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 Commmittees 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. Richard White, Texas A&M University
Dr. Anthony Koski, Colorado State University
Dr. Thomas Fermanian, University of Illinois
Dr. Gerald Pepin, Pickseed West, Inc.
Dr. Bridget Ruemmele, University of Rhode Island
Mr. Al Gardner, A-G Turf Farms, Inc.
Dr. Michael Kenna, USGA Green Section
Ms. Crystal Rose-Fricker, Pure-Seed Testing, Inc.

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1989 National Bentgrass (Fairway/Tee) Test - 1990-93 data

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CONTENTS (Continued)

LOCATIONS SUBMITTING DATA FOR 1990-93

State	Location	Code
California	Santa Clara	CA1
Illinois	Urbana	IL1
Indiana	West Lafayette	IN1
Kansas	Manhattan	KS1
Kansas	Wichita	KS2
Kentucky	Lexington	KY1
Maryland	Beltsville	UB1
Maryland	Silver Spring	MD1
Maryland	Lothian (Old South Country Club)	MD2
Michigan	East Lansing	MI1
New Jersey	North Brunswick	NJ1
New Jersey	Martinsville	NJ3
Ohio	Columbus	OH1
Ohio	Marysville	OH2
Ontario	Guelph	ON1
Oregon	Halsey	OR3
Oregon	Corvallis	OR4
Oregon	Tangent	OR5
Rhode Island	Kingston	RI1
Texas	Dallas	TX1
Virginia	Fairfax (Riverbend Country Club)	VA5
Washington	Puyallup	WA3

1989 NATIONAL BENTGRASS TEST

(Fairway/Tee)

Entries and Sponsors

Entry No.	Name	Species	Sponsor
1	BR 1518	A. castellana (dryland bent)	USGA Green Section
2	Carmen	creeping	Advanta Seeds West, Inc.
3	Tracenta	colonial	Advanta Seeds West, Inc.
4	Putter	creeping	Jacklin Seed Co.
5	SR 1020	creeping	Seed Research of OR, Inc.
6	Providence	creeping	Seed Research of OR, Inc.
7	Bardot	colonial	Barenbrug USA
8	Penncross	creeping	Tee-2-Green Corp.
9	Penneagle	creeping	Tee-2-Green Corp.
10	Egmont	A. capillaris (browntop bent)	Olsen-Fennell Seed Co.
11	Regent (Normarc 101)	creeping	Barenbrug USA
12	PRO/CUP (Forbes 89-12)	creeping	Forbes Seed & Grain, Inc.
13	Lopez (WVPB 89-D-15)	creeping	Finelawn Research Corp.
14	National	creeping	Pickseed West, Inc.
15	88.CBE	creeping	International Seeds, Inc.
16	Viper (88.CBL)	creeping	International Seeds, Inc.
17	Cobra	creeping	International Seeds, Inc.
18	Emerald	creeping	International Seeds, Inc.
19	TAMU 88-1	creeping	Texas A&M University
20	Allure	colonial	Willamette Seed Co.

TABLE A. 1990-1993 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN THE 1989 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
CA1	LOAM	6.1-6.5	61-150	0-150	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
IL1	SILT LOAM AND SILT	-	-	-	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
IN1	SILT LOAM AND SILT	7.1-7.5	151-270	376-500	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
KS1	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
KS2	SANDY LOAM	6.6-7.0	61-150	241-375	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
KY1	SILT LOAM AND SILT	6.1-6.5	271-450	241-375	2.1-3.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
MD1	SILT LOAM AND SILT	5.6-6.0	61-150	241-375	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MD2	SILT LOAM AND SILT	6.6-7.0	61-150	151-240	3.1-4.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
MI1	SANDY LOAM	7.1-7.5	-	-	8.1+	FULL SUN	0.0-0.5	TO PREVENT STRESS
NJ1	LOAM	6.1-6.5	61-150	0-150	2.1-3.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
NJ3	SILT LOAM AND SILT	6.6-7.0	151-270	501+	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
OH1	SILTY CLAY LOAM	7.1-7.5	271-450	0-150	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
OH2	SILTY CLAY LOAM	-	-	-	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
ON1	SANDY LOAM	6.6-7.0	-	-	1.1-2.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
OR3	LOAM	4.6-5.5	0-60	151-240	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
OR4	SILTY CLAY AND CLAY	5.6-6.0	-	-	4.1-5.0	FULL SUN	0.6-1.0	TO PREVENT DORMANCY
OR5	SILT LOAM AND SILT	6.1-6.5	-	-	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
RI1	SILT LOAM AND SILT	6.6-7.0	151-270	0-150	3.1-4.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
TX1	SILTY CLAY AND CLAY	7.6-8.5	451+	501+	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
UB1	SILT LOAM AND SILT	4.6-5.5	61-150	0-150	3.1-4.0	FULL SUN	0.6-1.0	TO PREVENT DORMANCY
VA5	SILTY CLAY LOAM	6.1-6.5	271-450	241-375	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
WA3	SANDY LOAM	5.6-6.0	61-150	151-240	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS

TABLE B. LOCATIONS AND DATA COLLECTED IN 1990-1993

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 RATING	SPRING GREENUP RATING
CA1	X	X	X	X	X	X	X	X	X	X	X	X	X	
IL1				X	X	X	X	X	X	X				
IN1				X	X	X	X	X	X					X
KS1										X	X			
KS2					X	X	X	X						
KY1			X	X	X	X	X	X	X	X				
MD1	X			X	X	X	X	X	X	X	X	X		X
MD2														
MI1					X	X	X	X	X					
NJ1			X	X	X	X	X	X	X	X	X		X	X
NJ3				X	X	X	X	X	X	X	X		X	X
OH1									X				X	
OH2					X	X	X	X	X	X			X	
ON1				X	X	X	X	X	X	X			X	
OR3	X	X	X	X	X	X	X	X	X	X	X	X	X	
OR4							X	X	X	X	X			
OR5										X			X	
RI1				X	X	X	X	X	X	X	X		X	X
TX1		X	X											
UB1				X	X	X	X	X	X	X	X			
VA5		X		X	X	X	X	X	X	X	X	X		
WA3	X	X	X	X	X	X	X	X	X	X	X	X	X	

TABLE B. (CONTINUED) LOCATIONS AND DATA COLLECTED IN 1990-1993

LOCATION	LEAF TEXTURE RATING	SEEDLING VIGOR	SPRING DENSITY	SUMMER DENSITY	FALL DENSITY	PERCENT COVER SPRING	PERCENT COVER FALL	WINTER COLOR	THATCH MEASUREMENTS	FUSARIUM PATCH	LEAF SPOT	DOLLAR SPOT	RED THREAD	BROWN PATCH	TAKE-ALL PATCH	CHINCH BUG
CA1	X		X	X	X				X							
IL1														X		
IN1												X		X		
KS1																
KS2																
KY1																
MD1		X						X	X			X		X		X
MD2		X					X									
MI1																
NJ1												X		X		
NJ3	X		X	X	X			X				X		X		
OH1																
OH2			X	X							X	X		X		
ON1		X		X	X							X				
OR3	X		X	X	X		X									
OR4																
OR5		X									X					
RI1				X								X	X			X
TX1						X										
UB1							X					X		X	X	
VA5							X	X						X		
WA3		X	X	X	X			X	X	X						

TABLE B. (CONTINUED) LOCATIONS AND DATA COLLECTED IN 1990-1993

LOCATION	UNIFORMITY RATING	SCALPING RATING	HERBICIDE INJURY	PERCENT POA ANNUA	PERCENT POA JANUARY	PERCENT POA FEBRUARY	PERCENT POA APRIL	PERCENT POA MAY	PERCENT POA JUNE	PERCENT POA JULY	PERCENT POA AUGUST	PERCENT POA SEPTEMBER	PERCENT POA OCTOBER	PERCENT POA DECEMBER	PERCENT POA AVERAGE
CA1					X	X	X	X	X	X	X	X	X		
IL1															
IN1															
KS1															
KS2															
KY1															
MD1															
MD2															
MI1															
NJ1															
NJ3															
OH1															
OH2	X			X											X
ON1															
OR3		X													
OR4															
OR5															
RI1															
TX1															
UB1															
VA5						X	X	X	X	X	X	X		X	
WA3			X												

TABLE 1.

MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON
A FAIRWAY OR TEE AT TWENTY-ONE LOCATIONS IN THE U.S. AND CANADA
1990-1993 DATA

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

NAME	CA1	IL1	IN1	KS1	KS2	KY1	MD1	MI1	NJ1	NJ3	OH1	OH2	ON1	OR3	OR4	OR5	RI1	TX1	UB1	VA5	WA3	MEAN
* PROVIDENCE	6.4	6.3	7.0	5.5	8.4	7.1	6.4	6.8	6.8	6.5	7.0	5.9	7.5	6.0	7.5	5.3	5.0	2.8	5.9	5.8	5.2	6.2
* PRO/CUP (FORBES 89-12)	6.3	6.1	6.5	6.0	8.2	6.4	6.2	6.1	6.4	5.3	8.0	6.3	7.5	6.2	6.9	6.0	4.4	3.5	5.1	5.7	4.9	6.1
* PUTTER	7.1	6.1	6.9	6.0	8.1	6.1	6.5	5.9	6.1	5.9	8.7	6.2	7.0	5.8	6.9	4.7	4.6	2.3	4.8	6.0	5.7	6.1
* PENNEAGLE	6.6	6.4	6.7	5.7	7.8	6.5	6.4	7.1	6.3	5.8	8.0	6.6	6.9	5.7	5.6	6.3	4.8	2.8	5.1	5.6	4.8	6.1
* PENNCROSS	6.6	5.7	6.9	5.8	7.7	6.0	5.9	6.3	5.9	5.6	7.7	6.3	7.0	5.8	5.9	7.0	4.4	3.0	5.1	6.7	5.3	6.0
* REGENT (NORMARC 101)	6.7	6.3	6.6	6.0	7.9	6.0	6.5	6.4	6.3	5.3	7.0	6.1	7.0	5.8	6.1	5.0	4.5	3.5	5.3	5.9	4.8	6.0
* LOPEZ (WVPB 89-D-15)	6.2	5.3	6.4	6.0	7.9	6.4	6.4	6.7	6.2	6.1	7.3	6.0	7.3	5.9	6.3	6.3	4.5	2.7	5.1	5.0	4.9	6.0
* VIPER (88.CBL)	.	5.2	.	6.2	7.9	6.8	6.5	6.4	6.3	.	7.3	.	7.7	6.4	.	.	4.7	2.2	5.1	5.2	4.8	5.9
* COBRA	6.7	5.5	6.5	6.0	7.8	6.7	6.4	6.2	6.3	5.8	7.3	6.1	7.2	5.9	5.4	6.0	4.5	2.0	5.0	5.3	4.9	5.9
TAMU 88-1	6.5	.	6.1	6.7	7.6	5.8	6.2	6.6	5.6	.	6.0	6.1	7.0	5.4	5.3	6.0	4.3	2.5	4.4	5.7	5.2	5.7
* SR 1020	6.2	5.8	6.4	5.8	7.9	6.3	6.0	6.5	5.5	5.6	7.0	6.1	6.9	5.6	7.0	3.3	4.1	2.3	4.6	4.8	5.1	5.7
* CARMEN	6.3	6.1	6.6	5.8	7.1	5.9	5.8	6.2	5.3	5.6	7.7	5.8	6.6	5.6	5.4	5.0	4.3	2.0	4.4	5.4	4.8	5.6
88.CBE	.	6.0	.	5.8	.	6.4	.	6.8	6.3	.	6.7	.	.	6.3	.	.	4.5	2.2	5.4	5.7	4.5	5.6
* NATIONAL	5.8	4.9	6.6	6.2	7.2	6.4	6.1	6.4	4.4	5.2	7.3	5.7	6.7	4.8	5.4	5.7	4.4	2.8	4.3	4.9	4.5	5.5
* EMERALD	5.6	4.4	6.2	6.5	6.9	5.6	6.2	6.0	4.6	4.6	8.0	5.3	6.4	5.4	5.6	6.3	4.1	2.7	3.8	6.3	4.8	5.5
* BARDOT	5.0	4.8	5.3	6.2	5.3	5.4	6.3	6.1	5.5	4.1	5.7	5.4	7.9	4.1	5.5	6.7	5.0	2.3	5.4	5.3	5.3	5.4
* EGMONT	5.4	4.9	5.1	5.2	5.3	6.1	6.0	6.5	5.1	4.2	5.7	4.8	7.5	4.1	5.5	7.0	4.9	1.8	5.9	5.0	5.6	5.3
* TRACENTA	4.7	4.9	5.4	4.8	5.0	5.6	6.0	6.3	5.7	3.6	5.7	5.4	8.0	3.7	5.1	5.0	4.7	1.3	5.6	5.3	5.3	5.1
ALLURE	5.2	.	4.3	5.7	4.6	5.4	6.0	6.1	4.4	3.7	.	4.9	6.9	3.8	4.7	6.3	4.5	1.3	4.1	4.8	5.2	4.8
BR 1518	4.1	3.5	4.2	5.2	5.0	4.6	5.7	5.6	4.2	2.6	6.3	4.6	7.5	2.4	2.9	6.0	4.6	1.8	4.3	4.4	4.5	4.5
LSD VALUE	0.4	0.6	0.5	1.3	0.8	0.8	0.4	0.7	0.6	0.6	1.5	0.7	0.7	0.4	0.8	2.0	0.8	1.4	0.8	0.7	0.4	0.2

* COMMERCIALLY AVAILABLE IN THE USA IN 1994

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 2. MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS FOR EACH MONTH GROWN ON A FAIRWAY OR TEE AT TWENTY-ONE LOCATIONS IN THE U.S. AND CANADA 1990-1993 DATA

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

NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
PROVIDENCE	4.9	4.3	5.9	6.0	6.4	6.6	6.6	6.5	6.4	6.2	5.7	5.1	6.3
PUTTER	5.4	4.9	5.7	5.5	6.2	6.4	6.4	6.2	6.0	5.6	5.4	5.8	6.0
PENNEAGLE	5.1	4.4	5.5	5.5	6.0	6.2	6.3	6.1	6.1	5.8	5.6	5.3	6.0
PRO/CUP (FORBES 89-12)	4.8	4.2	5.7	5.4	6.1	6.4	6.3	6.0	5.8	5.7	5.4	5.2	6.0
PENNCROSS	5.2	5.1	5.9	5.6	6.1	6.2	6.1	5.8	5.7	5.7	5.3	5.7	5.9
REGENT (NORMARC 101)	5.2	4.8	5.8	5.5	5.9	6.2	6.2	6.0	5.8	5.8	5.4	5.8	5.9
COBRA	5.2	4.7	5.6	5.8	5.9	6.1	6.1	5.9	5.8	5.8	5.3	5.8	5.9
LOPEZ (WVPB 89-D-15)	5.0	4.4	5.5	5.5	5.9	6.1	6.1	5.9	5.8	5.7	5.4	5.4	5.9
VIPER (88.CBL)	5.4	4.5	5.6	5.6	5.8	6.1	6.1	5.9	5.8	5.9	5.3	5.6	5.8
TAMU 88-1	5.7	5.0	5.5	5.2	5.8	5.8	5.7	5.5	5.6	5.7	5.3	5.5	5.7
SR 1020	5.2	4.5	5.8	5.3	5.8	5.8	5.9	5.7	5.6	5.3	5.2	5.2	5.6
88.CBE	4.6	4.4	5.6	5.4	5.8	5.9	5.9	5.8	5.7	5.8	5.0	5.3	5.6
CARMEN	5.0	4.3	5.3	5.1	5.8	5.9	5.8	5.6	5.5	5.3	4.9	5.3	5.6
NATIONAL	4.7	4.5	4.8	4.7	5.1	5.3	5.6	5.6	5.5	5.5	5.1	5.2	5.4
EMERALD	4.8	4.5	4.9	4.8	5.3	5.2	5.4	5.4	5.3	5.2	5.0	5.4	5.3
EGMONT	4.9	5.0	5.0	5.3	5.2	5.4	5.2	5.1	5.3	5.6	5.1	5.3	5.3
BARDOT	4.2	4.9	5.2	5.3	5.1	5.2	5.2	5.1	5.3	5.6	5.1	5.0	5.3
TRACENTA	4.2	4.4	5.0	5.4	5.2	5.2	5.1	4.9	5.1	5.3	4.8	5.0	5.2
ALLURE	4.5	4.8	5.0	5.1	4.7	4.7	4.5	4.6	4.7	5.1	4.8	4.8	4.8
BR 1518	4.1	4.0	4.0	4.2	4.1	4.0	4.0	4.1	4.4	4.7	4.3	4.3	4.3
LSD VALUE	0.6	0.8	0.7	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.7	0.3

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).

TABLE 3. RANKING OF MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE AT TWENTY-ONE LOCATIONS IN THE U.S. AND CANADA 1/ 1990-1993 DATA

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

NAME	CA1	IL1	IN1	KS1	KS2	KY1	MD1	MI1	NJ1	NJ3	OH1	OH2	ON1	OR3	OR4	OR5	RI1	TX1	UB1	VA5	WA3	MEAN
PROVIDENCE	7	3	1	17.0	1.0	1	7	3.0	1	1	12.0	10	6	4	1.0	13.0	1	5.0	2	5	6	1
PRO/CUP (FORBES 89-12)	8	4	8	8.0	2.0	6	11	17.0	2	10	3.0	3	4	3	3.5	9.5	14	1.5	10	6	10	2
PUTTER	1	6	2	8.0	3.0	10	3	19.0	9	3	1.0	4	11	9	3.5	17.0	8	11.0	13	3	1	3
PENNEAGLE	4	1	4	15.5	9.0	4	6	1.0	3	5	3.0	1	16	10	8.5	5.5	4	5.0	11	9	13	4
PENNCROSS	5	9	3	12.5	10.0	13	17	12.0	10	8	5.5	2	13	8	7.0	1.5	15	3.0	8	1	3	5
REGENT (NORMARC 101)	3	2	7	8.0	4.0	12	2	8.5	6	9	12.0	8	12	7	6.0	15.0	9	1.5	6	4	17	6
LOPEZ (WVPB 89-D-15)	10	11	11	8.0	6.5	8	4	4.0	8	2	8.5	9	8	6	5.0	5.5	12	7.5	7	16	12	7
VIPER (88.CBL)	.	12	.	4.0	6.5	2	1	8.5	4	.	8.5	.	3	1	.	.	6	13.5	9	14	14	8
COBRA	2	10	9	8.0	8.0	3	5	14.0	5	4	8.5	6	9	5	13.0	9.5	13	15.5	12	12	11	9
TAMU 88-1	6	.	13	1.0	11.0	15	10	5.0	12	.	16.0	7	10	13	15.0	9.5	18	9.0	16	8	8	10
SR 1020	11	8	10	12.5	5.0	9	14	6.0	13	7	12.0	5	14	11	2.0	18.0	19	11.0	14	18	9	11
CARMEN	9	5	5	12.5	13.0	14	18	13.0	15	6	5.5	11	18	12	13.0	15.0	17	15.5	15	10	15	12
88.CBE	.	7	.	12.5	.	5	.	2.0	7	.	14.0	.	.	2	.	.	10	13.5	5	7	18	13
NATIONAL	12	15	6	4.0	12.0	7	12	10.0	18	11	8.5	12	17	15	13.0	12.0	16	5.0	17	17	20	14
EMERALD	13	17	12	2.0	14.0	17	9	18.0	17	12	3.0	15	19	14	8.5	5.5	20	7.5	20	2	16	15
BARDOT	16	16	15	4.0	15.0	19	8	15.0	14	14	18.0	13	2	17	10.5	3.0	2	11.0	4	11	4	16
EGMONT	14	13	16	18.5	16.0	11	15	7.0	16	13	18.0	17	7	16	10.5	1.5	3	17.5	1	15	2	17
TRACENTA	17	14	14	20.0	17.0	16	13	11.0	11	16	18.0	14	1	19	16.0	15.0	5	19.5	3	13	5	18
ALLURE	15	.	17	15.5	19.0	18	16	16.0	19	15	.	16	15	18	17.0	5.5	11	19.5	19	19	7	19
BR 1518	18	18	18	18.5	18.0	20	19	20.0	20	17	15.0	18	5	20	18.0	9.5	7	17.5	18	20	19	20

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. MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE FOR EACH YEAR IN THE U.S. AND CANADA 1990-1993 DATA

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

NAME	1990 MEAN	1991 MEAN	1992 MEAN	1993 MEAN	1990-93 MEAN
PROVIDENCE	6.48	6.24	6.29	5.99	6.24
PRO/CUP (FORBES 89-12)	6.33	5.96	5.85	5.66	6.09
PUTTER	6.01	6.13	5.89	6.02	6.06
PENNEAGLE	6.03	5.96	6.04	5.99	6.06
PENNCROSS	6.12	5.92	5.85	5.88	6.02
REGENT (NORMARC 101)	5.94	5.91	5.94	5.83	5.95
LOPEZ (WVPB 89-D-15)	6.10	5.90	5.74	5.71	5.95
VIPER (88.CBL)	5.95	5.89	5.76	5.80	5.91
COBRA	5.90	5.91	5.87	5.77	5.89
TAMU 88-1	5.64	5.68	5.67	5.71	5.74
SR 1020	5.79	5.69	5.57	5.43	5.67
CARMEN	5.49	5.63	5.63	5.52	5.61
88.CBE	5.39	5.14	6.04	5.82	5.55
NATIONAL	5.47	5.35	5.40	5.20	5.50
EMERALD	5.43	5.38	5.14	5.21	5.48
BARDOT	5.57	5.27	5.31	4.97	5.35
EGMONT	5.39	5.32	5.31	5.13	5.31
TRACENTA	5.31	5.04	5.26	5.04	5.10
ALLURE	4.70	4.84	4.81	4.85	4.84
BR 1518	4.35	4.23	4.31	4.54	4.46
LSD VALUE	0.26	0.22	0.25	0.26	0.16

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. RANKING OF MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE FOR EACH YEAR IN THE U.S. AND CANADA 1/
1990-1993 DATA

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

NAME	1990 MEAN	1991 MEAN	1992 MEAN	1993 MEAN	1990-93 MEAN
PROVIDENCE	1	1	1	2	1
PRO/CUP (FORBES 89-12)	2	3	7	11	2
PUTTER	6	2	5	1	3
PENNEAGLE	5	4	3	3	4
PENNCROSS	3	5	8	4	5
REGENT (NORMARC 101)	8	7	4	5	6
LOPEZ (WVPB 89-D-15)	4	8	10	10	7
VIPER (88.CBL)	7	9	9	7	8
COBRA	9	6	6	8	9
TAMU 88-1	11	11	11	9	10
SR 1020	10	10	13	13	11
CARMEN	13	12	12	12	12
88.CBE	17	17	2	6	13
NATIONAL	14	14	14	15	14
EMERALD	15	13	18	14	15
BARDOT	12	16	16	18	16
EGMONT	16	15	15	16	17
TRACENTA	18	18	17	17	18
ALLURE	19	19	19	19	19
BR 1518	20	20	20	20	20

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 4.

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 6. GENETIC COLOR RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE
1990-1993 DATA

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

NAME	CA1	NJ1	NJ3	OH1	OH2	ON1	OR3	OR5	RI1	WA3	MEAN
VIPER (88.CBL)	.	6.7	.	7.3	.	7.5	7.2	.	6.7	6.8	7.0
88.CBE	.	7.3	.	6.7	.	.	7.5	.	6.3	7.2	7.0
PRO/CUP (FORBES 89-12)	7.0	8.0	5.7	7.7	7.5	6.0	7.2	4.3	6.7	7.2	6.7
PROVIDENCE	7.0	7.0	6.7	7.0	7.8	6.3	7.2	4.7	6.7	6.3	6.7
COBRA	7.3	6.0	6.0	7.7	7.7	5.7	6.5	5.3	6.0	6.8	6.5
LOPEZ (WVPB 89-D-15)	7.3	7.3	6.3	7.3	7.3	5.3	6.7	5.0	5.7	6.7	6.5
SR 1020	7.0	6.0	5.9	7.0	7.5	4.5	6.8	5.3	6.7	6.5	6.3
REGENT (NORMARC 101)	7.7	5.7	5.3	7.3	7.5	4.7	6.5	5.7	6.0	6.7	6.3
PENNCROSS	8.0	5.7	5.7	8.0	7.2	4.5	6.3	5.3	5.3	5.8	6.2
TRACENTA	5.3	4.7	4.5	6.3	7.2	7.7	6.5	6.7	5.0	7.0	6.1
PUTTER	7.7	5.0	5.6	8.0	7.2	3.0	6.3	5.3	5.7	6.8	6.1
TAMU 88-1	8.0	4.7	.	6.0	7.0	4.0	6.2	5.7	5.3	6.8	6.0
PENNEAGLE	7.3	5.0	5.6	7.7	7.5	3.8	6.3	5.3	4.7	6.3	6.0
BR 1518	6.0	5.0	3.5	7.3	7.2	6.3	6.2	7.0	4.7	5.8	5.9
CARMEN	7.0	5.3	5.5	7.7	7.0	3.0	6.0	5.3	5.3	6.5	5.9
EGMONT	5.3	3.7	4.5	6.3	7.0	5.8	5.5	8.0	5.0	5.5	5.7
BARDOT	5.0	3.7	4.6	6.0	7.0	6.2	5.5	5.7	4.7	6.3	5.5
NATIONAL	7.0	4.3	4.8	7.7	7.0	1.3	5.5	3.0	5.7	5.7	5.2
EMERALD	7.0	3.3	4.4	7.7	7.0	1.3	5.7	4.3	5.0	5.2	5.1
ALLURE	6.0	3.0	4.2	.	7.0	3.8	5.7	6.3	4.7	3.7	4.9
LSD VALUE	0.9	1.1	0.5	1.2	0.5	1.4	0.8	1.2	1.1	1.6	0.4

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

TABLE 7. SPRING GREENUP RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1990-1993 DATA

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

NAME	IN1	MD1	NJ1	NJ3	RI1	MEAN
ALLURE	3.2	7.0	8.0	7.0	4.3	5.9
BARDOT	2.8	8.0	7.3	6.3	3.7	5.6
BR 1518	2.3	7.3	8.3	5.0	4.7	5.5
TRACENTA	3.3	7.7	7.7	4.7	3.3	5.3
NATIONAL	4.8	6.0	5.7	5.7	4.3	5.3
EGMONT	3.0	6.7	7.0	5.7	4.0	5.3
EMERALD	3.7	6.0	6.0	5.3	4.0	5.0
REGENT (NORMARC 101)	3.3	6.0	4.0	5.0	4.7	4.6
PENNEAGLE	3.5	5.3	3.0	5.3	5.3	4.5
PUTTER	3.5	5.7	3.3	4.0	4.7	4.2
TAMU 88-1	3.2	5.3	2.7	.	5.0	4.0
PENNCROSS	3.3	5.3	2.0	5.7	3.7	4.0
PROVIDENCE	3.0	5.7	2.7	5.3	3.3	4.0
LOPEZ (WVPB 89-D-15)	2.8	5.3	2.0	5.3	4.0	3.9
COBRA	2.7	5.7	3.0	4.3	3.3	3.8
VIPER (88.CBL)	.	5.7	1.7	.	4.0	3.8
CARMEN	3.0	5.0	1.7	4.0	4.3	3.6
SR 1020	3.0	4.3	1.3	4.3	5.0	3.6
PRO/CUP (FORBES 89-12)	2.2	5.0	2.0	4.0	4.3	3.5
88.CBE	.	.	2.0	.	4.7	3.3
LSD VALUE	1.0	0.8	1.2	1.3	1.7	0.6

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 8. LEAF TEXTURE RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

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

NAME	CA1	NJ3	OR3	MEAN
SR 1020	7.0	6.5	7.0	6.8
COBRA	6.7	6.2	6.7	6.5
PROVIDENCE	6.3	6.5	6.7	6.5
TAMU 88-1	7.0	.	6.0	6.5
LOPEZ (WVPB 89-D-15)	6.7	6.2	6.3	6.4
PRO/CUP (FORBES 89-12)	6.0	5.8	7.3	6.4
PUTTER	7.0	6.1	6.0	6.4
VIPER (88.CBL)	.	.	6.3	6.3
CARMEN	7.0	5.9	6.0	6.3
BARDOT	8.0	5.8	5.0	6.3
REGENT (NORMARC 101)	7.0	5.9	5.7	6.2
PENNEAGLE	7.3	5.5	5.7	6.2
88.CBE	.	.	6.0	6.0
PENNCROSS	6.3	5.7	6.0	6.0
NATIONAL	6.0	5.5	6.3	5.9
EMERALD	7.0	4.8	5.3	5.7
EGMONT	6.0	5.7	5.3	5.7
TRACENTA	7.0	5.0	4.0	5.3
ALLURE	6.0	4.8	3.3	4.7
BR 1518	5.3	3.6	3.0	4.0
LSD VALUE	1.1	0.6	1.0	0.6

1/ LEAF TEXTURE RATED AT "CA1" IN 1993, AT "NJ3" IN 1990-93 AND AT "OR3" IN 1990.

2/ 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. SEEDLING VIGOR RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE
1990-1993 DATA

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

NAME	MD1	MD2	ON1	OR5	WA3	MEAN
EMERALD	7.7	.	7.7	5.3	8.0	7.2
VIPER (88.CBL)	7.7	.	5.7	.	5.7	6.3
PROVIDENCE	7.3	4.0	7.3	5.0	7.7	6.3
BR 1518	8.0	2.3	6.0	7.7	6.7	6.1
NATIONAL	7.3	3.3	7.7	5.7	6.7	6.1
PUTTER	8.3	3.0	7.0	5.0	6.7	6.0
REGENT (NORMARC 101)	8.7	3.7	6.0	4.7	6.7	5.9
EGMONT	6.7	2.7	4.7	7.0	8.0	5.8
PRO/CUP (FORBES 89-12)	7.0	3.3	7.7	4.0	6.7	5.7
COBRA	6.7	.	5.0	4.7	6.3	5.7
PENNCROSS	7.0	3.0	5.0	5.3	8.0	5.7
LOPEZ (WVPB 89-D-15)	7.7	3.7	6.3	4.0	6.3	5.6
SR 1020	7.0	3.3	5.3	4.7	7.0	5.5
TAMU 88-1	8.0	2.7	5.3	5.0	6.3	5.5
PENNEAGLE	7.7	2.7	4.0	4.7	6.7	5.1
BARDOT	6.0	2.3	5.7	4.7	6.7	5.1
ALLURE	6.7	2.0	2.7	6.0	6.7	4.8
88.CBE	.	3.0	.	.	6.0	4.5
CARMEN	5.7	2.0	3.0	4.0	4.7	3.9
TRACENTA	5.3	1.0	3.7	4.3	4.7	3.8
LSD VALUE	1.7	1.0	2.3	1.0	1.6	0.8

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

TABLE 10. SPRING DENSITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE
1990-1993 DATA

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

NAME	CA1	NJ3	OH2	OR3	WA3	MEAN
PUTTER	7.3	6.3	8.0	5.3	7.0	6.8
SR 1020	6.8	6.3	7.0	6.0	7.3	6.7
COBRA	7.3	6.3	7.7	5.3	6.7	6.7
PROVIDENCE	7.2	6.8	6.7	5.3	7.0	6.6
CARMEN	7.0	5.9	6.7	5.7	7.3	6.5
PENNCROSS	6.8	6.7	8.0	5.3	4.7	6.3
TAMU 88-1	6.7	.	7.0	6.0	5.3	6.3
LOPEZ (WVPB 89-D-15)	6.8	6.6	6.3	5.7	5.7	6.2
PENNEAGLE	6.7	6.2	8.3	5.3	4.3	6.2
REGENT (NORMARC 101)	7.5	5.6	8.0	5.3	4.3	6.2
PRO/CUP (FORBES 89-12)	7.0	5.8	7.3	5.7	4.7	6.1
EMERALD	6.8	4.7	7.0	5.7	5.0	5.8
NATIONAL	6.0	6.3	7.0	4.7	4.3	5.7
VIPER (88.CBL)	.	.	.	5.3	6.0	5.7
BARDOT	6.3	4.5	5.3	4.3	7.7	5.6
88.CBE	.	.	.	5.3	5.7	5.5
ALLURE	6.5	4.3	4.0	3.3	7.3	5.1
EGMONT	6.0	4.6	4.3	2.7	6.7	4.9
TRACENTA	5.8	4.2	4.3	3.0	6.7	4.8
BR 1518	4.8	2.8	5.0	2.3	4.0	3.8
LSD VALUE	1.2	0.8	2.0	0.9	2.1	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).

TABLE 11. SUMMER DENSITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE
1990-1993 DATA

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

NAME	CA1	NJ3	OH2	ON1	OR3	RI1	WA3	MEAN
PUTTER	7.3	6.7	7.0	9.0	5.0	3.0	6.0	6.3
PENNEAGLE	7.5	6.3	6.2	9.0	5.0	3.0	6.7	6.2
PRO/CUP (FORBES 89-12)	6.8	6.3	6.0	9.0	5.3	3.0	7.0	6.2
REGENT (NORMARC 101)	6.8	5.7	5.5	9.0	5.7	3.7	7.0	6.2
LOPEZ (WVPB 89-D-15)	6.8	6.6	6.5	9.0	5.0	3.0	6.0	6.1
PENNCROSS	6.8	5.7	6.2	9.0	5.0	3.7	6.3	6.1
PROVIDENCE	6.8	7.2	5.7	8.0	5.0	3.7	6.3	6.1
VIPER (88.CBL)	.	.	.	9.0	5.0	3.3	7.0	6.1
TAMU 88-1	6.8	.	5.8	9.0	5.7	3.0	6.0	6.1
NATIONAL	6.5	5.8	5.3	9.0	4.0	3.3	7.7	5.9
SR 1020	6.7	6.6	6.3	8.0	5.0	3.0	6.0	5.9
EMERALD	6.7	5.0	5.8	9.0	5.7	2.3	6.0	5.8
COBRA	6.7	5.9	5.8	8.0	5.0	2.3	6.7	5.8
CARMEN	7.0	5.6	5.7	7.0	5.0	3.0	7.0	5.8
BARDOT	4.8	4.4	4.8	7.0	4.0	5.3	7.3	5.4
TRACENTA	4.7	3.8	5.3	7.3	3.7	6.0	6.0	5.3
88.CBE	.	.	.	.	4.7	3.0	7.7	5.1
EGMONT	5.2	4.6	3.8	6.0	3.7	5.7	6.0	5.0
ALLURE	6.3	3.7	4.5	4.3	3.3	5.3	6.3	4.8
BR 1518	4.5	2.6	3.7	7.0	2.3	4.3	3.7	4.0
LSD VALUE	1.1	0.7	1.2	2.2	0.7	1.2	2.8	0.5

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

TABLE 12. FALL DENSITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE
1990-1993 DATA

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

NAME	CA1	NJ3	ON1	OR3	WA3	MEAN
PROVIDENCE	6.2	6.5	8.0	8.0	8.7	7.5
VIPER (88.CBL)	.	.	8.0	7.7	6.7	7.4
PRO/CUP (FORBES 89-12)	6.8	5.2	8.7	7.7	8.0	7.3
PUTTER	7.0	5.5	7.7	6.3	9.0	7.1
SR 1020	6.5	5.4	7.3	7.3	8.7	7.1
LOPEZ (WVPB 89-D-15)	6.7	5.8	8.0	7.3	7.3	7.0
COBRA	7.0	5.5	7.3	7.3	7.7	7.0
TAMU 88-1	6.7	.	8.0	7.0	5.7	6.8
REGENT (NORMARC 101)	6.8	5.3	8.0	7.0	6.7	6.8
EMERALD	6.5	4.3	8.3	7.3	6.7	6.6
PENNEAGLE	6.3	5.8	6.7	7.0	7.0	6.6
88.CBE	.	.	.	7.7	5.3	6.5
PENNCROSS	6.3	5.3	8.0	7.0	5.0	6.3
NATIONAL	6.0	5.3	8.3	7.0	4.3	6.2
BARDOT	5.5	4.8	7.0	5.3	8.0	6.1
CARMEN	6.5	4.8	5.7	5.0	8.3	6.1
TRACENTA	5.8	4.3	6.3	5.0	8.3	6.0
EGMONT	6.2	4.9	6.3	5.0	7.0	5.9
ALLURE	7.0	3.8	5.0	5.0	7.0	5.6
BR 1518	5.8	3.0	7.3	6.7	2.7	5.1
LSD VALUE	1.0	1.0	1.1	0.7	1.8	0.6

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. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 2/

NAME	TX1
REGENT (NORMARC 101)	19.0
TAMU 88-1	14.0
PENNEAGLE	12.0
PRO/CUP (FORBES 89-12)	11.0
PROVIDENCE	11.0
EMERALD	10.3
NATIONAL	9.3
EGMONT	8.7
LOPEZ (WVPB 89-D-15)	8.7
PUTTER	8.3
PENNCROSS	6.7
BR 1518	6.3
CARMEN	6.3
COBRA	5.7
ALLURE	4.3
BARDOT	4.3
TRACENTA	4.3
88.CBE	4.0
SR 1020	4.0
VIPER (88.CBL)	3.7
LSD VALUE	12.1

1/ PERCENT LIVING GROUND COVER (SPRING) RATED IN 1990 ONLY.

2/ 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. PERCENT LIVING GROUND COVER (FALL) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 2/

NAME	MD2	OR3	UB1	VA5	MEAN
PENNCROSS	88.3	66.7	90.0	88.3	83.3
REGENT (NORMARC 101)	90.0	73.3	87.3	80.0	82.7
EGMONT	73.3	66.7	94.7	80.0	78.7
PUTTER	88.3	73.3	65.0	83.3	77.5
CARMEN	86.7	70.0	75.0	75.0	76.7
BARDOT	75.0	60.0	95.0	75.0	76.3
PENNEAGLE	86.7	63.3	83.3	71.7	76.3
88.CBE	88.3	66.7	77.5	71.7	76.0
TRACENTA	65.0	60.0	95.0	83.3	75.8
PROVIDENCE	86.7	70.0	75.0	68.3	75.0
NATIONAL	90.7	73.3	65.0	70.0	74.8
PRO/CUP (FORBES 89-12)	85.0	70.0	73.3	70.0	74.6
VIPER (88.CBL)	.	70.0	83.3	70.0	74.4
LOPEZ (WVPB 89-D-15)	90.0	63.3	75.0	58.3	71.7
ALLURE	68.3	63.3	80.0	71.7	70.8
BR 1518	58.3	76.7	85.0	63.3	70.8
EMERALD	.	66.7	70.0	75.0	70.6
COBRA	.	66.7	80.0	60.0	68.9
TAMU 88-1	81.7	60.0	66.7	66.7	68.8
SR 1020	85.0	60.0	68.3	51.7	66.3
LSD VALUE	12.8	10.8	14.1	23.3	8.3

1/ PERCENT LIVING GROUND COVER (FALL) RATED AT "MD2" IN 1992, AT "OR3" & "VA5" IN 1990 AND AT "UB1" IN 1991.

2/ 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. WINTER COLOR RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

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

NAME	MD1	NJ3	VA5	WA3	MEAN
EGMONT	5.7	3.7	6.7	8.3	6.1
BR 1518	6.7	3.3	5.0	7.8	5.7
TRACENTA	5.3	2.3	6.3	7.0	5.3
BARDOT	5.3	3.0	5.7	6.5	5.1
ALLURE	5.0	3.3	6.0	6.0	5.1
88.CBE	.	.	5.0	5.0	5.0
TAMU 88-1	4.3	.	5.7	4.7	4.9
VIPER (88.CBL)	4.0	.	5.0	4.8	4.6
PUTTER	4.3	1.3	5.0	6.3	4.3
COBRA	4.0	2.0	5.0	5.3	4.1
PENNCROSS	4.0	1.7	5.7	4.8	4.0
SR 1020	4.0	3.0	3.7	5.3	4.0
EMERALD	4.3	2.0	5.0	4.5	4.0
PROVIDENCE	4.0	1.7	5.0	4.8	3.9
NATIONAL	4.0	1.7	5.0	4.3	3.8
PENNEAGLE	4.0	1.0	5.0	5.0	3.8
REGENT (NORMARC 101)	4.3	1.0	5.0	4.7	3.8
CARMEN	4.0	1.3	4.3	4.7	3.6
LOPEZ (WVPB 89-D-15)	4.0	1.7	5.0	3.5	3.5
PRO/CUP (FORBES 89-12)	4.0	1.3	4.7	3.2	3.3
LSD VALUE	0.6	1.1	1.0	1.1	0.6

1/ WINTER COLOR RATED AT "MD1", "NJ3" & "VA5" IN 1991 AND AT "WA3" IN 1991 & 1992.

2/ 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. THATCH MEASUREMENTS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

THATCH MEASUREMENTS IN MILLIMETERS 2/

NAME	CA1	MD1	WA3	MEAN
88.CBE	.	.	37.3	37.3
PUTTER	34.3	15.0	35.3	28.2
COBRA	34.8	12.3	35.7	27.6
LOPEZ (WVPB 89-D-15)	31.7	12.7	37.7	27.3
REGENT (NORMARC 101)	34.8	12.0	34.7	27.2
PENNCROSS	33.7	12.3	34.7	26.9
PRO/CUP (FORBES 89-12)	30.7	12.3	35.0	26.0
PROVIDENCE	29.8	13.0	35.0	25.9
PENNEAGLE	32.2	11.7	33.3	25.7
CARMEN	32.0	11.0	34.0	25.7
EMERALD	28.5	12.3	35.3	25.4
TAMU 88-1	28.3	11.0	35.0	24.8
SR 1020	27.5	12.3	33.7	24.5
NATIONAL	27.0	11.0	35.0	24.3
VIPER (88.CBL)	.	13.7	33.3	23.5
ALLURE	26.8	8.3	32.7	22.6
EGMONT	22.0	9.7	34.7	22.1
TRACENTA	20.5	10.0	33.7	21.4
BARDOT	20.5	10.7	30.0	20.4
BR 1518	17.8	8.3	33.3	19.8
LSD VALUE	8.3	2.2	3.9	4.8

1/ THATCH MEASUREMENTS RATED AT "CA1" IN 1992 & 1993, AT "MD1" IN 1993 AND AT "WA3" IN 1992.

2/ 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. THATCH ASHED DRY WEIGHT OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

THATCH ASHED DRY WEIGHT: GRAMS/0.25 SQ.FT. 2/

NAME	WA3
PENNEAGLE	13.7
BR 1518	13.0
LOPEZ (WVPB 89-D-15)	13.0
NATIONAL	13.0
PRO/CUP (FORBES 89-12)	13.0
COBRA	12.7
REGENT (NORMARC 101)	12.7
CARMEN	12.3
EGMONT	12.3
VIPER (88.CBL)	12.3
BARDOT	12.0
PENNCROSS	12.0
PROVIDENCE	12.0
SR 1020	12.0
EMERALD	11.7
PUTTER	11.7
TRACENTA	11.3
88.CBE	11.0
ALLURE	11.0
TAMU 88-1	10.7
LSD VALUE	1.8

1/ THATCH ASHED DRY WEIGHT RATED IN 1993 ONLY.

2/ 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. FUSARIUM PATCH RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

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

NAME	WA3
VIPER (88.CBL)	9.0
SR 1020	8.3
BR 1518	8.0
CARMEN	8.0
COBRA	8.0
EMERALD	8.0
ALLURE	7.7
PROVIDENCE	7.7
88.CBE	7.3
BARDOT	7.3
TRACENTA	7.3
PENNCROSS	7.0
PUTTER	7.0
REGENT (NORMARC 101)	7.0
PRO/CUP (FORBES 89-12)	6.7
NATIONAL	6.3
EGMONT	6.0
PENNEAGLE	6.0
TAMU 88-1	6.0
LOPEZ (WVPB 89-D-15)	4.7
LSD VALUE	2.5

1/ FUSARIUM PATCH RATED IN 1992 ONLY.

2/ 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. LEAF SPOT RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

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

NAME	OH2	OR5	MEAN
TAMU 88-1	6.7	7.3	7.0
PENNCROSS	6.7	7.0	6.8
CARMEN	6.3	7.0	6.7
LOPEZ (WVPB 89-D-15)	7.0	6.3	6.7
PENNEAGLE	6.0	7.3	6.7
COBRA	6.0	7.0	6.5
PRO/CUP (FORBES 89-12)	6.7	6.3	6.5
PROVIDENCE	6.7	6.3	6.5
EMERALD	6.3	6.3	6.3
PUTTER	7.3	5.3	6.3
BR 1518	7.0	5.0	6.0
NATIONAL	6.3	5.7	6.0
REGENT (NORMARC 101)	6.0	6.0	6.0
TRACENTA	6.3	5.0	5.7
ALLURE	6.0	5.0	5.5
BARDOT	7.0	4.0	5.5
SR 1020	6.7	4.3	5.5
EGMONT	6.0	4.0	5.0
LSD VALUE	1.8	0.7	0.9

1/ LEAF SPOT RATED AT "OH2" IN 1991 AND AT "OR5" IN 1990.

2/ 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. DOLLAR SPOT RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE
1990-1993 DATA

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

NAME	IN1	MD1	NJ1	NJ3	OH2	ON1	RI1	UB1	MEAN
EGMONT	7.0	8.8	8.0	7.2	6.2	4.3	6.0	6.8	6.8
TRACENTA	7.1	8.8	7.5	6.8	5.8	4.0	6.0	6.9	6.6
BARDOT	7.1	8.8	7.8	6.7	6.2	4.0	4.8	6.9	6.5
ALLURE	6.9	8.3	7.5	6.3	5.9	5.0	5.5	4.3	6.2
BR 1518	6.7	8.5	7.3	6.3	5.4	4.7	5.3	5.3	6.2
PROVIDENCE	5.8	8.2	5.3	5.0	5.8	3.0	5.0	6.3	5.5
NATIONAL	6.4	8.2	4.8	5.0	5.8	3.3	4.7	5.4	5.4
REGENT (NORMARC 101)	5.8	8.3	4.7	5.5	5.7	3.3	3.7	6.0	5.4
PENNEAGLE	5.4	8.2	5.2	5.5	5.9	3.3	4.2	5.1	5.3
LOPEZ (WVPB 89-D-15)	6.1	8.3	3.8	5.0	5.6	3.0	4.2	4.3	5.0
PENNCROSS	4.9	8.5	4.8	5.3	5.8	3.0	2.8	4.9	5.0
COBRA	5.7	8.2	4.3	4.8	5.3	3.3	4.0	3.8	4.9
VIPER (88.CBL)	.	7.8	4.3	.	.	3.0	3.5	5.4	4.8
88.CBE	.	.	4.5	.	.	.	4.3	4.9	4.6
PUTTER	4.9	7.2	4.3	4.7	5.6	3.0	3.5	3.2	4.5
PRO/CUP (FORBES 89-12)	4.1	7.7	3.2	4.7	5.7	3.0	3.8	4.1	4.5
CARMEN	4.7	7.8	2.3	4.8	5.7	3.0	4.0	3.7	4.5
TAMU 88-1	3.6	8.2	2.5	.	5.3	3.7	3.0	2.3	4.1
SR 1020	4.1	7.2	3.0	4.2	5.2	3.0	2.3	3.6	4.1
EMERALD	4.1	7.7	2.2	4.3	4.8	3.3	2.5	1.7	3.8
LSD VALUE	1.3	1.2	1.2	1.2	1.6	1.0	1.9	1.5	0.6

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 21. RED THREAD RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

NAME	RED THREAD RATINGS 1-9; 9=NO DISEASE 2/ RI1
BARDOT	8.0
CARMEN	8.0
EMERALD	8.0
LOPEZ (WVPB 89-D-15)	8.0
PENNEAGLE	8.0
PRO/CUP (FORBES 89-12)	8.0
PROVIDENCE	8.0
PUTTER	8.0
TAMU 88-1	8.0
VIPER (88.CBL)	8.0
88.CBE	7.7
COBRA	7.7
NATIONAL	7.7
PENNCROSS	7.7
REGENT (NORMARC 101)	7.7
SR 1020	7.7
EGMONT	7.3
TRACENTA	7.0
ALLURE	6.7
BR 1518	6.7
LSD VALUE	0.6

1/ RED THREAD RATED IN 1992 ONLY.

2/ 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 22. BROWN PATCH RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE
1990-1993 DATA

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

NAME	IL1	IN1	MD1	NJ1	NJ3	OH2	UB1	VA5	MEAN
PROVIDENCE	9.0	9.0	8.7	7.2	6.8	9.0	5.0	9.0	8.0
PRO/CUP (FORBES 89-12)	9.0	9.0	8.7	7.2	6.7	9.0	5.0	9.0	7.9
LOPEZ (WVPB 89-D-15)	8.5	8.7	8.7	6.7	7.0	9.0	5.0	8.8	7.8
PENNEAGLE	9.0	9.0	8.7	6.2	6.3	9.0	4.3	8.8	7.7
TAMU 88-1	.	8.7	8.5	6.7	.	9.0	4.0	8.8	7.6
PUTTER	8.7	9.0	7.8	6.8	6.7	9.0	4.3	8.3	7.6
REGENT (NORMARC 101)	8.7	8.3	9.0	7.2	5.7	9.0	3.7	9.0	7.6
NATIONAL	8.8	9.0	8.5	5.8	6.5	8.7	4.0	9.0	7.5
COBRA	8.5	9.0	8.5	7.2	5.8	9.0	3.3	8.8	7.5
PENNCROSS	9.0	9.0	7.8	5.5	7.0	9.0	3.7	9.0	7.5
EMERALD	6.5	9.0	8.7	6.5	5.8	9.0	5.7	8.7	7.5
CARMEN	8.7	9.0	8.3	5.7	6.2	9.0	3.7	8.7	7.4
VIPER (88.CBL)	8.5	.	8.5	6.8	.	.	4.0	8.5	7.3
SR 1020	7.3	7.7	8.7	6.3	6.3	9.0	2.7	8.8	7.1
88.CBE	8.7	.	.	6.8	.	.	3.3	8.7	6.9
TRACENTA	5.7	2.7	7.0	3.7	2.8	8.7	5.0	8.0	5.4
BARDOT	4.0	2.7	7.0	3.3	3.7	9.0	4.3	7.8	5.2
EGMONT	4.8	2.3	6.3	2.5	3.3	8.3	5.7	8.2	5.2
BR 1518	7.2	3.0	4.7	4.2	2.7	8.7	3.3	7.2	5.1
ALLURE	.	2.3	6.7	3.8	2.3	9.0	2.7	8.8	5.1
LSD VALUE	1.6	1.3	1.3	1.7	1.3	0.4	1.7	1.1	0.5

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

TABLE 23. TAKE-ALL PATCH RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

TAKE-ALL PATCH RATINGS 1-9; 9=NO DISEASE 2/

NAME	UB1
TRACENTA	8.7
ALLURE	8.3
BARDOT	8.3
EGMONT	8.3
PENNEAGLE	7.3
PROVIDENCE	7.3
REGENT (NORMARC 101)	7.0
CARMEN	6.7
COBRA	6.7
PRO/CUP (FORBES 89-12)	6.7
LOPEZ (WVPB 89-D-15)	6.3
PUTTER	6.0
88.CBE	5.7
BR 1518	5.7
NATIONAL	5.0
PENNCROSS	5.0
TAMU 88-1	5.0
EMERALD	4.7
SR 1020	4.7
VIPER (88.CBL)	4.7
LSD VALUE	3.7

1/ TAKE-ALL PATCH RATED IN 1990 ONLY.

2/ 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 24. CHINCH BUG RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

CHINCH BUG RATINGS 1-9; 9=NO DAMAGE 2/

NAME	MD1	RI1	MEAN
EGMONT	7.7	9.0	8.3
BR 1518	7.3	9.0	8.2
TRACENTA	7.3	9.0	8.2
BARDOT	7.7	8.3	8.0
ALLURE	8.0	7.7	7.8
PUTTER	7.7	7.0	7.3
PENNEAGLE	7.0	7.0	7.0
SR 1020	7.0	6.7	6.8
NATIONAL	7.3	6.3	6.8
PROVIDENCE	7.0	5.7	6.3
REGENT (NORMARC 101)	6.7	6.0	6.3
EMERALD	8.7	4.0	6.3
TAMU 88-1	6.3	6.0	6.2
VIPER (88.CBL)	7.0	4.7	5.8
COBRA	7.0	3.7	5.3
PENNCROSS	5.3	5.0	5.2
CARMEN	5.3	4.7	5.0
PRO/CUP (FORBES 89-12)	6.7	3.3	5.0
88.CBE	.	4.7	4.7
LOPEZ (WVPB 89-D-15)	6.7	2.7	4.7
LSD VALUE	1.7	2.2	1.4

1/ CHINCH BUG RATED IN 1991 ONLY.

2/ 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 25. UNIFORMITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

	UNIFORMITY RATINGS 1-9; 9=BEST 2/
NAME	OH2
SR 1020	7.7
COBRA	6.7
PENNEAGLE	6.7
REGENT (NORMARC 101)	6.7
TAMU 88-1	6.7
CARMEN	6.3
EMERALD	6.3
LOPEZ (WVPB 89-D-15)	6.3
PRO/CUP (FORBES 89-12)	6.3
PUTTER	6.3
EGMONT	6.0
PENNCROSS	6.0
TRACENTA	6.0
BARDOT	5.7
ALLURE	5.3
NATIONAL	5.0
PROVIDENCE	5.0
BR 1518	4.3
LSD VALUE	1.9

1/ UNIFORMITY RATED IN 1990 ONLY.

2/ 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 26. SCALPING RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

	SCALPING RATINGS 1-9; 9=NONE 2/
NAME	OR3
CARMEN	8.0
PENNCROSS	8.0
PRO/CUP (FORBES 89-12)	8.0
PROVIDENCE	8.0
LOPEZ (WVPB 89-D-15)	7.7
PENNEAGLE	7.7
REGENT (NORMARC 101)	7.7
SR 1020	7.7
VIPER (88.CBL)	7.7
88.CBE	7.3
COBRA	7.3
EGMONT	7.3
EMERALD	7.3
TAMU 88-1	7.3
BARDOT	7.0
PUTTER	7.0
TRACENTA	7.0
BR 1518	6.7
ALLURE	6.3
NATIONAL	6.3
LSD VALUE	1.2

1/ SCALPING RATED IN 1990 ONLY.

2/ 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 27. HERBICIDE INJURY RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

HERBICIDE INJURY RATINGS 1-9; 9=NO INJURY 2/

NAME	WA3
EMERALD	8.0
PUTTER	8.0
EGMONT	7.7
PRO/CUP (FORBES 89-12)	7.7
PROVIDENCE	7.7
BARDOT	7.3
VIPER (88.CBL)	7.3
ALLURE	7.0
BR 1518	7.0
CARMEN	6.7
COBRA	6.7
LOPEZ (WVPB 89-D-15)	6.7
PENNEAGLE	6.7
REGENT (NORMARC 101)	6.7
88.CBE	6.3
SR 1020	6.3
TAMU 88-1	6.3
NATIONAL	5.3
PENNCROSS	4.7
TRACENTA	4.7
LSD VALUE	4.2

1/ HERBICIDE INJURY RATED IN 1993 ONLY.

2/ 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 28. POA ANNUA RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

POA ANNUA RATINGS 1-9; 9=NO POA ANNUA 2/

NAME	OH2
PENNEAGLE	6.7
EMERALD	6.3
TAMU 88-1	6.3
PENNCROSS	6.0
PROVIDENCE	6.0
PUTTER	6.0
REGENT (NORMARC 101)	6.0
PRO/CUP (FORBES 89-12)	5.7
ALLURE	5.3
COBRA	5.3
EGMONT	5.3
NATIONAL	5.3
SR 1020	5.3
CARMEN	5.0
LOPEZ (WVPB 89-D-15)	5.0
TRACENTA	5.0
BARDOT	4.7
BR 1518	4.3
LSD VALUE	1.5

1/ POA ANNUA RATED IN 1991 ONLY.

2/ 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 29. PERCENT POA ANNUA (JANUARY) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

	PERCENT POA ANNUA: LOCATIONS 2/
NAME	CA1
EMERALD	26.3
NATIONAL	26.3
BARDOT	22.7
SR 1020	22.0
TAMU 88-1	22.0
CARMEN	21.3
LOPEZ (WVPB 89-D-15)	21.3
ALLURE	20.3
PRO/CUP (FORBES 89-12)	20.0
EGMONT	18.7
BR 1518	14.3
TRACENTA	13.7
PENNCROSS	10.7
PROVIDENCE	10.3
COBRA	10.0
PUTTER	7.0
REGENT (NORMARC 101)	6.3
PENNEAGLE	5.0
LSD VALUE	16.3

1/ PERCENT POA ANNUA (JANUARY) RATED IN 1993 ONLY.

2/ 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 30. PERCENT POA ANNUA (FEBRUARY) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

	PERCENT POA ANNUA: LOCATIONS 2/		
NAME	CA1	VA5	MEAN
BR 1518	33.7	30.0	31.8
88.CBE	.	31.7	31.7
VIPER (88.CBL)	.	31.7	31.7
LOPEZ (WVPB 89-D-15)	19.7	43.3	31.5
SR 1020	22.7	38.3	30.5
COBRA	12.0	45.0	28.5
PROVIDENCE	14.0	41.7	27.8
CARMEN	22.0	31.7	26.8
PRO/CUP (FORBES 89-12)	20.0	28.3	24.2
TRACENTA	17.0	28.3	22.7
TAMU 88-1	11.3	33.3	22.3
ALLURE	19.0	25.0	22.0
PENNEAGLE	2.3	35.0	18.7
EMERALD	17.7	16.7	17.2
EGMONT	15.3	18.3	16.8
BARDOT	11.0	21.7	16.3
NATIONAL	4.0	28.3	16.2
REGENT (NORMARC 101)	12.0	15.0	13.5
PENNCROSS	12.0	11.7	11.8
PUTTER	2.3	13.3	7.8
LSD VALUE	22.9	30.9	20.3

1/ PERCENT POA ANNUA (FEBRUARY) RATED AT "CA1" IN 1993 AND AT "VA5" IN 1991.

2/ 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 31. PERCENT POA ANNUA (APRIL) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

	PERCENT POA ANNUA: LOCATIONS 2/		
NAME	CA1	VA5	MEAN
SR 1020	32.3	50.0	41.2
VIPER (88.CBL)	.	40.8	40.8
BR 1518	25.3	45.0	35.2
LOPEZ (WVPB 89-D-15)	18.3	51.7	35.0
COBRA	13.7	55.8	34.8
88.CBE	.	34.2	34.2
NATIONAL	21.7	45.8	33.8
PRO/CUP (FORBES 89-12)	24.7	40.0	32.3
CARMEN	23.7	39.2	31.4
TAMU 88-1	8.3	51.7	30.0
EMERALD	15.0	39.2	27.1
PROVIDENCE	12.3	41.7	27.0
EGMONT	13.3	40.0	26.7
ALLURE	19.7	32.5	26.1
PENNEAGLE	5.7	43.3	24.5
TRACENTA	13.7	30.8	22.3
BARDOT	12.3	30.8	21.6
PENNCROSS	13.0	29.2	21.1
REGENT (NORMARC 101)	10.3	26.7	18.5
PUTTER	6.3	24.2	15.3
LSD VALUE	14.6	23.1	17.2

1/ PERCENT POA ANNUA (APRIL) RATED AT "CA1" IN 1993 AND AT "VA5" IN 1991 & 1992.

2/ 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 32. PERCENT POA ANNUA (MAY) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

NAME	PERCENT POA ANNUA: LOCATIONS 2/		
	CA1	VA5	MEAN
SR 1020	15.5	30.0	22.8
LOPEZ (WVPB 89-D-15)	18.2	26.0	22.1
NATIONAL	20.7	20.8	20.8
VIPER (88.CBL)	.	20.0	20.0
TRACENTA	17.8	20.2	19.0
ALLURE	10.7	24.8	17.7
COBRA	8.8	24.7	16.8
PRO/CUP (FORBES 89-12)	12.0	20.4	16.2
88.CBE	.	16.0	16.0
TAMU 88-1	10.5	21.4	16.0
PENNEAGLE	2.5	28.5	15.5
BR 1518	13.8	16.7	15.3
EGMONT	12.2	17.9	15.0
PROVIDENCE	9.7	20.0	14.8
BARDOT	11.2	17.0	14.1
EMERALD	14.3	12.7	13.5
CARMEN	12.0	14.6	13.3
PUTTER	5.0	17.3	11.2
REGENT (NORMARC 101)	6.3	14.2	10.3
PENNCROSS	8.2	8.8	8.5
LSD VALUE	9.7	12.2	9.2

1/ PERCENT POA ANNUA (MAY) RATED AT "CA1" IN 1992 & 1993 AND AT "VA5" IN 1991-93.

2/ 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 33. PERCENT POA ANNUA (JUNE) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

NAME	PERCENT POA ANNUA: LOCATIONS 2/ CA1	VA5	MEAN
VIPER (88.CBL)	.	33.3	33.3
88.CBE	.	28.3	28.3
LOPEZ (WVPB 89-D-15)	5.0	50.0	27.5
BR 1518	5.3	46.7	26.0
COBRA	1.7	45.0	23.3
NATIONAL	10.0	35.0	22.5
ALLURE	3.3	40.0	21.7
SR 1020	1.7	40.0	20.8
TAMU 88-1	5.0	33.3	19.2
PENNEAGLE	1.7	35.0	18.3
CARMEN	3.3	31.7	17.5
TRACENTA	5.0	30.0	17.5
PRO/CUP (FORBES 89-12)	5.0	26.7	15.8
PROVIDENCE	3.3	28.3	15.8
EGMONT	6.7	23.3	15.0
EMERALD	5.0	25.0	15.0
BARDOT	5.0	21.7	13.3
REGENT (NORMARC 101)	5.0	21.7	13.3
PENNCROSS	1.7	20.0	10.8
PUTTER	1.7	18.3	10.0
LSD VALUE	6.3	30.8	16.9

1/ PERCENT POA ANNUA (JUNE) RATED AT "CA1" IN 1992 AND AT "VA5" IN 1990.

2/ 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 34. PERCENT POA ANNUA (JULY) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

	PERCENT POA ANNUA: LOCATIONS 2/		
NAME	CA1	VA5	MEAN
BR 1518	43.5	39.2	41.3
NATIONAL	33.5	34.2	33.8
VIPER (88.CBL)	.	33.3	33.3
SR 1020	22.5	40.8	31.7
EGMONT	38.5	23.3	30.9
LOPEZ (WVPB 89-D-15)	19.7	37.5	28.6
BARDOT	39.3	16.7	28.0
TRACENTA	28.5	26.7	27.6
EMERALD	37.2	15.0	26.1
COBRA	13.5	38.3	25.9
CARMEN	26.3	25.0	25.7
PRO/CUP (FORBES 89-12)	24.5	24.2	24.3
88.CBE	.	22.5	22.5
ALLURE	17.2	27.5	22.3
REGENT (NORMARC 101)	21.8	19.2	20.5
PENNEAGLE	4.5	35.8	20.2
PROVIDENCE	21.0	16.7	18.8
TAMU 88-1	9.2	25.8	17.5
PUTTER	5.7	16.7	11.2
PENNCROSS	8.2	13.3	10.8
LSD VALUE	23.7	18.2	15.6

1/ PERCENT POA ANNUA (JULY) RATED AT "CA1" IN 1992 & 1993 AND AT "VA5" IN 1990 & 1992.

2/ 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 35. PERCENT POA ANNUA (AUGUST) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

	PERCENT POA ANNUA: LOCATIONS 2/		
NAME	CA1	VA5	MEAN
VIPER (88.CBL)	.	35.0	35.0
SR 1020	11.7	48.3	30.0
88.CBE	.	25.0	25.0
BR 1518	15.0	35.0	25.0
LOPEZ (WVPB 89-D-15)	6.7	43.3	25.0
COBRA	4.3	43.3	23.8
NATIONAL	11.7	35.0	23.3
CARMEN	15.0	26.7	20.8
PENNEAGLE	1.0	38.3	19.7
ALLURE	11.7	26.7	19.2
TRACENTA	18.3	20.0	19.2
EGMONT	13.3	23.3	18.3
EMERALD	23.3	11.7	17.5
BARDOT	20.0	13.3	16.7
PRO/CUP (FORBES 89-12)	8.3	20.0	14.2
TAMU 88-1	5.0	23.3	14.2
PROVIDENCE	5.3	18.3	11.8
REGENT (NORMARC 101)	5.0	16.7	10.8
PUTTER	3.0	18.3	10.7
PENNCROSS	5.3	6.7	6.0
LSD VALUE	10.0	29.9	16.9

1/ PERCENT POA ANNUA (AUGUST) RATED AT "CA1" IN 1992 AND AT "VA5" IN 1990.

2/ 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 36. PERCENT POA ANNUA (SEPTEMBER) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

	PERCENT POA ANNUA: LOCATIONS 2/		
NAME	CA1	VA5	MEAN
ALLURE	9.0	55.0	32.0
BR 1518	9.0	50.0	29.5
EGMONT	8.0	31.7	19.8
BARDOT	9.3	28.3	18.8
SR 1020	9.3	23.3	16.3
EMERALD	21.0	11.0	16.0
TRACENTA	6.7	24.3	15.5
LOPEZ (WVPB 89-D-15)	4.7	25.0	14.8
COBRA	2.7	26.7	14.7
NATIONAL	9.3	16.7	13.0
CARMEN	8.7	16.3	12.5
PRO/CUP (FORBES 89-12)	9.3	14.0	11.7
TAMU 88-1	6.3	15.0	10.7
88.CBE	.	8.7	8.7
PENNEAGLE	1.7	15.3	8.5
VIPER (88.CBL)	.	8.3	8.3
PROVIDENCE	5.3	7.3	6.3
REGENT (NORMARC 101)	5.7	6.0	5.8
PUTTER	1.7	7.7	4.7
PENNCROSS	3.0	3.0	3.0
LSD VALUE	8.0	21.5	12.3

1/ PERCENT POA ANNUA (SEPTEMBER) RATED IN 1992 ONLY.

2/ 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 37. PERCENT POA ANNUA (OCTOBER) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

	PERCENT POA ANNUA: LOCATIONS 2/
NAME	CA1
BR 1518	93.3
ALLURE	91.3
TRACENTA	86.7
PRO/CUP (FORBES 89-12)	85.3
BARDOT	80.3
PUTTER	66.0
NATIONAL	65.7
COBRA	65.0
LOPEZ (WVPB 89-D-15)	61.7
EGMONT	61.0
EMERALD	57.0
PENNCROSS	53.7
PENNEAGLE	52.0
TAMU 88-1	49.0
SR 1020	46.0
CARMEN	45.7
PROVIDENCE	43.3
REGENT (NORMARC 101)	33.3
LSD VALUE	31.0

1/ PERCENT POA ANNUA (OCTOBER) RATED IN 1993 ONLY.

2/ 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 38. PERCENT POA ANNUA (DECEMBER) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

PERCENT POA ANNUA: LOCATIONS 2/

NAME	VA5
SR 1020	48.3
COBRA	40.0
LOPEZ (WVPB 89-D-15)	40.0
BR 1518	36.7
TAMU 88-1	33.3
PROVIDENCE	31.7
NATIONAL	30.0
PRO/CUP (FORBES 89-12)	30.0
VIPER (88.CBL)	30.0
88.CBE	28.3
ALLURE	28.3
PENNEAGLE	28.3
BARDOT	25.0
CARMEN	25.0
EMERALD	25.0
EGMONT	20.0
REGENT (NORMARC 101)	20.0
PUTTER	16.7
TRACENTA	16.7
PENNCROSS	11.7
LSD VALUE	23.0

1/ PERCENT POA ANNUA (DECEMBER) RATED IN 1990 ONLY.

2/ 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 39. PERCENT POA ANNUA (MEAN) RATINGS OF BENTGRASS CULTIVARS GROWN ON A FAIRWAY OR TEE 1/
1990-1993 DATA

	PERCENT POA ANNUA: LOCATIONS 2/			
NAME	CA1	OH2	VA5	MEAN
BR 1518	26.8	51.7	30.9	36.4
ALLURE	19.9	41.0	30.4	30.4
EGMONT	20.7	44.3	23.3	29.5
EMERALD	23.7	46.7	16.8	29.0
SR 1020	19.1	24.3	38.8	27.4
VIPER (88.CBL)	.	.	27.3	27.3
BARDOT	22.9	36.7	22.1	27.2
TRACENTA	22.1	34.3	25.0	27.2
NATIONAL	22.4	32.7	26.3	27.1
LOPEZ (WVPB 89-D-15)	18.2	26.0	32.3	25.5
COBRA	13.1	24.3	31.5	23.0
CARMEN	18.7	28.7	20.6	22.7
PRO/CUP (FORBES 89-12)	21.1	17.7	27.1	21.9
TAMU 88-1	12.6	23.3	25.8	20.6
88.CBE	.	.	20.5	20.5
PROVIDENCE	13.3	23.7	23.7	20.2
PENNEAGLE	7.1	17.0	32.4	18.8
REGENT (NORMARC 101)	11.6	21.0	16.1	16.2
PUTTER	9.3	20.3	18.8	16.1
PENNCROSS	11.3	22.7	11.2	15.0
LSD VALUE	14.4	15.1	11.1	8.3

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).