

## **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, a national director, and an executive coordinator. The program will 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. The national director is responsible for the overall coordination and operation of the NTEP, including (1) soliciting entries and distribution of test seed sets to evaluators, (2) data summarization and distribution, and, (3) management of test materials, facilities, and finances.

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Executive Coordinator, NTEP Policy Committee - J. Jack Murray

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LOCATIONS SUBMITTING DATA FOR 1991

<u>State</u>	<u>Location</u>	<u>Code</u>
California	Santa Clara	CA1
Georgia	Griffin	GA1
Kansas	Manhattan	KS1
Kentucky	Lexington	KY1
Massachusetts	Deerfield	MA1
Michigan	East Lansing	MI1
Mississippi	Mississippi State	MS1
Texas	Dallas (mechanical traffic- summer)	TX1
Washington	Puyallup	WA3

1989 NATIONAL BENTGRASS TEST

(Greens-Modified Soil)

Entries and Sponsors

<u>Entry No.</u>	<u>Name</u>	<u>Species</u>	<u>Sponsor</u>
1	BR 1518	A. castellana (dryland bent)	USGA Green Section
2	Carmen	creeping	Advanta Seeds West
3	Tracentia	colonial	Advanta Seeds West
4	Putter	creeping	Jacklin Seed Co.
5	SR 1020	creeping	Seed Research of Oregon
6	Providence	creeping	Seed Research of Oregon
7	Bardot	colonial	Barenbrug USA
8	Penncross	creeping	Tee-2-Green Corp.
9	Pennlinks	creeping	Tee-2-Green Corp.
10	UM 84-01 (Biska)	creeping	Johnson Seeds, Ltd.
11	Egmont	A. capillaris (browntop bent)	Olsen-Fennell Seed Co.
12	Normarc 101 (Regent)	creeping	Normarc Seed Company
13	Forbes 89-12 (PRO/CUP)	creeping	Forbes Seed & Grain
14	WVPB 89-D-15 (Lopez)	creeping	Finelawn Research Corp.
15	National	creeping	Pickseed West
16	88.CBE	creeping	International Seeds
17	88.CBL	creeping	International Seeds
18	Cobra	creeping	International Seeds
19	Emerald	creeping	International Seeds
20	TAMU 88-1	creeping	Texas A&M University
21	Allure	colonial	Willamette Seed Co.
22	MSCB-6	creeping	Mississippi St. Univ.
23	MSCB-8	creeping	Mississippi St. Univ.

TABLE A.

1991 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN  
THE 1989 NATIONAL BENTGRASS (MODIFIED SOIL GREEN) TEST

LOCATION	SOIL TEXTURE	SOIL PH	SOIL PHOSPHOROUS (LBS/ACRE)	SOIL POTASSIUM (LBS/ACRE)	NITROGEN (LBS/1000 SQ FT)	SUN OR SHADE	MOWING HEIGHT (IN)	IRRIGATION PRACTICED
CA1	SAND	6.1-6.5	61-150	0-150	3.1-4.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
GA1	SAND	4.6-5.5	61-150	151-240	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
KS1	LOAMY SAND	6.1-6.5	61-150	151-240	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
KY1	SAND	7.1-7.5	0-60	151-240	5.1-6.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MA1	SAND	5.6-6.0	0-60	0-150	5.1-6.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MI1	-	7.6-8.5	61-150	0-150	3.1-4.0	FULL SUN	0.0-0.5 (5/32")	TO PREVENT STRESS
MS1	SAND	6.1-6.5	151-270	241-375	7.1-8.0	FULL SUN	0.0-0.5	TO PREVENT DORMANCY
TX1	LOAMY SAND	6.1-6.5	0-60	0-150	7.1-8.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
WA3	SAND	5.6-6.0	0-60	151-240	5.1-6.0	FULL SUN	0.0-0.5 (3/16")	TO PREVENT STRESS

TABLE B.

## LOCATIONS AND DATA COLLECTED IN 1991

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
CA1	X		X		X	X		X	X			
GA1				X	X	X	X	X	X	X		
KS1								X	X	X	X	
KY1			X	X	X	X	X	X	X	X		
MA1						X	X	X	X	X		
MI1						X	X	X				
MS1	X	X	X	X	X							
TX1								X				X
WA3	X		X		X	X	X	X	X	X	X	X

TABLE B. (CONTINUED)

## LOCATIONS AND DATA COLLECTED IN 1991

LOCATION	SPRING GREENUP RATING	SPRING DENSITY	SUMMER DENSITY	FALL DENSITY	FROST TOLERANCE	WINTER COLOR	DROUGHT TOLERANCE DORMANCY
CA1		X	X	X			
GA1							
KS1							
KY1							
MA1	X						
MI1							
MS1							X
TX1							
WA3			X		X	X	

TABLE 1. MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS GROWN ON A MODIFIED SOIL GREEN AT NINE LOCATIONS IN THE UNITED STATES 1991 DATA

NAME	TURFGRASS QUALITY 1-9; 9=IDEAL TURF 1/									
	CA1	GA1	KS1	KY1	MA1	MI1	MS1	TX1	WA3	MEAN
* PROVIDENCE	.	7.1	7.2	6.4	7.5	6.6	5.9	4.2	5.8	6.3
* PUTTER	6.3	6.9	7.0	5.5	6.9	6.2	5.7	4.3	6.6	6.2
88.CBL	.	6.9	6.8	6.0	7.5	6.2	6.5	3.3	5.7	6.1
* WVPB 89-D-15 (LOPEZ)	6.1	6.5	6.8	6.1	7.1	5.0	6.0	.	5.4	6.1
* SR 1020	6.4	6.7	6.9	5.5	7.1	5.9	6.4	4.2	5.8	6.1
* PENNLINKS	6.3	7.0	6.8	6.0	7.5	5.8	6.3	3.7	5.6	6.1
* FORBES 89-12 (PRO/CUP)	6.3	6.7	6.5	5.6	7.7	6.1	6.3	3.8	5.6	6.1
* NORMARC 101 (REGENT)	6.3	6.6	7.0	5.8	7.3	6.0	6.3	3.5	5.3	6.0
MSCB-8	6.3	.	6.6	.	6.8	5.3	6.3	.	4.3	6.0
* COBRA	6.6	6.4	6.8	5.3	7.3	5.8	6.1	3.3	5.6	5.9
88.CBE	5.8	6.6	6.8	6.2	7.3	5.7	6.1	3.5	5.1	5.9
* PENNCROSS	6.0	6.9	6.7	5.8	6.7	5.8	6.0	3.8	4.3	5.8
* CARMEN	5.9	6.8	6.5	5.2	6.6	6.0	5.7	3.5	4.7	5.7
TAMU 88-1	6.4	5.9	6.7	4.8	7.1	5.9	5.9	3.3	4.8	5.6
UM 84-01 (BISKA)	6.1	6.8	6.1	5.0	6.6	5.7	5.7	3.3	5.5	5.6
MSCB-6	.	5.6	6.3	.	6.5	4.7	6.3	.	4.4	5.6
* NATIONAL	5.2	6.5	6.5	6.3	6.4	4.7	5.4	4.7	4.4	5.6
* EMERALD	5.7	5.9	6.8	5.7	6.1	4.9	4.7	3.8	5.2	5.4
* EGMONT	5.5	4.7	6.3	6.0	6.7	1.8	5.5	.	5.9	5.3
* BARDOT	4.4	5.2	6.6	5.1	6.3	1.2	6.0	4.2	6.1	5.0
* TRACENTA	4.2	5.3	6.1	5.6	6.2	1.1	5.1	3.3	6.3	4.8
ALLURE	4.1	5.0	6.3	.	5.9	1.7	5.2	.	4.8	4.7
BR 1518	3.4	5.5	6.5	4.9	4.7	1.1	5.3	3.3	3.5	4.3
LSD VALUE	0.8	0.6	0.4	0.5	1.2	1.1	0.9	1.3	0.5	0.3

\* COMMERCIALY AVAILABLE IN THE UNITED STATES IN 1992

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 MODIFIED SOIL GREEN AT NINE LOCATIONS IN THE U.S.  
1991 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS 1/												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
PROVIDENCE	4.8	6.0	5.6	6.6	6.7	7.1	7.0	6.0	7.2	6.5	6.2	5.0	6.3
FUTTER	5.7	5.3	5.5	5.4	6.2	6.3	7.1	5.9	7.0	6.7	7.0	6.3	6.2
88.CBL	5.2	6.7	5.8	6.0	6.8	6.7	6.7	5.7	7.1	6.7	5.5	5.0	6.1
WBPB 89-D-15 (LOPEZ)	5.4	5.0	6.0	5.2	6.4	6.6	6.6	6.0	6.4	6.3	5.3	4.0	6.1
SR 1020	5.8	6.7	5.8	6.9	6.4	6.0	6.1	5.6	7.1	6.3	5.8	6.0	6.1
FENNLINKS	5.4	6.3	6.0	5.9	6.7	6.8	6.4	5.7	7.1	6.3	5.7	4.7	6.1
FORBES 89-12 (PRO/CUP)	5.3	6.7	6.2	6.4	6.7	6.7	6.7	5.8	6.4	6.3	5.2	4.3	6.1
NORMARC 101 (REGENT)	5.4	6.0	5.7	6.8	6.5	6.0	6.3	5.8	7.0	6.3	5.5	4.0	6.0
MSCB-8	5.3	6.0	5.4	7.0	5.6	5.8	6.1	6.3	6.6	5.2	5.0	2.3	6.0
COBRA	5.2	6.3	6.3	5.3	6.1	5.8	6.4	5.8	7.1	6.2	5.7	5.0	5.9
88.CBE	4.8	6.0	5.6	5.8	6.6	6.4	6.1	5.7	6.8	6.5	5.2	4.5	5.9
FENNCROSS	5.3	5.3	6.0	6.6	6.5	6.1	5.3	5.3	6.3	6.5	4.5	3.2	5.8
CARMEN	4.9	5.7	4.9	6.0	6.3	6.4	5.8	5.4	5.9	5.6	5.3	4.8	5.7
TAMU 88-1	5.6	6.0	5.8	5.6	5.8	5.7	5.7	5.6	6.0	5.6	5.3	4.3	5.6
UM 84-01 (BISKA)	4.7	5.3	5.9	5.3	6.4	5.7	6.1	6.0	6.3	6.0	4.7	3.7	5.6
MSCB-6	4.7	5.7	5.3	6.3	5.6	5.6	5.5	5.6	6.1	5.6	4.5	3.0	5.6
NATIONAL	4.0	5.3	4.8	6.0	5.9	5.8	5.9	5.7	6.0	6.1	5.0	4.8	5.6
EMERALD	4.6	5.0	5.5	5.2	5.5	5.3	5.3	5.5	6.4	6.0	6.0	5.2	5.4
EGMONT	5.9	5.7	5.5	4.9	5.9	4.7	5.3	5.2	5.9	6.1	5.8	6.3	5.3
EARDOT	5.3	6.7	5.7	5.0	5.3	4.2	5.5	5.1	5.6	5.6	6.0	5.2	5.0
TRACENTA	5.0	5.0	5.7	5.7	5.3	4.3	5.1	4.8	5.2	6.3	6.0	5.2	4.8
ALLURE	5.3	5.3	5.0	5.7	4.4	4.1	4.5	4.6	4.9	5.3	5.2	5.0	4.7
ER 1518	4.7	5.3	4.5	4.7	4.5	3.4	4.3	3.9	4.4	5.5	4.8	4.7	4.3
LSD VALUE	1.0	1.3	1.0	1.3	0.8	0.9	1.1	1.0	0.8	1.0	1.0	1.3	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 3. RANKING OF MEAN TURFGRASS QUALITY RATINGS OF BENTGRASS CULTIVARS  
GROWN ON A MODIFIED SOIL GREEN AT NINE LOCATIONS IN THE U.S. 1/  
1991 DATA

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

NAME	CA1	GAL	KS1	KY1	MA1	MI1	MS1	TX1	WA3	MEAN
PROVIDENCE	.	1.0	1.0	1.0	3.5	1.0	13.0	4.0	6.0	1
PUTTER	5	4.5	2.5	13.0	11.0	3.0	15.0	2.0	1.0	2
88.CBL	.	3.0	5.5	5.5	3.5	2.0	1.0	15.5	7.0	3
WVPB 89-D-15 (LOPEZ)	9	12.0	8.5	4.0	10.0	15.0	11.0	.	12.0	4
SR 1020	2	8.5	4.0	14.0	9.0	7.0	2.0	4.0	5.0	5
PENNLINKS	8	2.0	8.5	7.0	2.0	9.5	4.5	9.0	10.0	6
FORBES 89-12 (PRO/CUP)	5	8.5	16.5	12.0	1.0	4.0	4.5	7.0	8.5	7
NORMARC 101 (REGENT)	7	10.5	2.5	8.5	6.0	5.5	4.5	11.0	13.0	8
MSCB-8	5	.	13.5	.	12.0	14.0	4.5	.	21.0	9
COBRA	1	14.0	8.5	15.0	5.0	9.5	8.0	15.5	8.5	10
88.CBE	13	10.5	5.5	3.0	7.0	12.5	9.0	11.0	15.0	11
PENNCROSS	11	4.5	11.5	8.5	13.0	11.0	11.0	7.0	22.0	12
CARMEN	12	6.5	16.5	16.0	15.5	5.5	16.5	11.0	18.0	13
TAMU 88-1	3	15.5	11.5	20.0	8.0	8.0	14.0	15.5	16.5	14
UM 84-01 (BISKA)	10	6.5	22.5	18.0	15.5	12.5	16.5	15.5	11.0	15
MSCB-6	.	17.0	19.0	.	17.0	17.5	7.0	.	20.0	16
NATIONAL	16	13.0	16.5	2.0	18.0	17.5	19.0	1.0	19.0	17
EMERALD	14	15.5	8.5	10.0	21.0	16.0	23.0	7.0	14.0	18
EGMONT	15	22.0	20.5	5.5	14.0	19.0	18.0	.	4.0	19
BARDOT	17	20.0	13.5	17.0	19.0	21.0	11.0	4.0	3.0	20
TRACENTA	18	19.0	22.5	11.0	20.0	22.5	22.0	15.5	2.0	21
ALLURE	19	21.0	20.5	.	22.0	20.0	21.0	.	16.5	22
BR 1518	20	18.0	16.5	19.0	23.0	22.5	20.0	15.5	23.0	23

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. SPRING GREENUP RATINGS OF BENTGRASS CULTIVARS  
GROWN ON A MODIFIED SOIL GREEN  
1991 DATA

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

NAME	MA1	MEAN
ALLURE	8.0	8.0
BARDOT	7.7	7.7
EGMONT	7.7	7.7
TRACENTA	7.3	7.3
BR 1518	6.7	6.7
MSCB-8	5.7	5.7
NATIONAL	5.7	5.7
NORMARC 101 (REGENT)	5.3	5.3
PUTIER	5.3	5.3
CARMEN	5.0	5.0
PENNLINKS	5.0	5.0
WVPB 89-D-15 (LOPEZ)	5.0	5.0
88.CBE	4.7	4.7
88.CBL	4.7	4.7
COBRA	4.7	4.7
FORBES 89-12 (PRO/CUP)	4.7	4.7
PENNCROSS	4.7	4.7
SR 1020	4.7	4.7
EMERALD	4.3	4.3
MSCB-6	4.3	4.3
TAMU 88-1	4.3	4.3
PROVIDENCE	4.0	4.0
UM 84-01 (BISKA)	4.0	4.0
LSD VALUE	2.0	2.0

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

TABLE 5. SPRING DENSITY RATINGS OF BENIGRASS CULTIVARS  
GROWN ON A MODIFIED SOIL GREEN  
1991 DATA

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

NAME	CA1	MEAN
SR 1020	7.7	7.7
PENNCROSS	7.3	7.3
PUTTER	7.3	7.3
WVPB 89-D-15 (LOPEZ)	7.3	7.3
CARMEN	7.0	7.0
COBRA	7.0	7.0
EGMONT	7.0	7.0
FORBES 89-12 (PRO/CUP)	7.0	7.0
MSCB-8	7.0	7.0
NORMARC 101 (REGENT)	7.0	7.0
PENNLINKS	7.0	7.0
88.CBE	6.7	6.7
TAMU 88-1	6.7	6.7
NATIONAL	6.3	6.3
UM 84-01 (BISKA)	6.3	6.3
BARDOT	6.0	6.0
EMERALD	6.0	6.0
TRACENTA	5.3	5.3
ALLURE	5.0	5.0
BR 1518	5.0	5.0
LSD VALUE	1.0	1.0

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

TABLE 6. SUMMER DENSITY RATINGS OF BENIGRASS CULTIVARS  
GROWN ON A MODIFIED SOIL GREEN  
1991 DATA

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

NAME	CA1	WA3	MEAN
88.CBL	.	8.3	8.3
PROVIDENCE	.	8.3	8.3
PUTTER	7.3	9.0	8.2
88.CBE	7.7	8.3	8.0
FORBES 89-12 (PRO/CUP)	7.3	8.7	8.0
NORMARC 101 (REGENT)	7.7	8.0	7.8
UM 84-01 (BISKA)	8.0	7.7	7.8
COBRA	7.0	8.3	7.7
EMERALD	7.0	8.3	7.7
PENNLINKS	7.0	8.3	7.7
CARMEN	7.3	8.0	7.7
NATIONAL	7.7	7.3	7.5
BARDOT	7.0	7.7	7.3
SR 1020	6.7	8.0	7.3
TAMU 88-1	7.3	7.0	7.2
MSCB-8	8.0	6.0	7.0
WVPB 89-D-15 (LOPEZ)	7.3	6.3	6.8
TRACENTA	6.0	7.0	6.5
EGMONT	6.3	6.3	6.3
PENNCROSS	7.0	5.0	6.0
MSCB-6	.	5.0	5.0
ALLURE	4.3	5.3	4.8
BR 1518	4.0	2.0	3.0
LSD VALUE	0.9	1.4	0.9

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

TABLE 7. FALL DENSITY RATINGS OF BENTGRASS CULTIVARS  
GROWN ON A MODIFIED SOIL GREEN  
1991 DATA

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

NAME	CA1	MEAN
CARMEN	8.0	8.0
MSCB-8	7.7	7.7
PENNLINKS	7.7	7.7
PUTIER	7.7	7.7
SR 1020	7.7	7.7
COBRA	7.3	7.3
EGMONT	7.3	7.3
FORBES 89-12 (PRO/CUP)	7.3	7.3
NORMARC 101 (REGENT)	7.3	7.3
PENNCROSS	7.3	7.3
TAMU 88-1	7.3	7.3
88.CBE	7.0	7.0
ALLURE	7.0	7.0
EMERALD	7.0	7.0
UM 84-01 (BISKA)	7.0	7.0
WVPB 89-D-15 (LOPEZ)	7.0	7.0
NATIONAL	6.7	6.7
BARDOT	6.0	6.0
TRACENTA	6.0	6.0
BR 1518	5.7	5.7
LSD VALUE	1.0	1.0

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

TABLE 8. FROST TOLERANCE RATINGS OF BENIGRASS CULTIVARS  
GROWN ON A MODIFIED SOIL GREEN  
1991 DATA

FROST TOLERANCE RATINGS 1-9; 9=NO INJURY 1/		
NAME	WA3	MEAN
ALLURE	7.7	7.7
BARDOT	7.7	7.7
EGMONT	7.7	7.7
TRACENTA	7.3	7.3
BR 1518	6.0	6.0
PENNCROSS	5.7	5.7
TAMU 88-1	5.7	5.7
WVPB 89-D-15 (LOPEZ)	5.3	5.3
COBRA	5.0	5.0
EMERALD	5.0	5.0
PROVIDENCE	5.0	5.0
PUTTER	5.0	5.0
CARMEN	4.7	4.7
PENNLINKS	4.7	4.7
SR 1020	4.7	4.7
88.CBL	4.3	4.3
FOREES 89-12 (PRO/CUP)	4.3	4.3
NORMARC 101 (REGENT)	4.3	4.3
88.CBE	3.7	3.7
MSCB-6	3.7	3.7
MSCB-8	3.7	3.7
UM 84-01 (BISKA)	3.3	3.3
NATIONAL	2.0	2.0
LSD VALUE	1.1	1.1

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

TABLE 9. WINTER COLOR RATINGS OF BENTGRASS CULTIVARS  
GROWN ON A MODIFIED SOIL GREEN  
1991 DATA

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

NAME	WA3	MEAN
EGMONT	7.7	7.7
PUTIER	7.3	7.3
BR 1518	6.7	6.7
SR 1020	6.7	6.7
TRACENTA	6.3	6.3
ALLURE	6.0	6.0
BARDOT	6.0	6.0
88.CBL	5.7	5.7
CARMEN	5.3	5.3
PENNLINKS	5.3	5.3
PROVIDENCE	5.3	5.3
WVPB 89-D-15 (LOPEZ)	5.3	5.3
COBRA	5.0	5.0
EMERALD	5.0	5.0
NATIONAL	5.0	5.0
TAMU 88-1	5.0	5.0
88.CBE	4.7	4.7
NORMARC 101 (REGENT)	4.3	4.3
FORBES 89-12 (PRO/CUP)	4.0	4.0
MSCB-8	2.7	2.7
PENNCROSS	2.3	2.3
MSCB-6	2.0	2.0
UM 84-01 (BISKA)	2.0	2.0
LSD VALUE	1.4	1.4

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 10. DROUGHT TOLERANCE (DORMANCY) RATINGS OF BENTGRASS CULTIVARS  
GROWN ON A MODIFIED SOIL GREEN  
1991 DATA

DROUGHT TOLERANCE (DORMANCY) RATINGS 1-9; 9=NO DORMANCY 1/

NAME	MS1	MEAN
BARDOT	7.3	7.3
EGMONT	7.3	7.3
TRACENTA	7.3	7.3
88.CBE	6.0	6.0
BR 1518	5.7	5.7
MSCB-6	5.7	5.7
PENNCROSS	5.7	5.7
CARMEN	5.3	5.3
EMERALD	4.7	4.7
NORMARC 101 (REGENT)	4.7	4.7
PENNLINKS	4.7	4.7
UM 84-01 (BISKA)	4.7	4.7
88.CBL	4.3	4.3
ALLURE	4.3	4.3
TAMU 88-1	4.3	4.3
WVPB 89-D-15 (LOPEZ)	4.3	4.3
FORBES 89-12 (PRO/CUP)	4.0	4.0
PUTTER	4.0	4.0
SR 1020	4.0	4.0
COBRA	3.7	3.7
NATIONAL	3.3	3.3
MSCB-8	2.7	2.7
PROVIDENCE	2.3	2.3
LSD VALUE	2.3	2.3

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).