LPB-SD-103	33.3	94.3	63.8
LPB-SD-102	31.7	94.3	63.0
LINN	51.7	70.0	60.8
LPB-SD-104	20.0	92.7	56.3
LSD VALUE	20.2	6.3	10.6
C.V. (%)	19.2	4.0	11.4

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

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

TABLE 18.

PERCENT LIVING GROUND COVER (FALL) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2019 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	VA1	NAME	VA1	NAME	VA1
ASP0218 (A-6D)	99.0	PST-2GTD	89.3	DLFPS-236/3540	76.3
CPN	99.0	SR 4700 (DLFPS-236/3543)	89.3	DLFPS-236/3552	76.3
DLFPS-236/3538	99.0	BAR LP 6131	88.0	MRSL-PR15	76.3
PPG-PR 422	99.0	DLFPS-236/3550	88.0	PARADOX GLR (PPG-PR 331)	76.3
PR-6-15	99.0	FIREBALL (BWH)	88.0	PPG-PR 360	76.3
SLUGGER 3GL (PPG-PR 343)	99.0	GRAND SLAM GLD	88.0	PST-2PDA	76.3
BAR LP 6165	97.7	CS-6	86.0	SAGUARO	76.3
GO-141	97.7	DLFPS-236/3542	86.0	SIGNET	76.3
HOMERUN LS (PPG-PR 419)	97.7	DLFPS-236/3556	86.0	SLIDER LS (PPG-PR 241)	76.3
JR-197	97.7	PL2	86.0	BAR LP 6158	75.0
OVERDRIVE 5G	97.7	SPIKE GLS (UF3)	86.0	BAR LP 6159	75.0
STELLAR 4GL (PPG-PR 424)	97.7	PEPPER II (RAD-PR 103)	84.7	KARMA	75.0
XCELERATOR	97.7	023	83.0	LPB-SD-105	75.0
SUPERSTAR GL (PPG-PR 420)	96.3	BAR LP 6233	83.0	PST-2FOXY	75.0
BELIZE 2 (GO-142)	92.7	DLFPS-236/3548	83.0	SR 4650	75.0
DLFPS-236/3547	92.7	EVOLVE	83.0	LPB-SD-103	73.3
FURLONG (LTP-FCB)	92.7	FASTBALL 3GL (PPG-PR 329)	83.0	ALLSTAR III	73.0
INTENSE	92.7	GRAY HAWK (PST-2FIND)	83.0	ASP0117 (A-PR15)	70.0
PPG-PR 385	92.7	PST-2BDT	83.0	DLFPS-236/3553	70.0
02BS1	89.7	UMPQUA	83.0	HATRICK (BSP-17)	70.0
021	89.3	ALLOY (RRT)	79.7	JR-123	70.0
ALLSTAR FORE (DLFPS-236/3541)	89.3	CAYMAN (GO-143)	79.7	JR-888	70.0
APPLE 3GL (PPG-PR 339)	89.3	DLFPS-236/3544	79.7	MAN O'WAR	70.0
APR2616	89.3	DLFPS-236/3545	79.7	MENSA	70.0
APR3060	89.3	FIESTA CINCO (DLFPS-236/3554)	79.7	NP-3	70.0
ASP0116EXT	89.3	GREEN SUPREME+ (AMP-R1)	79.7	SAVANT	70.0
BAR LP 6117	89.3	JR-747	79.7	SHIELD (02BS4)	70.0
BAR LP 6162	89.3	LPB-SD-104	79.7	SILVER SPORT (PST-2CRP)	70.0
BAR LP 6164	89.3	NP-2	79.7	02BS2	66.7
GRAY WOLF (PST-2GAL)	89.3	PHARAOH	79.7	DLFPS-236/3546	66.7
MRSL-PR16	89.3	PST-2A2	79.7	LPB-SD-102	66.7
NEXUS GT (SNX)	89.3	PST-2EGAD	79.7	PARAGON 2 GLR (FP2)	66.7
PPG-PR 367	89.3	PST-2MAY	79.7	SEABISCUIT	66.7
PPG-PR 370	89.3	RAD-PR 112	79.7	BRIGHTSTAR SLT	63.3
PPG-PR 371	89.3	TEE-ME-UP (BSP-25)	79.7	DERBY XTREME	63.3
PPG-PR 372	89.3	DLFPS-238/3014	78.3	LINN	50.0
PPG-PR 421	89.3	LPB-SD-101	76.7		
PPG-PR 423	89.3	APR2612	76.3	LSD VALUE	23.6
PR-5-16	89.3	ASP0118GL (A-4G)	76.3	C.V. (%)	17.8

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 19.

RED THREAD RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2019 DATA

RED THREAD RATINGS 1-9; 9=NO DISEASE 2/

NAME	MD1	NAME	MD1	NAME	MD1
LINN	9.0	GRAY WOLF (PST-2GAL)	6.7	BAR LP 6131	6.0
MENSA	8.3	LPB-SD-103	6.7	BELIZE 2 (GO-142)	6.0
LPB-SD-105	7.7	LPB-SD-104	6.7	DLFPS-238/3014	6.0
SUPERSTAR GL (PPG-PR 420)	7.7	PARAGON 2 GLR (FP2)	6.7	INTENSE	6.0
BAR LP 6233	7.3	PPG-PR 367	6.7	MAN O'WAR	6.0
JR-747	7.3	PPG-PR 371	6.7	MRS�-PR16	6.0
PPG-PR 360	7.3	PPG-PR 372	6.7	PPG-PR 385	6.0
PPG-PR 421	7.3	PST-2BDT	6.7	PPG-PR 422	6.0
PR-5-16	7.3	PST-2MAY	6.7	UMPQUA	6.0
SAVANT	7.3	SAGUARO	6.7	023	5.7
SILVER SPORT (PST-2CRP)	7.3	SEABISCUIT	6.7	ASP0116EXT	5.7
ALLOY (RRT)	7.0	SLIDER LS (PPG-PR 241)	6.7	ASP0118GL (A-4G)	5.7
APR2616	7.0	SLUGGER 3GL (PPG-PR 343)	6.7	BAR LP 6164	5.7
ASP0218 (A-6D)	7.0	SPIKE GLS (UF3)	6.7	CPN	5.7
BAR LP 6162	7.0	SR 4700 (DLFPS-236/3543)	6.7	DLFPS-236/3544	5.7
DLFPS-236/3538	7.0	STELLAR 4GL (PPG-PR 424)	6.7	HOMERUN LS (PPG-PR 419)	5.7
DLFPS-236/3546	7.0	TEE-ME-UP (BSP-25)	6.7	MRS�-PR15	5.7
DLFPS-236/3547	7.0	XCELERATOR	6.7	NP-3	5.7
DLFPS-236/3548	7.0	021	6.3	PHARAOH	5.7
FASTBALL 3GL (PPG-PR 329)	7.0	BAR LP 6117	6.3	PPG-PR 423	5.7
Fiesta CINCO (DLFPS-236/3554)	7.0	BAR LP 6158	6.3	PST-2GTD	5.7
FURLONG (LTP-FCB)	7.0	CS-6	6.3	APR2612	5.3
JR-197	7.0	DLFPS-236/3542	6.3	APR3060	5.3
JR-888	7.0	DLFPS-236/3545	6.3	ASP0117 (A-PR15)	5.3
LPB-SD-101	7.0	DLFPS-236/3550	6.3	CAYMAN (GO-143)	5.3
LPB-SD-102	7.0	DLFPS-236/3552	6.3	EVOLVE	5.3
PEPPER II (RAD-PR 103)	7.0	DLFPS-236/3556	6.3	HATRICK (BSP-17)	5.3
PR-6-15	7.0	GREEN SUPREME+ (AMP-R1)	6.3	PST-2EGAD	5.3
SIGNET	7.0	JR-123	6.3	APPLE 3GL (PPG-PR 339)	5.0
SR 4650	7.0	KARMA	6.3	BAR LP 6159	5.0
02BS2	6.7	NP-2	6.3	BAR LP 6165	5.0
ALLSTAR FORE (DLFPS-236/3541)	6.7	PL2	6.3	NEXUS GT (SNX)	5.0
BRIGHTSTAR SLT	6.7	PPG-PR 370	6.3	OVERDRIVE 5G	5.0
DERBY XTREME	6.7	PST-2A2	6.3	PST-2PDA	5.0
DLFPS-236/3540	6.7	PST-2FOXY	6.3	PARADOX GLR (PPG-PR 331)	4.7
DLFPS-236/3553	6.7	RAD-PR 112	6.3	GRAY HAWK (PST-2FIND)	4.0
FIREBALL (BWH)	6.7	SHIELD (02BS4)	6.3		
GO-141	6.7	02BS1	6.0	LSD VALUE	1.5
GRAND SLAM GLD	6.7	ALLSTAR III	6.0	C.V. (%)	14.9

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 20.

FALL COLOR (NOVEMBER) RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2019 DATA

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

NAME	IL1	NAME	IL1	NAME	IL1
DERBY XTREME	7.0	BRIGHTSTAR SLT	6.3	DLFPS-236/3550	6.0
FURLONG (LTP-FCB)	7.0	CAYMAN (GO-143)	6.3	EVOLVE	6.0
GRAY HAWK (PST-2FIND)	7.0	DLFPS-236/3538	6.3	GO-141	6.0
GREEN SUPREME+ (AMP-R1)	7.0	DLFPS-236/3548	6.3	GRAND SLAM GLD	6.0
LPB-SD-103	7.0	DLFPS-238/3014	6.3	GRAY WOLF (PST-2GAL)	6.0
PARAGON 2 GLR (FP2)	7.0	FASTBALL 3GL (PPG-PR 329)	6.3	HOMERUN LS (PPG-PR 419)	6.0
PST-2PDA	7.0	FIESTA CINCO (DLFPS-236/3554)	6.3	INTENSE	6.0
SIGNET	7.0	JR-197	6.3	JR-123	6.0
021	6.7	LPB-SD-101	6.3	KARMA	6.0
02BS1	6.7	LPB-SD-104	6.3	MENSA	6.0
APPLE 3GL (PPG-PR 339)	6.7	MRSLS-PR16	6.3	OVERDRIVE 5G	6.0
BAR LP 6117	6.7	NP-2	6.3	PPG-PR 421	6.0
BAR LP 6233	6.7	PHARAOH	6.3	PPG-PR 422	6.0
CPN	6.7	PPG-PR 367	6.3	PST-2EGAD	6.0
CS-6	6.7	PPG-PR 371	6.3	PST-2MAY	6.0
FIREBALL (BWH)	6.7	PPG-PR 372	6.3	RAD-PR 112	6.0
HATRICK (BSP-17)	6.7	PPG-PR 423	6.3	SPIKE GLS (UF3)	6.0
LPB-SD-102	6.7	PR-5-16	6.3	SUPERSTAR GL (PPG-PR 420)	6.0
LPB-SD-105	6.7	PST-2A2	6.3	TEE-ME-UP (BSP-25)	6.0
MAN O'WAR	6.7	PST-2BDT	6.3	023	5.7
MRSLS-PR15	6.7	PST-2GTD	6.3	02BS2	5.7
NEXUS GT (SNX)	6.7	SAGUARO	6.3	APR2612	5.7
NP-3	6.7	SHIELD (02BS4)	6.3	APR2616	5.7
PARADOX GLR (PPG-PR 331)	6.7	SILVER SPORT (PST-2CRP)	6.3	APR3060	5.7
PEPPER II (RAD-PR 103)	6.7	SLIDER LS (PPG-PR 241)	6.3	BAR LP 6164	5.7
PPG-PR 370	6.7	SR 4700 (DLFPS-236/3543)	6.3	BAR LP 6165	5.7
PPG-PR 385	6.7	STELLAR 4GL (PPG-PR 424)	6.3	DLFPS-236/3545	5.7
PR-6-15	6.7	UMPQUA	6.3	DLFPS-236/3546	5.7
PST-2FOXY	6.7	XCELERATOR	6.3	DLFPS-236/3552	5.7
SAVANT	6.7	ALLOY (RRT)	6.0	DLFPS-236/3553	5.7
SEABISCUIT	6.7	ASP0117 (A-PR15)	6.0	DLFPS-236/3556	5.7
SLUGGER 3GL (PPG-PR 343)	6.7	ASP0218 (A-6D)	6.0	PL2	5.7
SR 4650	6.7	BAR LP 6131	6.0	PPG-PR 360	5.7
ALLSTAR FORE (DLFPS-236/3541)	6.3	BAR LP 6158	6.0	JR-888	5.3
ALLSTAR III	6.3	BELIZE 2 (GO-142)	6.0	JR-747	5.0
ASP0116EXT	6.3	DLFPS-236/3540	6.0	LINN	4.0
ASP0118GL (A-4G)	6.3	DLFPS-236/3542	6.0		
BAR LP 6159	6.3	DLFPS-236/3544	6.0	LSD VALUE	1.3
BAR LP 6162	6.3	DLFPS-236/3547	6.0	C.V. (%)	12.6

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.

WINTER KILL RATINGS OF PERENNIAL RYEGRASS CULTIVARS 1/
2019 DATA

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

NAME	IL1	NAME	IL1	NAME	IL1
BAR LP 6117	9.0	CAYMAN (GO-143)	6.3	FIREBALL (BWH)	4.7
BAR LP 6131	9.0	CPN	6.3	PPG-PR 372	4.7
DERBY XTREME	9.0	DLFPS-238/3014	6.3	PST-2BDT	4.7
DLFPS-236/3548	9.0	LFB-SD-102	6.3	PST-2FOXY	4.7
INTENSE	9.0	NEXUS GT (SNX)	6.3	PST-2MAY	4.7
LFB-SD-101	9.0	PPG-PR 360	6.3	TEE-ME-UP (BSP-25)	4.7
MENSA	9.0	PPG-PR 371	6.3	ALLSTAR III	4.3
PST-2A2	9.0	PPG-PR 421	6.3	BAR LP 6165	4.3
RAD-PR 112	9.0	PR-5-16	6.3	BRIGHTSTAR SLT	4.3
XCELERATOR	9.0	SIGNET	6.3	DLFPS-236/3545	4.3
APPLE 3GL (PPG-PR 339)	8.7	STELLAR 4GL (PPG-PR 424)	6.3	EVOLVE	4.3
APR2616	8.7	SUPERSTAR GL (PPG-PR 420)	6.3	HATRICK (BSP-17)	4.3
ASP0218 (A-6D)	8.7	DLFPS-236/3544	6.0	JR-197	4.3
BAR LP 6162	8.7	MRLS-PR16	6.0	APR3060	4.0
DLFPS-236/3547	8.7	PEPPER II (RAD-PR 103)	6.0	JR-123	4.0
FIESTA CINCO (DLFPS-236/3554)	8.7	PHARAOH	6.0	SILVER SPORT (PST-2CRP)	4.0
KARMA	8.3	PL2	6.0	SPIKE GLS (UF3)	4.0
NP-3	8.3	PPG-PR 370	6.0	023	3.7
PPG-PR 422	8.3	ASP0117 (A-PR15)	5.7	BELIZE 2 (GO-142)	3.7
PPG-PR 423	8.3	DLFPS-236/3553	5.7	DLFPS-236/3538	3.7
SHIELD (02BS4)	8.3	LFB-SD-104	5.7	LINN	3.7
SLUGGER 3GL (PPG-PR 343)	8.3	MRLS-PR15	5.7	PST-2GTD	3.7
ASP0118GL (A-4G)	8.0	OVERDRIVE 5G	5.7	SEABISCUIT	3.7
CS-6	8.0	PPG-PR 385	5.7	ALLSTAR FORE (DLFPS-236/3541)	3.3
HOMERUN LS (PPG-PR 419)	8.0	02BS1	5.3	GREEN SUPREME+ (AMP-R1)	3.3
LFB-SD-103	8.0	ASP0116EXT	5.3	JR-888	3.3
SAGUARO	8.0	BAR LP 6159	5.3	SLIDER LS (PPG-PR 241)	3.3
NP-2	7.7	DLFPS-236/3556	5.3	021	3.0
PARADOX GLR (PPG-PR 331)	7.7	GO-141	5.3	ALLOY (RRT)	3.0
PST-2PDA	7.3	LFB-SD-105	5.3	DLFPS-236/3542	3.0
SAVANT	7.3	PST-2EGAD	5.3	DLFPS-236/3552	3.0
DLFPS-236/3546	7.0	BAR LP 6233	5.0	GRAY HAWK (PST-2FIND)	3.0
DLFPS-236/3550	7.0	FASTBALL 3GL (PPG-PR 329)	5.0	JR-747	3.0
GRAY WOLF (PST-2GAL)	7.0	FURLONG (LTP-FCB)	5.0	02BS2	1.3
BAR LP 6158	6.7	PARAGON 2 GLR (FP2)	5.0	GRAND SLAM GLD	1.0
PPG-PR 367	6.7	SR 4650	5.0	MAN O'WAR	1.0
PR-6-15	6.7	SR 4700 (DLFPS-236/3543)	5.0		
APR2612	6.3	UMPQUA	5.0	LSD VALUE	5.3
BAR LP 6164	6.3	DLFPS-236/3540	4.7	C.V. (%)	55.8

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.

APPENDIX TABLE.

SUMMARY OF TURFGRASS QUALITY RATINGS FOR PERENNIAL RYEGRASS CULTIVARS */
 2019 DATA
 TURFGRASS QUALITY RATINGS 1 9; 9=IDEAL TURF **/

NAME	QUALITY	MAXIMUM	NAME	QUALITY	MAXIMUM	NAME	QUALITY	MAXIMUM
	MEAN 1/	IN TOP 25% 2/		MEAN 1/	IN TOP 25% 2/		MEAN 1/	IN TOP 25% 2/
021	5.6	16.7	DLFPS-236/3553	5.8	5.6	PL2	6.2	38.9
023	5.6	16.7	DLFPS-236/3556	6.0	38.9	PPG-PR 360	5.9	27.8
02BS1	5.6	16.7	DLFPS-238/3014	5.3	16.7	PPG-PR 367	6.1	55.6
02BS2	5.8	55.6	EVOLVE	5.4	0.0	PPG-PR 370	5.9	33.3
ALLOY (RRT)	5.9	50.0	FASTBALL 3GL (PPG-PR 329)	6.0	44.4	PPG-PR 371	6.1	44.4
ALLSTAR FORE (DLFPS-236/3541)	5.8	61.1	FIESTA CINCO (DLFPS-236/3554)	6.1	61.1	PPG-PR 372	6.1	50.0
ALLSTAR III	5.1	0.0	FIREBALL (BWH)	5.4	11.1	PPG-PR 385	5.7	22.2
APPLE 3GL (PPG-PR 339)	6.0	44.4	FURLONG (LTP-FCB)	6.1	72.2	PPG-PR 421	6.3	77.8
APR2612	5.4	0.0	GO-141	5.3	0.0	PPG-PR 422	6.1	55.6
APR2616	5.9	27.8	GRAND SLAM GLD	5.5	27.8	PPG-PR 423	6.2	61.1
APR3060	5.5	11.1	GRAY HAWK (PST-2FIND)	5.5	0.0	PR-5-16	5.9	44.4
ASP0116EXT	5.6	22.2	GRAY WOLF (PST-2GAL)	5.9	33.3	PR-6-15	6.0	50.0
ASP0117 (A-PR15)	5.6	16.7	GREEN SUPREME+ (AMP-R1)	5.2	5.6	PST-2A2	5.8	33.3
ASP0118GL (A-4G)	5.7	0.0	HATRICK (BSP-17)	5.4	5.6	PST-2BDT	5.7	11.1
ASP0218 (A-6D)	5.7	33.3	HOMERUN LS (PPG-PR 419)	6.0	38.9	PST-2EGAD	5.5	11.1
BAR LP 6117	5.6	16.7	INTENSE	5.8	27.8	PST-2FOXY	5.9	33.3
BAR LP 6131	5.5	5.6	JR-123	5.6	11.1	PST-2GTD	5.8	44.4
BAR LP 6158	5.5	16.7	JR-197	6.0	61.1	PST-2MAY	5.7	5.9
BAR LP 6159	5.4	0.0	JR-747	5.0	0.0	PST-2PDA	5.5	5.6
BAR LP 6162	5.0	0.0	JR-888	5.0	0.0	RAD-PR 112	5.4	16.7
BAR LP 6164	5.8	11.1	KARMA	5.7	11.8	SAGUARO	5.3	5.6
BAR LP 6165	5.4	11.1	LINN	3.1	0.0	SAVANT	5.0	5.6
BAR LP 6233	5.6	27.8	LPB-SD-101	5.1	11.1	SEABISCUIT	5.6	11.1
BELIZE 2 (GO-142)	5.2	0.0	LPB-SD-102	5.1	5.6	SHIELD (02BS4)	6.0	27.8
BRIGHTSTAR SLT	4.9	0.0	LPB-SD-103	5.2	5.6	SIGNET	5.7	5.6
CAYMAN (GO-143)	5.2	5.6	LPB-SD-104	4.7	0.0	SILVER SPORT (PST-2CRP)	5.9	50.0
CPN	5.9	44.4	LPB-SD-105	4.7	0.0	SLIDER LS (PPG-PR 241)	5.6	16.7
CS-6	5.6	16.7	MAN O'WAR	5.2	11.1	SLUGGER 3GL (PPG-PR 343)	6.2	61.1
DERBY XTREME	5.5	0.0	MENSA	5.1	5.6	SPIKE GLS (UF3)	5.8	27.8
DLFPS-236/3538	5.9	44.4	MRSL-PR15	5.4	5.6	SR 4650	5.7	11.1
DLFPS-236/3540	5.8	5.6	MRSL-PR16	5.6	5.6	SR 4700 (DLFPS-236/3543)	6.0	44.4
DLFPS-236/3542	5.8	33.3	NEXUS GT (SNX)	5.4	5.6	STELLAR 4GL (PPG-PR 424)	6.1	61.1
DLFPS-236/3544	6.1	44.4	NP-2	6.0	44.4	SUPERSTAR GL (PPG-PR 420)	6.0	50.0
DLFPS-236/3545	5.9	50.0	NP-3	6.0	44.4	TEE-ME-UP (BSP-25)	5.4	11.1
DLFPS-236/3546	6.1	50.0	OVERDRIVE 5G	6.0	44.4	UMPQUA	5.8	27.8
DLFPS-236/3547	6.2	55.6	PARADOX GLR (PPG-PR 331)	5.8	16.7	XCELERATOR	6.0	33.3
DLFPS-236/3548	6.0	27.8	PARAGON 2 GLR (FP2)	5.7	27.8			
DLFPS-236/3550	5.9	27.8	PEPPER II (RAD-PR 103)	5.4	11.1	LSD VALUE	0.4	
DLFPS-236/3552	5.9	38.9	PHARAOH	5.7	11.1	C.V. (%)	16.5	

*/ 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.