

NATIONAL TURFGRASS EVALUATION PROGRAM

The National Turfgrass Evaluation Program (NTEP) is designed to develop and coordinate uniform evaluation trials of turfgrass varieties and promising selections in the United States and Canada. Test results can be used by national companies and plant breeders to determine the broad picture of the adaptation of a cultivar. Results can also be used to determine if a cultivar is well adapted to a local area or level of turf maintenance.

Briefly, the NTEP is a self-supporting, non-profit program, sponsored by the Beltsville Agricultural Research Center and the National Turfgrass Federation, Inc. Program policy is made by a policy committee consisting of one member from each of the four (4) Regional Turfgrass Research Committees in the United States, one member from the Lawn Seed Division of the American Seed Trade Association, one member from the American Sod Producers Association, one member from the United States Golf Association (USGA) Green Section, one member from the Turfgrass Breeders Association, an executive director and a national program coordinator. The program does not make variety recommendations. However, the data from tests can be used by extension specialists and others for making recommendations.

The policy committee is responsible for determining program policy including, (1) requirements for submission of entries, (2) scheduling tests, (3) evaluation methods, (4) selecting standard or control test entries, (5) setting entry fees, (6) coordinating tests in their respective regions, (7) establishing guidelines for publication and data distribution and (8) scheduling committee meetings.

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LOCATIONS SUBMITTING DATA FOR 1993

<u>State</u>	<u>Location</u>	<u>Code</u>
Colorado	Fort Collins	CO1
District of Columbia	Washington Monument Grounds	DC1
Idaho	Rathdrum	ID3
Illinois	Urbana	IL1
Illinois	Carbondale	IL2
Iowa	Ames	IA1
Kansas	Wichita	KS2
Kentucky	Lexington	KY1
Maryland	Beltsville	UB1
Maryland	Silver Spring	MD1
Michigan	East Lansing	MI1
Nebraska	Lincoln	NE1
New Jersey	North Brunswick	NJ1
New Jersey	Adelphia	NJ2
New Jersey	Martinsville	NJ3
Oregon	Hubbard (30-40% Shade)	OR7
Oregon	Summary of data collected at Halsey and Hubbard	OR9
Virginia	Blacksburg	VA1
Washington	Pullman	WA1
Washington	Puyallup	WA3

1990 NATIONAL PERENNIAL RYEGRASS TEST

Entries and Sponsors

Entry No.	Name	Sponsor	Entry No.	Name	Sponsor	Entry No.	Name	Sponsor
1	Riviera	Roberts Seed Company	46	Pinnacle	Barenbrug USA	91	PS 89-90 (MVF 89-90)	Mid Valley Farms/Pro-Seeds
2	Calypto	Roberts Seed Company	47	Duet	Cascade Inter. Seed Co.	92	Stallion Select (PS-105)	Pro-Seeds Marketing
3	Seville	Willamette Seed Company	48	Pennant	E. F. Burlingham & Son	93	Stallion	Finelawn Research
4	Caliente	Willamette Seed Company	49	Competitor	E. F. Burlingham & Son	94	PR 9118	International Seeds, Inc.
5	Capri (ZW 42-176)	Limagrain Genetics	50	PR 9121	International Seeds, Inc.	95	SR 4200	Seed Research of OR, Inc.
6	BAR Lp 852	Barenbrug Holland	51	PR 9119	International Seeds, Inc.	96	Rodeo II	Turf Merchants
7	Barrage	Barenbrug Holland	52	PR 9108	International Seeds, Inc.	97	Patriot II	Turf Merchants
8	Barrage ++	Barenbrug Holland	53	Essence (PR 8820)	International Seeds, Inc.	98	OFI-D4	Olson-Fennel Seed Company
9	Commander	LESCO, Inc.	54	Cutless	International Seeds, Inc.	99	OFI-F7	Olson-Fennel Seed Company
10	Assure	LESCO, Inc.	55	Derby Supreme	International Seeds, Inc.	100	PR 9109	International Seeds, Inc.
11	Legacy	LESCO, Inc.	56	Regal	International Seeds, Inc.	101	Mulligan (NK 89001)	Medalist America
12	Dandy	Medalist America	57	Gator	International Seeds, Inc.	102	Target	Medalist America
13	Danilo	Danish Plant Breeding	58	Lindsay	International Seeds, Inc.	103	Goalie	Medalist America
14	Danaro	Danish Plant Breeding	59	Achiever (Pick 1800)	Pickseed West, Inc.	104	Advent	Jacklin Seed Company
15	Precision (Mom Lp 3147)	Advanta Seeds West	60	Riviera II (Pick DKM)	Pickseed West, Inc.	105	APM	Medalist America
16	Mom Lp 3184	Advanta Seeds West, Inc.	61	Greenland (Pick 9100)	Pickseed West, Inc.	106	Pennfine	-
17	Mom Lp 3185	Advanta Seeds West, Inc.	62	Pick EEC	Pickseed West	107	Unknown	-
18	Elite (WVPB-88-PR-C-23)	Forbes Seed & Grain	63	Express	Pickseed West	108	Palmer II (P89)	Loft's Seed, Inc.
19	Allegro	Prodana Seeds	64	Troubadour	International Seeds, Inc.	109	Yorktown III (LDRF)	Loft's Seed, Inc.
20	Taya	Prodana Seeds	65	Entrar	International Seeds, Inc.	110	Repell	Loft's Seed, Inc.
21	Loretta	O. M. Scott & Son	66	CLP 144	Cebeco Handelsraad	111	Prelude II (2P2-90)	Loft's Seed, Inc.
22	Ovation	O. M. Scott & Son	67	Morning Star (Syn-P)	Pennington Seed Inc.	112	Cowboy II (WM-II)	Loft's Seed, Inc.
23	WVPB 89-92	Willamette Valley Plt. Br.	68	N-33	Barenbrug USA	113	Repell II (LDRD)	Loft's Seed, Inc.
24	Buccaneer (Kooos 90-1)	John R. Kooos & Son	69	Dimension (2H7)	Advanta Seeds West, Inc.	114	Toronto	Advanta Seeds West, Inc.
25	Kooos 90-2	John R. Kooos & Son	70	Charger	Turf-Seed, Inc.	115	EEG 358	International Seeds, Inc.
26	Pleasure	Ampac Seed Company	71	Citation II	Turf-Seed, Inc.	116	Equal	All Star Farms, Inc.
27	Delaware Dwarf (4DD)	Ampac Seed Company	72	ZPS-2EZ	Zajac Performance Seeds	117	Nomad	Turf Merchants
28	BAR Lp 086FL	Barenbrug Holland	73	Manhattan II (E)	Manhattan Rye Growers	118	Evening Shade (Poly-SH)	Turf Merchants
29	Topeka (WVPB 88-PR-D-10)	Smith Seed Services	74	Prizm (ZPS-28D)	Zajac Performance Seeds	119	Mom Lp 3111	Advanta Seeds West, Inc.
30	Statesman (WVPB-88-PR-D-12)	Smith Seed Services	75	Navajo (PST-2DPR)	Turf-Seed, Inc.	120	Mom Lp 3179	Advanta Seeds West, Inc.
31	Accolade	O. M. Scott & Son	76	PST-28M	Pure-Seed Testing, Inc.	121	HE 311	Advanta Seeds West, Inc.
32	NightHawk (WVPB-89-PR-A-3)	Forbes Seed & Grain	77	PST-290	Pure-Seed Testing, Inc.	122	Mom Lp 3182	Advanta Seeds West, Inc.
33	Affinity (GEN-90)	Genesis Group	78	PST-2ROR	Pure-Seed Testing, Inc.	123	Linn	-
34	Sherwood	Jonathan Green & Son	79	PST-23C	Pure-Seed Testing, Inc.			
35	Gettysburg	Cascade Inter./Jon. Green	80	PST-2FF	Pure-Seed Testing, Inc.			
36	240 (Pebble Beach)	Pennington Seed Inc.	81	Quickstart (PST-2FQR)	Turf-Seed, Inc.			
37	Pronto (WVPB-89-87A)	Willamette Valley Plt. Br.	82	Shining Star (PST-2B3)	Pennington Seed, Inc.			
38	Fiesta II	Pickseed West, Inc.	83	Envy	Zajac Performance Seeds			
39	Cutter (Pick 89-4)	Pickseed West, Inc.	84	PST-20G	Turf-Seed, Inc.			
40	Lowgrow (Pick 89LLG)	Pickseed West, Inc.	85	Brightstar (PST-GH-89)	Turf-Seed, Inc.			
41	CLP 39	Cebeco Handelsraad	86	Saturn	Zajac Performance Seeds			
42	Surprise	Cebeco Handelsraad	87	856	Mid-Valley Ag. Products			
43	Cartel	Cebeco Handelsraad	88	89-666	Mid-Valley Ag. Products			
44	Meteor	Cebeco Handelsraad	89	C-21	Mid-Valley Ag. Products			
45	Premier	Barenbrug USA	90	MVF 89-88	Mid Valley Farms			

TABLE A.

1993 LOCATIONS, SITE DESCRIPTIONS AND MANAGEMENT PRACTICES IN
THE 1990 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
CO1	SANDY CLAY LOAM	7.6-8.5	0-60	501+	4.1-5.0	FULL SUN	0.6-1.0	TO PREVENT STRESS
DC1	-	-	-	-	-	-	-	-
IA1	SANDY CLAY LOAM	7.1-7.5	0-60	241-375	2.1-3.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
ID3	SILT LOAM AND SILT	7.1-7.5	61-150	501+	4.1-5.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
IL1	SILT LOAM AND SILT	6.1-6.5	0-60	376-500	3.1-4.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
IL2	SILTY CLAY LOAM	6.1-6.5	271-450	241-375	4.1-5.0	FULL SUN	1.1-1.5	ONLY DURING SEVERE STRESS
KS2	SANDY LOAM	6.6-7.0	61-150	241-375	3.1-4.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
KY1	SILT LOAM AND SILT	6.1-6.5	61-150	151-240	2.1-3.0	FULL SUN	1.1-1.5	ONLY DURING SEVERE STRESS
MD1	SANDY LOAM	6.1-6.5	151-270	0-150	4.1-5.0	FULL SUN	0.0-0.5	TO PREVENT STRESS
MI1	SANDY LOAM	7.1-7.5	-	-	3.1-4.0	FULL SUN	2.1-2.5	TO PREVENT STRESS
NE1	SANDY CLAY LOAM	6.6-7.0	151-270	376-500	3.1-4.0	FULL SUN	2.6-3.0	TO PREVENT STRESS
NJ1	LOAM	6.6-7.0	0-60	241-375	5.1-6.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
NJ2	LOAM	6.1-6.5	151-270	241-375	2.1-3.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
NJ3	SILT LOAM AND SILT	6.6-7.0	151-270	501+	3.1-4.0	FULL SUN	1.1-1.5	TO PREVENT STRESS
OR7	SILT LOAM AND SILT	5.6-6.0	151-270	241-375	4.1-5.0	UNIFORM SHADE	2.1-2.5	TO PREVENT DORMANCY
OR9	-	-	-	-	-	-	-	-
UB1	SILT LOAM AND SILT	5.6-6.0	151-270	0-150	3.1-4.0	FULL SUN	1.1-1.5	TO PREVENT DORMANCY
VA1	SILT LOAM AND SILT	6.1-6.5	61-150	241-375	3.1-4.0	FULL SUN	2.1-2.5	ONLY DURING SEVERE STRESS
WA1	SILT LOAM AND SILT	5.6-6.0	0-60	501+	3.1-4.0	FULL SUN	1.6-2.0	TO PREVENT STRESS
WA3	SANDY LOAM	5.6-6.0	0-60	151-240	4.1-5.0	FULL SUN	1.1-1.5	TO PREVENT STRESS

TABLE A.

LOCATIONS AND DATA COLLECTED IN 1993

LOCATION	JANUARY QUALITY RATINGS	FEBRUARY QUALITY RATINGS	MARCH QUALITY RATINGS	APRIL QUALITY RATINGS	MAY QUALITY RATINGS	JUNE QUALITY RATINGS	JULY QUALITY RATINGS	AUGUST QUALITY RATINGS	SEPTEMBER QUALITY RATINGS	OCTOBER QUALITY RATINGS	NOVEMBER QUALITY RATINGS	DECEMBER QUALITY RATINGS
CO1					X	X	X	X	X	X		
DC1					X	X	X	X	X	X	X	
IA1					X	X	X	X	X	X		
ID3				X	X	X	X	X	X	X	X	
IL1					X	X	X	X	X	X		
IL2				X	X	X	X	X				
KS2						X		X				
KY1			X	X	X	X	X	X	X	X		
MD1				X			X	X		X		
MI1					X	X	X	X	X			
NE1					X	X		X	X			
NJ1				X	X	X		X	X	X	X	X
NJ2				X	X	X	X					
NJ3				X				X				
OR7				X	X	X	X	X	X	X		
OR9	X	X	X	X	X	X	X	X	X	X	X	X
UB1				X	X	X	X	X		X	X	
VA1				X	X	X	X	X	X	X		
WA1				X	X		X					
WA3								X				X

TABLE A. (CONTINUED)

LOCATIONS AND DATA COLLECTED IN 1993

LOCATION	GENETIC COLOR RATINGS	LEAF TEXTURE RATINGS	PERCENT COVER SPRING	PERCENT COVER SUMMER	PERCENT COVER FALL	WINTER COLOR	DROUGHT TOLERANCE RECOVERY	TYPHULA BLIGHT RATINGS	RED THREAD	BROWN PATCH	COMBINATION SNOW MOLD	FLOOD RECOVERY
CO1	X					X						
DC1												
IA1												
ID3	X		X						X		X	
IL1												
IL2							X			X		
KS2												
KY1												
MD1	X											
MI1								X				
NE1	X											X
NJ1										X		
NJ2												
NJ3		X							X			
OR7												
OR9									X			
UB1												
VA1										X		
WA1												
WA3	X			X	X	X			X			

TABLE 1.

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT TWENTY LOCATIONS IN THE U.S.
1993 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF 1/																				
	CO1	DC1	IA1	ID3	IL1	IL2	KS2	KY1	MD1	MI1	NE1	NJ1	NJ2	NJ3	OR7	OR9	UB1	VA1	WA1	WA3	MEAN
* CUTTER (PICK 89-4)	7.2	3.5	6.8	6.0	5.7	8.2	6.5	6.3	6.7	5.5	5.8	7.0	5.4	6.0	6.6	6.5	7.3	5.5	7.0	4.0	6.2
* REPELL II (LDRD)	7.2	3.3	6.3	6.1	6.6	6.8	6.8	6.7	6.9	5.7	6.0	7.0	6.3	5.3	6.2	6.6	7.3	5.4	6.3	4.0	6.1
* SEVILLE	7.1	4.6	6.1	5.9	6.5	8.5	6.3	6.1	6.5	5.5	4.8	6.3	5.8	5.3	6.2	6.8	7.1	5.1	6.7	4.8	6.1
* PRELUDE II (2P2-90)	6.9	2.6	6.8	6.7	5.7	7.4	5.5	6.1	6.5	5.9	6.0	7.0	7.1	5.7	6.1	6.6	7.4	4.7	6.8	4.2	6.1
* PRIZM (ZPS-28D)	7.3	3.0	6.4	5.6	6.1	8.3	6.2	6.0	6.4	5.7	5.4	7.5	6.2	5.5	6.2	6.7	7.3	5.2	6.6	4.0	6.1
* PALMER II (P89)	7.1	2.9	5.8	5.3	5.9	7.3	6.2	6.9	6.3	5.8	5.3	6.6	6.8	5.2	6.7	6.6	7.6	5.5	7.0	4.5	6.1
* ADVENT	7.1	3.3	7.2	6.2	5.9	7.5	6.7	5.8	6.4	5.5	5.0	6.9	6.1	5.8	5.5	6.7	7.0	5.4	6.8	4.5	6.1
* RIVIERA II (PICK DKM)	6.9	3.7	6.9	5.8	5.8	7.9	6.3	6.7	6.4	5.7	5.7	6.7	5.4	5.7	5.8	6.6	7.2	5.1	6.9	4.0	6.1
* PRECISION (MOM LP 3147)	6.6	3.9	7.4	6.2	5.4	8.1	6.0	6.8	6.3	5.5	5.7	6.3	6.4	5.7	5.8	6.6	6.4	4.9	7.1	4.2	6.1
PST-2ROR	6.9	3.5	7.2	6.3	.	7.9	6.3	6.4	6.8	6.3	5.8	5.6	6.0	5.2	6.3	6.4	6.6	4.8	6.7	4.2	6.1
* SR 4200	7.1	2.4	6.2	6.7	6.3	6.9	6.7	6.4	6.8	5.7	5.8	7.0	5.3	5.3	5.8	6.4	6.9	4.8	7.1	4.7	6.0
* APM	6.8	3.0	7.1	5.9	6.3	7.9	6.5	5.9	6.7	5.7	5.0	6.5	5.3	5.0	6.5	6.8	7.2	5.1	6.4	4.7	6.0
* STALLION SELECT (PS-105)	6.9	3.4	6.8	5.9	5.9	6.9	5.7	6.1	6.7	5.7	5.9	7.5	5.8	6.2	5.8	6.4	7.2	4.5	6.8	4.0	6.0
PST-28M	6.9	3.0	6.7	6.1	5.8	8.6	6.2	6.5	6.7	5.7	5.2	6.4	5.2	5.3	6.6	6.6	7.3	4.9	6.4	4.0	6.0
* MORNING STAR (SYN-P)	7.2	3.8	6.0	5.9	5.1	7.7	7.0	6.2	6.3	5.4	5.6	6.5	6.2	5.8	5.8	6.3	7.0	5.1	6.3	4.5	6.0
* BRIGHTSTAR (PST-GH-89)	7.2	3.0	5.7	6.1	5.2	7.8	6.5	6.9	6.3	5.4	5.5	6.5	5.8	5.2	6.6	6.2	7.4	4.7	7.1	4.5	6.0
PST-2FF	7.1	3.0	6.1	6.2	.	7.3	6.5	6.4	6.6	5.6	5.9	6.1	5.5	5.5	6.4	6.6	7.0	5.3	6.6	4.0	6.0
* DELAWARE DWARF (4DD)	6.7	4.0	7.1	6.5	5.7	7.7	6.7	6.5	6.7	5.7	5.0	6.3	5.8	4.8	5.8	6.2	6.7	4.7	6.6	4.5	6.0
PST-23C	7.0	4.0	5.8	6.0	.	8.0	6.3	6.0	6.7	6.0	5.4	5.9	5.8	5.5	6.4	6.3	7.0	4.0	6.8	4.5	6.0
* NIGHTHAWK (WVPB-89-PR-A-3)	7.1	3.1	5.9	6.3	5.2	7.8	5.8	6.6	6.4	5.5	6.3	6.9	5.9	6.0	6.2	6.4	6.7	4.0	7.2	4.0	6.0
* YORKTOWN III (LDRF)	6.9	3.5	6.4	5.0	6.4	6.9	6.0	6.3	6.8	5.5	5.3	7.0	5.4	6.0	6.5	6.8	6.9	4.4	6.8	4.5	6.0
* ASSURE	7.2	3.1	5.9	5.4	4.8	8.3	6.0	7.0	6.8	5.4	5.5	6.1	5.7	5.7	5.7	6.8	7.5	5.0	7.1	4.2	6.0
* ACHIEVER (PICK 1800)	6.8	3.2	6.8	5.5	6.2	7.9	6.5	6.5	6.6	5.8	5.6	6.9	5.3	5.5	5.6	6.4	6.6	4.5	6.4	4.3	5.9
* GETTYSBURG	6.9	3.2	6.9	6.1	5.8	7.5	5.8	6.2	6.3	6.1	4.9	6.2	6.0	5.5	6.0	6.6	7.2	5.2	6.6	4.0	5.9
PICK EEC	6.9	3.8	6.5	6.1	5.6	7.4	5.8	6.8	6.6	5.8	5.8	6.7	5.7	5.0	4.8	6.6	6.5	4.6	7.3	4.5	5.9
* DANDY	7.1	3.8	6.9	6.0	5.8	7.2	6.0	6.9	6.5	5.7	5.7	5.7	4.9	5.3	5.7	6.4	6.4	4.7	6.9	5.0	5.9
* AFFINITY (GEN-90)	6.8	3.5	7.3	5.4	5.6	7.7	5.7	5.8	6.4	5.5	6.0	6.4	5.8	5.2	6.2	6.6	7.0	4.6	6.4	4.3	5.9
PST-290	6.7	3.5	7.1	5.5	5.4	6.7	6.2	6.4	6.6	5.7	5.8	6.4	5.6	5.8	6.3	6.5	6.6	4.4	6.6	4.3	5.9
* NAVAJO (PST-2DPR)	6.5	4.0	7.4	6.0	5.9	7.0	6.5	6.1	6.5	5.7	5.8	5.9	4.8	4.8	6.6	6.2	6.4	4.8	6.7	4.3	5.9
* PINNACLE	7.1	3.3	6.1	5.9	5.6	8.1	6.3	6.1	6.7	5.4	5.1	6.8	5.6	5.2	5.3	6.4	7.2	4.8	6.2	4.3	5.9
* LEGACY	6.9	3.8	6.4	5.8	4.7	7.7	6.2	6.8	6.4	5.5	5.4	6.2	5.5	5.3	5.9	6.6	6.9	4.8	6.7	4.2	5.9
* GREENLAND (PICK 9100)	7.3	3.3	5.8	4.6	5.5	7.4	6.3	6.3	6.6	5.3	5.7	6.3	6.8	5.0	5.9	6.8	6.8	4.3	6.9	4.2	5.9
89-666	6.8	3.6	6.0	6.0	5.7	7.5	5.7	6.2	6.5	5.6	5.6	6.6	4.9	5.0	5.1	6.3	7.4	5.3	6.6	4.3	5.8
* BUCCANEER (KOOS 90-1)	7.1	3.3	6.6	6.0	5.5	7.3	6.2	6.3	6.5	5.5	4.9	5.6	6.3	4.8	5.4	6.4	6.8	5.0	7.1	4.0	5.8
* QUICKSTART (PST-2FQR)	7.2	3.0	6.7	5.8	5.2	7.6	6.5	5.9	6.7	5.6	5.3	6.5	5.9	4.5	5.5	6.4	6.8	4.3	6.6	4.0	5.8
* SHINING STAR (PST-2B3)	6.9	3.1	6.5	5.9	5.7	7.1	6.0	6.5	6.4	5.8	5.4	5.6	5.5	5.2	5.6	6.6	6.8	4.8	6.4	4.2	5.8
* EQUAL	6.9	3.6	6.1	5.9	5.4	6.6	6.5	6.2	6.3	5.7	5.2	5.8	5.1	5.3	6.2	6.4	7.0	4.6	6.7	4.3	5.8
* ENVY	6.6	3.9	6.8	5.9	5.3	7.5	6.5	5.9	6.4	5.5	5.9	5.5	4.6	5.2	5.6	6.3	6.6	4.4	7.0	4.0	5.8
* FIESTA II	6.6	3.7	7.0	5.8	4.7	6.5	7.0	6.2	6.4	5.9	5.5	5.1	4.3	5.5	5.6	6.4	6.1	4.8	7.0	4.5	5.7
* TARGET	6.8	3.3	6.4	5.9	5.7	5.9	6.5	6.3	6.4	5.7	5.3	5.8	5.8	5.3	5.1	6.4	6.7	4.7	6.4	4.0	5.7
PST-2OG	7.0	3.8	7.3	5.6	5.4	6.9	6.0	5.9	6.3	5.8	5.9	4.7	4.8	4.8	6.0	6.3	6.5	4.6	6.4	4.3	5.7
* SHERWOOD	6.7	3.3	6.8	5.8	5.2	7.6	6.5	4.3	6.6	5.7	5.8	5.6	4.9	5.2	5.8	6.2	6.6	4.7	6.8	4.2	5.7
* EXPRESS	6.7	3.5	6.3	6.3	5.9	7.6	5.5	5.9	6.3	5.5	5.4	6.3	5.3	5.3	4.7	6.3	6.4	4.4	6.2	4.3	5.7
* ESSENCE (PR 8820)	6.7	3.7	6.7	5.5	4.9	6.9	5.8	6.0	6.2	5.5	6.2	5.9	3.9	4.5	7.0	6.4	6.7	4.4	6.9	4.0	5.7
* GATOR	6.8	4.0	7.3	4.9	.	5.7	6.2	6.0	6.3	5.9	5.3	5.0	4.5	5.5	5.2	6.0	6.4	5.7	6.3	4.8	5.7

TABLE 1. (CONTINUED)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT TWENTY LOCATIONS IN THE U.S.
1993 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF																				
	CO1	DC1	IA1	ID3	IL1	IL2	KS2	KY1	MD1	MI1	NE1	NJ1	NJ2	NJ3	OR7	OR9	UB1	VA1	WA1	WA3	MEAN
WVPB 89-92	6.5	3.4	7.3	5.8	4.7	6.6	5.5	5.8	6.6	5.8	6.2	5.1	4.8	4.8	6.0	6.4	6.5	4.9	6.6	4.0	5.7
* COMPETITOR	6.3	3.8	6.2	5.8	5.1	6.6	6.2	6.2	6.4	5.7	5.4	5.1	4.1	5.2	6.2	6.3	7.1	4.6	6.8	4.2	5.7
HE 311	6.6	3.3	7.7	6.2	5.2	5.5	6.8	6.1	6.4	5.7	5.3	4.9	5.2	5.0	5.9	6.2	6.0	4.7	6.2	4.3	5.7
* STATESMAN (WVPB-88-PR-D-12)	6.9	3.2	6.6	5.8	.	6.6	5.8	5.5	6.3	5.5	5.7	6.1	4.6	5.3	5.5	6.2	6.3	4.5	6.6	4.3	5.7
* DIMENSION (2H7)	6.9	2.8	6.9	5.6	5.1	7.7	5.3	5.9	6.4	5.5	5.3	6.6	4.8	5.0	5.5	6.5	6.5	4.5	6.2	4.0	5.7
* MANHATTAN II (E)	7.1	3.8	6.9	5.8	.	6.7	6.0	5.6	6.8	5.6	5.2	5.5	3.6	5.7	5.2	6.0	6.4	4.9	6.6	4.3	5.7
* LOWGROW (PICK 89LLG)	7.0	2.6	7.3	6.0	.	6.3	5.8	5.0	6.3	5.6	6.3	4.7	4.2	5.3	6.1	6.4	6.4	4.8	6.7	4.5	5.6
* SATURN	6.9	3.7	6.4	5.8	5.2	6.2	6.5	5.9	6.3	5.9	5.1	5.3	4.7	5.3	5.6	6.0	6.9	4.6	6.3	4.3	5.6
PR 9119	6.3	3.4	7.0	5.5	.	6.5	5.3	5.7	6.5	5.7	5.8	5.7	4.2	5.2	5.7	6.2	7.0	4.7	6.8	3.7	5.6
ZPS-2EZ	6.6	3.1	6.3	5.5	5.6	6.6	6.3	5.5	6.3	5.1	5.3	6.1	4.5	5.5	5.3	6.4	6.6	4.6	7.2	4.0	5.6
* PS 89-90 (MVF 89-90)	6.7	3.6	6.7	5.4	5.6	6.1	5.5	5.7	6.3	5.9	5.6	5.8	4.3	5.5	4.9	6.0	7.0	4.4	7.0	4.5	5.6
* CHARGER	6.3	3.5	6.9	6.2	4.8	6.1	5.8	5.9	6.3	5.8	5.3	5.5	4.5	4.8	5.5	6.6	6.4	4.7	6.7	4.5	5.6
* PRONTO (WVPB-89-87A)	6.6	3.7	6.7	5.4	5.1	6.7	5.7	6.5	6.3	5.7	4.9	5.4	4.5	5.2	5.6	6.3	6.4	4.9	6.7	4.2	5.6
KOOS 90-2	6.8	3.8	6.6	4.5	4.9	7.0	6.2	6.0	6.2	5.7	5.3	5.8	4.3	5.2	5.8	6.5	6.6	4.0	6.1	4.2	5.6
* COWBOY II (WM-II)	6.7	3.0	7.1	5.9	5.3	6.0	5.3	6.0	6.4	5.9	6.3	4.8	4.1	5.2	6.3	6.1	5.8	4.7	6.9	3.7	5.6
* PLEASURE	6.6	3.7	6.3	5.2	5.2	7.2	5.8	6.8	6.5	5.6	4.9	5.1	4.6	4.8	5.2	6.2	5.8	4.4	7.1	3.8	5.5
* NOMAD	6.7	4.0	6.9	6.2	4.9	5.3	5.7	5.7	6.1	5.9	5.5	5.4	4.5	5.3	6.0	5.9	6.0	4.4	6.2	4.2	5.5
* REPELL	6.6	3.2	6.6	5.6	6.2	5.7	5.3	6.0	6.3	6.1	5.5	4.8	3.4	5.0	5.8	5.9	6.7	5.1	6.4	4.5	5.5
* RIVIERA	6.7	3.6	6.9	5.3	5.2	7.0	6.2	5.8	6.5	5.6	4.8	5.2	4.0	4.7	5.0	6.1	6.6	4.8	6.3	4.3	5.5
* RODEO II	6.7	3.2	6.7	5.7	5.2	5.4	6.2	6.2	6.0	5.7	5.8	5.8	4.4	5.0	5.5	5.6	7.0	3.9	6.2	4.5	5.5
PR 9121	6.9	3.4	6.2	5.3	4.7	6.6	6.0	4.9	6.1	5.6	6.0	4.9	3.6	5.0	6.3	6.5	7.1	4.6	7.1	3.8	5.5
* 240 (PEBBLE BEACH)	7.1	3.5	6.4	5.3	4.1	6.2	5.8	5.6	6.4	6.0	5.6	4.9	4.5	5.2	6.1	6.1	6.3	4.8	6.4	4.2	5.5
* PATRIOT II	6.7	3.3	6.1	5.8	5.3	6.1	5.5	6.2	6.3	5.5	5.8	5.8	4.3	4.8	5.6	6.2	6.6	3.8	6.2	4.3	5.5
OFI-F7	6.8	3.2	5.4	5.2	5.4	6.7	6.3	5.9	6.2	5.5	5.3	5.9	4.6	4.5	5.3	6.2	7.2	4.1	6.4	4.0	5.5
* COMMANDER	6.6	3.5	6.6	5.4	4.8	5.5	6.3	6.5	6.6	5.5	5.7	5.4	3.8	4.8	5.2	6.2	6.2	4.7	6.7	4.2	5.5
* CUTLESS	6.8	4.2	7.2	5.6	4.8	5.3	5.8	6.0	6.2	5.5	5.4	4.9	3.4	5.0	5.3	6.1	6.8	4.5	6.4	4.5	5.5
* TOPEKA (WVPB-88-PR-D-10)	6.3	3.6	6.3	5.6	.	5.8	5.5	5.9	6.5	5.9	5.2	5.2	3.7	5.0	5.5	6.0	6.1	4.7	6.8	4.7	5.5
* EVENING SHADE (POLY-SH)	6.9	2.4	6.6	6.4	4.8	4.1	5.7	6.4	6.3	5.4	5.8	5.8	4.5	5.3	6.0	6.3	6.4	3.8	6.9	3.8	5.5
* CALYPSO	6.4	4.2	6.4	5.5	5.4	6.2	6.2	5.7	6.6	5.7	5.0	4.8	4.3	4.5	5.3	6.1	5.9	4.8	6.2	4.5	5.5
* ELITE (WVPB-88-PR-C-23)	6.4	3.6	7.0	4.6	5.1	6.5	5.5	5.9	6.4	5.7	5.4	4.8	4.1	4.7	5.6	6.1	6.0	4.5	6.6	4.8	5.5
UNKNOWN	6.3	2.8	6.9	5.6	.	4.8	5.5	6.0	6.4	5.7	5.3	4.8	4.5	5.0	5.7	5.8	5.7	5.0	6.3	.	5.5
* LINDSAY	6.2	3.6	6.8	5.6	4.9	6.2	5.5	5.6	6.3	5.5	5.3	5.0	4.4	5.0	5.7	6.0	6.0	4.6	6.3	4.3	5.5
* PENNANT	6.5	4.4	5.6	5.4	.	5.5	6.2	5.1	6.2	5.7	4.8	5.0	4.4	5.3	5.4	6.1	6.2	4.8	6.6	4.2	5.4
* DERBY SUPREME	6.2	3.4	6.9	5.5	4.7	6.2	5.5	6.3	6.2	5.5	5.3	4.8	4.0	4.8	5.5	6.0	6.0	4.6	7.0	4.5	5.4
N-33	6.5	3.2	6.7	5.8	5.1	6.4	5.3	5.9	6.3	5.8	5.1	5.8	4.0	4.8	5.4	5.9	6.0	4.4	6.1	4.0	5.4
MVF 89-88	6.5	3.8	7.1	5.8	4.7	6.2	5.5	5.8	6.4	6.1	5.3	4.5	3.9	5.2	4.7	5.8	6.2	4.7	6.3	4.0	5.4
* CITATION II	6.2	4.0	6.3	5.3	.	6.5	6.0	5.4	6.0	5.8	5.8	4.6	3.8	5.0	5.1	5.9	5.9	4.4	6.1	4.5	5.4
BAR LP 086FL	6.6	3.2	6.7	5.8	5.6	5.7	5.8	5.1	6.3	5.9	5.6	4.5	4.7	4.5	6.0	5.9	4.9	4.3	6.1	4.5	5.4
PR 9118	6.5	3.5	6.2	5.5	5.6	5.1	5.7	5.6	6.3	5.8	5.3	5.6	3.8	4.5	5.2	5.9	7.0	4.1	6.4	4.0	5.4
PR 9109	6.5	4.1	6.3	5.4	5.9	5.8	5.5	6.0	6.2	5.7	5.0	4.5	3.5	4.7	5.5	5.7	6.4	4.9	6.3	3.8	5.4
* MULLIGAN (NK 89001)	6.6	3.4	6.7	4.7	5.6	6.0	5.8	5.5	6.3	5.5	4.7	5.3	3.8	4.7	5.0	5.8	6.3	5.1	6.4	4.2	5.4
PR 9108	6.7	3.1	6.7	5.0	.	5.4	5.5	6.1	6.1	5.6	5.3	5.1	3.7	5.0	5.6	6.0	6.1	4.4	6.3	4.0	5.4
* STALLION	6.2	3.6	6.4	5.4	.	5.4	5.5	5.8	6.3	5.9	5.2	4.9	3.7	4.8	5.3	5.9	6.6	4.3	6.3	4.3	5.4
* PREMIER	6.5	3.0	6.1	4.6	.	6.1	6.5	6.3	6.3	5.7	5.7	5.0	3.8	5.2	4.9	5.6	5.6	4.9	5.8	4.0	5.3
* BARRAGE ++	5.5	5.0	7.4	5.0	6.2	5.7	4.5	5.8	6.4	6.0	5.5	3.4	3.4	4.7	5.0	5.4	6.2	5.2	5.8	4.5	5.3

TABLE 1. (CONTINUED)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT TWENTY LOCATIONS IN THE U.S.
1993 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF																				
	CO1	DC1	IA1	ID3	IL1	IL2	KS2	KY1	MD1	MI1	NE1	NJ1	NJ2	NJ3	OR7	OR9	UB1	VA1	WA1	WA3	MEAN
* BARRAGE	5.7	4.1	7.5	5.2	.	5.7	5.2	5.9	6.1	5.9	5.5	3.5	3.6	4.7	5.3	5.5	5.9	4.8	6.7	4.3	5.3
EEG 358	6.2	4.0	7.4	5.6	4.9	5.3	5.5	5.8	6.0	6.2	5.8	4.0	2.9	4.3	6.0	5.4	6.4	4.3	5.8	4.2	5.3
C-21	6.2	3.4	6.9	4.9	5.3	5.1	5.2	5.8	6.3	5.6	5.3	4.4	4.0	4.5	5.6	5.9	6.3	4.4	5.9	4.5	5.3
* ACCOLADE	6.7	3.0	4.6	5.5	4.5	5.3	6.0	5.9	6.4	5.5	5.4	4.9	3.3	4.8	6.1	6.0	6.0	4.6	6.4	4.3	5.3
* CALIENTE	5.7	4.0	6.0	5.4	5.6	5.7	6.5	5.8	6.5	5.8	5.0	4.4	3.5	4.8	4.4	5.3	5.8	4.9	6.0	4.2	5.3
* REGAL	6.3	2.7	5.6	5.1	.	5.9	5.5	6.7	5.8	5.5	4.9	4.6	4.4	5.0	4.6	5.5	5.6	5.0	6.6	4.0	5.2
* TAYA	5.9	3.2	7.3	5.0	4.6	5.0	5.8	5.9	6.1	5.9	5.5	4.0	3.3	4.8	5.5	5.5	6.1	4.7	6.0	4.2	5.2
CLP 39	5.9	3.8	7.3	5.5	.	4.9	4.5	5.2	6.3	6.0	5.9	3.4	2.6	5.0	5.6	5.6	6.2	4.6	6.3	4.5	5.2
MOM LP 3184	6.3	3.5	6.1	5.2	5.1	6.5	5.7	5.6	5.8	5.3	5.1	4.0	3.8	5.0	5.2	5.6	5.6	4.6	5.9	4.3	5.2
* DANILO	5.8	3.9	7.0	5.3	5.1	5.5	5.7	5.6	6.4	5.8	5.4	3.7	3.5	4.3	4.7	5.8	5.1	4.4	6.0	5.0	5.2
* DUET	6.0	3.7	6.4	4.7	5.1	6.3	5.7	5.8	5.8	5.6	5.1	3.9	3.9	4.8	5.0	5.4	5.7	4.6	6.4	3.7	5.2
* CAPRI (ZW 42-176)	6.4	3.0	6.1	5.4	4.6	5.6	5.0	5.1	6.1	5.3	4.5	4.8	3.9	5.2	5.2	6.2	5.8	4.3	6.7	4.2	5.2
OFI-D4	5.9	3.8	6.2	5.2	4.8	5.3	4.7	5.3	6.0	5.9	5.7	4.1	3.5	4.3	5.2	5.5	6.4	4.0	6.1	4.2	5.1
* ALLEGRO	6.4	3.2	7.4	4.5	4.8	4.7	5.3	5.2	5.9	6.1	5.6	4.0	3.3	4.2	5.3	5.7	5.5	4.2	6.0	4.5	5.1
BAR LP 852	6.5	4.0	5.9	3.7	4.7	6.3	4.8	5.7	5.9	5.5	4.8	4.7	3.6	4.7	6.0	5.4	5.7	4.0	6.1	3.7	5.1
* PENNFINE	6.1	3.6	6.4	5.6	.	3.9	6.3	5.4	6.0	6.0	4.6	3.9	2.7	4.7	4.5	5.2	5.3	4.6	6.4	.	5.1
* LORETTA	5.8	5.2	7.5	4.7	.	3.3	5.2	5.1	6.3	6.3	5.0	3.4	2.6	4.5	5.3	5.1	5.3	5.0	5.9	4.2	5.0
856	6.2	3.7	5.3	5.5	5.3	5.3	5.2	5.6	5.8	6.0	4.7	4.2	2.8	4.7	4.9	5.3	5.3	4.3	6.6	3.8	5.0
CLP 144	6.2	3.3	7.2	5.1	4.2	4.1	4.2	5.4	5.8	5.7	6.0	3.7	3.0	4.8	5.3	5.5	5.8	4.4	6.0	3.8	5.0
TORONTO	5.8	3.5	7.1	5.5	5.1	3.7	5.5	5.3	6.2	5.5	5.5	3.5	2.9	4.5	5.1	5.3	4.7	5.0	5.8	4.0	5.0
MOM LP 3182	5.9	4.0	5.4	4.7	5.8	5.5	5.2	5.4	6.0	5.3	4.6	3.9	2.3	4.7	5.0	5.4	5.9	4.4	5.9	3.5	4.9
* DANARO	6.1	3.4	6.3	5.1	4.5	4.3	5.0	5.6	6.0	5.3	5.1	3.7	3.1	5.0	5.3	5.5	5.1	4.2	6.0	4.2	4.9
MOM LP 3185	6.2	3.4	5.7	4.3	.	6.3	4.8	5.8	5.9	5.2	5.1	3.7	3.1	4.3	4.8	5.3	5.3	4.2	5.9	3.7	4.9
* OVATION	5.7	3.5	7.1	5.0	5.0	3.8	5.0	5.2	6.1	5.7	5.1	3.4	2.8	4.0	5.0	5.3	5.1	4.3	6.0	4.0	4.8
* ENTRAR	5.6	3.1	6.5	5.1	5.2	4.6	4.3	5.0	6.0	6.3	5.1	3.5	2.9	4.2	4.9	5.3	4.8	3.7	6.0	4.0	4.8
* SURPRISE	5.7	3.6	6.2	5.1	5.2	3.3	3.8	5.3	5.8	5.8	5.0	3.1	3.2	3.7	5.2	5.4	5.8	4.0	6.3	4.0	4.8
* TROUBADOUR	5.8	3.1	6.8	5.3	4.6	2.9	4.7	4.9	6.1	6.4	6.0	2.8	3.2	4.0	4.9	5.2	5.0	4.0	5.6	4.0	4.8
MOM LP 3111	5.8	3.3	6.4	5.0	4.6	4.1	4.5	5.0	5.8	5.8	4.9	3.2	2.8	4.3	5.0	5.3	4.7	4.4	6.1	3.8	4.8
* METEOR	5.0	2.9	6.6	5.2	4.2	5.3	4.5	4.6	5.7	5.7	4.3	3.1	3.2	3.3	5.3	5.2	5.3	4.0	5.7	4.0	4.6
MOM LP 3179	5.6	3.2	5.2	4.7	.	4.5	4.5	5.1	5.8	6.1	4.8	3.3	2.3	4.7	4.5	4.8	4.7	4.0	6.0	3.5	4.6
* CARTEL	5.2	2.9	5.2	5.0	4.8	4.2	3.8	5.3	5.8	5.4	4.8	3.0	2.8	3.8	5.2	5.1	4.5	4.2	6.2	4.5	4.6
* GOALIE	5.4	3.2	6.7	4.8	.	3.5	4.5	4.6	6.0	5.6	4.8	3.3	2.0	4.2	4.2	5.3	5.1	4.4	6.0	3.3	4.6
* LINN	3.6	2.4	4.4	3.1	.	1.3	3.2	3.5	5.0	5.3	3.8	1.4	1.0	3.0	3.6	3.2	3.0	3.2	4.1	2.8	3.2
LSD VALUE	0.5	1.0	0.9	1.1	1.0	1.4	1.3	1.2	0.5	0.6	1.0	0.9	1.4	0.9	1.0	0.4	1.1	0.9	0.9	0.7	0.2

* COMMERCIALY 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 PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT TWENTY LOCATIONS IN THE U.S.
1993 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	
CUTTER (PICK 89-4)	5.7	5.7	6.5	6.5	6.1	6.5	5.9	5.9	6.1	6.9	6.5	5.9	6.2
REPELL II (LDRD)	5.7	6.0	6.5	6.1	6.2	6.6	6.1	5.9	6.1	6.7	6.5	5.7	6.1
SEVILLE	6.0	6.3	6.3	6.2	6.2	6.6	6.1	5.9	5.8	6.6	6.2	5.3	6.1
PRELUDE II (2P2-90)	5.7	6.3	6.5	6.1	6.2	6.5	6.2	5.6	6.1	6.5	6.5	5.8	6.1
PRIZM (ZPS-28D)	6.3	6.7	6.7	6.3	6.3	6.6	5.9	5.7	6.0	6.5	6.0	5.6	6.1
PALMER II (P89)	5.3	6.3	7.0	6.6	6.4	6.5	5.7	5.5	6.0	6.5	5.8	5.6	6.1
ADVENT	6.3	6.7	6.7	5.9	6.0	6.6	6.2	5.7	5.8	6.4	6.3	6.0	6.1
RIVIERA II (PICK DKM)	6.0	6.3	7.0	6.2	6.3	6.4	6.2	5.8	5.9	6.3	5.9	5.8	6.1
PRECISION (MOM LP 3147)	6.3	6.3	6.7	5.9	6.1	6.5	6.1	5.6	5.8	6.5	6.5	5.6	6.1
PST-2ROR	4.7	5.7	6.0	6.2	6.4	6.6	6.1	5.8	5.7	6.3	5.4	5.4	6.1
SR 4200	6.0	6.0	6.5	6.1	6.3	6.5	5.8	5.6	5.9	6.4	6.0	5.9	6.0
APM	5.7	6.0	6.2	5.9	6.1	6.6	6.1	5.8	5.8	6.5	6.0	5.7	6.0
STALLION SELECT (PS-105)	5.0	6.3	6.8	6.2	6.3	6.4	5.8	5.6	5.8	6.4	6.5	5.7	6.0
PST-28M	6.3	7.0	6.8	6.0	6.2	6.4	5.9	5.8	5.8	6.4	6.1	5.7	6.0
MORNING STAR (SYN-P)	5.7	6.7	6.2	6.2	6.0	6.4	5.8	5.9	5.6	6.2	6.2	5.3	6.0
BRIGHTSTAR (PST-GH-89)	5.0	6.0	6.3	6.2	6.5	6.5	5.8	5.5	5.8	6.4	5.6	5.3	6.0
PST-2FF	6.3	6.3	6.7	6.1	6.1	6.3	6.1	5.8	5.8	6.4	5.6	5.3	6.0
DELAWARE DWARF (4DD)	5.7	6.7	6.3	5.8	6.2	6.5	6.0	5.7	5.9	6.4	5.9	5.3	6.0
PST-23C	5.3	5.3	6.7	6.2	6.1	6.5	6.0	5.6	5.5	6.1	5.8	5.9	6.0
NIGHTHAWK (WVPB-89-PR-A-3)	5.3	6.0	6.7	6.3	6.3	6.3	5.8	5.6	5.9	6.2	6.1	5.8	6.0
YORKTOWN III (LDRF)	5.7	6.7	6.8	6.0	6.0	6.4	5.8	5.5	5.9	6.4	6.1	5.9	6.0
ASSURE	6.0	6.0	6.3	6.2	6.2	6.5	5.8	5.7	5.6	6.3	6.0	5.4	6.0
ACHIEVER (PICK 1800)	5.3	6.0	6.8	5.9	6.0	6.4	5.8	5.7	5.8	6.5	5.9	5.8	5.9
GETTYSBURG	5.3	6.3	6.5	6.2	6.3	6.4	5.9	5.4	5.8	6.5	6.0	5.7	5.9
PICK EEC	6.0	6.3	7.0	6.1	6.2	6.4	5.8	5.4	5.9	6.1	6.3	5.8	5.9
DANDY	6.0	6.3	7.0	5.4	5.8	6.3	6.0	5.8	5.8	6.4	6.1	5.6	5.9
AFFINITY (GEN-90)	6.0	7.0	6.3	5.6	6.2	6.3	5.9	5.7	5.8	6.4	5.9	5.4	5.9
PST-290	5.7	5.7	6.5	6.0	6.1	6.4	5.8	5.6	5.9	6.3	5.5	5.3	5.9
NAVAJO (PST-2DPR)	5.3	4.7	6.8	6.4	6.4	6.2	5.6	5.4	5.8	6.5	5.7	5.6	5.9
PINNACLE	6.0	6.7	6.8	5.8	5.9	6.4	5.8	5.6	5.6	6.3	6.3	5.7	5.9
LEGACY	5.7	6.0	7.2	6.3	6.2	6.3	5.6	5.3	5.5	6.3	6.1	6.0	5.9
GREENLAND (PICK 9100)	6.0	6.7	6.8	6.1	6.0	6.3	5.7	5.5	5.7	6.1	5.6	5.7	5.9
89-666	6.0	6.7	6.7	5.8	5.8	6.2	5.8	5.6	5.7	6.4	6.3	5.6	5.8
BUCCANEER (KOOS 90-1)	5.7	5.7	6.5	5.8	6.3	6.3	5.9	5.5	5.4	6.2	5.7	5.2	5.8
SHINING STAR (PST-2B3)	5.7	6.7	6.5	5.9	5.9	6.2	5.8	5.4	5.7	6.2	5.6	5.9	5.8
QUICKSTART (PST-2FQR)	6.0	6.3	6.2	5.9	5.8	6.3	5.9	5.5	5.7	6.0	5.7	6.0	5.8
EQUAL	6.0	6.3	6.5	5.6	5.9	6.3	5.8	5.5	5.6	6.2	6.2	5.1	5.8
ENVY	5.7	6.7	5.7	5.8	5.8	6.1	5.5	5.6	5.8	6.1	5.7	5.0	5.8
FIESTA II	5.7	6.3	6.5	5.4	5.7	6.1	5.7	5.6	5.4	6.2	5.6	5.1	5.7
TARGET	5.7	6.0	6.7	5.7	6.0	6.2	5.7	5.3	5.4	6.0	5.7	5.6	5.7
PST-2OG	5.0	6.0	6.2	5.9	6.2	6.3	5.5	5.2	5.4	5.9	5.3	5.0	5.7
SHERWOOD	5.3	6.0	5.8	5.7	5.7	6.0	5.6	5.3	5.5	6.1	5.8	5.1	5.7
EXPRESS	6.0	6.7	6.2	5.6	5.7	6.2	5.7	5.4	5.1	6.2	6.4	5.8	5.7
ESSENCE (PR 8820)	6.0	6.3	6.2	5.6	6.1	6.3	5.4	5.2	5.8	6.3	5.7	5.4	5.7
GATOR	6.0	6.3	5.7	5.4	5.7	6.2	5.6	5.6	5.5	5.8	5.3	5.4	5.7

TABLE 2.
(CONTINUED)

MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT TWENTY LOCATIONS IN THE U.S.
1993 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS												MEAN
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
WVPB 89-92	5.7	6.3	6.2	5.8	6.0	6.2	5.6	5.3	5.3	5.9	5.6	5.4	5.7
COMPETITOR	5.7	5.7	6.7	5.6	5.8	5.8	5.5	5.5	5.5	6.5	5.7	5.1	5.7
HE 311	6.3	6.3	5.7	5.3	5.8	6.3	5.7	5.4	5.6	6.0	5.2	4.6	5.7
STATESMAN (WVPB-88-PR-D-12)	5.3	6.0	6.5	6.1	5.6	6.0	5.3	5.3	5.5	6.1	5.8	5.7	5.7
DIMENSION (2H7)	6.3	6.0	6.2	5.9	5.8	6.1	5.4	5.2	5.5	6.3	6.1	5.9	5.7
MANHATTAN II (E)	6.3	6.0	6.2	5.4	5.8	5.9	5.7	5.6	5.3	6.0	5.5	5.2	5.7
LOWGROW (PICK 89LLG)	6.3	6.3	5.7	5.4	6.1	6.4	5.3	5.3	5.4	5.9	5.4	4.9	5.6
SATURN	5.0	6.0	6.3	5.7	5.6	6.0	5.5	5.4	5.5	6.1	5.7	5.0	5.6
PR 9119	5.7	6.7	6.2	5.7	5.7	6.2	5.6	5.4	5.3	6.0	5.7	5.2	5.6
ZPS-2EZ	6.3	6.7	5.8	5.6	5.7	5.8	5.6	5.4	5.3	6.2	5.5	5.3	5.6
PS 89-90 (MVF 89-90)	5.0	6.3	6.2	5.7	5.7	6.0	5.3	5.2	5.1	6.2	5.8	5.7	5.6
CHARGER	6.3	6.0	7.0	5.7	5.5	6.1	5.6	5.4	5.4	6.1	5.7	5.2	5.6
PRQNT0 (WVPB-89-87A)	5.3	6.3	6.5	5.6	5.9	6.1	5.6	5.1	5.5	6.1	5.7	5.1	5.6
KOCS 90-2	6.0	6.3	6.3	5.6	5.8	6.1	5.5	5.3	5.3	5.9	5.3	5.7	5.6
COWBOY II (WM-II)	5.7	6.3	6.5	5.4	5.5	6.2	5.6	5.4	5.4	5.9	5.1	4.7	5.6
PLEASURE	5.3	6.7	6.7	5.4	5.6	6.0	5.6	5.4	5.3	5.9	5.2	5.1	5.5
NOMAD	5.7	6.0	6.2	5.6	5.9	6.0	5.2	5.3	5.2	6.1	5.6	5.0	5.5
REPELL	5.3	6.3	6.0	5.3	5.5	6.0	5.6	5.4	5.6	6.1	5.4	5.1	5.5
RIVIERA	5.3	6.7	6.2	5.3	5.4	5.9	5.4	5.3	5.3	6.3	5.8	5.0	5.5
RODEO II	5.3	6.0	6.0	5.5	5.5	5.9	5.3	5.1	5.1	6.1	6.1	5.4	5.5
PR 9121	6.3	6.0	6.0	5.7	5.7	5.8	5.2	5.2	5.3	5.9	5.8	5.2	5.5
240 (PEBBLE BEACH)	5.3	5.7	5.8	5.8	5.6	5.7	5.5	5.2	5.3	6.1	5.3	4.3	5.5
PATRIOT II	5.7	5.7	6.2	5.5	5.7	6.1	5.3	5.1	5.2	6.2	6.0	5.2	5.5
OFI-F7	5.7	6.3	6.5	5.9	5.7	5.9	5.2	5.2	5.3	5.9	5.5	5.1	5.5
COMMANDER	5.7	5.7	6.7	5.5	5.4	5.9	5.2	5.3	5.4	5.9	5.8	5.2	5.5
CUTLESS	6.3	6.7	6.0	5.4	5.7	5.7	5.3	5.2	5.4	6.1	5.6	5.1	5.5
TOPEKA (WVPB-88-PR-D-10)	6.0	6.0	6.2	5.3	5.3	5.9	5.6	5.3	5.2	6.0	5.4	5.6	5.5
EVENING SHADE (POLY-SH)	5.0	5.3	7.2	6.0	5.9	5.7	5.1	4.9	5.5	6.0	5.3	5.6	5.5
CALYPSO	5.7	6.3	6.0	4.9	5.4	5.9	5.6	5.4	5.2	6.1	5.3	5.2	5.5
ELITE (WVPB-88-PR-C-23)	5.7	5.7	6.2	5.4	5.8	5.9	5.2	5.1	5.2	5.8	5.0	5.6	5.5
UNKNOWN	6.0	6.0	6.0	5.1	5.2	5.8	5.5	5.3	5.3	5.9	5.3	5.8	5.5
LINDSAY	6.0	6.0	6.3	5.4	5.8	6.0	5.3	5.1	5.0	5.8	5.2	5.4	5.5
PENNANT	5.7	6.7	5.5	5.1	5.1	5.9	5.6	5.4	5.0	6.1	5.5	5.1	5.4
DERBY SUPREME	5.7	6.3	6.2	5.2	5.5	5.8	5.4	5.1	5.3	6.1	5.5	5.1	5.4
N-33	5.0	5.7	6.5	5.6	5.6	5.7	5.2	5.2	5.1	6.0	5.5	5.6	5.4
MVF 89-88	4.7	5.7	6.2	5.4	5.5	5.9	5.3	5.2	5.1	5.9	5.5	5.0	5.4
CITATION II	5.7	6.7	5.8	5.5	5.2	5.8	5.3	5.3	5.0	5.7	5.4	4.6	5.4
BAR LP 086FL	5.0	5.7	6.0	5.0	5.5	5.9	5.4	4.9	5.3	5.8	5.3	5.1	5.4
PR 9118	5.3	5.7	6.2	5.6	5.5	5.8	5.0	5.1	5.1	5.9	6.1	5.6	5.4
PR 9109	5.7	5.7	5.8	5.4	5.3	5.9	5.4	5.2	5.1	6.0	5.3	4.7	5.4
MULLIGAN (NK 89001)	5.7	6.0	5.5	4.9	5.3	5.8	5.5	5.1	5.0	6.0	5.5	5.3	5.4
PR 9108	5.7	5.7	6.3	5.2	5.4	5.7	5.3	5.2	5.2	5.9	5.5	5.6	5.4
STALLION	5.7	5.3	6.2	5.2	5.2	5.8	5.3	5.3	4.9	6.0	5.5	5.3	5.4
PREMIER	5.7	6.3	6.5	5.0	5.0	5.8	5.4	5.4	4.9	5.7	5.0	4.9	5.3
BARRAGE ++	5.3	5.7	6.0	5.3	5.6	5.4	5.2	5.3	5.3	5.9	4.9	4.4	5.3

TABLE 2.
(CONTINUED)
MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS FOR EACH
MONTH GROWN AT TWENTY LOCATIONS IN THE U.S.
1993 DATA

NAME	TURFGRASS QUALITY RATINGS 1-9; 9=IDEAL TURF: MONTHS												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	MEAN
BARRAGE	6.0	5.7	5.7	5.1	5.7	5.6	5.3	5.1	4.9	5.6	4.8	4.3	5.3
EEG 358	5.3	5.3	5.7	5.0	5.6	5.8	5.2	5.1	5.3	5.7	5.1	4.2	5.3
C-21	6.0	6.3	6.3	5.1	5.2	5.6	5.4	5.1	4.8	5.9	5.3	5.0	5.3
ACCOLADE	6.0	6.0	6.2	5.3	5.0	5.5	5.3	5.1	5.1	5.8	5.1	5.6	5.3
CALIENTE	5.0	5.0	5.8	4.8	4.9	5.5	5.4	5.2	5.1	5.8	5.3	4.4	5.3
REGAL	5.0	5.3	6.3	5.2	5.1	5.7	5.2	5.2	4.7	5.5	5.1	4.6	5.2
TAYA	4.7	6.0	5.8	5.3	5.7	5.7	4.9	4.8	4.9	5.6	4.5	4.8	5.2
CLP 39	5.7	6.0	5.8	5.1	5.6	5.7	5.0	4.9	4.9	5.7	4.9	4.1	5.2
MOM LP 3184	5.7	5.0	5.7	5.1	5.2	5.5	5.1	5.2	5.1	5.5	4.7	4.2	5.2
DANILO	5.3	6.0	5.3	4.7	5.1	5.6	5.2	5.0	5.1	5.6	4.9	4.8	5.2
DUET	5.3	5.3	6.2	5.1	5.0	5.5	5.2	5.0	4.9	5.7	4.4	4.1	5.2
CAPRI (ZW 42-176)	5.7	5.3	6.3	5.3	5.5	5.7	5.0	4.5	4.9	5.5	5.4	5.4	5.2
OFI-D4	5.3	5.7	5.8	5.1	5.3	5.7	4.8	4.8	4.8	5.6	4.9	4.6	5.1
ALLEGRO	5.7	6.3	5.5	4.9	5.6	5.7	4.7	4.5	4.9	5.4	4.5	4.7	5.1
BAR LP 852	4.7	5.3	6.2	5.3	5.0	5.5	5.0	4.8	4.8	5.6	4.9	4.7	5.1
PENNFINE	5.3	5.7	5.5	4.4	4.6	5.5	5.1	5.0	4.6	5.5	4.9	5.3	5.1
LORETTA	4.7	5.3	5.3	4.7	5.2	5.4	4.9	5.0	5.0	5.6	4.7	4.1	5.0
856	5.3	5.7	6.0	4.8	5.1	5.3	5.0	4.8	4.8	5.7	4.5	5.0	5.0
CLP 144	5.3	6.0	5.8	5.0	5.5	5.3	4.7	4.6	4.9	5.5	4.5	4.3	5.0
TORONTO	5.3	5.3	5.5	4.6	5.0	5.1	4.8	5.0	4.9	5.6	4.7	4.6	5.0
MOM LP 3182	4.7	5.0	5.5	4.8	4.8	5.3	5.1	4.7	5.0	5.6	4.9	4.3	4.9
DANARO	4.7	5.3	5.2	4.6	5.0	5.4	4.8	4.6	4.9	5.6	4.5	4.3	4.9
MOM LP 3185	5.3	5.3	5.8	5.0	4.7	5.2	5.0	4.7	4.8	5.1	4.3	4.3	4.9
OVATION	5.0	5.0	4.3	4.4	4.9	5.2	4.8	4.7	4.8	5.4	4.5	4.7	4.8
ENTRAR	5.3	5.3	5.2	4.7	5.2	5.3	4.6	4.4	4.6	5.3	4.4	4.0	4.8
SURPRISE	5.7	6.0	5.3	4.9	4.9	5.1	4.5	4.4	4.7	5.5	4.6	4.8	4.8
TROUBADOUR	5.7	5.7	5.2	4.6	5.3	5.1	4.3	4.5	4.6	5.1	4.3	4.1	4.8
MOM LP 3111	5.7	6.0	5.8	4.6	4.6	5.4	4.6	4.5	4.6	5.1	4.1	4.0	4.8
METEOR	5.7	6.3	4.8	4.9	5.1	5.2	4.4	4.2	4.1	5.0	4.1	4.6	4.6
MOM LP 3179	4.7	4.3	5.3	4.4	4.5	4.9	4.5	4.5	4.4	4.9	4.1	4.1	4.6
CARTEL	4.7	5.3	5.7	4.8	4.9	5.1	4.1	4.2	4.3	5.0	4.1	4.2	4.6
GOALIE	4.7	5.7	5.7	4.6	4.7	4.7	4.4	4.4	4.5	5.1	4.5	3.9	4.6
LINN	3.3	3.0	3.5	3.0	2.9	3.4	3.2	3.1	3.2	3.5	2.9	2.7	3.2
LSD VALUE	0.9	0.9	0.9	0.6	0.6	0.5	0.7	0.6	0.8	0.6	1.0	1.2	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 3.

RANKING OF MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT TWENTY LOCATIONS IN THE U.S. 1/
1993 DATA

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

NAME	CO1	DC1	IA1	ID3	IL1	IL2	KS2	KY1	MD1	MI1	NE1	NJ1	NJ2	NJ3	OR7	OR9	UB1	VA1	WA1	WA3	MEAN
CUTTER (PICK 89-4)	6.5	60.5	45.0	20.5	25.5	5.0	14.5	27.5	10.5	102.0	25.5	4.0	29.0	3.0	5.5	23.0	6.5	2.0	13.5	90.5	1
REPELL II (LDRD)	3.5	74.0	85.5	14.0	1.0	44.0	3.5	11.0	1.0	51.5	8.5	6.5	5.5	29.0	20.0	9.0	6.5	4.5	79.0	90.5	2
SEVILLE	18.0	3.0	97.5	28.5	2.0	2.0	26.5	44.0	29.0	102.0	111.0	25.0	15.5	29.0	18.0	4.5	17.0	11.0	37.0	4.0	3
PRELUDE II (2P2-90)	24.0	119.0	44.0	1.5	22.0	27.0	86.0	44.0	29.0	23.5	8.5	6.5	1.0	10.0	24.0	13.0	3.5	46.5	27.5	64.0	4
PRIZM (ZPS-28D)	2.0	110.0	78.5	53.5	9.0	4.0	38.0	51.0	45.0	64.5	58.0	2.0	7.5	17.0	16.0	7.0	8.5	8.0	48.0	90.5	5
PALMER II (P89)	10.0	114.5	111.0	88.0	10.5	30.5	38.0	2.5	61.5	36.5	66.5	15.5	2.5	45.0	2.0	17.5	1.0	3.0	13.5	20.5	6
ADVENT	10.0	79.5	17.0	9.0	13.0	25.0	6.0	74.0	45.0	102.0	96.0	8.0	9.0	6.0	65.0	6.0	25.0	4.5	27.5	20.5	7
RIVIERA II (PICK DKM)	37.0	38.0	34.0	41.5	18.0	10.5	26.5	9.5	45.0	64.5	34.0	12.0	29.0	10.0	42.0	17.5	12.5	12.0	18.0	90.5	8
PRECISION (MOM LP 3147)	70.5	20.5	4.0	12.0	39.5	7.0	49.5	7.5	61.5	102.0	30.0	24.0	4.0	10.0	42.0	13.0	66.5	25.5	8.0	64.0	9
PST-2ROR	27.5	55.0	17.0	6.5	.	10.5	26.5	21.5	4.5	2.0	25.5	50.5	10.5	45.0	13.0	34.5	45.5	39.5	37.0	64.0	10
SR 4200	18.0	121.0	93.5	1.5	4.0	40.0	6.0	21.5	2.0	45.0	25.5	4.0	33.5	29.0	37.5	34.5	29.0	33.5	8.0	7.0	11
APM	42.0	110.0	20.5	28.5	5.0	10.5	14.5	59.5	10.5	64.5	100.0	20.0	31.5	63.0	7.0	1.0	12.5	13.0	66.5	7.0	12
STALLION SELECT (PS-105)	27.5	67.0	47.5	33.5	10.5	40.0	72.5	40.5	10.5	51.5	14.0	1.0	19.0	1.0	37.5	40.0	12.5	78.0	27.5	90.5	13
PST-28M	32.5	110.0	57.5	16.5	18.0	1.0	38.0	15.0	10.5	64.5	84.0	21.5	35.5	29.0	5.5	17.5	8.5	30.0	66.5	90.5	14
MORNING STAR (SYN-P)	3.5	24.0	104.0	33.5	60.5	16.0	1.5	32.5	76.0	113.0	40.5	17.5	7.5	6.0	42.0	49.0	20.5	15.0	79.0	20.5	15
BRIGHTSTAR (PST-GH-89)	6.5	104.0	113.0	16.5	52.0	13.5	14.5	2.5	61.5	113.0	49.5	19.0	19.0	45.0	4.0	55.5	3.5	46.5	8.0	20.5	16
PST-2FF	12.0	106.5	100.0	12.0	.	30.5	14.5	21.5	19.0	82.5	14.0	32.0	26.0	17.0	10.0	9.0	25.0	6.0	48.0	90.5	17
DELAWARE DWARF (4DD)	56.5	12.0	25.5	3.0	25.5	16.0	6.0	15.0	10.5	64.5	100.0	27.0	15.5	81.0	42.0	51.5	38.0	53.5	48.0	20.5	18
PST-23C	21.0	12.0	111.0	20.5	.	8.0	26.5	47.0	10.5	13.5	58.0	36.5	15.5	17.0	9.0	42.0	25.0	115.5	27.5	20.5	19
NIGHTHAWK (WVPB-89-PR-A-3)	18.0	97.0	109.0	5.0	52.0	13.5	61.0	12.0	45.0	89.5	1.5	9.5	12.5	3.0	20.0	28.5	40.5	111.5	2.5	90.5	20
YORKTOWN III (LDRF)	32.5	60.5	74.5	105.5	3.0	40.0	49.5	27.5	4.5	89.5	75.5	4.0	29.0	3.0	8.0	4.5	30.5	80.5	23.0	20.5	21
ASSURE	6.5	99.5	107.5	76.0	78.0	3.0	49.5	1.0	4.5	113.0	45.0	32.0	21.5	10.0	48.5	3.0	2.0	20.0	4.5	64.0	22
ACHIEVER (PICK 1800)	46.0	84.5	47.5	69.5	7.5	10.5	14.5	15.0	19.0	36.5	40.5	9.5	31.5	17.0	54.0	26.0	45.5	75.5	66.5	42.5	23
GETTYSBURG	37.0	93.0	38.5	16.5	20.0	23.5	61.0	36.5	76.0	9.0	106.5	29.0	10.5	17.0	32.0	9.0	12.5	9.0	48.0	90.5	24
PICK EEC	24.0	30.0	69.0	16.5	28.0	28.5	61.0	7.5	19.0	36.5	25.5	13.0	21.5	63.0	113.5	11.0	56.0	61.0	1.0	20.5	25
DANDY	14.5	26.0	34.0	23.5	16.0	33.5	49.5	4.0	29.0	64.5	34.0	47.5	39.0	29.0	48.5	40.0	60.0	46.5	18.0	1.5	26
AFFINITY (GEN-90)	42.0	51.5	10.5	76.0	28.0	18.5	72.5	74.0	45.0	89.5	8.5	21.5	19.0	45.0	16.0	13.0	25.0	61.0	66.5	42.5	27
PST-290	49.0	55.0	20.5	64.0	43.0	45.5	38.0	19.0	19.0	51.5	19.0	23.0	23.5	6.0	13.0	24.5	50.5	80.5	48.0	42.5	28
NAVAJO (PST-2DPR)	76.0	12.0	6.5	23.5	13.0	37.0	14.5	40.5	29.0	45.0	25.5	36.5	41.5	81.0	3.0	60.5	63.0	33.5	37.0	42.5	29
PINNACLE	10.0	79.5	103.0	33.5	31.0	6.0	26.5	40.5	10.5	113.0	91.0	11.0	23.5	45.0	81.5	28.5	12.5	39.5	92.0	42.5	30
LEGACY	24.0	30.0	74.5	47.0	88.0	16.0	38.0	5.5	45.0	102.0	63.0	30.0	26.0	29.0	35.0	17.5	32.0	39.5	37.0	64.0	31
GREENLAND (PICK 9100)	1.0	74.0	111.0	116.0	36.5	28.5	26.5	24.5	19.0	117.5	34.0	27.0	2.5	63.0	35.0	2.0	34.0	97.5	21.0	64.0	32
89-666	39.0	43.5	105.5	25.0	24.0	23.5	72.5	36.5	29.0	76.5	40.5	15.5	39.0	63.0	99.5	44.5	5.0	7.0	48.0	42.5	33
BUCCANEER (KOOS 90-1)	14.5	79.5	63.0	20.5	36.5	32.0	38.0	24.5	29.0	102.0	109.0	50.5	5.5	81.0	73.5	31.5	36.5	20.0	4.5	90.5	34
QUICKSTART (PST-2FQR)	6.5	110.0	53.5	37.0	56.5	20.5	14.5	59.5	10.5	76.5	75.5	17.5	12.5	105.0	69.0	28.5	35.0	97.5	48.0	90.5	35
SHINING STAR (PST-2B3)	32.5	101.5	69.0	33.5	22.0	35.0	49.5	15.0	45.0	36.5	58.0	50.5	26.0	45.0	58.0	17.5	36.5	39.5	58.5	64.0	36
EQUAL	32.5	49.5	97.5	28.5	38.0	50.5	14.5	32.5	76.0	64.5	84.0	45.5	37.0	29.0	16.0	34.5	25.0	61.0	37.0	42.5	37
ENVY	65.0	19.0	47.5	28.5	48.0	26.0	14.5	67.0	45.0	102.0	14.0	55.5	48.5	45.0	58.0	47.0	45.5	86.5	13.5	90.5	38
FIESTA II	62.0	33.0	29.0	41.5	88.0	56.0	1.5	32.5	45.0	17.0	49.5	64.0	65.5	17.0	52.0	40.0	80.0	39.5	13.5	20.5	39
TARGET	46.0	79.5	71.5	28.5	22.0	78.0	14.5	27.5	45.0	51.5	75.5	39.5	15.5	29.0	99.5	37.0	40.5	53.5	66.5	90.5	40
PST-2OG	21.0	24.0	10.5	58.5	39.5	43.0	49.5	59.5	76.0	36.5	14.0	86.5	43.5	81.0	28.5	49.0	53.0	72.0	58.5	42.5	41
SHERWOOD	56.5	79.5	42.5	37.0	56.5	22.0	14.5	122.0	19.0	51.5	25.5	50.5	39.0	45.0	42.0	55.5	50.5	46.5	27.5	64.0	42
EXPRESS	49.0	55.0	89.0	6.5	15.0	20.5	86.0	67.0	76.0	102.0	58.0	27.0	33.5	29.0	116.5	44.5	66.5	91.0	92.0	42.5	43
ESSENCE (PR 8820)	56.5	38.0	51.0	69.5	72.0	42.0	61.0	51.0	88.5	89.5	4.5	36.5	78.5	105.0	1.0	31.5	40.5	93.5	18.0	90.5	44
GATOR	42.0	17.0	14.5	108.5	.	81.5	38.0	51.0	61.5	23.5	75.5	71.5	54.5	17.0	90.0	74.0	60.0	1.0	79.0	4.0	45

TABLE 3. (CONTINUED)

RANKING OF MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT TWENTY LOCATIONS IN THE U.S.
1993 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN; STATE LOCATIONS REPORTING

NAME	CO1	DC1	IA1	ID3	IL1	IL2	KS2	KY1	MD1	MI1	NE1	NJ1	NJ2	NJ3	OR7	OR9	UB1	VA1	WA1	WA3	MEAN
WVPB 89-92	76.0	64.0	10.5	41.5	84.5	53.5	86.0	74.0	19.0	36.5	4.5	66.5	41.5	81.0	28.5	38.0	54.0	25.5	48.0	90.5	46
COMPETITOR	86.5	24.0	93.5	37.0	63.0	50.5	38.0	36.5	45.0	64.5	58.0	66.5	71.0	45.0	20.0	44.5	17.0	66.0	27.5	64.0	47
HE 311	65.0	79.5	1.0	12.0	56.5	90.5	3.5	44.0	45.0	51.5	75.5	75.0	35.5	63.0	35.0	60.5	84.5	53.5	87.5	42.5	48
STATESMAN (WVPB-88-PR-D-12)	37.0	87.5	65.0	41.5	.	53.5	61.0	97.0	61.5	89.5	34.0	34.0	48.5	29.0	62.5	53.0	72.5	73.5	48.0	42.5	49
DIMENSION (2H7)	27.5	116.0	34.0	58.5	63.0	18.5	97.5	67.0	45.0	89.5	75.5	14.0	43.5	63.0	69.0	21.0	55.0	75.5	87.5	90.5	50
MANHATTAN II (E)	14.5	30.0	38.5	47.0	.	45.5	49.5	88.5	4.5	82.5	84.0	55.5	91.5	10.0	95.5	74.0	60.0	28.0	48.0	42.5	51
LOWGROW (PICK 89LLG)	21.0	120.0	13.0	20.5	.	63.0	61.0	117.0	76.0	76.5	1.5	88.0	68.5	29.0	23.0	28.5	57.0	31.0	37.0	20.5	52
SATURN	32.5	34.5	78.5	47.0	49.5	66.5	14.5	59.5	61.5	23.5	91.0	61.0	45.5	29.0	52.0	74.0	30.5	69.5	79.0	42.5	53
PR 9119	90.0	67.0	29.0	69.5	.	56.0	97.5	84.0	29.0	45.0	19.0	47.5	68.5	45.0	48.5	55.5	28.0	46.5	27.5	115.0	54
ZPS-2EZ	68.0	101.5	87.5	64.0	34.0	50.5	26.5	97.0	76.0	123.0	75.5	32.0	54.5	17.0	75.5	34.5	45.5	61.0	2.5	90.5	55
PS 89-90 (MVF 89-90)	49.0	43.5	57.5	76.0	31.0	74.0	86.0	84.0	76.0	23.5	40.5	42.5	65.5	17.0	109.5	77.0	20.5	93.5	13.5	20.5	56
CHARGER	86.5	60.5	34.0	9.0	78.0	71.5	61.0	67.0	61.5	36.5	75.5	54.0	54.5	81.0	69.0	17.5	66.5	53.5	37.0	20.5	57
PRONTO (WVPB-89-87A)	70.5	38.0	57.5	76.0	67.0	47.5	72.5	15.0	76.0	64.5	106.5	59.0	54.5	45.0	52.0	49.0	66.5	23.5	37.0	64.0	58
KOOS 90-2	42.0	22.0	63.0	119.0	71.0	37.0	38.0	51.0	88.5	51.5	66.5	42.5	65.5	45.0	42.0	22.0	45.5	111.5	99.5	64.0	59
COWBOY II (WM-II)	56.5	106.5	25.5	28.5	45.5	75.5	97.5	51.0	45.0	23.5	3.0	84.5	71.0	45.0	11.0	67.0	97.5	46.5	21.0	115.0	60
PLEASURE	62.0	38.0	87.5	92.5	56.5	33.5	61.0	5.5	29.0	82.5	104.0	66.5	48.5	81.0	90.0	58.0	94.5	86.5	8.0	109.0	61
NOMAD	56.5	12.0	31.0	9.0	75.0	99.5	72.5	86.5	96.5	23.5	49.5	57.5	54.5	29.0	26.0	83.5	84.5	80.5	87.5	64.0	62
REPELL	62.0	93.0	61.0	53.5	7.5	81.5	97.5	47.0	61.5	6.5	49.5	83.0	99.0	63.0	42.0	79.0	40.5	15.0	66.5	20.5	63
RIVIERA	56.5	43.5	41.0	88.0	49.5	37.0	38.0	74.0	29.0	76.5	111.0	62.0	74.5	95.0	104.5	67.0	50.5	39.5	79.0	42.5	64
RODEO II	56.5	93.0	57.5	50.0	56.5	94.0	38.0	36.5	105.0	64.5	25.5	42.5	60.5	63.0	65.0	93.0	20.5	119.0	92.0	20.5	65
PR 9121	32.5	71.0	93.5	88.0	88.0	50.5	49.5	119.0	96.5	76.5	8.5	78.0	91.5	63.0	13.0	24.5	17.0	61.0	8.0	109.0	66
240 (PEBBLE BEACH)	14.5	60.5	80.5	83.0	99.0	69.0	61.0	92.5	45.0	13.5	40.5	75.0	54.5	45.0	25.0	65.0	71.0	33.5	58.5	64.0	67
PATRIOT II	51.5	74.0	101.5	47.0	45.5	73.0	86.0	32.5	61.5	102.0	19.0	45.5	63.0	81.0	58.0	51.5	45.5	120.5	87.5	42.5	68
OFI-F7	46.0	93.0	118.0	92.5	41.5	47.5	26.5	67.0	88.5	89.5	66.5	36.5	48.5	105.0	75.5	55.5	12.5	109.0	66.5	90.5	69
COMMANDER	68.0	60.5	66.5	81.0	78.0	90.5	26.5	18.0	19.0	102.0	34.0	57.5	81.5	81.0	90.0	60.5	75.0	53.5	37.0	64.0	70
CUTLESS	42.0	6.0	19.0	58.5	78.0	99.5	61.0	54.5	88.5	89.5	58.0	75.0	99.0	63.0	81.5	67.0	33.0	73.5	66.5	20.5	71
TOPEKA (WVPB-88-PR-D-10)	86.5	47.5	82.0	53.5	.	79.5	86.0	59.5	29.0	23.5	84.0	63.0	88.0	63.0	69.0	78.0	80.0	53.5	27.5	7.0	72
EVENING SHADE (POLY-SH)	27.5	122.5	66.5	4.0	78.0	115.0	72.5	21.5	76.0	110.0	25.5	39.5	54.5	29.0	33.0	44.5	60.0	120.5	21.0	109.0	73
CALYPSO	82.5	5.0	74.5	69.5	41.5	70.0	38.0	84.0	19.0	51.5	100.0	84.5	65.5	105.0	81.5	69.0	92.0	39.5	92.0	20.5	74
ELITE (WVPB-88-PR-C-23)	82.5	43.5	27.0	117.5	60.5	59.0	86.0	59.5	45.0	64.5	58.0	80.5	71.0	95.0	58.0	64.0	87.5	77.0	55.0	4.0	75
UNKNOWN	86.5	117.0	38.5	53.5	.	107.0	86.0	47.0	45.0	64.5	75.5	80.5	54.5	63.0	48.5	87.0	100.0	17.0	79.0	.	76
LINDSAY	93.5	43.5	42.5	53.5	73.5	66.5	86.0	92.5	76.0	89.5	66.5	71.5	60.5	63.0	46.0	74.0	89.0	61.0	79.0	42.5	77
PENNANT	76.0	4.0	115.0	81.0	.	88.0	38.0	113.5	88.5	51.5	111.0	69.5	60.5	29.0	72.0	63.0	75.0	33.5	55.0	64.0	78
DERBY SUPREME	93.5	67.0	34.0	69.5	88.0	66.5	86.0	30.0	88.5	102.0	75.5	80.5	74.5	81.0	62.5	74.0	87.5	69.5	13.5	20.5	79
N-33	76.0	93.0	51.0	41.5	67.0	60.0	97.5	59.5	61.5	36.5	91.0	42.5	74.5	81.0	73.5	80.5	84.5	86.5	99.5	90.5	80
MVF 89-88	76.0	27.0	22.5	41.5	84.5	66.5	86.0	78.5	45.0	9.0	75.5	91.5	78.5	45.0	115.0	88.5	75.0	53.5	79.0	90.5	81
CITATION II	98.5	12.0	84.0	85.0	.	56.0	49.5	99.5	105.0	36.5	19.0	90.0	84.5	63.0	98.0	85.5	92.0	80.5	96.0	20.5	82
BAR LP 086FL	68.0	90.0	57.5	47.0	34.0	83.0	61.0	113.5	61.5	23.5	44.0	91.5	45.5	105.0	28.5	80.5	117.0	101.5	96.0	20.5	83
PR 9118	76.0	60.5	93.5	64.0	28.0	103.0	72.5	92.5	76.0	36.5	66.5	53.0	81.5	105.0	94.0	82.0	20.5	108.0	66.5	90.5	84
PR 9109	76.0	7.0	83.0	76.0	13.0	79.5	86.0	54.5	88.5	64.5	100.0	93.0	95.5	95.0	69.0	92.0	66.5	23.5	79.0	109.0	85
MULLIGAN (NK 89001)	65.0	71.0	57.5	114.5	34.0	75.5	61.0	97.0	76.0	102.0	117.5	60.0	84.5	95.0	104.5	88.5	70.0	15.0	66.5	64.0	86
PR 9108	56.5	99.5	53.5	102.5	.	94.0	86.0	40.5	96.5	82.5	75.5	66.5	88.0	63.0	58.0	71.0	80.0	86.5	79.0	90.5	87
STALLION	98.5	47.5	80.5	76.0	.	94.0	86.0	78.5	76.0	23.5	84.0	75.0	88.0	81.0	81.5	83.5	50.5	97.5	79.0	42.5	88
PREMIER	76.0	104.0	101.5	117.5	.	71.5	14.5	27.5	61.5	51.5	34.0	69.5	84.5	45.0	108.0	95.0	103.5	28.0	117.0	90.5	89
BARRAGE ++	119.0	2.0	8.0	102.5	6.0	85.0	115.5	74.0	45.0	13.5	49.5	113.0	99.0	95.0	107.0	106.0	78.0	10.0	119.0	20.5	90

TABLE 3. (CONTINUED)

RANKING OF MEAN TURFGRASS QUALITY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
GROWN AT TWENTY LOCATIONS IN THE U.S.
1993 DATA

QUALITY RANKINGS; 1=HIGHEST MEAN: STATE LOCATIONS REPORTING

NAME	CO1	DC1	IA1	ID3	IL1	IL2	KS2	KY1	MD1	MI1	NE1	NJ1	NJ2	NJ3	OR7	OR9	UB1	VA1	WA1	WA3	MEAN
BARRAGE	113.0	8.0	2.5	92.5	.	85.0	103.0	67.0	96.5	23.5	49.5	109.0	91.5	95.0	81.5	97.0	92.0	39.5	37.0	42.5	91
EEG 358	93.5	12.0	6.5	53.5	73.5	99.5	86.0	81.0	105.0	5.0	19.0	98.0	111.0	112.0	28.5	107.5	66.5	101.5	119.0	64.0	92
C-21	96.0	67.0	38.5	108.5	45.5	104.0	103.0	74.0	76.0	76.5	66.5	94.5	74.5	105.0	58.0	85.5	72.5	86.5	115.0	20.5	93
ACCOLADE	51.5	110.0	122.0	64.0	95.5	96.0	49.5	67.0	45.0	102.0	58.0	75.0	102.5	81.0	22.0	70.0	84.5	61.0	66.5	42.5	94
CALIENTE	115.0	12.0	105.5	81.0	31.0	85.0	14.5	81.0	29.0	36.5	100.0	94.5	95.5	81.0	121.0	114.0	97.5	28.0	106.5	64.0	95
REGAL	90.0	118.0	116.0	97.0	.	77.0	86.0	9.5	115.5	89.5	106.5	89.0	60.5	63.0	118.0	100.0	105.0	20.0	48.0	90.5	96
TAYA	107.0	87.5	10.5	105.5	91.0	105.0	61.0	59.5	96.5	23.5	49.5	101.0	101.0	81.0	65.0	100.0	82.0	53.5	106.5	64.0	97
CLP 39	105.0	30.0	14.5	64.0	.	106.0	115.5	108.5	76.0	13.5	14.0	113.0	118.5	63.0	58.0	96.0	77.0	66.0	79.0	20.5	98
MOM LP 3184	90.0	51.5	99.0	92.5	63.0	58.0	72.5	92.5	120.0	117.5	91.0	99.5	84.5	63.0	90.0	94.0	103.5	66.0	115.0	42.5	99
DANILO	109.0	20.5	29.0	85.0	67.0	90.5	72.5	92.5	45.0	36.5	58.0	107.0	95.5	112.0	116.5	90.0	113.5	86.5	106.5	1.5	100
DUET	103.0	34.5	77.0	112.0	67.0	64.0	72.5	81.0	115.5	76.5	91.0	103.5	78.5	81.0	104.5	104.0	101.5	69.5	58.5	115.0	101
CAPRI (ZW 42-176)	81.0	104.0	96.0	76.0	92.0	87.0	107.0	111.0	96.5	117.5	121.0	80.5	78.5	45.0	90.0	60.5	97.5	101.5	37.0	64.0	102
OFI-D4	105.0	30.0	90.0	92.5	82.0	99.5	111.5	105.0	105.0	23.5	34.0	97.0	95.5	112.0	95.5	102.0	60.0	111.5	96.0	64.0	103
ALLEGRO	84.0	84.5	5.0	120.0	82.0	108.0	97.5	107.0	111.0	6.5	40.5	99.5	102.5	116.0	81.5	91.0	106.0	104.0	106.5	20.5	104
BAR LP 852	76.0	17.0	107.5	122.0	88.0	61.5	109.5	86.5	111.0	102.0	114.5	86.5	91.5	95.0	31.0	104.0	101.5	111.5	99.5	115.0	105
PENNFINE	101.0	43.5	71.5	58.5	.	116.0	26.5	99.5	105.0	13.5	119.5	103.5	117.0	95.0	120.0	118.0	108.0	69.5	66.5	.	106
LORETTA	111.5	1.0	2.5	114.5	.	121.0	103.0	111.0	76.0	3.5	100.0	113.0	118.5	105.0	81.5	120.0	108.0	20.0	112.5	64.0	107
856	98.5	38.0	119.0	61.0	45.5	99.5	103.0	92.5	115.5	13.5	117.5	96.0	115.0	95.0	111.5	109.5	110.0	101.5	55.0	109.0	108
CLP 144	93.5	79.5	17.0	97.0	97.0	113.5	120.0	101.5	115.5	64.5	8.5	107.0	109.0	81.0	81.5	100.0	94.5	93.5	106.5	109.0	109
TORONTO	111.5	55.0	22.5	69.5	67.0	118.0	86.0	103.0	88.5	102.0	49.5	110.5	111.0	105.0	97.0	111.0	121.0	20.0	119.0	90.5	110
MOM LP 3182	105.0	17.0	117.0	112.0	18.0	90.5	103.0	101.5	105.0	117.5	119.5	102.0	120.5	95.0	101.5	107.5	90.0	86.5	112.5	118.5	111
DANARO	102.0	67.0	85.5	99.5	95.5	111.0	107.0	88.5	105.0	120.5	91.0	107.0	107.5	63.0	81.5	98.0	113.5	106.0	106.5	64.0	112
MOM LP 3185	98.5	71.0	114.0	121.0	.	61.5	109.5	74.0	111.0	122.0	91.0	105.0	107.5	112.0	113.5	116.0	108.0	106.0	115.0	115.0	113
OVATION	115.0	55.0	24.0	105.5	70.0	117.0	107.0	108.5	96.5	64.5	91.0	115.0	115.0	118.5	101.5	109.5	115.0	97.5	106.5	90.5	114
ENTRAR	117.0	97.0	69.0	99.5	52.0	109.0	119.0	115.5	105.0	3.5	91.0	110.5	111.0	116.0	111.5	114.0	118.0	122.0	106.5	90.5	115
SURPRISE	115.0	49.5	91.0	97.0	56.5	120.0	121.5	105.0	120.0	36.5	100.0	119.5	105.0	121.0	90.0	104.0	97.5	115.5	79.0	90.5	116
TROUBADOUR	109.0	97.0	47.5	85.0	93.0	122.0	111.5	118.0	96.5	1.0	8.5	122.0	105.0	118.5	109.5	118.0	116.0	115.5	122.0	90.5	117
MOM LP 3111	109.0	79.5	74.5	101.0	94.0	113.5	115.5	115.5	115.5	36.5	106.5	118.0	115.0	112.0	104.5	114.0	119.5	86.5	99.5	109.0	118
METEOR	122.0	114.5	63.0	92.5	98.0	99.5	115.5	120.5	122.0	64.5	122.0	119.5	105.0	122.0	81.5	118.0	111.0	115.5	121.0	90.5	119
MOM LP 3179	118.0	87.5	120.0	112.0	.	110.0	115.5	111.0	120.0	9.0	114.5	116.0	120.5	95.0	119.0	122.0	119.5	118.0	106.5	118.5	120
CARTEL	121.0	113.0	121.0	105.5	82.0	112.0	121.5	105.0	115.5	113.0	114.5	121.0	113.0	120.0	90.0	121.0	122.0	106.0	92.0	20.5	121
GOALIE	120.0	87.5	51.0	110.0	.	119.0	115.5	120.5	105.0	76.5	114.5	117.0	122.0	116.0	122.0	112.0	112.0	93.5	106.5	120.0	122
LINN	123.0	122.5	123.0	123.0	.	123.0	123.0	123.0	123.0	120.5	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	123.0	121.0	123

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

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

TABLE 4. GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

NAME	GENETIC COLOR RATINGS 1-9; 9=DARK GREEN 1/					
	COL	ID3	MD1	NE1	WA3	MEAN
BRIGHTSTAR (PST-GH-89)	8.3	8.3	7.7	6.3	8.0	7.7
PALMER II (P89)	8.0	8.3	7.3	6.7	8.0	7.7
GETTYSBURG	8.0	7.7	7.7	6.3	7.7	7.5
QUICKSTART (PST-2FQR)	7.7	7.7	7.3	6.7	8.0	7.5
REPELL II (LDRD)	7.7	7.7	7.3	6.7	8.0	7.5
RIVIERA II (PICK DKM)	7.7	7.7	7.3	6.7	8.0	7.5
STALLION SELECT (PS-105)	7.0	7.3	7.3	7.3	8.0	7.4
EVENING SHADE (POLY-SH)	8.0	7.7	7.0	6.0	8.0	7.3
NIGHTHAWK (WVPB-89-PR-A-3)	7.7	7.7	6.7	6.7	8.0	7.3
PRELUDE II (2P2-90)	7.7	8.0	7.0	6.0	8.0	7.3
ACHIEVER (PICK 1800)	8.0	7.7	6.7	6.0	8.0	7.3
ASSURE	7.7	7.0	7.3	6.7	7.7	7.3
CUTTER (PICK 89-4)	7.3	7.7	7.0	6.3	8.0	7.3
GREENLAND (PICK 9100)	7.7	7.0	6.7	6.7	8.0	7.2
PST-2FF	7.3	7.7	6.3	6.7	8.0	7.2
PST-2ROR	7.3	7.3	7.0	6.3	8.0	7.2
PICK EEC	7.3	7.3	6.7	6.7	7.7	7.1
APM	7.0	7.3	7.3	5.7	8.0	7.1
BUCCANEER (KOOS 90-1)	7.3	7.3	6.7	6.3	7.7	7.1
MORNING STAR (SYN-P)	7.3	7.3	7.0	6.0	7.7	7.1
PST-28M	7.3	7.3	6.7	6.0	8.0	7.1
AFFINITY (GEN-90)	7.0	7.0	6.3	6.7	8.0	7.0
ENVY	7.0	7.3	6.7	6.3	7.7	7.0
PST-23C	7.0	7.3	6.3	6.7	7.7	7.0
PST-290	7.3	7.3	6.7	6.3	7.3	7.0
SEVILLE	7.3	7.3	7.0	5.7	7.7	7.0
SR 4200	7.3	7.3	6.3	6.3	7.7	7.0
ZPS-2EZ	7.0	7.0	7.3	5.7	8.0	7.0
FIESTA II	7.0	7.0	6.7	6.0	8.0	6.9
DELAWARE DWARF (4DD)	7.0	7.0	7.0	6.0	7.7	6.9
NAVAJO (PST-2DPR)	6.7	7.3	6.7	6.3	7.7	6.9
PRECISION (MOM LP 3147)	7.0	7.0	6.7	6.3	7.7	6.9
SHERWOOD	7.0	7.0	6.3	6.3	8.0	6.9
COMMANDER	6.7	7.0	7.0	6.3	7.3	6.9
OFI-F7	7.0	7.0	7.0	5.7	7.7	6.9
PST-2OG	7.0	6.7	6.7	6.3	7.7	6.9
SHINING STAR (PST-2B3)	7.0	7.0	6.7	6.0	7.7	6.9
YORKTOWN III (LDRF)	7.0	6.7	6.7	6.0	8.0	6.9
ADVENT	7.3	7.0	6.7	5.3	8.0	6.9
LEGACY	7.3	7.0	6.0	6.0	8.0	6.9
240 (PEBBLE BEACH)	7.3	6.3	6.3	6.3	7.7	6.8
DIMENSION (2H7)	7.0	6.7	6.0	6.3	8.0	6.8
NOMAD	7.0	7.0	6.3	6.0	7.7	6.8
PINNACLE	7.0	7.0	6.3	5.7	8.0	6.8
PRIZM (ZPS-28D)	7.3	7.0	6.3	5.7	7.7	6.8

GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

NAME	GENETIC COLOR RATINGS 1-9; 9=DARK GREEN					
	COL	ID3	MD1	NE1	WA3	MEAN
PS 89-90 (MVF 89-90)	7.0	7.0	6.3	6.3	7.3	6.8
STATESMAN (WVPB-88-PR-D-12)	6.7	7.0	6.7	6.0	7.7	6.8
WVPB 89-92	6.7	7.0	6.7	6.3	7.3	6.8
EQUAL	7.3	6.3	6.3	5.7	8.0	6.7
DANDY	7.3	6.7	6.3	6.3	7.0	6.7
KOOS 90-2	6.7	6.7	6.7	6.3	7.3	6.7
PATRIOT II	7.3	7.0	6.3	5.7	7.3	6.7
PR 9121	7.0	6.7	6.3	6.3	7.3	6.7
CHARGER	6.7	7.0	6.3	6.0	7.3	6.7
COWBOY II (WM-II)	7.0	6.7	6.0	6.3	7.3	6.7
EXPRESS	7.0	6.7	6.0	6.0	7.7	6.7
LOWGROW (PICK 89LLG)	6.7	6.7	6.3	6.3	7.3	6.7
RODEO II	6.7	7.0	6.3	6.0	7.3	6.7
SATURN	7.0	6.7	6.7	5.7	7.3	6.7
COMPETITOR	6.3	7.0	6.0	6.3	7.7	6.7
PR 9119	6.3	7.0	6.3	6.3	7.3	6.7
PRONTO (WVPB-89-87A)	7.3	6.7	6.3	5.3	7.7	6.7
DERBY SUPREME	7.0	6.7	6.0	6.0	7.3	6.6
PR 9118	6.7	6.7	6.3	6.0	7.3	6.6
TARGET	7.0	6.7	6.7	5.3	7.3	6.6
PENNANT	7.0	6.7	6.3	5.7	7.0	6.5
PLEASURE	7.0	6.7	6.0	6.0	7.0	6.5
PR 9108	6.7	6.7	6.0	6.0	7.3	6.5
89-666	7.0	6.7	6.3	5.3	7.3	6.5
ESSENCE (PR 8820)	6.0	6.7	6.3	6.3	7.3	6.5
ACCOLADE	6.7	6.3	6.0	6.0	7.3	6.5
REGAL	6.3	6.3	6.3	6.0	7.3	6.5
TOPEKA (WVPB-88-PR-D-10)	6.7	7.0	6.0	5.7	7.0	6.5
EEG 358	6.0	6.3	6.7	6.3	7.0	6.5
HE 311	6.3	6.7	6.3	6.0	7.0	6.5
N-33	7.0	6.0	6.0	5.7	7.3	6.4
PREMIER	7.0	6.3	6.0	5.3	7.3	6.4
BAR LP 086FL	6.0	7.0	6.0	6.0	6.7	6.3
MVF 89-88	6.3	6.3	6.3	5.7	7.0	6.3
PR 9109	6.3	6.3	6.3	5.7	7.0	6.3
CAPRI (ZW 42-176)	6.3	7.0	6.0	5.3	7.0	6.3
CUTLESS	6.3	6.3	6.0	6.0	7.0	6.3
LINDSAY	6.3	6.3	6.0	6.0	7.0	6.3
MANHATTAN II (E)	6.3	6.3	6.0	6.0	7.0	6.3
DUET	6.3	6.3	6.3	5.7	6.7	6.3
GATOR	6.3	6.0	6.0	6.0	7.0	6.3
RIVIERA	6.3	6.3	6.0	5.7	7.0	6.3
STALLION	6.3	6.0	6.0	5.7	7.3	6.3
C-21	6.0	6.0	6.3	6.0	6.7	6.2
CALYPSO	6.3	6.0	6.0	5.7	7.0	6.2

TABLE 4.
(CONTINUED)

GENETIC COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

GENETIC COLOR RATINGS 1-9; 9=DARK GREEN

NAME	CO1	ID3	MD1	NE1	WA3	MEAN
OFI-D4	6.0	6.0	6.0	6.0	7.0	6.2
REPELL	6.0	6.3	6.0	5.3	7.0	6.1
UNKNOWN	6.7	6.0	6.0	5.7	.	6.1
BAR LP 852	6.7	6.0	6.0	5.0	6.7	6.1
ELITE (WVPB-88-PR-C-23)	6.0	5.7	5.7	6.0	7.0	6.1
CITATION II	6.3	6.0	6.0	5.0	7.0	6.1
ALLEGRO	5.7	5.7	6.0	6.0	6.7	6.0
856	6.0	6.0	5.7	5.3	6.7	5.9
CALIENTE	5.7	6.0	6.0	5.0	7.0	5.9
MOM LP 3182	6.0	5.7	6.0	5.0	7.0	5.9
MOM LP 3184	6.0	5.3	6.0	5.3	7.0	5.9
BARRAGE	5.7	5.7	6.0	5.7	6.3	5.9
ENTRAR	4.7	6.0	6.0	5.7	7.0	5.9
MOM LP 3111	5.7	5.3	6.0	5.3	7.0	5.9
TAYA	5.7	5.7	6.0	5.0	6.7	5.8
CLP 39	5.0	6.0	5.7	5.3	7.0	5.8
MOM LP 3185	5.3	5.0	6.0	5.7	7.0	5.8
MULLIGAN (NK 89001)	5.7	5.7	5.7	5.3	6.7	5.8
PENNFINE	6.0	6.0	6.0	5.0	.	5.8
GOALIE	5.7	6.0	6.0	4.3	6.5	5.7
BARRAGE ++	5.0	6.0	6.0	5.0	6.3	5.7
DANARO	5.0	5.7	5.3	5.3	7.0	5.7
CLP 144	5.0	5.3	6.0	5.3	6.3	5.6
DANILO	5.3	5.0	5.3	5.0	7.0	5.5
METEOR	4.3	5.7	5.7	5.3	6.7	5.5
OVATION	5.3	5.0	5.0	5.0	7.0	5.5
SURPRISE	5.3	5.0	5.3	5.0	6.7	5.5
CARTEL	4.7	5.0	5.7	5.0	6.3	5.3
TROUBADOUR	4.0	5.0	5.7	5.3	6.3	5.3
LORETTA	4.3	5.0	6.0	4.3	6.3	5.2
MOM LP 3179	4.3	4.3	5.7	4.7	6.3	5.1
TORONTO	4.7	4.7	5.0	4.3	6.3	5.0
LINN	3.3	4.7	5.0	4.3	5.7	4.6
LSD VALUE	0.8	0.8	0.7	0.9	0.7	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 5. LEAF TEXTURE RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

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

NAME	NJ3	NAME	NJ3
CAPRI (ZW 42-176)	6.7	REPELL	6.0
GETTYSBURG	6.7	RIVIERA II (PICK DKM)	6.0
HE 311	6.7	SATURN	6.0
AFFINITY (GEN-90)	6.3	SEVILLE	6.0
BAR LP 086FL	6.3	SR 4200	6.0
BRIGHTSTAR (PST-GH-89)	6.3	STALLION	6.0
CUTTER (PICK 89-4)	6.3	STALLION SELECT (PS-105)	6.0
ELITE (WVPB-88-PR-C-23)	6.3	TOPEKA (WVPB-88-PR-D-10)	6.0
LEGACY	6.3	ZPS-2EZ	6.0
LOWGROW (PICK 89LLG)	6.3	89-666	5.7
MANHATTAN II (E)	6.3	APM	5.7
NIGHTHAWK (WVPB-89-PR-A-3)	6.3	C-21	5.7
PR 9121	6.3	CALYPSO	5.7
PRIZM (ZPS-28D)	6.3	CHARGER	5.7
WVPB 89-92	6.3	CITATION II	5.7
YORKTOWN III (LDRF)	6.3	DANARO	5.7
240 (PEBBLE BEACH)	6.0	DANDY	5.7
ACHIEVER (PICK 1800)	6.0	DANILO	5.7
ADVENT	6.0	DELAWARE DWARF (4DD)	5.7
ASSURE	6.0	DERBY SUPREME	5.7
BUCCANEER (KOOS 90-1)	6.0	DUET	5.7
CLP 144	6.0	ESSENCE (PR 8820)	5.7
COMPETITOR	6.0	FIESTA II	5.7
COWBOY II (WM-II)	6.0	KOOS 90-2	5.7
CUTLESS	6.0	LINDSAY	5.7
DIMENSION (2H7)	6.0	MOM LP 3179	5.7
ENVY	6.0	MVF 89-88	5.7
EQUAL	6.0	NAVAJO (PST-2DPR)	5.7
EVENING SHADE (POLY-SH)	6.0	PENNANT	5.7
EXPRESS	6.0	PR 9108	5.7
GREENLAND (PICK 9100)	6.0	PR 9109	5.7
NOMAD	6.0	PR 9118	5.7
PALMER II (P89)	6.0	PRECISION (MOM LP 3147)	5.7
PATRIOT II	6.0	PRONTO (WVPB-89-87A)	5.7
PICK EEC	6.0	PST-23C	5.7
PINNACLE	6.0	PST-20G	5.7
PLEASURE	6.0	REPELL II (LDRD)	5.7
PR 9119	6.0	RODEO II	5.7
PRELUDE II (2P2-90)	6.0	SHERWOOD	5.7
PS 89-90 (MVF 89-90)	6.0	SHINING STAR (PST-2B3)	5.7
PST-28M	6.0	STATESMAN (WVPB-88-PR-D-12)	5.7
PST-290	6.0	TARGET	5.7
PST-2FF	6.0	TAYA	5.7
PST-2RCR	6.0	TROUBADOUR	5.7
QUICKSTART (PST-2FQR)	6.0	ACCOLADE	5.3

TABLE 5.
(CONTINUED)

LEAF TEXTURE RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

LEAF TEXTURE RATINGS 1-9; 9=VERY FINE

NAME	NJ3
ALLEGRO	5.3
BAR LP 852	5.3
CALIENTE	5.3
CARTEL	5.3
GATOR	5.3
GOALIE	5.3
LORETTA	5.3
MCM LP 3184	5.3
MORNING STAR (SYN-P)	5.3
MULLIGAN (NK 89001)	5.3
N-33	5.3
CLP 39	5.0
COMMANDER	5.0
EEG 358	5.0
ENTRAR	5.0
METEOR	5.0
MCM LP 3111	5.0
MCM LP 3182	5.0
MCM LP 3185	5.0
OFI-F7	5.0
OVATION	5.0
PENNFINE	5.0
PREMIER	5.0
REGAL	5.0
RIVIERA	5.0
SURPRISE	5.0
TCRONTO	5.0
UNKNOWN	5.0
BARRAGE	4.7
BARRAGE ++	4.7
OFI-D4	4.7
856	4.3
LINN	2.7
LSD VALUE	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 6. PERCENT LIVING GROUND COVER (SPRING) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS 1/			
NAME	ID3	NAME	ID3
CLP 144	95.0	CALIENTE	88.3
DELAWARE DWARF (4DD)	95.0	COMMANDER	88.3
856	94.7	COWBOY II (WM-II)	88.3
BARRAGE	93.3	DANARO	88.3
CLP 39	93.3	ELITE (WVPB-88-PR-C-23)	88.3
PENNFINE	93.3	ESSENCE (PR 8820)	88.3
PST-2OG	93.3	EVENING SHADE (POLY-SH)	88.3
TORONTO	93.3	LORETTA	88.3
CUTLESS	91.7	METEOR	88.3
EEG 358	91.7	MULLIGAN (NK 89001)	88.3
ENTRAR	91.7	N-33	88.3
FIESTA II	91.7	NAVAJO (PST-2DPR)	88.3
HE 311	91.7	PATRIOT II	88.3
LINDSAY	91.7	PENNANT	88.3
PR 9108	91.7	SURPRISE	88.3
PST-23C	91.7	ADVENT	86.7
PST-2ROR	91.7	ALLEGRO	86.7
SHINING STAR (PST-2B3)	91.7	DANILO	86.7
TARGET	91.7	DERBY SUPREME	86.7
89-666	90.0	EQUAL	86.7
BARRAGE ++	90.0	GATOR	86.7
CARTEL	90.0	LEGACY	86.7
ENVY	90.0	MOM LP 3179	86.7
EXPRESS	90.0	MOM LP 3185	86.7
GETTYSBURG	90.0	PLEASURE	86.7
GOALIE	90.0	PRELUDE II (2P2-90)	86.7
MANHATTAN II (E)	90.0	PRIZM (ZPS-28D)	86.7
MOM LP 3111	90.0	PST-290	86.7
MOM LP 3184	90.0	SEVILLE	86.7
MORNING STAR (SYN-P)	90.0	STATESMAN (WVPB-88-PR-D-12)	86.7
NOMAD	90.0	WVPB 89-92	86.7
OFI-D4	90.0	240 (PEBBLE BEACH)	85.0
OVATION	90.0	ACCOLADE	85.0
PICK EEC	90.0	APM	85.0
PR 9109	90.0	BAR LP 086FL	85.0
PST-2&M	90.0	COMPETITOR	85.0
PST-2FF	90.0	CUTTER (PICK 89-4)	85.0
REGAL	90.0	DANDY	85.0
RIVIERA II (PICK DKM)	90.0	LOWGROW (PICK 89LLG)	85.0
SATURN	90.0	MVF 89-88	85.0
SR 4200	90.0	NIGHTHAWK (WVPB-89-PR-A-3)	85.0
TROUBADOUR	90.0	PALMER II (P89)	85.0
UNKNOWN	90.0	PR 9118	85.0
ACHIEVER (PICK 1800)	88.3	PR 9119	85.0
BUCCANEER (KOOS 90-1)	88.3	STALLION	85.0

TABLE 6.
(CONTINUED)

PERCENT LIVING GROUND COVER (SPRING) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

PERCENT LIVING GROUND COVER IN SPRING: LOCATIONS

NAME	ID3
STALLION SELECT (PS-105)	85.0
TAYA	85.0
TOEKA (WVPB-88-PR-D-10)	85.0
ZPS-2EZ	85.0
BRIGHTSTAR (PST-GH-89)	83.3
C-21	83.3
CALYPSO	83.3
KOCS 90-2	83.3
MOM LP 3182	83.3
QUICKSTART (PST-2FQR)	83.3
REFELL II (LDRD)	83.3
RIVIERA	83.3
SHERWOOD	83.3
AFFINITY (GEN-90)	81.7
CITATION II	81.7
DUET	81.7
PINNACLE	81.7
PRECISION (MOM LP 3147)	81.7
PREMIER	81.7
PRONTO (WVPB-89-87A)	81.7
REFELL	81.7
RODEO II	81.7
YORKTOWN III (LDRF)	81.7
CARI (ZW 42-176)	80.0
DIMENSION (2H7)	80.0
PR 9121	80.0
PS 89-90 (MVF 89-90)	80.0
BAR LP 852	78.3
CHARGER	78.3
GREENLAND (PICK 9100)	78.3
LINN	76.7
OFI-F7	76.7
ASSURE	75.0
LSD VALUE	9.6

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. PERCENT LIVING GROUND COVER (SUMMER) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS 1/			
NAME	WA3	NAME	WA3
DANILO	80.0	PRIZM (ZPS-28D)	61.7
ELITE (WVPB-88-PR-C-23)	78.3	REPELL	61.7
CHARGER	75.0	STATESMAN (WVPB-88-PR-D-12)	61.7
AFFINITY (GEN-90)	73.3	856	60.0
APM	73.3	BARRAGE ++	60.0
CLP 39	73.3	COMPETITOR	60.0
FIESTA II	73.3	DERBY SUPREME	60.0
LINDSAY	73.3	MOM LP 3179	60.0
METEOR	73.3	MOM LP 3182	60.0
SEVILLE	73.3	NAVAJO (PST-2DPR)	60.0
NIGHTHAWK (WVPB-89-PR-A-3)	71.7	PATRIOT II	60.0
TORONTO	71.7	PINNACLE	60.0
YORKTOWN III (LDRF)	71.7	PS 89-90 (MVF 89-90)	60.0
CARTEL	70.0	SHINING STAR (PST-2B3)	60.0
EXPRESS	70.0	STALLION	60.0
SHERWOOD	70.0	SURPRISE	60.0
PST-290	68.3	CITATION II	58.3
TAYA	68.3	DANARO	58.3
ALLEGRO	66.7	PST-23C	58.3
CUTLESS	66.7	PST-2FF	58.3
GATOR	66.7	PST-2OG	58.3
TOPEKA (WVPB-88-PR-D-10)	66.7	PST-2ROR	58.3
WVPB 89-92	66.7	89-666	56.7
CALYPSO	65.0	ACHIEVER (PICK 1800)	56.7
DANDY	65.0	BRIGHTSTAR (PST-GH-89)	56.7
PICK EEC	65.0	EEG 358	56.7
ACCOLADE	63.3	ENTRAR	56.7
BAR LP 086FL	63.3	KOOS 90-2	56.7
BARRAGE	63.3	MOM LP 3111	56.7
COMMANDER	63.3	MOM LP 3184	56.7
CUTTER (PICK 89-4)	63.3	OVATION	56.7
DELAWARE DWARF (4DD)	63.3	PR 9118	56.7
DIMENSION (2H7)	63.3	SATURN	56.7
ESSENCE (PR 8820)	63.3	TARGET	56.7
HE 311	63.3	CAPRI (ZW 42-176)	55.0
LORETTA	63.3	MANHATTAN II (E)	55.0
MORNING STAR (SYN-P)	63.3	MULLIGAN (NK 89001)	55.0
NOMAD	63.3	C-21	53.3
PENNANT	63.3	EQUAL	53.3
PR 9119	63.3	MOM LP 3185	53.3
RIVIERA	63.3	N-33	53.3
SR 4200	63.3	OFI-D4	53.3
TROUBADOUR	63.3	PRONTO (WVPB-89-87A)	53.3
ASSURE	61.7	PST-28M	53.3
PRELUDE II (2P2-90)	61.7	BUCCANEER (KOOS 90-1)	51.7

TABLE 7.
(CONTINUED)

PERCENT LIVING GROUND COVER (SUMMER) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

PERCENT LIVING GROUND COVER IN SUMMER: LOCATIONS

NAME	WA3
CALIENTE	51.7
CLP 144	51.7
240 (PEBBLE BEACH)	50.0
ADVENT	50.0
ENVY	50.0
LOWGROW (PICK 89LLG)	50.0
MVF 89-88	50.0
PALMER II (P89)	50.0
RIVIERA II (PICK DKM)	50.0
RODEO II	50.0
STALLION SELECT (PS-105)	50.0
PR 9109	48.3
DUET	46.7
GETTYSBURG	46.7
GOALIE	46.7
GREENLAND (PICK 9100)	46.7
PLEASURE	46.7
PR 9108	46.7
PR 9121	46.7
PRECISION (MOM LP 3147)	46.7
PREMIER	46.7
BAR LP 852	45.0
LINN	45.0
REFELL II (LDRD)	45.0
COWBOY II (WM-II)	43.3
LEGACY	43.3
OFT-F7	43.3
QUICKSTART (PST-2FQR)	43.3
ZPS-2EZ	40.0
EVENING SHADE (POLY-SH)	33.3
REGAL	33.3
LSD VALUE	22.4

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 8. PERCENT LIVING GROUND COVER (FALL) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS 1/

NAME	WA3	NAME	WA3
AFFINITY (GEN-90)	76.7	ACCOLADE	60.0
CARTEL	76.7	ALLEGRO	60.0
ADVENT	75.0	ASSURE	60.0
METEOR	73.3	DELAWARE DWARF (4DD)	60.0
SR 4200	73.3	ENTRAR	60.0
BAR IP 086FL	70.0	EXPRESS	60.0
ELITE (WVPB-88-PR-C-23)	70.0	NIGHTHAWK (WVPB-89-PR-A-3)	60.0
FIESTA II	70.0	NOMAD	60.0
OFI-D4	70.0	PR 9121	60.0
PST-28M	70.0	PST-20G	60.0
PST-290	68.3	PST-2ROR	60.0
TOPEKA (WVPB-88-PR-D-10)	68.3	RIVIERA II (PICK DRM)	60.0
89-666	66.7	RODEO II	60.0
ACHIEVER (PICK 1800)	66.7	TROUBADOUR	60.0
CUTLESS	66.7	PLEASURE	58.3
LINDSAY	66.7	856	56.7
LOWGROW (PICK 89LLG)	66.7	CALIENTE	56.7
PICK EEC	66.7	CAPRI (ZW 42-176)	56.7
QUICKSTART (PST-2FQR)	66.7	DANARO	56.7
YORKTOWN III (LDRF)	66.7	DIMENSION (2H7)	56.7
BARRAGE ++	65.0	GREENLAND (PICK 9100)	56.7
C-21	65.0	MANHATTAN II (E)	56.7
CITATION II	65.0	MORNING STAR (SYN-P)	56.7
DERBY SUPREME	65.0	MVF 89-88	56.7
EEG 358	65.0	NAVAJO (PST-2DPR)	56.7
EQUAL	65.0	PR 9118	56.7
PS 89-90 (MVF 89-90)	65.0	PRONTO (WVPB-89-87A)	56.7
240 (PEBBLE BEACH)	63.3	SHERWOOD	56.7
APM	63.3	SHINING STAR (PST-2B3)	56.7
BRIGHTSTAR (PST-GH-89)	63.3	TORONTO	55.0
CHARGER	63.3	DUET	53.3
CLP 39	63.3	GETTYSBURG	53.3
DANILIO	63.3	MULLIGAN (NK 89001)	53.3
GATOR	63.3	N-33	53.3
KOOS 90-2	63.3	PALMER II (P89)	53.3
PINNACLE	63.3	PREMIER	53.3
PR 9108	63.3	PST-23C	53.3
PST-2FF	63.3	RIVIERA	53.3
SEVILLE	63.3	TARGET	53.3
STALLION SELECT (PS-105)	63.3	ZPS-2EZ	53.3
SURPRISE	63.3	MOM LP 3179	51.7
WVPB 89-92	63.3	BUCCANEER (KOOS 90-1)	50.0
ENVY	61.7	CALYPSO	50.0
STALLION	61.7	CUTTER (PICK 89-4)	50.0
STATESMAN (WVPB-88-PR-D-12)	61.7	HE 311	50.0

TABLE 8.
(CONTINUED)

PERCENT LIVING GROUND COVER (FALL) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

PERCENT LIVING GROUND COVER IN FALL: LOCATIONS

NAME	WA3
MOM LP 3182	50.0
PENNANT	50.0
PRELUDE II (2P2-90)	50.0
PRIZM (ZPS-28D)	50.0
REFELL	50.0
TAYA	50.0
CLP 144	48.3
SATURN	48.3
COMMANDER	46.7
DANDY	46.7
ESSENCE (PR 8820)	46.7
MOM LP 3111	46.7
PATRIOT II	46.7
PRECISION (MOM LP 3147)	46.7
MOM LP 3184	45.0
BAR LP 852	43.3
BARRAGE	43.3
COWBOY II (WM-II)	43.3
LEGACY	43.3
PR 9109	43.3
REGAL	43.3
COMPETITOR	41.7
EVENING SHADE (POLY-SH)	41.7
MOM LP 3185	41.7
LINN	40.0
LORETTA	40.0
GOALIE	36.7
OFI-F7	36.7
PR 9119	36.7
REFELL II (LDRD)	36.7
OVATION	33.3
LSD VALUE	21.7

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 9. WINTER COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

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

NAME	CO1	WA3	MEAN
BRIGHTSTAR (PST-GH-89)	4.7	8.0	6.3
PRELUDE II (2P2-90)	4.7	7.7	6.2
NIGHTHAWK (WVPB-89-PR-A-3)	4.0	8.0	6.0
PALMER II (P89)	4.0	8.0	6.0
REPELL II (LDRD)	4.7	7.3	6.0
ESSENCE (PR 8820)	4.7	7.0	5.8
PREMIER	5.0	6.7	5.8
PST-28M	4.7	7.0	5.8
PST-20G	5.0	6.7	5.8
PST-2ROR	5.0	6.7	5.8
STALLION SELECT (PS-105)	4.7	7.0	5.8
YORKTOWN III (LDRF)	4.7	7.0	5.8
DANDY	4.3	7.3	5.8
GREENLAND (PICK 9100)	4.3	7.3	5.8
HE 311	4.3	7.3	5.8
MORNING STAR (SYN-P)	4.3	7.3	5.8
RIVIERA II (PICK DKM)	4.3	7.3	5.8
SR 4200	4.3	7.3	5.8
PRIZM (ZPS-28D)	4.7	6.7	5.7
SATURN	4.7	6.7	5.7
89-666	4.3	7.0	5.7
AFFINITY (GEN-90)	4.3	7.0	5.7
APM	4.3	7.0	5.7
ASSURE	4.3	7.0	5.7
CHARGER	4.3	7.0	5.7
DELAWARE DWARF (4DD)	4.3	7.0	5.7
LEGACY	4.0	7.3	5.7
MANHATTAN II (E)	4.3	7.0	5.7
NOMAD	4.0	7.3	5.7
OFI-F7	4.3	7.0	5.7
PINNACLE	4.3	7.0	5.7
PST-23C	4.3	7.0	5.7
SEVILLE	4.3	7.0	5.7
WVPB 89-92	4.3	7.0	5.7
ZPS-2EZ	4.0	7.3	5.7
ADVENT	4.0	7.0	5.5
BUCCANEER (KOOS 90-1)	4.0	7.0	5.5
C-21	4.3	6.7	5.5
COMPETITOR	4.0	7.0	5.5
CUTTER (PICK 89-4)	4.3	6.7	5.5
DERBY SUPREME	4.0	7.0	5.5
DIMENSION (2H7)	4.0	7.0	5.5
EQUAL	4.0	7.0	5.5
LOWGROW (PICK 89LLG)	4.0	7.0	5.5
N-33	4.3	6.7	5.5

WINTER COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

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

NAME	CO1	WA3	MEAN
NAVAJO (PST-2DPR)	4.0	7.0	5.5
PICK EEC	3.7	7.3	5.5
PRONTO (WVPB-89-87A)	4.3	6.7	5.5
PST-290	4.0	7.0	5.5
PST-2FF	4.0	7.0	5.5
QUICKSTART (PST-2FQR)	4.0	7.0	5.5
RODEO II	4.3	6.7	5.5
SHINING STAR (PST-2B3)	4.0	7.0	5.5
STATESMAN (WVPB-88-PR-D-12)	4.0	7.0	5.5
TARGET	4.3	6.7	5.5
ACCOLADE	4.0	6.7	5.3
EVENING SHADE (POLY-SH)	4.0	6.7	5.3
GATOR	4.0	6.7	5.3
GETTYSBURG	4.0	6.7	5.3
KOOS 90-2	4.0	6.7	5.3
LINDSAY	4.7	6.0	5.3
PR 9119	4.7	6.0	5.3
REPELL	4.0	6.7	5.3
RIVIERA	4.0	6.7	5.3
STALLION	4.0	6.7	5.3
TOPEKA (WVPB-88-PR-D-10)	4.0	6.7	5.3
ACHIEVER (PICK 1800)	3.7	7.0	5.3
CALYPSO	4.3	6.3	5.3
CITATION II	4.3	6.3	5.3
DANILO	4.3	6.3	5.3
ENVY	4.3	6.3	5.3
EXPRESS	4.3	6.3	5.3
PATRIOT II	3.7	7.0	5.3
PENNANT	4.3	6.3	5.3
PLEASURE	4.3	6.3	5.3
PR 9108	4.3	6.3	5.3
BAR LP 086FL	3.7	6.7	5.2
ENTRAR	3.7	6.7	5.2
240 (PEBBLE BEACH)	4.0	6.3	5.2
BAR LP 852	4.0	6.3	5.2
CAPRI (ZW 42-176)	4.0	6.3	5.2
CLP 39	4.3	6.0	5.2
CUTLESS	4.0	6.3	5.2
FIESTA II	4.0	6.3	5.2
MOM LP 3184	4.0	6.3	5.2
PRECISION (MOM LP 3147)	4.3	6.0	5.2
SHERWOOD	4.3	6.0	5.2
856	4.0	6.0	5.0
ALLEGRO	4.3	5.7	5.0
COMMANDER	4.0	6.0	5.0

TABLE 9.
(CONTINUED)

WINTER COLOR RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

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

NAME	CO1	WA3	MEAN
COWBOY II (WM-II)	3.7	6.3	5.0
MOM LP 3185	3.7	6.3	5.0
MVF 89-88	4.0	6.0	5.0
OFI-D4	4.0	6.0	5.0
OVATION	4.0	6.0	5.0
PR 9118	4.0	6.0	5.0
PS 89-90 (MVF 89-90)	3.7	6.3	5.0
REGAL	4.0	6.0	5.0
TAYA	4.0	6.0	5.0
BARRAGE ++	4.0	5.7	4.8
CALIENTE	4.0	5.7	4.8
CLP 144	4.0	5.7	4.8
DANARO	4.0	5.7	4.8
DUET	4.0	5.7	4.8
SURPRISE	4.0	5.7	4.8
BARRAGE	3.7	6.0	4.8
EEG 358	3.3	6.3	4.8
ELITE (WVFB-88-PR-C-23)	3.7	6.0	4.8
MULLIGAN (NK 89001)	4.3	5.3	4.8
PR 9109	3.7	6.0	4.8
PR 9121	3.7	6.0	4.8
GOALIE	3.7	5.7	4.7
MOM LP 3182	3.7	5.7	4.7
UNKNOWN	4.7	.	4.7
LORETTA	4.0	5.3	4.7
MOM LP 3111	4.0	5.3	4.7
CARTEL	3.0	5.7	4.3
METEOR	3.7	5.0	4.3
PENNFINE	4.3	.	4.3
TORONTO	3.7	5.0	4.3
TROUBADOUR	3.3	5.3	4.3
LINN	3.0	5.0	4.0
MOM LP 3179	3.3	4.7	4.0
LSD VALUE	0.8	1.0	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 10. DROUGHT TOLERANCE (RECOVERY) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

DROUGHT TOLERANCE (RECOVERY) RATINGS 1-9; 9=COMPLETE RECOVERY 1/

NAME	IL2	NAME	IL2
OFI-F7	5.3	CITATION II	2.7
BARRAGE ++	5.0	PICK EEC	2.7
DELAWARE DWARF (4DD)	5.0	PREMIER	2.7
GATOR	4.7	PS 89-90 (MVF 89-90)	2.7
RIVIERA II (PICK DKM)	4.7	REPELL II (LDRD)	2.7
ACHIEVER (PICK 1800)	4.3	TOPEKA (WVPB-88-PR-D-10)	2.7
ELITE (WVPB-88-PR-C-23)	4.3	BAR LP 852	2.3
NOMAD	4.3	CALIENTE	2.3
REGAL	4.3	CHARGER	2.3
RODEO II	4.3	COMPETITOR	2.3
TAYA	4.3	DUET	2.3
EXPRESS	4.0	NIGHTHAWK (WVPB-89-PR-A-3)	2.3
TROUBADOUR	4.0	PR 9108	2.3
UNKNOWN	4.0	PR 9118	2.3
ADVENT	3.7	PST-2OG	2.3
AFFINITY (GEN-90)	3.7	QUICKSTART (PST-2FQR)	2.3
KOOS 90-2	3.7	SATURN	2.3
PENNFINE	3.7	STALLION SELECT (PS-105)	2.3
PLEASURE	3.7	ASSURE	2.0
PR 9119	3.7	BRIGHTSTAR (PST-GH-89)	2.0
STALLION	3.7	CALYPSO	2.0
TARGET	3.7	CAPRI (ZW 42-176)	2.0
BUCCANEER (KOOS 90-1)	3.3	CUTLESS	2.0
DANILO	3.3	EQUAL	2.0
GOALIE	3.3	ESSENCE (PR 8820)	2.0
GREENLAND (PICK 9100)	3.3	EVENING SHADE (POLY-SH)	2.0
OVATION	3.3	LEGACY	2.0
PATRIOT II	3.3	LINDSAY	2.0
PRIZM (ZPS-28D)	3.3	MANHATTAN II (E)	2.0
PRONTO (WVPB-89-87A)	3.3	PALMER II (P89)	2.0
SEVILLE	3.3	PR 9109	2.0
C-21	3.0	PST-2FF	2.0
CLP 144	3.0	SHINING STAR (PST-2B3)	2.0
CUTTER (PICK 89-4)	3.0	YORKTOWN III (LDRF)	2.0
DERBY SUPREME	3.0	240 (PEBBLE BEACH)	1.7
LORETTA	3.0	856	1.7
MOM LP 3184	3.0	89-666	1.7
MORNING STAR (SYN-P)	3.0	ACCOLADE	1.7
NAVAJO (PST-2DPR)	3.0	ALLEGRO	1.7
PST-28M	3.0	APM	1.7
PST-290	3.0	CARTEL	1.7
REPELL	3.0	COMMANDER	1.7
SURPRISE	3.0	DANDY	1.7
ZPS-2EZ	3.0	FIESTA II	1.7
BARRAGE	2.7	HE 311	1.7

TABLE 10.
(CONTINUED)

DROUGHT TOLERANCE (RECOVERY) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

DROUGHT TOLERANCE (RECOVERY) RATINGS 1-9; 9=COMPLETE RECOVERY

NAME	IL2
LOWGROW (PICK 89LLG)	1.7
MULLIGAN (NK 89001)	1.7
MVF 89-88	1.7
PINNACLE	1.7
PR 9121	1.7
PRELUDE II (2P2-90)	1.7
RIVIERA	1.7
SR 4200	1.7
WVPB 89-92	1.7
BAR LP 086FL	1.3
CLP 39	1.3
COWBOY II (WM-II)	1.3
ENVY	1.3
GETTYSBURG	1.3
LINN	1.3
METEOR	1.3
MCM LP 3179	1.3
MCM LP 3182	1.3
MCM LP 3185	1.3
N-33	1.3
PRECISION (MOM LP 3147)	1.3
PST-23C	1.3
PST-2ROR	1.3
SHERWOOD	1.3
TCRONTO	1.3
DANARO	1.0
DIMENSION (2H7)	1.0
EEG 358	1.0
ENTRAR	1.0
MCM LP 3111	1.0
OFT-D4	1.0
PENNANT	1.0
STATESMAN (WVPB-88-PR-D-12)	1.0
LSD VALUE	2.8

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 11. TYPHULA BLIGHT RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

TYPHULA BLIGHT RATINGS 1-9; 9=NO DISEASE 1/

NAME	MI1	NAME	MI1
PST-2RQR	7.7	ELITE (WVPB-88-PR-C-23)	5.7
DANDY	7.3	ENVY	5.7
ENTRAR	7.3	EXPRESS	5.7
FIESTA II	7.3	GETTYSBURG	5.7
TAYA	7.3	HE 311	5.7
BARRAGE	7.0	NIGHTHAWK (WVPB-89-PR-A-3)	5.7
BARRAGE ++	7.0	PENNFINE	5.7
LORETTA	7.0	PICK EEC	5.7
TROUBADOUR	7.0	PR 9119	5.7
WVPB 89-92	7.0	PRELUDE II (2P2-90)	5.7
ALLEGRO	6.7	PST-23C	5.7
DANILO	6.7	PST-2FF	5.7
DIMENSION (2H7)	6.7	REPELL	5.7
LEGACY	6.7	RODEO II	5.7
PENNANT	6.7	SR 4200	5.7
PLEASURE	6.7	STALLION	5.7
SURPRISE	6.7	89-666	5.3
UNKNOWN	6.7	ACHIEVER (PICK 1800)	5.3
EEG 358	6.3	AFFINITY (GEN-90)	5.3
GOALIE	6.3	APM	5.3
KOOS 90-2	6.3	BAR LP 086FL	5.3
MORNING STAR (SYN-P)	6.3	C-21	5.3
OVATION	6.3	CALYPSO	5.3
PRONTO (WVPB-89-87A)	6.3	COMMANDER	5.3
856	6.0	DELAWARE DWARF (4DD)	5.3
ASSURE	6.0	DERBY SUPREME	5.3
CHARGER	6.0	LINDSAY	5.3
CITATION II	6.0	LINN	5.3
CLP 39	6.0	LOWGROW (PICK 89LLG)	5.3
EQUAL	6.0	MOM LP 3111	5.3
GATOR	6.0	MOM LP 3182	5.3
METEOR	6.0	N-33	5.3
MOM LP 3184	6.0	NOMAD	5.3
MVF 89-88	6.0	PALMER II (P89)	5.3
NAVAJO (PST-2DPR)	6.0	PINNACLE	5.3
OFT-D4	6.0	PR 9108	5.3
PREMIER	6.0	PR 9118	5.3
PS 89-90 (MVF 89-90)	6.0	PRECISION (MOM LP 3147)	5.3
PST-2OG	6.0	PRIZM (ZPS-28D)	5.3
QUICKSTART (PST-2FQR)	6.0	REPELL II (LDRD)	5.3
STALLION SELECT (PS-105)	6.0	RIVIERA	5.3
240 (PEBBLE BEACH)	5.7	RIVIERA II (PICK DKM)	5.3
BUCCANEER (KOOS 90-1)	5.7	TARGET	5.3
CALIENTE	5.7	TOPEKA (WVPB-88-PR-D-10)	5.3
COMPETITOR	5.7	TORONTO	5.3

TABLE 11.
(CONTINUED)

TYPHULA BLIGHT RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

TYPHULA BLIGHT RATINGS 1-9; 9=NO DISEASE

NAME	MI1
ADVENT	5.0
BAR LP 852	5.0
COWBOY II (WM-II)	5.0
DANARO	5.0
DUET	5.0
ESSENCE (PR 8820)	5.0
GREENLAND (PICK 9100)	5.0
MQM LP 3179	5.0
MULLIGAN (NK 89001)	5.0
SATURN	5.0
SHERWOOD	5.0
SHINING STAR (PST-2B3)	5.0
ACCOLADE	4.7
CLP 144	4.7
CUTLESS	4.7
CUTTER (PICK 89-4)	4.7
EVENING SHADE (POLY-SH)	4.7
PR 9121	4.7
PST-28M	4.7
SEVILLE	4.7
YORKTOWN III (LDRF)	4.7
BRIGHTSTAR (PST-GH-89)	4.3
CAPRI (ZW 42-176)	4.3
CARTEL	4.3
PR 9109	4.3
PST-290	4.3
STATESMAN (WVPB-88-PR-D-12)	4.3
MQM LP 3185	4.0
OET-F7	4.0
ZFS-2EZ	4.0
PATRIOT II	3.7
REGAL	3.7
MANHATTAN II (E)	3.3
LSD VALUE	2.1

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 12.

RED THREAD RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

NAME	RED THREAD RATINGS 1-9; 9=NO DISEASE 1/				
	ID3	NJ3	OR9	WA3	MEAN
ZPS-2EZ	8.3	8.0	5.3	6.3	7.0
PST-28M	7.0	8.0	5.7	6.7	6.8
89-666	7.7	7.7	5.7	6.3	6.8
PRECISION (MOM LP 3147)	8.3	8.0	5.3	5.3	6.8
PRELUDE II (2P2-90)	7.3	8.7	4.7	6.3	6.8
DANDY	8.3	8.3	4.7	5.3	6.7
PENNFINE	7.7	7.3	5.0	.	6.7
CHARGER	8.0	7.0	5.3	6.3	6.7
NOMAD	7.7	8.0	5.0	5.7	6.6
PRIZM (ZPS-28D)	7.3	7.7	6.0	5.3	6.6
UNKNOWN	7.3	7.3	5.0	.	6.6
REPELL	8.7	7.7	4.0	5.7	6.5
OFI-F7	7.0	7.3	5.3	6.3	6.5
HE 311	7.3	8.3	4.7	5.3	6.4
TOPEKA (WVPB-88-PR-D-10)	7.7	7.0	5.7	5.3	6.4
AFFINITY (GEN-90)	6.3	7.0	6.3	6.0	6.4
PST-2FF	7.3	6.7	5.3	6.3	6.4
QUICKSTART (PST-2FQR)	6.7	7.3	4.7	6.7	6.3
SR 4200	8.0	6.7	4.7	6.0	6.3
EXPRESS	7.7	7.3	5.3	5.0	6.3
NIGHTHAWK (WVPB-89-PR-A-3)	8.0	7.3	4.3	5.7	6.3
SATURN	7.3	7.7	4.3	6.0	6.3
DUET	7.3	7.7	4.7	5.3	6.3
EQUAL	7.7	8.0	4.0	5.3	6.3
PINNACLE	7.7	7.3	4.0	6.0	6.3
PREMIER	6.3	8.0	4.7	6.0	6.3
RIVIERA II (PICK DKM)	7.3	7.3	5.7	4.7	6.3
SEVILLE	7.0	6.3	5.7	6.0	6.3
STATESMAN (WVPB-88-PR-D-12)	8.0	7.0	4.7	5.3	6.3
SHINING STAR (PST-2B3)	7.0	7.3	5.3	5.3	6.3
ADVENT	7.7	6.0	5.7	5.3	6.2
CALYPSO	8.0	7.0	5.0	4.7	6.2
CUTTER (PICK 89-4)	7.7	6.7	5.0	5.3	6.2
DERBY SUPREME	7.7	6.7	4.3	6.0	6.2
ENVY	6.3	6.7	5.0	6.7	6.2
ESSENCE (PR 8820)	6.0	7.0	5.0	6.7	6.2
MOM LP 3184	8.3	6.3	5.0	5.0	6.2
TARGET	7.0	8.3	4.3	5.0	6.2
YORKTOWN III (LDRF)	7.0	7.3	4.7	5.7	6.2
REPELL II (LDRD)	8.0	6.3	4.3	6.0	6.2
COMMANDER	6.7	7.3	4.7	5.7	6.1
COWBOY II (WM-II)	8.0	7.0	4.7	4.7	6.1
MULLIGAN (NK 89001)	5.7	8.3	5.7	4.7	6.1
OFI-D4	7.0	8.0	4.7	4.7	6.1
RIVIERA	8.0	7.0	4.7	4.7	6.1

RED THREAD RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

NAME	RED THREAD RATINGS 1-9; 9=NO DISEASE				
	ID3	NJ3	OR9	WA3	MEAN
ACHIEVER (PICK 1800)	7.3	7.7	3.3	6.0	6.1
APM	7.7	6.3	4.0	6.3	6.1
ASSURE	7.3	7.0	5.0	5.0	6.1
EVENING SHADE (POLY-SH)	7.7	7.3	4.3	5.0	6.1
FIESTA II	5.7	7.0	5.3	6.3	6.1
PST-23C	7.0	6.7	4.3	6.3	6.1
STALLION	8.0	7.0	4.3	5.0	6.1
BRIGHTSTAR (PST-GH-89)	6.7	7.7	3.7	6.0	6.0
CITATION II	7.3	7.0	4.0	5.7	6.0
MORNING STAR (SYN-P)	7.0	7.0	5.0	5.0	6.0
MVF 89-88	8.7	6.7	4.0	4.7	6.0
PS 89-90 (MVF 89-90)	6.7	7.7	4.3	5.3	6.0
CUTLESS	7.3	7.0	3.7	5.7	5.9
DANILO	6.7	8.0	4.0	5.0	5.9
DELAWARE DWARF (4DD)	6.7	7.7	3.7	5.7	5.9
LINDSAY	7.0	7.0	4.7	5.0	5.9
PICK EEC	8.0	5.7	5.0	5.0	5.9
PST-2ROR	7.3	7.3	3.3	5.7	5.9
TORONTO	7.3	8.3	3.3	4.7	5.9
BAR LP 086FL	7.3	7.0	4.3	5.0	5.9
LOWGROW (PICK 89LLG)	6.7	7.3	4.3	5.3	5.9
PENNANT	6.0	7.3	5.0	5.3	5.9
KOOS 90-2	5.7	6.3	5.7	5.7	5.8
MOM LP 3111	8.0	6.0	4.7	4.7	5.8
BARRAGE	6.3	7.3	5.0	4.7	5.8
CLP 144	6.0	8.0	4.3	5.0	5.8
DIMENSION (2H7)	7.3	6.0	4.3	5.7	5.8
GREENLAND (PICK 9100)	5.7	6.0	5.3	6.3	5.8
PLEASURE	6.3	8.0	4.7	4.3	5.8
PR 9109	7.0	6.3	5.3	4.7	5.8
PST-290	6.7	6.3	5.0	5.3	5.8
SHERWOOD	7.3	6.3	4.0	5.7	5.8
CALIENTE	6.7	7.3	4.3	4.7	5.8
GATOR	5.7	7.7	5.3	4.3	5.8
OVATION	7.0	8.0	2.7	5.3	5.8
PRONTO (WVPB-89-87A)	7.0	6.3	4.0	5.7	5.8
SURPRISE	7.7	6.3	4.7	4.3	5.8
METEOR	7.7	6.7	4.0	4.3	5.7
MOM LP 3182	7.7	8.0	3.0	4.0	5.7
C-21	6.3	6.3	4.0	6.0	5.7
EEG 358	7.3	7.0	4.3	4.0	5.7
GETTYSBURG	7.0	6.3	4.0	5.3	5.7
STALLION SELECT (PS-105)	7.0	7.0	3.3	5.3	5.7
MANHATTAN II (E)	7.0	6.7	3.7	5.0	5.6
N-33	7.7	5.7	4.3	4.7	5.6

TABLE 12. RED THREAD RATINGS OF PERENNIAL RYEGRASS CULTIVARS
(CONTINUED) 1993 DATA

RED THREAD RATINGS 1-9; 9=NO DISEASE

NAME	ID3	NJ3	OR9	WA3	MEAN
BUCCANEER (KOOS 90-1)	7.3	7.0	3.7	4.3	5.6
MOM LP 3179	7.3	7.3	3.0	4.7	5.6
PATRIOT II	6.3	7.3	4.0	4.7	5.6
PR 9121	6.7	6.0	4.3	5.3	5.6
PST-20G	5.0	7.3	4.3	5.7	5.6
RODEO II	7.3	7.0	3.0	5.0	5.6
DANARO	7.3	7.3	2.7	4.7	5.5
LEGACY	7.0	6.3	4.0	4.7	5.5
NAVAJO (PST-2DPR)	7.0	7.0	3.7	4.3	5.5
WVPB 89-92	7.0	6.3	4.0	4.7	5.5
856	7.3	7.0	3.7	3.7	5.4
BARRAGE ++	6.3	7.7	3.7	4.0	5.4
CARTEL	7.7	5.0	3.7	5.3	5.4
GOALIE	6.7	7.3	4.0	3.7	5.4
MOM LP 3185	6.0	6.3	4.7	4.7	5.4
LINN	7.3	7.0	3.3	4.0	5.4
PR 9118	6.3	6.3	4.7	4.3	5.4
ALLEGRO	5.0	7.0	4.7	4.7	5.3
ACCOLADE	6.3	6.0	4.7	4.3	5.3
PR 9119	7.0	5.7	3.7	4.7	5.3
REGAL	6.0	6.7	3.7	4.7	5.3
CLP 39	6.3	6.0	4.0	4.7	5.3
COMPETITOR	6.7	4.7	4.3	5.3	5.3
PALMER II (P89)	5.7	7.0	3.0	5.3	5.3
PR 9108	6.3	6.3	3.7	4.7	5.3
TAYA	6.7	6.3	4.0	4.0	5.3
LORETTA	5.3	6.0	4.0	5.3	5.2
240 (PEBBLE BEACH)	6.0	5.3	4.0	5.0	5.1
ENTRAR	6.0	6.3	3.7	4.3	5.1
TROUBADOUR	6.7	5.7	3.7	4.3	5.1
BAR LP 852	4.7	7.3	3.0	5.0	5.0
ELITE (WVPB-88-PR-C-23)	5.0	6.7	4.0	4.0	4.9
CAPRI (ZW 42-176)	6.7	4.7	4.0	4.0	4.8
LSD VALUE	2.3	2.1	1.8	1.5	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.

BROWN PATCH RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

NAME	BROWN PATCH RATINGS 1-9; 9=NO DISEASE 1/			
	IL2	NJ1	VA1	MEAN
PRIZM (ZPS-28D)	7.0	6.7	6.0	6.6
RIVIERA II (PICK DKM)	8.0	6.0	5.7	6.6
APM	6.3	7.3	5.7	6.4
PENNANT	7.7	6.3	5.3	6.4
PST-290	8.7	5.0	5.7	6.4
ASSURE	8.3	5.0	5.3	6.2
MULLIGAN (NK 89001)	6.7	5.3	6.7	6.2
PST-2ROR	8.3	5.3	5.0	6.2
AFFINITY (GEN-90)	7.7	5.0	5.7	6.1
PST-28M	6.7	6.7	5.0	6.1
ENVY	8.3	4.7	5.3	6.1
MORNING STAR (SYN-P)	7.3	5.3	5.7	6.1
PRECISION (MOM LP 3147)	8.0	5.0	5.3	6.1
CUTTER (PICK 89-4)	6.3	4.3	7.3	6.0
EXPRESS	8.0	6.3	3.7	6.0
GETTYSBURG	8.0	4.3	5.7	6.0
SEVILLE	7.0	5.7	5.3	6.0
SHINING STAR (PST-2B3)	7.7	4.7	5.7	6.0
89-666	6.3	4.7	6.7	5.9
CALIENTE	7.0	5.7	5.0	5.9
GATOR	5.7	4.7	7.3	5.9
PRELUDE II (2P2-90)	7.7	4.7	5.3	5.9
PREMIER	6.3	5.7	5.7	5.9
PST-2FF	5.0	6.7	5.7	5.8
ADVENT	6.0	6.0	5.3	5.8
BRIGHTSTAR (PST-GH-89)	8.3	3.7	5.3	5.8
ACHIEVER (PICK 1800)	6.7	5.7	4.7	5.7
CALYPSO	6.3	5.0	5.7	5.7
PST-23C	7.7	5.0	4.3	5.7
REPELL II (LDRD)	7.0	4.7	5.3	5.7
PST-2OG	7.3	4.7	4.7	5.6
RIVIERA	6.0	5.0	5.7	5.6
YORKTOWN III (LDRE)	7.0	5.3	4.3	5.6
CITATION II	6.3	5.3	4.7	5.4
MOM LP 3184	7.3	4.3	4.7	5.4
REPELL	6.3	4.7	5.3	5.4
BUCCANEER (KOOS 90-1)	5.3	4.7	6.0	5.3
EQUAL	6.0	5.0	5.0	5.3
PINNACLE	5.3	5.7	5.0	5.3
PLEASURE	6.3	5.0	4.7	5.3
856	5.7	4.0	6.0	5.2
FIESTA II	5.7	4.7	5.3	5.2
PRQNT0 (WVPB-89-87A)	5.3	4.7	5.7	5.2
TOPEKA (WVPB-88-PR-D-10)	5.3	4.7	5.7	5.2
STALLION	6.0	5.3	4.3	5.2

BROWN PATCH RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

NAME	BROWN PATCH RATINGS 1-9; 9=NO DISEASE			
	IL2	NJ1	VA1	MEAN
DIMENSION (2H7)	8.0	4.3	3.0	5.1
HE 311	4.0	6.3	5.0	5.1
MVF 89-88	5.0	3.7	6.7	5.1
PALMER II (P89)	6.0	4.0	5.3	5.1
QUICKSTART (PST-2FQR)	3.7	5.3	6.3	5.1
SATURN	5.3	5.0	5.0	5.1
STATESMAN (WVPB-88-PR-D-12)	6.3	3.7	5.3	5.1
C-21	5.0	4.7	5.3	5.0
COWBOY II (WM-II)	5.7	4.0	5.3	5.0
DANDY	6.0	4.0	5.0	5.0
LINDSAY	6.0	3.0	6.0	5.0
N-33	7.0	3.3	4.7	5.0
PENNFINE	4.3	4.0	6.7	5.0
SHERWOOD	5.7	5.0	4.3	5.0
SR 4200	5.0	5.0	5.0	5.0
DELAWARE DWARF (4DD)	4.7	5.3	4.7	4.9
DERBY SUPREME	6.0	3.3	5.3	4.9
DUET	4.0	4.0	6.7	4.9
ELITE (WVPB-88-PR-C-23)	5.7	3.7	5.3	4.9
PICK EEC	5.0	4.7	5.0	4.9
TARGET	4.7	4.0	6.0	4.9
WVPB 89-92	5.3	3.7	5.7	4.9
BARRAGE	6.0	4.3	4.3	4.9
LEGACY	6.3	3.0	5.3	4.9
MOM LP 3185	6.3	4.0	4.3	4.9
PR 9108	5.3	3.3	6.0	4.9
240 (PEBBLE BEACH)	5.7	3.3	5.3	4.8
STALLION SELECT (PS-105)	5.0	5.0	4.3	4.8
MOM LP 3182	6.0	4.0	4.0	4.7
NIGHTHAWK (WVPB-89-PR-A-3)	7.0	3.7	3.3	4.7
OVATION	5.0	3.0	6.0	4.7
PR 9109	4.3	4.0	5.7	4.7
PR 9121	6.3	3.3	4.3	4.7
OFI-D4	6.0	3.3	4.3	4.6
COMPETITOR	5.0	3.7	5.0	4.6
CUTLESS	5.3	3.3	5.0	4.6
GREENLAND (PICK 9100)	6.3	3.7	3.7	4.6
BAR LP 852	5.7	3.3	4.3	4.4
BARRAGE ++	5.0	3.0	5.3	4.4
COMMANDER	5.0	4.3	4.0	4.4
MANHATTAN II (E)	5.0	4.3	4.0	4.4
PR 9119	5.0	3.0	5.3	4.4
PS 89-90 (MVF 89-90)	5.3	4.0	4.0	4.4
ZPS-2EZ	6.3	3.3	3.7	4.4
CHARGER	4.7	4.3	4.0	4.3

TABLE 13.
(CONTINUED)

BROWN PATCH RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

BROWN PATCH RATINGS 1-9; 9=NO DISEASE

NAME	IL2	NJ1	VA1	MEAN
REGAL	4.3	3.3	5.3	4.3
METEOR	5.3	3.3	4.0	4.2
UNKNOWN	1.7	4.7	6.3	4.2
ESSENCE (PR 8820)	4.7	3.0	4.7	4.1
NOMAD	3.3	4.0	5.0	4.1
DANILO	3.3	4.7	4.3	4.1
NAVAJO (PST-2DPR)	3.3	3.7	5.3	4.1
TORONTO	2.0	3.7	6.7	4.1
OFI-F7	3.7	5.3	2.7	3.9
MOM LP 3179	4.0	4.0	3.3	3.8
DANARO	4.3	3.0	4.0	3.8
MOM LP 3111	2.3	4.7	4.3	3.8
PATRIOT II	4.3	4.0	3.0	3.8
RODEO II	4.0	3.7	3.7	3.8
SURPRISE	4.0	2.7	4.7	3.8
TAYA	4.3	3.0	4.0	3.8
CAPRI (ZW 42-176)	4.0	2.3	4.3	3.6
KOOS 90-2	3.3	3.0	4.3	3.6
LORETTA	2.3	3.0	5.3	3.6
CLP 144	4.3	2.7	3.3	3.4
BAR LP 086FL	2.0	3.7	4.0	3.2
PR 9118	1.7	3.7	4.3	3.2
ACCOLADE	2.0	3.7	3.3	3.0
EEG 358	3.3	2.0	3.3	2.9
TROUBADOUR	2.0	3.0	3.7	2.9
ENTRAR	2.0	3.7	2.7	2.8
GOALIE	1.7	2.7	4.0	2.8
LOWGROW (PICK 89LLG)	2.3	2.3	3.3	2.7
EVENING SHADE (POLY-SH)	1.7	3.7	2.3	2.6
CLP 39	1.7	2.0	3.7	2.4
ALLEGRO	1.0	2.7	3.7	2.4
CARTEL	1.7	2.3	3.0	2.3
LINN	1.0	2.0	3.7	2.2
LSD VALUE	3.8	1.7	2.8	1.7

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 14. SNOW MOLD COMBINATION (60% PINK + 40% GREY) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

SNOW MOLD RATINGS 1-9; 9=NO DISEASE 1/

NAME	ID3	NAME	ID3
NOMAD	7.0	ZPS-2EZ	5.0
DELAWARE DWARF (4DD)	6.3	COMMANDER	4.7
HE 311	6.3	DANDY	4.7
METEOR	6.3	DERBY SUPREME	4.7
CLP 39	6.0	DIMENSION (2H7)	4.7
MULLIGAN (NK 89001)	6.0	EEG 358	4.7
PRIZM (ZPS-28D)	6.0	ELITE (WVPB-88-PR-C-23)	4.7
PST-290	6.0	EQUAL	4.7
BARRAGE ++	5.7	ESSENCE (PR 8820)	4.7
CLP 144	5.7	MOM LP 3184	4.7
PENNFINE	5.7	OFI-D4	4.7
PST-23C	5.7	OFI-F7	4.7
PST-20G	5.7	PENNANT	4.7
TARGET	5.7	PR 9108	4.7
856	5.3	PR 9118	4.7
ADVENT	5.3	PST-28M	4.7
C-21	5.3	PST-2FF	4.7
DANILO	5.3	SR 4200	4.7
EXPRESS	5.3	UNKNOWN	4.7
GATOR	5.3	89-666	4.3
SURPRISE	5.3	ACHIEVER (PICK 1800)	4.3
TOPEKA (WVPB-88-PR-D-10)	5.3	APM	4.3
240 (PEBBLE BEACH)	5.0	CALYPSO	4.3
ALLEGRO	5.0	CARTEL	4.3
BARRAGE	5.0	COMPETITOR	4.3
BUCCANEER (KOOS 90-1)	5.0	COWBOY II (WM-II)	4.3
CALIENTE	5.0	CUTLESS	4.3
ENTRAR	5.0	EVENING SHADE (POLY-SH)	4.3
ENVY	5.0	LORETTA	4.3
FIESTA II	5.0	MANHATTAN II (E)	4.3
GETTYSBURG	5.0	MOM LP 3179	4.3
LEGACY	5.0	MORNING STAR (SYN-P)	4.3
LINDSAY	5.0	N-33	4.3
NAVAJO (PST-2DPR)	5.0	PR 9109	4.3
PATRIOT II	5.0	PR 9121	4.3
PICK EEC	5.0	QUICKSTART (PST-2FQR)	4.3
PLEASURE	5.0	REGAL	4.3
PST-2POR	5.0	RIVIERA II (PICK DRM)	4.3
REPELL	5.0	SHERWOOD	4.3
REPELL II (LDRD)	5.0	STALLION SELECT (PS-105)	4.3
SEVILLE	5.0	TROUBADOUR	4.3
SHINING STAR (PST-2B3)	5.0	WVPB 89-92	4.3
TAYA	5.0	AFFINITY (GEN-90)	4.0
TORONTO	5.0	ASSURE	4.0
YORKTOWN III (LDRF)	5.0	BRIGHTSTAR (PST-GH-89)	4.0

TABLE 14.
(CONTINUED)

SNOW MOLD COMBINATION (60% PINK + 40% GREY) RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

SNOW MOLD RATINGS 1-9; 9=NO DISEASE

NAME	ID3
CAPRI (ZW 42-176)	4.0
CUTTER (PICK 89-4)	4.0
GOALIE	4.0
GREENLAND (PICK 9100)	4.0
KOOS 90-2	4.0
MCM LP 3111	4.0
MVF 89-88	4.0
PALMER II (P89)	4.0
PINNACLE	4.0
PRELUDE II (2P2-90)	4.0
RODEO II	4.0
STATESMAN (WVPB-88-PR-D-12)	4.0
BAR LP 086FL	3.7
DANARO	3.7
MCM LP 3185	3.7
PR 9119	3.7
PRECISION (MOM LP 3147)	3.7
PRONTO (WVPB-89-87A)	3.7
PS 89-90 (MVF 89-90)	3.7
RIVIERA	3.7
SATURN	3.7
STALLION	3.7
CHARGER	3.3
LINN	3.3
LOWGROW (PICK 89LLG)	3.3
NIGHTHAWK (WVPB-89-PR-A-3)	3.3
PREMIER	3.3
CITATION II	3.0
OVATION	3.0
BAR LP 852	2.7
DUET	2.7
MCM LP 3182	2.7
ACCOLADE	2.3
LSD VALUE	1.7

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 15. FLOOD RECOVERY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

FLOOD RECOVERY RATINGS 1-9; 9=BEST 1/

NAME	NE1	NAME	NE1
COMPETITOR	9.0	PST-2ROR	7.7
COWBOY II (WM-II)	9.0	SHERWOOD	7.7
PRELUDE II (2P2-90)	9.0	STALLION SELECT (PS-105)	7.7
PST-2FF	9.0	ALLEGRO	7.3
QUICKSTART (PST-2FQR)	9.0	CUTLESS	7.3
REPELL II (LDRD)	9.0	DANARO	7.3
RODEO II	9.0	FIESTA II	7.3
TORONTO	9.0	GREENLAND (PICK 9100)	7.3
EEG 358	8.7	MOM LP 3111	7.3
OFI-F7	8.7	MULLIGAN (NK 89001)	7.3
PATRIOT II	8.7	PINNACLE	7.3
PST-2OG	8.7	PR 9121	7.3
REPELL	8.7	SATURN	7.3
SHINING STAR (PST-2B3)	8.7	UNKNOWN	7.3
SR 4200	8.7	89-666	7.0
AFFINITY (GEN-90)	8.3	CITATION II	7.0
CARTEL	8.3	CLP 144	7.0
ENVY	8.3	CLP 39	7.0
ESSENCE (PR 8820)	8.3	DANILO	7.0
NIGHTHAWK (WVPB-89-PR-A-3)	8.3	DERBY SUPREME	7.0
PR 9118	8.3	DUET	7.0
PR 9119	8.3	EVENING SHADE (POLY-SH)	7.0
PREMIER	8.3	EXPRESS	7.0
TROUBADOUR	8.3	GATOR	7.0
240 (PEEBLE BEACH)	8.0	GETTYSBURG	7.0
BRIGHTSTAR (PST-GH-89)	8.0	LINDSAY	7.0
CHARGER	8.0	MOM LP 3179	7.0
ENTRAR	8.0	MOM LP 3182	7.0
LINN	8.0	N-33	7.0
MOM LP 3184	8.0	PR 9109	7.0
NAVAJO (PST-2DPR)	8.0	PRIZM (ZPS-28D)	7.0
NOMAD	8.0	PRONTO (WVPB-89-87A)	7.0
OFI-D4	8.0	PST-23C	7.0
PICK EEC	8.0	RIVIERA II (PICK IKM)	7.0
PR 9108	8.0	STATESMAN (WVPB-88-PR-D-12)	7.0
YORKTOWN III (LDRF)	8.0	SURPRISE	7.0
ACHIEVER (PICK 1800)	7.7	ZPS-2EZ	7.0
DIMENSION (2H7)	7.7	ACCOLADE	6.7
EQUAL	7.7	DELAWARE DWARF (4DD)	6.7
HE 311	7.7	MANHATTAN II (E)	6.7
METEOR	7.7	OVATION	6.7
MOM LP 3185	7.7	PALMER II (P89)	6.7
MORNING STAR (SYN-P)	7.7	PST-290	6.7
PENNANT	7.7	REGAL	6.7
PST-28M	7.7	STALLION	6.7

TABLE 15.
(CONTINUED)

FLOOD RECOVERY RATINGS OF PERENNIAL RYEGRASS CULTIVARS
1993 DATA

FLOOD RECOVERY RATINGS 1-9; 9=BEST

NAME	NE1
TARGET	6.7
TOPEKA (WVPB-88-PR-D-10)	6.7
ADVENT	6.3
AM	6.3
ASSURE	6.3
BAR LP 086FL	6.3
BAR LP 852	6.3
BARRAGE	6.3
BUCCANEER (KOOS 90-1)	6.3
C-21	6.3
CALIENTE	6.3
CAPRI (ZW 42-176)	6.3
COMMANDER	6.3
CUTTER (PICK 89-4)	6.3
DANDY	6.3
ELITE (WVPB-88-PR-C-23)	6.3
GOALIE	6.3
KOOS 90-2	6.3
LEGACY	6.3
LOWGROW (PICK 89LLG)	6.3
PLEASURE	6.3
PRECISION (MOM LP 3147)	6.3
SEVILLE	6.3
TAYA	6.3
WVPB 89-92	6.3
BARRAGE ++	6.0
MVF 89-88	6.0
PENNFINE	6.0
PS 89-90 (MVF 89-90)	6.0
RIVIERA	6.0
CALYPSO	5.7
LORETTA	5.7
856	5.0
LSD VALUE	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).