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, one member from the Sports Turf Managers Association of America (STMA), 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. Micah Gould, Barenbrug USA.
Dr. Cole Thompson, 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*.

2020 NATIONAL BENTGRASS TEST
(Fairway/Tee)

LOCATIONS SUBMITTING DATA FOR 2024

State	Location	Code
Indiana	West Lafayette	IN1
Indiana	West Lafayette (No Poa Annua Suppression)	IN2
Iowa	Ames	IA1
Maryland	College Park	MD1
Massachusetts	Amherst	MA1
Massachusetts	Amherst (Traffic Stress)	MA2
New Jersey	North Brunswick	NJ1
Quebec	Quebec City	QE1
Virginia	Blacksburg	VA1
Wisconsin	Madison	WI1

2020 NTEP National Bentgrass (Fairway/Tee) Test
Entries and Sponsors

Entry #	Name	Species	Sponsor
*1	Penncross	Creeping	Standard
*2	Chinook (H10G-OP)	Creeping	Standard
*3	007XL	Creeping	DLF USA
*4	S1	Creeping	SiteOne Landscape Supply
*5	TourPro	Creeping	Columbia Seeds
*6	Piranha	Creeping	Standard
*7	Barracuda	Creeping	Mountain View Seeds
*8	Musket	Colonial	Standard
*9	Shark	Creeping	Mountain View Seeds
*10	Match Play	Creeping	Landmark Turf & Native Seed
*11	Tillinghast (DLF-AP-3084)	Creeping	DLF USA
12	PVF-PV-1	Creeping	Lebanon Turf
*13	Prodigy (PVF-PV-2)	Creeping	SiteOne Landscape
*14	Spectrum (LNS 19)	Creeping	Landmark Turf & Native Seed
*15	Oakley (PPG-AP-MTV1)	Creeping	Mountain View Seeds
*16	Piper (PPG-AP-MTV2)	Creeping	Mountain View Seeds
17	PST-0MRN	Creeping	Pure-Seed Testing Inc.
18	PST-0R2O	Creeping	Pure-Seed Testing Inc.
19	PST-R0DS	Creeping	Pure-Seed Testing Inc.

*Commercially Available in the US or any Other Country in 2025

TABLE A. 2024 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN THE 2020 NATIONAL BENTGRASS (FAIRWAY/TEE) 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
IA1	SANDY CLAY LOAM	7.1-7.5	0-60	0-150	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
IN1	SILT LOAM AND SILT	7.1-7.5	61-150	151-240	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
IN2	SILT LOAM AND SILT	7.1-7.5	61-150	151-240	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
MA1	SILT LOAM AND SILT	5.6-6.0	61-150	151-240	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MA2	-	-	-	-	-	-	-	-
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
NJ1	SANDY LOAM	5.6-6.0	271-450	151-240	1.1-2.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
QE1	-	-	-	-	-	-	-	-
VA1	SILTY CLAY LOAM	5.6-6.0	61-150	151-240	3.1-4.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
WI1	SILT LOAM AND SILT	7.1-7.5	-	-	3.1-4.0	FULL SUN	-	TO PREVENT DORMANCY

TABLE B. LOCATIONS AND DATA COLLECTED IN 2024

LOCATION	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	SPRING DENSITY	SUMMER DENSITY	FALL DENSITY
IA1	X	X	X	X	X	X	X	X			X		X	X	X
IN1		X	X	X	X	X	X	X			X	X			X
IN2		X	X	X	X	X	X	X			X	X			X
MA1	X	X	X	X	X	X	X	X	X						
MA2															
MD1	X	X	X	X	X	X	X	X		X					X
NJ1	X	X	X	X	X	X	X			X	X	X			X
QE1		X	X	X	X	X	X			X	X		X	X	
VA1	X	X	X	X	X	X	X			X					
WI1	X	X	X	X	X	X		X		X	X		X	X	X

TABLE B. (CONT'D) LOCATIONS AND DATA COLLECTED IN 2024

LOCATION	PERCENT COVER SPRING	PERCENT COVER SUMMER	PERCENT COVER FALL	DOLLAR SPOT	PINK SNOW MOLD	FALL COLOR NOVEMBER	POA ANNUA	PERCENT ANNUAL BLUEGRASS	WEAR TOLERANCE MAY	WEAR TOLERANCE JULY	WEAR TOLERANCE OCTOBER
IA1	X	X	X			X					
IN1				X			X	X			
IN2				X			X	X			
MA1									X	X	X
* MA2											
MD1											
NJ1											
QE1					X	X	X				
VA1											
WI1											

* MORE DATA FOR MA2 IN TABLE 5.

TABLE 1. MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE AT SIX LOCATIONS IN THE U.S. AND CANADA 1/
2024 DATA

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

NAME	IA1	IN1	MD1	NJ1	VA1	WI1	MEAN
007XL	6.9	6.1	5.5	6.7	5.3	6.5	6.2
PIPER (PPG-AP-MTV2)	6.6	6.2	5.1	6.5	5.5	6.6	6.1
MATCH PLAY	6.9	6.5	5.5	5.7	5.8	6.0	6.1
TOURPRO	6.8	6.0	5.7	5.9	5.8	6.2	6.1
OAKLEY (PPG-AP-MTV1)	7.0	6.2	5.0	6.1	5.6	6.4	6.0
PRODIGY (PVF-PV-2)	7.0	6.4	5.7	6.0	5.1	5.8	6.0
SPECTRUM (LNS 19)	6.8	5.9	5.5	5.6	6.1	6.1	6.0
S1	6.8	6.0	5.0	5.9	6.0	6.3	6.0
CHINOOK (H10G-OP)	7.0	6.0	5.4	5.9	5.3	6.2	6.0
PVF-PV-1	6.9	6.3	5.3	5.4	5.8	5.9	5.9
SHARK	6.9	6.0	4.7	4.8	6.5	6.2	5.9
PIRANHA	7.0	6.2	5.4	5.0	5.5	6.1	5.8
PST-0R2O	7.0	5.8	4.7	5.6	5.6	6.4	5.8
TILLINGHAST (DLF-AP-3084)	6.8	6.1	5.4	5.3	5.2	6.0	5.8
PST-0MRN	7.0	5.9	4.4	5.2	5.9	6.4	5.8
PST-R0DS	7.0	5.6	4.4	4.7	6.1	6.1	5.7
BARRACUDA	6.8	6.1	4.8	4.4	5.7	6.0	5.6
MUSKET	6.7	5.5	5.8	5.3	4.3	5.6	5.5
PENNCROSS	7.2	5.2	4.0	1.5	4.4	4.7	4.5
LSD VALUE	0.3	0.5	0.5	1.6	1.0	0.7	0.4
C.V. (%)	2.5	4.8	6.2	19.1	11.3	7.5	9.5

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

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

TABLE 2. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS GROWN UNDER TRAFFIC STRESS AT AMHERST, MA 1/
2024 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
MUSKET	4.0	3.7	3.3	5.3	7.0	7.0	7.0	7.0	6.3	6.3	4.7	4.7	6.1
TOURPRO	5.0	5.0	5.0	5.3	5.0	6.0	5.7	6.3	6.3	6.0	5.7	5.0	5.7
007XL	6.0	5.7	5.7	4.7	5.7	5.7	5.7	6.0	6.0	5.7	6.0	5.0	5.6
PST-0MRN	5.7	4.7	4.7	4.3	6.3	6.3	5.3	5.7	6.3	6.0	5.0	5.0	5.6
SPECTRUM (LNS 19)	5.3	5.3	4.7	6.0	5.7	5.7	5.0	5.3	6.7	5.7	5.7	5.0	5.6
MATCH PLAY	5.7	5.0	5.0	5.7	5.0	5.3	5.0	5.7	6.7	5.7	5.0	4.3	5.4
PIPER (PPG-AP-MTV2)	5.3	5.0	5.0	5.0	5.7	5.7	5.3	5.7	6.0	5.3	5.0	4.7	5.4
PIRANHA	5.7	5.7	5.3	5.7	5.0	5.3	4.7	4.7	6.3	6.0	5.7	5.0	5.4
PST-0R2O	6.0	5.7	5.0	5.7	6.3	6.0	4.3	5.3	5.7	5.3	5.3	5.0	5.4
OAKLEY (PPG-AP-MTV1)	5.7	5.7	5.0	5.3	5.3	6.0	5.0	6.0	5.7	5.7	5.0	4.0	5.3
PVF-PV-1	5.7	4.7	5.0	5.7	5.3	5.7	4.7	5.0	6.3	5.7	5.3	4.0	5.3
PRODIGY (PVF-PV-2)	5.3	5.3	4.7	6.0	5.3	5.7	5.0	5.0	5.3	5.7	5.0	5.0	5.3
BARRACUDA	5.3	5.7	5.3	4.7	5.0	5.3	6.0	5.7	6.0	5.0	5.3	4.0	5.2
PST-R0DS	4.3	4.0	4.0	5.3	5.3	5.3	4.0	5.3	6.0	6.0	5.3	4.0	5.2
CHINOOK (H10G-OP)	5.0	5.0	4.7	5.0	5.0	6.0	5.0	5.3	5.7	5.3	5.0	4.0	5.1
SHARK	5.0	4.0	4.0	6.0	4.7	5.0	5.0	5.3	6.0	5.0	5.3	4.0	5.1
TILLINGHAST (DLF-AP-3084)	4.7	4.3	4.3	5.0	5.7	5.3	4.3	5.0	5.3	5.0	5.0	4.3	5.0
S1	4.7	5.0	4.7	5.0	4.7	5.0	4.3	5.3	5.7	5.0	5.0	4.0	4.9
PENNCROSS	3.7	3.0	3.0	3.0	3.0	4.3	4.0	4.0	4.0	3.7	4.0	3.0	3.7
LSD VALUE	0.8	0.9	0.7	0.9	0.7	0.7	0.7	0.6	0.8	0.7	0.6	0.4	0.3
C.V. (%)	9.5	11.7	9.4	10.3	8.6	7.6	9.0	7.1	7.9	7.7	7.0	5.6	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 3. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS GROWN WITHOUT POA ANNUA SUPPRESSION AT WEST LAFAYETTE, IN 1/
2024 DATA

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

NAME	SPRING GREENUP	LEAF TEXTURE	FALL DENSITY	DOLLAR SPOT	POA ANNUA	PERCENT ANNUAL BLUEGRASS	QUALITY RATINGS MAY	JUN	JUL	AUG	SEP	OCT	NOV	MEAN
MATCH PLAY	5.7	6.3	7.3	6.3	8.0	0.0	6.7	7.0	7.0	7.3	7.3	7.3	7.0	7.1
OAKLEY (PPG-AP-MTV1)	5.3	6.3	7.3	7.0	7.7	0.7	7.3	7.3	6.0	7.7	7.3	7.3	6.7	7.1
PST-0MRN	6.3	6.7	7.0	3.7	7.3	3.3	7.7	7.7	6.3	7.7	7.0	7.0	6.0	7.0
PVF-PV-1	5.3	6.3	7.7	6.3	7.3	1.3	7.3	7.3	6.3	7.0	7.0	7.3	7.0	7.0
PRODIGY (PVF-PV-2)	6.0	6.7	7.3	7.3	6.3	2.0	6.7	7.7	7.0	7.3	7.3	7.0	6.3	7.0
SPECTRUM (LNS 19)	4.3	7.0	8.0	7.7	7.3	1.3	7.0	7.3	6.0	7.7	7.0	7.3	6.7	7.0
TILLINGHAST (DLF-AP-3084)	6.3	6.7	7.3	7.7	7.3	0.7	7.0	6.3	6.0	7.7	7.3	8.0	6.7	7.0
PIPER (PPG-AP-MTV2)	5.0	7.0	7.3	7.3	7.0	1.3	6.3	7.0	6.0	7.7	7.0	7.0	6.7	6.8
PIRANHA	6.0	7.0	7.3	6.3	7.7	1.0	6.7	7.0	6.3	7.3	7.0	6.7	6.7	6.8
S1	6.3	7.0	7.0	6.3	7.3	1.7	6.3	7.0	6.3	7.0	7.0	7.0	6.7	6.8
007XL	6.0	7.0	8.0	7.3	6.0	1.3	6.7	6.7	5.7	7.0	7.0	7.0	6.7	6.7
PST-R0DS	5.3	6.7	7.3	4.7	6.7	3.0	6.3	6.7	6.7	7.3	6.3	7.3	6.3	6.7
SHARK	6.3	7.0	7.0	5.3	7.0	0.7	6.0	7.7	6.0	7.0	7.3	7.0	6.0	6.7
BARRACUDA	6.3	7.0	7.0	6.3	6.0	3.0	6.0	6.7	6.3	7.0	7.3	6.7	6.3	6.6
CHINOOK (H10G-OP)	5.7	6.7	6.7	6.7	7.3	2.7	6.7	6.7	6.3	7.0	6.7	7.0	6.0	6.6
PST-0R2O	5.3	7.0	7.7	4.3	6.3	1.0	6.3	7.0	6.7	7.3	6.3	6.7	6.0	6.6
TOURPRO	6.3	6.3	7.0	6.0	6.3	4.0	6.3	6.7	5.7	6.7	6.7	7.3	6.3	6.5
MUSKET	4.0	5.3	6.0	5.7	4.7	18.3	5.0	6.7	6.3	6.7	6.0	6.0	5.0	6.0
PENNCROSS	8.0	5.3	6.0	3.3	4.7	16.7	5.0	6.3	6.0	6.3	6.0	6.0	5.3	5.9
LSD VALUE	2.1	0.8	0.7	2.6	1.4	4.0	1.1	1.8	2.0	1.5	0.9	0.6	1.3	0.6
C.V. (%)	17.7	6.8	6.0	22.2	11.7	76.6	9.7	9.5	10.8	8.1	7.0	4.9	9.7	4.7

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 4. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS EVALUATING SNOW MOLD AT QUEBEC CITY (CANADA), QE 1/
2024 DATA

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

NAME	GENETIC COLOR	SPRING GREENUP	SPRING DENSITY	SUMMER DENSITY	PINK SNOW MOLD	COLOR NOVEMBER	POA ANNUA	QUALITY RATINGS MAY	JUN	JUL	AUG	SEP	OCT	MEAN
MUSKET	7.3	6.3	7.7	8.0	7.3	4.7	1.3	4.7	4.7	3.7	6.0	2.0	3.7	4.1
007XL	5.3	3.7	5.3	5.7	4.7	4.0	1.0	3.7	4.3	4.7	4.3	3.3	3.0	3.9
MATCH PLAY	3.3	2.7	2.7	3.0	2.0	6.3	1.3	2.0	2.3	2.3	6.0	4.7	4.7	3.7
OAKLEY (PPG-AP-MTV1)	3.0	1.7	2.7	3.0	2.0	4.7	1.7	1.7	1.7	1.7	6.3	4.0	3.3	3.1
PIPER (PPG-AP-MTV2)	3.3	3.3	3.0	3.3	5.0	5.0	1.3	2.0	2.3	2.0	4.7	3.7	3.7	3.1
SPECTRUM (LNS 19)	5.0	3.0	4.0	5.0	3.3	2.7	1.0	2.7	3.0	3.7	4.3	2.3	2.3	3.1
BARRACUDA	5.3	3.7	4.7	4.3	4.7	2.7	1.0	3.0	3.3	3.3	3.0	2.3	2.3	2.9
PST-0MRN	3.3	2.7	2.7	3.0	2.0	4.7	1.3	2.0	2.3	2.0	4.7	3.3	3.3	2.9
PENNCROSS	5.7	4.0	4.7	5.0	4.0	2.7	1.7	3.0	4.0	3.7	2.3	2.0	2.0	2.8
PIRANHA	5.3	3.3	2.3	4.7	4.3	3.0	1.0	2.3	3.0	2.7	2.7	2.3	2.3	2.6
S1	1.0	1.0	1.0	1.0	1.0	5.7	1.7	1.0	1.0	1.0	5.3	3.0	4.3	2.6
TILLINGHAST (DLF-AP-3084)	3.0	2.3	2.7	3.0	2.7	3.0	1.3	2.0	2.3	1.7	3.0	4.0	2.3	2.6
PST-0R2O	3.3	2.0	2.7	3.0	2.7	3.0	1.0	2.0	2.3	2.0	2.3	2.7	2.7	2.3
SHARK	3.0	2.3	3.0	3.3	3.3	1.0	1.3	2.3	2.7	2.7	4.0	1.0	1.0	2.3
PVF-PV-1	1.0	2.7	3.0	1.0	2.7	2.3	1.0	2.3	1.0	1.0	2.7	2.3	2.3	1.9
CHINOOK (H10G-OP)	1.0	2.3	3.0	1.0	3.0	1.0	1.0	2.0	1.7	1.0	2.7	1.0	1.0	1.6
PST-R0DS	3.0	1.7	2.3	2.7	2.3	1.0	1.0	2.0	1.7	1.7	1.0	1.0	1.0	1.4
TOURPRO	1.0	2.3	1.0	1.0	3.3	1.0	1.7	1.0	1.0	1.0	2.7	1.0	1.0	1.3
PRODIGY (PVF-PV-2)	1.0	1.0	1.0	1.0	1.0	2.7	1.0	1.0	1.0	1.0	1.0	1.0	2.3	1.2
LSD VALUE	6.6	4.4	5.9	5.7	6.6	6.9	2.2	4.0	4.1	4.3	5.5	5.1	5.1	3.9
C.V. (%)	78.4	64.3	74.9	75.7	74.9	79.3	51.2	64.5	67.7	73.7	61.8	74.9	70.8	53.1

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 5. MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS
GROWN ON A FAIRWAY OR TEE EVALUATING WATER USE/DROUGHT TOLERANCE AT AMHERST, MA 1/
2024 DATA

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

QUALITY RATINGS JUNE-JULY

NAME	TOTAL WATER APPLIED	DAYS UNTIL REWATER	PRE-DROUGHT 6/26	DURING DROUGHT PERIOD 7/1	7/8	7/10	7/11	7/11	DURING RECOVERY 7/12	7/18	7/26	MEAN
MUSKET	17	16	8.0	8.0	8.0	8.0	7.3	.	7.0	8.0	7.7	7.8
007XL	17	16	8.0	7.7	7.7	7.3	7.7	.	6.0	7.3	8.0	7.5
PST-0MRN	17	16	8.0	8.0	7.7	7.3	7.5	5.0	6.0	7.7	7.7	7.4
PIPER (PPG-AP-MTV2)	17	16	8.0	7.7	7.7	7.7	6.7	.	5.3	7.0	7.7	7.2
PST-0R2O	17	16	8.3	8.0	7.3	6.7	7.0	6.0	4.7	7.0	8.0	7.0
PIRANHA	17	16	7.3	7.3	7.3	6.7	7.0	5.0	5.3	7.3	7.3	6.9
SHARK	17	16	7.3	7.7	7.0	7.0	6.5	5.0	5.7	7.0	7.3	6.9
MATCH PLAY	17	16	7.0	7.3	7.0	7.0	7.0	5.0	5.3	7.0	7.7	6.8
PRODIGY (PVF-PV-2)	17	16	7.3	7.7	7.7	7.0	7.0	5.0	5.0	7.0	7.3	6.8
PVF-PV-1	17	16	7.7	7.7	7.3	6.0	6.5	7.0	4.7	6.3	7.0	6.7
SPECTRUM (LNS 19)	17	16	7.3	7.3	7.7	6.7	7.0	5.0	4.7	6.0	7.3	6.7
BARRACUDA	17	16	6.7	7.0	7.0	6.7	7.0	5.0	5.0	6.7	7.3	6.6
CHINOOK (H10G-OP)	17	16	7.0	7.3	7.0	7.0	7.0	5.0	5.0	6.7	7.0	6.6
OAKLEY (PPG-AP-MTV1)	17	16	7.0	7.0	7.3	6.7	6.5	5.0	5.0	6.7	7.3	6.6
TOURPRO	17	16	7.0	7.0	7.0	6.3	6.0	6.0	5.0	6.7	7.7	6.6
PST-R0DS	17	16	7.3	7.7	7.0	7.0	7.0	4.5	4.7	6.3	7.0	6.5
PENNCROSS	17	16	5.7	7.0	6.3	6.3	6.3	.	5.3	6.7	6.7	6.3
TILLINGHAST (DLF-AP-3084)	17	16	7.0	7.3	6.7	5.3	6.0	6.0	4.7	6.0	7.0	6.3
S1	17	16	6.7	7.3	7.0	5.3	6.0	5.5	4.3	5.3	7.0	6.1
LSD VALUE	0	0	1.2	1.2	1.1	1.6	1.9	3.2	0.9	1.4	1.6	0.7
C.V. (%)	0	0	8.8	6.6	7.0	11.5	7.9	16.4	10.1	10.2	7.8	5.9

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 5. (CONT'D)

MEAN TURFGRASS QUALITY AND OTHER RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE EVALUATING WATER USE/DROUGHT TOLERANCE AT AMHERST, MA 1/
2024 DATA

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

PERCENT COVER RATINGS FROM JUNE-JULY

	PRE-DROUGHT PERIOD			DURING DROUGHT PERIOD				DURING RECOVERY PERIOD			
NAME	6/12	6/20	6/24	7/1	7/5	7/8	7/10	7/12	7/15	7/19	7/26
MUSKET	91.7	73.0	90.0	98.0	95.7	96.3	92.0	89.7	89.0	95.7	97.3
007XL	94.7	90.0	97.7	99.0	99.0	99.0	96.0	92.3	91.3	97.3	99.0
PST-0MRN	97.3	90.3	96.7	99.0	99.0	98.0	95.7	94.3	94.0	98.0	99.0
PIPER (PPG-AP-MTV2)	92.7	86.7	95.7	98.5	97.7	97.7	94.3	79.3	78.7	95.3	98.3
PST-0R2O	94.0	90.0	96.7	99.0	98.7	97.7	88.7	80.3	81.0	94.0	98.7
PIRANHA	94.3	87.3	95.0	98.3	96.3	95.0	92.3	85.3	88.3	95.3	98.3
SHARK	94.3	85.7	94.0	98.3	94.3	95.0	90.3	83.7	86.3	95.0	98.7
MATCH PLAY	93.3	85.0	93.7	98.3	97.3	96.7	91.3	83.0	86.0	95.7	98.7
PRODIGY (PVF-PV-2)	92.3	81.0	93.0	98.7	97.3	97.0	85.7	77.7	82.3	95.7	98.7
PVF-PV-1	93.7	84.7	94.7	98.7	98.3	97.3	89.0	77.3	80.3	95.3	98.7
SPECTRUM (LNS 19)	94.3	84.0	94.3	98.7	96.7	97.0	83.3	67.3	73.7	91.3	97.3
BARRACUDA	91.0	80.0	92.3	97.7	96.3	94.7	87.3	83.7	87.3	95.7	98.0
CHINOOK (H10G-OP)	94.3	81.7	91.3	97.7	94.3	94.3	87.7	79.3	82.0	94.3	98.0
OAKLEY (PPG-AP-MTV1)	94.7	80.3	92.7	99.0	97.3	97.3	89.3	75.7	80.3	95.0	98.7
TOURPRO	88.7	82.7	93.0	98.3	95.3	94.3	86.0	83.3	87.7	95.3	98.7
PST-R0DS	91.7	84.7	93.7	97.5	96.7	96.3	84.7	68.7	76.0	93.0	98.0
PENNCROSS	91.3	86.0	93.3	97.3	93.7	93.0	85.0	81.7	85.3	90.7	95.7
TILLINGHAST (DLF-AP-3084)	91.0	80.0	92.7	96.0	93.7	91.7	80.0	71.0	74.3	90.3	96.7
S1	88.3	80.3	92.3	98.0	95.7	94.7	77.7	62.3	68.3	88.7	96.7
LSD VALUE	7.7	10.0	5.9	3.2	3.2	3.2	11.9	25.9	19.9	6.9	3.1
C.V. (%)	3.4	5.8	2.7	1.0	1.8	1.8	6.5	13.9	10.5	3.3	1.3

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 6. GENETIC COLOR RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

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

NAME	MD1	NJ1	VA1	WI1	MEAN
PIPER (PPG-AP-MTV2)	6.0	7.3	5.3	7.7	6.6
007XL	6.0	8.0	5.3	6.7	6.5
OAKLEY (PPG-AP-MTV1)	6.0	7.3	5.3	7.3	6.5
PST-0MRN	6.0	5.0	6.7	8.0	6.4
SPECTRUM (LNS 19)	6.0	6.7	5.7	7.3	6.4
PVF-PV-1	6.0	7.3	5.3	7.0	6.4
PST-0R2O	6.0	4.3	6.3	8.0	6.2
TILLINGHAST (DLF-AP-3084)	6.0	6.0	5.3	7.3	6.2
TOURPRO	6.0	6.0	5.0	7.0	6.0
PRODIGY (PVF-PV-2)	6.0	5.3	5.3	7.3	6.0
CHINOOK (H10G-OP)	6.0	5.7	5.0	7.0	5.9
PIRANHA	6.0	5.3	5.3	7.0	5.9
MATCH PLAY	6.0	5.0	5.3	7.0	5.8
PST-R0DS	6.0	4.0	5.7	7.3	5.8
S1	6.0	5.0	5.3	6.7	5.8
SHARK	6.3	4.0	5.0	7.7	5.8
BARRACUDA	6.0	5.0	5.3	6.3	5.7
PENNCROSS	6.0	1.0	6.3	6.3	4.9
MUSKET	8.0	1.7	3.3	5.7	4.7
LSD VALUE	0.2	1.6	0.9	1.0	0.5
C.V. (%)	2.2	18.5	10.7	8.6	10.8

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

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

TABLE 7. SPRING GREENUP RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

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

NAME	IA1	IN1	NJ1	WI1	MEAN
S1	8.7	5.7	6.3	6.0	6.7
TOURPRO	8.3	5.0	6.7	6.0	6.5
007XL	8.3	4.3	6.0	6.0	6.2
CHINOOK (H10G-OP)	8.0	5.0	5.3	6.3	6.2
MATCH PLAY	8.0	5.0	5.0	6.0	6.0
PRODIGY (PVF-PV-2)	7.3	4.3	6.3	6.0	6.0
PENNCROSS	7.7	8.0	2.0	6.0	5.9
PIPER (PPG-AP-MTV2)	7.3	3.7	6.7	6.0	5.9
TILLINGHAST (DLF-AP-3084)	7.7	5.0	4.7	6.0	5.8
PVF-PV-1	7.7	4.3	5.0	6.0	5.8
OAKLEY (PPG-AP-MTV1)	5.7	5.0	6.0	6.0	5.7
PIRANHA	6.7	5.7	4.3	6.0	5.7
SHARK	6.7	5.7	4.0	6.0	5.6
SPECTRUM (LNS 19)	7.0	3.0	6.0	6.3	5.6
PST-0MRN	6.3	5.3	4.3	6.0	5.5
PST-R0DS	6.3	4.7	5.0	6.0	5.5
PST-0R2O	7.3	4.3	3.7	6.0	5.3
BARRACUDA	5.7	5.3	3.7	6.0	5.2
MUSKET	7.3	6.3	1.0	6.0	5.2
LSD VALUE	2.5	2.4	2.0	0.3	1.0
C.V. (%)	21.7	29.2	25.7	3.1	21.5

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 8. LEAF TEXTURE RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

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

NAME	IN1	NJ1	MEAN
PIPER (PPG-AP-MTV2)	7.3	8.0	7.7
PVF-PV-1	7.3	7.0	7.2
TOURPRO	7.3	7.0	7.2
MUSKET	5.7	8.3	7.0
PIRANHA	7.3	6.7	7.0
SPECTRUM (LNS 19)	7.3	6.7	7.0
TILLINGHAST (DLF-AP-3084)	7.0	7.0	7.0
CHINOOK (H10G-OP)	7.0	6.7	6.8
OAKLEY (PPG-AP-MTV1)	7.0	6.7	6.8
007XL	7.3	6.3	6.8
PRODIGY (PVF-PV-2)	7.3	6.3	6.8
PST-0MRN	7.3	6.0	6.7
MATCH PLAY	7.0	6.0	6.5
PST-0R2O	7.3	5.7	6.5
PST-R0DS	7.0	6.0	6.5
S1	7.7	5.0	6.3
BARRACUDA	6.7	5.3	6.0
SHARK	7.3	4.7	6.0
PENNCROSS	5.7	1.0	3.3
LSD VALUE	0.9	1.7	1.0
C.V. (%)	7.7	17.7	13.0

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 9. SPRING DENSITY RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

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

NAME	IA1	WI1	MEAN
PRODIGY (PVF-PV-2)	7.7	7.3	7.5
PST-0MRN	8.0	6.7	7.3
PVF-PV-1	7.7	7.0	7.3
PST-0R2O	7.3	7.3	7.3
OAKLEY (PPG-AP-MTV1)	7.7	6.7	7.2
SPECTRUM (LNS 19)	7.3	6.7	7.0
TILLINGHAST (DLF-AP-3084)	7.3	6.7	7.0
PST-R0DS	7.0	6.7	6.8
CHINOOK (H10G-OP)	6.7	6.7	6.7
TOURPRO	6.7	6.7	6.7
PIPER (PPG-AP-MTV2)	6.3	7.0	6.7
PIRANHA	6.3	7.0	6.7
SHARK	7.0	6.3	6.7
007XL	6.7	6.3	6.5
BARRACUDA	6.7	6.3	6.5
S1	6.7	6.0	6.3
MATCH PLAY	6.0	6.3	6.2
MUSKET	5.7	6.0	5.8
PENNCROSS	7.3	4.0	5.7
LSD VALUE	1.8	0.9	1.0
C.V. (%)	15.8	8.9	13.1

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

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

TABLE 10. SUMMER DENSITY RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

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

NAME	IA1	WI1	MEAN
PST-0MRN	8.3	7.7	8.0
PST-0R2O	8.0	8.0	8.0
PIPER (PPG-AP-MTV2)	8.0	7.7	7.8
PRODIGY (PVF-PV-2)	8.0	7.7	7.8
PVF-PV-1	8.0	7.7	7.8
SPECTRUM (LNS 19)	7.7	8.0	7.8
PIRANHA	7.7	7.7	7.7
007XL	7.3	8.0	7.7
PST-R0DS	7.3	8.0	7.7
BARRACUDA	7.7	7.3	7.5
CHINOOK (H10G-OP)	7.7	7.3	7.5
S1	7.7	7.3	7.5
OAKLEY (PPG-AP-MTV1)	7.0	7.7	7.3
TILLINGHAST (DLF-AP-3084)	6.7	8.0	7.3
TOURPRO	7.0	7.7	7.3
MATCH PLAY	7.3	7.3	7.3
SHARK	7.3	7.0	7.2
PENNCROSS	7.7	5.0	6.3
MUSKET	6.3	6.3	6.3
LSD VALUE	1.2	0.7	0.7
C.V. (%)	10.3	6.2	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).

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

TABLE 11. FALL DENSITY RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

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

NAME	IA1	IN1	MD1	NJ1	WI1	MEAN
007XL	8.0	7.7	7.3	7.3	7.3	7.5
PIPER (PPG-AP-MTV2)	8.0	7.0	7.0	7.7	7.7	7.5
SPECTRUM (LNS 19)	8.0	7.7	7.0	7.0	7.7	7.5
OAKLEY (PPG-AP-MTV1)	8.0	7.3	7.0	7.3	7.7	7.5
PVF-PV-1	8.3	7.7	7.0	6.3	7.7	7.4
PST-0R2O	8.0	7.7	7.0	5.3	8.0	7.2
PRODIGY (PVF-PV-2)	8.0	7.3	7.0	5.7	7.7	7.1
TILLINGHAST (DLF-AP-3084)	8.0	7.3	7.0	6.0	7.3	7.1
MATCH PLAY	8.0	7.3	7.0	5.7	7.3	7.1
PST-0MRN	8.0	6.7	7.0	5.3	8.3	7.1
PIRANHA	8.0	7.3	7.0	5.7	7.0	7.0
S1	8.0	7.0	6.7	6.0	7.0	6.9
CHINOOK (H10G-OP)	8.0	6.3	7.0	6.0	7.3	6.9
MUSKET	8.0	6.0	7.7	5.7	7.0	6.9
SHARK	8.0	7.0	7.0	4.7	7.7	6.9
TOURPRO	8.0	7.0	7.0	5.7	6.7	6.9
PST-R0DS	8.0	7.0	6.7	4.7	7.7	6.8
BARRACUDA	8.0	6.7	6.7	5.7	6.7	6.7
PENNCROSS	8.0	5.0	6.0	1.0	5.3	5.1
LSD VALUE	0.2	1.0	0.5	2.0	1.0	0.5
C.V. (%)	1.7	8.7	4.3	22.2	8.3	10.0

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

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

TABLE 12. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/

NAME	IA1
S1	94.0
MATCH PLAY	92.7
TOURPRO	92.3
CHINOOK (H10G-OP)	91.3
007XL	90.7
PENNCROSS	90.0
TILLINGHAST (DLF-AP-3084)	87.3
MUSKET	85.7
PST-0R2O	85.7
PVF-PV-1	85.7
PRODIGY (PVF-PV-2)	84.7
PIPER (PPG-AP-MTV2)	83.7
PIRANHA	80.3
SPECTRUM (LNS 19)	78.7
SHARK	78.0
PST-R0DS	75.0
BARRACUDA	73.0
OAKLEY (PPG-AP-MTV1)	70.0
PST-0MRN	69.7
LSD VALUE	22.5
C.V. (%)	16.7

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 13. PERCENT LIVING GROUND COVER (SUMMER) RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS 2/

NAME	IA1
007XL	99
BARRACUDA	99
CHINOOK (H10G-OP)	99
MATCH PLAY	99
MUSKET	99
OAKLEY (PPG-AP-MTV1)	99
PENNCROSS	99
PIPER (PPG-AP-MTV2)	99
PIRANHA	99
PRODIGY (PVF-PV-2)	99
PST-0MRN	99
PST-0R2O	99
PST-R0DS	99
PVF-PV-1	99
S1	99
SHARK	99
SPECTRUM (LNS 19)	99
TILLINGHAST (DLF-AP-3084)	99
TOURPRO	99
LSD VALUE	0
C.V. (%)	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 14. PERCENT LIVING GROUND COVER (FALL) RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	IA1
007XL	99.0
BARRACUDA	99.0
OAKLEY (PPG-AP-MTV1)	99.0
PIPER (PPG-AP-MTV2)	99.0
PRODIGY (PVF-PV-2)	99.0
PST-0R2O	99.0
PVF-PV-1	99.0
SPECTRUM (LNS 19)	99.0
S1	98.7
CHINOOK (H10G-OP)	98.3
MATCH PLAY	98.3
PST-0MRN	98.3
TILLINGHAST (DLF-AP-3084)	98.3
PIRANHA	98.0
PST-R0DS	98.0
TOURPRO	98.0
MUSKET	97.7
SHARK	97.7
PENNCROSS	97.3
LSD VALUE	1.1
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 15. DOLLAR SPOT RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

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

NAME	IN1
007XL	6.7
TILLINGHAST (DLF-AP-3084)	6.7
PIPER (PPG-AP-MTV2)	6.3
SPECTRUM (LNS 19)	6.3
MATCH PLAY	6.0
OAKLEY (PPG-AP-MTV1)	6.0
PVF-PV-1	6.0
MUSKET	5.3
BARRACUDA	5.0
S1	5.0
TOURPRO	5.0
CHINOOK (H10G-OP)	4.7
PIRANHA	4.7
PRODIGY (PVF-PV-2)	4.7
SHARK	4.7
PST-R0DS	4.0
PENNCROSS	3.0
PST-0R2O	3.0
PST-0MRN	2.3
LSD VALUE	2.6
C.V. (%)	31.8

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

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

TABLE 16. FALL COLOR (NOVEMBER) RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

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

NAME	IA1
PENNCROSS	8.3
MATCH PLAY	8.0
MUSKET	8.0
PIRANHA	8.0
PST-0MRN	8.0
PST-R0DS	8.0
SHARK	8.0
TILLINGHAST (DLF-AP-3084)	8.0
TOURPRO	8.0
007XL	7.7
BARRACUDA	7.7
CHINOOK (H10G-OP)	7.7
PST-0R2O	7.7
PRODIGY (PVF-PV-2)	7.3
S1	7.3
SPECTRUM (LNS 19)	7.3
OAKLEY (PPG-AP-MTV1)	7.0
PIPER (PPG-AP-MTV2)	7.0
PVF-PV-1	7.0
LSD VALUE	1.0
C.V. (%)	7.7

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

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

TABLE 17. POA ANNUA RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

NAME	POA ANNUA RATINGS 1-9; 9=NONE 2/ IN1
MATCH PLAY	6.3
CHINOOK (H10G-OP)	5.3
OAKLEY (PPG-AP-MTV1)	5.3
PIRANHA	5.3
PRODIGY (PVF-PV-2)	5.3
TILLINGHAST (DLF-AP-3084)	5.3
PIPER (PPG-AP-MTV2)	5.0
S1	5.0
PVF-PV-1	4.7
SHARK	4.7
TOURPRO	4.7
BARRACUDA	4.3
PST-0R2O	4.3
SPECTRUM (LNS 19)	4.3
007XL	4.0
PST-0MRN	3.7
PST-R0DS	3.3
MUSKET	2.7
PENNCROSS	2.3
LSD VALUE	1.5
C.V. (%)	21.1

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

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

TABLE 18. PERCENT ANNUAL BLUEGRASS RATINGS OF BENTGRASS CULTIVARS 1/
GROWN ON A FAIRWAY OR TEE
2024 DATA

NAME	POA ANNUA RATINGS 1-9; 9=NONE 2/ IN1
PENNCROSS	70.0
MUSKET	56.7
PST-R0DS	36.7
PST-0MRN	35.0
SPECTRUM (LNS 19)	30.0
TOURPRO	26.7
PST-0R2O	24.3
CHINOOK (H10G-OP)	21.7
S1	21.7
007XL	17.7
PVF-PV-1	17.7
SHARK	17.7
PIPER (PPG-AP-MTV2)	17.3
PRODIGY (PVF-PV-2)	16.7
PIRANHA	13.3
OAKLEY (PPG-AP-MTV1)	12.7
TILLINGHAST (DLF-AP-3084)	12.7
MATCH PLAY	10.3
BARRACUDA	10.0
LSD VALUE	19.9
C.V. (%)	50.1

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.

APPENDIX TABLE. SUMMARY OF TURFGRASS QUALITY RATINGS FOR BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 2024 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF

NAME	QUALITY MEAN 1/	MAXIMUM IN TOP 25% 2/
007XL	6.2	50.0
BARRACUDA	5.6	0.0
CHINOOK (H10G-OP)	6.0	16.7
MATCH PLAY	6.1	33.3
MUSKET	5.5	16.7
OAKLEY (PPG-AP-MTV1)	6.0	33.3
PENNCROSS	4.5	16.7
PIPER (PPG-AP-MTV2)	6.1	50.0
PIRANHA	5.8	16.7
PRODIGY (PVF-PV-2)	6.0	66.7
PST-0MRN	5.8	33.3
PST-0R2O	5.8	16.7
PST-R0DS	5.7	16.7
PVF-PV-1	5.9	16.7
S1	6.0	16.7
SHARK	5.9	16.7
SPECTRUM (LNS 19)	6.0	16.7
TILLINGHAST (DLF-AP-3084)	5.8	0.0
TOURPRO	6.1	16.7
LSD VALUE	0.4	
C.V. (%)	9.5	

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