

UCRTRAC Accumulative Research Summary
Section D: Unbiased Cultivar Evaluations
Project 3

Title: USGA, GCSAA, and NTEP On-Site Testing of Grasses for Overseeding Bermudagrass Fairways, 1999-2001.

Objective: To evaluate 42 new turfgrass cultivars, blends, and mixtures 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); 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 10 locations across the southern region of the United States that are evaluating the same 42 overseed grass treatments.
- The study was seeded on in-use bermudagrass fairways 1 Oct. 1999 and 6 Oct. 2000 and included three 5.0- x 20.0-ft replicate plots for each of the 42 overseed treatments (Table 1). Different fairways were used each year.

Location: Mountain Vista Golf Course, Palm Desert, Calif.

Duration: Two seasons (1999 – 2000 and 2000 – 2001)

Funding Source: USGA, GCSAA, NTEP, Hi-Lo Desert GCSA
(Note: Considerable assistance from Nancy Dickens and her staff, Mike Henry, UCCE, and Jeff Place, College of the Desert)

Findings: Overall visual turfgrass quality ratings for selected sites are shown in Table 1. For more information, go to the NTEP website at <http://www.ntep.org>.

Status: A two-season study was completed. Information associated with this study was published in NTEP Progress Reports and *Better Turf Thru Agronomics*.

Table 1. Overall visual turfgrass quality ratings (scale: 1-9, 1 = worst and 9 = best quality) for two seasons (1999-2000 and 2000-2001) for a bermudagrass fairway overseeded with 42 treatments consisting of cultivars, blends, and mixtures of perennial, intermediate, and annual ryegrasses and cultivars of *Poa trivialis*, in Palm Desert, Calif. and Tucson (1999-2000) or Green Valley (2000-2001), Ariz. and the national average for all 10 sites (including California and Arizona).

Overseed treatment	Species ²	Overall visual turfgrass quality		
		California	Arizona	National
Paragon	PR	7.4	6.4	5.9
Barlennium	PR	7.4	5.6	6.0
Marvelgreen Supreme	PRb	7.4	5.7	5.9
Tourstar	PRb	7.3	6.4	6.1
Seville II	PR	7.3	6.2	5.9
Elfkin	PR	7.3	6.2	5.9
Brightstar II	PR	7.3	6.3	5.9
Charger II	PR	7.2	5.8	6.0
First Cut	PR/PT	7.2	5.5	5.9
Leaderboard	PRb	7.2	6.2	6.0
Pirouette	PR	7.2	6.0	5.8
Phantom	PR	7.2	5.3	5.8
Fiesta 3	PR	7.1	6.0	6.0
Mt. View Blend 2	PRb	7.1	6.4	6.0
Professional's Select	PRb	7.1	5.8	6.0
MED-007	PRb	7.1	5.8	5.9
Cebeco Blend 1	PRb	7.1	5.9	5.9
Charger	PR	7.1	5.8	5.8
Mt. View Blend 1	PRb	7.1	5.7	5.8
LS-DE1	PRb	7.1	5.9	5.7
Citation III	PR	7.1	6.0	5.7
Mt. View Blend 3	PRb	7.1	5.7	5.8
Prime	PRb	7.1	6.3	5.7
Essence	PR	7.0	6.0	5.9
Marvelgreen + Laser	PRb/PT	6.9	5.2	5.8
Allsport	PR	6.9	6.1	5.8
Top Hat	PR	6.9	6.0	5.8
Brightstar II + Winterplay	PR/PT	6.9	5.1	5.7
MP58	PR	6.9	5.7	5.6
PST-3BK-99 (Quick Trans.)	PR	6.9	5.6	5.5
MP111	PR	6.8	5.5	5.5
Citation III + Winterstar	PR/PT	6.8	5.6	5.8
Futura 2500	PRb/IR	6.7	5.1	5.6
Capri	PR	6.7	5.0	5.5
Pick HR A-97	IR	6.3	5.2	5.5
Transist	IR	6.0	5.0	5.4
Proam	PT	5.4	3.5	5.3
Snowbird	PT	5.3	3.5	5.3
Sabre	PT	5.3	3.5	5.2
Bariviera	PT	5.1	3.6	5.1
Winterplay	PT	5.0	3.3	5.1
ABT-99-3.268 (Axcella)	AR	4.3	5.3	5.0
Mean		6.7	5.5	5.7

² PR = perennial ryegrass, PRb = perennial ryegrass blend, IR = intermediate ryegrass, AR = annual ryegrass, PT = *Poa trivialis*.

Note: All ryegrasses seeded at 300, 450 or 600 lb/acre (Calif./Ariz.: 600 lb/acre), *Poa trivialis* seeded at 100 or 200 lb/acre (Calif.: 200 lb/acre, Ariz.: 100 lb/acre), and all ryegrass/*Poa trivialis* mixtures were seeded at 250 or 400 lb/acre (Calif./Ariz.: 400 lb/acre).

Note: For more information, go to the NTEP website at <http://www.ntep.org> or see the following NTEP reports: 2000-2001 data season – NTEP No. 01-20 and 1999-2000 data season – NTEP No. 00-13.