

In the Tall Fescue Division, Who is Georgia's Beauty Queen: 2004 Update on Tall Fescue Evaluations

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The use of tall fescue (*Festuca arundinacea*) has increased since the introduction of turf-type cultivars in the early 1980's. Tall fescue is a cool-season, bunch-type grass best adapted to Georgia's piedmont and is used for homelawns, golf course rough, general areas, and for soil stabilization. Because it can be seeded or sodded, tall fescue is popular with do-it-yourself homeowners and turfgrass professionals. Furthermore its popularity relates to the genetically dark green color during the spring and fall. Tall fescue is adapted to a wide range of soil conditions but grows best on fertile, well-drained soils with a soil pH between 5.5 and 6.5.

Compared to other cool-season species, some cultivated varieties (cultivars) of tall fescue have shown good temperature and drought tolerance, and disease resistance. Improvement of these characteristics, while maintaining quality traits like fine leaf texture and dark green color, have been the focus of various breeding programs throughout the United States. There are several hundred tall fescue cultivars and determining which is best adapted for particular conditions can make the mind swim with confusion. One cultivar may be better adapted to dry arid conditions while another may have disease tolerance which improves its adaptability in the Southeast.

To assist the professional and homeowner alike, the use of the National Turfgrass Evaluation Program (NTEP) to compare tall fescue cultivars have proven useful in the past. The NTEP program collects improved cultivars from breeders and then sends samples of each variety to university sites around the country for long-term (5-years) evaluation under various environmental and management conditions. To learn more about NTEP and other grasses being tested, visit their website at www.NTEP.org.

The University of Georgia has long been a NTEP site for tall fescue evaluations and in 2001 was chosen again as a site for the newest evaluation period of recently developed cultivars. After the plot area, on the UGA Griffin Campus, was prepared and fumigated with methyl-iodine, each 5-foot X 5-foot plot was seeded at 5 pounds per 1000 ft² with one of 162 cultivars, replicated three times. Since establishment in October 2001, plots have been fertilized with 2 lbs. N / 1000 ft² per year (1 lb N / 1000 ft² in February and October) and mowed at 3-inches. Furthermore, the trial is irrigated only during severe drought stress, fungicides and insecticides are not used for the control of diseases or insects, and plots have never been reseeded. This management regime would be considered a low maintenance program.

For the sake of space, these data represent the average for the annual rating period. When environmental conditions are favorable for tall fescue, fall and spring, most cultivars have much higher turfgrass quality and color ratings. Ratings during stress periods, especially after periods of prolonged cold temperatures (below 40° F) and during the summer months, can be much lower due to off-color, canopy thinning, and disease infection. By presenting these data as an annual average it provided the consumer a realistic expectation of how a particular cultivar

will perform during the year. Just because a grass looks great during ideal weather conditions does not mean it will be desirable when conditions are less than favorable. To see seasonal difference visit www.NTEP.org and follow the “All NTEP Reports: Select a turfgrass species” link to the “2001 National Tall Fescue Test: 2003 data progress report”.

When turfgrass quality (TQ) was averaged for the 2003 rating period (11 rating dates between January and December), three commercially available cultivars were grouped into an excellent performing category, mean TQ ratings ≥ 6.50 (Table 1). Thirty cultivars grouped into the good (mean TQ ratings between 6.20 and 6.50) category (Table 2). Grasses in the excellent and good categories performed well and would persist in Griffin and into northern Georgia. Nineteen cultivars were grouped into the acceptable (mean TQ ratings between 6.00 and 6.19) category (Table 3). Of the commercially available cultivars being evaluated, 27 had mean TQ ratings below 6.00 which were not statistically different than the commonly used cultivar ‘K-31’ (Table 4).

Evaluations taken during 2003 were from the second year of this five year study supported by The National Turfgrass Evaluation Program (NTEP), and The Georgia Turfgrass Foundation Trust (GTFT). For additional information on growing and maintaining tall fescue in Georgia, visit www.GeorgiaTurf.com and follow the “Turfgrasses” link to tall fescue.

Table 1. Excellent performing cultivars – 2003.

Excellent Performing Tall Fescue Cultivars *	
<u>Cultivar</u> **	<u>TQ (1-9)</u> ***
Davinci	6.76
Forte	6.64
Cochise II	6.61

* Excellent designation given to cultivars with a mean Turf Quality (TQ) rating greater than 6.52.

** Cultivars listed are possibly commercially available as seed or sod.

*** Overall TQ was rated on a 1 to 9 scale with 1 = dead grass, 6 = minimally acceptable, and 9 = ideal turfgrass.

Table 2. Good Performing cultivars - 2003

Good Performing Tall Fescue Cultivars*			
Cultivar**	TQ (1-9)***	Cultivar**	TQ (1-9)***
Avenger	6.48	Focus	6.33
Rebel Exeda	6.48	Turbo	6.30
Blackwatch	6.48	Olympic Gold	6.30
Mustang	6.45	Endeavor	6.27
Justice	6.45	Masterpiece	6.27
2 nd Millennium	6.45	Silverado II	6.24
Gremlin	6.42	Magellan	6.24
Tar Heel II	6.36	Picasso	6.24
Tar Heel	6.36	Kalahari	6.24
Inferno	6.36	Five Point	6.21
Watchdog	6.36	Covenant	6.21
Padre	6.33	Barrington	6.21
Dynasty	6.33	Finesse II	6.21
Falcon IV	6.33	Constitution	6.21
Dominion	6.33	Bingo	6.21

* Good designation given to cultivars with a mean Turf Quality (TQ) rating between 6.20 and 6.50.

** Cultivars listed are possibly commercially available as seed or sod.

*** Overall TQ was rated on a 1 to 9 scale with 1 = dead grass, 6 = minimally acceptable, and 9 = ideal turfgrass.

Table 3. Acceptable performing cultivars – 2003.

Acceptable Performing Tall Fescue Cultivars *			
Cultivar **	TQ (1-9) ***	Cultivar **	TQ (1-9) ***
Cayenne	6.18	Guardian – 21	6.09
Finelawn Elite	6.18	Prospect	6.06
Jaguar 3	6.18	Southern Choice	6.03
Rebel Sentry	6.18	South Paw	6.03
Signia	6.15	Wolfpack	6.03
Quest	6.15	Coyote	6.03
Scorpion	6.12	Tulsa II	6.03
Tahoe	6.09	Lancer	6.00
Millennium	6.09	Biltmore	6.00
Grande II	6.09		

* Acceptable designation given to cultivars with a mean Turf Quality (TQ) rating between 6.00 and 6.19.

** Cultivars listed are possibly commercially available as seed or sod.

*** Overall TQ was rated on a 1 to 9 scale with 1 = dead grass, 6 = minimally acceptable, and 9 = ideal turfgrass.

Table 4. Cultivars no different than 'K-31' tall fescue – 2003.

Tall Fescue Cultivars No Different than 'K-31'			
<u>Cultivar</u> *	<u>TQ (1-9)</u> **	<u>Cultivar</u> *	<u>TQ (1-9)</u> **
Daytona	5.97	Pure Gold	5.82
Titanium	5.97	Titan LTD.	5.79
Laramie	5.97	Elisa	5.76
Legitimate	5.94	Southeast	5.76
Stetson	5.94	Raptor	5.73
Barlexas II	5.91	Plantation	5.70
Kitty Hawk 2000	5.91	Riverside	5.70
Matador	5.88	Tempest	5.67
Wyatt	5.88	Falcon II	5.67
Rendition	5.88	Bonsai	5.52
Rembrandt	5.85	Tomahawk RT	5.52
Bravo	5.85	Tracer	5.48
Barlexas	5.85	K-31	5.45
Barrera	5.85		

* Cultivars listed are possibly commercially available as seed or sod.

** Overall TQ was rated on a 1 to 9 scale with 1 = dead grass, 6 = minimally acceptable, and 9 = ideal turfgrass.