NATIONAL TURFGRASS EVALUATION PROGRAM

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

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

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

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

CURRENT POLICY COMMITTEE MEMBERS:

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

FOR ADDITIONAL REPORTS OR INFORMATION CONTACT:

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

CONTENTS

		2014 National Bentgrass (Putting Green) Test - 2015 data
LOCATIO	NS	SUBMITTING DATA FOR 20151
NATIONA	LE	BENTGRASS (PUTTING GREEN) TEST, 2014 Entries and Sponsors2
Table A		 2015 Locations, Site Descriptions and Management Practices in the 2014 National Bentgrass (Putting Green) Test
Table B		· Locations and Data Collected in 20154
Table 1		• Mean Turfgrass Quality Ratings of Bentgrass Cultivars Grown on a Green at Six Locations in the USA for Location Performance Index (LPI) Group 1
Table 2	-	• Mean Turfgrass Quality Ratings of Bentgrass Cultivars Grown on a Green at Five Locations in the USA for Location Performance Index (LPI) Group 2
Table 3	-	 Mean Turfgrass Quality and Other Ratings of Bentgrass Cultivars Grown on a Green under under Traffic Stress at Amherst, MA
Table 4	-	 Mean Turfgrass Quality and Other Ratings of Bentgrass Cultivars Grown on a Green under under Drought Stress at Logan, UT
Table 5	; -	 Mean Turfgrass Quality and Other Ratings of Bentgrass Cultivars Grown on a Green at San Francisco (California Golf Club Of San Francisco),CA10
Table 6	-	Mean Turfgrass Quality and Other Ratings of Bentgrass Cultivars Grown on a Green at Los Angeles (Los Angeles Country Club), CA
Table 7	-	 Mean Turfgrass Quality and Other Ratings of Bentgrass Cultivars Grown on a Green at Glenview (North Shore Country Club), IL
Table 8	-	Genetic Color Ratings of Bentgrass Cultivars Grown on a Green
Table 9	-	• Spring Greenup Ratings of Bentgrass Cultivars Grown on a Green
Table 1	.0 -	 Leaf Texture Ratings of Bentgrass Cultivars Grown on a Green
Table 1	.1 -	- Seedling Vigor Ratings of Bentgrass Cultivars Grown on a Green
Table 1	.2 -	• Spring Density Ratings of Bentgrass Cultivars Grown on a Green
Table 1	.3 -	Summer Density Ratings of Bentgrass Cultivars Grown on a Green
Table 1	.4 -	 Fall Density Ratings of Bentgrass Cultivars Grown on a Green

CONTENTS (Continued)

Table	15	-	Percent Living Ground Cover (Spring) Ratings of Bentgrass Cultivars Grown on a Green
Table	16	-	Percent Living Ground Cover (Summer) Ratings of Bentgrass Cultivars Grown on a Green
Table	17	-	Percent Living Ground Cover (Fall) Ratings of Bentgrass Cultivars Grown on a Green
Table	18	-	Dollar Spot Ratings of Bentgrass Cultivars Grown on a Green
Table	19	-	Brown Patch (Warm Temperature) Ratings of Bentgrass Cultivars Grown on a Green24
Table	20	-	Pink Snow Mold Ratings of Bentgrass Cultivars Grown on a Green
Table	21	-	Percent Establishment Ratings of Bentgrass Cultivars Grown on a Green
Table	22	-	Percent Establishment Ratings of Bentgrass Cultivars Grown on a Green at St. Paul, MN
Table	23	-	percent Dollar Spot Ratings of Bentgrass Cultivars Grown on a Green at St. Paul, MN
Table	24	-	Percent Establishment Ratings of Bentgrass Cultivars Grown on a Green at Raleigh, NC 29
Table	25	-	Percent Establishment Ratings of Bentgrass Cultivars Grown on a Green at Stillwater, OK
Append	lix	Τa	able- Summary of Turfgrass Quality Ratings of Bentgrass Cultivars Grown on a Green

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 <u>http://www.ntep.org/reports/ratings.htm</u>.

2014 NATIONAL BENTGRASS TEST (Putting Green)

LOCATIONS SUBMITTING DATA FOR 2015

State	Location	Code
Arkansas	Fayetteville	AR1
California	San Francisco (California Golf Club)	CA5
California	Los Angeles (Los Angeles C.C.)	CA6
Illinois	Glenview (North Shore C.C.)	IL4
Indiana	West Lafayette	IN1
Iowa	Ames	IA1
Kansas	Manhattan	KS1
Kentucky	Lexington	KY1
Massachusetts	Amherst (Traffic Study)	MA1
Michigan	East Lansing	MI1
Minnesota	St. Paul	MN1
Missouri	Columbia	MO1
New Jersey	North Brunswick	NJ1
North Carolina	Raleigh	NC1
Oklahoma	Stillwater	OK1
Utah	Logan	UT1
Utah	Logan (Drought)	UT2
Virginia	Blacksburg	VA1

2014 NATIONAL BENTGRASS TEST (Putting Green)

Entries and Sponsors

Entry No	Name	Species	Sponsor
*1	Luminary	Creeping	Standard
*2	DLFPS-AP/3054	Creeping	DLF Pickseed USA
3	DLFPS-AP/3018	Creeping	DLF Pickseed USA
4	DLFPS-AP/3056	Creeping	DLF Pickseed USA
5	DLFPS-AP/3058	Creeping	DLF Pickseed USA
6	DLFPS-AP/3059	Creeping	DLF Pickseed USA
*7	Pure Select	Creeping	Tee-2-Green Corp.
*8	Penn A-1	Creeping	Standard
*9	Penncross	Creeping	Standard
*10	L-93XD	Creeping	Jacklin Seed by Simplot®
*11	Armor	Creeping	Jacklin Seed by $Simplot $
*12	Kingdom	Creeping	Jacklin Seed by $\mathtt{Simplot}^{\mathbb{R}}$
*13	Nightlife	Creeping	Jacklin Seed by Simplot®
*14	V-8	Creeping	Standard
15	GDE	Creeping	SemillasFito
*16	Piranha (DC-1)	Creeping	Mountain View Seeds & Toyo Green Co. Ltd.
17	PST-ROPS	Creeping	Pure Seed Testing, Inc
*18	Shark	Creeping	Mountain View Seeds
*19	Barracuda	Creeping	Mountain View Seeds
*20	Declaration	Creeping	Standard

* Commercially Available in the USA in 2016

TABLE A.

2015 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN THE 2014 NATIONAL BENTGRASS (GREEN) 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
AR1	SAND	6 1 6 5	0-60	0-150	4 1 5 0	FULL SUN	0.0-0.5	TO PREVENT STRESS
		6.1-6.5			4.1-5.0			
CA5	SAND	6.6-7.0	0-60	151-240	0.0-1.0	FULL SUN	0.0-0.5	ONLY DURING SEVERE STRESS
CA6	SAND	7.1-7.5	0-60	151-240	2.1-3.0	LIGHT SHADE	0.0-0.5	TO PREVENT STRESS
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
IL4	SAND	-	61-150	0-150	-	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
KOI								
KS1	-	-	-	-	-	-		
KY1	SAND	7.6-8.5	0-60	0-150	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MA1	SAND	5.6-6.0	0-60	241-375	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MI1	-	-	-	-	-	-	-	-
MN1	SAND	7.1-7.5	0-60	0-150	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MO1	-	-	-	-	-	-	-	-
NC1	SILTY CLAY LOAM	6.1-6.5	61-150	0-150	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
NJ 1	SAND	6.1-6.5	0-60	151-240	1.1-2.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
OK1	SAND	7.1-7.5	0-60	241-375	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
UT1	<u>-</u>	_	_	_	-	_	_	-
UT2	_	_	_	_	_	_	_	_
VA1	SILTY CLAY LOAM	6.1-6.5	- 61-150	- 151-240	3.1-4.0	FULL SUN	0.6-1.0	TO PREVENT DORMANCY

Taken from the 2014 Bentgrass (Putting Green) test - 2015 data report with permission from NTEP

TABLE B.						LOCATION	S AND DAT	A COLLECT	ED IN 2015						
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
AR1					х	х	х	х	Х				х		
CA5	Х	Х	х	Х	Х	Х	Х	Х	Х	х	Х	Х	Х		
CA6	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		
IA1				х	х	х	х	х	Х	х			х		
IL4				X X	Х	Х	Х	Х	Х	Х			Х	Х	
IN1					Х	Х	Х	Х	Х	Х	Х		Х		Х
KS1				х	х	х	х	х		х			х		
KY1			Х	х	х	X X	Х	Х	Х	Х	Х				
MA1								Х	Х	Х	Х				
MI1					х	х	х	х		х			х	х	
MN1				Х	Х	Х	Х	Х	Х	Х			Х	Х	
MO1				Х	Х	X X	Х	Х	Х	Х					
NC1				х	х	х	х	х	Х	х	х		х		
NJ1				х	Х	х	х	х	Х	х	Х		х	Х	Х
0K1															
UT1								х	Х	х					
UT2								Х		Х					
VA1						Х	Х	X	Х	X	Х		Х		

Taken from the 2014 Bentgrass (Putting Green) test - 2015 data report with permission from NTEP

TABLE B. (CONT'D) LOCATIONS AND DATA COLLECTED IN 2015 PERCENT PERCENT PERCENT PERCENT BROWN PINK FALL PERCENT WEAR COVER COVER COVER PATCH SNOW COLOR ESTABLISH- TOLERANCE DOLLAR SEEDLING SPRING SUMMER FALL WINTER DOLLAR LOCATION VIGOR DENSITY DENSITY DENSITY SPRING SUMMER FALL COLOR SPOT WARM TEMP. MOLD OCTOBER MENT SEP OCT NOV SPOT AR1 Х Х Х Х Х Х Х CA5 Х Х CA6 IA1 Х Х IL4 IN1 Х Х KS1 Х KY1 Х Х Х Х х х х MA1 MI1 Х Х MN1 Х Х Х M01 Х Х Х Х Х Х Х Х NC1 Х Х Х Х Х Х NJ1 Х Х Х Х 0K1 UT1 Х UT2 Х Х VA1

TABLE 1.

MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON 1/ A GREEN AT SIX LOCATIONS IN THE U.S. FOR LPI GROUP 1 **/ 2015 DATA

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

NAME	NJ 1	MO1	NC1	MN1	IN1	MI1	MEAN
* L-93 XD	7.7	6.0	7.3	5.8	7.6	6.6	6.8
* 777 (DLFPS-AP/3054)	7.4	5.9	7.2	5.8	7.6	6.6	6.7
DLFPS-AP/3018	7.0	5.7	7.1	5.7	7.5	6.5	6.6
* PIRANHA (DC-1)	7.0	5.6	7.1	5.6	7.4	6.4	6.5
GDE	6.5	5.5	7.0	5.7	7.5	6.6	6.5
DLFPS-AP/3058	6.8	5.5	7.0	5.5	7.4	6.4	6.4
PST-ROPS	6.7	5.5	6.9	5.5	7.4	6.4	6.4
* V-8	6.4	5.4	6.9	5.6	7.4	6.4	6.4
* SHARK	6.3	5.4	6.9	5.5	7.4	6.4	6.3
DLFPS-AP/3056	6.2	5.3	6.8	5.4	7.3	6.3	6.2
* PURE SELECT	6.2	5.2	6.7	5.4	7.3	6.3	6.2
* BARRACUDA	5.8	5.1	6.7	5.4	7.3	6.3	6.1
* LUMINARY	6.1	5.2	6.7	5.3	7.2	6.2	6.1
* NIGHTLIFE	5.6	5.0	6.6	5.3	7.3	6.3	6.0
* KINGDOM	5.3	4.9	6.5	5.2	7.2	6.2	5.9
DLFPS-AP/3059	4.9	4.6	6.2	5.0	7.0	6.0	5.6
* DECLARATION	4.8	4.6	6.2	5.1	7.0	6.1	5.6
* ARMOR	4.8	4.6	6.2	5.0	7.0	6.0	5.6
* PENN A-1	4.4	4.4	6.1	4.9	6.9	6.0	5.5
* PENNCROSS	1.5	2.7	4.5	3.6	5.8	4.9	3.8
LSD VALUE	0.8	0.8	0.8	0.8	0.8	0.8	0.8
C.V. (%)	8.5	9.8	7.6	9.4	6.9	8.0	8.3

^{*} COMMERCIALLY AVAILABLE IN THE USA IN 2016.

- **/ ENTRIES WITHIN THIS TABLE ARE ORDERED BY THE OVERALL MEAN AND HAVE SIMILAR TURF QUALITY PERFORMANCES IN ALL TEST LOCATIONS INCLUDED IN THIS AMMI GROUP. IF YOUR STATE IS NOT REPRESENTED, THEN CHOOSE AN AMMI GROUP THAT CONTAINS A LOCATION AND MANAGEMENT SIMILAR TO YOUR PLANTING CONDITIONS. FOR MORE INFORMATION ON AMMI, GO TO WWW.NTEP.OR/AMMI Q&A.PDF
- 1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).
- 2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 2. MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON 1/ A GREEN AT FIVE LOCATIONS IN THE U.S. FOR LPI GROUP 2 */ 2015 DATA

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

NAME	VA1	KY1	KS1	AR1	IA1	MEAN
GDE	6.4	6.8	6.1	6.2	5.5	6.2
SHARK	6.3	6.7	5.9	6.1	5.4	6.1
V-8	6.3	6.7	5.9	6.1	5.4	6.1
BARRACUDA	6.3	6.6	5.9	6.0	5.5	6.1
DLFPS-AP/3018	6.4	6.6	5.9	6.0	5.3	6.0
NIGHTLIFE	6.2	6.6	5.9	6.0	5.5	6.0
L-93 XD	6.4	6.6	5.9	6.0	5.1	6.0
777 (DLFPS-AP/3054)	6.4	6.6	5.9	6.0	5.2	6.0
DLFPS-AP/3056	6.2	6.6	5.8	6.0	5.4	6.0
KINGDOM	6.1	6.5	5.8	6.0	5.5	6.0
PIRANHA (DC-1)	6.3	6.6	5.8	5.9	5.2	6.0
DECLARATION	6.0	6.5	5.8	5.9	5.5	5.9
PURE SELECT	6.2	6.5	5.8	5.9	5.3	5.9
PST-ROPS	6.2	6.5	5.8	5.9	5.2	5.9
DLFPS-AP/3058	6.2	6.5	5.8	5.9	5.1	5.9
PENN A-1	5.9	6.4	5.7	5.9	5.5	5.9
DLFPS-AP/3059	6.0	6.4	5.7	5.8	5.4	5.9
LUMINARY	6.1	6.4	5.7	5.8	5.2	5.8
ARMOR	5.9	6.4	5.7	5.8	5.4	5.8
PENNCROSS	4.9	5.5	5.0	5.1	5.1	5.1
LSD VALUE	0.8	0.8	0.8	0.8	0.8	0.8
C.V. (%)	8.2	7.7	8.7	8.5	9.4	8.4

- */ ENTRIES WITHIN THIS TABLE ARE ORDERED BY THE OVERALL MEAN AND HAVE SIMILAR TURF QUALITY PERFORMANCES IN ALL TEST LOCATIONS INCLUDED IN THIS AMMI GROUP. IF YOUR STATE IS NOT REPRESENTED, THEN CHOOSE AN AMMI GROUP THAT CONTAINS A LOCATION AND MANAGEMENT SIMILAR TO YOUR PLANTING CONDITIONS. FOR MORE INFORMATION ON AMMI, GO TO WWW.NTEP.OR/AMMI Q&A.PDF
- 1/ TO DETERMINE STATISTICAL DIFFERENCES AMONG ENTRIES, SUBTRACT ONE ENTRY'S MEAN FROM ANOTHER ENTRY'S MEAN. STATISTICAL DIFFERENCES OCCUR WHEN THIS VALUE IS LARGER THAN THE CORRESPONDING LSD VALUE (LSD 0.05).
- 2/ C.V. (COEFFICIENT OF VARIATION) INDICATES THE PERCENT VARIATION OF THE MEAN IN EACH COLUMN.

TABLE 3.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS GROWN ON A GREEN UNDER TRAFFIC STRESS AT AMHERST, MA 1/ 2015 DATA

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

	PERCENT								
	ESTABLISH-	WEAR TO	LERANCE RAT	INGS			LITY RA	TINGS	
NAME	MENT	SEPTEMBER	OCTOBER	NOVEMBER	AUG	SEP	ОСТ	NOV	MEAN
GDE	48.3	6.7	6.7	6.3	6.3	6.7	6.3	6.3	6.4
KINGDOM	48.3	5.3	6.3	5.7	6.0	6.3	6.0	5.7	6.0
BARRACUDA	45.0	5.3	6.0	5.3	6.0	6.3	6.0	5.3	5.9
DLFPS-AP/3059	43.3	5.3	6.0	6.0	5.7	6.0	6.3	5.7	5.9
DLFPS-AP/3018	41.7	6.3	6.3	5.7	5.7	6.0	6.0	5.3	5.8
DLFPS-AP/3056	40.0	6.3	5.0	5.3	5.7	5.3	6.0	6.3	5.8
NIGHTLIFE	43.3	5.3	6.0	6.7	5.0	6.3	6.0	5.7	5.8
PST-ROPS	41.7	5.3	5.3	4.7	5.7	5.7	6.0	5.3	5.7
DLFPS-AP/3058	41.7	5.3	5.0	5.0	5.3	5.7	6.0	5.3	5.6
PURE SELECT	40.0	5.7	5.3	5.3	5.0	5.3	6.3	5.7	5.6
PIRANHA (DC-1)	38.3	5.3	5.0	4.7	5.3	5.7	5.7	5.3	5.5
777 (DLFPS-AP/3	054)40.0	5.3	5.7	5.0	5.0	5.7	5.3	5.3	5.3
DECLARATION	36.7	5.0	4.7	4.7	5.3	5.0	5.3	5.3	5.3
L-93 XD	36.7	4.7	5.3	5.0	5.0	5.3	5.3	5.3	5.3
LUMINARY	33.3	5.0	5.0	5.3	4.7	5.3	5.3	5.3	5.2
ARMOR	38.3	5.0	5.0	4.7	5.0	5.3	5.3	4.7	5.1
PENN A-1	36.7	5.0	5.0	5.0	5.0	5.3	4.7	5.3	5.1
SHARK	41.7	5.0	4.7	5.3	5.0	5.3	4.7	5.3	5.1
V-8	43.3	5.3	5.0	4.3	5.3	5.3	5.3	4.3	5.1
PENNCROSS	40.0	3.7	3.7	4.0	4.7	4.3	4.0	4.0	4.3
LSD VALUE	6.7	0.9	1.0	1.4	1.2	1.0	0.9	1.1	0.8
C.V. (%)	9.0	9.8	11.0	13.7	10.4	9.5	9.6	10.5	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 4.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS

GROWN ON A GREEN UNDER DROUGHT STRESS AT LOGAN, UT 1/ 2015 DATA

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

	SEEDLING	QU	ALITY RA	TINGS
NAME	VIGOR	AUG	OCT	MEAN
DLFPS-AP/3059	7.3	7.7	5.3	6.5
GDE	7.3	6.7	6.0	6.3
PIRANHA (DC-1)	6.7	6.0	6.3	6.2
SHARK	7.3	6.7	5.3	6.0
BARRACUDA	7.3	6.3	5.3	5.8
DLFPS-AP/3018	7.7	6.3	5.3	5.8
PURE SELECT	6.7	6.0	5.7	5.8
NIGHTLIFE	6.7	6.0	5.3	5.7
V-8	7.3	6.0	5.3	5.7
777 (DLFPS-AP/305	4) 6.7	5.3	5.7	5.5
ARMOR	6.0	5.0	6.0	5.5
DECLARATION	7.0	6.0	5.0	5.5
L-93 XD	6.3	5.3	5.7	5.5
PST-ROPS	7.0	5.3	5.7	5.5
LUMINARY	6.7	6.0	4.7	5.3
PENN A-1	7.7	6.0	4.7	5.3
DLFPS-AP/3056	7.0	5.7	4.3	5.0
DLFPS-AP/3058	6.7	5.3	4.7	5.0
KINGDOM	5.7	5.0	5.0	5.0
PENNCROSS	6.7	5.3	3.0	4.2
LSD VALUE	1.3	1.0	1.3	0.8
C.V. (%)	9.1	9.7	13.7	8.5
C.V. (%)	9.1	9.7	13.7	8.5

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).

TABLE 5.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS GROWN ON A GREEN AT SAN FRANCISCO (CALIFORNIA GOLF CLUB OF SAN FRANCISCO),CA 1/

2015 DATA

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

	GENETIC	SEEDLING	DENSITY	WINTER	PINK						QUAL	ITY RA	TINGS					
NAME	COLOR	VIGOR	SUMMER	COLOR	SNOW MOLD	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PURE SELECT	7.3	5.7	7.0	7.0	8.3	6.7	6.7	6.7	7.0	7.3	7.0	7.0	6.3	6.0	6.3	6.7	7.3	6.8
KINGDOM	9.0	6.0	7.0	9.0	9.0	7.0	7.0	7.0	7.0	7.3	7.0	6.7	6.3	5.7	5.7	6.3	7.0	6.7
L-93 XD	7.3	5.3	7.0	3.0 7.0	9.0	6.3	6.3	6.3	7.0	7.7	7.0	6.7	6.7	6.7	6.0	6.7	7.0	6.7
NIGHTLIFE	9.0	6.0	7.0	9.0	9.0	7.0	7.0	7.0	7.0	7.0	7.0	6.3	6.0	5.3	5.7	6.3	7.0	6.6
777 (DLFPS-AP/3		5.0	7.0	3.0 7.0	9.0	6.0	6.0	6.0	7.0	7.7	7.0	6.3	6.7	6.0	6.0	6.7	6.7	6.5
BARRACUDA	7.0	5.7	7.0	7.0	9.0	6.7	6.7	6.7	7.0	7.3	7.0	6.0	6.0	5.0	5.7	6.0	6.7	6.4
DLFPS-AP/3018	7.0	5.3	7.0	7.0	8.7	6.3	6.3	6.3	6.7	7.0	7.0	6.0	6.0	5.7	6.0	6.3	6.7	6.4
GDE	7.7	5.3	7.0	7.0	8.7	6.3	6.3	6.3	7.0	7.0	7.0	6.0	6.0	5.7	5.7	6.0	7.0	6.4
SHARK	7.7	5.3	7.0	7.0	8.7	6.3	6.3	6.3	7.0	7.7	7.0	6.3	6.3	5.7	5.7	6.0	6.3	6.4
V-8	8.0	5.0	7.0	7.7	9.0	6.0	6.0	6.0	7.0	7.3	7.0	6.7	6.0	5.3	6.0	6.7	6.3	6.4
ARMOR	9.0	5.7	6.7	8.7	9.0	6.7	6.7	6.7	7.0	7.0	6.3	5.7	5.7	5.3	5.3	6.3	6.7	6.3
DLFPS-AP/3058	7.3	5.0	7.0	7.0	9.0	6.0	6.0	6.0	6.7	7.0	7.0	5.7 6.0	5.7 6.3	5.3	5.3	6.7	6.7	6.3
,	7.0	5.0		7.0		6.0		6.0		7.0	7.0			5.7	5.7	6.3	6.7	
			7.0		9.0		6.0		7.0			6.0	6.3					6.3
PENN A-1	7.7	5.0	7.0	7.7	9.0	6.0	6.0	6.0	7.0	7.3	7.0	6.0	6.0	6.0	6.0	6.0	6.3	6.3
PST-ROPS	8.0	5.0	7.0	7.0	8.3	6.0	5.7	5.7	6.7	7.0	7.0	6.3	6.3	6.3	5.3	6.3	7.3	6.3
PIRANHA (DC-1)	7.0	5.0	7.0	7.0	8.0	6.0	6.0	6.0	7.0	7.0	6.7	6.0	6.0	5.3	5.3	6.3	6.3	6.2
DLFPS-AP/3056	7.7	5.0	6.7	6.3	9.0	6.0	6.0	6.0	7.0	7.3	6.7	5.7	6.0	5.3	5.3	6.3	6.7	6.2
DLFPS-AP/3059	6.7	5.0	6.7	7.3	8.7	6.0	6.0	6.0	6.7	6.7	6.7	5.7	5.7	5.3	5.7	6.0	5.7	6.0
DECLARATION	6.7	5.0	6.7	7.3	9.0	6.0	6.0	6.0	6.7	6.7	6.3	5.7	5.7	5.0	4.7	5.0	5.3	5.8
PENNCROSS	6.7	5.0	5.7	7.3	9.0	6.0	5.7	5.7	6.3	6.3	5.7	4.3	5.0	5.3	4.7	4.7	5.0	5.4
LSD VALUE	0.8	0.6	0.5	0.7	1.8	0.6	0.7	0.7	0.9	1.3	0.6	0.9	1.5	1.2	1.5	1.1	1.2	0.4
C.V. (%)	6.6	6.5	4.2	5.7	6.5	5.5	6.3	6.3	4.7	7.1	4.7	8.4	9.4	9.4	10.7	9.2	9.4	3.9

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).

TABLE 6.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS GROWN ON A GREEN AT LOS ANGELES (LOS ANGELES COUNTRY CLUB), CA 1/ 2015 DATA

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

	GENETIC	SEEDLING	WINTER						QUAL	ITY RAT	INGS					
NAME	COLOR	VIGOR	COLOR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	NOV	DEC	MEAN
PST-ROPS	7.0	6.0	7.0	6.3	7.3	7.3	7.3	7.7	8.3	8.3	8.3	8.0	8.0	8.0	8.0	7.8
777 (DLFPS-AP/30	54) 7.3	6.7	7.3	6.7	7.0	7.0	7.3	7.3	7.3	7.3	7.7	7.3	7.3	7.7	7.7	7.3
DLFPS-AP/3018	7.0	5.7	7.0	6.0	6.7	7.3	7.3	7.7	7.7	7.7	7.7	7.7	7.0	7.3	7.7	7.3
PIRANHA (DC-1)	7.0	6.0	7.0	6.3	7.0	7.3	7.0	7.0	8.0	8.0	7.7	7.3	7.0	6.7	6.7	7.2
L-93 XD	7.0	5.7	7.0	6.0	6.3	7.0	7.0	7.7	7.7	8.0	7.7	7.7	7.0	7.3	7.3	7.2
V-8	7.7	6.7	7.7	6.7	6.7	7.0	7.0	7.7	7.7	7.7	7.7	7.3	7.0	7.0	7.0	7.2
DLFPS-AP/3058	7.0	6.0	7.0	6.3	7.0	7.3	7.0	7.3	7.7	7.7	7.3	7.3	6.7	7.0	7.0	7.1
GDE	7.0	6.7	7.0	6.7	6.7	7.0	7.3	7.3	7.3	7.3	7.3	7.3	7.0	7.0	7.0	7.1
LUMINARY	7.0	6.3	7.0	6.7	6.7	7.0	7.3	7.7	7.7	7.7	7.7	7.3	6.7	6.7	6.3	7.1
NIGHTLIFE	9.0	6.7	9.0	6.7	6.7	7.0	7.3	7.3	7.3	7.7	7.7	7.3	6.7	6.0	6.0	7.0
PENN A-1	8.0	6.7	8.0	7.0	7.3	7.3	7.0	7.0	7.3	7.7	7.7	7.3	6.0	6.0	6.0	7.0
DLFPS-AP/3056	7.0	6.3	7.0	6.7	6.7	6.7	6.7	7.3	7.3	7.3	7.3	7.0	7.0	6.7	6.7	6.9
KINGDOM	9.0	6.0	9.0	6.0	6.0	7.0	7.0	7.3	7.0	7.3	7.3	7.0	7.3	7.0	7.0	6.9
SHARK	7.0	6.0	7.0	6.3	6.7	6.7	7.0	7.0	7.0	7.0	7.0	7.0	6.7	6.7	6.7	6.8
ARMOR	9.0	5.3	9.0	5.7	6.3	6.7	7.0	6.7	7.0	7.0	7.0	7.0	6.7	6.7	6.7	6.7
BARRACUDA	7.0	6.0	7.0	6.3	6.7	6.7	6.7	6.7	6.7	6.7	7.0	6.7	7.0	6.7	7.0	6.7
DECLARATION	7.0	6.0	7.0	6.3	6.7	6.7	7.0	7.0	7.0	7.0	7.0	6.7	6.0	6.3	6.0	6.6
DLFPS-AP/3059	7.0	5.3	7.0	6.0	6.3	6.3	6.7	6.7	6.7	6.7	6.7	6.3	6.0	6.3	6.0	6.4
PURE SELECT	7.3	5.7	7.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
PENNCROSS	6.0	6.3	6.0	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	5.7	5.3	5.0	6.1
LSD VALUE	0.3	2.4	0.3	2.3	1.7	1.4	1.6	1.9	1.2	1.5	1.9	1.0	0.6	0.9	0.7	0.8
C.V. (%)	3.1	12.7	3.1	10.7	8.6	7.5	7.7	9.7	8.3	9.3	10.0	7.2	5.9	7.6	6.3	6.1

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).

TABLE 7.

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS GROWN ON A GREEN AT GLENVIEW (NORTH SHORE COUNTRY CLUB), IL 1/ 2015 DATA

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

	GENETIC	SPRING	FALL COLOR	PERCENT ESTABLISH-				QUALITY	RATINGS			
NAME	COLOR	GREENUP	OCTOBER	MENT	APR	MAY	JUN	JUL	AUG	SEP	ОСТ	MEAN
777 (DLFPS-AP/30	54) 6.7	9	5.7	78.3	4.0	4.7	7.0	5.0	5.3	7.3	6.3	5.7
GDE	6.3	9	6.7	86.7	3.7	4.0	6.3	5.3	5.7	7.0	6.0	5.4
PIRANHA (DC-1)	6.0	9	5.7	75.0	3.3	4.0	6.7	4.3	5.0	6.7	5.7	5.1
DLFPS-AP/3056	6.3	9	6.0	68.3	4.0	3.7	6.3	4.7	4.7	6.0	5.7	5.0
ARMOR	7.0	9	7.0	78.3	3.7	3.7	4.7	4.7	5.3	6.0	6.3	4.9
BARRACUDA	6.3	9	5.7	90.0	4.0	3.0	5.0	3.7	5.0	6.7	6.7	4.9
DLFPS-AP/3018	6.3	9	5.3	76.7	4.3	3.7	6.0	4.0	4.3	6.3	5.7	4.9
PENN A-1	6.7	9	6.7	81.7	3.3	3.7	5.7	4.0	5.7	5.7	6.0	4.9
PST-ROPS	6.3	9	6.0	85.0	3.7	3.7	5.7	4.0	5.0	6.0	6.3	4.9
DLFPS-AP/3059	6.0	9	6.0	71.7	3.7	3.7	5.7	3.7	5.3	5.7	5.7	4.8
LUMINARY	6.7	9	5.3	65.0	3.7	3.0	5.0	4.0	5.0	6.3	6.3	4.8
PENNCROSS	5.3	9	5.7	85.0	4.3	4.7	5.3	3.7	4.0	5.3	6.0	4.8
V - 8	6.3	9	6.3	81.7	3.0	3.7	5.3	4.3	5.0	6.3	5.7	4.8
SHARK	6.7	9	6.7	75.0	4.0	4.3	4.7	3.3	4.7	6.3	5.0	4.6
DLFPS-AP/3058	5.3	9	6.0	70.0	3.3	4.0	5.0	3.3	4.3	5.7	5.7	4.5
DECLARATION	5.3	9	5.7	75.0	4.0	3.3	5.3	3.3	4.0	5.3	5.3	4.4
KINGDOM	7.7	9	7.3	70.0	3.0	3.0	5.0	4.0	4.3	5.7	5.7	4.4
L-93 XD	5.7	9	5.3	70.0	2.7	3.0	4.0	3.7	5.0	5.7	5.3	4.2
NIGHTLIFE	7.3	9	7.3	76.7	3.0	2.7	4.0	3.7	4.3	5.7	6.0	4.2
PURE SELECT	6.3	9	5.7	80.0	2.7	2.7	4.7	3.0	4.3	6.3	5.7	4.2
LSD VALUE	1.5	0	0.9	38.0	1.8	2.3	1.7	2.3	3.8	1.5	3.5	1.4
C.V. (%)	11.3	0	9.0	15.9	20.3	24.6	16.2	22.0	22.9	11.1	16.6	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).

TABLE 8.

GENETIC COLOR RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

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

NAME	AR1	IA1	IN1	KS1	MI1	MN1	NC1	NJ 1	VA1	MEAN
NIGHTLIFE	8.7	8.7	9.0	8	7.0	8.7	8.0	5.0	9.0	8.0
KINGDOM	8.3	8.7	9.0	8	7.0	7.3	8.0	4.3	8.7	7.7
ARMOR	8.7	8.0	9.0	8	7.0	8.0	8.0	4.0	8.0	7.6
777 (DLFPS-AP/3054)	8.0	7.0	7.0	7	6.0	6.7	6.3	8.3	7.7	7.1
L-93 XD	8.0	7.3	6.7	7	6.0	5.7	6.7	8.7	6.7	7.0
DLFPS-AP/3058	7.7	7.7	7.0	7	6.0	5.7	6.3	8.3	6.7	6.9
DLFPS-AP/3056	7.7	6.7	7.3	7	6.0	6.3	6.3	7.0	7.0	6.8
PIRANHA (DC-1)	7.0	6.7	7.0	7	6.0	6.3	6.7	8.3	6.3	6.8
DLFPS-AP/3018	7.3	7.0	7.0	7	6.0	6.3	6.3	8.0	6.3	6.8
V-8	8.0	7.3	7.3	7	5.7	6.3	6.7	6.3	6.7	6.8
PST-ROPS	8.0	6.3	7.0	7	6.0	6.0	6.3	7.7	6.7	6.8
SHARK	8.0	6.7	7.0	7	6.0	6.0	6.0	7.3	6.7	6.7
GDE	8.0	6.0	7.0	7	6.0	6.0	6.3	7.3	6.7	6.7
LUMINARY	7.3	6.3	7.0	7	6.0	6.3	6.3	7.0	6.7	6.7
BARRACUDA	8.0	7.0	7.0	7	6.0	5.7	6.0	6.3	6.0	6.6
PURE SELECT	7.0	6.7	7.0	7	6.0	6.0	6.0	6.3	6.0	6.4
DECLARATION	7.7	6.0	7.0	7	6.0	5.3	6.3	5.7	6.7	6.4
DLFPS-AP/3059	7.3	7.0	6.7	7	6.0	5.3	6.7	4.3	7.0	6.4
PENN A-1	8.0	6.0	7.3	7	5.7	6.7	6.3	3.7	6.3	6.3
PENNCROSS	8.0	6.3	7.3	7	5.0	3.0	5.3	1.3	7.0	5.6
LSD VALUE	1.5	1.8	0.5	0	0.3	0.9	0.8	1.3	0.8	0.3
C.V. (%)	12.1	16.0	4.3	0	3.0	8.6	7.4	12.9	7.4	9.4

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

TABLE 9. SPRING GREENUP RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

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

NAME	MI1	MN1	NJ1	MEAN
DLFPS-AP/3018	4.3	6.0	6.7	5.7
SHARK	3.0	6.7	7.0	5.6
777 (DLFPS-AP/3054)	3.7	7.0	6.0	5.6
BARRACUDA	2.7	7.0	7.0	5.6
GDE	2.7	7.0	6.7	5.4
LUMINARY	2.7	6.3	7.3	5.4
V - 8	3.7	6.3	6.3	5.4
L-93 XD	2.7	7.0	6.3	5.3
DLFPS-AP/3058	2.3	7.0	6.3	5.2
PURE SELECT	3.3	6.3	6.0	5.2
DECLARATION	2.0	6.3	7.0	5.1
DLFPS-AP/3059	3.0	6.0	6.3	5.1
PENN A-1	2.3	6.7	6.3	5.1
DLFPS-AP/3056	3.0	6.3	5.7	5.0
PST-ROPS	3.3	6.7	5.0	
PIRANHA (DC-1)	3.3	5.3	6.0	4.9
PENNCROSS	4.0		5.7	
KINGDOM	3.7	6.7	3.3	4.6
NIGHTLIFE	2.3	5.0	3.3	3.6
ARMOR	2.3	4.0	4.0	3.4
LSD VALUE	1.2	1.4	1.6	0.8
C.V. (%)	25.7	14.2	17.3	17.8

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

TABLE 10. LEAF TEXTURE RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

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

NAME	IN1	NJ 1	MEAN
PST-ROPS	9.0	8.3	8.7
777 (DLFPS-AP/3054)	7.3	8.3	7.8
PURE SELECT	7.7	8.0	7.8
V - 8	7.7	8.0	7.8
L-93 XD	7.0	8.7	7.8
DLFPS-AP/3018	7.0	8.3	7.7
PIRANHA (DC-1)	7.3	7.7	7.5
GDE	6.7	7.7	7.2
DLFPS-AP/3056	7.0	7.3	7.2
NIGHTLIFE	7.3	7.0	7.2
BARRACUDA	6.7	7.3	7.0
DLFPS-AP/3058	7.0	7.0	7.0
SHARK	6.7	7.3	7.0
ARMOR	7.0	6.3	6.7
KINGDOM	7.3	6.0	6.7
DECLARATION	6.7	6.3	6.5
LUMINARY	6.0	7.0	6.5
PENN A-1	6.3	5.7	6.0
DLFPS-AP/3059	6.3	5.3	5.8
PENNCROSS	3.7	3.0	3.3
LSD VALUE	0.9	1.0	0.7
C.V. (%)	8.2	8.6	8.4

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).

TABLE 11. SEEDLING VIGOR RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

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

NAME	AR1	MO1	NC1	NJ 1	UT1	MEAN
BARRACUDA	5.3	8.7	7.3	7.0	6.0	6.9
GDE	7.3	7.0	6.7	6.3	6.3	6.7
SHARK	7.3	7.0	6.3	7.0	6.0	6.7
777 (DLFPS-AP/3054)	6.3	7.7	6.7	6.0	6.3	6.6
NIGHTLIFE	6.7	7.7	6.3	5.7	6.7	6.6
DECLARATION	6.0	6.3	6.7	6.7	7.0	6.5
PURE SELECT	5.3	7.7	7.0	5.7	7.0	6.5
PENNCROSS	6.7	7.7	6.0	5.0	7.0	6.5
PENN A-1	6.3	7.0	6.7	5.3	6.7	6.4
DLFPS-AP/3056	5.3	7.3	6.0	6.7	6.0	6.3
V-8	5.7	7.7	6.7	4.7	6.3	6.2
DLFPS-AP/3059	4.7	6.7	6.0	6.3	6.7	6.1
DLFPS-AP/3018	4.7	7.3	7.3	4.7	6.3	6.1
KINGDOM	6.7	7.3	5.7	4.7	5.3	5.9
L-93 XD	6.0	6.0	5.3	5.3	6.7	5.9
DLFPS-AP/3058	4.7	5.7	6.0	5.7	6.7	5.7
PIRANHA (DC-1)	4.3	6.7	4.7	5.3	6.3	5.5
ARMOR	6.0	6.0	5.3	4.0	5.7	5.4
LUMINARY	3.7	5.7	5.7	5.3	6.3	5.3
PST-ROPS	4.7	5.3	4.3	3.3	5.3	4.6
LSD VALUE	3.2	1.8	1.6	1.8	1.3	0.9
C.V. (%)	34.7	15.8	16.3	20.6	13.1	20.8

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).

TABLE 12. SPRING DENSITY RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

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

NAME	NC1
777 (DLFPS-AP/3054) BARRACUDA DECLARATION DLFPS-AP/3018 KINGDOM PENN A-1 PIRANHA (DC-1) PURE SELECT V-8 DLFPS-AP/3058 GDE L-93 XD NIGHTLIFE DLFPS-AP/3056 DLFPS-AP/3059 PENNCROSS SHARK LUMINARY PST-ROPS ARMOR	$\begin{array}{c} 7.0\\ 7.0\\ 7.0\\ 7.0\\ 7.0\\ 7.0\\ 7.0\\ 7.0\\$
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).

TABLE 13. SUMMER DENSITY RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

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

NAME	IN1	MN 1	NC1	MEAN
V-8	8.0	6.7	8.0	7.6
PST-ROPS	8.3	6.0	8.0	7.4
777 (DLFPS-AP/3054)	7.7	6.3	8.0	7.3
PIRANHA (DC-1)	8.0	6.0	8.0	7.3
PURE SELECT	8.0	6.3	7.7	7.3
SHARK	8.0	6.3	7.7	7.3
DLFPS-AP/3018	7.7	6.3	7.7	7.2
L-93 XD	7.7	6.0	7.7	7.1
NIGHTLIFE	7.7	6.0	7.7	7.1
ARMOR	8.0	6.0	7.3	7.1
GDE	7.7	6.3	7.3	7.1
DLFPS-AP/3056	7.3	6.3	7.3	7.0
DLFPS-AP/3058	7.0	6.3	7.7	7.0
KINGDOM	8.0	6.0	6.7	6.9
BARRACUDA	7.3	6.0	7.3	6.9
DLFPS-AP/3059	7.0	6.0	7.3	6.8
LUMINARY	7.0	6.0	7.0	6.7
PENN A-1	7.0	5.7	7.0	6.6
DECLARATION	7.3	6.0	6.3	6.6
PENNCROSS	5.7	2.0	5.0	4.2
LSD VALUE	0.9	0.6	0.7	0.4
C.V. (%)	7.5	6.5	6.3	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).

TABLE 14. FALL DENSITY RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

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

NAME	MN1	NC1	NJ1	MEAN
L-93 XD	6.3	8.0	8.3	7.6
DLFPS-AP/3058	6.7	8.3	7.3	7.4
777 (DLFPS-AP/3054)	6.7	8.0	7.3	7.3
DLFPS-AP/3018	6.7	8.0	7.3	7.3
PIRANHA (DC-1)	6.7	8.0	7.3	7.3
PST-ROPS	6.7	7.7	7.7	7.3
GDE	6.3	8.0	6.3	6.9
V-8	6.0	8.0	6.3	6.8
DLFPS-AP/3056	5.7	8.0	6.3	6.7
BARRACUDA	6.0	8.0	5.7	6.6
PURE SELECT	5.7	8.3	5.7	6.6
LUMINARY	5.7	8.0	5.7	6.4
SHARK	5.3	8.0	6.0	6.4
NIGHTLIFE	5.3	7.3	6.3	6.3
ARMOR	4.3	7.3	5.7	5.8
DLFPS-AP/3059	4.7	8.0	4.3	5.7
KINGDOM	4.3	7.0	5.7	5.7
DECLARATION	5.7		4.3	5.6
PENN A-1	4.7	8.0	4.0	5.6
PENNCROSS	1.3	5.3	1.7	2.8
LSD VALUE	1.0	0.7	1.8	0.7
C.V. (%)	11.4	5.3	18.4	12.0

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 15. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/

NAME	AR1	KY1	NC1	VA1	MEAN
PENNCROSS	92.7	53.3	94.3	70.0	77.6
GDE	93.3	56.7	88.3	66.7	76.3
BARRACUDA	73.0	53.3	93.3	78.3	74.5
PENN A-1	80.7	48.3	92.7	75.0	74.2
777 (DLFPS-AP/3054)	91.0	58.3	83.3	63.3	74.0
SHARK	92.3	48.3	83.3	70.0	73.5
V - 8	84.0	48.3	86.7	71.7	72.7
DLFPS-AP/3018	65.7	65.0	81.7	66.7	69.8
DECLARATION	81.0	43.3	86.7	65.0	69.0
NIGHTLIFE	73.7	51.7	83.3	63.3	68.0
DLFPS-AP/3056	79.0	43.3	83.3	65.0	67.7
DLFPS-AP/3058	72.0	41.7	86.7	68.3	67.2
L-93 XD	83.3	38.3	85.0	61.7	67.1
LUMINARY	66.0	51.7	81.7	68.3	66.9
DLFPS-AP/3059	52.3	60.0	83.3	71.7	66.8
PST-ROPS	71.7	48.3	76.7	68.3	66.3
KINGDOM	69.0	43.3	80.0	68.3	65.2
PURE SELECT	50.0	46.7	88.3	75.0	65.0
PIRANHA (DC-1)	60.0	48.3	78.3	71.7	64.6
ARMOR	66.0	36.7	70.0	60.0	58.2
LSD VALUE	41.0	12.7	11.3	12.6	11.5
C.V. (%)	34.1	16.1	8.3	11.5	20.7

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).

TABLE 16. PERCENT LIVING GROUND COVER (SUMMER) RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS 2/

NAME	AR1	KY1	NC1	MEAN
GDE	99.0	76.7	99.0	91.6
PENN A-1	97.7	73.3	99.0	90.0
BARRACUDA	98.0	71.7	99.0	89.6
SHARK	96.3	73.3	99.0	89.6
777 (DLFPS-AP/3054)	97.7	71.7	99.0	89.4
V-8	98.3	70.0	99.0	89.1
L-93 XD	99.0	66.7	99.0	88.2
PENNCROSS	96.7	71.7	95.7	88.0
NIGHTLIFE	94.0	70.0	99.0	87.7
PST-ROPS	93.3	70.0	99.0	87.4
DLFPS-AP/3056	97.7	63.3	99.0	86.7
DECLARATION	93.7	65.0	99.0	85.9
DLFPS-AP/3018	77.7	80.0	99.0	85.6
KINGDOM	92.0	65.0	99.0	85.3
ARMOR	96.0	60.0	99.0	85.0
PIRANHA (DC-1)	68.3	75.0	99.0	80.8
LUMINARY	73.0	70.0	99.0	80.7
DLFPS-AP/3058	77.7	65.0	99.0	80.6
PURE SELECT	76.0	65.0	99.0	80.0
DLFPS-AP/3059	53.7	71.7	99.0	74.8
LSD VALUE	38.1	9.0	0.4	13.0
C.V. (%)	26.6	8.0	0.3	16.4

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).

TABLE 17. PERCENT LIVING GROUND COVER (FALL) RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	NC1	NJ 1	MEAN
NAME BARRACUDA DLFPS-AP/3056 PURE SELECT SHARK 777 (DLFPS-AP/3054) DECLARATION GDE L-93 XD NIGHTLIFE DLFPS-AP/3059 DLFPS-AP/3058 DLFPS-AP/3018 LUMINARY	NC1 99.0 99.0 99.0 99.0 99.0 99.0 99.0 99.	NJ1 83.3 81.7 81.7 80.0 78.3 75.0 73.3 71.7 68.3 66.7 66.7	MEAN 91.2 90.3 90.3 89.5 88.7 87.0 86.2 86.2 85.3 83.7 82.8 82.8
PENN A-1	99.0	66.7	82.8
PIRANHA (DC-1)	99.0	65.0	82.0
PENNCROSS	97.0	66.7	81.8
V-8	97.7	63.3	80.5
KINGDOM	99.0	55.0	77.0
PST-ROPS	99.0	55.0	77.0
ARMOR	99.0	53.3	76.2
LSD VALUE	1.1	18.0	9.0
C.V. (%)	0.7	15.9	9.4

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

TABLE 18. DOLLAR SPOT RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

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

NAME	KS1	MO 1	NC1	MEAN
L-93 XD	8.7	9.0	7.7	8.4
DLFPS-AP/3018	8.3	9.0	7.0	8.1
BARRACUDA	8.3	8.3	6.3	7.7
LUMINARY	8.3	8.3	6.3	7.7
DLFPS-AP/3058	8.0	8.7	6.3	7.7
GDE	8.0	9.0	5.7	7.6
PENN A-1	8.0	8.7	5.7	7.4
PIRANHA (DC-1)	7.7	8.3	6.3	7.4
V-8	7.3	9.0	5.3	7.2
777 (DLFPS-AP/3054)	7.7	6.7	7.0	7.1
DECLARATION	8.3	9.0	4.0	7.1
PST-ROPS	7.7	6.7	7.0	7.1
SHARK	6.0	8.0	7.0	7.0
PURE SELECT	7.7	8.0	4.7	6.8
DLFPS-AP/3056	7.3	9.0	4.0	6.8
DLFPS-AP/3059	7.3	8.3	4.3	6.7
PENNCROSS	8.3	9.0	2.3	6.6
KINGDOM	8.0	8.7	2.7	6.4
NIGHTLIFE	7.3	7.0	4.0	6.1
ARMOR	6.0	4.3	6.0	5.4
LSD VALUE	1.1	1.5	1.6	0.8
C.V. (%)	9.0	11.1	17.8	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).

TABLE 19. BROWN PATCH (WARM TEMPERATURE) RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

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

NAME	KS1	MO1	MEAN
PENNCROSS	8.3	9.0	8.7
BARRACUDA	8.7	8.0	8.3
KINGDOM	8.0	8.3	8.2
PST-ROPS	7.3	9.0	8.2
DLFPS-AP/3056	8.0	7.7	7.8
SHARK	8.3	7.3	7.8
DLFPS-AP/3018	8.3	7.0	7.7
PIRANHA (DC-1)	8.3	7.0	7.7
DLFPS-AP/3058	7.3	7.7	7.5
NIGHTLIFE	7.0	8.0	7.5
V - 8	8.3	6.7	7.5
GDE	8.0	6.7	7.3
DECLARATION	6.7	7.7	7.2
777 (DLFPS-AP/3054)	5.7	8.3	7.0
ARMOR	6.7	7.3	7.0
L-93 XD	8.3	5.7	7.0
PURE SELECT	6.7	7.3	7.0
LUMINARY	6.3	7.3	6.8
DLFPS-AP/3059	6.0	5.0	5.5
PENN A-1	5.7	5.0	5.3
LSD VALUE	2.6	2.7	1.9
C.V. (%)	22.2	23.3	22.8

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).

TABLE 20. PINK SNOW MOLD RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2015 DATA

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

NAME	MO1
DECLARATION	9.0
DLFPS-AP/3018	8.3
KINGDOM	8.3
777 (DLFPS-AP/3054)	8.0
ARMOR	8.0
BARRACUDA	8.0
GDE	8.0
V - 8	8.0
PENNCROSS	7.7
PST-ROPS	7.7
SHARK	7.7
NIGHTLIFE	7.3
PIRANHA (DC-1)	7.3
DLFPS-AP/3056	7.0
DLFPS-AP/3058	6.7
DLFPS-AP/3059	6.7
PURE SELECT	6.0
L-93 XD	5.7
PENN A-1	5.0
LUMINARY	3.7
LSD VALUE	2.4
C.V. (%)	20.5

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).

	2015 DAT	A		
NAME	KY1	MI1	MO1	MEAN
DLFPS-AP/3018	40.0	64.3	95.7	66.7
777 (DLFPS-AP/3054)	38.3	56.7	97.7	64.2
PURE SELECT	33.3	58.3	97.0	62.9
SHARK	40.0	49.0	98.3	62.4
V-8	35.0	53.3	98.3	62.2
DLFPS-AP/3056	33.3	54.3	98.3	62.0
BARRACUDA	38.3	48.3	98.3	61.7
DLFPS-AP/3059	40.0	49.3	95.7	61.7
DECLARATION	36.7	47.3	97.7	60.6
GDE	38.3	43.3	97.7	59.8
KINGDOM	31.7	50.0	97.0	59.6
PENNCROSS	35.0	44.3	99.0	59.4
PENN A-1	38.3	40.0	97.3	58.6
PST-ROPS	33.3	44.3	96.0	57.9
NIGHTLIFE	31.7	42.7	99.0	57.8
L-93 XD	30.0	45.0	97.7	57.6
ARMOR	33.3	41.0	97.3	57.2
PIRANHA (DC-1)	35.0	40.0	96.0	57.0
LUMINARY	33.3	35.0	97.3	55.2
DLFPS-AP/3058	33.3	28.7	94.3	52.1
LSD VALUE	7.7	20.7	4.1	7.5
C.V. (%)	13.5	27.5	2.6	13.5

TABLE 21. PERCENT ESTABLISHMENT RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN 2/ 2015 DATA

- 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.	PERCENT ESTABLISHMENT RATINGS OF BENTGRASS CULTIVARS 1	/
	GROWN ON A GREEN AT ST. PAUL, MN 2/	
	2015 DATA	

NAME	OCTOBER 2014	APRIL 2015	MEAN
DLFPS-AP/3056	7.0	6.3	6.7
SHARK	7.0	6.3	6.7
V-8	6.7	6.7	6.7
DLFPS-AP/3018	6.7	6.3	6.5
GDE	6.3	6.7	6.5
KINGDOM	6.3	6.7	6.5
PURE SELECT	6.7	6.3	6.5
777 (DLFPS-AP/3054)	6.3	6.3	6.3
BARRACUDA	6.7	6.0	6.3
DECLARATION	6.3	6.3	6.3
NIGHTLIFE	6.3	6.3	6.3
DLFPS-AP/3058	6.0	6.3	6.2
PENNCROSS	6.0	6.0	6.0
PENN A-1	5.3	6.3	5.8
DLFPS-AP/3059	5.3	5.7	5.5
L-93 XD	5.3	5.3	5.3
LUMINARY	5.0	5.3	5.2
ARMOR	4.7	5.0	4.8
PIRANHA (DC-1)	4.7	5.0	4.8
PST-ROPS	3.7	4.7	4.2
LSD VALUE	1.7	1.5	1.4
C.V. (%)	15.2	12.1	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.

	2010			
NAME	SEP 9	SEP 30	OCTOBER	MEAN
PST-ROPS	28.0	47.0	32.7	35.9
ARMOR	22.7	46.7	28.7	32.7
NIGHTLIFE	19.3	37.0	23.3	26.6
SHARK	17.3	31.3	25.3	24.7
PENNCROSS	19.3	29.0	19.7	22.7
PURE SELECT	17.3	28.3	20.0	21.9
KINGDOM	20.0	26.7	16.7	21.1
PIRANHA (DC-1)	14.0	26.7	18.0	19.6
777 (DLFPS-AP/3054)	16.7	26.3	14.3	19.1
V-8	13.7	21.3	16.0	17.0
BARRACUDA	13.3	22.0	14.3	16.6
L-93 XD	14.0	22.7	11.3	16.0
LUMINARY	12.3	22.3	12.3	15.7
PENN A-1	12.7	20.0	14.0	15.6
DLFPS-AP/3059	11.7	21.0	12.0	14.9
DLFPS-AP/3018	10.7	20.0	13.7	14.8
DLFPS-AP/3058	10.0	19.7	10.0	13.2
DLFPS-AP/3056	10.0	18.0	10.3	12.8
GDE	8.3	18.7	10.7	12.6
DECLARATION	10.0	16.0	10.3	12.1
LSD VALUE	9.2	13.9	11.9	10.6
C.V. (%)	32.9	30.3	38.6	31.2

TABLE 23. PERCENT DOLLAR SPOT RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN AT ST. PAUL, MN 2/ 2015 DATA

- 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.

	GROWN ON A	GREEN AT RA 2015 DATA	LEIGH, NC	2/	
	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	
NAME	2014	2014	2015	2015	MEAN
BARRACUDA	65.0	85.0	90.0	91.7	82.9
GDE	60.0	76.7	85.0	86.7	77.1
PURE SELECT	63.3	76.7	81.7	86.7	77.1
PENNCROSS	51.7	78.3	86.7	90.0	76.7
PENN A-1	51.7	75.0	83.3	90.0	75.0
DECLARATION	55.0	73.3	80.0	85.0	73.3
DLFPS-AP/3018	58.3	73.3	78.3	81.7	72.9
DLFPS-AP/3056	55.0	73.3	78.3	81.7	72.1
DLFPS-AP/3058	50.0	73.3	80.0	83.3	71.7
V - 8	53.3	73.3	78.3	81.7	71.7
DLFPS-AP/3059	51.7	73.3	78.3	81.7	71.3
777 (DLFPS-AP/3054)	53.3	73.3	76.7	80.0	70.8
NIGHTLIFE	51.7	70.0	76.7	81.7	70.0
SHARK	46.7	70.0	76.7	81.7	68.8
KINGDOM	43.3	70.0	75.0	78.3	66.7
L-93 XD	43.3	66.7	75.0	80.0	66.3
LUMINARY	46.7	66.7	73.3	78.3	66.3
PST-ROPS	33.3	63.3	70.0	75.0	60.4
PIRANHA (DC-1)	38.3	60.0	66.7	75.0	60.0
ARMOR	38.3	61.7	65.0	66.7	57.9
LSD VALUE	15.4	14.3	11.0	12.4	11.0
C.V. (%)	16.4	9.6	7.8	7.7	8.6

TABLE 24. PERCENT ESTABLISHMENT RATINGS OF BENTGRASS CULTIVARS 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).

	2015 DATA					
NAME	3-WEEKS	4-WEEKS	5-WEEKS	MEAN		
LUMINARY	31.7	50.0	55.0	45.6		
SHARK	30.0	45.0	55.0	43.3		
BARRACUDA	31.7	45.0	51.7	42.8		
NIGHTLIFE	30.0	46.7	51.7	42.8		
V-8	30.0	45.0	50.0	41.7		
DLFPS-AP/3056	25.0	38.3	53.3	38.9		
777 (DLFPS-AP/3054)	26.7	38.3	48.3	37.8		
PENNCROSS	28.3	40.0	45.0	37.8		
GDE	25.0	40.0	46.7	37.2		
ARMOR	25.0	36.7	43.3	35.0		
PENN A-1	25.0	36.7	43.3	35.0		
KINGDOM	23.3	33.3	41.7	32.8		
DLFPS-AP/3058	21.0	33.3	41.7	32.0		
PURE SELECT	21.0	31.7	41.7	31.4		
PST-ROPS	20.0	33.3	38.3	30.6		
DLFPS-AP/3018	16.0	28.3	35.0	26.4		
DLFPS-AP/3059	15.0	28.3	35.0	26.1		
DECLARATION	14.3	25.0	36.7	25.3		
PIRANHA (DC-1)	10.0	25.0	40.0	25.0		
L-93 XD	6.0	11.7	23.3	13.7		
LSD VALUE	15.6	23.3	21.9	18.7		
C.V. (%)	35.0	30.8	22.7	26.8		

TABLE 25. PERCENT ESTABLISHMENT RATINGS OF BENTGRASS CULTIVARS 1/ GROWN ON A GREEN AT STILLWATER, OK 2/ 2015 DATA

- 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 GREEN 2015 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

	QUALITY	MAXIMUM
NAME	MEAN 1/	IN TOP 25% 2/
777 (DLFPS-AP/3054)	6.4	46.2
ARMOR	5.7	23.1
BARRACUDA	6.1	15.4
DECLARATION	5.8	0.0
DLFPS-AP/3018	6.3	53.8
DLFPS-AP/3056	6.1	23.1
1		15.4
DLFPS-AP/3058	6.2	
DLFPS-AP/3059	5.8	0.0
GDE	6.3	30.8
KINGDOM	5.9	30.8
L-93 XD	6.4	38.5
LUMINARY	6.0	0.0
NIGHTLIFE	6.0	30.8
PENN A-1	5.6	0.0
PENNCROSS	4.4	0.0
PIRANHA (DC-1)	6.2	46.2
PST-ROPS	6.1	38.5
PURE SELECT	6.0	7.7
SHARK	6.2	15.4
V-8	6.2	38.5
LSD VALUE	0.2	
C.V. (%)	8.3	

- */ 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.