UCRTRAC Accumulative Research Summary Section D: Unbiased Cultivar Evaluations Project 4

Title: USGA, GCSAA, and NTEP On-Site Testing of Grasses for Overseeding Bermudagrass Fairways, 2004-2006.

Objective: To evaluate 31 new turfgrass cultivars, blends, and mixtures (Table 1) used to overseed bermudagrass fairways under actual golf course conditions. Primary data include percent establishment rate (4 to 6 weeks after seeding); turfgrass quality (monthly during winter, one to three times per month during spring and fall transition period); plot color, genetic color (two times – late fall/early winter and spring); density of overseed grass (once in spring); leaf texture of overseed grass (once in spring); percent cover of dormant bermudagrass and overseed grass (once in mid-winter); rate or speed of transition from bermudagrass to overseeded grass in fall (one to three times per month during fall transition); and rate or speed of transition from overseeded grass to bermudagrass in spring (one to three times per month during spring transition). Secondary data may include environmental stress, traffic and divoting damage, disease and insect damage and other data deemed appropriate and feasible.

- This is a national study, so an additional objective is to evaluate the performance of turfgrasses for overseeding bermudagrass fairways for both local and regional adaptation and for a broader adaptation across the United States. Information from this project is valuable to the golfing industry. These studies will determine the adaptation of grasses for golf course use. In addition, information obtained from on-site testing will be of particular value to plant breeders, researchers, extension educators, USGA agronomists, golf course architects, and superintendents, who need to select the best adapted turfgrasses for overseeding bermudagrass fairways for a particular regional climate. There are 12 locations (Table 2) across the southern region of the United States that are evaluating the same 31 overseed grass treatments.
- The 2004-2005 study was seeded on Fairway 8 on 16 Oct. 2004 and included three 5.0- x 20.0-ft replicate plots for each of the 31 overseed treatments (please see plot plan).

Location: Indian Wells Country Club, Classic Golf Course, Indian Wells, Calif.

Duration: Two seasons (2004 – 2005 and 2005 – 2006)

Funding Source: USGA, GCSAA, NTEP

(Note: Considerable assistance from David Hay and his staff; this is a cooperative project involving Robert Green (UCR), Sowyma Mitra (California State Poly. Univ., Pomona), Mike Henry (UC Cooperative Extension), and Jeff Place (College of the Desert)

Findings: Too soon to report.

Status: A two-season study was initiated. Information associated with this study will be published in various trade journals along with being available on the UCR Turf website.

Entry name	Species or composition	Sponsor		
Charger	Perennial ryegrass	Standard entry		
Winterplay	Poa trivialis	Standard entry		
ProSelect	40% Jet, 40% Sonata, 20% Integra perennial	Pennington Seed Co.		
	ryegrass blend			
Marvelgreen	40% Palmer IV, 40% Prelude IV, 40% Sunkissed	ProSeed Marketing, Inc.		
Supreme	perennial ryegrass blend			
ALS2	Perennial ryegrass	LESCO, Inc.		
PRS2	Perennial ryegrass	LESCO, Inc.		
Overseeding Eagle	33% Greenville, 33% ProSport, 34% Pacesetter	LESCO, Inc.		
Blend	perennial ryegrass blend			
Futura 2500	30% Blazer 4, 30% Sunshine II perennial	Pickseed West, Inc.		
	ryegrasses and 40% Pick Lh A -00 intermediate			
	ryegrass			
Pick SD	Perennial ryegrass	Pickseed West, Inc.		
Playmate	50% Headstart 2, 50% Pick HS-01-09 perennial	TurfOne		
	ryegrass blend			
BMX 020383	Perennial ryegrass	Lewis Seed		
RAD-OS3	Intermediate ryegrass	Lewis Seed		
RAM-100	Poa trivialis	Lewis Seed		
IS-OS	Perennial ryegrass	DLF International Seeds		
Top Hat	Perennial ryegrass	Standard entry		
IS-IR3	Intermediate ryegrass	DLF International Seeds		
Champion GQ	34% SR 4550, 33% SR 4420, 33% SR 4220	Seed Research of Oregon		
	perennial ryegrass blend			
Magnum Gold	34% Peregrine, 33% Hawkeye, 33% Penguin	Seed Research of Oregon		
	perennial ryegrass blend			
Flash II	Perennial ryegrass	Mountain View Seed Ltd		
MTV-124	Perennial ryegrass	Mountain View Seed Ltd		
OS	Perennial ryegrass	Mountain View Seed Ltd		
STP	Perennial ryegrass	Mountain View Seed Ltd		
PR 17	Perennial ryegrass	Mountain View Seed Ltd		
Starlite	Poa trivialis	Mountain View Seed Ltd		
CRR	Perennial ryegrass	Novel AG		
League Master	40% Ringer, 20% Omega, 20% 04-BRE, 20%	Oregro Seeds		
	04-BEN perennial ryegrass blend			
OSC110	Perennial ryegrass	Olsen Seed Co.		
OSC108	Perennial ryegrass	Olsen Seed Co.		
Covet	Perennial ryegrass	Olsen Seed Co.		
OSC116	Perennial ryegrass	Olsen Seed Co.		
Colt	Poa trivialis	Standard entry		

Table 1. Thirty-one entries for the 2004-2006 on-site testing of grasses for overseeding of bermudagrass fairways.

Golf course	Location	Superintendent	Research cooperator
Pinehurst Resort & CC	Pinehurst, NC	Bob Farren	Art Bruneau, North Carolina State Univ.
The John E. Kirkpatrick Five-Hole Demonstration GC	Oklahoma City, OK	David Gerken	Dennis Martin & David Gerken, Oklahoma State Univ.
New Mexico State Univ. GC	Las Cruces, NM	Bruce Erhard	Bernd Leinauer, New Mexico State Univ.
Roanoke CC	Roanoke, VA	Dan Wheeler	Mike Goatley, Virginia Tech
Mississippi State Univ. GC	Starkville, MS	James Patrick Sneed	H. Wayne Philley, Mississippi State Univ.
The Palmer Course at Starrs Mill	Fayetteville, GA (Atlanta area)	Ryan Mattocks	Clint Waltz, Univ. of Georgia
University of Florida GC	Gainesville, FL	Todd Wilkinson	Grady L. Miller, Univ. of Florida, Gainesville
Osceola Golf Club	Pensacola, FL	Eddie Daigle	J. Bryan Unruh, Univ. of Florida, Milton
The Traditions Club at Texas A&M	Bryan, TX	Sean Hogan	David Chalmers, Texas A&M Univ.
Heritage Highlands Golf & CC	Marana, AZ (Tucson area)	David Herman, GCSA	David Kopec, Univ. of Arizona
Blackmoor GC	Myrtle Beach, SC	Bob Zuecher	Bruce Martin, Clemson Univ.
Indian Wells Country Club	Indian Wells, CA	David Hay	Sowyma Mitra, Cal-Poly Pomona Robert Green, Univ. of California, Riverside

Table 2. Twelve locations for the 2004-2006 on-site testing of grasses for overseeding bermudagrass fairways.

NTEP On-Site Fairway Overseeding Trial: 2004-2005

Indian Wells Country Club, Classic Golf Course, Indian Wells, CA

⇔ green Fairway 8, Par 5 (N↑) tees ⇒										TREATMENTS:			
¹¹¹ 11	110 10	¹⁰⁹ 9	¹⁰⁸ 8	¹⁰⁷ 7	¹⁰⁶ 6	¹⁰⁵ 5	¹⁰⁴ 4	¹⁰³ 3	¹⁰² 2	¹⁰¹ 1	# 1 2 3	Name Charger Winterplay ProSelect	Species PR <i>PT</i> PRb
Rep	121 21 131	120 20 130	119 19 129	118 18 128	117 17 127	116 16 126	115 15 125	114 14 124	113 13 123	112 12	4 5 6	Marvelgreen Supreme ALS2 PRS2	PRb PR PR
I	31	30	29	28	27	26	25	24	23	22	7 8 9 10	Overseeding Eagle Blend Futura 2500 Pick SD Playmate	PRb PRb/IR PR PRb
Cart Path										11 12 13	BMX 020383 RAD-OS3 RAM-100	PR IR <i>PT</i>	
²¹¹ 14	²¹⁰ 7	12	²⁰⁸ 3	²⁰⁷ 15	16	²⁰⁵ 21	²⁰⁴ 5	²⁰³ 17	²⁰² 27	²⁰¹ 13	14 15 16	IS-OS Top Hat IS-IR3	PR PR IR
Rep	221 28	²²⁰ 25	²¹⁹ 11	²¹⁸ 23	²¹⁷ 19	²¹⁶ 18	²¹⁵ 4	²¹⁴ 9	²¹³ 6	²¹² 22	17 18 19	Champion GQ Magnum Gold Flash II	PRb PRb PR
II	231	8	²²⁹ 1	²²⁸ 29	²²⁷ 24	30	²²⁵ 20	²²⁴ 26	²²³ 31	10	20 21 22 23	MTV-124 OS STP PR 17	PR PR PR PR
311	310	309	308	307	=20 inches 306	305	304	303	302	301	24 25	Starlite CRR	<i>PT</i> PR
6	13	10	21	8	24	4	28	31	16	25	26 27	League Master OSC110	PRb PR
Rep	³²¹ 22	15	³¹⁹ 2	³¹⁸ 12	³¹⁷ 7	³¹⁶ 5	³¹⁵ 20	³¹⁴ 3	³¹³ 14	³¹² 26	28 29 30 31	OSC108 Covet OSC116 Colt	PR PR PR <i>PT</i>
III	³³¹ 19	³³⁰ 9	³²⁹ 11	³²⁸ 30	³²⁷ 17	³²⁶ 27	³²⁵ 18	³²⁴ 29	³²³ 23	³²² 1	PR= IR=ii	perennial ryegrass; PRb=perennial ntermediate ryegrass; PT=Poa trivia ding rates: PR, PRb, IR = 600 lb/a;	ryegrass blend; alis

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