

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 Maryland Turfgrass Council. 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, 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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LOCATIONS SUBMITTING DATA FOR 1989

<u>State</u>	<u>Location</u>	<u>Code</u>
District of Columbia	Washington Monument Grounds	DC1
Idaho	Post Falls	ID2
Illinois	Urbana	IL1
Illinois	Carbondale	IL2
Indiana	West Lafayette	IN1
Kansas	Manhattan	KS1
Kansas	Wichita	KS2
Kentucky	Lexington	KY1
Maryland	Beltsville	UB1
Maryland	Silver Spring	MD1
Michigan	East Lansing	MI1
Missouri	Columbia	MO1
Nebraska	Lincoln	NE1
New Jersey	North Brunswick	NJ1
New Jersey	Adelphia	NJ2
New York	Ithaca	NY1
Ohio	Marysville	OH2
Oregon	Hubbard	OR1
Oregon	Corvallis	OR2
Pennsylvania	University Park (low mowing)	PA1
Pennsylvania	University Park (high mowing)	PA2
Rhode Island	Kingston	RI1
South Dakota	Brookings	SD1
Virginia	Blacksburg	VA1

1986 NATIONAL PERENNIAL RYEGRASS TEST

Entries and Sponsors

Entry No.	Name	Sponsor			
1	Barry	Barenbrug Holland	37	PSU-222	Joe Duich - Penn State
2	BAR Lp 454 (Barcredo)	Barenbrug Holland	38	PSU-333	Joe Duich - Penn State
3	Tara	Hubbard Seed & Supply	39	Mom Lp 763	Van der Have - Oregon, Inc.
4	BAR Lp 410 (Barrage)	Barenbrug Holland	40	Sheriff	Van der Have - Oregon, Inc.
5	Cowboy	Loft's Seed, Inc.			
6	Yorktown II	Loft's Seed, Inc.	41	Birdie II	Turf-Seed, Inc.
7	Prelude	Loft's Seed, Inc.	42	Citation II	Turf-Seed, Inc.
8	Palmer	Loft's Seed, Inc.	43	Regency	LESCO, Inc.
9	Diplomat	Loft's Seed, Inc.	44	Manhattan II	Turf Merchants & Turf-Seed
10	Pavo (WW E 14)	E. F. Burlingham & Sons	45	PST-2PM (Saturn)	Zajac Performance Seeds
11	Ronja (WW E 31)	E. F. Burlingham & Sons			
12	Caliente	NPI Seed, Inc.	46	PST-2DD	Pure-Seed Testing, Inc.
13	KWS-Al-2 (Aquarius)	Fred Ledebuer-KWS Einbeck	47	PST-2H7 (Dimension)	Van der Have - Oregon, Inc.
14	Delray	Northrup King Co.	48	PST-250 (Competitor)	E. F. Burlingham & Sons
15	Goalie	Northrup King Co.	49	Vintage-2DF	LESCO, Inc.
			50	PST-259 (Commander)	Turf-Seed, Inc.
16	Acrobat (HE 177)	Van der Have - Oregon, Inc.			
17	Rival (HE 178)	Van der Have - Oregon, Inc.	51	PST-M2E (Manhattan II w/endophyte)	Manhattan Rye Growers Assoc.
18	Brenda	Van der Have - Oregon, Inc.	52	246	Turf-Seed, Inc.
19	Derby	International Seeds, Inc.	53	Omega II	Turf-Seed, Inc.
20	Regal	International Seeds, Inc.	54	PST-2HH (Charger)	Pure-Seed Testing, Inc.
21	Gator	International Seeds, Inc.			
22	Patriot	Turf Merchants, Inc.	55	ISI-851 (Lindsay)	International Seeds, Inc.
23	Rodeo	Turf Merchants, Inc.	56	NK 80389	Northrup King Co.
24	Allaire	Jonathan Green & Sons	57	Manhattan	-
25	Pick 300 (Blazer II)	Pickseed West, Inc.	58	Repell	Loft's Seed, Inc.
			59	DEL 946	Northrup King Co.
26	Pick 715	Pickseed West, Inc.			
27	Ovation	O. M. Scott & Sons	60	Belle	E. F. Burlingham & Sons
28	SR 4000	Seed Research, Inc.	61	Pennant	E. F. Burlingham & Sons
29	SR 4031 (Nova)	Seed Research, Inc.	62	J207	Jacklin Seed Co.
30	SR 4100	Seed Research, Inc.	63	J208	Jacklin Seed Co.
			64	Linn	-
31	Pick 233 (Dasher II)	Pickseed West, Inc.			
32	Pick 647 (Riviera)	Roberts Seed Co.	65	Runaway	Van der Have - Oregon, Inc.
33	Pick 600 (Fiesta II)	Pickseed West, Inc.			
34	Ranger	Van der Have - Oregon, Inc.			
35	ISI-K2 (Dillon)	International Seeds, Inc.			

Entry No.	Name	Sponsor
36	Pennfine	Joe Duich - Penn State

TABLE A.

1989 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES
IN THE 1986 NATIONAL PERENNIAL RYEGRASS 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
DC1	LOAM	4.6-5.5	61-150	241-375	1.1-2.0	FULL SUN	2.1-2.5	NO IRRIGATION
ID2	SILT LOAM AND SILT	4.6-5.5	0-60	0-150	2.1-3.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
IL1	SILT LOAM AND SILT	-	-	-	2.1-3.0	FULL SUN	1.6-2.0	TO PREVENT STRESS
IL2	SILTY CLAY AND CLAY	6.1-6.5	61-150	151-240	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT DORMANCY
IN1	SILT LOAM AND SILT	7.1-7.5	61-150	241-375	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
KS1	SILTY CLAY LOAM	7.1-7.5	151-270	376-500	3.1-4.0	FULL SUN	2.6-3.0	TO PREVENT STRESS
KS2	SANDY LOAM	6.6-7.0	61-150	241-375	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
KY1	SILT LOAM AND SILT	6.1-6.5	151-270	241-375	2.1-3.0	FULL SUN	1.6-2.0	ONLY DURING SEVERE STRESS
MD1	SANDY LOAM	6.1-6.5	151-270	0-150	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
MI1	-	-	-	-	-	-	-	-
MO1	SILT LOAM AND SILT	6.1-6.5	-	-	2.1-3.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
NE1	SANDY CLAY LOAM	6.6-7.0	0-60	151-240	3.1-4.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
NJ1	LOAM	6.1-6.5	151-270	151-240	1.1-2.0	FULL SUN	1.1-1.5	TO PREVENT DORMANCY
NJ2	SANDY LOAM	5.6-6.0	61-150	241-375	3.1-4.0	FULL SUN	1.6-2.0	TO PREVENT DORMANCY
NY1	SANDY LOAM	6.1-6.5	0-60	0-150	2.1-3.0	FULL SUN	1.1-1.5	TO PREVENT DORMANCY
OH2	SILTY CLAY AND CLAY	-	-	-	-	FULL SUN	1.1-1.5	ONLY DURING SEVERE STRESS
OR1	SILT LOAM AND SILT	4.6-5.5	151-270	241-375	4.1-5.0	FULL SUN	1.1-1.5	TO PREVENT DORMANCY
OR2	SILTY CLAY LOAM	5.6-6.0	-	-	7.1-8.0	FULL SUN	1.6-2.0	TO PREVENT DORMANCY
PA1	SILT LOAM AND SILT	6.6-7.0	61-150	241-375	2.1-3.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
PA2	SILT LOAM AND SILT	6.6-7.0	61-150	241-375	2.1-3.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
RI1	SILT LOAM AND SILT	6.1-6.5	271-450	241-375	3.1-4.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
SD1	SILTY CLAY LOAM	6.6-7.0	-	-	-	FULL SUN	2.1-2.5	TO PREVENT STRESS
UB1	SILT LOAM AND SILT	5.6-6.0	0-60	0-150	2.1-3.0	FULL SUN	1.1-1.5	TO PREVENT DORMANCY
VA1	-	6.6-7.0	271-450	151-240	3.1-4.0	FULL SUN	1.6-2.0	ONLY DURING SEVERE STRESS

TABLE B.

LOCATIONS AND DATA COLLECTED IN 1989

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
DC1					X	X	X			X	X	
ID2			X				X		X	X		
IL1					X	X		X		X		
IL2							X	X	X	X	X	
IN1				X	X	X	X	X	X			
KS1				X		X	X	X	X	X		
KS2							X	X		X		
KY1			X	X	X	X	X	X		X		
MD1				X	X	X	X		X		X	
MI1				X	X	X	X	X	X	X	X	
MO1			X		X	X		X		X		
NE1					X	X	X	X				
NJ1			X	X	X	X	X	X	X	X	X	
NJ2				X		X	X	X	X	X	X	
NY1				X	X	X	X	X	X	X		
OH2					X				X			
OR1	X	X	X	X	X	X	X	X	X	X	X	X
OR2					X	X	X	X	X			X
PA1				X	X		X	X	X	X		
PA2				X	X		X	X		X		
RI1				X	X	X	X	X	X		X	
SD1					X	X	X	X	X	X		
UB1				X	X	X	X	X	X	X	X	
VA1			X	X	X	X	X	X		X	X	

TABLE B. (continued)

LOCATIONS AND DATA COLLECTED IN 1989

LOCATION	SPRING GREENUP RATING	GENETIC COLOR RATING	LEAF TEXTURE RATING	SPRING DENSITY	SUMMER DENSITY	PERCENT COVER SPRING	PERCENT WINTER KILL	LEAFSPOT	DOLLAR SPOT	RED THREAD	BROWN PATCH	CROWN RUST	CHINCH BUGS	WHITE GRUBS
DC1														
ID2														
IL1									X					
IL2														
IN1	X								X					X
KS1														
KS2														
KY1														
MD1											X			
MI1										X				
MO1														
NE1		X												
NJ1											X			
NJ2														
NY1														
OH2		X						X		X				
OR1												X		
OR2														
PA1									X	X				
PA2									X	X				
RI1														
SD1		X	X	X	X		X							
UB1										X			X	
VA1														

TABLE 1. MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
AT TWENTY-FOUR LOCATIONS IN THE UNITED STATES
1989 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 1/												
NAME	DC1	ID2	IL1	IL2	IN1	KS1	KS2	KY1	MD1	MI1	MO1	NE1
* PST-2PM (SATURN)	4.7	7.3	5.9	7.5	6.1	6.6	7.9	6.2	5.8	5.8	7.3	6.5
* SR 4100	3.4	6.7	5.7	7.9	6.6	6.9	6.8	6.5	6.4	5.4	7.5	5.9
* PENNANT	4.2	6.8	5.6	7.7	6.7	6.6	7.0	6.2	6.7	5.3	7.3	6.2
* SR 4000	3.7	6.4	5.7	7.3	6.1	6.7	6.7	6.4	6.7	5.3	6.7	6.1
* PST-M2E (MAN. II W/ENDO)	4.6	6.1	5.8	6.7	6.3	6.8	7.4	5.6	5.9	5.2	7.0	5.8
* PST-259 (COMMANDER)	4.7	5.8	6.1	7.2	6.3	6.8	7.3	6.4	5.8	5.0	6.9	5.9
* PST-2H7 (DIMENSION)	3.7	6.6	5.9	6.6	6.0	6.6	7.1	6.3	5.3	5.6	6.7	6.4
* PALMER	6.4	6.5	5.8	7.2	6.1	6.3	6.2	6.0	6.2	5.4	6.4	5.8
* PICK 715	3.4	6.4	5.6	5.9	6.4	6.8	6.8	6.4	6.5	4.9	7.3	5.6
* PICK 647 (RIVIERA)	3.7	6.8	5.7	7.6	5.6	6.3	7.2	6.5	5.3	5.3	7.0	6.1
* PST-2HH (CHARGER)	3.5	6.3	6.0	7.7	5.9	6.4	7.1	5.8	6.6	5.3	7.2	5.9
* PICK 233 (DASHER II)	2.7	6.0	5.3	6.5	5.8	6.9	7.4	6.0	5.8	5.3	7.1	6.4
* PICK 600 (FIESTA II)	4.2	6.9	5.7	6.9	6.7	6.8	6.1	6.1	5.0	4.9	6.6	6.3
* REPELL	5.3	5.8	4.8	7.1	6.3	6.3	6.7	6.6	5.7	5.1	6.4	6.3
* PICK 300 (BLAZER II)	5.4	7.0	5.8	6.8	6.8	6.7	5.7	6.4	5.6	5.1	6.3	6.1
* OMEGA II	2.1	6.8	5.8	6.2	5.9	6.5	6.9	6.4	5.7	5.3	6.3	5.9
* GOALIE	4.6	6.5	5.6	7.7	5.8	6.6	7.0	5.9	6.6	5.0	6.8	5.0
* MANHATTAN II	4.4	6.3	5.6	6.4	5.4	6.2	7.2	6.0	5.7	5.4	6.0	5.9
* CITATION II	2.0	6.4	5.8	6.9	5.6	6.6	7.1	6.6	6.4	5.1	6.5	5.7
* CALIENTE	5.0	6.2	5.4	7.3	5.8	6.8	7.2	6.1	6.1	4.6	6.7	6.4
* PRELUDE	4.7	6.3	5.3	6.8	5.9	6.5	7.0	6.0	6.1	5.1	5.9	5.5
* PSU-333	4.5	6.2	5.4	7.4	6.2	6.9	7.1	5.9	5.9	5.1	6.3	6.0
* BIRDIE II	3.7	6.5	5.6	7.1	6.2	6.4	6.8	6.0	6.2	5.1	6.5	5.8
* PST-250 (COMPETITOR)	4.2	6.0	5.3	6.6	5.6	6.5	7.0	5.8	5.1	5.2	6.5	5.8
* GATOR	5.3	6.5	5.5	6.1	5.9	6.3	5.7	6.8	5.3	4.8	6.5	5.8
* ALLAIRE	5.3	6.3	5.5	5.8	6.2	6.6	7.0	5.9	6.1	5.5	6.4	5.9
* PST-2DD	3.1	7.6	5.0	6.9	5.7	5.9	5.9	5.7	4.9	5.2	5.7	6.5
* ISI-851 (LINDSAY)	4.7	6.5	5.4	6.7	5.4	6.6	6.3	5.8	6.1	5.2	6.0	5.9
* PATRIOT	3.9	6.2	5.3	7.1	5.7	6.1	7.4	6.0	5.1	4.7	6.7	6.1
* 246	3.9	6.8	5.8	6.4	5.9	6.7	7.4	5.4	5.4	5.0	6.6	5.5
* REGAL	3.6	6.2	4.7	7.1	5.7	6.5	7.9	6.0	5.3	5.4	6.8	5.8
* BAR LP 410 (BARRAGE)	4.7	5.6	4.9	7.1	5.6	6.8	6.3	6.3	5.1	5.1	6.9	5.6
* TARA	3.5	6.8	5.5	6.9	5.2	6.8	5.9	6.1	5.6	5.4	6.0	5.8
* RUNAWAY	5.0	6.4	5.5	6.1	6.3	6.3	6.1	6.0	6.1	5.3	6.1	5.1
* RIVAL	3.9	6.9	5.7	6.3	6.4	6.9	5.9	6.0	5.7	5.0	6.5	5.9
* PSU-222	4.4	6.2	4.8	6.5	5.6	6.7	6.4	5.8	5.8	4.9	5.7	6.5
* PENNFINE	4.2	6.4	5.1	7.0	6.2	6.4	6.7	5.9	6.2	4.9	5.9	6.1
* BELLE	4.3	6.3	5.2	6.2	6.3	6.3	7.2	6.0	5.4	5.4	5.9	5.5
* SR 4031 (NOVA)	1.7	6.1	5.6	6.9	6.1	6.8	6.4	6.0	5.8	4.9	5.9	5.7
* DERBY	3.3	6.1	5.0	7.1	6.0	6.3	6.2	5.6	5.3	5.1	6.1	5.6
* RODEO	4.7	6.7	5.2	5.8	5.5	6.5	5.9	6.1	5.0	5.0	6.0	5.5
* KWS-AL-2 (AQUARIUS)	2.2	7.3	4.7	6.1	4.7	6.7	6.3	5.4	5.1	5.1	6.1	5.2
* DEL 946	3.3	6.3	4.8	6.8	5.9	6.7	6.4	6.5	6.4	4.9	6.0	5.7
* RANGER	4.4	6.3	5.0	6.4	5.9	6.4	5.8	6.2	4.9	4.9	6.5	5.7
* MOM LP 763	4.7	5.8	5.8	5.7	5.8	6.3	5.8	5.9	6.1	4.8	6.1	5.8

TABLE 1. (continued) MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
AT TWENTY-FOUR LOCATIONS IN THE UNITED STATES
1989 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF												
NAME	DC1	ID2	IL1	IL2	IN1	KS1	KS2	KY1	MD1	MI1	MO1	NE1
* BARRY	3.5	5.4	5.3	6.0	6.0	6.5	6.9	5.9	5.2	5.1	5.7	5.7
* DELRAY	2.3	5.4	5.2	6.3	5.8	6.9	7.2	5.9	6.2	4.5	6.2	5.2
* BRENDA	3.7	6.6	5.9	5.9	6.3	6.6	6.8	5.8	5.3	5.1	5.6	5.3
ACROBAT	6.1	6.0	5.2	5.7	5.6	6.3	5.9	5.7	5.4	4.8	6.5	5.7
* YORKTOWN II	4.8	5.6	5.1	6.2	6.1	6.6	5.9	5.8	4.6	4.9	5.8	5.7
* OVATION	3.7	6.4	5.6	5.1	6.4	6.6	5.7	5.9	5.9	4.8	6.3	5.1
BAR LP 454 (BARCREDO)	2.7	6.2	5.3	5.8	5.8	6.7	6.0	6.4	4.4	4.7	6.2	6.4
* VINTAGE-2DF	3.7	5.6	4.9	6.7	5.8	6.7	6.6	5.7	5.8	4.9	6.2	6.2
* DIPLOMAT	5.3	5.9	5.1	6.1	5.9	6.5	5.8	5.5	4.6	4.5	5.9	6.1
RONJA	4.1	6.9	4.3	6.6	6.1	6.4	5.6	5.8	5.1	4.7	5.7	5.3
* SHERIFF	4.7	5.9	4.8	5.8	5.8	5.9	5.6	5.6	5.6	4.5	6.1	5.3
* ISI-K2 (DILLON)	2.5	5.8	5.3	6.1	5.9	6.8	5.7	6.0	5.4	4.8	5.7	6.2
* REGENCY	3.6	5.6	5.2	5.8	5.6	6.2	6.6	5.2	5.3	4.8	5.9	5.8
NK 80389	4.1	5.6	4.8	5.5	4.8	6.1	6.1	6.1	4.8	5.0	5.1	5.8
* COWBOY	1.5	6.1	5.1	6.5	5.4	6.6	6.3	5.6	5.1	5.1	5.7	5.3
PAVO	4.5	6.0	4.7	5.5	6.2	6.6	6.0	5.6	5.1	4.5	5.1	5.8
J208	4.8	6.0	4.3	5.5	5.8	5.8	5.6	5.4	4.8	4.6	4.9	5.8
* MANHATTAN	5.3	6.1	5.2	5.7	5.4	5.5	5.4	5.7	5.2	4.9	5.3	6.1
J207	3.4	5.8	5.3	6.0	5.8	6.1	5.9	5.4	4.7	4.5	4.9	6.0
* LINN	1.2	4.4	2.0	5.5	5.4	5.7	4.2	3.7	4.0	3.6	2.9	4.1
LSD VALUE	2.0	1.0	0.8	1.5	0.9	0.8	1.1	0.7	1.1	0.5	0.7	1.1
* COMMERCIALY AVAILABLE VARIETY												

TABLE 1. (continued) MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
AT TWENTY-FOUR LOCATIONS IN THE UNITED STATES
1989 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF													
NAME	NJ1	NJ2	NY1	OH2	OR1	OR2	PA1	PA2	RI1	SD1	UB1	VA1	MEAN
PST-2PM (SATURN)	6.2	6.2	4.7	7.2	6.4	6.7	6.8	6.9	6.8	6.5	7.0	4.2	6.4
SR 4100	6.3	6.0	5.1	7.0	6.2	6.7	6.6	6.9	6.8	6.7	7.2	4.9	6.3
PENNANT	6.0	5.5	5.2	7.0	5.5	6.7	6.4	6.7	6.7	6.7	6.7	4.7	6.2
SR 4000	6.7	6.3	5.0	7.0	5.9	6.8	6.4	6.4	6.9	7.0	7.0	4.4	6.2
PST-M2E (MAN. II W/ENDO)	6.0	6.1	4.9	7.5	6.9	6.9	6.7	6.3	6.5	6.8	6.9	4.3	6.2
PST-259 (COMMANDER)	5.8	6.0	4.8	7.0	6.6	6.7	6.9	6.5	6.3	6.9	6.7	4.4	6.2
PST-2H7 (DIMENSION)	6.5	6.4	4.9	6.8	6.6	6.9	6.6	6.6	6.3	6.8	6.5	4.1	6.2
PALMER	5.7	5.6	4.6	7.0	5.9	6.6	5.9	6.7	6.5	6.7	6.0	4.9	6.1
PICK 715	6.3	5.9	4.8	7.2	6.3	6.7	6.2	6.2	6.4	6.7	7.0	4.1	6.1
PICK 647 (RIVIERA)	6.2	5.9	4.6	7.2	6.1	6.8	5.9	6.6	6.7	6.9	5.6	4.0	6.1
PST-2HH (CHARGER)	5.1	5.9	4.5	7.3	6.4	6.8	5.7	6.1	6.5	7.0	6.0	4.5	6.1
PICK 233 (DASHER II)	6.0	5.6	5.1	7.3	6.4	6.9	6.2	6.5	6.3	6.7	6.6	4.4	6.1
PICK 600 (FIESTA II)	5.8	6.1	5.2	7.3	6.1	6.9	5.6	6.4	6.6	7.2	5.4	4.5	6.1
REPELL	5.7	5.0	4.9	7.3	5.9	6.9	6.2	6.7	6.9	6.8	6.8	3.9	6.1
PICK 300 (BLAZER II)	6.0	6.4	4.3	7.2	6.5	6.8	5.6	5.9	6.3	6.9	4.5	4.1	6.0
OMEGA II	5.4	5.7	5.1	7.5	7.0	6.8	5.9	6.3	6.6	6.8	6.4	4.1	6.0
GOALIE	5.8	4.9	4.7	7.5	5.1	6.1	5.8	5.9	6.6	6.9	5.8	4.9	6.0
MANHATTAN II	5.7	5.8	5.0	7.0	6.2	6.8	5.9	6.2	6.4	6.8	5.5	4.8	5.9
CITATION II	5.6	5.9	4.6	7.0	6.0	6.7	5.7	6.2	6.7	6.4	6.9	4.3	5.9
CALIENTE	5.2	4.9	4.5	7.0	5.1	6.5	5.8	6.1	6.2	6.6	6.0	4.7	5.9
PRELUDE	5.9	5.6	4.3	7.3	6.1	6.5	5.7	6.4	6.6	6.8	5.1	4.4	5.9
PSU-333	5.1	5.3	4.9	7.0	5.1	6.3	6.2	6.1	6.7	6.8	5.0	4.4	5.9
BIRDIE II	4.7	4.7	4.7	6.8	6.2	6.7	5.9	6.4	6.4	6.3	6.5	4.5	5.9
PST-250 (COMPETITOR)	5.8	6.1	4.9	7.0	6.0	6.8	6.4	5.9	6.1	7.0	5.9	4.1	5.9
GATOR	5.3	6.0	4.9	7.0	6.1	6.6	6.0	6.4	6.7	6.8	4.4	5.0	5.9
ALLAIRE	5.7	6.0	4.5	6.5	6.2	6.7	6.2	5.8	6.2	6.5	4.7	3.7	5.9
PST-2DD	5.4	5.7	4.6	7.0	6.8	7.2	.	6.6	6.4	7.2	6.0	3.9	5.9
ISI-851 (LINDSAY)	5.1	5.3	4.9	6.8	5.6	6.8	5.9	6.1	6.3	6.9	5.2	4.8	5.8
PATRIOT	5.1	5.1	4.8	7.0	5.4	6.7	6.2	5.8	6.8	6.8	5.5	4.4	5.8
246	4.7	5.1	4.0	7.2	5.9	6.9	5.6	5.5	6.1	6.6	6.7	4.3	5.8
REGAL	4.6	5.2	3.8	7.8	5.5	6.4	5.9	5.6	6.0	6.3	6.7	4.8	5.8
BAR LP 410 (BARRAGE)	4.8	4.9	4.1	7.3	5.6	6.5	5.8	5.6	6.6	6.7	5.8	4.7	5.8
TARA	4.8	5.7	4.9	7.5	5.9	6.9	5.6	6.2	6.4	6.8	4.0	3.9	5.8
RUNAWAY	5.1	5.2	4.6	7.3	5.6	6.5	5.9	5.6	5.7	6.9	4.5	4.5	5.7
RIVAL	4.0	3.9	4.9	7.0	5.3	6.3	5.7	6.5	6.6	6.6	4.8	4.5	5.7
PSU-222	5.0	4.6	5.2	7.2	5.2	6.3	5.7	5.9	7.0	6.9	4.2	4.6	5.7
PENNFINE	4.7	4.2	4.9	7.2	5.0	6.2	5.8	5.5	6.2	6.9	5.3	4.0	5.7
BELLE	5.9	5.4	4.3	7.0	4.9	6.4	5.3	5.7	6.8	7.1	3.8	4.2	5.7
SR 4031 (NOVA)	4.6	5.4	4.9	6.7	5.6	6.3	6.3	5.6	6.1	6.0	6.5	4.5	5.7
DERBY	4.7	5.1	4.7	7.2	5.7	6.4	6.3	6.3	6.1	6.9	4.9	4.5	5.7
RODEO	5.5	5.0	5.0	6.7	5.9	6.8	6.2	6.3	6.1	6.5	3.8	3.8	5.6
KWS-AL-2 (AQUARIUS)	6.4	6.0	4.3	7.0	6.5	7.4	5.8	5.9	6.0	7.2	4.3	3.7	5.6
DEL 946	4.3	4.1	5.1	7.2	4.8	5.9	5.8	5.6	6.3	6.6	4.2	4.5	5.6
RANGER	4.9	4.6	4.8	7.0	5.7	6.7	5.4	5.7	6.3	6.8	3.6	4.2	5.6
MOM LP 763	4.1	4.0	5.0	7.2	5.6	6.1	5.6	5.7	6.6	6.9	4.0	4.3	5.6

TABLE 1. (continued) MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
AT TWENTY-FOUR LOCATIONS IN THE UNITED STATES
1989 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF													
NAME	NJ1	NJ2	NY1	OH2	OR1	OR2	PA1	PA2	RI1	SD1	UB1	VA1	MEAN
BARRY	4.7	5.0	4.7	6.7	5.5	6.7	5.6	5.1	6.3	6.7	5.2	4.1	5.6
DELRAY	4.5	4.7	4.6	7.3	5.5	6.0	5.7	5.9	6.5	6.7	4.4	4.4	5.5
BRENDA	4.5	4.8	4.3	7.0	5.6	6.1	5.4	5.3	6.1	6.9	4.2	4.3	5.5
ACROBAT	4.1	4.1	4.7	7.3	5.3	6.3	5.1	5.6	6.4	6.9	3.9	4.5	5.5
YORKTOWN II	4.0	4.3	4.4	7.3	5.5	6.4	5.3	5.9	6.6	6.9	4.5	4.5	5.5
OVATION	4.4	3.8	4.7	7.2	5.2	6.0	5.6	5.2	6.4	7.0	5.1	4.3	5.5
BAR LP 454 (BARCREDO)	4.4	4.0	5.2	7.0	5.3	6.0	5.2	5.5	6.7	7.1	4.7	4.5	5.5
VINTAGE-2DF	3.9	3.5	4.3	7.0	5.0	6.3	5.6	5.2	5.6	6.3	5.8	4.2	5.5
DIPLOMAT	3.7	4.4	4.7	7.3	5.3	6.2	5.4	6.1	5.9	6.9	3.9	4.0	5.5
RONJA	4.3	3.6	4.6	6.5	5.9	6.4	5.1	5.7	6.5	6.7	4.1	4.9	5.5
SHERIFF	4.3	4.6	4.5	6.7	5.5	6.3	5.4	5.3	6.2	6.6	4.7	4.3	5.4
ISI-K2 (DILLON)	4.0	3.7	4.8	6.7	5.7	6.3	5.3	5.2	6.6	6.7	4.1	3.9	5.4
REGENCY	3.9	3.7	4.7	7.0	5.1	6.2	5.5	5.7	6.6	6.5	4.0	4.6	5.4
NK 80389	4.5	4.2	4.4	7.2	5.1	6.5	5.9	5.1	6.4	7.1	3.2	4.5	5.3
COWBOY	4.8	4.1	4.7	6.8	5.4	6.4	5.6	5.5	5.9	6.0	4.3	4.0	5.3
PAVO	3.3	3.3	5.1	7.3	4.9	6.3	5.1	5.9	5.9	6.6	4.5	4.0	5.3
J208	4.1	3.5	5.3	7.0	5.1	6.2	5.5	5.3	6.2	6.8	4.3	4.1	5.3
MANHATTAN	3.2	3.6	4.0	6.8	4.7	6.6	4.9	4.9	6.2	6.4	4.0	4.2	5.2
J207	3.7	3.0	4.9	6.5	4.8	6.2	5.8	5.3	6.3	6.6	4.3	4.2	5.2
LINN	1.8	1.3	3.0	5.7	2.8	4.7	2.9	1.8	4.1	5.3	1.9	3.0	3.5
LSD VALUE	1.0	0.7	0.7	0.6	0.8	0.4	0.8	0.7	0.7	0.5	0.9	0.8	0.2

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

TABLE 2.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR
EACH MONTH GROWN AT TWENTY-FOUR LOCATIONS IN THE UNITED STATES
1989 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
PST-2PM (SATURN)	7.0	5.7	6.2	6.4	6.3	6.2	6.2	6.1	6.4	6.4	6.2	5.8	6.4
SR 4100	5.3	4.7	5.6	6.3	6.3	6.2	6.3	6.3	6.6	6.6	6.1	5.5	6.3
PENNANT	5.3	4.3	6.0	5.8	6.0	6.2	6.1	6.1	6.5	6.4	6.1	5.8	6.2
SR 4000	5.7	4.3	5.9	6.0	6.2	6.4	6.1	5.9	6.6	6.3	6.1	5.8	6.2
PST-M2E (MAN. II W/ ENDO)	6.0	5.3	5.9	6.0	6.4	6.2	5.9	5.9	6.4	6.3	6.3	6.2	6.2
PST-259 (COMMANDER)	7.0	5.7	5.9	5.9	6.3	6.0	6.1	6.2	6.4	6.2	5.9	5.7	6.2
PST-2H7 (DIMENSION)	6.3	5.0	5.5	6.2	6.3	6.1	6.0	5.9	6.3	6.3	6.1	6.5	6.2
PALMER	6.0	5.3	5.8	6.0	6.1	6.0	5.9	5.5	6.3	6.4	6.3	5.7	6.1
PICK 715	5.7	4.7	6.0	5.9	6.2	6.0	5.9	5.8	6.4	6.3	5.9	5.8	6.1
PICK 647 (RIVIERA)	6.0	4.3	5.4	5.7	6.3	5.9	5.8	5.9	6.2	6.1	5.9	5.8	6.1
PST-2HH (CHARGER)	6.0	5.0	5.3	5.8	6.2	6.0	5.9	5.6	6.5	6.1	5.8	5.8	6.1
PICK 233 (DASHER II)	6.3	5.0	5.6	5.9	6.1	5.9	5.9	5.9	6.2	6.2	6.0	6.2	6.1
PICK 600 (FIESTA II)	5.0	4.3	5.4	5.9	6.4	6.1	5.8	5.7	6.2	6.2	5.6	6.0	6.1
REPELL	5.3	4.7	5.0	6.0	6.4	6.1	5.8	5.6	6.2	6.2	6.1	5.7	6.1
PICK 300 (BLAZER II)	6.0	5.0	5.6	5.9	6.3	6.0	5.8	5.5	6.2	6.0	5.9	5.7	6.0
OMEGA II	7.7	5.7	5.6	6.0	6.3	6.0	5.8	5.5	6.2	6.0	5.6	6.0	6.0
GOALIE	5.3	4.3	5.9	5.7	5.9	5.8	5.8	5.8	5.9	6.0	5.8	5.0	6.0
MANHATTAN II	6.0	4.7	5.3	6.0	6.2	6.1	5.6	5.4	5.9	6.2	6.1	6.3	5.9
CITATION II	6.3	4.3	5.5	6.0	6.3	5.8	5.7	6.2	6.0	6.0	5.6	5.7	5.9
CALIENTE	5.3	4.3	5.6	5.5	5.8	5.9	5.8	5.6	6.0	6.2	5.4	5.0	5.9
PRELUDE	5.7	5.0	5.9	6.0	6.1	5.9	5.6	5.4	6.1	5.9	5.8	5.2	5.9
PSU-333	5.3	4.7	5.4	5.9	5.9	5.9	5.8	5.6	5.8	5.7	5.7	5.2	5.9
BIRDIE II	7.0	6.0	5.8	5.5	5.8	5.7	5.9	5.8	6.1	5.9	5.5	6.0	5.9
PST-250 (COMPETITOR)	6.3	4.7	5.6	5.9	6.1	5.9	5.6	5.5	6.0	5.9	6.0	5.8	5.9
GATOR	5.3	4.3	5.8	6.1	6.4	6.0	5.5	5.5	5.9	5.8	5.7	5.3	5.9
ALLAIRE	7.3	5.7	5.6	5.9	6.2	6.0	5.6	5.2	5.9	5.9	5.8	5.5	5.9
PST-2DD	7.3	5.7	5.2	5.7	6.2	5.8	5.5	5.2	6.1	6.1	5.9	6.0	5.9
ISI-851 (LINDSAY)	6.0	5.0	5.3	5.9	6.0	5.7	5.6	5.2	6.0	6.1	5.8	6.0	5.8
PATRIOT	6.3	4.0	5.3	5.7	6.1	5.6	5.7	5.4	5.8	5.9	5.3	5.7	5.8
246	6.7	5.3	5.9	5.7	5.7	5.4	5.4	5.4	5.9	6.2	5.8	6.2	5.8
REGAL	6.3	5.3	5.7	5.7	5.6	5.8	5.8	5.4	5.8	5.6	5.6	5.2	5.8
BAR LP 410 (BARRAGE)	5.0	4.3	5.3	5.9	6.2	5.8	5.4	5.3	5.7	5.7	5.5	5.2	5.8
TARA	6.0	4.7	5.1	5.7	6.1	5.8	5.5	5.2	5.6	5.6	5.4	6.2	5.8
RUNAWAY	6.3	4.7	5.6	5.7	6.2	5.9	5.4	4.9	5.6	5.7	5.7	5.5	5.7
RIVAL	5.0	4.7	5.5	5.5	6.1	5.7	5.5	5.3	5.6	5.6	5.2	4.8	5.7
PSU-222	5.3	4.7	5.4	5.8	5.8	5.8	5.5	5.1	5.7	5.6	5.5	5.2	5.7
PENNFINE	5.0	4.3	5.3	5.5	5.6	5.8	5.8	5.2	5.7	5.6	5.3	4.7	5.7
BELLE	5.7	5.7	5.2	5.8	5.8	5.7	5.3	5.2	5.6	5.7	5.6	4.8	5.7
SR 4031 (NOVA)	5.3	4.7	5.2	5.9	5.7	5.6	5.6	5.4	5.8	5.7	5.4	5.3	5.7
DERBY	6.7	5.0	5.4	5.6	5.7	5.6	5.6	5.4	5.8	5.7	5.1	5.2	5.7
RODEO	6.0	5.3	5.1	5.7	5.8	5.9	5.5	4.9	5.6	5.8	5.5	5.7	5.6
KWS-AL-2 (AQUARIUS)	5.3	5.0	5.4	6.0	6.0	5.7	5.3	5.0	5.6	5.7	5.4	6.2	5.6
DEL 946	4.7	4.7	5.2	5.7	5.6	5.5	5.3	5.2	5.7	5.7	5.1	4.3	5.6
RANGER	6.0	5.3	5.4	5.5	6.0	5.7	5.3	5.1	5.5	5.4	5.1	5.8	5.6
MOM LP 763	5.3	4.7	5.1	5.5	6.0	5.6	5.3	5.0	5.5	5.5	5.1	5.0	5.6

TABLE 2. (continued) MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR
EACH MONTH GROWN AT TWENTY-FOUR LOCATIONS IN THE UNITED STATES
1989 DATA

TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS													
NAME	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
BARRY	5.3	4.7	4.5	5.5	5.7	5.7	5.3	5.2	5.7	5.5	5.3	5.5	5.6
DELRAY	6.3	5.3	5.0	5.5	5.7	5.5	5.5	5.2	5.5	5.4	4.9	4.7	5.5
BRENDA	6.7	4.7	5.2	5.4	5.4	5.6	5.5	5.2	5.5	5.5	5.1	5.2	5.5
ACROBAT	5.0	4.0	5.1	5.5	6.1	5.5	5.1	5.0	5.5	5.3	5.2	5.0	5.5
YORKTOWN II	6.0	5.7	5.0	5.2	5.6	5.7	5.2	5.2	5.4	5.4	5.5	6.0	5.5
OVATION	5.3	5.0	5.2	5.5	5.9	5.7	5.2	4.9	5.5	5.5	5.2	4.8	5.5
BAR LP 454 (BARCREDO)	5.7	5.0	5.4	5.7	6.0	5.6	5.3	4.9	5.4	5.3	4.8	5.2	5.5
VINTAGE-2DF	5.7	5.0	5.1	5.2	5.5	5.3	5.3	5.2	5.6	5.4	5.0	5.2	5.5
DIPLOMAT	6.0	5.0	4.9	5.2	5.8	5.5	5.1	4.8	5.3	5.5	5.2	5.3	5.5
RONJA	6.7	5.0	5.3	5.4	6.1	5.7	5.1	4.6	5.5	5.3	5.2	5.5	5.5
SHERIFF	6.0	5.7	5.2	5.5	5.8	5.4	5.2	4.7	5.4	5.4	5.3	5.2	5.4
ISI-K2 (DILLON)	5.3	4.0	4.9	5.3	5.9	5.4	5.2	5.0	5.5	5.2	4.9	5.2	5.4
REGENCY	5.3	5.0	5.2	5.3	5.4	5.4	5.1	5.0	5.3	5.4	4.9	4.8	5.4
NK 80389	5.0	5.0	4.9	5.2	6.0	5.4	5.1	4.6	5.1	5.2	5.1	5.3	5.3
COWBOY	5.7	4.7	5.4	5.2	5.3	5.3	5.2	4.9	5.4	5.4	4.7	5.7	5.3
PAVO	4.7	4.3	4.7	5.2	5.7	5.1	5.1	4.8	5.4	5.1	4.8	4.8	5.3
J208	5.7	4.0	4.9	5.2	5.8	5.5	5.0	4.7	5.2	5.0	5.0	4.7	5.3
MANHATTAN	5.7	4.7	4.4	5.2	5.8	5.3	4.8	4.5	5.0	4.9	5.2	5.3	5.2
J207	5.0	4.3	4.6	5.0	5.7	5.4	4.9	4.7	5.3	5.0	4.7	4.8	5.2
LINN	3.0	3.3	3.4	3.1	3.6	3.6	3.5	3.1	3.9	3.2	3.1	3.0	3.5
LSD VALUE	1.8	1.5	0.9	0.5	0.4	0.5	0.5	0.5	0.7	0.6	0.8	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 PERENNIAL RYEGRASS
CULTIVARS AT TWENTY-FOUR LOCATIONS IN THE UNITED STATES 1/
1989 DATA

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

NAME	DC1	ID2	IL1	IL2	IN1	KS1	KS2	KY1	MD1	MI1	MO1	NE1
PST-2PM (SATURN)	15.5	2.5	4.0	6.0	20.5	30.0	1.5	15.0	23.0	1.0	2.5	2.0
SR 4100	51.0	13.5	15.0	1.0	4.0	1.5	26.5	4.0	6.0	7.5	1.0	25.5
PENNANT	30.0	11.0	21.0	4.0	2.0	23.5	19.0	16.5	1.0	12.5	2.5	11.0
SR 4000	42.0	24.5	15.0	9.0	23.0	20.0	29.0	8.5	2.0	15.5	14.0	16.0
PST-M2E (MAN. II W/ ENDO)	22.0	43.0	7.0	28.0	12.0	7.0	3.5	54.5	21.0	19.5	7.5	39.5
PST-259 (COMMANDER)	15.5	55.5	1.0	10.5	12.0	12.0	7.0	11.5	25.0	37.0	9.5	25.5
PST-2H7 (DIMENSION)	42.0	15.5	4.0	30.5	26.0	26.0	15.5	14.0	40.5	2.0	15.5	5.5
PALMER	1.0	19.0	7.0	10.5	20.5	49.0	40.0	28.0	9.5	4.5	27.5	33.5
PICK 715	51.0	24.5	21.0	51.0	5.0	7.0	24.5	11.5	5.0	44.5	4.0	50.0
PICK 647 (RIVIERA)	42.0	8.5	15.0	5.0	52.5	49.0	9.5	6.0	40.5	12.5	7.5	16.0
PST-2HH (CHARGER)	48.5	30.5	2.0	2.0	35.5	45.5	13.5	47.0	3.5	10.0	5.0	25.5
PICK 233 (DASHER II)	57.0	48.0	37.0	34.0	39.5	1.5	5.5	32.5	26.5	12.5	6.0	5.5
PICK 600 (FIESTA II)	30.0	6.0	15.0	21.0	3.0	7.0	43.5	20.5	55.5	44.5	17.5	8.0
REPELL	7.5	53.0	56.5	13.0	12.0	49.0	29.0	3.0	28.0	28.5	26.0	9.0
PICK 300 (BLAZER II)	3.0	4.0	7.0	24.0	1.0	20.0	58.5	8.5	33.5	28.5	31.5	16.0
OMEGA II	61.0	11.0	10.5	42.0	30.5	38.0	22.5	8.5	29.0	15.5	29.5	25.5
GOALIE	21.0	19.0	21.0	3.0	39.5	26.0	19.0	36.5	3.5	37.0	12.0	64.0
MANHATTAN II	25.5	34.0	21.0	37.0	60.0	56.0	12.0	32.5	30.5	4.5	43.0	25.5
CITATION II	62.0	24.5	10.5	19.5	50.0	33.5	15.5	2.0	7.0	22.5	22.5	45.0
CALIENTE	10.0	37.5	30.0	8.0	39.5	12.0	9.5	20.5	13.0	58.5	15.5	5.5
PRELUDE	19.5	30.5	33.0	25.5	28.5	38.0	19.0	28.0	15.5	22.5	46.5	53.5
PSU-333	24.0	37.5	30.0	7.0	17.0	5.0	13.5	36.5	19.0	28.5	31.5	20.5
BIRDIE II	42.0	19.0	21.0	16.0	14.5	42.5	24.5	24.0	11.0	28.5	22.5	33.5
PST-250 (COMPETITOR)	30.0	48.0	37.0	32.0	52.5	38.0	19.0	43.5	48.0	17.5	19.0	39.5
GATOR	7.5	19.0	26.5	47.0	33.0	49.0	58.5	1.0	40.5	52.0	22.5	33.5
ALLAIRE	5.0	30.5	26.5	55.0	17.0	30.0	19.0	40.5	15.5	3.0	27.5	25.5
PST-2DD	55.0	1.0	51.0	22.5	47.0	62.0	49.0	52.0	58.0	19.5	57.0	2.0
ISI-851 (LINDSAY)	19.5	19.0	30.0	27.0	58.0	30.0	37.5	47.0	15.5	17.5	43.0	25.5
PATRIOT	36.0	37.5	37.0	16.0	48.5	58.0	5.5	32.5	49.5	56.5	13.0	16.0
246	37.0	11.0	10.5	37.0	33.0	15.5	3.5	61.0	37.5	37.0	17.5	53.5
REGAL	45.5	37.5	61.0	13.0	48.5	38.0	1.5	28.0	44.5	7.5	11.0	33.5
BAR LP 410 (BARRAGE)	15.5	60.0	53.5	16.0	55.5	9.0	37.5	13.0	52.0	22.5	9.5	50.0
TARA	47.0	8.5	26.5	22.5	63.0	12.0	49.0	20.5	32.0	7.5	43.0	39.5
RUNAWAY	9.0	24.5	26.5	47.0	8.0	53.0	42.0	28.0	18.0	12.5	37.0	62.5
RIVAL	35.0	6.0	15.0	39.5	6.5	3.5	49.0	24.0	30.5	35.0	22.5	25.5
PSU-222	25.5	37.5	59.0	34.0	52.5	17.0	33.5	43.5	26.5	44.5	57.0	2.0
PENNFINE	32.0	24.5	47.5	18.0	17.0	42.5	29.0	36.5	12.0	44.5	48.5	16.0
BELLE	28.0	30.5	42.5	42.0	9.5	49.0	9.5	32.5	35.5	7.5	50.5	53.5
SR 4031 (NOVA)	63.0	43.0	21.0	19.5	19.0	12.0	35.0	28.0	23.0	44.5	48.5	45.0
DERBY	54.0	43.0	51.0	13.0	26.0	55.0	41.0	57.0	43.0	28.5	37.0	50.0
RODEO	15.5	13.5	42.5	55.0	57.0	38.0	49.0	18.0	55.5	33.5	43.0	53.5
KWS-AL-2 (AQUARIUS)	60.0	2.5	61.0	44.5	65.0	20.0	37.5	63.0	52.0	22.5	39.5	60.5
DEL 946	53.0	30.5	56.5	25.5	35.5	15.5	33.5	5.0	8.0	44.5	43.0	45.0
RANGER	27.0	30.5	51.0	37.0	33.0	45.5	55.5	16.5	57.0	39.5	22.5	45.0
MM LP 763	15.5	55.5	10.5	58.5	45.0	53.0	55.5	40.5	15.5	52.0	39.5	33.5

TABLE 3. (continued)

RANKING OF MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS
CULTIVARS AT TWENTY-FOUR LOCATIONS IN THE UNITED STATES
1989 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN; STATE LOCATIONS REPORTING

NAME	DC1	ID2	IL1	IL2	IN1	KS1	KS2	KY1	MD1	MI1	MO1	NE1
BARRY	48.5	63.5	37.0	49.5	26.0	38.0	22.5	42.0	47.0	28.5	53.0	45.0
DELRAY	59.0	63.5	42.5	39.5	39.5	3.5	9.5	36.5	9.5	63.5	34.0	60.5
BRENDA	42.0	15.5	4.0	52.0	9.5	33.5	26.5	47.0	44.5	28.5	59.0	57.5
ACROBAT	2.0	48.0	42.5	60.0	52.5	53.0	49.0	50.0	35.5	49.0	22.5	45.0
YORKTOWN II	12.0	60.0	47.5	42.0	23.0	26.0	52.5	47.0	62.0	44.5	52.0	45.0
OVATION	38.0	24.5	21.0	65.0	6.5	30.0	58.5	39.0	20.0	52.0	29.5	62.5
BAR LP 454 (BARCREDO)	56.0	37.5	33.0	55.0	45.0	20.0	45.5	8.5	64.0	56.5	34.0	5.5
VINTAGE-2DF	39.0	60.0	53.5	29.0	45.0	20.0	32.0	52.0	23.0	44.5	34.0	11.0
DIPLOMAT	5.0	51.5	47.5	47.0	28.5	38.0	54.0	59.0	63.0	61.0	50.5	16.0
RQNJ	34.0	6.0	63.5	30.5	23.0	44.0	62.0	47.0	49.5	55.0	54.5	57.5
SHERIFF	15.5	51.5	56.5	55.0	43.0	61.0	62.0	57.0	33.5	61.0	37.0	57.5
ISI-K2 (DILLON)	58.0	55.5	33.0	44.5	30.5	12.0	58.5	24.0	37.5	52.0	54.5	11.0
REGENCY	45.5	60.0	42.5	55.0	55.5	57.0	31.0	64.0	40.5	52.0	46.5	39.5
NK 80389	33.0	60.0	56.5	64.0	64.0	59.0	43.5	20.5	59.5	33.5	61.5	33.5
COWBOY	64.0	43.0	47.5	34.0	62.0	23.5	37.5	57.0	52.0	28.5	57.0	57.5
PAVO	23.0	48.0	61.0	63.0	14.5	30.0	45.5	54.5	54.0	63.5	61.5	33.5
J208	11.0	48.0	63.5	62.0	39.5	63.0	62.0	61.0	59.5	58.5	63.0	33.5
MANHATTAN	5.0	43.0	42.5	58.5	60.0	65.0	64.0	52.0	46.0	39.5	60.0	16.0
J207	51.0	55.5	37.0	49.5	39.5	60.0	52.5	61.0	61.0	61.0	64.0	20.5
LINN	65.0	65.0	65.0	61.0	60.0	64.0	65.0	65.0	65.0	65.0	65.0	65.0

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 RANK, BOTH ARE ASSIGNED "2.5".

TABLE 3. (continued)

RANKING OF MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS
CULTIVARS AT TWENTY-FOUR LOCATIONS IN THE UNITED STATES
1989 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN; STATE LOCATIONS REPORTING

NAME	NJ1	NJ2	NY1	OH2	OR1	OR2	PA1	PA2	RI1	SD1	UB1	VA1	MEAN
PST-2HM (SATURN)	7.0	4.0	38.5	23.5	9.5	21.0	2.0	2.0	5.0	55.5	3.5	44.0	1
SR 4100	5.0	10.5	6.5	40.5	14.0	27.0	4.0	1.0	4.0	38.5	1.0	4.5	2
PENNANT	11.0	24.0	2.0	40.5	40.0	27.0	7.0	3.5	12.5	44.5	10.5	10.5	3
SR 4000	1.0	3.0	13.0	40.5	23.5	12.5	8.0	14.5	2.0	8.5	3.5	31.0	4
PST-MZE (MAN. II W/ ENDO)	9.0	6.5	22.5	3.5	2.0	5.0	3.0	20.0	26.5	34.0	5.5	36.0	5
PST-259 (COMMANDER)	14.5	10.5	28.5	40.5	4.0	21.0	1.0	9.5	42.5	13.5	10.5	31.0	6
PST-2H7 (DIMENSION)	2.0	1.0	25.5	54.0	5.0	3.0	5.0	8.0	38.5	34.0	14.5	50.5	7
PALMER	18.5	22.0	43.0	40.5	22.0	30.0	25.5	3.5	25.0	41.5	19.5	2.5	8
PICK 715	4.0	15.0	30.5	23.5	11.0	21.0	16.0	22.5	35.0	38.5	2.0	50.5	9
PICK 647 (RIVIERA)	6.0	13.0	47.5	23.5	17.5	12.5	22.0	6.5	10.0	13.5	25.0	55.5	10
PST-2HH (CHARGER)	31.5	15.0	51.0	11.5	9.5	17.0	36.0	25.5	28.0	8.5	17.5	22.0	11
PICK 233 (DASHER II)	10.0	22.0	8.0	11.5	8.0	7.5	14.0	9.5	38.5	44.5	12.0	27.5	12
PICK 600 (FIESTA II)	17.0	5.0	4.0	11.5	17.5	5.0	42.0	14.5	19.5	2.5	28.0	22.0	13
REPELL	20.0	34.5	25.5	11.5	25.0	9.0	12.0	5.0	3.0	27.0	7.0	58.5	14
PICK 300 (BLAZER II)	8.0	2.0	56.0	23.5	6.5	12.5	47.5	36.5	38.5	18.0	42.5	47.0	15
OMEGA II	25.0	19.0	9.5	3.5	1.0	17.0	22.0	17.5	15.5	27.0	16.0	47.0	16
GOALIE	16.0	37.0	38.5	3.5	52.5	58.5	33.0	32.0	19.5	22.0	23.5	2.5	17
MANHATTAN II	18.5	17.0	14.0	40.5	14.0	12.5	19.0	22.5	35.0	30.5	26.5	6.0	18
CITATION II	22.0	15.0	43.0	40.5	20.0	27.0	39.5	22.5	8.0	59.0	5.5	38.0	19
CALIENTE	27.0	39.0	50.0	40.5	55.0	35.0	29.0	25.5	49.5	52.5	17.5	10.5	20
PRELUDE	12.0	22.0	58.5	11.5	19.0	35.0	38.0	14.5	14.0	27.0	32.0	27.5	21
PSU-333	29.0	27.0	22.5	40.5	52.5	45.5	16.0	27.0	10.0	34.0	34.0	27.5	22
BIRDIE II	40.0	41.5	33.5	54.0	14.0	27.0	22.0	12.0	35.0	60.0	14.5	17.0	23
PST-250 (COMPETITOR)	14.5	6.5	22.5	40.5	21.0	12.5	6.0	32.0	53.0	8.5	21.0	47.0	24
GATOR	26.0	10.5	22.5	40.5	16.0	31.5	18.0	14.5	12.5	34.0	44.5	1.0	25
ALLAIRE	21.0	8.0	49.0	63.0	12.0	27.0	12.0	38.5	47.0	55.5	38.5	63.0	26
PST-2DD	24.0	19.0	47.5	40.5	3.0	2.0	.	6.5	31.0	2.5	19.5	60.5	27
ISI-851 (LINDSAY)	28.0	28.0	16.0	54.0	33.0	12.5	27.0	28.5	42.5	18.0	31.0	7.5	28
PATRIOT	31.5	33.0	27.0	40.5	44.5	21.0	16.0	38.5	6.5	30.5	26.5	27.5	29
246	38.5	31.0	62.0	23.5	23.5	5.0	42.0	53.0	56.0	50.5	8.5	34.0	30
REGAL	44.0	29.0	64.0	1.0	42.5	41.0	25.5	49.5	58.0	62.0	8.5	7.5	31
BAR LP 410 (BARRAGE)	35.0	38.0	61.0	11.5	37.0	35.0	33.0	46.5	19.5	38.5	23.5	9.0	32
TARA	36.0	19.0	16.0	3.5	26.5	7.5	45.0	22.5	31.0	27.0	55.5	60.5	33
RUNAWAY	30.0	30.0	46.0	11.5	34.5	35.0	22.0	46.5	63.0	22.0	40.0	22.0	34
RIVAL	57.5	55.0	19.0	40.5	47.5	50.0	36.0	11.0	15.5	48.0	36.0	22.0	35
PSU-222	33.0	45.0	4.0	23.5	51.0	50.0	36.0	32.0	1.0	13.5	51.0	12.5	36
PENNFINE	41.0	48.5	19.0	23.5	58.5	56.0	29.0	53.0	47.0	22.0	29.0	53.0	37
BELLE	13.0	25.5	58.5	40.5	60.5	41.0	56.5	42.0	6.5	5.5	62.0	41.0	38
SR 4031 (NOVA)	43.0	25.5	19.0	59.0	34.5	50.0	10.0	46.5	53.0	63.5	13.0	14.5	39
DERBY	38.5	32.0	38.5	23.5	31.0	41.0	9.0	19.0	56.0	22.0	35.0	22.0	40
RODEO	23.0	34.5	11.5	59.0	26.5	17.0	12.0	17.5	53.0	55.5	61.0	62.0	41
KWS-AL-2 (AQUARIUS)	3.0	10.5	55.0	40.5	6.5	1.0	33.0	35.0	59.0	1.0	46.0	64.0	42
DEL 946	52.0	50.5	6.5	23.5	62.5	64.0	29.0	49.5	45.0	48.0	51.0	17.0	43
RANGER	34.0	43.5	30.5	40.5	30.0	21.0	54.0	42.0	42.5	27.0	63.0	41.0	44
MOM LP 763	54.5	53.5	11.5	23.5	32.0	60.0	42.0	40.0	19.5	18.0	55.5	38.0	45

TABLE 3. (continued)

RANKING OF MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS
CULTIVARS AT TWENTY-FOUR LOCATIONS IN THE UNITED STATES
1989 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN: STATE LOCATIONS REPORTING													
NAME	NJ1	NJ2	NY1	OH2	OR1	OR2	PA1	PA2	RI1	SD1	UB1	VA1	MEAN
BARRY	42.0	36.0	33.5	59.0	40.0	24.0	49.0	63.0	38.5	38.5	30.0	50.5	46
DELRAY	46.5	41.5	43.0	11.5	40.0	62.0	39.5	32.0	26.5	44.5	44.5	31.0	47
BRENDA	46.5	40.0	58.5	40.5	36.0	58.5	54.0	57.5	56.0	13.5	51.0	38.0	48
ACROBAT	54.5	52.0	33.5	11.5	49.0	50.0	61.0	46.5	31.0	13.5	59.5	22.0	49
YORKTOWN II	56.0	47.0	53.0	11.5	38.0	38.0	58.0	32.0	19.5	13.5	41.0	17.0	50
OVATION	48.5	56.0	38.5	23.5	50.0	62.0	47.5	60.0	31.0	8.5	33.0	34.0	51
BAR LP 454 (BARCREDO)	48.5	53.5	4.0	40.5	46.0	62.0	59.0	53.0	10.0	4.0	38.5	14.5	52
VINTAGE-2DF	59.0	62.0	58.5	40.5	58.5	45.5	45.0	60.0	64.0	61.0	22.0	44.0	53
DIPLOMAT	61.5	46.0	33.5	11.5	47.5	53.5	54.0	28.5	60.0	22.0	59.5	55.5	54
RONJA	50.0	59.5	45.0	63.0	28.0	43.0	62.0	44.0	24.0	44.5	53.0	4.5	55
SHERIFF	51.0	43.5	52.0	59.0	42.5	45.5	52.0	57.5	49.5	52.5	37.0	34.0	56
ISI-K2 (DILLON)	57.5	57.5	28.5	59.0	29.0	45.5	56.5	60.0	23.0	41.5	54.0	58.5	57
REGENCY	60.0	57.5	38.5	40.5	56.0	53.5	50.5	42.0	19.5	55.5	58.0	12.5	58
NK 80389	45.0	48.5	54.0	23.5	57.0	35.0	22.0	62.0	31.0	5.5	64.0	22.0	59
COWBOY	37.0	50.5	38.5	54.0	44.5	39.0	45.0	51.0	61.0	63.5	47.5	55.5	60
PAVO	63.0	63.0	9.5	11.5	60.5	50.0	60.0	36.5	62.0	48.0	42.5	55.5	61
J208	53.0	61.0	1.0	40.5	54.0	56.0	50.5	55.5	47.0	34.0	47.5	50.5	62
MANHATTAN	64.0	59.5	63.0	54.0	64.0	31.5	63.0	64.0	51.0	58.0	57.0	44.0	63
J207	61.5	64.0	16.0	63.0	62.5	56.0	31.0	55.5	42.5	50.5	49.0	41.0	64
LINN	65.0	65.0	65.0	65.0	65.0	65.0	64.0	65.0	65.0	65.0	65.0	65.0	65

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 RANK, BOTH ARE ASSIGNED "2.5".

TABLE 4. SPRING GREENUP RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

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

NAME	IN1	MEAN
PENNANT	7.7	7.7
SR 4100	7.7	7.7
PICK 233 (DASHER II)	7.3	7.3
PICK 600 (FIESTA II)	7.3	7.3
REGENCY	7.3	7.3
SR 4031 (NOVA)	7.3	7.3
DELRAY	7.0	7.0
OVATION	7.0	7.0
RONJA	7.0	7.0
ACROBAT	6.7	6.7
BELIE	6.7	6.7
J208	6.7	6.7
MOM LP 763	6.7	6.7
PALMER	6.7	6.7
PST-2PM (SATURN)	6.7	6.7
RIVAL	6.7	6.7
BIRDIE II	6.3	6.3
CALIENTE	6.3	6.3
COWBOY	6.3	6.3
DEL 946	6.3	6.3
GOALIE	6.3	6.3
PAVO	6.3	6.3
PENNFINE	6.3	6.3
PICK 300 (BLAZER II)	6.3	6.3
PICK 715	6.3	6.3
PST-2HH (CHARGER)	6.3	6.3
PSU-333	6.3	6.3
RANGER	6.3	6.3
SR 4000	6.3	6.3
BAR LP 410 (BARRAGE)	6.0	6.0
BAR LP 454 (BARCREDO)	6.0	6.0
BARRY	6.0	6.0
BRENDA	6.0	6.0
ISI-851 (LINDSAY)	6.0	6.0
MANHATTAN II	6.0	6.0
PATRIOT	6.0	6.0
PST-2H7 (DIMENSION)	6.0	6.0
PST-M2E (MAN. II W/ ENDO)	6.0	6.0
REGAL	6.0	6.0
RUNAWAY	6.0	6.0
CITATION II	5.7	5.7
DIPLOMAT	5.7	5.7
J207	5.7	5.7
PICK 647 (RIVIERA)	5.7	5.7
PRELUDE	5.7	5.7

SPRING GREENUP RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

SPRING GREENUP RATINGS 1-9; 9=COMPLETELY GREEN

NAME	IN1	MEAN
PSU-222	5.7	5.7
REPELL	5.7	5.7
SHERIFF	5.7	5.7
ALLAIRE	5.3	5.3
DERBY	5.3	5.3
GATOR	5.3	5.3
KWS-AL-2 (AQUARIUS)	5.3	5.3
MANHATTAN	5.3	5.3
PST-259 (COMMANDER)	5.3	5.3
RODEO	5.3	5.3
VINTAGE-2DF	5.3	5.3
246	5.0	5.0
ISI-K2 (DILLON)	5.0	5.0
PST-2DD	5.0	5.0
TARA	5.0	5.0
YORKTOWN II	5.0	5.0
LINN	4.7	4.7
NK 80389	4.7	4.7
OMEGA II	4.7	4.7
PST-250 (COMPETITOR)	4.7	4.7
LSD VALUE	1.9	1.9

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 5. GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 1/				
NAME	NE1	OH2	SD1	MEAN
PST-2DD	7.3	7.3	7.0	7.2
PICK 600 (FIESTA II)	7.0	7.0	7.3	7.1
REGAL	6.0	7.3	8.0	7.1
KWS-AL-2 (AQUARIUS)	6.3	7.3	7.3	7.0
PATRIOT	6.7	7.0	7.3	7.0
PICK 300 (BLAZER II)	7.0	7.0	7.0	7.0
PST-2HH (CHARGER)	6.0	7.3	7.7	7.0
PST-2H7 (DIMENSION)	6.7	7.0	7.0	6.9
TARA	6.7	7.0	7.0	6.9
SR 4000	6.3	7.0	7.3	6.9
ISI-851 (LINDSAY)	6.3	7.0	7.0	6.8
PICK 233 (DASHER II)	6.3	7.0	7.0	6.8
PICK 647 (RIVIERA)	6.0	7.0	7.3	6.8
PST-259 (COMMANDER)	6.3	7.0	7.0	6.8
PST-2PM (SATURN)	6.3	7.0	7.0	6.8
RUNAWAY	6.3	7.0	7.0	6.8
ALLAIRE	6.3	7.0	6.7	6.7
CITATION II	6.3	7.0	6.7	6.7
COWBOY	6.0	7.0	7.0	6.7
OMEGA II	6.0	7.0	7.0	6.7
PENNANT	6.0	7.0	7.0	6.7
PRELUDE	6.3	7.0	6.7	6.7
PST-250 (COMPETITOR)	6.3	7.0	6.7	6.7
PST-M2E (MAN. II W/ENDO)	5.7	7.0	7.3	6.7
RODEO	6.0	7.0	7.0	6.7
246	6.0	7.7	6.0	6.6
ACROBAT	6.0	7.0	6.7	6.6
BARRY	6.0	7.0	6.7	6.6
BELLE	5.7	7.0	7.0	6.6
DERBY	5.7	7.0	7.0	6.6
GATOR	6.0	7.0	6.7	6.6
ISI-K2 (DILLON)	6.0	7.0	6.7	6.6
PALMER	6.0	7.0	6.7	6.6
SR 4100	6.0	7.0	6.7	6.6
VINTAGE-2DF	6.0	7.0	6.7	6.6
BIRDIE II	6.3	7.0	6.3	6.6
PAVO	6.3	7.0	6.3	6.6
GOALIE	5.7	7.0	6.7	6.4
PICK 715	5.7	7.0	6.7	6.4
REGENCY	5.7	7.0	6.7	6.4
MANHATTAN II	6.0	6.3	7.0	6.4
PENNFINE	5.3	7.0	7.0	6.4
REPELL	6.0	7.0	6.3	6.4
BRENDA	5.0	7.0	7.0	6.3
CALIENTE	6.0	7.0	6.0	6.3

GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN

NAME	NE1	OH2	SD1	MEAN
DIPLOMAT	5.7	7.0	6.3	6.3
J207	5.7	7.0	6.3	6.3
MANHATTAN	5.7	7.0	6.3	6.3
RANGER	5.3	7.0	6.7	6.3
SR 4031 (NOVA)	5.3	7.0	6.7	6.3
DELRAY	5.7	7.0	6.0	6.2
PSU-333	5.3	7.0	6.3	6.2
YORKTOWN II	5.3	7.0	6.3	6.2
PSU-222	6.0	6.7	5.7	6.1
BAR LP 410 (BARRAGE)	5.3	7.0	6.0	6.1
DEL 946	5.0	7.0	6.3	6.1
MOM LP 763	5.0	7.0	6.3	6.1
NK 80389	5.3	7.0	6.0	6.1
LINN	5.0	7.0	6.0	6.0
SHERIFF	4.7	7.0	6.3	6.0
BAR LP 454 (BARCREDO)	5.0	7.0	5.7	5.9
RIVAL	4.7	7.0	6.0	5.9
RONJA	5.3	6.7	5.7	5.9
J208	5.0	6.7	5.7	5.8
OVATION	4.3	7.0	6.0	5.8
LSD VALUE	1.0	0.3	0.8	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 6. LEAF TEXTURE RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

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

NAME	SD1	MEAN
NK 80389	8.0	8.0
J208	7.7	7.7
KWS-AL-2 (AQUARIUS)	7.7	7.7
OVATION	7.7	7.7
PICK 600 (FIESTA II)	7.7	7.7
BELIE	7.3	7.3
PST-2DD	7.3	7.3
REPELL	7.3	7.3
YORKTOWN II	7.3	7.3
ACROBAT	7.0	7.0
ALLAIRE	7.0	7.0
BAR LP 410 (BARRAGE)	7.0	7.0
BAR LP 454 (BARCREDO)	7.0	7.0
BARRY	7.0	7.0
BRENDA	7.0	7.0
DEL 946	7.0	7.0
DERBY	7.0	7.0
DIPLOMAT	7.0	7.0
GOALIE	7.0	7.0
ISI-851 (LINDSAY)	7.0	7.0
MANHATTAN II	7.0	7.0
MOM LP 763	7.0	7.0
OMEGA II	7.0	7.0
PALMER	7.0	7.0
PATRIOT	7.0	7.0
PAVO	7.0	7.0
PENNANT	7.0	7.0
PENNFINE	7.0	7.0
PICK 233 (DASHER II)	7.0	7.0
PICK 647 (RIVIERA)	7.0	7.0
PICK 715	7.0	7.0
PST-250 (COMPETITOR)	7.0	7.0
PST-259 (COMMANDER)	7.0	7.0
PST-2HH (CHARGER)	7.0	7.0
PST-M2E (MAN. II W/ ENDO)	7.0	7.0
PSU-222	7.0	7.0
RANGER	7.0	7.0
RIVAL	7.0	7.0
RODEO	7.0	7.0
RONJA	7.0	7.0
RUNAWAY	7.0	7.0
SHERIFF	7.0	7.0
SR 4000	7.0	7.0
TARA	7.0	7.0
246	6.7	6.7

LEAF TEXTURE RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE

NAME	SD1	MEAN
CALIENTE	6.7	6.7
CITATION II	6.7	6.7
COWBOY	6.7	6.7
DELPAY	6.7	6.7
ISI-K2 (DILLON)	6.7	6.7
J207	6.7	6.7
PICK 300 (BLAZER II)	6.7	6.7
PRELUDE	6.7	6.7
PST-2H7 (DIMENSION)	6.7	6.7
PST-2PM (SATURN)	6.7	6.7
PSU-333	6.7	6.7
REGAL	6.7	6.7
REGENCY	6.7	6.7
SR 4100	6.7	6.7
BIRDIE II	6.3	6.3
GATOR	6.3	6.3
MANHATTAN	6.3	6.3
SR 4031 (NOVA)	6.3	6.3
VINTAGE-2DF	6.3	6.3
LINN	6.0	6.0
LSD VALUE	0.6	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 7. SPRING DENSITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

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

NAME	SD1	MEAN
BELLIE	7.0	7.0
BRENDA	7.0	7.0
DIPLOMAT	7.0	7.0
GOALIE	7.0	7.0
MOM LP 763	7.0	7.0
PENNFINE	7.0	7.0
REGENCY	7.0	7.0
SR 4000	7.0	7.0
YORKTOWN II	7.0	7.0
ACROBAT	6.7	6.7
BAR LP 410 (BARRAGE)	6.7	6.7
BAR LP 454 (BARCREDO)	6.7	6.7
BIRDIE II	6.7	6.7
CALIENTE	6.7	6.7
DEL 946	6.7	6.7
DELRAY	6.7	6.7
DERBY	6.7	6.7
J207	6.7	6.7
MANHATTAN	6.7	6.7
OVATION	6.7	6.7
PAVO	6.7	6.7
PRELUDE	6.7	6.7
PST-250 (COMPETITOR)	6.7	6.7
PSU-222	6.7	6.7
PSU-333	6.7	6.7
RANGER	6.7	6.7
RUNAWAY	6.7	6.7
SHERIFF	6.7	6.7
BARRY	6.3	6.3
CITATION II	6.3	6.3
GATOR	6.3	6.3
ISI-851 (LINDSAY)	6.3	6.3
J208	6.3	6.3
NK 80389	6.3	6.3
PALMER	6.3	6.3
PATRIOT	6.3	6.3
PENNANT	6.3	6.3
PICK 300 (BLAZER II)	6.3	6.3
PICK 647 (RIVIERA)	6.3	6.3
PST-2PM (SATURN)	6.3	6.3
RIVAL	6.3	6.3
TARA	6.3	6.3
246	6.0	6.0
KWS-AL-2 (AQUARIUS)	6.0	6.0
PICK 233 (DASHER II)	6.0	6.0

SPRING DENSITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY

NAME	SD1	MEAN
PICK 600 (FIESTA II)	6.0	6.0
PST-259 (COMMANDER)	6.0	6.0
PST-2H7 (DIMENSION)	6.0	6.0
PST-M2E (MAN. II W/ENDO)	6.0	6.0
SR 4031 (NOVA)	6.0	6.0
SR 4100	6.0	6.0
VINTAGE-2DF	6.0	6.0
ALLAIRE	5.7	5.7
ISI-K2 (DILLON)	5.7	5.7
MANHATTAN II	5.7	5.7
PICK 715	5.7	5.7
PST-2HH (CHARGER)	5.7	5.7
REGAL	5.7	5.7
REPELL	5.7	5.7
RONJA	5.7	5.7
COWBOY	5.3	5.3
OMEGA II	5.3	5.3
PST-2DD	5.3	5.3
RODEO	5.3	5.3
LINN	4.0	4.0
LSD VALUE	0.9	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 8. SUMMER DENSITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

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

NAME	SD1	MEAN
BAR LP 454 (BARCREDO)	8.7	8.7
PSU-222	8.3	8.3
KWS-AL-2 (AQUARIUS)	8.0	8.0
OVATION	8.0	8.0
PENNFINE	8.0	8.0
PICK 715	8.0	8.0
PRELUDE	8.0	8.0
SR 4000	8.0	8.0
BAR LP 410 (BARRAGE)	7.7	7.7
BELIE	7.7	7.7
BRENDA	7.7	7.7
DERBY	7.7	7.7
DIPLOMAT	7.7	7.7
GOALIE	7.7	7.7
MOM LP 763	7.7	7.7
NK 80389	7.7	7.7
PST-259 (COMMANDER)	7.7	7.7
RUNAWAY	7.7	7.7
YORKTOWN II	7.7	7.7
GATOR	7.3	7.3
ISI-851 (LINDSAY)	7.3	7.3
PALMER	7.3	7.3
PICK 300 (BLAZER II)	7.3	7.3
PST-250 (COMPETITOR)	7.3	7.3
PST-2HH (CHARGER)	7.3	7.3
PSU-333	7.3	7.3
RANGER	7.3	7.3
REPELL	7.3	7.3
RIVAL	7.3	7.3
TARA	7.3	7.3
246	7.0	7.0
ACROBAT	7.0	7.0
BIRDIE II	7.0	7.0
DEL 946	7.0	7.0
DELRAY	7.0	7.0
ISI-K2 (DILLON)	7.0	7.0
J207	7.0	7.0
J208	7.0	7.0
MANHATTAN	7.0	7.0
PATRIOT	7.0	7.0
PAVO	7.0	7.0
PICK 233 (DASHER II)	7.0	7.0
PICK 600 (FIESTA II)	7.0	7.0
PICK 647 (RIVIERA)	7.0	7.0
PST-2DD	7.0	7.0

SUMMER DENSITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

DENSITY RATINGS 1-9; 9=MAXIMUM DENSITY

NAME	SD1	MEAN
PST-2H7 (DIMENSION)	7.0	7.0
REGENCY	7.0	7.0
SR 4100	7.0	7.0
CALIENTE	6.7	6.7
CITATION II	6.7	6.7
MANHATTAN II	6.7	6.7
OMEGA II	6.7	6.7
PST-2PM (SATURN)	6.7	6.7
PST-M2E (MAN. II W/ ENDO)	6.7	6.7
RODEO	6.7	6.7
RONJA	6.7	6.7
SHERIFF	6.7	6.7
VINTAGE-2DF	6.7	6.7
ALLAIRE	6.3	6.3
BARRY	6.3	6.3
PENNANT	6.3	6.3
REGAL	6.3	6.3
SR 4031 (NOVA)	6.0	6.0
COWBOY	5.7	5.7
LINN	4.3	4.3
LSD VALUE	1.2	1.2

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

TABLE 9. PERCENT LIVING GROUND COVER (SUMMER)
RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS 1/

NAME	MO1	MEAN
PENNANT	96.3	96.3
SR 4100	96.3	96.3
PICK 715	95.0	95.0
PATRIOT	93.3	93.3
CALIENTE	91.7	91.7
PSU-333	91.7	91.7
GOALIE	91.3	91.3
BIRDIE II	90.0	90.0
DEL 946	90.0	90.0
GATOR	90.0	90.0
PICK 233 (DASHER II)	90.0	90.0
PICK 647 (RIVIERA)	90.0	90.0
REGAL	90.0	90.0
CITATION II	88.3	88.3
DERBY	88.3	88.3
PST-259 (COMMANDER)	88.3	88.3
PST-2PM (SATURN)	88.3	88.3
DELRAY	86.7	86.7
PICK 300 (BLAZER II)	86.7	86.7
PST-2H7 (DIMENSION)	86.7	86.7
PST-2HH (CHARGER)	86.7	86.7
RANGER	86.7	86.7
RODEO	86.7	86.7
SR 4031 (NOVA)	86.7	86.7
BAR LP 410 (BARRAGE)	85.0	85.0
PST-M2E (MAN. II W/ ENDO)	85.0	85.0
REGENCY	85.0	85.0
REPELL	85.0	85.0
VINTAGE-2DF	85.0	85.0
MOM LP 763	83.3	83.3
PALMER	83.3	83.3
RIVAL	83.3	83.3
RUNAWAY	83.3	83.3
YORKTOWN II	83.3	83.3
246	81.7	81.7
ACROBAT	81.7	81.7
DIPLOMAT	81.7	81.7
MANHATTAN II	81.7	81.7
PENNFINE	81.7	81.7
ISI-K2 (DILLON)	80.0	80.0
OVATION	80.0	80.0
PICK 600 (FIESTA II)	80.0	80.0
ALLAIRE	78.3	78.3
J207	78.3	78.3
PST-250 (COMPETITOR)	78.3	78.3

PERCENT LIVING GROUND COVER (SUMMER)
RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS

NAME	MO1	MEAN
PSU-222	78.3	78.3
SHERIFF	78.3	78.3
TARA	78.3	78.3
BARRY	76.7	76.7
BELIE	76.7	76.7
BRENDA	76.7	76.7
ISI-851 (LINDSAY)	76.7	76.7
OMEGA II	76.7	76.7
BAR LP 454 (BARCREDO)	75.0	75.0
COWBOY	75.0	75.0
PST-2DD	75.0	75.0
KWS-AL-2 (AQUARIUS)	73.3	73.3
SR 4000	73.3	73.3
PRELUDE	71.7	71.7
PAVO	70.0	70.0
MANHATTAN	68.3	68.3
NK 80389	66.7	66.7
RONJA	66.7	66.7
J208	61.7	61.7
LINN	50.0	50.0
LSD VALUE	13.4	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).

TABLE 10. PERCENT WINTER KILL RATINGS
OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

PERCENT WINTER KILL: LOCATIONS 1/		
NAME	SD1	MEAN
LINN	18.3	18.3
COWBOY	16.0	16.0
ALLAIRE	15.0	15.0
MANHATTAN II	15.0	15.0
TARA	15.0	15.0
RODEO	13.7	13.7
KWS-AL-2 (AQUARIUS)	13.3	13.3
OMEGA II	13.3	13.3
REPELL	13.3	13.3
VINTAGE-2DF	12.7	12.7
PICK 600 (FIESTA II)	11.7	11.7
PST-2DD	11.7	11.7
PST-2HH (CHARGER)	11.7	11.7
PST-2H7 (DIMENSION)	11.0	11.0
SR 4031 (NOVA)	10.7	10.7
246	10.0	10.0
BARRY	10.0	10.0
ISI-851 (LINDSAY)	10.0	10.0
ISI-K2 (DILLON)	10.0	10.0
J208	10.0	10.0
PICK 715	10.0	10.0
PST-2PM (SATURN)	10.0	10.0
PST-M2E (MAN. II W/ENDO)	10.0	10.0
RUNAWAY	10.0	10.0
PICK 647 (RIVIERA)	9.3	9.3
REGAL	9.3	9.3
SR 4000	9.3	9.3
SR 4100	9.3	9.3
BAR LP 410 (BARRAGE)	9.0	9.0
PST-250 (COMPETITOR)	9.0	9.0
CITATION II	8.3	8.3
DEL 946	8.3	8.3
PALMER	8.3	8.3
PATRIOT	8.3	8.3
PAVO	8.3	8.3
PICK 233 (DASHER II)	8.3	8.3
PICK 300 (BLAZER II)	8.3	8.3
PSU-222	8.3	8.3
RANGER	8.3	8.3
RONJA	8.3	8.3
SHERIFF	8.3	8.3
YORKTOWN II	8.3	8.3
BIRDIE II	7.7	7.7
DIPLOMAT	7.7	7.7
NK 80389	7.7	7.7

PERCENT WINTER KILL RATINGS
OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

PERCENT WINTER KILL: LOCATIONS

NAME	SD1	MEAN
PSU-333	7.7	7.7
RIVAL	7.7	7.7
ACROBAT	7.0	7.0
BAR LP 454 (BARCREDO)	7.0	7.0
DERBY	7.0	7.0
BELLE	6.7	6.7
BRENDA	6.7	6.7
CALIENTE	6.7	6.7
GATOR	6.7	6.7
J207	6.7	6.7
MANHATTAN	6.7	6.7
PENNANT	6.7	6.7
PENNINE	6.7	6.7
PRELUDE	6.7	6.7
PST-259 (COMMANDER)	6.7	6.7
REGENCY	6.7	6.7
MOM LP 763	6.0	6.0
DELRAY	5.0	5.0
GOALIE	5.0	5.0
OVATION	5.0	5.0
LSD VALUE	4.9	4.9

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 11. LEAFSPOT RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

LEAFSPOT RATINGS 1-9; 9=NO DISEASE 1/		
NAME	OH2	MEAN
MANHATTAN II	7.7	7.7
REPELL	7.7	7.7
246	7.0	7.0
BAR LP 410 (BARRAGE)	7.0	7.0
BIRDIE II	7.0	7.0
CALIENTE	7.0	7.0
COWBOY	7.0	7.0
DERBY	7.0	7.0
DIPLOMAT	7.0	7.0
GATOR	7.0	7.0
GOALIE	7.0	7.0
J207	7.0	7.0
KWS-AL-2 (AQUARIUS)	7.0	7.0
OMEGA II	7.0	7.0
PALMER	7.0	7.0
PAVO	7.0	7.0
PICK 233 (DASHER II)	7.0	7.0
PICK 300 (BLAZER II)	7.0	7.0
PICK 647 (RIVIERA)	7.0	7.0
PST-250 (COMPETITOR)	7.0	7.0
PST-2HH (CHARGER)	7.0	7.0
REGAL	7.0	7.0
RODEO	7.0	7.0
SR 4000	7.0	7.0
SR 4031 (NOVA)	7.0	7.0
SR 4100	7.0	7.0
ACROBAT	6.3	6.3
ALLAIRE	6.3	6.3
BAR LP 454 (BARCREDO)	6.3	6.3
BARRY	6.3	6.3
BELIE	6.3	6.3
BRENDA	6.3	6.3
CITATION II	6.3	6.3
DEL 946	6.3	6.3
DELRAY	6.3	6.3
ISI-851 (LINDSAY)	6.3	6.3
ISI-K2 (DILLON)	6.3	6.3
J208	6.3	6.3
MANHATTAN	6.3	6.3
MOM LP 763	6.3	6.3
NK 80389	6.3	6.3
PATRIOT	6.3	6.3
PENNANT	6.3	6.3
PENNFINE	6.3	6.3
PICK 600 (FIESTA II)	6.3	6.3

LEAFSPOT RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

LEAFSPOT RATINGS 1-9; 9=NO DISEASE

NAME	OH2	MEAN
PICK 715	6.3	6.3
PRELUDE	6.3	6.3
PST-259 (COMMANDER)	6.3	6.3
PST-2DD	6.3	6.3
PST-2H7 (DIMENSION)	6.3	6.3
PST-2PM (SATURN)	6.3	6.3
PST-M2E (MAN. II W/ENDO)	6.3	6.3
PSU-222	6.3	6.3
PSU-333	6.3	6.3
RANGER	6.3	6.3
REGENCY	6.3	6.3
RIVAL	6.3	6.3
RONJA	6.3	6.3
TARA	6.3	6.3
OVATION	5.7	5.7
RUNAWAY	5.7	5.7
SHERIFF	5.7	5.7
VINTAGE-2DF	5.7	5.7
YORKTOWN II	5.0	5.0
LINN	4.3	4.3
LSD VALUE	1.8	1.8

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

TABLE 12. DOLLAR SPOT RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

DOLLAR SPOT RATINGS 1-9; 9=NO DISEASE 1/					
NAME	IL1	IN1	PA1	PA2	MEAN
PENNANT	4.3	8.7	6.7	8.3	7.0
PST-259 (COMMANDER)	6.0	6.7	7.0	8.0	6.9
PST-2PM (SATURN)	5.3	7.7	6.7	8.0	6.9
SR 4100	4.7	8.0	7.0	8.0	6.9
REGENCY	6.0	7.3	6.3	8.0	6.9
BIRDIE II	4.7	8.0	6.7	8.0	6.8
DELRAY	4.7	7.7	6.7	8.3	6.8
BRENDA	5.3	7.7	6.3	8.0	6.8
PST-250 (COMPETITOR)	5.3	7.0	7.0	7.7	6.8
CITATION II	5.3	7.3	6.0	8.0	6.7
DERBY	3.7	7.3	7.0	8.7	6.7
PATRIOT	3.7	8.3	6.7	7.7	6.6
PICK 715	4.3	8.0	6.0	7.7	6.5
VINTAGE-2DF	4.7	6.7	6.7	8.0	6.5
PST-M2E (MAN. II W/ENDO)	4.0	7.3	7.3	7.3	6.5
ALLAIRE	4.0	7.0	6.7	8.0	6.4
DEL 946	4.3	6.7	6.7	8.0	6.4
GOALIE	6.0	6.0	5.7	8.0	6.4
PICK 600 (FIESTA II)	6.0	7.0	5.0	7.7	6.4
SR 4031 (NOVA)	5.0	7.3	6.0	7.3	6.4
PICK 300 (BLAZER II)	5.7	8.0	5.0	6.7	6.3
PENNFINE	4.7	6.3	6.3	8.0	6.3
RUNAWAY	3.7	8.0	6.3	7.3	6.3
246	5.0	5.7	6.7	7.7	6.3
J207	4.3	6.7	6.3	7.7	6.3
LINN	3.0	8.3	6.3	7.3	6.3
PST-2H7 (DIMENSION)	4.0	6.0	7.3	7.7	6.3
RANGER	4.7	7.3	5.7	7.3	6.3
SR 4000	3.7	7.7	6.7	7.0	6.3
PST-2DD	3.3	7.7	.	7.7	6.2
MOM LP 763	5.7	6.7	5.0	7.3	6.2
RIVAL	5.0	6.7	5.3	7.7	6.2
SHERIFF	4.0	7.7	5.7	7.3	6.2
REGAL	4.3	5.7	6.3	8.3	6.2
COWBOY	4.0	5.3	6.7	8.3	6.1
DIPLOMAT	3.7	6.7	6.0	8.0	6.1
OVATION	4.7	8.0	5.7	6.0	6.1
PICK 233 (DASHER II)	3.7	6.7	6.0	8.0	6.1
BELLE	4.3	6.7	5.3	8.0	6.1
CALIENTE	4.0	5.3	7.0	8.0	6.1
ISI-K2 (DILLON)	4.7	6.7	5.7	7.3	6.1
MANHATTAN II	4.0	6.3	6.0	8.0	6.1
RODEO	3.0	7.3	6.7	7.3	6.1
BARRY	3.7	7.3	6.0	7.0	6.0
ISI-851 (LINDSAY)	5.0	5.3	6.0	7.7	6.0

DOLLAR SPOT RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

DOLLAR SPOT RATINGS 1-9; 9=NO DISEASE

NAME	IL1	IN1	PA1	PA2	MEAN
PALMER	3.7	7.0	5.7	7.7	6.0
REPELL	4.3	7.3	5.3	7.0	6.0
OMEGA II	4.0	6.3	6.3	7.3	6.0
NK 80389	5.7	3.7	6.3	8.0	5.9
PSU-222	4.3	5.7	6.0	7.7	5.9
PRELUDE	4.0	6.3	5.3	8.0	5.9
PST-2HH (CHARGER)	4.3	6.3	5.7	7.3	5.9
PICK 647 (RIVIERA)	5.0	5.0	6.0	7.3	5.8
YORKTOWN II	3.3	6.3	6.0	7.7	5.8
BAR LP 454 (BARCREDO)	4.7	6.0	6.0	6.3	5.8
GATOR	4.3	6.0	5.7	7.0	5.8
MANHATTAN	4.7	5.7	5.3	7.3	5.8
J208	2.3	7.3	5.7	7.3	5.7
PSU-333	3.7	6.0	6.0	7.0	5.7
BAR LP 410 (BARRAGE)	2.3	5.7	5.7	8.0	5.4
ACROBAT	3.7	5.3	4.7	7.3	5.3
PAVO	2.7	5.7	4.7	8.0	5.3
RONJA	3.3	5.3	4.0	7.3	5.0
TARA	3.7	4.0	5.3	7.0	5.0
KWS-AL-2 (AQUARIUS)	2.0	4.3	5.7	7.0	4.8
LSD VALUE	2.0	2.8	1.5	1.1	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 13. RED THREAD RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

RED THREAD RATINGS 1-9; 9=NO DISEASE 1/						
NAME	MI1	OH2	PA1	PA2	UB1	MEAN
DELRAY	5.3	8.0	6.7	7.7	7.0	6.9
REGAL	6.0	8.0	6.7	6.7	7.0	6.9
RIVAL	7.3	7.7	6.3	8.0	4.7	6.8
BAR LP 410 (BARRAGE)	7.0	7.7	6.3	6.7	5.7	6.7
TARA	6.7	6.3	7.7	6.0	6.3	6.6
PST-259 (COMMANDER)	5.7	7.7	7.7	6.7	4.3	6.4
RUNAWAY	6.0	7.3	6.7	6.3	5.3	6.3
PENNFINE	6.3	7.7	5.7	6.7	5.0	6.3
NK 80389	5.7	7.3	7.0	7.0	4.3	6.3
YORKTOWN II	7.0	6.0	6.0	6.7	5.3	6.2
BELLE	6.0	7.7	6.0	6.7	4.3	6.1
PAVO	6.3	7.7	6.7	5.7	4.3	6.1
REPELL	6.3	6.7	6.0	7.0	4.7	6.1
BIRDIE II	6.3	7.7	6.3	6.0	4.3	6.1
BRENDA	6.3	7.3	5.7	6.3	5.0	6.1
PALMER	6.7	6.3	6.3	7.0	4.3	6.1
COWBOY	6.0	6.0	6.7	6.7	5.0	6.1
PICK 300 (BLAZER II)	6.7	7.3	4.7	6.7	5.0	6.1
DEL 946	5.7	6.7	6.3	6.0	5.3	6.0
DERBY	6.0	6.0	6.0	6.0	6.0	6.0
OMEGA II	5.0	7.3	7.0	6.0	4.7	6.0
PICK 233 (DASHER II)	5.7	6.7	7.0	6.3	4.3	6.0
PSU-222	5.7	6.7	5.7	6.7	5.3	6.0
ACROBAT	7.0	6.3	7.3	5.7	3.3	5.9
ALLAIRE	5.3	5.7	7.7	6.7	4.0	5.9
PICK 647 (RIVIERA)	6.0	6.0	6.7	6.7	3.7	5.8
CITATION II	5.0	6.7	7.0	6.0	4.3	5.8
MOM LP 763	5.0	6.7	6.3	6.0	5.0	5.8
PST-2H7 (DIMENSION)	5.3	5.0	7.0	6.7	5.0	5.8
PST-M2E (MAN. II W/ENDO)	5.0	6.0	6.3	5.7	6.0	5.8
MANHATTAN	4.7	7.0	6.7	5.3	5.0	5.7
GATOR	5.7	6.3	6.3	7.0	3.3	5.7
GOALIE	5.0	7.3	6.3	6.3	3.7	5.7
OVATION	6.7	6.7	6.7	5.3	3.3	5.7
J207	5.7	5.7	6.3	6.3	4.3	5.7
PSU-333	6.3	6.3	5.3	5.3	5.0	5.7
PICK 715	6.3	4.7	6.3	6.0	4.7	5.6
RONJA	5.7	6.7	6.3	6.3	3.0	5.6
BAR LP 454 (BARCREDO)	6.3	6.7	4.7	5.3	4.7	5.5
PICK 600 (FIESTA II)	5.3	6.7	5.3	6.3	4.0	5.5
RANGER	5.3	7.0	6.0	5.3	4.0	5.5
REGENCY	4.7	6.0	6.3	6.0	4.7	5.5
SHERIFF	4.0	7.0	6.0	5.3	5.3	5.5
SR 4031 (NOVA)	6.0	6.3	6.3	4.3	4.7	5.5
VINTAGE-2DF	5.0	6.7	5.7	5.0	5.3	5.5

TABLE 13. RED THREAD RATINGS OF PERENNIAL RYEGRASS CULTIVARS
(continued) 1989 DATA

RED THREAD RATINGS 1-9; 9=NO DISEASE						
NAME	MI1	OH2	PA1	PA2	UB1	MEAN
DIPLOMAT	6.0	5.7	6.7	6.0	3.0	5.5
J208	5.7	6.3	5.7	5.3	4.3	5.5
MANHATTAN II	5.3	7.0	6.3	4.7	4.0	5.5
RODEO	4.7	6.0	6.0	6.0	4.7	5.5
CALIENTE	5.3	6.7	5.3	5.7	4.0	5.4
ISI-K2 (DILLON)	5.7	6.0	5.7	5.0	4.7	5.4
KWS-AL-2 (AQUARIUS)	5.0	7.0	6.0	5.0	3.7	5.3
PENNANT	6.3	5.0	5.7	6.0	3.7	5.3
PATRIOT	4.3	5.7	6.0	5.0	5.3	5.3
SR 4100	6.3	4.0	6.7	5.7	3.3	5.2
246	3.7	7.0	6.3	5.7	3.0	5.1
PRELUDE	5.3	6.0	5.0	5.7	3.7	5.1
SR 4000	5.3	6.0	5.7	5.7	3.0	5.1
PST-2HH (CHARGER)	4.7	5.3	6.0	5.0	4.3	5.1
PST-2PM (SATURN)	5.3	6.0	5.7	4.3	4.0	5.1
LINN	2.3	7.0	5.3	6.0	4.0	4.9
ISI-851 (LINDSAY)	4.3	5.3	5.3	5.3	4.3	4.9
PST-250 (COMPETITOR)	4.7	6.0	5.3	5.0	3.3	4.9
PST-2DD	5.0	5.3	.	5.7	3.3	4.8
BARRY	3.7	5.3	5.3	3.0	3.0	4.1
LSD VALUE	2.2	2.7	1.7	1.7	2.7	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 14. BROWN PATCH RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE 1/			
NAME	MD1	NJ1	MEAN
OMEGA II	8.3	6.0	7.2
PST-2H7 (DIMENSION)	7.7	6.7	7.2
PST-2PM (SATURN)	8.3	6.0	7.2
GOALIE	8.0	6.3	7.2
SR 4000	9.0	5.3	7.2
PENNANT	8.3	5.3	6.8
PICK 600 (FIESTA II)	7.7	6.0	6.8
SR 4100	7.7	6.0	6.8
CALIENTE	7.7	5.7	6.7
PICK 233 (DASHER II)	8.3	5.0	6.7
PALMER	7.3	6.0	6.7
PICK 715	8.0	5.3	6.7
BIRDIE II	8.3	4.7	6.5
MANHATTAN II	7.7	5.3	6.5
PRELUDE	7.0	6.0	6.5
PST-2HH (CHARGER)	7.7	5.3	6.5
PST-M2E (MAN. II W/ENDO)	8.3	4.7	6.5
CITATION II	8.0	4.7	6.3
PICK 300 (BLAZER II)	6.7	6.0	6.3
PSU-333	7.0	5.7	6.3
PST-259 (COMMANDER)	7.3	5.0	6.2
VINTAGE-2DF	7.3	5.0	6.2
COWBOY	7.7	4.3	6.0
DERBY	6.7	5.3	6.0
PENNFINE	7.3	4.7	6.0
PSU-222	6.3	5.7	6.0
REGAL	7.0	5.0	6.0
BELLE	6.0	5.7	5.8
PATRIOT	7.0	4.7	5.8
RODEO	6.7	5.0	5.8
ISI-851 (LINDSAY)	7.3	4.3	5.8
PICK 647 (RIVIERA)	6.3	5.3	5.8
PST-2DD	7.3	4.3	5.8
PST-250 (COMPETITOR)	6.7	4.7	5.7
DELRAY	7.3	4.0	5.7
SHERIFF	7.3	4.0	5.7
BRENDA	6.3	4.7	5.5
GATOR	5.7	5.3	5.5
KWS-AL-2 (AQUARIUS)	6.3	4.7	5.5
REPELL	6.7	4.3	5.5
SR 4031 (NOVA)	7.3	3.7	5.5
OVATION	6.7	4.0	5.3
DEL 946	6.3	4.3	5.3
REGENCY	7.0	3.7	5.3
TARA	6.3	4.3	5.3

BROWN PATCH RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE

NAME	MD1	NJ1	MEAN
YORKTOWN II	5.3	5.3	5.3
ISI-K2 (DILLON)	7.3	3.0	5.2
ALLAIRE	6.3	3.7	5.0
RUNAWAY	6.0	4.0	5.0
246	6.3	3.3	4.8
BAR LP 410 (BARRAGE)	6.3	3.3	4.8
NK 80389	4.7	4.7	4.7
RANGER	5.7	3.7	4.7
BARRY	5.7	3.3	4.5
DIPLOMAT	5.0	4.0	4.5
RIVAL	5.0	4.0	4.5
ACROBAT	5.7	3.0	4.3
J207	5.0	3.3	4.2
MOM LP 763	5.0	3.3	4.2
BAR LP 454 (BARCREDO)	4.7	3.3	4.0
LINN	4.7	3.0	3.8
RONJA	5.7	2.0	3.8
MANHATTAN	4.7	2.7	3.7
J208	4.3	3.0	3.7
PAVO	5.3	1.7	3.5
LSD VALUE	1.4	2.0	1.2

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

TABLE 15. CROWN RUST RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

CROWN RUST RATINGS 1-9; 9=NO DISEASE 1/

NAME	OR1	MEAN
KWS-AL-2 (AQUARIUS)	7.7	7.7
GATOR	7.3	7.3
ISI-K2 (DILLON)	7.0	7.0
J208	7.0	7.0
BAR LP 454 (BARCREDO)	6.7	6.7
MOM LP 763	6.7	6.7
PICK 300 (BLAZER II)	6.7	6.7
PST-2DD	6.7	6.7
BAR LP 410 (BARRAGE)	6.3	6.3
RIVAL	6.3	6.3
ALLAIRE	6.0	6.0
J207	6.0	6.0
MANHATTAN II	6.0	6.0
OMEGA II	6.0	6.0
PAVO	6.0	6.0
RODEO	6.0	6.0
ACROBAT	5.7	5.7
BIRDIE II	5.7	5.7
ISI-851 (LINDSAY)	5.7	5.7
OVATION	5.7	5.7
PRELUDE	5.7	5.7
PST-250 (COMPETITOR)	5.7	5.7
PST-2H7 (DIMENSION)	5.7	5.7
PST-M2E (MAN. II W/ENDO)	5.7	5.7
REPELL	5.7	5.7
RONJA	5.7	5.7
RUNAWAY	5.7	5.7
CITATION II	5.3	5.3
DERBY	5.3	5.3
NK 80389	5.3	5.3
PST-2HH (CHARGER)	5.3	5.3
COWBOY	5.0	5.0
PATRIOT	5.0	5.0
PICK 715	5.0	5.0
TARA	5.0	5.0
PICK 600 (FIESTA II)	4.7	4.7
PST-259 (COMMANDER)	4.7	4.7
246	4.3	4.3
PALMER	4.3	4.3
REGAL	4.3	4.3
SR 4031 (NOVA)	4.3	4.3
PICK 647 (RIVIERA)	4.0	4.0
SR 4100	4.0	4.0
BARRY	3.7	3.7
LINN	3.7	3.7

CROWN RUST RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

CROWN RUST RATINGS 1-9; 9=NO DISEASE

NAME	OR1	MEAN
PICK 233 (DASHER II)	3.7	3.7
PSU-222	3.7	3.7
RANGER	3.7	3.7
SHERIFF	3.7	3.7
SR 4000	3.7	3.7
CALIENTE	3.3	3.3
DELRAY	3.3	3.3
DIPLOMAT	3.3	3.3
PENNFINE	3.3	3.3
PST-2PM (SATURN)	3.3	3.3
VINTAGE-2DF	3.3	3.3
BRENDA	3.0	3.0
GOALIE	3.0	3.0
MANHATTAN	3.0	3.0
REGENCY	3.0	3.0
YORKTOWN II	3.0	3.0
DEL 946	2.7	2.7
PSU-333	2.7	2.7
BELLE	2.3	2.3
PENNANT	2.3	2.3
LSD VALUE	1.9	1.9

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 16. CHINCH BUG RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

CHINCH BUG RATINGS 1-9; 9=NO DAMAGE 1/		
NAME	UB1	MEAN
PENNANT	9.0	9.0
PICK 715	9.0	9.0
PST-259 (COMMANDER)	9.0	9.0
CITATION II	8.7	8.7
PST-M2E (MAN. II W/ENDO)	8.7	8.7
REGAL	8.7	8.7
SR 4000	8.7	8.7
BIRDIE II	8.3	8.3
PST-2PM (SATURN)	8.3	8.3
SR 4100	8.3	8.3
VINTAGE-2DF	8.3	8.3
PICK 233 (DASHER II)	8.0	8.0
SR 4031 (NOVA)	8.0	8.0
246	7.7	7.7
PST-2H7 (DIMENSION)	7.7	7.7
CALIENTE	7.3	7.3
GOALIE	7.3	7.3
OMEGA II	7.0	7.0
PST-2HH (CHARGER)	7.0	7.0
REPELL	7.0	7.0
BAR LP 410 (BARRAGE)	6.7	6.7
PALMER	6.3	6.3
PATRIOT	6.3	6.3
PST-2DD	6.3	6.3
BARRY	6.0	6.0
DELRAY	6.0	6.0
PICK 600 (FIESTA II)	5.7	5.7
PSU-333	5.7	5.7
PENNFINE	5.3	5.3
PICK 647 (RIVIERA)	5.3	5.3
DERBY	5.0	5.0
ISI-851 (LINDSAY)	5.0	5.0
BAR LP 454 (BARCREDO)	4.7	4.7
COWBOY	4.7	4.7
OVATION	4.7	4.7
RIVAL	4.7	4.7
PAVO	4.3	4.3
PST-250 (COMPETITOR)	4.3	4.3
MOM LP 763	4.0	4.0
PRELUDE	4.0	4.0
J207	3.7	3.7
MANHATTAN	3.7	3.7
DEL 946	3.3	3.3
GATOR	3.3	3.3
KWS-AL-2 (AQUARIUS)	3.3	3.3

CHINCH BUG RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

CHINCH BUG RATINGS 1-9; 9=NO DAMAGE

NAME	UB1	MEAN
ALLAIRE	3.0	3.0
BRENDA	3.0	3.0
J208	3.0	3.0
MANHATTAN II	3.0	3.0
PICK 300 (BLAZER II)	3.0	3.0
RONJA	3.0	3.0
SHERIFF	3.0	3.0
TARA	2.7	2.7
YORKTOWN II	2.7	2.7
ISI-K2 (DILLON)	2.3	2.3
LINN	2.3	2.3
NK 80389	2.3	2.3
PSU-222	2.3	2.3
ACROBAT	1.7	1.7
DIPLOMAT	1.7	1.7
RUNAWAY	1.7	1.7
BELLE	1.3	1.3
REGENCY	1.3	1.3
RODEO	1.3	1.3
RANGER	1.0	1.0
LSD VALUE	2.6	2.6

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 17. WHITE GRUB RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

WHITE GRUB RATINGS 1-9; 9=NO DAMAGE 1/

NAME	IN1	MEAN
PENNFINE	9.0	9.0
PICK 600 (FIESTA II)	9.0	9.0
RIVAL	9.0	9.0
246	8.7	8.7
BELLE	8.7	8.7
PENNANT	8.7	8.7
PICK 300 (BLAZER II)	8.7	8.7
PICK 715	8.7	8.7
PST-M2E (MAN. II W/ENDO)	8.7	8.7
BRENDA	8.3	8.3
DERBY	8.3	8.3
ISI-K2 (DILLON)	8.3	8.3
RANGER	8.3	8.3
REGAL	8.3	8.3
GOALIE	8.0	8.0
OVATION	8.0	8.0
PAVO	8.0	8.0
VINTAGE-2DF	8.0	8.0
ACROBAT	7.7	7.7
BAR LP 454 (BARCREDO)	7.7	7.7
BIRDIE II	7.7	7.7
DEL 946	7.7	7.7
GATOR	7.7	7.7
PST-259 (COMMANDER)	7.7	7.7
RUNAWAY	7.7	7.7
BARRY	7.3	7.3
CALIENTE	7.3	7.3
OMEGA II	7.3	7.3
PRELUDE	7.3	7.3
PSU-333	7.3	7.3
REPELL	7.3	7.3
J207	7.0	7.0
LINN	7.0	7.0
PALMER	7.0	7.0
PST-2HH (CHARGER)	7.0	7.0
DIPLOMAT	6.7	6.7
RONJA	6.7	6.7
SR 4031 (NOVA)	6.7	6.7
SR 4100	6.7	6.7
ALLAIRE	6.3	6.3
DELRAY	6.3	6.3
MOM LP 763	6.3	6.3
REGENCY	6.3	6.3
SR 4000	6.3	6.3
CITATION II	6.0	6.0

WHITE GRUB RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1989 DATA

WHITE GRUB RATINGS 1-9; 9=NO DAMAGE

NAME	IN1	MEAN
ISI-851 (LINDSAY)	6.0	6.0
J208	6.0	6.0
MANHATTAN II	6.0	6.0
PICK 647 (RIVIERA)	6.0	6.0
PST-2PM (SATURN)	6.0	6.0
SHERIFF	6.0	6.0
TARA	6.0	6.0
YORKTOWN II	6.0	6.0
PST-2H7 (DIMENSION)	5.7	5.7
PSU-222	5.7	5.7
COWBOY	5.3	5.3
PICK 233 (DASHER II)	5.3	5.3
BAR LP 410 (BARRAGE)	5.0	5.0
PST-250 (COMPETITOR)	5.0	5.0
MANHATTAN	4.7	4.7
PATRIOT	4.7	4.7
PST-2DD	4.7	4.7
RODEO	4.7	4.7
NK 80389	3.7	3.7
KWS-AL-2 (AQUARIUS)	3.3	3.3
LSD VALUE	3.3	3.3

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).