

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.

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A Guide to NTEP Turfgrass Ratings

Introduction

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

General Considerations

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

Turfgrass Quality

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

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

Other Ratings

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

2018 NATIONAL TALL FESCUE TEST

LOCATIONS SUBMITTING DATA FOR 2019

State	Location	Code
California	Fresno	CA7
Connecticut	Storrs	CT1
Delaware	Newark	DE1
Georgia	Griffin	GA1
Indiana	West Lafayette	IN1
Iowa	Ames	IA1
Iowa	Ames (Traffic)	IA2
Iowa	Ames (Shade)	IA3
Kansas	Manhattan	KS1
Kentucky	Lexington	KY1
Maryland	College Park	MD1
Michigan	East Lansing	MI1
Mississippi	Mississippi State	MS1
Missouri	Columbia	MO1
Nebraska	Mead	NE1
New Jersey	North Brunswick	NJ1
New Jersey	North Brunswick (Traffic)	NJ3
New Jersey	Adelphia	NJ2
North Carolina	Raleigh	NC1
Oklahoma	Stillwater	OK1
Ontario	Guelph Park	ON1
Oregon	Corvallis	OR1
Pennsylvania	Kennett Square	PA2
Tennessee	Knoxville	TN1
Utah	Logan	UT1
Utah	Logan (Drought)	UT2
Virginia	Blacksburg (3" Height)	VA1
Virginia	Blacksburg (1.5" Height)	VA2

2018 NATIONAL TALL FESCUE TEST ENTRIES AND SPONSORS

ENTRY	NAME	SPONSOR	ENTRY	NAME	SPONSOR	ENTRY	NAME	SPONSOR
*1	Naturally Green	Carlton Seed Co.	45	PST-5MINK	Pure Seed Testing	89	ZRC1	Z Seeds
*2	Paramount	Standard	*46	Moondance GLX	Integrated Seed Growers	90	PPG-TF 231	Peak Plant Genetics LLC
3	DLFPS-321/3693	DLF Pickseed USA	*47	Monument (PST-5SQB)	Pure Seed Testing	91	PPG-TF 306	Peak Plant Genetics LLC
4	DLFPS-321/3694	DLF Pickseed USA	48	PST-5DZM	Pure Seed Testing	92	PPG-TF 318	Peak Plant Genetics LLC
5	DLFPS-321/3695	DLF Pickseed USA	49	PST-5GLBS	Pure Seed Testing	*93	Bullseye	Standard
6	TMT1	DLF Pickseed USA	*50	GLX ACED (PST-5DART)	Pure Seed (Rose Agri)	*94	Firehawk SLT	Burlingham Seeds
7	ATF2116	Pennington Seed	51	PST-5DC24	Pure Seed (Rose Agri)	*95	Hemi	Standard
8	NT-3	Pennington Seed	*52	Tango	Site One Land. Supply	*96	Bullseye LTZ	Burlingham Seeds
9	RS1	DLF Pickseed USA	53	3N1	Site One Land. Supply	97	RAD-TF 115 (TURBO SS)	Burlingham Seeds
10	5LSS	Pure Seed Testing	*54	Bandit	Site One Land. Supply	*98	Dragster	Burlingham Seeds
11	BGR-TF3	Berger International	*55	Copious TF	Site One Land. Supply	99	GO-RH20	Grassland Oregon Seed
12	ATF1768	Pennington Seed	*56	Padre 2	Site One Land. Supply	*100	Birmingham	Grassland Oregon Seed
13	DLFPS-TF/3550	DLF Pickseed USA	*57	Bravo 2	Site One Land. Supply	101	GO-AOMK	Grassland Oregon Seed
14	DLFPS-TF/3552	DLF Pickseed USA	58	NAI-FQZ-17	Lakeside Ag. Ventures	102	NAI-3N2	Columbia Seeds
15	DLFPS-TF/3553	DLF Pickseed USA	59	DLFPS-321/3705	DLF Pickseed USA	103	NAI-ROS4	Landmark Turf & Native Seed
16	DLFPS-321/3679	DLF Pickseed USA	60	DLFPS-321/3706	DLF Pickseed USA	104	NAI-TUE	Columbia Seeds
17	LBF	Tualatin Valley Seeds	61	DLFPS-321/3707	DLF Pickseed USA	105	NAI-ST5	Landmark Turf & Native Seed
18	TD2	Pennington Seed	62	DLFPS-321/3708	DLF Pickseed USA	106	SE53D2	Smith Seed Services, LLC
19	DLFPS-321/3696	DLF Pickseed USA	63	BAR TF 134	Barenbrug Research	107	SE5STAR	Smith Seed Services, LLC
20	DLFPS-321/3699	DLF Pickseed USA	64	BAR-FA8230	Barenbrug Research	108	SESCR1	Smith Seed Services, LLC
*21	Grande 3	DLF Pickseed USA	65	AH1	Landmark Turf & Native Seed	109	SETF104	Smith Seed Services, LLC
*22	Fayette	Standard	66	PPG-TF 249	Landmark Turf & Native Seed	110	SETFM2	Smith Seed Services, LLC
23	JT 517	Jacklin Seed by Simplot	67	PPG-TF 262	Landmark Turf & Native Seed	111	SETFM3	Smith Seed Services, LLC
*24	Bonfire (JS DTT)	Jacklin Seed by Simplot	68	PPG-TF 267	Landmark Turf & Native Seed	112	3B2	ProSeeds Marketing
25	RDC	Oregro	69	AH2	Brett Young Seeds	113	RAD-TF105	Radix Research
26	BAR 9FE MAS	Barenbrug Research	70	K18-RS6	The Scotts Company	114	RAD-TF131	Radix Research
27	BAR FA 8228	Barenbrug Research	71	K18-WB1	The Scotts Company	115	RHL2	Semillas Fito
28	COL-TF-148	Columbia Seeds	72	RH1	ProSeeds Marketing Inc.	*116	Raptor III	Standard
*29	O'Keefe (LTP-TF-122)	Lebanon Seaboard Corp.	73	RH3	ProSeeds Marketing Inc.	117	RHF	Semillas Dalmau
*30	Degas (LTP-TF-111)	Lebanon Seaboard Corp.	74	JT 233	Jacklin Seed by Simplot	118	PPG-TF 313	Columbia Seeds
31	K18-ROE	The Scotts Company	75	JT 268	Jacklin Seed by Simplot	119	PPG-TF 320	Peak Plant Genetics
32	K18-NSE	The Scotts Company	76	PPG-TF 244	Integra Turf, Inc.	120	PPG-TF 323	Columbia Seeds
33	BY-TF-169	Brett Young	77	PPG-TF 305	Integra Turf, Inc.	121	PPG-TF 338	Columbia Seeds
34	DLFPS-321/3701	DLF Pickseed USA	78	PPG-TF 316	Lewis Seed Co.	122	Estrena	Semillas Dalmau
35	DLFPS-321/3702	DLF Pickseed USA	79	RC4	Semillas Fito	*123	AST8118LM	Allied Seed LLC
36	DLFPS-321/3703	DLF Pickseed USA	80	PPG-TF 257	Vista Seed Partners	*124	AST8218LM	Allied Seed LLC
37	PST-5TRN	Pure Seed Testing	81	PPG-TF 238	Mountain View Seeds	125	A-TF31	Allied Seed LLC
38	PST-5GQ	Pure Seed Testing	82	PPG-TF 254	Mountain View Seeds	*126	Palomar	Oregro Seed
39	PST-5MCMO	Pure Seed Testing	83	PPG-TF 308	Mountain View Seeds	*127	Escalade	Oregro Seed
*40	Pro Gold	Integrated Seed Growers	84	PPG-TF 255	Mountain View Seeds	*128	OG-WALK	Oregro Seed
41	PST-5E6	Pure Seed Testing	85	PPG-TF 312	Mountain View Seeds	129	TF445	Smith Seed Services
42	PST-5THM	Pure Seed Testing	86	PPG-TF 315	Mountain View Seeds	130	TF456	Smith Seed Services
43	PST-5BYOB	Brett Young	87	PPG-TF 336	Mountain View Seeds	*131	Grand Prix (FC15-01P)	Criadero El Concerro SA
*44	Lifeguard	Pure Seed (Rose Agri)	88	PPG-TF 337	Mountain View Seeds	*132	Kentucky-31	Standard

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

TABLE A.

2019 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN
THE 2018 NATIONAL TALL FESCUE 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	7.6-8.5	0-60	0-150	1.1-2.0	FULL SUN	1.6-2.0	TO PREVENT STRESS
CT1	SANDY LOAM	5.6-6.0	61-150	151-240	-	FULL SUN	2.6-3.0	TO PREVENT STRESS
DE1	-	6.6-7.0	0-60	0-150	-	-	-	-
GA1	SANDY CLAY LOAM	4.6-5.5	0-60	151-240	3.1-4.0	FULL SUN	2.6-3.0	TO PREVENT STRESS
IA1	SANDY CLAY LOAM	7.1-7.5	0-60	0-150	2.1-3.0	FULL SUN	2.1-2.5	TO PREVENT DORMANCY
IA2	SANDY CLAY LOAM	7.1-7.5	0-60	0-150	2.1-3.0	FULL SUN	2.1-2.5	TO PREVENT DORMANCY
IA3	SANDY CLAY LOAM	7.1-7.5	0-60	0-150	2.1-3.0	DENSE SHADE	2.1-2.5	TO PREVENT DORMANCY
IN1	SILT LOAM AND SILT	7.1-7.5	61-150	151-240	2.1-3.0	FULL SUN	4.1+	NO IRRIGATION
KS1	SILTY CLAY LOAM	7.1-7.5	61-150	0-150	1.1-2.0	FULL SUN	1.6-2.0	NO IRRIGATION
KY1	SILT LOAM AND SILT	-	-	-	2.1-3.0	FULL SUN	2.6-3.0	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
MI1	-	-	-	-	-	-	-	-
MO1	-	-	-	-	-	-	-	-
MS1	SANDY LOAM	7.1-7.5	271-450	501+	2.1-3.0	FULL SUN	3.1-3.5	TO PREVENT DORMANCY
NC1	SILTY CLAY LOAM	6.1-6.5	61-150	0-150	1.1-2.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
NE1	SILTY CLAY AND CLAY	7.1-7.5	0-60	376-500	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
NJ1	LOAM	5.6-6.0	61-150	376-500	4.1-5.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
NJ2	SANDY LOAM	6.1-6.5	271-450	376-500	4.1-5.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
NJ3	LOAM	5.6-6.0	61-150	376-500	4.1-5.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
OK1	LOAM	7.1-7.5	61-150	241-375	4.1-5.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
ON1	-	7.1-7.5	0-60	0-150	0.0-1.0	FULL SUN	1.6-2.0	TO PREVENT STRESS
OR1	SILTY CLAY LOAM	5.6-6.0	61-150	241-375	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT DORMANCY
PA2	SILT LOAM AND SILT	6.1-6.5	61-150	151-240	0.0-1.0	FULL SUN	2.6-3.0	NO IRRIGATION
TN1	SILT LOAM AND SILT	6.1-6.5	0-60	0-150	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
UT1	SILT LOAM AND SILT	-	-	-	-	FULL SUN	2.6-3.0	TO PREVENT STRESS
UT2	SILT LOAM AND SILT	-	-	-	-	FULL SUN	2.6-3.0	TO PREVENT DORMANCY
VA1	SILT LOAM AND SILT	5.6-6.0	0-60	0-150	0.0-1.0	FULL SUN	3.1-3.5	NO IRRIGATION
VA2	SILT LOAM AND SILT	5.6-6.0	0-60	0-150	0.0-1.0	FULL SUN	3.1-3.5	NO IRRIGATION

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	GENETIC COLOR	SPRING GREENUP	LEAF TEXTURE
CA7						X	X	X	X	X	X	X			
CT1						X	X	X	X	X	X				
DE1			X	X	X	X	X	X	X	X			X		X
GA1	X	X	X	X	X	X	X	X	X	X		X	X		
IA1				X	X	X	X	X	X	X	X		X	X	
IA2				X	X	X	X	X	X	X	X		X	X	
IA3				X	X	X	X	X	X	X	X		X		
IN1					X	X	X	X	X	X			X		X
KS1						X	X	X	X	X					X
KY1			X	X	X	X	X	X	X	X	X				
MD1								X	X	X					
MI1					X	X	X	X	X	X					X
MO1				X	X	X	X	X	X						
MS1	X	X	X	X	X	X	X	X	X	X	X	X	X		X
NC1			X	X	X	X	X	X	X	X	X		X	X	X
NE1				X	X	X	X	X	X	X			X	X	X
NJ1				X	X	X	X	X	X	X				X	
NJ2				X	X	X	X	X	X	X			X		
NJ3															
OK1	X	X	X	X	X	X	X	X		X	X		X		X
ON1															
OR1					X	X	X	X	X	X	X	X	X		X
PA2				X	X	X	X	X	X	X	X				
TN1	X	X	X	X		X	X	X	X	X	X	X	X	X	X
UT1						X	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					

TABLE B.
(CONT'D)

LOCATIONS AND DATA COLLECTED IN 2019

LOCATION	SEEDLING VIGOR	SPRING DENSITY	SUMMER DENSITY	FALL DENSITY	PERCENT COVER SPRING	PERCENT COVER SUMMER	PERCENT COVER FALL	WINTER COLOR	BROWN PATCH WARM TEMP	PYTHIUM BLIGHT	BROWN PATCH COOL TEMP	GRAY LEAF SPOT
CA7					X					X		
CT1	X											
DE1									X			
GA1												
IA1					X	X	X					
IA2												
IA3		X	X	X								
IN1	X		X						X			
KS1									X			
KY1	X											
MD1												
MI1				X								
MO1					X						X	
MS1		X						X				
NC1		X		X	X						X	
NE1	X			X								
NJ1												X
NJ2												X
NJ3												
OK1		X	X	X	X	X			X			
ON1												
OR1				X								
PA2							X					
TN1		X	X	X	X	X	X					
UT1	X			X								
UT2					X	X	X					
VA1												
VA2												

TABLE B.
(CONT'D)

LOCATIONS AND DATA COLLECTED IN 2019

LOCATION	FALL COLOR NOVEMBER	PERCENT ESTABLISH- MENT	QUALITY FALL 2018	PERCENT ESTABLISHMENT RATINGS AFTER SEEDED		
				2-WEEKS	3-WEEKS	4-WEEKS
CA7						
CT1						
DE1		X				
GA1						
* IA1						
* IA2						
* IA3						
IN1						
KS1						
KY1						
MD1						
MI1		X				
MO1						
MS1		X				
NC1		X	X			
NE1	X					
NJ1		X				
NJ2		X	X			
* NJ3						
OK1			X	X	X	X
* ON1						
OR1	X	X				
PA2		X				
TN1						
UT1	X					
UT2						
VA1						
VA2						

* MORE DATA FOR IA1, IA2, IA3, NJ3 AND ON1 IN TABLE 33, 11, 13, 12 AND 35.

TABLE 1.

TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1 **/
2019 DATA

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

NAME	ENTRY #	NJ1	NJ2	MD1	KS1	NC1	GA1	MO1	VA1	OR1	DE1	MEAN
ZRC1	89	7.4	6.3	6.1	5.6	4.8	6.4	5.7	7.3	5.8	6.3	6.9
PPG-TF 336	87	7.4	6.2	6.0	5.5	4.6	6.3	5.6	7.1	5.7	6.2	6.8
PPG-TF 318	92	7.1	6.0	5.9	5.4	4.6	6.2	5.5	7.1	5.6	6.1	6.6
RHF	117	7.0	6.0	5.9	5.5	4.6	6.3	5.6	7.1	5.7	6.2	6.5
RHL2	115	7.0	6.0	5.9	5.4	4.6	6.3	5.6	7.1	5.7	6.2	6.5
PPG-TF 338	121	6.9	6.0	5.9	5.5	4.6	6.3	5.6	7.2	5.7	6.3	6.5
PPG-TF 306	91	6.9	6.0	6.0	5.6	4.8	6.4	5.8	7.3	5.9	6.4	6.4
TF456	130	6.9	6.0	5.9	5.5	4.7	6.4	5.7	7.2	5.8	6.3	6.4
PPG-TF 308	83	6.9	5.9	5.8	5.4	4.6	6.2	5.5	7.1	5.7	6.2	6.4
PPG-TF 312	85	6.9	5.9	5.8	5.4	4.6	6.2	5.5	7.1	5.7	6.2	6.4
TF445	129	6.8	5.9	5.9	5.5	4.7	6.4	5.7	7.2	5.8	6.3	6.4
PPG-TF 315	86	6.8	5.9	5.8	5.5	4.6	6.3	5.6	7.2	5.7	6.3	6.4
AH2	69	8.2	6.7	6.5	5.8	4.9	6.5	5.8	7.4	5.9	6.4	6.3
PPG-TF 320	119	6.7	5.8	5.8	5.4	4.6	6.2	5.5	7.1	5.7	6.2	6.3
PPG-TF 313	118	6.7	5.8	5.7	5.4	4.6	6.2	5.5	7.1	5.7	6.2	6.3
PPG-TF 255	84	6.6	5.9	5.9	5.6	4.8	6.4	5.8	7.3	5.9	6.4	6.2
*DRAGSTER	98	6.7	5.8	5.7	5.3	4.5	6.1	5.4	7.0	5.6	6.1	6.2
PPG-TF 231	90	6.7	5.7	5.6	5.2	4.4	6.1	5.4	6.9	5.5	6.0	6.2
NAI-ROS4	103	6.6	5.8	5.8	5.5	4.6	6.3	5.6	7.2	5.8	6.3	6.2
PPG-TF 337	88	6.6	5.8	5.7	5.4	4.5	6.2	5.5	7.1	5.6	6.2	6.2
K18-RS6	70	7.9	6.5	6.3	5.7	4.8	6.4	5.7	7.3	5.8	6.3	6.2
PPG-TF 323	120	6.5	5.7	5.7	5.4	4.6	6.2	5.5	7.1	5.7	6.2	6.1
TD2	18	7.3	6.2	6.1	5.7	4.8	6.5	5.8	7.3	5.9	6.4	6.1
GO-RH20	99	6.4	5.7	5.6	5.4	4.6	6.2	5.5	7.1	5.7	6.2	6.0
NAI-3N2	102	6.3	5.6	5.6	5.3	4.5	6.2	5.5	7.0	5.6	6.1	6.0
*BULLSEYE LTZ	96	6.3	5.6	5.6	5.3	4.5	6.2	5.5	7.1	5.7	6.2	6.0
*BONFIRE (JS DTT)	24	7.1	6.1	6.0	5.6	4.7	6.4	5.7	7.3	5.8	6.3	6.0
JT 268	75	7.5	6.2	6.0	5.5	4.6	6.3	5.5	7.1	5.7	6.2	5.9
PPG-TF 238	81	7.3	6.1	6.0	5.4	4.6	6.2	5.5	7.1	5.6	6.1	5.9
*RAPTOR III	116	6.2	5.5	5.5	5.2	4.4	6.0	5.3	6.9	5.5	6.0	5.9
DLFPS-321/3699	20	6.9	6.0	5.9	5.5	4.7	6.3	5.6	7.2	5.8	6.3	5.9
*OKEEFE (LTP-TF-122)	29	7.3	6.1	5.9	5.4	4.5	6.2	5.5	7.0	5.6	6.1	5.8
NAI-ST5	105	6.1	5.5	5.5	5.3	4.5	6.2	5.5	7.1	5.7	6.2	5.8
COL-TF-148	28	7.1	6.0	5.9	5.4	4.5	6.2	5.5	7.1	5.6	6.1	5.8
RH3	73	6.8	5.9	5.8	5.5	4.6	6.3	5.6	7.2	5.7	6.3	5.8
PPG-TF 254	82	6.8	5.9	5.8	5.4	4.6	6.3	5.6	7.1	5.7	6.2	5.8
BY-TF-169	33	6.6	5.8	5.8	5.5	4.7	6.3	5.6	7.2	5.8	6.3	5.8
RC4	79	6.9	5.9	5.8	5.4	4.6	6.2	5.5	7.1	5.7	6.2	5.8
AH1	65	6.9	5.9	5.8	5.4	4.5	6.2	5.5	7.1	5.6	6.1	5.8
PPG-TF 244	76	6.7	5.9	5.8	5.4	4.6	6.3	5.6	7.1	5.7	6.2	5.7
RH1	72	6.5	5.8	5.8	5.5	4.7	6.4	5.7	7.2	5.8	6.3	5.7
DLFPS-TF/3552	14	6.7	5.8	5.8	5.4	4.6	6.3	5.6	7.1	5.7	6.2	5.7
TMT1	6	6.6	5.8	5.7	5.4	4.6	6.3	5.6	7.1	5.7	6.2	5.7
PPG-TF 262	67	6.7	5.8	5.7	5.4	4.5	6.2	5.5	7.1	5.6	6.2	5.7
DLFPS-321/3705	59	6.4	5.7	5.7	5.5	4.7	6.4	5.7	7.2	5.8	6.3	5.7
RDC	25	6.6	5.8	5.7	5.4	4.6	6.2	5.5	7.1	5.7	6.2	5.7
PPG-TF 267	68	6.7	5.8	5.7	5.4	4.6	6.2	5.5	7.1	5.7	6.2	5.7
*HEMI	95	6.0	5.4	5.4	5.1	4.3	6.0	5.3	6.9	5.4	6.0	5.7

TABLE 1.
(CONT'D)

TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1 **/
2019 DATA

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

JT 233	74	6.6	5.8	5.7	5.4	4.6	6.2	5.5	7.1	5.7	6.2	5.7
K18-NSE	32	6.9	5.8	5.7	5.3	4.5	6.1	5.4	7.0	5.5	6.1	5.7
DLFPS-321/3695	5	6.6	5.8	5.7	5.3	4.5	6.2	5.5	7.1	5.6	6.1	5.7
BAR TF 134	63	6.7	5.8	5.7	5.3	4.5	6.2	5.5	7.0	5.6	6.1	5.7
5LSS	10	6.7	5.8	5.7	5.3	4.5	6.2	5.5	7.0	5.6	6.1	5.7
PPG-TF 316	78	6.5	5.7	5.7	5.4	4.6	6.2	5.5	7.1	5.7	6.2	5.7
DLFPS-TF/3550	13	6.5	5.7	5.7	5.4	4.5	6.2	5.5	7.1	5.7	6.2	5.6
*DEGAS (LTP-TF-111)	30	6.4	5.7	5.6	5.4	4.6	6.2	5.5	7.1	5.7	6.2	5.6
K18-WB1	71	6.7	5.8	5.7	5.3	4.5	6.1	5.4	7.0	5.5	6.1	5.6
NT-3	8	6.4	5.6	5.6	5.3	4.5	6.2	5.5	7.1	5.7	6.2	5.6
DLFPS-TF/3553	15	6.4	5.7	5.6	5.3	4.5	6.2	5.5	7.1	5.6	6.2	5.6
DLFPS-321/3693	3	6.4	5.7	5.6	5.3	4.5	6.2	5.5	7.0	5.6	6.1	5.6
DLFPS-321/3701	34	6.2	5.6	5.6	5.3	4.6	6.2	5.5	7.1	5.7	6.2	5.6
SESCR1	108	5.8	5.4	5.4	5.2	4.5	6.1	5.5	7.0	5.6	6.1	5.6
RS1	9	6.1	5.6	5.6	5.4	4.6	6.3	5.6	7.1	5.7	6.2	5.6
PPG-TF 249	66	6.3	5.6	5.6	5.3	4.5	6.2	5.5	7.0	5.6	6.1	5.6
DLFPS-321/3696	19	6.2	5.5	5.5	5.3	4.5	6.2	5.5	7.0	5.6	6.1	5.5
*PADRE 2	56	6.0	5.5	5.5	5.3	4.6	6.2	5.6	7.1	5.7	6.2	5.5
PPG-TF 257	80	6.3	5.6	5.5	5.2	4.4	6.1	5.4	7.0	5.6	6.1	5.5
*PARAMOUNT	2	6.3	5.5	5.5	5.2	4.4	6.1	5.4	7.0	5.5	6.0	5.5
PPG-TF 305	77	5.8	5.4	5.4	5.3	4.5	6.2	5.5	7.1	5.7	6.2	5.4
DLFPS-321/3707	61	6.3	5.5	5.5	5.1	4.3	6.0	5.3	6.9	5.4	5.9	5.4
K18-ROE	31	6.0	5.4	5.4	5.2	4.4	6.1	5.4	7.0	5.6	6.1	5.4
*GLX ACED (PST-5DART)	50	6.1	5.4	5.4	5.2	4.4	6.1	5.4	6.9	5.5	6.0	5.4
DLFPS-321/3703	36	6.0	5.4	5.4	5.2	4.4	6.1	5.4	7.0	5.6	6.1	5.4
*GRANDE 3	21	5.7	5.3	5.4	5.3	4.5	6.2	5.5	7.1	5.7	6.2	5.4
*ESTRENA	122	5.7	5.1	5.2	5.0	4.2	5.9	5.2	6.8	5.4	5.9	5.4
DLFPS-321/3694	4	6.1	5.4	5.4	5.1	4.3	6.0	5.3	6.9	5.4	6.0	5.4
DLFPS-321/3702	35	5.7	5.3	5.3	5.2	4.5	6.2	5.5	7.0	5.6	6.1	5.4
*FIREHAWK SLT	94	5.6	5.1	5.2	5.0	4.3	6.0	5.3	6.8	5.4	5.9	5.4
NAI-TUE	104	5.5	5.2	5.2	5.1	4.4	6.1	5.4	6.9	5.5	6.0	5.4
PST-5TRN	37	5.8	5.3	5.3	5.2	4.4	6.1	5.4	7.0	5.6	6.1	5.4
DLFPS-321/3708	62	5.7	5.3	5.3	5.2	4.4	6.1	5.4	7.0	5.6	6.1	5.3
3N1	53	5.6	5.2	5.3	5.2	4.4	6.1	5.4	7.0	5.6	6.1	5.3
DLFPS-321/3706	60	5.7	5.2	5.3	5.1	4.3	6.0	5.3	6.9	5.5	6.0	5.3
PST-5BYOB	43	5.4	5.1	5.2	5.2	4.4	6.1	5.4	7.0	5.6	6.1	5.3
PST-5MCMO	39	5.5	5.1	5.2	5.1	4.4	6.1	5.4	6.9	5.5	6.1	5.3
3B2	112	5.4	5.1	5.2	5.1	4.3	6.0	5.3	6.9	5.5	6.0	5.2
SE53D2	106	5.4	5.0	5.1	5.0	4.2	5.9	5.2	6.8	5.4	5.9	5.2
*PRO GOLD	40	5.3	5.1	5.1	5.1	4.4	6.0	5.3	6.9	5.5	6.0	5.2
*LIFEGUARD	44	5.1	5.0	5.1	5.1	4.4	6.1	5.4	7.0	5.6	6.1	5.2
DLFPS-321/3679	16	5.2	5.0	5.1	5.1	4.3	6.0	5.3	6.9	5.5	6.0	5.1
PST-5GLBS	49	5.0	4.9	5.0	5.1	4.4	6.0	5.4	6.9	5.5	6.1	5.1
PST-5THM	42	4.9	4.8	5.0	5.0	4.3	6.0	5.3	6.9	5.5	6.0	5.1
SETF104	109	5.1	4.9	5.1	5.0	4.3	6.0	5.3	6.9	5.5	6.0	5.0
*MONUMENT (PST-5SQB)	47	5.2	4.9	5.0	4.9	4.2	5.9	5.2	6.8	5.4	5.9	5.0
*MOONDANCE GLX	46	4.9	4.8	4.9	4.9	4.2	5.9	5.2	6.8	5.4	5.9	5.0
A-TF31	125	5.2	4.8	4.9	4.8	4.0	5.7	5.0	6.6	5.2	5.7	5.0
PST-5GQ	38	5.0	4.8	4.9	4.9	4.2	5.9	5.2	6.8	5.4	5.9	5.0

TABLE 1.
(CONT'D)

TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1 **/
2019 DATA

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

*FAYETTE	22	4.8	4.7	4.9	4.9	4.2	5.9	5.2	6.8	5.4	5.9	5.0
PST-5E6	41	4.6	4.7	4.8	5.0	4.3	6.0	5.3	6.9	5.5	6.0	4.9
*BRAVO 2	57	4.4	4.6	4.8	5.0	4.3	6.0	5.3	6.9	5.5	6.1	4.9
RAD-TF105	113	5.0	4.9	5.0	5.0	4.3	5.9	5.3	6.8	5.4	6.0	4.9
ATF1768	12	4.5	4.6	4.8	4.9	4.3	6.0	5.3	6.9	5.5	6.0	4.9
LBF	17	4.5	4.6	4.8	4.9	4.2	5.9	5.3	6.8	5.5	6.0	4.9
*COPIOUS TF	55	4.5	4.6	4.7	4.8	4.1	5.8	5.2	6.7	5.3	5.9	4.8
PST-5DZM	48	4.7	4.6	4.7	4.8	4.1	5.7	5.1	6.6	5.2	5.8	4.8
ATF2116	7	4.2	4.5	4.7	4.9	4.2	5.9	5.2	6.8	5.4	5.9	4.8
*BULLSEYE	93	4.9	4.7	4.8	4.8	4.1	5.8	5.1	6.7	5.3	5.8	4.8
BGR-TF3	11	4.1	4.4	4.7	4.9	4.2	5.9	5.3	6.8	5.5	6.0	4.8
BAR-FA8230	64	4.2	4.4	4.6	4.8	4.2	5.9	5.2	6.8	5.4	5.9	4.8
*TANGO	52	4.4	4.5	4.7	4.8	4.1	5.8	5.1	6.7	5.3	5.8	4.8
GO-AOMK	101	4.8	4.6	4.8	4.7	4.0	5.7	5.0	6.6	5.2	5.7	4.7
SE5STAR	107	4.7	4.7	4.8	4.8	4.1	5.8	5.1	6.7	5.3	5.8	4.7
PST-5DC24	51	4.2	4.4	4.6	4.7	4.0	5.7	5.0	6.6	5.2	5.8	4.7
*AST8118LM	123	4.7	4.6	4.7	4.8	4.1	5.8	5.1	6.7	5.3	5.8	4.6
PST-5MINK	45	4.3	4.4	4.5	4.6	3.9	5.6	4.9	6.5	5.1	5.6	4.6
JT 517	23	3.8	4.2	4.5	4.8	4.1	5.8	5.1	6.7	5.4	5.9	4.6
*NATURALLY GREEN	1	3.9	4.2	4.5	4.7	4.1	5.8	5.1	6.7	5.3	5.8	4.6
*BIRMINGHAM	100	4.6	4.6	4.8	4.9	4.2	5.9	5.2	6.8	5.4	5.9	4.6
SETFM3	111	4.5	4.6	4.7	4.8	4.2	5.8	5.2	6.8	5.4	5.9	4.6
BAR 9FE MAS	26	4.1	4.2	4.4	4.6	3.9	5.6	4.9	6.5	5.1	5.6	4.5
*BANDIT	54	3.7	4.1	4.4	4.6	4.0	5.7	5.0	6.6	5.2	5.8	4.5
NAI-FQZ-17	58	3.8	4.1	4.3	4.6	3.9	5.6	5.0	6.5	5.2	5.7	4.5
*AST8218LM	124	4.3	4.4	4.6	4.8	4.1	5.8	5.1	6.7	5.3	5.8	4.4
BAR FA 8228	27	3.0	3.7	4.1	4.5	3.9	5.6	5.0	6.6	5.2	5.7	4.3
RAD-TF131	114	3.8	4.1	4.3	4.6	3.9	5.6	4.9	6.5	5.1	5.7	3.9
*GRAND PRIX (FC15-01P)	131	3.6	4.0	4.3	4.6	3.9	5.6	5.0	6.5	5.2	5.7	3.8
SETFM2	110	3.5	4.0	4.3	4.6	4.0	5.7	5.0	6.6	5.2	5.8	3.8
*ESCALADE	127	3.5	3.9	4.2	4.5	3.9	5.6	4.9	6.5	5.1	5.7	3.7
RAD-TF 115 (TURBO SS)	97	3.1	3.7	4.0	4.4	3.8	5.5	4.8	6.4	5.0	5.6	3.4
*PALOMAR	126	3.0	3.7	4.0	4.5	3.9	5.6	4.9	6.5	5.1	5.6	3.4
*OG-WALK	128	2.8	3.5	3.9	4.3	3.7	5.4	4.8	6.4	5.0	5.5	3.2
*KENTUCKY-31	132	0.7	2.1	2.6	3.4	2.9	4.6	3.9	5.5	4.2	4.7	1.4
LSD VALUE		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
C.V. (%)		11.2	12.2	12.2	12.5	14.7	10.6	12.0	9.3	11.7	10.7	12.0

* 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.

TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 */
2019 DATA

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

NAME	KY1	PA2	CT1	MS1	MI1	TN1	UT1	NE1	OK1	IA1	MEAN
PPG-TF 255	6.2	6.9	6.2	4.9	6.6	6.6	8.2	5.3	5.8	7.2	6.6
PPG-TF 306	6.2	6.9	6.1	4.9	6.6	6.6	8.2	5.2	5.7	7.1	6.6
TF456	6.1	6.8	6.1	4.8	6.5	6.5	8.1	5.1	5.6	7.0	6.5
TF445	6.1	6.8	6.1	4.8	6.5	6.5	8.1	5.1	5.6	7.0	6.5
TD2	6.2	6.9	6.1	4.9	6.6	6.6	8.1	5.2	5.7	7.0	6.5
ZRC1	6.1	6.8	6.0	4.8	6.5	6.5	8.0	5.1	5.5	6.9	6.5
RH1	6.1	6.9	6.1	4.8	6.6	6.6	8.1	5.2	5.7	7.1	6.5
DLFPS-321/3705	6.1	6.9	6.1	4.8	6.5	6.6	8.1	5.2	5.7	7.1	6.5
NAI-ROS4	6.1	6.8	6.0	4.8	6.5	6.5	8.1	5.1	5.6	7.0	6.4
BONFIRE (JS DTT)	6.1	6.9	6.1	4.8	6.5	6.5	8.1	5.1	5.6	7.0	6.4
AH2	6.2	6.9	6.1	4.8	6.5	6.5	8.1	5.1	5.5	6.9	6.4
PPG-TF 315	6.1	6.8	6.0	4.7	6.4	6.4	8.0	5.1	5.6	7.0	6.4
PPG-TF 338	6.1	6.8	6.0	4.7	6.4	6.4	8.0	5.1	5.5	6.9	6.4
BY-TF-169	6.1	6.8	6.0	4.8	6.5	6.5	8.1	5.1	5.6	7.0	6.4
RS1	6.1	6.8	6.0	4.8	6.5	6.5	8.1	5.1	5.6	7.1	6.4
DLFPS-321/3699	6.1	6.8	6.0	4.8	6.5	6.5	8.0	5.1	5.6	7.0	6.4
GO-RH20	6.0	6.7	6.0	4.7	6.4	6.4	8.0	5.1	5.6	7.0	6.4
PADRE 2	6.0	6.8	6.0	4.7	6.5	6.5	8.1	5.1	5.6	7.1	6.4
GRANDE 3	6.0	6.7	6.0	4.7	6.5	6.5	8.1	5.1	5.6	7.1	6.4
RHF	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.4
RH3	6.1	6.8	6.0	4.7	6.4	6.5	8.0	5.1	5.6	7.0	6.4
PPG-TF 305	6.0	6.7	6.0	4.7	6.5	6.5	8.1	5.1	5.6	7.1	6.4
PPG-TF 320	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.4
RHL2	6.0	6.7	5.9	4.7	6.4	6.4	7.9	5.0	5.5	6.9	6.4
K18-RS6	6.1	6.8	6.0	4.7	6.4	6.4	8.0	5.0	5.5	6.8	6.4
PPG-TF 323	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.3
NAI-ST5	6.0	6.7	6.0	4.7	6.4	6.4	8.0	5.1	5.6	7.0	6.3
PPG-TF 336	6.0	6.7	5.9	4.6	6.3	6.3	7.9	4.9	5.4	6.8	6.3
BULLSEYE LTZ	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.5	7.0	6.3
DLFPS-321/3701	6.0	6.7	6.0	4.7	6.4	6.4	8.0	5.1	5.6	7.0	6.3
PPG-TF 244	6.0	6.7	6.0	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.3
PPG-TF 308	6.0	6.7	5.9	4.6	6.3	6.3	7.9	5.0	5.4	6.8	6.3
DLFPS-TF/3552	6.0	6.7	6.0	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.3
PPG-TF 313	6.0	6.7	5.9	4.6	6.3	6.3	7.9	5.0	5.5	6.9	6.3
PPG-TF 312	6.0	6.7	5.9	4.6	6.3	6.3	7.9	5.0	5.4	6.8	6.3
TMT1	6.0	6.7	6.0	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.3
DLFPS-321/3702	6.0	6.7	6.0	4.7	6.4	6.4	8.0	5.1	5.6	7.0	6.3
SESCR1	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.6	7.0	6.3
PPG-TF 337	6.0	6.7	5.9	4.6	6.3	6.3	7.9	5.0	5.5	6.9	6.3
PPG-TF 254	6.0	6.7	6.0	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.3
DEGAS (LTP-TF-111)	6.0	6.7	6.0	4.7	6.4	6.4	8.0	5.0	5.5	7.0	6.3
NT-3	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.5	7.0	6.3
BRAVO 2	5.9	6.6	5.9	4.7	6.4	6.4	8.0	5.1	5.7	7.2	6.3
NAI-3N2	5.9	6.7	5.9	4.6	6.3	6.3	7.9	5.0	5.5	6.9	6.3
PPG-TF 316	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.3
PST-5BYOB	5.9	6.7	5.9	4.7	6.4	6.4	8.0	5.1	5.6	7.1	6.3
RDC	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.3

TABLE 2.
(CONT'D)

TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 */
2019 DATA

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

JT 233	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.3
DLFPS-TF/3550	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.3
PPG-TF 318	5.9	6.6	5.9	4.6	6.3	6.3	7.9	4.9	5.4	6.8	6.3
PPG-TF 267	6.0	6.7	5.9	4.7	6.4	6.4	8.0	5.0	5.5	6.9	6.3
LIFEGUARD	5.9	6.6	5.9	4.7	6.4	6.4	8.0	5.1	5.6	7.1	6.3
DLFPS-321/3696	6.0	6.7	5.9	4.6	6.4	6.4	8.0	5.0	5.5	6.9	6.3
DLFPS-TF/3553	6.0	6.7	5.9	4.6	6.4	6.4	7.9	5.0	5.5	6.9	6.3
PST-5GLBS	5.9	6.6	5.9	4.6	6.4	6.4	8.0	5.1	5.6	7.1	6.3
RC4	6.0	6.7	5.9	4.6	6.3	6.3	7.9	5.0	5.4	6.8	6.3
3N1	5.9	6.6	5.9	4.6	6.4	6.4	8.0	5.0	5.5	7.0	6.3
PPG-TF 249	5.9	6.7	5.9	4.6	6.3	6.4	7.9	5.0	5.5	6.9	6.3
PPG-TF 262	6.0	6.7	5.9	4.6	6.3	6.3	7.9	5.0	5.4	6.9	6.2
DLFPS-321/3695	6.0	6.7	5.9	4.6	6.3	6.3	7.9	5.0	5.5	6.9	6.2
DRAGSTER	5.9	6.6	5.8	4.6	6.3	6.3	7.8	4.9	5.4	6.8	6.2
DLFPS-321/3693	5.9	6.7	5.9	4.6	6.3	6.3	7.9	5.0	5.5	6.9	6.2
PST-5E6	5.9	6.6	5.9	4.6	6.4	6.4	8.0	5.0	5.6	7.1	6.2
NAI-TUE	5.9	6.6	5.9	4.6	6.3	6.3	7.9	5.0	5.5	6.9	6.2
DLFPS-321/3708	5.9	6.6	5.9	4.6	6.3	6.3	7.9	5.0	5.5	7.0	6.2
BGR-TF3	5.8	6.6	5.9	4.6	6.4	6.4	8.0	5.1	5.6	7.1	6.2
PST-5MCMO	5.9	6.6	5.9	4.6	6.3	6.3	7.9	5.0	5.5	7.0	6.2
AH1	5.9	6.6	5.9	4.6	6.3	6.3	7.9	4.9	5.4	6.8	6.2
PST-5TRN	5.9	6.6	5.9	4.6	6.3	6.3	7.9	5.0	5.5	6.9	6.2
DLFPS-321/3679	5.9	6.6	5.9	4.6	6.3	6.3	7.9	5.0	5.5	7.0	6.2
ATF1768	5.8	6.6	5.9	4.6	6.3	6.4	8.0	5.0	5.6	7.1	6.2
JT 268	6.0	6.7	5.9	4.6	6.3	6.3	7.9	4.9	5.4	6.7	6.2
DLFPS-321/3703	5.9	6.6	5.9	4.6	6.3	6.3	7.9	5.0	5.5	6.9	6.2
PRO GOLD	5.9	6.6	5.9	4.6	6.3	6.3	7.9	5.0	5.5	7.0	6.2
PST-5THM	5.9	6.6	5.9	4.6	6.3	6.3	7.9	5.0	5.5	7.0	6.2
3B2	5.9	6.6	5.8	4.6	6.3	6.3	7.9	5.0	5.5	6.9	6.2
5LSS	5.9	6.6	5.9	4.6	6.3	6.3	7.9	4.9	5.4	6.8	6.2
SETF104	5.8	6.6	5.8	4.6	6.3	6.3	7.9	5.0	5.5	7.0	6.2
LBF	5.8	6.6	5.8	4.6	6.3	6.3	7.9	5.0	5.6	7.1	6.2
K18-ROE	5.9	6.6	5.8	4.6	6.3	6.3	7.9	5.0	5.5	6.9	6.2
ATF2116	5.8	6.5	5.8	4.6	6.3	6.3	8.0	5.0	5.6	7.1	6.2
PPG-TF 238	5.9	6.6	5.8	4.6	6.3	6.3	7.8	4.9	5.3	6.7	6.2
COL-TF-148	5.9	6.6	5.8	4.6	6.3	6.3	7.9	4.9	5.4	6.8	6.2
PPG-TF 257	5.9	6.6	5.8	4.6	6.3	6.3	7.9	4.9	5.4	6.8	6.2
BAR TF 134	5.9	6.6	5.8	4.6	6.3	6.3	7.9	4.9	5.4	6.8	6.2
BAR-FA8230	5.8	6.5	5.8	4.6	6.3	6.3	7.9	5.0	5.6	7.1	6.2
RAPTOR III	5.8	6.5	5.8	4.5	6.2	6.2	7.8	4.9	5.3	6.8	6.2
GLX ACED (PST-5DART)	5.9	6.6	5.8	4.5	6.3	6.3	7.9	4.9	5.4	6.8	6.2
PARAMOUNT	5.9	6.6	5.8	4.5	6.3	6.3	7.8	4.9	5.4	6.8	6.2
RAD-TF105	5.8	6.5	5.8	4.5	6.3	6.3	7.9	4.9	5.5	6.9	6.2
FAYETTE	5.8	6.5	5.8	4.5	6.3	6.3	7.9	5.0	5.5	7.0	6.2
PPG-TF 231	5.8	6.5	5.7	4.5	6.2	6.2	7.7	4.8	5.3	6.7	6.2
K18-WB1	5.9	6.6	5.8	4.5	6.2	6.2	7.8	4.9	5.3	6.7	6.1
OKEEFE (LTP-TF-122)	5.9	6.6	5.8	4.5	6.2	6.2	7.8	4.8	5.3	6.7	6.1
JT 517	5.7	6.5	5.8	4.5	6.3	6.3	7.9	5.0	5.5	7.1	6.1
DLFPS-321/3706	5.8	6.5	5.8	4.5	6.2	6.2	7.8	4.9	5.4	6.8	6.1
HEMI	5.8	6.5	5.7	4.5	6.2	6.2	7.8	4.8	5.3	6.8	6.1

TABLE 2.
(CONT'D)

TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 */
2019 DATA

	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/										
K18-NSE	5.9	6.6	5.8	4.5	6.2	6.2	7.8	4.8	5.3	6.7	6.1
MOONDANCE GLX	5.8	6.5	5.8	4.5	6.3	6.3	7.9	4.9	5.5	6.9	6.1
FIREHAWK SLT	5.8	6.5	5.7	4.5	6.2	6.2	7.8	4.9	5.4	6.8	6.1
SETFM3	5.7	6.5	5.7	4.5	6.2	6.2	7.8	4.9	5.4	6.9	6.1
BIRMINGHAM	5.7	6.5	5.7	4.5	6.2	6.2	7.8	4.9	5.4	6.9	6.1
DLFPS-321/3694	5.8	6.5	5.7	4.5	6.2	6.2	7.8	4.8	5.3	6.7	6.1
SE53D2	5.7	6.4	5.7	4.4	6.2	6.2	7.8	4.8	5.3	6.8	6.1
PST-5GQ	5.7	6.4	5.7	4.5	6.2	6.2	7.8	4.9	5.4	6.9	6.1
COPIOUS TF	5.7	6.4	5.7	4.5	6.2	6.2	7.8	4.9	5.4	6.9	6.1
NATURALLY GREEN	5.7	6.4	5.7	4.4	6.2	6.2	7.8	4.9	5.5	7.0	6.1
MONUMENT (PST-5SQB)	5.7	6.4	5.7	4.4	6.2	6.2	7.8	4.8	5.4	6.8	6.1
TANGO	5.7	6.4	5.7	4.4	6.2	6.2	7.8	4.9	5.4	6.9	6.1
ESTRENA	5.7	6.4	5.7	4.4	6.1	6.1	7.7	4.8	5.3	6.7	6.1
DLFPS-321/3707	5.8	6.5	5.7	4.4	6.1	6.2	7.7	4.8	5.3	6.7	6.1
SE5STAR	5.7	6.4	5.7	4.4	6.2	6.2	7.8	4.8	5.4	6.8	6.0
BANDIT	5.6	6.4	5.7	4.4	6.2	6.2	7.8	4.9	5.4	7.0	6.0
AST8218LM	5.7	6.4	5.7	4.4	6.2	6.2	7.8	4.9	5.4	6.9	6.0
BAR FA 8228	5.6	6.3	5.7	4.4	6.2	6.2	7.8	4.9	5.5	7.0	6.0
BULLSEYE	5.6	6.4	5.6	4.4	6.1	6.1	7.7	4.8	5.3	6.8	6.0
SETFM2	5.6	6.4	5.7	4.4	6.2	6.2	7.8	4.9	5.5	7.0	6.0
AST8118LM	5.6	6.4	5.6	4.4	6.1	6.1	7.7	4.8	5.3	6.8	6.0
PST-5DC24	5.6	6.3	5.6	4.4	6.1	6.1	7.7	4.8	5.3	6.8	6.0
PST-5DZM	5.6	6.3	5.6	4.3	6.1	6.1	7.7	4.8	5.3	6.8	6.0
NAI-FQZ-17	5.5	6.3	5.6	4.3	6.1	6.1	7.7	4.8	5.3	6.8	5.9
GRAND PRIX (FC15-01P)	5.6	6.3	5.6	4.3	6.1	6.1	7.7	4.8	5.4	6.9	5.9
GO-AOMK	5.6	6.3	5.6	4.3	6.0	6.0	7.6	4.7	5.2	6.7	5.9
ESCALADE	5.5	6.3	5.6	4.3	6.1	6.1	7.7	4.8	5.3	6.9	5.9
PALOMAR	5.5	6.3	5.6	4.3	6.1	6.1	7.7	4.8	5.4	7.0	5.9
A-TF31	5.5	6.3	5.5	4.2	6.0	6.0	7.6	4.6	5.2	6.6	5.9
RAD-TF131	5.5	6.3	5.6	4.3	6.1	6.1	7.7	4.7	5.3	6.8	5.9
BAR 9FE MAS	5.5	6.2	5.5	4.2	6.0	6.0	7.6	4.7	5.2	6.7	5.9
PST-5MINK	5.5	6.2	5.5	4.2	6.0	6.0	7.6	4.7	5.2	6.7	5.9
RAD-TF 115 (TURBO SS)	5.4	6.2	5.5	4.2	6.0	6.0	7.6	4.7	5.3	6.8	5.8
OG-WALK	5.4	6.1	5.5	4.2	6.0	6.0	7.6	4.7	5.3	6.8	5.8
KENTUCKY-31	4.6	5.4	4.8	3.5	5.3	5.3	7.0	4.1	4.7	6.3	5.0
LSD VALUE	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
C.V. (%)	11.0	9.8	11.0	14.1	10.2	10.2	8.2	13.0	11.8	9.3	10.4

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

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

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

TABLE 3. TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 3 */
2019 DATA

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

NAME	CA7	IN1	MEAN
BRAVO 2	5.3	6.5	5.9
BGR-TF3	5.2	6.5	5.9
PPG-TF 255	5.2	6.4	5.8
JT 517	5.2	6.4	5.8
ATF2116	5.2	6.4	5.8
PST-5E6	5.2	6.4	5.8
BAR-FA8230	5.2	6.4	5.8
BAR FA 8228	5.1	6.4	5.8
ATF1768	5.1	6.4	5.8
LBF	5.1	6.4	5.8
PST-5GLBS	5.1	6.4	5.8
GRANDE 3	5.2	6.4	5.8
DLFPS-321/3705	5.2	6.3	5.8
LIFEGUARD	5.1	6.4	5.8
SETFM2	5.1	6.4	5.7
RH1	5.2	6.3	5.7
PPG-TF 305	5.1	6.3	5.7
PADRE 2	5.1	6.3	5.7
PPG-TF 306	5.2	6.3	5.7
PST-5BYOB	5.1	6.3	5.7
RS1	5.1	6.3	5.7
PALOMAR	5.1	6.4	5.7
DLFPS-321/3702	5.1	6.3	5.7
PST-5THM	5.1	6.3	5.7
NATURALLY GREEN	5.1	6.3	5.7
BANDIT	5.0	6.3	5.7
DLFPS-321/3679	5.1	6.3	5.7
FAYETTE	5.0	6.3	5.7
SETF104	5.1	6.3	5.7
TF445	5.1	6.2	5.6
3N1	5.0	6.2	5.6
BY-TF-169	5.1	6.2	5.6
SESCR1	5.0	6.2	5.6
PRO GOLD	5.0	6.2	5.6
SETFM3	5.0	6.3	5.6
TF456	5.1	6.2	5.6
NAI-ROS4	5.1	6.2	5.6
TD2	5.1	6.2	5.6
DLFPS-321/3701	5.0	6.2	5.6
GRAND PRIX (FC15-01P)	5.0	6.3	5.6
PST-5MCMO	5.0	6.2	5.6
BIRMINGHAM	5.0	6.2	5.6
TANGO	5.0	6.2	5.6
RAD-TF105	5.0	6.2	5.6
NAI-ST5	5.0	6.2	5.6
ESCALADE	5.0	6.3	5.6
MOONDANCE GLX	5.0	6.2	5.6

TABLE 3. TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
 (CONT'D) GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 3 */
 2019 DATA

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

COPIOUS TF	5.0	6.2	5.6
3B2	5.0	6.2	5.6
BONFIRE (JS DTT)	5.0	6.2	5.6
GO-RH20	5.0	6.2	5.6
NAI-TUE	5.0	6.2	5.6
AST8218LM	5.0	6.2	5.6
OG-WALK	4.9	6.3	5.6
DLFPS-321/3708	5.0	6.2	5.6
RAD-TF 115 (TURBO SS)	4.9	6.2	5.6
RH3	5.0	6.2	5.6
BULLSEYE LTZ	5.0	6.2	5.6
DLFPS-321/3699	5.0	6.1	5.6
PST-5TRN	5.0	6.2	5.6
NT-3	5.0	6.2	5.6
DLFPS-321/3696	5.0	6.2	5.6
DEGAS (LTP-TF-111)	5.0	6.2	5.6
PPG-TF 315	5.0	6.1	5.6
NAI-FQZ-17	4.9	6.2	5.6
PPG-TF 323	5.0	6.1	5.6
TMT1	5.0	6.1	5.6
PST-5DC24	4.9	6.2	5.6
RAD-TF131	4.9	6.2	5.5
PPG-TF 244	5.0	6.1	5.5
PPG-TF 316	5.0	6.1	5.5
DLFPS-TF/3552	5.0	6.1	5.5
PST-5GQ	4.9	6.1	5.5
DLFPS-321/3703	5.0	6.1	5.5
DLFPS-TF/3550	5.0	6.1	5.5
DLFPS-TF/3553	5.0	6.1	5.5
SE5STAR	4.9	6.1	5.5
PPG-TF 338	5.0	6.1	5.5
PPG-TF 249	4.9	6.1	5.5
K18-ROE	4.9	6.1	5.5
JT 233	4.9	6.1	5.5
NAI-3N2	4.9	6.1	5.5
PPG-TF 320	4.9	6.1	5.5
RDC	4.9	6.1	5.5
PPG-TF 254	4.9	6.1	5.5
PPG-TF 267	4.9	6.1	5.5
ZRC1	4.9	6.1	5.5
DLFPS-321/3693	4.9	6.1	5.5
MONUMENT (PST-5SQB)	4.9	6.1	5.5
AST8118LM	4.9	6.1	5.5
DLFPS-321/3706	4.9	6.1	5.5
PPG-TF 337	4.9	6.0	5.5
GLX ACED (PST-5DART)	4.9	6.1	5.5
FIREHAWK SLT	4.9	6.1	5.5
BULLSEYE	4.9	6.1	5.5
DLFPS-321/3695	4.9	6.0	5.5
PPG-TF 313	4.9	6.0	5.5

TABLE 3. TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
 (CONT'D) GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 3 */
 2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/			
PPG-TF 257	4.9	6.0	5.5
RHF	4.9	6.0	5.5
PPG-TF 262	4.9	6.0	5.5
PST-5DZM	4.8	6.1	5.4
RHL2	4.9	6.0	5.4
SE53D2	4.9	6.0	5.4
BAR 9FE MAS	4.8	6.1	5.4
PPG-TF 308	4.9	6.0	5.4
RC4	4.9	6.0	5.4
PPG-TF 312	4.9	6.0	5.4
AH2	4.9	6.0	5.4
PARAMOUNT	4.9	6.0	5.4
5LSS	4.9	6.0	5.4
PST-5MINK	4.8	6.0	5.4
AH1	4.8	6.0	5.4
RAPTOR III	4.8	6.0	5.4
HEMI	4.8	6.0	5.4
K18-RS6	4.8	5.9	5.4
BAR TF 134	4.8	5.9	5.4
DRAGSTER	4.8	5.9	5.4
ESTRENA	4.8	6.0	5.4
GO-AOMK	4.8	6.0	5.4
DLFPS-321/3694	4.8	5.9	5.4
PPG-TF 336	4.8	5.9	5.4
K18-WB1	4.8	5.9	5.3
PPG-TF 318	4.8	5.9	5.3
COL-TF-148	4.8	5.9	5.3
DLFPS-321/3707	4.7	5.9	5.3
K18-NSE	4.7	5.9	5.3
PPG-TF 238	4.7	5.8	5.3
JT 268	4.7	5.8	5.3
PPG-TF 231	4.7	5.8	5.3
A-TF31	4.7	5.9	5.3
OKEFE (LTP-TF-122)	4.7	5.8	5.2
KENTUCKY-31	4.4	5.8	5.1
LSD VALUE	1.0	1.0	1.0
C.V. (%)	13.0	10.5	11.6

* 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 4. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
GROWN AT FOUR LOCATIONS 1/
IN THE NORTHEAST REGION
2019 DATA

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

NAME	CT1	NJ1	NJ2	PA2	MEAN
AH2	6.3	7.7	7.6	6.8	7.1
K18-RS6	5.9	8.3	6.5	6.9	6.9
TD2	6.2	7.3	6.0	7.0	6.6
PPG-TF 315	6.5	6.4	6.6	7.0	6.6
AH1	6.0	7.1	6.9	6.5	6.6
COL-TF-148	6.2	7.1	6.6	6.4	6.6
ZRC1	6.1	7.1	6.2	6.6	6.5
PPG-TF 338	6.2	7.1	5.9	6.9	6.5
PPG-TF 336	6.6	7.0	5.8	6.6	6.5
BONFIRE (JS DTT)	6.0	6.3	7.2	6.3	6.5
NAI-ROS4	6.5	6.7	6.1	6.5	6.5
RHF	6.0	7.4	5.7	6.8	6.4
JT 268	5.7	8.0	5.4	6.8	6.4
PPG-TF 238	6.1	7.5	5.6	6.7	6.4
DLFPS-321/3699	5.7	6.5	6.6	6.9	6.4
DLFPS-TF/3552	5.8	6.9	6.3	6.7	6.4
TMT1	5.5	6.5	6.8	6.9	6.4
OKEEFE (LTP-TF-122)	5.7	7.3	6.2	6.5	6.4
PPG-TF 255	6.1	6.1	6.6	6.9	6.4
PPG-TF 318	6.0	7.2	5.7	6.6	6.4
DLFPS-321/3695	5.7	6.7	6.5	6.6	6.4
K18-NSE	5.6	7.1	5.7	7.1	6.4
PPG-TF 231	6.1	6.8	5.9	6.7	6.4
DLFPS-TF/3553	6.6	6.6	5.1	7.0	6.3
PPG-TF 320	6.1	7.0	5.3	7.0	6.3
DLFPS-321/3696	6.1	5.8	6.6	6.8	6.3
RDC	6.1	6.2	6.3	6.6	6.3
PPG-TF 244	5.7	6.4	6.4	6.7	6.3
PPG-TF 257	5.9	6.5	6.0	6.8	6.3
5LSS	5.9	7.1	5.5	6.6	6.3
TF445	5.8	6.2	6.3	6.8	6.3
DLFPS-321/3693	6.3	6.5	5.7	6.7	6.3
PPG-TF 254	5.9	6.4	6.2	6.7	6.3
RHL2	6.0	7.1	5.5	6.5	6.3
DLFPS-TF/3550	5.8	6.4	6.0	6.8	6.3
TF456	5.8	7.0	5.5	6.8	6.3
BAR TF 134	5.6	6.4	6.4	6.7	6.3
DRAGSTER	5.8	6.6	6.0	6.6	6.3
PPG-TF 249	6.3	6.0	6.1	6.6	6.3
PPG-TF 312	6.0	7.2	4.9	6.9	6.3
DEGAS (LTP-TF-111)	5.8	6.2	6.3	6.7	6.3
PPG-TF 313	5.7	7.3	5.2	6.8	6.3
PPG-TF 267	6.1	6.8	5.2	6.8	6.3
NAI-3N2	5.8	6.5	6.0	6.7	6.2

TABLE 4.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
GROWN AT FOUR LOCATIONS 1/
IN THE NORTHEAST REGION
2019 DATA

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

NAME	CT1	NJ1	NJ2	PA2	MEAN
RH3	5.9	7.1	5.3	6.6	6.2
PPG-TF 262	6.4	6.9	5.1	6.5	6.2
JT 233	5.6	6.7	5.9	6.8	6.2
PPG-TF 308	5.7	7.0	5.5	6.7	6.2
PARAMOUNT	6.2	6.7	5.1	6.8	6.2
PPG-TF 306	5.6	6.3	6.0	6.8	6.2
PPG-TF 316	6.1	6.0	5.8	6.7	6.2
GO-RH20	6.2	6.4	5.4	6.6	6.2
RH1	5.7	6.6	5.8	6.5	6.2
RC4	5.4	7.0	5.5	6.6	6.1
RS1	5.9	5.9	6.1	6.7	6.1
DLFPS-321/3694	5.9	6.3	6.0	6.3	6.1
BY-TF-169	5.7	6.6	5.5	6.7	6.1
BULLSEYE LTZ	5.7	6.5	5.4	6.8	6.1
GLX ACED (PST-5DART)	5.7	5.7	6.5	6.5	6.1
PPG-TF 323	5.6	6.4	5.4	6.9	6.1
NAI-ST5	5.7	5.8	6.0	6.7	6.1
DLFPS-321/3705	6.1	5.8	6.0	6.3	6.1
DLFPS-321/3707	5.7	6.2	5.4	6.9	6.1
NT-3	6.1	6.6	4.9	6.6	6.1
K18-WB1	5.9	7.2	4.8	6.2	6.0
K18-ROE	6.0	6.2	5.3	6.5	6.0
GRANDE 3	6.3	5.2	5.9	6.6	6.0
PPG-TF 337	5.7	6.5	5.1	6.7	6.0
DLFPS-321/3701	5.9	6.3	5.2	6.5	6.0
NAI-TUE	5.8	5.4	5.7	7.0	6.0
PPG-TF 305	5.8	5.9	5.4	6.6	5.9
DLFPS-321/3708	5.9	5.7	5.3	6.8	5.9
RAPTOR III	5.6	6.9	4.5	6.5	5.9
PADRE 2	5.7	6.2	5.0	6.4	5.8
PRO GOLD	6.0	5.2	5.6	6.6	5.8
PST-5BYOB	6.0	5.2	5.7	6.5	5.8
PST-5MCMO	5.9	5.0	6.0	6.3	5.8
PST-5TRN	6.2	5.4	5.3	6.3	5.8
DLFPS-321/3706	5.7	5.9	4.7	6.9	5.8
DLFPS-321/3703	5.6	6.3	4.3	6.8	5.8
SE53D2	5.8	5.2	5.5	6.5	5.8
HEMI	5.6	6.1	5.0	6.3	5.7
SETF104	6.5	5.7	3.9	6.8	5.7
ESTRENA	5.9	6.9	3.5	6.5	5.7
SESCR1	5.6	6.0	4.6	6.6	5.7
FIREHAWK SLT	5.7	6.3	4.0	6.7	5.7
DLFPS-321/3702	5.3	5.7	5.0	6.7	5.7
A-TF31	5.7	5.4	5.2	6.4	5.7
3N1	5.6	5.6	4.8	6.5	5.6

TABLE 4.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
GROWN AT FOUR LOCATIONS 1/

IN THE NORTHEAST REGION
2019 DATA

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

NAME	CT1	NJ1	NJ2	PA2	MEAN
DLFPS-321/3679	5.8	5.1	4.7	6.8	5.6
BGR-TF3	6.4	4.5	4.5	7.0	5.6
MOONDANCE GLX	5.9	4.6	5.6	6.2	5.6
ATF1768	6.1	3.9	5.6	6.6	5.6
COPIOUS TF	5.9	4.1	5.8	6.5	5.6
PST-5GLBS	5.7	4.5	6.0	6.0	5.6
3B2	5.7	5.3	4.8	6.4	5.5
BULLSEYE	6.1	5.0	4.7	6.4	5.5
LBFB	6.2	4.7	4.7	6.6	5.5
MONUMENT (PST-5SQB)	5.5	5.7	4.4	6.3	5.5
LIFEGUARD	5.7	4.6	5.3	6.3	5.5
AST8118LM	5.4	4.9	4.7	6.8	5.5
RAD-TF105	5.9	5.1	4.2	6.6	5.5
PST-5GQ	5.4	4.8	5.0	6.5	5.4
PST-5THM	5.9	4.1	5.4	6.2	5.4
BIRMINGHAM	5.7	4.8	4.5	6.6	5.4
AST8218LM	5.4	4.3	5.0	6.9	5.4
SETFM3	6.0	4.5	4.6	6.5	5.4
BRAVO 2	5.7	4.3	4.7	6.7	5.4
FAYETTE	5.7	5.2	4.1	6.3	5.4
GO-AOMK	5.3	5.2	4.1	6.6	5.3
PST-5MINK	5.8	4.0	5.2	6.3	5.3
SE5STAR	5.6	4.6	4.5	6.4	5.3
TANGO	5.6	4.2	4.5	6.7	5.2
PST-5E6	5.9	4.2	4.5	6.3	5.2
BAR-FA8230	5.8	3.9	4.8	6.3	5.2
PST-5DC24	5.8	4.4	4.2	6.3	5.2
BANDIT	5.8	3.9	4.1	6.9	5.2
JT 517	5.8	4.0	3.9	6.8	5.1
PST-5DZM	5.5	4.7	4.0	6.3	5.1
BAR 9FE MAS	5.4	3.8	4.9	6.3	5.1
ATF2116	5.5	4.3	4.1	6.4	5.1
NATURALLY GREEN	5.8	3.4	4.6	6.3	5.0
ESCALADE	5.9	4.0	3.9	6.2	5.0
NAI-FQZ-17	5.5	3.7	4.1	6.6	5.0
SETFM2	5.6	3.6	3.8	6.7	4.9
GRAND PRIX (FC15-01P)	5.7	3.7	3.8	6.3	4.9
RAD-TF131	5.3	4.6	2.9	6.7	4.9
PALOMAR	5.7	2.6	4.8	6.4	4.9
RAD-TF 115 (TURBO SS)	5.6	3.3	3.1	6.6	4.7
OG-WALK	5.6	2.8	3.6	6.0	4.5
BAR FA 8228	5.7	2.8	3.1	6.4	4.5
KENTUCKY-31	4.3	1.1	1.3	4.1	2.7
LSD VALUE	0.7	1.4	1.1	0.5	0.5
C.V. (%)	7.4	14.9	13.3	4.7	10.5

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

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

TABLE 5.

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
GROWN AT NINE LOCATIONS 1/
IN THE TRANSITION REGION
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/									MEAN
	DE1	KS1	KY1	MD1	MO1	NC1	OK1	TN1	VA1	
PPG-TF 306	6.4	6.4	6.1	6.6	5.2	5.4	5.5	6.5	8.1	6.2
ZRC1	6.4	6.5	6.1	6.3	6.5	4.8	5.5	6.9	7.2	6.2
PPG-TF 255	6.0	6.0	6.0	5.9	6.7	4.6	5.9	6.7	7.3	6.1
DLFPS-321/3705	6.2	6.1	6.2	6.0	5.8	5.6	5.6	6.1	7.6	6.1
TF445	6.4	6.3	5.8	6.2	5.2	5.4	5.5	6.4	7.6	6.1
AH2	6.8	6.1	6.1	6.0	6.2	4.8	5.2	6.7	6.8	6.1
TD2	6.6	5.1	6.0	6.4	5.7	5.0	5.5	6.8	7.6	6.1
PPG-TF 336	6.4	5.4	6.2	6.9	5.2	4.2	5.2	6.8	8.2	6.1
TF456	6.2	6.1	6.2	5.9	5.6	5.1	5.5	6.0	7.7	6.0
BONFIRE (JS DTT)	6.5	6.0	6.0	6.3	6.3	4.6	5.4	6.3	6.8	6.0
BY-TF-169	5.6	6.1	5.9	6.0	5.7	5.2	5.5	6.7	7.3	6.0
PPG-TF 238	6.5	6.1	6.1	5.4	5.3	4.9	5.8	6.2	7.4	6.0
PPG-TF 254	6.5	5.9	6.1	6.1	5.7	4.6	5.6	6.5	6.7	6.0
PPG-TF 320	6.5	5.0	6.0	5.7	5.6	4.7	5.8	5.9	8.3	5.9
RH1	5.9	5.6	6.0	5.8	5.6	5.6	5.6	6.7	6.8	5.9
DLFPS-321/3699	6.0	5.8	5.8	6.2	5.7	4.9	5.6	6.8	6.7	5.9
RH3	6.6	5.2	6.0	5.9	6.3	4.9	5.6	6.4	6.7	5.9
PPG-TF 337	6.3	6.2	6.0	5.7	4.8	4.6	5.5	6.3	8.2	5.9
BULLSEYE LTZ	6.5	5.5	5.9	5.2	5.4	5.3	5.6	6.9	7.1	5.9
PPG-TF 316	6.3	5.7	6.2	6.2	5.1	5.2	5.4	6.6	6.6	5.9
DLFPS-321/3701	6.2	5.3	5.9	5.3	5.8	4.6	5.4	6.2	8.6	5.9
K18-RS6	6.3	5.3	6.2	6.0	6.3	4.6	5.4	6.5	6.6	5.9
SESCR1	6.0	5.5	6.1	5.4	5.4	5.3	5.5	6.7	7.1	5.9
PPG-TF 338	6.1	6.0	5.9	5.8	5.7	5.3	5.8	6.5	6.1	5.9
PPG-TF 323	6.2	6.3	6.1	5.7	5.1	4.7	5.7	6.2	7.3	5.9
PST-5TRN	6.0	5.2	5.7	5.8	5.7	5.3	5.9	5.9	7.5	5.9
GO-RH20	6.2	5.8	5.7	5.3	5.7	5.6	5.5	6.8	6.5	5.9
PPG-TF 312	6.5	5.7	6.2	6.3	5.4	3.7	5.1	6.5	7.6	5.9
NAI-ROS4	6.2	4.5	6.1	5.2	5.5	5.1	5.5	6.7	8.1	5.9
PADRE 2	6.0	4.7	5.8	5.8	5.9	4.9	5.3	6.7	7.7	5.9
PPG-TF 315	6.1	5.7	5.8	5.9	6.0	3.9	6.0	6.7	6.7	5.9
RS1	6.3	5.2	6.0	4.9	6.3	4.3	5.3	6.3	8.3	5.9
RHF	6.1	5.9	6.0	5.2	5.8	5.3	5.6	6.4	6.5	5.9
RDC	6.3	4.9	6.2	6.2	5.7	4.7	5.4	6.5	6.9	5.9
RC4	6.3	6.2	6.1	6.2	4.6	4.0	5.8	6.4	7.2	5.9
DLFPS-321/3702	6.2	6.2	5.9	5.0	5.7	3.7	5.6	6.4	8.0	5.9
PST-5E6	6.8	5.1	5.9	5.2	5.3	4.9	5.6	6.4	7.6	5.9
PPG-TF 244	5.8	5.1	6.0	5.4	5.9	5.4	5.6	5.5	7.9	5.9
LIFEGUARD	6.5	5.6	5.9	5.4	5.4	4.3	5.8	6.3	7.6	5.9
DLFPS-321/3703	5.9	6.0	5.9	5.2	5.7	4.6	5.1	6.6	7.5	5.8
PPG-TF 318	6.1	5.7	6.1	6.0	4.8	4.7	5.4	6.4	7.2	5.8
NT-3	6.5	6.1	6.0	5.6	4.7	4.7	4.8	6.3	7.7	5.8
PPG-TF 308	6.5	5.2	5.7	6.0	5.6	4.6	5.5	5.8	7.4	5.8
RHL2	5.9	6.3	6.2	5.9	5.3	4.3	5.0	6.3	7.2	5.8

TABLE 5.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
GROWN AT NINE LOCATIONS 1/
IN THE TRANSITION REGION
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/									MEAN
	DE1	KS1	KY1	MD1	MO1	NC1	OK1	TN1	VA1	
3N1	6.0	5.2	5.7	5.6	5.0	4.9	5.6	6.1	8.2	5.8
JT 233	6.3	6.1	5.8	5.1	5.7	5.0	5.5	6.4	6.3	5.8
DLFPS-TF/3552	6.1	5.2	6.2	5.1	5.2	4.5	5.7	6.2	8.1	5.8
JT 268	6.3	6.3	5.9	5.4	6.3	4.3	5.5	5.3	6.7	5.8
DRAGSTER	6.3	6.1	6.0	5.3	5.6	4.9	5.4	6.4	6.2	5.8
PST-5MCMO	6.5	4.7	5.9	5.7	4.8	4.7	5.8	6.7	7.5	5.8
DLFPS-TF/3550	6.3	5.1	5.8	5.6	5.3	4.4	5.5	6.3	7.8	5.8
PPG-TF 267	5.9	5.9	5.9	6.0	5.4	5.1	5.6	6.3	6.0	5.8
OKEEFE (LTP-TF-122)	6.1	5.3	6.0	6.0	5.1	4.5	5.5	6.5	7.0	5.8
PST-5THM	6.4	5.0	5.7	5.8	5.2	4.6	5.5	6.6	7.2	5.8
PPG-TF 262	6.3	4.8	5.9	6.3	5.9	4.4	5.1	6.4	6.7	5.8
GRANDE 3	5.9	5.4	5.9	5.9	5.6	4.6	5.3	6.7	6.6	5.8
DLFPS-TF/3553	6.3	6.0	5.9	5.6	5.1	4.1	5.5	6.0	7.3	5.8
PPG-TF 249	6.0	5.3	6.1	5.7	5.6	4.0	5.8	6.1	7.2	5.7
PPG-TF 305	6.5	4.8	6.0	5.3	5.4	4.0	5.7	6.1	7.9	5.7
DEGAS (LTP-TF-111)	6.0	4.3	5.9	5.9	4.7	4.9	5.9	6.4	7.7	5.7
BAR TF 134	5.8	5.2	5.7	5.9	5.5	4.0	5.6	6.1	7.8	5.7
PST-5BYOB	6.5	4.6	5.8	5.3	5.2	4.6	5.8	6.4	7.3	5.7
3B2	6.5	5.1	5.8	5.8	5.4	4.7	5.8	5.8	6.4	5.7
K18-ROE	6.0	5.7	5.8	4.9	5.8	4.8	5.7	6.5	6.2	5.7
DLFPS-321/3695	6.4	5.0	6.3	5.0	5.4	4.2	5.5	6.6	6.9	5.7
DLFPS-321/3693	6.3	4.7	6.1	5.9	5.3	3.6	5.4	6.7	7.4	5.7
NAI-3N2	6.0	4.5	6.1	5.0	5.7	5.4	5.6	6.6	6.5	5.7
DLFPS-321/3679	6.0	5.3	5.9	5.8	5.4	4.0	5.8	6.3	6.6	5.7
TMT1	6.0	4.6	6.1	5.1	6.2	4.2	5.4	6.4	6.9	5.7
PST-5GLBS	5.9	4.7	5.9	5.1	5.7	4.8	6.0	6.2	6.6	5.7
PPG-TF 231	5.9	4.9	6.1	5.7	5.5	3.7	5.5	6.5	7.1	5.7
DLFPS-321/3708	6.0	5.5	5.8	5.3	4.7	3.8	5.8	6.4	7.5	5.6
DLFPS-321/3696	5.9	5.9	5.8	5.2	5.4	4.2	5.4	6.7	6.2	5.6
NAI-ST5	5.9	4.4	6.1	6.1	5.2	5.1	5.9	5.6	6.4	5.6
PRO GOLD	6.2	4.9	5.8	5.1	5.8	4.3	5.3	6.5	6.8	5.6
HEMI	6.5	5.0	5.9	5.4	5.4	4.1	4.9	6.6	6.8	5.6
PARAMOUNT	5.8	4.7	5.7	5.3	5.8	4.2	5.4	6.4	7.4	5.6
PPG-TF 313	6.4	4.5	5.9	6.3	5.9	4.0	5.1	6.6	5.9	5.6
5LSS	6.5	5.1	5.7	5.0	4.7	4.0	5.0	6.1	8.6	5.6
DLFPS-321/3706	6.0	5.1	5.9	5.8	5.2	3.5	5.2	6.7	7.1	5.6
BAR-FA8230	6.0	4.9	5.6	4.6	5.2	4.0	6.1	6.5	7.7	5.6
COL-TF-148	6.2	3.9	6.0	6.0	5.9	3.9	5.4	6.6	6.4	5.6
RAPTOR III	5.5	4.9	6.0	5.4	5.7	4.3	5.3	6.6	6.5	5.6
GLX ACED (PST-5DART)	6.0	4.6	5.9	5.7	4.8	4.7	5.8	6.1	6.9	5.6
BRAVO 2	5.5	4.5	5.9	5.0	5.8	5.1	5.4	6.1	7.0	5.6
ATF2116	5.8	4.6	5.7	5.1	4.4	5.0	6.2	6.3	7.2	5.6
ATF1768	6.0	4.4	5.9	5.0	5.4	4.3	5.7	6.4	7.1	5.6
MOONDANCE GLX	5.9	4.4	5.9	4.4	5.4	4.4	6.1	5.4	8.1	5.6
K18-WB1	6.0	4.9	5.9	6.1	5.4	3.7	5.7	5.9	6.2	5.6

TABLE 5.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
GROWN AT NINE LOCATIONS 1/
IN THE TRANSITION REGION
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/									
	DE1	KS1	KY1	MD1	MO1	NC1	OK1	TN1	VA1	MEAN
K18-NSE	6.3	4.9	6.0	5.4	5.5	4.3	4.9	6.7	5.9	5.6
FAYETTE	5.5	5.1	5.8	4.9	5.6	4.6	5.7	6.1	6.7	5.5
SETF104	6.0	4.8	5.9	5.0	6.1	3.9	5.0	6.2	7.1	5.5
NAI-TUE	6.2	4.9	5.9	4.6	5.4	5.1	5.6	5.6	6.4	5.5
JT 517	6.1	5.0	5.7	4.2	5.5	3.6	5.4	6.5	7.6	5.5
RAD-TF105	5.8	6.0	5.9	5.1	5.1	4.3	4.8	6.4	6.2	5.5
PST-5GQ	6.1	3.8	5.8	5.1	5.1	4.6	5.7	5.7	7.6	5.5
NATURALLY GREEN	5.6	4.9	6.0	4.7	5.3	4.3	5.4	6.1	7.2	5.5
DLFPS-321/3707	6.0	4.5	5.8	6.1	4.9	3.9	5.0	6.2	6.9	5.5
PPG-TF 257	6.0	4.9	5.8	5.3	4.1	4.6	5.5	6.6	6.3	5.5
AH1	5.8	3.7	6.1	5.6	6.2	3.9	5.3	6.5	5.8	5.4
BIRMINGHAM	5.8	4.6	5.6	4.3	5.4	5.2	5.8	6.4	5.6	5.4
DLFPS-321/3694	6.3	4.5	5.9	4.4	5.6	3.4	5.0	6.2	7.5	5.4
LBF	6.0	5.4	5.7	4.2	5.3	3.5	5.4	6.4	6.7	5.4
SETFM3	5.5	5.1	5.8	4.7	4.6	4.1	5.6	6.2	7.1	5.4
SE5STAR	5.8	5.2	5.7	5.7	4.9	4.7	5.4	5.3	6.0	5.4
SE53D2	6.3	4.4	5.9	5.0	4.9	4.4	5.8	5.6	6.1	5.4
FIREHAWK SLT	6.0	4.4	6.1	5.3	5.2	3.7	4.9	6.5	6.3	5.4
PST-5DZM	5.3	4.3	5.6	5.6	5.2	4.2	5.5	6.1	6.6	5.4
BAR FA 8228	5.9	4.8	5.6	5.1	5.1	4.0	5.2	6.3	6.3	5.4
TANGO	6.2	4.2	5.6	5.0	4.9	4.5	5.2	6.3	6.2	5.4
ESTRENA	5.7	4.7	5.9	5.0	5.8	4.3	5.0	6.2	5.5	5.3
MONUMENT (PST-5SQB)	5.5	4.1	5.5	5.2	5.2	4.7	5.7	5.4	6.7	5.3
COPIOUS TF	5.8	5.3	5.7	4.0	5.2	4.0	5.0	6.4	6.6	5.3
BGR-TF3	5.7	5.3	5.9	3.9	4.7	3.4	5.5	6.5	6.7	5.3
BULLSEYE	6.2	4.1	5.7	5.0	5.1	3.5	5.3	6.4	6.2	5.3
PST-5DC24	5.5	4.7	5.6	4.6	4.7	3.5	5.7	6.3	6.9	5.3
GRAND PRIX (FC15-01P)	5.8	4.7	5.6	4.2	5.1	4.1	5.5	6.3	6.2	5.3
AST8218LM	5.6	4.7	5.6	4.0	4.8	3.7	5.7	6.4	6.7	5.2
AST8118LM	5.4	4.9	5.6	4.2	5.0	3.4	5.4	6.4	6.9	5.2
SETFM2	5.4	5.1	5.6	4.7	4.7	3.4	5.3	6.5	6.6	5.2
GO-AOMK	4.9	4.4	5.9	4.8	4.2	4.3	5.6	6.5	6.3	5.2
BAR 9FE MAS	5.6	4.9	5.4	4.1	5.4	3.4	5.4	5.8	6.5	5.2
BANDIT	6.3	5.1	5.7	3.9	5.4	3.5	5.4	5.6	5.7	5.2
PST-5MINK	5.8	5.2	5.3	4.2	3.9	3.8	5.1	6.3	6.7	5.2
NAI-FQZ-17	5.6	4.6	5.7	4.4	4.8	3.8	5.2	6.1	6.1	5.1
PALOMAR	5.9	4.2	5.6	3.7	5.3	3.9	5.4	5.8	6.4	5.1
ESCALADE	5.2	4.6	5.7	3.8	4.6	4.0	5.6	5.6	6.4	5.1
RAD-TF131	5.6	4.3	5.7	4.3	5.1	2.6	4.8	6.1	6.8	5.0
OG-WALK	5.4	4.5	5.5	3.6	4.7	3.7	5.4	6.2	6.4	5.0
A-TF31	4.5	5.4	5.6	4.2	5.0	3.0	4.9	6.3	5.9	5.0
RAD-TF 115 (TURBO SS)	5.5	4.8	5.7	3.7	5.2	2.9	4.6	6.5	5.9	5.0
KENTUCKY-31	5.6	3.1	4.4	2.7	4.8	3.9	4.4	5.9	4.9	4.4
LSD VALUE	0.8	1.6	0.4	1.1	1.3	1.3	0.5	0.8	2.0	0.4
C.V. (%)	7.9	18.8	3.7	12.6	14.8	18.4	6.1	8.0	18.2	13.1

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 TALL FESCUE CULTIVARS
 GROWN AT TWO LOCATIONS 1/
 IN THE SOUTHEAST REGION
 2019 DATA

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

NAME	GA1	MS1	MEAN
AH2	6.8	4.9	5.8
COL-TF-148	6.9	4.8	5.8
TD2	6.6	5.1	5.8
PPG-TF 337	6.8	4.8	5.8
PPG-TF 262	6.7	4.8	5.7
NAI-ST5	6.7	4.7	5.7
PPG-TF 244	6.4	4.9	5.7
BONFIRE (JS DTT)	6.4	4.9	5.7
PPG-TF 255	6.6	4.8	5.7
K18-WB1	6.7	4.6	5.6
BY-TF-169	6.6	4.7	5.6
TMT1	6.8	4.5	5.6
DLFPS-321/3701	6.5	4.7	5.6
PPG-TF 315	6.4	4.7	5.6
JT 268	6.5	4.7	5.6
DLFPS-321/3708	6.1	5.0	5.6
K18-NSE	6.4	4.7	5.6
PPG-TF 267	6.4	4.7	5.6
PPG-TF 336	6.6	4.5	5.6
K18-RS6	6.3	4.8	5.5
TF445	6.4	4.7	5.5
DEGAS (LTP-TF-111)	6.3	4.8	5.5
DLFPS-321/3702	6.3	4.8	5.5
PPG-TF 249	6.5	4.5	5.5
SETF104	6.4	4.7	5.5
RHF	6.5	4.6	5.5
BAR TF 134	6.2	4.9	5.5
PST-5GQ	6.4	4.6	5.5
5LSS	6.3	4.7	5.5
PST-5GLBS	6.3	4.7	5.5
DLFPS-321/3707	6.1	4.9	5.5
PPG-TF 308	6.2	4.8	5.5
AH1	6.1	4.9	5.5
GRANDE 3	6.1	4.8	5.5
JT 233	6.4	4.6	5.5
NAI-ROS4	6.2	4.7	5.5
PPG-TF 306	6.2	4.7	5.5
DLFPS-TF/3553	6.2	4.8	5.5
SE53D2	6.4	4.5	5.5
GO-RH20	6.3	4.6	5.4
HEMI	6.3	4.6	5.4
RHL2	6.2	4.7	5.4
DLFPS-321/3705	6.2	4.6	5.4
DLFPS-TF/3552	6.0	4.8	5.4

TABLE 6.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
GROWN AT TWO LOCATIONS 1/
IN THE SOUTHEAST REGION
2019 DATA

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

NAME	GA1	MS1	MEAN
PPG-TF 238	6.3	4.6	5.4
PPG-TF 323	6.2	4.6	5.4
DLFPS-321/3696	6.3	4.6	5.4
OKEEFE (LTP-TF-122)	6.3	4.5	5.4
DLFPS-TF/3550	6.1	4.8	5.4
FIREHAWK SLT	6.3	4.5	5.4
NAI-TUE	6.3	4.5	5.4
PPG-TF 254	6.3	4.6	5.4
RH1	6.1	4.8	5.4
RDC	6.1	4.8	5.4
TF456	6.1	4.7	5.4
ZRC1	6.2	4.6	5.4
RS1	6.1	4.7	5.4
RAPTOR III	6.1	4.7	5.4
DLFPS-321/3699	6.1	4.7	5.4
RH3	6.3	4.4	5.4
ATF2116	6.1	4.7	5.4
K18-ROE	6.2	4.6	5.4
PPG-TF 305	5.7	5.0	5.4
PPG-TF 320	6.1	4.6	5.4
PST-5DC24	6.2	4.5	5.3
NAI-3N2	6.1	4.6	5.3
PADRE 2	5.9	4.8	5.3
BRAVO 2	6.5	4.2	5.3
RC4	5.9	4.7	5.3
RAD-TF105	6.3	4.4	5.3
DLFPS-321/3679	6.0	4.6	5.3
NT-3	5.7	4.9	5.3
PPG-TF 313	5.9	4.7	5.3
TANGO	6.3	4.3	5.3
DLFPS-321/3695	6.2	4.4	5.3
PPG-TF 316	5.8	4.8	5.3
PPG-TF 257	6.0	4.6	5.3
PPG-TF 318	6.2	4.4	5.3
PST-5E6	5.9	4.7	5.3
BAR-FA8230	5.8	4.8	5.3
DRAGSTER	5.9	4.6	5.3
SESCR1	6.1	4.4	5.3
LIFEGUARD	6.2	4.3	5.3
GO-AOMK	6.0	4.5	5.3
MONUMENT (PST-5SQB)	6.1	4.4	5.3
DLFPS-321/3693	5.8	4.7	5.3
GLX ACED (PST-5DART)	5.9	4.6	5.2
LBF	6.0	4.4	5.2
PARAMOUNT	5.9	4.5	5.2

TABLE 6.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
GROWN AT TWO LOCATIONS 1/
IN THE SOUTHEAST REGION
2019 DATA

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

NAME	GA1	MS1	MEAN
PST-5TRN	6.0	4.5	5.2
PST-5THM	5.8	4.6	5.2
PPG-TF 338	5.6	4.8	5.2
BGR-TF3	6.1	4.3	5.2
PPG-TF 312	6.0	4.4	5.2
BULLSEYE	5.9	4.4	5.2
DLFPS-321/3703	6.0	4.4	5.2
DLFPS-321/3706	5.7	4.6	5.2
AST8218LM	6.1	4.3	5.2
BAR FA 8228	5.7	4.6	5.2
PST-5MCMO	5.7	4.6	5.2
PST-5DZM	6.0	4.3	5.2
3N1	5.9	4.4	5.1
DLFPS-321/3694	6.0	4.3	5.1
BIRMINGHAM	6.1	4.1	5.1
BULLSEYE LTZ	5.8	4.5	5.1
SETFM3	5.9	4.3	5.1
3B2	5.7	4.5	5.1
ATF1768	5.8	4.4	5.1
MOONDANCE GLX	5.6	4.6	5.1
PST-5BYOB	5.8	4.4	5.1
RAD-TF131	5.6	4.4	5.0
SETFM2	5.7	4.4	5.0
BANDIT	5.6	4.5	5.0
COPIOUS TF	5.7	4.4	5.0
OG-WALK	5.8	4.3	5.0
FAYETTE	5.6	4.4	5.0
A-TF31	5.9	4.1	5.0
JT 517	5.6	4.4	5.0
NATURALLY GREEN	5.6	4.4	5.0
RAD-TF 115 (TURBO SS)	5.6	4.4	5.0
PRO GOLD	5.5	4.5	5.0
SE5STAR	5.5	4.4	5.0
NAI-FQZ-17	5.6	4.3	4.9
PPG-TF 231	5.7	4.2	4.9
AST8118LM	5.7	4.1	4.9
BAR 9FE MAS	5.7	4.2	4.9
ESCALADE	5.6	4.3	4.9
GRAND PRIX (FC15-01P)	5.5	4.4	4.9
ESTRENA	5.6	4.1	4.8
PALOMAR	5.2	4.4	4.8
PST-5MINK	5.1	4.4	4.8
KENTUCKY-31	4.4	3.9	4.2
LSD VALUE	0.7	0.4	0.4
C.V. (%)	7.6	5.1	6.9

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 7. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
GROWN AT FOUR LOCATIONS 1/
IN THE NORTH CENTRAL REGION
2019 DATA

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

NAME	IA1	IN1	MI1	NE1	MEAN
RH1	6.9	6.7	7.3	5.0	6.5
RS1	7.0	6.3	7.1	5.3	6.4
RHL2	7.0	6.2	6.8	5.5	6.4
GRANDE 3	6.8	6.8	6.7	4.9	6.3
SE5STAR	6.8	6.7	6.6	5.2	6.3
TF456	6.9	6.2	6.7	5.4	6.3
PST-5GLBS	7.0	6.8	6.5	4.9	6.3
BGR-TF3	7.2	6.9	6.5	4.6	6.3
3B2	6.7	6.8	6.8	5.0	6.3
BRAVO 2	6.8	6.6	6.7	5.1	6.3
PPG-TF 267	7.0	6.3	6.4	5.3	6.3
PPG-TF 255	7.0	6.2	6.7	5.1	6.3
AH2	6.9	6.3	6.7	5.2	6.3
DLFPS-321/3699	7.2	6.2	6.7	5.0	6.2
FAYETTE	7.1	6.4	6.5	5.0	6.2
BANDIT	7.1	6.7	6.2	5.0	6.2
PPG-TF 313	6.9	6.8	6.2	5.1	6.2
BONFIRE (JS DTT)	7.2	6.2	6.6	5.0	6.2
ATF2116	7.0	6.6	6.6	4.7	6.2
AH1	7.2	6.6	6.3	4.9	6.2
TMT1	7.2	6.2	6.7	4.9	6.2
NAI-ST5	7.0	6.1	6.9	5.0	6.2
K18-WB1	6.9	5.9	6.8	5.2	6.2
BY-TF-169	6.9	6.1	6.9	5.0	6.2
MONUMENT (PST-5SQB)	6.7	6.8	6.6	4.8	6.2
5LSS	6.7	6.2	6.8	5.1	6.2
PADRE 2	6.8	6.6	6.5	5.0	6.2
ESCALADE	7.0	6.8	6.1	4.9	6.2
DLFPS-321/3705	6.8	6.2	7.0	4.9	6.2
TD2	6.9	6.5	6.4	5.0	6.2
K18-RS6	6.7	6.3	6.5	5.3	6.2
SE53D2	6.9	6.7	6.3	4.9	6.2
RHF	6.7	6.6	6.6	5.0	6.2
DLFPS-TF/3552	7.1	6.9	5.9	4.8	6.2
BIRMINGHAM	7.2	5.7	6.8	5.0	6.2
PRO GOLD	7.0	6.4	6.2	5.2	6.2
RH3	6.6	6.3	6.4	5.4	6.2
DLFPS-321/3679	7.0	6.2	6.4	5.1	6.2
NAI-3N2	7.0	6.5	6.0	5.2	6.2
3N1	6.9	5.9	6.7	5.1	6.2
ESTRENA	7.0	6.4	6.4	4.8	6.2
ATF1768	6.9	6.2	6.7	4.8	6.1
DLFPS-TF/3550	6.8	6.8	6.2	4.7	6.1
BULLSEYE LTZ	7.0	6.4	6.3	4.9	6.1

TABLE 7.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
GROWN AT FOUR LOCATIONS 1/
IN THE NORTH CENTRAL REGION
2019 DATA

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

NAME	IA1	IN1	MI1	NE1	MEAN
LIFEGUARD	6.8	6.2	6.6	4.9	6.1
OG-WALK	6.8	6.4	6.4	4.9	6.1
DLFPS-321/3696	6.9	6.1	6.3	5.2	6.1
DLFPS-321/3694	7.1	5.8	6.7	4.9	6.1
DLFPS-321/3707	7.1	6.4	6.0	5.0	6.1
NT-3	6.9	6.2	6.3	5.0	6.1
MOONDANCE GLX	6.8	6.1	6.6	5.0	6.1
PPG-TF 338	7.1	6.3	5.9	5.0	6.1
PPG-TF 320	7.1	6.2	6.4	4.8	6.1
PPG-TF 323	7.0	6.0	6.4	5.0	6.1
PST-5BYOB	6.9	6.1	6.5	5.0	6.1
RAD-TF 115 (TURBO SS)	7.2	6.3	5.8	5.0	6.1
BAR-FA8230	6.8	6.1	6.4	5.1	6.1
SESCR1	7.0	5.6	6.7	5.1	6.1
NAI-TUE	7.0	6.2	6.3	4.9	6.1
NAI-ROS4	6.7	6.0	6.8	4.9	6.1
DLFPS-321/3703	6.8	6.3	6.3	5.0	6.1
RAD-TF105	7.0	6.6	5.8	5.0	6.1
HEMI	7.0	6.0	6.4	4.9	6.1
SETF104	7.0	6.7	5.7	4.9	6.1
SETFM2	7.1	6.9	5.6	4.7	6.1
JT 517	7.0	6.6	5.8	4.9	6.1
RC4	7.1	5.9	6.2	5.1	6.1
DLFPS-321/3695	6.8	6.5	6.2	4.8	6.1
PPG-TF 249	7.0	6.2	5.9	5.1	6.1
AST8118LM	7.3	5.8	6.3	4.9	6.1
PST-5MINK	7.0	6.1	6.7	4.5	6.1
RAD-TF131	7.0	6.4	5.7	5.1	6.1
PPG-TF 312	6.8	6.0	6.2	5.3	6.1
PPG-TF 244	6.8	6.1	6.3	5.0	6.1
PPG-TF 262	6.9	6.0	6.3	5.0	6.1
PPG-TF 257	6.8	6.2	6.1	5.2	6.1
PPG-TF 306	6.9	5.5	6.8	5.0	6.1
PST-5DC24	7.0	6.4	5.9	4.9	6.0
DLFPS-321/3702	7.0	6.2	6.2	4.8	6.0
COL-TF-148	6.7	6.3	6.0	5.2	6.0
DEGAS (LTP-TF-111)	6.8	6.7	6.1	4.7	6.0
NAI-FQZ-17	6.7	5.9	6.6	5.0	6.0
BULLSEYE	7.1	6.1	6.1	4.9	6.0
SETFM3	7.2	6.2	5.8	4.9	6.0
K18-NSE	6.8	6.0	6.3	5.0	6.0
COPIOUS TF	7.1	6.3	5.6	5.1	6.0
JT 233	6.9	6.3	6.1	4.9	6.0
FIREHAWK SLT	6.8	5.6	6.5	5.2	6.0
TF445	6.8	5.9	6.2	5.1	6.0

TABLE 7. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE 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	IN1	MI1	NE1	MEAN
RDC	6.7	6.0	6.2	5.1	6.0
DLFPS-321/3706	6.7	6.2	6.2	4.9	6.0
GLX ACED (PST-5DART)	6.5	6.5	6.1	4.9	6.0
PPG-TF 308	6.6	6.1	6.2	5.0	6.0
BAR TF 134	6.8	5.8	6.3	5.0	6.0
TANGO	7.0	6.3	5.9	4.8	6.0
AST8218LM	7.1	6.2	5.8	4.9	6.0
LBF	7.1	6.4	5.9	4.6	6.0
DLFPS-321/3701	7.0	5.8	6.3	4.9	6.0
GO-AOMK	6.9	5.9	6.2	5.0	6.0
PST-5DZM	6.7	6.1	6.2	5.0	6.0
RAPTOR III	6.8	5.9	6.3	4.9	6.0
BAR 9FE MAS	7.1	5.9	6.1	4.8	6.0
GRAND PRIX (FC15-01P)	6.8	6.1	6.2	4.9	6.0
A-TF31	7.0	5.8	6.2	4.8	6.0
GO-RH20	6.7	5.6	6.7	4.9	6.0
K18-ROE	6.9	6.1	6.1	4.9	6.0
DLFPS-321/3693	7.1	5.7	6.4	4.7	6.0
PARAMOUNT	7.0	5.4	6.3	5.1	6.0
OKEEFE (LTP-TF-122)	6.7	5.8	6.2	5.1	6.0
PPG-TF 305	7.0	5.7	6.2	4.9	5.9
PALOMAR	6.8	6.1	6.2	4.7	5.9
DLFPS-TF/3553	7.1	6.2	5.8	4.7	5.9
ZRC1	6.6	5.8	6.6	4.8	5.9
DLFPS-321/3708	7.1	5.8	5.7	5.0	5.9
PPG-TF 318	6.8	5.6	6.2	5.2	5.9
PPG-TF 336	7.0	5.6	6.1	5.0	5.9
PPG-TF 337	6.9	5.2	6.4	5.0	5.9
JT 268	7.0	5.6	6.1	4.9	5.9
PPG-TF 254	6.8	5.5	6.3	4.9	5.9
PST-5TRN	6.8	5.6	6.2	4.9	5.9
DRAGSTER	6.8	6.0	5.8	4.8	5.9
PPG-TF 315	7.0	5.4	6.2	4.9	5.9
PST-5E6	6.5	5.8	6.2	4.9	5.9
PST-5GQ	6.7	5.8	5.8	5.2	5.9
BAR FA 8228	6.8	6.1	5.8	4.7	5.9
PST-5THM	6.7	5.7	6.4	4.7	5.9
PPG-TF 316	7.0	5.4	5.9	5.1	5.9
PPG-TF 231	7.0	5.6	6.1	4.8	5.8
PST-5MCMO	6.7	6.1	5.7	4.9	5.8
NATURALLY GREEN	7.0	5.8	5.7	4.7	5.8
PPG-TF 238	6.8	5.1	6.5	4.8	5.8
KENTUCKY-31	6.4	5.8	5.6	4.4	5.6
LSD VALUE	0.4	0.8	1.0	0.4	0.4
C.V. (%)	3.2	8.5	10.2	5.3	7.4

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

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

TABLE 8. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE 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					MEAN
	JUN	JUL	AUG	SEP	OCT	
PPG-TF 308	7.7	9.0	8.0	8.7	8.3	8.3
RAD-TF105	7.3	8.7	8.7	8.3	8.7	8.3
AH1	7.3	8.3	8.7	8.3	8.7	8.3
RAD-TF 115 (TURBO SS)	7.3	8.3	8.3	8.7	8.7	8.3
AST8218LM	6.7	8.7	8.7	8.7	8.3	8.2
NAI-3N2	7.3	8.0	8.7	8.7	8.3	8.2
SETF104	7.3	8.7	8.3	8.3	8.3	8.2
TF456	7.3	8.3	8.3	8.3	8.7	8.2
PPG-TF 305	7.3	8.7	8.3	8.3	8.3	8.2
ATF1768	8.0	8.3	8.0	8.3	8.0	8.1
DLFPS-321/3702	7.3	8.7	8.0	8.7	8.0	8.1
DLFPS-TF/3552	7.0	8.3	8.3	8.3	8.7	8.1
PADRE 2	7.7	8.7	8.0	8.0	8.3	8.1
PPG-TF 262	7.3	8.7	8.0	8.3	8.3	8.1
RDC	7.3	8.7	8.0	8.3	8.3	8.1
DLFPS-321/3701	7.3	9.0	8.3	8.0	8.0	8.1
DLFPS-321/3708	7.0	8.3	8.7	8.7	8.0	8.1
JT 268	7.0	8.7	8.3	8.7	8.0	8.1
NAI-ROS4	7.3	9.0	8.0	8.3	8.0	8.1
PPG-TF 255	7.3	8.7	7.7	8.7	8.3	8.1
PPG-TF 313	7.0	8.3	8.0	8.3	9.0	8.1
PRO GOLD	6.7	9.0	8.3	8.3	8.3	8.1
RAPTOR III	7.0	9.0	8.3	8.3	8.0	8.1
RHL2	6.7	8.7	8.3	8.7	8.3	8.1
NAI-ST5	7.0	8.7	7.7	8.3	8.7	8.1
PPG-TF 323	6.3	8.7	8.0	8.7	8.7	8.1
BGR-TF3	7.0	8.3	8.0	8.7	8.3	8.1
BULLSEYE LTZ	7.3	8.7	8.0	8.3	8.0	8.1
BY-TF-169	7.3	9.0	7.7	8.3	8.0	8.1
DEGAS (LTP-TF-111)	7.0	9.0	8.3	8.0	8.0	8.1
DLFPS-321/3705	7.3	8.3	8.3	8.0	8.3	8.1
GO-RH20	7.0	8.3	7.7	8.7	8.7	8.1
K18-RS6	8.0	8.3	7.7	8.3	8.0	8.1
K18-WB1	7.3	8.0	8.0	8.7	8.3	8.1
PPG-TF 312	7.7	8.7	7.7	8.0	8.3	8.1
PPG-TF 316	7.3	8.3	8.3	8.3	8.0	8.1
PPG-TF 318	7.0	8.7	8.3	8.3	8.0	8.1
RC4	7.3	8.3	8.3	8.0	8.3	8.1
RH3	7.3	8.7	8.0	8.0	8.3	8.1
DLFPS-321/3693	7.3	8.7	7.3	8.0	8.7	8.0
DRAGSTER	6.7	8.3	8.3	8.3	8.3	8.0
ESTRENA	7.3	8.3	7.7	8.3	8.3	8.0
FIREHAWK SLT	6.7	8.0	8.3	8.7	8.3	8.0
GO-AOMK	6.0	8.3	8.7	8.7	8.3	8.0
HEMI	7.3	8.7	8.0	8.0	8.0	8.0

TABLE 8. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS FOR EACH MONTH GROWN AT LOGAN, UT (IN THE UPPER WEST/MOUNTAIN REGION) 1/ 2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/						
NAME	JUN	JUL	AUG	SEP	OCT	MEAN
K18-NSE	7.0	8.7	7.7	8.3	8.3	8.0
NT-3	7.3	8.7	8.0	8.0	8.0	8.0
RAD-TF131	6.7	7.7	8.3	8.7	8.7	8.0
RH1	7.0	8.3	8.0	8.3	8.3	8.0
TD2	7.3	8.3	8.3	8.0	8.0	8.0
BONFIRE (JS DTT)	7.3	8.3	7.7	8.3	8.0	7.9
BRAVO 2	7.0	8.3	8.0	8.3	8.0	7.9
DLFPS-321/3694	7.3	8.0	8.0	8.3	8.0	7.9
DLFPS-321/3695	7.0	8.0	8.3	8.3	8.0	7.9
DLFPS-321/3706	7.0	8.3	7.7	8.3	8.3	7.9
PPG-TF 249	7.3	8.0	8.0	8.3	8.0	7.9
PPG-TF 337	7.3	8.3	8.0	8.0	8.0	7.9
PST-5GQ	7.0	8.7	7.7	8.0	8.3	7.9
RS1	7.3	7.7	8.3	8.0	8.3	7.9
TANGO	7.7	8.3	7.7	8.0	8.0	7.9
5LSS	7.7	8.7	7.3	8.0	8.0	7.9
DLFPS-321/3696	6.7	8.7	8.3	8.0	8.0	7.9
GRANDE 3	7.3	8.7	7.7	8.0	8.0	7.9
NAI-TUE	6.3	8.0	8.0	8.7	8.7	7.9
PPG-TF 306	7.0	8.3	8.0	8.0	8.3	7.9
PPG-TF 320	7.0	8.0	7.7	8.3	8.7	7.9
TMT1	7.0	8.0	8.0	8.7	8.0	7.9
ATF2116	6.7	8.3	7.7	8.3	8.3	7.9
BAR TF 134	6.3	8.7	8.0	8.3	8.0	7.9
BAR-FA8230	7.0	8.7	8.3	8.0	7.3	7.9
BIRMINGHAM	7.0	8.0	7.7	8.3	8.3	7.9
BULLSEYE	7.0	8.3	8.0	8.0	8.0	7.9
COPIOUS TF	6.7	8.0	8.0	8.3	8.3	7.9
DLFPS-321/3699	7.0	8.0	8.0	8.3	8.0	7.9
LBF	6.7	8.0	8.0	8.3	8.3	7.9
LIFEGUARD	7.3	8.7	7.3	8.0	8.0	7.9
NATURALLY GREEN	6.7	8.0	8.0	8.7	8.0	7.9
PPG-TF 231	7.0	8.0	7.7	8.7	8.0	7.9
PPG-TF 238	7.0	8.3	8.0	8.0	8.0	7.9
PPG-TF 244	6.3	8.3	8.0	8.3	8.3	7.9
PPG-TF 257	6.7	8.3	7.7	8.3	8.3	7.9
PPG-TF 336	7.0	8.0	8.0	8.3	8.0	7.9
PPG-TF 338	7.3	8.3	7.7	8.0	8.0	7.9
PST-5BYOB	7.3	8.7	7.7	8.0	7.7	7.9
PST-5DC24	7.0	8.0	8.3	8.0	8.0	7.9
RHF	7.3	8.3	7.7	8.0	8.0	7.9
SESCR1	6.3	8.0	8.0	8.3	8.7	7.9
TF445	7.0	8.7	7.7	8.0	8.0	7.9
NAI-FQZ-17	6.3	8.7	8.0	8.3	8.0	7.9
PPG-TF 315	6.3	7.3	8.7	8.7	8.3	7.9

TABLE 8. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS FOR EACH MONTH GROWN AT LOGAN, UT (IN THE UPPER WEST/MOUNTAIN REGION) 1/ 2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/						
NAME	JUN	JUL	AUG	SEP	OCT	MEAN
3N1	6.3	8.7	8.0	8.0	8.0	7.8
BANDIT	6.3	8.3	8.0	8.3	8.0	7.8
PST-5E6	6.7	8.3	8.0	8.0	8.0	7.8
PST-5MCMO	6.7	8.0	8.0	8.0	8.3	7.8
MONUMENT (PST-5SQB)	7.0	8.3	7.7	8.0	8.0	7.8
PST-5TRN	6.7	8.7	7.7	8.0	8.0	7.8
PST-5THM	7.3	8.0	7.7	7.7	8.0	7.7
3B2	6.7	7.7	8.0	8.3	8.0	7.7
A-TF31	6.3	7.3	8.0	8.7	8.3	7.7
BAR 9FE MAS	6.3	7.7	8.3	8.0	8.3	7.7
COL-TF-148	6.0	7.7	8.0	8.7	8.3	7.7
DLFPS-321/3703	6.3	8.0	8.0	8.3	8.0	7.7
GRAND PRIX (FC15-01P)	6.3	8.3	8.0	8.0	8.0	7.7
K18-ROE	6.7	8.0	8.0	8.0	8.0	7.7
MOONDANCE GLX	7.0	8.0	7.7	8.0	8.0	7.7
PST-5DZM	6.3	8.7	7.7	8.3	7.7	7.7
ZRC1	7.3	8.0	7.7	8.0	7.7	7.7
AH2	7.3	7.0	8.0	8.0	8.0	7.7
DLFPS-321/3679	7.0	7.3	7.7	8.3	8.0	7.7
DLFPS-321/3707	6.7	8.0	7.3	8.0	8.3	7.7
DLFPS-TF/3550	6.7	8.0	7.7	8.0	8.0	7.7
DLFPS-TF/3553	6.7	8.0	7.7	7.7	8.3	7.7
FAYETTE	6.3	7.3	8.7	8.0	8.0	7.7
JT 517	6.3	7.7	8.0	8.3	8.0	7.7
OKEEFE (LTP-TF-122)	6.3	8.3	7.7	8.0	8.0	7.7
PARAMOUNT	7.0	7.3	7.7	8.0	8.3	7.7
PPG-TF 267	6.7	7.7	7.7	8.0	8.3	7.7
SETFM2	6.7	7.3	8.0	8.3	8.0	7.7
SETFM3	6.3	8.0	7.7	8.3	8.0	7.7
AST8118LM	6.3	7.7	8.0	8.0	8.0	7.6
GLX ACED (PST-5DART)	6.7	8.0	7.3	8.0	8.0	7.6
JT 233	6.7	7.3	7.7	8.0	8.3	7.6
PPG-TF 254	6.3	8.3	7.7	7.7	8.0	7.6
PALOMAR	6.0	8.0	8.0	8.0	8.0	7.6
PST-5MINK	6.0	8.0	8.0	8.0	8.0	7.6
SE5STAR	6.3	8.3	7.3	8.0	8.0	7.6
BAR FA 8228	6.7	8.0	7.3	8.0	7.7	7.5
ESCALADE	7.0	8.0	7.3	8.0	7.3	7.5
PST-5GLBS	6.7	7.7	7.7	8.0	7.7	7.5
OG-WALK	6.0	7.0	8.0	8.0	8.0	7.4
SE53D2	6.0	7.3	7.3	7.7	8.0	7.3
KENTUCKY-31	8.3	7.0	7.0	7.0	6.0	7.1
LSD VALUE	1.3	1.3	0.9	0.7	0.7	0.5
C.V. (%)	11.8	9.6	7.3	5.5	5.3	4.1

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

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

TABLE 9. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS FOR EACH MONTH GROWN AT FRESNO, CA (IN THE SOUTHWEST REGION) 1/
2019 DATA

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

NAME	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PPG-TF 305	5.0	5.3	5.0	6.7	8.0	7.7	7.3	6.4
PST-5BYOB	5.0	5.0	4.3	6.0	7.7	7.7	7.3	6.1
BRAVO 2	5.3	5.3	4.7	6.7	7.0	7.0	6.7	6.1
PADRE 2	5.3	5.7	3.7	5.7	7.3	7.3	7.3	6.0
LBF	5.3	4.7	5.3	5.0	7.3	7.3	7.0	6.0
PPG-TF 306	5.0	5.0	4.3	6.3	6.7	7.0	7.0	5.9
PST-5MCMO	5.3	5.3	4.7	5.3	7.0	6.7	6.3	5.8
PPG-TF 257	5.0	5.3	4.7	5.7	6.7	6.7	6.7	5.8
FIREHAWK SLT	5.0	5.0	3.7	5.7	7.0	7.0	6.7	5.7
TF445	5.0	5.3	3.3	5.7	7.0	7.0	6.7	5.7
BAR FA 8228	5.7	5.7	3.7	4.7	7.0	6.7	6.3	5.7
MONUMENT (PST-5SQB)	5.7	5.0	4.0	5.7	6.7	6.3	6.3	5.7
RH3	6.0	5.3	4.0	5.7	6.0	6.3	6.0	5.6
RH1	5.7	5.3	4.0	5.7	6.3	6.0	6.0	5.6
DLFPS-321/3705	5.0	4.7	3.7	5.0	7.0	6.7	6.7	5.5
PPG-TF 254	5.3	5.0	4.7	5.0	6.0	6.3	6.3	5.5
PPG-TF 313	5.0	5.3	4.0	5.3	6.3	6.3	6.3	5.5
PST-5E6	5.0	4.7	4.0	5.7	6.7	6.3	6.3	5.5
SETFM2	5.0	4.7	4.0	5.3	6.3	6.7	6.7	5.5
3N1	5.0	5.0	4.3	5.3	6.0	6.3	6.3	5.5
BY-TF-169	5.3	5.0	4.7	5.3	6.0	6.0	6.0	5.5
DLFPS-321/3696	4.7	4.3	4.3	5.3	6.7	6.7	6.3	5.5
PPG-TF 315	4.3	4.7	5.3	5.3	6.0	6.3	6.3	5.5
PST-5GLBS	5.0	5.7	4.0	5.3	6.7	6.0	5.7	5.5
GLX ACED (PST-5DART)	5.0	4.7	4.7	5.0	6.7	6.0	6.0	5.4
NAI-ST5	5.3	5.3	4.3	5.3	6.0	6.0	5.7	5.4
PALOMAR	4.7	5.0	3.7	4.7	6.3	7.0	6.7	5.4
BGR-TF3	5.0	5.0	4.0	4.3	6.3	6.7	6.3	5.4
FAYETTE	5.0	4.7	4.7	5.3	6.3	6.0	5.7	5.4
PARAMOUNT	5.0	4.3	3.7	4.7	6.3	7.0	6.7	5.4
TF456	5.3	4.7	4.0	5.7	6.3	6.0	5.7	5.4
ATF2116	5.0	5.0	4.7	5.0	5.7	5.7	6.3	5.3
DLFPS-321/3693	5.0	5.3	4.3	6.0	5.7	5.7	5.3	5.3
ESCALADE	5.3	5.0	3.7	5.0	5.7	6.3	6.3	5.3
JT 233	5.3	5.0	3.7	5.3	6.3	6.0	5.7	5.3
PPG-TF 255	5.0	5.0	4.7	5.0	6.0	6.0	5.7	5.3
DLFPS-321/3679	4.7	4.7	3.7	5.3	6.7	6.0	6.0	5.3
GO-RH20	4.7	4.7	3.7	5.3	6.3	6.3	6.0	5.3
GRAND PRIX (FC15-01P)	5.0	5.0	3.7	5.3	6.0	6.0	6.0	5.3
BONFIRE (JS DTT)	5.0	5.0	3.7	5.0	6.3	6.0	5.7	5.2
DEGAS (LTP-TF-111)	4.7	5.0	3.7	5.0	6.0	6.3	6.0	5.2
LIFEGUARD	4.7	4.7	4.3	5.0	6.3	6.0	5.7	5.2
RAPTOR III	5.3	6.0	3.0	5.0	5.7	6.0	5.7	5.2
ZRC1	5.0	5.0	3.7	5.3	5.7	6.0	6.0	5.2

TABLE 9. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS FOR EACH MONTH GROWN AT FRESNO, CA (IN THE SOUTHWEST REGION) 1/ 2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/								
NAME	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
GRANDE 3	4.7	5.0	3.3	5.3	6.3	6.0	5.7	5.2
JT 517	4.7	5.0	4.3	5.0	5.7	6.0	5.7	5.2
K18-ROE	5.0	5.3	4.3	4.7	5.7	5.7	5.7	5.2
K18-RS6	4.7	5.7	3.7	5.0	5.3	6.0	6.0	5.2
NAI-ROS4	5.0	5.3	3.7	5.3	5.7	5.7	5.7	5.2
SESCR1	5.0	4.3	3.3	5.7	5.7	6.3	6.0	5.2
PST-5TRN	4.3	5.0	4.3	5.0	5.7	6.0	6.0	5.2
AH1	5.0	4.7	4.0	5.0	6.0	5.7	5.7	5.1
DLFPS-321/3699	5.0	4.7	4.7	4.7	5.7	5.7	5.7	5.1
DLFPS-321/3701	5.0	4.7	3.7	5.0	6.0	6.0	5.7	5.1
NATURALLY GREEN	5.0	5.0	4.0	5.0	5.7	5.7	5.7	5.1
A-TF31	4.7	4.7	3.7	5.0	6.3	6.0	5.7	5.1
DLFPS-TF/3553	5.0	4.7	5.0	4.3	5.7	5.7	5.7	5.1
ESTRENA	5.3	4.7	3.3	4.7	6.0	6.0	6.0	5.1
NT-3	4.7	5.0	5.0	4.7	5.7	5.7	5.3	5.1
COPIOUS TF	5.0	5.7	3.7	4.7	5.3	5.7	5.7	5.1
PST-5THM	4.7	4.7	3.7	4.7	6.3	6.0	5.7	5.1
PPG-TF 338	5.3	4.7	3.3	4.7	6.0	6.3	5.3	5.1
TMT1	5.0	4.7	4.0	4.3	6.0	6.0	5.7	5.1
DLFPS-321/3708	5.0	5.0	3.3	4.7	6.0	5.7	5.7	5.0
PPG-TF 244	4.7	5.3	4.0	4.7	5.3	5.7	5.7	5.0
PPG-TF 312	4.7	4.7	3.7	5.3	6.0	5.7	5.3	5.0
PPG-TF 316	4.7	4.7	4.0	4.7	6.0	6.0	5.3	5.0
RC4	4.7	5.0	3.0	4.7	6.3	6.0	5.7	5.0
PRO GOLD	5.3	5.0	4.0	4.3	5.7	5.3	5.3	5.0
PST-5GQ	4.7	4.3	4.0	4.3	6.0	6.0	5.7	5.0
RAD-TF131	4.7	4.3	2.3	4.7	6.0	6.3	6.3	5.0
SETFM3	5.3	5.0	4.0	3.7	5.7	5.7	5.3	5.0
TD2	5.0	5.0	3.7	4.7	5.0	5.7	5.7	5.0
PPG-TF 318	5.0	5.0	3.7	4.3	5.3	5.3	5.7	4.9
AST8118LM	4.7	4.3	3.3	4.3	6.0	6.0	5.7	4.9
DLFPS-TF/3550	4.7	4.3	2.7	4.7	5.3	6.0	6.3	4.9
NAI-TUE	5.0	4.7	3.3	4.3	6.3	5.3	5.0	4.9
SE5STAR	5.0	4.3	3.3	4.7	5.7	5.7	5.3	4.9
TANGO	5.0	5.0	3.0	4.3	5.3	5.7	5.7	4.9
BAR TF 134	5.0	4.3	3.0	4.7	5.7	5.7	5.3	4.8
ATF1768	5.0	5.0	2.3	4.3	5.7	5.7	5.7	4.8
COL-TF-148	4.7	4.3	3.7	5.0	5.0	5.7	5.3	4.8
DLFPS-321/3702	4.7	4.7	4.3	4.7	5.0	5.3	5.0	4.8
JT 268	5.3	5.3	3.0	4.7	5.0	5.3	5.0	4.8
DLFPS-321/3695	5.3	5.0	4.0	4.3	5.0	5.0	4.7	4.8
PPG-TF 231	5.3	6.0	4.0	3.7	4.3	5.0	5.0	4.8
BAR-FA8230	5.3	5.0	3.3	4.3	5.7	4.7	4.7	4.7
BIRMINGHAM	5.3	5.3	2.7	4.3	5.7	5.0	4.7	4.7
NAI-FQZ-17	5.0	5.0	3.0	4.0	5.7	5.3	5.0	4.7

TABLE 9. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE 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/							
	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
AST8218LM	4.7	5.0	3.7	4.3	5.0	5.0	5.0	4.7
RDC	4.3	4.7	4.3	4.3	5.0	5.3	4.7	4.7
DLFPS-TF/3552	5.0	5.0	2.7	4.0	4.7	5.3	5.3	4.7
DLFPS-321/3706	4.3	4.7	4.3	4.3	4.7	5.0	5.0	4.6
MOONDANCE GLX	5.3	5.0	3.0	3.7	4.7	5.3	5.3	4.6
PPG-TF 267	5.0	5.0	3.0	4.3	5.3	5.0	4.7	4.6
DLFPS-321/3694	5.3	4.7	3.0	4.0	5.0	5.0	5.3	4.6
3B2	5.0	4.7	4.0	4.0	4.7	5.0	4.7	4.6
5LSS	5.3	4.3	3.3	4.0	5.0	5.0	5.0	4.6
DLFPS-321/3703	5.0	5.3	3.7	4.3	4.7	4.7	4.3	4.6
SETF104	5.0	4.7	3.3	4.3	5.0	5.0	4.7	4.6
PPG-TF 323	5.0	4.7	3.7	4.3	5.0	4.7	4.7	4.6
BULLSEYE LTZ	4.7	4.3	2.7	4.3	5.0	5.3	5.3	4.5
PPG-TF 262	4.7	4.7	3.0	4.3	5.0	5.0	5.0	4.5
PPG-TF 308	4.7	5.0	4.0	4.7	4.7	4.3	4.3	4.5
RAD-TF105	4.7	4.7	4.0	4.0	4.7	4.7	4.7	4.5
BANDIT	4.7	4.7	2.3	3.7	5.3	5.3	5.3	4.5
K18-WB1	4.7	4.3	2.7	4.7	5.0	5.0	5.0	4.5
DRAGSTER	5.0	5.0	4.0	3.7	4.3	4.7	4.7	4.5
PPG-TF 320	4.7	4.7	3.0	3.7	4.7	5.0	5.0	4.4
BULLSEYE	4.7	4.3	3.0	4.0	4.7	5.0	5.0	4.4
KENTUCKY-31	6.0	5.3	3.0	3.7	4.3	4.3	4.0	4.4
PST-5DZM	4.7	4.7	2.7	4.0	5.0	5.0	4.7	4.4
RHF	5.3	5.7	4.3	3.7	4.0	4.0	3.7	4.4
K18-NSE	5.3	5.7	2.7	4.0	4.0	4.3	4.3	4.3
OKEEFE (LTP-TF-122)	5.0	5.7	4.0	3.7	4.0	4.0	4.0	4.3
RS1	4.7	4.3	3.3	4.0	4.3	4.7	5.0	4.3
OG-WALK	5.3	4.7	2.7	4.0	4.7	4.3	4.3	4.3
PPG-TF 238	4.7	4.7	3.0	4.0	4.7	4.7	4.3	4.3
PPG-TF 337	4.7	4.3	3.0	4.0	4.7	5.0	4.3	4.3
PST-5DC24	4.7	5.0	2.7	3.7	4.3	4.7	5.0	4.3
RHL2	4.7	5.3	4.0	4.0	4.0	4.0	4.0	4.3
NAI-3N2	4.7	4.0	3.0	4.3	4.3	4.7	4.3	4.2
PPG-TF 249	4.0	4.7	4.0	4.7	4.0	4.0	4.0	4.2
BAR 9FE MAS	4.7	4.3	3.3	4.0	4.0	4.3	4.3	4.1
AH2	5.0	4.7	2.7	3.7	4.3	4.0	4.0	4.0
HEMI	4.3	5.0	3.3	3.7	4.0	4.0	4.0	4.0
PST-5MINK	4.7	4.7	3.0	4.0	4.0	4.0	4.0	4.0
SE53D2	5.0	4.0	3.0	3.3	4.0	4.3	4.7	4.0
GO-AOMK	4.7	4.7	2.7	3.7	3.7	4.3	4.3	4.0
PPG-TF 336	4.3	4.3	2.3	3.3	3.3	3.7	3.7	3.6
DLFPS-321/3707	4.7	4.7	2.0	3.0	3.3	3.3	3.3	3.5
RAD-TF 115 (TURBO SS)	4.0	4.0	2.3	3.0	3.7	3.7	3.3	3.4
LSD VALUE	1.0	1.2	1.9	2.6	3.3	3.1	3.0	1.9
C.V. (%)	12.4	14.8	33.1	35.1	37.0	34.3	33.8	23.8

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

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

TABLE 10. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS FOR EACH MONTH GROWN AT CORVALLIS, OR (IN THE PACIFIC REGION) 1/ 2019 DATA

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

NAME	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PPG-TF 305	6.7	6.7	7.7	7.7	7.0	6.0	4.7	3.7	6.3
PPG-TF 306	6.7	6.7	7.7	7.7	6.7	6.0	5.0	3.7	6.3
DLFPS-321/3702	6.0	6.0	7.0	7.3	7.0	6.3	5.3	4.0	6.1
NT-3	6.7	6.7	7.7	7.0	6.0	6.0	5.3	3.7	6.1
PPG-TF 308	6.0	6.3	7.3	7.0	6.3	6.0	5.3	4.7	6.1
RAD-TF105	6.7	6.7	7.7	7.3	6.7	5.7	4.7	3.7	6.1
DLFPS-321/3695	6.7	6.7	7.7	7.0	6.3	5.7	4.7	3.7	6.0
JT 233	6.3	6.3	7.3	7.3	6.7	6.0	5.0	3.3	6.0
JT 268	6.7	6.7	7.7	7.3	6.3	5.7	4.3	3.7	6.0
PPG-TF 316	6.7	6.7	7.7	7.3	6.3	5.7	4.7	3.3	6.0
AH1	6.0	6.0	7.0	7.0	6.7	6.3	5.3	3.7	6.0
DLFPS-321/3707	6.0	6.0	7.0	7.3	6.7	6.0	5.0	3.7	6.0
PST-5THM	6.7	6.7	7.7	6.7	5.7	5.7	5.0	3.7	6.0
RAD-TF131	6.3	6.3	7.3	7.3	6.3	5.7	4.3	4.0	6.0
RS1	6.3	6.3	7.3	7.3	6.3	6.0	4.7	3.3	6.0
TMT1	6.3	6.0	7.0	7.0	6.3	6.0	5.0	4.0	6.0
PPG-TF 313	5.3	5.7	6.7	7.0	7.3	6.7	5.0	3.7	5.9
PPG-TF 338	6.0	6.0	7.0	7.0	6.3	6.0	5.0	4.0	5.9
SETFM3	6.3	6.3	7.3	7.0	6.3	5.7	4.7	3.7	5.9
LBF	5.3	6.0	7.0	7.0	6.7	6.0	5.0	4.0	5.9
NAI-TUE	6.3	6.3	7.3	7.0	6.3	5.7	4.7	3.3	5.9
RAD-TF 115 (TURBO SS)	6.7	6.3	7.3	7.0	6.3	5.7	4.7	3.0	5.9
AH2	5.7	6.0	7.0	7.0	6.0	5.7	5.0	4.3	5.8
DEGAS (LTP-TF-111)	5.7	6.0	7.0	6.7	6.0	6.0	5.3	4.0	5.8
DLFPS-321/3693	6.3	6.0	7.0	7.0	6.3	5.7	4.7	3.7	5.8
DLFPS-321/3706	6.0	6.0	7.0	7.0	6.7	5.7	4.7	3.7	5.8
DLFPS-TF/3553	5.7	5.7	6.7	7.0	6.3	6.0	5.3	4.0	5.8
K18-WB1	5.7	6.0	7.0	7.0	6.7	6.0	4.7	3.7	5.8
PPG-TF 254	6.0	6.0	7.0	6.7	6.0	6.0	5.3	3.7	5.8
PPG-TF 323	6.0	6.3	7.3	7.0	6.3	5.7	4.7	3.3	5.8
RH1	5.7	5.7	6.7	7.0	7.0	6.3	4.7	3.7	5.8
5LSS	6.0	6.0	7.0	6.7	6.0	5.7	5.3	3.7	5.8
DLFPS-321/3699	5.7	5.7	6.7	7.0	6.3	6.0	5.0	4.0	5.8
DLFPS-321/3703	5.7	6.0	7.0	6.7	6.3	6.0	4.7	4.0	5.8
DLFPS-TF/3550	5.3	5.7	6.7	7.0	6.7	6.0	5.0	4.0	5.8
GO-RH20	5.7	5.7	6.7	6.7	6.3	6.0	5.3	4.0	5.8
PPG-TF 257	6.0	6.0	7.0	7.0	6.3	5.7	4.7	3.7	5.8
PPG-TF 337	6.0	6.0	7.0	7.0	6.0	5.7	5.0	3.7	5.8
RC4	6.0	6.0	7.0	7.0	6.7	6.0	4.3	3.3	5.8
DLFPS-TF/3552	5.3	5.7	6.7	6.7	6.3	6.0	5.3	4.0	5.8
NAI-3N2	6.0	6.0	7.0	7.0	6.3	5.7	4.7	3.3	5.8
TD2	5.3	5.7	6.7	7.0	7.0	6.0	4.7	3.7	5.8
A-TF31	5.7	5.7	6.7	7.0	6.7	5.7	4.7	3.7	5.7
AST8118LM	6.3	6.0	7.0	7.0	6.0	5.3	4.3	3.7	5.7

TABLE 10. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS FOR EACH
(CONT'D) MONTH GROWN AT CORVALLIS, OR (IN THE PACIFIC REGION) 1/
2019 DATA

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

NAME	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
DLFPS-321/3708	5.3	5.3	6.3	7.0	6.7	6.0	5.0	4.0	5.7
NAI-ROS4	5.7	5.7	6.7	6.7	6.3	6.0	5.0	3.7	5.7
NAI-ST5	6.0	6.0	7.0	7.0	6.3	5.7	4.3	3.3	5.7
PPG-TF 244	5.7	6.0	7.0	7.0	6.3	5.7	4.3	3.7	5.7
BGR-TF3	6.0	6.0	7.0	6.7	5.7	5.3	4.7	4.0	5.7
BONFIRE (JS DTT)	6.0	6.0	7.0	7.0	6.0	5.3	4.7	3.3	5.7
K18-NSE	5.0	6.0	7.0	7.0	6.0	5.7	4.7	4.0	5.7
PPG-TF 249	5.7	5.7	6.7	6.7	6.0	5.7	5.0	4.0	5.7
PPG-TF 262	5.3	5.7	6.7	7.0	6.3	5.7	4.7	4.0	5.7
DLFPS-321/3694	5.7	6.0	7.0	6.7	6.0	5.7	4.7	3.3	5.6
DLFPS-321/3701	5.0	5.3	6.3	6.3	6.3	6.3	5.3	4.0	5.6
ESTRENA	5.7	5.7	6.7	7.0	6.7	5.7	4.3	3.3	5.6
FIREHAWK SLT	5.7	5.7	6.7	7.0	6.3	5.7	4.7	3.3	5.6
GRANDE 3	5.7	6.0	7.0	6.7	5.7	5.3	4.7	4.0	5.6
PPG-TF 267	5.3	5.7	6.7	6.7	6.0	5.7	5.0	4.0	5.6
RHL2	5.7	5.7	6.7	6.7	6.3	5.7	5.0	3.3	5.6
SESCR1	6.0	6.0	7.0	7.0	6.3	5.3	3.7	3.7	5.6
BULLSEYE LTZ	5.3	5.3	6.3	6.3	6.3	6.0	5.0	4.0	5.6
DRAGSTER	5.0	5.0	6.0	6.7	6.3	6.0	5.3	4.3	5.6
GLX ACED (PST-5DART)	6.0	6.0	7.0	6.7	6.0	5.3	4.0	3.7	5.6
OKEEFE (LTP-TF-122)	5.0	5.7	6.7	6.7	6.0	5.7	5.0	4.0	5.6
PADRE 2	5.3	5.3	6.3	6.3	6.3	5.7	5.0	4.3	5.6
PPG-TF 315	6.0	6.0	7.0	6.7	6.0	5.3	4.3	3.3	5.6
PST-5DZM	6.0	6.0	7.0	7.0	6.0	5.3	4.0	3.3	5.6
3B2	5.7	5.7	6.7	6.7	6.0	5.3	4.7	3.7	5.5
PPG-TF 336	5.7	5.7	6.7	6.7	6.0	5.7	4.7	3.3	5.5
RDC	5.7	5.7	6.7	6.3	5.7	5.7	5.0	3.7	5.5
DLFPS-321/3705	5.3	5.7	6.7	6.7	6.0	5.3	4.7	3.7	5.5
SE53D2	5.7	6.0	7.0	6.7	5.7	5.0	4.3	3.7	5.5
SETFM2	6.0	6.0	7.0	7.0	6.0	5.0	3.7	3.3	5.5
TANGO	5.7	6.0	7.0	6.7	5.7	5.3	4.0	3.7	5.5
TF445	5.7	6.0	7.0	6.7	5.7	5.3	4.3	3.3	5.5
BANDIT	5.0	5.3	6.3	6.7	6.3	5.7	4.3	4.0	5.5
BY-TF-169	5.3	5.3	6.3	6.3	6.0	5.7	4.7	4.0	5.5
FAYETTE	5.0	5.3	6.3	6.3	6.0	5.7	5.0	4.0	5.5
NATURALLY GREEN	5.0	5.3	6.3	6.3	6.0	5.7	4.7	4.3	5.5
PPG-TF 255	5.3	5.3	6.3	6.3	6.3	5.7	4.7	3.7	5.5
PPG-TF 318	5.3	5.7	6.7	6.7	6.3	5.3	4.3	3.3	5.5
RHF	5.0	5.0	6.0	6.3	6.3	6.0	5.0	4.0	5.5
SETF104	5.7	5.3	6.3	6.3	6.0	5.7	4.7	3.7	5.5
3N1	5.3	5.3	6.3	6.3	6.0	5.3	4.7	4.0	5.4
AST8218LM	5.7	5.7	6.7	6.7	5.7	5.3	4.3	3.3	5.4
COL-TF-148	4.7	5.3	6.3	6.3	6.0	5.7	5.0	4.0	5.4
COPIOUS TF	6.0	5.3	6.3	6.3	6.0	5.3	4.3	3.7	5.4
NAI-FQZ-17	5.3	5.3	6.3	6.7	6.0	5.7	4.7	3.3	5.4

TABLE 10. MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS FOR EACH
(CONT'D) MONTH GROWN AT CORVALLIS, OR (IN THE PACIFIC REGION) 1/
2019 DATA

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

NAME	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PPG-TF 238	5.3	5.7	6.7	6.7	6.0	5.3	4.3	3.3	5.4
K18-ROE	5.3	5.7	6.7	6.0	5.0	5.3	5.0	4.0	5.4
PST-5BYOB	6.0	5.7	6.7	6.0	5.3	5.3	4.7	3.3	5.4
RH3	5.7	5.7	6.7	6.3	5.3	5.3	4.3	3.7	5.4
BULLSEYE	5.3	5.3	6.3	6.3	5.3	5.3	4.7	4.0	5.3
GO-AOMK	5.3	5.3	6.3	6.3	5.7	5.3	4.7	3.7	5.3
JT 517	5.3	5.3	6.3	6.3	6.0	5.3	4.3	3.7	5.3
PARAMOUNT	5.3	5.3	6.3	6.0	5.3	5.3	5.0	4.0	5.3
PPG-TF 320	5.3	5.3	6.3	6.3	6.0	5.3	4.7	3.3	5.3
TF456	5.3	5.3	6.3	6.3	5.7	5.3	4.7	3.7	5.3
K18-RS6	5.3	5.3	6.3	6.3	6.0	5.3	4.3	3.3	5.3
ATF1768	5.7	5.3	6.3	6.0	5.0	5.3	4.7	3.7	5.3
BIRMINGHAM	5.3	5.3	6.3	6.0	5.3	5.3	4.7	3.7	5.3
DLFPS-321/3696	5.7	5.7	6.7	6.0	5.3	5.0	4.3	3.3	5.3
PST-5GQ	5.3	5.0	6.0	6.0	5.3	5.3	5.0	4.0	5.3
RAPTOR III	5.3	5.3	6.3	6.3	5.7	5.3	4.3	3.3	5.3
BAR FA 8228	5.0	5.3	6.3	6.0	5.0	5.0	4.7	4.3	5.2
BAR-FA8230	5.3	5.3	6.3	5.7	5.0	5.3	4.7	4.0	5.2
MOONDANCE GLX	5.0	5.0	6.0	6.0	6.0	5.3	4.7	3.7	5.2
PPG-TF 312	5.0	5.3	6.3	6.3	5.7	5.3	4.3	3.3	5.2
ZRC1	5.3	5.3	6.3	6.0	5.7	5.0	4.3	3.7	5.2
BAR 9FE MAS	5.0	5.0	6.0	6.0	5.3	5.3	4.7	4.0	5.2
BAR TF 134	5.0	5.0	6.0	6.0	5.3	5.3	4.7	4.0	5.2
BRAVO 2	4.7	5.3	6.3	6.3	5.7	5.0	4.3	3.7	5.2
PPG-TF 231	5.0	5.0	6.0	6.0	5.7	5.3	4.7	3.3	5.1
PRO GOLD	5.0	5.0	6.0	6.3	5.7	5.0	4.3	3.7	5.1
PST-5E6	5.0	5.0	6.0	6.0	5.0	5.0	4.7	4.0	5.1
ATF2116	5.3	5.3	6.3	6.0	5.0	4.7	4.0	3.7	5.0
HEMI	5.3	5.3	6.3	6.0	5.0	4.7	4.0	3.7	5.0
LIFEGUARD	5.0	5.0	6.0	6.0	5.3	5.0	4.3	3.7	5.0
PALOMAR	5.3	5.3	6.3	6.0	4.7	4.7	4.3	3.7	5.0
PST-5MCMO	5.0	5.0	6.0	6.0	5.3	5.0	4.3	3.7	5.0
PST-5MINK	5.3	5.0	6.0	6.0	5.3	5.0	4.3	3.3	5.0
PST-5TRN	5.0	5.0	6.0	5.7	5.0	5.0	4.7	4.0	5.0
DLFPS-321/3679	4.7	4.7	5.7	5.7	5.0	5.3	5.0	4.0	5.0
PST-5DC24	5.0	5.0	6.0	6.0	5.7	5.0	4.0	3.3	5.0
PST-5GLBS	5.0	5.0	6.0	5.7	5.0	5.0	4.3	3.7	5.0
SE5STAR	5.3	5.0	6.0	6.0	5.3	4.7	3.7	3.3	4.9
MONUMENT (PST-5SQB)	5.0	5.3	6.3	5.7	4.7	4.7	4.0	3.3	4.9
ESCALADE	4.7	5.0	6.0	5.3	4.7	4.7	4.0	3.7	4.8
GRAND PRIX (FC15-01P)	4.7	4.7	5.7	5.7	5.0	4.7	4.0	3.3	4.7
OG-WALK	4.7	4.7	5.7	5.7	4.7	4.3	4.0	4.0	4.7
KENTUCKY-31	3.0	3.0	4.0	3.0	2.0	3.3	4.0	4.3	3.3
LSD VALUE	1.1	1.1	1.1	0.9	1.1	1.0	1.4	1.2	0.7
C.V. (%)	12.8	11.9	10.1	8.6	11.2	11.3	19.4	20.8	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 11.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER TRAFFIC STRESS AMES, IA 1/
2019 DATA

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

NAME	GENETIC	SPRING	QUALITY RATINGS								
	COLOR	GREENUP	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	MEAN
BIRMINGHAM	7.0	6.3	6.7	7.7	7.3	7.7	7.3	7.0	7.0	7.7	7.3
PPG-TF 338	7.0	6.3	6.7	7.7	7.0	7.0	8.0	7.0	7.0	8.0	7.3
AST8118LM	6.7	7.3	6.7	7.7	7.7	7.7	7.0	6.7	7.0	7.0	7.2
AST8218LM	7.7	7.7	7.0	7.7	7.3	7.7	7.0	7.0	7.0	6.7	7.2
DLFPS-321/3699	7.3	7.0	6.7	8.0	7.3	7.3	7.0	6.7	7.0	7.3	7.2
BGR-TF3	7.7	6.3	6.7	7.3	6.7	7.3	7.3	7.0	7.0	7.3	7.1
PPG-TF 249	7.3	6.7	6.7	7.3	7.0	7.0	7.7	7.0	7.0	7.0	7.1
DLFPS-TF/3552	7.0	6.7	6.3	8.0	7.0	7.3	7.3	6.3	7.0	6.7	7.0
FAYETTE	7.0	6.3	6.3	7.7	7.0	7.0	7.3	6.7	7.0	7.3	7.0
LBF	7.7	6.3	6.3	6.7	7.3	7.7	7.3	6.3	7.0	7.0	7.0
PPG-TF 255	7.3	6.7	6.3	7.3	7.3	7.0	7.3	6.7	7.0	7.0	7.0
PPG-TF 320	6.7	6.3	6.7	7.3	7.7	7.3	7.3	6.0	6.7	6.7	7.0
RHF	6.3	6.0	6.7	7.0	6.7	6.7	8.0	6.7	7.0	7.0	7.0
TF456	6.3	6.0	6.7	6.7	6.7	6.7	7.7	7.0	7.0	7.3	7.0
TMT1	7.0	6.0	6.7	7.3	7.0	7.3	7.0	7.0	6.7	6.7	7.0
AH1	6.7	6.7	7.0	7.0	7.0	7.3	7.0	6.3	6.7	6.7	6.9
BANDIT	7.3	7.0	7.0	7.0	7.0	7.3	6.3	6.7	7.0	6.7	6.9
BONFIRE (JS DTT)	6.7	6.3	6.7	7.3	7.3	7.7	6.7	6.0	6.7	6.7	6.9
DLFPS-321/3693	6.7	6.3	6.7	7.3	7.0	7.0	6.7	6.3	6.7	7.3	6.9
DLFPS-TF/3553	6.3	6.3	6.7	7.3	7.0	7.3	6.7	6.0	7.0	7.0	6.9
ESCALADE	6.3	5.7	6.3	7.3	7.0	7.0	7.3	6.0	7.0	7.3	6.9
HEMI	6.7	6.3	6.3	7.0	7.0	7.0	7.3	6.7	7.0	6.7	6.9
K18-ROE	7.3	6.0	6.7	7.0	7.0	7.0	7.0	6.7	6.3	7.3	6.9
NATURALLY GREEN	7.7	7.3	6.7	7.3	7.3	7.3	7.0	6.3	6.7	6.7	6.9
NT-3	6.7	5.7	6.3	6.7	7.0	7.3	6.7	6.7	6.7	7.7	6.9
RC4	6.3	7.0	6.3	7.0	7.7	7.0	6.7	6.7	7.0	7.0	6.9
RS1	7.0	6.0	6.3	7.0	7.0	7.3	7.3	6.7	6.7	6.7	6.9
SE53D2	6.3	6.0	6.3	7.3	7.0	7.0	7.0	6.3	7.0	7.0	6.9
SETFM3	7.0	7.0	6.7	7.0	7.7	7.3	6.7	6.3	7.0	6.3	6.9
A-TF31	6.7	7.3	6.7	7.3	6.7	7.3	6.7	6.3	6.7	6.7	6.8
BULLSEYE LTZ	6.3	6.3	6.7	7.0	6.7	7.3	7.3	6.3	7.0	6.3	6.8
COPIOUS TF	7.0	7.7	6.7	6.7	7.3	7.3	6.7	6.3	6.7	6.3	6.8
DLFPS-321/3679	7.0	6.3	6.3	7.0	7.0	7.0	7.0	6.3	6.7	6.7	6.8
DLFPS-321/3694	7.0	6.0	6.0	7.0	7.3	7.7	7.0	6.3	6.3	7.0	6.8
DLFPS-321/3702	7.0	7.0	7.0	7.0	7.0	6.7	7.3	6.3	7.3	6.0	6.8
DLFPS-321/3708	6.7	6.7	6.7	7.7	7.3	7.0	6.3	6.0	6.7	6.7	6.8
GRAND PRIX (FC15-01P)	6.3	6.3	6.3	7.3	6.3	7.0	7.0	6.3	6.7	7.3	6.8
GRANDE 3	7.0	6.0	6.0	7.0	7.0	7.0	6.7	6.3	7.0	7.0	6.8
JT 233	6.0	7.0	6.7	7.0	7.0	7.0	7.0	5.7	6.7	7.0	6.8
JT 268	7.3	7.0	6.3	7.3	7.0	7.0	7.0	6.7	6.3	6.7	6.8
OG-WALK	6.7	6.7	6.0	7.7	6.7	7.0	7.0	6.0	6.7	7.3	6.8
PARAMOUNT	6.3	6.7	6.3	7.3	7.0	7.3	7.0	6.3	6.7	6.3	6.8
PPG-TF 231	6.0	6.3	6.3	7.3	7.3	7.3	6.7	6.0	6.7	7.0	6.8
PPG-TF 254	7.0	7.0	6.3	6.7	6.3	6.0	7.0	7.0	7.0	8.0	6.8
PPG-TF 305	6.3	6.7	7.0	7.7	7.0	7.0	7.0	6.3	6.3	6.3	6.8

TABLE 11.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER TRAFFIC STRESS AMES, IA 1/
2019 DATA

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

NAME	GENETIC	SPRING	QUALITY RATINGS								MEAN
	COLOR	GREENUP	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	
PPG-TF 306	6.3	6.3	6.3	6.7	7.3	7.0	7.3	6.0	7.0	6.3	6.8
PPG-TF 315	6.7	7.0	7.0	7.0	6.3	7.0	7.0	6.3	7.0	6.7	6.8
PPG-TF 323	6.0	7.0	6.7	7.3	7.3	7.0	6.7	6.0	6.7	7.0	6.8
PPG-TF 336	6.0	6.0	6.7	7.3	7.0	7.0	7.3	5.7	7.0	6.3	6.8
PRO GOLD	6.3	5.7	6.7	7.0	7.3	7.0	6.7	6.3	6.7	6.7	6.8
PST-5MINK	6.3	7.3	6.7	7.3	7.0	7.0	6.7	6.7	6.7	6.3	6.8
RH1	6.3	5.7	6.7	7.0	6.7	7.3	7.0	6.3	6.7	7.0	6.8
SE5STAR	6.3	6.7	6.3	7.0	7.0	7.0	7.0	6.0	6.7	7.0	6.8
SETFM2	7.7	6.3	6.0	7.0	7.0	8.0	6.3	6.3	6.7	7.0	6.8
TF445	6.3	6.0	6.3	6.7	6.7	7.3	7.0	6.3	6.7	7.0	6.8
RAD-TF 115 (TURBO SS)	7.0	8.3	7.3	7.0	6.7	7.3	6.7	6.3	6.3	6.7	6.8
ATF2116	6.3	7.0	6.7	7.0	7.7	7.0	6.0	6.0	6.7	6.3	6.7
DLFPS-321/3696	6.7	6.0	6.0	7.3	6.7	7.3	7.0	6.0	6.7	6.3	6.7
JT 517	7.3	7.0	6.7	7.3	6.7	7.0	6.7	6.0	6.7	6.7	6.7
LIFEGUARD	6.0	6.3	6.3	7.0	7.0	7.0	7.0	5.7	7.0	6.3	6.7
NAI-3N2	6.3	6.0	6.0	7.3	7.0	7.0	6.7	6.3	6.7	6.3	6.7
OKEEFE (LTP-TF-122)	7.0	6.3	5.7	6.7	6.7	6.7	7.0	7.0	7.0	6.7	6.7
PADRE 2	6.7	5.7	6.0	7.0	7.0	7.0	6.7	6.0	6.7	7.0	6.7
PALOMAR	6.3	6.7	6.0	6.7	7.3	7.0	7.0	6.3	6.3	6.7	6.7
PPG-TF 262	6.3	6.7	6.7	7.0	6.7	6.7	7.3	6.0	6.7	6.3	6.7
PPG-TF 318	6.3	6.3	6.3	7.3	7.0	6.7	7.0	5.3	7.0	6.7	6.7
PST-5BYOB	6.0	5.7	6.3	7.0	7.3	7.0	7.0	5.7	6.7	6.3	6.7
PST-5GLBS	6.7	6.3	6.7	7.0	7.3	7.0	6.3	6.3	6.7	6.3	6.7
PST-5THM	6.7	6.0	6.0	7.3	7.0	6.7	7.3	6.0	6.7	6.7	6.7
RAD-TF131	6.3	7.0	6.7	7.7	6.7	7.0	6.7	6.0	6.3	6.7	6.7
SETF104	6.7	6.7	6.3	7.3	7.0	7.0	6.7	5.7	6.7	7.0	6.7
TD2	6.3	5.3	5.7	7.0	6.7	8.0	6.7	6.0	6.3	7.0	6.7
ZRC1	6.3	5.0	6.0	6.7	6.7	7.0	7.0	6.3	7.0	6.7	6.7
3N1	6.7	6.7	6.7	7.0	7.3	6.7	6.0	6.0	6.7	6.7	6.6
BAR FA 8228	7.0	6.3	6.0	7.0	6.7	7.0	6.7	6.3	6.7	6.7	6.6
BY-TF-169	6.3	6.0	6.3	7.3	7.0	6.7	7.0	6.0	6.3	6.3	6.6
DLFPS-321/3695	6.7	5.3	6.0	7.0	6.7	6.7	7.0	6.3	6.7	6.7	6.6
DLFPS-321/3703	6.7	7.3	6.7	6.7	6.3	7.0	6.7	6.0	6.7	7.0	6.6
DLFPS-321/3705	6.0	5.7	6.0	6.7	6.7	7.0	7.0	6.3	6.7	6.7	6.6
DLFPS-TF/3550	6.3	6.3	6.3	7.3	7.0	7.3	5.7	6.0	6.3	6.7	6.6
DRAGSTER	6.0	6.3	6.3	7.0	7.0	6.7	6.7	5.7	6.7	6.7	6.6
NAI-TUE	6.0	6.3	6.3	7.3	7.0	7.0	7.0	5.7	6.3	6.3	6.6
PPG-TF 257	6.7	6.0	6.3	7.0	6.3	7.0	7.0	6.3	7.0	6.0	6.6
PPG-TF 267	6.0	6.3	6.7	7.0	7.0	7.0	6.7	6.3	6.3	6.0	6.6
PPG-TF 312	5.7	5.0	6.3	6.7	7.0	7.0	7.0	5.7	6.7	6.3	6.6
PPG-TF 313	6.0	6.3	6.3	7.3	6.7	7.0	7.0	6.0	6.7	6.0	6.6
PST-5DC24	6.7	7.0	6.7	7.0	6.3	7.3	6.7	5.7	7.0	6.0	6.6
RH3	6.0	5.3	6.0	6.3	6.7	7.0	7.0	6.3	6.7	7.0	6.6
SESCR1	6.3	6.3	6.3	7.3	7.3	7.0	6.3	5.7	6.3	6.3	6.6
3B2	5.0	6.3	6.0	7.3	7.3	6.7	6.7	5.3	6.7	6.3	6.5

TABLE 11.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER TRAFFIC STRESS AMES, IA 1/
2019 DATA

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

NAME	GENETIC	SPRING	QUALITY RATINGS								MEAN
	COLOR	GREENUP	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	
AH2	5.7	6.7	7.0	7.0	7.0	7.0	6.7	5.3	6.3	5.7	6.5
ATF1768	6.3	6.0	6.0	7.0	7.0	6.7	6.7	6.0	6.7	6.0	6.5
BAR TF 134	5.7	6.3	6.7	7.0	7.0	7.0	6.3	5.7	6.7	6.0	6.5
BULLSEYE	6.3	6.0	6.7	6.7	7.3	7.3	6.3	5.7	6.7	5.3	6.5
COL-TF-148	6.3	5.3	5.7	6.3	6.7	7.0	7.0	6.3	6.7	6.7	6.5
DEGAS (LTP-TF-111)	6.3	6.0	6.0	6.7	6.7	7.0	6.7	6.0	6.7	6.3	6.5
DLFPS-321/3701	6.0	6.7	6.7	6.7	6.3	7.0	6.7	6.0	6.3	6.0	6.5
DLFPS-321/3706	5.3	5.7	6.0	7.0	7.0	7.3	6.3	5.3	6.7	6.0	6.5
DLFPS-321/3707	6.3	6.7	6.7	7.7	7.3	6.7	6.3	5.7	6.0	6.0	6.5
ESTRENA	6.0	5.7	6.7	7.3	7.0	7.3	6.3	5.7	6.0	5.3	6.5
FIREHAWK SLT	6.3	6.7	6.3	7.0	7.0	6.7	6.3	5.7	6.7	6.3	6.5
GLX ACED (PST-5DART)	6.3	6.3	6.0	7.0	6.0	7.0	6.7	5.7	7.0	7.0	6.5
GO-RH20	6.3	6.0	5.7	6.3	6.3	6.7	7.0	6.3	7.0	6.7	6.5
K18-RS6	6.0	6.3	6.3	6.7	7.0	6.7	6.7	6.0	6.7	6.3	6.5
K18-WB1	6.0	5.3	6.3	7.0	6.3	7.3	6.7	5.3	6.3	6.3	6.5
MOONDANCE GLX	6.0	7.0	6.3	7.3	6.7	7.0	6.3	5.3	6.7	6.7	6.5
NAI-ST5	6.0	6.3	6.3	7.3	7.0	7.3	6.3	5.3	6.3	5.7	6.5
PPG-TF 238	6.3	6.3	6.0	6.7	7.0	6.7	6.7	6.0	7.0	6.3	6.5
PPG-TF 308	6.0	6.3	6.0	6.3	6.0	7.3	7.0	6.3	6.7	6.3	6.5
PPG-TF 316	6.3	6.7	6.7	7.0	6.7	7.0	6.3	5.7	6.7	6.3	6.5
PST-5GQ	6.0	6.7	6.3	6.7	7.0	6.3	6.3	6.0	6.7	6.7	6.5
PST-5MCMO	6.0	6.7	6.3	6.7	6.3	7.0	6.7	5.3	6.7	7.0	6.5
PST-5TRN	6.0	6.3	6.0	6.7	6.3	7.0	6.7	6.0	6.7	7.0	6.5
5LSS	5.3	5.0	6.0	7.0	6.7	7.0	6.3	5.7	6.3	6.0	6.4
BAR 9FE MAS	5.7	6.0	6.3	7.3	7.0	7.0	6.7	5.3	6.0	5.7	6.4
BAR-FA8230	6.7	5.7	6.3	7.0	6.7	6.7	6.0	6.0	7.0	5.7	6.4
BRAVO 2	6.3	5.7	6.0	7.0	6.7	7.0	6.3	5.7	6.3	6.0	6.4
MONUMENT (PST-5SQB)	5.3	6.0	6.0	6.7	7.0	6.7	7.0	5.0	5.7	7.0	6.4
RDC	6.3	5.3	6.3	7.0	7.0	6.7	6.0	6.0	6.0	6.0	6.4
RHL2	5.3	6.0	6.7	7.0	7.0	7.0	6.0	5.3	5.7	6.3	6.4
GO-AOMK	6.0	6.7	6.0	7.0	6.7	7.0	6.3	5.3	6.3	5.7	6.3
NAI-FQZ-17	6.0	6.7	6.0	6.7	7.0	6.7	6.7	5.3	6.0	5.7	6.3
PPG-TF 244	6.0	5.7	6.3	6.7	6.7	7.0	6.3	5.3	6.3	6.0	6.3
PST-5DZM	5.7	6.3	6.0	7.0	6.0	7.0	6.0	5.7	6.7	6.0	6.3
PST-5E6	5.3	6.0	6.3	6.3	6.7	6.3	6.3	5.3	6.7	6.3	6.3
RAD-TF105	6.0	7.3	6.7	6.7	6.7	7.3	5.7	5.3	6.3	5.7	6.3
RAPTOR III	6.7	6.0	6.0	7.0	6.3	6.7	6.0	5.7	6.3	6.0	6.3
TANGO	6.0	5.3	6.0	7.0	7.0	7.3	6.0	5.3	6.3	5.3	6.3
PPG-TF 337	5.7	6.3	6.0	6.7	7.0	6.7	6.3	5.0	6.7	5.0	6.2
K18-NSE	5.3	5.7	6.0	7.0	6.7	6.7	6.0	5.3	5.7	5.3	6.1
NAI-ROS4	5.3	6.0	6.0	6.7	7.0	6.7	5.3	5.3	6.0	5.7	6.1
KENTUCKY-31	4.3	4.0	6.0	6.3	6.7	6.7	5.3	4.7	6.7	5.7	6.0
LSD VALUE	2.2	1.1	1.4	1.6	3.2	2.5	3.2	3.1	3.1	2.8	1.1
C.V. (%)	13.0	10.0	7.6	7.4	9.0	7.7	11.5	13.3	8.6	13.0	5.4

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 11.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER TRAFFIC STRESS AMES, IA 1/
2019 DATA

NAME	TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/						PERCENT ESTABLISHMENT		
	PERCENT GROUND COVER APRIL-NOVEMBER						OCTOBER	NOVEMBER	
	4_29	5_22	7_12	8_7	9_30	10_4	11_5		
BIRMINGHAM	69.0	78.3	91.3	54.7	21.7	79.3	63.3	36.7	76.7
PPG-TF 338	72.7	82.3	92.0	74.7	30.7	78.7	68.7	36.7	70.0
AST8118LM	54.0	70.3	90.0	50.7	22.7	68.7	66.0	31.7	68.3
AST8218LM	66.7	87.3	91.0	54.0	20.3	66.0	48.3	36.7	76.7
DLFPS-321/3699	64.7	82.7	95.7	53.0	18.3	74.7	60.7	31.7	75.0
BGR-TF3	69.0	84.0	88.0	59.7	23.0	75.3	68.0	43.3	78.3
PPG-TF 249	58.3	77.7	97.3	66.0	24.7	74.0	62.7	31.7	66.7
DLFPS-TF/3552	69.3	86.3	91.0	58.3	14.3	71.7	58.7	25.0	76.7
FAYETTE	49.7	63.3	93.3	60.0	21.7	78.3	65.0	26.7	70.0
LBF	63.0	64.3	89.0	46.3	18.7	64.3	56.7	30.0	70.0
PPG-TF 255	44.3	61.7	91.3	59.3	20.0	73.0	64.7	26.7	66.7
PPG-TF 320	71.3	79.7	95.0	59.3	18.0	66.7	48.7	28.3	78.3
RHF	78.7	85.0	93.3	76.7	24.3	79.7	63.0	40.0	78.3
TF456	49.0	60.3	91.7	72.0	28.0	82.7	69.7	25.0	63.3
TMT1	58.0	73.3	90.7	58.3	27.0	66.7	51.3	40.0	71.7
AH1	65.3	72.7	93.7	55.7	17.0	63.0	48.7	45.0	80.0
BANDIT	62.3	73.0	86.7	45.0	17.3	71.7	52.3	31.7	65.0
BONFIRE (JS DTT)	68.0	78.7	94.7	50.3	16.3	65.0	52.7	38.3	81.7
DLFPS-321/3693	69.0	79.3	93.7	57.7	20.7	78.0	62.3	30.0	70.0
DLFPS-TF/3553	53.7	76.3	90.7	44.7	17.7	64.3	53.3	26.7	65.0
ESCALADE	64.7	81.7	86.3	57.7	20.3	75.0	62.3	36.7	78.3
HEMI	58.7	70.0	90.0	57.0	21.3	75.7	64.3	23.3	68.3
K18-ROE	61.7	78.3	88.0	66.0	20.7	70.0	63.0	36.7	73.3
NATURALLY GREEN	53.7	86.3	86.7	46.0	14.7	56.3	42.3	30.0	70.0
NT-3	66.3	69.3	90.3	48.7	22.0	73.7	68.7	28.3	70.0
RC4	47.3	56.3	96.0	47.3	20.3	71.0	59.3	28.3	66.7
RS1	60.7	87.7	93.7	61.7	21.7	69.3	64.3	38.3	73.3
SE53D2	50.7	70.7	93.0	57.7	23.3	76.7	62.7	26.7	73.3
SETFM3	55.3	70.0	88.0	48.0	16.7	65.3	50.7	26.7	60.0
A-TF31	53.0	69.3	85.0	49.0	20.0	62.7	46.3	35.0	68.3
BULLSEYE LTZ	70.3	86.7	94.3	56.0	19.7	78.0	57.3	43.3	81.7
COPIOUS TF	35.7	64.0	89.7	55.0	22.3	75.3	46.3	36.7	68.3
DLFPS-321/3679	62.7	65.7	87.0	45.0	12.7	54.0	40.3	26.7	61.7
DLFPS-321/3694	61.7	80.0	85.7	44.0	16.3	68.7	52.3	31.7	76.7
DLFPS-321/3702	59.0	83.7	94.3	53.3	20.7	69.3	49.0	31.7	76.7
DLFPS-321/3708	49.0	69.0	94.7	40.7	15.0	47.0	41.7	35.0	70.0
GRAND PRIX (FC15-01P)	41.3	57.0	79.7	47.3	19.7	68.3	55.0	23.3	63.3
GRANDE 3	54.0	69.3	90.0	52.0	20.3	72.0	58.0	30.0	70.0
JT 233	60.3	69.3	95.7	56.3	16.7	71.7	54.3	38.3	70.0
JT 268	49.3	74.0	94.7	57.3	19.3	68.3	51.7	25.0	61.7
OG-WALK	48.7	69.3	91.3	46.3	18.7	68.0	58.3	21.7	66.7
PARAMOUNT	47.7	70.7	91.3	54.3	21.3	53.7	54.0	28.3	70.0
PPG-TF 231	63.0	74.7	92.0	59.7	19.3	65.3	50.0	35.0	68.3
PPG-TF 254	39.3	61.0	72.7	59.0	27.0	79.7	71.0	30.0	55.0
PPG-TF 305	60.0	78.3	94.7	53.3	21.3	76.3	49.3	33.3	73.3

TABLE 11.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER TRAFFIC STRESS AMES, IA 1/
2019 DATA

NAME	TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/							PERCENT ESTABLISHMENT	
	4_29	PERCENT GROUND COVER APRIL-NOVEMBER					10_4	11_5	OCTOBER
	5_22	7_12	8_7	9_30					
PPG-TF 306	53.7	69.7	83.7	57.3	16.7	60.3	46.0	23.3	60.0
PPG-TF 315	61.0	72.3	93.7	51.0	16.7	69.0	56.0	26.7	66.7
PPG-TF 323	73.0	79.0	94.7	54.3	19.3	69.7	56.3	30.0	73.3
PPG-TF 336	66.7	75.0	95.3	53.3	15.3	73.7	51.0	43.3	76.7
PRO GOLD	62.3	81.0	92.3	55.3	25.0	66.7	53.3	38.3	76.7
PST-5MINK	46.7	63.0	89.3	47.0	22.3	69.7	45.0	20.0	66.7
RH1	63.3	64.3	89.0	58.7	19.7	75.3	58.0	38.3	66.7
SE5STAR	41.3	57.3	88.7	57.0	22.0	76.0	58.7	25.0	61.7
SETFM2	58.0	65.7	88.3	50.3	21.0	60.0	47.3	26.7	63.3
TF445	65.0	76.3	86.3	64.3	20.7	81.7	61.3	28.3	73.3
RAD-TF 115 (TURBO SS)	47.0	57.0	82.0	38.0	16.7	56.3	48.3	26.7	63.3
ATF2116	56.3	67.3	88.3	40.3	15.7	57.7	40.3	23.3	68.3
DLFPS-321/3696	66.0	76.3	92.7	49.3	16.3	61.0	52.3	36.7	73.3
JT 517	52.0	63.3	80.0	35.3	13.7	63.7	45.0	36.7	70.0
LIFEGUARD	61.0	83.7	92.0	51.0	16.7	55.3	47.7	38.3	75.0
NAI-3N2	64.0	63.7	93.7	48.0	19.7	66.7	51.0	36.7	68.3
OKEEFE (LTP-TF-122)	56.3	76.7	85.7	51.0	19.3	72.0	54.7	31.7	63.3
PADRE 2	65.3	70.7	92.3	52.7	16.7	62.3	63.3	40.0	73.3
PALOMAR	60.7	63.7	87.3	49.7	20.3	52.0	47.7	28.3	68.3
PPG-TF 262	65.7	81.7	88.7	53.7	16.7	58.3	45.7	21.7	67.3
PPG-TF 318	53.3	81.7	94.0	57.0	15.3	62.3	56.0	31.7	66.7
PST-5BYOB	57.0	71.0	94.7	49.0	17.7	65.0	47.3	33.3	70.0
PST-5GLBS	65.0	74.0	91.7	48.0	20.3	64.3	56.3	26.7	76.7
PST-5THM	45.7	68.7	74.7	52.0	21.0	66.0	54.7	30.0	73.3
RAD-TF131	52.3	62.3	80.0	47.7	18.7	57.7	50.3	30.0	66.7
SETF104	47.7	65.3	86.0	45.3	14.3	54.0	47.7	33.3	70.0
TD2	67.0	81.7	84.3	46.7	16.3	68.3	64.3	40.0	76.7
ZRC1	60.7	76.3	94.7	60.3	21.0	71.7	55.7	26.7	63.3
3N1	50.3	58.3	82.3	50.0	20.0	61.7	55.3	25.0	61.7
BAR FA 8228	67.0	79.0	89.3	40.7	15.0	58.7	44.3	31.7	73.3
BY-TF-169	68.0	77.7	92.0	47.3	15.7	57.3	51.7	25.0	66.7
DLFPS-321/3695	61.3	68.3	78.0	44.7	18.0	61.7	54.3	35.0	71.7
DLFPS-321/3703	62.7	63.3	91.7	56.3	19.0	69.3	60.0	21.7	56.7
DLFPS-321/3705	60.7	82.0	94.3	54.7	22.7	73.0	59.3	36.7	76.7
DLFPS-TF/3550	67.0	77.7	92.7	31.3	14.3	59.7	51.7	30.0	68.3
DRAGSTER	50.3	69.0	87.3	49.7	14.7	64.7	52.3	25.0	65.0
NAI-TUE	45.7	55.3	87.7	51.0	14.0	54.7	43.3	26.7	61.7
PPG-TF 257	60.7	66.0	85.3	58.3	18.7	71.0	50.7	33.3	73.3
PPG-TF 267	55.3	71.3	92.7	45.3	16.0	56.0	36.0	25.0	65.0
PPG-TF 312	68.3	78.0	91.3	59.0	17.7	67.7	51.7	33.3	73.3
PPG-TF 313	64.0	79.7	93.0	63.3	18.7	64.0	50.3	31.7	71.7
PST-5DC24	52.0	40.3	82.7	35.3	10.0	50.3	42.0	33.3	65.0
RH3	72.3	69.3	85.7	55.3	18.7	77.3	59.7	45.0	75.0
SESCR1	58.3	68.3	86.7	42.0	11.3	50.7	39.7	31.7	63.3
3B2	32.3	70.0	82.3	50.7	17.0	68.0	51.0	33.3	63.3

TABLE 11.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER TRAFFIC STRESS AMES, IA 1/
2019 DATA

NAME	TURFGRASS QUALITY AND OTHER RATINGS 1-9; 9=BEST 2/							PERCENT ESTABLISHMENT	
	4_29	PERCENT GROUND COVER APRIL-NOVEMBER					10_4	11_5	OCTOBER
		5_22	7_12	8_7	9_30				
AH2	70.7	92.0	95.3	54.0	11.7	57.3	39.7	46.7	83.3
ATF1768	53.7	54.3	90.7	41.0	13.7	65.0	48.7	28.3	65.0
BAR TF 134	72.3	81.0	94.3	44.7	13.0	63.0	51.0	26.7	76.7
BULLSEYE	48.7	56.0	87.7	44.0	14.7	49.3	38.7	28.3	60.0
COL-TF-148	50.7	67.7	88.7	49.0	18.7	66.3	57.7	25.0	66.7
DEGAS (LTP-TF-111)	47.0	65.0	91.3	54.0	18.3	65.3	57.0	28.3	56.7
DLFPS-321/3701	62.0	57.7	89.3	51.3	14.3	69.3	47.3	23.3	60.0
DLFPS-321/3706	63.0	68.7	89.7	50.3	14.7	59.0	47.3	30.0	65.0
DLFPS-321/3707	58.3	72.0	85.3	42.3	10.7	50.0	40.0	26.7	65.0
ESTRENA	65.7	83.3	93.0	39.3	13.7	46.0	39.7	35.0	75.0
FIREHAWK SLT	52.0	56.7	88.3	50.7	13.7	70.7	56.7	25.0	63.3
GLX ACED (PST-5DART)	42.7	48.0	89.3	54.0	18.7	72.3	56.7	23.3	58.3
GO-RH20	37.7	55.3	74.0	49.0	18.3	75.0	61.0	31.7	65.0
K18-RS6	50.3	69.0	90.7	53.7	18.3	61.7	51.3	31.7	66.7
K18-WB1	65.7	76.3	91.7	52.0	13.7	57.7	50.7	35.0	75.0
MOONDANCE GLX	46.0	53.3	91.0	45.7	15.0	62.0	43.7	25.0	63.3
NAI-ST5	43.0	63.3	81.7	34.0	8.3	51.0	36.3	31.7	68.3
PPG-TF 238	56.3	69.0	93.0	51.7	19.0	65.0	50.3	28.3	66.7
PPG-TF 308	43.7	40.7	91.3	56.0	21.0	68.7	57.3	31.7	51.7
PPG-TF 316	54.0	72.7	94.3	55.0	17.3	73.0	51.0	36.7	75.0
PST-5GQ	48.7	60.0	82.7	45.3	16.7	61.7	49.7	18.3	63.3
PST-5MCMO	37.3	51.7	89.7	37.3	13.3	56.3	47.0	21.7	61.7
PST-5TRN	31.7	58.0	87.7	51.0	18.3	64.0	59.3	25.0	63.3
5LSS	64.3	78.7	92.3	38.0	11.7	46.7	37.7	36.7	75.0
BAR 9FE MAS	56.0	64.0	88.3	30.3	10.3	49.0	41.0	36.7	80.0
BAR-FA8230	47.3	50.0	72.0	42.7	19.0	60.7	47.0	25.0	61.7
BRAVO 2	55.3	70.7	85.7	41.3	12.0	55.3	39.3	36.7	70.0
MONUMENT (PST-5SQB)	55.3	74.0	89.0	54.0	13.7	50.7	54.0	25.0	78.3
RDC	76.3	92.7	88.0	41.3	17.0	61.0	48.3	36.7	78.3
RHL2	64.7	64.3	96.0	36.0	11.0	51.7	47.7	36.7	78.3
GO-AOMK	41.7	55.3	78.0	36.3	14.0	51.7	33.3	20.0	55.0
NAI-FQZ-17	40.7	62.3	81.7	45.3	13.0	62.0	59.3	30.0	66.7
PPG-TF 244	75.3	80.7	95.7	47.7	13.0	65.3	48.7	36.7	80.0
PST-5DZM	37.3	51.3	81.0	41.3	13.7	57.0	41.7	20.0	58.3
PST-5E6	49.0	48.3	89.3	42.0	13.7	58.7	47.3	25.0	66.7
RAD-TF105	53.0	59.0	91.7	36.7	13.0	52.0	37.7	31.7	65.0
RAPTOR III	51.7	56.7	83.3	38.3	15.3	49.3	44.3	26.7	60.0
TANGO	47.7	55.3	88.0	31.0	10.0	56.7	34.0	36.7	68.3
PPG-TF 337	47.7	55.7	86.3	47.7	10.0	59.0	30.3	21.7	60.0
K18-NSE	67.0	84.3	91.7	38.3	9.7	46.0	35.7	40.0	83.3
NAI-ROS4	37.7	51.3	91.0	37.3	11.0	46.3	41.7	30.0	66.7
KENTUCKY-31	65.7	72.0	80.7	25.3	7.3	45.3	29.3	45.0	78.3
LSD VALUE	51.1	38.5	46.3	30.2	26.1	59.5	54.0	15.4	33.6
C.V. (%)	27.5	21.8	10.3	24.5	38.8	23.2	27.6	24.4	14.8

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 12.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER TRAFFIC STRESS AT NORTH BRUNSWICK, NJ 1/
2019 DATA

TURFGRASS COVER UNIFORMITY RATINGS 1-9; 9=MOST DENSE, UNIFORM TURF COVER 2/ */

NAME	BEFORE TRAFFIC ON AUGUST 28				AFTER TRAFFIC OCTOBER 4 2019					
	UNIFORMITY		FULLNESS OF CANOPY		UNIFORMITY		PERCENT GREEN COVER (OCTOBER)		FULLNESS OF CANOPY	
	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC
DEGAS (LTP-TF-111)	8.7	8.7	93.0	96.0	9.0	7.3	88.3	92.7	97.7	75.0
TD2	9.0	9.0	99.0	96.0	9.0	7.3	88.7	92.0	99.0	75.0
JT 268	9.0	9.0	97.7	97.7	9.0	7.0	88.3	89.3	99.0	73.3
OKEEFE (LTP-TF-122)	9.0	9.0	99.0	97.7	9.0	7.3	87.0	89.3	99.0	73.3
RH3	8.7	9.0	94.3	94.3	9.0	7.3	90.0	92.7	97.7	73.3
DRAGSTER	9.0	9.0	96.0	96.0	9.0	7.3	89.0	90.0	96.3	71.7
K18-RS6	9.0	9.0	99.0	99.0	9.0	7.3	88.3	90.7	99.0	71.7
PPG-TF 267	9.0	9.0	96.3	96.3	9.0	7.3	92.0	90.0	97.7	71.7
GLX ACED (PST-5DART)	8.0	8.0	93.0	94.7	9.0	7.7	90.0	93.3	93.3	70.0
K18-ROE	8.7	8.3	94.7	96.3	8.7	7.3	87.7	90.0	95.0	70.0
NAI-ROS4	9.0	9.0	97.7	96.3	9.0	7.0	89.7	90.3	97.7	70.0
PPG-TF 306	9.0	9.0	94.7	96.3	9.0	6.7	90.3	89.7	96.3	70.0
PPG-TF 312	9.0	8.3	99.0	97.7	9.0	6.7	91.0	91.7	99.0	70.0
PST-5TRN	7.3	7.3	90.0	93.0	8.7	6.7	91.3	91.7	91.7	70.0
TF456	9.0	9.0	97.7	97.7	9.0	6.7	87.0	89.7	97.7	70.0
ZRC1	9.0	9.0	99.0	99.0	9.0	7.0	90.7	90.7	99.0	70.0
3B2	8.3	8.7	86.7	90.0	9.0	6.7	88.3	89.7	95.0	68.3
3N1	8.7	8.7	93.3	96.3	9.0	6.7	91.3	89.3	97.7	68.3
BY-TF-169	9.0	8.7	99.0	96.0	9.0	6.3	84.7	88.0	99.0	68.3
DLFPS-321/3696	8.7	9.0	93.3	97.7	9.0	6.3	87.7	91.0	96.3	68.3
DLFPS-321/3702	8.7	8.7	93.3	95.0	9.0	6.3	83.0	90.7	96.3	68.3
K18-WB1	8.7	8.7	94.7	93.0	9.0	7.0	88.0	90.7	97.7	68.3
DLFPS-321/3699	9.0	9.0	96.0	97.7	8.7	6.3	87.0	90.3	95.0	66.7
DLFPS-321/3701	8.7	8.7	94.7	93.0	9.0	6.3	90.3	85.0	99.0	66.7
GRANDE 3	8.7	8.7	91.7	91.7	9.0	6.7	90.0	90.0	94.7	66.7
MOONDANCE GLX	8.3	8.3	93.0	91.3	9.0	6.7	88.0	92.7	93.3	66.7
PPG-TF 257	9.0	9.0	93.3	91.7	9.0	6.7	91.0	86.3	96.3	66.7
PPG-TF 313	8.7	8.7	96.0	97.7	9.0	7.0	88.0	88.3	97.7	66.7
PPG-TF 318	9.0	9.0	97.7	99.0	9.0	6.7	87.0	88.3	97.7	66.7
PPG-TF 336	9.0	9.0	99.0	99.0	9.0	6.7	90.7	89.3	97.7	66.7
PPG-TF 337	8.7	8.7	96.3	93.3	9.0	6.3	90.7	87.7	97.7	66.7
RAPTOR III	8.7	9.0	94.3	97.7	9.0	6.3	87.0	90.0	95.0	66.7
AH2	8.7	8.7	97.7	92.7	9.0	6.3	90.0	85.0	96.3	65.0
BAR TF 134	9.0	8.7	96.3	92.7	9.0	6.3	89.7	84.7	96.3	65.0
DLFPS-321/3693	9.0	9.0	94.7	99.0	9.0	6.0	88.0	86.0	97.7	65.0
DLFPS-321/3703	9.0	9.0	94.7	94.7	8.3	5.7	89.0	87.7	96.3	65.0
DLFPS-321/3707	8.7	8.7	94.3	94.3	9.0	6.7	89.3	87.3	99.0	65.0
DLFPS-TF/3552	9.0	9.0	97.7	99.0	9.0	6.7	87.7	86.7	96.3	65.0
GO-RH20	8.7	8.7	91.3	94.3	9.0	6.7	90.3	90.3	97.7	65.0
JT 233	9.0	9.0	94.7	96.3	9.0	6.7	91.0	87.0	97.7	65.0
NAI-3N2	9.0	9.0	97.7	99.0	8.7	6.7	89.7	88.7	94.7	65.0
PPG-TF 231	9.0	9.0	97.7	99.0	9.0	6.7	91.3	87.7	99.0	65.0
PPG-TF 244	8.7	8.3	96.0	93.0	9.0	6.7	89.7	86.3	94.7	65.0
PPG-TF 262	9.0	9.0	97.7	96.0	9.0	6.0	90.0	81.3	97.7	65.0
PST-5BYOB	8.3	8.3	93.0	94.3	8.7	6.7	92.0	90.7	93.3	65.0

TABLE 12.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER TRAFFIC STRESS AT NORTH BRUNSWICK, NJ 1/
2019 DATA

TURFGRASS COVER UNIFORMITY RATINGS 1-9; 9=MOST DENSE, UNIFORM TURF COVER 2/ */

NAME	BEFORE TRAFFIC ON AUGUST 28				AFTER TRAFFIC OCTOBER 4 2019					
	UNIFORMITY		FULLNESS OF CANOPY		UNIFORMITY		PERCENT GREEN COVER (OCTOBER)		FULLNESS OF CANOPY	
	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC
RHL2	8.7	9.0	97.7	96.0	9.0	6.0	90.3	88.7	97.7	65.0
AH1	9.0	9.0	94.3	97.7	9.0	6.0	89.3	86.0	97.7	63.3
DLFPS-TF/3553	9.0	9.0	93.3	94.7	9.0	6.0	91.0	85.0	95.0	63.3
BONFIRE (JS DTT)	8.7	8.7	96.3	93.0	9.0	6.7	88.0	86.3	96.3	63.3
PARAMOUNT	9.0	9.0	96.3	96.3	9.0	6.3	89.3	89.0	95.0	63.3
PPG-TF 238	9.0	9.0	96.0	97.7	9.0	6.0	91.7	86.0	96.3	63.3
MONUMENT (PST-5SQB)	8.0	8.3	89.7	94.7	8.7	6.7	90.0	90.7	94.7	63.3
RHF	9.0	9.0	97.7	96.0	9.0	5.7	90.7	81.0	96.0	63.3
TMT1	9.0	9.0	96.3	94.3	9.0	6.3	85.7	83.0	96.3	63.3
DLFPS-321/3705	8.3	8.7	93.0	94.7	9.0	5.7	89.7	88.3	94.7	61.7
ESTRENA	8.7	9.0	96.0	89.7	9.0	5.7	91.3	81.0	99.0	61.7
GO-AOMK	8.7	8.3	93.0	91.7	8.7	5.3	90.3	85.3	93.3	61.7
PPG-TF 308	9.0	9.0	96.3	99.0	9.0	6.3	88.7	87.0	96.3	61.7
PPG-TF 338	9.0	9.0	99.0	96.0	9.0	5.7	88.0	87.3	99.0	61.7
PST-5GLBS	7.7	7.7	83.3	86.7	8.7	5.7	88.3	86.0	90.0	61.7
RC4	8.7	8.7	93.3	94.7	9.0	6.0	91.0	84.7	96.3	61.7
SESCR1	9.0	8.7	94.7	93.0	9.0	5.7	88.0	85.0	96.3	61.7
BGR-TF3	7.7	7.7	81.7	83.3	8.3	6.0	89.7	87.7	90.0	60.0
BULLSEYE LTZ	8.7	8.7	93.3	93.0	9.0	5.3	89.7	87.3	96.3	60.0
DLFPS-321/3708	8.7	8.7	94.7	96.3	8.7	5.3	91.7	84.3	93.3	60.0
PADRE 2	8.7	9.0	93.3	95.0	9.0	5.7	90.3	87.3	96.3	60.0
PPG-TF 249	8.7	8.0	94.7	86.3	9.0	6.0	91.7	86.7	93.3	60.0
PPG-TF 255	9.0	9.0	93.3	93.3	9.0	5.7	89.0	90.0	96.3	60.0
PPG-TF 315	9.0	9.0	96.0	97.7	9.0	5.7	91.0	84.7	96.3	60.0
PPG-TF 320	9.0	9.0	96.3	96.3	9.0	6.0	89.3	85.0	96.3	60.0
PPG-TF 323	9.0	9.0	97.7	96.0	8.7	5.7	86.3	86.0	99.0	60.0
PRO GOLD	8.0	8.0	90.0	91.7	8.3	5.7	92.0	88.7	93.0	60.0
PST-5DC24	7.7	7.7	83.3	85.0	8.0	5.7	88.3	87.0	88.3	60.0
PST-5THM	7.3	7.3	85.0	88.3	8.0	6.0	91.0	90.3	90.0	60.0
RH1	8.7	9.0	93.0	96.3	9.0	6.0	88.7	88.0	94.7	60.0
RS1	9.0	9.0	95.0	97.7	9.0	5.3	90.3	82.7	96.3	60.0
SE53D2	8.0	8.0	91.7	93.3	8.7	5.7	90.3	85.7	93.0	60.0
5LSS	9.0	9.0	97.7	97.7	9.0	5.0	92.3	78.0	97.7	58.3
DLFPS-321/3679	8.0	8.0	90.0	91.7	9.0	5.7	90.7	80.7	93.3	58.3
FAYETTE	8.3	8.3	89.7	86.7	9.0	6.0	89.7	86.7	95.0	58.3
LIFEGUARD	8.3	8.3	86.7	88.0	8.7	5.0	92.3	86.7	91.7	58.3
PPG-TF 254	8.7	8.7	93.0	94.7	9.0	5.7	91.0	83.3	93.3	58.3
PST-5MCMO	8.3	8.0	91.7	86.7	8.7	5.7	92.3	84.0	91.7	58.3
RDC	9.0	9.0	96.3	94.7	9.0	5.7	91.3	85.0	97.7	58.3
SETF104	8.7	8.7	94.3	94.7	8.7	6.0	89.7	85.3	94.7	58.3
SETFM3	7.7	7.7	85.0	85.0	8.3	5.3	89.3	88.7	91.3	58.3
TF445	9.0	9.0	93.0	91.7	9.0	5.3	89.3	84.0	96.0	58.3
BULLSEYE	8.3	8.3	86.7	83.3	8.7	5.0	91.7	84.7	91.7	56.7
HEMI	8.3	8.3	93.0	91.3	9.0	5.7	90.0	85.0	95.0	56.7
K18-NSE	8.3	8.7	91.0	94.3	9.0	5.7	88.7	78.7	97.7	56.7

TABLE 12.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER TRAFFIC STRESS AT NORTH BRUNSWICK, NJ 1/
2019 DATA

TURFGRASS COVER UNIFORMITY RATINGS 1-9; 9=MOST DENSE, UNIFORM TURF COVER 2/ */

NAME	BEFORE TRAFFIC ON AUGUST 28				AFTER TRAFFIC OCTOBER 4 2019					
	UNIFORMITY		FULLNESS OF CANOPY		UNIFORMITY		PERCENT GREEN COVER		OCTOBER FULLNESS OF CANOPY	
	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC
PPG-TF 305	9.0	8.7	96.3	91.7	8.3	5.0	88.7	84.7	97.7	56.7
PST-5GQ	7.3	7.3	88.3	88.3	8.7	5.0	91.3	87.3	91.7	56.7
AST8118LM	7.7	7.7	85.0	83.3	8.7	5.7	88.3	90.3	88.3	55.0
COL-TF-148	8.7	9.0	96.3	96.3	9.0	5.0	89.3	78.3	99.0	55.0
DLFPS-321/3694	9.0	8.3	96.3	90.0	8.7	5.0	90.3	80.0	96.3	55.0
DLFPS-321/3706	8.3	8.7	90.0	90.0	9.0	5.7	90.3	82.0	97.7	55.0
A-TF31	8.3	8.3	88.3	86.7	8.7	5.0	91.0	88.0	85.0	53.3
AST8218LM	7.7	8.0	83.3	81.7	8.3	5.0	86.0	88.0	85.0	53.3
ATF1768	7.0	7.0	85.0	80.0	8.0	5.0	92.3	82.7	93.3	53.3
BRAVO 2	7.3	7.3	81.7	78.3	8.0	5.0	92.0	79.3	90.0	53.3
COPIOUS TF	7.3	7.3	83.3	85.0	8.3	5.3	91.3	87.0	91.7	53.3
DLFPS-321/3695	8.7	8.3	91.7	93.3	9.0	5.3	86.3	83.7	94.7	53.3
DLFPS-TF/3550	8.7	9.0	91.3	90.0	8.7	4.7	90.7	76.7	91.3	53.3
NAI-ST5	8.0	8.0	90.0	88.3	8.7	5.0	90.3	76.7	96.3	53.3
NT-3	8.7	8.7	93.3	93.3	9.0	5.0	90.7	78.3	93.3	53.3
PPG-TF 316	8.7	8.7	93.0	86.7	9.0	5.0	91.0	83.0	96.3	53.3
PST-5MINK	7.0	8.0	76.7	83.3	8.3	5.0	91.7	85.3	86.7	53.3
RAD-TF131	8.3	7.7	90.0	80.0	9.0	5.0	88.3	84.3	90.0	53.3
SETFM2	8.0	7.3	85.0	80.0	8.3	5.0	90.3	87.0	90.0	53.3
TANGO	7.7	7.7	81.7	83.3	8.7	5.0	90.7	80.7	90.0	53.3
ATF2116	6.7	6.7	81.7	83.3	8.3	4.7	88.0	80.0	90.0	51.7
BANDIT	7.3	7.3	88.3	86.7	8.0	5.3	90.3	89.7	86.7	51.7
BAR 9FE MAS	6.7	6.7	80.0	81.7	8.0	4.7	91.0	85.7	83.3	51.7
BAR-FA8230	7.0	7.0	85.0	81.7	8.7	5.0	92.3	84.7	88.3	51.7
FIREHAWK SLT	9.0	9.0	94.7	91.3	8.3	4.3	90.7	82.3	94.7	51.7
GRAND PRIX (FC15-01P)	7.7	7.7	85.0	86.7	8.3	5.3	92.0	87.0	88.3	51.7
JT 517	7.3	7.3	83.3	81.7	8.3	5.3	88.7	89.7	88.3	51.7
PST-5DZM	8.3	8.3	89.7	93.0	8.7	4.3	90.0	80.7	91.3	51.7
SE5STAR	8.0	8.3	88.3	88.3	8.3	4.7	91.3	86.7	90.0	51.7
BIRMINGHAM	8.0	8.0	88.3	88.3	8.3	4.3	92.3	83.0	93.0	50.0
LBF	7.3	7.7	80.0	81.7	8.7	4.3	89.3	85.7	88.3	50.0
NAI-TUE	8.7	8.3	88.3	91.7	8.7	4.7	90.7	77.3	91.7	50.0
PALOMAR	6.7	6.7	73.3	73.3	8.0	4.3	92.3	87.0	83.3	50.0
PST-5E6	8.0	8.0	88.3	88.0	8.7	4.7	93.3	85.7	88.3	50.0
RAD-TF105	8.3	8.3	91.7	93.3	8.7	4.7	90.3	83.0	90.0	50.0
NAI-FQ2-17	7.7	7.7	85.0	86.7	8.0	4.7	91.3	78.7	88.3	48.3
ESCALADE	7.3	7.3	83.3	83.3	8.0	4.7	90.3	83.3	88.3	46.7
NATURALLY GREEN	7.0	7.0	73.3	75.0	7.7	4.0	91.3	81.0	85.0	46.7
BAR FA 8228	6.0	6.7	68.3	71.7	7.3	4.0	93.3	82.0	80.0	43.3
OG-WALK	6.7	6.7	78.3	75.0	7.3	3.3	91.0	85.7	80.0	43.3
RAD-TF 115 (TURBO SS)	8.0	7.7	88.3	86.7	8.0	3.3	88.3	74.0	81.7	40.0
KENTUCKY-31	5.3	5.3	65.0	65.0	6.7	2.3	96.7	79.3	68.3	28.3
LSD VALUE	0.9	0.9	8.6	8.8	0.6	1.6	5.2	16.3	4.9	13.2
C.V. (%)	6.7	6.5	5.8	6.0	4.2	16.1	2.7	6.7	3.4	12.8

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

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

TABLE 13.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER SHADE AT AMES, IA 1/
2019 DATA

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

NAME	GENETIC COLOR	DENSITY RATINGS						QUALITY RATINGS					MEAN
		SPRING	SUMMER	FALL	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	
DLFPS-321/3696	8.0	5.7	6.7	5.3	7.0	7.0	7.0	7.0	7.3	7.3	6.7	7.0	7.0
GO-RH20	8.3	5.7	6.3	6.0	7.0	6.3	6.3	6.3	7.3	7.0	7.3	7.3	6.9
PST-5TRN	8.0	5.7	7.3	6.0	6.7	7.0	6.7	6.7	7.3	7.0	7.0	7.0	6.9
BRAVO 2	8.3	6.3	7.0	5.7	6.7	6.3	6.3	7.3	7.7	7.0	7.0	5.7	6.8
DLFPS-321/3705	8.3	6.3	6.7	5.0	6.3	6.7	7.0	7.0	7.0	7.0	6.7	7.0	6.8
FAYETTE	8.0	5.3	6.7	5.3	6.3	6.3	7.0	7.0	7.3	7.0	6.3	6.7	6.8
GRANDE 3	8.7	6.0	7.3	5.3	6.3	7.0	6.3	7.0	7.3	7.0	6.7	7.0	6.8
JT 268	8.0	6.0	6.3	6.0	6.7	6.7	6.7	6.7	7.3	7.0	6.7	6.7	6.8
K18-NSE	7.7	6.0	6.7	5.7	5.7	7.0	7.0	6.7	6.7	7.3	7.0	6.7	6.8
PPG-TF 231	8.0	6.0	7.0	5.3	6.3	6.3	6.7	7.0	7.7	7.0	6.7	6.3	6.8
PPG-TF 254	8.3	5.7	6.7	5.3	6.7	6.7	6.7	6.3	7.0	7.3	6.3	7.0	6.8
SETF104	7.7	5.3	7.0	7.0	7.3	5.7	6.7	6.3	7.0	7.0	7.7	7.0	6.8
RAD-TF 115 (TURBO SS)	8.0	6.3	6.3	5.3	6.7	6.0	6.7	6.7	7.0	7.3	6.7	7.0	6.8
DLFPS-321/3699	8.0	5.7	6.7	5.0	6.3	6.3	7.0	6.7	7.3	6.7	6.7	6.3	6.7
DRAGSTER	8.0	5.0	7.0	5.0	6.3	6.0	6.7	6.3	7.3	7.3	6.3	7.0	6.7
PADRE 2	8.0	6.3	6.3	4.3	6.3	7.0	6.7	7.0	7.0	6.7	6.7	6.0	6.7
PPG-TF 305	8.0	5.7	6.7	5.7	7.0	6.3	7.0	6.7	7.0	6.7	6.3	6.3	6.7
PPG-TF 306	8.0	5.7	7.0	5.0	7.0	6.0	6.7	6.7	7.3	7.0	6.7	6.3	6.7
PST-5GQ	7.7	5.3	7.0	6.0	6.7	5.7	6.7	6.3	7.0	7.0	7.0	7.3	6.7
PST-5MINK	7.7	6.3	7.7	5.3	6.7	6.3	7.0	7.3	7.3	6.7	6.3	5.7	6.7
BANDIT	8.3	5.7	6.0	6.0	6.3	6.7	6.7	7.0	7.0	6.7	6.7	6.0	6.6
COL-TF-148	7.7	5.3	6.0	5.3	6.7	6.3	6.7	6.7	6.7	7.0	6.3	6.3	6.6
COPIOUS TF	8.3	6.7	7.0	5.7	6.0	6.3	7.0	7.3	7.0	6.3	6.7	6.3	6.6
DLFPS-321/3702	8.0	5.7	6.7	5.0	6.3	7.0	6.7	6.3	6.7	6.7	6.3	6.7	6.6
JT 233	8.3	5.3	6.0	6.0	6.7	6.7	6.7	6.7	6.7	6.7	7.0	6.0	6.6
JT 517	8.0	5.7	5.3	4.7	6.3	6.7	7.0	7.0	6.7	7.0	6.7	5.7	6.6
PPG-TF 257	7.7	6.3	6.3	6.7	6.3	6.0	6.3	6.0	7.3	7.0	7.0	6.7	6.6
PPG-TF 308	8.3	6.7	6.3	5.7	6.3	6.3	6.3	6.7	7.0	7.0	6.7	6.3	6.6
PRO GOLD	7.7	6.7	7.0	6.0	6.0	6.7	6.7	7.0	7.3	6.7	6.7	5.7	6.6
PST-5BYOB	8.0	5.7	6.7	5.3	6.7	6.7	6.7	6.0	7.0	6.7	6.3	6.7	6.6
RH1	8.3	6.0	7.0	5.7	6.7	6.3	6.3	6.3	7.3	6.7	7.0	6.3	6.6
TF445	7.3	6.0	6.0	5.0	6.3	6.7	7.0	7.0	7.0	6.7	6.0	6.3	6.6
BIRMINGHAM	7.7	5.7	6.3	5.3	6.7	6.7	5.3	6.3	6.7	7.3	6.3	6.3	6.5
BULLSEYE	8.0	5.3	7.0	5.3	7.3	6.0	6.0	6.3	7.3	6.3	6.7	6.3	6.5
BY-TF-169	8.3	5.3	6.0	5.3	6.3	6.3	6.7	6.0	6.7	7.0	7.0	6.3	6.5
DLFPS-321/3701	8.0	6.7	6.7	4.7	6.3	6.7	6.0	7.0	7.0	6.7	5.7	6.3	6.5
DLFPS-321/3703	8.3	5.7	6.3	4.7	6.3	6.3	6.7	6.7	7.0	6.7	6.0	6.3	6.5
NAI-ROS4	8.0	5.0	5.7	5.3	6.3	6.0	6.7	6.3	6.7	6.7	6.3	6.7	6.5
NAI-TUE	8.7	5.7	6.3	4.3	6.7	6.3	6.7	6.7	7.0	6.3	5.7	7.0	6.5
PPG-TF 238	8.0	6.0	7.0	5.3	6.7	5.7	6.7	6.3	7.0	6.7	6.7	6.3	6.5
PPG-TF 318	7.7	5.7	6.3	4.7	6.7	6.3	6.3	7.0	7.0	6.3	6.0	6.0	6.5
PST-5DC24	8.3	6.3	6.7	4.3	6.3	6.7	6.3	7.0	7.0	6.7	6.0	6.0	6.5
PST-5E6	7.7	6.7	7.0	4.7	5.7	6.3	6.3	6.7	7.3	7.0	6.3	6.7	6.5
PST-5MCMO	8.0	5.3	7.3	5.3	6.0	6.3	6.7	6.7	7.3	6.7	6.7	5.7	6.5
RAD-TF105	8.0	5.7	6.7	4.3	6.7	6.3	6.3	7.0	7.3	7.0	5.0	6.7	6.5

TABLE 13.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER SHADE AT AMES, IA 1/
2019 DATA

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

NAME	GENETIC COLOR	DENSITY RATINGS					QUALITY RATINGS						MEAN
		SPRING	SUMMER	FALL	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	
RH3	7.7	4.7	5.7	6.3	6.7	6.3	6.3	6.3	7.0	6.3	7.0	6.3	6.5
ZRC1	7.3	5.7	7.0	5.0	6.0	6.7	6.3	6.7	7.0	6.7	6.3	6.3	6.5
BONFIRE (JS DTT)	7.7	6.0	6.7	4.3	6.7	6.3	6.3	6.3	7.0	6.7	6.0	6.0	6.4
DLFPS-321/3679	8.3	6.0	6.7	4.7	6.3	6.7	6.3	6.7	7.0	6.3	6.3	5.7	6.4
GLX ACED (PST-5DART)	7.7	6.3	6.0	4.7	5.7	6.3	6.3	6.7	7.0	6.7	6.3	6.0	6.4
HEMI	8.0	5.3	6.3	4.7	6.0	6.3	6.7	6.3	7.0	6.3	6.0	6.3	6.4
LIFEGUARD	7.7	6.0	6.0	5.3	6.0	6.3	7.0	6.3	6.7	6.3	6.0	6.3	6.4
OKEEFE (LTP-TF-122)	7.3	6.0	6.0	4.3	6.3	6.3	6.3	6.7	6.7	6.3	6.0	6.7	6.4
PPG-TF 244	8.3	6.7	6.3	4.3	6.3	6.3	6.7	6.7	7.3	6.3	5.3	6.3	6.4
RC4	7.3	7.0	6.3	4.7	6.7	6.3	6.7	6.3	6.7	6.7	6.0	6.0	6.4
RDC	7.3	6.0	6.3	4.3	6.3	6.3	7.0	6.3	6.7	6.7	5.7	6.0	6.4
TANGO	7.7	6.7	6.3	4.7	5.7	6.3	6.3	7.0	6.7	7.0	6.7	5.7	6.4
3B2	8.3	5.3	6.3	5.0	6.0	6.3	6.3	6.3	6.7	6.7	6.0	6.0	6.3
A-TF31	7.3	6.0	6.0	5.3	6.3	6.0	6.3	6.7	7.0	6.0	6.0	6.3	6.3
DEGAS (LTP-TF-111)	8.0	6.3	6.0	5.0	5.7	6.3	6.7	6.3	6.7	6.7	6.0	6.0	6.3
LBF	8.3	6.7	6.3	4.3	6.3	7.0	6.7	6.7	6.7	6.7	5.0	5.3	6.3
NAI-3N2	8.0	5.7	5.7	5.0	6.0	6.0	6.3	6.7	6.7	6.3	6.3	6.0	6.3
NAI-FQZ-17	8.0	5.7	6.3	4.7	6.3	6.7	7.0	6.0	7.0	6.3	5.7	5.7	6.3
NAI-ST5	8.3	6.0	6.0	5.7	6.7	7.0	6.0	6.0	6.3	6.3	6.3	5.7	6.3
PST-5GLBS	7.3	6.3	6.7	5.0	6.0	6.0	6.0	6.3	6.7	7.0	6.3	6.0	6.3
MONUMENT (PST-5SQB)	8.0	6.0	6.0	5.3	6.7	6.0	6.3	6.0	6.3	6.7	6.3	5.7	6.3
SETFM3	8.0	5.7	6.3	5.0	6.3	6.3	6.3	7.0	6.7	6.3	5.7	5.3	6.3
TD2	8.0	6.3	6.3	5.7	6.3	6.7	6.3	6.3	6.7	6.3	6.3	5.3	6.3
TF456	8.0	6.7	6.7	5.0	5.7	6.7	6.7	6.7	7.0	6.3	5.7	5.3	6.3
GRAND PRIX (FC15-01P)	8.0	5.7	6.0	5.3	6.0	6.0	6.3	6.3	6.3	6.3	6.3	6.0	6.2
K18-WB1	8.0	6.3	6.0	5.0	6.3	6.7	6.0	5.7	6.3	6.3	6.0	6.3	6.2
NATURALLY GREEN	8.3	7.0	6.3	5.0	6.3	5.7	6.3	6.3	7.0	6.3	5.7	5.7	6.2
PPG-TF 249	7.7	6.0	5.7	4.7	6.7	6.0	6.0	5.7	6.7	6.7	5.7	6.0	6.2
PPG-TF 315	8.0	6.3	5.7	4.7	6.0	6.0	6.3	6.0	6.3	6.7	6.0	6.3	6.2
PPG-TF 316	8.0	6.3	5.7	5.7	6.3	6.7	5.7	6.0	6.3	6.3	6.3	5.7	6.2
PST-5THM	7.7	6.0	6.7	5.0	5.7	6.3	6.7	6.7	6.3	6.3	6.0	5.3	6.2
SESCR1	7.7	5.7	7.0	4.3	6.0	6.0	6.7	6.0	6.3	6.7	5.7	6.0	6.2
SETFM2	7.7	5.0	5.7	5.3	5.7	6.3	6.3	6.0	6.7	6.3	6.7	5.7	6.2
TMT1	7.7	6.3	6.0	4.3	6.3	6.3	6.0	6.3	6.7	6.0	6.0	5.7	6.2
AST8118LM	8.3	5.7	6.3	4.3	6.3	6.0	6.7	6.3	6.7	6.7	4.3	5.7	6.1
ATF1768	8.0	5.7	5.3	4.7	6.0	6.0	6.7	6.3	6.3	6.3	5.7	5.3	6.1
DLFPS-321/3707	8.0	6.0	6.0	4.0	6.0	6.0	6.0	6.3	6.3	6.7	5.3	6.0	6.1
MOONDANCE GLX	8.0	6.0	6.0	4.7	5.7	6.3	5.3	6.3	6.7	6.3	5.7	6.3	6.1
NT-3	8.0	6.3	7.0	4.3	6.3	6.3	5.7	6.0	7.0	5.7	5.7	6.0	6.1
PPG-TF 255	8.0	6.3	6.0	6.0	6.7	6.0	6.0	5.7	6.3	6.3	6.3	5.7	6.1
PPG-TF 312	7.7	5.7	6.3	4.7	6.0	6.0	6.3	5.7	6.7	6.3	6.3	5.3	6.1
PPG-TF 323	8.0	5.7	6.0	4.0	6.7	6.3	6.3	6.0	6.3	5.7	5.7	5.7	6.1
PPG-TF 336	7.3	5.7	6.0	6.0	6.3	6.0	6.0	6.0	6.7	6.0	6.3	5.7	6.1
RHF	8.0	6.0	6.0	5.3	6.3	5.3	5.7	6.3	6.7	6.7	6.3	5.3	6.1
RS1	7.7	6.0	6.3	5.0	6.3	6.7	6.7	6.0	6.3	5.7	6.0	5.3	6.1

TABLE 13.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER SHADE AT AMES, IA 1/
2019 DATA

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

NAME	GENETIC COLOR	DENSITY RATINGS					QUALITY RATINGS						MEAN
		SPRING	SUMMER	FALL	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	
AH2	8.0	5.0	6.0	5.0	5.7	6.3	5.7	6.0	6.7	6.3	6.0	5.7	6.0
ATF2116	7.3	6.0	5.7	4.7	6.0	5.7	6.3	6.3	6.3	5.7	6.0	5.3	6.0
BAR 9FE MAS	8.0	5.3	6.3	4.0	5.3	6.3	6.7	6.3	6.7	5.7	5.0	5.7	6.0
BAR FA 8228	8.0	5.3	5.7	4.3	6.0	6.7	6.3	6.0	6.3	6.0	5.3	5.0	6.0
BAR-FA8230	7.7	5.7	6.0	4.7	6.3	6.0	5.7	6.3	6.7	5.7	5.7	5.7	6.0
BGR-TF3	8.3	6.0	6.0	5.0	6.0	6.3	6.0	6.3	6.7	5.7	5.3	6.0	6.0
BULLSEYE LTZ	7.7	5.3	5.7	4.0	6.3	6.3	5.3	5.7	6.0	6.3	5.7	6.3	6.0
DLFPS-TF/3550	8.0	6.0	5.7	4.3	6.3	6.0	6.3	6.7	6.0	5.7	5.7	5.3	6.0
DLFPS-TF/3552	7.7	5.3	6.0	4.7	6.0	6.3	6.3	6.3	6.3	5.7	5.7	5.7	6.0
ESCALADE	7.7	6.3	6.3	5.0	6.0	6.7	6.0	6.0	6.3	5.7	6.0	5.3	6.0
FIREHAWK SLT	7.3	6.7	5.7	4.3	6.3	6.3	6.0	5.3	6.3	5.7	5.7	6.0	6.0
K18-ROE	7.3	6.0	5.7	4.7	5.7	6.3	6.3	5.7	6.0	6.3	5.3	6.0	6.0
K18-RS6	8.0	6.0	5.7	4.7	5.7	6.7	6.0	6.3	6.3	6.0	6.0	5.0	6.0
PST-5DZM	7.7	5.7	5.3	4.3	6.0	6.0	6.0	5.3	6.3	6.0	6.0	6.3	6.0
RAD-TF131	8.3	5.0	5.7	4.7	6.3	5.7	5.7	5.7	6.3	6.7	5.7	6.3	6.0
RAPTOR III	8.3	6.7	6.3	4.3	6.0	6.3	6.0	6.0	6.3	6.0	5.3	5.7	6.0
RHL2	7.7	5.7	6.3	4.7	6.3	5.0	5.7	6.0	7.0	7.0	6.0	5.3	6.0
SE5STAR	8.3	5.0	5.7	4.0	6.3	6.0	6.0	6.0	6.3	6.3	5.7	5.7	6.0
3N1	7.7	6.3	6.3	5.0	5.7	6.0	6.0	6.7	6.3	6.0	5.7	5.0	5.9
DLFPS-321/3693	8.3	6.3	6.0	4.3	5.7	6.3	6.3	6.0	6.7	6.3	5.0	5.0	5.9
DLFPS-321/3708	8.3	7.0	6.0	4.3	6.7	6.3	6.0	5.7	6.3	6.3	5.3	4.7	5.9
ESTRENA	7.0	6.3	6.0	4.0	6.7	6.3	5.3	6.3	6.3	5.7	5.3	5.3	5.9
GO-AOMK	6.7	5.0	5.7	5.0	6.0	6.0	6.3	5.7	6.0	6.0	5.7	5.7	5.9
PPG-TF 313	7.7	6.3	5.7	5.3	6.0	6.0	5.7	5.7	6.0	6.3	5.7	5.7	5.9
PPG-TF 337	7.7	7.0	6.3	5.0	5.7	6.3	5.7	6.0	6.3	6.3	5.7	5.3	5.9
5LSS	7.3	5.3	5.7	4.7	6.0	5.7	6.0	6.0	6.3	5.3	5.7	5.3	5.8
AH1	7.7	6.0	6.0	5.0	5.7	5.7	6.0	6.0	6.0	6.0	5.7	5.0	5.8
AST8218LM	8.0	5.3	6.0	4.7	6.0	6.0	6.3	6.0	6.0	5.7	5.7	5.0	5.8
DLFPS-321/3694	8.0	6.0	6.3	4.7	5.7	5.3	6.0	6.0	6.7	6.0	5.0	5.3	5.8
DLFPS-321/3706	8.3	5.7	5.7	4.3	6.3	6.0	5.7	6.7	6.3	5.3	5.3	4.7	5.8
DLFPS-TF/3553	7.7	6.0	5.7	5.0	5.7	6.3	6.3	6.0	6.0	6.0	5.3	5.0	5.8
KENTUCKY-31	7.0	7.0	6.0	6.3	6.0	7.0	5.7	5.3	6.0	5.7	6.3	4.7	5.8
OG-WALK	8.0	7.3	5.7	4.0	6.0	6.3	6.7	6.0	6.3	5.3	5.0	5.0	5.8
PARAMOUNT	7.7	6.3	6.7	4.3	6.0	6.7	5.7	5.7	6.3	6.3	5.3	4.3	5.8
PPG-TF 338	7.0	6.0	5.7	4.3	6.0	6.0	6.0	6.0	6.0	5.7	5.3	5.0	5.8
SE53D2	7.7	5.3	5.3	5.0	6.3	6.0	6.0	5.3	6.3	5.3	5.3	5.3	5.8
BAR TF 134	7.7	6.0	5.7	4.0	6.3	6.3	5.3	6.0	6.0	5.7	5.0	5.0	5.7
PPG-TF 320	7.7	6.3	6.3	4.7	5.7	6.3	6.0	5.3	6.7	5.7	5.3	4.7	5.7
PALOMAR	7.7	6.0	5.3	4.0	5.7	5.7	6.0	5.7	5.7	5.7	4.7	5.7	5.6
DLFPS-321/3695	7.3	6.0	5.7	5.0	6.0	5.0	5.3	5.3	5.7	5.7	5.3	6.0	5.5
PPG-TF 267	8.3	5.0	4.7	4.0	6.7	6.0	5.3	5.3	6.0	5.3	4.7	4.7	5.5
PPG-TF 262	8.0	6.3	5.7	4.0	5.7	6.0	5.7	5.3	6.0	5.3	5.0	4.3	5.4
LSD VALUE	3.8	2.8	4.7	6.4	4.6	4.3	3.0	5.7	5.1	4.1	3.8	3.7	2.8
C.V. (%)	8.5	13.7	14.8	23.2	12.1	11.7	11.6	14.7	12.6	13.9	16.6	17.4	9.6

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 13.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER SHADE AT AMES, IA 1/
2019 DATA

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

NAME	PERCENT GROUND COVER APRIL-NOVEMBER					PERCENT ESTABLISHMENT		
	4_29	5_22	7_12	8_7	10_4	11_5	OCTOBER	NOVEMBER
DLFPS-321/3696	55.0	75.0	65.0	58.3	50.0	30.0	30.0	51.7
GO-RH20	80.0	75.0	76.7	61.7	53.3	43.3	43.3	63.3
PST-5TRN	61.7	81.7	76.7	60.0	61.7	30.0	35.0	53.3
BRAVO 2	45.0	68.3	80.0	60.0	46.7	16.7	36.7	55.0
DLFPS-321/3705	48.3	63.3	71.7	53.3	51.7	31.7	33.3	61.7
FAYETTE	53.3	55.0	78.3	61.7	51.7	25.0	21.7	51.7
GRANDE 3	60.0	81.7	75.0	55.0	45.0	33.3	36.7	63.3
JT 268	50.0	58.3	55.0	61.7	38.3	33.3	33.3	60.0
K18-NSE	40.0	85.0	66.7	48.3	61.7	36.7	40.0	58.3
PPG-TF 231	58.3	60.0	76.7	65.0	43.3	35.0	33.3	55.0
PPG-TF 254	56.7	60.0	61.7	56.7	38.3	26.7	41.7	68.3
SETF104	65.0	70.0	66.7	56.7	70.0	33.3	33.3	61.7
TURBO SS	48.3	66.7	70.0	56.7	35.0	33.3	43.3	55.0
DLFPS-321/3699	48.3	66.7	66.7	46.7	55.0	25.0	33.3	56.7
DRAGSTER	62.0	70.0	70.0	51.7	30.0	36.7	35.0	53.3
PADRE 2	43.3	66.7	60.0	58.3	48.3	23.3	33.3	56.7
PPG-TF 305	53.3	51.7	58.3	48.3	31.7	23.3	35.0	56.7
PPG-TF 306	55.0	65.0	68.3	56.7	63.3	21.7	40.0	63.3
PST-5GQ	58.3	61.7	63.3	56.7	56.7	30.0	25.0	51.7
PST-5MINK	50.0	51.7	68.3	48.3	48.3	18.3	26.7	58.3
BANDIT	38.3	63.3	55.0	41.7	38.3	20.0	30.0	55.0
COL-TF-148	56.7	68.3	60.0	50.0	38.3	26.7	25.0	50.0
COPIOUS TF	35.0	58.3	66.7	51.7	46.7	25.0	38.3	63.3
DLFPS-321/3702	50.0	81.7	50.0	36.0	41.7	23.3	30.0	45.0
JT 233	50.0	51.7	70.0	58.3	51.7	20.0	28.3	53.3
JT 517	33.3	71.7	78.3	43.3	53.3	20.0	33.3	53.3
PPG-TF 257	50.0	55.0	61.7	65.0	43.3	35.0	30.0	66.7
PPG-TF 308	35.0	55.0	68.3	51.7	48.3	25.0	36.7	66.7
PRO GOLD	46.7	71.7	66.7	43.3	46.7	20.0	30.0	56.7
PST-5BYOB	58.3	68.3	50.0	51.7	46.7	26.7	40.0	58.3
RHI	51.7	73.3	73.3	55.0	50.0	26.7	35.0	58.3
TF445	50.0	63.3	71.7	55.0	43.3	23.3	31.7	56.7
BIRMINGHAM	55.0	65.0	53.3	40.0	36.7	26.7	26.7	56.7
BULLSEYE	66.7	58.3	55.0	53.3	51.7	38.3	35.0	65.0
BY-TF-169	51.7	53.3	51.7	38.3	50.0	23.3	31.7	58.3
DLFPS-321/3701	41.7	63.3	63.3	46.7	28.3	26.7	33.3	56.7
DLFPS-321/3703	43.3	61.7	65.0	41.7	38.3	23.3	35.0	58.3
NAI-ROS4	53.3	40.0	58.3	53.3	40.0	28.3	40.0	56.7
NAI-TUE	70.0	65.0	65.0	47.0	25.0	30.0	45.0	63.3
PPG-TF 238	56.7	48.3	51.7	48.3	43.3	26.7	36.7	68.3
PPG-TF 318	55.0	50.0	63.3	55.0	38.3	21.7	35.0	55.0
PST-5DC24	45.0	53.3	66.7	45.0	25.0	21.7	38.3	60.0
PST-5E6	43.3	71.7	73.3	61.7	50.0	20.0	38.3	66.7
PST-5MCMO	53.3	68.3	48.3	51.7	50.0	16.7	33.3	56.7
RAD-TF105	63.3	63.3	68.3	55.0	28.3	26.7	30.0	60.0

TABLE 13.
(CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
GROWN UNDER SHADE AT AMES, IA 1/
2019 DATA

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

NAME	PERCENT GROUND COVER APRIL-NOVEMBER						PERCENT ESTABLISHMENT	
	4_29	5_22	7_12	8_7	10_4	11_5	OCTOBER	NOVEMBER
RH3	51.7	58.3	63.3	63.3	48.3	26.7	25.0	58.3
ZRC1	51.7	76.7	65.0	55.0	31.7	20.0	36.7	53.3
BONFIRE (JS DTT)	53.3	45.0	65.0	50.0	38.3	18.3	35.0	56.7
DLFPS-321/3679	43.3	70.0	53.3	40.0	46.7	18.3	33.3	61.7
GLX ACED (PST-5DART)	33.3	60.0	65.0	55.0	38.3	26.7	33.3	61.7
HEMI	58.3	60.0	61.7	51.7	45.0	30.0	41.7	66.7
LIFEGUARD	41.7	55.0	60.0	43.3	31.7	20.0	35.0	65.0
OKEEFE (LTP-TF-122)	51.7	58.3	60.0	45.0	45.0	25.0	40.0	48.3
PPG-TF 244	55.0	61.7	71.7	56.7	38.3	23.3	41.7	58.3
RC4	48.3	55.0	58.3	55.0	38.3	25.0	41.7	66.7
RDC	50.0	68.3	66.7	53.3	28.3	20.0	33.3	63.3
TANGO	38.3	48.3	61.7	43.3	45.0	21.7	36.7	56.7
3B2	46.7	71.7	60.0	41.7	35.0	16.7	31.7	55.0
A-TF31	45.0	56.7	53.3	51.7	36.7	23.3	26.7	43.3
DEGAS (LTP-TF-111)	45.0	60.0	53.3	38.3	36.7	20.0	33.3	65.0
LBF	51.7	85.0	51.7	35.0	20.0	13.3	41.7	65.0
NAI-3N2	46.7	48.3	61.7	55.0	28.3	23.3	35.0	58.3
NAI-FQZ-17	40.0	70.0	55.0	40.0	33.3	15.0	33.3	65.0
NAI-ST5	53.3	55.0	53.3	35.0	28.3	16.7	45.0	71.7
PST-5GLBS	33.3	43.3	58.3	55.0	43.3	26.7	31.7	61.7
MONUMENT (PST-5SQB)	35.0	33.3	36.7	36.7	36.7	11.7	38.3	58.3
SETFM3	46.7	63.3	55.0	40.0	25.0	18.3	38.3	63.3
TD2	55.0	60.0	51.7	40.0	36.7	15.0	41.7	60.0
TF456	36.7	55.0	58.3	43.3	30.0	20.0	36.7	60.0
GRAND PRIX (FC15-01P)	30.0	60.0	40.0	40.0	36.7	16.7	28.3	48.3
K18-WB1	41.7	66.7	56.7	45.0	43.3	33.3	33.3	60.0
NATURALLY GREEN	48.3	33.3	53.3	33.3	18.3	13.3	41.7	66.7
PPG-TF 249	43.3	48.3	55.0	53.3	30.0	28.3	33.3	58.3
PPG-TF 315	38.3	25.0	48.3	46.7	33.3	21.7	40.0	63.3
PPG-TF 316	45.0	45.0	40.0	36.7	26.7	21.7	41.7	61.7
PST-5THM	36.7	63.3	50.0	33.3	40.0	16.7	33.3	58.3
SESCR1	38.3	46.7	53.3	40.0	41.7	23.3	33.3	50.0
SETFM2	38.3	66.7	51.7	50.0	24.3	18.3	30.0	40.0
TMT1	36.7	38.3	46.7	43.3	40.0	25.0	36.7	60.0
AST8118LM	40.0	46.7	33.3	33.3	8.3	11.7	28.3	65.0
ATF1768	35.0	55.0	41.7	31.7	26.7	11.7	38.3	60.0
DLFPS-321/3707	43.3	53.3	58.3	41.7	36.7	21.7	30.0	58.3
MOONDANCE GLX	23.3	53.3	43.3	46.7	30.0	23.3	35.0	50.0
NT-3	50.0	55.0	46.7	43.3	28.3	18.3	40.0	66.7
PPG-TF 255	25.0	41.7	40.0	35.0	35.0	26.7	35.0	61.7
PPG-TF 312	40.0	55.0	50.0	41.7	41.7	21.7	33.3	51.7
PPG-TF 323	31.7	40.0	41.7	35.0	26.7	15.0	26.7	40.0
PPG-TF 336	45.0	50.0	56.7	53.3	43.3	26.7	36.7	60.0
RHF	50.0	33.3	55.0	36.7	38.3	15.0	38.3	60.0
RS1	41.7	53.3	43.3	38.3	25.0	15.0	38.3	60.0

TABLE 13. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF TALL FESCUE CULTIVARS
(CONT'D) GROWN UNDER SHADE AT AMES, IA 1/
2019 DATA

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

NAME	PERCENT GROUND COVER APRIL-NOVEMBER					PERCENT ESTABLISHMENT		
	4_29	5_22	7_12	8_7	10_4	11_5	OCTOBER	NOVEMBER
AH2	30.0	55.0	48.3	40.0	30.0	15.0	38.3	66.7
ATF2116	41.7	43.3	46.7	38.3	33.3	18.3	31.7	63.3
BAR 9FE MAS	35.0	60.0	38.3	30.0	13.3	11.7	31.7	56.7
BAR FA 8228	43.3	71.7	43.3	30.0	21.7	6.7	43.3	61.7
BAR-FA8230	40.0	46.7	48.3	46.7	33.3	21.7	31.7	56.7
BGR-TF3	46.7	63.3	51.7	40.0	20.0	16.7	41.7	63.3
BULLSEYE LTZ	41.7	40.0	40.0	33.3	41.7	21.7	40.0	53.3
DLFPS-TF/3550	50.0	58.3	36.7	21.7	31.7	10.0	38.3	60.0
DLFPS-TF/3552	25.0	48.3	46.7	41.7	35.0	20.0	28.3	63.3
ESCALADE	41.7	56.7	41.7	31.7	36.7	21.7	35.0	56.7
FIREHAWK SLT	36.7	45.0	40.0	35.0	33.3	16.7	36.7	53.3
K18-ROE	26.7	66.7	41.7	30.0	36.7	18.3	45.0	50.0
K18-RS6	31.7	46.7	41.7	35.0	28.3	13.3	38.3	61.7
PST-5DZM	18.3	26.7	35.0	33.3	38.3	20.0	35.0	55.0
RAD-TF131	36.7	45.0	53.3	36.7	30.0	26.7	40.0	65.0
RAPTOR III	33.3	50.0	48.3	36.7	28.3	13.3	33.3	53.3
RHL2	53.3	35.0	60.0	46.7	33.3	25.0	38.3	70.0
SE5STAR	48.3	60.0	38.3	25.0	26.7	11.7	30.0	55.0
3N1	21.7	40.0	38.3	26.7	28.3	11.7	31.7	50.0
DLFPS-321/3693	35.0	45.0	48.3	36.7	20.0	8.3	38.3	56.7
DLFPS-321/3708	36.7	43.3	43.3	31.7	20.0	8.3	31.7	56.7
ESTRENA	38.3	40.0	41.7	41.7	38.3	18.3	38.3	66.7
GO-AOMK	41.7	50.0	53.3	36.7	21.7	18.3	40.0	53.3
PPG-TF 313	33.3	38.3	43.3	33.3	26.7	21.7	40.0	63.3
PPG-TF 337	25.0	50.0	53.3	45.0	26.7	15.0	33.3	61.7
5LSS	46.7	50.0	38.3	31.7	33.3	15.0	35.0	56.7
AH1	31.7	31.7	28.3	21.7	21.7	13.3	40.0	60.0
AST8218LM	21.7	36.7	33.3	15.0	26.7	8.3	36.7	56.7
DLFPS-321/3694	31.7	36.7	48.3	35.0	25.0	15.0	40.0	60.0
DLFPS-321/3706	36.7	46.7	36.7	21.7	18.3	10.0	31.7	58.3
DLFPS-TF/3553	38.3	46.7	40.0	31.7	25.0	21.7	40.0	58.3
KENTUCKY-31	36.7	70.0	31.7	23.3	33.3	10.0	46.7	70.0
OG-WALK	25.0	55.0	25.0	16.7	8.3	6.7	31.7	55.0
PARAMOUNT	33.3	45.0	41.7	33.3	18.3	10.0	35.0	48.3
PPG-TF 338	33.3	33.3	30.0	23.3	16.7	10.0	36.7	60.0
SE53D2	50.0	43.3	41.7	38.3	35.0	18.3	31.7	55.0
BAR TF 134	40.0	35.0	33.3	25.0	15.0	10.0	35.0	61.7
PPG-TF 320	35.0	60.0	41.7	33.3	23.3	16.7	33.3	65.0
PALOMAR	18.3	36.7	21.7	15.0	6.7	5.0	31.7	48.3
DLFPS-321/3695	36.7	41.7	30.0	25.0	20.0	21.7	41.7	60.0
PPG-TF 267	41.7	40.0	20.0	18.3	10.0	6.7	41.7	63.3
PPG-TF 262	33.3	28.3	21.7	13.3	10.0	6.7	40.0	68.3
LSD VALUE	146.4	141.0	140.9	161.7	108.1	59.8	22.0	28.0
C.V. (%)	50.8	44.4	47.1	56.7	61.1	62.5	20.6	15.4

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 14.

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

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

NAME	GENETIC	LEAF	SEEDLING	FALL	COLOR	QUALITY RATINGS					MEAN
	COLOR	TEXTURE	VIGOR	DENSITY	NOVEMBER	JUN	JUL	AUG	SEP	OCT	
AH1	7.3	6.3	6.0	8.3	3.0	7.3	8.3	8.7	8.3	8.7	8.3
PPG-TF 308	7.3	6.3	5.3	8.3	3.3	7.7	9.0	8.0	8.7	8.3	8.3
RAD-TF105	7.0	6.0	5.0	8.0	3.0	7.3	8.7	8.7	8.3	8.7	8.3
RAD-TF 115 (TURBO SS)	8.7	5.7	5.3	8.0	3.0	7.3	8.3	8.3	8.7	8.7	8.3
AST8218LM	7.7	5.7	4.7	8.0	3.3	6.7	8.7	8.7	8.7	8.3	8.2
NAI-3N2	8.0	5.7	5.3	8.3	3.0	7.3	8.0	8.7	8.7	8.3	8.2
PPG-TF 305	7.3	6.7	5.3	8.3	3.3	7.3	8.7	8.3	8.3	8.3	8.2
SETF104	7.7	5.7	5.3	8.0	3.0	7.3	8.7	8.3	8.3	8.3	8.2
TF456	7.3	6.0	5.7	8.3	3.0	7.3	8.3	8.3	8.3	8.7	8.2
ATF1768	7.0	6.0	5.0	8.0	3.0	8.0	8.3	8.0	8.3	8.0	8.1
BGR-TF3	8.0	6.3	5.3	8.0	3.0	7.0	8.3	8.0	8.7	8.3	8.1
BULLSEYE LTZ	7.3	6.0	5.3	8.3	3.0	7.3	8.7	8.0	8.3	8.0	8.1
BY-TF-169	7.0	6.3	4.7	8.3	3.0	7.3	9.0	7.7	8.3	8.0	8.1
DLFPS-321/3701	7.0	6.3	5.0	8.3	3.0	7.3	9.0	8.3	8.0	8.0	8.1
DLFPS-321/3702	7.0	6.3	5.3	8.3	3.0	7.3	8.7	8.0	8.7	8.0	8.1
DLFPS-321/3705	7.3	6.3	5.0	8.0	3.0	7.3	8.3	8.3	8.0	8.3	8.1
DLFPS-321/3708	8.0	6.0	5.3	8.0	3.0	7.0	8.3	8.7	8.7	8.0	8.1
DLFPS-TF/3552	7.0	5.7	5.7	8.3	3.0	7.0	8.3	8.3	8.3	8.7	8.1
GO-RH20	7.7	6.0	5.3	8.0	3.0	7.0	8.3	7.7	8.7	8.7	8.1
JT 268	7.3	6.7	4.7	8.3	3.0	7.0	8.7	8.3	8.7	8.0	8.1
K18-RS6	6.7	6.3	5.3	8.3	3.0	8.0	8.3	7.7	8.3	8.0	8.1
K18-WB1	7.3	6.3	5.0	9.0	3.3	7.3	8.0	8.0	8.7	8.3	8.1
DEGAS (LTP-TF-111)	6.7	6.0	4.7	8.7	3.0	7.0	9.0	8.3	8.0	8.0	8.1
NAI-ROS4	7.0	6.3	5.7	8.0	3.0	7.3	9.0	8.0	8.3	8.0	8.1
NAI-ST5	7.7	6.3	5.3	8.0	3.3	7.0	8.7	7.7	8.3	8.7	8.1
PADRE 2	7.3	6.0	4.7	8.0	3.0	7.7	8.7	8.0	8.0	8.3	8.1
PPG-TF 255	7.7	6.7	5.3	8.7	3.0	7.3	8.7	7.7	8.7	8.3	8.1
PPG-TF 262	7.0	5.7	5.3	8.3	3.0	7.3	8.7	8.0	8.3	8.3	8.1
PPG-TF 312	6.7	7.0	5.7	8.7	3.3	7.7	8.7	7.7	8.0	8.3	8.1
PPG-TF 313	6.7	6.7	5.0	8.7	3.3	7.0	8.3	8.0	8.3	9.0	8.1
PPG-TF 316	7.0	7.3	5.3	8.3	3.0	7.3	8.3	8.3	8.3	8.0	8.1
PPG-TF 318	7.7	6.0	5.3	8.3	3.0	7.0	8.7	8.3	8.3	8.0	8.1
PPG-TF 323	7.7	6.3	5.0	8.7	3.3	6.3	8.7	8.0	8.7	8.7	8.1
PRO GOLD	6.7	5.3	5.0	7.7	3.0	6.7	9.0	8.3	8.3	8.3	8.1
RAPTOR III	7.3	6.0	5.0	8.0	3.0	7.0	9.0	8.3	8.3	8.0	8.1
RC4	7.0	6.3	5.3	8.3	3.0	7.3	8.3	8.3	8.0	8.3	8.1
RDC	6.3	6.7	6.0	8.3	3.0	7.3	8.7	8.0	8.3	8.3	8.1
RH3	6.3	6.3	5.3	8.0	3.0	7.3	8.7	8.0	8.0	8.3	8.1
RHL2	7.3	6.7	5.3	8.3	3.0	6.7	8.7	8.3	8.7	8.3	8.1
DLFPS-321/3693	7.3	7.0	5.3	8.0	3.0	7.3	8.7	7.3	8.0	8.7	8.0
DRAGSTER	7.0	6.3	5.3	8.3	3.0	6.7	8.3	8.3	8.3	8.3	8.0
ESTRENA	6.7	6.3	5.0	8.0	3.0	7.3	8.3	7.7	8.3	8.3	8.0
FIREHAWK SLT	7.3	6.3	5.0	8.0	3.0	6.7	8.0	8.3	8.7	8.3	8.0
GO-AOMK	8.0	6.0	4.7	8.0	3.3	6.0	8.3	8.7	8.7	8.3	8.0
HEMI	6.7	5.7	5.7	7.7	3.0	7.3	8.7	8.0	8.0	8.0	8.0

TABLE 14.
(CONT'D)

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

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

NAME	GENETIC	LEAF	SEEDLING	FALL	COLOR	QUALITY RATINGS					MEAN
	COLOR	TEXTURE	VIGOR	DENSITY	NOVEMBER	JUN	JUL	AUG	SEP	OCT	
K18-NSE	7.3	7.0	5.7	8.7	3.0	7.0	8.7	7.7	8.3	8.3	8.0
NT-3	7.3	6.3	5.3	8.3	3.0	7.3	8.7	8.0	8.0	8.0	8.0
RAD-TF131	7.7	6.3	4.7	8.0	3.0	6.7	7.7	8.3	8.7	8.7	8.0
RH1	7.7	6.0	5.3	8.0	3.3	7.0	8.3	8.0	8.3	8.3	8.0
TD2	7.0	6.3	5.7	8.0	3.0	7.3	8.3	8.3	8.0	8.0	8.0
5LSS	6.7	6.7	5.3	8.0	3.0	7.7	8.7	7.3	8.0	8.0	7.9
ATF2116	7.7	6.0	4.7	7.3	3.0	6.7	8.3	7.7	8.3	8.3	7.9
BAR TF 134	7.0	6.0	4.7	7.7	3.3	6.3	8.7	8.0	8.3	8.0	7.9
BAR-FA8230	6.0	5.7	5.3	7.7	3.0	7.0	8.7	8.3	8.0	7.3	7.9
BIRMINGHAM	7.3	6.0	5.0	7.7	3.0	7.0	8.0	7.7	8.3	8.3	7.9
BRAVO 2	7.7	5.7	5.3	8.0	3.0	7.0	8.3	8.0	8.3	8.0	7.9
BULLSEYE	6.7	5.0	4.0	7.7	3.3	7.0	8.3	8.0	8.0	8.0	7.9
COPIOUS TF	8.0	5.7	5.0	8.0	3.0	6.7	8.0	8.0	8.3	8.3	7.9
DLFPS-321/3694	7.0	6.7	5.3	8.0	3.0	7.3	8.0	8.0	8.3	8.0	7.9
DLFPS-321/3695	8.0	6.3	5.7	8.3	3.0	7.0	8.0	8.3	8.3	8.0	7.9
DLFPS-321/3696	7.7	5.7	5.3	8.3	3.0	6.7	8.7	8.3	8.0	8.0	7.9
DLFPS-321/3699	7.3	6.0	4.7	8.3	3.0	7.0	8.0	8.0	8.3	8.0	7.9
DLFPS-321/3706	6.7	6.7	5.3	9.0	3.0	7.0	8.3	7.7	8.3	8.3	7.9
GRANDE 3	6.3	6.0	5.7	8.3	3.0	7.3	8.7	7.7	8.0	8.0	7.9
BONFIRE (JS DTT)	6.3	5.7	5.7	8.0	3.3	7.3	8.3	7.7	8.3	8.0	7.9
LBF	7.7	6.0	4.7	8.0	3.0	6.7	8.0	8.0	8.3	8.3	7.9
LIFEGUARD	6.3	6.0	5.0	8.0	3.0	7.3	8.7	7.3	8.0	8.0	7.9
NAI-FQZ-17	8.0	5.7	4.7	8.0	3.0	6.3	8.7	8.0	8.3	8.0	7.9
NAI-TUE	7.3	6.3	5.3	8.0	3.0	6.3	8.0	8.0	8.7	8.7	7.9
NATURALLY GREEN	7.3	6.3	4.7	7.7	3.0	6.7	8.0	8.0	8.7	8.0	7.9
PPG-TF 231	7.0	6.0	5.3	8.7	3.0	7.0	8.0	7.7	8.7	8.0	7.9
PPG-TF 238	7.0	6.0	5.3	8.3	2.7	7.0	8.3	8.0	8.0	8.0	7.9
PPG-TF 244	7.3	6.0	4.7	8.3	3.3	6.3	8.3	8.0	8.3	8.3	7.9
PPG-TF 249	7.0	6.3	5.0	8.3	3.0	7.3	8.0	8.0	8.3	8.0	7.9
PPG-TF 257	6.7	6.0	5.3	8.0	3.0	6.7	8.3	7.7	8.3	8.3	7.9
PPG-TF 306	7.3	6.3	5.0	8.0	3.0	7.0	8.3	8.0	8.0	8.3	7.9
PPG-TF 315	7.3	6.0	4.7	8.3	3.0	6.3	7.3	8.7	8.7	8.3	7.9
PPG-TF 320	7.0	5.7	5.3	8.0	3.0	7.0	8.0	7.7	8.3	8.7	7.9
PPG-TF 336	6.7	6.3	5.0	8.0	3.0	7.0	8.0	8.0	8.3	8.0	7.9
PPG-TF 337	7.0	6.7	5.3	8.3	3.0	7.3	8.3	8.0	8.0	8.0	7.9
PPG-TF 338	7.7	6.3	4.7	8.0	3.0	7.3	8.3	7.7	8.0	8.0	7.9
PST-5BYOB	6.3	5.0	5.7	7.3	3.0	7.3	8.7	7.7	8.0	7.7	7.9
PST-5DC24	7.0	6.0	5.0	8.0	3.0	7.0	8.0	8.3	8.0	8.0	7.9
PST-5GQ	7.0	5.7	5.3	7.7	2.7	7.0	8.7	7.7	8.0	8.3	7.9
RHF	6.3	6.3	5.3	8.0	3.0	7.3	8.3	7.7	8.0	8.0	7.9
RS1	6.7	6.3	5.3	8.0	3.0	7.3	7.7	8.3	8.0	8.3	7.9
SESCR1	7.7	6.0	5.0	8.0	3.3	6.3	8.0	8.0	8.3	8.7	7.9
TANGO	6.7	6.0	5.0	8.0	3.0	7.7	8.3	7.7	8.0	8.0	7.9
TF445	7.0	6.3	5.7	9.0	3.0	7.0	8.7	7.7	8.0	8.0	7.9
TMT1	7.0	6.3	5.3	8.0	3.3	7.0	8.0	8.0	8.7	8.0	7.9

TABLE 14.
(CONT'D)

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

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

NAME	QUALITY RATINGS										MEAN
	GENETIC COLOR	LEAF TEXTURE	SEEDLING VIGOR	FALL DENSITY	COLOR NOVEMBER	JUN	JUL	AUG	SEP	OCT	
3N1	7.3	6.0	4.7	8.0	3.0	6.3	8.7	8.0	8.0	8.0	7.8
BANDIT	7.3	6.7	5.0	8.0	3.0	6.3	8.3	8.0	8.3	8.0	7.8
PST-5E6	6.3	5.0	5.0	7.3	2.7	6.7	8.3	8.0	8.0	8.0	7.8
PST-5MCMO	6.7	6.0	5.0	7.7	3.0	6.7	8.0	8.0	8.0	8.3	7.8
MONUMENT (PST-5SQB)	6.3	5.0	5.3	7.7	3.0	7.0	8.3	7.7	8.0	8.0	7.8
PST-5TRN	6.0	5.7	5.0	7.7	3.0	6.7	8.7	7.7	8.0	8.0	7.8
3B2	6.7	5.7	4.3	8.3	3.0	6.7	7.7	8.0	8.3	8.0	7.7
A-TF31	7.7	6.3	4.3	7.7	2.7	6.3	7.3	8.0	8.7	8.3	7.7
AH2	7.0	6.3	5.7	8.0	3.0	7.3	7.0	8.0	8.0	8.0	7.7
BAR 9FE MAS	7.0	6.0	4.7	8.0	3.0	6.3	7.7	8.3	8.0	8.3	7.7
COL-TF-148	7.3	6.3	4.3	8.0	3.0	6.0	7.7	8.0	8.7	8.3	7.7
DLFPS-321/3679	7.3	5.7	5.0	7.7	3.3	7.0	7.3	7.7	8.3	8.0	7.7
DLFPS-321/3703	7.3	5.7	4.7	8.0	3.0	6.3	8.0	8.0	8.3	8.0	7.7
DLFPS-321/3707	7.0	6.3	4.3	8.0	3.3	6.7	8.0	7.3	8.0	8.3	7.7
DLFPS-TF/3550	6.7	5.7	5.0	8.3	3.0	6.7	8.0	7.7	8.0	8.0	7.7
DLFPS-TF/3553	7.0	6.0	5.0	8.0	3.7	6.7	8.0	7.7	7.7	8.3	7.7
FAYETTE	7.0	6.0	5.0	8.0	3.0	6.3	7.3	8.7	8.0	8.0	7.7
GRAND PRIX (FC15-01P)	6.7	6.3	4.0	8.0	3.0	6.3	8.3	8.0	8.0	8.0	7.7
JT 517	7.7	6.3	4.3	8.0	3.3	6.3	7.7	8.0	8.3	8.0	7.7
K18-ROE	6.7	5.7	5.3	7.7	3.0	6.7	8.0	8.0	8.0	8.0	7.7
OKEEFE (LTP-TF-122)	7.0	6.3	4.3	8.0	3.7	6.3	8.3	7.7	8.0	8.0	7.7
MOONDANCE GLX	6.0	4.7	4.7	7.7	3.0	7.0	8.0	7.7	8.0	8.0	7.7
PARAMOUNT	6.0	6.0	5.0	8.7	3.0	7.0	7.3	7.7	8.0	8.3	7.7
PPG-TF 267	6.7	6.3	4.7	8.3	2.7	6.7	7.7	7.7	8.0	8.3	7.7
PST-5DZM	7.3	6.0	4.7	8.0	3.0	6.3	8.7	7.7	8.3	7.7	7.7
PST-5THM	5.7	6.0	5.0	7.7	3.0	7.3	8.0	7.7	7.7	8.0	7.7
SETFM2	8.0	6.0	4.7	8.0	3.3	6.7	7.3	8.0	8.3	8.0	7.7
SETFM3	7.3	5.7	5.0	7.7	3.0	6.3	8.0	7.7	8.3	8.0	7.7
ZRC1	6.3	6.3	5.3	8.0	3.0	7.3	8.0	7.7	8.0	7.7	7.7
AST8118LM	7.7	6.3	4.3	8.0	3.3	6.3	7.7	8.0	8.0	8.0	7.6
GLX ACED (PST-5DART)	6.7	5.3	5.0	7.7	3.0	6.7	8.0	7.3	8.0	8.0	7.6
JT 233	7.3	6.3	4.3	8.0	3.3	6.7	7.3	7.7	8.0	8.3	7.6
PALOMAR	7.0	5.3	4.0	7.3	3.0	6.0	8.0	8.0	8.0	8.0	7.6
PPG-TF 254	6.7	5.3	4.7	7.7	3.0	6.3	8.3	7.7	7.7	8.0	7.6
PST-5MINK	7.0	6.0	4.3	8.0	3.0	6.0	8.0	8.0	8.0	8.0	7.6
SE5STAR	6.3	6.0	5.0	8.0	3.0	6.3	8.3	7.3	8.0	8.0	7.6
BAR FA 8228	6.3	5.3	5.0	7.7	3.0	6.7	8.0	7.3	8.0	7.7	7.5
ESCALADE	6.3	5.0	5.0	7.7	3.0	7.0	8.0	7.3	8.0	7.3	7.5
PST-5GLBS	6.3	5.7	5.3	7.7	3.0	6.7	7.7	7.7	8.0	7.7	7.5
OG-WALK	6.7	4.3	4.7	7.0	3.0	6.0	7.0	8.0	8.0	8.0	7.4
SE53D2	6.0	5.0	4.3	7.7	3.0	6.0	7.3	7.3	7.7	8.0	7.3
KENTUCKY-31	3.3	4.3	5.7	6.0	2.0	8.3	7.0	7.0	7.0	6.0	7.1
LSD VALUE	1.1	0.8	1.2	1.0	0.7	1.4	2.8	1.7	1.2	1.0	0.7
C.V. (%)	8.7	7.8	10.8	6.1	8.9	9.0	8.9	6.6	5.1	5.4	3.8

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

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

TABLE 15.

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT BLACKSBURG (1.5" MOWING HEIGHT), VA 1/
2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/							
NAME	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
DLFPS-321/3701	8.7	8.7	8.3	8.3	8.3	8.3	8.4
PPG-TF 320	8.3	8.3	8.0	8.3	8.7	8.7	8.4
3N1	8.7	8.3	8.0	8.3	7.3	7.7	8.1
MOONDANCE GLX	8.3	8.0	8.7	8.0	7.3	8.3	8.1
PPG-TF 336	8.3	8.3	8.7	7.3	8.0	8.0	8.1
RS1	8.3	8.3	8.3	7.7	8.0	8.0	8.1
PPG-TF 337	8.0	8.0	8.3	7.3	8.3	8.0	8.0
5LSS	8.0	8.0	8.0	7.3	8.3	8.0	7.9
PPG-TF 244	8.0	8.0	8.3	7.7	7.3	8.0	7.9
PPG-TF 306	8.0	8.0	8.3	7.0	8.0	8.0	7.9
BAR TF 134	8.0	8.0	8.0	7.3	7.7	7.7	7.8
DLFPS-TF/3552	8.0	8.0	8.0	7.7	7.3	8.0	7.8
NAI-ROS4	8.0	7.7	8.3	6.7	8.3	8.0	7.8
TF445	8.0	7.7	8.0	7.7	7.7	8.0	7.8
BAR-FA8230	8.0	7.7	8.3	7.3	7.3	7.7	7.7
DLFPS-321/3702	7.7	8.3	7.3	7.7	7.7	7.7	7.7
LIFEGUARD	8.0	8.0	7.7	7.7	7.3	7.7	7.7
NT-3	8.0	8.0	8.0	7.7	7.0	7.3	7.7
PPG-TF 312	7.7	7.3	8.0	7.0	8.3	7.7	7.7
TD2	7.7	8.0	7.7	7.7	7.3	7.7	7.7
DLFPS-321/3703	7.7	7.7	8.0	7.0	7.7	7.7	7.6
DLFPS-321/3708	7.7	7.7	7.7	7.7	7.0	7.7	7.6
DLFPS-TF/3550	7.7	8.0	7.3	7.3	7.3	7.7	7.6
PPG-TF 238	7.7	7.7	8.0	6.7	7.7	7.7	7.6
PPG-TF 249	8.0	7.7	8.3	7.0	7.0	7.7	7.6
PPG-TF 305	7.7	7.3	8.0	7.0	8.0	7.7	7.6
PPG-TF 308	7.7	7.3	7.7	7.0	8.0	7.7	7.6
PST-5E6	8.0	8.0	8.0	7.3	7.0	7.3	7.6
PST-5GQ	7.7	7.7	7.7	7.0	7.7	7.7	7.6
DEGAS (LTP-TF-111)	7.7	7.3	8.0	6.7	8.0	7.3	7.5
RHL2	8.0	7.7	8.3	6.7	7.0	7.3	7.5
ATF2116	7.7	7.7	8.0	7.3	6.3	7.3	7.4
DLFPS-321/3695	7.7	7.3	8.3	6.3	7.0	7.7	7.4
JT 517	7.7	7.7	8.0	6.0	7.7	7.7	7.4
PADRE 2	7.7	7.7	7.7	6.7	7.3	7.3	7.4
PPG-TF 231	7.7	7.3	8.7	6.3	7.0	7.7	7.4
PPG-TF 255	7.7	7.7	8.0	6.3	7.3	7.7	7.4
PPG-TF 318	7.7	7.7	7.7	7.0	7.0	7.3	7.4
PST-5TRN	7.7	7.3	8.0	6.3	7.7	7.7	7.4
TF456	7.3	7.7	7.7	7.3	7.0	7.3	7.4
ZRC1	7.3	7.7	8.0	7.0	7.0	7.3	7.4
DLFPS-321/3694	7.3	7.3	7.7	6.7	7.3	7.3	7.3
DLFPS-321/3705	7.7	7.3	7.7	6.3	7.7	7.3	7.3
DLFPS-TF/3553	7.3	7.3	7.7	6.7	7.7	7.3	7.3
NATURALLY GREEN	7.3	7.3	7.3	7.0	7.3	7.3	7.3

TABLE 15.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT BLACKSBURG (1.5" MOWING HEIGHT), VA 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/						MEAN
	MAY	JUN	JUL	AUG	SEP	OCT	
PST-5DC24	7.3	7.3	8.0	6.3	7.7	7.3	7.3
PST-5MCMO	7.7	7.3	7.3	7.0	7.3	7.3	7.3
PST-5THM	7.3	7.3	8.0	6.7	7.0	7.3	7.3
DLFPS-321/3706	7.7	7.3	8.0	5.7	7.0	7.3	7.2
PARAMOUNT	7.3	7.3	8.0	6.0	7.3	7.3	7.2
RC4	7.3	7.3	8.0	6.0	7.3	7.3	7.2
RH1	7.3	7.3	8.0	6.3	6.7	7.3	7.2
SESCR1	7.0	7.0	7.7	6.3	7.7	7.3	7.2
ATF1768	7.3	7.0	8.3	6.0	6.7	7.3	7.1
DLFPS-321/3693	7.3	7.3	8.0	6.0	7.0	7.0	7.1
PST-5BYOB	7.3	7.0	8.0	6.3	6.7	7.0	7.1
AST8118LM	7.3	7.0	7.3	6.7	6.7	7.0	7.0
PPG-TF 323	7.0	7.0	7.0	6.0	7.7	7.3	7.0
SETFM3	7.3	7.0	7.3	6.3	7.0	7.0	7.0
BULLSEYE LTZ	7.0	7.0	7.7	5.7	7.3	7.0	6.9
DLFPS-321/3699	7.0	7.0	7.3	6.3	6.7	7.0	6.9
JT 268	7.0	6.7	7.7	6.0	7.0	7.0	6.9
RH3	7.0	7.0	7.7	6.0	6.7	7.0	6.9
BRAVO 2	7.3	7.0	7.3	5.7	6.7	7.0	6.8
DLFPS-321/3707	7.0	7.0	7.0	6.3	6.7	6.7	6.8
BONFIRE (JS DTT)	7.0	6.7	8.0	5.3	6.7	7.0	6.8
LBF	7.0	7.0	7.3	6.7	6.0	7.0	6.8
PPG-TF 262	6.7	6.7	7.3	6.0	7.0	7.0	6.8
PST-5MINK	7.0	7.0	7.0	7.0	6.3	6.7	6.8
MONUMENT (PST-5SQB)	6.7	6.7	6.7	6.7	7.0	7.0	6.8
AST8218LM	6.7	6.7	7.0	6.3	6.7	6.7	6.7
BGR-TF3	6.7	6.7	7.3	5.7	7.0	6.7	6.7
GRANDE 3	6.7	6.7	7.0	6.3	6.7	6.7	6.7
NAI-ST5	6.7	6.3	8.0	5.3	7.0	7.0	6.7
OG-WALK	7.0	6.7	7.7	6.0	6.0	7.0	6.7
PRO GOLD	7.0	6.7	7.0	6.7	6.3	6.7	6.7
AH2	6.7	6.7	7.3	5.3	7.0	6.7	6.6
BY-TF-169	6.7	6.7	6.7	5.7	7.3	6.7	6.6
COL-TF-148	6.7	6.7	7.3	5.7	6.3	6.7	6.6
GO-RH20	6.0	6.7	7.3	6.3	6.7	6.7	6.6
OKEEFE (LTP-TF-122)	6.7	6.3	7.3	5.3	7.0	6.7	6.6
PPG-TF 254	6.7	6.7	7.3	5.3	6.7	6.7	6.6
PPG-TF 316	6.7	6.7	7.3	5.3	6.7	6.7	6.6
RAPTOR III	6.7	6.3	7.7	5.7	6.7	6.7	6.6
SETF104	6.7	6.7	6.3	6.3	7.0	6.7	6.6
3B2	6.7	6.3	7.0	6.0	6.3	6.7	6.5
FAYETTE	6.7	6.7	6.7	5.3	7.0	6.7	6.5
FIREHAWK SLT	6.7	6.3	7.0	5.7	6.7	6.7	6.5
HEMI	6.7	6.7	7.0	5.7	6.7	6.3	6.5

TABLE 15.
(CONT'D)

MEAN TURFGRASS QUALITY RATINGS OF TALL FESCUE CULTIVARS
AT BLACKSBURG (1.5" MOWING HEIGHT), VA 1/
2019 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=BEST 2/						MEAN
	MAY	JUN	JUL	AUG	SEP	OCT	
JT 233	6.3	6.3	7.3	5.7	6.7	6.7	6.5
PPG-TF 315	7.0	6.7	7.3	5.0	6.7	6.3	6.5
RHF	6.7	6.7	7.7	4.7	6.7	6.7	6.5
SE53D2	6.7	6.3	8.0	5.0	6.3	6.7	6.5
TMT1	6.7	6.3	6.7	5.7	7.0	6.7	6.5
COPIOUS TF	6.3	6.3	6.7	5.3	7.0	6.7	6.4
DLFPS-321/3679	6.7	6.3	7.0	5.3	6.7	6.7	6.4
DRAGSTER	6.7	6.3	7.3	6.0	6.0	6.3	6.4
ESCALADE	6.7	6.7	6.7	5.7	6.7	6.3	6.4
GO-AOMK	6.7	6.7	6.7	6.0	6.3	6.3	6.4
GRAND PRIX (FC15-01P)	6.3	6.3	6.0	6.0	7.0	6.7	6.4
K18-RS6	6.3	6.3	7.3	4.7	7.0	6.7	6.4
PALOMAR	6.7	6.7	7.3	5.7	5.7	6.3	6.4
RAD-TF131	6.7	6.7	6.7	5.3	6.7	6.7	6.4
SETFM2	6.7	6.7	6.3	6.7	6.0	6.3	6.4
BAR 9FE MAS	6.7	6.0	7.3	5.0	6.7	6.3	6.3
BAR FA 8228	6.7	6.7	7.7	5.3	5.3	6.3	6.3
BULLSEYE	6.7	6.0	7.3	5.3	6.0	6.3	6.3
NAI-TUE	6.7	6.3	7.3	4.7	6.3	6.3	6.3
PPG-TF 257	6.3	6.3	6.7	6.0	6.0	6.3	6.3
PST-5GLBS	6.3	6.3	6.7	5.3	6.7	6.7	6.3
DLFPS-321/3696	6.3	6.3	6.7	6.0	6.0	6.0	6.2
K18-NSE	6.3	6.0	7.0	4.7	6.7	6.3	6.2
NAI-3N2	6.3	6.3	6.7	5.7	6.0	6.3	6.2
NAI-FQZ-17	6.3	6.0	7.3	5.0	6.0	6.3	6.2
PST-5DZM	6.3	6.3	6.3	6.0	6.0	6.0	6.2
RDC	6.0	5.7	6.7	4.7	7.7	6.7	6.2
SE5STAR	6.3	6.0	7.3	5.0	6.3	6.3	6.2
A-TF31	6.7	6.0	7.0	5.3	5.7	5.7	6.1
BIRMINGHAM	6.0	6.0	6.7	5.3	6.0	6.3	6.1
K18-WB1	6.3	6.3	6.7	5.0	6.0	6.3	6.1
PPG-TF 313	6.0	6.0	6.7	4.7	6.7	6.3	6.1
PPG-TF 338	6.3	6.3	6.3	4.7	6.7	6.0	6.1
TANGO	6.3	6.3	7.0	5.0	5.7	6.0	6.1
BANDIT	6.3	5.7	7.0	5.3	5.7	6.0	6.0
K18-ROE	6.0	6.0	6.7	5.0	6.3	6.0	6.0
PPG-TF 267	6.3	5.7	7.3	4.7	5.7	6.3	6.0
RAD-TF105	6.0	6.0	6.3	5.0	6.0	6.0	5.9
RAD-TF 115 (TURBO SS)	6.3	6.0	6.7	5.0	5.7	6.0	5.9
AH1	6.3	5.7	6.3	5.3	5.3	5.7	5.8
ESTRENA	5.7	5.3	6.3	4.7	5.7	5.7	5.6
KENTUCKY-31	4.3	4.7	4.3	4.3	4.7	4.7	4.5
LSD VALUE	6.5	7.4	5.5	7.4	5.9	6.0	6.0
C.V. (%)	17.9	19.6	15.6	26.2	18.3	17.0	17.3

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 16.

GENETIC COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	DE1	GA1	IA1	IN1	MS1	NC1	NE1	NJ2	OK1	OR1	TN1	UT1	MEAN
RAD-TF 115 (TURBO SS)	7.7	7.3	5.0	6.7	6.0	7.3	5.0	8.7	7.7	7.3	6.0	8.7	6.9
BGR-TF3	7.7	7.7	5.7	7.0	4.7	7.3	5.3	8.0	8.0	7.3	6.0	8.0	6.9
LBF	7.7	7.3	6.3	6.0	5.3	7.0	5.0	8.3	8.0	7.3	6.3	7.7	6.9
SETFM2	7.3	7.3	5.0	6.7	5.0	7.0	5.7	9.0	8.0	7.0	5.7	8.0	6.8
NAI-TUE	7.7	7.3	5.3	6.7	5.0	7.3	5.3	8.3	8.0	6.7	6.3	7.3	6.8
AST8118LM	8.0	6.0	5.3	6.7	5.7	7.0	5.3	8.7	8.0	7.3	5.3	7.7	6.8
GO-AOMK	7.3	7.0	5.3	7.0	5.0	7.0	6.0	8.0	8.0	7.3	5.0	8.0	6.8
NATURALLY GREEN	7.7	7.0	5.7	6.0	4.7	7.0	6.0	8.0	8.0	7.3	6.3	7.3	6.8
RAD-TF105	7.7	7.3	5.7	6.0	5.0	7.3	5.0	8.3	8.0	7.0	6.3	7.0	6.7
AST8218LM	7.7	7.3	5.3	6.0	5.0	6.7	5.7	8.7	8.0	7.0	5.0	7.7	6.7
ATF2116	6.7	7.3	5.7	6.7	4.3	7.3	4.7	8.3	8.0	7.3	6.0	7.7	6.7
DLFPS-321/3679	7.7	7.0	5.3	7.0	4.3	6.7	5.3	8.7	8.0	7.0	5.7	7.3	6.7
JT 517	7.7	7.0	6.0	6.3	5.0	6.7	5.3	7.7	8.0	7.0	5.7	7.7	6.7
A-TF31	8.0	6.3	5.0	5.7	5.3	7.0	5.3	8.7	8.0	6.7	6.0	7.7	6.6
DLFPS-321/3699	7.3	7.0	5.0	6.0	4.7	7.0	5.0	8.3	8.0	7.3	6.7	7.3	6.6
TMT1	6.3	7.7	5.3	6.7	5.0	7.3	5.0	8.3	8.0	7.0	6.0	7.0	6.6
BANDIT	7.7	6.7	5.7	7.0	5.0	7.0	5.0	7.7	8.0	7.3	5.3	7.3	6.6
DLFPS-321/3708	7.7	6.7	5.0	6.7	5.0	7.0	5.0	7.3	8.0	7.3	5.7	8.0	6.6
PPG-TF 323	7.3	6.0	4.7	6.3	5.3	7.0	5.3	7.3	8.0	7.0	7.3	7.7	6.6
PPG-TF 306	7.3	7.3	5.3	6.3	5.0	7.0	5.0	7.0	8.0	7.0	6.7	7.3	6.6
SETF104	7.3	7.3	5.0	7.0	5.0	7.0	5.3	6.7	8.0	7.0	5.7	7.7	6.6
SETFM3	7.3	7.0	5.0	7.3	4.3	7.0	5.3	7.7	8.0	7.3	5.3	7.3	6.6
ATF1768	7.0	7.0	5.0	7.0	4.7	7.0	5.0	8.0	7.7	7.0	6.3	7.0	6.6
BAR 9FE MAS	7.3	6.7	5.7	6.0	5.3	7.0	5.3	7.7	8.0	7.0	5.7	7.0	6.6
COPIOUS TF	7.0	6.7	5.3	6.7	4.3	7.0	5.0	8.0	8.0	7.0	5.7	8.0	6.6
DLFPS-321/3707	6.7	7.3	5.0	6.7	5.0	7.0	5.0	6.7	8.0	7.3	7.0	7.0	6.6
RAD-TF131	7.3	7.0	5.3	5.7	5.3	7.0	5.0	8.7	8.0	7.0	4.7	7.7	6.6
DEGAS (LTP-TF-111)	6.7	7.3	4.7	7.0	4.3	7.0	5.0	7.3	8.0	7.0	7.3	6.7	6.5
PPG-TF 255	7.3	7.0	4.7	6.3	5.0	6.7	5.3	8.0	8.0	6.7	5.7	7.7	6.5
DLFPS-TF/3552	7.0	7.0	4.7	6.3	5.3	6.7	5.0	8.0	8.0	7.3	6.0	7.0	6.5
JT 268	7.0	7.0	5.0	5.7	5.3	7.0	5.3	7.7	8.0	7.3	5.7	7.3	6.5
PST-5DC24	7.0	7.0	5.7	7.0	4.7	7.0	5.0	7.7	8.0	7.3	5.0	7.0	6.5
DLFPS-321/3695	5.7	7.0	5.7	6.7	5.0	7.3	5.0	7.0	8.0	7.0	5.7	8.0	6.5
DLFPS-321/3696	7.3	7.7	5.3	5.3	5.0	7.3	5.0	7.0	8.0	7.0	5.3	7.7	6.5
DLFPS-321/3701	6.7	7.7	5.0	6.7	5.0	6.7	5.0	7.7	8.0	7.3	5.3	7.0	6.5
DLFPS-TF/3553	7.0	7.3	5.3	6.3	5.0	7.0	5.0	7.0	8.0	7.0	6.0	7.0	6.5
JT 233	7.0	7.3	4.7	6.3	5.3	7.0	5.3	6.7	8.0	7.3	5.7	7.3	6.5
BIRMINGHAM	7.0	7.0	5.0	6.3	5.0	7.0	5.0	7.0	8.0	7.0	6.3	7.3	6.5
DLFPS-321/3694	6.7	7.0	5.3	6.0	4.7	7.0	4.7	8.0	8.0	7.0	6.3	7.0	6.5
RH1	7.0	6.7	4.3	6.7	5.0	7.0	5.0	6.7	8.0	7.3	6.3	7.7	6.5
PPG-TF 315	7.3	8.0	4.7	6.3	4.7	6.3	5.0	7.3	8.0	6.7	5.7	7.3	6.4
TANGO	7.0	7.3	5.3	6.7	5.0	6.3	5.0	7.3	8.0	7.0	5.7	6.7	6.4
AH1	6.7	6.7	4.3	6.7	5.0	7.0	4.7	7.0	8.0	7.3	6.7	7.3	6.4
BULLSEYE LTZ	6.7	6.0	4.7	7.0	5.3	7.3	5.0	7.0	8.0	7.3	5.7	7.3	6.4
DLFPS-321/3702	7.0	6.3	5.3	7.0	5.0	6.7	5.0	7.0	8.0	7.3	5.7	7.0	6.4
PPG-TF 308	7.0	6.3	6.7	6.3	5.0	6.3	5.0	7.3	8.0	7.3	4.7	7.3	6.4

TABLE 16.
(CONT'D)

GENETIC COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	DE1	GA1	IA1	IN1	MS1	NC1	NE1	NJ2	OK1	OR1	TN1	UT1	MEAN
GRANDE 3	6.3	7.3	5.0	7.3	5.0	7.3	5.0	6.0	8.0	7.3	6.3	6.3	6.4
PPG-TF 262	6.7	7.3	5.0	6.7	5.0	6.7	4.7	7.3	8.0	7.0	5.7	7.0	6.4
NAI-3N2	7.3	6.7	4.7	6.7	4.7	7.0	5.0	6.3	8.0	6.7	6.0	8.0	6.4
NAI-ST5	6.7	7.3	4.7	6.0	5.0	6.7	5.3	7.7	8.0	6.7	5.3	7.7	6.4
PPG-TF 249	6.7	7.0	4.7	6.3	5.3	7.0	4.7	7.3	8.0	7.0	6.0	7.0	6.4
PPG-TF 254	7.0	7.3	6.0	7.3	5.0	6.3	5.0	6.3	8.0	6.7	5.3	6.7	6.4
PPG-TF 338	7.3	6.0	4.3	6.7	5.0	7.0	5.0	7.0	8.0	7.0	6.0	7.7	6.4
K18-WB1	7.0	7.3	4.7	6.3	5.0	7.0	5.3	6.7	8.0	6.7	5.7	7.3	6.4
NAI-FQZ-17	7.3	6.7	5.0	5.7	5.3	6.3	5.0	7.3	8.0	7.3	4.7	8.0	6.4
3N1	7.0	7.7	5.0	6.3	5.0	6.7	5.0	7.0	8.0	7.3	4.3	7.3	6.4
DLFPS-321/3705	6.3	7.0	4.7	5.3	5.0	7.0	5.3	7.0	8.0	6.7	7.0	7.3	6.4
OKEEFE (LTP-TF-122)	6.3	7.0	4.3	6.3	5.0	7.3	5.0	7.0	8.0	7.0	6.3	7.0	6.4
PADRE 2	7.0	6.3	4.7	7.0	4.7	6.7	5.3	7.0	8.0	7.3	5.3	7.3	6.4
BRAVO 2	7.0	7.0	4.7	6.0	5.0	6.7	5.0	7.3	8.0	6.7	5.3	7.7	6.4
GO-RH20	7.0	6.7	4.7	5.3	4.7	7.0	5.0	8.0	8.0	7.0	5.3	7.7	6.4
GRAND PRIX (FC15-01P)	7.0	6.7	4.7	6.7	4.7	7.0	5.0	8.0	8.0	6.7	5.3	6.7	6.4
BY-TF-169	7.0	7.3	5.0	6.3	4.7	6.7	5.0	7.0	8.0	7.0	5.3	7.0	6.4
NT-3	6.3	6.3	5.0	6.3	4.7	7.3	4.7	7.3	8.0	7.0	6.0	7.3	6.4
PPG-TF 316	7.3	6.0	5.3	6.7	4.7	7.0	4.7	7.7	8.0	6.7	5.3	7.0	6.4
PPG-TF 320	7.3	6.7	4.3	6.7	4.3	6.0	5.3	7.0	8.0	7.3	6.3	7.0	6.4
COL-TF-148	6.7	7.3	5.0	6.7	5.0	6.7	5.0	6.0	8.0	6.7	5.7	7.3	6.3
DLFPS-321/3693	6.7	6.7	5.0	5.7	5.0	7.0	5.0	7.0	8.0	7.0	5.7	7.3	6.3
FIREHAWK SLT	7.0	7.7	4.3	6.7	5.0	6.3	4.7	6.3	8.0	7.0	5.7	7.3	6.3
PPG-TF 231	7.3	6.3	5.0	6.3	5.3	7.0	5.0	6.7	8.0	7.0	5.0	7.0	6.3
PPG-TF 267	7.0	7.7	4.7	6.7	4.7	6.7	5.0	6.7	8.0	7.0	5.3	6.7	6.3
PPG-TF 318	7.0	7.0	4.3	5.7	5.3	6.7	5.0	7.0	8.0	7.0	5.3	7.7	6.3
PPG-TF 336	7.0	8.0	5.0	5.3	5.0	6.7	5.0	7.0	8.0	7.0	5.3	6.7	6.3
PPG-TF 337	6.7	7.3	4.3	5.0	5.0	7.0	5.0	7.3	8.0	7.0	6.3	7.0	6.3
RC4	6.7	6.3	5.3	6.3	5.0	7.0	5.0	6.7	8.0	6.7	6.0	7.0	6.3
TD2	7.0	7.0	5.0	6.0	5.0	6.7	5.0	6.7	8.0	6.7	6.0	7.0	6.3
PPG-TF 244	6.7	7.3	4.3	5.3	4.7	7.0	5.0	7.7	8.0	7.3	5.3	7.3	6.3
3B2	7.0	6.7	5.0	6.7	4.7	7.0	4.7	7.3	8.0	7.0	5.0	6.7	6.3
BULLSEYE	7.3	7.0	4.7	6.3	4.7	6.3	5.0	7.0	8.0	7.0	5.7	6.7	6.3
BONFIRE (JS DTT)	7.0	6.3	4.7	6.3	5.0	6.7	5.0	6.7	8.0	7.3	6.3	6.3	6.3
DLFPS-321/3703	6.3	7.0	4.7	6.7	4.7	7.0	5.0	6.7	8.0	7.0	5.3	7.3	6.3
FAYETTE	7.0	7.0	5.3	6.0	5.0	6.3	5.0	8.0	8.0	6.7	4.3	7.0	6.3
RHL2	6.7	6.3	4.7	6.3	5.0	6.7	5.0	6.7	8.0	7.0	6.0	7.3	6.3
DLFPS-TF/3550	6.7	6.7	5.0	6.7	5.0	6.7	5.0	6.0	8.0	7.0	6.0	6.7	6.3
PPG-TF 305	7.0	5.7	5.0	6.3	5.0	6.7	5.0	7.3	8.0	6.7	5.3	7.3	6.3
OG-WALK	6.3	7.0	5.0	6.0	5.3	6.3	5.0	7.3	8.0	6.7	5.3	6.7	6.3
GLX ACED (PST-5DART)	6.3	6.3	4.3	7.0	4.7	6.7	5.3	6.3	8.0	6.7	6.3	6.7	6.2
PST-5MINK	6.7	6.0	5.3	6.0	4.7	6.7	5.0	7.3	8.0	6.7	5.3	7.0	6.2
PPG-TF 238	7.0	6.7	4.7	6.7	5.0	7.0	5.0	5.7	7.7	7.0	5.3	7.0	6.2
PST-5DZM	6.7	7.3	4.7	6.0	4.7	6.7	4.7	7.0	8.0	6.7	5.0	7.3	6.2
DRAGSTER	6.7	6.0	4.3	5.7	4.7	6.7	5.0	7.0	8.0	7.3	6.0	7.0	6.2
K18-ROE	7.0	6.7	4.3	5.7	4.7	7.0	5.3	6.0	8.0	7.3	5.7	6.7	6.2
RS1	6.3	7.3	4.7	6.3	4.7	6.7	5.0	6.3	8.0	7.0	5.3	6.7	6.2

TABLE 16.
(CONT'D)

GENETIC COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	DE1	GA1	IA1	IN1	MS1	NC1	NE1	NJ2	OK1	OR1	TN1	UT1	MEAN
PPG-TF 257	7.0	6.7	4.3	5.3	5.0	7.0	5.0	7.7	8.0	7.0	4.7	6.7	6.2
PST-5GLBS	6.3	8.0	5.0	7.0	5.0	6.0	4.3	6.3	8.0	6.7	5.3	6.3	6.2
RAPTOR III	6.7	6.3	4.7	5.7	5.0	6.3	5.0	6.7	8.0	6.7	6.0	7.3	6.2
AH2	6.0	7.3	4.0	6.3	4.7	7.0	4.3	7.3	8.0	6.7	5.3	7.0	6.2
K18-RS6	6.3	7.0	4.0	7.0	5.0	6.3	4.7	6.3	8.0	6.7	6.0	6.7	6.2
NAI-ROS4	6.3	7.0	4.7	6.3	4.7	6.7	5.0	6.3	8.0	6.7	5.3	7.0	6.2
PST-5BYOB	6.3	6.3	4.3	6.7	4.7	6.3	5.3	7.3	8.0	7.0	5.3	6.3	6.2
SESCR1	6.7	6.7	4.7	5.3	5.3	6.7	5.0	5.7	8.0	6.3	6.0	7.7	6.2
HEMI	6.7	7.3	4.7	6.3	5.0	6.0	5.0	5.7	8.0	7.0	5.3	6.7	6.1
PPG-TF 313	7.3	6.3	4.0	7.3	5.0	6.0	5.0	6.3	8.0	6.7	5.0	6.7	6.1
PST-5GQ	6.3	7.7	5.7	5.3	4.7	6.3	5.0	6.3	8.0	6.7	4.7	7.0	6.1
PST-5TRN	6.7	6.7	4.7	6.0	5.0	6.3	5.0	6.7	8.0	7.0	5.7	6.0	6.1
RHF	6.7	7.3	4.0	7.0	4.7	6.7	5.0	6.0	8.0	7.0	5.0	6.3	6.1
PARAMOUNT	6.7	6.3	5.3	5.3	5.0	7.0	4.7	6.7	8.0	6.7	6.0	6.0	6.1
MONUMENT (PST-5SQB)	6.3	6.7	5.7	6.0	5.0	6.3	5.0	6.3	8.0	6.7	5.3	6.3	6.1
TF445	6.3	7.0	4.3	6.3	5.0	7.0	4.7	5.7	8.0	6.3	6.0	7.0	6.1
TF456	6.3	6.7	4.3	6.3	5.0	7.0	5.0	5.7	8.0	6.3	5.7	7.3	6.1
PALOMAR	6.7	6.3	5.0	5.7	4.7	6.3	5.0	6.7	8.0	7.0	5.0	7.0	6.1
LIFEGUARD	6.0	7.0	4.7	7.3	5.0	6.3	5.0	5.7	8.0	6.7	5.3	6.3	6.1
BAR-FA8230	6.7	6.3	4.7	6.3	4.3	6.7	4.3	6.3	8.0	7.0	6.0	6.0	6.1
ESCALADE	7.0	6.7	4.3	6.7	5.0	6.0	4.7	5.3	8.0	6.7	6.0	6.3	6.1
ESTRENA	6.0	6.3	4.7	6.7	4.7	6.3	5.3	6.3	8.0	6.7	5.0	6.7	6.1
BAR FA 8228	6.7	6.7	4.7	6.3	5.0	5.7	5.0	6.0	8.0	6.7	5.7	6.3	6.1
BAR TF 134	6.3	6.3	4.3	6.3	4.7	6.7	5.0	5.7	8.0	6.7	5.7	7.0	6.1
K18-NSE	6.0	7.0	4.3	6.3	4.7	6.7	4.7	5.3	8.0	7.0	5.3	7.3	6.1
RDC	6.0	6.0	4.3	6.7	4.7	6.3	5.0	6.7	8.0	6.7	6.0	6.3	6.1
SE5STAR	7.0	6.3	4.7	6.7	5.0	6.3	5.0	5.7	8.0	6.3	5.3	6.3	6.1
ZRC1	6.3	6.7	4.0	6.3	5.0	6.7	5.0	6.0	8.0	6.7	5.7	6.3	6.1
PST-5THM	6.0	6.3	5.7	6.0	4.7	6.0	5.3	6.3	8.0	7.0	5.0	5.7	6.0
RH3	6.3	6.3	4.3	5.7	5.0	7.0	5.0	5.7	8.0	6.7	5.7	6.3	6.0
SE53D2	6.3	8.0	4.7	6.0	4.0	6.0	5.0	5.7	8.0	7.0	5.3	6.0	6.0
DLFPS-321/3706	5.7	6.3	4.0	5.7	5.0	6.7	5.0	6.3	8.0	7.0	5.3	6.7	6.0
MOONDANCE GLX	6.7	6.7	4.3	6.3	4.0	6.7	5.0	5.3	8.0	7.3	5.3	6.0	6.0
PPG-TF 312	6.7	6.3	4.3	6.0	5.0	6.0	5.0	5.7	8.0	6.3	5.7	6.7	6.0
PST-5MCMO	6.3	6.7	4.3	5.3	5.0	6.0	4.7	6.0	8.0	7.0	5.3	6.7	5.9
5LSS	6.0	6.7	4.0	7.0	4.3	7.0	5.0	4.7	7.3	6.3	6.0	6.7	5.9
PST-5E6	5.7	6.3	4.7	6.3	4.3	6.3	5.0	6.3	7.3	7.0	5.0	6.3	5.9
PRO GOLD	6.0	5.3	4.7	6.0	4.3	6.0	5.0	5.7	8.0	6.7	5.7	6.7	5.8
KENTUCKY-31	4.3	5.3	3.7	6.7	3.0	4.0	3.0	1.0	4.0	6.0	3.7	3.3	4.0
LSD VALUE	0.9	1.6	1.3	1.2	0.7	0.7	0.6	1.5	0.3	0.8	1.7	1.0	0.3
C.V. (%)	8.2	14.4	16.6	11.5	9.2	6.5	6.9	13.5	2.1	7.4	19.1	9.0	10.9

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

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

TABLE 17.

 SPRING GREENUP RATINGS OF TALL FESCUE CULTIVARS 1/
 2019 DATA

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

NAME	IA1	NC1	NE1	NJ1	TN1	MEAN
BIRMINGHAM	7.7	7.7	4.0	6.3	8.0	6.7
FAYETTE	8.3	6.0	4.7	6.3	8.3	6.7
KENTUCKY-31	6.0	6.3	4.0	9.0	8.3	6.7
SESCR1	8.0	7.0	4.3	6.3	8.0	6.7
NAI-3N2	7.3	7.3	4.0	6.0	8.7	6.7
BY-TF-169	7.3	7.0	4.0	6.3	8.3	6.6
PALOMAR	8.0	6.3	4.0	7.0	7.7	6.6
3N1	7.7	6.3	4.0	6.3	8.3	6.5
NAI-ROS4	8.0	6.7	4.0	6.3	7.7	6.5
OG-WALK	7.7	6.0	4.0	6.7	8.0	6.5
OKEEFE (LTP-TF-122)	6.7	6.7	4.3	6.0	8.7	6.5
PARAMOUNT	7.3	6.3	4.3	6.0	8.3	6.5
PST-5MCMO	7.7	6.0	4.0	6.0	8.7	6.5
TF445	6.7	7.3	4.0	6.0	8.3	6.5
TF456	7.3	6.3	4.3	6.7	7.7	6.5
DLFPS-321/3707	8.0	6.0	4.3	6.0	8.0	6.5
DRAGSTER	7.0	6.3	4.3	6.3	8.3	6.5
PADRE 2	7.3	6.3	4.0	6.3	8.3	6.5
PPG-TF 262	7.3	6.7	4.3	6.0	8.0	6.5
PST-5TRN	7.3	6.3	4.0	6.3	8.3	6.5
AH2	6.0	6.3	4.0	6.7	9.0	6.4
COPIOUS TF	8.0	6.0	4.0	5.7	8.3	6.4
DLFPS-321/3695	7.0	5.7	4.3	6.3	8.7	6.4
DLFPS-321/3701	7.3	7.0	4.0	5.3	8.3	6.4
ESCALADE	7.0	6.3	4.0	7.0	7.7	6.4
ESTRENA	6.7	6.0	4.0	7.0	8.3	6.4
FIREHAWK SLT	7.3	6.0	4.0	6.7	8.0	6.4
GLX ACED (PST-5DART)	7.3	6.0	4.3	6.0	8.3	6.4
K18-NSE	6.0	6.7	4.3	6.7	8.3	6.4
K18-ROE	6.7	6.3	4.0	7.0	8.0	6.4
LBF	7.7	6.7	4.0	5.7	8.0	6.4
NATURALLY GREEN	7.0	7.0	4.7	5.7	7.7	6.4
PPG-TF 231	7.0	6.0	4.0	6.7	8.3	6.4
PPG-TF 254	7.3	6.3	4.0	6.0	8.3	6.4
MONUMENT (PST-5SQB)	6.7	6.0	4.0	7.0	8.3	6.4
RH1	7.0	6.7	4.0	6.0	8.3	6.4
ATF2116	7.3	7.0	4.3	5.3	8.0	6.4
DEGAS (LTP-TF-111)	7.0	6.3	3.7	6.7	8.0	6.3
DLFPS-321/3699	7.7	6.7	4.0	5.3	8.0	6.3
GO-RH20	7.0	6.7	4.0	6.0	8.0	6.3
GRAND PRIX (FC15-01P)	7.7	6.0	4.0	6.3	7.7	6.3
JT 233	7.3	6.7	4.0	5.7	8.0	6.3
NAI-TUE	7.7	6.0	4.0	6.0	8.0	6.3
PRO GOLD	6.7	6.0	4.0	6.7	8.3	6.3
PST-5E6	6.0	6.7	4.0	6.7	8.3	6.3
PST-5THM	7.7	6.0	4.0	5.7	8.3	6.3

TABLE 17.
(CONT'D)

SPRING GREENUP RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	IA1	NC1	NE1	NJ1	TN1	MEAN
SE53D2	7.7	6.0	4.0	6.0	8.0	6.3
3B2	7.3	6.3	4.0	6.0	8.0	6.3
AH1	7.0	6.0	4.0	6.3	8.3	6.3
BAR-FA8230	7.3	6.0	4.0	6.3	8.0	6.3
BRAVO 2	7.3	6.0	4.3	6.0	8.0	6.3
NAI-ST5	7.7	6.3	4.0	6.3	7.3	6.3
PPG-TF 267	6.7	6.3	4.3	6.0	8.3	6.3
PST-5BYOB	7.3	5.7	4.0	6.3	8.3	6.3
RAPTOR III	7.7	5.3	4.0	6.3	8.3	6.3
RHF	6.3	6.7	4.3	6.3	8.0	6.3
RHL2	7.3	5.7	4.3	6.0	8.3	6.3
TD2	6.3	6.7	4.0	6.3	8.3	6.3
BAR TF 134	6.7	5.7	4.3	6.7	8.0	6.3
BONFIRE (JS DTT)	7.3	6.0	4.0	5.7	8.3	6.3
BULLSEYE LTZ	6.7	7.0	4.0	5.3	8.3	6.3
DLFPS-321/3693	7.0	6.0	4.7	5.7	8.0	6.3
DLFPS-321/3703	7.0	7.0	4.0	5.0	8.3	6.3
PPG-TF 255	7.7	5.7	4.3	5.3	8.3	6.3
PPG-TF 306	7.3	6.7	4.0	5.0	8.3	6.3
PPG-TF 313	7.0	5.7	4.0	6.3	8.3	6.3
PPG-TF 318	6.7	6.0	4.3	6.0	8.3	6.3
PST-5GQ	7.7	6.3	4.0	5.7	7.7	6.3
SETF104	7.7	6.0	4.0	5.7	8.0	6.3
TANGO	7.7	5.3	4.0	6.0	8.3	6.3
BAR FA 8228	7.0	6.0	4.3	6.0	8.0	6.3
BGR-TF3	6.7	6.3	4.3	6.3	7.7	6.3
DLFPS-321/3706	7.0	6.0	4.0	6.3	8.0	6.3
DLFPS-TF/3553	7.7	6.3	4.0	5.3	8.0	6.3
K18-WB1	6.7	6.3	4.3	6.0	8.0	6.3
PPG-TF 249	7.3	6.0	4.3	5.7	8.0	6.3
PPG-TF 308	7.0	6.3	4.0	6.0	8.0	6.3
SETFM3	8.0	6.0	4.3	5.3	7.7	6.3
PST-5DZM	7.7	6.0	4.0	5.7	7.7	6.2
A-TF31	8.0	5.3	4.0	6.0	7.7	6.2
BAR 9FE MAS	7.3	6.0	4.3	5.7	7.7	6.2
COL-TF-148	6.7	5.7	4.3	5.7	8.7	6.2
DLFPS-321/3694	6.3	5.7	4.7	6.3	8.0	6.2
DLFPS-321/3702	7.0	6.0	4.0	5.7	8.3	6.2
DLFPS-TF/3552	7.0	6.0	4.0	6.0	8.0	6.2
GRANDE 3	6.7	6.3	3.7	6.3	8.0	6.2
K18-RS6	6.3	5.7	4.0	6.7	8.3	6.2
LIFEGUARD	6.3	6.0	4.0	6.7	8.0	6.2
PPG-TF 244	6.3	7.0	4.0	6.0	7.7	6.2
PPG-TF 257	7.0	6.0	4.0	5.7	8.3	6.2
PPG-TF 305	7.3	5.7	4.0	6.0	8.0	6.2
PPG-TF 316	6.7	6.3	4.0	6.0	8.0	6.2
PPG-TF 323	7.7	6.3	4.0	5.0	8.0	6.2

TABLE 17.
(CONT'D)

SPRING GREENUP RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	IA1	NC1	NE1	NJ1	TN1	MEAN
PPG-TF 336	7.0	5.7	4.3	5.7	8.3	6.2
PST-5DC24	8.3	5.3	4.3	4.7	8.3	6.2
SE5STAR	7.3	6.0	4.0	6.0	7.7	6.2
TMT1	6.7	6.7	4.3	5.3	8.0	6.2
AST8218LM	7.3	6.3	4.0	5.3	8.0	6.2
ATF1768	7.3	6.3	4.0	5.3	8.0	6.2
DLFPS-321/3679	7.3	6.3	4.0	5.3	8.0	6.2
BANDIT	7.0	5.7	4.0	6.0	8.0	6.1
MOONDANCE GLX	7.7	5.7	4.0	6.0	7.3	6.1
NT-3	7.0	5.7	4.7	5.3	8.0	6.1
DLFPS-TF/3550	7.3	5.7	3.7	5.3	8.7	6.1
HEMI	7.3	5.0	4.0	6.0	8.3	6.1
PPG-TF 238	6.3	5.7	4.0	6.3	8.3	6.1
PPG-TF 315	7.3	6.0	4.0	5.3	8.0	6.1
PPG-TF 337	7.3	5.7	4.0	5.3	8.3	6.1
PPG-TF 338	7.3	6.0	4.3	5.0	8.0	6.1
PST-5GLBS	7.0	6.0	4.0	5.3	8.3	6.1
RH3	6.3	6.0	4.0	6.3	8.0	6.1
RS1	6.3	5.7	4.3	6.3	8.0	6.1
SETFM2	8.0	5.3	4.0	5.3	8.0	6.1
ZRC1	6.0	6.3	4.0	6.3	8.0	6.1
5LSS	6.3	6.0	4.0	5.7	8.3	6.1
AST8118LM	8.3	5.0	4.0	5.0	8.0	6.1
DLFPS-321/3696	7.3	5.7	4.0	4.7	8.7	6.1
DLFPS-321/3708	8.0	5.7	4.0	4.3	8.3	6.1
RAD-TF131	8.3	6.0	4.0	4.0	8.0	6.1
RDC	5.7	6.0	4.3	5.7	8.7	6.1
RAD-TF 115 (TURBO SS)	8.3	6.0	4.3	3.7	8.0	6.1
BULLSEYE	7.0	5.3	4.0	6.0	8.0	6.1
GO-AOMK	7.7	6.3	4.0	4.3	8.0	6.1
JT 268	7.0	6.0	4.0	6.0	7.3	6.1
JT 517	8.0	5.0	4.3	5.0	8.0	6.1
RAD-TF105	6.3	6.3	4.0	5.7	8.0	6.1
PPG-TF 320	7.0	5.7	4.0	5.7	7.7	6.0
DLFPS-321/3705	5.7	6.3	4.0	5.7	8.3	6.0
PPG-TF 312	5.7	6.0	4.0	6.3	8.0	6.0
PST-5MINK	7.7	5.3	4.0	5.0	8.0	6.0
NAI-FQZ-17	7.3	5.0	4.0	5.7	7.7	5.9
RC4	7.7	4.7	4.0	4.7	8.3	5.9
LSD VALUE	1.6	1.3	0.6	1.0	0.8	0.5
C.V. (%)	13.6	13.5	8.9	10.6	6.3	11.1

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

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

TABLE 18.

LEAF TEXTURE RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	DE1	IN1	KS1	MI1	MS1	NC1	NE1	OK1	OR1	TN1	UT1	MEAN
PPG-TF 312	6.0	6.3	7.7	5.7	4.7	6.7	5.3	5	5.7	5.3	7.0	5.9
K18-WB1	5.7	7.3	7.3	5.7	5.0	6.0	5.3	5	6.0	5.7	6.3	5.9
RHF	5.7	6.7	7.0	5.3	5.3	6.0	5.3	5	6.0	6.7	6.3	5.9
TD2	6.3	6.7	7.0	6.0	5.7	6.3	5.0	5	6.0	5.0	6.3	5.9
5LSS	6.0	6.3	7.7	6.0	5.7	7.0	5.3	5	6.7	2.7	6.7	5.9
PPG-TF 313	6.3	6.7	7.0	5.7	5.3	6.0	5.0	5	6.3	5.0	6.7	5.9
K18-NSE	6.0	6.0	7.0	5.7	5.7	6.3	5.3	5	6.3	4.3	7.0	5.9
DLFPS-321/3703	5.7	6.3	7.3	5.7	5.3	6.0	6.0	5	5.3	6.3	5.7	5.9
PPG-TF 305	5.7	5.7	6.7	5.7	5.3	6.3	5.3	5	6.3	5.7	6.7	5.8
AH2	6.3	7.0	6.7	5.0	5.7	6.7	5.0	5	5.7	5.0	6.3	5.8
JT 233	5.7	7.0	7.0	5.0	5.3	6.3	5.0	5	5.0	6.7	6.3	5.8
PPG-TF 337	6.3	5.7	7.7	6.3	5.0	6.3	5.0	5	5.7	4.7	6.7	5.8
DLFPS-321/3693	6.0	6.3	6.7	5.7	5.0	6.3	5.0	5	6.0	5.0	7.0	5.8
PPG-TF 267	5.7	5.7	6.5	5.7	5.0	6.3	5.0	5	5.7	7.0	6.3	5.8
PADRE 2	5.3	6.3	6.5	5.3	5.0	6.0	6.0	5	5.7	6.7	6.0	5.8
DLFPS-321/3695	6.0	7.0	6.7	5.0	5.0	6.7	5.7	5	5.3	5.0	6.3	5.8
DLFPS-321/3702	5.3	6.0	7.3	6.0	5.0	6.3	5.7	5	5.7	5.0	6.3	5.8
DLFPS-TF/3553	5.7	6.3	7.3	5.7	5.7	6.3	5.3	5	5.3	5.0	6.0	5.8
NT-3	6.3	6.3	7.0	5.3	5.0	5.7	6.0	5	5.3	5.3	6.3	5.8
PPG-TF 306	6.0	6.3	7.3	5.0	5.0	6.3	5.3	5	5.7	5.3	6.3	5.8
RAD-TF131	5.3	6.7	5.7	5.3	5.0	6.7	5.7	5	5.7	6.3	6.3	5.8
RHL2	6.0	6.3	7.3	5.0	5.0	7.0	5.3	5	6.0	4.0	6.7	5.8
PPG-TF 238	6.3	6.3	7.3	5.0	4.7	6.3	5.3	5	5.7	5.3	6.0	5.8
PPG-TF 316	6.3	5.7	7.3	5.0	5.3	6.0	5.0	5	6.0	4.3	7.3	5.8
PPG-TF 320	5.3	6.7	6.0	5.3	5.3	6.3	6.0	5	5.0	6.7	5.7	5.8
BULLSEYE LTZ	6.0	6.7	7.0	5.3	4.7	6.0	5.3	5	5.7	5.3	6.0	5.7
BY-TF-169	5.7	6.7	7.3	5.7	5.0	6.0	5.3	5	6.0	4.0	6.3	5.7
JT 268	5.7	6.7	7.0	5.7	5.3	6.7	5.0	5	5.3	4.0	6.7	5.7
RAPTOR III	5.3	6.7	6.3	4.7	4.7	6.0	6.0	5	5.3	7.0	6.0	5.7
RC4	6.0	5.7	7.3	5.3	5.0	6.7	5.7	5	5.3	4.7	6.3	5.7
RH3	5.7	7.0	7.0	6.0	4.7	5.7	5.3	5	5.3	5.0	6.3	5.7
ZRC1	5.7	5.7	7.7	5.7	5.0	6.0	6.0	5	5.3	4.3	6.3	5.7
DLFPS-321/3708	6.0	6.3	7.0	5.3	5.3	6.0	5.0	5	5.3	5.3	6.0	5.7
RS1	5.0	6.3	7.0	5.7	5.0	6.3	5.0	5	5.3	5.7	6.3	5.7
DLFPS-321/3706	6.0	6.0	6.7	5.0	4.7	6.0	5.7	5	6.7	4.3	6.7	5.7
PPG-TF 255	5.7	7.0	7.3	5.7	5.0	6.3	5.3	5	5.7	3.0	6.7	5.7
K18-RS6	5.0	6.7	6.7	5.0	5.3	6.0	6.0	5	5.7	4.7	6.3	5.7
LIFEGUARD	5.0	6.0	7.0	5.3	4.3	6.3	5.3	5	5.0	7.0	6.0	5.7
PPG-TF 338	5.3	6.7	6.7	5.7	5.0	5.7	5.0	5	5.3	5.7	6.3	5.7
AH1	5.3	6.7	5.7	6.3	5.3	6.7	5.7	5	5.7	3.7	6.3	5.7
ESTRENA	5.3	7.0	7.3	5.7	4.3	6.0	5.7	5	6.0	3.7	6.3	5.7
GO-RH20	6.3	6.7	7.0	5.0	5.0	5.7	5.7	5	5.0	5.0	6.0	5.7
PPG-TF 308	5.7	7.0	6.3	5.0	5.3	6.0	6.0	5	5.7	4.0	6.3	5.7
TF456	6.0	6.0	7.3	5.3	4.7	6.0	5.3	5	5.7	5.0	6.0	5.7
DLFPS-321/3694	6.0	6.0	7.0	5.0	4.0	6.3	5.3	5	5.7	5.0	6.7	5.6
DLFPS-321/3707	6.0	6.0	7.0	5.0	5.3	6.0	5.0	5	5.3	5.0	6.3	5.6

TABLE 18.
(CONT'D)

LEAF TEXTURE RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	DE1	IN1	KS1	MI1	MS1	NC1	NE1	OK1	OR1	TN1	UT1	MEAN
PPG-TF 315	5.7	5.3	7.7	5.3	5.3	6.7	5.7	5	5.3	4.0	6.0	5.6
TF445	5.7	6.0	7.3	4.7	4.3	6.0	5.3	5	5.7	5.7	6.3	5.6
PPG-TF 254	5.3	6.7	6.7	5.0	4.7	6.0	5.0	5	5.7	6.3	5.3	5.6
DLFPS-321/3701	6.0	5.3	7.0	5.3	5.0	6.0	5.0	5	6.0	4.7	6.3	5.6
DLFPS-TF/3552	6.0	7.0	6.7	5.3	5.0	6.0	6.0	5	5.3	3.7	5.7	5.6
PPG-TF 323	5.3	6.3	7.3	5.0	4.3	5.7	5.7	5	6.0	4.7	6.3	5.6
NAI-TUE	4.7	7.3	5.7	5.0	4.0	6.0	6.0	5	5.0	6.3	6.3	5.6
3N1	5.0	5.0	6.0	5.3	4.7	6.3	6.0	5	5.3	6.7	6.0	5.6
A-TF31	5.0	6.0	6.7	5.7	5.3	6.7	5.0	5	5.7	4.0	6.3	5.6
BAR TF 134	5.7	6.7	6.3	5.3	5.3	5.7	5.3	5	5.0	5.0	6.0	5.6
DLFPS-321/3696	5.3	5.7	7.0	5.7	4.3	6.7	5.3	5	5.3	5.3	5.7	5.6
DLFPS-321/3699	6.0	5.7	7.0	5.3	5.0	6.0	5.3	5	5.7	4.3	6.0	5.6
PPG-TF 249	5.3	6.0	6.3	5.7	4.0	7.0	5.3	5	6.0	4.3	6.3	5.6
COL-TF-148	5.7	6.3	6.3	5.0	5.0	6.0	5.7	5	5.0	5.0	6.3	5.6
FAYETTE	5.0	6.3	6.7	5.0	5.0	6.0	5.3	5	5.3	5.3	6.0	5.5
OKEEFE (LTP-TF-122)	5.7	6.3	7.0	5.3	4.3	5.3	5.3	5	5.7	4.7	6.3	5.5
PPG-TF 318	5.3	6.0	7.0	5.3	4.0	6.0	5.3	5	5.7	5.3	6.0	5.5
PPG-TF 336	6.3	5.3	7.0	5.3	4.0	6.0	5.7	5	5.7	4.3	6.3	5.5
SETFM2	4.7	7.0	6.0	5.0	4.7	7.0	5.7	5	5.0	5.0	6.0	5.5
PPG-TF 231	5.3	6.0	6.5	5.3	4.3	6.3	5.3	5	5.3	5.3	6.0	5.5
BIRMINGHAM	5.3	6.7	5.7	5.3	4.7	6.3	5.3	5	4.3	6.0	6.0	5.5
RAD-TF105	5.7	6.7	7.0	5.3	4.3	6.0	5.3	5	5.3	4.0	6.0	5.5
BONFIRE (JS DTT)	5.0	6.3	7.0	5.3	4.7	6.0	6.0	5	4.7	5.0	5.7	5.5
HEMI	5.0	6.7	5.3	5.0	4.7	5.7	5.7	5	5.0	7.0	5.7	5.5
NAI-ST5	5.7	6.3	5.3	5.0	4.7	6.3	5.7	5	5.7	4.7	6.3	5.5
PPG-TF 257	6.0	5.3	5.7	5.0	4.7	6.3	5.0	5	6.0	5.7	6.0	5.5
PST-5MINK	5.0	5.7	6.0	5.3	4.3	7.0	5.0	5	5.3	6.0	6.0	5.5
FIREHAWK SLT	5.3	6.0	5.7	5.0	5.0	6.7	5.3	5	5.3	4.7	6.3	5.5
PPG-TF 244	5.0	6.0	6.3	4.7	4.7	6.0	5.7	5	5.7	5.3	6.0	5.5
RDC	5.3	6.7	5.7	6.0	4.7	6.3	5.0	5	5.3	3.7	6.7	5.5
SESCR1	5.0	5.7	6.3	5.3	4.7	6.3	5.7	5	5.3	5.0	6.0	5.5
SETF104	5.0	6.7	6.3	5.0	4.7	6.0	5.3	5	5.3	5.3	5.7	5.5
TMT1	5.3	6.0	6.0	5.0	4.3	6.3	6.0	5	5.7	4.3	6.3	5.5
DLFPS-TF/3550	5.3	7.3	6.3	5.0	4.3	6.0	5.3	5	6.0	4.0	5.7	5.5
AST8118LM	5.0	6.7	6.0	5.0	4.3	6.3	5.3	5	5.3	4.7	6.3	5.5
GLX ACED (PST-5DART)	5.0	7.3	5.7	5.0	4.7	5.7	5.3	5	5.0	6.0	5.3	5.5
DEGAS (LTP-TF-111)	5.3	6.7	5.3	5.0	5.0	6.0	5.3	5	5.7	4.7	6.0	5.5
DLFPS-321/3679	5.7	6.7	6.7	5.3	4.7	6.0	4.7	5	4.7	5.0	5.7	5.5
GRANDE 3	5.0	6.3	6.3	5.3	4.3	6.3	6.0	5	4.3	5.0	6.0	5.5
NAI-ROS4	5.3	6.3	5.3	5.0	4.3	6.0	6.0	5	5.0	5.3	6.3	5.5
PARAMOUNT	5.0	5.7	6.3	5.3	5.0	6.3	5.3	5	5.0	5.0	6.0	5.5
PST-5THM	4.7	6.0	6.3	4.7	4.3	6.0	6.0	5	5.0	6.0	6.0	5.5
DLFPS-321/3705	5.0	6.0	6.7	4.7	4.7	5.3	5.7	5	5.0	5.3	6.3	5.4
DRAGSTER	5.3	6.3	7.0	5.3	4.0	6.0	5.3	5	5.0	4.0	6.3	5.4
JT 517	5.0	6.7	6.3	5.0	4.7	6.3	5.0	5	5.3	4.0	6.3	5.4
PST-5DZM	5.0	6.0	5.3	5.3	4.7	6.7	5.0	5	5.3	5.3	6.0	5.4
PST-5TRN	5.3	5.7	6.0	4.7	5.0	6.0	6.0	5	4.3	6.0	5.7	5.4

TABLE 18.
(CONT'D)

LEAF TEXTURE RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	DE1	IN1	KS1	MI1	MS1	NC1	NE1	OK1	OR1	TN1	UT1	MEAN
RAD-TF 115 (TURBO SS)	5.0	6.7	6.0	5.0	4.7	6.3	5.0	5	6.3	4.0	5.7	5.4
RH1	5.0	6.3	6.3	4.7	5.0	5.7	5.3	5	5.7	4.7	6.0	5.4
PPG-TF 262	5.7	6.3	6.3	5.0	4.3	5.7	5.7	5	5.7	4.3	5.7	5.4
3B2	4.7	7.0	5.3	4.3	5.3	5.3	5.0	5	5.3	6.3	5.7	5.4
BGR-TF3	4.7	6.7	6.0	5.3	4.0	6.0	5.3	5	5.3	4.7	6.3	5.4
COPIOUS TF	5.3	6.0	6.7	5.0	5.0	6.3	5.0	5	6.0	3.3	5.7	5.4
TANGO	5.0	5.7	5.0	5.3	4.0	5.7	5.3	5	4.7	7.7	6.0	5.4
K18-ROE	4.7	6.0	6.3	5.0	4.3	6.0	5.7	5	5.0	5.7	5.7	5.4
BANDIT	5.7	5.7	5.0	5.0	4.7	6.0	5.3	5	5.0	5.0	6.7	5.4
GO-AOMK	5.0	6.0	6.0	5.3	4.7	6.3	5.0	5	5.0	4.7	6.0	5.4
PRO GOLD	5.0	6.3	6.0	5.7	4.3	6.0	5.3	5	5.0	5.0	5.3	5.4
PST-5GLBS	5.7	6.7	4.3	4.7	4.3	6.0	6.0	5	4.3	6.0	5.7	5.3
BAR 9FE MAS	4.7	6.0	6.3	5.3	4.0	6.3	5.3	5	4.0	5.7	6.0	5.3
GRAND PRIX (FC15-01P)	4.7	6.0	5.3	5.0	4.0	6.0	5.7	5	4.0	6.7	6.3	5.3
PST-5DC24	5.0	6.3	5.0	5.0	5.3	6.3	5.7	5	4.7	4.3	6.0	5.3
LBF	5.3	5.7	6.0	5.7	5.0	6.0	5.3	5	5.3	3.0	6.0	5.3
SE5STAR	4.7	6.0	6.3	4.7	4.3	6.0	5.3	5	5.0	5.0	6.0	5.3
PST-5MCMO	5.0	5.7	5.7	5.3	4.3	6.0	5.7	5	4.7	5.0	6.0	5.3
AST8218LM	4.7	6.3	5.0	4.3	4.7	6.3	6.0	5	5.0	5.0	5.7	5.3
ATF1768	5.0	6.0	5.3	5.0	4.3	5.3	5.7	5	4.7	5.7	6.0	5.3
PST-5E6	5.0	6.3	5.0	4.3	4.3	5.7	5.7	5	4.7	7.0	5.0	5.3
ESCALADE	4.0	7.0	4.7	4.7	4.3	5.7	5.3	5	3.3	8.7	5.0	5.2
NAI-FQZ-17	4.3	5.7	5.7	4.7	4.0	5.7	6.0	5	5.0	6.0	5.7	5.2
NATURALLY GREEN	4.7	5.7	4.7	5.3	4.3	6.0	5.7	5	5.0	5.0	6.3	5.2
PST-5GQ	5.0	6.7	4.7	4.7	4.3	6.3	5.0	5	4.7	5.7	5.7	5.2
MONUMENT (PST-5SQB)	5.0	6.0	4.7	5.3	4.3	6.3	5.7	5	5.0	5.3	5.0	5.2
BULLSEYE	5.0	6.0	5.3	4.7	4.3	6.3	5.7	5	4.7	5.3	5.0	5.2
SE53D2	5.0	6.0	5.0	5.0	5.0	6.0	6.0	5	5.0	4.3	5.0	5.2
SETFM3	5.0	6.3	5.7	5.0	4.3	6.3	5.3	5	5.0	3.7	5.7	5.2
BAR-FA8230	5.0	6.0	5.3	5.0	4.3	5.7	5.7	5	4.0	5.3	5.7	5.2
NAI-3N2	4.7	5.7	5.7	4.7	4.3	6.0	5.3	5	5.3	4.3	5.7	5.2
BRAVO 2	4.7	6.0	5.0	4.7	4.3	5.7	5.7	5	4.7	5.3	5.7	5.2
ATF2116	5.3	6.3	4.5	4.7	4.3	5.3	5.7	5	4.0	5.3	6.0	5.1
PST-5BYOB	4.7	5.7	4.7	5.0	4.3	5.7	6.0	5	4.7	5.7	5.0	5.1
MOONDANCE GLX	5.3	6.3	5.0	4.7	4.3	6.0	6.0	5	4.7	4.0	4.7	5.1
BAR FA 8228	4.3	6.7	4.3	4.3	4.0	5.7	6.0	5	4.0	5.7	5.3	5.0
OG-WALK	4.0	6.3	4.7	4.7	4.0	5.3	6.0	5	3.0	7.7	4.3	5.0
PALOMAR	4.3	5.7	4.3	4.0	4.0	5.3	5.7	5	3.3	8.0	5.3	5.0
KENTUCKY-31	3.0	5.3	2.0	2.0	3.0	4.7	6.0	4	2.0	6.0	4.3	3.8
LSD VALUE	0.8	1.1	1.7	0.8	0.9	0.9	0.7	0	0.9	2.3	0.9	0.3
C.V. (%)	9.9	10.7	16.5	10.2	12.5	8.8	8.2	0	10.1	27.1	9.5	12.8

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. SEEDLING VIGOR RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	CT1	IN1	KY1	NE1	UT1	MEAN
KENTUCKY-31	5.7	5.7	4.7	6.0	5.7	5.5
AH2	6.3	5.0	4.7	5.7	5.7	5.5
BONFIRE (JS DTT)	4.7	6.3	4.3	6.3	5.7	5.5
DLFPS-321/3695	5.0	6.3	4.7	5.7	5.7	5.5
GRANDE 3	5.3	6.0	4.3	6.0	5.7	5.5
NAI-3N2	4.0	6.7	4.7	6.7	5.3	5.5
BULLSEYE LTZ	4.7	6.7	4.0	6.3	5.3	5.4
RHF	4.7	6.0	4.3	6.7	5.3	5.4
GO-RH20	5.7	5.0	4.7	6.0	5.3	5.3
NAI-ROS4	5.3	5.7	4.3	5.7	5.7	5.3
PPG-TF 231	5.3	5.7	4.7	5.7	5.3	5.3
RDC	5.3	4.7	4.0	6.7	6.0	5.3
RH1	5.0	5.7	4.3	6.3	5.3	5.3
AH1	5.3	4.7	4.7	5.7	6.0	5.3
PPG-TF 249	4.7	6.0	4.7	6.0	5.0	5.3
PPG-TF 312	4.3	5.7	4.7	6.0	5.7	5.3
PPG-TF 336	5.0	5.7	4.7	6.0	5.0	5.3
TMT1	5.0	5.7	4.7	5.7	5.3	5.3
PST-5BYOB	5.7	4.0	4.7	6.0	5.7	5.2
FAYETTE	4.7	5.7	4.0	6.7	5.0	5.2
BGR-TF3	5.3	6.0	4.3	5.0	5.3	5.2
BAR 9FE MAS	5.3	5.3	4.3	6.0	4.7	5.1
GLX ACED (PST-5DART)	5.0	6.0	4.0	5.7	5.0	5.1
JT 517	4.7	7.0	3.3	6.3	4.3	5.1
NAI-TUE	4.7	6.0	4.0	5.7	5.3	5.1
PST-5DZM	4.3	7.0	3.7	6.0	4.7	5.1
SESCR1	4.0	6.0	4.7	6.0	5.0	5.1
TANGO	4.7	5.7	3.7	6.7	5.0	5.1
DLFPS-TF/3550	4.3	6.0	4.3	6.0	5.0	5.1
ESCALADE	4.7	5.3	4.3	6.3	5.0	5.1
K18-RS6	4.7	4.7	4.7	6.3	5.3	5.1
PPG-TF 337	4.7	5.3	4.3	6.0	5.3	5.1
RHL2	4.7	5.3	4.3	6.0	5.3	5.1
RAD-TF 115 (TURBO SS)	4.7	5.0	4.3	6.3	5.3	5.1
TF456	3.3	5.3	4.3	6.7	5.7	5.1
5LSS	5.0	5.3	4.0	5.7	5.3	5.1
DLFPS-321/3694	4.7	5.0	4.3	6.0	5.3	5.1
HEMI	4.3	5.0	4.3	6.0	5.7	5.1
MOONDANCE GLX	5.0	6.0	4.3	5.3	4.7	5.1
NT-3	4.7	4.7	4.7	6.0	5.3	5.1
PPG-TF 255	4.3	4.7	4.0	7.0	5.3	5.1
PPG-TF 306	4.3	5.7	4.3	6.0	5.0	5.1
PPG-TF 318	4.7	4.3	4.7	6.3	5.3	5.1
PST-5DC24	4.7	5.3	4.0	6.3	5.0	5.1
PST-5THM	5.0	5.0	4.0	6.3	5.0	5.1
SETFM3	4.3	6.0	4.0	6.0	5.0	5.1

TABLE 19. SEEDLING VIGOR RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

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

NAME	CT1	IN1	KY1	NE1	UT1	MEAN
TF445	4.3	5.3	4.0	6.0	5.7	5.1
DLFPS-TF/3552	3.3	5.0	4.3	6.7	5.7	5.0
PPG-TF 267	4.7	5.7	4.0	6.0	4.7	5.0
TD2	4.7	5.0	3.7	6.0	5.7	5.0
ATF1768	4.7	5.0	4.3	6.0	5.0	5.0
DLFPS-321/3696	4.3	4.7	4.7	6.0	5.3	5.0
PPG-TF 254	4.7	5.0	4.3	6.3	4.7	5.0
PPG-TF 305	4.7	4.3	4.7	6.0	5.3	5.0
PPG-TF 308	4.0	5.7	4.0	6.0	5.3	5.0
PRO GOLD	4.7	5.0	4.3	6.0	5.0	5.0
PST-5E6	4.3	5.0	4.7	6.0	5.0	5.0
RAD-TF105	5.0	5.0	4.0	6.0	5.0	5.0
RH3	4.0	5.7	4.0	6.0	5.3	5.0
ZRC1	5.0	4.7	4.7	5.3	5.3	5.0
BAR-FA8230	4.3	5.7	3.7	6.0	5.3	5.0
PPG-TF 262	4.7	5.3	3.7	6.0	5.3	5.0
PPG-TF 316	4.3	5.3	4.7	5.3	5.3	5.0
PPG-TF 323	4.0	5.3	4.3	6.3	5.0	5.0
AST8218LM	4.0	6.3	3.7	6.0	4.7	4.9
ATF2116	4.0	5.7	3.7	6.7	4.7	4.9
K18-ROE	4.7	5.0	4.0	5.7	5.3	4.9
PPG-TF 320	3.7	5.7	4.3	5.7	5.3	4.9
RC4	4.0	5.0	4.7	5.7	5.3	4.9
DLFPS-321/3693	5.3	4.3	4.3	5.3	5.3	4.9
DLFPS-321/3706	4.0	6.0	3.7	5.7	5.3	4.9
K18-NSE	4.3	5.0	4.3	5.3	5.7	4.9
PARAMOUNT	5.0	5.3	3.7	5.7	5.0	4.9
PPG-TF 257	4.0	5.0	4.3	6.0	5.3	4.9
PST-5GLBS	4.3	4.3	4.7	6.0	5.3	4.9
RS1	4.7	4.3	4.0	6.3	5.3	4.9
ESTRENA	4.3	4.7	4.7	5.7	5.0	4.9
K18-WB1	4.0	4.7	4.7	6.0	5.0	4.9
NATURALLY GREEN	4.7	5.0	4.3	5.7	4.7	4.9
PPG-TF 244	4.3	5.7	4.0	5.7	4.7	4.9
PPG-TF 313	3.7	5.7	4.0	6.0	5.0	4.9
BAR FA 8228	4.7	5.3	3.7	5.7	5.0	4.9
BRAVO 2	4.3	4.7	4.0	6.0	5.3	4.9
LIFEGUARD	4.7	5.3	4.0	5.3	5.0	4.9
NAI-ST5	4.7	4.3	4.0	6.0	5.3	4.9
PPG-TF 338	4.3	5.0	4.3	6.0	4.7	4.9
MONUMENT (PST-5SQB)	4.3	5.7	3.7	5.3	5.3	4.9
RAD-TF131	4.3	5.0	4.0	6.3	4.7	4.9
BIRMINGHAM	4.0	4.3	4.7	6.0	5.0	4.8
JT 268	4.3	5.0	4.3	5.7	4.7	4.8
NAI-FQZ-17	3.7	5.3	4.0	6.3	4.7	4.8
PADRE 2	4.0	5.3	4.3	5.7	4.7	4.8
PST-5GQ	4.0	4.7	3.3	6.7	5.3	4.8

TABLE 19. SEEDLING VIGOR RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

SEEDLING VIGOR RATINGS 1-9; 9=MAXIMUM VIGOR 2/						
NAME	CT1	IN1	KY1	NE1	UT1	MEAN
PST-5MCMO	4.3	4.3	4.0	6.3	5.0	4.8
SE5STAR	4.3	6.0	3.7	5.0	5.0	4.8
DRAGSTER	3.7	5.0	3.7	6.3	5.3	4.8
PPG-TF 238	4.0	4.0	4.3	6.3	5.3	4.8
SETF104	4.7	4.3	4.3	5.3	5.3	4.8
COL-TF-148	4.0	5.7	3.3	6.3	4.3	4.7
COPIOUS TF	4.3	4.7	4.0	5.7	5.0	4.7
DLFPS-321/3703	3.7	5.3	3.7	6.3	4.7	4.7
OG-WALK	3.7	6.0	3.3	6.0	4.7	4.7
SETFM2	3.3	5.7	4.0	6.0	4.7	4.7
3B2	4.3	4.7	4.0	6.3	4.3	4.7
DLFPS-321/3702	3.3	4.3	4.3	6.3	5.3	4.7
DLFPS-321/3705	4.0	5.0	4.3	5.3	5.0	4.7
DLFPS-321/3708	3.7	5.0	4.0	5.7	5.3	4.7
RAPTOR III	3.3	5.3	4.0	6.0	5.0	4.7
SE53D2	4.0	5.0	4.0	6.3	4.3	4.7
BY-TF-169	4.3	4.3	3.3	6.7	4.7	4.7
LBF	4.0	4.7	4.3	5.7	4.7	4.7
PPG-TF 315	4.7	5.0	3.3	5.7	4.7	4.7
3N1	4.0	5.0	3.7	6.0	4.7	4.7
BANDIT	3.7	4.0	3.7	7.0	5.0	4.7
BULLSEYE	4.3	4.7	4.0	6.3	4.0	4.7
DLFPS-321/3679	4.0	4.7	4.3	5.3	5.0	4.7
DLFPS-TF/3553	4.0	4.3	4.3	5.7	5.0	4.7
PST-5TRN	4.0	4.3	3.7	6.3	5.0	4.7
DEGAS (LTP-TF-111)	4.0	6.0	3.3	5.0	4.7	4.6
A-TF31	4.0	5.0	3.7	6.0	4.3	4.6
AST8118LM	4.3	4.7	3.3	6.3	4.3	4.6
BAR TF 134	3.0	6.3	3.0	6.0	4.7	4.6
DLFPS-321/3701	5.0	3.7	3.3	6.0	5.0	4.6
JT 233	4.3	5.3	3.3	5.7	4.3	4.6
FIREHAWK SLT	3.7	4.7	3.3	6.0	5.0	4.5
GO-AOMK	3.7	5.3	3.3	5.7	4.7	4.5
DLFPS-321/3699	4.0	4.0	4.0	5.7	4.7	4.5
DLFPS-321/3707	3.7	5.3	3.7	5.3	4.3	4.5
PST-5MINK	4.7	5.0	2.7	5.7	4.3	4.5
OKEEFE (LTP-TF-122)	3.7	5.0	3.3	5.7	4.3	4.4
PALOMAR	4.0	4.7	4.0	5.3	4.0	4.4
GRAND PRIX (FC15-01P)	3.7	5.0	3.0	6.0	4.0	4.3
LSD VALUE	1.4	1.4	1.0	1.1	1.1	0.5
C.V. (%)	20.2	17.1	14.8	11.6	13.7	15.4

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 20. SPRING DENSITY RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	MS1	NC1	OK1	TN1	MEAN
RH1	7.0	5.7	6.7	8.0	6.8
NAI-3N2	6.7	6.3	6.3	8.0	6.8
DLFPS-321/3699	6.7	6.0	6.3	7.7	6.7
BIRMINGHAM	6.0	6.7	6.7	7.0	6.6
BULLSEYE LTZ	6.3	5.0	7.0	8.0	6.6
PPG-TF 306	6.3	6.0	6.3	7.7	6.6
RDC	6.7	5.3	6.3	8.0	6.6
PPG-TF 231	7.0	4.7	6.7	7.7	6.5
RHF	7.0	4.7	6.7	7.7	6.5
DRAGSTER	6.3	5.7	6.3	7.7	6.5
NAI-ROS4	6.7	5.3	6.3	7.7	6.5
PPG-TF 244	7.0	5.7	6.0	7.3	6.5
BY-TF-169	6.3	5.0	6.7	7.7	6.4
DEGAS (LTP-TF-111)	6.7	4.7	6.7	7.7	6.4
GO-RH20	6.0	5.7	6.3	7.7	6.4
GRANDE 3	6.7	5.0	6.3	7.7	6.4
PPG-TF 308	6.7	4.3	6.7	8.0	6.4
PPG-TF 337	7.0	4.3	6.7	7.7	6.4
ZRC1	6.7	5.0	6.3	7.7	6.4
SESCR1	6.7	5.3	5.7	7.7	6.3
ATF2116	6.7	5.3	6.0	7.3	6.3
PPG-TF 255	6.7	4.3	6.3	8.0	6.3
PPG-TF 267	6.0	5.3	6.0	8.0	6.3
PPG-TF 254	6.7	4.7	6.0	7.7	6.3
DLFPS-321/3703	6.3	5.7	5.3	7.7	6.3
GO-AOMK	6.0	4.3	6.3	8.3	6.3
K18-NSE	7.0	4.7	5.3	8.0	6.3
PADRE 2	6.7	5.0	6.0	7.3	6.3
PPG-TF 312	6.7	4.7	5.7	8.0	6.3
PPG-TF 336	6.7	4.0	6.3	8.0	6.3
PPG-TF 338	7.0	4.0	6.0	8.0	6.3
PST-5GLBS	7.0	4.3	6.7	7.0	6.3
K18-ROE	6.3	5.3	6.0	7.3	6.3
DLFPS-321/3695	6.7	4.7	6.0	7.3	6.2
DLFPS-321/3701	6.7	5.0	5.7	7.3	6.2
ESTRENA	6.7	4.3	5.7	8.0	6.2
NAI-ST5	6.7	4.7	6.3	7.0	6.2
PPG-TF 305	7.0	4.0	6.0	7.7	6.2
PPG-TF 316	7.0	3.7	6.3	7.7	6.2
MONUMENT (PST-5SQB)	6.7	4.7	6.3	7.0	6.2
RAD-TF105	7.0	4.0	6.0	7.7	6.2
TF445	6.7	4.7	6.0	7.3	6.2
TF456	6.7	4.3	6.0	7.7	6.2
BGR-TF3	6.3	5.0	6.0	7.3	6.2
DLFPS-321/3679	6.3	4.3	6.7	7.3	6.2
DLFPS-321/3693	7.0	3.7	6.0	8.0	6.2

TABLE 20. SPRING DENSITY RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

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

NAME	MS1	NC1	OK1	TN1	MEAN
DLFPS-321/3694	6.7	4.3	6.3	7.3	6.2
NATURALLY GREEN	5.7	5.3	6.3	7.3	6.2
PPG-TF 315	7.0	3.7	6.0	8.0	6.2
PPG-TF 318	6.7	4.3	6.3	7.3	6.2
RC4	7.0	3.7	6.0	8.0	6.2
TD2	7.0	5.0	5.3	7.3	6.2
JT 268	6.7	4.3	6.7	6.7	6.1
PPG-TF 262	6.7	4.3	5.7	7.7	6.1
PPG-TF 320	6.7	3.7	6.3	7.7	6.1
RAPTOR III	6.3	3.7	6.7	7.7	6.1
RHL2	6.7	4.0	6.0	7.7	6.1
AH2	6.3	5.0	5.0	8.0	6.1
ATF1768	6.3	4.3	6.3	7.3	6.1
BONFIRE (JS DTT)	7.0	4.3	5.7	7.3	6.1
DLFPS-321/3706	7.0	3.7	6.0	7.7	6.1
DLFPS-TF/3553	6.0	3.7	6.7	8.0	6.1
JT 233	6.3	4.3	6.0	7.7	6.1
JT 517	6.3	3.7	6.3	8.0	6.1
PARAMOUNT	6.7	4.3	6.0	7.3	6.1
SETFM3	6.0	4.3	6.3	7.7	6.1
TMT1	7.0	4.3	5.3	7.7	6.1
BAR 9FE MAS	6.0	4.7	5.7	7.7	6.0
LBF	5.7	5.0	5.7	7.7	6.0
RAD-TF131	6.7	3.7	6.0	7.7	6.0
AST8118LM	6.0	3.3	6.7	8.0	6.0
BULLSEYE	7.0	3.7	5.7	7.7	6.0
FIREHAWK SLT	6.0	4.0	6.3	7.7	6.0
GRAND PRIX (FC15-01P)	6.0	4.7	6.0	7.3	6.0
K18-RS6	6.7	4.3	6.0	7.0	6.0
NAI-TUE	6.3	5.0	6.0	6.7	6.0
NT-3	6.3	4.0	6.0	7.7	6.0
PST-5BYOB	6.0	4.0	6.3	7.7	6.0
PST-5TRN	6.3	5.0	5.7	7.0	6.0
RH3	7.0	4.0	6.0	7.0	6.0
RS1	6.7	4.0	6.3	7.0	6.0
SE53D2	6.3	4.3	5.7	7.7	6.0
OG-WALK	6.3	4.0	6.3	7.3	6.0
PPG-TF 323	6.3	4.0	6.3	7.3	6.0
3B2	6.7	4.7	5.3	7.0	5.9
AH1	6.7	4.7	5.0	7.3	5.9
AST8218LM	6.0	5.0	5.0	7.7	5.9
DLFPS-321/3696	6.7	3.7	5.0	8.3	5.9
DLFPS-321/3707	6.7	3.7	6.3	7.0	5.9
DLFPS-321/3708	6.7	3.0	6.0	8.0	5.9
ESCALADE	6.0	4.7	6.3	6.7	5.9
K18-WB1	6.7	3.7	6.0	7.3	5.9
LIFEGUARD	7.0	4.3	5.7	6.7	5.9

TABLE 20. SPRING DENSITY RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

NAME	DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 2/				
	MS1	NC1	OK1	TN1	MEAN
PPG-TF 249	6.7	4.0	6.0	7.0	5.9
PPG-TF 257	6.3	3.7	6.0	7.7	5.9
PPG-TF 313	7.0	3.3	5.7	7.7	5.9
PRO GOLD	6.3	4.0	5.7	7.7	5.9
PST-5MCMO	6.0	4.7	5.7	7.3	5.9
SETF104	6.7	3.7	5.7	7.7	5.9
BANDIT	6.0	4.0	6.3	7.3	5.9
BAR FA 8228	6.0	4.3	6.3	7.0	5.9
BRAVO 2	7.0	4.3	5.3	7.0	5.9
DLFPS-321/3705	6.0	4.3	6.0	7.3	5.9
FAYETTE	6.3	4.3	6.0	7.0	5.9
OKEEFE (LTP-TF-122)	6.3	4.0	6.0	7.3	5.9
PST-5E6	6.3	4.3	5.7	7.3	5.9
SETFM2	6.3	3.7	6.3	7.3	5.9
GLX ACED (PST-5DART)	6.7	3.7	6.0	7.0	5.8
5LSS	6.7	4.0	5.3	7.3	5.8
BAR-FA8230	6.3	4.0	6.0	7.0	5.8
DLFPS-TF/3552	6.0	4.0	6.0	7.3	5.8
KENTUCKY-31	5.0	6.3	5.7	6.3	5.8
SE5STAR	6.3	4.3	6.3	6.3	5.8
RAD-TF 115 (TURBO SS)	5.3	3.7	6.3	8.0	5.8
3N1	6.0	4.0	5.7	7.3	5.8
A-TF31	5.7	3.0	6.0	8.3	5.8
BAR TF 134	6.3	3.3	6.0	7.3	5.8
COL-TF-148	6.7	3.7	5.0	7.7	5.8
COPIOUS TF	6.0	3.7	5.3	8.0	5.8
PST-5GQ	6.0	4.3	6.0	6.7	5.8
PST-5MINK	6.0	3.7	5.7	7.7	5.8
PST-5THM	6.3	4.3	5.0	7.3	5.8
MOONDANCE GLX	6.7	4.0	5.7	6.3	5.7
DLFPS-321/3702	6.3	3.7	5.3	7.3	5.7
HEMI	6.0	4.3	5.3	7.0	5.7
TANGO	6.0	3.7	5.7	7.3	5.7
DLFPS-TF/3550	6.0	3.3	5.7	7.3	5.6
PPG-TF 238	6.0	3.7	5.3	7.3	5.6
PST-5DZM	6.3	3.7	5.0	7.3	5.6
NAI-FQZ-17	6.3	3.0	5.7	7.0	5.5
PALOMAR	6.3	3.7	6.0	6.0	5.5
PST-5DC24	6.0	3.0	5.3	7.7	5.5
LSD VALUE	0.8	1.9	1.5	1.1	0.7
C.V. (%)	7.4	27.0	15.8	8.9	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 21. SUMMER DENSITY RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	IN1	OK1	TN1	MEAN
DLFPS-321/3702	7.0	7.3	8.3	7.6
DLFPS-TF/3550	7.0	7.3	7.7	7.3
NAI-TUE	6.7	7.3	8.0	7.3
3B2	7.7	7.0	7.0	7.2
BRAVO 2	7.0	6.7	8.0	7.2
BY-TF-169	7.0	6.7	8.0	7.2
DLFPS-TF/3552	7.0	7.0	7.7	7.2
PRO GOLD	7.0	6.7	8.0	7.2
JT 233	7.0	7.3	7.3	7.2
PPG-TF 262	6.3	6.7	8.7	7.2
PPG-TF 257	6.7	7.0	7.7	7.1
PPG-TF 338	6.0	7.0	8.3	7.1
PST-5BYOB	6.3	6.7	8.3	7.1
RC4	6.3	7.3	7.7	7.1
AH1	6.3	6.3	8.3	7.0
DEGAS (LTP-TF-111)	7.0	6.3	7.7	7.0
DLFPS-321/3703	6.7	7.0	7.3	7.0
DLFPS-321/3708	5.7	7.3	8.0	7.0
JT 517	6.3	6.3	8.3	7.0
K18-WB1	7.0	6.7	7.3	7.0
LBF	7.3	6.0	7.7	7.0
LIFEGUARD	7.0	6.7	7.3	7.0
PADRE 2	6.3	6.7	8.0	7.0
PPG-TF 249	6.7	7.0	7.3	7.0
MONUMENT (PST-5SQB)	7.0	7.0	7.0	7.0
SE5STAR	6.7	6.7	7.7	7.0
TD2	7.0	6.0	8.0	7.0
DLFPS-321/3694	6.7	6.3	7.7	6.9
DLFPS-321/3695	6.7	6.3	7.7	6.9
FAYETTE	7.0	7.0	6.7	6.9
PPG-TF 313	6.7	6.3	7.7	6.9
PPG-TF 323	6.3	6.7	7.7	6.9
PPG-TF 336	6.0	6.7	8.0	6.9
PST-5GLBS	7.0	6.7	7.0	6.9
RAD-TF105	6.7	6.0	8.0	6.9
RAPTOR III	6.3	6.7	7.7	6.9
RH3	6.7	6.3	7.7	6.9
SETF104	7.3	5.7	7.7	6.9
DLFPS-321/3679	6.3	7.0	7.3	6.9
NAI-3N2	6.0	6.0	8.7	6.9
RHL2	6.0	6.3	8.3	6.9
BULLSEYE	5.7	6.3	8.3	6.8
BULLSEYE LTZ	5.3	6.7	8.3	6.8
DLFPS-321/3701	6.7	6.7	7.0	6.8
DLFPS-321/3705	6.0	6.7	7.7	6.8
DRAGSTER	6.0	6.0	8.3	6.8

TABLE 21. SUMMER DENSITY RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

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

NAME	IN1	OK1	TN1	MEAN
GO-AOMK	5.0	7.0	8.3	6.8
K18-RS6	6.7	6.0	7.7	6.8
PPG-TF 231	5.7	6.3	8.3	6.8
PPG-TF 267	6.7	6.0	7.7	6.8
PPG-TF 316	6.0	6.7	7.7	6.8
RH1	6.0	6.0	8.3	6.8
RHF	6.0	6.7	7.7	6.8
BANDIT	7.0	6.3	7.0	6.8
DLFPS-321/3693	5.3	7.0	8.0	6.8
DLFPS-321/3699	6.3	6.3	7.7	6.8
HEMI	6.3	6.3	7.7	6.8
K18-ROE	6.3	6.7	7.3	6.8
PPG-TF 255	6.3	6.0	8.0	6.8
RS1	6.7	6.3	7.3	6.8
AST8218LM	6.3	6.3	7.3	6.7
BGR-TF3	6.7	5.7	7.7	6.7
BIRMINGHAM	5.3	6.7	8.0	6.7
DLFPS-321/3696	5.7	6.3	8.0	6.7
DLFPS-TF/3553	6.0	6.0	8.0	6.7
GLX ACED (PST-5DART)	6.3	6.7	7.0	6.7
GRANDE 3	6.3	6.0	7.7	6.7
K18-NSE	6.3	5.7	8.0	6.7
MOONDANCE GLX	6.3	7.0	6.7	6.7
NATURALLY GREEN	6.3	6.0	7.7	6.7
OKEEFE (LTP-TF-122)	5.7	6.7	7.7	6.7
PARAMOUNT	5.7	6.7	7.7	6.7
PPG-TF 306	5.3	6.7	8.0	6.7
PPG-TF 308	6.7	6.7	6.7	6.7
PST-5DC24	6.3	6.0	7.7	6.7
SESCR1	6.3	5.7	8.0	6.7
SETFM2	7.0	6.0	7.0	6.7
5LSS	6.0	6.0	7.7	6.6
ATF1768	5.3	6.7	7.7	6.6
BAR-FA8230	5.7	6.3	7.7	6.6
COPIOUS TF	6.7	5.3	7.7	6.6
DLFPS-321/3707	6.3	5.7	7.7	6.6
ESTRENA	6.0	5.7	8.0	6.6
FIREHAWK SLT	5.7	6.0	8.0	6.6
GO-RH20	5.3	6.7	7.7	6.6
JT 268	6.7	6.0	7.0	6.6
NAI-ST5	5.7	6.7	7.3	6.6
PPG-TF 244	6.0	6.7	7.0	6.6
PPG-TF 318	5.0	6.7	8.0	6.6
PPG-TF 320	6.0	6.7	7.0	6.6
PST-5DZM	5.7	6.3	7.7	6.6
PST-5TRN	6.0	6.7	7.0	6.6
SETFM3	5.7	6.0	8.0	6.6

TABLE 21. SUMMER DENSITY RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 2/				
NAME	IN1	OK1	TN1	MEAN
ATF2116	6.3	6.0	7.3	6.6
BAR TF 134	6.0	6.3	7.3	6.6
GRAND PRIX (FC15-01P)	6.0	6.3	7.3	6.6
OG-WALK	6.0	6.3	7.3	6.6
PPG-TF 337	5.3	6.3	8.0	6.6
TF445	5.0	6.3	8.3	6.6
PPG-TF 305	5.0	6.7	7.7	6.4
AST8118LM	5.3	6.7	7.3	6.4
BAR FA 8228	6.0	6.0	7.3	6.4
BONFIRE (JS DTT)	6.0	6.3	7.0	6.4
COL-TF-148	5.3	6.3	7.7	6.4
NAI-ROS4	5.3	6.7	7.3	6.4
NT-3	6.3	5.7	7.3	6.4
PPG-TF 254	5.0	7.0	7.3	6.4
PPG-TF 315	4.3	7.0	8.0	6.4
SE53D2	6.0	6.0	7.3	6.4
AH2	6.0	5.7	7.3	6.3
DLFPS-321/3706	6.0	5.7	7.3	6.3
NAI-FQZ-17	6.0	6.0	7.0	6.3
PALOMAR	5.7	6.7	6.7	6.3
PPG-TF 238	4.7	6.7	7.7	6.3
PST-5MINK	5.0	6.0	8.0	6.3
TF456	5.7	6.0	7.3	6.3
ZRC1	5.3	5.7	8.0	6.3
ESCALADE	6.3	5.7	6.7	6.2
PST-5E6	5.7	6.3	6.7	6.2
PST-5THM	5.7	5.7	7.3	6.2
RDC	5.3	5.7	7.7	6.2
TMT1	5.3	5.7	7.7	6.2
PST-5MCMO	5.3	6.0	7.3	6.2
3N1	5.7	6.0	6.7	6.1
PST-5GQ	5.7	6.0	6.7	6.1
BAR 9FE MAS	5.0	6.3	7.0	6.1
PPG-TF 312	5.3	5.7	7.3	6.1
TANGO	5.7	5.3	7.0	6.0
A-TF31	5.0	4.3	8.0	5.8
RAD-TF 115 (TURBO SS)	6.3	3.3	7.7	5.8
RAD-TF131	6.3	3.7	7.0	5.7
KENTUCKY-31	5.3	4.0	6.3	5.2
LSD VALUE	1.4	1.4	1.2	0.8
C.V. (%)	14.3	14.2	10.1	12.7

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

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

TABLE 22. FALL DENSITY RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	MI1	NC1	NE1	OK1	OR1	TN1	UT1	MEAN
PST-5GLBS	7.0	7.3	5.3	7.0	7.0	5.3	7.7	6.7
SESCR1	8.0	7.7	5.0	5.0	7.0	5.7	8.0	6.6
PADRE 2	7.0	6.0	5.0	6.3	7.3	6.3	8.0	6.6
PPG-TF 255	7.7	6.3	5.3	5.0	7.0	6.0	8.7	6.6
BRAVO 2	7.3	6.3	5.3	6.3	7.0	5.3	8.0	6.5
DLFPS-321/3705	8.0	6.3	5.0	6.3	6.7	5.3	8.0	6.5
NAI-ST5	8.0	7.0	5.0	5.3	7.0	5.3	8.0	6.5
PPG-TF 238	8.0	6.3	5.0	5.3	7.0	5.7	8.3	6.5
PST-5MCMO	7.3	7.3	5.3	5.3	7.0	5.7	7.7	6.5
PPG-TF 244	7.7	5.7	5.0	6.3	7.0	5.3	8.3	6.5
PST-5DZM	7.7	6.0	5.3	4.7	7.7	6.0	8.0	6.5
BANDIT	7.3	5.0	5.7	6.0	7.3	6.0	8.0	6.5
PPG-TF 315	7.3	5.7	5.0	5.7	7.0	6.0	8.3	6.4
DLFPS-321/3708	7.0	6.0	5.3	5.7	7.3	5.7	8.0	6.4
LIFEGUARD	7.3	6.3	5.3	5.7	7.0	5.3	8.0	6.4
PPG-TF 316	7.3	6.7	5.3	4.3	7.0	6.0	8.3	6.4
SE53D2	7.0	7.3	5.0	5.7	7.0	5.3	7.7	6.4
RDC	8.0	5.7	5.7	3.7	7.3	6.0	8.3	6.4
GO-AOMK	7.3	5.3	5.0	5.7	7.3	6.0	8.0	6.4
PPG-TF 249	7.3	5.3	5.7	5.3	7.0	5.7	8.3	6.4
3N1	7.7	5.7	5.0	5.0	7.3	5.7	8.0	6.3
DLFPS-TF/3552	7.0	7.0	5.0	4.0	7.3	5.7	8.3	6.3
NAI-FQZ-17	7.7	5.3	5.0	5.7	7.3	5.3	8.0	6.3
TANGO	7.0	6.7	5.0	4.7	7.0	6.0	8.0	6.3
PST-5BYOB	7.0	7.0	5.0	5.7	7.0	5.0	7.3	6.3
ATF2116	7.3	5.3	5.3	6.0	7.3	5.3	7.3	6.3
COPIOUS TF	7.0	5.3	5.3	5.7	7.3	5.3	8.0	6.3
RH1	8.0	6.7	5.3	3.3	7.0	5.7	8.0	6.3
PPG-TF 267	6.7	7.0	5.7	3.3	7.0	5.7	8.3	6.2
PST-5E6	7.3	6.3	5.3	5.0	7.0	5.3	7.3	6.2
TF456	7.7	5.7	5.7	4.0	7.0	5.3	8.3	6.2
BONFIRE (JS DTT)	8.0	6.3	5.3	3.3	7.3	5.3	8.0	6.2
GLX ACED (PST-5DART)	7.0	6.3	5.0	6.0	6.7	5.0	7.7	6.2
MOONDANCE GLX	7.3	6.0	5.0	5.0	7.0	5.7	7.7	6.2
PPG-TF 312	7.7	4.7	5.7	4.0	7.0	6.0	8.7	6.2
PPG-TF 320	7.3	7.7	5.0	3.3	7.0	5.3	8.0	6.2
PST-5THM	7.3	7.0	5.0	4.7	7.0	5.0	7.7	6.2
PST-5TRN	7.3	6.3	5.0	4.7	7.0	5.7	7.7	6.2
K18-RS6	7.3	6.3	5.0	3.3	7.0	6.0	8.3	6.2
NAI-3N2	7.3	4.3	5.0	5.7	7.0	5.7	8.3	6.2
PPG-TF 337	8.0	4.7	5.7	3.3	7.3	6.0	8.3	6.2
RC4	7.7	6.0	5.0	3.7	7.0	5.7	8.3	6.2
RHF	7.7	6.3	5.0	3.7	7.3	5.3	8.0	6.2
TF445	7.7	5.7	5.3	3.3	7.0	5.3	9.0	6.2
COL-TF-148	7.3	5.3	5.3	4.3	7.0	6.0	8.0	6.2
NAI-ROS4	7.3	5.0	5.0	5.3	7.0	5.7	8.0	6.2

TABLE 22. FALL DENSITY RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

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

NAME	MI1	NC1	NE1	OK1	OR1	TN1	UT1	MEAN
TD2	7.3	5.7	6.0	3.3	7.0	6.0	8.0	6.2
3B2	7.3	5.3	5.0	4.3	7.0	5.7	8.3	6.1
AH2	7.3	6.7	5.7	2.3	7.0	6.0	8.0	6.1
DEGAS (LTP-TF-111)	7.3	4.7	5.0	4.0	7.0	6.3	8.7	6.1
DLFPS-TF/3553	7.3	5.3	5.3	3.7	7.3	6.0	8.0	6.1
JT 268	7.3	6.0	5.0	3.7	7.0	5.7	8.3	6.1
NAI-TUE	7.3	5.7	5.0	4.3	6.7	6.0	8.0	6.1
SE5STAR	7.0	5.0	5.3	5.7	7.0	5.0	8.0	6.1
PST-5GQ	7.0	6.0	5.3	5.3	6.7	5.0	7.7	6.1
AH1	7.7	6.3	5.0	2.7	7.0	5.7	8.3	6.1
ATF1768	7.3	5.0	5.0	4.0	7.7	5.7	8.0	6.1
GO-RH20	7.3	6.3	5.0	3.3	6.7	6.0	8.0	6.1
PPG-TF 231	7.7	5.0	5.0	3.3	7.3	5.7	8.7	6.1
SETFM3	7.7	5.7	5.0	4.0	7.0	5.7	7.7	6.1
PPG-TF 318	7.0	6.0	5.3	3.3	7.0	5.3	8.3	6.0
BAR TF 134	7.0	6.0	5.7	3.3	7.0	5.7	7.7	6.0
BAR-FA8230	6.7	5.3	5.0	5.0	7.3	5.3	7.7	6.0
PPG-TF 254	7.3	6.3	5.0	3.0	7.0	6.0	7.7	6.0
PRO GOLD	7.0	6.7	5.3	3.0	7.0	5.7	7.7	6.0
PST-5DC24	7.3	5.0	5.3	3.7	7.0	6.0	8.0	6.0
MONUMENT (PST-5SQB)	7.0	6.3	5.0	4.3	7.0	5.0	7.7	6.0
RS1	8.0	6.0	5.3	2.3	7.0	5.7	8.0	6.0
NT-3	7.7	5.7	5.3	2.0	7.0	6.0	8.3	6.0
AST8218LM	7.0	4.0	5.0	4.7	7.0	6.3	8.0	6.0
BAR 9FE MAS	7.0	5.7	5.0	3.3	7.3	5.7	8.0	6.0
DLFPS-321/3702	7.3	5.3	5.0	3.7	7.0	5.3	8.3	6.0
DLFPS-TF/3550	7.3	6.3	5.0	2.3	7.3	5.3	8.3	6.0
DRAGSTER	7.3	5.3	5.0	2.7	7.3	6.0	8.3	6.0
JT 233	7.3	6.3	5.0	2.0	7.3	6.0	8.0	6.0
K18-ROE	7.3	4.7	5.3	4.7	7.0	5.3	7.7	6.0
K18-WB1	7.7	3.7	5.3	3.3	7.0	6.0	9.0	6.0
PPG-TF 257	7.3	6.0	5.3	2.7	7.0	5.7	8.0	6.0
PPG-TF 305	7.3	5.7	5.3	3.7	7.0	4.7	8.3	6.0
PPG-TF 313	7.0	5.7	5.3	2.7	7.0	5.7	8.7	6.0
RAPTOR III	7.0	6.3	5.0	3.0	7.0	5.7	8.0	6.0
DLFPS-321/3695	7.7	5.0	5.3	2.7	7.0	5.7	8.3	6.0
DLFPS-321/3701	7.3	4.7	5.0	4.0	7.0	5.3	8.3	6.0
PPG-TF 308	7.7	5.3	5.0	3.0	6.7	5.7	8.3	6.0
PPG-TF 338	7.7	5.3	5.7	4.0	7.0	4.0	8.0	6.0
SETFM2	6.7	6.0	5.0	3.0	7.0	6.0	8.0	6.0
AST8118LM	7.3	5.0	5.0	3.0	7.3	6.0	8.0	6.0
BULLSEYE LTZ	7.3	5.0	5.3	3.0	7.0	5.7	8.3	6.0
DLFPS-321/3699	7.3	4.7	5.0	3.0	7.3	6.0	8.3	6.0
K18-NSE	7.7	4.7	5.3	3.7	6.7	5.0	8.7	6.0
PPG-TF 323	7.7	5.0	5.0	3.0	6.7	5.7	8.7	6.0
ESCALADE	7.0	3.7	5.3	4.7	7.0	6.0	7.7	5.9
GRAND PRIX (FC15-01P)	7.0	4.7	5.0	3.7	7.3	5.7	8.0	5.9

TABLE 22. FALL DENSITY RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

NAME	DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY 2/							MEAN
	MI1	NC1	NE1	OK1	OR1	TN1	UT1	
PPG-TF 306	7.7	4.7	5.0	3.3	7.0	5.7	8.0	5.9
RAD-TF105	7.0	5.0	5.3	2.7	7.0	6.3	8.0	5.9
DLFPS-321/3694	7.3	4.7	5.3	3.0	7.0	6.0	8.0	5.9
HEMI	7.3	6.0	5.0	2.0	7.7	5.7	7.7	5.9
ZRC1	7.7	5.3	5.0	2.3	7.3	5.7	8.0	5.9
BGR-TF3	7.7	3.7	5.0	3.7	7.3	5.7	8.0	5.9
DLFPS-321/3706	7.0	3.3	5.0	3.7	7.0	6.0	9.0	5.9
FIREHAWK SLT	7.7	5.3	5.0	2.0	7.3	5.7	8.0	5.9
OKEEFE (LTP-TF-122)	7.7	5.0	5.3	2.7	7.0	5.3	8.0	5.9
RH3	7.0	5.0	5.0	3.3	7.0	5.7	8.0	5.9
TMT1	7.7	4.3	5.3	3.0	7.0	5.7	8.0	5.9
DLFPS-321/3679	7.3	5.3	5.3	3.3	7.3	4.7	7.7	5.9
5LSS	8.0	4.0	5.7	2.3	7.0	5.7	8.0	5.8
BY-TF-169	7.3	5.3	5.0	2.0	7.3	5.3	8.3	5.8
DLFPS-321/3696	7.0	4.3	5.3	2.7	7.0	6.0	8.3	5.8
LBF	7.0	5.0	5.3	2.7	7.0	5.7	8.0	5.8
PARAMOUNT	7.7	4.0	5.3	3.0	7.0	5.0	8.7	5.8
PPG-TF 262	7.3	5.0	5.0	2.3	6.7	6.0	8.3	5.8
FAYETTE	7.3	4.7	5.7	2.7	7.0	5.0	8.0	5.8
NATURALLY GREEN	7.0	5.7	5.0	2.7	7.0	5.3	7.7	5.8
DLFPS-321/3707	7.7	4.3	5.3	2.3	7.3	5.3	8.0	5.8
SETF104	7.3	4.0	5.0	3.0	7.3	5.7	8.0	5.8
DLFPS-321/3703	7.3	5.0	5.0	2.3	7.0	5.3	8.0	5.7
JT 517	6.7	4.7	5.0	2.7	7.3	5.7	8.0	5.7
KENTUCKY-31	6.0	5.3	5.0	5.0	7.0	5.7	6.0	5.7
OG-WALK	7.0	5.0	5.0	3.3	7.0	5.7	7.0	5.7
DLFPS-321/3693	7.0	4.7	5.0	3.0	6.7	5.3	8.0	5.7
PALOMAR	6.7	4.7	5.0	3.0	7.0	6.0	7.3	5.7
ESTRENA	7.0	3.7	5.0	3.0	7.0	6.0	8.0	5.7
GRANDE 3	7.3	4.3	5.0	2.0	7.0	5.7	8.3	5.7
PPG-TF 336	7.3	4.0	5.3	2.3	7.0	5.7	8.0	5.7
A-TF31	7.3	4.0	5.0	2.7	7.0	5.7	7.7	5.6
RHL2	7.3	4.0	5.7	2.0	6.7	5.3	8.3	5.6
BAR FA 8228	7.0	5.0	5.0	3.0	7.3	4.0	7.7	5.6
BIRMINGHAM	7.7	3.7	5.0	2.3	7.0	5.7	7.7	5.6
PST-5MINK	7.3	4.7	5.0	2.3	6.7	5.0	8.0	5.6
BULLSEYE	6.7	3.7	5.0	2.3	7.3	5.3	7.7	5.4
RAD-TF131	7.3	2.7	5.0	2.0	7.7	5.3	8.0	5.4
RAD-TF 115 (TURBO SS)	7.3	2.3	5.3	2.0	7.3	4.7	8.0	5.3
LSD VALUE	0.8	1.5	0.6	1.6	0.6	1.1	0.8	0.4
C.V. (%)	7.0	17.6	7.3	26.4	5.3	12.2	6.1	11.1

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

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

TABLE 23. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/

NAME	CA7	IA1	MO1	NC1	OK1	TN1	MEAN
AH2	81.7	92.0	85.0	95.7	94.7	95.3	90.7
RS1	91.7	87.7	83.3	92.3	95.0	92.7	90.4
RHF	90.0	85.0	81.7	97.0	95.0	93.0	90.3
TD2	90.0	81.7	81.7	97.0	95.0	95.3	90.1
RDC	83.3	92.7	83.3	94.3	90.0	94.7	89.7
BULLSEYE LTZ	81.7	86.7	81.7	97.0	95.0	94.0	89.3
K18-NSE	91.7	84.3	81.7	95.7	88.3	93.7	89.2
BIRMINGHAM	91.7	78.3	81.7	99.0	93.3	90.7	89.1
K18-ROE	90.0	78.3	83.3	94.7	95.0	92.0	88.9
KENTUCKY-31	89.7	72.0	91.7	98.3	91.7	89.3	88.8
DLFPS-321/3702	90.0	83.7	81.7	91.7	91.7	93.3	88.7
PST-5GLBS	94.7	74.0	80.0	94.0	95.0	94.0	88.6
TF445	91.7	76.3	83.3	97.7	88.3	94.3	88.6
BAR FA 8228	91.7	79.0	75.0	95.7	95.0	93.3	88.3
BY-TF-169	86.7	77.7	78.3	97.0	95.0	95.0	88.3
PPG-TF 244	85.0	80.7	81.7	98.3	93.3	89.3	88.1
ESTRENA	90.0	83.3	80.0	96.0	85.0	94.0	88.1
K18-WB1	90.0	76.3	80.0	94.3	95.0	92.3	88.0
DLFPS-321/3694	89.7	80.0	80.0	93.7	91.7	92.0	87.8
NATURALLY GREEN	81.7	86.3	81.7	96.3	93.3	86.7	87.7
RH1	90.0	64.3	86.7	97.7	93.3	94.0	87.7
DLFPS-321/3699	81.7	82.7	80.0	97.7	91.7	92.0	87.6
PPG-TF 318	90.0	81.7	70.0	95.7	95.0	93.3	87.6
AH1	83.3	72.7	88.3	93.7	91.7	95.7	87.6
DLFPS-TF/3550	91.7	77.7	75.0	95.0	91.7	94.3	87.6
RH3	88.3	69.3	83.3	97.7	95.0	91.7	87.6
PPG-TF 231	88.3	74.7	80.0	93.7	95.0	92.7	87.4
DLFPS-321/3705	85.0	82.0	75.0	97.0	93.3	91.7	87.3
PRO GOLD	81.7	81.0	76.7	93.7	95.0	94.7	87.1
BONFIRE (JS DTT)	76.3	78.7	86.7	94.3	93.3	92.7	87.0
PPG-TF 323	85.0	79.0	73.3	97.0	95.0	92.3	86.9
ZRC1	85.0	76.3	81.7	96.3	91.7	90.0	86.8
PPG-TF 312	85.0	78.0	78.3	92.0	93.3	94.0	86.8
OG-WALK	86.7	69.3	83.3	97.0	93.3	90.7	86.7
JT 268	88.3	74.0	86.7	95.7	93.3	82.0	86.7
PPG-TF 338	81.7	82.3	73.3	97.7	91.7	92.0	86.4
DLFPS-TF/3552	85.0	86.3	70.0	95.7	90.0	91.3	86.4
PADRE 2	85.0	70.7	76.7	97.7	95.0	92.7	86.3
PPG-TF 316	85.0	72.7	75.0	95.7	96.0	93.3	86.3
AST8218LM	83.3	87.3	76.7	91.0	88.3	91.0	86.3
ESCALADE	83.3	81.7	73.3	97.7	93.3	88.3	86.3
PPG-TF 262	80.0	81.7	75.0	95.0	93.3	92.3	86.2
FAYETTE	86.7	63.3	83.3	97.0	95.0	91.7	86.2
PPG-TF 313	80.0	79.7	78.3	92.7	91.7	94.3	86.1
DLFPS-321/3706	88.3	68.7	80.0	92.0	95.0	92.7	86.1
PPG-TF 267	85.0	71.3	78.3	96.3	93.3	92.3	86.1
LIFEGUARD	73.3	83.7	81.7	95.0	91.7	91.0	86.1

TABLE 23. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/							
NAME	CA7	IA1	MO1	NC1	OK1	TN1	MEAN
PPG-TF 306	83.3	69.7	76.7	97.0	95.0	94.7	86.1
PPG-TF 305	81.7	78.3	78.3	93.0	93.3	91.3	86.0
BGR-TF3	86.7	84.0	73.3	93.0	91.7	87.0	85.9
OKEEFE (LTP-TF-122)	85.0	76.7	71.7	95.7	91.7	95.0	85.9
HEMI	80.0	70.0	81.7	92.7	96.0	95.0	85.9
DLFPS-321/3696	78.3	76.3	81.7	95.0	90.0	94.0	85.9
BRAVO 2	83.3	70.7	81.7	97.7	90.0	91.7	85.8
PARAMOUNT	86.7	70.7	76.7	95.7	92.3	92.3	85.7
K18-RS6	78.3	69.0	85.0	95.0	93.3	93.7	85.7
DLFPS-321/3703	90.0	63.3	76.7	97.0	91.7	95.3	85.7
JT 233	81.7	69.3	78.3	96.3	95.0	93.0	85.6
SESCR1	85.0	68.3	76.7	98.3	93.3	91.7	85.6
PPG-TF 255	88.0	61.7	85.0	93.7	91.7	93.0	85.5
SETF104	85.0	65.3	83.3	94.3	93.3	91.3	85.4
DLFPS-321/3693	76.7	79.3	75.0	95.7	93.3	92.3	85.4
MONUMENT (PST-5SQB)	83.3	74.0	73.3	96.3	93.3	92.0	85.4
COPIOUS TF	85.0	64.0	80.0	95.0	95.0	93.0	85.3
PST-5BYOB	80.0	71.0	78.3	94.3	93.3	94.7	85.3
PST-5THM	86.7	68.7	76.7	95.7	90.0	93.7	85.2
TMT1	73.3	73.3	83.3	96.3	91.7	93.3	85.2
PALOMAR	85.0	63.7	85.0	96.3	95.0	86.0	85.2
PPG-TF 315	76.7	72.3	81.7	92.0	95.0	93.3	85.2
DLFPS-321/3695	83.0	68.3	73.3	96.3	93.3	96.0	85.1
3B2	86.7	70.0	78.3	96.3	89.3	89.3	85.0
DRAGSTER	85.0	69.0	73.3	96.3	95.0	91.0	84.9
PPG-TF 320	75.0	79.7	75.0	95.7	95.0	88.3	84.8
GRANDE 3	83.3	69.3	76.7	95.7	93.3	90.0	84.7
DLFPS-TF/3553	85.0	76.3	71.7	95.7	91.7	87.3	84.6
PPG-TF 336	73.3	75.0	76.7	95.0	93.3	94.0	84.6
BAR TF 134	75.0	81.0	71.7	93.7	93.3	92.3	84.5
AST8118LM	85.0	70.3	71.7	94.3	95.0	90.3	84.4
TF456	85.0	60.3	85.0	97.7	91.7	86.3	84.3
GO-RH20	86.7	55.3	83.3	97.0	91.7	91.7	84.3
JT 517	86.7	63.3	76.7	94.3	93.3	91.0	84.2
LBF	83.3	64.3	80.0	94.3	93.3	90.0	84.2
NAI-TUE	93.3	55.3	78.3	97.7	93.3	87.3	84.2
SETFM2	83.3	65.7	78.3	91.3	95.0	91.3	84.2
5LSS	83.3	78.7	70.0	95.7	85.0	92.0	84.1
DLFPS-321/3708	91.7	69.0	63.3	93.0	93.3	94.0	84.1
RAPTOR III	90.0	56.7	78.3	93.3	91.7	94.3	84.1
DEGAS (LTP-TF-111)	88.3	65.0	70.0	97.7	90.0	90.0	83.5
NAI-3N2	71.7	63.7	80.0	98.3	93.3	93.7	83.4
BULLSEYE	80.0	56.0	80.0	95.0	95.0	93.7	83.3
PPG-TF 257	85.0	66.0	63.3	94.0	95.7	94.7	83.1
BAR 9FE MAS	90.0	64.0	71.7	93.7	90.0	89.3	83.1
DLFPS-321/3707	71.7	72.0	78.3	92.0	93.3	91.0	83.1
COL-TF-148	66.7	67.7	80.0	95.0	93.3	94.7	82.9

TABLE 23. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/							
NAME	CA7	IA1	MO1	NC1	OK1	TN1	MEAN
SE53D2	78.3	70.7	71.7	95.0	91.7	90.0	82.9
GRAND PRIX (FC15-01P)	85.0	57.0	78.3	95.0	93.3	88.7	82.9
A-TF31	80.0	69.3	76.7	88.7	93.3	88.3	82.7
BAR-FA8230	85.0	50.0	81.7	96.3	91.7	91.3	82.7
PPG-TF 337	88.3	55.7	70.0	94.3	95.0	92.7	82.7
DLFPS-321/3701	80.0	57.7	76.7	97.7	93.3	90.0	82.6
ATF1768	83.3	54.3	78.3	97.0	91.7	90.3	82.5
SETFM3	80.0	70.0	71.7	93.3	93.3	86.7	82.5
NAI-ROS4	88.3	51.3	76.7	94.3	94.3	90.0	82.5
BANDIT	88.3	73.0	83.3	65.0	93.3	91.7	82.4
GLX ACED (PST-5DART)	86.7	48.0	76.7	96.3	93.3	93.7	82.4
RHL2	73.3	64.3	76.7	96.3	90.0	94.0	82.4
DLFPS-321/3679	81.7	65.7	71.7	94.7	88.3	92.3	82.4
SE5STAR	86.7	57.3	75.0	96.3	93.3	85.7	82.4
ATF2116	76.7	67.3	70.0	97.7	91.7	89.7	82.2
NAI-FQZ-17	85.0	62.3	73.3	92.7	90.0	88.3	81.9
PPG-TF 238	75.0	69.0	71.7	95.7	86.7	93.3	81.9
PPG-TF 249	60.0	77.7	75.0	94.3	95.0	89.0	81.8
FIREHAWK SLT	76.7	56.7	76.7	93.7	93.3	93.3	81.7
MOONDANCE GLX	83.3	53.3	81.7	95.7	93.3	83.0	81.7
PST-5GQ	88.3	60.0	70.0	94.0	90.0	87.7	81.7
PST-5MCMO	88.3	51.7	71.7	95.7	88.3	94.0	81.6
RAD-TF105	81.7	59.0	75.0	93.3	90.0	89.3	81.4
PPG-TF 254	88.3	61.0	53.0	96.3	95.0	94.0	81.3
NT-3	73.3	69.3	65.0	95.7	93.3	90.7	81.2
GO-AOMK	83.3	55.3	63.3	97.0	95.0	92.0	81.0
NAI-ST5	73.3	63.3	76.7	97.0	91.7	81.7	80.6
RC4	88.3	56.3	68.3	91.0	86.7	92.7	80.6
PST-5TRN	65.0	58.0	78.3	96.3	93.3	92.3	80.6
3N1	73.3	58.3	68.3	96.3	95.0	91.3	80.4
PST-5MINK	76.7	63.0	63.3	95.7	91.7	91.3	80.3
RAD-TF131	75.0	62.3	73.3	88.7	90.0	92.0	80.2
RAD-TF 115 (TURBO SS)	76.7	57.0	75.0	87.0	93.3	92.0	80.2
PST-5DC24	80.0	40.3	73.3	92.7	95.0	94.0	79.2
PST-5DZM	81.7	51.3	70.0	94.7	88.3	88.7	79.1
PPG-TF 308	76.7	40.7	71.7	95.7	95.7	91.0	78.6
PST-5E6	73.3	48.3	76.7	93.3	85.0	93.3	78.3
TANGO	83.3	55.3	76.7	65.7	93.3	92.7	77.8
LSD VALUE	19.0	26.0	14.5	10.9	6.3	6.9	6.4
C.V. (%)	14.2	23.3	11.7	7.1	4.2	4.7	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 24. PERCENT LIVING GROUND COVER (SUMMER) RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS 2/				
NAME	IA1	OK1	TN1	MEAN
SE53D2	98.3	75.0	97.7	90.3
DLFPS-321/3705	99.0	73.3	97.7	90.0
PPG-TF 244	99.0	73.3	96.0	89.4
K18-RS6	98.7	73.3	96.0	89.3
PPG-TF 249	98.0	73.3	96.7	89.3
BAR TF 134	98.7	73.3	95.0	89.0
PPG-TF 315	98.7	73.3	94.7	88.9
BAR-FA8230	97.3	73.3	96.0	88.9
LIFEGUARD	98.3	73.3	95.0	88.9
RC4	97.0	73.3	96.3	88.9
DLFPS-321/3708	98.7	73.3	94.0	88.7
DLFPS-321/3695	96.7	73.3	95.7	88.6
5LSS	98.3	70.0	96.7	88.3
PPG-TF 320	98.3	70.0	96.7	88.3
PST-5GLBS	98.7	70.0	96.3	88.3
PST-5TRN	96.3	76.7	92.0	88.3
MOONDANCE GLX	98.0	70.0	96.7	88.2
PPG-TF 255	98.7	70.0	95.7	88.1
BULLSEYE LTZ	98.3	70.0	96.0	88.1
GLX ACED (PST-5DART)	98.0	70.0	96.3	88.1
TF445	97.7	70.0	96.3	88.0
K18-WB1	99.0	70.0	94.7	87.9
RH1	98.0	70.0	95.3	87.8
AH1	99.0	66.7	97.0	87.6
BY-TF-169	97.7	70.0	95.0	87.6
DLFPS-321/3702	98.7	66.7	97.3	87.6
ZRC1	98.7	66.7	97.3	87.6
DLFPS-321/3693	99.0	68.3	95.3	87.6
SESCR1	98.3	70.0	94.0	87.4
JT 233	98.3	70.0	93.7	87.3
DLFPS-TF/3550	97.0	68.3	96.3	87.2
BONFIRE (JS DTT)	99.0	66.7	95.7	87.1
K18-NSE	98.7	66.7	96.0	87.1
RAPTOR III	98.3	66.7	96.3	87.1
AST8218LM	97.7	70.0	93.3	87.0
DLFPS-TF/3552	99.0	66.7	95.3	87.0
PRO GOLD	99.0	66.7	95.3	87.0
MONUMENT (PST-5SQB)	99.0	66.7	95.3	87.0
ATF2116	98.0	66.7	96.0	86.9
BIRMINGHAM	98.3	66.7	95.7	86.9
DLFPS-321/3699	97.3	66.7	96.7	86.9
DLFPS-321/3707	98.3	66.7	95.7	86.9
JT 517	95.3	70.0	95.3	86.9
PPG-TF 267	99.0	66.7	94.7	86.8
OG-WALK	96.7	68.3	95.3	86.8
PPG-TF 323	99.0	70.0	91.3	86.8
3N1	98.7	70.0	91.3	86.7

TABLE 24. PERCENT LIVING GROUND COVER (SUMMER) RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS 2/				
NAME	IA1	OK1	TN1	MEAN
K18-ROE	98.0	66.7	95.3	86.7
PST-5THM	96.3	70.0	93.7	86.7
TD2	97.0	68.3	94.3	86.6
DLFPS-321/3696	97.3	66.7	95.3	86.4
TMT1	97.3	66.7	95.0	86.3
SETFM2	97.7	66.7	94.3	86.2
PPG-TF 238	98.0	66.7	93.7	86.1
BRAVO 2	97.0	71.7	89.3	86.0
DLFPS-321/3679	97.7	66.7	93.7	86.0
PPG-TF 318	98.7	65.0	94.3	86.0
PST-5E6	95.0	66.7	96.3	86.0
NAI-TUE	97.0	70.0	90.7	85.9
SETFM3	99.0	63.3	95.3	85.9
PADRE 2	98.0	68.3	91.3	85.9
TF456	98.3	66.7	92.3	85.8
PPG-TF 336	97.3	63.3	96.3	85.7
PST-5MCMO	98.0	63.3	95.3	85.6
PPG-TF 306	98.3	63.3	94.7	85.4
COL-TF-148	98.7	61.7	95.7	85.3
DLFPS-321/3701	99.0	63.3	93.7	85.3
PST-5BYOB	98.3	63.3	94.3	85.3
GRAND PRIX (FC15-01P)	96.7	63.3	95.7	85.2
PPG-TF 257	98.7	61.7	95.3	85.2
PPG-TF 254	95.3	68.3	92.0	85.2
AH2	98.7	60.0	96.7	85.1
3B2	91.3	73.3	90.7	85.1
PPG-TF 231	98.7	60.0	96.3	85.0
PPG-TF 305	98.3	66.7	89.7	84.9
DEGAS (LTP-TF-111)	98.3	60.0	96.3	84.9
GO-AOMK	96.7	63.3	94.0	84.7
PST-5DZM	95.7	63.3	94.7	84.6
PPG-TF 338	98.7	60.0	94.7	84.4
ESCALADE	98.0	60.0	95.3	84.4
NAI-ROS4	95.3	63.3	94.3	84.3
PARAMOUNT	98.7	60.0	94.3	84.3
AST8118LM	98.0	66.7	88.0	84.2
DLFPS-321/3703	98.7	60.0	94.0	84.2
BGR-TF3	97.7	60.0	94.3	84.0
PPG-TF 313	98.3	58.3	95.3	84.0
PPG-TF 337	98.7	56.7	96.7	84.0
RS1	98.7	60.0	93.3	84.0
SE5STAR	97.7	63.3	91.0	84.0
KENTUCKY-31	96.7	70.0	85.0	83.9
BANDIT	95.0	60.0	96.0	83.7
PST-5DC24	93.0	63.3	94.7	83.7
ESTRENA	98.7	58.3	93.3	83.4
NAI-ST5	97.7	60.0	92.3	83.3

TABLE 24. PERCENT LIVING GROUND COVER (SUMMER) RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS 2/				
NAME	IA1	OK1	TN1	MEAN
LBF	97.7	60.0	92.0	83.2
ATF1768	97.3	58.3	94.0	83.2
DLFPS-321/3706	97.7	56.7	95.0	83.1
PPG-TF 316	99.0	56.7	93.7	83.1
PST-5MINK	98.3	55.0	95.7	83.0
PALOMAR	96.0	60.0	92.7	82.9
OKEEFE (LTP-TF-122)	98.3	55.0	95.3	82.9
RH3	95.7	60.0	92.7	82.8
GO-RH20	97.0	56.7	94.7	82.8
RDC	98.7	53.3	96.0	82.7
TANGO	96.7	58.3	93.0	82.7
BAR FA 8228	97.3	56.7	93.7	82.6
BAR 9FE MAS	96.0	63.3	87.7	82.3
DLFPS-321/3694	97.7	53.3	96.0	82.3
DRAGSTER	97.3	53.3	96.0	82.2
PPG-TF 262	98.3	53.3	95.0	82.2
PPG-TF 308	96.3	60.0	89.7	82.0
NAI-3N2	97.3	51.7	96.0	81.7
PST-5GQ	96.3	56.7	90.7	81.2
RAD-TF105	96.3	50.0	96.7	81.0
RHF	98.7	48.3	96.0	81.0
NAI-FQZ-17	98.0	56.7	87.0	80.6
NATURALLY GREEN	97.3	53.3	91.0	80.6
COPIOUS TF	98.3	50.0	93.0	80.4
FAYETTE	97.3	60.0	83.7	80.3
FIREHAWK SLT	98.7	46.7	94.3	79.9
GRANDE 3	96.0	50.0	93.7	79.9
DLFPS-TF/3553	98.3	46.7	94.0	79.7
HEMI	96.3	46.7	95.3	79.4
JT 268	98.3	53.3	86.3	79.3
PPG-TF 312	98.3	43.3	94.7	78.8
NT-3	98.7	41.7	95.0	78.4
BULLSEYE	97.7	41.7	94.3	77.9
RHL2	98.0	38.3	96.7	77.7
A-TF31	98.7	38.3	94.0	77.0
SETF104	98.0	35.0	92.0	75.0
RAD-TF131	96.7	8.3	94.7	66.6
RAD-TF 115 (TURBO SS)	93.7	5.0	95.0	64.6
LSD VALUE	3.1	22.6	6.8	7.9
C.V. (%)	1.9	22.7	4.5	10.1

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

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

TABLE 25. PERCENT LIVING GROUND COVER (FALL) RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/				
NAME	IA1	PA2	TN1	MEAN
BULLSEYE LTZ	98.3	99.0	99.0	98.8
FIREHAWK SLT	98.0	99.0	99.0	98.7
PADRE 2	98.3	98.7	99.0	98.7
RH1	98.3	98.7	99.0	98.7
BAR TF 134	98.7	98.7	98.3	98.6
DLFPS-321/3693	97.7	99.0	99.0	98.6
K18-WB1	98.0	98.7	99.0	98.6
PPG-TF 255	98.3	98.7	98.7	98.6
PPG-TF 313	97.7	99.0	99.0	98.6
PPG-TF 336	98.0	99.0	98.7	98.6
JT 233	97.7	98.7	99.0	98.4
K18-RS6	98.0	98.7	98.7	98.4
ZRC1	97.7	98.7	99.0	98.4
PPG-TF 312	98.3	98.3	98.7	98.4
3B2	97.0	99.0	99.0	98.3
AH1	97.7	99.0	98.3	98.3
DLFPS-321/3694	97.7	98.7	98.7	98.3
PPG-TF 306	98.0	98.7	98.3	98.3
PPG-TF 315	98.0	98.3	98.7	98.3
PST-5E6	97.3	98.7	99.0	98.3
AH2	97.7	98.3	98.7	98.2
DLFPS-321/3699	97.3	98.7	98.7	98.2
DLFPS-321/3701	97.3	98.7	98.7	98.2
ESCALADE	97.0	99.0	98.7	98.2
HEMI	96.7	99.0	99.0	98.2
K18-NSE	97.7	99.0	98.0	98.2
PPG-TF 249	97.3	98.7	98.7	98.2
PPG-TF 254	97.7	98.0	99.0	98.2
PPG-TF 267	97.0	99.0	98.7	98.2
PPG-TF 320	97.0	99.0	98.7	98.2
PPG-TF 337	97.7	99.0	98.0	98.2
RDC	97.0	98.7	99.0	98.2
RH3	97.0	98.7	99.0	98.2
RHL2	97.7	98.7	98.3	98.2
PPG-TF 257	97.3	98.3	99.0	98.2
3N1	97.0	98.7	98.7	98.1
DLFPS-321/3703	96.7	99.0	98.7	98.1
DRAGSTER	97.0	98.7	98.7	98.1
ATF1768	97.3	98.3	98.7	98.1
COL-TF-148	97.3	98.0	99.0	98.1
PPG-TF 316	97.0	99.0	98.3	98.1
PPG-TF 338	97.0	98.3	99.0	98.1
5LSS	97.3	99.0	97.7	98.0
BIRMINGHAM	96.7	98.3	99.0	98.0
DEGAS (LTP-TF-111)	97.3	98.7	98.0	98.0
DLFPS-321/3706	96.3	99.0	98.7	98.0
DLFPS-TF/3553	97.0	98.3	98.7	98.0

TABLE 25. PERCENT LIVING GROUND COVER (FALL) RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/				
NAME	IA1	PA2	TN1	MEAN
GO-RH20	96.3	99.0	98.7	98.0
GRANDE 3	97.7	99.0	97.3	98.0
NAI-ST5	97.3	99.0	97.7	98.0
PPG-TF 231	97.3	98.3	98.3	98.0
PPG-TF 318	98.7	98.7	96.7	98.0
PST-5BYOB	97.0	98.3	98.7	98.0
PST-5GLBS	97.3	98.3	98.3	98.0
RS1	97.0	98.3	98.7	98.0
TD2	97.7	98.7	97.7	98.0
TMT1	96.0	99.0	99.0	98.0
BONFIRE (JS DTT)	97.7	98.0	98.0	97.9
NAI-3N2	97.0	98.7	98.0	97.9
PPG-TF 244	98.7	98.7	96.3	97.9
PRO GOLD	95.7	99.0	99.0	97.9
DLFPS-TF/3552	97.3	98.0	98.3	97.9
FAYETTE	97.0	98.3	98.3	97.9
LIFEGUARD	96.3	98.3	99.0	97.9
PPG-TF 262	96.3	99.0	98.3	97.9
RC4	96.3	98.3	99.0	97.9
AST8218LM	97.0	97.7	98.7	97.8
DLFPS-321/3702	96.7	98.7	98.0	97.8
A-TF31	96.7	98.3	98.3	97.8
DLFPS-321/3696	96.0	98.3	99.0	97.8
OG-WALK	96.3	98.3	98.7	97.8
PARAMOUNT	95.3	99.0	99.0	97.8
PST-5DZM	96.0	99.0	98.3	97.8
RAPTOR III	95.3	99.0	99.0	97.8
TF445	97.3	99.0	97.0	97.8
PST-5TRN	96.3	98.3	98.3	97.7
RHF	96.0	98.3	98.7	97.7
SETFM3	96.3	98.7	98.0	97.7
BANDIT	95.0	99.0	98.7	97.6
ESTRENA	95.7	98.7	98.3	97.6
PST-5THM	96.7	98.7	97.3	97.6
RAD-TF105	95.3	98.7	98.7	97.6
PST-5DC24	96.3	98.3	98.0	97.6
DLFPS-321/3705	96.0	98.7	97.7	97.4
NT-3	97.0	98.7	96.7	97.4
PST-5MCMO	95.0	98.7	98.7	97.4
AST8118LM	97.0	98.3	97.0	97.4
GRAND PRIX (FC15-01P)	95.3	98.0	99.0	97.4
OKEEFE (LTP-TF-122)	97.0	98.0	97.3	97.4
BAR 9FE MAS	95.0	98.3	98.7	97.3
K18-ROE	97.0	98.0	97.0	97.3
BAR-FA8230	95.0	98.7	98.0	97.2
TANGO	94.3	98.7	98.7	97.2
DLFPS-321/3707	94.7	98.0	98.7	97.1

TABLE 25. PERCENT LIVING GROUND COVER (FALL) RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/				
NAME	IA1	PA2	TN1	MEAN
MONUMENT (PST-5SQB)	97.0	98.3	96.0	97.1
BGR-TF3	94.0	98.7	98.3	97.0
BRAVO 2	94.0	98.0	99.0	97.0
DLFPS-321/3708	93.7	98.3	99.0	97.0
GLX ACED (PST-5DART)	96.3	97.7	97.0	97.0
NAI-FQZ-17	95.0	98.7	97.3	97.0
PALOMAR	93.7	98.3	99.0	97.0
SETF104	95.7	98.3	97.0	97.0
LBF	94.7	98.7	97.3	96.9
SE53D2	98.0	98.7	94.0	96.9
COPIOUS TF	94.3	98.0	98.3	96.9
PST-5GQ	94.3	98.0	98.3	96.9
PST-5MINK	94.3	99.0	97.3	96.9
KENTUCKY-31	94.0	98.7	97.0	96.6
PPG-TF 323	97.3	98.7	93.7	96.6
JT 268	96.3	99.0	94.3	96.6
RAD-TF131	94.3	99.0	96.3	96.6
DLFPS-321/3695	92.7	98.0	98.7	96.4
RAD-TF 115 (TURBO SS)	92.0	98.7	98.7	96.4
NATURALLY GREEN	93.3	99.0	96.7	96.3
NAI-TUE	91.7	98.3	98.7	96.2
BULLSEYE	91.7	99.0	97.7	96.1
PPG-TF 238	96.0	99.0	92.7	95.9
DLFPS-TF/3550	91.7	98.0	97.7	95.8
PPG-TF 308	91.3	98.7	97.3	95.8
TF456	97.7	98.7	90.7	95.7
SESCR1	90.3	97.7	98.7	95.6
JT 517	89.7	99.0	97.7	95.4
ATF2116	96.3	98.7	91.3	95.4
NAI-ROS4	88.3	99.0	99.0	95.4
DLFPS-321/3679	89.3	99.0	97.7	95.3
SETFM2	96.3	99.0	90.7	95.3
GO-AOMK	88.3	98.3	98.7	95.1
MOONDANCE GLX	96.3	98.7	88.3	94.4
BY-TF-169	86.3	98.3	98.3	94.3
SE5STAR	87.0	98.7	92.7	92.8
BAR FA 8228	94.3	99.0	83.0	92.1
PPG-TF 305	96.7	99.0	80.0	91.9
LSD VALUE	6.0	1.0	7.8	3.3
C.V. (%)	3.9	0.6	5.0	3.7

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 26.

WINTER COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	MS1
GRANDE 3	6.7
3B2	6.0
3N1	6.0
A-TF31	6.0
AH1	6.0
AH2	6.0
BANDIT	6.0
BAR 9FE MAS	6.0
BAR TF 134	6.0
BAR-FA8230	6.0
BONFIRE (JS DTT)	6.0
BULLSEYE	6.0
BULLSEYE LTZ	6.0
BY-TF-169	6.0
COL-TF-148	6.0
DEGAS (LTP-TF-111)	6.0
DLFPS-321/3679	6.0
DLFPS-321/3693	6.0
DLFPS-321/3694	6.0
DLFPS-321/3695	6.0
DLFPS-321/3696	6.0
DLFPS-321/3699	6.0
DLFPS-321/3701	6.0
DLFPS-321/3702	6.0
DLFPS-321/3703	6.0
DLFPS-321/3705	6.0
DLFPS-321/3706	6.0
DLFPS-321/3707	6.0
DLFPS-TF/3550	6.0
DLFPS-TF/3552	6.0
DLFPS-TF/3553	6.0
DRAGSTER	6.0
ESCALADE	6.0
ESTRENA	6.0
FAYETTE	6.0
FIREHAWK SLT	6.0
GLX ACED (PST-5DART)	6.0
GRAND PRIX (FC15-01P)	6.0
JT 268	6.0
JT 517	6.0
K18-NSE	6.0
K18-ROE	6.0
K18-WB1	6.0
LIFEGUARD	6.0
MOONDANCE GLX	6.0
NAI-3N2	6.0
NAI-ROS4	6.0

TABLE 26.
(CONT'D)

WINTER COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	MS1
NAI-ST5	6.0
NATURALLY GREEN	6.0
OKEEFE (LTP-TF-122)	6.0
PADRE 2	6.0
PALOMAR	6.0
PARAMOUNT	6.0
PPG-TF 231	6.0
PPG-TF 238	6.0
PPG-TF 244	6.0
PPG-TF 249	6.0
PPG-TF 257	6.0
PPG-TF 262	6.0
PPG-TF 267	6.0
PPG-TF 306	6.0
PPG-TF 308	6.0
PPG-TF 312	6.0
PPG-TF 313	6.0
PPG-TF 315	6.0
PPG-TF 318	6.0
PPG-TF 320	6.0
PPG-TF 323	6.0
PPG-TF 336	6.0
PPG-TF 337	6.0
PPG-TF 338	6.0
PRO GOLD	6.0
PST-5BYOB	6.0
PST-5E6	6.0
PST-5GLBS	6.0
PST-5GQ	6.0
PST-5MCMO	6.0
PST-5MINK	6.0
MONUMENT (PST-5SQB)	6.0
PST-5THM	6.0
PST-5TRN	6.0
RAPTOR III	6.0
RC4	6.0
RH1	6.0
RHF	6.0
RHL2	6.0
RS1	6.0
SE53D2	6.0
SESCR1	6.0
SETF104	6.0
SETFM3	6.0
TD2	6.0
TF445	6.0
TF456	6.0

TABLE 26.
(CONT'D)

WINTER COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	MS1
TMT1	6.0
ZRC1	6.0
5LSS	5.7
AST8118LM	5.7
AST8218LM	5.7
ATF1768	5.7
ATF2116	5.7
BAR FA 8228	5.7
BGR-TF3	5.7
BIRMINGHAM	5.7
COPIOUS TF	5.7
GO-RH20	5.7
HEMI	5.7
JT 233	5.7
K18-RS6	5.7
KENTUCKY-31	5.7
LBF	5.7
OG-WALK	5.7
PPG-TF 254	5.7
PPG-TF 255	5.7
PPG-TF 305	5.7
PPG-TF 316	5.7
PST-5DC24	5.7
SE5STAR	5.7
SETFM2	5.7
TANGO	5.7
GO-AOMK	5.3
NAI-FQZ-17	5.3
NAI-TUE	5.3
NT-3	5.3
PST-5DZM	5.3
RAD-TF105	5.3
RDC	5.3
RH3	5.3
RAD-TF 115 (TURBO SS)	5.3
BRAVO 2	5.0
DLFPS-321/3708	5.0
RAD-TF131	5.0
LSD VALUE	0.5
C.V. (%)	5.0

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

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

TABLE 27. BROWN PATCH (WARM TEMPERATURE) RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE 2/

NAME	DE1	IN1	KS1	OK1	MEAN
3B2	6.7	8.3	8.7	7.3	7.8
SESCR1	7.3	8.0	8.7	6.7	7.7
RC4	7.3	7.3	8.3	7.3	7.6
PADRE 2	7.0	7.7	9.0	6.3	7.5
PPG-TF 308	6.3	8.0	9.0	6.7	7.5
DLFPS-TF/3552	6.7	7.0	8.7	7.3	7.4
JT 233	7.7	7.0	7.7	7.3	7.4
MOONDANCE GLX	7.7	6.7	8.0	7.3	7.4
GO-RH20	7.7	6.3	8.7	7.0	7.4
K18-NSE	7.3	6.3	9.0	7.0	7.4
PPG-TF 262	7.3	7.3	9.0	6.0	7.4
PST-5THM	6.3	7.3	9.0	7.0	7.4
DEGAS (LTP-TF-111)	6.7	7.0	9.0	6.7	7.3
DLFPS-321/3705	6.7	7.0	9.0	6.7	7.3
NAI-TUE	5.7	8.0	8.7	7.0	7.3
BAR TF 134	8.0	6.0	8.7	6.7	7.3
MONUMENT (PST-5SQB)	5.7	8.3	9.0	6.3	7.3
TD2	7.0	6.3	8.7	7.3	7.3
TF456	7.0	6.3	8.7	7.3	7.3
DRAGSTER	7.0	6.7	8.7	6.7	7.3
ATF2116	6.3	7.0	9.0	6.7	7.3
BY-TF-169	6.3	6.7	9.0	7.0	7.3
DLFPS-321/3694	7.3	7.3	8.3	6.0	7.3
PST-5MCMO	6.0	7.3	9.0	6.7	7.3
TF445	7.3	5.7	8.7	7.3	7.3
AH1	5.7	6.3	9.0	7.7	7.2
DLFPS-321/3699	6.0	8.0	8.3	6.3	7.2
HEMI	7.0	7.3	8.7	5.7	7.2
PPG-TF 320	6.7	6.7	8.7	6.7	7.2
PRO GOLD	5.3	7.7	9.0	6.7	7.2
RH3	7.3	6.7	8.3	6.3	7.2
DLFPS-321/3701	7.0	6.0	8.7	7.0	7.2
GLX ACED (PST-5DART)	6.3	7.3	8.7	6.3	7.2
K18-ROE	6.3	7.0	8.3	7.0	7.2
PPG-TF 306	7.3	5.3	9.0	7.0	7.2
PST-5DC24	6.0	7.3	8.3	7.0	7.2
BAR-FA8230	6.7	6.7	9.0	6.0	7.1
PPG-TF 255	6.7	7.0	8.7	6.0	7.1
PPG-TF 257	7.0	6.7	8.0	6.7	7.1
DLFPS-321/3707	6.3	7.0	8.3	6.7	7.1
K18-RS6	6.3	6.7	9.0	6.3	7.1
NAI-ROS4	7.0	7.0	7.3	7.0	7.1
PST-5BYOB	7.0	6.3	8.3	6.7	7.1
RHF	6.0	6.3	9.0	7.0	7.1
BULLSEYE LTZ	7.3	6.0	8.5	6.3	7.0
DLFPS-TF/3550	7.0	6.7	7.7	6.7	7.0

TABLE 27. BROWN PATCH (WARM TEMPERATURE) RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE 2/

NAME	DE1	IN1	KS1	OK1	MEAN
5LSS	6.3	6.3	7.7	7.7	7.0
ATF1768	5.7	7.0	8.3	7.0	7.0
JT 268	7.0	7.7	7.0	6.3	7.0
JT 517	7.0	7.0	8.0	6.0	7.0
NAI-3N2	6.3	7.0	8.7	6.0	7.0
PPG-TF 336	7.3	5.3	8.7	6.7	7.0
PPG-TF 337	7.0	6.7	8.0	6.3	7.0
OKEEFE (LTP-TF-122)	7.3	5.3	9.0	6.3	7.0
ZRC1	7.3	4.3	9.0	7.3	7.0
PPG-TF 267	5.7	7.3	8.5	6.3	7.0
AST8218LM	5.7	7.3	8.0	6.7	6.9
PARAMOUNT	6.7	5.3	9.0	6.7	6.9
PPG-TF 313	6.0	6.7	8.7	6.3	6.9
PPG-TF 338	5.7	6.7	8.3	7.0	6.9
TMT1	6.3	5.7	9.0	6.7	6.9
DLFPS-321/3708	6.0	6.3	9.0	6.3	6.9
PPG-TF 323	5.0	6.3	9.0	7.3	6.9
RH1	6.0	8.0	7.3	6.3	6.9
AH2	7.0	5.7	9.0	5.7	6.8
COL-TF-148	5.7	6.7	9.0	6.0	6.8
ESTRENA	5.7	7.0	8.7	6.0	6.8
NT-3	7.0	6.7	9.0	4.7	6.8
PST-5TRN	6.0	5.7	9.0	6.7	6.8
NAI-ST5	5.3	6.7	9.0	6.3	6.8
PPG-TF 238	7.0	4.3	8.3	7.7	6.8
RAPTOR III	5.3	7.7	8.7	5.7	6.8
RHL2	6.3	6.3	8.7	6.0	6.8
PST-5GQ	4.7	6.7	9.0	6.7	6.8
BONFIRE (JS DTT)	4.3	7.3	8.7	6.7	6.8
DLFPS-321/3695	7.0	6.0	8.0	6.0	6.8
PPG-TF 231	7.0	5.3	8.0	6.7	6.8
PPG-TF 318	6.3	6.7	8.0	6.0	6.8
PST-5GLBS	4.7	8.0	7.0	7.3	6.8
SE53D2	6.7	6.0	7.3	7.0	6.8
DLFPS-321/3693	7.3	6.0	7.3	6.3	6.8
DLFPS-321/3696	5.0	7.3	8.3	6.3	6.8
PPG-TF 254	6.7	4.3	8.7	7.3	6.8
PPG-TF 316	7.0	5.3	8.3	6.3	6.8
BRAVO 2	4.7	7.0	8.0	7.0	6.7
DLFPS-321/3706	6.3	7.0	7.7	5.7	6.7
PPG-TF 244	4.7	6.7	8.3	7.0	6.7
GRANDE 3	7.3	6.0	8.0	5.3	6.7
PPG-TF 305	7.3	5.7	6.3	7.3	6.7
DLFPS-321/3703	5.7	7.0	7.0	6.7	6.6
ESCALADE	3.7	7.7	9.0	6.0	6.6
PPG-TF 249	6.3	5.7	7.7	6.7	6.6
SETF104	5.7	7.3	8.3	5.0	6.6

TABLE 27. BROWN PATCH (WARM TEMPERATURE) RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE 2/					
NAME	DE1	IN1	KS1	OK1	MEAN
3N1	6.3	5.3	8.3	6.3	6.6
BANDIT	5.3	7.3	7.3	6.3	6.6
DLFPS-321/3679	5.3	7.0	6.7	7.3	6.6
PST-5DZM	6.3	8.0	5.3	6.7	6.6
DLFPS-TF/3553	6.0	6.7	7.7	5.7	6.5
K18-WB1	6.3	6.7	7.0	6.0	6.5
KENTUCKY-31	6.0	5.3	9.0	5.7	6.5
OG-WALK	5.3	7.7	6.3	6.3	6.4
RDC	6.7	4.3	8.7	6.0	6.4
TANGO	5.3	7.0	8.0	5.3	6.4
PPG-TF 312	6.7	6.0	7.0	5.7	6.3
RAD-TF105	6.0	7.0	6.7	5.7	6.3
SETFM2	6.7	7.0	7.7	4.0	6.3
DLFPS-321/3702	5.3	7.3	6.3	6.3	6.3
LIFEGUARD	6.3	6.7	6.0	6.3	6.3
NATURALLY GREEN	6.0	6.0	8.7	4.7	6.3
PPG-TF 315	5.7	4.0	8.3	7.3	6.3
RS1	5.3	5.7	9.0	5.3	6.3
SE5STAR	4.7	7.3	7.0	6.3	6.3
RAD-TF131	5.7	7.0	8.7	3.7	6.3
FAYETTE	5.0	5.7	8.0	6.3	6.3
PALOMAR	6.3	6.3	6.3	6.0	6.3
PST-5E6	6.0	5.0	7.3	6.7	6.3
BAR 9FE MAS	6.0	5.0	7.7	6.0	6.2
FIREHAWK SLT	6.0	4.3	8.3	6.0	6.2
RAD-TF 115 (TURBO SS)	6.3	7.3	9.0	2.0	6.2
LBF	4.7	6.3	7.7	5.3	6.0
BAR FA 8228	4.0	6.3	8.3	5.3	6.0
BULLSEYE	5.7	5.0	8.0	5.0	5.9
A-TF31	5.7	6.0	6.3	5.3	5.8
GRAND PRIX (FC15-01P)	5.3	5.7	6.3	6.0	5.8
NAI-FQZ-17	4.0	6.3	7.7	5.3	5.8
PST-5MINK	5.3	5.3	6.3	6.3	5.8
AST8118LM	6.0	4.3	6.7	6.0	5.8
COPIOUS TF	5.7	7.3	6.0	4.0	5.8
BIRMINGHAM	5.0	6.0	5.0	6.7	5.7
GO-AOMK	4.3	5.7	6.0	6.3	5.6
BGR-TF3	3.7	6.7	5.3	5.3	5.3
SETFM3	5.0	5.0	4.3	6.3	5.2
LSD VALUE	2.2	2.1	2.5	1.6	1.1
C.V. (%)	22.6	19.6	19.0	15.6	19.4

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 28.

PYTHIUM BLIGHT RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

PYTHIUM BLIGHT RATINGS 1-9; 9=NO DISEASE 2/

NAME	CA7
FAYETTE	8.3
NT-3	8.3
PPG-TF 255	8.3
PPG-TF 257	8.3
LBF	8.0
ATF2116	7.7
BY-TF-169	7.7
DLFPS-321/3696	7.7
DLFPS-TF/3553	7.7
GLX ACED (PST-5DART)	7.7
K18-ROE	7.7
PPG-TF 254	7.7
PPG-TF 305	7.7
PPG-TF 315	7.7
3N1	7.3
BGR-TF3	7.3
BRAVO 2	7.3
DLFPS-321/3693	7.3
JT 517	7.3
PPG-TF 249	7.3
RH1	7.3
TMT1	7.3
AH1	7.0
DLFPS-321/3706	7.0
JT 233	7.0
NAI-ST5	7.0
PALOMAR	7.0
PPG-TF 244	7.0
PPG-TF 306	7.0
PPG-TF 313	7.0
PST-5MCMO	7.0
RHF	7.0
COL-TF-148	6.7
COPIOUS TF	6.7
DEGAS (LTP-TF-111)	6.7
DLFPS-321/3699	6.7
DLFPS-321/3703	6.7
DRAGSTER	6.7
GRAND PRIX (FC15-01P)	6.7
GRANDE 3	6.7
K18-RS6	6.7
NAI-ROS4	6.7
PPG-TF 308	6.7
PST-5BYOB	6.7
PST-5E6	6.7
MONUMENT (PST-5SQB)	6.7

TABLE 28.
(CONT'D)

PYTHIUM BLIGHT RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

PYTHIUM BLIGHT RATINGS 1-9; 9=NO DISEASE 2/

NAME	CA7
PST-5TRN	6.7
RDC	6.7
RHL2	6.7
TF456	6.7
DLFPS-321/3679	6.3
DLFPS-321/3701	6.3
ESCALADE	6.3
HEMI	6.3
OKEEFE (LTP-TF-122)	6.3
PADRE 2	6.3
PPG-TF 312	6.3
PPG-TF 316	6.3
PPG-TF 323	6.3
PST-5GLBS	6.3
PST-5GQ	6.3
PST-5THM	6.3
RH3	6.3
TD2	6.3
AST8118LM	6.0
AST8218LM	6.0
BAR FA 8228	6.0
DLFPS-321/3695	6.0
DLFPS-321/3705	6.0
FIREHAWK SLT	6.0
LIFEGUARD	6.0
PPG-TF 318	6.0
PPG-TF 337	6.0
PRO GOLD	6.0
SESCR1	6.0
SETFM3	6.0
3B2	5.7
5LSS	5.7
DLFPS-321/3702	5.7
ESTRENA	5.7
GO-RH20	5.7
NATURALLY GREEN	5.7
PPG-TF 231	5.7
RAD-TF105	5.7
TANGO	5.7
TF445	5.7
ZRC1	5.7
BAR 9FE MAS	5.3
BAR TF 134	5.3
BAR-FA8230	5.3
BULLSEYE	5.3
DLFPS-TF/3552	5.3
K18-WB1	5.3

TABLE 28.
(CONT'D)

PYTHIUM BLIGHT RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

PYTHIUM BLIGHT RATINGS 1-9; 9=NO DISEASE 2/

NAME	CA7
MOONDANCE GLX	5.3
NAI-FQZ-17	5.3
PARAMOUNT	5.3
PPG-TF 338	5.3
SE5STAR	5.3
A-TF31	5.0
BONFIRE (JS DTT)	5.0
DLFPS-321/3694	5.0
NAI-TUE	5.0
PPG-TF 267	5.0
RC4	5.0
SETFM2	5.0
RAD-TF 115 (TURBO SS)	5.0
ATF1768	4.7
BULLSEYE LTZ	4.7
DLFPS-321/3708	4.7
DLFPS-TF/3550	4.7
NAI-3N2	4.7
PPG-TF 238	4.7
PPG-TF 262	4.7
PST-5MINK	4.7
RAD-TF131	4.7
RAPTOR III	4.7
RS1	4.7
SETF104	4.7
K18-NSE	4.3
PPG-TF 320	4.3
PPG-TF 336	4.3
BIRMINGHAM	4.0
GO-AOMK	4.0
JT 268	4.0
OG-WALK	4.0
PST-5DC24	4.0
KENTUCKY-31	3.7
PST-5DZM	3.7
SE53D2	3.7
AH2	3.3
BANDIT	3.3
DLFPS-321/3707	2.7
LSD VALUE	3.8
C.V. (%)	39.3

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 29. BROWN PATCH (COOL TEMPERATURE) RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE 2/

NAME	MO1	NC1	MEAN
PADRE 2	9.0	7.7	8.3
PPG-TF 308	9.0	7.7	8.3
DLFPS-321/3705	8.7	7.3	8.0
DLFPS-TF/3552	8.0	8.0	8.0
KENTUCKY-31	8.0	8.0	8.0
AH2	8.0	7.7	7.8
OKEEFE (LTP-TF-122)	9.0	6.7	7.8
RDC	8.3	7.3	7.8
BAR TF 134	7.7	7.7	7.7
K18-RS6	8.3	7.0	7.7
LIFEGUARD	7.7	7.7	7.7
PPG-TF 338	8.3	7.0	7.7
PRO GOLD	7.7	7.7	7.7
PPG-TF 244	8.0	7.3	7.7
PST-5TRN	8.0	7.3	7.7
ZRC1	8.7	6.7	7.7
BY-TF-169	7.3	7.7	7.5
PPG-TF 255	7.3	7.7	7.5
PPG-TF 267	7.3	7.7	7.5
PST-5GLBS	8.0	7.0	7.5
MONUMENT (PST-5SQB)	7.3	7.7	7.5
RC4	7.3	7.7	7.5
AH1	7.0	7.7	7.3
K18-NSE	8.3	6.3	7.3
PPG-TF 318	7.0	7.7	7.3
PST-5THM	7.0	7.7	7.3
RS1	6.7	8.0	7.3
JT 268	7.3	7.3	7.3
PPG-TF 238	7.3	7.3	7.3
3N1	6.7	7.7	7.2
DLFPS-321/3695	7.7	6.7	7.2
DLFPS-321/3702	7.7	6.7	7.2
GO-RH20	7.7	6.7	7.2
GRANDE 3	7.7	6.7	7.2
MOONDANCE GLX	8.3	6.0	7.2
PPG-TF 262	7.7	6.7	7.2
RH1	6.7	7.7	7.2
SE53D2	7.7	6.7	7.2
BONFIRE (JS DTT)	7.0	7.3	7.2
ESTRENA	7.3	7.0	7.2
FAYETTE	7.0	7.3	7.2
PPG-TF 323	7.0	7.3	7.2
RAPTOR III	7.3	7.0	7.2
SESCR1	6.3	8.0	7.2
3B2	7.7	6.3	7.0
BULLSEYE	6.3	7.7	7.0

TABLE 29. BROWN PATCH (COOL TEMPERATURE) RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE 2/

NAME	MO1	NC1	MEAN
COL-TF-148	7.7	6.3	7.0
DLFPS-321/3701	8.3	5.7	7.0
DLFPS-TF/3550	7.7	6.3	7.0
DLFPS-TF/3553	7.7	6.3	7.0
FIREHAWK SLT	7.3	6.7	7.0
GLX ACED (PST-5DART)	6.7	7.3	7.0
NAI-ST5	6.7	7.3	7.0
NAI-TUE	7.3	6.7	7.0
PPG-TF 231	7.7	6.3	7.0
PPG-TF 312	7.7	6.3	7.0
PPG-TF 320	6.3	7.7	7.0
PPG-TF 337	6.0	8.0	7.0
PST-5GQ	7.0	7.0	7.0
PST-5MINK	7.3	6.7	7.0
RHF	7.3	6.7	7.0
ATF2116	7.0	6.7	6.8
BAR 9FE MAS	7.0	6.7	6.8
BULLSEYE LTZ	6.7	7.0	6.8
DLFPS-321/3699	7.7	6.0	6.8
DLFPS-321/3707	7.7	6.0	6.8
JT 233	6.0	7.7	6.8
JT 517	7.0	6.7	6.8
NAI-3N2	7.0	6.7	6.8
PPG-TF 254	7.0	6.7	6.8
PPG-TF 257	7.0	6.7	6.8
PPG-TF 316	6.7	7.0	6.8
PST-5E6	7.0	6.7	6.8
SETFM3	6.7	7.0	6.8
DEGAS (LTP-TF-111)	7.3	6.3	6.8
DLFPS-321/3708	7.3	6.3	6.8
PST-5BYOB	6.3	7.3	6.8
PST-5MCMO	6.3	7.3	6.8
TD2	7.3	6.3	6.8
DLFPS-321/3679	6.7	6.7	6.7
DLFPS-321/3694	6.7	6.7	6.7
PPG-TF 249	6.7	6.7	6.7
PPG-TF 305	6.7	6.7	6.7
RHL2	7.7	5.7	6.7
SETFM2	6.7	6.7	6.7
BAR FA 8228	5.3	8.0	6.7
NATURALLY GREEN	6.0	7.3	6.7
PPG-TF 306	7.0	6.3	6.7
PPG-TF 313	6.3	7.0	6.7
ATF1768	7.0	6.0	6.5
DLFPS-321/3693	7.7	5.3	6.5
DLFPS-321/3696	6.3	6.7	6.5
DRAGSTER	7.3	5.7	6.5

TABLE 29. BROWN PATCH (COOL TEMPERATURE) RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE 2/				
NAME	MO1	NC1	MEAN	
GO-AOMK	7.0	6.0	6.5	
LBF	7.7	5.3	6.5	
PARAMOUNT	7.7	5.3	6.5	
PPG-TF 336	6.3	6.7	6.5	
PST-5DZM	6.7	6.3	6.5	
RH3	7.0	6.0	6.5	
TF445	6.3	6.7	6.5	
TMT1	8.7	4.3	6.5	
BANDIT	6.0	6.7	6.3	
BAR-FA8230	6.0	6.7	6.3	
BRAVO 2	6.7	6.0	6.3	
K18-WB1	6.7	6.0	6.3	
PALOMAR	6.7	6.0	6.3	
AST8218LM	6.3	6.3	6.3	
DLFPS-321/3703	7.3	5.3	6.3	
TANGO	5.3	7.3	6.3	
HEMI	7.0	5.3	6.2	
K18-ROE	6.0	6.3	6.2	
NAI-ROS4	6.3	6.0	6.2	
NT-3	7.3	5.0	6.2	
OG-WALK	5.3	7.0	6.2	
RAD-TF105	6.3	6.0	6.2	
TF456	6.3	6.0	6.2	
AST8118LM	5.7	6.3	6.0	
PST-5DC24	5.0	7.0	6.0	
SETF104	6.7	5.3	6.0	
A-TF31	5.7	6.0	5.8	
COPIOUS TF	5.3	6.3	5.8	
GRAND PRIX (FC15-01P)	5.3	6.3	5.8	
SE5STAR	6.3	5.3	5.8	
BIRMINGHAM	6.7	4.7	5.7	
DLFPS-321/3706	7.0	4.3	5.7	
NAI-FQZ-17	5.0	6.3	5.7	
PPG-TF 315	6.3	5.0	5.7	
RAD-TF 115 (TURBO SS)	6.0	5.3	5.7	
5LSS	6.3	4.7	5.5	
ESCALADE	6.7	4.3	5.5	
RAD-TF131	5.7	4.0	4.8	
BGR-TF3	5.3	4.3	4.8	
LSD VALUE	1.9	2.1	1.4	
C.V. (%)	17.0	19.6	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 30.

GRAY LEAF SPOT RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	NJ1	NJ2	MEAN
AH2	9.0	7.3	8.2
BAR 9FE MAS	9.0	7.3	8.2
BONFIRE (JS DTT)	9.0	7.3	8.2
DLFPS-321/3699	9.0	7.3	8.2
AH1	9.0	7.0	8.0
COL-TF-148	9.0	7.0	8.0
GLX ACED (PST-5DART)	9.0	7.0	8.0
PPG-TF 255	9.0	7.0	8.0
DEGAS (LTP-TF-111)	9.0	6.7	7.8
DRAGSTER	9.0	6.7	7.8
GRANDE 3	9.0	6.7	7.8
PPG-TF 315	9.0	6.7	7.8
PPG-TF 323	9.0	6.7	7.8
PST-5THM	9.0	6.7	7.8
BAR TF 134	9.0	6.3	7.7
DLFPS-321/3696	9.0	6.3	7.7
NAI-3N2	9.0	6.3	7.7
OKEEFE (LTP-TF-122)	9.0	6.3	7.7
PPG-TF 244	9.0	6.3	7.7
PPG-TF 254	9.0	6.3	7.7
PPG-TF 338	9.0	6.3	7.7
PST-5MCMO	9.0	6.3	7.7
PST-5TRN	9.0	6.3	7.7
TMT1	9.0	6.3	7.7
AST8218LM	9.0	6.0	7.5
COPIOUS TF	9.0	6.0	7.5
DLFPS-321/3693	8.7	6.3	7.5
DLFPS-321/3708	9.0	6.0	7.5
JT 233	9.0	6.0	7.5
K18-RS6	9.0	6.0	7.5
MOONDANCE GLX	9.0	6.0	7.5
NAI-ST5	9.0	6.0	7.5
NAI-TUE	9.0	6.0	7.5
PPG-TF 306	9.0	6.0	7.5
PPG-TF 308	9.0	6.0	7.5
A-TF31	9.0	5.7	7.3
AST8118LM	9.0	5.7	7.3
BULLSEYE LTZ	9.0	5.7	7.3
DLFPS-321/3705	9.0	5.7	7.3
DLFPS-321/3707	9.0	5.7	7.3
DLFPS-TF/3552	9.0	5.7	7.3
JT 268	9.0	5.7	7.3
PPG-TF 257	9.0	5.7	7.3
PPG-TF 316	9.0	5.7	7.3
PRO GOLD	9.0	5.7	7.3
PST-5GLBS	9.0	5.7	7.3

TABLE 30.
(CONT'D)

GRAY LEAF SPOT RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	NJ1	NJ2	MEAN
RDC	9.0	5.7	7.3
RH1	9.0	5.7	7.3
RHF	9.0	5.7	7.3
TF445	9.0	5.7	7.3
5LSS	9.0	5.3	7.2
DLFPS-321/3695	9.0	5.3	7.2
DLFPS-TF/3550	9.0	5.3	7.2
K18-NSE	9.0	5.3	7.2
PPG-TF 249	9.0	5.3	7.2
PPG-TF 337	9.0	5.3	7.2
PST-5BYOB	9.0	5.3	7.2
TD2	8.7	5.7	7.2
TF456	9.0	5.3	7.2
ATF1768	9.0	5.0	7.0
BAR-FA8230	8.7	5.3	7.0
BIRMINGHAM	9.0	5.0	7.0
BY-TF-169	9.0	5.0	7.0
DLFPS-TF/3553	9.0	5.0	7.0
GO-AOMK	9.0	5.0	7.0
GO-RH20	9.0	5.0	7.0
LIFEGUARD	9.0	5.0	7.0
NAI-ROS4	9.0	5.0	7.0
PPG-TF 238	9.0	5.0	7.0
PPG-TF 312	9.0	5.0	7.0
PPG-TF 313	8.7	5.3	7.0
PPG-TF 318	9.0	5.0	7.0
PPG-TF 320	9.0	5.0	7.0
PPG-TF 336	9.0	5.0	7.0
PST-5MINK	8.7	5.3	7.0
MONUMENT (PST-5SQB)	9.0	5.0	7.0
RC4	9.0	5.0	7.0
RH3	9.0	5.0	7.0
SE53D2	9.0	5.0	7.0
ZRC1	9.0	5.0	7.0
3N1	9.0	4.7	6.8
DLFPS-321/3701	9.0	4.7	6.8
PARAMOUNT	9.0	4.7	6.8
PPG-TF 231	9.0	4.7	6.8
PST-5DC24	9.0	4.7	6.8
PST-5GQ	9.0	4.7	6.8
RHL2	9.0	4.7	6.8
RS1	8.3	5.3	6.8
SE5STAR	9.0	4.7	6.8
SETFM3	9.0	4.7	6.8
3B2	9.0	4.3	6.7
BULLSEYE	9.0	4.3	6.7
DLFPS-321/3679	9.0	4.3	6.7

TABLE 30.
(CONT'D)

GRAY LEAF SPOT RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	NJ1	NJ2	MEAN
DLFPS-321/3703	9.0	4.3	6.7
DLFPS-321/3706	9.0	4.3	6.7
K18-ROE	9.0	4.3	6.7
K18-WB1	9.0	4.3	6.7
PALOMAR	9.0	4.3	6.7
PPG-TF 267	9.0	4.3	6.7
PPG-TF 305	9.0	4.3	6.7
PST-5E6	9.0	4.3	6.7
RAPTOR III	9.0	4.3	6.7
BANDIT	9.0	4.0	6.5
BGR-TF3	9.0	4.0	6.5
DLFPS-321/3694	9.0	4.0	6.5
DLFPS-321/3702	9.0	4.0	6.5
FAYETTE	9.0	4.0	6.5
HEMI	9.0	4.0	6.5
PADRE 2	9.0	4.0	6.5
RAD-TF105	9.0	4.0	6.5
SESCR1	9.0	4.0	6.5
SETFM2	9.0	4.0	6.5
TANGO	9.0	4.0	6.5
ATF2116	9.0	3.7	6.3
BRAVO 2	9.0	3.7	6.3
LBF	9.0	3.7	6.3
NAI-FQZ-17	9.0	3.7	6.3
NT-3	9.0	3.7	6.3
OG-WALK	9.0	3.7	6.3
PPG-TF 262	9.0	3.7	6.3
FIREHAWK SLT	9.0	3.3	6.2
JT 517	9.0	3.3	6.2
PST-5DZM	8.7	3.7	6.2
GRAND PRIX (FC15-01P)	9.0	3.0	6.0
NATURALLY GREEN	9.0	3.0	6.0
BAR FA 8228	9.0	2.7	5.8
ESCALADE	8.7	3.0	5.8
ESTRENA	9.0	2.3	5.7
SETF104	8.3	3.0	5.7
KENTUCKY-31	9.0	2.0	5.5
RAD-TF 115 (TURBO SS)	6.0	3.0	4.5
RAD-TF131	6.7	2.0	4.3
LSD VALUE	0.5	1.5	0.8
C.V. (%)	3.3	18.5	9.9

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 31.

FALL COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	NE1	OR1	UT1	MEAN
OKEEFE (LTP-TF-122)	6.3	3.7	3.7	4.6
PPG-TF 308	6.0	4.0	3.3	4.4
COL-TF-148	6.3	4.0	3.0	4.4
DLFPS-TF/3553	6.0	3.7	3.7	4.4
BGR-TF3	6.7	3.3	3.0	4.3
PPG-TF 244	6.0	3.7	3.3	4.3
PPG-TF 313	6.0	3.7	3.3	4.3
SESCR1	6.0	3.7	3.3	4.3
BULLSEYE	6.0	3.3	3.3	4.2
DEGAS (LTP-TF-111)	6.0	3.7	3.0	4.2
DLFPS-321/3679	6.3	3.0	3.3	4.2
DLFPS-321/3702	6.0	3.7	3.0	4.2
DLFPS-321/3707	6.0	3.3	3.3	4.2
DLFPS-TF/3552	6.0	3.7	3.0	4.2
DRAGSTER	6.0	3.7	3.0	4.2
FAYETTE	6.0	3.7	3.0	4.2
GO-AOMK	6.0	3.3	3.3	4.2
GRANDE 3	6.0	3.7	3.0	4.2
JT 517	6.0	3.3	3.3	4.2
MOONDANCE GLX	6.0	3.7	3.0	4.2
NAI-ST5	6.0	3.3	3.3	4.2
NATURALLY GREEN	6.0	3.7	3.0	4.2
PPG-TF 249	6.0	3.7	3.0	4.2
PPG-TF 254	6.0	3.7	3.0	4.2
PPG-TF 257	6.0	3.7	3.0	4.2
RH3	6.0	3.7	3.0	4.2
TMT1	6.0	3.3	3.3	4.2
3B2	6.0	3.3	3.0	4.1
3N1	6.0	3.3	3.0	4.1
5LSS	6.0	3.3	3.0	4.1
AH1	6.0	3.3	3.0	4.1
AH2	6.0	3.3	3.0	4.1
AST8118LM	6.0	3.0	3.3	4.1
AST8218LM	6.0	3.0	3.3	4.1
BANDIT	6.0	3.3	3.0	4.1
BAR FA 8228	6.0	3.3	3.0	4.1
BAR TF 134	6.0	3.0	3.3	4.1
BONFIRE (JS DTT)	6.0	3.0	3.3	4.1
BULLSEYE LTZ	6.0	3.3	3.0	4.1
BY-TF-169	6.0	3.3	3.0	4.1
DLFPS-321/3701	6.0	3.3	3.0	4.1
DLFPS-321/3705	6.0	3.3	3.0	4.1
DLFPS-321/3706	6.0	3.3	3.0	4.1
DLFPS-321/3708	6.0	3.3	3.0	4.1
FIREHAWK SLT	6.0	3.3	3.0	4.1
GO-RH20	6.0	3.3	3.0	4.1

TABLE 31.
(CONT'D)

FALL COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	NE1	OR1	UT1	MEAN
JT 233	6.0	3.0	3.3	4.1
K18-NSE	6.0	3.3	3.0	4.1
K18-ROE	6.0	3.3	3.0	4.1
K18-WB1	6.0	3.0	3.3	4.1
NAI-3N2	6.0	3.3	3.0	4.1
NAI-ROS4	6.0	3.3	3.0	4.1
OG-WALK	6.0	3.3	3.0	4.1
PADRE 2	6.0	3.3	3.0	4.1
PARAMOUNT	6.0	3.3	3.0	4.1
PPG-TF 262	6.0	3.3	3.0	4.1
PPG-TF 305	6.0	3.0	3.3	4.1
PPG-TF 306	6.0	3.3	3.0	4.1
PPG-TF 312	6.0	3.0	3.3	4.1
PPG-TF 320	6.0	3.3	3.0	4.1
PPG-TF 337	6.0	3.3	3.0	4.1
PPG-TF 338	6.0	3.3	3.0	4.1
PRO GOLD	6.0	3.3	3.0	4.1
PST-5TRN	6.0	3.3	3.0	4.1
RDC	6.0	3.3	3.0	4.1
RH1	6.0	3.0	3.3	4.1
SETFM2	6.0	3.0	3.3	4.1
TF445	6.0	3.3	3.0	4.1
ZRC1	6.0	3.3	3.0	4.1
LBF	6.3	3.0	3.0	4.1
RHL2	6.3	3.0	3.0	4.1
TD2	6.3	3.0	3.0	4.1
ATF1768	6.0	3.0	3.0	4.0
ATF2116	6.0	3.0	3.0	4.0
BAR 9FE MAS	6.0	3.0	3.0	4.0
BAR-FA8230	6.0	3.0	3.0	4.0
BIRMINGHAM	6.0	3.0	3.0	4.0
BRAVO 2	6.0	3.0	3.0	4.0
COPIOUS TF	6.0	3.0	3.0	4.0
DLFPS-321/3693	6.0	3.0	3.0	4.0
DLFPS-321/3694	6.0	3.0	3.0	4.0
DLFPS-321/3695	6.0	3.0	3.0	4.0
DLFPS-321/3696	6.0	3.0	3.0	4.0
DLFPS-321/3699	6.0	3.0	3.0	4.0
DLFPS-321/3703	6.0	3.0	3.0	4.0
DLFPS-TF/3550	6.0	3.0	3.0	4.0
ESCALADE	6.0	3.0	3.0	4.0
ESTRENA	6.0	3.0	3.0	4.0
GRAND PRIX (FC15-01P)	6.0	3.0	3.0	4.0
HEMI	6.0	3.0	3.0	4.0
JT 268	6.0	3.0	3.0	4.0
K18-RS6	6.0	3.0	3.0	4.0
LIFEGUARD	6.0	3.0	3.0	4.0

TABLE 31.
(CONT'D)

FALL COLOR RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA

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

NAME	NE1	OR1	UT1	MEAN
NAI-FQZ-17	6.0	3.0	3.0	4.0
NAI-TUE	6.0	3.0	3.0	4.0
NT-3	6.0	3.0	3.0	4.0
PALOMAR	6.0	3.0	3.0	4.0
PPG-TF 231	6.0	3.0	3.0	4.0
PPG-TF 255	6.0	3.0	3.0	4.0
PPG-TF 267	6.0	3.3	2.7	4.0
PPG-TF 315	6.0	3.0	3.0	4.0
PPG-TF 318	6.0	3.0	3.0	4.0
PPG-TF 323	6.0	2.7	3.3	4.0
PPG-TF 336	6.0	3.0	3.0	4.0
PST-5BYOB	6.0	3.0	3.0	4.0
PST-5DC24	6.0	3.0	3.0	4.0
PST-5DZM	6.0	3.0	3.0	4.0
PST-5E6	6.0	3.3	2.7	4.0
PST-5GLBS	6.0	3.0	3.0	4.0
PST-5GQ	6.0	3.3	2.7	4.0
PST-5MCMO	6.0	3.0	3.0	4.0
PST-5MINK	6.0	3.0	3.0	4.0
MONUMENT (PST-5SQB)	6.0	3.0	3.0	4.0
PST-5THM	6.0	3.0	3.0	4.0
RAD-TF105	6.0	3.0	3.0	4.0
RAD-TF131	6.0	3.0	3.0	4.0
RAPTOR III	6.0	3.0	3.0	4.0
RC4	6.0	3.0	3.0	4.0
RHF	6.0	3.0	3.0	4.0
RS1	6.0	3.0	3.0	4.0
SE53D2	6.0	3.0	3.0	4.0
SE5STAR	6.0	3.0	3.0	4.0
SETF104	6.0	3.0	3.0	4.0
SETFM3	6.0	3.0	3.0	4.0
TANGO	6.0	3.0	3.0	4.0
TF456	6.0	3.0	3.0	4.0
RAD-TF 115 (TURBO SS)	6.0	3.0	3.0	4.0
A-TF31	6.0	3.0	2.7	3.9
GLX ACED (PST-5DART)	6.0	2.7	3.0	3.9
PPG-TF 238	6.0	3.0	2.7	3.9
PPG-TF 316	6.0	2.7	3.0	3.9
KENTUCKY-31	6.0	3.3	2.0	3.8
LSD VALUE	0.2	0.9	0.4	0.3
C.V. (%)	2.2	18.0	8.9	9.2

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 32. PERCENT ESTABLISHMENT RATINGS OF TALL FESCUE CULTIVARS 1/
2019 DATA 2/

NAME	DE1	MI1	MS1	NC1	NJ1	NJ2	OR1	PA2	MEAN
KENTUCKY-31	83.3	90.7	61.7	66.7	97.7	57.7	13.7	86.7	69.8
TMT1	78.3	93.0	61.7	46.7	80.0	77.0	12.7	86.7	67.0
AH2	80.0	93.0	43.3	50.0	85.0	78.7	14.0	90.0	66.8
BONFIRE (JS DTT)	80.0	90.7	58.3	46.7	75.0	76.0	12.0	86.7	65.7
AH1	70.0	93.3	63.3	46.7	75.0	70.3	13.7	90.0	65.3
RDC	75.0	90.0	48.3	50.0	80.0	71.0	11.3	90.0	64.5
LIFEGUARD	68.3	91.0	51.7	51.7	86.7	63.7	13.0	83.3	63.7
NATURALLY GREEN	70.0	88.7	53.3	56.7	73.3	66.0	10.7	90.0	63.6
RH1	73.3	95.0	53.3	53.3	70.0	58.7	11.7	90.0	63.2
PPG-TF 338	75.0	87.3	46.7	45.0	80.0	68.0	11.3	90.0	62.9
K18-RS6	71.7	90.0	50.0	48.3	75.0	66.0	12.0	90.0	62.9
TD2	75.0	91.0	51.7	45.0	78.3	61.3	10.7	90.0	62.9
PPG-TF 336	73.3	88.3	48.3	46.7	76.7	65.3	13.3	90.0	62.8
DLFPS-321/3694	75.0	94.3	45.0	48.3	73.3	66.0	10.0	90.0	62.8
DLFPS-321/3695	73.3	90.0	43.3	46.7	80.0	65.3	13.3	90.0	62.8
BGR-TF3	71.7	94.0	56.7	45.0	70.0	60.3	13.0	90.0	62.6
PST-5BYOB	70.0	89.3	43.3	50.0	81.7	64.3	12.0	90.0	62.6
DLFPS-321/3699	76.7	93.3	38.3	51.7	70.0	71.3	10.7	86.7	62.3
5LSS	75.0	91.7	45.0	46.7	70.0	67.0	13.0	90.0	62.3
PPG-TF 238	71.7	92.3	50.0	48.3	80.0	58.7	10.0	86.7	62.2
PPG-TF 254	75.0	89.7	46.7	50.0	65.0	70.3	10.7	90.0	62.2
BIRMINGHAM	70.0	92.3	45.0	48.3	80.0	59.7	12.0	90.0	62.2
GRANDE 3	66.7	91.7	43.3	50.0	71.7	69.7	14.0	90.0	62.1
PPG-TF 249	71.7	91.7	50.0	46.7	68.3	69.3	12.7	86.7	62.1
PST-5GLBS	76.7	91.7	51.7	48.3	71.7	58.7	10.7	86.7	62.0
RS1	73.3	93.3	46.7	45.0	71.7	65.3	13.3	86.7	61.9
TF445	71.7	91.7	41.7	55.0	76.7	62.7	12.0	83.3	61.8
PPG-TF 308	75.0	90.7	45.0	48.3	66.7	68.3	13.0	86.7	61.7
GLX ACED (PST-5DART)	70.0	90.7	41.7	45.0	73.3	70.3	11.3	90.0	61.5
NAI-TUE	73.3	90.7	43.3	50.0	68.3	65.3	10.7	90.0	61.5
LBF	73.3	92.7	50.0	46.7	70.0	56.3	12.0	90.0	61.4
NAI-3N2	70.0	91.0	43.3	45.0	70.0	69.3	12.0	90.0	61.3
DLFPS-321/3696	71.7	89.3	38.3	46.7	73.3	71.0	9.3	90.0	61.2
BULLSEYE LTZ	73.3	91.0	40.0	43.3	76.7	62.7	12.0	90.0	61.1
K18-NSE	73.3	89.0	38.3	51.7	80.0	56.0	10.7	90.0	61.1
RH3	76.7	92.3	36.7	43.3	76.7	60.3	13.0	90.0	61.1
RHL2	66.7	94.7	45.0	51.7	75.0	56.0	10.0	90.0	61.1
COPIOUS TF	70.0	89.0	46.7	46.7	71.7	67.7	13.7	83.3	61.1
PRO GOLD	75.0	93.3	41.7	43.3	73.3	67.0	11.3	83.3	61.0
ESTRENA	68.3	90.0	51.7	46.7	78.3	51.7	11.3	90.0	61.0
PPG-TF 318	70.0	91.7	50.0	48.3	65.0	62.7	10.0	90.0	61.0
PPG-TF 231	70.0	91.3	45.0	50.0	66.7	62.7	14.3	86.7	60.8
HEMI	68.3	93.0	41.7	46.7	80.0	56.3	10.7	90.0	60.8
MONUMENT (PST-5SQB)	70.0	96.3	31.7	48.3	85.0	61.7	9.7	83.3	60.8
DLFPS-321/3693	68.3	93.3	38.3	45.0	65.0	74.3	11.3	90.0	60.7
ZRC1	73.3	90.3	36.7	50.0	63.3	69.3	12.7	90.0	60.7
K18-WB1	71.7	94.0	48.3	45.0	76.7	52.7	12.7	83.3	60.5
PPG-TF 320	71.7	90.7	40.0	45.0	78.3	59.3	9.3	90.0	60.5
PPG-TF 316	66.7	90.3	46.7	46.7	71.7	60.3	11.3	90.0	60.5

TABLE 32. PERCENT ESTABLISHMENT RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA 2/

NAME	DE1	MI1	MS1	NC1	NJ1	NJ2	OR1	PA2	MEAN
PPG-TF 337	76.7	90.0	41.7	50.0	60.0	61.0	13.7	90.0	60.4
GO-RH20	73.3	90.0	40.0	45.0	71.7	58.3	12.7	90.0	60.1
PPG-TF 255	65.0	94.3	43.3	46.7	68.3	65.0	8.3	90.0	60.1
TF456	68.3	89.3	38.3	46.7	71.7	66.0	10.0	90.0	60.0
RHF	68.3	91.7	43.3	43.3	65.0	67.0	10.7	90.0	59.9
PST-5THM	68.3	90.7	43.3	51.7	70.0	63.3	11.7	80.0	59.9
K18-ROE	73.3	90.0	35.0	50.0	80.0	57.0	10.0	83.3	59.8
ATF1768	66.7	91.7	45.0	46.7	63.3	62.0	13.0	90.0	59.8
NAI-ST5	68.3	91.3	41.7	50.0	76.7	59.3	10.7	80.0	59.8
BANDIT	78.3	91.0	41.7	45.0	61.7	59.7	10.0	90.0	59.7
PPG-TF 305	71.7	89.3	45.0	40.0	75.0	60.3	12.0	83.3	59.6
DLFPS-321/3707	71.7	91.7	43.3	48.3	66.7	58.0	10.0	86.7	59.5
DLFPS-321/3679	68.3	91.7	50.0	41.7	66.7	58.7	8.7	90.0	59.5
FAYETTE	78.3	91.7	35.0	50.0	71.7	54.7	10.7	83.3	59.4
BRAVO 2	70.0	92.0	43.3	46.7	70.0	58.7	10.7	83.3	59.3
PPG-TF 306	71.7	90.3	33.3	51.7	65.0	60.0	12.7	90.0	59.3
BULLSEYE	73.3	89.7	38.3	45.0	78.3	53.7	12.0	83.3	59.2
RAD-TF105	71.7	88.3	48.3	40.0	73.3	50.0	12.0	90.0	59.2
PPG-TF 244	65.0	93.0	38.3	50.0	70.0	62.7	10.0	83.3	59.0
SE5STAR	71.7	92.0	50.0	48.3	66.7	54.3	8.0	80.0	58.9
ESCALADE	71.7	90.0	36.7	46.7	68.3	54.3	12.7	90.0	58.8
JT 268	68.3	89.3	35.0	50.0	66.7	59.3	11.3	90.0	58.8
PPG-TF 257	68.3	92.3	43.3	41.7	60.0	62.0	11.3	90.0	58.6
PADRE 2	73.3	89.3	33.3	45.0	68.3	62.7	10.0	86.7	58.6
RC4	75.0	90.0	36.7	43.3	66.7	59.3	10.7	86.7	58.5
PPG-TF 267	63.3	92.0	45.0	43.3	66.7	57.0	10.0	90.0	58.4
NT-3	73.3	90.0	35.0	51.7	68.3	53.7	11.3	83.3	58.3
PST-5MCMO	81.7	89.3	31.7	48.3	61.7	61.7	12.0	80.0	58.3
AST8218LM	68.3	90.7	38.3	43.3	65.0	59.7	10.7	90.0	58.3
DLFPS-TF/3550	68.3	92.0	35.0	41.7	68.3	59.3	11.3	90.0	58.3
PPG-TF 313	66.7	90.0	40.0	41.7	70.0	62.0	8.7	86.7	58.2
DLFPS-TF/3553	70.0	86.0	40.0	45.0	66.7	60.3	10.7	86.7	58.2
BAR 9FE MAS	70.0	90.7	41.7	41.7	56.7	67.7	10.0	86.7	58.1
TANGO	70.0	87.0	38.3	48.3	70.0	52.7	11.3	86.7	58.0
PPG-TF 315	65.0	89.3	40.0	41.7	63.3	63.7	11.3	90.0	58.0
AST8118LM	65.0	88.3	48.3	38.3	56.7	68.0	9.3	90.0	58.0
ATF2116	71.7	90.0	41.7	46.7	70.0	50.0	10.7	83.3	58.0
JT 517	68.3	90.0	40.0	48.3	65.0	52.0	10.0	90.0	58.0
FIREHAWK SLT	73.3	91.7	26.7	45.0	75.0	49.3	12.0	90.0	57.9
JT 233	66.7	89.0	36.7	46.7	61.7	62.7	9.3	90.0	57.8
PST-5TRN	68.3	92.7	35.0	41.7	63.3	61.0	10.7	90.0	57.8
COL-TF-148	73.3	90.7	31.7	45.0	66.7	63.7	7.3	83.3	57.7
PST-5E6	80.0	91.3	36.7	46.7	53.3	52.0	11.3	90.0	57.7
SESCR1	66.7	91.7	48.3	46.7	58.3	47.0	12.0	90.0	57.6
BAR FA 8228	75.0	90.0	26.7	48.3	73.3	51.0	9.3	86.7	57.5
RAPTOR III	70.0	90.7	40.0	45.0	61.7	58.3	11.3	83.3	57.5
PPG-TF 262	70.0	87.3	43.3	48.3	61.7	51.3	11.3	86.7	57.5
PALOMAR	70.0	90.7	35.0	45.0	55.0	67.0	9.3	86.7	57.3
RAD-TF 115 (TURBO SS)	70.0	90.7	31.7	40.0	76.7	53.0	10.0	86.7	57.3

TABLE 32. PERCENT ESTABLISHMENT RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) 2019 DATA 2/

NAME	DE1	MI1	MS1	NC1	NJ1	NJ2	OR1	PA2	MEAN
PST-5GQ	75.0	91.7	36.7	38.3	60.0	56.0	10.7	90.0	57.3
SE53D2	71.7	89.0	41.7	45.0	55.0	58.0	10.0	86.7	57.1
DLFPS-321/3705	61.7	91.7	38.3	50.0	55.0	67.0	10.0	83.3	57.1
NAI-ROS4	66.7	91.0	38.3	46.7	60.0	59.3	11.3	83.3	57.1
DLFPS-TF/3552	70.0	90.7	31.7	46.7	55.0	62.0	10.3	90.0	57.0
MOONDANCE GLX	68.3	92.0	35.0	45.0	63.3	67.7	8.3	76.7	57.0
DLFPS-321/3706	71.7	90.7	43.3	43.3	56.7	49.7	10.7	90.0	57.0
DLFPS-321/3708	68.3	89.3	40.0	43.3	55.0	60.3	8.7	90.0	56.9
NAI-FQZ-17	75.0	89.0	28.3	38.3	66.7	56.7	10.7	90.0	56.8
BAR-FA8230	66.7	88.0	31.7	43.3	70.0	61.0	10.7	83.3	56.8
SETF104	71.7	86.7	43.3	38.3	66.7	48.7	11.3	86.7	56.7
A-TF31	65.0	90.0	33.3	43.3	58.3	66.3	10.0	86.7	56.6
DLFPS-321/3703	66.7	89.0	35.0	45.0	65.0	51.7	10.0	90.0	56.5
BAR TF 134	65.0	89.3	26.7	41.7	68.3	69.3	8.7	83.3	56.5
RAD-TF131	75.0	90.3	30.0	43.3	70.0	44.3	10.7	86.7	56.3
PARAMOUNT	71.7	90.7	33.3	45.0	51.7	64.3	9.3	83.3	56.2
PPG-TF 312	70.0	91.0	35.0	45.0	58.3	56.0	10.7	83.3	56.2
DLFPS-321/3701	70.0	90.0	35.0	45.0	56.7	56.0	9.3	86.7	56.1
PPG-TF 323	70.0	91.3	31.7	41.7	53.3	64.3	7.0	86.7	55.8
DEGAS (LTP-TF-111)	66.7	90.0	38.3	43.3	60.0	58.7	7.7	80.0	55.6
DLFPS-321/3702	70.0	90.0	31.7	41.7	65.0	49.7	9.3	86.7	55.5
PST-5DZM	73.3	90.0	30.0	46.7	58.3	46.7	10.7	86.7	55.3
OG-WALK	65.0	90.7	38.3	46.7	61.7	55.0	8.0	76.7	55.3
SETFM3	66.7	87.0	36.7	46.7	56.7	52.7	10.7	83.3	55.0
PST-5DC24	68.3	90.0	43.3	41.7	46.7	52.0	10.7	86.7	54.9
SETFM2	71.7	88.7	33.3	40.0	56.7	51.0	10.7	86.7	54.8
3B2	70.0	91.3	36.7	41.7	58.3	55.3	8.7	76.7	54.8
OKEEFE (LTP-TF-122)	65.0	90.3	35.0	45.0	65.0	52.7	8.7	73.3	54.4
PST-5MINK	73.3	90.0	31.7	36.7	45.0	65.3	5.7	83.3	53.9
DRAGSTER	66.7	87.0	33.3	45.0	51.7	60.3	7.3	76.7	53.5
3N1	70.0	88.3	31.7	43.3	48.3	57.7	9.3	76.7	53.2
BY-TF-169	63.3	93.3	30.0	41.7	55.0	53.7	10.0	76.7	53.0
GRAND PRIX (FC15-01P)	68.3	88.3	33.3	46.7	58.3	51.0	8.0	66.7	52.6
GO-AOMK	63.3	90.7	25.0	38.3	55.0	48.7	9.3	86.7	52.1
LSD VALUE	8.6	5.4	14.9	9.9	17.3	13.2	2.8	8.7	3.9
C.V. (%)	7.6	3.7	22.7	13.3	15.9	13.6	15.9	6.2	11.6

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 33.

FALL QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
2018 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/				
NAME	NC1	NJ2	OK1	MEAN
DLFPS-321/3699	3.3	7.3	5.3	5.3
BONFIRE (JS DTT)	3.0	7.7	5.0	5.2
TMT1	3.0	6.7	6.0	5.2
AH2	3.3	6.7	5.0	5.0
DEGAS (LTP-TF-111)	3.0	6.3	5.7	5.0
DLFPS-321/3696	3.3	6.7	5.0	5.0
GRANDE 3	3.3	6.3	5.3	5.0
NAI-3N2	3.0	6.0	6.0	5.0
JT 233	3.0	5.7	6.0	4.9
PPG-TF 254	3.7	5.7	5.3	4.9
BAR 9FE MAS	3.0	6.7	4.7	4.8
BAR TF 134	3.0	5.7	5.7	4.8
COL-TF-148	3.0	6.0	5.3	4.8
GLX ACED (PST-5DART)	3.0	6.3	5.0	4.8
NAI-ST5	3.3	5.0	6.0	4.8
OKEEFE (LTP-TF-122)	3.3	5.3	5.7	4.8
PPG-TF 255	3.0	6.0	5.3	4.8
PPG-TF 323	3.0	6.0	5.3	4.8
PST-5MCMO	3.3	5.7	5.3	4.8
PST-5THM	3.7	6.0	4.7	4.8
RDC	3.7	5.3	5.3	4.8
TD2	3.0	6.0	5.3	4.8
TF445	3.7	5.0	5.7	4.8
ZRC1	3.3	5.0	6.0	4.8
BULLSEYE LTZ	3.0	5.3	5.7	4.7
DRAGSTER	3.3	5.7	5.0	4.7
NAI-TUE	3.3	5.3	5.3	4.7
PPG-TF 306	3.3	5.0	5.7	4.7
PPG-TF 315	3.0	5.7	5.3	4.7
PST-5GLBS	3.7	4.7	5.7	4.7
RH1	3.7	4.7	5.7	4.7
RHF	3.0	5.3	5.7	4.7
TF456	3.3	5.3	5.3	4.7
AH1	3.0	6.0	4.7	4.6
AST8218LM	3.0	5.7	5.0	4.6
PPG-TF 249	3.3	4.7	5.7	4.6
PPG-TF 316	3.3	5.0	5.3	4.6
DLFPS-321/3695	3.3	5.3	5.0	4.6
DLFPS-321/3705	3.7	5.0	5.0	4.6
DLFPS-321/3707	3.3	5.3	5.0	4.6
PPG-TF 257	3.0	5.3	5.3	4.6
PPG-TF 308	3.0	5.3	5.3	4.6
PST-5TRN	3.0	5.3	5.3	4.6
AST8118LM	3.0	5.7	4.7	4.4
ATF1768	3.0	4.7	5.7	4.4
DLFPS-TF/3550	3.0	4.7	5.7	4.4

TABLE 33.
(CONT'D)

FALL QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
2018 DATA

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

NAME	NC1	NJ2	OK1	MEAN
PST-5MINK	3.0	4.7	5.7	4.4
5LSS	3.0	5.0	5.3	4.4
DLFPS-TF/3552	3.0	5.0	5.3	4.4
LIFEGUARD	3.3	4.3	5.7	4.4
NAI-ROS4	3.3	4.7	5.3	4.4
PPG-TF 244	3.3	5.3	4.7	4.4
PPG-TF 337	3.3	4.3	5.7	4.4
PPG-TF 338	3.0	5.0	5.3	4.4
PST-5BYOB	3.3	4.3	5.7	4.4
MONUMENT (PST-5SQB)	3.3	4.3	5.7	4.4
3N1	3.3	4.3	5.3	4.3
A-TF31	3.0	5.0	5.0	4.3
BAR-FA8230	3.3	4.3	5.3	4.3
DLFPS-321/3679	3.0	4.3	5.7	4.3
DLFPS-321/3693	3.0	5.7	4.3	4.3
DLFPS-321/3708	3.0	4.3	5.7	4.3
DLFPS-TF/3553	3.3	4.3	5.3	4.3
JT 268	3.3	4.7	5.0	4.3
K18-ROE	3.0	4.3	5.7	4.3
K18-RS6	3.3	4.7	5.0	4.3
MOONDANCE GLX	3.3	4.7	5.0	4.3
PPG-TF 231	3.3	4.0	5.7	4.3
PPG-TF 320	3.0	4.3	5.7	4.3
RH3	3.0	4.3	5.7	4.3
RS1	3.0	5.3	4.7	4.3
SE53D2	3.0	4.7	5.3	4.3
BGR-TF3	3.0	4.0	5.7	4.2
BIRMINGHAM	3.0	4.3	5.3	4.2
BULLSEYE	3.0	4.3	5.3	4.2
BY-TF-169	2.7	4.3	5.7	4.2
COPIOUS TF	3.0	5.0	4.7	4.2
FAYETTE	3.0	4.0	5.7	4.2
HEMI	3.0	4.0	5.7	4.2
PPG-TF 238	3.7	4.0	5.0	4.2
PPG-TF 312	3.0	4.0	5.7	4.2
PPG-TF 318	3.3	4.0	5.3	4.2
PPG-TF 336	3.0	4.3	5.3	4.2
PRO GOLD	3.0	5.0	4.7	4.2
RC4	3.0	4.3	5.3	4.2
RHL2	3.7	4.0	5.0	4.2
SETFM3	3.3	4.0	5.3	4.2
DLFPS-321/3694	3.3	3.7	5.3	4.1
DLFPS-321/3701	3.0	4.0	5.3	4.1
DLFPS-321/3706	3.0	3.7	5.7	4.1
GO-RH20	3.0	4.0	5.3	4.1
NATURALLY GREEN	4.0	2.7	5.7	4.1
NT-3	3.7	3.3	5.3	4.1

TABLE 33.
(CONT'D)

FALL QUALITY RATINGS OF TALL FESCUE CULTIVARS 1/
2018 DATA

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

NAME	NC1	NJ2	OK1	MEAN
PADRE 2	3.0	4.0	5.3	4.1
PALOMAR	3.3	3.7	5.3	4.1
PPG-TF 267	3.0	4.0	5.3	4.1
SE5STAR	3.0	4.0	5.3	4.1
3B2	3.3	3.7	5.0	4.0
GO-AOMK	2.7	4.3	5.0	4.0
JT 517	3.3	3.3	5.3	4.0
K18-NSE	3.3	4.3	4.3	4.0
K18-WB1	3.0	3.7	5.3	4.0
LBF	3.0	3.7	5.3	4.0
PPG-TF 313	3.0	4.7	4.3	4.0
PST-5DC24	3.0	3.7	5.3	4.0
PST-5E6	3.0	4.3	4.7	4.0
TANGO	3.3	3.7	5.0	4.0
BANDIT	3.0	3.3	5.3	3.9
DLFPS-321/3702	3.0	3.3	5.3	3.9
DLFPS-321/3703	3.0	4.0	4.7	3.9
FIREHAWK SLT	3.0	3.3	5.3	3.9
OG-WALK	3.0	3.0	5.7	3.9
PPG-TF 305	3.0	3.3	5.3	3.9
PARAMOUNT	3.0	3.7	5.0	3.9
PPG-TF 262	3.0	3.3	5.0	3.8
PST-5GQ	3.0	3.3	5.0	3.8
ATF2116	3.0	3.0	5.3	3.8
RAPTOR III	3.0	3.7	4.7	3.8
SESCR1	3.0	3.0	5.3	3.8
SETF104	3.0	3.0	5.3	3.8
SETFM2	3.0	3.0	5.3	3.8
BAR FA 8228	3.3	1.7	6.0	3.7
BRAVO 2	3.3	3.0	4.7	3.7
GRAND PRIX (FC15-01P)	3.0	2.7	5.3	3.7
NAI-FQZ-17	3.0	3.0	5.0	3.7
ESCALADE	3.0	2.3	5.3	3.6
RAD-TF105	3.0	3.3	4.0	3.4
KENTUCKY-31	4.0	1.0	5.3	3.4
ESTRENA	3.3	2.0	4.7	3.3
PST-5DZM	3.3	2.7	4.0	3.3
RAD-TF131	3.0	1.7	5.0	3.2
RAD-TF 115 (TURBO SS)	3.0	2.0	4.7	3.2
LSD VALUE	0.6	1.5	1.0	0.6
C.V. (%)	12.2	20.8	12.2	16.1

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

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

TABLE 34. PERCENT LIVING GROUND COVER RATINGS OF TALL FESCUE CULTIVARS 1/
GROWN UNDER NO TRAFFIC STRESS AT AMES, IA 2/
2019 DATA

NAME	APR_29	MAY_22	JULY_12	AUG_20	SEPT_30	OCT_4	NOV_6	MEAN
AH2	70.7	92.0	95.3	98.7	99.0	97.7	95.7	92.7
RDC	76.3	92.7	88.0	98.7	99.0	97.0	96.0	92.5
RHF	78.7	85.0	93.3	98.7	99.0	96.0	97.0	92.5
PPG-TF 244	75.3	80.7	95.7	99.0	99.0	98.7	97.7	92.3
BULLSEYE LTZ	70.3	86.7	94.3	98.3	98.0	98.3	96.7	91.8
BAR TF 134	72.3	81.0	94.3	98.7	98.7	98.7	98.0	91.7
DLFPS-TF/3552	69.3	86.3	91.0	99.0	99.0	97.3	97.7	91.4
PPG-TF 338	72.7	82.3	92.0	98.7	99.0	97.0	97.3	91.3
PPG-TF 323	73.0	79.0	94.7	99.0	98.7	97.3	96.7	91.2
K18-NSE	67.0	84.3	91.7	98.7	98.3	97.7	98.3	90.9
PPG-TF 320	71.3	79.7	95.0	98.3	98.3	97.0	96.0	90.8
BONFIRE (JS DTT)	68.0	78.7	94.7	99.0	98.7	97.7	97.7	90.6
DLFPS-321/3693	69.0	79.3	93.7	99.0	99.0	97.7	96.0	90.5
RS1	60.7	87.7	93.7	98.7	98.7	97.0	96.3	90.4
DLFPS-321/3699	64.7	82.7	95.7	97.3	98.7	97.3	96.0	90.3
PPG-TF 312	68.3	78.0	91.3	98.3	99.0	98.3	97.7	90.1
AST8218LM	66.7	87.3	91.0	97.7	98.0	97.0	90.7	89.8
PPG-TF 313	64.0	79.7	93.0	98.3	99.0	97.7	97.0	89.8
BIRMINGHAM	69.0	78.3	91.3	98.3	98.3	96.7	96.0	89.7
ESTRENA	65.7	83.3	93.0	98.7	98.0	95.7	93.3	89.7
K18-WB1	65.7	76.3	91.7	99.0	99.0	98.0	98.0	89.7
DLFPS-321/3702	59.0	83.7	94.3	98.7	98.3	96.7	96.7	89.6
DLFPS-321/3705	60.7	82.0	94.3	99.0	99.0	96.0	96.0	89.6
5LSS	64.3	78.7	92.3	98.3	98.3	97.3	97.3	89.5
AH1	65.3	72.7	93.7	99.0	99.0	97.7	98.3	89.4
BGR-TF3	69.0	84.0	88.0	97.7	97.7	94.0	94.7	89.3
PPG-TF 262	65.7	81.7	88.7	98.3	98.3	96.3	96.3	89.3
LIFEGUARD	61.0	83.7	92.0	98.3	99.0	96.3	94.0	89.2
PRO GOLD	62.3	81.0	92.3	99.0	98.7	95.7	95.7	89.2
TD2	67.0	81.7	84.3	97.0	98.3	97.7	98.0	89.1
DLFPS-321/3696	66.0	76.3	92.7	97.3	98.3	96.0	96.3	89.0
PPG-TF 249	58.3	77.7	97.3	98.0	98.7	97.3	95.7	89.0
ESCALADE	64.7	81.7	86.3	98.0	98.3	97.0	96.3	88.9
PPG-TF 336	66.7	75.0	95.3	97.3	98.7	98.0	91.3	88.9
ZRC1	60.7	76.3	94.7	98.7	98.7	97.7	95.0	88.8
PST-5GLBS	65.0	74.0	91.7	98.7	97.7	97.3	96.7	88.7
DLFPS-TF/3550	67.0	77.7	92.7	97.0	98.0	91.7	96.3	88.6
PADRE 2	65.3	70.7	92.3	98.0	99.0	98.3	96.7	88.6
PPG-TF 318	53.3	81.7	94.0	98.7	99.0	98.7	95.0	88.6
BAR FA 8228	67.0	79.0	89.3	97.3	98.0	94.3	94.3	88.5
PPG-TF 315	61.0	72.3	93.7	98.7	98.7	98.0	97.0	88.5
PPG-TF 231	63.0	74.7	92.0	98.7	98.0	97.3	95.3	88.4
DLFPS-321/3694	61.7	80.0	85.7	97.7	98.7	97.7	96.3	88.2
TF445	65.0	76.3	86.3	97.7	98.3	97.3	96.3	88.2
NT-3	66.3	69.3	90.3	98.7	98.7	97.0	96.3	88.1
PPG-TF 305	60.0	78.3	94.7	98.3	97.7	96.7	91.0	88.1
K18-ROE	61.7	78.3	88.0	98.0	98.3	97.0	92.7	87.7

TABLE 34.
(CONT'D)

PERCENT LIVING GROUND COVER RATINGS OF TALL FESCUE CULTIVARS 1/
GROWN UNDER NO TRAFFIC STRESS AT AMES, IA 2/
2019 DATA

NAME	APR_29	MAY_22	JULY_12	AUG_20	SEPT_30	OCT_4	NOV_6	MEAN
JT 233	60.3	69.3	95.7	98.3	98.7	97.7	93.0	87.6
PPG-TF 316	54.0	72.7	94.3	99.0	99.0	97.0	97.3	87.6
RH3	72.3	69.3	85.7	95.7	95.7	97.0	96.7	87.5
BY-TF-169	68.0	77.7	92.0	97.7	98.7	86.3	91.7	87.4
DLFPS-TF/3553	53.7	76.3	90.7	98.3	99.0	97.0	97.0	87.4
RHL2	64.7	64.3	96.0	98.0	95.7	97.7	95.7	87.4
PST-5BYOB	57.0	71.0	94.7	98.3	99.0	97.0	93.7	87.2
NATURALLY GREEN	53.7	86.3	86.7	97.3	97.7	93.3	94.3	87.0
DLFPS-321/3703	62.7	63.3	91.7	98.7	98.7	96.7	96.7	86.9
OKEEFE (LTP-TF-122)	56.3	76.7	85.7	98.3	97.3	97.0	97.0	86.9
PPG-TF 267	55.3	71.3	92.7	99.0	98.7	97.0	94.3	86.9
RH1	63.3	64.3	89.0	98.0	98.3	98.3	97.0	86.9
TMT1	58.0	73.3	90.7	97.3	98.7	96.0	94.3	86.9
JT 268	49.3	74.0	94.7	98.3	98.3	96.3	96.7	86.8
NAI-3N2	64.0	63.7	93.7	97.3	98.7	97.0	92.0	86.6
SE53D2	50.7	70.7	93.0	98.3	98.7	98.0	96.7	86.6
HEMI	58.7	70.0	90.0	96.3	98.3	96.7	95.7	86.5
AST8118LM	54.0	70.3	90.0	98.0	98.3	97.0	96.3	86.3
PPG-TF 238	56.3	69.0	93.0	98.0	98.3	96.0	93.7	86.3
SETFM3	55.3	70.0	88.0	99.0	98.7	96.3	96.0	86.2
DLFPS-321/3701	62.0	57.7	89.3	99.0	99.0	97.3	97.3	86.0
GRANDE 3	54.0	69.3	90.0	96.0	98.7	97.7	96.0	86.0
K18-RS6	50.3	69.0	90.7	98.7	99.0	98.0	96.0	86.0
MONUMENT (PST-5SQB)	55.3	74.0	89.0	99.0	91.7	97.0	95.7	86.0
DLFPS-321/3707	58.3	72.0	85.3	98.3	98.3	94.7	94.0	85.9
ATF2116	56.3	67.3	88.3	98.0	97.3	96.3	96.3	85.7
LBF	63.0	64.3	89.0	97.7	98.0	94.7	93.3	85.7
BANDIT	62.3	73.0	86.7	95.0	96.0	95.0	91.3	85.6
PPG-TF 306	53.7	69.7	83.7	98.3	97.7	98.0	97.3	85.5
COL-TF-148	50.7	67.7	88.7	98.7	97.7	97.3	97.0	85.4
PPG-TF 257	60.7	66.0	85.3	98.7	99.0	97.3	90.7	85.4
A-TF31	53.0	69.3	85.0	98.7	98.7	96.7	95.7	85.3
DLFPS-321/3708	49.0	69.0	94.7	98.7	98.3	93.7	93.0	85.2
PARAMOUNT	47.7	70.7	91.3	98.7	98.7	95.3	94.0	85.2
SESCR1	58.3	68.3	86.7	98.3	99.0	90.3	95.7	85.2
SETFM2	58.0	65.7	88.3	97.7	98.0	96.3	91.3	85.0
BRAVO 2	55.3	70.7	85.7	97.0	97.0	94.0	94.3	84.9
DRAGSTER	50.3	69.0	87.3	97.3	98.3	97.0	95.0	84.9
KENTUCKY-31	65.7	72.0	80.7	96.7	98.0	94.0	87.0	84.9
DEGAS (LTP-TF-111)	47.0	65.0	91.3	98.3	98.7	97.3	95.7	84.8
FAYETTE	49.7	63.3	93.3	97.3	98.0	97.0	95.0	84.8
BAR 9FE MAS	56.0	64.0	88.3	96.0	97.3	95.0	96.0	84.7
DLFPS-321/3706	63.0	68.7	89.7	97.7	88.0	96.3	89.7	84.7
TF456	49.0	60.3	91.7	98.3	99.0	97.7	96.7	84.7
OG-WALK	48.7	69.3	91.3	96.7	97.0	96.3	92.0	84.5
PPG-TF 255	44.3	61.7	91.3	98.7	98.7	98.3	97.0	84.3
DLFPS-321/3679	62.7	65.7	87.0	97.7	97.7	89.3	89.3	84.2

TABLE 34.
(CONT'D)

PERCENT LIVING GROUND COVER RATINGS OF TALL FESCUE CULTIVARS 1/
GROWN UNDER NO TRAFFIC STRESS AT AMES, IA 2/
2019 DATA

NAME	APR_29	MAY_22	JULY_12	AUG_20	SEPT_30	OCT_4	NOV_6	MEAN
FIREHAWK SLT	52.0	56.7	88.3	98.7	98.7	98.0	96.7	84.1
PALOMAR	60.7	63.7	87.3	96.0	97.3	93.7	89.3	84.0
DLFPS-321/3695	61.3	68.3	78.0	96.7	96.0	92.7	94.0	83.9
RAD-TF105	53.0	59.0	91.7	96.3	97.0	95.3	93.3	83.7
ATF1768	53.7	54.3	90.7	97.3	97.3	97.3	94.7	83.6
RC4	47.3	56.3	96.0	97.0	97.7	96.3	94.7	83.6
SETF104	47.7	65.3	86.0	98.0	97.7	95.7	92.0	83.2
PPG-TF 337	47.7	55.7	86.3	98.7	98.3	97.7	96.3	83.0
PST-5MINK	46.7	63.0	89.3	98.3	98.0	94.3	91.0	83.0
RAD-TF131	52.3	62.3	80.0	96.7	98.0	94.3	96.7	82.9
NAI-ST5	43.0	63.3	81.7	97.7	99.0	97.3	97.3	82.8
RAPTOR III	51.7	56.7	83.3	98.3	98.3	95.3	94.3	82.6
MOONDANCE GLX	46.0	53.3	91.0	98.0	98.7	96.3	94.3	82.5
3N1	50.3	58.3	82.3	98.7	97.7	97.0	92.7	82.4
COPIOUS TF	35.7	64.0	89.7	98.3	98.7	94.3	94.7	82.2
TANGO	47.7	55.3	88.0	96.7	97.7	94.3	95.0	82.1
PST-5E6	49.0	48.3	89.3	95.0	97.0	97.3	95.0	81.6
PST-5GQ	48.7	60.0	82.7	96.3	94.0	94.3	95.3	81.6
NAI-TUE	45.7	55.3	87.7	97.0	98.0	91.7	94.3	81.4
GLX ACED (PST-5DART)	42.7	48.0	89.3	98.0	98.3	96.3	96.0	81.2
JT 517	52.0	63.3	80.0	95.3	97.3	89.7	91.0	81.2
BULLSEYE	48.7	56.0	87.7	97.7	97.3	91.7	88.7	81.1
NAI-FQZ-17	40.7	62.3	81.7	98.0	98.0	95.0	92.3	81.1
SE5STAR	41.3	57.3	88.7	97.7	99.0	87.0	95.0	80.9
PST-5THM	45.7	68.7	74.7	96.3	88.3	96.7	95.0	80.8
PST-5MCMO	37.3	51.7	89.7	98.0	98.3	95.0	95.0	80.7
RAD-TF 115 (TURBO SS)	47.0	57.0	82.0	93.7	97.7	92.0	92.0	80.2
GRAND PRIX (FC15-01P)	41.3	57.0	79.7	96.7	97.3	95.3	91.3	79.8
PST-5TRN	31.7	58.0	87.7	96.3	98.0	96.3	90.3	79.8
NAI-ROS4	37.7	51.3	91.0	95.3	97.0	88.3	96.0	79.5
PPG-TF 254	39.3	61.0	72.7	95.3	93.3	97.7	97.0	79.5
3B2	32.3	70.0	82.3	91.3	91.3	97.0	91.7	79.4
BAR-FA8230	47.3	50.0	72.0	97.3	97.3	95.0	93.0	78.9
GO-RH20	37.7	55.3	74.0	97.0	98.7	96.3	93.3	78.9
PST-5DC24	52.0	40.3	82.7	93.0	93.3	96.3	92.3	78.6
PST-5DZM	37.3	51.3	81.0	95.7	98.0	96.0	90.7	78.6
GO-AOMK	41.7	55.3	78.0	96.7	97.3	88.3	90.7	78.3
PPG-TF 308	43.7	40.7	91.3	96.3	93.0	91.3	90.7	78.1
LSD VALUE	51.1	38.5	46.3	4.6	15.5	12.8	14.7	15.0
C.V. (%)	27.5	21.8	10.3	1.8	3.3	3.9	4.1	6.2

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 35. PERCENT ESTABLISHMENT RATINGS OF TALL FESCUE CULTIVARS 1/
 AT STILLWATER, OK 2/
 2019 DATA

NAME	2 WEEKS	3 WEEKS	4 WEEKS	MEAN
AST8218LM	56.7	69.3	80.0	68.7
MOONDANCE GLX	58.3	67.7	80.0	68.7
PPG-TF 231	58.3	67.7	80.0	68.7
DLFPS-321/3703	56.7	69.3	76.7	67.6
PPG-TF 262	50.0	65.0	86.7	67.2
PPG-TF 267	51.7	65.0	85.0	67.2
ZRC1	57.3	67.7	76.7	67.2
PPG-TF 257	56.7	69.3	71.7	65.9
3B2	51.7	65.0	80.0	65.6
NAI-ROS4	58.3	65.0	73.3	65.6
NAI-3N2	53.3	66.7	75.0	65.0
NATURALLY GREEN	57.3	67.7	70.0	65.0
PST-5MINK	57.3	67.7	70.0	65.0
SETFM3	50.0	65.0	78.3	64.4
HEMI	51.7	63.3	75.0	63.3
SE5STAR	50.0	65.0	75.0	63.3
PARAMOUNT	58.3	67.7	63.3	63.1
DLFPS-321/3705	58.3	65.0	63.3	62.2
DLFPS-TF/3553	58.3	65.0	63.3	62.2
ATF2116	51.7	63.3	70.0	61.7
AST8118LM	46.7	60.3	75.0	60.7
DLFPS-TF/3552	53.3	66.7	61.7	60.6
PST-5DC24	51.7	63.3	66.7	60.6
ESCALADE	45.0	60.0	75.0	60.0
KENTUCKY-31	41.7	61.7	76.7	60.0
NT-3	46.7	60.0	73.3	60.0
TANGO	46.7	60.0	73.3	60.0
BAR TF 134	50.0	65.0	63.3	59.4
LIFEGUARD	41.7	61.7	75.0	59.4
PPG-TF 308	45.0	60.0	73.3	59.4
RC4	46.7	60.3	70.0	59.0
BONFIRE (JS DTT)	51.7	65.0	60.0	58.9
BULLSEYE LTZ	46.7	60.0	70.0	58.9
JT 517	50.0	65.0	61.7	58.9
PPG-TF 337	41.7	61.7	73.3	58.9
PST-5MCMO	45.0	60.0	70.0	58.3
BULLSEYE	45.0	58.3	70.0	57.8
DLFPS-321/3695	45.0	58.3	68.3	57.2
DLFPS-321/3696	50.0	65.0	56.7	57.2
JT 268	33.3	50.0	88.3	57.2
K18-WB1	40.0	55.0	76.7	57.2
3N1	41.7	55.0	73.3	56.7
NAI-FQZ-17	53.3	66.7	50.0	56.7
PST-5GLBS	45.0	58.3	66.7	56.7
TD2	41.7	55.0	73.3	56.7
RAD-TF 115 (TURBO SS)	41.7	55.0	73.3	56.7
PPG-TF 338	36.3	59.0	73.3	56.2

TABLE 35. PERCENT ESTABLISHMENT RATINGS OF TALL FESCUE CULTIVARS 1/
 (CONT'D) AT STILLWATER, OK 2/
 2019 DATA

NAME	2 WEEKS	3 WEEKS	4 WEEKS	MEAN
RHL2	40.0	55.0	73.3	56.1
PPG-TF 305	36.3	55.7	75.0	55.7
DLFPS-321/3708	41.7	55.0	70.0	55.6
SE53D2	41.7	55.0	70.0	55.6
FIREHAWK SLT	40.0	55.0	70.0	55.0
GLX ACED (PST-5DART)	40.0	55.0	70.0	55.0
PPG-TF 336	30.0	55.0	80.0	55.0
TMT1	40.0	55.0	70.0	55.0
DLFPS-321/3702	46.7	60.3	56.7	54.6
BAR 9FE MAS	35.0	51.7	76.7	54.4
BY-TF-169	36.7	55.0	71.7	54.4
DLFPS-321/3699	36.7	50.0	76.7	54.4
PPG-TF 244	31.7	50.0	80.0	53.9
PALOMAR	33.3	54.0	73.3	53.6
RH1	26.7	48.3	85.0	53.3
RS1	41.7	55.0	63.3	53.3
BRAVO 2	35.0	54.3	70.0	53.1
GO-AOMK	35.0	54.3	70.0	53.1
K18-RS6	35.0	51.7	71.7	52.8
PST-5BYOB	30.0	55.0	73.3	52.8
BAR-FA8230	36.7	50.0	70.0	52.2
RAD-TF131	35.0	51.7	70.0	52.2
BANDIT	30.0	51.7	73.3	51.7
COL-TF-148	26.7	48.3	80.0	51.7
DLFPS-321/3679	33.3	55.0	66.7	51.7
DLFPS-321/3706	33.3	55.0	66.7	51.7
GRAND PRIX (FC15-01P)	30.0	55.0	70.0	51.7
JT 233	25.0	48.3	81.7	51.7
PPG-TF 323	33.3	51.7	70.0	51.7
SESCR1	36.7	50.0	68.3	51.7
PPG-TF 254	33.3	54.0	66.7	51.3
K18-ROE	31.7	51.7	70.0	51.1
DLFPS-TF/3550	35.0	54.3	63.3	50.9
K18-NSE	34.0	48.7	70.0	50.9
AH1	28.3	50.0	73.3	50.6
DRAGSTER	30.0	51.7	70.0	50.6
NAI-TUE	33.3	55.0	63.3	50.6
PPG-TF 320	32.0	48.3	70.0	50.1
RH3	21.7	41.7	86.7	50.0
BAR FA 8228	40.0	55.0	53.3	49.4
SETF104	28.3	50.0	70.0	49.4
GRANDE 3	28.3	50.0	68.3	48.9
MONUMENT (PST-5SQB)	26.7	45.0	75.0	48.9
5LSS	30.0	51.7	63.3	48.3
DLFPS-321/3694	31.7	45.0	68.3	48.3
RAPTOR III	26.7	48.3	70.0	48.3
OKEEFE (LTP-TF-122)	22.7	41.7	80.0	48.1

TABLE 35. PERCENT ESTABLISHMENT RATINGS OF TALL FESCUE CULTIVARS 1/
(CONT'D) AT STILLWATER, OK 2/
2019 DATA

NAME	2 WEEKS	3 WEEKS	4 WEEKS	MEAN
AH2	25.0	41.7	76.7	47.8
DEGAS (LTP-TF-111)	21.7	50.0	71.7	47.8
PPG-TF 313	23.3	50.0	70.0	47.8
COPIOUS TF	26.7	49.0	66.7	47.4
GO-RH20	26.7	49.0	66.7	47.4
PST-5GQ	33.3	54.0	55.0	47.4
PADRE 2	31.7	38.3	70.0	46.7
PPG-TF 249	25.0	40.0	75.0	46.7
PPG-TF 318	31.7	45.0	63.3	46.7
PPG-TF 306	26.7	45.0	66.7	46.1
PRO GOLD	20.0	46.7	71.7	46.1
PST-5E6	21.7	40.0	76.7	46.1
PST-5TRN	28.3	41.7	68.3	46.1
BGR-TF3	26.7	49.0	61.7	45.8
A-TF31	28.3	41.7	66.7	45.6
ATF1768	31.7	38.3	66.7	45.6
PPG-TF 238	28.3	41.7	66.7	45.6
PPG-TF 255	20.0	46.7	70.0	45.6
PST-5DZM	31.7	45.0	60.0	45.6
DLFPS-321/3693	26.7	45.0	63.3	45.0
FAYETTE	25.0	40.0	70.0	45.0
BIRMINGHAM	31.7	38.3	63.3	44.4
OG-WALK	20.0	46.7	66.7	44.4
PPG-TF 312	21.7	40.0	71.7	44.4
RAD-TF105	25.0	41.7	66.7	44.4
RDC	25.0	41.7	66.7	44.4
LBF	23.3	33.3	75.0	43.9
RHF	23.3	41.7	66.7	43.9
SETFM2	25.0	40.0	66.7	43.9
DLFPS-321/3707	23.3	33.3	70.0	42.2
PPG-TF 316	15.0	35.0	76.7	42.2
PST-5THM	17.7	36.7	71.7	42.0
DLFPS-321/3701	15.0	35.0	75.0	41.7
TF445	21.7	40.0	63.3	41.7
PPG-TF 315	17.7	36.7	70.0	41.4
NAI-ST5	23.3	33.3	63.3	40.0
TF456	17.7	36.7	60.0	38.1
ESTRENA	15.0	35.0	63.3	37.8
LSD VALUE	53.1	43.0	23.7	39.9
C.V. (%)	48.8	27.4	13.3	21.9

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 36. PERCENT ESTABLISHMENT RATINGS OF TALL FESCUE CULTIVARS
AT GUELPH, ON 1/
2019 DATA

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

NAME	PERCENT	PERCENT	PERCENT ESTABLISHMENT	
	WEEDS 28 DAYS	BARE SOIL 28 DAYS	16 DAYS	28 DAYS
AH1	5.0	10.0	63.3	85.0
AH2	5.0	11.7	73.3	83.3
NAI-ST5	8.3	8.3	61.7	83.3
PPG-TF 308	6.7	10.0	70.0	83.3
ESTRENA	6.7	11.7	56.7	81.7
MOONDANCE GLX	8.3	10.0	51.7	81.7
SETF104	8.3	10.0	65.0	81.7
ZRC1	8.3	10.0	55.0	81.7
DLFPS-321/3701	6.7	13.3	46.7	80.0
K18-NSE	8.3	11.7	60.0	80.0
K18-ROE	10.0	10.0	63.3	80.0
KENTUCKY-31	6.7	13.3	46.7	80.0
PPG-TF 254	6.7	13.3	55.0	80.0
ATF1768	11.7	10.0	56.7	78.3
DLFPS-321/3695	15.0	6.7	55.0	78.3
K18-WB1	10.0	11.7	53.3	78.3
PPG-TF 316	8.3	13.3	51.7	78.3
PPG-TF 337	10.0	11.7	55.0	78.3
PPG-TF 338	15.0	6.7	55.0	78.3
PST-5BYOB	5.0	16.7	53.3	78.3
PST-5GLBS	15.0	6.7	56.7	78.3
RH3	8.3	13.3	56.7	78.3
5LSS	13.3	10.0	48.3	76.7
DLFPS-321/3694	13.3	10.0	50.0	76.7
DLFPS-TF/3553	13.3	10.0	55.0	76.7
K18-RS6	11.7	11.7	55.0	76.7
LBF	10.0	13.3	48.3	76.7
NAI-3N2	13.3	10.0	48.3	76.7
PPG-TF 249	11.7	11.7	48.3	76.7
PPG-TF 262	8.3	15.0	56.7	76.7
PPG-TF 312	13.3	10.0	61.7	76.7
PRO GOLD	13.3	10.0	41.7	76.7
RDC	8.3	15.0	66.7	76.7
SESCR1	8.3	15.0	45.0	76.7
TMT1	13.3	10.0	68.3	76.7
ATF2116	10.0	15.0	46.7	75.0
DLFPS-321/3693	13.3	11.7	60.0	75.0
DLFPS-321/3696	18.3	6.7	46.7	75.0
NAI-FQZ-17	10.0	15.0	51.7	75.0
NAI-TUE	16.7	8.3	55.0	75.0
PPG-TF 244	10.0	15.0	53.3	75.0
PPG-TF 336	5.0	20.0	65.0	75.0
PST-5GQ	11.7	13.3	50.0	75.0
RAD-TF105	16.7	8.3	61.7	75.0
SE53D2	11.7	13.3	43.3	75.0

TABLE 36. PERCENT ESTABLISHMENT RATINGS OF TALL FESCUE CULTIVARS
 (CONT'D) AT GUELPH, ON 1/
 2019 DATA

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

NAME	PERCENT	PERCENT	PERCENT ESTABLISHMENT 16 DAYS	PERCENT ESTABLISHMENT 28 DAYS
	WEEDS 28 DAYS	BARE SOIL 28 DAYS		
BAR 9FE MAS	16.7	10.0	50.0	73.3
BULLSEYE LTZ	16.7	10.0	58.3	73.3
DLFPS-321/3699	8.3	18.3	55.0	73.3
DLFPS-TF/3552	6.7	20.0	46.7	73.3
FIREHAWK SLT	16.7	10.0	50.0	73.3
GLX ACED (PST-5DART)	13.3	13.3	50.0	73.3
GO-RH20	15.0	11.7	53.3	73.3
BONFIRE (JS DTT)	13.3	13.3	55.0	73.3
JT 233	21.7	5.0	60.0	73.3
JT 268	13.3	13.3	41.7	73.3
NATURALLY GREEN	16.7	10.0	63.3	73.3
PPG-TF 306	21.7	5.0	56.7	73.3
PPG-TF 323	18.3	8.3	43.3	73.3
PST-5DZM	13.3	13.3	35.0	73.3
PST-5MCMO	13.3	13.3	51.7	73.3
PST-5TRN	13.3	13.3	51.7	73.3
TF445	8.3	18.3	40.0	73.3
BAR FA 8228	15.0	13.3	56.7	71.7
BAR TF 134	15.0	13.3	50.0	71.7
BY-TF-169	18.3	10.0	43.3	71.7
COL-TF-148	15.0	13.3	58.3	71.7
DLFPS-321/3705	11.7	16.7	46.7	71.7
DLFPS-TF/3550	16.7	11.7	50.0	71.7
ESCALADE	15.0	13.3	50.0	71.7
FAYETTE	10.0	18.3	46.7	71.7
GRANDE 3	20.0	8.3	58.3	71.7
JT 517	13.3	15.0	51.7	71.7
LIFEGUARD	20.0	8.3	60.0	71.7
PPG-TF 231	16.7	11.7	48.3	71.7
PPG-TF 238	20.0	8.3	55.0	71.7
PPG-TF 267	10.0	18.3	55.0	71.7
PPG-TF 320	16.7	11.7	55.0	71.7
PST-5THM	18.3	10.0	55.0	71.7
RAD-TF131	11.7	16.7	38.3	71.7
TANGO	13.3	15.0	51.7	71.7
TD2	16.7	11.7	66.7	71.7
BAR-FA8230	16.7	13.3	51.7	70.0
BRAVO 2	16.7	13.3	51.7	70.0
DLFPS-321/3679	20.0	10.0	50.0	70.0
DLFPS-321/3702	8.3	21.7	38.3	70.0
DLFPS-321/3703	10.0	20.0	40.0	70.0
NAI-ROS4	15.0	15.0	48.3	70.0
NT-3	20.0	10.0	43.3	70.0
PADRE 2	11.7	18.3	43.3	70.0
PARAMOUNT	13.3	16.7	53.3	70.0

TABLE 36. PERCENT ESTABLISHMENT RATINGS OF TALL FESCUE CULTIVARS
 (CONT'D) AT GUELPH, ON 1/
 2019 DATA

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

NAME	% WEEDS	& BARE SOIL	PERCENT ESTABLISHMENT	
	28 DAYS	28 DAYS	16 DAYS	28 DAYS
PPG-TF 305	8.3	21.7	50.0	70.0
RC4	13.3	16.7	51.7	70.0
RS1	20.0	10.0	53.3	70.0
3N1	15.0	16.7	35.0	68.3
BANDIT	20.0	11.7	53.3	68.3
BGR-TF3	15.0	16.7	51.7	68.3
BULLSEYE	21.7	10.0	50.0	68.3
DLFPS-321/3708	18.3	13.3	48.3	68.3
GRAND PRIX (FC15-01P)	11.7	20.0	35.0	68.3
DEGAS (LTP-TF-111)	16.7	15.0	48.3	68.3
PPG-TF 257	20.0	11.7	50.0	68.3
PPG-TF 313	16.7	15.0	51.7	68.3
PPG-TF 315	11.7	20.0	53.3	68.3
PPG-TF 318	21.7	10.0	55.0	68.3
MONUMENT (PST-5SQB)	18.3	13.3	53.3	68.3
RHL2	18.3	13.3	50.0	68.3
SETFM2	23.3	8.3	55.0	68.3
SETFM3	16.7	15.0	48.3	68.3
A-TF31	20.0	13.3	46.7	66.7
BIRMINGHAM	11.7	21.7	51.7	66.7
DLFPS-321/3707	13.3	20.0	51.7	66.7
DRAGSTER	15.0	18.3	51.7	66.7
PST-5E6	11.7	21.7	33.3	66.7
RAPTOR III	21.7	11.7	40.0	66.7
RHF	18.3	15.0	46.7	66.7
AST8118LM	16.7	18.3	36.7	65.0
AST8218LM	18.3	16.7	40.0	65.0
COPIOUS TF	15.0	20.0	55.0	65.0
HEMI	15.0	20.0	58.3	65.0
OKEEFE (LTP-TF-122)	23.3	11.7	36.7	65.0
PALOMAR	23.3	11.7	36.7	65.0
PPG-TF 255	25.0	10.0	51.7	65.0
RH1	20.0	15.0	51.7	65.0
TF456	16.7	18.3	48.3	65.0
RAD-TF 115 (TURBO SS)	15.0	20.0	46.7	65.0
OG-WALK	30.0	8.3	40.0	61.7
PST-5DC24	16.7	21.7	46.7	61.7
SE5STAR	30.0	8.3	35.0	61.7
DLFPS-321/3706	16.7	23.3	51.7	60.0
3B2	28.3	13.3	30.0	58.3
GO-AOMK	18.3	23.3	26.7	58.3
PST-5MINK	26.7	15.0	36.7	58.3
LSD VALUE	34.2	25.7	16.3	32.5
C.V. (%)	59.2	49.9	17.6	12.3

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

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

APPENDIX TABLE.

SUMMARY OF TURFGRASS QUALITY RATINGS FOR TALL FESCUE CULTIVARS */

2019 DATA
TURFGRASS QUALITY RATINGS 1 9; 9=IDEAL TURF **/

NAME	QUALITY		MAXIMUM TOP 25% 2/	NAME	QUALITY		MAXIMUM TOP 25% 2/
	MEAN 1/	IN			MEAN 1/	IN	
3B2	5.8		17.4	FIREHAWK SLT	5.7		17.4
3N1	5.8		21.7	GLX ACED (PST-5DART)	5.8		17.4
5LSS	5.9		26.1	GO-AOMK	5.5		0.0
A-TF31	5.4		0.0	GO-RH20	6.0		34.8
AH1	5.9		39.1	GRAND PRIX (FC15-01P)	5.4		0.0
AH2	6.2		60.9	GRANDE 3	5.9		26.1
AST8118LM	5.5		8.7	HEMI	5.7		13.0
AST8218LM	5.5		17.4	JT 233	6.0		26.1
ATF1768	5.7		17.4	JT 268	6.0		34.8
ATF2116	5.7		17.4	JT 517	5.6		8.7
BANDIT	5.5		13.0	K18-NSE	5.8		17.4
BAR 9FE MAS	5.4		4.3	K18-ROE	5.8		13.0
BAR FA 8228	5.4		4.3	K18-RS6	6.1		43.5
BAR TF 134	5.9		13.0	K18-WB1	5.8		30.4
BAR-FA8230	5.6		17.4	KENTUCKY-31	4.4		0.0
BGR-TF3	5.7		26.1	LBF	5.7		21.7
BIRMINGHAM	5.6		17.4	LIFEGUARD	5.8		17.4
BONFIRE (JS DTT)	6.1		34.8	MOONDANCE GLX	5.7		13.0
BRAVO 2	5.8		30.4	NAI-3N2	5.9		26.1
BULLSEYE	5.5		8.7	NAI-FQZ-17	5.4		4.3
BULLSEYE LTZ	5.9		21.7	NAI-ROS4	6.0		43.5
BY-TF-169	6.1		34.8	NAI-ST5	5.9		43.5
COL-TF-148	5.9		39.1	NAI-TUE	5.8		17.4
COPIOUS TF	5.6		8.7	NATURALLY GREEN	5.5		0.0
DEGAS (LTP-TF-111)	6.0		39.1	NT-3	6.0		30.4
DLFPS-321/3679	5.8		13.0	OG-WALK	5.2		4.3
DLFPS-321/3693	5.9		26.1	OKEEFE (LTP-TF-122)	5.9		26.1
DLFPS-321/3694	5.7		17.4	PADRE 2	6.0		34.8
DLFPS-321/3695	5.9		30.4	PALOMAR	5.3		4.3
DLFPS-321/3696	5.9		30.4	PARAMOUNT	5.8		21.7
DLFPS-321/3699	6.1		34.8	PPG-TF 231	5.8		17.4
DLFPS-321/3701	6.0		21.7	PPG-TF 238	6.0		30.4
DLFPS-321/3702	5.9		26.1	PPG-TF 244	6.0		30.4
DLFPS-321/3703	5.8		17.4	PPG-TF 249	5.9		26.1
DLFPS-321/3705	6.1		47.8	PPG-TF 254	6.0		30.4
DLFPS-321/3706	5.7		13.0	PPG-TF 255	6.2		60.9
DLFPS-321/3707	5.7		26.1	PPG-TF 257	5.8		17.4
DLFPS-321/3708	5.8		26.1	PPG-TF 262	5.9		34.8
DLFPS-TF/3550	5.9		21.7	PPG-TF 267	6.0		34.8
DLFPS-TF/3552	6.0		39.1	PPG-TF 305	5.9		30.4
DLFPS-TF/3553	5.9		26.1	PPG-TF 306	6.2		43.5
DRAGSTER	5.9		13.0	PPG-TF 308	6.0		26.1
ESCALADE	5.4		4.3	PPG-TF 312	6.0		39.1
ESTRENA	5.6		13.0	PPG-TF 313	5.9		47.8
FAYETTE	5.7		13.0	PPG-TF 315	6.0		47.8

APPENDIX TABLE. SUMMARY OF TURFGRASS QUALITY RATINGS FOR TALL FESCUE CULTIVARS
(CONT'D) 2019 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	QUALITY	MAXIMUM
	MEAN 1/	IN TOP 25% 2/
PPG-TF 316	6.0	43.5
PPG-TF 318	5.9	30.4
PPG-TF 320	6.0	30.4
PPG-TF 323	6.0	26.1
PPG-TF 336	6.0	34.8
PPG-TF 337	5.9	21.7
PPG-TF 338	6.0	43.5
PRO GOLD	5.8	17.4
PST-5BYOB	5.9	13.0
PST-5DC24	5.5	4.3
PST-5DZM	5.5	0.0
PST-5E6	5.7	17.4
PST-5GLBS	5.8	26.1
PST-5GQ	5.6	17.4
PST-5MCMO	5.8	26.1
PST-5MINK	5.4	4.3
MONUMENT (PST-5SQB)	5.6	17.4
PST-5THM	5.7	13.0
PST-5TRN	5.8	21.7
RAD-TF105	5.7	17.4
RAD-TF131	5.4	13.0
RAPTOR III	5.8	13.0
RC4	6.0	43.5
RDC	6.0	39.1
RH1	6.1	34.8
RH3	6.0	39.1
RHF	6.0	34.8
RHL2	6.0	30.4
RS1	6.0	26.1
SE53D2	5.6	17.4
SE5STAR	5.6	13.0
SESCR1	5.9	21.7
SETF104	5.7	26.1
SETFM2	5.5	17.4
SETFM3	5.6	8.7
TANGO	5.5	4.3
TD2	6.2	56.5
TF445	6.1	43.5
TF456	6.1	43.5
TMT1	6.0	34.8
RAD-TF 115 (TURBO SS)	5.2	13.0
ZRC1	6.1	47.8
LSL VALUE		0.2
C.V. (%)		11.1

*/ 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).
 **/ 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.