NATIONAL TURFGRASS EVALUATION PROGRAM

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

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

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

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

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Mr. Ryan Jeffries, Columbia Seeds, Inc.

Dr. Mike Kenna, USGA Green Section

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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 .

2014 NATIONAL BENTGRASS TEST (Fairway/Tee)

LOCATIONS SUBMITTING DATA FOR 2018

State	Location	Code
Illinois	Urbana	IL1
Indiana	West Lafayette (Reduced Irrigation)	IN1
Iowa	Ames	IA1
Kansas	Manhattan	KS1
Kentucky	Lexington	KY1
Massachusetts	Amherst (Traffic)	MA1
Maryland	College Park	MD1
Michigan	East Lansing	MI1
Missouri	Columbia	MO1
New Jersey	North Brunswick	NJ1
North Dakota	Fargo (Winter Tolerance)	ND1
Utah	Logan (Reduced Irrigation)	UT1
Virginia	Blacksburg (Traffic)	VA2

2014 NATIONAL BENTGRASS TEST (Fairway/Tee)

Entries and Sponsors

Entry No	Name	Species	Sponsor
1	DLFPS-AT/3026	Colonial	DLF Pickseed USA
*2	007	Creeping	Standard
*3	Penncross	Creeping	Standard
*4	Crystal Blue Links	Creeping	Standard
*5	Greentime	Colonial	Standard
*6	L-93XD	Creeping	Jacklin Seed by Simplot®
*7	Armor	Creeping	Jacklin Seed by Simplot®
*8	Kingdom	Creeping	Jacklin Seed by Simplot®
*9	Nightlife	Creeping	Jacklin Seed by Simplot®
*10	V-8	Creeping	Jacklin Seed by Simplot®
*11	Piranha (DC-1)	Creeping	Mountain View Seeds & Toyo Green Co. Ltd.
*12	Musket (PPG-AT 104)	Colonial	Mountain View Seeds
*13	Chinook (H10G-OP)	Creeping	Vista Seed Partners LLC
*14	Shark	Creeping	Mountain View Seeds
*15	Barracuda	Creeping	Mountain View Seeds
16	PST-ORBS	Creeping	Pure Seed Testing Inc
*17	PC2.0 (PST-0CV6)	Creeping	Tee-2-Green

^{*} Commercially Available in the US or any Other Country in 2019.

TABLE A. 2018 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN

THE 2014 NATIONAL BENTGRASS (FAIRWAY/TEE) TEST

			SOIL	SOIL		SUN	MOWING	
	SOIL	SOIL	PHOSPHOROUS	POTASSIUM	NITROGEN	OR	HEIGHT	IRRIGATION
LOCATION	TEXTURE	PH	(LBS/ACRE)	(LBS/ACRE)	(LBS/1000 SQ FT)	SHADE	(IN)	PRACTICED
IA1	SANDY CLAY LOAM	7.1-7.5	0-60	0-150	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
IL1	SILT LOAM AND SILT	6.1-6.5	0-60	376-500	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
IN1	SAND	7.6-8.5	61-150	151-240	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
KS1	-	-	-	_	-	-	-	-
KY1	SILT LOAM AND SILT	5.6-6.0	271-450	241-375	0.0-1.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
MA1	LOAM	5.6-6.0	0-60	241-375	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MD1	SILT LOAM AND SILT	6.1-6.5	61-150	151-240	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MI1	-	-	-	-	-	-	-	-
MO1	-	-	-	-	-	-	-	-
ND1	SILTY CLAY AND CLAY	7.1-7.5	0-60	151-240	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
NJ1	SANDY LOAM	6.1-6.5	451+	151-240	1.1-2.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
UT1	SILT LOAM AND SILT	7.1-7.5	-	-	-	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
VA2	SILTY CLAY LOAM	6.1-6.5	61-150	151-240	3.1-4.0	FULL SUN	0.6-1.0	TO PREVENT DORMANCY

	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER							
	QUALITY	QUALITY	QUALITY	QUALITY	GENETIC	SPRING	LEAF	SPRING	SUMMER	FALL							
LOCATION	RATING	RATING	RATING	RATING	COLOR	GREENUP	TEXTURE	DENSITY	DENSITY	DENSITY							
IA1			X	X	X	X	X	X			X						
IL1		X	X	X	X	X	X	X			X	X					
IN1		X	X	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								
MA1		X	X	X	X	X	X	X	X	X							
MD1			X	X	X	X	X	X	X								
MI1			X	X	X		X	X			X	X					
MO1		X	X	X	X	X	X	X									
ND1			X	X	X	X	X							X	X	X	
NJ1		X	X	X	X	X	X	X			X	X	X			X	
UT1		X	X	X	X	X	X	X			X	X					
VA2			X	X	X	X	X										

TABLE B. (CONT'D)

LOCATIONS AND DATA COLLECTED IN 2018

LOCATION	PERCENT COVER SPRING	PERCENT COVER SUMMER	PERCENT COVER FALL	DOLLAR SPOT	BROWN PATCH WARM TEMP.	FALL COLOR OCTOBER	FALL COLOR NOVEMBER	PERCENT CRABGRASS AUGUST	PERCENT POA ANNUA	DOLLAR JULY A		WEAR 1	FOLERAN JULY	CE RATINGS OCTOBER	
IA1 IL1 IN1				X X			Х		х		X				
KS1 KY1 MA1												Х	Х	Х	
MD1 MI1 MO1				Х	Х	Х		Х							
ND1 NJ1 UT1	Х	Х	X X	Х	Х					X	Х				

^{*} VA2

^{*} MORE DATA FOR VA2 IN TABLE 4.

TABLE 1A. MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON 1/
A FAIRWAY OR TEE GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1 **/
2018 DATA

NAME	# ENTRY	NJ1	KY1	IA1	KS1	MEAN
DLFPS-AT/3026	1	7.1	6.9	6.8	5.1	6.4
* PIRANHA (DC-1)	11	7.4	6.8	6.7	4.3	6.3
* CHINOOK (H10G-OP)	13	7.5	6.7	6.7	4.3	6.3
* 007	2	7.0	6.7	6.7	4.2	6.2
* V-8	10	6.5	6.7	6.7	4.1	6.0
* BARRACUDA	15	6.0	6.7	6.7	4.2	5.9
* L-93XD	6	6.9	6.5	6.5	3.7	5.9
* MUSKET (PPG-AT 104)	12	6.4	6.2	6.2	3.8	5.7
* GREENTIME	5	4.7	6.5	6.4	5.0	5.6
* PENNCROSS	3	4.5	6.5	6.4	5.1	5.6
* SHARK	14	5.5	6.5	6.5	3.9	5.6
* CRYSTAL BLUE LINKS	4	4.5	6.6	6.7	4.1	5.5
* NIGHTLIFE	9	4.6	6.5	6.6	4.0	5.4
* PC2.0 (PST-0CV6)	17	4.1	6.6	6.6	4.3	5.4
* KINGDOM	8	4.2	6.3	6.4	3.8	5.2
PST-0RBS	16	3.5	6.4	6.4	4.0	5.1
* ARMOR	7	3.6	6.2	6.3	3.9	5.0
LSD VALUE		0.9	0.9	0.9	0.9	0.9
C.V. (%)		10.4	8.8	8.8	13.6	10.0

^{*/} COMMERCIALLY AVAILABLE IN THE USA IN 2019

^{**/} 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 1B. MEAN TURFGRASS QUALITY RATINGS OF CREEPING BENTGRASS CULTIVARS GROWN ON 1/
A FAIRWAY OR TEE GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1 */
2018 DATA

NAME	# ENTRY	NJ1	KY1	IA1	KS1	MEAN
* PIRANHA (DC-1)	11	7.4	6.8	6.7	4.3	6.3
* CHINOOK (H10G-OP)	13	7.5	6.7	6.7	4.3	6.3
* 007	2	7.0	6.7	6.7	4.2	6.2
* V-8	10	6.5	6.7	6.7	4.1	6.0
* BARRACUDA	15	6.0	6.7	6.7	4.2	5.9
* L-93XD	6	6.9	6.5	6.5	3.7	5.9
* PENNCROSS	3	4.5	6.5	6.4	5.1	5.6
* SHARK	14	5.5	6.5	6.5	3.9	5.6
* CRYSTAL BLUE LINKS	4	4.5	6.6	6.7	4.1	5.5
* NIGHTLIFE	9	4.6	6.5	6.6	4.0	5.4
* PC2.0 (PST-0CV6)	17	4.1	6.6	6.6	4.3	5.4
* KINGDOM	8	4.2	6.3	6.4	3.8	5.2
PST-ORBS	16	3.5	6.4	6.4	4.0	5.1
* ARMOR	7	3.6	6.2	6.3	3.9	5.0
LSD VALUE		0.9	0.9	0.9	0.9	0.9
C.V. (%)		10.6	8.8	8.7	13.8	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 1C. MEAN TURFGRASS QUALITY RATINGS OF COLONIAL BENTGRASS CULTIVARS GROWN ON 1/
A FAIRWAY OR TEE GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 1 */
2018 DATA

NAME	# ENTRY	NJ1	KY1	IA1	KS1	MEAN
DLFPS-AT/3026 * MUSKET (PPG-AT 104) * GREENTIME	1 12 5	7.1 6.4 4.7	6.9 6.2 6.5	6.8 6.2 6.4	5.1 3.8 5.0	6.4 5.7 5.6
LSD VALUE C.V. (%)		0.9	0.9	0.9	0.9 12.5	0.9 9.7

- */ 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 2A. MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON 1/
A FAIRWAY OR TEE GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 */
2018 DATA

NAME	# ENTRY	MD1	IL1	MI1	MO1	MEAN
V-8	10	6.6	7.4	6.9	5.3	6.5
BARRACUDA	15	6.3	7.4	6.9	5.3	6.5
CRYSTAL BLUE LINKS	4	5.7	7.6	6.9	5.6	6.5
007	2	6.5	7.3	6.8	5.1	6.4
L-93XD	6	6.8	7.1	6.6	5.0	6.4
NIGHTLIFE	9	5.7	7.4	6.8	5.4	6.3
PIRANHA (DC-1)	11	6.5	7.2	6.7	5.0	6.3
SHARK	14	6.2	7.3	6.7	5.2	6.3
CHINOOK (H10G-OP)	13	6.4	7.1	6.6	4.9	6.3
PC2.0 (PST-0CV6)	17	5.0	7.5	6.7	5.4	6.2
KINGDOM	8	5.4	7.2	6.5	5.2	6.1
PST-ORBS	16	5.0	7.4	6.6	5.3	6.1
ARMOR	7	4.8	7.2	6.5	5.1	5.9
MUSKET (PPG-AT 104)	12	5.9	6.8	6.2	4.6	5.9
DLFPS-AT/3026	1	5.0	7.2	6.4	4.5	5.8
GREENTIME	5	3.3	7.0	6.0	4.3	5.1
PENNCROSS	3	3.1	7.1	6.1	4.3	5.1
LSD VALUE		0.9	0.9	0.9	0.9	0.9
C.V. (%)		10.4	7.9	8.7	11.4	9.4

^{*/} 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 2B. MEAN TURFGRASS QUALITY RATINGS OF CREEPING BENTGRASS CULTIVARS GROWN ON 1/
A FAIRWAY OR TEE GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 */
2018 DATA

NAME	# ENTRY	MD1	IL1	MI1	MO1	MEAN
V-8	10	6.6	7.4	6.9	5.3	6.5
BARRACUDA	15	6.3	7.4	6.9	5.3	6.5
CRYSTAL BLUE LINKS	4	5.7	7.6	6.9	5.6	6.5
007	2	6.5	7.3	6.8	5.1	6.4
L-93XD	6	6.8	7.1	6.6	5.0	6.4
NIGHTLIFE	9	5.7	7.4	6.8	5.4	6.3
PIRANHA (DC-1)	11	6.5	7.2	6.7	5.0	6.3
SHARK	14	6.2	7.3	6.7	5.2	6.3
CHINOOK (H10G-OP)	13	6.4	7.1	6.6	4.9	6.3
PC2.0 (PST-0CV6)	17	5.0	7.5	6.7	5.4	6.2
KINGDOM	8	5.4	7.2	6.5	5.2	6.1
PST-ORBS	16	5.0	7.4	6.6	5.3	6.1
ARMOR	7	4.8	7.2	6.5	5.1	5.9
PENNCROSS	3	3.1	7.1	6.1	4.3	5.1
LSD VALUE		0.9	0.9	0.9	0.9	0.9
C.V. (%)		10.0	7.9	8.6	11.2	9.3

- 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 2C. MEAN TURFGRASS QUALITY RATINGS OF COLONIAL BENTGRASS CULTIVARS GROWN ON 1/
A FAIRWAY OR TEE GROWN IN LOCATION PERFORMANCE INDEX (LPI) GROUP 2 */
2018 DATA

NAME	# ENTRY	MD1	IL1	MI1	MO1	MEAN
MUSKET (PPG-AT 104) DLFPS-AT/3026	12 1	5.9 5.0	6.8 7.2	6.2	4.6	5.9 5.8
GREENTIME	5	3.3	7.0	6.0	4.3	5.1
LSD VALUE		0.9	0.9	0.9	0.9	0.9
C.V. (%)		12.2	8.2	9.2	12.9	10.3

^{*/} 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 3A. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS

GROWN UNDER TRAFFIC STRESS AT AMHERST, MA 1/

2018 DATA

	WEA	QUALITY RATINGS											
NAME	MAY	JULY	OCTOBER	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PIRANHA (DC-1)	6.3	6.7	7.3	6.0	6.0	6.7	6.7	6.7	6.7	7.0	6.3	5.7	6.4
KINGDOM	7.0	6.3	7.7	5.3	5.7	6.7	6.7	6.0	6.3	5.7	6.0	5.7	6.0
007	5.7	6.3	6.0	5.0	6.0	6.0	6.3	6.3	6.0	5.7	5.7	5.7	5.9
NIGHTLIFE	6.0	7.3	6.0	5.0	5.3	6.0	6.3	6.7	6.3	6.0	6.0	5.7	5.9
CHINOOK (H10G-OP)	5.0	5.0	5.7	5.7	5.7	5.7	5.7	6.0	5.7	5.7	5.7	5.7	5.7
SHARK	5.0	5.7	5.7	5.0	6.3	6.3	5.7	6.0	5.3	5.7	5.3	5.3	5.7
ARMOR	5.7	5.7	6.7	5.0	6.0	6.3	6.7	6.3	5.3	5.3	5.0	4.7	5.6
L-93XD	5.3	5.0	6.0	5.3	6.0	6.0	5.3	5.3	5.7	5.3	5.7	5.3	5.6
PC2.0 (PST-0CV6)	4.7	5.3	6.0	5.0	5.0	5.3	6.0	5.7	5.7	5.3	6.0	5.3	5.5
MUSKET (PPG-AT 104)	4.3	5.3	6.3	4.3	6.7	6.7	7.0	5.3	5.7	5.0	4.0	3.7	5.4
V-8	4.7	5.0	5.0	5.0	6.0	6.0	5.7	5.3	5.0	5.3	5.0	5.0	5.4
BARRACUDA	4.7	5.3	5.3	4.3	5.7	5.0	5.0	6.0	5.3	5.0	5.3	5.7	5.3
DLFPS-AT/3026	3.7	4.3	4.7	4.3	6.3	6.7	7.0	5.0	5.3	5.0	4.0	4.0	5.3
PST-0RBS	5.3	5.7	6.3	5.0	5.3	5.7	6.0	5.7	5.0	4.7	5.3	5.0	5.3
CRYSTAL BLUE LINKS	4.3	4.7	5.7	3.7	4.3	5.7	5.3	5.3	5.3	4.7	4.0	4.7	4.8
GREENTIME	3.7	5.0	4.3	4.3	5.0	5.3	5.3	4.7	5.0	4.3	3.7	4.0	4.6
PENNCROSS	3.3	4.0	4.0	3.0	4.0	4.0	4.3	4.3	4.0	4.3	4.0	4.0	4.0
LSD VALUE	0.8	0.7	1.0	0.9	1.2	0.7	1.0	0.8	0.6	0.8	0.7	0.7	0.4
C.V. (%)	10.0	8.0	10.7	10.8	11.5	7.3	9.6	8.4	6.8	9.2	9.0	8.5	4.4

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

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

TABLE 3B. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF CREEPING BENTGRASS CULTIVARS
GROWN UNDER TRAFFIC STRESS AT AMHERST, MA 1/
2018 DATA

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

	WEAR	TOLERANCE :	RATINGS	QUALITY RATINGS									
NAME	MAY	JULY	OCTOBER	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PIRANHA (DC-1)	6.3	6.7	7.3	6.0	6.0	6.7	6.7	6.7	6.7	7.0	6.3	5.7	6.4
KINGDOM	7.0	6.3	7.7	5.3	5.7	6.7	6.7	6.0	6.3	5.7	6.0	5.7	6.0
007	5.7	6.3	6.0	5.0	6.0	6.0	6.3	6.3	6.0	5.7	5.7	5.7	5.9
NIGHTLIFE	6.0	7.3	6.0	5.0	5.3	6.0	6.3	6.7	6.3	6.0	6.0	5.7	5.9
CHINOOK (H10G-OP)	5.0	5.0	5.7	5.7	5.7	5.7	5.7	6.0	5.7	5.7	5.7	5.7	5.7
SHARK	5.0	5.7	5.7	5.0	6.3	6.3	5.7	6.0	5.3	5.7	5.3	5.3	5.7
ARMOR	5.7	5.7	6.7	5.0	6.0	6.3	6.7	6.3	5.3	5.3	5.0	4.7	5.6
L-93XD	5.3	5.0	6.0	5.3	6.0	6.0	5.3	5.3	5.7	5.3	5.7	5.3	5.6
PC2.0 (PST-0CV6)	4.7	5.3	6.0	5.0	5.0	5.3	6.0	5.7	5.7	5.3	6.0	5.3	5.5
V-8	4.7	5.0	5.0	5.0	6.0	6.0	5.7	5.3	5.0	5.3	5.0	5.0	5.4
BARRACUDA	4.7	5.3	5.3	4.3	5.7	5.0	5.0	6.0	5.3	5.0	5.3	5.7	5.3
PST-0RBS	5.3	5.7	6.3	5.0	5.3	5.7	6.0	5.7	5.0	4.7	5.3	5.0	5.3
CRYSTAL BLUE LINKS	4.3	4.7	5.7	3.7	4.3	5.7	5.3	5.3	5.3	4.7	4.0	4.7	4.8
PENNCROSS	3.3	4.0	4.0	3.0	4.0	4.0	4.3	4.3	4.0	4.3	4.0	4.0	4.0
LSD VALUE	0.8	0.7	1.0	0.8	1.1	0.6	1.1	0.9	0.6	0.9	0.7	0.7	0.4
C.V. (%)	9.4	8.2	9.8	10.3	11.2	6.6	10.6	8.5	6.6	9.7	8.1	7.6	4.2

- 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 3C. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF COLONIAL BENTGRASS CULTIVARS GROWN UNDER TRAFFIC STRESS AT AMHERST, MA 1/2018 DATA

WEAR TOLERANCE RATINGS								QUALITY RATINGS						
NAME	MAY	JULY	OCTOBER	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN	
MUSKET (PPG-AT 104)	4.3	5.3	6.3	4.3	6.7	6.7	7.0	5.3	5.7	5.0	4.0	3.7	5.4	
DLFPS-AT/3026	3.7	4.3	4.7	4.3	6.3	6.7	7.0	5.0	5.3	5.0	4.0	4.0	5.3	
GREENTIME	3.7	5.0	4.3	4.3	5.0	5.3	5.3	4.7	5.0	4.3	3.7	4.0	4.6	
LSD VALUE	0.8	0.8	0.8	1.3	1.9	1.5	0.8	0.9	0.9	0.8	1.5	0.8	0.6	
C.V. (%)	8.6	6.8	6.5	13.3	13.6	10.7	5.2	8.2	7.7	7.0	17.1	8.6	5.2	

^{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.

								QUALITY RATINGS						
	QUALITY RATINGS BEFORE TRAFFIC								NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC		
NAME	MAY	JUN	JUL	AUG	SEP	MEAN	DISEASE	OCTOBER 18	OCTOBER 30	OCTOBER 31	OCTOBER 31	NOVEMBER		
007	7.3	7.7	7.7	7.3	7.7	7.5	2.7	5.3	5.7	6.0	8.0	6.0		
ARMOR	7.7	7.3	7.0	7.3	7.7	7.4	2.7	5.3	5.3	5.7	8.0	6.0		
CRYSTAL BLUE LINKS	7.7	8.0	7.3	7.7	7.7	7.7	2.7	5.7	5.7	6.0	8.0	6.0		
DLFPS-AT/3026	8.0	8.0	7.0	8.0	8.0	7.8	2.0	5.3	4.3	6.0	6.3	6.0		
GREENTIME	7.7	7.3	7.3	7.0	7.7	7.4	2.7	5.7	5.7	6.0	7.7	6.0		
KINGDOM	7.7	7.3	7.3	7.3	7.3	7.4	2.3	5.0	5.3	5.7	8.3	6.0		
L-93XD	7.7	7.3	7.7	7.7	7.7	7.6	2.7	6.0	6.3	6.0	8.7	6.0		
MUSKET (PPG-AT 104)	8.0	8.0	7.3	7.7	7.3	7.7	2.3	5.7	5.7	6.0	8.0	6.0		
PC2.0 (PST-0CV6)	7.7	7.7	7.3	7.7	7.7	7.6	3.0	6.0	6.0	6.3	8.0	6.0		
PENNCROSS	7.7	7.3	7.3	7.3	7.7	7.5	2.7	5.7	6.3	5.7	8.3	6.0		
PIRANHA (DC-1)	7.7	7.7	7.3	7.7	8.0	7.7	2.7	5.7	6.0	6.3	8.0	6.0		
PST-ORBS	7.7	7.3	7.3	7.3	7.3	7.4	2.7	6.0	6.0	6.0	8.0	6.0		
SHARK	8.0	7.7	7.7	8.0	8.0	7.9	2.3	5.0	5.3	6.0	8.7	6.0		
V-8	7.7	7.3	7.7	7.3	8.0	7.6	2.7	6.0	6.3	6.0	8.0	6.0		
BARRACUDA	7.7	7.3	7.3	7.3	7.3	7.4	2.5	6.0	6.0	6.0	8.3	5.7		
CHINOOK (H10G-OP)	7.3	7.3	7.3	7.7	8.0	7.5	2.7	5.3	4.7	5.7	8.0	5.7		
NIGHTLIFE	8.0	7.7	7.7	7.3	8.0	7.7	2.7	5.3	5.3	6.0	8.3	5.7		
LSD VALUE	1.5	1.2	2.0	1.4	1.4	1.0	1.6	1.9	2.7	2.2	2.2	1.6		
C.V. (%)	6.0	5.6	7.8	6.4	6.2	4.2	19.2	11.5	17.0	10.1	10.1	7.2		

^{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 4B. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF CREEPING BENTGRASS CULTIVARS GROWN UNDER TRAFFIC STRESS AT BLACKSBURG, VA 1/

2018 DATA

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

								QUALITY RATINGS						
	QUAL	ITY RAT	INGS BE	FORE TR	AFFIC			NO TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC		
NAME	MAY	JUN	JUL	AUG	SEP	MEAN	DISEASE	OCTOBER 18	OCTOBER 30	OCTOBER 31	OCTOBER 31	NOVEMBER		
007	7.3	7.7	7.7	7.3	7.7	7.5	2.7	5.3	5.7	6.0	8.0	6.0		
ARMOR	7.7	7.3	7.0	7.3	7.7	7.4	2.7	5.3	5.3	5.7	8.0	6.0		
CRYSTAL BLUE LINKS	7.7	8.0	7.3	7.7	7.7	7.7	2.7	5.7	5.7	6.0	8.0	6.0		
KINGDOM	7.7	7.3	7.3	7.3	7.3	7.4	2.3	5.0	5.3	5.7	8.3	6.0		
L-93XD	7.7	7.3	7.7	7.7	7.7	7.6	2.7	6.0	6.3	6.0	8.7	6.0		
PC2.0 (PST-0CV6)	7.7	7.7	7.3	7.7	7.7	7.6	3.0	6.0	6.0	6.3	8.0	6.0		
PENNCROSS	7.7	7.3	7.3	7.3	7.7	7.5	2.7	5.7	6.3	5.7	8.3	6.0		
PIRANHA (DC-1)	7.7	7.7	7.3	7.7	8.0	7.7	2.7	5.7	6.0	6.3	8.0	6.0		
PST-ORBS	7.7	7.3	7.3	7.3	7.3	7.4	2.7	6.0	6.0	6.0	8.0	6.0		
SHARK	8.0	7.7	7.7	8.0	8.0	7.9	2.3	5.0	5.3	6.0	8.7	6.0		
V-8	7.7	7.3	7.7	7.3	8.0	7.6	2.7	6.0	6.3	6.0	8.0	6.0		
BARRACUDA	7.7	7.3	7.3	7.3	7.3	7.4	2.5	6.0	6.0	6.0	8.3	5.7		
CHINOOK (H10G-OP)	7.3	7.3	7.3	7.7	8.0	7.5	2.7	5.3	4.7	5.7	8.0	5.7		
NIGHTLIFE	8.0	7.7	7.7	7.3	8.0	7.7	2.7	5.3	5.3	6.0	8.3	5.7		
LSD VALUE	1.6	1.3	2.0	1.4	1.3	1.0	1.7	1.8	2.7	2.2	0.9	1.6		
C.V. (%)	6.4	5.9	8.1	6.2	6.0	4.3	19.1	11.7	16.1	11.1	4.4	8.0		

^{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).

TABLE 4C. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF COLONIAL BENTGRASS CULTIVARS

GROWN UNDER TRAFFIC STRESS AT BLACKSBURG, VA 1/

2018 DATA

					QUALITY RATINGS								
	QUAL	ITY RAT	INGS BE	FORE TR	AFFIC			NO TRAFFIC	NO TRAFFIC	TRAFFIC	NO TRAFFIC	TRAFFIC	
NAME	MAY	JUN	JUL	AUG	SEP	MEAN	DISEASE	OCTOBER 18	OCTOBER 30	OCTOBER 31	OCTOBER 31	NOVEMBER	
DLFPS-AT/3026	8.0	8.0	7.0	8.0	8.0	7.8	2.0	5.3	4.3	6	6.3	6	
GREENTIME	7.7	7.3	7.3	7.0	7.7	7.4	2.7	5.7	5.7	6	7.7	6	
MUSKET (PPG-AT 104)	8.0	8.0	7.3	7.7	7.3	7.7	2.3	5.7	5.7	6	8.0	6	
LSD VALUE	0.8	0.8	0.8	0 0	0.9	0.6	0.9	1.5	3.1	0	4 1	0	
		0.0	0.0	0.8						U	4.1	U	
C.V. (%)	4.2	4.3	4.6	4.4	5.3	3.2	17.5	12.0	25.5	0	24.3	0	

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

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

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

TABLE 5A.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS IN THE
GROWN ON A FAIRWAY OR TEE UNDER REDUCED IRRIGATION AT WEST LAFAYETTE, IN 1/
2018 DATA

	LEAF	SUMMER	DOLLAR SPOT	DOLLAR SPOT	PERCENT POA				Q	UALITY R	ATINGS			
NAME	TEXTURE	DENSITY	JUNE	AUGUST	ANNUA	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	MEAN
L-93XD	7.0	8.3	8.0	6.3	3.0	7.3	7.0	7.7	7.0	5.7	5.7	7.3	7.3	6.9
007	6.3	8.0	7.7	6.3	7.0	6.7	6.7	7.3	6.7	5.3	6.0	8.0	7.3	6.8
CHINOOK (H10G-OP)	7.3	7.7	8.7	7.7	2.7	7.0	6.7	6.7	6.7	5.7	6.0	7.3	7.3	6.7
PIRANHA (DC-1)	7.0	8.3	7.3	5.3	3.7	7.0	7.0	7.0	6.3	5.3	5.7	7.3	7.3	6.6
SHARK	7.0	8.0	8.0	4.7	2.3	7.0	6.3	7.3	5.7	4.7	5.7	8.0	7.3	6.5
PC2.0 (PST-0CV6)	7.0	7.7	6.0	4.3	3.3	7.3	7.0	7.3	6.7	4.0	5.0	7.0	7.0	6.4
PST-0RBS	7.7	7.7	8.0	4.7	9.0	7.3	6.7	6.3	5.0	4.7	5.7	7.7	7.7	6.4
CRYSTAL BLUE LINKS	7.0	6.3	7.0	5.7	8.3	6.7	6.3	7.0	6.3	4.3	5.7	7.0	7.0	6.3
NIGHTLIFE	7.3	7.7	7.3	5.7	8.0	7.0	6.7	7.0	5.7	4.3	5.0	7.3	7.0	6.3
V-8	7.0	7.0	8.0	6.7	7.7	5.3	6.0	7.0	6.3	5.3	6.0	7.3	7.0	6.3
ARMOR	7.0	7.3	4.3	3.7	7.0	7.0	6.7	7.3	5.0	3.7	5.3	7.0	7.3	6.2
BARRACUDA	7.0	7.7	7.7	5.3	6.0	6.3	6.3	6.3	5.7	5.0	6.0	7.0	7.0	6.2
MUSKET (PPG-AT 104)	8.3	8.3	9.0	6.3	23.3	5.7	5.7	6.7	6.0	5.7	5.7	6.7	7.0	6.1
KINGDOM	7.0	7.7	7.0	6.0	10.0	6.3	6.0	7.0	5.0	5.3	5.0	6.7	6.7	6.0
DLFPS-AT/3026	8.0	8.0	9.0	7.3	31.7	5.0	5.7	6.3	6.0	5.3	5.7	6.7	6.3	5.9
GREENTIME	6.7	7.0	7.0	5.7	26.7	4.7	5.7	5.3	6.0	4.7	5.3	6.7	6.0	5.5
PENNCROSS	5.3	5.7	6.0	4.0	21.7	5.3	5.7	6.0	5.3	4.0	5.0	6.0	6.7	5.5
LSD VALUE	0.7	1.7	2.4	1.6	14.3	1.7	1.3	1.3	1.8	0.9	1.1	1.5	1.1	0.6
C.V. (%)	6.4	11.0	16.5	16.3	76.1	13.8	9.6	9.7	13.7	11.1	8.7	9.4	7.1	5.6

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

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

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF CREEPING BENTGRASS CULTIVARS IN THE GROWN ON A FAIRWAY OR TEE UNDER REDUCED IRRIGATION AT WEST LAFAYETTE, IN $1/2018~{ m DATA}$

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

	LEAF	SUMMER	DOLLAR SPOT	DOLLAR SPOT	PERCENT POA					QUALITY	RATTNGS			
NAME	TEXTURE	DENSITY	JUNE	AUGUST	ANNUA	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	MEAN
L-93XD	7.0	8.3	8.0	6.3	3.0	7.3	7.0	7.7	7.0	5.7	5.7	7.3	7.3	6.9
007	6.3	8.0	7.7	6.3	7.0	6.7	6.7	7.3	6.7	5.3	6.0	8.0	7.3	6.8
CHINOOK (H10G-OP)	7.3	7.7	8.7	7.7	2.7	7.0	6.7	6.7	6.7	5.7	6.0	7.3	7.3	6.7
PIRANHA (DC-1)	7.0	8.3	7.3	5.3	3.7	7.0	7.0	7.0	6.3	5.3	5.7	7.3	7.3	6.6
SHARK	7.0	8.0	8.0	4.7	2.3	7.0	6.3	7.3	5.7	4.7	5.7	8.0	7.3	6.5
PC2.0 (PST-0CV6)	7.0	7.7	6.0	4.3	3.3	7.3	7.0	7.3	6.7	4.0	5.0	7.0	7.0	6.4
PST-ORBS	7.7	7.7	8.0	4.7	9.0	7.3	6.7	6.3	5.0	4.7	5.7	7.7	7.7	6.4
CRYSTAL BLUE LINKS	7.0	6.3	7.0	5.7	8.3	6.7	6.3	7.0	6.3	4.3	5.7	7.0	7.0	6.3
NIGHTLIFE	7.3	7.7	7.3	5.7	8.0	7.0	6.7	7.0	5.7	4.3	5.0	7.3	7.0	6.3
V-8	7.0	7.0	8.0	6.7	7.7	5.3	6.0	7.0	6.3	5.3	6.0	7.3	7.0	6.3
ARMOR	7.0	7.3	4.3	3.7	7.0	7.0	6.7	7.3	5.0	3.7	5.3	7.0	7.3	6.2
BARRACUDA	7.0	7.7	7.7	5.3	6.0	6.3	6.3	6.3	5.7	5.0	6.0	7.0	7.0	6.2
KINGDOM	7.0	7.7	7.0	6.0	10.0	6.3	6.0	7.0	5.0	5.3	5.0	6.7	6.7	6.0
PENNCROSS	5.3	5.7	6.0	4.0	21.7	5.3	5.7	6.0	5.3	4.0	5.0	6.0	6.7	5.5
LSD VALUE	0.8	1.7	2.7	1.4	19.7	1.9	1.6	1.6	1.7	1.0	0.9	1.4	1.6	0.7
C.V. (%)	6.3	10.9	18.0	15.4	107.4	12.6	9.5	9.4	13.7	11.5	8.2	8.8	7.6	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 5C. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF COLONIAL BENTGRASS CULTIVARS IN THE GROWN ON A FAIRWAY OR TEE UNDER REDUCED IRRIGATION AT WEST LAFAYETTE, IN 1/2018 DATA

	LEAF	SUMMER	DOLLAR SPOT	DOLLAR SPOT	PERCENT POA				QUA	LITY RAT	'INGS			
NAME	TEXTURE	DENSITY	JUNE	AUGUST	ANNUA	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	MEAN
MUSKET (PPG-AT 104)	8.3	8.3	9.0	6.3	23.3	5.7	5.7	6.7	6.0	5.7	5.7	6.7	7.0	6.1
DLFPS-AT/3026	8.0	8.0	9.0	7.3	31.7	5.0	5.7	6.3	6.0	5.3	5.7	6.7	6.3	5.9
GREENTIME	6.7	7.0	7.0	5.7	26.7	4.7	5.7	5.3	6.0	4.7	5.3	6.7	6.0	5.5
LSD VALUE	0.9	2.4	1.3	3.1	26.7	2.3	1.6	1.5	2.1	1.2	1.5	1.6	0.8	1.0
C.V. (%)	5.3	13.6	6.9	20.7	42.2	19.0	12.5	10.9	15.2	10.1	12.0	10.6	5.2	7.1

^{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 6A. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE UNDER REDUCED IRRIGATION AT LOGAN, UT 1/2018 DATA

	GENETIC	SPRING				OUALIT	Y RATING	S		
NAME	COLOR	GREENUP	APR	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
NIGHTLIFE	6.7	5.3	5.7	7.3	6.3	7.0	6.3	6.0	6.7	6.5
ARMOR	7.0	5.3	6.0	6.7	7.0	6.3	5.7	6.0	6.3	6.3
KINGDOM	6.3	5.3	5.0	7.3	6.3	6.3	6.0	6.0	6.3	6.2
PST-ORBS	4.3	4.3	5.0	6.7	7.0	5.7	6.3	5.3	6.0	6.0
PIRANHA (DC-1)	4.7	5.0	5.3	6.0	6.3	6.0	5.7	5.3	5.7	5.8
CHINOOK (H10G-OP)	4.7	5.3	4.7	6.0	6.3	5.7	5.7	5.3	6.3	5.7
MUSKET (PPG-AT 104)	6.0	6.0	6.0	6.3	6.3	5.3	5.3	5.0	5.3	5.7
BARRACUDA	4.7	5.3	5.3	5.3	6.3	6.3	4.7	5.0	5.7	5.5
V-8	5.0	3.7	4.3	5.7	5.7	6.0	6.0	5.3	5.3	5.5
DLFPS-AT/3026	6.0	6.7	6.0	6.3	6.0	4.7	5.0	4.7	5.0	5.4
PC2.0 (PST-0CV6)	4.0	5.0	5.3	5.0	6.3	6.0	5.0	4.7	5.3	5.4
SHARK	4.7	4.0	4.3	5.7	5.7	6.0	5.0	4.7	5.7	5.3
007	4.3	5.7	5.0	4.7	5.7	5.7	5.3	4.7	5.7	5.2
CRYSTAL BLUE LINKS	3.0	6.0	4.7	5.7	6.7	5.0	4.7	4.3	5.3	5.2
PENNCROSS	4.3	5.0	4.3	3.3	3.7	5.0	5.3	3.7	4.3	4.2
L-93XD	4.0	4.0	4.7	4.3	5.0	4.7	3.3	3.3	3.7	4.1
GREENTIME	6.7	6.0	5.3	5.0	4.3	3.0	3.0	4.0	3.7	4.0
LSD VALUE	1.1	3.2	4.4	2.0	2.9	2.6	2.0	2.6	1.5	1.5
C.V. (%)	13.8	23.9	25.7	18.7	20.4	20.8	19.2	22.2	15.4	14.4

^{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 6B. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF CREEPING BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE UNDER REDUCED IRRIGATION AT LOGAN, UT 1/2018 DATA

	GENETIC	SPRING				QUALIT	Y RATING	S		
NAME	COLOR	GREENUP	APR	MAY	JUN	JUL	AUG	SEP	OCT	MEAN
NIGHTLIFE	6.7	5.3	5.7	7.3	6.3	7.0	6.3	6.0	6.7	6.5
ARMOR	7.0	5.3	6.0	6.7	7.0	6.3	5.7	6.0	6.3	6.3
KINGDOM	6.3	5.3	5.0	7.3	6.3	6.3	6.0	6.0	6.3	6.2
PST-ORBS	4.3	4.3	5.0	6.7	7.0	5.7	6.3	5.3	6.0	6.0
PIRANHA (DC-1)	4.7	5.0	5.3	6.0	6.3	6.0	5.7	5.3	5.7	5.8
CHINOOK (H10G-OP)	4.7	5.3	4.7	6.0	6.3	5.7	5.7	5.3	6.3	5.7
BARRACUDA	4.7	5.3	5.3	5.3	6.3	6.3	4.7	5.0	5.7	5.5
V-8	5.0	3.7	4.3	5.7	5.7	6.0	6.0	5.3	5.3	5.5
PC2.0 (PST-0CV6)	4.0	5.0	5.3	5.0	6.3	6.0	5.0	4.7	5.3	5.4
SHARK	4.7	4.0	4.3	5.7	5.7	6.0	5.0	4.7	5.7	5.3
007	4.3	5.7	5.0	4.7	5.7	5.7	5.3	4.7	5.7	5.2
CRYSTAL BLUE LINKS	3.0	6.0	4.7	5.7	6.7	5.0	4.7	4.3	5.3	5.2
PENNCROSS	4.3	5.0	4.3	3.3	3.7	5.0	5.3	3.7	4.3	4.2
L-93XD	4.0	4.0	4.7	4.3	5.0	4.7	3.3	3.3	3.7	4.1
LSD VALUE	1.3	3.3	3.6	2.1	3.3	3.0	2.3	2.3	1.6	1.6
C.V. (%)	15.7	24.0	23.4	19.6	21.7	18.4	19.1	20.6	14.7	14.0

^{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).

TABLE 6C. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF COLONIAL BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE UNDER REDUCED IRRIGATION AT LOGAN, UT 1/2018 DATA

NAME	GENETIC COLOR	SPRING GREENUP	APR	MAY	JUN	QUALIT JUL	Y RATIN AUG	GS SEP	OCT	MEAN
MUSKET (PPG-AT 104)	6.0	6.0	6.0	6.3	6.3	5.3	5.3	5.0	5.3	5.7
DLFPS-AT/3026	6.0	6.7	6.0	6.3	6.0	4.7	5.0	4.7	5.0	5.4
GREENTIME	6.7	6.0	5.3	5.0	4.3	3.0	3.0	4.0	3.7	4.0
LSD VALUE	0.8	2.8	0.8	2.3	1.5	2.5	2.4	3.6	2.5	1.8
C.V. (%)	5.4	19.3	5.8	16.5	12.0	24.9	23.7	34.3	23.1	15.2

^{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.

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

TABLE 7A. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS

GROWN ON A FAIRWAY OR TEE UNDER LOW TEMPERATURE/WINTER TOLERANCE AT FARGO, ND 1/

2018 DATA

	DEI	NSITY RATIN	IGS	PERCENT GROUND COVER			QUALITY RATINGS					
NAME	SPRING	SUMMER	FALL	SPRING	SUMMER	FALL	MAY	JUN	JUL	AUG	SEP	MEAN
SHARK	6.0	7.0	8.0	95.0	99	99	5.0	6.7	7.0	7.0	7.0	6.5
PENNCROSS	5.3	6.0	7.0	95.0	95	99	5.0	6.0	7.0	7.0	6.3	6.3
007	4.0	6.0	7.0	95.0	99	99	6.0	6.0	6.0	6.7	6.0	6.1
DLFPS-AT/3026	4.0	6.0	7.0	90.0	95	99	5.0	6.0	6.3	6.3	7.0	6.1
KINGDOM	5.0	6.0	7.0	93.3	99	99	5.0	6.0	6.7	7.0	6.0	6.1
PC2.0 (PST-0CV6)	4.0	6.0	7.0	95.0	99	99	5.0	6.0	6.7	7.0	6.0	6.1
BARRACUDA	5.0	7.0	8.0	95.0	99	99	4.0	6.0	6.0	7.0	7.0	6.0
CHINOOK (H10G-OP)	5.0	6.0	7.0	91.7	99	99	5.0	6.0	6.0	7.0	6.0	6.0
CRYSTAL BLUE LINKS	6.0	6.0	8.0	91.7	99	99	5.0	6.0	6.0	7.0	6.0	6.0
PIRANHA (DC-1)	5.0	6.0	6.0	93.3	95	99	4.0	6.0	6.0	7.0	7.0	6.0
PST-ORBS	4.0	6.0	8.0	95.0	99	99	5.0	6.0	6.0	7.0	6.0	6.0
ARMOR	5.0	6.0	6.7	83.3	99	99	5.0	6.0	6.3	6.0	6.0	5.9
L-93XD	5.0	7.0	7.0	85.0	99	99	4.0	5.3	6.0	7.0	6.3	5.7
V-8	4.0	6.0	7.0	93.3	95	99	4.0	5.7	6.0	6.7	6.0	5.7
GREENTIME	4.7	5.7	7.0	83.3	99	99	4.0	5.0	6.0	6.3	6.7	5.6
MUSKET (PPG-AT 104)	4.0	5.0	7.0	85.0	95	99	3.3	5.0	6.0	7.0	6.0	5.5
NIGHTLIFE	4.0	5.0	7.0	88.3	95	99	4.0	5.3	6.0	6.0	6.0	5.5
LSD VALUE	0.3	0.4	0.2	4.3	0	0	0.2	0.5	0.5	0.5	0.4	0.2
C.V. (%)	4.3	4.6	2.0	2.9	0	0	3.0	4.8	4.5	4.2	3.9	1.8

^{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 7B. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF CREEPING BENTGRASS CULTIVARS
GROWN ON A FAIRWAY OR TEE UNDER LOW TEMPERATURE/WINTER TOLERANCE AT FARGO, ND 1/
2018 DATA

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

	DENS	SITY RATII	NGS	PERCENT GROUND COVER				QUALITY RATINGS				
NAME	SPRING	SUMMER	FALL	SPRING	SUMMER	FALL	MAY	JUN	JUL	AUG	SEP	MEAN
SHARK	6.0	7	8.0	95.0	99	99	5	6.7	7.0	7.0	7.0	6.5
PENNCROSS	5.3	6	7.0	95.0	95	99	5	6.0	7.0	7.0	6.3	6.3
007	4.0	6	7.0	95.0	99	99	6	6.0	6.0	6.7	6.0	6.1
KINGDOM	5.0	6	7.0	93.3	99	99	5	6.0	6.7	7.0	6.0	6.1
PC2.0 (PST-0CV6)	4.0	6	7.0	95.0	99	99	5	6.0	6.7	7.0	6.0	6.1
BARRACUDA	5.0	7	8.0	95.0	99	99	4	6.0	6.0	7.0	7.0	6.0
CHINOOK (H10G-OP)	5.0	6	7.0	91.7	99	99	5	6.0	6.0	7.0	6.0	6.0
CRYSTAL BLUE LINKS	6.0	6	8.0	91.7	99	99	5	6.0	6.0	7.0	6.0	6.0
PIRANHA (DC-1)	5.0	6	6.0	93.3	95	99	4	6.0	6.0	7.0	7.0	6.0
PST-0RBS	4.0	6	8.0	95.0	99	99	5	6.0	6.0	7.0	6.0	6.0
ARMOR	5.0	6	6.7	83.3	99	99	5	6.0	6.3	6.0	6.0	5.9
L-93XD	5.0	7	7.0	85.0	99	99	4	5.3	6.0	7.0	6.3	5.7
V-8	4.0	6	7.0	93.3	95	99	4	5.7	6.0	6.7	6.0	5.7
NIGHTLIFE	4.0	5	7.0	88.3	95	99	4	5.3	6.0	6.0	6.0	5.5
LSD VALUE	0.2	0	0.2	4.8	0	0	0	0.6	0.5	0.4	0.4	0.1
C.V. (%)	3.2	0	2.1	3.1	0	0	0	5.3	4.4	3.3	3.6	1.6

- 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 7C. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF COLONIAL BENTGRASS CULTIVARS

GROWN ON A FAIRWAY OR TEE UNDER LOW TEMPERATURE/WINTER TOLERANCE AT FARGO, ND 1/

2018 DATA

	DEI	NSITY RATIN	IGS	PERCEN'	GROUND CO	OVER		QUA	LITY RA	TINGS		
NAME	SPRING	SUMMER	FALL	SPRING	SUMMER	FALL	MAY	JUN	JUL	AUG	SEP	MEAN
DLFPS-AT/3026 GREENTIME	4.0 4.7	6.0 5.7	7 7	90.0 83.3	95 99	99 99	5.0 4.0	6 5	6.3 6.0	6.3 6.3	7.0 6.7	6.1 5.6
MUSKET (PPG-AT 104)	4.0	5.0	7	85.0	95	99	3.3	5	6.0	7.0	6.0	5.5
LSD VALUE C.V. (%)	0.8 7.9	1.5 12.0	0	3.9 1.9	0	0	0.8 8.1	0	0.8 5.5	1.2	0.8 5.1	0.4

^{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 8A.

GENETIC COLOR RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A FAIRWAY OR TEE 2018 DATA

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

NAME	IA1	IL1	MI1	NJ1	MEAN
BARRACUDA	8.3	7.7	7.0	7.3	7.6
007	8.3	7.3	7.3	7.0	7.5
CHINOOK (H10G-OP)	7.3	7.7	6.7	8.0	7.4
NIGHTLIFE	8.0	7.7	8.0	5.5	7.3
PIRANHA (DC-1)	7.7	7.0	6.7	7.7	7.3
V-8	8.0	7.0	7.0	6.7	7.2
SHARK	7.7	7.3	7.0	6.0	7.0
L-93XD	7.0	7.3	6.3	7.3	7.0
CRYSTAL BLUE LINKS	6.7	7.7	7.0	6.3	6.9
KINGDOM	7.3	7.3	7.3	5.3	6.8
PST-ORBS	8.0	7.7	7.0	4.5	6.8
PENNCROSS	6.7	7.3	7.3	5.0	6.6
ARMOR	6.7	7.0	7.3	5.0	6.5
PC2.0 (PST-0CV6)	7.3	7.0	7.0	4.7	6.5
DLFPS-AT/3026	6.3	6.0	6.3	6.7	6.3
GREENTIME	7.3	6.7	7.0	4.3	6.3
MUSKET (PPG-AT 104)	6.7	6.0	6.3	5.7	6.2
LSD VALUE	1.1	0.7	0.7	1.5	0.5
C.V. (%)	9.5	6.5	6.0	14.3	9.1

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

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

TABLE 8B. GENETIC COLOR RATINGS OF CREEPING BENTGRASS CULTIVARS 1/GROWN ON A FAIRWAY OR TEE

2018 DATA

NAME	IA1	IL1	MI1	NJ1	MEAN
BARRACUDA 007 CHINOOK (H10G-OP) NIGHTLIFE PIRANHA (DC-1) V-8 SHARK L-93XD CRYSTAL BLUE LINKS KINGDOM PST-0RBS PENNCROSS ARMOR PC2.0 (PST-0CV6)	8.3 8.3 7.3 8.0 7.7 8.0 7.7 7.0 6.7 7.3 8.0 6.7	7.7 7.3 7.7 7.7 7.0 7.0 7.3 7.3 7.7 7.3 7.7	7.0 7.3 6.7 8.0 6.7 7.0 6.3 7.0 7.3 7.0	7.3 7.0 8.0 5.5 7.7 6.7 6.0 7.3 6.3 5.3 4.5 5.0	7.6 7.5 7.4 7.3 7.2 7.0 6.9 6.8 6.8 6.6 6.5
LSD VALUE C.V. (%)	1.1	0.8	0.7	1.4 12.5	0.5

- 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 8C. GENETIC COLOR RATINGS OF COLONIAL BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

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

NAME	IA1	IL1	MI1	NJ1	MEAN
DLFPS-AT/3026	6.3	6.0	6.3	6.7	6.3
GREENTIME	7.3	6.7	7.0	4.3	6.3
MUSKET (PPG-AT 104)	6.7	6.0	6.3	5.7	6.2
LSD VALUE	1.3	0.5	0.8	1.9	0.6
C.V. (%)	12.0	5.4	7.2	20.8	12.2

- 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 9A. SPRING GREENUP RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

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

NAME	IL1	MI1	NJ1	MEAN
CHINOOK (H10G-OP) CRYSTAL BLUE LINKS 007 BARRACUDA PC2.0 (PST-0CV6) PIRANHA (DC-1) SHARK DLFPS-AT/3026 PENNCROSS V-8 PST-0RBS MUSKET (PPG-AT 104) L-93XD GREENTIME ARMOR KINGDOM NIGHTLIFE	7.0 7.0 6.7 6.3 6.3 6.0 7.0 6.3 6.0 6.3 6.0 6.7 6.7 6.7	4.0 5.0 4.3 5.7 2.7 3.3 5.3 3.7 4.3 3.7 4.0 3.3	6.7 5.7 6.3 6.3 5.0 7.3 6.7 3.3 5.0 4.7 4.5 3.0 5.3 2.7 3.0 2.5	5.9 5.7 5.7 5.7 5.4 5.3 5.2 5.0 4.8 4.7 4.4 4.3 4.2
LSD VALUE C.V. (%)	0.7 7.2	1.6 24.6	1.5 18.4	

^{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 9B. SPRING GREENUP RATINGS OF CREEPING BENTGRASS CULTIVARS 1/GROWN ON A FAIRWAY OR TEE

2018 DATA

SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN 2	SPRING	GREENUP	RATINGS	1-9:	9=COMPLETELY GREEN	2.
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NAME	IL1	MI1	NJ1	MEAN
CHINOOK (H10G-OP)	7.0	4.0	6.7	5.9
CRYSTAL BLUE LINKS	7.0	5.0	5.7	5.9
007	6.7	4.0	6.3	5.7
BARRACUDA	6.3	4.3	6.3	5.7
PC2.0 (PST-0CV6)	6.3	5.7	5.0	5.7
PIRANHA (DC-1)	6.3	2.7	7.3	5.4
SHARK	6.0	3.3	6.7	5.3
PENNCROSS	6.3	3.7	5.0	5.0
V-8	6.0	4.3	4.7	5.0
PST-ORBS	6.3	3.7	4.5	4.8
L-93XD	6.0	2.7	5.3	4.7
ARMOR	6.7	3.3	3.0	4.3
KINGDOM	6.7	4.0	2.0	4.2
NIGHTLIFE	6.3	3.3	2.5	4.1
LSD VALUE	0.7	1.6	1.5	0.8
C.V. (%)	7.2	26.2	16.6	15.7

- 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 9C. SPRING GREENUP RATINGS OF COLONIAL BENTGRASS CULTIVARS 1/GROWN ON A FAIRWAY OR TEE 2018 DATA

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

NAME	IL1	MI1	NJ1	MEAN
DLFPS-AT/3026	7.0	5.3	3.3	5.2
MUSKET (PPG-AT 104)	6.3	5.0	3.0	4.8
GREENTIME	6.7	4.0	2.7	4.4
LSD VALUE	0.8	1.4	1.5	0.7
C.V. (%)	7.1	18.5	31.4	16.5

- 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.

LEAF TEXTURE RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A FAIRWAY OR TEE 2018 DATA

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

NAME	NJ1
MUSKET (PPG-AT 104) DLFPS-AT/3026 CHINOOK (H10G-OP) L-93XD PIRANHA (DC-1) V-8 007 BARRACUDA GREENTIME SHARK KINGDOM ARMOR NIGHTLIFE CRYSTAL BLUE LINKS PC2.0 (PST-0CV6) PST-0RBS PENNCROSS	8.0 7.7 7.3 7.3 7.0 6.7 6.3 6.3 5.7 5.0 4.5 4.5 4.3 4.3
LSD VALUE C.V. (%)	1.3 12.6

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

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

TABLE 10B. LEAF TEXTURE RATINGS OF CREEPING BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

LEAF '	TEXTURE	RATINGS	1-9:	9=VERY	FINE	2./
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NAME	NJ1
CHINOOK (H10G-OP) L-93XD	7.3 7.3
PIRANHA (DC-1) V-8	7.3
007 BARRACUDA SHARK	6.7 6.3 5.7
KINGDOM ARMOR	5.0 4.5
NIGHTLIFE CRYSTAL BLUE LINKS	4.5
PC2.0 (PST-0CV6) PST-0RBS PENNCROSS	4.3 4.0 3.0
ISD VALUE	1.4
C.V. (%)	14.3

- 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 10C. LEAF TEXTURE RATINGS OF COLONIAL BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

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

NAME	NJ1
MUSKET (PPG-AT 104) DLFPS-AT/3026 GREENTIME	8.0 7.7 6.3
LSD VALUE C.V. (%)	0.8

- 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.

2018 DATA

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

NAME	NJ1
CHINOOK (H10G-OP) L-93XD BARRACUDA MUSKET (PPG-AT 104) PIRANHA (DC-1) 007 V-8 DLFPS-AT/3026 CRYSTAL BLUE LINKS GREENTIME KINGDOM SHARK PC2.0 (PST-0CV6) ARMOR NIGHTLIFE PST-0RBS PENNCROSS	7.7 7.7 7.0 7.0 7.0 6.7 6.7 6.3 5.0 4.7 4.7 4.7 3.5 3.5 3.5 3.5
LSD VALUE C.V. (%)	1.4 15.3

^{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 11B. FALL DENSITY RATINGS OF CREEPING BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

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

NAME	NJ1
CHINOOK (H10G-OP) L-93XD BARRACUDA PIRANHA (DC-1) 007 V-8 CRYSTAL BLUE LINKS KINGDOM SHARK PC2.0 (PST-0CV6) ARMOR NIGHTLIFE	7.7 7.7 7.0 7.0 6.7 6.7 5.0 4.7 4.7 3.7 3.5
PST-ORBS	3.5
PENNCROSS	2.0
LSD VALUE C.V. (%)	1.5

- 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 11C. FALL DENSITY RATINGS OF COLONIAL BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

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

NAME	NJ1
MUSKET (PPG-AT 104)	7.0
DLFPS-AT/3026	6.3
GREENTIME	4.7
LSD VALUE	1.2
C.V. (%)	12.4

- 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 12A. PERCENT LIVING GROUND COVER (FALL) RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	NJ1
DLFPS-AT/3026 PIRANHA (DC-1) BARRACUDA CHINOOK (H10G-OP) MUSKET (PPG-AT 104) L-93XD V-8 SHARK 007 NIGHTLIFE CRYSTAL BLUE LINKS KINGDOM ARMOR PC2.0 (PST-0CV6) PST-0RBS GREENTIME	93.3 93.3 91.7 90.0 90.0 88.3 88.3 81.7 80.0 70.0 63.3 61.7 60.0 60.0 56.7
PENNCROSS LSD VALUE	50.0 15.6
C.V. (%)	11.7

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

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

TABLE 12B. PERCENT LIVING GROUND COVER (FALL) RATINGS OF CREEPING BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	NJ1
PIRANHA (DC-1) BARRACUDA CHINOOK (H10G-OP) L-93XD V-8 SHARK 007 NIGHTLIFE CRYSTAL BLUE LINKS KINGDOM ARMOR PC2.0 (PST-0CV6) PST-0RBS	93.3 91.7 90.0 88.3 88.3 81.7 80.0 70.0 63.3 61.7 60.0 60.0
PENNCROSS	50.0
LSD VALUE C.V. (%)	16.4 12.3

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

TABLE 12C. PERCENT LIVING GROUND COVER (FALL) RATINGS OF COLONIAL BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	NJ1
DLFPS-AT/3026	93.3
MUSKET (PPG-AT 104)	90.0
GREENTIME	56.7
LSD VALUE	12.0
C.V. (%)	9.3

- 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 13A. DOLLAR SPOT RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE

2018 DATA

NAME	IA1	MD1	NJ1	MEAN
DLFPS-AT/3026	8.3	8.3	8.0	8.2
CHINOOK (H10G-OP)	8.3	8.0	7.3	7.9
L-93XD	8.7	7.7	7.3	7.9
PIRANHA (DC-1)	9.0	7.3	7.0	7.8
007	9.0	6.7	7.3	7.7
V-8	8.3	7.3	5.0	7.6
MUSKET (PPG-AT 104)	9.0	8.7		7.6
BARRACUDA	8.7	7.0		7.1
CRYSTAL BLUE LINKS GREENTIME	8.0 9.0	6.7 7.0	6.0	6.9
NIGHTLIFE SHARK	8.0	5.0 6.3 5.0	2.7	6.0 5.8
KINGDOM	6.3	5.0	4.3	5.2
PC2.0 (PST-0CV6)	7.7		2.7	5.1
PST-0RBS	7.7		2.0	5.0
PENNCROSS	7.0	3.3	4.0	4.8
ARMOR	5.7	3.3	1.5	3.5
LSD VALUE	1.7		2.2	1.0
C.V. (%)	13.2		24.5	16.6

^{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 13B. DOLLAR SPOT RATINGS OF CREEPING BENTGRASS CULTIVARS 1/GROWN ON A FAIRWAY OR TEE

2018 DATA

	DOTITIAR	SPOT	RATINGS	1-9:	9=NO	DISEASE	2./
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NAME	IA1	MD1	NJ1	MEAN
CHINOOK (H10G-OP) L-93XD PIRANHA (DC-1) 007 V-8 BARRACUDA CRYSTAL BLUE LINKS NIGHTLIFE SHARK KINGDOM PC2.0 (PST-0CV6) PST-0RBS PENNCROSS	8.3 8.7 9.0 9.0 8.3 8.7 8.0 8.3 6.3 7.7 7.7	8.0 7.7 7.3 6.7 7.3 7.0 6.7 5.0 6.3 5.0 5.0 3.3	7.3 7.0 7.3 7.0 5.7 6.0 5.0 2.7 4.3 2.7 2.0 4.0	7.9 7.8 7.7 7.6 7.1 6.9 6.0 5.8 5.2 5.1 4.8
ARMOR	5.7	3.3	1.5	3.5
LSD VALUE C.V. (%)	1.8 14.3	1.6 16.7	2.2 24.1	1.1 17.6

- 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 13C. DOLLAR SPOT RATINGS OF COLONIAL BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

NAME	IA1	MD1	NJ1	MEAN
DLFPS-AT/3026	8.3	8.3	8.0	8.2
MUSKET (PPG-AT 104)	9.0	8.7	5.0	7.6
GREENTIME	9.0	7.0	4.3	6.8
LSD VALUE	1.1	0.8	2.3	0.9
C.V. (%)	7.6	5.9	25.1	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 14A. BROWN PATCH (WARM TEMPERATURE) RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

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

NAME	MD1	NJ1	MEAN
007	9.0	9.0	9.0
BARRACUDA	9.0	9.0	9.0
CHINOOK (H10G-OP)	9.0	9.0	9.0
L-93XD	9.0	9.0	9.0
PIRANHA (DC-1)	9.0	9.0	9.0
SHARK	9.0	9.0	9.0
PST-ORBS	8.7	8.5	8.6
ARMOR	8.0	9.0	8.5
PENNCROSS	9.0	8.0	8.5
V-8	8.3	8.7	8.5
CRYSTAL BLUE LINKS	8.3	8.3	8.3
PC2.0 (PST-0CV6)	7.7	8.7	8.2
KINGDOM	7.0	8.3	7.7
MUSKET (PPG-AT 104)	7.7	7.7	7.7
NIGHTLIFE	6.3	9.0	7.7
DLFPS-AT/3026	7.3	5.0	6.2
GREENTIME	6.0	5.3	5.7
LSD VALUE	1.5	1.6	1.1
C.V. (%)	11.7	11.1	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 14B. BROWN PATCH (WARM TEMPERATURE) RATINGS OF CREEPING BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

BROWN PA	ATCH RATII	IGS 1-9;	9=NO	DISEASE	2/
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- 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 14C. BROWN PATCH (WARM TEMPERATURE) RATINGS OF COLONIAL BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

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

NAME	MD1	NJ1	MEAN
MUSKET (PPG-AT 104)	7.7	7.7	7.7
DLFPS-AT/3026	7.3	5.0	6.2
GREENTIME	6.0	5.3	5.7
LSD VALUE	2.2	2.9	1.8
C.V. (%)	19.6	29.9	24.6

^{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 15A. FALL COLOR (OCTOBER) RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

NAME	MI1
PIRANHA (DC-1) SHARK 007 BARRACUDA MUSKET (PPG-AT 104) PC2.0 (PST-OCV6) PST-ORBS ARMOR CHINOOK (H10G-OP) CRYSTAL BLUE LINKS DLFPS-AT/3026 GREENTIME PENNCROSS V-8 KINGDOM L-93XD NIGHTLIFE	8.3 8.0 8.0 8.0 8.0 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.3 7.3
LSD VALUE C.V. (%)	1.1

^{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 15B. FALL COLOR (OCTOBER) RATINGS OF CREEPING BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

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

NAME	MI1
PIRANHA (DC-1) SHARK 007 BARRACUDA PC2.0 (PST-0CV6) PST-0RBS ARMOR CHINOOK (H10G-OP) CRYSTAL BLUE LINKS PENNCROSS V-8 KINGDOM L-93XD NIGHTLIFE	8.3 8.3 8.0 8.0 8.0 7.7 7.7 7.7 7.7 7.3 7.3
LSD VALUE C.V. (%)	1.1

- 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 15C. FALL COLOR (OCTOBER) RATINGS OF COLONIAL BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

NAME	MI1
MUSKET (PPG-AT 104) DLFPS-AT/3026 GREENTIME	8.0 7.7 7.7
LSD VALUE C.V. (%)	1.2

- 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 16A. FALL COLOR (NOVEMBER) RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2018 DATA

NAME	IL1
BARRACUDA DLFPS-AT/3026 GREENTIME NIGHTLIFE PENNCROSS SHARK 007 CHINOOK (H10G-OP) CRYSTAL BLUE LINKS KINGDOM PST-ORBS ARMOR L-93XD MUSKET (PPG-AT 104) PC2.0 (PST-0CV6) PIRANHA (DC-1) V-8	7.7 7.7 7.7 7.7 7.7 7.3 7.3 7.3 7.3 7.0 7.0 7.0 7.0
LSD VALUE C.V. (%)	0.7 6.3

^{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 16B. FALL COLOR (NOVEMBER) RATINGS OF CREEPING BENTGRASS CULTIVARS 1/ GROWN ON A FAIRWAY OR TEE

2018 DATA

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

NAME	IL1
BARRACUDA NIGHTLIFE PENNCROSS SHARK 007 CHINOOK (H10G-OP) CRYSTAL BLUE LINKS KINGDOM PST-0RBS ARMOR L-93XD PC2.0 (PST-0CV6) PIRANHA (DC-1) V-8	7.7 7.7 7.7 7.7 7.3 7.3 7.3 7.3 7.0 7.0 7.0
LSD VALUE C.V. (%)	0.7

- 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 16C. FALL COLOR (NOVEMBER) RATINGS OF COLONIAL BENTGRASS CULTIVARS 1/ GROWN ON A FAIRWAY OR TEE 2018 DATA

NAME	IL1
DLFPS-AT/3026 GREENTIME MUSKET (PPG-AT 104)	7.7 7.7 7.0
LSD VALUE C.V. (%)	0.8

- 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 17A.	PERCENT CRABGRASS (AUGUST) RATINGS OF BENTGRASS CULTIVARS 1/		
	GROWN ON A FAIRWAY OR TEE 2/		
2018 DATA			

NAME	MD1
GREENTIME PENNCROSS DLFPS-AT/3026 PST-ORBS PC2.0 (PST-OCV6)	41.7 36.7 13.7 12.7 12.0
ARMOR	11.3
KINGDOM	10.7
CRYSTAL BLUE LINKS NIGHTLIFE	8.0 6.3
CHINOOK (H10G-OP)	4.3
MUSKET (PPG-AT 104)	4.0
V-8 007	3.7
SHARK	3.0
BARRACUDA	2.7
L-93XD	2.0
PIRANHA (DC-1)	1.7
LSD VALUE C.V. (%)	6.1 36.1

^{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 17B.	PERCENT CRABGRASS (AUGUST) RATINGS OF CREEPING BENTGRASS CULTIVARS 1/			
	GROWN ON A FAIRWAY OR TEE 2/			
2018 DATA				

NAME	MD1
PENNCROSS PST-ORBS PC2.0 (PST-OCV6) ARMOR KINGDOM CRYSTAL BLUE LINKS NIGHTLIFE CHINOOK (H10G-OP) V-8 007 SHARK BARRACUDA L-93XD PIRANHA (DC-1)	36.7 12.7 12.0 11.3 10.7 8.0 6.3 4.3 3.7 3.0 3.0 2.7 2.0 1.7
LSD VALUE C.V. (%)	4.7 35.0

- 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 17C. PERCENT CRABGRASS (AUGUST) RATINGS OF COLONIAL BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE 2/
2018 DATA

NAME	MD1
GREENTIME	41.7
DLFPS-AT/3026	13.7
MUSKET (PPG-AT 104)	4.0
LSD VALUE	10.2
C.V. (%)	31.9

- 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 18A. DOLLAR SPOT RATINGS OF BENTGRASS CULTIVARS
GROWN ON A FAIRWAY OR TEE AT NORTH BRUNSWICK, NJ 1/
2018 DATA

NAME	JULY	AUGUST	MEAN
007	7.3	7.7	7.5
ARMOR	1.5	1.5	1.5
BARRACUDA	5.7	6.3	6.0
CHINOOK (H10G-OP)	7.3	8.0	7.7
CRYSTAL BLUE LINKS	6.0	4.0	5.0
DLFPS-AT/3026	8.0	9.0	8.5
GREENTIME	4.3	8.0	6.2
KINGDOM	4.3	4.0	4.2
L-93XD	7.3	7.0	7.2
MUSKET (PPG-AT 104)	5.0	9.0	7.0
NIGHTLIFE	5.0	3.0	4.0
PC2.0 (PST-0CV6)	2.7	4.3	3.5
PENNCROSS	4.0	5.0	4.5
PIRANHA (DC-1)	7.0	5.7	6.3
PST-ORBS	2.0	4.5	3.3
SHARK	2.7	3.0	2.8
V-8	7.0	6.7	6.8
LSD VALUE	2.3	1.5	1.5
C.V. (%)	24.4	14.7	15.2

^{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 18B. DOLLAR SPOT RATINGS OF CREEPING BENTGRASS CULTIVARS

GROWN ON A FAIRWAY OR TEE AT NORTH BRUNSWICK, NJ 1/

2018 DATA

DOLLAR SPOT RATINGS 1-9; 9=NO DISEASE 2/

NAME	JULY	AUGUST	MEAN
007	7.3	7.7	7.5
ARMOR	1.5	1.5	1.5
BARRACUDA	5.7	6.3	6.0
CHINOOK (H10G-OP)	7.3	8.0	7.7
CRYSTAL BLUE LINKS	6.0	4.0	5.0
KINGDOM	4.3	4.0	4.2
L-93XD	7.3	7.0	7.2
NIGHTLIFE	5.0	3.0	4.0
PC2.0 (PST-0CV6)	2.7	4.3	3.5
PENNCROSS	4.0	5.0	4.5
PIRANHA (DC-1)	7.0	5.7	6.3
PST-ORBS	2.0	4.5	3.3
SHARK	2.7	3.0	2.8
V-8	7.0	6.7	6.8
LSD VALUE	2.3	1.7	1.6
C.V. (%)	24.0	18.6	17.0

- 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 18C. DOLLAR SPOT RATINGS OF COLONIAL BENTGRASS CULTIVARS

GROWN ON A FAIRWAY OR TEE AT NORTH BRUNSWICK, NJ 1/

2018 DATA

NAME	JULY	AUGUST	MEAN
DLFPS-AT/3026	8.0	9	8.5
GREENTIME	4.3	8	6.2
MUSKET (PPG-AT 104)	5.0	9	7.0
LSD VALUE	4.1	0	2.0
C.V. (%)	30.5		12.2

- 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.

APPENDIX TABLE. SUMMARY OF TURFGRASS QUALITY RATINGS FOR BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 2018 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME		MAXIMUM IN TOP 25% 2/
007		37.5
ARMOR	5.5	12.5
BARRACUDA	6.2	37.5
CHINOOK (H10G-OP)	6.3	25.0
CRYSTAL BLUE LINKS	6.0	25.0
DLFPS-AT/3026	6.1	37.5
	5.4	
KINGDOM	5.6	12.5
L-93XD	6.1	12.5
MUSKET (PPG-AT 104)	5.8	12.5
	5.9	
PC2.0 (PST-0CV6)	5.8	12.5
PENNCROSS	5.5	12.5
PIRANHA (DC-1)	6.3	62.5
PST-ORBS	5.7	12.5
SHARK	6.0	12.5
V-8	6.3	50.0
LSD VALUE	0.3	
C.V. (%)	9.7	

^{*/} 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 VALUE 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.