

The National Turfgrass Evaluation Program at UCR

S.T. Cockerham and S.B. Ries, Agricultural Operations University of California, Riverside

The National Turfgrass Evaluation Program (NTEP), a cooperative effort between the non-profit National Turfgrass Federation, Inc., and the United States Department of Agriculture (USDA), is designed to coordinate evaluation trials of turfgrass varieties and promising selections in the United States and Canada. Information such as turfgrass quality, color, density, resistance to diseases and insects, tolerance to heat, cold, and drought can be used by seed and sod distributors and plant breeders to determine the broad picture of the adaptation of a cultivar. Results can also be used by sports turf managers, golf course superintendents, landscape architects, landscape contractors, ground managers and consultants to determine if a cultivar is well adapted to a local area.

Local and state government entities, such as parks and highway departments, use NTEP for locating resource-efficient varieties. Most important, growers and consumers use NTEP extensively to purchase drought tolerant, pest resistant, attractive and durable seed or sod. It is the acceptance by the end-user that has made NTEP the standard for turfgrass evaluation in the U.S.A. and other countries worldwide.

Four NTEP studies are currently underway at UCR. Plot maps and mean visual quality results for the 2009 calendar year are presented for tall fescue (Table 1), bermudagrass (Table 2), zoysiagrass (Table 3) and Seashore Paspalum (Table 4). Results for leaf texture, color, density, and winter color (warm-season grasses), as well as annual progress and final reports, can be found at <http://www.ntep.org/>.

NTEP Tall Fescue Trial (north replicate)

100	109	40	31	61	103	91	50	11	32
4	65	86	24	25	95	96	111	73	38
93	70	57	9	89	27	64	53	112	43
20	30	21	10	74	19	26	22	56	108
49	52	84	60	72	8	78	62	80	42
14	77	5	6	68	37	82	39	113	28
2	44	17	16	1	79	36	35	66	18
90	63	13	34	88	98	106	23	45	46
97	54	101	105	76	87	15	59	7	3
110	47	58	71	92	48	51	69	41	67
99	107	83	75	94	12	102	29	81	33
104	55	85							

NTEP Tall Fescue Trial (middle replicate)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113							

NTEP Tall Fescue Trial (south replicate)

42	66	111	23	65	13	69	95	99	43
103	50	8	49	110	109	45	88	52	48
72	101	68	19	100	44	78	75	113	73
25	105	92	41	7	67	59	24	79	96
85	77	70	83	57	35	76	9	61	97
62	33	106	46	74	30	51	34	98	28
39	5	36	102	54	56	112	2	90	94
84	26	15	10	107	86	47	14	27	87
16	32	53	22	37	4	12	38	93	104
82	6	58	60	80	18	108	89	29	55
17	71	21	63	11	1	3	64	91	20
31	81	40							

2007 NTEP Tall Fescue Entries

1	KY-31	31	Toccoa	61	BAR Fa 6253	91	Darlington
2	Spyder	32	Terrier	62	Talladega	92	KZ-1
3	Bravheart	33	Raptor II	63	Tahoe II	93	Renovate
4	Umbrella	34	Aggressor	64	06-WALK	94	Compete
5	Cannavaro	35	Essential	65	Escalade	95	Hudson
6	Greenbrooks	36	Fat Cat	66	06-DUST	96	Reunion
7	Plato	37	IS-TF-161	67	Honky Tonk	97	GWTF
8	Lindbergh	38	MVS-341	68	PSG-85QR	98	KZ-2
9	Aristotle	39	MVS-1107	69	STR-8GRQR	99	AST9002
10	Einstein	40	Titanium	70	PSG-82BR	100	AST9001
11	Silverado	41	Firecracker LS	71	Faith	101	RNP
12	Monet	42	M4	72	GO-1BFD	102	AST-4
13	Cezanne Rz	43	0312	73	SR 8650	103	AST 7003
14	Van Gogh	44	PSG-TTST	74	STR-8BB5	104	AST9003
15	Ninja 3	45	Col-1	75	Tulsa Time	105	J-140
16	Cochise IV	46	J-130	76	PSG-RNDR	106	ATF-1199
17	RK 4	47	Corona	77	PSG-TTRH	107	Justice
18	RK 5	48	Crossfire 3	78	Speedway	108	Rebel IV
19	GE-1	49	Hunter	79	Rembrandt	109	3rd
20	SC-1	50	Biltmore	80	JT-41	110	Traverse SPR
21	ATF 1328	51	Padre	81	JT-36	111	Rhambler SPR
22	Skyline	52	Magellan	82	JT-45	112	Firenza
23	Hemi	53	Catelist	83	JT-42	113	Falcon IV
24	Turbo RZ	54	Stetson II	84	JT-33		
25	Turbo	55	Finelawn Xpress	85	BGR-TF1		
26	Bullseye	56	Falcon NG	86	BGR-TF2		
27	Trio	57	Shenandoah Elite	87	Gazelle II		
28	Sidewinder	58	Falcon V	88	Wolfpack II		
29	Rocket	59	Shenandoah III	89	AST 7002		
30	Jamboree	60	BAR Fa 6363	90	AST 7001		

Table 1. NTEP tall fescue mean visual quality ratings for 2009 at UC Riverside (9-best). Quality among entries are significantly different if they differ by the LSD value or greater.

	mean		mean		mean
ESSENTIAL	6.8	CEZANNE RZ	5.8	UMBRELLA	5.4
FALCON V	6.8	GAZELLE II	5.8	DARLINGTON	5.3
CATELYST	6.7	J-130	5.8	JT-33	5.3
BULLSEYE	6.6	JAMBOREE	5.8	JT-41	5.3
SHENANDOAH ELITE	6.6	JUSTICE	5.8	PSG-TTST	5.3
FIRENZA	6.4	PADRE	5.8	SIDEWINDER	5.3
HEMI	6.4	SPYDER LS	5.8	AST9002	5.2
MONET	6.4	TERRIER	5.8	BGR-TF2	5.2
RK 5	6.4	TRAVERSE SRP	5.8	HUNTER	5.2
3RD MILLENNIUM SRP	6.3	TURBO	5.8	LINDBERGH	5.2
GARRISON	6.3	ESCALADE	5.7	PSG-RNDR	5.2
BRAVEHEART	6.3	J-140	5.7	PSG-TTRH	5.2
COCHISE IV	6.3	JT-36	5.7	AST7003	5.1
FIRECRACKER LS	6.3	REMBRANDT	5.7	AST9001	5.1
RHAMBLER SRP	6.3	ROCKET	5.7	GWTF	5.1
SHENANDOAH III	6.3	AST9003	5.6	KZ-2	5.1
SPEEDWAY	6.3	COL-1	5.6	MAGELLAN	5.1
CANNAVARO	6.2	CORONA	5.6	PLATO	5.1
FAITH	6.2	FAT CAT	5.6	TULSA TIME	5.1
FINELAWN XPRESS	6.2	GO-1BFD	5.6	ATF 1328	5.0
PSG-85QR	6.2	HONKY TONK	5.6	COMPETE	5.0
FALCON IV	6.1	JT-42	5.6	EINSTEIN	5.0
GREENBROOKS	6.1	JT-45	5.6	TURBO RZ	5.0
MUSTANG 4	6.1	RAPTOR II	5.6	RNP	4.9
RK 4	6.1	REBEL IV	5.6	SILVERADO	4.9
LS 1200	6.1	STR-8BB5	5.6	AST1001	4.8
FALCON NG	6.0	HUDSON	5.5	CROSSFIRE 3	4.8
SR 8650	6.0	IS-TF-159	5.5	STETSON II	4.8
STR-8GRQR	6.0	KZ-1	5.5	TOCCOA	4.8
TALLADEGA	6.0	MVS-341	5.5	BAR FA 6363	4.7
WOLFPACK II	6.0	SKYLINE	5.5	AST 7001	4.6
BAR FA 6253	5.9	312	5.4	BILTMORE	4.6
GE-1	5.9	06-WALK	5.4	TAHOE II	4.5
MVS-1107	5.9	AST 7002	5.4	ARISTOTLE	4.3
PEDIGREE	5.9	BGR-TF1	5.4	KY-31	3.9
PSG-82BR	5.9	NINJA 3	5.4		
TITANIUM LS	5.9	RENOVATE	5.4	LSD	0.7
VAN GOGH	5.9	REUNION	5.4		
06-DUST	5.8	TRIO	5.4		

2007 NTEP Bermudagrass Trial

8	5	16	13	23	24	7	28
11	27	17	15	6	18	14	1
4	9	3	30	12	20	21	10
2	25	29	19	31	22	26	13
23	8	30	19	22	16	1	27
12	17	14	10	28	25	24	15
3	11	20	2	5	31	29	9
26	6	4	21	7	18	15	24
21	18	12	17	10	11	6	20
22	23	27	28	2	5	16	8
25	19	29	7	30	31	26	4
13	9	14	1	3			

NTEP Bermudagrass Entries

- | | | |
|-----------------|----------------|---------------|
| 1. Riviera | 12. Premier | 23. PSG 94524 |
| 2. Princess 77 | 13. SWI-1057 | 24. IS-01-201 |
| 3. NuMex-Sahara | 14. BAR 7CD5 | 25. Pyramid 2 |
| 4. SWI-1070 | 15. Gold Glove | 26. Hollywood |
| 5. SWI-1081 | 16. Sunsport | 27. Yukon |
| 6. SWI-1083 | 17. Patriot | 28. Veracruz |
| 7. SWI-1113 | 18. OKC 1119 | 29. PSG 9BAN |
| 8. SWI-1117 | 19. OKC 1134 | 30. PSG PROK |
| 9. SWI-1122 | 20. RAD-CD1 | 31. PSG 9Y2OK |
| 10. Midlawn | 21. OKS 2004-2 | |
| 11. Tifway | 22. PSG 91215 | |

Table 2. NTEP bermudagrass mean visual quality ratings for 2009 at UC Riverside (9-best).

	mean		mean
PSG 9Y2OK	5.9	SWI-1083	5.0
OKC 1119	5.8	OKS 2004-2	4.9
BAR 7CD5	5.5	PATRIOT	4.8
OKC 1134	5.5	PSG 94524	4.8
PREMIER	5.5	PSG 9BAN	4.8
PSG PROK	5.4	RIVIERA	4.8
SWI-1081	5.4	PSG 91215	4.7
TIFWAY	5.4	GOLD GLOVE	4.7
SWI-1070	5.3	SWI-1057	4.7
IS-01-201	5.2	SUNSPORT	4.6
PRINCESS 77	5.2	YUKON	4.6
SWI-1113	5.2	NUMEX-SAHARA	4.5
SWI-1122	5.2	PYRAMID 2	4.4
VERACRUZ	5.2	MIDLAWN	4.3
HOLLYWOOD	5.1	SWI-1117	4.1
RAD-CD1	5.0		
		LSD	1.2

2007 NTEP Zoysiagrass Trial

5	3	6	1	10	9	4
2	7	8	11	7	2	1
5	6	10	8	3	9	4
11	3	4	8	10	7	6
2	11	5	1	9		

NTEP Zoysiagrass Entries

1 Zenith	5 DALZ 0701	9 29-2
2 Meyer	6 DALZ 0702	10 240
3 Zorro	7 Shadowturf	11 380-1
4 DALZ 0501	8 L1F	

Table 3. NTEP zoysiagrass mean visual quality ratings for 2009 at UC Riverside (9-best).

	mean
ZORRO	7.3
DALZ 0701	6.6
DALZ 0501	6.2
DALZ 0702	6.2
L1F	6.2
SHADOWTURF	5.7
29-2	5.4
ZENITH	5.0
380-1	4.4
240	3.8
MEYER	3.7
LSD	0.9

2007 NTEP Seashore Paspalum Trial

5	6	2	4	3	1	3
6	1	5	2	4	5	4
6	1	3	2			

Seashore Paspalum Entries

- 1 Salam
- 2 Sea Isle 1
- 3 SRX 9 HSCP
- 4 UGA 7
- 5 UGA 22
- 6 UGA 31

Table 4. NTEP Seashore paspalum mean visual quality ratings for 2009 at UC Riverside (9-best).

	mean
SRX 9HSCP	7.2
UGA 22	7.0
SEA ISLE 1	6.8
UGA 7	6.7
SALAM	6.6
UGA 31	6.1
LSD	0.6