

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 American Sod Producers Association, one member from the United States Golf Association (USGA) Green Section, one member from the Turfgrass Breeders Association, an executive director and a national program coordinator. 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 - Dr. Robert Shearman, University of Nebraska

National Program Coordinator - Kevin N. Morris, National Turfgrass Federation, Inc.

CURRENT POLICY COMMITTEE MEMBERS:

Dr. A. Douglas Brede, Jacklin Seed Company
Dr. David Chalmers, Virginia Tech University
Dr. Thomas Fermanian, University of Illinois
Dr. Donald Floyd, Pickseed West, Inc.
Mr. Al Gardner, Gardner Turfgrass, Inc.
Dr. Michael Kenna, USGA Green Section
Dr. Anthony Koski, Colorado State University
Dr. Jeff Nus, Golf Course Superintendents Association of America
Dr. Bridget Ruemmele, University of Rhode Island

FOR ADDITIONAL REPORTS OR INFORMATION WRITE:

Kevin Morris, National Program Coordinator
National Turfgrass Evaluation Program
Beltsville Agricultural Research Center-West
Building 002, Room 013
Beltsville, Maryland 20705

CONTENTS

1993 National Bentgrass (Fairway/Tee) Test - 1997 data

LOCATIONS SUBMITTING DATA FOR 1997.....	1
NATIONAL BENTGRASS (FAIRWAY/TEE) TEST, 1993 - Entries and Sponsors.....	2
Table A - 1997 Locations, Site Descriptions and Management Practices in the 1993 National Bentgrass (Fairway/Tee) Test.....	3
Table B - Locations and Data Collected in 1997.....	4
Table 1 - Mean Turfgrass Quality Ratings of Bentgrass Cultivars Grown on a Fairway or Tee at Eleven Locations in the U. S.....	5
Table 2 - Mean Turfgrass Quality Ratings of Bentgrass Cultivars For Each Month Grown on a Fairway or Tee at Eleven Locations in U. S.....	6
Table 3 - Ranking of Mean Turfgrass Quality Ratings of Bentgrass Cultivars Grown on a Fairway or Tee at Eleven Locations in the U. S.....	7
Table 4 - Genetic Color Ratings of Bentgrass Cultivars Grown on a Fairway or Tee.....	8
Table 5 - Spring Greenup Ratings of Bentgrass Cultivars Grown on a Fairway or Tee.....	9
Table 6 - Leaf Texture Ratings of Bentgrass Cultivars Grown on a Fairway or Tee.....	10
Table 7 - Spring Density Ratings of Bentgrass Cultivars Grown on a Fairway or Tee.....	11
Table 8 - Summer Density Ratings of Bentgrass Cultivars Grown on a Fairway or Tee.....	12
Table 9 - Fusarium Patch Ratings of Bentgrass Cultivars Grown on a Fairway or Tee.....	13

LOCATIONS SUBMITTING DATA FOR 1997

<u>State</u>	<u>Location</u>	<u>Code</u>
Iowa	Ames	IA1
Illinois	Urbana	IL1
Kentucky	Lexington	KY1
Maryland	Beltsville	UB1
Massachusetts	Amherst	MA1
Michigan	East Lansing	MI1
New Jersey	North Brunswick	NJ1
Ohio	Columbus	OH1
Rhode Island	Kingston	RI1
Washington	Pullman	WA1
Wisconsin	Madison	WI1

1993 NATIONAL BENTGRASS TEST
(Fairway/Tee)

Entries and Sponsors

Entry No.	Name	Species	Sponsor
1	18th Green	creeping	Zajac Performance Seeds/ Johnson Seeds, Ltd.
2	BAR As 492	creeping	Barenbrug Holland
3	BAR Ws 42102	creeping	Barenbrug Holland
4	Trueline	creeping	Turf Merchants
5	Providence	creeping	Seed Research of OR, Inc.
6	Seaside	creeping	Standard entry
7	Cato	creeping	Pickseed West, Inc.
8	Exeter	colonial	Standard entry
9	PRO/CUP	creeping	Forbes Seed & Grain, Inc.
10	Crenshaw	creeping	Loft's Seed, Inc.
11	Southshore	creeping	Loft's Seed, Inc.
12	SR 7100	colonial	Seed Research of OR, Inc.
13	Penncross	creeping	Standard entry
14	Seaside II (DF-1)	creeping	Tee-2-Green Corp.
15	Penn G-2 (G-2)	creeping	LESCO, Inc.
16	Penn G-6 (G-6)	creeping	Tee-2-Green Corp.
17	Penneagle	creeping	Tee-2-Green Corp.
18	Lopez	creeping	Finelawn Research, Inc.
19	Tendenz	colonial	Finelawn Research, Inc.
20	ISI-At-90162	colonial	International Seeds, Inc.
21	Tiger (OM-At-90163)	colonial	O.M. Scott & Sons

TABLE A. 1997 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN
THE 1993 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	SILTY CLAY LOAM	7.1-7.5	0-60	241-375	3.1-4.0	-	-	-
IL1	SILT LOAM AND SILT	6.1-6.5	0-60	376-500	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
KY1	SILT LOAM AND SILT	6.1-6.5	61-150	241-375	3.1-4.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
MA1	SILT LOAM AND SILT	6.1-6.5	61-150	151-240	5.1-6.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MI1	SANDY LOAM	7.1-7.5	61-150	0-150	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
NJ1	SANDY LOAM	5.6-6.0	271-450	0-150	1.1-2.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
OH1	SILTY CLAY LOAM	7.6-8.5	0-60	151-240	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
RI1	SILT LOAM AND SILT	6.1-6.5	61-150	151-240	3.1-4.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
UB1	SILT LOAM AND SILT	5.6-6.0	61-150	0-150	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
WA1	SILT LOAM AND SILT	5.6-6.0	271-450	501+	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
WI1	SILT LOAM AND SILT	7.1-7.5	-	-	1.1-2.0	FULL SUN	0.0-0.5	TO PREVENT STRESS

TABLE B.

LOCATIONS AND DATA COLLECTED IN 1997

LOCATION	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	GENETIC COLOR	SPRING GREENUP	LEAF TEXTURE	SPRING DENSITY	SUMMER DENSITY	FUSARIUM PATCH
IA1			X	X	X	X	X	X		X	X	X			
IL1			X	X	X	X	X	X			X			X	
KY1	X	X	X	X	X	X	X	X		X	X	X			
MA1		X	X	X	X	X	X	X			X				
MI1			X	X	X	X	X	X	X	X	X	X			X
NJ1		X	X	X	X	X	X	X		X	X		X		
OH1				X	X	X	X	X		X	X	X			
RI1		X	X	X	X	X	X	X	X	X	X	X			
UB1		X	X	X	X	X	X	X	X						
WA1		X	X	X	X	X	X	X		X	X	X			X
WI1			X	X	X	X		X							

TABLE 1. MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON
A FAIRWAY OR TEE AT ELEVEN LOCATIONS IN THE U.S. 1/
1997 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 2/												
NAME	IA1	IL1	KY1	MA1	MI1	NJ1	OH1	RI1	UB1	WA1	WI1	MEAN
* PENN G-6 (G-6)	6.6	5.9	7.3	5.7	4.8	7.3	7.4	4.0	5.6	7.7	5.9	6.2
* PENNEAGLE	6.6	5.9	6.9	6.1	6.0	6.0	7.3	4.2	4.8	7.7	6.3	6.2
* CATO	6.9	5.6	7.2	6.1	5.0	6.9	7.3	3.7	4.9	7.9	6.1	6.1
* PENN G-2 (G-2)	6.2	5.4	7.2	6.0	4.9	7.0	7.1	4.3	5.4	7.7	5.9	6.1
* SOUTHSORE	7.1	5.8	7.4	5.6	5.6	5.9	7.7	4.5	4.2	7.4	5.5	6.0
* CRENSHAW	6.9	5.4	6.9	6.1	4.8	6.0	7.5	4.1	5.1	7.6	5.7	6.0
* PROVIDENCE	6.3	5.8	6.9	5.6	4.5	6.5	7.7	4.3	4.7	7.5	6.0	6.0
* TRUELINE	6.6	5.2	6.8	6.1	5.3	5.2	7.5	5.4	4.2	7.5	5.7	6.0
* SEASIDE II (DF-1)	6.3	5.9	7.0	5.9	6.1	5.3	7.1	4.1	4.6	7.1	5.7	5.9
* PRO/CUP	6.6	5.5	7.5	6.1	5.0	5.2	7.4	4.1	4.5	7.5	5.7	5.9
BAR WS 42102	6.6	5.5	6.6	6.0	4.7	5.2	7.5	4.3	4.6	7.7	5.8	5.9
* LOPEZ	6.7	5.2	6.8	6.1	4.6	5.1	7.2	4.3	4.6	7.6	5.9	5.8
* PENNCROSS	5.9	5.4	6.5	5.6	4.7	5.0	7.3	4.2	3.9	7.3	5.9	5.6
ISI-AT-90162	5.4	4.9	7.5	5.0	4.0	4.9	6.5	3.9	5.1	7.0	5.5	5.4
* EXETER	5.3	4.9	6.8	5.0	5.0	4.8	6.7	4.2	4.1	7.6	5.1	5.4
* TIGER (OM-AT-90163)	5.3	4.8	7.2	5.7	3.9	3.6	7.3	3.8	5.8	6.7	5.3	5.4
* SR 7100	4.9	4.3	7.0	5.0	4.6	5.1	6.5	4.0	5.6	7.0	5.1	5.4
BAR AS 492	5.3	4.7	6.5	4.9	4.3	4.1	6.7	3.9	5.8	6.7	4.8	5.3
* 18TH GREEN	6.2	4.8	5.7	5.1	4.3	4.6	6.7	3.5	3.6	7.8	5.1	5.2
* TENDENZ	5.2	4.2	5.5	5.1	4.5	2.5	6.6	3.3	5.8	7.5	5.0	5.0
* SEASIDE	5.6	4.6	6.2	4.3	4.1	2.7	6.5	3.0	3.7	5.9	4.9	4.7
LSD VALUE	0.9	0.7	0.3	0.9	0.9	1.0	0.7	0.4	1.1	0.8	0.4	0.2
C.V. (%)	9.0	8.4	2.5	10.4	11.3	12.1	6.2	6.5	14.5	7.1	5.0	8.6

* COMMERCIALY AVAILABLE IN THE USA IN 1998.

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 FOR EACH MONTH GROWN
ON A FAIRWAY OR TEE AT ELEVEN LOCATIONS IN THE U.S. 1/
1997 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 2/										
NAME	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	MEAN
PENN G-6 (G-6)	8.3	5.3	5.9	6.7	6.5	6.5	5.9	6.2	4.2	6.2
PENNEAGLE	7.7	5.1	6.0	6.4	6.2	6.8	6.0	6.0	4.1	6.2
CATO	7.7	5.6	5.9	6.2	6.2	6.4	6.1	6.3	4.0	6.1
PENN G-2 (G-2)	8.7	5.4	5.9	6.5	6.3	6.2	6.0	6.2	4.0	6.1
SOUTHSHORE	8.0	5.4	5.9	6.4	6.3	6.4	6.0	6.1	3.9	6.0
CRENSHAW	7.0	5.1	5.7	6.2	6.3	6.3	6.1	6.1	3.7	6.0
PROVIDENCE	7.0	5.2	5.8	6.2	5.9	6.2	6.1	6.1	4.0	6.0
TRUELINE	7.0	4.8	5.7	6.1	6.2	6.4	6.1	5.8	4.4	6.0
SEASIDE II (DF-1)	8.3	5.2	5.7	6.3	5.8	6.2	5.8	5.9	4.1	5.9
PRO/CUP	8.0	4.8	5.4	6.1	6.3	6.5	5.9	5.8	3.9	5.9
BAR WS 42102	6.0	5.1	5.8	6.4	6.1	6.0	5.7	6.0	3.6	5.9
LOPEZ	7.0	5.1	5.5	6.1	6.2	6.2	5.6	5.7	3.9	5.8
PENNCROSS	7.3	5.0	5.4	5.9	5.8	6.0	5.3	5.4	3.2	5.6
ISI-AT-90162	8.3	5.4	5.3	5.7	5.8	5.5	5.3	5.2	3.8	5.4
EXETER	7.0	5.1	5.1	5.5	5.6	5.7	5.6	5.6	3.8	5.4
TIGER (OM-AT-90163)	7.3	5.0	5.0	5.6	5.2	5.6	5.7	5.4	3.8	5.4
SR 7100	7.0	5.7	5.1	5.8	5.5	5.5	5.2	5.3	3.8	5.4
BAR AS 492	7.0	5.1	5.1	5.2	5.2	5.5	5.4	5.3	3.9	5.3
18TH GREEN	5.0	4.2	4.7	5.3	5.7	5.9	5.4	5.2	3.6	5.2
TENDENZ	6.0	4.8	4.6	5.2	4.9	5.2	5.2	5.0	4.0	5.0
SEASIDE	6.0	3.8	4.1	4.8	4.8	5.0	4.8	4.7	3.6	4.7
LSD VALUE	0.6	0.9	0.7	0.6	0.6	0.7	0.9	0.7	1.1	0.6
C.V. (%)	5.0	28.6	26.7	21.7	22.6	25.1	30.9	23.8	28.7	21.0

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 3. RANKING OF MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE AT ELEVEN LOCATIONS IN THE U.S. 1/
1997 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN; STATE LOCATIONS REPORTING 2/

NAME	IA1	IL1	KY1	MA1	MI1	NJ1	OH1	RI1	UB1	WA1	WI1	MEAN
PENN G-6 (G-6)	6.5	1.0	4.0	10.5	9.0	1.0	6.5	13.5	5.0	3.0	4.5	1
PENNEAGLE	6.5	3.0	10.5	4.0	2.0	5.0	10.5	9.0	10.0	5.0	1.0	2
CATO	3.0	6.0	5.5	4.0	6.0	3.0	8.5	18.0	9.0	1.0	2.0	3
PENN G-2 (G-2)	12.5	9.0	5.5	7.5	8.0	2.0	14.0	5.0	6.0	5.0	7.0	4
SOUTHSHORE	1.0	4.5	3.0	13.0	3.0	7.0	2.0	2.0	16.0	14.0	14.0	5
CRENSHAW	2.0	10.5	12.0	4.0	10.0	6.0	3.0	10.0	7.0	8.5	12.0	6
PROVIDENCE	10.0	4.5	10.5	13.0	16.0	4.0	1.0	3.5	11.0	11.5	3.0	7
TRUELINE	5.0	12.5	13.5	4.0	4.0	9.5	4.0	1.0	17.0	11.5	10.0	8
SEASIDE II (DF-1)	11.0	2.0	9.0	9.0	1.0	8.0	13.0	11.5	14.0	16.0	10.0	9
PRO/CUP	9.0	7.5	2.0	1.0	6.0	11.0	6.5	11.5	15.0	10.0	10.0	10
BAR WS 42102	8.0	7.5	16.0	7.5	11.5	9.5	5.0	6.0	12.5	5.0	8.0	11
LOPEZ	4.0	12.5	13.5	4.0	13.0	13.0	12.0	3.5	12.5	8.5	6.0	12
PENNCROSS	14.0	10.5	18.0	13.0	11.5	14.0	8.5	7.5	19.0	15.0	4.5	13
ISI-AT-90162	16.0	15.0	1.0	18.0	20.0	15.0	20.0	15.0	8.0	17.5	13.0	14
EXETER	18.0	14.0	15.0	19.0	6.0	16.0	15.0	7.5	18.0	7.0	17.5	15
TIGER (OM-AT-90163)	18.0	16.5	7.0	10.5	21.0	19.0	10.5	17.0	1.5	20.0	15.0	16
SR 7100	21.0	20.0	8.0	17.0	14.0	12.0	20.0	13.5	4.0	17.5	17.5	17
BAR AS 492	18.0	18.0	17.0	20.0	17.0	18.0	16.5	16.0	1.5	19.0	21.0	18
18TH GREEN	12.5	16.5	20.0	15.5	18.0	17.0	16.5	19.0	21.0	2.0	16.0	19
TENDENZ	20.0	21.0	21.0	15.5	15.0	21.0	18.0	20.0	3.0	13.0	19.0	20
SEASIDE	15.0	19.0	19.0	21.0	19.0	20.0	20.0	21.0	20.0	21.0	20.0	21

1/ THIS TABLE CONTAINS NO STATISTICAL VALUES (LSD VALUES) THEREFORE IT SHOULD ONLY BE USED TO DETERMINE THE GENERAL PERFORMANCE OF AN ENTRY OR ENTRIES ACROSS SEVERAL LOCATIONS OR REGIONS. TO ASSESS STATISTICAL DIFFERENCES AMONG ENTRIES, REFER TO THE MEANS AND LSD VALUES FOUND IN TABLE 1.

2/ RANKING OF MEAN TURFGRASS QUALITY IS ACHIEVED BY ASSIGNING "1" TO THE HIGHEST MEAN, "2" TO THE SECOND HIGHEST MEAN, ETC. FOR EACH LOCATION. FOR EXAMPLE, IF TWO MEANS ARE TIED FOR THE SECOND AND THIRD RANKS, BOTH ARE ASSIGNED "2.5".

TABLE 4. GENETIC COLOR RATINGS OF BENTGRASS CULTIVARS GROWN ON
A FAIRWAY OR TEE 1/
1997 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 2/								
NAME	IA1	KY1	MI1	NJ1	OH1	RI1	WA1	MEAN
CRENSHAW	7.3	8.0	6.7	7.3	7.3	7.3	7.7	7.4
CATO	7.7	8.0	7.0	7.3	7.7	5.7	8.0	7.3
PROVIDENCE	7.0	8.0	6.7	6.0	8.0	7.0	8.0	7.2
18TH GREEN	7.3	6.3	6.0	6.0	8.0	7.7	8.3	7.1
LOPEZ	7.3	7.0	7.0	5.7	7.3	6.3	8.0	7.0
PENN G-6 (G-6)	6.7	8.0	6.7	6.0	7.0	6.3	8.0	7.0
PENNCROSS	7.0	8.0	7.7	5.0	8.0	5.3	7.7	7.0
PRO/CUP	7.3	7.0	7.0	5.7	8.0	5.7	7.7	6.9
PENN G-2 (G-2)	6.7	8.0	6.7	5.7	7.7	6.7	6.7	6.9
SOUTHSHORE	6.3	8.0	6.3	5.0	8.0	6.3	8.0	6.9
TRUELINE	6.7	8.0	6.7	6.0	7.3	5.7	7.7	6.9
ISI-AT-90162	5.7	7.7	6.7	6.7	7.3	6.0	7.7	6.8
TIGER (OM-AT-90163)	6.0	8.0	6.7	6.3	7.3	5.0	7.7	6.7
PENNEAGLE	6.7	8.0	6.7	5.0	7.3	5.3	7.7	6.7
EXETER	6.7	8.0	6.7	4.7	7.7	5.0	7.7	6.6
BAR WS 42102	6.7	7.3	6.7	4.3	7.7	5.7	7.3	6.5
SEASIDE II (DF-1)	6.3	8.0	6.0	4.7	7.3	5.3	7.3	6.4
BAR AS 492	6.7	7.0	5.7	5.0	7.0	7.0	6.7	6.4
SR 7100	5.7	7.0	6.3	5.7	7.3	4.7	7.7	6.3
TENDENZ	6.3	7.3	6.0	5.0	7.3	3.0	7.7	6.1
SEASIDE	6.0	5.0	6.3	4.0	7.3	3.3	6.3	5.5
LSD VALUE	1.2	0.5	1.0	1.4	0.8	0.9	0.8	0.4
C.V. (%)	11.6	4.4	9.4	16.0	6.3	9.3	6.6	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 5. SPRING GREENUP RATINGS OF BENTGRASS CULTIVARS GROWN ON
A FAIRWAY OR TEE 1/
1997 DATA

SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN 2/										
NAME	IA1	IL1	KY1	MA1	MI1	NJ1	OH1	RI1	WA1	MEAN
SR 7100	7.3	5.7	8.3	7.0	5.7	8.7	7.0	6.0	6.3	6.9
BAR AS 492	6.0	6.7	8.7	5.7	6.0	8.0	7.0	5.7	6.0	6.6
TIGER (OM-AT-90163)	6.3	6.0	8.0	7.3	6.0	6.0	7.0	5.3	6.0	6.4
ISI-AT-90162	7.0	5.7	7.7	6.7	5.3	6.3	7.0	6.0	5.7	6.4
PENNCROSS	6.7	6.3	6.3	5.7	6.7	5.7	7.0	5.0	6.0	6.1
SOUTHSHORE	7.0	6.3	6.7	5.0	6.0	5.7	7.0	4.7	6.0	6.0
EXETER	6.0	6.3	7.0	5.3	6.0	5.7	7.0	5.7	5.0	6.0
CATO	7.0	7.0	7.0	5.7	5.7	5.0	7.0	4.3	5.0	6.0
TENDENZ	6.7	5.7	5.3	6.7	6.0	6.3	7.0	3.7	6.3	6.0
CRENSHAW	6.0	7.0	7.7	5.3	6.0	5.7	7.0	4.7	4.3	6.0
PENNEAGLE	6.7	6.0	6.7	4.7	6.0	6.0	7.0	4.0	6.3	5.9
PRO/CUP	6.7	6.3	7.3	4.3	6.0	5.0	7.0	4.7	6.0	5.9
PROVIDENCE	7.0	6.0	7.0	5.0	5.7	4.7	7.0	4.3	5.3	5.8
LOPEZ	6.7	5.7	6.3	4.7	6.3	4.0	6.7	5.7	5.7	5.7
SEASIDE	6.3	5.3	8.3	4.3	5.7	4.7	7.0	3.0	7.0	5.7
TRUELINE	7.0	6.0	7.0	4.3	6.0	3.7	7.0	5.0	5.7	5.7
PENN G-6 (G-6)	7.0	6.3	6.7	4.3	5.0	6.3	7.0	3.3	5.0	5.7
18TH GREEN	7.3	6.3	6.0	3.7	5.3	4.0	6.7	3.3	6.0	5.4
BAR WS 42102	6.3	6.3	6.0	4.7	6.0	2.7	7.0	4.3	5.0	5.4
SEASIDE II (DF-1)	6.3	6.0	5.0	4.3	5.0	5.0	6.7	3.3	5.0	5.2
PENN G-2 (G-2)	6.3	6.3	6.0	3.3	5.0	5.0	6.3	2.7	5.0	5.1
LSD VALUE	0.9	1.0	0.7	0.9	0.7	2.6	0.4	0.8	1.7	0.4
C.V. (%)	8.0	10.4	6.3	11.2	7.2	29.5	3.6	10.8	18.8	13.1

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

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

TABLE 6. LEAF TEXTURE RATINGS OF BENTGRASS CULTIVARS GROWN ON
A FAIRWAY OR TEE 1/
1997 DATA

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

NAME	IA1	KY1	MI1	OH1	RI1	WA1	MEAN
BAR WS 42102	8.0	8.3	5.3	8.0	7.0	8.3	7.5
SEASIDE II (DF-1)	7.3	8.7	5.0	8.7	7.0	8.0	7.4
BAR AS 492	6.3	9.0	5.0	8.7	7.3	8.0	7.4
CRENSHAW	6.7	8.3	5.7	8.7	7.0	8.0	7.4
CATO	6.7	8.7	5.0	8.3	7.7	8.0	7.4
PENN G-6 (G-6)	7.0	8.3	5.0	8.0	7.7	8.0	7.3
SOUTHSHORE	7.0	8.0	5.0	8.0	7.3	8.0	7.2
PENNEAGLE	7.3	8.0	5.0	8.0	7.0	8.0	7.2
ISI-AT-90162	6.0	9.0	4.7	8.0	7.3	8.0	7.2
PRO/CUP	6.3	8.3	5.3	8.7	6.7	7.7	7.2
SR 7100	6.7	8.0	5.0	8.3	6.7	8.0	7.1
EXETER	6.0	8.3	5.0	9.0	6.0	8.0	7.1
PENN G-2 (G-2)	6.0	7.7	4.3	8.3	7.3	8.7	7.1
PROVIDENCE	6.7	7.3	5.3	8.0	8.0	7.0	7.1
TIGER (OM-AT-90163)	6.0	8.3	5.0	8.3	6.7	7.7	7.0
PENNCROSS	5.7	8.3	5.3	8.3	6.7	7.7	7.0
TRUELINE	6.3	7.3	5.7	8.7	6.3	7.3	6.9
TENDENZ	5.3	8.3	5.7	8.7	5.7	8.0	6.9
LOPEZ	6.0	7.3	5.3	8.0	6.7	7.7	6.8
SEASIDE	5.0	6.0	5.3	9.0	6.7	8.0	6.7
18TH GREEN	6.7	5.7	5.0	8.0	6.0	7.7	6.5
LSD VALUE	1.1	1.3	0.7	0.8	0.8	0.9	0.4
C.V. (%)	10.2	10.2	8.1	5.6	6.8	7.1	8.2

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 7. SPRING DENSITY RATINGS OF BENTGRASS CULTIVARS GROWN ON
A FAIRWAY OR TEE 1/
1997 DATA

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

NAME	NJ1
PENN G-2 (G-2)	8.0
PENN G-6 (G-6)	7.3
CATO	7.0
BAR WS 42102	6.7
SEASIDE II (DF-1)	6.3
SOUTHSHORE	6.3
SR 7100	6.3
PROVIDENCE	6.0
ISI-AT-90162	5.7
PENNEAGLE	5.7
CRENSHAW	5.3
TIGER (OM-AT-90163)	4.3
TRUELINE	4.3
BAR AS 492	3.7
LOPEZ	3.7
PENNCROSS	3.7
PRO/CUP	3.7
EXETER	3.5
18TH GREEN	3.0
TENDENZ	1.7
SEASIDE	1.3
LSD VALUE	1.2
C.V. (%)	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 8. SUMMER DENSITY RATINGS OF BENTGRASS CULTIVARS GROWN ON
A FAIRWAY OR TEE 1/
1997 DATA

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

NAME	IL1
PENN G-6 (G-6)	7.7
BAR WS 42102	7.3
SEASIDE II (DF-1)	7.0
PENNEAGLE	6.7
18TH GREEN	6.0
CATO	6.0
CRENSHAW	6.0
PENN G-2 (G-2)	6.0
PRO/CUP	6.0
SOUTHSHORE	5.7
BAR AS 492	5.3
ISI-AT-90162	5.3
PROVIDENCE	5.3
SR 7100	5.3
TENDENZ	5.3
EXETER	5.0
PENNCROSS	5.0
TIGER (OM-AT-90163)	5.0
TRUELINE	5.0
LOPEZ	4.7
SEASIDE	4.0
LSD VALUE	1.2
C.V. (%)	13.4

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 9. FUSARIUM PATCH RATINGS OF BENTGRASS CULTIVARS GROWN ON
A FAIRWAY OR TEE 1/
1997 DATA

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

NAME	MI1	WA1	MEAN
PENNEAGLE	8.7	8.0	8.3
TIGER (OM-AT-90163)	8.7	7.7	8.2
PENNCROSS	8.7	7.0	7.8
SEASIDE II (DF-1)	7.7	7.3	7.5
ISI-AT-90162	8.0	6.7	7.3
LOPEZ	8.3	6.3	7.3
SR 7100	8.7	5.3	7.0
SOUTHSHORE	8.7	4.0	6.3
TRUELINE	9.0	3.7	6.3
TENDENZ	7.7	4.7	6.2
EXETER	8.0	4.3	6.2
PENN G-6 (G-6)	5.3	6.7	6.0
PRO/CUP	8.3	3.3	5.8
CRENSHAW	7.3	4.3	5.8
SEASIDE	8.0	2.7	5.3
PROVIDENCE	7.0	3.3	5.2
18TH GREEN	7.7	2.3	5.0
BAR WS 42102	8.0	2.0	5.0
CATO	7.0	3.0	5.0
BAR AS 492	7.7	1.7	4.7
PENN G-2 (G-2)	4.7	4.3	4.5
LSD VALUE	1.5	1.6	1.1
C.V. (%)	12.1	20.9	15.5

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.