

1996 NTEP Tall Fescue Test

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Objective

Our objective was to determine which of the 129 varieties of turf-type tall fescue were best adapted to Indiana growing conditions.

Rationale

Turf-type tall fescue has many attributes such as good drought tolerance, good heat tolerance, and resistance to many pests that make it a good choice for many turf sites. When properly maintained tall fescue will form a dense, attractive turf stand. By determining the performance of the 129 varieties, we will be able to offer sound information on which varieties of turf-type tall fescue to plant in Indiana.

How It Was Done

One hundred and twenty nine varieties of turf-type tall fescue were seeded on 5 Sep 1996 at the Purdue Agronomy Research Center on a silt loam soil. Seeding rate was 4.5 lbs per 1000 sq. ft. and seed was spread using a hand shaker jar. After seeding the experiment was lightly raked and rolled and a starter fertilizer was applied at the rate of 0.4 lbs N, 1.5 P₂O₅ lbs, and 0.8 lbs K₂O per 1000 sq. ft. After establishment the turf was fertilized with 3.5 lbs N, 1 lbs P₂O₅, 2 lbs K₂O per 1000 sq. ft. per year using a 4:1:2 nutrient ratio fertilizer. Rates in lbs N per 1000 sq. ft. and dates of application were 1.0 lb N in late May, 1.0 lb N in mid Sep, and 1.5 lbs N in early Nov. Turf was mowed twice per week at 2.0 inches with clippings returned and irrigated to prevent any sign of drought stress. A preemergence herbicide was applied each spring to control crabgrass and a postemergence herbicide was applied each fall to control broadleaf weeds. No insecticides or fungicides were applied during the experiment.

In 1997, 1998, and 1999 data collected were spring green-up, genetic color, leaf texture, disease incidence, and monthly visual quality ratings from Apr to Nov. All data taken were visual observations of turf characteristics and performance. Visual quality ratings were taken using a scale of 1 to 9 with 1 = no living turf, 5 = acceptable turf, and 9 = ideal turf.

Results to Date

- The variety average visual quality after three years of rating was 6.0. This provides a benchmark to compare the varieties on the market to the average performance of all turf-type tall fescue varieties in this test.
- Many varieties of turf-type tall fescue in the test had an average visual quality rating of 6.0 or higher.
- Some of the top performing varieties after three years were Rembrandt, Millenium, Masterpiece, Watchdog, and Gazelle.

Table 1. Average yearly visual quality ratings of tall fescue varieties for 1997, 1998, 1999 and three year average visual quality ratings.

Variety	Visual quality ^a			Three year average
	1997	1998	1999	
Rembrandt (LTP-4026 E+)	6.4	6.5	6.9	6.6
Millennium (TMI-RBR)	6.5	6.4	6.8	6.6
Masterpiece (LTP-SD-TF)	6.3	6.7	6.8	6.6
Watchdog (Pick FA B-93)	6.3	6.5	6.9	6.5
Gazelle	6.0	6.7	6.9	6.5
BAR FA 6D	6.1	6.5	6.7	6.4
ATF-188	6.0	6.6	6.7	6.4
Crossfire II	6.1	6.4	6.7	6.4
SR 8210	6.1	6.5	6.7	6.4
Jaguar 3	6.0	6.3	6.8	6.4
Pick RT-95	6.0	6.5	6.6	6.4
Tracer (BAR Fa6 US1)	5.9	6.5	6.7	6.4
Barrera (BAR Fa6 US3)	6.0	6.4	6.6	6.4
CU9502T	6.2	6.3	6.5	6.3
Arid 3 (J-98)	5.9	6.4	6.6	6.3
Plantation (Pennington-1901)	6.1	6.4	6.5	6.3
Bulldawg (Pick GA-96)	6.0	6.2	6.6	6.3
Pick FA N-93	5.8	6.5	6.6	6.3
OFI-931	5.8	6.4	6.7	6.3
Pick FA 20-92	6.0	6.4	6.5	6.3
Empress	5.8	6.3	6.8	6.3
Scorpio (ZPS-2PTF)	6.0	6.4	6.6	6.3
Sunpro	6.2	6.3	6.3	6.3
PST-523	5.9	6.3	6.6	6.3
Barrington (BAR Fa6D USA)	5.9	6.5	6.7	6.3
Red Coat (ATF-038)	5.6	6.2	6.7	6.2
R5AU	6.0	6.1	6.5	6.2
Aztec II (TMI-AZ)	5.9	6.0	6.6	6.2
Bonsai 2000 (Bullet)	6.0	6.1	6.5	6.2
Mustang II	6.1	6.1	6.5	6.2
OFI-96-31	6.1	6.1	6.5	6.2
Bravo (RG-93)	6.0	6.2	6.5	6.2
MB 29	5.9	6.2	6.3	6.2
Southern Choice	6.2	6.0	6.3	6.2
Olympic Gold (PST-5E5)	6.0	6.1	6.4	6.2
Wolfpack (PST-R5TK)	5.9	6.1	6.5	6.2
Coyote	5.7	6.4	6.6	6.2
OFI-FWY	5.9	6.3	6.4	6.2
PST-5M5	5.9	6.3	6.3	6.2
BAR Fa6 US2U	5.9	6.3	6.4	6.2
Genesis	6.2	6.0	6.3	6.2
ATF-196	5.7	6.1	6.5	6.1

Table 1. Average yearly visual quality ratings of tall fescue varieties for 1997, 1998, 1999 and three year average visual quality ratings. (continued)

Variety	Visual quality ^a			Three year average
	1997	1998	1999	
Reserve (ATF-182)	5.8	6.0	6.5	6.1
Tulsa	5.9	5.9	6.5	6.1
Regiment	5.8	6.1	6.4	6.1
Rebel Sentry (AA-A91)	5.8	6.2	6.4	6.1
CU9501T	5.9	6.0	6.4	6.1
DP 50-9011	6.0	6.0	6.5	6.1
Arabia (J-5)	5.4	6.4	6.6	6.1
Brandy (J-101)	5.7	6.1	6.5	6.1
Pick FA 15-92	5.8	6.1	6.5	6.1
BAR FA 6LV	5.5	6.4	6.5	6.1
EC-101	6.0	5.8	6.3	6.1
MB 26	5.7	6.2	6.5	6.1
MB 211	5.8	6.0	6.3	6.1
MB 212	5.8	6.0	6.5	6.1
Duster	5.9	6.0	6.5	6.1
Shenandoah II (WRS2)	5.7	6.2	6.5	6.1
Apache II	5.8	6.2	6.3	6.1
OFI-951	5.4	6.4	6.5	6.1
SRX 8500	5.7	6.3	6.4	6.1
PRO 8430	5.8	6.0	6.4	6.1
Pick FA XK-95	5.3	6.5	6.4	6.1
Rebel 2000 (AA-989)	5.7	5.9	6.3	6.0
Pixie E+	5.8	6.0	6.4	6.0
Pick FA 6-91	5.5	6.0	6.5	6.0
Pick FA UT-93	5.3	6.3	6.4	6.0
Chapel Hill (TA-7)	6.0	5.8	6.2	6.0
WVPB-1B	6.1	5.8	6.2	6.0
MB 213	5.7	6.0	6.4	6.0
TF 6 (BAR FA6 US6F)	5.6	6.0	6.3	6.0
Cochise II	5.5	6.1	6.4	6.0
ZPS-5LZ	5.3	6.2	6.3	6.0
PST-5TO	5.7	6.1	6.4	6.0
Tarheel	5.8	5.9	6.4	6.0
Coronado	5.8	6.1	6.2	6.0
Coronado Gold (PST-5RT)	5.6	6.0	6.4	6.0
Shenandoah	6.0	5.9	6.2	6.0
ATF-257	5.6	5.7	6.3	5.9
Velocity (AA-983)	5.5	6.0	6.3	5.9
Alamo E+	5.3	6.0	6.3	5.9
Shortstop II	5.5	6.2	6.2	5.9
Pedestal (PC-AO)	5.7	5.9	6.1	5.9
MB 28	6.0	5.8	6.0	5.9

Table 1. Average yearly visual quality ratings of tall fescue varieties for 1997, 1998, 1999 and three year average visual quality ratings. (continued)

Variety	Visual quality ^a			
	1997	1998	1999	Three year average
MB 210	5.7	5.9	6.3	5.9
MB 214	5.7	5.8	6.2	5.9
MB 215	5.7	5.9	6.1	5.9
Renegade	5.8	5.8	6.0	5.9
Falcon II	5.8	5.8	6.3	5.9
WX3-275	5.5	5.9	6.3	5.9
ISI-TF10	5.6	5.9	6.2	5.9
ISI-TF9	5.7	5.9	6.3	5.9
Bandana (PST-R5AE)	5.5	5.9	6.4	5.9
Safari	5.8	5.6	6.3	5.9
Tomahawk-E	5.5	5.9	6.2	5.9
Kitty Hawk S.S.T. (SS45DW)	5.7	5.8	6.2	5.9
Finelawn Petite	5.8	5.8	6.1	5.9
Leprechaun	5.8	6.0	5.9	5.9
Bonsai	5.7	5.8	6.2	5.9
Arid 2 (J-3)	5.4	5.8	6.3	5.8
Anthem (TMI-FMN)	5.4	5.8	6.3	5.8
MB 216	5.5	5.8	6.2	5.8
Marksman	5.8	5.7	5.9	5.8
JTTFA-96	5.5	5.7	6.3	5.8
ISI-TF11	5.5	5.8	6.3	5.8
Comstock (SSDE31)	5.5	5.6	6.1	5.8
EA 41	5.2	6.0	6.3	5.8
PSII-TF-9	5.8	5.8	6.0	5.8
ATF-022	5.1	5.7	6.2	5.7
ATF-020	5.5	5.5	6.0	5.7
ATF-253	5.3	5.7	6.1	5.7
OFI-96-32	5.8	5.8	5.6	5.7
JSC-1	5.6	5.5	5.8	5.7
WVPB-1D	5.5	5.7	5.8	5.7
Wpeze (WVPB-1C)	5.5	5.8	5.8	5.7
JTTFC-96	5.5	5.6	6.1	5.7
Titan 2	5.6	5.5	6.0	5.7
SRX 8084	5.5	5.8	5.7	5.7
Equinox (TMI-N91)	5.4	5.5	5.8	5.6
Twilight II (TMI-TW)	5.1	5.7	6.1	5.6
Lion	5.3	5.7	5.9	5.6
PSII-TF-10	5.4	5.7	5.7	5.6
Axiom (ATF-192)	5.2	5.5	5.8	5.5
Good-En (Koos 96-14)	5.3	5.7	5.4	5.5
Arid	5.5	5.1	5.6	5.4
DP 7952	5.1	5.2	5.8	5.4

Table 1. Average yearly visual quality ratings of tall fescue varieties for 1997, 1998, 1999 and three year average visual quality ratings. (continued)

Variety	Visual quality ^a			
	1997	1998	1999	Three year average
DLF-1	5.4	5.3	5.4	5.4
AV-1	5.1	4.9	5.0	5.0
Kentucky-31 w/endo.	4.3	3.3	2.9	3.5
Variety Average ^b	5.7	6.0	6.3	6.0

^a Visual quality ratings were taken using a scale of 1 to 9 with 1 = no living turf, 5 = acceptable turf, and 9 = ideal turf.

^b Variety average is the average visual quality rating of all 129 varieties of turf-type tall fescue in the test for a given year and the three year average.